PINAL COUNTY
WIDE OPEN OPPORTUNITY

NOTICE OF PUBLIC MEETING
PINAL COUNTY CITIZEN ADVISORY COMMITTEE
SUMMARY OF AGENDA
Thursday, September 4, 2025

6:00 p.m - CALL TO ORDER

PINAL COUNTY ADMINISTRATIVE COMPLEX
EMERGENCY OPERATIONS CENTER
301 E. 11th ST.
FLORENCE, AZ 85132

Action means discussion/recommendation for approval or denial to the Pinal County Planning and Zoning Commission on the following Planning Cases. (Numbers are shown for administrative convenience only. All interested persons should be aware that the cases may be heard in an order different than that shown on the agenda.)

1. **ROLL CALL**

( ) Michelle Washburn	( ) Bill Robertson	( ) Michael Hernandez
( ) Toby Metzger	( ) Terry Clark	( ) Christopher Maddux
( ) Briana Frenzel	( ) Phillip Todd	( ) Terrilyn Klucar
( ) Alan Sinclair	( ) Rusty Riggs	( ) Colleen Bechtel
( ) Arthur Wilkerson	( ) Tanya Lopez	( ) Joy Ide
( ) Jeanne Stockton	( ) Pamela Rabago	( ) Shirley Ann Hartman
( ) Kenneth G Lepper		

2. **MANAGER REPORT (INFORMATION ITEM)**

A. Major Comprehensive Plan Amendment Process

B. Rules and Responsibilities of CAC Members

3. **NEW CASES**

A. **PZ-PA-010-25 -- PUBLIC HEARING/ACTION**: Silver King Solar, LLC, Dave Lundgren, applicant/agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate **8,965± acres** of land from **Moderate Low Density Residential** (MLDR, 1-3.5 du/ac) **to Green Energy Production** for photovoltaic solar generation facility, a Battery Energy Storage System (BESS), substation and a generation-tie (gen-tie) transmission line, situated on portions of sections 13, 14, 22, 23, 24, 25, 26, 27, 34, 35, 36 of range 09E, T02D, and sections 18, 19, 30, 31 of range 10E, T02S, and sections 1, 2, 11, 12 of range 09E, T03S, and section 6 of range 10E, T03S of the Gila and Salt River Base and Meridian, tax parcels on file for reference, located to the south-west of Florence Junction, south of Queen Creek wash, north-east of Town of Florence, and five (5) miles to the north of E Arizona Farms Rd in unincorporated area of Pinal County.

B. **PZ-PA-011-25 -- PUBLIC HEARING/ACTION**: Vermaland LLC, Rob Clang, applicant/agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate **3,374± acres** of land from **Very Low Density Residential** (VLDR, 0-1 du/ac), **Moderate Low Density Residential** (MLDR, 1-3.5 du/ac), **and Proposed Open Space to 1,910± acres Employment, 480± acres General Public Facilities/Services, and 983± acres of Proposed Open Space** for industrial, office, business park and natural gas fired power plant, situated on portions of sections 3,4,7,10,11,12,13,17,18, 20, 21,and 29, T09S and T10S, R08E and R09E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 409-11-0040; -0050; -006C; -002E; -002F; -002G; -002H; -003D; -013C; -015C; -015E; -0160; -018A; -0190; 409-14-002D; -002F; -004A; -005A; -005E; 409-24-001C; 409-25-001E; -001D; -001C; -002F; -002G; -003G; -003E; 409-26-0010; -002A; -002B; -0240; -0220; -0250; -0260; -0270; -0490; -0480; 409-30-0020; 409-31-0010; and -0330 located along Greene Canal of Santa Cruz wash, south of Baumgartner road, and east of eleven mile corner road, south of the City of Eloy in unincorporated area of Pinal County.

C. **PZ-PA-012-25 -- PUBLIC HEARING/ACTION**: Silver Reef Energy LLC, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate **801± acres** of land from **Very Low Density Residential** (VLDR, 0-1 du/ac) **to Green Energy Production** for a utility scale Solar Facility for a 150 megawatt photovoltaic solar and 200 megawatt Battery Energy Storage System, situated on a portions of section 14 T07S R03E, sections 12 & 13 T07S R03E, section 18 T07S R04E, and section 19 T07S R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-03-0040; 500-62-0160; -0200; -0230; -0310; -0320; -0330; -0340; 500-11-027G; -027H; -028D; and -028E; located 6.5 miles southwest of Casa Grande, south of Interstate 8 (I-8), in the unincorporated area of Pinal County.

D. **PZ-PA-013-25 -- PUBLIC HEARING/ACTION**: Withey Morris Baugh LLC, applicant/agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate **215± acres** of land **from Moderate Low Density Residential** to **Employment** for a data center campus, with a flexible industrial category that can support additional complementary industrial uses. Situated on a portion of section 1, T07S, R04E, of the Gila and Salt River Base and Meridian (legal on file) tax parcel: 500-12-001B.

E. **PZ-PA-014-25 -- PUBLIC HEARING/ACTION**: Rose Law Group and Griffin Energy LLC, agent/applicant, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate **2,685.58± acres** of land from **Moderate Low Density Residential** (MLDR, 1-3.5 du/ac), **and Proposed Open Space to Green Energy Production, General Public Facilities/Services, and Proposed Open Space** for a utility scale solar facility with Battery Energy Storage System (BESS) and a gas fired power plant, situated on a portions of sections 10, 11, 12, 13, 14, 15, and 24, T07S, R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-16-001G; -001B; 500-11-0160; -017A; -017C; -0180; -019B; -020A; -0210; 500-18-001A; -001B; -001C; 500-19-002B; -002E; -0030; -004A; -004C; -0050; -006A, -006B; 500-23-003A; -003B; and -0120 located between the Santa Rosa Wash and Green Wash sited on both sides of Interstate 8, in the unincorporated area of Pinal County.

F. **PZ-PA-015-25 -- PUBLIC HEARING/ACTION:** Arizona RR Ranches LLC, owner, W Holdings, applicant, Jordan Rose, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate **±495 acres** of land from **Moderate Low Density Residential (MLDR, 1-3.5 du/ac)** to ±414 acres **Employment** and ±81 acres **General Public Facilities/Services**, for the location of an energy generation and technology campus, situated on portion of sections 25, 26, T05S, R03E, of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 510-53-003D, 510-53-003E, 510-53-003A and portion of parcels, 510-54-002A, 510-48-029L, generally located northeast of Maricopa Road and Teel Road, in unincorporated area of Pinal County.

4. **CALL TO THE COMMITTEE (Information Only):** Committee Members may briefly comment on current events or direct staff to study a topic matter. No discussion or action will be taken, except to direct staff to review the issue or schedule it for future consideration.

ADJOURNMENT

Support documents for the above-listed matters are available at the Pinal County Community Development Office for the public inspection at least 48 hours prior to the meeting at the Pinal County Community Development Department, Pinal County Complex, 85 N. Florence Street, Florence, Arizona, Monday through Thursday between the hours of 7:00 a.m. and 5:30 p.m.

NOTE: One or more members of the Committee may participate in this meeting by telephonic conference call.

The Committee may go into Executive Session for the purpose of obtaining legal advice from the County's Attorney(s) on any of the above agenda items pursuant to A.R.S. 38-431.03(A)(3).

In accordance with the requirement of Title II of the Americans with Disabilities Act (ADA), the Citizen Advisory Committee does not discriminate against qualified individuals with disabilities admission to public meetings. If you need accommodation for a meeting, please contact the Community Development Department at (520) 866-6442, at least (5) five business days prior to the meeting (not including weekends or holidays) so that your request may be accommodated.

Pursuant to A.R.S. 38-431.02, NOTICE IS HEREBY GIVEN, that the public will have physical access to the meeting room at 5:30 P.M.

Posted this _28th_ day of _August_, 2025, around __5_ P.M. by (Cory Busby).

PINAL COUNTY
WIDE OPEN OPPORTUNITY

BOARDS AND COMMISSIONS
AGENDA ITEM

09/04/2025
Citizen Advisory Committee

Funds #:
Dept. #:
Dept. Name: Development Services
Requested By:

AGENDA ITEM AND REQUESTED BOARD ACTION:

PZ-PA-010-25 -- PUBLIC HEARING/ACTION: Silver King Solar, LLC, Dave Lundgren, applicant/agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate **8,965± acres** of land from **Moderate Low Density Residential** (MLDR, 1-3.5 du/ac) **to Green Energy Production** for photovoltaic solar generation facility, a Battery Energy Storage System (BESS), substation and a generation-tie (gen-tie) transmission line, situated on portions of sections 13, 14, 22, 23, 24, 25, 26, 27, 34, 35, 36 of range 09E, T02D, and sections 18, 19, 30, 31 of range 10E, T02S, and sections 1, 2, 11, 12 of range 09E, T03S, and section 6 of range 10E, T03S of the Gila and Salt River Base and Meridian, tax parcels on file for reference, located to the south-west of Florence Junction, south of Queen Creek wash, north-east of Town of Florence, and five (5) miles to the north of E Arizona Farms Rd in unincorporated area of Pinal County.

MOTION:

Attachments

PZ-PA-010-15 CAC PKT

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Leo Lew
County Manager

MEETING DATE: SEPTEMBER 4, 2025

TO: CITIZENS ADVISORY COMMITTEE

CASE NO(S): **PZ-PA-010-25 SILVER KING SOLAR AND STORAGE PROJECT**

CASE COORDINATOR(s): VALENTYN PANCHENKO, PLANNER

Executive Summary*: Silver King Solar LLC requests a Major Comprehensive Plan Amendment to re-designate approximately 8,965 acres of Arizona State Trust Land, located northeast of Florence and bisected by the Magma Arizona Railroad, from Medium Low Density Residential (MLDR) to Green Energy Production (Solar). The proposed Silver King Energy Center would generate up to 1,100 megawatts (MW) of renewable energy through solar photovoltaic (PV) technology with integrated Battery Energy Storage Systems (BESS). The project site was identified by the applicant as highly suitable for utility-scale energy due to its adjacency to existing high-voltage transmission corridors and a nearby electrical substation.*

If this request is approved:
If this major amendment to the Pinal County Comprehensive Plan is approved, the action will allow the applicant to begin the process of rezoning the ±8,965-acres of property to develop the Silver King Solar and Storage System facility, a renewable energy complex including solar photovoltaic fields, battery energy storage systems (BESS), and associated energy infrastructure.

LEGAL DESCRIPTION: 8,965± acres, situated on a portions of sections 13, 14, 22, 23, 24, 25, 26, 27, 34, 35, 36 of range 09E, T02D, and sections 18, 19, 30, 31 of range 10E, T02S, and sections 1, 2, 11, 12 of range 09E, T03S, and section 6 of range 10E, T03S of the Gila and Salt River Base and Meridian.

TAX PARCELS: 104298040, 104298050, 104298060, 104298070, 104307060, 104307090, 201017000, 210337000, 210337020.

APPLICANT/AGENT: Silver King Solar, LLC, Dave Lundgren.

REQUESTED ACTION & PURPOSE **PZ-PA-010-25 – PUBLIC HEARING/ACTION:** Silver King Solar, LLC, Dave Lundgren, applicant/agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate **8,965± acres** of land **from Moderate Low Density Residential** (MLDR, 1-3.5 du/ac) **to Green Energy Production** for **photovoltaic solar generation facility, a Battery Energy Storage System (BESS), substation and a generation-tie (gen-tie) transmission line**, situated on a portions of sections 13, 14, 22, 23, 24, 25, 26, 27, 34, 35, 36 of range 09E, T02D, and sections 18, 19, 30, 31 of range 10E, T02S, and sections 1, 2, 11, 12 of range 09E, T03S, and section 6 of range 10E, T03S of the Gila and Salt River Base and Meridian, tax parcels on file for reference, located to the southwest of Florence Junction, south of Queen Creek wash, northeast of the Town of Florence, and five (5) miles to the north of E Arizona Farms Rd in an unincorporated area of Pinal County.

LOCATION: south of I-60 and west of SR 79, to the southwest of Florence Junction, south of Queen Creek wash, northeast of the Town of Florence, and north of E Arizona Farms Rd.

SIZE: 8,965± acres.

PUBLIC COMMENT:
To date no comments in writing have been received from surrounding property owners.

PUBLIC PARTICIPATION:

60 day review period:	6/9/2025 to 8/8/2025
Newspaper Publication:	08/19/2025, 08/20/25 & 08/21/25
Broadcast sign posting:	08/13/25
Site Posting:	Week 18th Aug
Property mail out:	Week 18th Aug
Web posting:	08/1/25

OTHER REVIEW AGENCY COMMENTS:
As of the date of the report, comments from Arizona Technology Council and Pinal County Open Space, Trails & Regional Parks Department has been received and attached.

PLAN AMENDMENT DISCUSSION:

Project Proposal
The applicant, Silver King Solar LLC, is requesting a Major Comprehensive Plan Amendment to re-designate ±8,983 acres of Arizona State Trust Land from Medium Low Density Residential (MLDR) to Green Energy Production. The purpose of this amendment is to facilitate development of the Silver King Solar and Storage Project, a utility-scale renewable energy facility designed to generate up to 1,100 megawatts (MW) of power through solar photovoltaic technology and battery energy storage systems (BESS). The subject property consists of twenty (20) partial or full sections administered by the Arizona State Land Department (ASLD).

Multiple studies that have been submitted as part of the original application and supplemental and include: ALTA survey, Biological Technical Memorandum, Aquatic Delineation Report, Cultural Resources Technical Memorandum, Traffic Impact Statement, Hydrology Study.

Technical studies submitted by the applicant in support of the proposal include a hydrology analysis, which confirms that the majority of the site is located in FEMA Zone X with localized Zone A areas along the Magma Wash; and that drainage can be managed with appropriate design. A traffic impact study confirms that construction traffic will be temporary, while operational traffic will be minimal. Utility analysis demonstrates that the project requires minimal public services, with negligible wastewater demand and limited water use for solar panel washing.

The applicant envisions the Silver King Solar and Storage Project as a long-term renewable energy corridor within northern Pinal County. The facility will diversify the County's economic base, contribute

to Arizona's clean energy transition, and conserve scarce water resources while ensuring compatibility with surrounding vacant lands and utility infrastructure.

The proposed facility will include the following principal components:

- Solar Photovoltaic Arrays: Utility-scale solar panel fields to capture renewable energy.
- Battery Energy Storage Systems (BESS): Enclosures designed to store excess energy and provide grid stability during peak demand.
- Transmission Interconnection: Direct tie-in to the existing Florence Junction Substation northeast of the project site, with proximity to regional transmission corridors and connection to the existing Abel Substation.
- Supporting Infrastructure: Electrical collection lines, inverters, transformers, access roads, operations and monitoring facilities, perimeter fencing, and emergency access provisions consistent with County standards.

Site Data, Location and Accessibility

The subject property is generally bounded by U.S. Route 60 to the north, State Route 79 to the east, Arizona Farms Road to the south, and Skyline Drive to the southwest. The Magma Arizona Railroad bisects the property in a northeast-to-southwest direction.

Surrounding lands are largely vacant State Trust Land, with an existing electrical substation located northeast of the site that provides a direct interconnection opportunity between the existing Florence Junction Substation and the existing Abel Substation. The site is situated within a regional corridor characterized by transportation infrastructure and utility uses, with limited nearby residential or commercial development.

Primary access to the project site will be provided from:

- An existing roadway connection directly off U.S. Route 60, and
- A newly improved access point from State Route 79 (SR 79).

The applicant has committed to completing a Traffic Impact Statement (TIS) in accordance with the Pinal County Traffic Impact Assessment Guidelines and Procedures. The project will be required to coordinate with the Arizona Department of Transportation (ADOT) and Pinal County Public Works to ensure access design meets all applicable requirements for ingress and egress.

Paved all-weather access to county standards will be provided only for the project site entrances. Once constructed, the facility is anticipated to generate very minimal daily traffic volumes, with temporary peak activity occurring only during the construction phase. Long-term operational traffic will be limited to maintenance personnel and occasional service vehicles.

Flood Zone

The project site generally drains from northeast to southwest, with storm water conveyed through natural desert washes that ultimately discharge into the Magma Wash system located along the southern portion of the property.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs):

- The majority of the project site lies within Zone X (areas determined to be outside the 500-year floodplain), representing minimal flood hazard.
- Portions of the southern project area, specifically within the Magma Wash corridor, are designated as Zone A (areas subject to 100-year flooding without detailed base flood elevations determined).
- To the north of the project area, the Queen Creek Wash serves as a regional drainage feature, with mapped FEMA floodplains located outside of the project boundary but within close proximity.

A Hydrology Study prepared by Kimley-Horn (2025) utilized HEC-RAS 2D modeling to evaluate watershed flows across the site. Key findings include:

- The contributing watershed area is approximately 40 square miles.
- Proposed development can maintain existing drainage patterns while incorporating on-site retention and conveyance systems.
- Floodplain encroachments will be avoided, with solar PV and BESS facilities sited outside high-risk areas.
- Storm water design will employ retention basins, culverts, and dry wells consistent with Pinal County Flood Control District standards.

While Queen Creek Wash defines a regional drainage system north of the site, Magma Wash directly influences on-site drainage (south of the railroad) and represents the key hydrologic factor for project design and floodplain management within the project boundaries.

With appropriate drainage design, flood risks associated with the site are manageable. While the site is in proximity to both the Magma Wash (south) and the Queen Creek Wash (north), solar and storage facilities will be located to avoid adverse impacts. Compliance with County floodplain regulations will be ensured during future zoning and site plan approvals.

Environmental study

The project site consists of ±8,965 acres of undeveloped Arizona State Trust Land in a **Sonoran Desert landscape**. Vegetation is primarily creosote bush scrub and desert wash habitat. The applicant has indicated that **biological technical memorandum** has been provided, as per Arizona State Land Department (ASLD) requirements, to identify sensitive species and habitats. According to studies provided by the applicant, the key findings include the following:

- No critical habitat designated under the Endangered Species Act is present within the site.
- Protected species under the Arizona Game and Fish Department (AGFD) may occur within the area, including the Sonoran desert tortoise and migratory birds. The applicant will be required to follow AGFD guidelines for relocation and monitoring if species are encountered during construction.
- Existing washes on-site will be evaluated during future permitting for potential jurisdictional status under the Clean Water Act, Section 404.

The Pinal County Wildlife Connectivity Assessment: Report on Stakeholder Input (2013) identifies the project area as a **Landscape Movement Area**. **Future threats to wildlife connectivity were noted by Pinal County Open Space, Trails, & Regional Parks** as high and low density residential and commercial development with wildlife movement showing a higher concentration along washes.

The proposed project area is occupied by Species of Economic and Recreational Importance such as mule deer, javelina, and kit fox. It is recommended that the applicant incorporate and maintain open unfenced corridors across the project area to facilitate wildlife movement, including within upland habitats as well

as maintaining the washes that occur in the project area in their natural state without fencing or other barriers to wildlife movement (currently seen in the most recent site plan submittal). These washes serve multiple functions in the ecosystem, including landscape-level conveyance corridors for wildlife movement.

The applicant has prepared a **Class I cultural resources records review** in coordination with the Arizona State Museum (ASM) and the State Historic Preservation Office (SHPO). Initial review indicates potential for archaeological resources within the area given its proximity to historic travel corridors and known prehistoric sites in northern Pinal County.

- Any ground-disturbing activity will require compliance with A.R.S. §41-844 regarding discovery of human remains and cultural artifacts.
- Additional **Class III (intensive) surveys** will be conducted as part of the rezoning and construction permitting process.

During construction, the project will generate temporary dust, vehicle emissions, and particulate matter. The applicant will be required to obtain a **Dust Control Permit** from the Pinal County Air Quality Control, and to implement best management practices such as water trucks, soil stabilization, and vehicle speed limits. Once operational, the facility will generate negligible emissions.

Construction activities will result in **temporary noise impacts** associated with heavy equipment and vehicle traffic. These impacts will be limited in duration and mitigated by compliance with County construction hour restrictions. Operational noise from inverters and BESS cooling systems is anticipated to be minimal and will be subject to County performance standards at the property line.

The project will introduce large-scale solar arrays and associated facilities into an area of predominantly undeveloped desert. **Visual changes** will be most apparent from:

- **U.S. Route 60** to the north,
- **State Route 79** to the east, and
- The **Magma Arizona Railroad** corridor through the site.

Mitigation measures include perimeter fencing, retention of natural vegetation buffers where feasible, and low-profile design of solar panels. Due to the scale of the project, visual impacts may remain noticeable but are consistent with other regional utility and infrastructure uses. Based on the visual analysis and modeling conducted by the applicant, project will not be visible from mentioned roads.

According to the applicant's narratives, the proposed solar field and associated facilities **require minimal water during operations**, and no water is needed for the generation of electricity. The project will have **no direct impact on groundwater resources** within the area.

The majority of water demand will occur during the **construction phase**, primarily for **dust suppression**. Based on project estimates, construction water use is **not anticipated to exceed one (1) acre-foot per megawatt of installed capacity**, equating to approximately **1,100 acre-feet** over the duration of construction. Water for construction activities will be sourced from a commercial water provider or an existing water rights holder and delivered by truck to the site. Onsite water storage tanks will be used to support dust suppression during active construction.

During the **operational phase**, water use will be limited to periodic solar panel washing and minor domestic use associated with operations and maintenance activities. **Operational water demand is not expected to exceed 20 acre-feet per year, as per applicant**. Panel washing will be performed only on an as-needed basis to maintain efficiency by removing accumulated dust.

STAFF ANALYSIS AND RECOMMENDATION:

The Silver King Energy Center represents a significant opportunity for Pinal County to advance renewable energy production while diversifying its economic base. Unlike traditional fossil-fuel generation facilities, which require substantial water resources, produce air emissions, and generate long-term environmental impacts, solar photovoltaic and battery storage facilities provide clean, low-impact, and sustainable power generation.

Key advantages of renewable energy production over conventional facilities include:

- **Reduced Air Emissions**: Solar power produces electricity without combustion, eliminating greenhouse gas emissions, particulates, and other pollutants associated with coal or natural gas plants.
- **Lower Water Use**: Solar facilities require minimal water, particularly compared to steam-driven thermal power plants that consume large volumes for cooling.
- **Compatibility with State Trust Land**: Large-scale solar uses allow the productive use of desert landscapes with limited long-term disturbance and provide a stable source of revenue for the Arizona Permanent School Fund.
- **Scalability and Resilience**: Integration of Battery Energy Storage Systems (BESS) improves grid reliability and reduces dependence on single-source, water- and fuel-intensive generation.
- **Alignment with State and County Policy**: Arizona has adopted renewable energy standards and long-term goals to expand solar production, and Pinal County's Comprehensive Plan encourages land uses that conserve resources and promote sustainability.

AIR EMISSIONS. Traditional fossil-fuel power plants, particularly those relying on **coal and natural gas**, generate electricity through combustion, which releases large quantities of **carbon dioxide (CO_2), sulfur dioxide (SO_2), nitrogen oxides (NO_x), and particulate matter**. These pollutants contribute to **climate change, smog, acid rain, and respiratory illnesses**.

By contrast, **solar photovoltaic (PV) systems** produce electricity directly from sunlight with **no combustion process and no direct emissions**. Over its operational life, a utility-scale solar facility such as the Silver King Energy Center will displace significant amounts of fossil-fuel-based generation, thereby:

- **Reducing greenhouse gas emissions** that contribute to climate change.
- **Lowering local air pollutants** (NO_x, SO_2, particulates), improving public health outcomes.
- **Avoiding waterborne pollutants** associated with cooling systems at traditional plants.

According to the **U.S. Environmental Protection Agency (EPA)**, each megawatt-hour (MWh) of electricity generated by solar instead of fossil fuels avoids approximately **0.576 metric tons of CO_2 emissions**. For a facility with up to **1,100 MW capacity**, this could represent **millions of tons of avoided CO_2 emissions annually**, depending on generation and grid displacement factors (EPA Greenhouse Gas Equivalencies Calculator). See Emissions avoided & equivalencies based on 30% capacity factor on the Figure 1.

Solar energy provides a direct environmental benefit by **eliminating operational emissions** and improving air quality relative to traditional power generation, while contributing to long-term sustainability goals.

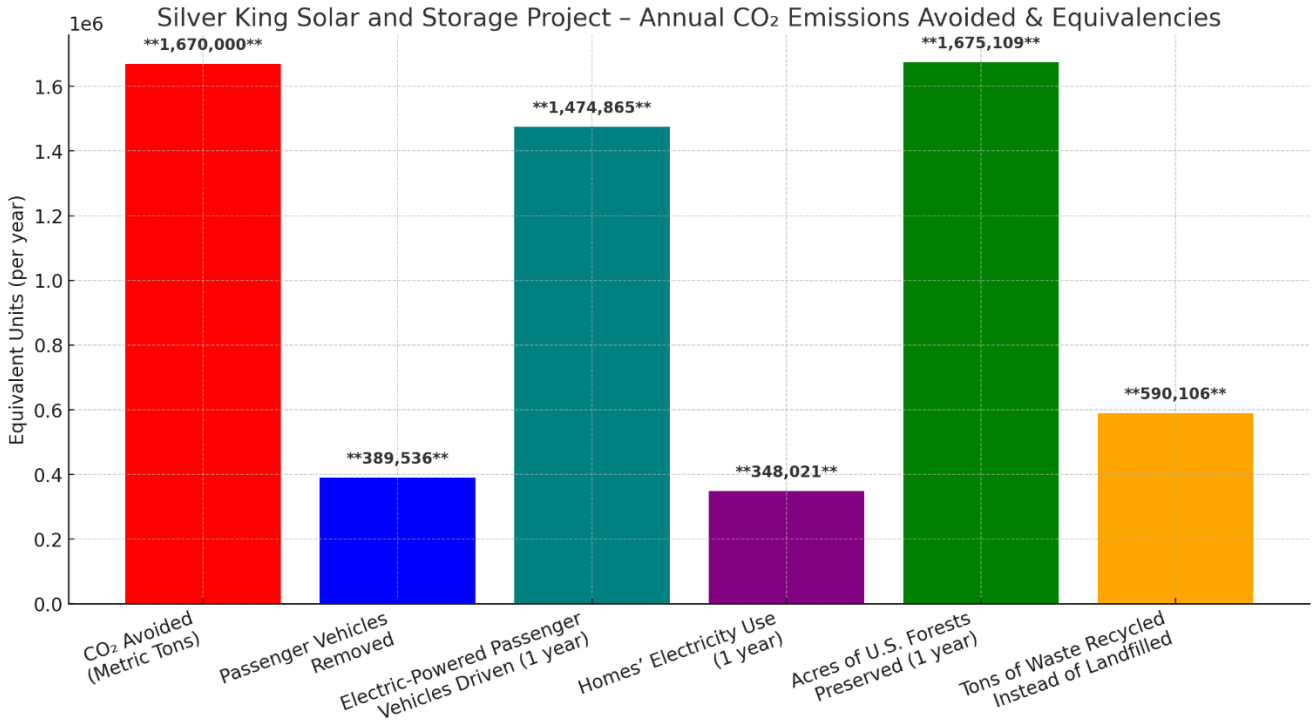


Figure 1. Annual Emissions Avoided & Equivalencies (@30% capacity factor).

WATER USE. Traditional thermoelectric power plants—such as **coal, natural gas, and nuclear facilities**, require substantial volumes of water for **steam production and cooling**. According to the **U.S. Department of Energy** (DOE, 2014, *The Water-Energy Nexus: Challenges and Opportunities*), a conventional coal or nuclear plant can consume **400–600 gallons of water per megawatt-hour (MWh)** of electricity generated. Natural gas combined-cycle plants typically consume **180–300 gallons per MWh**. This heavy reliance on water places significant pressure on groundwater and surface water resources, particularly in **arid regions such as Pinal County**. By contrast, **solar photovoltaic (PV) generation** requires **no water for power production**. Water use is limited to:

- **Dust suppression during construction** (temporary and short-term).
- **Periodic panel washing** during operations to maintain efficiency.

Independent Sources on Solar PV Water Consumption confirms applicant's estimations but may slightly vary depending on the sources and conditions:

1. **U.S. Department of Energy** (DOE, 2014 – *The Water-Energy Nexus*)
   - Solar **PV** systems require **negligible water for power generation**.
   - Water use is limited to **panel washing**, which varies by region, dust levels, and cleaning methods.
   - Typical estimates: **15–30 gallons/MWh** in arid areas.
2. **National Renewable Energy Laboratory** (NREL, 2015 – *The Water Consumption of Energy Production*)
   - Utility-scale solar PV: **~20 gallons/MWh** (mostly for panel washing).

- By comparison, **Concentrated Solar Power (CSP)** with wet cooling uses **600–800 gallons/MWh** (much higher, similar to coal/nuclear).

3. **U.S. Geological Survey** (USGS, 2018 – *Thermoelectric Power Water Use*)
   - Confirms PV water use is **orders of magnitude lower** than fossil fuels or CSP.
   - Cites average **0.05 acre-feet/MW/year** for large PV systems, equating to about **15–25 gallons/MWh**.
4. **World Bank** (2018 –*Where Sun Meets Water*)
   - PV systems typically consume **10–30 gallons/MWh** for panel washing.
   - In desert environments, higher-frequency cleaning may push values closer to **30–40 gallons/MWh**, but still negligible compared to fossil generation.

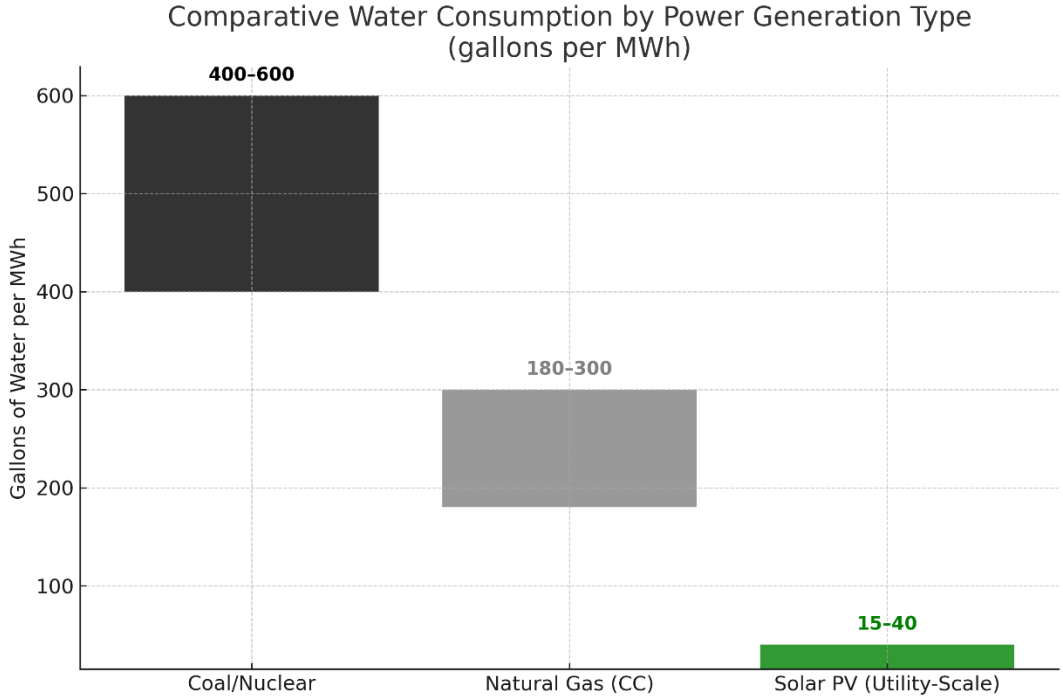


Figure 2. Comparative Water Consumption by Power Generation Type

Water consumption is a critical consideration in Pinal County, where long-term groundwater availability is a central factor in evaluating development proposals. A comparison across potential land uses for the 8,965-acre Silver King Solar and Storage Project site highlights the substantial conservation benefit of utility-scale renewable energy development.

Utility-scale solar photovoltaic (PV) facilities in arid regions typically consume **0.05–0.10 acre-feet of water per acre per year (approximately 16,000–32,000 gallons/MW/year)**, primarily for panel washing and dust suppression. These values are supported by the National Renewable Energy Laboratory's review of operational water use factors *(NREL, A Review of Operational Water Consumption and Withdrawal Factors for Electricity Generating Technologies, NREL/TP-6A20-50900, 2011)* and subsequent U.S. Department of Energy reports on concentrating solar power and photovoltaics *(DOE, Concentrating Solar Power and Photovoltaics Water Consumption Reports, 2015).* This operational demand is minimal and not required for actual electricity production.

Battery Energy Storage Systems (BESS), which are proposed in conjunction with the solar facility, have **negligible ongoing water demand**. Water use is limited to closed-loop HVAC cooling within enclosures

and rare emergency fire suppression, with no measurable consumptive demand identified in national studies *(U.S. Energy Information Administration (EIA), Battery Storage in the United States: An Update on Market Trends, 2020)* or in *California Energy Commission BESS permitting reports*.

By comparison, **Medium Low Density Residential (MLDR)** development in Central Arizona averages **0.5–1.0 acre-feet per acre per year**, reflecting combined indoor, outdoor, and landscaping water needs. These estimates correspond with the Arizona Department of Water Resources' *(ADWR, Arizona Water Use Estimates, 2021)* municipal water use data and the Central Arizona Project's (*CAP, Residential Water Use in Central Arizona, 2019*) analysis of residential demand, which report that typical municipal consumption in the region is **100–150 gallons per capita per day (GPCD)**. At MLDR densities of 1–3 dwelling units per acre, this equates to approximately 0.5–1 AFY per acre.

The most water-intensive comparative use is **irrigated agriculture**, which in Pinal County consumes on average **3–6 acre-feet per acre per year**, depending on crop type and irrigation practices. These figures are documented by the University of Arizona Cooperative Extension's irrigation guidance *(UoACE, Irrigation Water Requirements for Crops in Arizona, 2017)* and the ADWR's Agricultural Water Use report *(ADWR, Agricultural Water Use in Arizona, 2020)* for major crops such as cotton, alfalfa, sorghum, and forage.

Taken together, these comparisons demonstrate that the proposed Silver King Solar and Storage Project would require **substantially less water than either residential or agricultural development** of the same site. Even under maximum operational assumptions, PV and BESS uses would represent a **90–98% reduction in annual water demand compared to irrigated agriculture**, and a **75–90% reduction compared to residential development**.

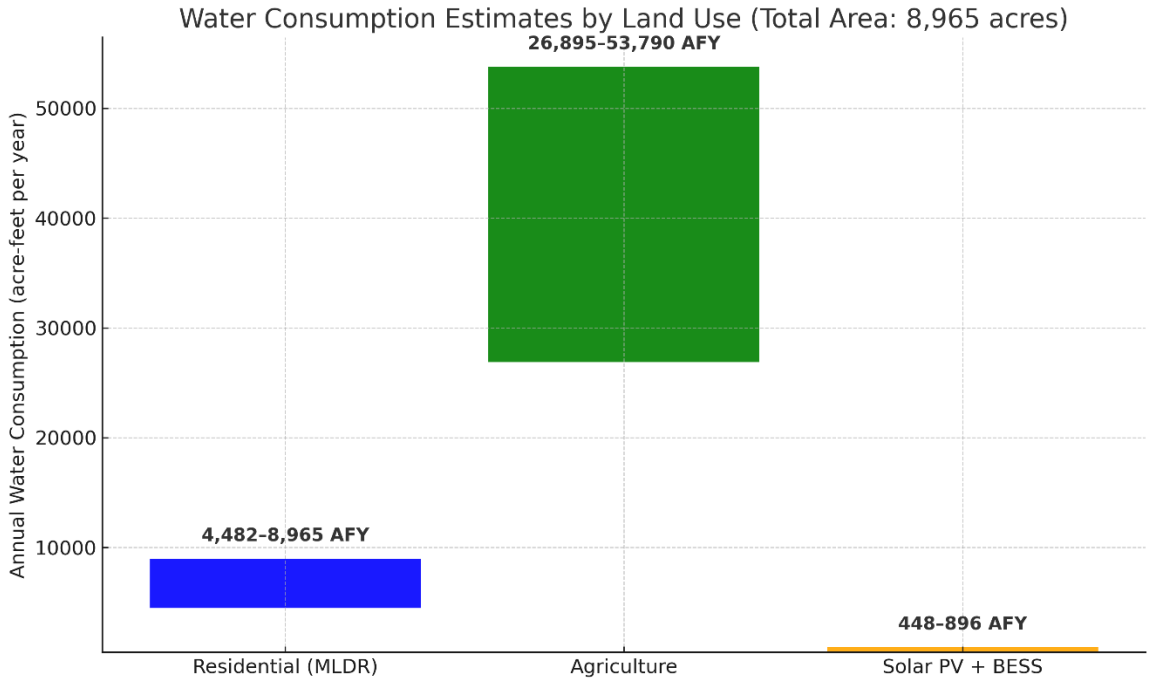


Figure 3. Yearly Water Consumption Estimates by Land Use.

COMPATIBILITY WITH STATE TRUST LAND. The Silver King Solar and Storage Project site is located on lands administered by the **Arizona State Land Department (ASLD).** State Trust Land is not public land;

rather, it is held in trust for specific beneficiaries, with the largest share of revenues directed to **public education in Arizona.** Trust revenues are generated through land leases, sales, and royalties, and projects that locate on State Trust Land must demonstrate that they provide strong and consistent financial returns while remaining compatible with surrounding land uses.

Because the project site is located on **Arizona State Trust Land**, revenues are distributed through two primary mechanisms: (1) **lease payments** to the Arizona State Land Department (ASLD) for the benefit of specific Trust beneficiaries, and (2) **property tax revenues** to local taxing jurisdictions, including school districts.

Each parcel of State Trust Land has a designated beneficiary, established under the Arizona-New Mexico Enabling Act of 1910 and the State Constitution. For the parcels comprising the Silver King project area, the designated beneficiaries include:

- **Normal Schools** (largest beneficiary for the project area) – supports teacher education and training programs at Arizona's public universities, strengthening the pipeline of qualified educators.
- **Agriculture and Mechanic Colleges** – supports agricultural research, mechanical trades, and extension programs vital to Arizona's rural economy.
- **State Charitable, Penal, and Reformatory Institutions** – provides financial support to correctional and rehabilitative facilities.
- **County Bond – Common Schools** – revenues derived from County Bond lands are now added to the Common Schools grant.
- **School of Mines** – supports mining engineering and geology programs at state institutions, reflecting Arizona's historic mining economy.
- **Common Schools** (largest beneficiary statewide, though not the largest in this project area) – the largest trust overall, supporting K–12 education across Arizona (92% of distribution).
- **Miners' Hospital** – historically funded health care for miners, now directed to associated public health support.
- **Legislative, Executive, and Judicial Buildings** – assists in funding the construction and maintenance of Arizona's state government buildings.
- **Penitentiary** – supports prison facilities and related operations.

According to the **Arizona State Land Department Renewable Energy Program** *(ASLD, Renewable Energy Program Lease Terms and Revenues, 2022),* utility-scale solar leases typically generate **$40–60 per acre annually** during early lease phases, increasing to **$200–400 per acre annually** once operational. For the Silver King project area of **8,965 acres**, this translates to approximately **$1.8–3.6 million annually** in lease revenue directed to the Trust's designated beneficiaries.

In addition, the project will be centrally valued by the **Arizona Department of Revenue** *(ADOR, Valuation of Renewable Energy Equipment for Property Tax Purposes, 2021)* under its renewable energy property valuation formula. Based on comparable-scale projects with capital investment in the range of **$1.5–1.8 billion**, estimated annual **property tax revenues** are projected at **$15–20 million** during peak assessed years.

Research by the **Morrison Institute for Public Policy** *(The Role of State Trust Land in Funding Arizona Public Education, 2019)* indicates that approximately **50–55% of property tax revenues** from large-scale utility projects flow directly to **local school districts** under Arizona's school funding structure. Applying

this distribution, the Silver King project could generate **$7–11 million annually for local schools in Pinal County**, providing a recurring long-term benefit.

***SCALABILITY AND RESILIENCE*.** The Silver King Solar and Storage Project represents a flexible and forward-looking land use that can be scaled to meet evolving regional energy needs while enhancing system resilience. Unlike traditional generation facilities, which typically require large, permanent infrastructure investments, utility-scale solar paired with battery energy storage systems (BESS) can be developed in **modular phases**. This approach allows capacity to be added incrementally, aligning with market demand, grid requirements, and technological advancements without overcommitting resources at the outset.

From a resilience perspective, the integration of BESS provides **grid stability and reliability benefits**. Batteries allow excess solar energy to be stored during periods of high generation and discharged during evening hours or peak demand, reducing reliance on natural gas peaker plants and helping to buffer the grid against outages. The distributed nature of solar arrays and storage systems also lowers the risk of system-wide disruptions compared to centralized fossil fuel facilities.

Further, solar with storage offers **long-term adaptability**. Advances in solar panel efficiency and battery technology can be incorporated into project upgrades over time, ensuring the facility remains competitive and effective over its operational life. At the end of the lease term, the modular nature of the infrastructure also facilitates reversibility, enabling decommissioning and land restoration with minimal permanent impact.

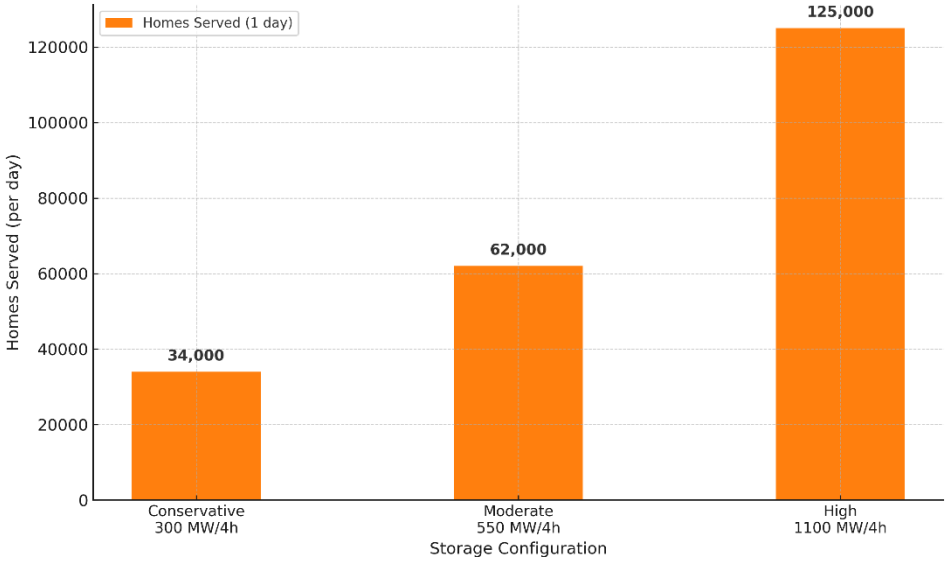


Figure 4. Estimated Homes Served per Day by BESS.

To illustrate the resilience benefit in quantitative terms, staff modeled several storage configurations using the standard industry benchmark of **four-hour duration batteries**, as described by the U.S. Department of Energy's National Renewable Energy Laboratory (*NREL, Grid-Scale Battery Storage: Cost and Performance Trends, 2020*) and the U.S. Energy Information Administration (*EIA, Battery Storage in the United States: An Update on Market Trends, 2020*). For example:

- A **300 MW / 4-hour** battery would store approximately **1,200 MWh**, enough to supply the daily electricity needs of about **34,000 Arizona homes**.

- A **550 MW / 4-hour** system would provide **2,200 MWh**, sufficient for approximately **62,000 homes**.
- A **1,100 MW / 4-hour** system (parity with the proposed solar capacity) would deliver **4,400 MWh**, meeting the daily needs of roughly **125,000 homes**.

These household equivalencies are based on the **average residential electricity use in Arizona of 1,059 kWh per month, or approximately 35.3 kWh per day**, as reported by the U.S. Energy Information Administration (*EIA, Electric Sales, Revenue, and Average Price – Residential Sector, State Data, 2023*).

By providing modular, scalable storage capacity, the Silver King Solar and Storage Project **enhances resilience** at both the local and regional levels, ensuring that renewable energy resources can reliably support Pinal County's grid under varying demand and outage conditions.

ALIGNMENT WITH STATE AND COUNTY POLICY. The proposed Silver King Solar and Storage Project is consistent with and directly supportive of both **State of Arizona** and **Pinal County** policy objectives related to renewable energy, land use, and economic development.

At the **state level**, Arizona has established a clear policy framework promoting the transition toward renewable energy resources, both to strengthen grid reliability and to diversify the energy portfolio. The Arizona Corporation Commission (ACC) has adopted renewable energy standards requiring regulated utilities to incorporate renewable generation into their portfolios. In addition, the Arizona State Land Department (ASLD) actively encourages renewable energy leasing on State Trust Lands as a strategy to generate stable, long-term revenue streams for beneficiaries such as public schools, Normal Schools, and other designated institutions. The Silver King Project advances these priorities by converting underutilized State Trust Lands into a productive, revenue-generating renewable energy facility on an interim use basis.

At the **county level**, the Pinal County Comprehensive Plan identifies renewable energy as a land use that supports long-term sustainability, economic diversification, and environmental stewardship. The plan emphasizes encouraging utility-scale renewable generation in appropriate rural areas with access to major transmission corridors. By locating the project along U.S. Highway 60 and State Route 79, adjacent to existing utility infrastructure, the Silver King Project aligns with these policies by minimizing land use conflicts and maximizing infrastructure efficiency.

Further, the project advances **economic development goals** by creating temporary construction employment, ongoing operations and maintenance positions, and generating substantial property tax revenues for local governments and school districts. The project also supports **environmental stewardship commitments**, including the reduction of greenhouse gas emissions, lower water consumption compared to agricultural or residential land uses, and preservation of natural washes to maintain wildlife movement corridors.

FIRE SAFETY CONSIDERATIONS

Solar PV Arrays:

- Photovoltaic (PV) panels are non-combustible and present minimal fire risk.
- The primary hazard is electrical arcing, which is addressed through National Electrical Code (NEC) compliance, UL-certified components, and regular inspection/maintenance protocols.

- Industry standards (NFPA 855 and NEC Article 690) require equipment grounding, accessible disconnects, and emergency response planning.

Battery Energy Storage Systems (BESS):

- Lithium-ion batteries can pose **thermal runaway risks** if damaged or improperly managed.
- National standards now regulate BESS siting, design, and fire protection, including:
  - **NFPA 855** (*Standard for the Installation of Stationary Energy Storage Systems*).
  - **UL 9540 / UL 9540A** testing requirements for battery safety and thermal propagation.
  - **International Fire Code (IFC),** adopted in Arizona jurisdictions, requires spacing, ventilation, fire suppression, and monitoring systems.
- Modern BESS facilities use containerized systems with integrated **fire suppression**, **temperature/humidity controls**, and **gas detection systems**.
- Pinal County Emergency Management and local fire districts will review emergency response protocols during the rezoning and site plan review stages.

Emergency Response & Coordination:

- The project developer must coordinate with the **local fire authority** to prepare an **Emergency Response Plan (ERP)**.
- Fire departments are trained on PV/BESS hazards, access corridors, and shut-down procedures.

Staff finds that the proposed Major Comprehensive Plan Amendment to change the designation from *Medium Low Density Residential (MLDR)* to *Green Energy Production (Solar)* is consistent with County and State policy goals for renewable energy, economic diversification, and State Trust Land stewardship. The applicant has provided a site plan that includes required **wash buffers** to preserve natural drainage and wildlife movement corridors, and will be required to comply with all **environmental stewardship measures** identified by Pinal County Open Space and Parks. Compared to alternative uses such as agriculture or residential, the project represents a **low water consumption land use**, while also delivering significant **lease revenues to State Trust beneficiaries, particularly public schools, along with long-term property tax revenues and construction employment**. Taken together, the proposal advances sustainability, provides measurable public benefits, and can be appropriately refined during subsequent rezoning and site plan review stages.

However, should the Citizen Advisory Committee find, after the presentation of the applicant and together with the testimony and evidence presented at the public hearing, that this Major Comprehensive Plan amendment is needed and necessary at this location and time, will not negatively impact adjacent properties, will promote orderly growth and development of the County and will be compatible and consistent with the applicable goals and policies of the Pinal County Comprehensive Plan, then staff will recommend that the Citizen Advisory Committee forward **PZ-PA-010-25**, to the Planning and Zoning Commission with a favorable recommendation. If the Citizen Advisory Committee cannot find all of the factors listed above grounds for approval, then staff recommends that the Citizen Advisory Committee forward this case to the Planning and Zoning Commission with recommendation of denial.

Date Prepared: 08/18/24 VP

NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT 6:00 P.M. ON THE **4TH** DAY OF **SEPTEMBER 2025**, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 311 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR **MAJOR COMPREHENSIVE PLAN AMENDMENT** TO THE PINAL COUNTY COMPREHENSIVE PLAN.

PZ-PA-010-25 – PUBLIC HEARING/ACTION: Silver King Solar, LLC, Dave Lundgren, applicant/agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 8,965± acres of land from Moderate Low Density Residential (MLDR, 1-3.5 du/ac) to Green Energy Production for photovoltaic solar generation facility, a Battery Energy Storage System (BESS), substation and a generation-tie (gen-tie) transmission line, situated on a portions of sections 13, 14, 22, 23, 24, 25, 26, 27, 34, 35, 36 of range 09E, T02D, and sections 18, 19, 30, 31 of range 10E, T02S, and sections 1, 2, 11, 12 of range 09E, T03S, and section 6 of range 10E, T03S of the Gila and Salt River Base and Meridian tax parcels on file for reference, located to the south-west of Florence Junction, south of Queen Creek wash, north-east of Town of Florence, and five (5) miles to the north of E Arizona Farms Rd in unincorporated area of Pinal County.

ALL PERSONS INTERESTED IN THIS MATTER MAY APPEAR AND SPEAK AT THE PUBLIC HEARING AT THE DATE, TIME, AND PLACE DESIGNATED ABOVE.

DOCUMENTS PERTAINING TO THIS CASE CAN BE FOUND ON THE NOTICE OF HEARING PAGE FOR THE P&Z COMMISSION AT:
https://www.pinal.gov/236/Notice-of-Hearings

DATED THIS **5th** DAY OF **AUGUST 2025**, by Pinal County Development Services

TO QUALIFY FOR FURTHER NOTIFICATION IN THIS LAND USE MATTER YOU MUST FILE WITH THE PLANNING DEPARTMENT A WRITTEN STATEMENT OF SUPPORT OR OPPOSITION TO THE SUBJECT APPLICATION. YOUR STATEMENT **MUST** CONTAIN THE FOLLOWING INFORMATION:

1) Planning Case Number (see above)
2) Your name, address, telephone number and property tax parcel number **(Print or type)**
3) A brief statement of reasons for supporting or opposing the request
4) Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:
PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT
85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132

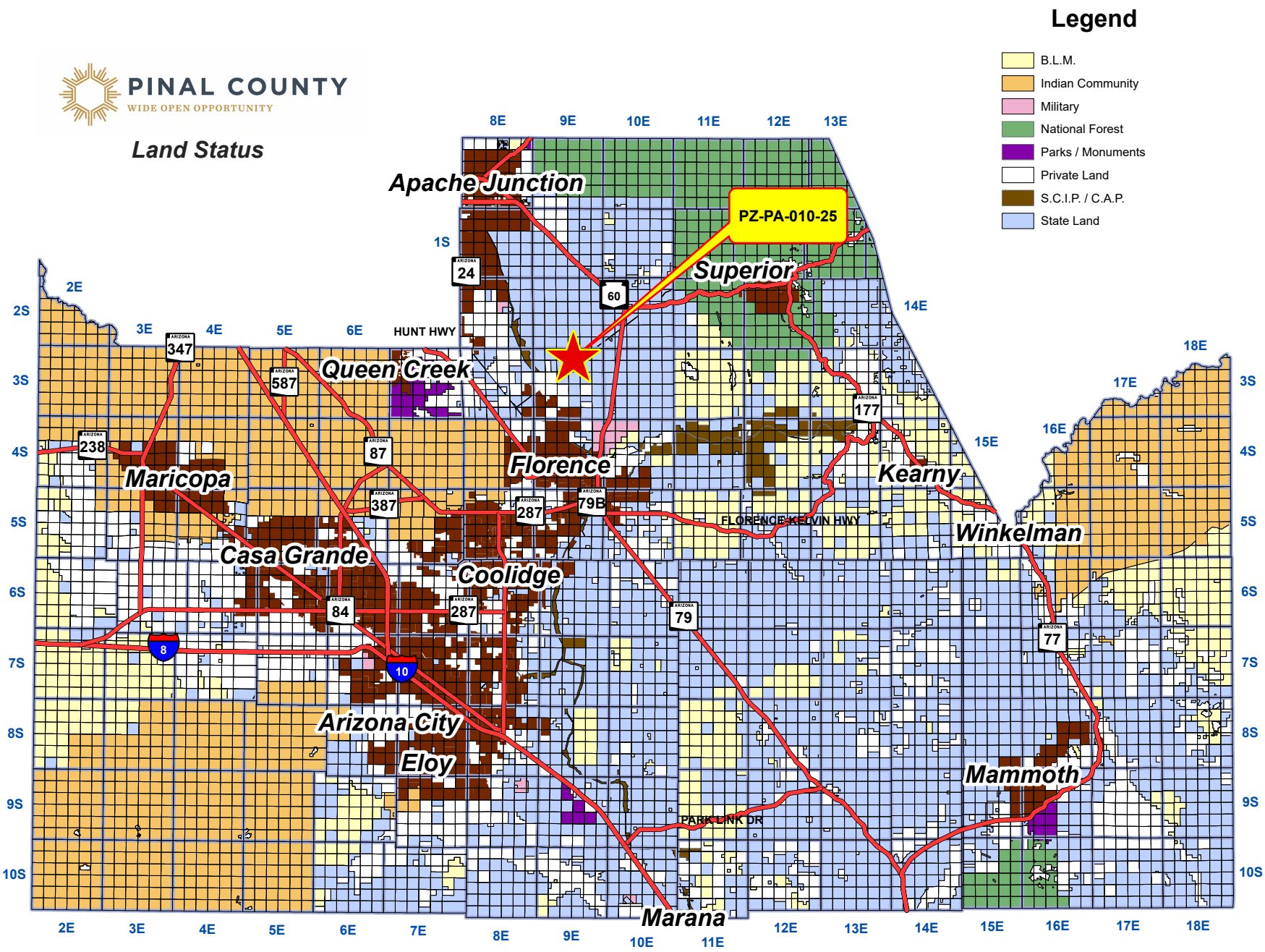
Contact for this matter: Valentyn Panchenko, Planner
E-mail address: valentyn.panchenko@pinal.gov
Phone # (520) 866-6414

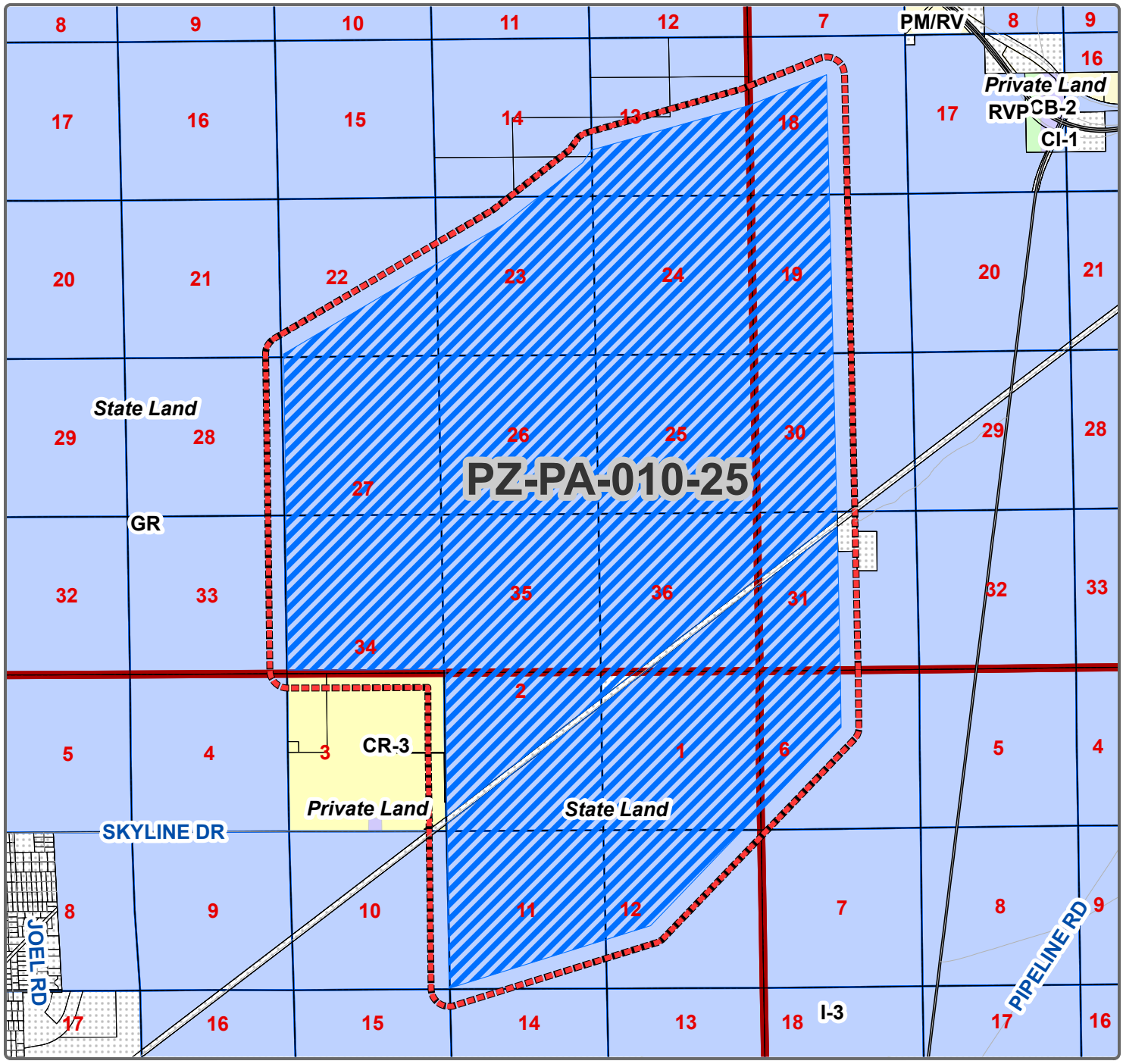
[*Anything below this line is not for publication*.]

Pinal Central Dispatch
Arizona Republic

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Land Status





Community Development

PZ-PA-010-25 – PUBLIC HEARING/ACTION: Silver King Solar LLC, Dave Lundgren, applicant/agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 8,965.90± acres of land from Moderate Low Density Residential (MLDR, 1-3.5 du/ac) to Green Energy Production for photovoltaic solar generation facility, battery energy storage system, substation and generation tie line, situated on a portions of sections 13, 14, 22, 23, 24, 25, 26, 27, 34, 35, 36 of range 09E, T02D, and sections 18, 19, 30, 31 of range 10E, T02S, and sections 1, 2, 11, 12 of range 09E, T03S, and section 6 of range 10E, T03S of the Gila and Salt River Base and Meridian tax parcels on file for reference, located to the south-west of Florence Junction, south of Queen Creek wash, north-east of Town of Florence, and five (5) miles to the north of E Arizona Farms Rd in unincorporated area of Pinal County.

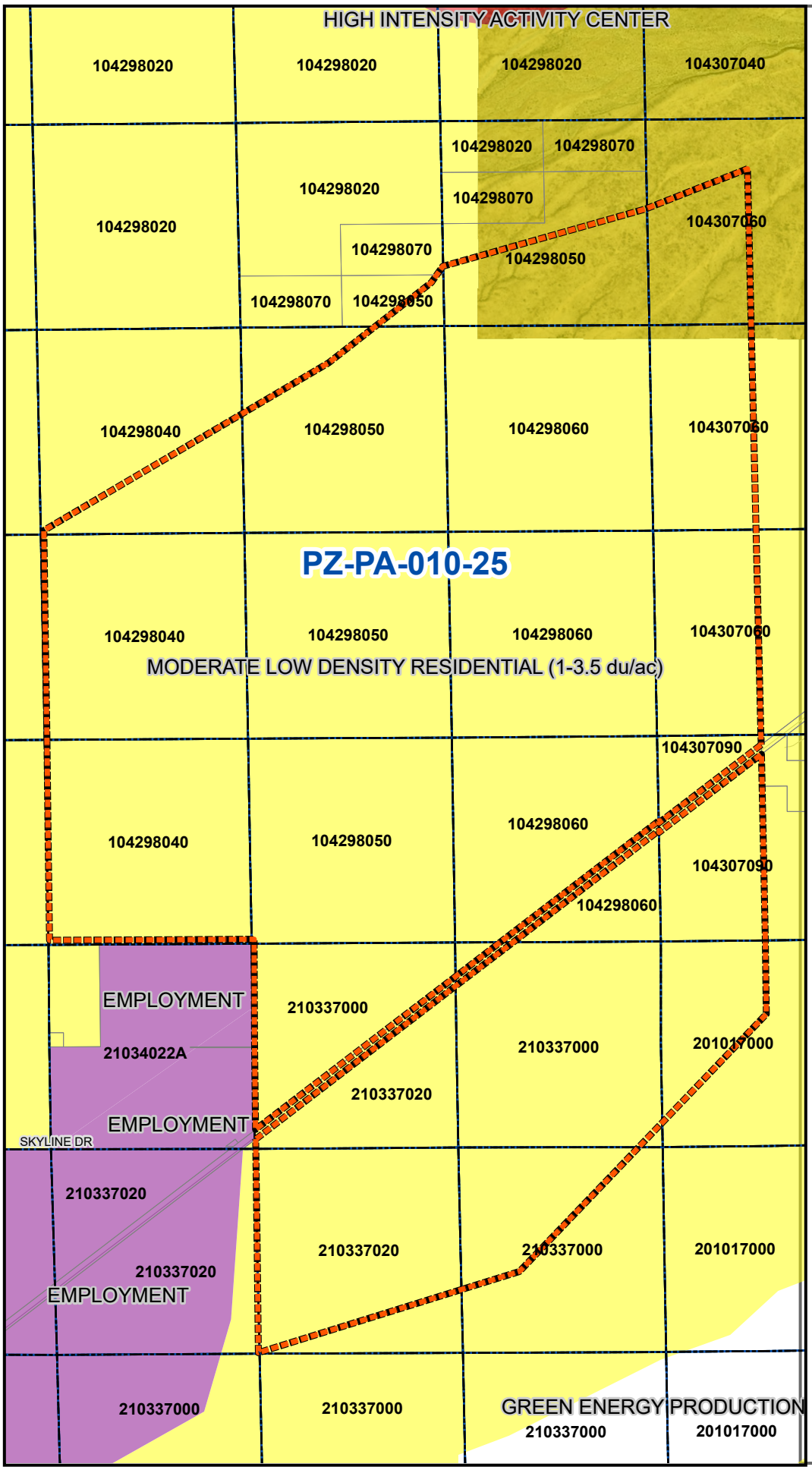
Current Zoning: GR	Requested Zoning: Rezone	Current Land Use: MLDR

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Legal Description:

Situated on a portions of sections 13, 22, 23, 24, 25, 26, 27, 34, 35, 36 of range 09E, T02D, and sections 18, 19, 30, 31 of range 10E, T02S, and sections 1, 2, 11, 12 of range 09E, T03S, and section 6 of range 10E, T03S of the Gila and Salt River Base and Meridian tax parcels on file for reference, located to the south-west of Florence Junction, south of Queen Creek wash, north-east of Town of Florence, and five (5) miles to the north of E Arizona Farms Rd in unincorporated area of Pinal County.

Sheet No. 1 of 1	Owner/Applicant: SILVER KING SOLAR LLC DAVE LUNDGREN		
	Drawn By: GIS / IT /LJT		Date: 07/10/2025
	Section: *multiple*	Township: *multiple*	Range: *multiple*
	Case Number: PZ-PA-010-25		



PINAL COUNTY
WIDE OPEN OPPORTUNITY

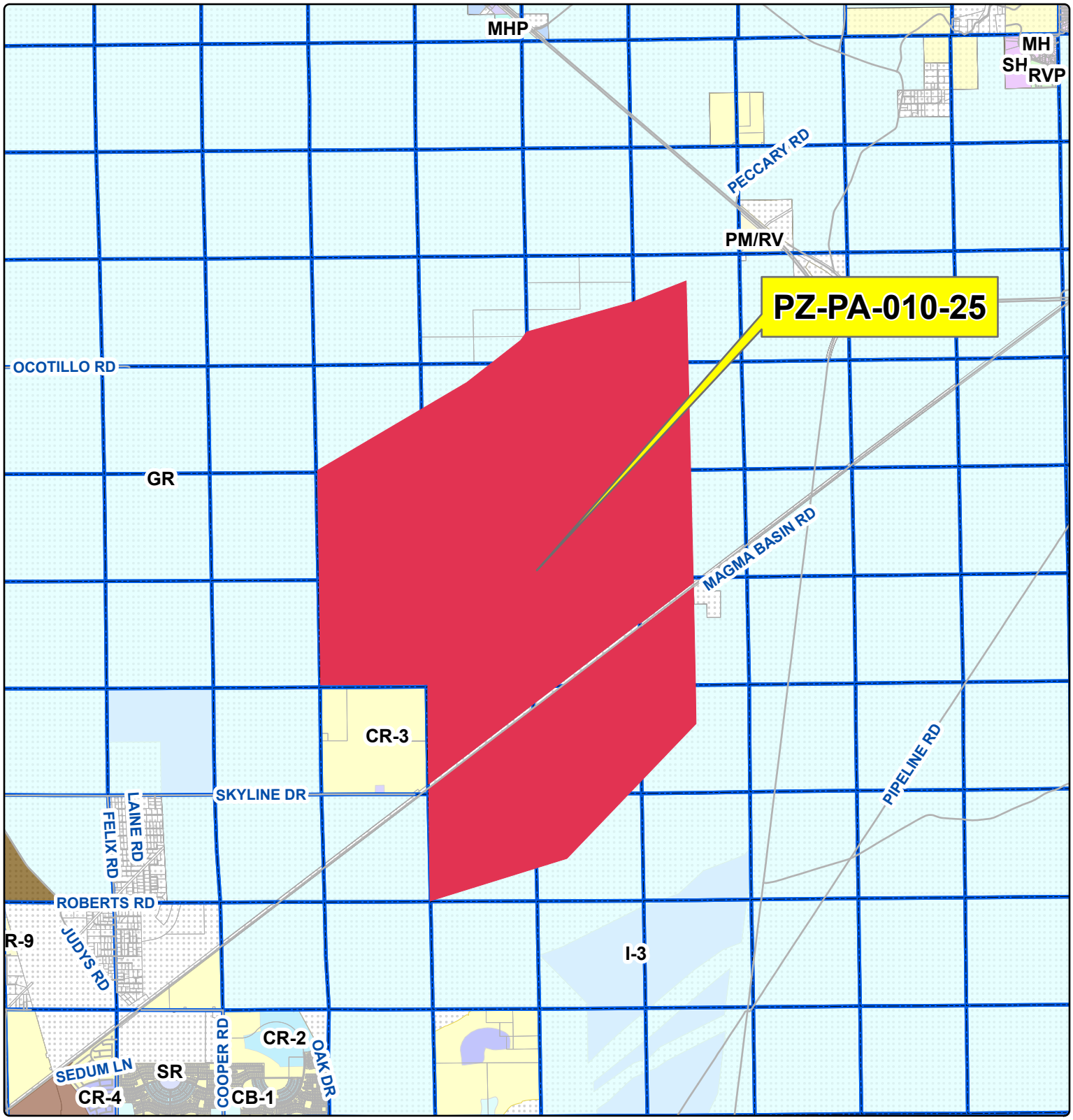
PZ-PA-010-25

FROM:

MODERATE LOW DENSITY RESIDENTIAL

TO:

GREEN ENERGY PRODUCTION



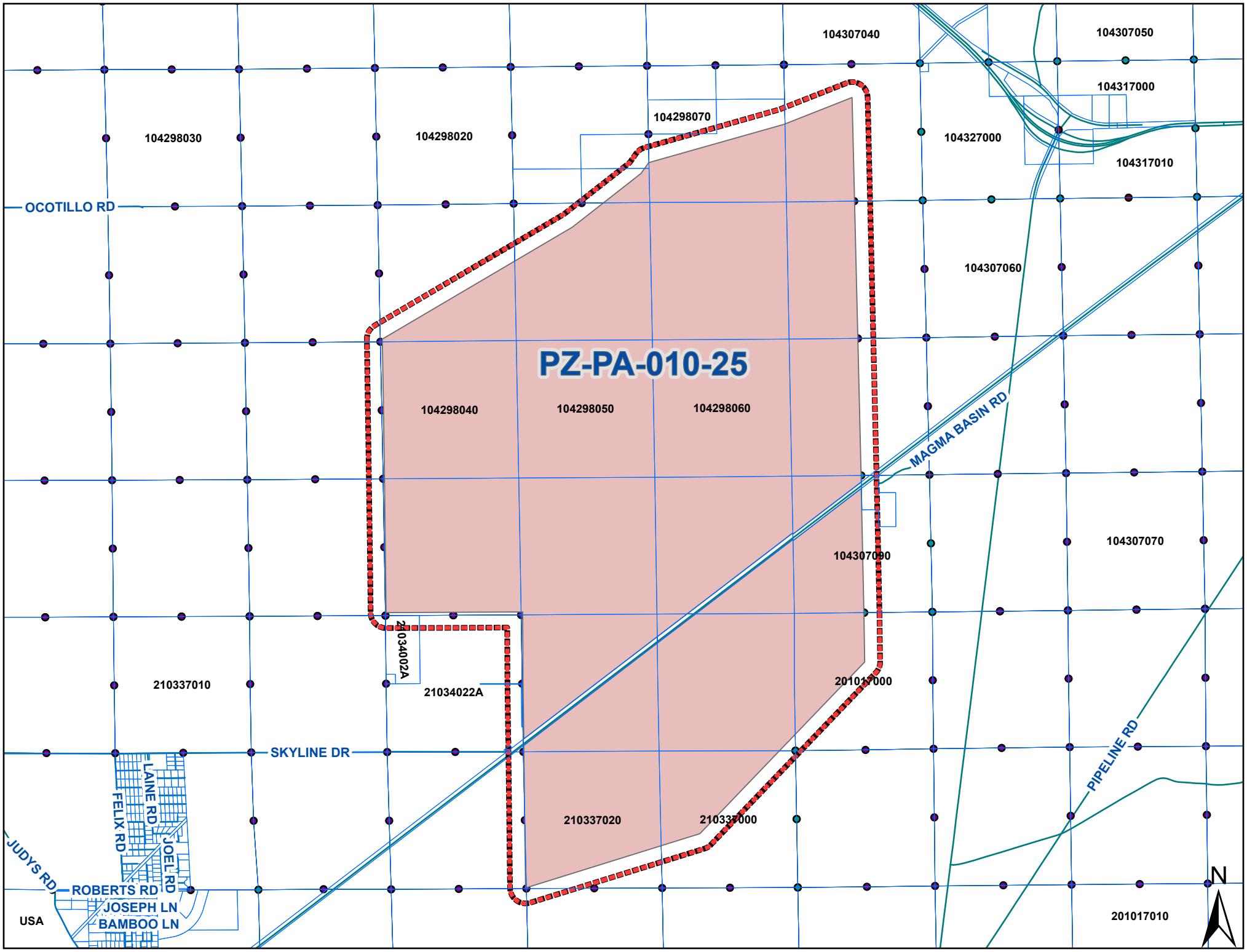
Community Development

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Legal Description:

Situated on a portions of sections 13, 22, 23, 24, 25, 26, 27, 34, 35, 36 of range 09E, T02D, and sections 18, 19, 30, 31 of range 10E, T02S, and sections 1, 2, 11, 12 of range 09E, T03S, and section 6 of range 10E, T03S of the Gila and Salt River Base and Meridian tax parcels on file for reference, located to the south-west of Florence Junction, south of Queen Creek wash, north-east of Town of Florence, and five (5) miles to the north of E Arizona Farms Rd in unincorporated area of Pinal County.

Owner/Applicant:	SILVER KING SOLAR LLC DAVE LUNDGREN
Drawn By:	GIS / IT / LJT
Date:	07/10/2025
Sheet No.	1 of 1
Section	multiple
Township	multiple
Range	multiple
Case Number:	PZ-PA-010-25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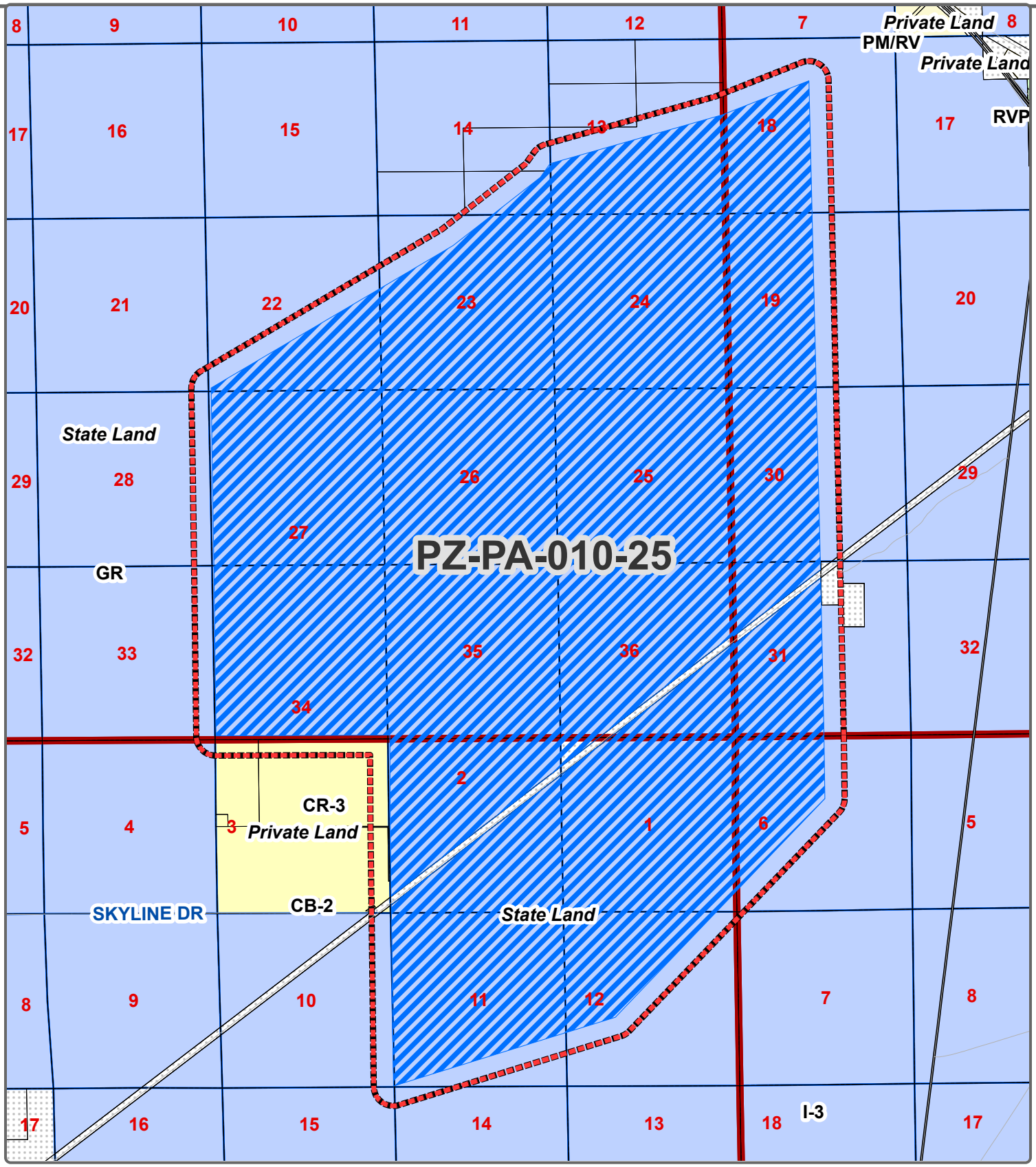


Community Development

Owner/Applicant:	Silver King Solar LLC Dave Lundgren
Drawn By:	GIS/IT - LJT
Date:	07/10/2025
Section	multiple
Township	multiple
Range	multiple
Case Number:	PZ-PA-010-25

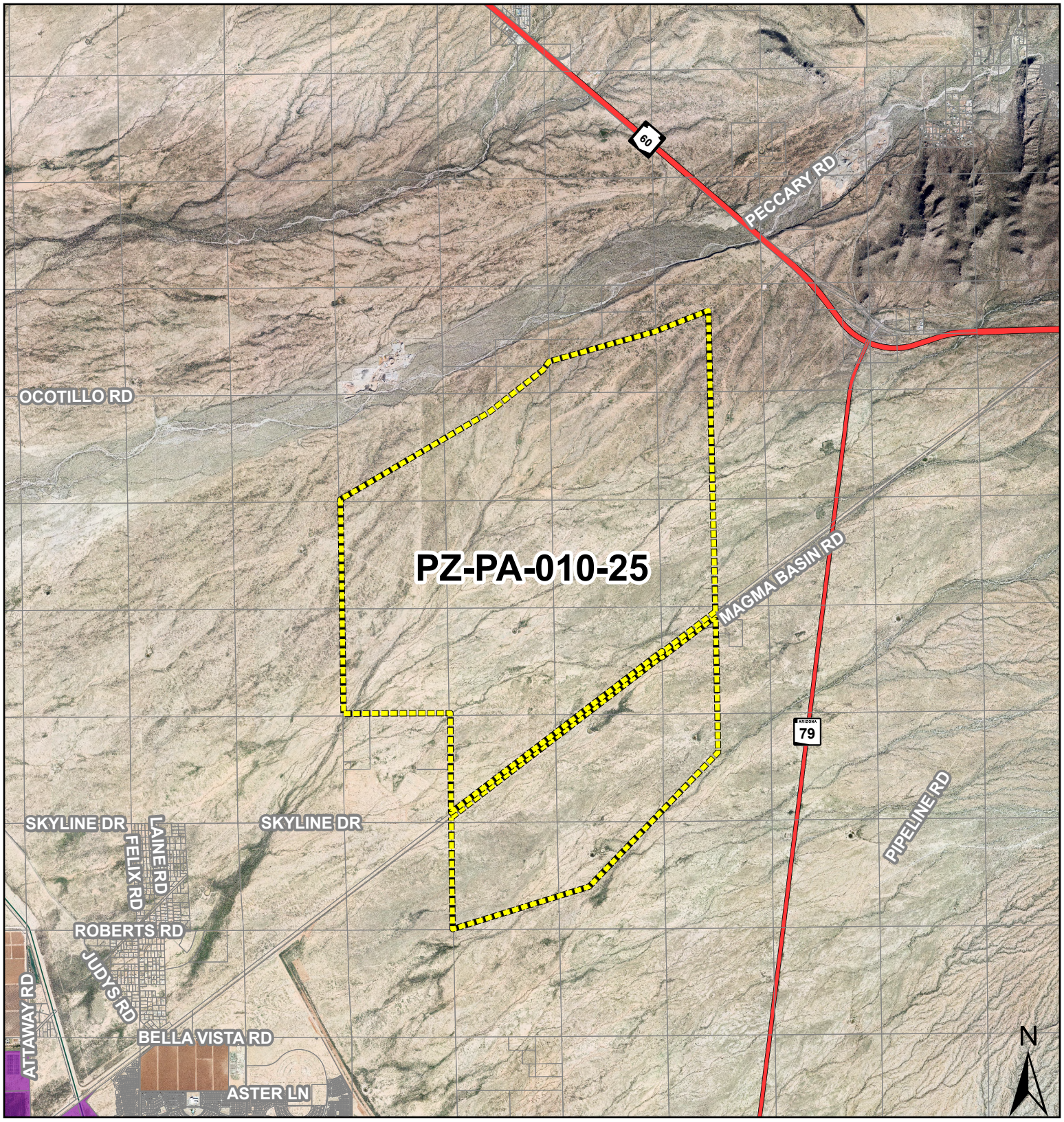
Legal Description:

Situated on a portions of sections 13, 22, 23, 24, 25, 26, 27, 34, 35, 36 of range 09E, T02D, and sections 18, 19, 30, 31 of range 10E, T02S, and sections 1, 2, 11, 12 of range 09E, T03S, and section 6 of range 10E, T03S of the Gila and Salt River Base and Meridian tax parcels on file for reference, located to the south-west of Florence Junction, south of Queen Creek wash, north-east of Town of Florence, and five (5) miles to the north of E Arizona Farms Rd in unincorporated area of Pinal County.

Sheet No. 1 of 1

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Current Zoning: CR-3
Request Zoning: Rezone
Current Land Use: MLDR



Community Development

PINAL COUNTY
WIDE OPEN OPPORTUNITY

PZ-PA-010-25

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

PROCEDURE AND APPLICATION FOR A PROPOSED NON-MAJOR COMPREHENSIVE PLAN AMENDMENT

A. Attend a Concept Review (Zoning pre-application (Z-PA)) meeting with the Planning Department and affected County agencies.

B. File an application and all required supporting documentation for a Comprehensive Plan Amendment. Please use the attached application forms.

C. Public hearing before the Planning Commission with Commission recommendation to the Board of Supervisors. Time frame is approximately 10 to 15 weeks from application acceptance by the Planning Department.

D. Public hearing, (approximately 4 to 8 weeks after Planning Commission hearing), before the Board of Supervisors.

PROCEDURE FOR A PROPOSED MAJOR COMPREHENSIVE PLAN AMENDMENT

A. Attend a Concept Review (Zoning Pre-Application (Z-PA)) meeting with the Planning Department and affected County agencies.

B. File an application and all required supporting documentation for a Comprehensive Plan Amendment. Please use the attached application forms.

C. Public meeting with the Citizens Advisory Committee.

D. Public hearing before the Planning Commission with Commission recommendation to the Board of Supervisors.

E. Public hearing before the Board of Supervisors.

*Public hearing schedule will be made available in June.

FEE SCHEDULE FOR MAJOR AND NON-MAJOR AMENDMENTS

A. Major Comprehensive Plan Amendment: $5,091.00

B. Non-major Comprehensive Plan Amendment:

   a. 0-499 mailouts: $4,478.00
   b. 500 or more mailouts: $4,824.00
   c. With accompanying zone change: $3,354.00

COMMUNITY DEVELOPMENT
Planning Division

85 N. Florence St., PO Box 2973, Florence, AZ 85132 T 520-866-6442 FREE 888-431-1311 F 520-866-6530
www.pinalcountyaz.gov

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT IN AN UNINCORPORATED AREA OF PINAL COUNTY, ARIZONA
(All Applications Must Be Typed or Written in Ink)

Comprehensive Plan Amendment unincorporated & Property Information:
(Feel free to include answers and to these questions in a Supplementary Narrative, when doing so write see narrative on the space provided)

1. The legal description of the property: See narrative, Appendix A

2. Parcel Number(s): 104290010, 104298040, 104298050, 104298060, 104298070, 104300120, 104307060, 104307090, 201017000, 210337000, 210337020, 21033001A Total Acreage: 9,000

3. Current Land Use Designation: Moderate-Low Density Residential

4. Requested Land Use Designation: Green Energy Production

5. Date of Concept Review: 02/25/2025 Concept Review Number: Z-PA-130-24

6. Why is this Comprehensive Plan Amendment being requested? (You must provide a summary of the anticipated development on this page, if not provided, the application cannot be processed.): A Major Comprehensive Plan Amendment is requested to change the land use designation for the site of the proposed Silver King Solar and Storage Project from Moderate-Low Density Residential to Green Energy Production. The Silver King Solar and Storage Project is a proposed solar generation facility with the capability of producing up to 1,100 MW of energy along with a battery energy storage system of up to 1,100 MW. The facility would be connected to the existing Abel Substation by a generation tie-line to be constructed in parallel to an existing transmission line crossing the property. The underlying land is owned by the Arizona State Land Department (ASLD).

7. Discuss any recent changes in the area that would support your application. The site is owned by the ASLD and is currently vacant with the exception of a small amount of sand and gravel mining, minimal grazing, and existing transmission line and railroad easements that run through the property. There are no recent changes that would impact the suitability of this site.

8. Explain why the proposed amendment is needed and necessary at this time. The proposed amendment is needed to allow for Green Energy Production on the subject property. As noted in the attached application, this site is suitable for such development and is anticipated to be under a solar lease from ASLD. The Project will supply needed additional energy to support grid stability in the region.

INV#: AMT: DATE: CASE: Xref:

COMMUNITY DEVELOPMENT
Planning Division

85 N. Florence, St, PO Box 2973, Florence, AZ 85132 T 520-866-6442 FREE 888-431-1311 F 520-866-6530
www.pinalcountyaz.gov

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

- ☐ A. **Certified Boundary Survey**, including legal descriptions of the proposed designations
- ☐ B. Location map which identifies the property and its relationship to Pinal County environs.
- ☐ C. Map showing the topography of the property.
- ☐ D. Site map which specifically identifies the property including parcels under separate ownership.
- ☐ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ☐ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ☐ G. Non-refundable filing fee as shown on the cover page.
- ☐ H. Narrative in PDF format.
- ☐ I. Neighborhood meeting report

Your application must be submitted digitally via the online submittal portal site at https://citizenaccess.pinalcountyaz.gov/CitizenAccess/Default.aspx

Please call or email the Planning Division for more information.

I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information, as requested. I understand if the information submitted is incomplete, this application cannot be processed.

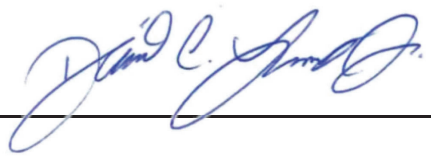
Silver King Solar LLC	500 N Central Ave, Suite 600, Glendale, CA 91203	917-653-8116
Name of Landowner (Applicant)	Address	Phone Number



mark@areviapower.com

Signature of Landowner (Applicant) — E-Mail Address

Dave Lundgren, VP of Development	900 South Pavilion Center Dr., Suite 155, Las Vegas, NV 89144	415-317-7450
Name of Agent	Address	Phone Number



dave@areviapower.com

Signature of Agent — E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

AGENCY AUTHORIZATION

(To be completed by landowners of subject property when landowners do not represent themselves. Instructions for completing required information are in bold and brackets below lines. If applicant is a company, corporation, partnership, joint venture, trustee, etc., please use the corporate signature block and have the notary fill in the notarization section for corporations not individuals and cannot be submitted digitally)

TO: Pinal County Planning & Development Services
P.O. Box 2973
Florence, AZ 85132

Arizona State Land Department, See attached Planning Authorization Letter.
_____
[Insert Name -- If a Corporation, Partnership or Association, Include State of Incorporation]

hereinafter referred to as "Owner," is/are the owner(s) of _____ acres located at _____, and further identified
[Insert Address of Property]

as assessor parcel number _____ and legally described as follows:
[Insert Parcel Number]

[Legal Description is attached hereto as Exhibit A]

Said property is hereinafter referred to as the "Property."

Owner hereby appoints _____
[Insert Agent's Name. If the Agent Is a Company, Insert Company Name Only]

hereinafter referred to as "Agent," to act on Owner's behalf in relation to the Property in obtaining approvals from Pinal County for any necessary amendment to Pinal County's Comprehensive Plan; zone changes; planned area development overlay districts; platting of the subject property; special use permit or industrial use permit; and to file applications and make the necessary submittals for such approvals.

Owner consents and agrees to be bound by all stipulations agreed to by this Agent in connection with any of above-referenced processes.

[Individual PROPERTY OWNER signature block and acknowledgment. DO NOT SIGN HERE IF SIGNING AS AN OFFICER OF A CORPORATION ON THE NEXT PAGE.]

_____ _____
[Signature] ***[Signature]***

_____ _____
[Address] ***[Address]***

Dated: _____ Dated: _____

STATE OF _____)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ____ day of __, _____ by _____.
[Insert Name of Signor(s)]

My commission expires _____

_____ _____
Printed Name of Notary Signature of Notary Public

Corporate PROPERTY OWNER signature block and acknowledgment the appropriate corporate officer or trustee signs this signature block NOT the block on the previous page.

_____
[Insert Company or Trustee's Name]

By: _____
[Signature of Authorized Officer or Trustee]

Its: _____
[Insert Title]

Dated: _____

STATE OF_____)
) ss.
COUNTY OF_____)

The foregoing instrument was acknowledged before me, this_____day of_____,
_____, by_____,_____of
[Insert Signor's Name] ***[Insert Title]***
_____, an _____
[Insert Name of Company or Trust] ***[Insert State of Incorporation, if applicable]***

and who being authorized to do so, executed the foregoing instrument on behalf of said entity for the purposes stated therein.

_____
Notary Public

My commission expires: _____

ALTERNATE: Use the following acknowledgment only when a second company is signing on behalf of the owner:
STATE OF_____)
) ss.
COUNTY OF_____)

On this_____day of_____, _____, before me, the undersigned, personally appeared

_____ Who acknowledged himself/herself to be
[Insert Signor's Name]

_____ of _____
[Title of Office Held] ***[Second Company]***
As_____for_____, and who being
[i.e, member, manager, etc.] ***[Owner's Name]***
Authorized to do so, executed the foregoing instrument on behalf of said entities for the purposes stated therein.

My commission expires: _____

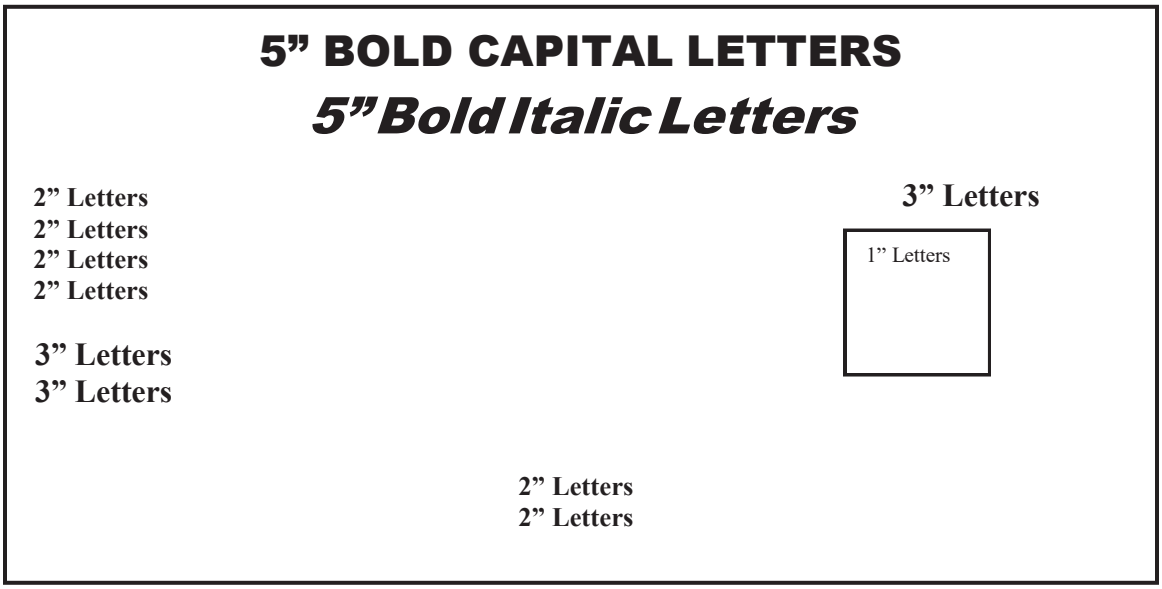
_____ _____
Printed Name of Notary Signature of Notary

Pinal County Broadcast Notification Signs:

Comprehensive Plan Amendment <u>Site Posting Requirements</u>

1. Broadcast signs shall be installed and removed by the applicant
2. Broadcast signs shall be installed 21 days before the Planning Commission hearing (Non-Major Amendments) <u>or</u> 21 days before the first Citizen's Advisory Committee meeting (Major Amendments)
3. Broadcast signs shall remain in place until the Board of Supervisors has made a decision on the case
4. Broadcast signs shall be removed no later than 30 days after the Board of Supervisors has made a decision on the case
5. Broadcast signs shall be placed adjacent to each road that borders the property, or as determined by the Planning Manager
6. Broadcast signs can contain more than one case
7. Regular signs, if needed, will be posted by County staff
8. Text on the sign shall meet the specifications shown on page 2 of this document
9. Broadcast sign specifications:
    a. 4 Feet Tall by 8 Feet Wide
    b. Top of the sign shall be 6 feet above the ground
    c. Laminated plywood or MDO board
    d. Attached to 2 – 4" by 4" wooden poles
    e. All surfaces, including edges shall be painted **White**
    f. **Black** letters shall be used and shall be sized per the specifications shown below
10. Pinal County staff will place information about Planning Commission and Board of Supervisor hearings on the Broadcast sign in the designated area

Letter Sizes: All Letters Upper and Lower Case Unless Specified



Comprehensive Plan Amendment Cases:

4 Feet Tall by 8 Feet Wide

PINAL COUNTY

Public Hearings

Case Number:
Existing Comprehensive Plan Designation:

Proposed Comprehensive Plan Designation:

Acreage:

Public Hearing Information

Hearing Info Posted by Pinal County

Applicant Name: Applicant
Phone Number:

Case Information Available at Pinal County Planning and Development Services (520) 866-6442

AFFIDAVIT OF POSTING OF BROADCAST SIGN

I,_____, Applicant for case_____(Case number), personally caused_____sign(s) to be posted in a visible place on or near the proposed project site on_ _____(Date), at least 28 days before the Planning and Zoning Commission Public Hearing, regarding the proposed_____(Type of application), in unincorporated Pinal County

The notice was posted as indicated on the attached map and photograph.

_____
Applicant

STATE OF ARIZONA)
) ss:
COUNTY OF PINAL)

Subscribed and sworn to me by_____this_____day of_____, 20_____.

_____
Notary Public

My Commission Expires: _____

E-Submittal Requirements:

All Zoning Case reviews must be submitted digitally through the online permitting portal using the following naming convention:

ePlan Reviews

Plans can be submitted electronically through the Citizen Access Portal, which can be found at https://citizenaccess.pinalcountyaz.gov/CitizenAccess/ When plans are submitted through the ePlan review system, they **MUST** be in **one multi-page PDF** and use following naming format:
Review Type #_Plan Type. For example:

- First Submittal Review
  - SUB1_Application
  - SUB1_PAD Book or Narrative
  - SUB1_TIA
  - SUB1_ALTA
  - SUB1_Drainage Report...etc
  - SUB1 _...etc

- Second Substantive Review (only resubmit items that are being amended)
  - SUB2_Application
  - SUB2_Drainage Report
  - SUB2_TIA
  - SUB2_ALTA
  - SUB2_...etc

** Documents that are uploaded which do not follow the appropriate naming convention will be rejected.*
** Online submittals are subject (up to) a 5 day processing timeframe for invoicing based on uploaded documents please do not pay until your staff coordinator has provided a fee amount*

Major Comprehensive Plan Amendment Narrative Report

May 2025



SUBMITTED TO

Pinal County Planning Division

PREPARED BY

KP Environmental

ON BEHALF OF

Silver King Solar LLC

SILVER KING SOLAR AND STORAGE PROJECT APPLICATION FOR A MAJOR COMPREHENSIVE PLAN AMENDMENT NARRATIVE REPORT

Z-PA-130-24

Prepared for:

Pinal County Planning Division
85 North Florence Street, First Floor
P.O. Box 2973 Florence,
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KPenvironmental.net

On Behalf of:

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89144
(707) 363-4155

May 28, 2025

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A. EXECUTIVE SUMMARY

Silver King Solar LLC (Applicant), a wholly owned subsidiary of Arevia Power LLC, is requesting a major comprehensive plan amendment (MCPA) to the 2019 Pinal County Comprehensive Plan (Comprehensive Plan) (Pinal County 2021) to construct and operate the Silver King Solar and Storage Project (Project). The Project would include solar photovoltaic (PV) panels, a Project substation, a Battery Energy Storage System (BESS) and a generation-tie (gen-tie) transmission line (**Figure A-1** in **Appendix A**). The Project includes a total of 11 parcels near the Town of Florence in unincorporated Pinal County, Arizona (herein referred to as the Project Area) (**Figure 1**). The parcels are approximately 12,839 gross acres total and the Project involves the lease of approximately 9,000 acres of Arizona State Trust Lands. Table 1 below describes the Project parcels, including the Assessor's Parcel Numbers (APNs), acreage, and Public Land Survey System (PLSS) locations. **Appendix A** provides a legal description of the Project, and **Appendix B** includes a site plan.

Table 1. Proposed Major Comprehensive Plan Amendment Parcels

Parcel APN	Gross Acreage	Net Acreage	PLSS Location
104298040	639.91	192.77	22 T2S R9E
104298040	638.22	638.22	27 T2S R9E
104298040	640.09	640.09	34 T2S R9E
104298050	398.23	273.41	13 T2S R9E
104298050	79.56	30.06	14 T2S R9E
104298050	636.77	545.59	23 T2S R9E
104298050	638.36	638.36	26 T2S R9E
104298050	639.54	639.54	35 T2S R9E
104298060	638.13	638.13	24 T2S R9E
104298060	639.99	639.99	25 T2S R9E
104298060	640.35	618.17	36 T2S R9E
104298070	158.66	0.78	14 T2S R9E
104307060	641.67	209.82	18 T2S R10E
104307060	644.62	322.18	19 T2S R10E
104307060	648.30	326.23	30 T2S R10E
104307090	650.17	313.13	31 T2S R10E
201017000	650.39	205.79	6 T3S R10E
210337000	649.25	637.13	1 T3S R9E
210337000	642.08	232.42	12 T3S R9E
210337000	643.24	346.03	2 T3S R9E
210337020	638.24	535.51	11 T3S R9E
210337020	643.24	267.11	2 T3S R9E
104290010*	22.18	22.18	36 T2S R9E
104300120*	15.32	15.32	31 T2S R10E
21033001A*	30.09	30.09	2 T3S R9E
21033001A*	7.85	7.85	1 T3S R9E
Total	**12,914.45**	**8,965.90**	

Total Excluding Railroad Parcels*	**12,839.01**	**8,890.46**	
**Project development will avoid railroad parcels*			

At ultimate build-out, the Project could include an up-to-1,100 megawatt (MW) solar photovoltaic (PV) generating facility, an up-to-1,100 MW BESS, a substation and gen-tie line near the Town of Florence, Arizona. The Project is proposed on public land owned by the Arizona State Land Department (ASLD) in unincorporated Pinal County, Arizona (**Figure 2**). A study area for resource surveys within a 1-mile buffer around the Project Area (1-mile study area) is depicted in **Figures 3 and 4.**

Paved and unpaved rural roads provide access to the site and adjacent properties, including Superstition Freeway (US Highway 60) running northeast to southwest near the northeast corner of the Project Area and State Route 79, running parallel to the Project Area's eastern boundary. Access is also available to the Project Area's western boundary via East Skyline Road and East Ocotillo Road, which run west to east.

The MCPA is needed to facilitate development of the interim use of State Trust Lands for PV solar and associated facilities and components to provide clean, safe, affordable, efficient energy to the regional transmission grid. This Project will connect to the existing Abel Substation located approximately 5.3 miles southwest of the Project Area. Project development would likely take 4-5 years for the planning, design, and construction of the facility.

Figure 1. Topographic map.



Figure 2. Project parcels.

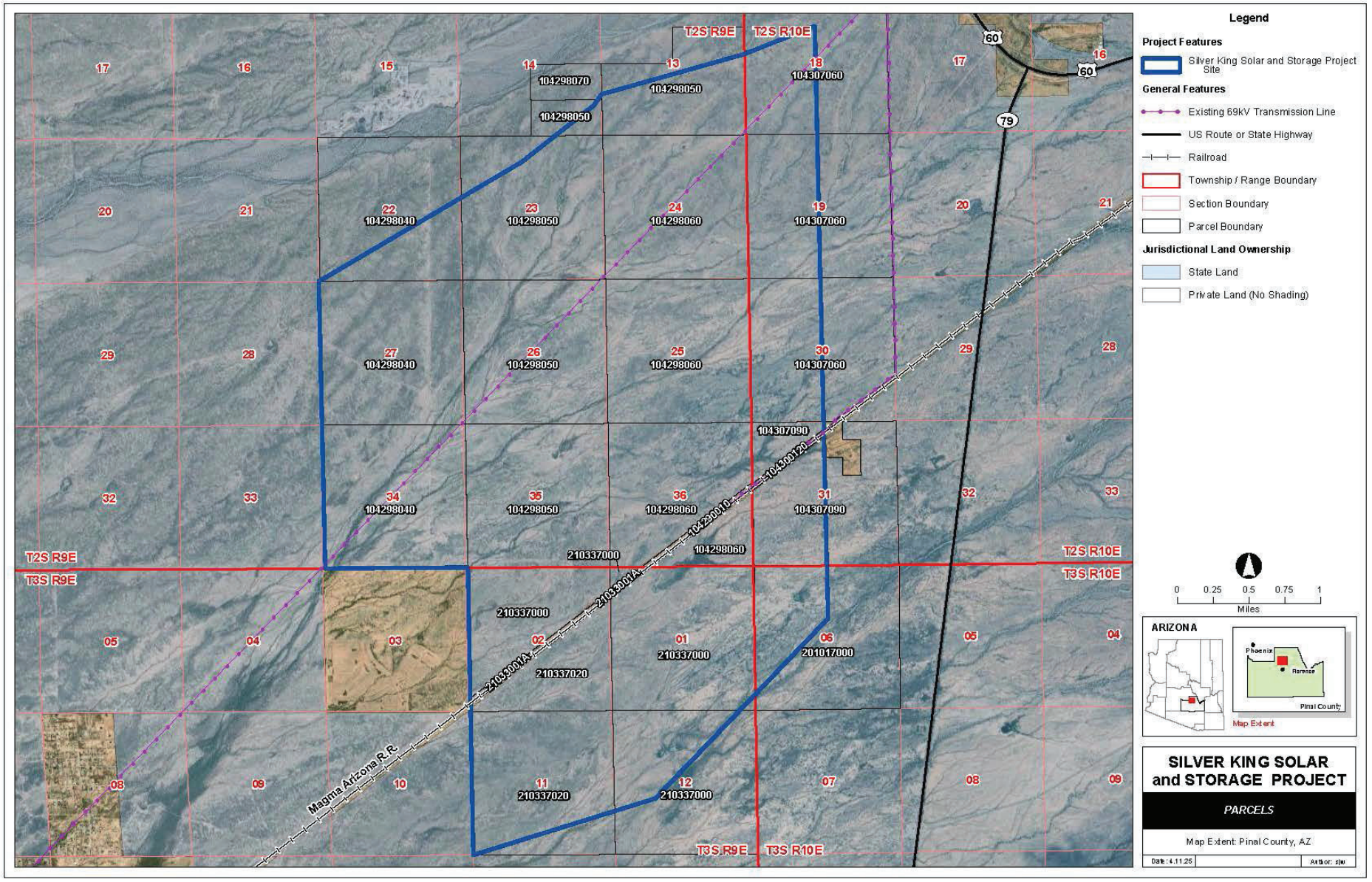


Figure 3. Existing land use.

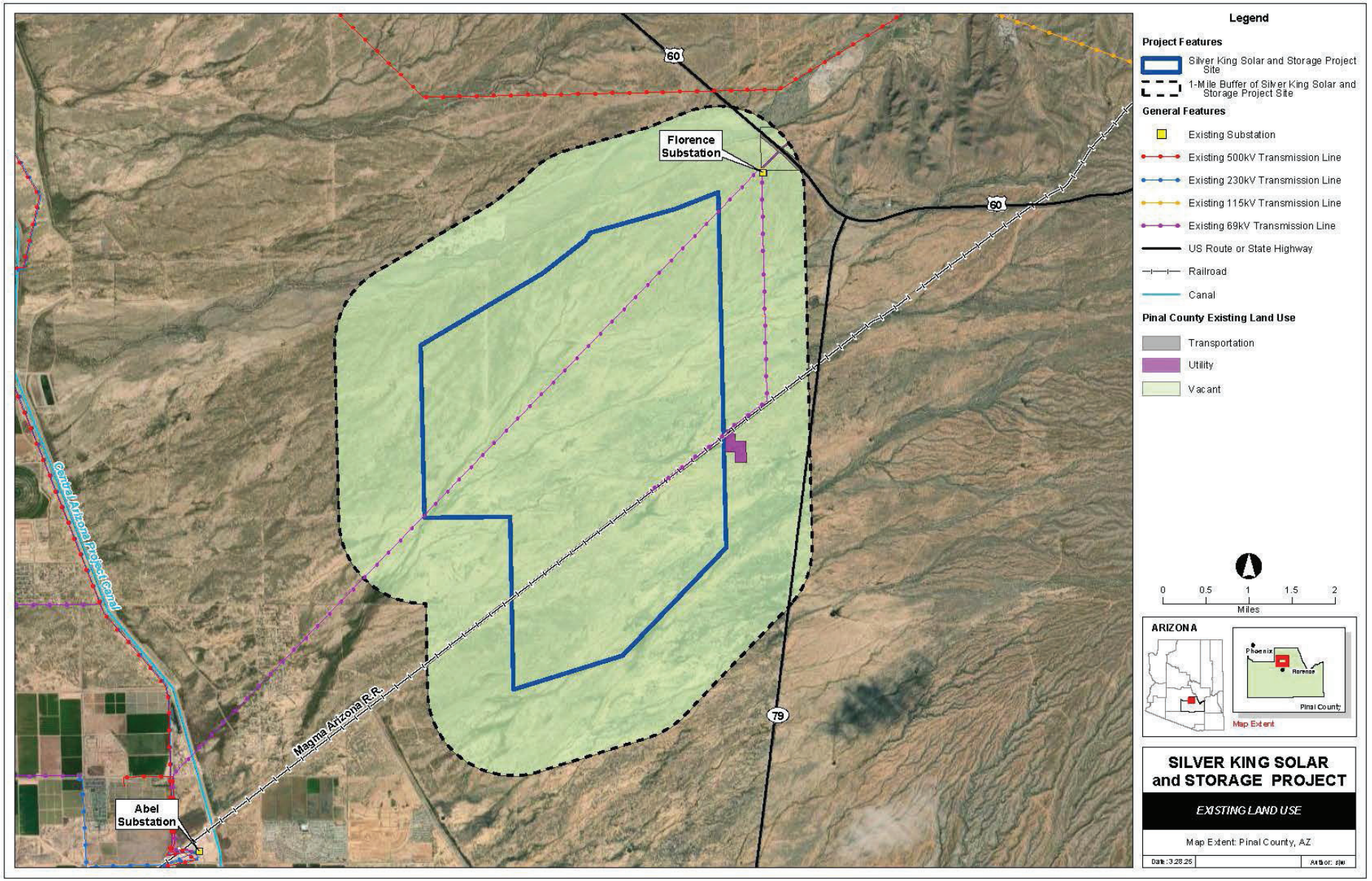
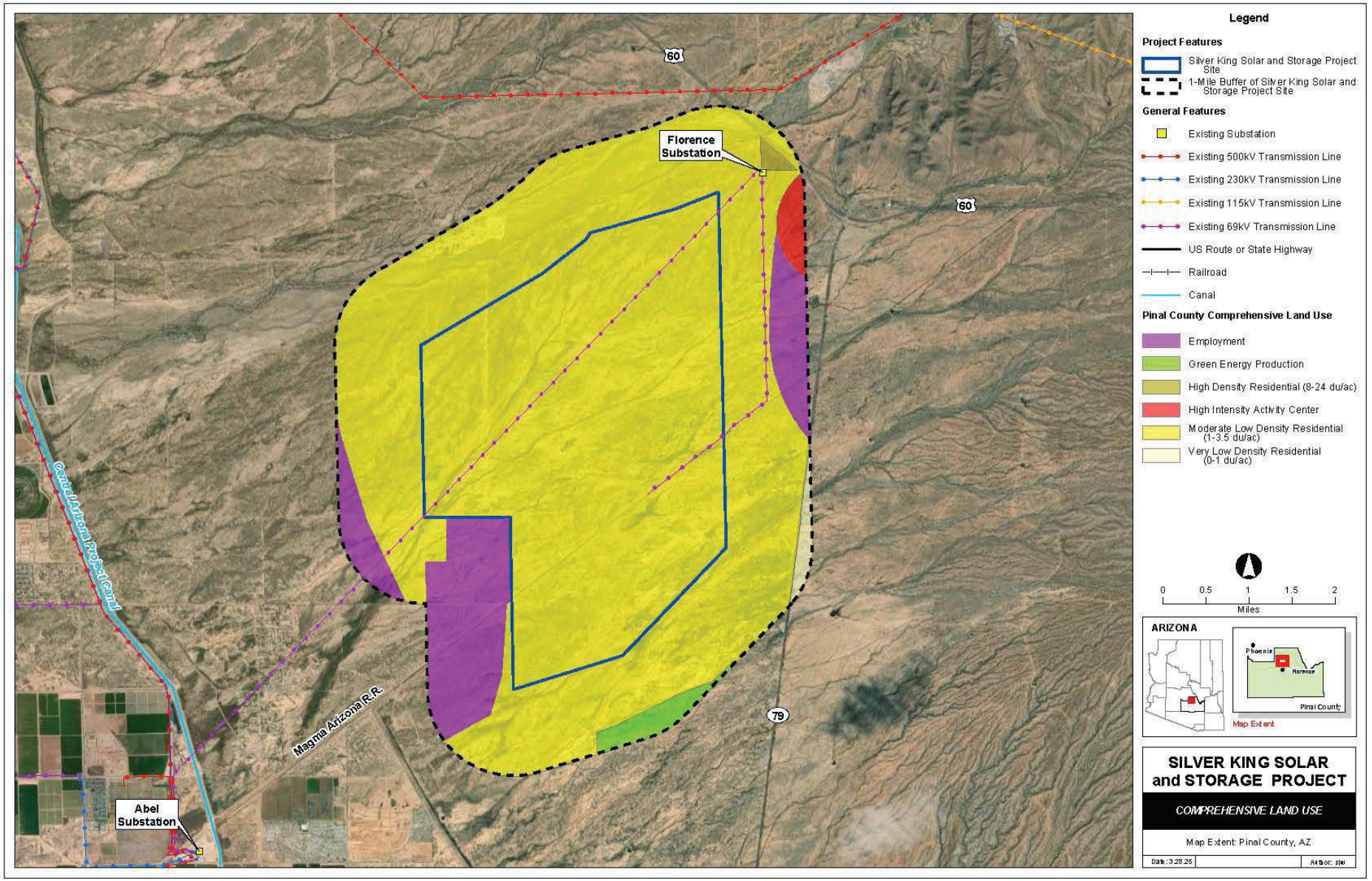


Figure 4. Planned land use.



A.1 Proposed Land Use

The Applicant is requesting a MCPA for an anticipated solar lease on ASLD property (see **Figure 1**). The Town, Section and Range locations can be found in **Table 1**. The Comprehensive Plan designates the land use for the Project Area as Moderate Low Density Residential (see **Figure 3**). Solar generating facilities are not identified in the Comprehensive Plan as a compatible or alternative use for areas designated as Moderate Low Residential. As such, the Applicant is submitting an MCPA application to redesignate the Project Area to Green Energy Production. Due to the lease with ASLD, this would be considered an interim use.

A.2 Location and Accessibility

The Project Area is within a portion of land owned by ASLD, northeast of the community of Florence, just west of the intersection of State Highways 60 and 79 in unincorporated Pinal County. The Project Area parcels are currently undeveloped and are anticipated to be under a solar lease from ASLD to the Applicant.

A.3 Site Suitability

The Applicant identified the Project Area as an optimal location for an electrical generation facility based on favorable resources available at, and in close proximity to, the Project Site including large, generally level land areas and existing utility transmission and interconnection facilities. The Project is on ASLD land and is anticipated to receive a solar lease from ASLD.

No designated or proposed critical habitat for federally protected species is known to occur in or within five miles of the Project Area (USFWS 2025 and AZGFD 2025).

The Project Area lies within the 29,096-acre Superior Tank watershed (12-digit Hydrologic Unit Code 150501000901). A majority of the Project area falls within the 10th-level HUC Lower Queen Creek watershed (HUC10 - 1505010008) and Paisano Wash - Gila River watershed (HUC10 – 1505010007). The extreme northwestern portion of the Project area fall within the 10th-level HUC Middle Queen Creek watershed (HUC10 - 15050100009) as defined by the U.S. Geological Survey (USGS) Watershed Boundary Dataset (EPA 2025b). There are no perennial surface waters or wetlands in the Project Area.

The Project Area is in Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map 04021C02225E, 04021C0240E, 0402104021C05000E and 04021C0525E. The Project Area contains two flood zones: Zone X, an area of minimal flood hazard, outside the 0.2% annual chance floodplain and Zone A: Areas determined to be inside the 1% annual chance of flood. (FEMA 2024) (see **Figure 2**).

Project development would require a floodplain use permit from the Pinal County (County) Flood Control District at the time of Site Plan review and prior to the issuance of a building permit to ensure development meets minimum requirements of the National Flood Insurance Program and County Floodplain Ordinance.

A.4 Public Services/Utilities

Existing utilities in the vicinity of the Project Area include the Florence Junction Substation near the northeast corner of the Project Area and the Abel Substation to the southwest of the Project Area. Both substations are owned by Salt River Project (SRP). An existing 69 kV transmission line runs through the Project Site between the Florence Junction and Abel Substations. An additional 69 kV transmission line runs from the Florence Junction Substation south towards, then southwest parallel to, the Magma Arizona Railroad. Water is expected to be hauled to the Project Site during construction; section C.2.7.3 provides more details on water resources and infrastructure. Any road construction, if needed, to access the Project Area would be paid for and constructed by the Applicant, in coordination with the County Public Works Department (Public Works), as necessary. Overall, the Project Area would increase the land's taxable value while adding little, if any, burden to public services.

The County Sheriff's Office provides law enforcement services in the Project Area vicinity, and the Regional Fire and Rescue Department provides subscription-based fire and emergency medical services to the region. New or additional public services resulting from the MCPA are not anticipated.

B. PROJECT NARRATIVE

B.1 Introduction

This narrative report provides the information required to support the Applicant's request for a MCPA for the Project in unincorporated Pinal County on land owned by ASLD. The Applicant is requesting this MCPA to construct and operate a PV solar facility, BESS, substation and gen-tie. The Project Area consists entirely of ASLD owned parcels which are anticipated to be leased to the Applicant for a solar facility as an interim use (see **Figure 1**). The Project would also require a gen-tie line and additional Project infrastructure. The gen-tie line would run parallel to the existing 69 kV transmission line from the Project into the Abel Substation.

The Applicant is applying to change the Pinal County Comprehensive Plan via a major amendment from the Project Area's current designation as Moderate Low Density Residential (1 to 3.5 dwelling units/acre) to Green Energy Production. Subsequent to approval of the MCPA by the County, the Applicant also intends to apply for a change in zoning of the MCPA parcels from General Rural (GR) to Industrial Zoning District (I-3).

Changing the zoning and land use designation would allow for the development of a new energy facility that can be built and serve the SRP grid in an expedited manner to help meet the increased demands in electricity consumption from residential, commercial, and industrial users in Pinal County. In addition to supporting demand growth and reliability, the Project will contribute significantly to the regional economy. The Project is estimated to directly support upwards of 300 construction jobs per year and approximately 3-5 long-term job opportunities. Additionally, the Project would generate over $20 million in sales tax revenue during construction, with approximately $5.3 million to Pinal County. Over the life of the Project, it is estimated that over $77 million in property taxes would be generated, with approximately $25 million for Pinal County, and over $109 million in lease payments to ASLD, with over $70 million going to the state's public schools and institutions. The Applicant would use local labor and local contractors/materials as much as possible for the Project.

A Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission (ACC) is anticipated to be applied for in the fourth quarter, 2025 for approval of the gen-tie line. The Solar generation, BESS, and substation are not under the jurisdiction of the ACC.

The Project Area is well suited for the proposed changes to the Comprehensive Plan. The primary criteria for determining the location of power generation facilities include the existence of compatible adjacent and nearby land uses; minimal topographic variability; and the proximity to existing electrical infrastructure (see **Figures 1 and 3**).

As part of the MCPA process, the Applicant held a neighborhood meeting on April 30, 2025, to offer an opportunity for area residents and stakeholders to engage with the Project and Applicant. The meeting was an open house format and invitations were sent within a four-mile radius of the Project Site, far exceeding the 1,200-foot requirement by the County. A summary report, Neighborhood Meeting Report for the Silver King Solar and Storage Project, is provided (**Appendix C**) to document compliance with the neighborhood meeting process.

B.1.1 Project Description

The Project would be constructed in phases to include a PV solar field consisting of panels with an output of up to 1,100 MW. A BESS of up to 1,100 MW would be developed with the PV solar field as part of the Project. Additionally, the Project would include an on-site Project substation and gen-tie line with a proposed connection to the Abel Substation.

The solar panels will generate power in the form of direct current (DC). Inverters will be installed as part of the Project to convert the DC power to alternating current (AC) for storage and/or transmission. The generated power will flow through a medium voltage (34.5 kV) collection system to the Project Substation. The Project Substation will include a voltage step-up transformer, breakers, and other associated substation equipment, along with telecommunications equipment and meteorological station(s). The voltage will be increased to 230 kV at the Project Substation and then transmitted via the gen-tie to the electrical grid at the existing Abel Substation where it will be distributed to the residents of Pinal County.

In addition to the solar field, the Project may include an operations and maintenance (O&M) building adjacent to the Project Substation. The O&M building would be a single-story facility (e.g., a double-wide trailer or similar) and would be used by the O&M staff to provide a workspace and serve as a control center for the solar field. The O&M building would have potable water and is expected to have portable toilets for collection and disposal of sanitary waste. The O&M building and its components would comply with all applicable laws and regulations, industry standards and would be consistent with County building standards and specifications.

In accordance with the National Electrical Code (NEC) requirements for outdoor electrical installations, perimeter security fencing will be installed around Project facilities where appropriate based on washes and other exclusion areas, and access points will be controlled to provide protection of the equipment, and deter unauthorized access to the site. The Project currently has an approximate 0.8-mile setback from both Hwy 60 and Hwy 79, and fencing will be installed in accordance with NEC requirements and any County setback requirements.

Battery Energy Storage System

The on-site BESS stores power so that it can be dispatched at a later date or time, when it is needed to support the regional transmission grid. The BESS would be housed in a series of buildings or

storage containers composed of batteries and inverters. The batteries would be controlled by a management system, which is monitored 24 hours per day, 7 days per week, that monitors the condition, performance, and allows control for dispatching energy to the grid.

The BESS will meet all applicable national, local, and SRP codes and requirements, and will include a security system, smoke detectors, emergency pressure relief system, thermal management system, and other critical safety requirements for the safe operation of the batteries. The BESS will be designed to meet and exceed all applicable life safety codes.

The Applicant has coordinated with the Superstition Fire & Medical District and is committed to providing necessary training related to BESS safety to the Fire & Medical District personnel.

Lighting System

The Project's lighting system may include motion-activated or infrared security lighting and cameras at the Project's perimeter, O&M building, substation, and other pertinent infrastructure. The lighting will be designed to provide the minimum illumination necessary to achieve safety and security requirements and will be downward facing and shielded to focus only on the desired locations. There will not be lighting in the solar field, therefore, it will not have any lighting impacts to surrounding properties.

Grading and Drainage

The Project site is located on relatively flat and level land and it is not anticipated to require extensive grading for the installation and operation of the solar field. The Applicant will provide Pinal County with the necessary drainage study and/or report.

The Applicant will require construction contractors to install mitigation measures for stormwater discharge to manage temporary erosion and control sediment. The Project will be designed with appropriately sized, permanent stormwater management features such that post-construction stormwater discharges do not exceed existing conditions. The site drainage plan will be in accordance with the current Pinal County Drainage Ordinance and Manual, as well as the requirements of the stormwater regulations administered by the Arizona Department of Environmental Quality. Refer to section C.2.7.3 for further information.

Water Use

The solar field and associated facilities use minimal water during operations and no water is needed for the Project to generate power. The Project would have no impact on groundwater in the area.

The majority of water use will be during the construction of the Project and will be primarily used for dust suppression. It is estimated that the water demand during construction is not anticipated to exceed one acre-foot per megawatt. Water necessary for dust suppression for construction and maintenance activities would likely be purchased from a commercial water source or from a water user with sufficient rights and appropriation. Water could be trucked to the Project site where it would be stored in an onsite water storage tank. During the Project's operational life, solar panel washing would be conducted periodically on an as-needed basis to remove accumulated dust and improve power generation efficiency. Water demand for panel washing and other O&M domestic use is not expected to exceed 20 acre-feet per year.

Site Access/Traffic and Circulation

Primary access to the Project site will be from an existing road directly off of Highway 60 and an improved access point from SR 79. A Traffic Impact Assessment will be conducted per the current Pinal County Traffic Impact Assessment Guidelines & Procedures.

The Project will construct paved, all weather access roads and will be designed to accommodate two-way traffic. The roads will be designed to meet Pinal County standards, as well as necessary Arizona Department of Transportation requirements for ingress and egress off of Highway 60 and SR 79.

Once constructed, the Project site will generate very minimal traffic volume.

Employment

It is estimated that the Project will generate approximately 300 jobs in Pinal County during the construction phase. During construction, it is estimated that on average approximately 250 workers will be on site each month, with a peak of up to 300 personnel. After construction, it is estimated that approximately 3-5 permanent personnel will be onsite during the operational phase.

The operational lifespan of the Project is anticipated to be approximately 35-40 years. The exact time frame can be impacted by changes in electrical demand, Project maintenance and facilities' condition. Over the life of the Project, the facilities and components will be continuously monitored and maintained to ensure consistent operation and meet maintenance requirements. A solar lease from ASLD is anticipated for an initial term of 35-40 years with potential for additional extensions. If the Project is decommissioned after this approximate 35–40-year period, the underlying ASLD land ownership would not change. Project equipment would be removed, and the underlying disturbed land areas would be restored in accordance with the Project's Decommissioning Plan and state and local requirements.

B.1.2 Project Decommissioning

The Applicant expects this Project to operate for approximately 35-40 years. After the Project's useful life, the facilities will be decommissioned, and the Project Site returned to its natural condition for suitable future use. As discussed previously, Project equipment would be removed, and the underlying disturbed land areas would be restored per state and local requirements. As part of the lease from ASLD, a decommissioning bond is required to be posted, along with the preparation of a decommissioning plan.

The Applicant is committed to the sustainable decommissioning of the Project and adheres to strict internal standards related to safety, environmental stewardship, and disposal best-practices. The Project's decommissioning procedures will comply with all relevant local, state and federal regulations and adhere to industry best practices. This includes obtaining any necessary permits prior to de-energizing and decommissioning the Project. A formal Decommissioning Plan will be prepared and submitted to the ASLD and Pinal County at least one year prior to the beginning of the removal of facilities from the Project Site. The Applicant's procedures for developing a formal Decommissioning Plan are as follows:

- Scoping: The Project Site and Project Facilities are thoroughly reviewed and catalogued to identify all infrastructure to be decommissioned. Site assessments are carried out to document existing environmental conditions and identify any permits or special studies needed.

- Plan Development: Based on the results of the scoping phase, Silver King Solar and Storage Project and its contractors prepare a formal Decommissioning Plan. The formal Decommissioning Plan will include the timeline for obtaining pre-decommissioning permits and performing pre-decommissioning studies (such as, where needed, studies to authorize de- energizing the facility), detailed scheduling for the physical decommissioning of the Project, and proactive management plans for existing environmental conditions (i.e., sediment and erosion control, soil remediation, ecological restoration, etc.).

- Coordination and Formalization: The formal Decommissioning Plan is shared with the ASLD and Pinal County and any other relevant authorities at least one year in advance of beginning physical decommissioning to obtain necessary authorizations. Where needed, subplans relating to noise control, environmental monitoring, transportation etc., are developed in coordination with the relevant authorities and formalized.

The Applicant will utilize the following procedures during the development of its Decommissioning Plan:

- Solar PV Equipment Decommissioning: The Solar PV modules will be inspected for physical damage, tested for functionality, and removed from racking. Where testing shows it is feasible with then-current technology, the PV modules will the packed and transported to storage facilities for reuse. Other PV modules will be packed into pallets and transported to manufacturers or third-party recycling facilities and dismantled into constituent materials for re- sale or re-use. The inverters will be returned to the manufacturer and/or an electronics recycler for reuse of functioning parts. Racking and poles will be removed and transported to a metal recycling facility.

- Battery Energy Storage System Decommissioning: The BESS units will be inspected for physical damage, tested for functionality, and removed from their foundations. Where testing shows it is feasible with then-current technology, BESS units will be refurbished and reused. Other BESS units will be transported to recycling facilities and dismantled into constituent materials for re- sale or re-use.

- Other Facilities Decommissioning: Any concrete from pads and foundations will be sent to a concrete recycler or donated to local use for rip-rap and erosion control. Collection lines, wires, conduits, junction boxes and Project substation facilities will be disassembled on-site and transported to the appropriate manufacturer or third-party facilities for recycling or appropriate disposal.

- Civil Infrastructure Decommissioning: Fencing will be removed and transported to a metal recycling facility. Computers, hard drives, and other monitoring equipment will be tested for reuse or transported to an electronics recycler. Access roads will be de-compacted and reintegrated into the overall Project Site. Roads, fences, and/or support buildings that the ASLD identifies as desirable for future use will be listed in the formal Silver King Solar Decommissioning Plan for approval by Pinal County; such civil infrastructure that is approved will not be removed.

- Site Restoration: The soil will be de-compacted and restored. Any holes left from the removal of poles, pads, and foundations will be refilled with soil. Disturbed areas of the Project Site will be re-seeded with appropriate vegetation. At the time of the formal Silver King Solar Decommissioning Plan, the site restoration details, such the seed mix and location of re-seeding, will be assessed for compatibility with potential and planned

future uses of the Project Site.

The Applicant recognizes that decommissioning requires a crew and equipment similar to those required by the Construction Phase. There is the potential for temporary noise, dust, and other impacts. The Silver King Solar and Storage Project will adhere to best practices related to construction of a temporary laydown yard, dust suppression, work timing, community engagement, and coordinate with local authorities to anticipate and minimize those impacts.

B.2 Physical Settings, Existing Uses, and Relationship to Surrounding Land Uses

The Project Area is entirely in unincorporated Pinal County, north of Florence, Arizona, on Arizona State Trust Lands managed by ASLD (see **Figure 2**). The associated parcels are currently zoned as GR and are vacant. The Project Site is currently fenced in the northern portion, up to the northern boundary with the railroad. The Project Area is entirely on ASLD owned land, anticipated to be under a solar lease.

Existing land uses within 1 mile of the Project Area include vacant land, sand and gravel mining, utility transmission lines, the Magma Arizona Railroad, and the Florence Substation (see **Figure 3**).

Transportation and travel routes in the vicinity of the Project Area include the north-south aligned State Route (SR) 79, east-west aligned U.S. Highway 60, and several paved and unpaved local roads.

C. COMPREHENSIVE PLAN AMENDMENT CRITERIA

The overall intent of the Comprehensive Plan is to act as a tool that will serve to "steer the County on a positive course of action to manage growth, preserve the quality of life, and promote sustainability. It is a long-term vision that promotes effective economic vitality while ensuring environmental stewardship.

The Plan articulates the vision and outlines the strategic direction to position Pinal as a vibrant, healthy, and economically sustainable region within the state of Arizona" (Pinal County 2021).

To ensure conformity with the Comprehensive Plan, development proposals must meet the criteria outlined in the Comprehensive Plan compliance checklist (Pinal County 2021: **Appendix D**). The Comprehensive Plan compliance checklist focuses on two major components:

- Consistency with Pinal County's vision components;
- Consistency with the Plan's key concepts illustrated on land use, circulation, and economic development graphics.

C.1 Consistency with Pinal County's Vision Components

The chapters of the Comprehensive Plan include the following: Sense of Community; Mobility and Connectivity; Economic Sustainability; Open Spaces and Places; Environmental Stewardship; Healthy, Happy Residents; and Quality Educational Opportunities. These chapters are also the vision components, which are discussed in sections C.1.1 through C.1.7 below with specific responses to

the applicable questions included in the Comprehensive Plan compliance checklist.

In addition to reviewing the Comprehensive Plan, the Applicant met with Pinal County Planning Staff to receive comments and input as to compatibility with the Plan. Comments received and the Applicant's responses are incorporated into the sections below.

C.1.1 Sense of Community

Is the proposal consistent with the Sense of Community vision component?

Sense of Community is reflected in the mix of residential and commercial land uses in the area. Densities of development impact a sense of community, described in the Comprehensive Plan as "balancing emerging urban centers and Pinal County's rural character." The Project Area is in an undeveloped area where a utility-scale solar facility is unlikely to interfere with other pending developments or sensitive land uses. The closest residences are located approximately 1.7 miles to the southwest of the Project Site.

In comments as part of the pre-application process, the Pinal County Planning and Development staff noted that the Project Area is within an area currently designated for Moderate Low Density Residential development. It falls within the Superstition Vistas growth area, a regional planned development of approximately 275 sq. miles originally proposed in the early 2000s. In the Project Area, the plan conceptually identifies four high intensity activity centers and employment areas along the proposed SR 505 corridor and Magma Arizona Railroad. These activity centers are proposed to contain a mix of employment and residential development with a residential population of up to 11,000. The Project Area is west of the Central Vistas Activity Center and would not impede development of this area.

While the Applicant is aware of the Superstition Vistas growth area, the Project Area is a relatively small portion of the overall Comprehensive Plan. More importantly, the Applicant's proposal is for an interim use and no infrastructure currently is present or proposed that would support this type of development in the Project Area. The absence of sufficient water for large scale development is seen as a significant impediment. To that point, no steps have been taken to implement the planned development in the Project Area since its original inclusion in the proposed master plan. The Project Area would not support this proposed development, absent significant changes in water access and supporting infrastructure, and is much more suited to the proposed Major Comprehensive Plan Amendment to Green Energy Production. Further, the proposed land use is consistent with Comprehensive Plan Policy 3.1.1.5, which is included in the Comprehensive Plan's Sense of Community vision component: "locate more impactful commercial and industrial uses in areas away from homes where negative impacts can be mitigated." As discussed previously, the closest residences are approximately 1.7 miles southwest of the Project Site and denser residential and commercial development ranges from 2-6 miles.

The MCPA is consistent with Policy 3.1.1.2, "encourage, coordinate and support commercial and industrial land uses in appropriate areas to maximize adequate services including transportation, water, sewer, fire suppression and utilities." The proposed Project maximizes the use of existing electric infrastructure by siting near transmission, therefore minimizing additional gen-tie lines to the nearby substation. In addition, current water, transportation and public services are sufficient to serve the proposed use.

C.1.2 Mobility and Connectivity

Is the proposal consistent with the Mobility and Connectivity vision component?

The MCPA is consistent with the Mobility and Connectivity vision component. Chapter 4: Mobility and Connectivity of the Comprehensive Plan explains the County's vision to serve people with multimodal transportation options in transportation corridors at appropriate locations. Under the goals, objectives, and policies in this chapter, Policy 4.1.1.4 states that "The County will evaluate the transportation impacts of all proposed Comprehensive Plan amendments and rezonings on Pinal County's regional transportation system" (Pinal County 2021).

Development of power generation facilities in the Project Area would have minimal impact on planned land uses from traffic and the goals that address this vision. Access would be provided from existing paved and unpaved roads including Superstition Freeway (U.S. Highway 60) which runs northeast to southeast near the northeast corner of the Project area and State Route 79 which runs parallel to the Project Area's eastern boundary. Access is also available to the Project Area's western boundary via East Skyline Road and East Ocotillo Road, which run west to east, however these roads would only be used for emergency or backup access. The Applicant plans to use and improve existing access roads to the Project site from US Highway 60 and State Route 79 to the Project Site for workers/equipment and operational needs. The Applicant will supply a Traffic Impact Statement (TIS) with the site plan per the County's TIS guidelines. As noted in Pre-Application comments from the Pinal County Engineer, the Applicant will comply with required approvals and design criteria throughout the development process.

For full build-out of the Project site, construction is expected to last up to 4-5 years. There would be a temporary increase in daily vehicle trips during the construction period related to workers arriving and departing and equipment deliveries. During operation, the Project would require infrequent visits for routine maintenance and repairs; given this, the Applicant does not anticipate the Project will have a negative effect on local roads.

During pre-application, Pinal County's Planning and Development Department commented that the location of the proposed Project near US Highway 60, State Route 79 and a proposed State Route 505 to the south may interfere with future economic activity offered by the connectivity of these roads in the Project Area and potential for future activity centers near them. The proposed alignment of State Route 505 is approximately 2 miles outside of the Project Site, located between the Project and the Central Arizona Project Canal. As discussed in the Sense of Community section above, the potential for future development in the area of the Project Site is constrained by water access and limited infrastructure.

C.1.3 Economic Sustainability

Is the proposal consistent with the Economic Sustainability vision component?

The MCPA is consistent with the Economic Sustainability vision component. This element promotes long-term economic viability and specifically includes "environmentally friendly employers who champion Pinal County's conservation philosophy." (Pinal County, 2021) The Economic Sustainability element also concentrates on the County's ability to provide quality employment opportunities for its residents by setting specific goals, objectives, and policies. Two main goals that address this vision are:

1. *Encourage a full range of quality jobs for residents of Pinal County and increase the jobs per capita ratio.*

2. *Encourage sustainable development consistent with Pinal County's environmental preservation philosophy* (Pinal County 2021).

The MCPA would further promote economic diversity and employment opportunities in the area by providing direct and indirect employment during the construction and operational life of the proposed facility. Over the approximate 4–5-year construction term, the Project would provide an opportunity for construction employment, an important sector for Pinal County. In addition to direct jobs, the Project is anticipated to contribute directly to the Pinal County tax base and generate revenue not just for the County, but also the State from a long-term lease. This has a direct and positive impact on the tax base and schools. These revenues and economic investments contribute greatly to the economic sustainability of the Project Area and broader community.

Additionally, power generated by the proposed facility will support residential growth and job creation in Pinal County by providing clean, safe, affordable, and efficient electricity to local communities and the region.

C.1.4 Open Spaces and Places

Is the proposal consistent with the Open Spaces and Places vision component?

The MCPA is consistent with the Open Spaces and Places vision component. According to the Comprehensive Plan, siting of specific proposed open space and trails is based on the "suitability of activities, surrounding land uses, ecological factors, topography, viewsheds, and cultural resources" (Pinal County 2021).

According to the Pinal County Comprehensive Plan (Pinal County 2007, 2021) a planned regional multi- use trail is adjacent to/transecting the Project Area along the Queen Creek Wash. The Project would not limit development of any currently proposed trails.

Pursuant to Development Services Code 2.176.170 B, the Applicant would develop the trail with decomposed granite pedestrian paths and dedicate it to the County to be consistent with Pinal County's standards. As discussed with staff during Pre-Application, it would be desirable to have trails along the Magma Arizona Railroad where the Project is developed. This would eliminate the potential for people crossing the railroad to access the trail and therefore improve pedestrian safety. Currently, the Applicant is proposing construction on only one side of the Magma Arizona Railroad and therefore has proposed a trail along the south side of the Magma Arizona Railroad. The Applicant will comply with all requirements for signage, trail make up and setbacks. The current County requirement is the dedication of the trail to the County. Given that the Project is on ASLD property and is leased for a fixed term, this dedication may not be feasible. The Applicant will work with Pinal County and ASLD to determine the most appropriate way to ensure that Pinal County's interests in the recreation trail and preserve.

C.1.5 Environmental Stewardship

Is the proposal consistent with the Environmental Stewardship vision component?

The MCPA is consistent with the Environmental Stewardship goals of the Comprehensive Plan and Environmental Vision. During Project development, the Applicant has studied and analyzed the potential for environmental impacts. The Applicant has consulted with a number of agencies including Pinal County, ASLD and information from Arizona Game and Fish Department (AGFD) to understand best practices and requirements for solar project development. The Project will comply with all

applicable federal, state, and local laws, regulations, and guidelines and will work with agencies and stakeholders to consider best practices and proposed mitigation of environmental impacts.

The MCPA seeks to convert the Comprehensive Plan Designation for the Project Site from Moderate Low Density Residential to Green Energy Production. The Project includes solar panels for generation as well as BESS to store energy on site. The combination of solar power and battery storage enables the efficient production of much needed electricity to support growing regional demand while managing the transmission of power to ensure it is used most efficiently by the transmission grid. Chapter 7: Environmental Stewardship of the Comprehensive Plan states that "Pinal County will provide support for the development and location of renewable sources" and that "the expansion of renewable energy opportunities should be supported by the County through its land use planning and permitting process" (Pinal County 2021). This Project meets those goals in an environmentally sustainable way and is therefore consistent with the Comprehensive Plan with respect to this vision element.

Regarding air quality and water resources, the Comprehensive Plan, Chapter 7: Environmental Stewardship, includes Goal 7.1.3, "improve air quality" and Goal 7.2.2, "encourage the maximum conservation of water resources currently available in Pinal County." Solar generation and BESS are means of generating and storing much needed electricity with far less air quality impact than other fossil fuel types of generation, such as coal and gas. As fossil fuel plants are retired, additional green energy resources are needed to supplement electric demand. With respect to water consumption, a solar generator is a low water use facility. The Applicant will take steps to utilize components that minimize water usage and are compatible with the Project environment.

C.1.6 Healthy, Happy Residents

Is the proposal consistent with the Healthy, Happy Residents vision component?

The MCPA is consistent with the Healthy, Happy Residents vision component. This vision component identifies the following features as contributing to Healthy, Happy Residents: well-designed neighborhoods, cost of housing and public services, and availability of healthy foods. Chapter 8: Healthy, Happy Residents of the Comprehensive Plan (Pinal County 2021) states the following goals:

Goal 8.1*: Pinal County has a mix of housing types and is well positioned to respond to emerging housing industry trends and markets.*

Goal 8.2*: Maximize residential development opportunities where existing infrastructure and services are provided or planned.*

Goal 8.3*: Promote a philosophy that new growth pays for its share of financial impacts in an equitable manner.*

Goal 8.4*: Maintain long-term financial sustainability for Pinal County.*

Goal 8.5*: Pinal County and its residents have access to healthy foods.*

As noted in section C.1.3, the proposed Project and related MCPA would be consistent with this vision and would improve economic stability (Goal 8.4) by investing significant capital, creating jobs and increasing tax revenue for both Pinal County and the State of Arizona. Specifically, the MCPA would be consistent with Goal 8.3 because the Applicant is paying for the new infrastructure required to support its proposal, such as access roads and the generation tie-line and is committing to mitigation such as the installation of a public trail. While the current Comprehensive Plan

designation for the Project Area is Moderate Low Density Residential, as discussed in C.1.1 the necessary infrastructure to support such development in the Project Area is lacking, most notably sufficient water supply. Therefore, the Project is not in conflict with Goal 8.2 due to lack of existing or planned infrastructure.

C.1.7 Quality Educational Opportunities

Is the proposal consistent with the Quality Educational Opportunities vision component?

There are no educational facilities or impacts associated with the proposed Project. As noted in the Comprehensive Plan Checklist, this element will not apply to some projects.

C.2 Consistency with the Plan's Key Concepts Illustrated on Land Use, Economic, and Circulation Graphics

C.2.1 Consistency with the Land Use Designation Shown on the Graphics

The designated land use of the Project Area in the Pinal County Comprehensive Plan is Moderate Low Density Residential which allows for 1-3.5 du/ac (see **Figure 3**). The land use designations within a one-mile area surrounding the Project include Moderate Low Density Residential, Very Low Density Residential (0-1 du/ac), High Intensity Residential, High Intensity Activity Center, Green Energy Production, and Employment. This MCPA requests to amend the designation from Moderate Low Density Residential to Green Energy Production within the Project Area. The requested amendment to Green Energy Production would be compatible with the proposed uses and is defined in the Comprehensive Plan as indicating "areas that are designated specifically for the location of large scale photovoltaic solar panel power generation facilities". (Pinal County, 2021). The requested change is consistent with the surrounding land uses, which include undeveloped land and existing utility infrastructure. The proposed Project is not anticipated to impact proposed land uses outside of the Project Area.

Pinal County's Comprehensive Plan states that it "must be flexible enough to adjust to changing conditions and economic opportunities" (Pinal County 2021). The Silver King Solar and Storage Project is an opportunity to enhance economic and environmental sustainability and maximize the use of existing infrastructure in a way that does not prohibit future surrounding land uses.

C.2.2 Consistency with the Mixed-Use Activity Center Concepts

Not Applicable. The MCPA is not for a mixed-use project or in an existing Mixed-Use Activity Center.

C.2.3 Consistency with the Planning Guidelines Described in the Land Use Element

The Project Area is sited on land owned by ASLD and is anticipated to be under a solar lease. As noted in Chapter 3 of the Comprehensive Plan, Pinal County and ASLD work closely to guide

development of the County. ASLD must approve any submittals for MCPAs on its land and must manage the land for its highest and best use. The factors discussed above have shown that Green Energy Production is suitable for this Project on ASLD land.

Per comments from Pinal County Planning and Development staff, the Project Area is also in proximity to the Florence Military Reservation and all renewable projects in the area are required to conform to processes laid out by Luke Air Force Base and the Department of Defense. The Applicant has received the preliminary approvals and will make any updates to the approvals necessary to demonstrate compliance with the requirements.

C.2.4 Quality Employment Opportunities Countywide

The MCPA is consistent with the Economic Development discussed in 3-10 of the Comprehensive Plan. While Green Energy Production is not specifically called out in this section, it does meet the philosophy of "produce a competitive jobs per capita ration throughout Pinal County" (Pinal County, 2021). The Project is anticipated to create over 300 construction jobs on average per year for the first phase of construction and upwards of 1,000 construction jobs for the full build-out over a 4–5-year construction period. The MCPA would be compatible with the vision outlined in Chapter 5: Economic Sustainability of the Comprehensive Plan.

C.2.5 Viable Agriculture, Equestrian, and Rural Lifestyle

The ASLD land that is identified as the Project Area is currently vacant with the exception of electric and railroad infrastructure. There are no buildings. There is minimal grazing on the land, but no food production. Comments received from Pinal County Planning and Development staff note that "Agricultural land is converted to the fast-growing solar industry and is a concern to the food production industry." While this may be the case in other parts of Pinal County, this Project is not proposed in an agricultural area. None of the surrounding lands are actively farmed or have the water rights or ability to become a productive agricultural area. To the extent that Green Energy Production is sited on vacant, non- farmed land, as this Project is, it may offset additional development in areas more suitable to agriculture.

C.2.6 System of Connected Trails and Preservation of Open Space

The MCPA is consistent with the *Pinal County Open Space and Trails Master Plan* (Open Space and Trails Master Plan) (Pinal County 2007) and Chapter 6: Open Spaces and Places of the Comprehensive Plan. The Open Spaces and Places chapter of the Comprehensive Plan's vision is to site specific proposed open space and trails based on the "suitability of activities, surrounding land uses, ecological factors, topography, viewsheds, and cultural resources" (Pinal County 2021).

The MCPA is consistent with this element because the site is not designated currently for Recreation/Conservation. No trails or recreational facilities are currently located within the Project Area. The Project Site is located near a proposed trail and per the Development Services Code 2.176.170 B, the Applicant will develop the trail to be consistent with Pinal County's standards. With the completion of the trail, the Project is contributing to the regional trail system. The Applicant will develop a recreational trail along the Magma Arizona Railroad corridor.

C.2.7 Natural Resource Conservation

The Applicant has considered potential environmental impacts of the Project and would mitigate

impacts to the natural and cultural environment by minimizing ground disturbance where possible, including avoiding major washes which would allow for wildlife movement across the site. Development of the Project would comply with all applicable federal, state, and local environmental laws, regulations, and guidelines, as required. Based on preliminary review, the Project Area is in an area with minimal sensitive environmental resources; however, environmentally sensitive areas that the Project may impact are described below.

C.2.7.1 BIOLOGICAL RESOURCES

C.2.7.1.1 *Federally Protected Species*

The U.S. Fish and Wildlife Service (USFWS) maintains a list of protected species and the critical habitat known to occur in each Arizona county. These species are currently listed or are proposed for listing as endangered or threatened under the Endangered Species Act (ESA) (16 United States Code [USC] 1531 et seq.). The list also includes candidate species proposed as threatened or endangered, species delisted from protection under the ESA, and species delisted from protection under the ESA but currently proposed for relisting.

The ESA specifically prohibits the "take" of listed endangered and listed threatened wildlife species if an ESA Section 4(d) rule was designated at the time of listing. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to engage in any such conduct," but the ESA does not provide the same take protections of plant species (except on federal land). Some bird species also receive legal protection under the federal Migratory Bird Treaty Act (MBTA) (16 USC 703–712). Only species listed by the USFWS are afforded protection under the ESA. The special-status species evaluated in this document were based on the list of endangered, threatened, and proposed delisted species for Pinal County, Arizona, available in the USFWS Information for Planning and Consultation (IPaC) system (USFWS 2024a).

Data from the IPaC system (USFWS 2025), Ecological Conservation Online System (ECOS) (USFWS 024b), Arizona Game and Fish Department (AZGFD) Online Environmental Review Tool (AZGFD 2025), USGS National Hydrography Dataset (USGS 2024b), recent aerial photography imagery available online (Google Earth 2025) and a site reconnaissance survey in March 2025 were reviewed to assess the potential for occurrence of federally protected species and their habitat.

No designated or proposed critical habitat for federally protected species is known to occur in or within five miles of the Project Area (USFWS 2025 and AZGFD 2025).

The USFWS IPaC system identified seven federally listed (or candidate for listing) species with the potential to occur in the Project Area: Mexican wolf (*Canis lupus baileyi*)(Experimental Population), ocelot (*Leopardus pardalis*)(Endangered), cactus ferruginous pygmy-owl (*Glaucidium brasilianum cactorum*)(Threatened), southwestern willow flycatcher (*Empidonax traillii extimus*)(Endangered), yellow-billed cuckoo (*Coccyzus americanus*)(Threatened), Gila topminnow (*Poeciliopsis occidentalis*)(Endangered), and monarch butterfly (*Danaus plexippus*) (Candidate). The search results are included in **Appendix E**. The Project Area and 1-mile study area lack suitable habitat for six of the seven species, are distant from the nearest known populations, or both. Monarch butterfly, a candidate species for listing, may occur in or near the Project Area wherever flowering plants are present for foraging or milkweed plants (family Asclepiadaceae) are present for breeding. No milkweed species were observed during surveys conducted in March and May 2025, but other flowering plants were observed.

To help validate IPaC findings, the AZGFD Heritage Data Management System (HDMS), which tracks

records for federally listed species and other species of special concern database, was accessed through the AGFD Arizona Heritage Geographic Information System (AZHGIS) online environmental review tool to determine whether any federally proposed or designated critical habitat or special-status species have been documented on or near the Project Area. The search results are included in **Appendix F**. According to AZHGIS, there are no records for seven listed species within 5 miles of the Project Area.

Biological field surveys, completed on March 11 and 12 and May 12-14, 2025, have confirmed that no habitat is present for federally protected species within the Project Area (**Appendix G**). Although no federally listed species may occur or are known to occur in the Project Area, should a species become listed or new information become available, the Applicant would coordinate with a qualified biologist to determine whether coordination or consultation with USFWS is required.

C.2.7.1.2 *Other Federally Protected Species*

The MBTA provides federal protection to nearly all birds native to North America, including their nests and eggs, on all lands (public or private). The MBTA does not protect nonnative bird species, and it does not protect certain native birds (quails, grouse, or turkeys, or their relatives). Numerous species protected by the MBTA are expected to forage and nest in the 1-mile study area and/or migrate through the 1-mile study area. The Applicant would comply with the MBTA when constructing, operating, and maintaining the Project. Bald eagle (Haliaeetus leucocephalus) and golden eagle (Aquila chrysaetos) are protected under both the MBTA and the Bald and Golden Eagle Protection Act (BGEPA) on all lands (public or private). The golden eagle has the potential to hunt within the 1-mile study area or move across it. The bald eagle has potential to move across the 1-mile study area. There is no potential bald eagle nesting habitat (i.e., cliffs or tall trees) within the 1-mile study area. There is potential golden eagle nesting habitat approximately 2 miles northeast of the Project Area, which is a sufficient distance away that nesting golden eagles would not likely be affected by the Project. Therefore, the Project is unlikely to impact golden or bald eagles.

C.2.7.1.3 *State-Protected Species*

The State of Arizona does not have an equivalent counterpart to the federal ESA and there is no comparable permitting process for harm to wildlife during development. AZGFD can provide an advisory role during the planning and permitting of energy infrastructure projects and may provide formal comments during state and local permitting processes. Species of Greatest Conservation Need (SGCN) is a nonregulatory AZGFD status that lists wildlife of conservation priority in the state of Arizona (described nationally as Wildlife of Greatest Conservation Need). SGCN are species of vertebrates, crustaceans, and mollusks that rank high in the AZGFD vulnerability assessment and have been identified as priorities for immediate conservation action, as detailed in The Arizona Wildlife Conservation Strategy (2022–2032) (AZGFD 2022). Each species is assessed by AZGFD in terms of vulnerability and assigned a Tier 1, 2, or 3 ranking, with Tier 1 representing the highest threat level (AZGFD 2022). The SGCN list may overlap species already discussed above under relevant federal laws. SGCNs not otherwise protected by federal laws are not given additional protection under state law except that generally no hunting or capture of SGCN is allowed with some exceptions for managed recreational fisheries of native fish (AZGFD 2017) and recreational capture of certain reptiles (AZGFD 2015).

According to AZHGIS, there are records for 16 SGCN listed wildlife species within 5 miles of the Project Area, including two amphibian species, two bird species, five mammal species, and seven reptile species (see **Appendix F**) (AZGFD 2024). Many of these species records likely occur in Queen Creek, which is approximately 0.5 miles north of the Project Area; however, many of the species use

upland or xeroriparian habitat and have the potential to occur in the Project Area. Harris' hawk (SGCN 2) was observed near the Project Area during the site reconnaissance survey.

The Sonoran Desert tortoise (Gopherus morafkai), an SGCN Tier 1 species additionally protected under ARS 17-306 and 17-309, has occurrence records within 5 miles of the Project Area (see **Appendix F**) (AZGFD 2025). The Project Area does not contain suitable rocky slope habitat for the Sonoran Desert tortoise, though it does contain incised washes with caliche caves suitable for use by this species. The Bureau of Land Management (BLM) has a map that shows suitable desert tortoise habitat split by importance categories. The closest potentially suitable habitat is approximately 4 miles northeast of the Project area. However, this habitat is designated as "Other Habitat" and the Project is not located in close proximity to any "High Importance" or "Medium Importance" habitats (BLM 2016). Sonoran Desert tortoises may disperse into the Project Area from these mountainous bajadas, but are more likely to disperse within Queen Creek, 0.5 miles north of the Project Area. In the event a Sonoran Desert tortoise is encountered during construction activities, the Guidelines for Handling Sonoran Desert Tortoises (AZGFD 2014) would be followed.

The Arizona Native Plant Law (ANPL) (Arizona Revised Statutes 3-904) protects certain native plants on private and public lands in Arizona (Arizona Department of Agriculture [AZDA] 2024). The only exception to this law is for plant removal on federal and Tribal lands, in which case the federal land management agency or Tribe must be contacted directly for guidance on their requirements for native plants. Harvest and transport of native plants or native plant materials from any land, including private land, requires permission from the landowner and a permit from the AZDA. The AZDA also requires notification before land clearing is undertaken, even if the plants would be destroyed or salvaged and replanted off-site. Projects of 40 acres or more require written submittal of the Notice of Intent to Clear Land to the AZDA 60 days prior to construction plant clearance. A separate application is required for the permits necessary to salvage and transport protected native plants off-site. The landowner has the right to transplant on-site or to destroy any plants occurring on the property without permits. On state lands, ASLD Instructional Memo No. 12.05 requires that a native plant survey be conducted for projects larger than 20 acres to estimate the number of trees, cacti and succulents that will be removed. The Applicant will ensure this survey is implemented and data are provided to ASLD in a timely fashion. (AZGFD 2022). Each species is assessed by AZGFD in terms of vulnerability and assigned a Tier 1, 2, or 3 ranking, with Tier 1 representing the highest threat level (AZGFD 2022). The SGCN list may overlap species already discussed above under relevant federal laws. SGCNs not otherwise protected by federal laws are not given additional protection under state law except that generally no hunting or capture of SGCN is allowed with some exceptions for managed recreational fisheries of native fish (AZGFD 2017) and recreational capture of certain reptiles (AZGFD 2015).

According to AZHGIS, there are records for 15 SGCN listed wildlife species within 5 miles of the Project Area, including one amphibian species, two bird species, five mammal species, and seven reptile species (see **Appendix F**) (AZGFD 2025). Many of these species records likely occur in Queen Creek, which is approximately 0.5 miles north of the Project Area; however, many of the species use upland or xeroriparian habitat and have the potential to occur in the Project Area. Harris' hawk (SGCN 2) was observed near the Project Area during the site reconnaissance survey.

The Sonoran Desert tortoise (Gopherus morafkai), a SGCN Tier 1 species additionally protected under ARS 17-306 and 17-309, has occurrence records within 5 miles of the Project Area (see **Appendix F**) (AZGFD 2025). The Project Area does not contain suitable rocky slope habitat for the Sonoran Desert tortoise, though it does contain incised washes with caliche caves suitable for use by this species. The closest suitable habitat is approximately 1.5 miles northeast of the Project Area. Sonoran Desert tortoises may disperse into the Project Area from these mountainous bajadas, but are more likely to disperse within Queen Creek, 0.5 miles north of the Project Area. In the event a Sonoran Desert tortoise

is encountered during construction activities, the Guidelines for Handling Sonoran Desert Tortoises (AZGFD 2014) would be followed.

The Arizona Native Plant Law (ANPL) (Arizona Revised Statutes 3-904) protects certain native plants on private and public lands in Arizona (Arizona Department of Agriculture [AZDA] 2024). The only exception to this law is for plant removal on federal and Tribal lands, in which case the federal land management agency or Tribe must be contacted directly for guidance on their requirements for native plants. Harvest and transport of native plants or native plant materials from any land, including private land, requires permission from the landowner and a permit from the AZDA. The AZDA also requires notification before land clearing is undertaken, even if the plants would be destroyed or salvaged and replanted off-site. Projects of 40 acres or more require written submittal of the Notice of Intent to Clear Land to the AZDA 60 days prior to construction plant clearance. A separate application is required for the permits necessary to salvage and transport protected native plants off-site. The landowner has the right to transplant on-site or to destroy any plants occurring on the property without permits. On state lands, ASLD Instructional Memo No. 12.05 requires that a native plant survey be conducted for projects larger than 20 acres to estimate the number of trees, cacti and succulents that will be removed. The Applicant will ensure this survey is implemented and data are provided to ASLD in a timely fashion.

The ANPL also designates certain species as Highly Safeguarded and Salvage Restricted species. The Pinal County Highly Safeguarded and Salvage Restricted species (AZGFD 2025b) were researched, and it was determined that only the saguaro (Carnegiea gigantea), stag-horn cholla (Opuntia versicolor), and desert barrel cactus (Ferocactus cylindraceus) have the potential to occur within the Project area. Saguaros were observed during field surveys, but the other two were not, but they have a low to moderate potential to occur. The rest of the species either do not occur in the habitat types within the Project area, do not occur in the elevation ranges within the Project area, are only known to occur in areas that are not near the Project area, or some combination of these factors.

C.2.7.1.4 *Wildlife Connectivity*

Based on comments provided by the Pinal County Open Space, Trails and Regional Parks Department, the Project may fall within an area with increased wildlife connectivity. In particular, Queen Creek, located approximately 0.5 miles north of the Project, has been identified as an important wildlife movement corridor. There are also several smaller xeroriparian areas identified by the AZGFD (AZGFD 2025) that traverse the Project. The Project would not impact wildlife movement in the Queen Creek corridor because of its distance from the corridor and because it is located on the plateau above Queen Creek. The Project will also avoid the corridors identified by the AGFD to the extent feasible to avoid and minimize impacts to those corridors. The Project will also comply with the Guidelines for Solar development within Arizona (AZGFD 2010).

C.2.7.1.5 *Noxious Weeds*

- The AZDA defines three classes of noxious weeds in the state of Arizona (Arizona Administrative Code R3-4-245) (AZDA 2024):Class A is categorized as a species of plant that is not known to exist or that is of limited distribution in the state and is a high-priority pest for quarantine, control, or mitigation.
- Class B is categorized as a species of plant that is known to occur but that is of limited distribution in the state and may be a high-priority pest for quarantine, control, or mitigation if a significant threat to a crop, commodity, or habitat is known to exist.
- Class C is categorized as a species of plant that is widespread but may be

recommended for active control based on risk assessment.

Two restrictions have been developed to control noxious weeds in Arizona: 1) a Class A, B, or C noxious weed or a commodity infested or contaminated with a Class A, B, or C noxious weed cannot be admitted into the state unless otherwise authorized by the AZDA and 2) the AZDA may quarantine and abate an area infested or contaminated with a Class A or Class B noxious weed if it has been determined that an imminent threat to agriculture or horticulture exists.

Noxious weeds including buffelgrass (Pennisetum ciliare), Bermuda grass (Cynodon dactylon), Mediterranean grass (Schismus barbatus), redstem stork's bill (Erodium cicutarium), Sahara mustard (Brassica tournefortii) and wild oats (Avena fatua) have been observed along U.S. Highway 60 near the Project Area (iMapInvasives 2025). The Project would prepare an invasive/noxious weed management plan that would be implemented to reduce or eliminate the spread of weeds during construction, operations and decommissioning activities.

C.2.7.1.6 *Pinal County Riparian Habitat*

The County has existing policies, codes, and regulations that stress the importance of riparian areas and provide guidance toward protecting them including the Comprehensive Plan, Open Space and Trails Master Plan, and P Development Services Code. The Pinal County Riparian Area Guidelines (AZGFD 2019) provide a description of riparian areas and mitigation measures should a project be expected to impact a riparian area.

The AZHGIS online environmental review tool response also indicated that riparian areas occur in the Project Area (AZGFD 2025; Pinal County 2019). The mapped riparian areas in the Project Area are closely associated with xeroriparian desert scrub vegetation and could be impacted if Project development impacts the xeroriparian washes within the Project Area. The Applicant will work with the County and AZGFD to avoid riparian area impacts where feasible.

C.2.7.2 *Cultural Resources*

A Class I Literature Review (Class I) was completed by Chronicle Heritage for the Project Area and has been included in **Appendix H**.

Chronicle Heritage consulted records from AZSITE, the National Register Information System database, and Arizona State Museum (ASM) Archaeological Records Office (ARO) to determine if any previous projects and previously recorded cultural resources are within a 1-mi radius of the Project area. General Land Office (GLO) maps and historical U.S. Geological Survey (USGS) topographic maps were also reviewed to evaluate the possible presence of historical Euro-American infrastructure in and near the Project area.

Eight previous projects extend into the current Project Area. There are previously recorded resources that are within the Project Area (see **Appendix H**). However, because less than 1 percent of the Project Area was surveyed in the past 10 years, Chronicle Heritage is currently completing a Class III survey of the entire Project boundary.

The Applicant is working with the ASLD to discuss any known cultural environmentally sensitive areas and avoidance or mitigation of those areas to reduce impacts.

C.2.7.3 *Water Resources, Public Facilities/Services, and Infrastructure Support*

Adequate services are in place or are planned for within a reasonable time of the start of the new development.

The County Sheriff's Office provides law enforcement services to the Project Area. The Regional Fire and Rescue Department provides subscription-based fire and emergency medical services to the region. New or additional public services resulting from the MCPA are not anticipated.

No public improvements to sewer systems or water systems would be needed as a result of the Project, portable toilets will be utilized as necessary. The Applicant will evaluate the impact of the Project on traffic and will work with the County to determine whether any road improvements are needed. Water is expected to be hauled to the site during construction and operation. Water hauled to the site would be from permitted sources with existing water rights.

Any proposed road construction needed to access the Project would be constructed and paid for by the Applicant, in coordination with ADOT and Public Works, as necessary, and would not require public expenditures.

Development of the Project would not impact existing water quality. The Project Area would be designed such that stormwater from off-site would flow through or around the site in a manner similar to the existing conditions. Based on a final hydrologic analysis of the site, on-site drainage would be routed as necessary to retention basins, in accordance with Public Works regulations. Based on the field reconnaissance, an Aquatics Technical Memorandum is included in **Appendix I**.

Proposed drainage design concepts would allow the site to be developed without increasing stormwater runoff or creating an adverse impact on adjacent properties. Site design that is sensitive to existing topography and drainage patterns would also function to protect surface water quality.

In areas where there is any potential for contamination, all stormwater would be retained on-site to comply with Arizona Department of Environmental Quality (ADEQ) requirements. The Project would comply with the Arizona Pollutant Discharge Elimination System construction general permit. In addition, the Project will adhere to the ADEQ Aquifer Protection Program and biannual water quality assessment report, as required by the Clean Water Act.

D. LITERATURE CITED

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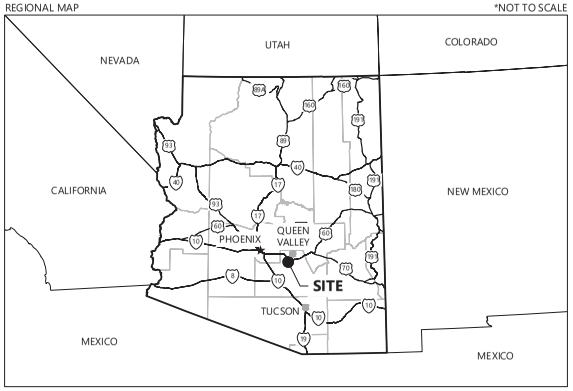
APPENDIX A

Boundary Survey

BOUNDARY SURVEY

THAT PORTION OF ARIZONA STATE LAND BEING LOCATED IN SECTIONS 13, 14, 22, 23, 24, 25, 26, 27, 34, 35, 36, TOWNSHIP 2 SOUTH, RANGE 9 EAST, TOGETHER WITH SECTIONS 18, 19, 30, 31, TOWNSHIP 2 SOUTH, RANGE 10 EAST, TOGETHER WITH A PORTION OF SECTION 6, TOWNSHIP 3 SOUTH, RANGE 10 EAST, TOGETHER WITH SECTIONS 1, 2, 11, 12, TOWNSHIP 3 SOUTH, RANGE 9 EAST, OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA

REGIONAL MAP *NOT TO SCALE



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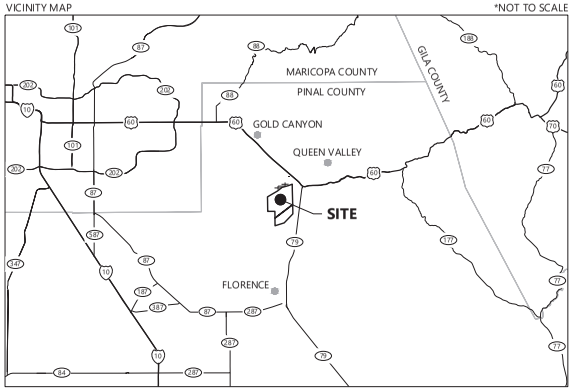

GENERAL NOTES:

1. *THE HORIZONTAL DATUM IS THE ARIZONA STATE PLANE COORDINATE SYSTEM, NAD83 (2011), CENTRAL ZONE, INTERNATIONAL FOOT. THE VERTICAL DATUM IS NAVD88 (GEOID18).*
2. *ALL AREAS AND DISTANCES SHOWN HEREON ARE GRID VALUES. THE COMBINED SCALE FACTOR IS 0.999852132 BASED ON THE OPUS POST PROCESSING SOLUTION ABOUT THE WESTWOOD CONTROL POINT NO.1, LOCATED AT N: 797684.74, E:855608.78.*
3. *POINT TABLES HAVE A BRIEF DESCRIPTION OF THE POINTS THAT WERE FOUND DURING THIS SURVEY.*
4. *THIS SURVEY WAS PREPARED USING TITLE COMMITMENT FILE NUMBER 24000741-040-DO, DOCKET 254, PAGE 193, REC NO. 2002-059862, REC NO. 2002-059889; DOC 09-3170;*
5. *BASIS OF BEARING IS ARIZONA STATE PLANE COORDINATE SYSTEM NAD83(2011), CENTRAL ZONE, INTERNATIONAL FOOT, NO ROTATION APPLIED.*

CERTIFICATION

I HEREBY CERTIFY THAT THIS SURVEY WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT ALL MONUMENTS SHOWN ARE OF THE CHARACTER DESCRIBED, AND OCCUPY THE POSITIONS SHOWN.

BRICK WELCH, RLS, CFEDS
ARIZONA LICENSE NO. 71745,
BRICK.WELCH@WESTWOODPS.COM

DATE 4/11/2025

REGISTERED LAND SURVEYOR CERTIFICATE NO. 71745 ERICK A. WELCH Date Signed 4/11/2025 ARIZONA, U.S.A.

Westwood

Phone (480) 747-6558
Fax (480) 367-8025

6909 East Greenway Parkway, Suite 250
Scottsdale, AZ 85254
westwoodps.com

Westwood Professional Services, Inc.

PREPARED FOR:

SILVER KING SOLAR LLC
500 N. CENTRAL AVENUE, SUITE 600
GLENDALE, CA 91203

LEGEND:

- XX — COUNTY HIGHWAY
- XX — STATE HIGHWAY
- XX — INTERSTATE HIGHWAY

BOUNDARY SURVEY
SILVER KING
SOLAR LLC PROJECT
PINAL COUNTY, ARIZONA

PROJECT NUMBER: 0046584.00

DATE: 4/11/2025

SHEET: 01 OF 03

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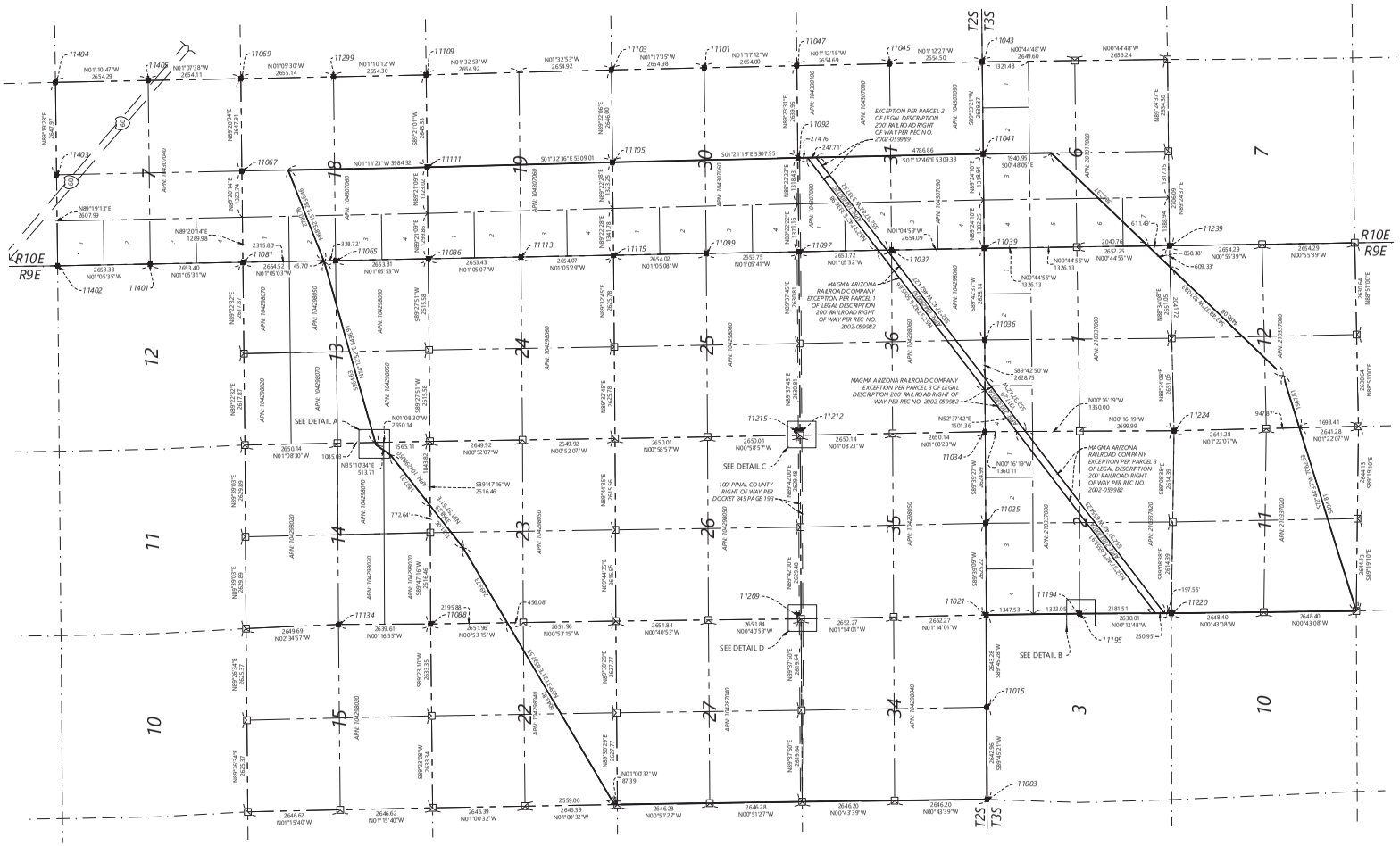

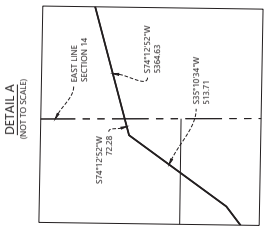

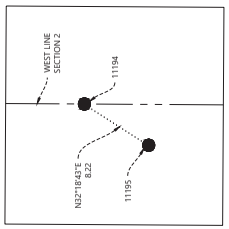

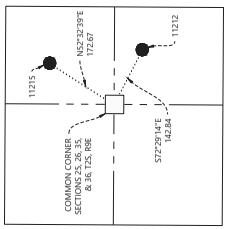

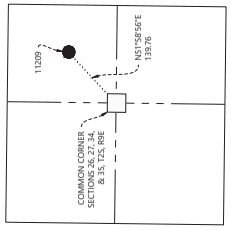

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500 N. CENTRAL AVENUE, SUITE 600
GLENDALE, CA 91203

LEGEND:

- SECTION LINE
- QUARTER SECTION LINE
- SECTION LINE (GIS - NOT RESOLVED)
- PROPOSED BOUNDARY LINE
- ADJOINER LINE
- ROW LINE
- ROW BREAK LINE
- FOUND MONUMENT (SEE LABEL)
- NOTHING FOUND NOTHING SET CALCULATED POSITION
- STATE 60 HIGHWAY

GRAPHIC SCALE
0 1500' 3000' 4500'
(IN FEET)
1 INCH = 1500 FT

BOUNDARY SURVEY
SILVER KING SOLAR LLC PROJECT
PINAL COUNTY, ARIZONA

PROJECT NUMBER: 0046584.00

DATE: 4/11/2025

SHEET: 02 OF 03

LEGAL DESCRIPTIONS

THAT PORTION OF ARIZONA STATE LAND BEING LOCATED IN SECTIONS 13, 14, 22, 23, 24, 25, 26, 27, 34, 35, 36, TOWNSHIP 2 SOUTH, RANGE 9 EAST, TOGETHER WITH SECTIONS 18, 19, 30, 31, TOWNSHIP 2 SOUTH, RANGE 10 EAST, TOGETHER WITH A PORTION OF SECTION 6, TOWNSHIP 3 SOUTH, RANGE 10 EAST, TOGETHER WITH SECTIONS 1, 2, 11, 12, TOWNSHIP 3 SOUTH, RANGE 9 EAST, OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID SECTION 22, TOWNSHIP 2 SOUTH, RANGE 9 EAST, THENCE NORTH 01°00'32" WEST, ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 22, A DISTANCE OF 87.40 FEET; THENCE NORTH 59°31'21" EAST A DISTANCE OF 8,537.53 FEET; THENCE NORTH 51°57'51" EAST A DISTANCE OF 3,368.39 FEET; THENCE NORTH 35°10'34" EAST A DISTANCE OF 513.71 FEET; THENCE NORTH 74°12'52" EAST A DISTANCE OF 5,436.91 FEET; THENCE NORTH 68°32'15" EAST A DISTANCE OF 2,836.46 FEET TO THE EAST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 18; THENCE SOUTH 01°11'23" EAST, ALONG SAID EAST LINE, A DISTANCE OF 1,330.19 FEET TO THE CENTER QUARTER CORNER OF SAID SECTION 18; THENCE CONTINUING SOUTH 01°11'23" EAST, ALONG THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 18, A DISTANCE OF 2,654.13 FEET TO THE QUARTER CORNER COMMON TO SAID SECTIONS 18 AND 19, BEING A FOUND 1-INCH IRON PIPE WITH A 3-INCH PINAL COUNTY BRASS CAP STAMPED "1962"; THENCE SOUTH 01°32'36" EAST, ALONG THE EAST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 19, A DISTANCE OF 2,654.25 FEET TO THE CENTER QUARTER CORNER OF SAID SECTION 19; THENCE CONTINUING SOUTH 01°32'36" EAST, ALONG THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 19, A DISTANCE OF 2,654.76 FEET TO THE QUARTER CORNER COMMON TO SAID SECTIONS 19 AND 30, BEING A FOUND 1-INCH IRON PIPE WITH A 3-INCH PINAL COUNTY BRASS CAP STAMPED "1962"; THENCE SOUTH 01°21'19" EAST, ALONG THE EAST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 30, A DISTANCE OF 2,654.44 FEET TO THE CENTER QUARTER CORNER OF SAID SECTION 30; THENCE CONTINUING SOUTH 01°21'19" EAST, ALONG THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 30, A DISTANCE OF 2,653.51 FEET TO THE QUARTER CORNER COMMON TO SAID SECTIONS 30 AND 31, BEING A FOUND 1-INCH IRON PIPE IN CONCRETE WITH A 3-INCH PINAL COUNTY BRASS CAP STAMPED "1962"; THENCE SOUTH 01°12'46" EAST, ALONG THE EAST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 31, A DISTANCE OF 2,654.68 FEET TO THE CENTER QUARTER CORNER OF SAID SECTION 31; THENCE CONTINUING SOUTH 01°12'46" EAST, ALONG THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 31, A DISTANCE OF 2,654.65 FEET TO THE QUARTER CORNER COMMON TO SAID SECTIONS 31 AND 6, BEING A FOUND 1-INCH IRON PIPE WITH A 3-INCH PINAL COUNTY BRASS CAP STAMPED "1962"; THENCE SOUTH 00°48'05" EAST, ALONG THE EAST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 6, A DISTANCE OF 1,940.95 FEET; THENCE SOUTH 43°48'37" WEST A DISTANCE OF 9,210.83 FEET; THENCE SOUTH 72°44'33" WEST A DISTANCE OF 7,062.63 FEET TO THE SOUTHWEST CORNER OF SAID SECTION 11; THENCE NORTH 00°43'08" WEST, ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 11, A DISTANCE OF 2,648.40 FEET TO THE WEST QUARTER CORNER OF SAID SECTION 11; THENCE CONTINUING NORTH 00°43'08" WEST, ALONG THE WEST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 11, A DISTANCE OF 2,648.40 FEET TO THE NORTHWEST CORNER OF SAID SECTION 11, BEING A FOUND 1-1/4 INCH IRON PIPE WITH A 2-INCH BRASS CAP STAMPED "1986 LS 12900"; THENCE NORTH 00°12'48" WEST, ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 2, A DISTANCE OF 2,630.01 FEET TO THE WEST QUARTER CORNER OF SAID SECTION 2, BEING A FOUND 2-INCH ALUMINUM CAP STAMPED "RLS 40014"; THENCE NORTH 00°48'39" WEST, ALONG THE WEST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 2, A DISTANCE OF 2,670.58 FEET TO THE NORTHWEST CORNER OF SAID SECTION 2, BEING A FOUND 1-1/4 INCH IRON PIPE; THENCE SOUTH 89°45'28" WEST, ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 34, A DISTANCE OF 2,643.28 FEET TO THE SOUTH QUARTER CORNER OF SAID SECTION 34, BEING A FOUND 3-1/4 INCH BRASS CAP STAMPED "SRP 2009 RLS 42847"; THENCE SOUTH 89°45'21" WEST, ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 34, A DISTANCE OF 2,642.96 FEET TO THE SOUTHWEST CORNER OF SAID SECTION 34, BEING A FOUND 3-1/4 INCH BRASS CAP STAMPED "SRP 2009 RLS 42847"; THENCE NORTH 00°43'39" WEST, ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 34, A DISTANCE OF 2,646.20 FEET TO THE WEST QUARTER CORNER OF SAID SECTION 34; THENCE CONTINUING NORTH 00°43'39" WEST A DISTANCE OF 2,646.20 FEET TO THE NORTHWEST CORNER OF SAID SECTION 34; THENCE NORTH 00°51'27" WEST, ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 27, A DISTANCE OF 2,646.28 FEET TO THE WEST QUARTER CORNER OF SAID SECTION 27; THENCE CONTINUING NORTH 00°51'27" WEST, ALONG THE WEST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 27, A DISTANCE OF 2,646.28 FEET TO THE NORTHWEST CORNER OF SAID SECTION 27, ALSO BEING THE POINT OF BEGINNING.

EXCEPT THEREFROM THAT 200-FOOT STRIP OF LAND AND INTEREST DESCRIBED AS THE MAGMA ARIZONA RAILROAD COMPANY PER DOCUMENT NUMBER 2002-059182 OF THE PINAL COUNTY RECORDER.

CONTAINING 387,268,655 SQUARE FEET OR 8,890.465 ACRES, MORE OR LESS.

ALL DISTANCES ARE GRID DISTANCES BASED ON THE NORTH AMERICAN DATUM 1983 (2011), ARIZONA STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE (0202), INTERNATIONAL FEET. THE COMBINED SCALE FACTOR IS 0.99985212.

SUBJECT TO ALL EASEMENTS, RIGHTS OF WAY, AND OTHER ENCUMBRANCES OF RECORD.

Project Boundary			
Parcel APN	**Gross Acreage**	**Net Acreage**	**PLSS Location**
104298040	639.91	192.77	22 T2S R9E
104298040	638.22	638.22	27 T2S R9E
104298040	640.09	640.09	34 T2S R9E
104298050	398.23	273.41	13 T2S R9E
104298050	79.56	30.06	14 T2S R9E
104298050	636.77	545.59	23 T2S R9E
104298050	638.36	638.36	26 T2S R9E
104298050	639.54	639.54	35 T2S R9E
104298060	638.13	638.13	24 T2S R9E
104298060	639.99	639.99	25 T2S R9E
104298060	640.35	618.17	36 T2S R9E
104298070	158.66	0.78	14 T2S R9E
104307060	641.67	209.82	18 T2S R10E
104307060	644.62	322.18	19 T2S R10E
104307060	648.3	326.23	30 T2S R10E
104307090	650.17	313.13	31 T2S R10E
201017000	650.39	205.79	6 T3S R10E
210337000	649.25	637.13	1 T3S R9E
210337000	642.08	232.42	12 T3S R9E
210337000	643.24	346.03	2 T3S R9E
210337020	638.24	535.51	11 T3S R9E
210337020	643.24	267.11	2 T3S R9E
Total	**12,839.01**	**8,890.46**	

Magma Arizona Railroad Company Parcels			
104290010	22.18	22.18	36 T2S R9E
104300120	15.32	15.32	31 T2S R10E
21033001A	30.09	30.09	2 T3S R9E
21033001A	7.85	7.85	1 T3S R9E
Total	**75.44**	**75.44**	

Total Project Boundary (including Railroad)	**8,965.90**

POINT TABLE					
Point #	Northing	Easting	Elevation	Raw Description	Accepted/Rejected
11003	802731.516	850887.292	1662.99	FOUND 3-1/4 INCH BRASS CAP STAMPED "SRP T2S R9E S33 S34 S4 S3 T3S 2009 RLS 42847" 3 INCHES BELOW GROUND CORNER TO SECTIONS 33 & 34, T2S, R9E & SECTIONS 3 & 4, T3S, R9E	Accepted
11015	802742.781	853530.223	1676.79	FOUND 3-1/4 INCH BRASS CAP STAMPED "SRP T2S R9E S33 S34 S4 S3 T3S 2009 RLS 42847" 1 INCH BELOW GROUND 1/4 CORNER TO SECTION 34, T2S, R9E & SECTION 2, T3S, R9E	Accepted
11021	802753.951	856173.477	1691.53	FOUND 1-1/4 INCH IRON PIPE 5 INCHES ABOVE GROUND CORNER TO SECTIONS 2 & 3, T3S, R9E & SECTIONS 34 & 35, T2S, R9E	Accepted
11025	802769.868	858798.649	1707.85	FOUND 1 INCH IRON PIN 3 INCHES ABOVE GROUND 1/4 CORNER TO SECTION 35, T2S, R9E & SECTION 2, T3S, R9E	Accepted
11034	802785.557	861423.597	1723.54	FOUND 1-1/4 INCH IRON PIPE WITH NO CAP 3 INCHES ABOVE GROUND CORNER TO SECTIONS 35 & 36, T2S, R9E & SECTIONS 1 & 2, T3S, R9E	Accepted
11036	802798.689	864052.315	1737.54	FOUND 1-1/4 INCH IRON PIPE 3 INCHES ABOVE GROUND CORNER TO SECTION 1, T3S, R9E & SECTION 36, T2S, R9E	Accepted
11037	805465.596	866630.257	1762.37	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "PINAL COUNTY T2S R9E S36 T2S R10E S31 1962" 5 INCHES ABOVE GROUND 1/4 CORNER TO SECTION 36, T2S, R9E & SECTION 31, T2S, R10E	Accepted
11039	802811.982	866680.421	1756.22	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "PINAL COUNTY T2S R9E S36 T2S R10E S31 T3S R9E S1 T3S R10E S6 1962" 8 INCHES ABOVE GROUND CORNER TO SECTION 1, T3S, R9E; SECTION 36 T2S, R9E; SECTION 31, T2S, R10E & SECTION 6, T3S, R10E	Accepted
11041	802840.131	869381.466	1775.18	FOUND 1 INCH IRON PIPE WITH 3-1/4 INCH BRASS CAP STAMPED "PINAL COUNTY T2S R10E S31 T3S R10E S6 1962" 8 INCHES ABOVE GROUND 1/4 CORNER TO SECTION 31, T2S, R10E & SECTION 6, T3S, T10E	Accepted
11043	802868.268	872020.684	1793.74	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "PINAL COUNTY T2S R10E S31 S32 T3S R10E S6 S5 1962" 6 INCHES ABOVE GROUND CORNER TO SECTIONS 5 & 6, T3S, R10E & SECTIONS 31 & 32, T2S, T10E	Accepted
11045	805522.178	871964.745	1799.52	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "PINAL COUNTY T2S R10E S31 S32 1962" 12 INCHES ABOVE GROUND 1/4 CORNER TO SECTIONS 31 & 32, T2S, R10E	Accepted
11047	808180.281	871908.913	1805.79	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP WITNESS CORNER STAMPED "PINAL COUNTY T2S R10E S30 S29 S32 S31 WC 1962" 14 INCHES ABOVE GROUND 4 FEET NORTH OF CORNER TO SECTIONS 29, 30, 31 & 32, T2S, R10E	Accepted
11065	821385.508	866327.022	1837.36	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "T2S R10E S18 1962" BENT SOUTH SHOT AT BEND 1/4 CORNER TO SECTION 18, T2S, R10E & SECTION 13, T2S, R9E	Accepted
11067	824069.781	868890.342	1872.78	FOUND 3 INCH PINAL COUNTY BRASS CAP ON 1 INCH IRON PIPE, 9 INCHES ABOVE GROUND STAMPED "PINAL COUNTY T2S R10E S7 S18 1962" 1/4 CORNER TO SECTIONS 7 & 8, T2S, R10E	Accepted
11069	824100.154	871538.076	1887.21	FOUND 3 INCH PINAL COUNTY BRASS CAP ON 1 INCH IRON PIPE, BENT SOUTH, SHOT AT BEND, STAMPED "PINAL COUNTY T2S R10E S7 S8 S18 S17 1962" CORNER TO SECTIONS 7, 8, 17 & 18, T2S, R10E	Accepted
11081	824039.552	866276.794	1853.32	FOUND 3 INCH PINAL COUNTY BRASS CAP ON 1 INCH IRON PIPE, 10 INCHES ABOVE GROUND STAMPED "PINAL COUNTY T2S R9E S12 S13 T2S R10E S7 S18 1962" CORNER TO SECTIONS 12 & 13, T2S, R9E & SECTIONS 7 & 18, T2S, R10E	Accepted
11086	818732.182	866377.876	1819.57	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "PINAL COUNTY T2S R9E S13 S24 T2S R10E S18 S19 1962" 10 INCHES ABOVE GROUND CORNER TO SECTIONS 13 & 24, T2S, R9E & SECTIONS 18 & 19, T2S, R10E	Accepted
11088	818663.864	855914.061	1753.29	FOUND 5/8 INCH REBAR CORNER TO SECTIONS 14, 15, 22 & 23, T2S, R9E	Accepted
11092	808148.271	869269.099	1791.71	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "PINAL COUNTY T2S R10E S30 S31 1962" IN CONCRETE 6 INCHES ABOVE GROUND 2 INCHES ABOVE CONCRETE FOR CORNER TO SECTIONS 30 & 31, T2S, R10E	Accepted
11097	808118.829	866579.672	1771.92	FOUND 3-1/4 INCH ALUMINUM CAP STAMPED "PINAL COUNTY HIGHWAY DEPARTMENT 210213 2004" 7 INCHES BELOW GROUND CORNER TO SECTIONS 25 & 36, T2S, R9E & SECTIONS 30 & 31, T2S, R10E	Accepted
11099	810772.097	866528.974	1779.06	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "PINAL COUNTY T2S R9E S25 T2S R10E S30 1962" 7 -1/2 INCHES ABOVE GROUND 1/4 CORNER TO SECTIONS 25, T2S, R9E & SECTION 30, T2S, R10E	Accepted
11101	810829.610	871849.320	1817.75	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "PINAL COUNTY T2S R10E S30 S29" LEANING NORTH SHOT AT BASE 8 INCHES ABOVE GROUND 1/4 CORNER TO SECTIONS 29 & 30, T3S, R10E	Accepted
11103	813483.909	871789.405	1826.25	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "PINAL COUNTY T2S R10E S19 S20 S30 S29 1962" IN PILE OF ROCKS 6 INCHES ABOVE GROUND CORNER TO SECTIONS 19, 20, 29 & 30, T2S, R10E	Accepted
11105	813454.733	869143.564	1807.87	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "PINAL COUNTY T2S R10E S19 S30 1962" 7 INCHES ABOVE GROUND 1/4 CORNER FOR SECTIONS 19 & 30, T2S, R10E	Accepted
11109	818791.815	871645.946	1847.56	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "T2S R10E S17 S18 S19 S20 1962" BENT WEST SHOT AT BEND 1/4 CORNER TO SECTIONS 17, 18, 19 & 20, T2S, R10E	Accepted
11111	818761.817	869000.588	1833.13	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "PINAL COUNTY T2S R10E S18 S19 1962" 14 INCHES ABOVE GROUND 1/4 CORNER FOR SECTIONS 18 & 19, T2S, R10E	Accepted
11113	816079.225	866428.135	1790.14	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "PINAL COUNTY T2S R9E S24 T2S R10E S19 1962" 9 INCHES ABOVE GROUND 1/4 CORNER TO SECTION 24, T2S, R9E & SECTION 19, T2S, R10E	Accepted
11115	813425.639	866478.690	1790.65	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "PINAL COUNTY T2S R9E S30 S19 T2S R10E S25 S24 1962" 7 INCHES ABOVE GROUND SAYS S31 NOT S30 CORNER TO SECTIONS 19 & 30, T2S, T10E & SECTIONS 24 & 25, T2S, R9E	Accepted
11134	821303.445	855901.069	1750.64	FOUND 1/2 INCH REBAR WITH PINK RIBBON FLUSH 1/4 CORNER TO SECTIONS 14 & 15, T2S, R9E	Accepted
11194	800083.635	856211.275	1682.38	FOUND 2 INCH ALUMINUM CAP STAMPED "T3S R9E 2007 RLS 40014" FLUSH 8.22 FEET NE 1/4 CORNER TO SECTIONS 2 & 3, T3S, R9E	Accepted
11195	800076.686	856206.880	1682.35	FOUND 1 INCH IRON PIPE BENT, SHOT AT BEND	Accepted
11209	808143.342	856169.390	1703.33	FOUND 1/2 INCH REBAR WITH NO CAP 3 INCHES ABOVE GROUND	Rejected
11212	808041.803	861454.384	1737.19	FOUND 7/8 INCH REBAR 5 INCHES ABOVE GROUND	Rejected
11215	808189.794	861455.229	1737.93	FOUND 1/2 INCH REBAR 5 INCHES ABOVE GROUND	Rejected
11220	797453.642	856221.067	1679.61	FOUND 1-1/4 INCH IRON PIPE WITH 2 INCH BRASS CAP STAMPED "T3S R9E S3 S2 S10 S11 1986 LS 12900" 8 INCHES ABOVE GROUND CORNER TO SECTIONS 2, 3, 10 & 11, T3S, R9E	Accepted
11224	797375.517	861449.264	1713.92	FOUND 1-1/2 INCH IRON PIPE WITH NO CAP 9 INCHES ABOVE GROUND CORNER TO SECTIONS 1, 2, 11 & 12, T3S, R9E	Accepted
11239	797507.927	866749.715	1739.12	FOUND 1-1/4 INCH IRON PIPE WITH 2 INCH BRASS CAP STAMPED "T3S R9E S1 S12 T3S R10E S6 S7 1986 LS 12900" 10 INCHES ABOVE GROUND CORNER TO SECTIONS 1 & 12, T3S, R9E & SECTIONS 6 & 7, T3S, R10E	Accepted
11299	821445.561	871591.745	1868.57	FOUND 1 INCH IRON PIPE WITH 3 INCH BRASS CAP STAMPED "T2S R10E S18 S17 1962" 21 INCHES ABOVE GROUND 1/4 CORNER TO SECTIONS 17 & 18, T3S, R10E	Accepted
11401	826692.472	866226.234	1827.91	FOUND 3 INCH PINAL COUNTY BRASS CAP ON 1 INCH IRON PIPE, 11 INCHES ABOVE GROUND STAMPED "PINAL COUNTY T2S R9E T2S R10E S12 S7 1962" 1/4 CORNER TO SECTION 12, T2S, R9E & SECTION 7, T2S, R10E	Accepted
11402	829345.323	866175.624	1871.12	FOUND 3 INCH PINAL COUNTY BRASS CAP ON 1 INCH IRON PIPE, 11 INCHES ABOVE GROUND STAMPED "PINAL COUNTY T2S R9E T2S R10E S1 S6 S7 S12 1962" CORNER TO SECTIONS 1 & 12, T2S, R9E & SECTIONS 6 & 7, T2S, R10E	Accepted
11403	829376.258	868783.432	1877.84	FOUND 3 INCH PINAL COUNTY BRASS CAP ON 1 INCH IRON PIPE, 10 INCHES ABOVE GROUND STAMPED "PINAL COUNTY T2S R10E S6 S7 1962" 1/4 CORNER TO SECTIONS 6 & 7, T2S, R10E	Accepted
11404	829407.475	871431.217	1886.62	FOUND 3 INCH PINAL COUNTY BRASS CAP ON 1 INCH IRON PIPE, BENT NW, SHOT AT VERTICAL, 11 INCHES ABOVE GROUND (DAMAGED, PARTIALLY ILLEGIBLE) STAMPING PARTIALLY READS "PINAL COUNTY T2S R9E T2S R10E S6 S5" CORNER TO SECTIONS 5, 6, 7 & 8, T2S, R10E	Accepted
11405	826753.748	871485.868	1862.69	FOUND 1 INCH IRON PIPE, NO CAP, WITH BRASS TAG, 17 INCHES ABOVE GROUND STAMPED "RBF LS 37174" 1/4 CORNER TO SECTIONS 7 & 8, T2S, R10E	Accepted

Westwood

Phone (480) 747-6558
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6909 East Greenway Parkway, Suite 250
Scottsdale, AZ 85254
westwoodps.com

Westwood Professional Services, Inc.

PREPARED FOR:

SILVER KING SOLAR LLC
500 N. CENTRAL AVENUE, SUITE 600
GLENDALE, CA 91203

BOUNDARY SURVEY
SILVER KING SOLAR LLC PROJECT
PINAL COUNTY, ARIZONA

PROJECT NUMBER: 0046584.00

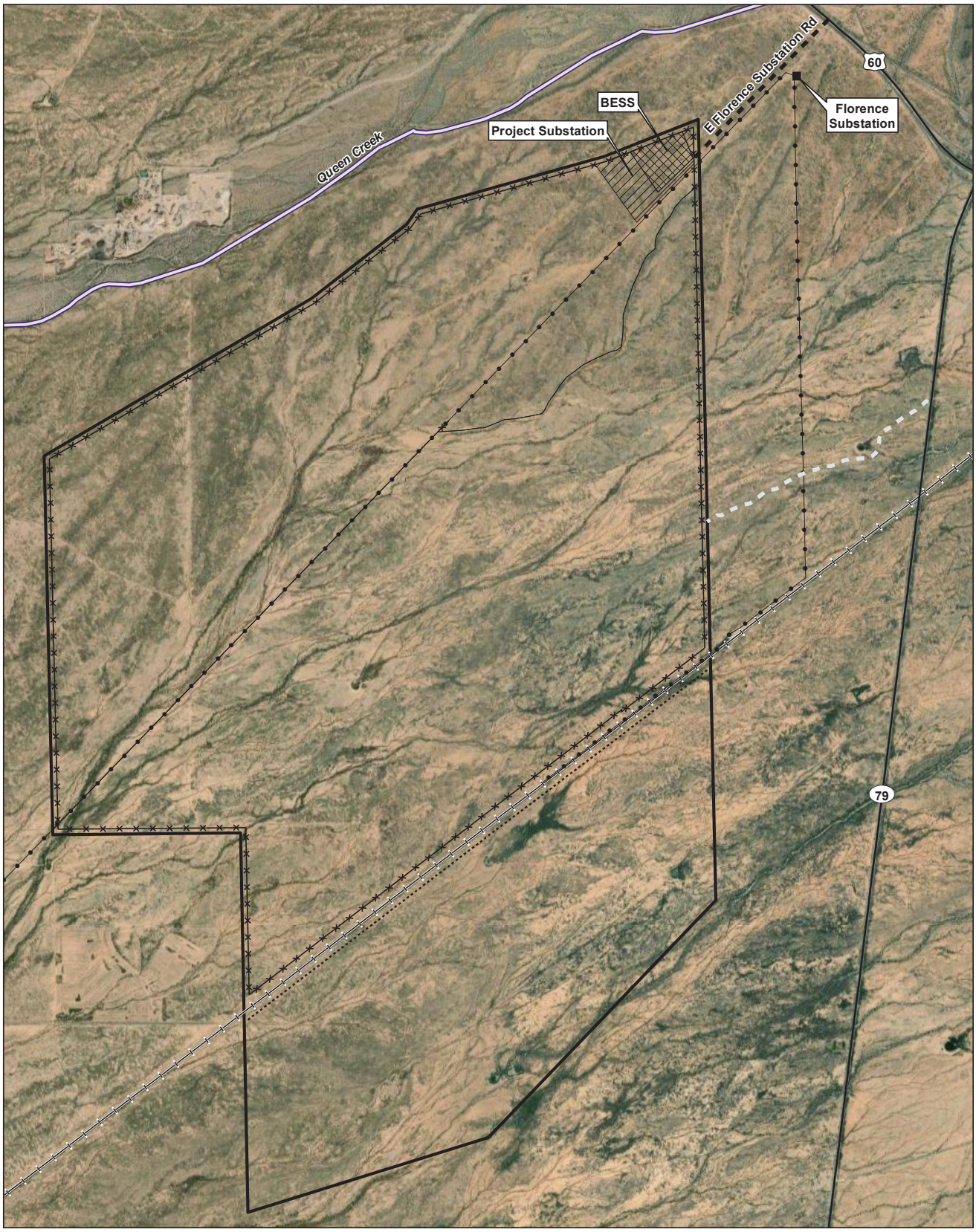
DATE: 4/11/2025

SHEET: 03 OF 03

N:\0046584.00_CAD_Survey\05 Drawings\Boundary\00_Cover_4-11-2025_4:16 PM_Ryan.dwf

APPENDIX B

Site Plan and
Location

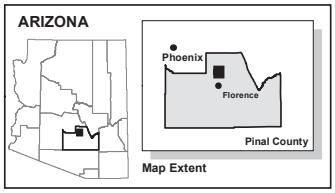


SILVER KING SOLAR and STORAGE PROJECT

PRELIMINARY SITE PLAN

Map Extent: Pinal County, AZ

Date: 4.09.25 | Author: sjw



Legend

Project Features

- Fenceline
- Existing Access Road
- Proposed Access Road
- Proposed Recreational Trail
- BESS
- Project Substation
- Silver King Solar and Storage Project Boundary

General Features

- Existing Substation
- Existing 69kV Transmission Line
- US Route or State Highway
- Railroad
- Stream

0 0.25 0.5 0.75
Miles

State Plane Coordinate System
NAD 83, Arizona Central
Linear Unit: Foot US

Data Sources: ADOT, AGIC, BLM, ESRI, Pinal Co., USGS.
F\\Silver King Notification 031925.mxd

Preliminary design subject to change

APPENDIX C

Neighborhood

Meeting Report

NEIGHBORHOOD MEETING REPORT FOR THE SILVER KING SOLAR AND STORAGE PROJECT

PRE-APPLICATION CASE NO: Z-PA-130-24

Prepared for:

Pinal County Planning Division
85 North Florence Street, First Floor
P.O. Box 2973
Florence, Arizona 85132
(520) 866-6442
Attn: Sangeeta Deokar

Prepared by:

KP Environmental
280 Melba Road
Encinitas, CA 92024
(602) 909-2636
Kpenvironmental.net

On Behalf of:

Silver King Solar LLC
900 S Pavillion Center Dr
Suite 155
Las Vegas, NV 89144
(707) 363-4155
Attn: Dave Lundgren

May 2025

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Appendices

Appendix A. Copy of postcard and mailing list
Appendix B. Photos from meeting
Appendix C. Copies of open house boards
Appendix D. Copies of sign in sheet
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1.0 INTRODUCTION

Silver King Solar LLC (Applicant) is requesting a major comprehensive plan amendment (MCPA) to the 2019 Pinal County Comprehensive Plan (Comprehensive Plan) (Pinal County 2021) to construct and operate the Silver King Solar and Storage Project (Project). The Project is sited on approximately 9,000 acres of Arizona State Land Department (ASLD) land in unincorporated Pinal County, Arizona and includes 11 parcels, in whole or in part, south of US Highway 60 and west of State Route 79. The Project would include an up-to 1,100-megawatt (MW) solar photovoltaic (PV) generating facility, a Project substation, an up-to 1,100-MW Battery Energy Storage System (BESS) and a generation-tie (gen-tie) transmission line.

The Project site is designated as Moderate Low Density Residential per the Comprehensive Plan. Solar generating facilities are not identified in the Comprehensive Plan as a compatible or alternative use for areas designated as Moderate Low Density Residential. As such, the Applicant is submitting an MCPA application to redesignate the Project Area to Green Energy Production.

As part of the MCPA process, Pinal County requires holding a neighborhood meeting that complies with the Citizen Review process outlined in Chapter 2.166.050, Section E: Citizen Review, of the Pinal County Development Services Code (Pinal County 2024). The following is the Neighborhood Meeting Report (Report).

The requirements for the neighborhood meeting are as follows:

i. Notice of the meeting shall be sent to the head of homeowners' or community associations nearest the property proposed for rezoning.

ii. Notice shall be sent to all real property owners, as shown on the last assessment of the property, within 1,200 feet of the property proposed for rezoning.

iii. Notification shall include the date, time and location of the meeting; a description and location of the project; and how verbal and written comments can be submitted.

iv. Notwithstanding the notice requirement, the failure of any person or entity to receive notice shall not constitute grounds for preventing any action by the county. (Pinal County 2024).

In addition, the Neighborhood Meeting Report must include the following:

i. Dates and locations of all meetings where citizens were invited to discuss the applicant's proposal.

ii. Content, dates mailed, numbers of mailings, including letters, meeting notices, newsletters and other publications, and names and addresses where mailed.

iii. Copies of mailings.

iv. Copies of sign-in sheets from all public meetings.

v. A summary of concerns, issues and problems expressed during the process, including:

A. The substance of the concerns, issues, and problems.

B. Statement as to how the applicant has addressed or intends to address concerns, issues and problems expressed during the process.

C. A statement about the concerns, issues, and problems the applicant is unwilling or unable to address and why. (Pinal County 2024).

This Neighborhood Meeting Report documents the compliance with the neighborhood meeting process and has met the reporting requirements described in Chapter 2.166.050, Section E: Citizen Review, of the Pinal County Development Services Code (Pinal County 2024). This Neighborhood Meeting Report is part of the Application for an MCPA for the Project.

2.0 NEIGHBORHOOD MEETING NOTIFICATIONS

2.1 Notice of the Meeting

The Applicant developed a mailing list based on a 4-mile buffer surrounding the Project. Due to the limited number of property owners immediately adjacent to the Project, the 4-mile notification radius was implemented to ensure surrounding property owners, stakeholders, and community associations were made aware of the Project. This far exceeds the 1,200-foot notification distance required by Pinal County, but the Applicant wanted to ensure a robust public process and extensive notification.

A copy of the mailing list is included in **Appendix A.** The mailing list and parcel data were obtained from the Pinal County Assessor's Office. The informational postcard mailer is described below and included in **Appendix A.**

In addition to physically mailing the postcard, the Applicant sent stakeholders and elected officials email invitations.

The informational postcard was a full color postcard that included the date, time, and location of the neighborhood meeting, a description and map of the Project location, a link to the Project website where comments could be submitted, and a telephone number to

reach the Project development team. The postcard was mailed to the names on the mailing list on April 11, 2025, approximately three weeks before the meeting.

3.0 NEIGHBORHOOD MEETING

The Applicant held an open house format neighborhood meeting on Wednesday, April 30, 2025, from 4:30 p.m. to 6:30 p.m., at the Magma Ranch K-8 School. The Magma Ranch K-8 School is located at 10980 E Desert Mountain Blvd, Florence, AZ, 85132 and is within 5 miles of the Project. This is the closest public building to the Project site.

The neighborhood meeting was presented in an open-house format where the public could come and go during the posted time. There was no formal presentation. Upon entering, attendees were asked to provide their contact information at a sign-in table, were invited to take comment forms, and were then led to a series of informational posters. Project representatives were available to answer attendees' questions one-on-one or on a small group basis. This format allowed community members to attend at their convenience, review Project information boards, and speak with Project representatives.

Photos taken during the neighborhood meeting are shown in **Appendix B**.

At the meeting, the Applicant provided 24 poster boards set up on easels around the room at designated stations (**Appendix C**). There were also comment forms provided to attendees and refreshments were provided. The poster board stations included:

- Welcome,
- Project Overview,
- Project Components and Design,
- Environmental and Permitting Process, and
- Comments.

In total, 55 individuals signed in, and there were some additional attendees that did not sign in. Among the attendees were Pinal County Supervisor Serdy and Arizona State Legislator Ralph Heap. A copy of the completed sign-in sheet from the neighborhood meeting is provided in **Appendix D**.

The following Project representatives were present at the meeting to interact with the public, listen to concerns, and answer questions:

- Dave Ludgren – Vice President of Development, Arevia Power
- Rafik Albert – Executive Vice President of Lands & Permitting, Arevia Power
- Ian Calkins – Vice President of Public Affairs, Copper State Consulting Group
- Kenda Pollio – Principal, KP Environmental

- Sarah Justus – Public Relations Manager/Senior Project Manager, KP Environmental
- Gabby Glener – Environmental Planner, KP Environmental
- Leslie McFadden – Public Affairs Specialist, KP Environmental

4.0 STAKEHOLDER FEEDBACK

Throughout the public involvement process, the KPE team solicited public comments. During the neighborhood meeting, the Applicant received 19 comment forms and a written letter (**Appendix E**).

4.1 Comment Themes

A high-level summary of the comments collected, and letter is below:

- Water usage
- Environmental impacts
- Anti-development
- Decommissioning and waste disposal
- Visual Impacts
- Tax Revenue from Project
- Heat island
- Grazing leases
- Different Site
- Who this power will be supplying

4.2 Comments

In addition to the comment forms received at the neighborhood meeting, members of the public were able to submit comments through the Project website and call the Project 1-800 information line. The table below are all comments received through the Project website, 1-800 information line, and neighborhood meeting comment forms.

Table 1
Comments and Responses

Comment Method	Comment	Applicant Response
Website	Good luck with the project. I will try to attend the open house on 30 April. What kind of employment at the site, if any, will there be after the project is up and running? Maintenance workers of some kind?	The Applicant answered questions about employment and construction.

Table 1 Comments and Responses		
Comment Method	**Comment**	**Applicant Response**
Website	No thanks! This is not a beneficial project for AZ, so close to population in an area that should be preserved for its beauty alongisde the Superstitions! No!	No response.
Website	I am in favor of this project.	No response.
Website	Leave our desert alone!!! Go back to California. We don't want you destroying our beautiful area.	No response.
Website	I would like to know why you want to put a solar farm of this size so close to a major city and also take all of the grazing land out of production and when do you plan on starting this project.	The Applicant provided responses explaining the location of the Project, anticipated start of construction and included meeting information.
Website	I would like to learn more about the hazard mitigation policies on the BESS system you will be building at the silverking project.	The Applicant provided responses and suggested coming to the meeting to talk with Project representatives.
Website	Does any of the energy generated go to California?	The Applicant answered questions about energy use and generation and that power generated from this project would tie into the SRP system.
Website	As a new resident of Pinal County having lived in Maricopa for 38 years I have loved the pristine desert out here. This project will mar the beauty of the drive down to Florence and beyond.	No response.
Website	I live in Apache Junction and am strongly against your project. This will have a devastating impact on the animals and landscape. I'd much prefer a micro nuclear project. You are all about solar, which is fine in small doses. What do you do with the panels after	The Applicant answered questions about the Project and decommissioning, panel recycling, siting and design options, and suggested coming to the meeting to talk with Project representatives.

Table 1 Comments and Responses		
Comment Method	**Comment**	**Applicant Response**
	their usefulness is depleted? Consider moving that project somewhere else. Or not at all.	
Website	Hello, Where is the proposed transmission line for interconnection? And to which substation?	The Applicant provided responses explaining interconnection to the existing Florence Junction substation and suggested coming to the meeting to talk with Project representatives.
Website	I was going to come to the April 30th meeting, but your "terms of agreement" were so odious, complicated, etc. they made it difficult to attend the meeting- WHY should I generate a password in order to come to an information meeting? Looking at all your rules, no wonder so few are attending- I guess that is your intent.	The Applicant provided responses explaining the open house registration process but also described that you can attend without registration.
Website	Please don't approve the solar project at this location. Please help save our natural landscape by voting no on this.	The Applicant provided information about the Project and permitting process.
Website	Will the proposed electricity generated at this facility off Hwy 79 be used solely in Arizona?	The Applicant answered questions about generation and provided information about interconnection into SRPs system.
Written Comment Form	How much water "might" be used per year, to clean the panels. What % of the panels will need to be replaced per year. How will the dirt (dust) be reduced? Crush rock? Grass?	No response.
Written Comment Form	How much bond money will be established for Pinal County to ensure site is returned to current status? Why are you building a solar farm on the 14,000 acres in	No response.

Table 1 Comments and Responses		
Comment Method	**Comment**	**Applicant Response**
	California. Brush, trees and houses are gone now. Just level the area and install solar panels.	
Written Comment Form	I tried to register on line – your website is particularly unfriendly – after clicking "attend", then "next", it wanted me to generate a password and agree to pages of terms – I backed out of the online registry.	No response.
Written Comment Form	No solar farm in our area!!! No- No- No- No- We want to keep your area beautiful. Please give the border a try!!!	No response.
Written Comment Form	Do not want more eyesores in our beautiful area. Why not put on the California border?	No response.
Written Comment Form	Please do not build. We don't need another solar field.	No response.
Written Comment Form	Will work on getting a location for a Gold Canyon Community meeting.	No response.
Written Comment Form	I am opposed to this solar farm. I think the damage that will be done to the ecosystem will be counter productive to what is supposed to be alternative energy to save the environment. There are too many factors including rancher, environment, (water tables, birds, soil) etc. that will be adversely affected. This is designed most for big businesses rather than individuals.	No response.
Written Comment Form	I oppose this project. It will spoil the land, it will be unsightly and will only benefit California.	No response.

Table 1
Comments and Responses

Comment Method	Comment	Applicant Response
Written Comment Form	Too much desert being ruined for power supply, need to consider nuclear or more hydro.	No response.
Written Comment Form	Put your solar panels up over parking lots. Do not tear up the desert for no reason other than corporate greed. Who is getting rich from this?	No response.
Written Comment Form	No solar farm. Why destroy the rancher living.	No response.
Written Comment Form	1) Environmental impact to wildlife and land 2) Air water impacts. 3) Your alternate land choices in less populated areas with less population growth potential? 4) Effects on home values? 5) Take away from our natural beauty!	No response.
Written Comment Form	I support this project to ensure GRID in AZ will be effective for its residences in the future.	No response.
Written Comment Form	Need more info- will look up more info at this point I oppose this project.	No response.
Written Comment Form	Fourteen square miles of solar projects in arguably the finest trust land does not make sense. Additionally, it will damper nearby hope development in the future, since people are going to be less interested in a solar farm than other housing. There have to be a lot of other candidates for the project between here and California that won't spoil prime Sonoran desert. Thank you.	No response.

Table 1 Comments and Responses		
Comment Method	**Comment**	**Applicant Response**
Written Comment Form	We are a heavy civil contractor that thrives in the energy sector especially in renewable. This would be a great project for Pinal County.	No response.
Written Comment Form	The full Gold Canyon organization (3,000 + citizen) are absolutely opposed to this solar farm for a vast of reasons. I will attempt to get a meeting setup in Gold Canyon for a community meeting.	No response.

5.0 ADDRESSING PUBLIC CONCERNS AND ISSUES

Based on the comments provided on the website and during the neighborhood meeting (see **Table 1)** the Applicant will be reaching out to stakeholders and members of the public to respond to questions and concerns. This will include meeting with individual stakeholder groups such as the Association for the Development of a Better Environment (ADOBE) and the Superstition Area Land Trust (SALT) and reaching out to individuals that requested a meeting or call to discuss the Project.

The Applicant will continue a robust outreach and public process to continue through the Pinal County process and the required state Arizona Corporation Committee (ACC) process. If any concerns, issues, or problems arise during the Project permitting process that require additional mitigation, the Applicant will address those to the extent feasible.

6.0 LITERATURE CITED

Pinal County. 2019. We Create Our Future: Pinal County Comprehensive Plan. Available at: https://www.pinal.gov/DocumentCenter/View/627/Comprehensive-Plan-2020-PDF?bidId=. Accessed May 2025.

2024. Pinal County Development Services Code. Available at https://library.municode.com/az/pinal_county/codes/development_services_code_and_floodplain_management_?nodeId=DEVELOPMENT_SERVICES_CODE_TIT2ZO_CH2.166RE_2.166.050APPR. Accessed May 2025.

APPENDIX A

OWNER NAME 1	OWNER ANME 2	CARE OF	MAILING ADDRESS	MAILING CITY	MAILING STATE	MAILING ZIP	MAILING 2	MAILING 3	MAILING 4
BERBENAK DONALD	BERBENAK MAUREEN	NULL	10 ELLIOT PL	ST ALBERT	NULL		AB	T8N 5S5	CANADA
JUAREZ JOSE CARILLO	NULL	NULL	10000 E TATEM RD	SAN TAN VALLEY	AZ	851437202	NULL	NULL	NULL
JESSEE CHAD A	NULL	NULL	10001 E ASBURY AVE	SAN TAN VALLEY	AZ	851438591	NULL	NULL	NULL
WEDIC RAYMOND	NULL	NULL	10001 E TATEM RD	SAN TAN VALLEY	AZ	851437202	NULL	NULL	NULL
SEVENSKI SALLY	NULL	NULL	10010 BINGHAM RD	ELMIRA	MI	497309529	NULL	NULL	NULL
BATES MICHAEL A	NULL	NULL	10018 E WESLEY WAY	SAN TAN VALLEY	AZ	851437824	NULL	NULL	NULL
ZARATE ANGELITA	NULL	NULL	10024 E ASBURY AVE	SAN TAN VALLEY	AZ	851438591	NULL	NULL	NULL
DIDESCH DANIEL S	NULL	NULL	10063 E PARKER TRL	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
ROWLEY ERVIN P	ROWLEY ROXIE M	NULL	10064 E WESLEY WAY	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
TREVIZO VICTOR ERNAN	NULL	NULL	10066 E ASBURY AVE	SAN TAN VALLEY	AZ	851438591	NULL	NULL	NULL
KEEFE COLLIN T	NULL	NULL	10077 E RENARD RD	SAN TAN VALLEY	AZ	851435713	NULL	NULL	NULL
DAVIS EDWARD J	OGANOVICH-DAVIS MARYBETH	NULL	101 S PIEDRA NEGRA DR	QUEEN VALLEY	AZ	851189715	NULL	NULL	NULL
GEPHART RICHARD A	NULL	NULL	10140 E BELLA LN	SAN TAN VALLEY	AZ	851435929	NULL	NULL	NULL
HILL MELIA LEANN & ALAN GRANT	NULL	NULL	10140 E HORIZON TRL	SAN TAN VALLEY	AZ	851435967	NULL	NULL	NULL
VILLANUEVA DARRIN J	NULL	NULL	10145 E PRAIRIE HAWK LN	SAN TAN VALLEY	AZ	851435384	NULL	NULL	NULL
ROSS BRALEY	NULL	NULL	10147 E KRISTEN LN	SAN TAN VALLEY	AZ	851437946	NULL	NULL	NULL
LAND HILL HOLDINGS LLC	NULL	NULL	1015 W BRIDLE PATH LN	PAYSON	AZ	855413078	NULL	NULL	NULL
STONE SAM JR & SHARON K	NULL	NULL	10157 E VICTOR WAY	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
LAFFOON ELLIANA	CISNEROS ALDO II	NULL	10160 E ROBERTS RD	SAN TAN VALLEY	AZ	851436449	NULL	NULL	NULL
MCNARY JASON & ASHLEY	NULL	NULL	10187 E LIND RD	SAN TAN VALLEY	AZ	851438107	NULL	NULL	NULL
ZARD RICK JAMES	NULL	NULL	10189 E BELLA LN	SAN TAN VALLEY	AZ	851435929	NULL	NULL	NULL
JOHNSON JASON T	NANCE DANA H	NULL	10190 E BELLA LN	SAN TAN VALLEY	AZ	851435929	NULL	NULL	NULL
BUTTERS PEGGY A	NULL	NULL	10191 E PRAIRIE HAWK LN	SAN TAN VALLEY	AZ	851435384	NULL	NULL	NULL
RODRIQUEZ IGNACIO F & MARGARITA M	NULL	NULL	10194 E HORIZON TRL	SAN TAN VALLEY	AZ	851435967	NULL	NULL	NULL
CARPIO LOUIS	CORONA MARY	NULL	10196 E VICTOR WAY	SAN TAN VALLEY	AZ	851437226	NULL	NULL	NULL
WILLIAMS ANDREW E & CASSIDY M	NULL	NULL	10197 E CLEM LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
SMITH GERALD R	NULL	NULL	10198 E KRISTEN LN	SAN TAN VALLEY	AZ	851437946	NULL	NULL	NULL
BRAATEN ANGELA L	NULL	NULL	10201 E HORIZON TRL	SAN TAN VALLEY	AZ	851437648	NULL	NULL	NULL
NIKOLAUS GORDON SR & TAMI	NULL	NULL	10203 E KRISTEN LN	SAN TAN VALLEY	AZ	851437945	NULL	NULL	NULL
FREESE TROY EUGENE & NICKCOLE CHER	NULL	NULL	10234 E PRIMROSE LN	FLORENCE	AZ	851327469	NULL	NULL	NULL
SEIDELL ELIZABETH N	SEIDELL RAY	NULL	10239 E PRAIRIE HAWK LN	SAN TAN VALLEY	AZ	851435770	NULL	NULL	NULL
DIAMOND DOUGLAS J LIV TRUST	NULL	NULL	10240 E BELLA LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
RODRIGUEZ MANUEL	NULL	NULL	10240 E HORIZON TRL	SAN TAN VALLEY	AZ	851437648	NULL	NULL	NULL
GABRIELLINI PAUL & CAIPEN JANINE LIV TRUST	NULL	NULL	10240 E VICTOR WAY	SAN TAN VALLEY	AZ	851437201	NULL	NULL	NULL
CIRKS CHAD & CANDACE	NULL	NULL	10241 E SKYLINE DR	SAN TAN VALLEY	AZ	851435111	NULL	NULL	NULL
ENTRADA RENTALS LLC	NULL	C/O LOREN A & BARBARA J DRAMSTAD	10241 HWY 200	BINFORD	ND	584169342	NULL	NULL	NULL
CELAYA ADOLFO ARMENDARIZ & FIGUEROA LAURA IRINA LORONA	NULL	NULL	10243 E HORIZON TRL	SAN TAN VALLEY	AZ	851437648	NULL	NULL	NULL
ESPINOZA LUIS A & RUBI VERONICA CO-TRS	ESPINOZA FAMILY TRUST	NULL	10251 E BELLA LN	SAN TAN VALLEY	AZ	851435864	NULL	NULL	NULL
SHAMBURG MICHAEL & COLLEEN	NULL	NULL	10253 E LIND RD	SAN TAN VALLEY	AZ	851438173	NULL	NULL	NULL
CLARK DAMON KD & DANA MADDEN	NULL	NULL	10254 E PRIMROSE LN	FLORENCE	AZ	851327469	NULL	NULL	NULL
DWIGGINS DARRELL & KILLARY LAURA	NULL	NULL	10255 E KRISTEN LN	SAN TAN VALLEY	AZ	851437945	NULL	NULL	NULL
BROWN KELLY LINDEN & CHRISTINE EDLA	NULL	NULL	10256 E KRISTEN LN	SAN TAN VALLEY	AZ	851437945	NULL	NULL	NULL
COVARRUBIAS MARIA TERESA	NULL	NULL	10258 E ASTER LN	FLORENCE	AZ	851327183	NULL	NULL	NULL
BLACK ZANE & SIEGEL ZOE	NULL	NULL	10263 E CLEM LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
VANDERPOL TRISTAN & ROCHELLE	NULL	NULL	10266 E SUNFLOWER LN	FLORENCE	AZ	851327473	NULL	NULL	NULL
KROM ELIZABETH RENDE	NULL	NULL	10267 E PRIMROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
WHITE MICHAEL & LENORA	NULL	NULL	10268 E CAROL LN	SAN TAN VALLEY	AZ	851435749	NULL	NULL	NULL
RAUCH KATHERINE L	NULL	NULL	10269 E ASTER LN	FLORENCE	AZ	851327183	NULL	NULL	NULL
HART DONALD JR & KARLA	HART DONALD SR & SANDRA	NULL	10269 E LUPINE LN	FLORENCE	AZ	85132-7194	NULL	NULL	NULL
THIED E ERIK DENNIS	NULL	NULL	10270 E CLIFFROSE LN	FLORENCE	AZ	851327186	NULL	NULL	NULL
RATTS STEPHANIE	NULL	NULL	10270 E MARIGOLD LN	FLORENCE	AZ	851327176	NULL	NULL	NULL
SIMONIN RICHARD	JONES SARAH	NULL	10270 E PRIMROSE LN	FLORENCE	AZ	851327469	NULL	NULL	NULL
ESPINOZA JOSE L & ESTELA CO-TRS	JOSE & ESTELA TRUST	NULL	10277 E BELLA LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
GALLEGOS RICHARD	NULL	NULL	10280 E SUNFLOWER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
MANSKE MARLA JO	NULL	NULL	10281 E MARIGOLD LN	FLORENCE	AZ	851327191	NULL	NULL	NULL
LESUEUR HAYLEY & HYRUM	NULL	NULL	10281 E PRIMROSE LN	FLORENCE	AZ	851327470	NULL	NULL	NULL
KEMPER RYAN J	NULL	NULL	10283 E ROLLS RD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
BROKAW NATALIE	NULL	NULL	10284 E PRIMROSE LN	FLORENCE	AZ	851327469	NULL	NULL	NULL
WICKENS JACK & CORCORAN KAYLA	NULL	NULL	10285 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
LORONA MARCOS A	NULL	NULL	10286 E MARIGOLD LN	FLORENCE	AZ	851327176	NULL	NULL	NULL
GARGAN HUNTER	SHAW ASHLEY	NULL	10287 E LUPINE LN	FLORENCE	AZ	85132-7194	NULL	NULL	NULL
REED DELANEY	REED DAVID ARNOLD & NANCY EVALINE	NULL	10288 E BELLA LN	SAN TAN VALLEY	AZ	851435865	NULL	NULL	NULL
MOSIMA EDMOND ELINGE MALIVA	KEKAY FABIOLA KEMAI	NULL	1029 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
MOSIMA EDMOND ELINGE MALIVA	KEKAY FABIOLA	NULL	10290 E ASTER LN	FLORENCE	AZ	851327183	NULL	NULL	NULL
RODRIGUEZ JUSTIN FRANCISCO	NULL	NULL	10290 E HORIZON TRL	SAN TAN VALLEY	AZ	851437648	NULL	NULL	NULL
SEREMO AMANDA & JEFFREY	NULL	NULL	10293 E HORIZON TRL	SAN TAN VALLEY	AZ	851437648	NULL	NULL	NULL
KELLEY DAVID M & MICHAELA L	NULL	NULL	10293 E SKYLINE DR	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
BOLDUC DYLAN JOSEPH & HANNA LEEANN	NULL	NULL	10294 E SUNFLOWER LN	FLORENCE	AZ	851327473	NULL	NULL	NULL
MONTGOMERY JOHN G	MONTGOMERY SANDRA K	NULL	10296 E PRAIRIE HAWK LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
MEDRANO PHILICIA MONIQUE	NULL	NULL	10297 E MARIGOLD LN	FLORENCE	AZ	851327191	NULL	NULL	NULL
PETERSON MATTHEW R & CHELLCEE	NULL	NULL	10298 E PRIMROSE LN	FLORENCE	AZ	851327469	NULL	NULL	NULL
PORTER DAVID RYAN	NULL	NULL	10302 E LUPINE LN	FLORENCE	AZ	851327188	NULL	NULL	NULL
MCBRIDE MERCURY & AMBER TRS	MARLIN HOLDING TRUST/MCBRIDE ENTERPRISES	NULL	10303 E ASTER LN	FLORENCE	AZ	851327184	NULL	NULL	NULL
ALBRIGHT DAVID E & LINDA L CO-TRS	ALBRIGHT LIV TRUST	NULL	10303 E LUPINE LN	FLORENCE	AZ	851327188	NULL	NULL	NULL
ROBERTSON DON L & VANESSA B	NULL	NULL	10304 E MARIGOLD LN	FLORENCE	AZ	851327177	NULL	NULL	NULL
LEYVAS ARTURO R	NULL	NULL	10308 E SUNFLOWER LN	FLORENCE	AZ	851327190	NULL	NULL	NULL
TRUJILLO ANTONIO & MELISSA	NULL	NULL	10310 E ASTER LN	FLORENCE	AZ	851327184	NULL	NULL	NULL
GRAHAM DAVID & KANDRA	NULL	NULL	10312 E PRIMROSE LN	FLORENCE	AZ	851327468	NULL	NULL	NULL
GUTIERREZ OMAR GARCIA	NULL	NULL	10313 E KRISTEN LN	SAN TAN VALLEY	AZ	851437296	NULL	NULL	NULL
PENPRASE EDWARD D	NULL	NULL	10313 E MARIGOLD LN	FLORENCE	AZ	851327192	NULL	NULL	NULL
DONNER ROBERT	DONNER CHRISTINA	NULL	10319 E ASTER LN	FLORENCE	AZ	851327184	NULL	NULL	NULL
WEST SAMANTHA A	NULL	NULL	10319 E LUPINE LN	FLORENCE	AZ	851327188	NULL	NULL	NULL
MANICKAM SENT	NULL	NULL	1032 E PALOMINO WAY	SAN TAN VALLEY	AZ	851435323	NULL	NULL	NULL
BROTHERS PHILLIP JAMES	BROTHERS OLIVIA ALEXANDRA	NULL	10320 E CLIFFROSE LN	FLORENCE	AZ	851327187	NULL	NULL	NULL
PLUMB KELSEY A & ZEPEDA JOSE J	NULL	NULL	10320 E LUPINE LN	FLORENCE	AZ	851327188	NULL	NULL	NULL
HLUSAK BLAKE ALLEN	NULL	NULL	10320 E MARIGOLD LN	FLORENCE	AZ	851327177	NULL	NULL	NULL
KNOWLES DUSTIN KENNETH	NULL	NULL	10320 E RANCH GATE RD	SCOTTSDALE	AZ	852552315	NULL	NULL	NULL
DEATON THOMAS LEE	NULL	NULL	10321 E LIND RD	SAN TAN VALLEY	AZ	851438175	NULL	NULL	NULL
TAPAHA BRIAN	SCHURZ ALICIA MONIQUE	NULL	10322 E SUNFLOWER LN	FLORENCE	AZ	851327190	NULL	NULL	NULL
SHAVER JON	VAUGHN CORLISS MCINTYRE	NULL	10323 E PRIMROSE LN	FLORENCE	AZ	851327462	NULL	NULL	NULL
WININGER RONN & JOAN	NULL	NULL	10326 E ASTER LN	FLORENCE	AZ	851327184	NULL	NULL	NULL
HUNTER HARRISON & KIRI	NULL	NULL	10326 E PRIMROSE LN	FLORENCE	AZ	851327468	NULL	NULL	NULL
WIK DEBRA ANN	NULL	NULL	10327 E HORIZON TRL	SAN TAN VALLEY	AZ	851437800	NULL	NULL	NULL
SUTTON TINA M	NULL	NULL	10327 E LIND RD	SAN TAN VALLEY	AZ	851438175	NULL	NULL	NULL
ZAUGG DONOVAN	DENE ALYSSA	NULL	10327 E SUNFLOWER LN	FLORENCE	AZ	851327190	NULL	NULL	NULL
DE LA CRUZ JUAN CARLOS & JIMENEZ DIANE CHRISTINE	NULL	NULL	10335 E ASTER LN	FLORENCE	AZ	851327184	NULL	NULL	NULL
SPANFELNER JASON C & ANDREA AILEEN	NULL	NULL	10335 E LUPINE LN	FLORENCE	AZ	851327188	NULL	NULL	NULL
FETSCO THOMAS GEORGE & SHELLEY JEAN TR	NULL	NULL	10336 E CLIFFROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
POLING GARY & CHRISTI	NULL	NULL	10336 E JOSEPH LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
HITCHCOCK AMBER	EVANS STEVE	NULL	10336 E LUPINE LN	FLORENCE	AZ	851327188	NULL	NULL	NULL
YOUNG ANTHONY M	NULL	NULL	10336 E MARIGOLD LN	FLORENCE	AZ	851327177	NULL	NULL	NULL
PATTERSON MAXINE	NULL	NULL	10336 E SUNFLOWER LN	FLORENCE	AZ	851327190	NULL	NULL	NULL
WEST JOSEPH A & DARYL A	NULL	NULL	10337 E CLIFFROSE LN	FLORENCE	AZ	851327187	NULL	NULL	NULL
SCHULTZ ROBERT & TAWNY MARIE	NULL	NULL	10337 E PRIMROSE LN	FLORENCE	AZ	851327462	NULL	NULL	NULL
ESPINOZA MARA G	NULL	NULL	10339 E BELLA LN	SAN TAN VALLEY	AZ	851435843	NULL	NULL	NULL
ULEP SHANNEL K	NULL	NULL	10339 E SUNFLOWER LN	FLORENCE	AZ	851327190	NULL	NULL	NULL
BURKE MARY FRANCES	NULL	NULL	10342 E BELLA LN	SAN TAN VALLEY	AZ	851435843	NULL	NULL	NULL
D'ATTILIO WILLIAM & SANDRA	NULL	NULL	10344 E ASTER LN	FLORENCE	AZ	851327184	NULL	NULL	NULL
WESLEY HENRY A & VIXEN	NULL	NULL	10345 E MARIGOLD LN	FLORENCE	AZ	851327192	NULL	NULL	NULL
GRAVELY STEPHEN D	NULL	NULL	10348 E SUNFLOWER LN	FLORENCE	AZ	851327190	NULL	NULL	NULL
WHITE ROCKY D JR	NULL	NULL	10351 E CLIFFROSE LN	FLORENCE	AZ	851327187	NULL	NULL	NULL
LAWSON LACRESHA	NULL	NULL	10351 E PRIMROSE LN	FLORENCE	AZ	851327462	NULL	NULL	NULL
MANIFO TOOTOO JR & LUNA DIANA	NULL	NULL	10353 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
FILETTI JOHN & JENNY ANN	NULL	NULL	10354 E CLIFFROSE LN	FLORENCE	AZ	851327187	NULL	NULL	NULL
CASTANEDA ANDRES RAUL & SPENCER ALEXIS	NULL	NULL	10354 E MARIGOLD LN	FLORENCE	AZ	851327177	NULL	NULL	NULL
ROMAN TAMMY S	NULL	NULL	10354 E PRIMROSE LN	FLORENCE	AZ	851327468	NULL	NULL	NULL
MCDONALD RUSSELL A & ELIZABETH M	NULL	NULL	10360 E ASTER LN	FLORENCE	AZ	851327184	NULL	NULL	NULL
SCHAELER HEIDI	NULL	NULL	10360 E SUNFLOWER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
GONZALEZ FLORA TR	GONZALEZ FAM LIV TRUST	NULL	10361 E MARIGOLD LN	FLORENCE	AZ	85132-7192	NULL	NULL	NULL
MACIVER DANIEL C & PAMELA E	NULL	NULL	10363 E SUNFLOWER LN	FLORENCE	AZ	851327190	NULL	NULL	NULL
CIOFALO MARY E & MICHAEL A	NULL	NULL	10365 E PRIMROSE LN	FLORENCE	AZ	851327462	NULL	NULL	NULL
PASCHICH MASON & MORGAN A	NULL	NULL	10366 E BAMBOO LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
ROSS JAYDEN & EMILY	NULL	NULL	10369 E ASTER LN	FLORENCE	AZ	851327184	NULL	NULL	NULL
ELISALDE JOSE E ORTEGA & MENDEZ MARIA E VERDUZCO	NULL	NULL	10369 E CLIFFROSE LN	FLORENCE	AZ	851327187	NULL	NULL	NULL
VERHAEGHE MINDI	BOLES CAROL	NULL	10370 E KRISTEN LN	SAN TAN VALLEY	AZ	851437296	NULL	NULL	NULL
GRANILLO FRANCISCA A	NULL	NULL	10370 E MARIGOLD LN	FLORENCE	AZ	851327177	NULL	NULL	NULL
HENDERSON JOSHUA S & MEGHAN M	NULL	NULL	10371 E LUPINE LN	FLORENCE	AZ	851327188	NULL	NULL	NULL
SLOAN WILL JOSEPH & CARA M	NULL	NULL	10373 E PRAIRIE HAWK LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
PETERSON VALERIE R	PETERSON LORENCE JAY	NULL	10374 E SUNFLOWER LN	FLORENCE	AZ	851327190	NULL	NULL	NULL
PETERSON MICHAEL L	NULL	NULL	10375 E LIND RD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
LOPEZ MARITZA & HERNANDEZ LUIS A LOPEZ	NULL	NULL	10375 E MARIGOLD LN	FLORENCE	AZ	851327192	NULL	NULL	NULL
ANDERSON PATRICK C	NULL	NULL	10375 E SUNFLOWER LN	FLORENCE	AZ	851327190	NULL	NULL	NULL
POLICK NICHOLAS & MISSAN CARI	NULL	NULL	10378 E ASTER LN	FLORENCE	AZ	851327184	NULL	NULL	NULL
JOHNSON JOHN	NULL	NULL	10379 E PRIMROSE LN	FLORENCE	AZ	851327462	NULL	NULL	NULL
ZEIDAN ALA A	NULL	NULL	1038 ABETO CT	CHULA VISTA	CA	919108002	NULL	NULL	NULL
ODELL CRAIG M	NULL	NULL	10380 E LUPINE LN	FLORENCE	AZ	851327188	NULL	NULL	NULL
FLORES ANTHONY V JR & CRYSTLE A	NULL	NULL	10383 E VICTOR WAY	SAN TAN VALLEY	AZ	851437294	NULL	NULL	NULL
WILLIAMS MARK A TRS	MAW FAM TRUST	NULL	10385 E ROLLS RD	SAN TAN VALLEY	AZ	851437002	NULL	NULL	NULL
BARRAZA JUAN F & BELEN A	NULL	NULL	10387 E ASTER LN	FLORENCE	AZ	851327184	NULL	NULL	NULL
BRAGNA ANTHONY MICHAEL & MELINDA LEANNE	NULL	NULL	10387 E CLIFFROSE LN	FLORENCE	AZ	851327187	NULL	NULL	NULL
STONE ZANE	NULL	NULL	10387 E HORIZON TRL	SAN TAN VALLEY	AZ	851437800	NULL	NULL	NULL
ROSAS MARIA G	NULL	NULL	10387 E MARIGOLD LN	FLORENCE	AZ	851327192	NULL	NULL	NULL
CLARK STANLEY D	NULL	NULL	10388 E BELLA LN	SAN TAN VALLEY	AZ	851435843	NULL	NULL	NULL
ELLSWORTH MERIT ROBERT & JACQUELYNN DEE	NULL	NULL	10388 E HORIZON TRL	SAN TAN VALLEY	AZ	851437858	NULL	NULL	NULL
MOOMEY VIRGINIA	NULL	NULL	10388 E PRAIRIE HAWK LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
SALCEDO NAPOLEON & RAQUELLE	NULL	NULL	10388 E SUNFLOWER LN	FLORENCE	AZ	851327190	NULL	NULL	NULL
REYES RODOLFO	MONDACA LEYDY GUADALUPE DOMINGUEZ	NULL	10389 E SUNFLOWER LN	FLORENCE	AZ	851327190	NULL	NULL	NULL
OSIFE MARCUS	NULL	NULL	10393 E PRIMROSE LN	FLORENCE	AZ	851327462	NULL	NULL	NULL
DAVIS JAMES ROBERT	NULL	NULL	10394 E LUPINE LN	FLORENCE	AZ	851327188	NULL	NULL	NULL

BLACK RICHARD M	NULL	NULL	10396 E ASTER LN	FLORENCE	AZ	851327184	NULL	NULL	NULL
FELTHAM SHALEE	MUTH JERRY	NULL	10396 E VICTOR WAY	SAN TAN VALLEY	AZ	851437294	NULL	NULL	NULL
CAMPBELL TROY	NULL	NULL	10399 E ROBERTS RD	SAN TAN VALLEY	AZ	851436413	NULL	NULL	NULL
ROGERS SUSAN GAY	NULL	NULL	104 S POMEROY RD	QUEEN VALLEY	AZ	851189766	NULL	NULL	NULL
GOMEZ RAFAELA G	CASTRO DANIEL LOPEZ	NULL	10401 E LIND RD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
GULLATT LACRESHA	NULL	NULL	10401 E SUNFLOWER LN	FLORENCE	AZ	851327456	NULL	NULL	NULL
GRANT ANTHONY & MEGAN	NULL	NULL	10402 E JOSEPH LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
MCCALEB LYNELLE	MOREY TIM LEE	NULL	10402 E LIND RD	SAN TAN VALLEY	AZ	851438176	NULL	NULL	NULL
JORDAN MACHELLION & LISA	NULL	NULL	10403 E ASTER LN	FLORENCE	AZ	851327185	NULL	NULL	NULL
TYLER WILLIAM CLAYTON	NULL	NULL	10403 E CLIFFROSE LN	FLORENCE	AZ	851327196	NULL	NULL	NULL
LAROCQUE BETH L	NULL	NULL	10403 E MARIGOLD LN	FLORENCE	AZ	851327193	NULL	NULL	NULL
MENDOZA RICHARD EDWARD & PATRICIA MARIE	NULL	NULL	10407 E PRIMROSE LN	FLORENCE	AZ	851327463	NULL	NULL	NULL
PACHECO PATRICK & KANDI	NULL	NULL	10412 E ASTER LN	FLORENCE	AZ	851327185	NULL	NULL	NULL
RAMIREZ DANNY J & CATHERINE V	NULL	NULL	10412 E VERBINA LN	FLORENCE	AZ	851327476	NULL	NULL	NULL
JUDD VENTURES LLC	NULL	NULL	10414 2 STREET	BROOKLYN	NY	11219	NULL	NULL	NULL
RUEDA-PALACIOS ARMIN	RUEDA CHELSEA	NULL	10416 E SUNFLOWER LN	FLORENCE	AZ	851327461	NULL	NULL	NULL
BARRIOS LOURDES L DAVILA & HERNANDEZ MARIA	CASTILLO CARLOS ENAMORADO	NULL	10418 E BAMBOO LN	SAN TAN VALLEY	AZ	85140	NULL	NULL	NULL
RUVALCABA MARIA INES & LUIS ALBERTO	NULL	NULL	10418 E LUPINE LN	FLORENCE	AZ	851327189	NULL	NULL	NULL
PUGH DOROTHY	NULL	NULL	10418 E PRIMROSE LN	FLORENCE	AZ	851327467	NULL	NULL	NULL
HUNTER RORY M	NULL	NULL	10419 E WALLFLOWER LN	FLORENCE	AZ	851327199	NULL	NULL	NULL
VAN SKYKE MATTHEW	NULL	NULL	10420 E MARIGOLD LN	FLORENCE	AZ	85132-7178	NULL	NULL	NULL
WILSON RITCHIE & DUNG C	NULL	NULL	10421 E ASTER LN	FLORENCE	AZ	851327185	NULL	NULL	NULL
MAYNARD SHERI & KEN	NULL	NULL	10421 E CLIFFROSE LN	FLORENCE	AZ	851327196	NULL	NULL	NULL
JOHNSON ARTHUR & SHARLENE	NULL	NULL	10421 E PRIMROSE LN	FLORENCE	AZ	851327463	NULL	NULL	NULL
NELSON SHAWN ALCOTT	NULL	NULL	10427 E SUNFLOWER LN	FLORENCE	AZ	851327456	NULL	NULL	NULL
LANGEHEINE BRIAN	NULL	NULL	10430 E ASTER LN	FLORENCE	AZ	851327185	NULL	NULL	NULL
BOLLER TERESA	NULL	NULL	10430 E SUNFLOWER LN	FLORENCE	AZ	851327461	NULL	NULL	NULL
DRAWBOND JOSEPH S & CARLY CLEMENTYN	NULL	NULL	10431 E HORIZON TRL	SAN TAN VALLEY	AZ	851437913	NULL	NULL	NULL
GORDON WILLIAM R & CHRISTINE ELIZABETH	NULL	NULL	10433 E WALLFLOWER LN	FLORENCE	AZ	851327199	NULL	NULL	NULL
MACIK JOHN IV	NULL	NULL	10434 E PRIMROSE LN	FLORENCE	AZ	851327467	NULL	NULL	NULL
HATCHER JASON A	NULL	NULL	10435 E PRIMROSE LN	FLORENCE	AZ	851327463	NULL	NULL	NULL
MCDAVID BRENNA & JACOB	NULL	NULL	10437 E ASTER LN	FLORENCE	AZ	851327185	NULL	NULL	NULL
MALVIDO ANGEL DANIEL & SOMMER RAE	NULL	NULL	10437 E CLIFFROSE LN	FLORENCE	AZ	851327196	NULL	NULL	NULL
HAMPTON DEREK A	NULL	NULL	10438 E LUPINE LN	FLORENCE	AZ	851327189	NULL	NULL	NULL
PARE BRETT & SAGE CASSIDY	NULL	NULL	10439 E LUPINE LN	FLORENCE	AZ	851327189	NULL	NULL	NULL
GORMAN KENNY & DIANA	NULL	NULL	10441 E SUNFLOWER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
ARREOLA JESUS	NULL	NULL	10442 E VICTOR WAY	SAN TAN VALLEY	AZ	851437665	NULL	NULL	NULL
SKINNER KENT L	NULL	NULL	10444 E SUNFLOWER LN	FLORENCE	AZ	851327461	NULL	NULL	NULL
ANDERSON IAN & DANIELLE	ANDERSON BRAYDEN	NULL	10447 E WALLFLOWER LN	FLORENCE	AZ	85132-7199	NULL	NULL	NULL
EWEN DOUGLAS R	NULL	NULL	10448 E ASBURY AVE	SAN TAN VALLEY	AZ	851438592	NULL	NULL	NULL
FONG JOSE	NULL	NULL	10448 E ASTER LN	FLORENCE	AZ	851327185	NULL	NULL	NULL
LEWIN ALEXIS DANIELLE	ROSSOW JACK R	NULL	10448 E PRIMROSE LN	FLORENCE	AZ	851327467	NULL	NULL	NULL
KINNEY KEITH & KAYLEE	NULL	NULL	10448 E VERBINA LN	FLORENCE	AZ	851327476	NULL	NULL	NULL
LANDAU MARK	KILZER MARY JO	NULL	10449 E PRIMROSE LN	FLORENCE	AZ	851327463	NULL	NULL	NULL
HOLBERTON KRISTINE & JUSTIN	NULL	NULL	10454 E MARIGOLD LN	FLORENCE	AZ	851327178	NULL	NULL	NULL
FRENCH ALFRED & ANITA	NULL	NULL	10454 E WALLFLOWER LN	FLORENCE	AZ	851327198	NULL	NULL	NULL
LEWIS DELBERT JAMES & GERALYNN G	NULL	NULL	10455 E VERBINA LN	FLORENCE	AZ	851327476	NULL	NULL	NULL
STANDARD RYAN A	PETERSEN PAIGE A	NULL	10457 E LUPINE LN	FLORENCE	AZ	851327189	NULL	NULL	NULL
BARRETO VICTOR M & MARIA DELOURDES	NULL	NULL	10458 E LUPINE LN	FLORENCE	AZ	851327189	NULL	NULL	NULL
MCCAULEY SHAWN & DESTINY	NULL	NULL	10458 E SUNFLOWER LN	FLORENCE	AZ	851327461	NULL	NULL	NULL
SILVERLY GREGORY	NULL	NULL	10461 E WALLFLOWER LN	FLORENCE	AZ	851327199	NULL	NULL	NULL
PROSSER FRANKLIN D & LISA M	NULL	NULL	10464 E ASTER LN	FLORENCE	AZ	851327185	NULL	NULL	NULL
MCDONALD CONNOR DAVID SCOTT	NULL	NULL	10466 E ROLLS RD	SAN TAN VALLEY	AZ	851437000	NULL	NULL	NULL
HORTON JACK DANIEL	NULL	NULL	10468 E BAMBOO LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
STEPHENS EMERSON	NULL	NULL	10470 E JOSEPH LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
VELASQUEZ FRANCISCO GUERRERO	VELASQUEZ JEANNIE MICHELLE	NULL	10470 E MARIGOLD LN	FLORENCE	AZ	851327178	NULL	NULL	NULL
SALIN CHYRES	NULL	NULL	10470 E WALLFLOWER LN	FLORENCE	AZ	851327198	NULL	NULL	NULL
JONES JASON & STARR APRIL	NULL	NULL	10471 E CLIFFROSE LN	FLORENCE	AZ	851327196	NULL	NULL	NULL
GAUDETTE THOMAS	NEBOSCHIZKIJ APRIL PERSSON	NULL	10473 E LUPINE LN	FLORENCE	AZ	851327189	NULL	NULL	NULL
KELLER DEVON	NULL	NULL	10473 E VERBINA LN	FLORENCE	AZ	851327476	NULL	NULL	NULL
LABRANCHE ANTONIO J & CATHERINE T TRS	LABRANCHE FAM LIV TRUST	NULL	10474 E LUPINE LN	FLORENCE	AZ	85132-7189	NULL	NULL	NULL
MATSON MARK A & SARAH A	NULL	NULL	10479 E HORIZON TRL	SAN TAN VALLEY	AZ	851437913	NULL	NULL	NULL
KITCHEN JOHN R & PAMELA D	NULL	NULL	10480 E ASTER LN	FLORENCE	AZ	851327185	NULL	NULL	NULL
MCKENZIE JAMES & CAREN	NULL	NULL	10482 E PRIMROSE LN	FLORENCE	AZ	851327467	NULL	NULL	NULL
PULLIN AARON	NULL	NULL	10484 E LIND RD	SAN TAN VALLEY	AZ	851438176	NULL	NULL	NULL
MARTINEZ ADAM	NULL	NULL	10484 E VERBINA LN	FLORENCE	AZ	851327476	NULL	NULL	NULL
NETTLETON-MITCHELL STEVEN A JR	NULL	NULL	10486 E WALLFLOWER LN	FLORENCE	AZ	851327198	NULL	NULL	NULL
MARISCAL RAMIRO & MARIA LUZ	NULL	NULL	10487 E BELLA LN	SAN TAN VALLEY	AZ	851435863	NULL	NULL	NULL
MARISCAL RENE A	NULL	NULL	10487 E BELLA LN	SAN TAN VALLEY	AZ	851435863	NULL	NULL	NULL
LEIDER CHRISTOPHER S	NAVARRO BIANCA	NULL	10487 E VERBINA LN	FLORENCE	AZ	851327476	NULL	NULL	NULL
COBOS JESSICA	LUNA GERARDO JACOBO COBOS	NULL	10488 E LUPINE LN	FLORENCE	AZ	851327189	NULL	NULL	NULL
BARRERAS EMIGDIO JR & GARZA NICOLE	NULL	NULL	10489 E WALLFLOWER LN	FLORENCE	AZ	851327199	NULL	NULL	NULL
MAYO GORDON S	NULL	NULL	10490 E BELLA LN	SAN TAN VALLEY	AZ	851435863	NULL	NULL	NULL
NORTE CHRISTOPHER PATRICK & ASHLEY D	NULL	NULL	10490 E PRAIRIE HAWK LN	SAN TAN VALLEY	AZ	851435234	NULL	NULL	NULL
HOLDER DEVIN	SWANSON JAYCIE	NULL	10492 E BAMBOO LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
LUTZ EMMALEE & WEST MALAKAI	NULL	NULL	10496 E PRIMROSE LN	FLORENCE	AZ	851327467	NULL	NULL	NULL
HEDGER KEVIN KWINN REV LIV TRUST	NULL	NULL	10496 E ROBERTS RD	SAN TAN VALLEY	AZ	851436403	NULL	NULL	NULL
KRONBERG TONYA LEA	NULL	NULL	10498 E HORIZON TRL	SAN TAN VALLEY	AZ	851437951	NULL	NULL	NULL
SIK TODD D	NULL	NULL	105 9TH ST W	CANBY	MN	562201039	NULL	NULL	NULL
BROWN LAURA N	NULL	NULL	10501 E LUPINE LN	FLORENCE	AZ	851327325	NULL	NULL	NULL
KLEINSTUBERAN JASON ROBERT	NULL	NULL	10502 E LUPINE LANE	FLORENCE	AZ	85132-7324	NULL	NULL	NULL
KOVARIK CHANG & KARL	NULL	NULL	10502 E VERBINA LN	FLORENCE	AZ	851327474	NULL	NULL	NULL
KRAUSE ERIC & MCCABE MEGHAN	NULL	NULL	10502 E WALLFLOWER LN	FLORENCE	AZ	851327304	NULL	NULL	NULL
REXING YVETTE	MURPHY MATTHEW DEAN	NULL	10503 E ROLLS RD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
PLISZKA STANISLAWA ANNA	NULL	NULL	10503 E VERBINA LN	FLORENCE	AZ	851327475	NULL	NULL	NULL
BOOTHE JAMES & JESSICA	NULL	NULL	10503 E WALLFLOWER LN	FLORENCE	AZ	851327197	NULL	NULL	NULL
RAMIREZ ADRIAN & CHEYENNE	NULL	NULL	10505 E PRIMROSE LN	FLORENCE	AZ	851327464	NULL	NULL	NULL
JOHNSON BRYANT P	LUTHERN-JOHNSON ALEASHA	NULL	10510 E PRIMROSE LN	FLORENCE	AZ	851327466	NULL	NULL	NULL
DEAL JAMES & JANINE	NULL	NULL	10510 E SUNFLOWER LN	FLORENCE	AZ	851327460	NULL	NULL	NULL
BALDWIN BRUCE G & SUE A	NULL	NULL	10515 E CLIFFROSE LN	FLORENCE	AZ	851327335	NULL	NULL	NULL
TUITA KELSIE TAYLOR & LEINI TAVITE	NULL	NULL	10515 E LUPINE LN	FLORENCE	AZ	851327325	NULL	NULL	NULL
VASQUEZ REBECCA	NULL	NULL	10516 E ASTER LN	FLORENCE	AZ	851327195	NULL	NULL	NULL
VALLES SABRINA V	HINOJOS SIMON LOPEZ	NULL	10516 E LUPINE LN	FLORENCE	AZ	851327324	NULL	NULL	NULL
BERRY JAZMINE	LURTSEMA HANS	NULL	10518 E CAROL LN	SAN TAN VALLEY	AZ	851435529	NULL	NULL	NULL
SIMARD JULIE	NULL	NULL	10519 E PRIMROSE LN	FLORENCE	AZ	851327464	NULL	NULL	NULL
SERDUTZ DANIEL & SHIRLEY	CANDELARIO FREDERICK	NULL	10520 E VERBINA LN	FLORENCE	AZ	851327474	NULL	NULL	NULL
ELVERS LORI	NULL	NULL	10520 E WALLFLOWER LN	FLORENCE	AZ	851327304	NULL	NULL	NULL
JAMES JASMINE DANEA & RADVAN SEAN ANDREW	NULL	NULL	10523 E WALLFLOWER LN	FLORENCE	AZ	851327197	NULL	NULL	NULL
DOCKERY GILBERT ARDINELLO	NULL	NULL	10524 E PRIMROSE LN	FLORENCE	AZ	851327466	NULL	NULL	NULL
SCHRAH SARAH	NULL	NULL	10528 E SUNFLOWER LN	FLORENCE	AZ	851327460	NULL	NULL	NULL
ALLBRITTEN MAURICE L	HOOPER JESSICA L	NULL	10533 E AMERICAN PRIDE DR	SAN TAN VALLEY	AZ	851437978	NULL	NULL	NULL
BALDWIN APRYL	NULL	NULL	10533 E CLIFFROSE LN	FLORENCE	AZ	851327335	NULL	NULL	NULL
CARTER ANDREW M & TONYA L	NULL	NULL	10533 E PRIMROSE LN	FLORENCE	AZ	851327464	NULL	NULL	NULL
BUSSEY GRANT	NULL	NULL	10534 E VICTOR WAY	SAN TAN VALLEY	AZ	851437100	NULL	NULL	NULL
REIDHEAD DENNA D	NULL	NULL	10536 E LUPINE LN	FLORENCE	AZ	851327324	NULL	NULL	NULL
PHILLIPS CHARLES ANDREW & ANGELA MARIE	MARTIN TERRI L	NULL	10537 E LUPINE LN	FLORENCE	AZ	851327325	NULL	NULL	NULL
MONTES BRICEIDA GUADALUPE & HERNANDEZ HECTOR OSORIO	MONTES GISELLE BERENICE	NULL	10538 E PRIMROSE LN	FLORENCE	AZ	851327466	NULL	NULL	NULL
PADILLA JAKE M	NULL	NULL	10540 E AMERICAN PRIDE DR	SAN TAN VALLEY	AZ	851437978	NULL	NULL	NULL
HIRALES ROSEMARY & EDMUNDO	NULL	NULL	10540 E VERBINA LN	FLORENCE	AZ	851327474	NULL	NULL	NULL
CHEVES DARLA M LIV TRUST	NULL	NULL	10540 E WALLFLOWER LN	FLORENCE	AZ	851327304	NULL	NULL	NULL
FLORES MARIO & LAURIE	GONZALEZ JULIE A	NULL	10543 E HORIZON TRL	SAN TAN VALLEY	AZ	851435435	NULL	NULL	NULL
ROMERO GLADYS FAM TRUST	NULL	NULL	10547 E PRIMROSE LN	FLORENCE	AZ	85132-7464	NULL	NULL	NULL
CLINE MICHAEL W & PATRICIA A TRS	CLINE FAMILY LIVING TRUST	NULL	10548 E CLIFFROSE LN	FLORENCE	AZ	851327334	NULL	NULL	NULL
MAYNARD BENJAMIN C & LORI F	NULL	NULL	10550 E WESTERN STAR RD	SAN TAN VALLEY	AZ	851437203	NULL	NULL	NULL
HOBART BOBBIE JEAN	NULL	NULL	10552 E PRIMROSE LN	FLORENCE	AZ	851327466	NULL	NULL	NULL
PETERSON WILBERT TAREY	NULL	NULL	10553 E CLIFFROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
BOWERS ALINA	NULL	NULL	10555 E SUNFLOWER LN	FLORENCE	AZ	851327457	NULL	NULL	NULL
WILSON TIMOTHY T & TONI	NULL	NULL	10558 E SUNFLOWER LN	FLORENCE	AZ	851327460	NULL	NULL	NULL
MACIAS FERNANDA	LOMELI ALVARO	NULL	10561 E PRIMROSE LN	FLORENCE	AZ	851327464	NULL	NULL	NULL
WHELDEN RICHARD & CHRISTINE	NULL	NULL	10562 E LUPINE LN	FLORENCE	AZ	851327324	NULL	NULL	NULL
CAVNER SUSAN	NULL	NULL	10565 E LUPINE LN	FLORENCE	AZ	851327325	NULL	NULL	NULL
KANE JAMES FREDERICK & BRENDA LEIGH TRS	KANE FAMILY TRUST	NULL	10566 KETCH CIR	ANCHORAGE	AK	995152428	NULL	NULL	NULL
LAWLER WILLIAM & DAWN	NULL	NULL	10567 E SUNFLOWER LN	FLORENCE	AZ	851327457	NULL	NULL	NULL
MEGAHEY JESSICA K & NORD MICHAEL L	NULL	NULL	10570 E SUNFLOWER LN	FLORENCE	AZ	851327460	NULL	NULL	NULL
ANTHONY DARREL	NULL	NULL	10573 E CLIFFROSE LN	FLORENCE	AZ	851327335	NULL	NULL	NULL
JUAREZ JAMES J & CYNTHIA A	NULL	NULL	10574 E VERBINA LN	FLORENCE	AZ	851327306	NULL	NULL	NULL
LEE MICHAEL & FALLS DAWN	NULL	NULL	10578 E CLIFFROSE LN	FLORENCE	AZ	851327334	NULL	NULL	NULL
NEELY KAREN AHIMEE	NEELY CHRISTOPHER RYAN	NULL	10580 E PRIMROSE LN	FLORENCE	AZ	851327466	NULL	NULL	NULL
MONTOYA GERALDINE ELIZABETH	TINSDALE CHAD EUGENE	NULL	10581 E HORIZON TRL	SAN TAN VALLEY	AZ	851435435	NULL	NULL	NULL
MCKINLEY PAUL M	NULL	NULL	10582 E LUPINE LN	FLORENCE	AZ	851327324	NULL	NULL	NULL
SMITH COREY D & SUSAN S	NULL	NULL	10582 E SUNFLOWER LN	FLORENCE	AZ	851327460	NULL	NULL	NULL
BARKER SAMUEL CURTIS	MEADE DAVID MICHAEL	NULL	10584 E MARIGOLD LN	FLORENCE	AZ	851327318	NULL	NULL	NULL
MARTINEZ JOSE F JR & MONTI T	NULL	NULL	10585 E MARIGOLD LN	FLORENCE	AZ	851327318	NULL	NULL	NULL
KURRAN GEORGE M	KURRAN DEBRA L	NULL	10586 E VERBINA LN	FLORENCE	AZ	851327306	NULL	NULL	NULL
CLINE KENNETH & RITA	NULL	NULL	10587 E VERBINA LN	FLORENCE	AZ	851327315	NULL	NULL	NULL
HUMPHREY RANDALL L	NULL	NULL	10588 E AMERICAN PRIDE DR	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
LUCAS WAYNE	LUCAS LOUISE	NULL	10591 E CLIFFROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
MACGREGOR JOSEPH A & BARBARA K	NULL	NULL	10591 E LUPINE LN	FLORENCE	AZ	851327325	NULL	NULL	NULL
HAIRSTON DAREN & SAMANTHA	NULL	NULL	10591 E SUNFLOWER LN	FLORENCE	AZ	851327457	NULL	NULL	NULL
GARBER JON & DEIDRE	NULL	NULL	10592 E CLIFFROSE LN	FLORENCE	AZ	851327334	NULL	NULL	NULL
BLACK DONNA	NULL	NULL	10592 E VICTOR WAY	SAN TAN VALLEY	AZ	851437100	NULL	NULL	NULL
MCKINZIE MATTHEW TODD & KRISTINA ANN	NULL	NULL	10593 E AMERICAN PRIDE DR	SAN TAN VALLEY	AZ	851437978	NULL	NULL	NULL
PARKER MOLLIE & GARRETT	NULL	NULL	10594 E PRIMROSE LN	FLORENCE	AZ	851327466	NULL	NULL	NULL
ZAVALA CHRISTOPHER RONALD	GRACY JUSTICE ANGELL	NULL	10594 E SUNFLOWER LN	FLORENCE	AZ	851327460	NULL	NULL	NULL
SMITH STEPHEN & APRIL NOLEN	NULL	NULL	10594 E WALLFLOWER LN	FLORENCE	AZ	851327304	NULL	NULL	NULL
BILLYARD BLADE BRYCE	WESTON BREANNE J	NULL	10598 E LUPINE LN	FLORENCE	AZ	851327324	NULL	NULL	NULL
IBARRA STEVEN H & SAMIRA V	NULL	NULL	10598 E MANGOLD LN	FLORENCE	AZ	85132-7318	NULL	NULL	NULL
HAUGAARD KEVIN	NULL	NULL	10598 E PRIMROSE CT	FLORENCE	AZ	851327496	NULL	NULL	NULL
TORRES ELIZABETH FLORES	TORRES YEIMI FLORES	NULL	10598 E VERBINA LN	FLORENCE	AZ	851327306	NULL	NULL	NULL
GOHDE RANDOLPH L & SINDEE R	NULL	NULL	106 EAGLE DR	MC GREGOR	IA	521578514	NULL	NULL	NULL

NOLLOLA TANYA I & ELI D	NULL	NULL	10601 E SUNFLOWER CT	FLORENCE	AZ	851327489	NULL	NULL	NULL
JOHNSON ADAM N & JENNIFER F	NULL	NULL	10601 E VERBINA LN	FLORENCE	AZ	851327308	NULL	NULL	NULL
HAYFORD KYLE J & NICOLE R	NULL	NULL	10601 E WALLFLOWER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
PAZ FUENTES FRANCISCO A	NULL	NULL	10602 E SUNFLOWER CT	FLORENCE	AZ	851327486	NULL	NULL	NULL
BLACK JUSTINE	NULL	NULL	10603 E SUNFLOWER LN	FLORENCE	AZ	851327458	NULL	NULL	NULL
BURNETT AMBER	NULL	NULL	10604 E SUNFLOWER LN	FLORENCE	AZ	851327459	NULL	NULL	NULL
VAN BUREN ROBIN LYNN TRS	VAN BUREN DUANE	NULL	10608 E CLIFFROSE LN	FLORENCE	AZ	851327332	NULL	NULL	NULL
MILLER MICHAEL & ALYSSA	NULL	NULL	10608 E PRIMROSE LN	FLORENCE	AZ	851327465	NULL	NULL	NULL
KETELSEN JACOB & DOPLE CHANCE	NULL	NULL	10611 E LUPINE LN	FLORENCE	AZ	851327327	NULL	NULL	NULL
MYERS PERRY M	NULL	NULL	10611 E MARIGOLD LN	FLORENCE	AZ	851327319	NULL	NULL	NULL
RICHARDSON DAVID WILLIAM TR	RICHARDSON FAM TRUST	NULL	10611 E PRIMROSE CT	FLORENCE	AZ	851327482	NULL	NULL	NULL
MAJORS BRENT	NULL	NULL	10611 E SUNFLOWER CT	FLORENCE	AZ	851327489	NULL	NULL	NULL
STAPLETON ROBERT SCOTT	NULL	NULL	10612 E LUPINE LN	FLORENCE	AZ	851327326	NULL	NULL	NULL
PIONKE TYLER & ARIEL	NULL	NULL	10612 E MARIGOLD LN	FLORENCE	AZ	851327320	NULL	NULL	NULL
JAY JOEL & NINA	NULL	NULL	10612 E PRIMROSE CT	FLORENCE	AZ	851327481	NULL	NULL	NULL
CORDERO ALISHA & EDDIE	NULL	NULL	10613 E MARIGOLD CT	FLORENCE	AZ	851327491	NULL	NULL	NULL
SWANSON ANDREW JOHN	NULL	NULL	10613 E VERBINA LN	FLORENCE	AZ	851327308	NULL	NULL	NULL
WISE THOMAS RUSSELL & JEANNE LYNN	NULL	NULL	10614 E SUNFLOWER CT	FLORENCE	AZ	851327486	NULL	NULL	NULL
BLASER JASON WESLEY	NULL	NULL	10614 E WALLFLOWER LN	FLORENCE	AZ	85132-7300	NULL	NULL	NULL
DENNISON BRANDI LEE & MICHAEL SAMPSON	NULL	NULL	10615 E SUNFLOWER LN	FLORENCE	AZ	851327458	NULL	NULL	NULL
MILLER TAMMIE D	NULL	NULL	10615 E WALLFLOWER LN	FLORENCE	AZ	851327301	NULL	NULL	NULL
CORRELL BRANDON M & MICHELLE M	NULL	NULL	10619 E MARIGOLD CT	FLORENCE	AZ	851327491	NULL	NULL	NULL
BROWN JUANITA L	NULL	NULL	10620 E PRIMROSE CT	FLORENCE	AZ	851327481	NULL	NULL	NULL
COLEMAN MAX ALAN & AMANDA ELIZABETH	NULL	NULL	10623 E SUNFLOWER CT	FLORENCE	AZ	851327489	NULL	NULL	NULL
SOLIZ NOELLE	NULL	NULL	10624 E CLIFFROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
MANN PAUL E & KEARA TRS	MEI FAM TRUST	NULL	10625 E VERBINA LN	FLORENCE	AZ	851327308	NULL	NULL	NULL
DAY PAULA L	NULL	NULL	10626 E SUNFLOWER CT	FLORENCE	AZ	851327486	NULL	NULL	NULL
STODDARD SEAN G & REBECCA M	NULL	NULL	10628 E LUPINE LN	FLORENCE	AZ	851327326	NULL	NULL	NULL
BARRETT BRIAN & REGENA TRS	BARRETT FAM REV LIV TRUST	NULL	10629 E LUPINE LN	FLORENCE	AZ	85132-7327	NULL	NULL	NULL
WARRAYAT REDA	NULL	NULL	10629 E WALLFLOWER LN	FLORENCE	AZ	851327301	NULL	NULL	NULL
BRITTAIN JUSTIN & JESSICA	NULL	NULL	10630 E MARIGOLD LN	FLORENCE	AZ	851327320	NULL	NULL	NULL
OTTEN PAUL M & TERI M	NULL	NULL	10631 E HORIZON TRL	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
PORTILLO JOSE ANTONIO JR	NULL	NULL	10633 E SUNFLOWER CT	FLORENCE	AZ	851327489	NULL	NULL	NULL
MEGANEY RYAN	NULL	NULL	10637 E VERBINA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
BISBEE MIRANDA & GARRETT MICHAEL	NULL	NULL	10638 E PRIMROSE CT	FLORENCE	AZ	851327481	NULL	NULL	NULL
MUTAHI JOYCE & FRANCIS	NULL	NULL	10638 E SUNFLOWER CT	FLORENCE	AZ	85132-7486	NULL	NULL	NULL
HORETSKI ROY V & FUNICELLI SHARON LIV TRUST	NULL	NULL	10638 E VICTOR WAY	SAN TAN VALLEY	AZ	851437168	NULL	NULL	NULL
CURTIS JEFFREY A	GOMEZ-CURTIS SOPHIA Y S	NULL	10639 E VICTOR WAY	SAN TAN VALLEY	AZ	851437101	NULL	NULL	NULL
SKARWECKI MELANIE	PHILLIPS JESSE	NULL	10640 E WALLFLOWER LN	FLORENCE	AZ	851327300	NULL	NULL	NULL
FRANCO SIRENA MARLEEN TRUST	NULL	NULL	10641 E SUNFLOWER CT	FLORENCE	AZ	851327489	NULL	NULL	NULL
JOHNSTON ROBERT BARNEY	NULL	NULL	10642 E CLIFFROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
COFFEY DEBRA A	NULL	NULL	10643 E AMERICAN PRIDE DR	SAN TAN VALLEY	AZ	851435283	NULL	NULL	NULL
ESCOBEDO ROBERT CARILLO	NULL	NULL	10643 E WALLFLOWER LN	FLORENCE	AZ	851327301	NULL	NULL	NULL
RANEY THOMAS C & ANGELYN D	NULL	NULL	10644 E AMERICAN PRIDE DR	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
GARCIA ANTONIO	RODRIGUEZ ROSALIA	NULL	10645 E CLIFFROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
JUAREZ MANUEL QUINONEZ & LOPEZ CINDY	NULL	NULL	10645 E MARIGOLD CT	FLORENCE	AZ	85132	NULL	NULL	NULL
MCWILLIAMS THOMAS ANTHONY	NULL	NULL	10645 E PRIMROSE CT	FLORENCE	AZ	851327482	NULL	NULL	NULL
CYR RANDY & ANDON SARAH	NULL	NULL	10646 E LUPINE LN	FLORENCE	AZ	851327326	NULL	NULL	NULL
MARCINIAK SAMANTHA REBECCA	SIMZYK KYLE WILSON	NULL	10647 E LUPINE LN	FLORENCE	AZ	851327327	NULL	NULL	NULL
CHAVEZ SAUL MENDEZ	NULL	NULL	10648 E MARIGOLD LN	FLORENCE	AZ	851327320	NULL	NULL	NULL
GALVIS ANDRES ORTEGA & CHRISTIANA	NULL	NULL	10648 E SUNFLOWER CT	FLORENCE	AZ	851327486	NULL	NULL	NULL
DAIL RONALD E	NULL	NULL	10649 E SUNFLOWER LN	FLORENCE	AZ	851327458	NULL	NULL	NULL
AGUIRRE CHRISTOPHER JASON & FREDEE RAVEN	NULL	NULL	10649 E VERBINA LN	FLORENCE	AZ	851327308	NULL	NULL	NULL
LEONNIG GREGORY P & SHIRLEY A	NULL	NULL	10652 E PRIMROSE CT	FLORENCE	AZ	851327481	NULL	NULL	NULL
THEORIN RACHEL & DAVIS HAROLD II	NULL	NULL	10653 E SUNFLOWER CT	FLORENCE	AZ	851327489	NULL	NULL	NULL
HARMON JANNA KAY & LORI	NULL	NULL	10655 E WALLFLOWER LN	FLORENCE	AZ	851327301	NULL	NULL	NULL
ANDERSON DANIEL & AHUERO ESMERALDA	NULL	NULL	10660 E CLIFFROSE LN	FLORENCE	AZ	851327332	NULL	NULL	NULL
SCHROEDER DAVID & CHELCI	NULL	NULL	10664 E SUNFLOWER CT	FLORENCE	AZ	851327486	NULL	NULL	NULL
THOMPSON JOSHUA J	NULL	NULL	10664 E WALLFLOWER LN	FLORENCE	AZ	851327300	NULL	NULL	NULL
WHITE JAMIE & DAPHNE L	NULL	NULL	10665 E CLIFFROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
ARNOLD-LEWIS ASHLEY R & LEWIS ROBERE L III	NULL	NULL	10665 E MARIGOLD CT	FLORENCE	AZ	851327491	NULL	NULL	NULL
ANDERSEN LARRY V & MARY E	NULL	NULL	10665 E PRIMROSE CT	FLORENCE	AZ	851327482	NULL	NULL	NULL
ROTH CHERYL	NULL	NULL	10665 E SUNFLOWER CT	FLORENCE	AZ	851327489	NULL	NULL	NULL
FARR DARWIN LAMARR & GLENDA ROBYN	NULL	NULL	10668 E MARIGOLD LN	FLORENCE	AZ	851327320	NULL	NULL	NULL
KAHNS DERRELLJAY	HARRISON MCKENZIE	NULL	10669 E LUPINE LN	FLORENCE	AZ	851327327	NULL	NULL	NULL
ROGAZ NATALIE & VEGA RAFAEL TRS	ROGAZ LIVING TRUST	NULL	10669 E WALLFLOWER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
WILL RYON C	NELSON HEATHER D	NULL	10672 E WALLFLOWER LN	FLORENCE	AZ	851327300	NULL	NULL	NULL
GRUNSTEAD ELYSE	NULL	NULL	10673 E SUNFLOWER CT	FLORENCE	AZ	851327489	NULL	NULL	NULL
ALVARADO MARK	NULL	NULL	10674 E VERBINA LN	FLORENCE	AZ	851327307	NULL	NULL	NULL
LEE TIMOTHY & JODY	NULL	NULL	10675 E VERBINA LN	FLORENCE	AZ	851327308	NULL	NULL	NULL
BISCOGLIO PHILIP JOHN JR & KRISTIE M	NULL	NULL	10676 E CLIFFROSE LN	FLORENCE	AZ	851327332	NULL	NULL	NULL
NELSON KINDRA K	NULL	NULL	10676 E PRIMROSE CT	FLORENCE	AZ	851327481	NULL	NULL	NULL
PEARSON ROXANNE M & EVAN B	NULL	NULL	10681 E CLIFFROSE LN	FLORENCE	AZ	85132-7333	NULL	NULL	NULL
DEVESELEANU MARCEL	NULL	NULL	10682 E LUPINE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
FILES JACK	NULL	NULL	10682 E VICTOR WAY	SAN TAN VALLEY	AZ	851437168	NULL	NULL	NULL
STODDARD SEAN & REBECCA	NULL	NULL	10683 E LUPINE LN	FLORENCE	AZ	851327327	NULL	NULL	NULL
COOK GAYLEN	COOK SUZANNE	NULL	10683 E WALLFLOWER LN	FLORENCE	AZ	851327301	NULL	NULL	NULL
COULTER WAYNE A & PATRICIA A	NULL	NULL	10684 E PRIMROSE CT	FLORENCE	AZ	851327481	NULL	NULL	NULL
PEREZ PETE J SR & MONICA	NULL	NULL	10684 E SUNFLOWER CT	FLORENCE	AZ	851327486	NULL	NULL	NULL
BATES DERICK & REILLY NATASHA DANIELLE	NULL	NULL	10684 E VERBINA LN	FLORENCE	AZ	851327307	NULL	NULL	NULL
BARKER KALEM	WILKERSON PAMELA	NULL	10684 E WALLFLOWER LN	FLORENCE	AZ	851327300	NULL	NULL	NULL
SWAFFORD STEPHANIE	NULL	NULL	10685 E MARIGOLD CT	FLORENCE	AZ	85132	NULL	NULL	NULL
ZAMBRANO KIMBERLY DIANA	TORRES ANA ROSA GALLEGOS	NULL	10685 E PRIMROSE CT	FLORENCE	AZ	851327482	NULL	NULL	NULL
STURDEVANT BRIAN S & SUSAN M	NULL	NULL	10685 E SUNFLOWER CT	FLORENCE	AZ	85132-7489	NULL	NULL	NULL
LITTLE SEAN & TOLEDO ALEXA	NULL	NULL	10687 E VERBINA LN	FLORENCE	AZ	851327308	NULL	NULL	NULL
QUICK LAWRENCE J SR	QUICK CHERYL	NULL	10691 E AMERICAN PRIDE DR	QUEEN CREEK	AZ	85143	NULL	NULL	NULL
TIETJEN DAVID NELO & CAMILLE ARLENE	NULL	NULL	10694 E CLIFFROSE LN	FLORENCE	AZ	851327332	NULL	NULL	NULL
ESTEVEZ ENRIQUE	NULL	NULL	10696 E SUNFLOWER CT	FLORENCE	AZ	851327486	NULL	NULL	NULL
ARONSTEIN RICHARD & TOSHA	NULL	NULL	10696 E VERBINA LN	FLORENCE	AZ	851327307	NULL	NULL	NULL
LEWIS MORGAN LEIGH & TIMOTHY	NULL	NULL	10696 E WALLFLOWER LN	FLORENCE	AZ	851327300	NULL	NULL	NULL
YOUNG MARTIN W	YOUNG LORINDA S	NULL	10697 E WALLFLOWER LN	FLORENCE	AZ	851327301	NULL	NULL	NULL
HALVORSON THOMAS KALANI	JONES AUTUMN NICOLE LORRINE	NULL	10699 E VERBINA LN	FLORENCE	AZ	851327308	NULL	NULL	NULL
MCKENNA PATRICK J	NULL	NULL	107 MALLARD AVE	STORM LAKE	IA	505887677	NULL	NULL	NULL
CANDELARIA CODY & JANEANE M	NULL	NULL	10700 E LUPINE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
KRONE DUSTIN	NULL	NULL	10701 E LUPINE LN	FLORENCE	AZ	851327329	NULL	NULL	NULL
MORALES ROBERT	NULL	NULL	10702 E MARIGOLD LN	FLORENCE	AZ	851327321	NULL	NULL	NULL
SORIA NANCY JACQUELINE & JAIME ZARATE	NULL	NULL	10703 E PRIMROSE CT	FLORENCE	AZ	851327483	NULL	NULL	NULL
KLEIN DAVID E & DENISE H	NULL	NULL	10705 E SUNFLOWER CT	FLORENCE	AZ	851327490	NULL	NULL	NULL
RENIXE JOHN R & ESTHER A	NULL	NULL	10710 E WALLFLOWER LN	FLORENCE	AZ	851327302	NULL	NULL	NULL
GURROLA HECTOR C JR & RACHEL L	NULL	NULL	10711 E VERBINA LN	FLORENCE	AZ	851327310	NULL	NULL	NULL
WISSMAN ANGELA G & MICHAEL F	NULL	NULL	10711 E WALLFLOWER LN	FLORENCE	AZ	851327303	NULL	NULL	NULL
SHUTE JAMIE E & TANIA P	NULL	NULL	10716 E VERBINA LN	FLORENCE	AZ	851327309	NULL	NULL	NULL
LINDBLAD CHRISTA & DAVID	JENNINGS THERESA	NULL	10717 E CLIFFROSE LN	FLORENCE	AZ	851327331	NULL	NULL	NULL
JEROME JAMIE	NULL	NULL	10718 E LUPINE LN	FLORENCE	AZ	85132-7328	NULL	NULL	NULL
LAIRD RICHARD I & PERRY-LAIRD KAREN TRS	PERRY-LAIRD FAM TRUST	NULL	10719 E LUPINE LN	FLORENCE	AZ	851327329	NULL	NULL	NULL
QUINNELL BRUCE A & VALERIE S	NULL	NULL	10719 E SUNFLOWER CT	FLORENCE	AZ	851327490	NULL	NULL	NULL
REES JAMES & BROOKE LYNN	NULL	NULL	10720 E MARIGOLD LN	FLORENCE	AZ	85132-7321	NULL	NULL	NULL
NORDSTROM DIAN & WATERS PATRICK	NULL	NULL	10722 E LARSON CT	SAN TAN VALLEY	AZ	851436409	NULL	NULL	NULL
CASTILLO LUIS & BLANCA	NULL	NULL	10723 E VERBINA LN	FLORENCE	AZ	851327310	NULL	NULL	NULL
MORFIN JUAN MANUEL SANCHEZ	SOTO CRISTAL ALVAREZ	NULL	10724 E GRINGO TRL	SAN TAN VALLEY	AZ	851437686	NULL	NULL	NULL
DEGRACE CAROLYNN FAMILY TRUST	NULL	NULL	10725 E PRIMROSE CT	FLORENCE	AZ	851327483	NULL	NULL	NULL
DECKER CHRISTOPHER B & SHELBIE YVONNE	NULL	NULL	10725 E WALLFLOWER LN	FLORENCE	AZ	85132-7303	NULL	NULL	NULL
GARCIA FRANCISCO	NULL	NULL	10726 E WALLFLOWER LN	FLORENCE	AZ	851327302	NULL	NULL	NULL
WATSON GREGORY D & JULIE J TRS	WATSON GREGORY D & JULIE J LIV TR	NULL	10727 E LARSON CT	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
HARRISON WESTON	NULL	NULL	10728 E VERBINA LN	FLORENCE	AZ	85132-7309	NULL	NULL	NULL
JOHNSON GERALD & JESSIE	NULL	NULL	10730 E CLIFFROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
WARD KATHLEEN	NULL	NULL	10730 E PRIMROSE CT	FLORENCE	AZ	851327495	NULL	NULL	NULL
SMITH WAYNE C & YANITZA I NILES	NULL	NULL	10734 E SUNFLOWER CT	FLORENCE	AZ	851327487	NULL	NULL	NULL
FEATHER DANA C & DATHYL L REV TRUST	NULL	NULL	10735 E BOULDER DR	APACHE JUNCTION	AZ	851204237	NULL	NULL	NULL
MOSSMAN ANDRE & HOLLY	NULL	NULL	10735 E VERBINA LN	FLORENCE	AZ	851327310	NULL	NULL	NULL
KELLEY DAVID M	NULL	NULL	10736 E AMERICAN PRIDE DR	SAN TAN VALLEY	AZ	851435201	NULL	NULL	NULL
MONTOSA ZOBEIDA & CARLOS A	NULL	NULL	10739 E HORIZON TRL	SAN TAN VALLEY	AZ	851435867	NULL	NULL	NULL
MARTIN JONATHAN GABRIEL & SAATHOFF CAPRICE	NULL	NULL	10739 E PRIMROSE CT	FLORENCE	AZ	851327483	NULL	NULL	NULL
FISHER KRISTEN C	NULL	NULL	10739 E WALLFLOWER LN	FLORENCE	AZ	851327303	NULL	NULL	NULL
TOMPKINS PAUL A & LISA G TRS	TOMPKINS FAM LIV TRUST	NULL	10741 E MARIGOLD CT	FLORENCE	AZ	851327492	NULL	NULL	NULL
ALVARADO DISENIA	ALVARADO JOSE JR	NULL	10742 E VERBINA LN	FLORENCE	AZ	851327309	NULL	NULL	NULL
LANTZ EZRA & TIFFANY	NULL	NULL	10742 E WALLFLOWER LN	FLORENCE	AZ	851327302	NULL	NULL	NULL
TIMBER RIDGE HOMES & CONSTRUCTION LLC	NULL	NULL	10742 E WALLFLOWER LN	FLORENCE	AZ	851327302	NULL	NULL	NULL
REINHART KURT	REINHART KARLI	NULL	10747 E VERBINA LN	FLORENCE	AZ	851327310	NULL	NULL	NULL
NIELSEN JOSHUA	NULL	NULL	10748 E CLIFFROSE LN	FLORENCE	AZ	851327330	NULL	NULL	NULL
PANKEY MELINDA	NULL	NULL	10748 E SUNFLOWER CT	FLORENCE	AZ	851327487	NULL	NULL	NULL
MURAKAMI ALAN Y	NULL	NULL	1075 S EL CAMINO VIEJO RD	QUEEN VALLEY	AZ	85118	NULL	NULL	NULL
YARBROUGH GENE C & LENORE	NULL	NULL	10753 E WALLFLOWER LN	FLORENCE	AZ	851327303	NULL	NULL	NULL
RUIZ EDWARD L & CRISTAL L TRS	ECR TRUST	NULL	10755 E MARIGOLD LN	FLORENCE	AZ	851327323	NULL	NULL	NULL
APODACA MIRANDA	GARCIA GUILLERMO	NULL	10755 E VICTOR WAY	SAN TAN VALLEY	AZ	851437834	NULL	NULL	NULL
PERALES CANDACE B	NULL	NULL	10756 E WALLFLOWER LN	FLORENCE	AZ	851327302	NULL	NULL	NULL
EDWARDS LINDA MAY & BAEZ ALFRED	NULL	NULL	10759 E SUNFLOWER CT	FLORENCE	AZ	851327490	NULL	NULL	NULL
SMITHSON ROBERT & RHONDA	NULL	NULL	10759 E VERBINA LN	FLORENCE	AZ	851327310	NULL	NULL	NULL
SONATY CHRISTOPHER M TRS	SONATY CHRISTOPHER LIVING TRUST	NULL	10761 E PRIMROSE CT	FLORENCE	AZ	851327484	NULL	NULL	NULL
PACE CLARK	NULL	NULL	10765 E WALLFLOWER LN	FLORENCE	AZ	85132-7303	NULL	NULL	NULL
PORTER DAVID	PORTER MARY	NULL	10766 E CLIFFROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
COWART HEATHER	NULL	NULL	10772 E VERBINA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
RUDY BRIAN & KIMBERLY	NULL	NULL	10775 E MARIGOLD LN	FLORENCE	AZ	85132	NULL	NULL	NULL
LANGFORD BRIAN & WENDY DAWN	NULL	NULL	10781 E SUNFLOWER CT	FLORENCE	AZ	851327490	NULL	NULL	NULL
HAMMOND JON M	HAMMOND JANINE M	NULL	10782 E CLIFFROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
BARRIGA TEASHA A FAM TRUST	NULL	NULL	10782 E SUNFLOWER CT	FLORENCE	AZ	85132-7480	NULL	NULL	NULL
MILNER ALLEN & AMY	NULL	NULL	10787 E AMERICAN PRIDE DR	SAN TAN VALLEY	AZ	851435201	NULL	NULL	NULL
PALMER TREVOR A & TEA	NULL	NULL	10790 E PRIMROSE CT	FLORENCE	AZ	851327495	NULL	NULL	NULL
COREA ROBERT & DOUGLAS	NULL	NULL	10793 E HORIZON TRL	SAN TAN VALLEY	AZ	851435867	NULL	NULL	NULL
OLSON AMY E	NULL	NULL	10793 E WALLFLOWER LN	FLORENCE	AZ	851327303	NULL	NULL	NULL

HERNANDEZ JOSE V & TRACY A	NULL	NULL	10794 E WALLFLOWER LN	FLORENCE	AZ	851327302	NULL	NULL	NULL
LITWILLER KIM M TRUST	NULL	NULL	10795 E MARIGOLD LN	FLORENCE	AZ	851327323	NULL	NULL	NULL
KINCHELOE DARYL A & CARDUCCI HEATHER R	NULL	NULL	10796 E AMERICAN PRIDE DR	SAN TAN VALLEY	AZ	851435201	NULL	NULL	NULL
IRONGATE GOLD CANYON LLC	NULL	NULL	10796 E CORDOVA ST	GOLD CANYON	AZ	851186831	NULL	NULL	NULL
NICHOLS EVAN & MATRACA ANN	NULL	NULL	10798 E GRINGO TRL	SAN TAN VALLEY	AZ	851437686	NULL	NULL	NULL
WALTON STACY E	NULL	NULL	10799 E PRIMROSE CT	FLORENCE	AZ	851327484	NULL	NULL	NULL
CONTRERAS RICHARD JR FAMILY LIVING TRUST	NULL	NULL	108 N 98TH ST	MESA	AZ	85207	NULL	NULL	NULL
SYWARUNGSYMUN STEVEN C	NULL	NULL	10800 E CLIFROSE LN	FLORENCE	AZ	851327336	NULL	NULL	NULL
RINGER BRIAN D & MAUD CAMERON L	NULL	NULL	10800 E SUNFLOWER CT	FLORENCE	AZ	851327479	NULL	NULL	NULL
KALE DANIEL	NULL	NULL	10801 E MARIGOLD CT	FLORENCE	AZ	851327493	NULL	NULL	NULL
STANGEBY ELEXIS BREANNA ANDRADE	NULL	NULL	10803 E SUNFLOWER CT	FLORENCE	AZ	851327477	NULL	NULL	NULL
GALLIGHER FRANK R	NULL	NULL	10803 E WESTERN STAR RD	SAN TAN VALLEY	AZ	851437204	NULL	NULL	NULL
FEENEY DOUGLAS RICHARD	NULL	NULL	10806 E VERBINA LN	FLORENCE	AZ	851327311	NULL	NULL	NULL
HELSEL TONY & JULIE	NULL	NULL	10807 E LARSON CT	SAN TAN VALLEY	AZ	851436408	NULL	NULL	NULL
WILLIAMS BAILEY CHRISTINA & CHRISTOPHER JAMES	NULL	NULL	10807 E WALLFLOWER LN	FLORENCE	AZ	851327305	NULL	NULL	NULL
JONES PAUL D & LELA A	NULL	NULL	10808 E LARSON CT	SAN TAN VALLEY	AZ	851436408	NULL	NULL	NULL
JOHNSON TERENCE A & HEIDI	NULL	NULL	10810 E WALLFLOWER LN	FLORENCE	AZ	851327305	NULL	NULL	NULL
SANCHEZ ROBERT J & HEIDI CHRISTINA	NULL	NULL	10818 E CLIFROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
PACHECO JULISSA	LOPEZ ISMAEL	NULL	10825 E PRIMROSE CT	FLORENCE	AZ	851327485	NULL	NULL	NULL
BAUMGARDNER O JOAN TRUST	NULL	NULL	10826 E PRIMROSE CT	FLORENCE	AZ	851327494	NULL	NULL	NULL
ADAMS CASEY & JODY	NULL	NULL	10826 E WALLFLOWER LN	FLORENCE	AZ	851327344	NULL	NULL	NULL
HEID MICHELLE	BELSITO ROCCO JOSEPH II	NULL	10827 E SUNFLOWER CT	FLORENCE	AZ	85132	NULL	NULL	NULL
HARRIS PHILLIP	NULL	NULL	10829 E VERBINA LN	FLORENCE	AZ	851327312	NULL	NULL	NULL
EDSALL MICHAEL PAUL & PAMELA A	NULL	NULL	10830 E SUNFLOWER CT	FLORENCE	AZ	851327479	NULL	NULL	NULL
MEGGISON JENNIFER	NULL	NULL	10836 E CLIFROSE LN	FLORENCE	AZ	851327336	NULL	NULL	NULL
MILLER FRED J JR	BORCHELT SHERRY L TRS; BORCHELT/LINENBERGER TRUST	NULL	10842 E LARSON CT	SAN TAN VALLEY	AZ	851436408	NULL	NULL	NULL
GARCIA MARTIN	NULL	NULL	10844 E VERBINA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
HINTON GLENN E & GWENDOLYN L	NULL	NULL	10847 E VERBINA LN	FLORENCE	AZ	851327312	NULL	NULL	NULL
CHAPPELL CLARENCE E MYLES	WOMACK-CHAPPELL RUBY	NULL	10849 E PRIMROSE CT	FLORENCE	AZ	85132-7485	NULL	NULL	NULL
AUCIELLO LAURA	NULL	NULL	10850 E SUNFLOWER CT	FLORENCE	AZ	851327479	NULL	NULL	NULL
DEMUTH LARRY & SUSAN	NULL	NULL	10851 E WESTERN STAR RD	SAN TAN VALLEY	AZ	851437204	NULL	NULL	NULL
ALDACO STEPHANIE RAE	NULL	NULL	10856 E PRIMROSE CT	FLORENCE	AZ	851327494	NULL	NULL	NULL
RIPPLE HOME LLC	NULL	NULL	10856 E WALLFLOWER LN	FLORENCE	AZ	851327344	NULL	NULL	NULL
BEAUCHAMP JEFFREY L & DENISE J	NULL	NULL	10860 HANKERD RD	PLEASANT LAKE	MI	492729657	NULL	NULL	NULL
CLARK ZACHARY ELIAS & KACEY NIKOLE	NULL	NULL	10863 E SUNFLOWER CT	FLORENCE	AZ	851327477	NULL	NULL	NULL
WILSON THOMAS B & KATHLEEN K	NULL	NULL	10863 E VERBINA LN	FLORENCE	AZ	851327312	NULL	NULL	NULL
HERRERA ROBERT J & CONSUELO	NULL	NULL	10869 E MAGMA RD	FLORENCE	AZ	851328577	NULL	NULL	NULL
BOYD STEVEN & GAIL	NULL	NULL	10873 E MARIGO CT	FLORENCE	AZ	85132	NULL	NULL	NULL
TAYLOR CHARLES	NULL	NULL	10874 E SUNFLOWER CT	FLORENCE	AZ	85132-7479	NULL	NULL	NULL
GASTELO JOE ALBERT & DIANA KARINA	NULL	NULL	10874 E WALLFLOWER LN	FLORENCE	AZ	851327344	NULL	NULL	NULL
WIEDEN MICHAEL & JENNIFER	NULL	NULL	10880 E VERBINA LN	FLORENCE	AZ	851327311	NULL	NULL	NULL
MCEVOY MARGARET A	NULL	NULL	10881 E VERBINA LN	FLORENCE	AZ	851327312	NULL	NULL	NULL
MARTINEZ DAVID & ELIZABETH L	NULL	NULL	10883 E PRIMROSE CT	FLORENCE	AZ	851327485	NULL	NULL	NULL
HEISLER CYNTHIA ANN	NULL	NULL	10891 E SUNFLOWER CT	FLORENCE	AZ	851327477	NULL	NULL	NULL
LOHMAN KEITH EDWARD	NULL	NULL	10893 E MARIGOLD CT	FLORENCE	AZ	851327493	NULL	NULL	NULL
VELASQUEZ MARCOS MANUEL	NULL	NULL	10897 E VERBINA LN	FLORENCE	AZ	851327312	NULL	NULL	NULL
SCHRINER KEVIN	NULL	NULL	10898 E PRIMROSE CT	FLORENCE	AZ	851327494	NULL	NULL	NULL
FIELDS STEPHEN C & CHERYL A	NULL	NULL	10898 E SUNFLOWER CT	FLORENCE	AZ	85132	NULL	NULL	NULL
MCQUINN SHANE LEE & CHARITY LEE	NULL	NULL	10898 E VERBINA LN	FLORENCE	AZ	851327311	NULL	NULL	NULL
ADAMCZYK JERZY & ZOFIA CO-TRS	NULL	NULL	10906 E WALLFLOWER LN	FLORENCE	AZ	851327345	NULL	NULL	NULL
HOLLAND CYNTHIA J & LAWYER TJ ROBERT	NULL	NULL	10913 E SUNFLOWER CT	FLORENCE	AZ	851327478	NULL	NULL	NULL
DOOLING NEERA	NULL	NULL	10933 E VERBINA LN	FLORENCE	AZ	851327314	NULL	NULL	NULL
SALAZAR MARTIN RODRIGUEZ	NULL	NULL	10934 E VERBINA LN	FLORENCE	AZ	851327313	NULL	NULL	NULL
MELANCON THEODORE A	NULL	NULL	10940 E WALLFLOWER LN	FLORENCE	AZ	851327345	NULL	NULL	NULL
WISE STEVEN & KENDRA	NULL	NULL	10949 E VERBINA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
MASTERS YASMEA PENNIE VARIE	HAWKS JESSE LEE	NULL	10954 E VERBINA LN	FLORENCE	AZ	851327313	NULL	NULL	NULL
FAJARDO DANIEL P & CONNIE	NULL	NULL	10999 E MAGMA RD	FLORENCE	AZ	851328592	NULL	NULL	NULL
SPEAKER MICHAEL ALLEN	SPEAKER GRISELDA IRENE	NULL	11005 E VERBINA LN	FLORENCE	AZ	85132-7679	NULL	NULL	NULL
GOMEZ OSCAR RUIZ VELASCO	ALVAREZ SALVADOR SALDANA	NULL	11010 E WALLFLOWER LN	FLORENCE	AZ	851327692	NULL	NULL	NULL
JUDD AUSTYN	NULL	NULL	11011 MCCORMICK RD STE 400	HUNT VALLEY	MD	210318627	NULL	NULL	NULL
MYERS BRADLEY K & MELISSA L	NULL	NULL	11015 E SUNFLOWER CT	FLORENCE	AZ	851327707	NULL	NULL	NULL
CRUSE STEPHEN RAY	NULL	NULL	11023 E VERBINA LN	FLORENCE	AZ	851327679	NULL	NULL	NULL
STANESCU LOAN & ASHLEY	NULL	NULL	11028 E WALLFLOWER LN	FLORENCE	AZ	851327692	NULL	NULL	NULL
SCHEIFLA DARYL & REBECCA ARTUS	NULL	NULL	11031 E SUNFLOWER CT	FLORENCE	AZ	851327707	NULL	NULL	NULL
ROSE JASON DAVID & MICHELLE YVETTE	ROSE TYLER SHELDON	NULL	11038 E PRIMROSE CT	FLORENCE	AZ	851327697	NULL	NULL	NULL
LANE LAURA ANNE	NULL	NULL	11039 E VERBINA LN	FLORENCE	AZ	851327679	NULL	NULL	NULL
SAUCEDO MARIA GUADALUPE	LOPEZ VICTOR SAUCEDO	NULL	11040 E SUNFLOWER CT	FLORENCE	AZ	85132-7499	NULL	NULL	NULL
NAPIER JOHN	NULL	NULL	11040 E VERBINA LN	FLORENCE	AZ	851327686	NULL	NULL	NULL
PALKA VINCENT A	DITUSA LAUREN K	NULL	11047 E SUNFLOWER CT	FLORENCE	AZ	851327707	NULL	NULL	NULL
STAMIDIS MICHAEL & MELISSA	NULL	NULL	11053 E PRIMROSE CT	FLORENCE	AZ	851327696	NULL	NULL	NULL
WILSON BRYAN LLOYD & NATALIE GLAUS	NULL	NULL	11057 E VERBINA LN	FLORENCE	AZ	851327679	NULL	NULL	NULL
FOLK SHANE	NULL	NULL	11058 E SUNFLOWER CT	FLORENCE	AZ	851327499	NULL	NULL	NULL
MUNDORF NANCY & CHARLES BYRON	DRAPER DUSTIN M	NULL	11060 E VERBINA LN	FLORENCE	AZ	851327686	NULL	NULL	NULL
CALDWELL JILL	NULL	NULL	11062 E WALLFLOWER LN	FLORENCE	AZ	851327692	NULL	NULL	NULL
HAMMOND LISA A REV TRUST	NULL	NULL	11063 E SUNFLOWER CT	FLORENCE	AZ	851327707	NULL	NULL	NULL
JOHNSON CHARLES E & CHALIEW	NULL	NULL	11075 E PRIMROSE CT	FLORENCE	AZ	851327696	NULL	NULL	NULL
WHEELER DAVID WIN	NULL	NULL	11076 E SUNFLOWER CT	FLORENCE	AZ	851327499	NULL	NULL	NULL
QUIGLEY VIRGINIA G FAM TRUST	NULL	NULL	11077 E VERBINA LN	FLORENCE	AZ	851327679	NULL	NULL	NULL
BANKS TOMMY L II & ALISSA LE	NULL	NULL	11078 E VERBINA LN	FLORENCE	AZ	851327686	NULL	NULL	NULL
BOZ DAMIAN & PERPHELIA	NULL	NULL	11080 E WALLFLOWER LN	FLORENCE	AZ	851327692	NULL	NULL	NULL
ALVAREZ VICTOR FUENTES	NULL	NULL	1109 W LOMA DE ORO	QUEEN CREEK	AZ	851429119	NULL	NULL	NULL
GIBSON MYIESHA N TRS	GIBSON-SMITH FAMILY TRUST	NULL	11092 E PRIMROSE CT	FLORENCE	AZ	851327697	NULL	NULL	NULL
SCHROEDER BRADEN W & BRITNEY G	NULL	NULL	11094 E SUNFLOWER CT	FLORENCE	AZ	851327499	NULL	NULL	NULL
LEE LORI FAM TRUST	NULL	NULL	11095 E PRIMROSE CT	FLORENCE	AZ	851327696	NULL	NULL	NULL
DIMASI SALVATORE	NULL	NULL	11095 E SUNFLOWER CT	FLORENCE	AZ	851327707	NULL	NULL	NULL
BORDEN JOSHUA E & AMBER	NULL	NULL	11096 E VERBINA LN	FLORENCE	AZ	851327686	NULL	NULL	NULL
DONALDSON ALICIA	NULL	NULL	11098 E WALLFLOWER LN	FLORENCE	AZ	851327692	NULL	NULL	NULL
CRAWFORD ROBERT DANIEL & JENETTE LYNN	NULL	NULL	11101 E MARIGOLD CT	FLORENCE	AZ	851327708	NULL	NULL	NULL
CLARK JUSTIN S & DUNSHIE KANDICE MARIE	NULL	NULL	11108 E PRIMROSE CT	FLORENCE	AZ	851327698	NULL	NULL	NULL
ARBUCKLE LOWELL F & MENEFEE ROBIN G	NULL	NULL	11111 E SUNFLOWER CT	FLORENCE	AZ	851327706	NULL	NULL	NULL
RACKLEY CHARLES R	NULL	NULL	11112 E SUNFLOWER CT	FLORENCE	AZ	851327701	NULL	NULL	NULL
HEMMER WENDEL W	NULL	NULL	11113 E VERBINA LN	FLORENCE	AZ	851327680	NULL	NULL	NULL
GRINHAM THOMAS LAWRENCE & DIANE	NULL	NULL	11114 E ASTER LN	FLORENCE	AZ	851327659	NULL	NULL	NULL
HATTON RENEE MICHELLE	NULL	NULL	11115 E PRIMROSE CT	FLORENCE	AZ	851327695	NULL	NULL	NULL
ZANE CRYSTAL M	NULL	NULL	11116 E VERBINA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
GREEN FELIX	NULL	NULL	11116 E WALLFLOWER LN	FLORENCE	AZ	851327691	NULL	NULL	NULL
CHAVEZ VALENTIN TORRES	CENICEROS IRMA	NULL	11127 E SUNFLOWER CT	FLORENCE	AZ	851327706	NULL	NULL	NULL
BROCKMAN-CANTRELL CHANTELL LEONDRA	CANTRELL JAMES PRESTON	NULL	11129 E MARIGOLD CT	FLORENCE	AZ	851327708	NULL	NULL	NULL
RAMOS GERARDO JR	OCAMPO KRISTIN ANN	NULL	11130 E SUNFLOWER CT	FLORENCE	AZ	851327701	NULL	NULL	NULL
MIX DEVON M & HALVERSON KATLYN N	NULL	NULL	11133 E VERBINA LN	FLORENCE	AZ	851327680	NULL	NULL	NULL
POLLARD KEVIN W & BRANDI N	NULL	NULL	11134 E ASTER LN	FLORENCE	AZ	851327659	NULL	NULL	NULL
MEZA CHRISTOPHER MATHEW & AKIN CASSY LATASHA	NULL	NULL	11134 E WALLFLOWER LN	FLORENCE	AZ	851327691	NULL	NULL	NULL
CONTRERAS ADRIANA & JOSE L	NULL	NULL	11135 E PRIMROSE CT	FLORENCE	AZ	851327695	NULL	NULL	NULL
HENDERSON KIMBERLY J	NULL	NULL	11136 E VERBINA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
WIER THEON & SAUNDRA JO	NULL	NULL	11138 E PRIMROSE CT	FLORENCE	AZ	851327698	NULL	NULL	NULL
HOWEY DIANE L LIVING TRUST	NULL	NULL	11140 E CLIFROSE LN	FLORENCE	AZ	85132-7645	NULL	NULL	NULL
MARVELL PATRICIA "GOLFER" TRUST	NULL	NULL	11141 E ASTER LN	FLORENCE	AZ	851327688	NULL	NULL	NULL
PACHECO PATRICK JAMES JR	NULL	NULL	11141 E CLIFROSE LN	FLORENCE	AZ	851327646	NULL	NULL	NULL
SHARRER KIRSTIN & JUSTIN RAY	NULL	NULL	11141 E PRIMROSE CT	FLORENCE	AZ	851327695	NULL	NULL	NULL
LIZAKOWSKI LESLIE VIANEY	NULL	NULL	11141 E WALLFLOWER LN	FLORENCE	AZ	851327693	NULL	NULL	NULL
LOPEZ KATHERINE R & LOPEZ FELIPE E	NULL	NULL	11143 E SUNFLOWER CT	FLORENCE	AZ	851327706	NULL	NULL	NULL
SHAW THOMAS BYRD & MICHELLE MONIQUE	NULL	NULL	11147 E MARIGOLD CT	FLORENCE	AZ	851327708	NULL	NULL	NULL
MAITLAND DON ROCA & BETTY ANN	NULL	NULL	11150 E PRIMROSE CT	FLORENCE	AZ	851327698	NULL	NULL	NULL
WILLIAMS GUYMAN F & DIANE	NULL	NULL	11151 E VERBINA LN	FLORENCE	AZ	851327680	NULL	NULL	NULL
ADAMS JEFFREY W & JINNY K	NULL	NULL	11152 E ASTER LN	FLORENCE	AZ	851327659	NULL	NULL	NULL
ZAMBRANO ANA	NULL	NULL	11152 E WALLFLOWER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
CALDWELL DENISE LYNN	NULL	NULL	11153 E MARIGOLD LN	FLORENCE	AZ	851327653	NULL	NULL	NULL
WONG CLAUDIA	RAYGOZA SAUL	NULL	11156 E VERBINA LN	FLORENCE	AZ	851327685	NULL	NULL	NULL
HUGHES JONATHAN JOSEPH & AMANDA GAYLE	NULL	NULL	11159 E SUNFLOWER CT	FLORENCE	AZ	851327706	NULL	NULL	NULL
KLINGER DERRICK	NULL	NULL	11160 E CLIFROSE LN	FLORENCE	AZ	851327645	NULL	NULL	NULL
LOMELI KRYSTA LIBERTAD	NULL	NULL	11161 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
HITCHCOCK DONALD G LIV TRUST	NULL	NULL	11161 E CLIFROSE LN	FLORENCE	AZ	851327646	NULL	NULL	NULL
SANCHEZ RAMON SORIA & ADELLA LIV TRUST	NULL	NULL	11166 E SUNFLOWER CT	FLORENCE	AZ	851327701	NULL	NULL	NULL
MELVIN PERRY & STEPHANIE	NULL	NULL	11169 E WALLFLOWER LN	FLORENCE	AZ	851327693	NULL	NULL	NULL
HICKS THOMAS & SUSAN K	NULL	NULL	11170 E ASTER LN	FLORENCE	AZ	851327659	NULL	NULL	NULL
DUNCAN CAROLINE F	NULL	NULL	11170 E VERBINA LN	FLORENCE	AZ	851327685	NULL	NULL	NULL
SCOTT TIMOTHY A	NULL	NULL	11171 E MARIGOLD LN	FLORENCE	AZ	85132	NULL	NULL	NULL
BOLANOS KATRINA	NULL	NULL	11175 E PRIMROSE CT	FLORENCE	AZ	851327695	NULL	NULL	NULL
PLATT ROSS M & ABBY	NULL	NULL	11178 E CLIFFROSE LN	FLORENCE	AZ	851327645	NULL	NULL	NULL
DODGE HARRIET ANN	NULL	NULL	11179 E CLIFROSE LN	FLORENCE	AZ	85132-7646	NULL	NULL	NULL
JADERLUND WARREN L	NULL	NULL	11183 E VERBINA LN	FLORENCE	AZ	851327680	NULL	NULL	NULL
SCHEMMEL DEBORAH	NULL	NULL	11183 E WALLFLOWER LN	FLORENCE	AZ	851327693	NULL	NULL	NULL
BURTON JOSHUA ADAM	POVITCH LAURA AILEEN	NULL	11184 E SUNFLOWER CT	FLORENCE	AZ	851327701	NULL	NULL	NULL
CHUNG ANDERSON	NULL	NULL	11184 E WALLFLOWER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
DUMBRILL TARUH ANISA	NULL	NULL	11186 E VERBINA LN	FLORENCE	AZ	851327685	NULL	NULL	NULL
HUGHES ASHLEY ANN & RODRIGUEZ DANNY	NULL	NULL	11188 E ASTER LN	FLORENCE	AZ	851327659	NULL	NULL	NULL
ZURFLUH BENJAMIN & MARISSA	NULL	NULL	11189 E MARIGOLD LN	FLORENCE	AZ	851327653	NULL	NULL	NULL
PINO LUIS F	NULL	NULL	11191 E SUNFLOWER CT	FLORENCE	AZ	851327706	NULL	NULL	NULL
PAREDES DANIEL D	NULL	NULL	11195 E PRIMROSE CT	FLORENCE	AZ	85132-7695	NULL	NULL	NULL
SANCHEZ JAIRO ALEJANDRO & MORILLON VANESA GUADALUPE	NULL	NULL	11197 E ASTER LN	FLORENCE	AZ	851327668	NULL	NULL	NULL
JAMES CALVIN & RACHEL	NULL	NULL	11197 E CLIFFROSE LN	FLORENCE	AZ	851327646	NULL	NULL	NULL
MONGEON MARK & CINDY	NULL	NULL	11198 E VERBINA LN	FLORENCE	AZ	851327685	NULL	NULL	NULL
ISLAM ANWARA	NULL	NULL	11198 E WALLFLOWER LN	FLORENCE	AZ	851327691	NULL	NULL	NULL
SAYLOR PAUL F & ERICA J	NULL	NULL	11201 E MAGMA RD	FLORENCE	AZ	851329467	NULL	NULL	NULL
WEBER MARY E	NULL	NULL	11202 E SUNFLOWER CT	FLORENCE	AZ	851327702	NULL	NULL	NULL
MORGAN JAMES B & LORI	NULL	NULL	11203 E VERBINA LN	FLORENCE	AZ	851327681	NULL	NULL	NULL
RASMUSSON AUSTEN	NULL	NULL	11204 E ASTER LN	FLORENCE	AZ	851327660	NULL	NULL	NULL
VILLA MICHAEL N & RAMIREZ TRENA C	NULL	NULL	11207 E MARIGOLD LN	FLORENCE	AZ	851327654	NULL	NULL	NULL
SCIANNA ANTONINO & MARY J	NULL	NULL	11207 E SUNFLOWER CT	FLORENCE	AZ	851327705	NULL	NULL	NULL
MCLAUGHLIN GEORGE & ROSA	NULL	NULL	11208 E VERBINA LN	FLORENCE	AZ	85132-7684	NULL	NULL	NULL

WINSLOW JEREMY THEODORE	NULL	NULL	11212 E CLIFFROSE LN	FLORENCE	AZ	851327644	NULL	NULL	NULL
WARD KEVAN ALEXANDER	NULL	NULL	11213 E ASTER LN	FLORENCE	AZ	851327667	NULL	NULL	NULL
MATAMOROS-CONTRERAS JUDIT	MATAMOROS CONTRERAS ALAN	NULL	11213 E CLIFFROSE LN	FLORENCE	AZ	851327647	NULL	NULL	NULL
KIST DANIEL E & ROSALIE	NULL	NULL	11214 E WALLFLOWER LN	FLORENCE	AZ	851327690	NULL	NULL	NULL
SMITH GUY ZACHARY & TORIE DAWN	NULL	NULL	11218 E PRIMROSE CT	FLORENCE	AZ	851327699	NULL	NULL	NULL
PERKINS JOSEPH P III	PERKINS JOSEPH P JR	NULL	11218 E VERBINA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
GARRETT MATTHEW J & JODY LYNN	NULL	NULL	11221 E MARIGOLD CT	FLORENCE	AZ	851327709	NULL	NULL	NULL
196TH TRUST	NULL	NULL	11221 E PRIMROSE CT	FLORENCE	AZ	85132-7498	NULL	NULL	NULL
HERNANDEZ MARIA R	NULL	NULL	11221 E WALLFLOWER LN	FLORENCE	AZ	851327694	NULL	NULL	NULL
CASAUDOUMECQ TC & CAROLYN	NULL	NULL	11223 E SUNFLOWER CT	FLORENCE	AZ	851327705	NULL	NULL	NULL
GODINEZ RONNIE	VILLARREAL BIANCA	NULL	11224 E SUNFLOWER CT	FLORENCE	AZ	85132-7702	NULL	NULL	NULL
MUCHOWICZ ALAN E	NULL	NULL	11225 E VERBINA LN	FLORENCE	AZ	851327681	NULL	NULL	NULL
KITCHEN ABBY LINNAE & MAXWELL SCOTT WILLARD JR	NULL	NULL	11228 E VERBINA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
CRIPPS JAMES B & RONALEE A	NULL	NULL	11228 E WALLFLOWER LN	FLORENCE	AZ	851327690	NULL	NULL	NULL
JAQUES AMBER	NULL	NULL	11230 E CLIFFROSE LN	FLORENCE	AZ	851327644	NULL	NULL	NULL
LOPEZ JORGE A & MARIA R	NULL	NULL	11231 BRUNSWICK WAY	SANTA ANA	CA	927052368	NULL	NULL	NULL
MILLER ADAM WESLEY & CHANTAL DAWN	NULL	NULL	11231 E ASTER LN	FLORENCE	AZ	851327667	NULL	NULL	NULL
BOOTSMA CYNTHIA S & JOHN A	NULL	NULL	11231 E CLIFFROSE LN	FLORENCE	AZ	851327647	NULL	NULL	NULL
BECK MARIA DOLORES	NULL	NULL	11235 E WALLFLOWER LN	FLORENCE	AZ	851327694	NULL	NULL	NULL
PEZNER CATHERINE T & RICHARD A	NULL	NULL	11237 E VERBINA LN	FLORENCE	AZ	851327681	NULL	NULL	NULL
SANDOVAL GUADALUPE MARIA & MACIAS JUAN	NULL	NULL	11239 E SHELLEY AVE	MESA	AZ	852123219	NULL	NULL	NULL
ABRAMS JERRY O & ALAINE K	NULL	NULL	11240 E ASTER LN	FLORENCE	AZ	851327660	NULL	NULL	NULL
ANDERSON BENJAMIN PARKER	ANDERSON ERICA & NED	NULL	11240 E VERBINA LN	FLORENCE	AZ	851327684	NULL	NULL	NULL
FELICE BRIANNA	NULL	NULL	11240 E WALLFLOWER LN	FLORENCE	AZ	851327690	NULL	NULL	NULL
BILLUPS KATRINA TR	BILLUPS REVOCABLE TRUST	NULL	11242 E PRIMROSE CT	FLORENCE	AZ	85132-7699	NULL	NULL	NULL
RICE JACOB MICHAEL	MESTER BEVERLY DARLENE	NULL	11246 E CLIFFROSE LN	FLORENCE	AZ	851327644	NULL	NULL	NULL
LANDRY LAQUATA LYNN	NULL	NULL	11249 E VERBINA LN	FLORENCE	AZ	851327681	NULL	NULL	NULL
SCHNEIDER THOMAS J	PACHECO GABRIELA FELIX	NULL	11255 E SUNFLOWER CT	FLORENCE	AZ	851327705	NULL	NULL	NULL
HILLIKER THOMAS L & CARLENE A TRS	HILLIKER FAM TRUST	NULL	11258 E ASTER LN	FLORENCE	AZ	851327660	NULL	NULL	NULL
COLELLA SOMMER	NULL	NULL	11259 E PRIMROSE CT	FLORENCE	AZ	851327698	NULL	NULL	NULL
HAIT PATRICK & DEBORAH LIV TRUST	NULL	NULL	11262 E SUNFLOWER CT	FLORENCE	AZ	851327702	NULL	NULL	NULL
VAN HUSS JOE A JR & BETTY A TRS	NULL	NULL	11263 E MARIGOLD CT	FLORENCE	AZ	851327709	NULL	NULL	NULL
DE DUARTE MARLENE M OSEGUEDA & DUARTE OSCAR HUMBERTO	NULL	NULL	11264 E CLIFFROSE LN	FLORENCE	AZ	851327644	NULL	NULL	NULL
CORDOVA JOSEARMANDO GONZALEZ	CORDOVA CASSIDY MARIE	NULL	11264 E WALLFLOWER LN	FLORENCE	AZ	851327690	NULL	NULL	NULL
CARROLL ALEC J & ROPER SHANNON MARIE	NULL	NULL	11265 E ASTER LN	FLORENCE	AZ	851327667	NULL	NULL	NULL
CRESPO CARLOS ALBERTO JR	NULL	NULL	11265 E CLIFFROSE LN	FLORENCE	AZ	851327647	NULL	NULL	NULL
GOLDEN DAMIEN EDWARD	HARTMAN CAMILLE CHEYENNE	NULL	11266 E PRIMROSE CT	FLORENCE	AZ	851327699	NULL	NULL	NULL
FOJAU OULOINO & ROSA ANGELICA	NULL	NULL	11267 E MARIGOLD LN	FLORENCE	AZ	851327654	NULL	NULL	NULL
SANDOVAL JOSE FACUNDO	NULL	NULL	11267 E WALLFLOWER LN	FLORENCE	AZ	851327694	NULL	NULL	NULL
MAYNARD KENNETH L & HORTON ASHLEY N	NULL	NULL	11271 E SUNFLOWER CT	FLORENCE	AZ	851327705	NULL	NULL	NULL
NINO PORFIRIO M & NINO JESUS	NULL	NULL	11273 E VERBINA LN	FLORENCE	AZ	851327681	NULL	NULL	NULL
GULLO MATTHEW T & JORDAN N TRS	GULLO FAM LIV TRUST	NULL	11274 E ASTER LN	FLORENCE	AZ	85132-7660	NULL	NULL	NULL
STOKER KASSANDRA LYN & EANES ANTONIO	NULL	NULL	11276 E WALLFLOWER LN	FLORENCE	AZ	851327690	NULL	NULL	NULL
SHORT BRANDON MICHAEL & HALEY ANNE	NULL	NULL	11279 E MARIGOLD LN	FLORENCE	AZ	851327654	NULL	NULL	NULL
ALVAREZ ALFONSO MACIEL	NULL	NULL	11280 E SUNFLOWER CT	FLORENCE	AZ	851327702	NULL	NULL	NULL
HILL JEFFREY DANIEL & HEATHER MARIE	HARRIS ANITA	NULL	11281 E WALLFLOWER LN	FLORENCE	AZ	851327694	NULL	NULL	NULL
SALAZAR LISA & GILBERT SR	NULL	NULL	11282 E MARIGOLD LN	FLORENCE	AZ	851327652	NULL	NULL	NULL
BURDON CARLA LENORE	CAVANAUGH RANDALL E ERNEST	NULL	11285 E PRIMROSE CT	FLORENCE	AZ	851327498	NULL	NULL	NULL
WEBER CHLOE A	PEDONE TYLER HENRY	NULL	11286 E WALLFLOWER LN	FLORENCE	AZ	851327690	NULL	NULL	NULL
TAYLOR BRIAN M & MONIQUE D	NULL	NULL	11287 E MARIGOLD CT	FLORENCE	AZ	851327709	NULL	NULL	NULL
KORB BRIAN TODD & JENNIFER A	NULL	NULL	11287 E SUNFLOWER CT	FLORENCE	AZ	851327705	NULL	NULL	NULL
SISA MARCOS LUIS & LORENA E	NULL	NULL	11287 E VERBINA LN	FLORENCE	AZ	851327681	NULL	NULL	NULL
GRIEGO LUKE	NULL	NULL	11289 E MAGMA RD	FLORENCE	AZ	851329467	NULL	NULL	NULL
HANCOCK SUSAN A & DONALD R	NULL	NULL	11290 E PRIMROSE CT	FLORENCE	AZ	851327699	NULL	NULL	NULL
JIMENEZ ERIC	NULL	NULL	11292 E ASTER LN	FLORENCE	AZ	851327660	NULL	NULL	NULL
CORRELL KASSONDRA LEEANNA & JESSICA RENEE	NULL	NULL	11292 E SUNFLOWER CT	FLORENCE	AZ	851327702	NULL	NULL	NULL
MORGAN BRETT L SR	NULL	NULL	11295 E MARIGOLD LN	FLORENCE	AZ	851327654	NULL	NULL	NULL
TURENSKY DENNIS & REBECCA L	NULL	NULL	11295 E WALLFLOWER LN	FLORENCE	AZ	851327694	NULL	NULL	NULL
CERVANTES CARLOS A & VILLAVICENCIO BLANCA IVONNE GONZALEZ	NULL	NULL	11298 E CLIFFROSE LN	FLORENCE	AZ	851327644	NULL	NULL	NULL
WENDT CHRISTINE A RUMSEY	NULL	NULL	11298 E WALLFLOWER LN	FLORENCE	AZ	851327690	NULL	NULL	NULL
JOERSZ TIMOTHY	NULL	NULL	11299 E ASTER LN	FLORENCE	AZ	851327667	NULL	NULL	NULL
JONES IRIS G	GODINEZ OSCAR MORGADO	NULL	11299 E CLIFFROSE LN	FLORENCE	AZ	851327647	NULL	NULL	NULL
LARSON BRUCE & DEBRA	NULL	NULL	11299 E VERBINA LN	FLORENCE	AZ	85132-7681	NULL	NULL	NULL
AMAYA TANIA GUADALUPE	NULL	NULL	11301 E PRIMROSE CT	FLORENCE	AZ	85132	NULL	NULL	NULL
MALONEY TRINA	NULL	NULL	11303 E SUNFLOWER CT	FLORENCE	AZ	851327704	NULL	NULL	NULL
GUTIERREZ EMIL DOUGLAS	NULL	NULL	11308 E ASTER LN	FLORENCE	AZ	851327661	NULL	NULL	NULL
LYONS EUGENE M & CAROLYN L	NULL	NULL	1131 RAWSON LN	VICKSBURG	MI	490979723	NULL	NULL	NULL
ACEVEDO BRYAN	NULL	NULL	11310 E WALLFLOWER LN	FLORENCE	AZ	851327688	NULL	NULL	NULL
HILL HERBERT J & PENELOPE L	NULL	NULL	11311 E MARIGOLD LN	FLORENCE	AZ	85132	NULL	NULL	NULL
ARMSTRONG LESLEY HOWARD	NULL	NULL	11312 E MARIGOLD LN	FLORENCE	AZ	851327651	NULL	NULL	NULL
SNELLENBERGER JOHN E & NITTAYA	NULL	NULL	11313 E MARIGOLD CT	FLORENCE	AZ	851327710	NULL	NULL	NULL
PENUNURI FIDEL III & FLOR A	NULL	NULL	11314 E PRIMROSE CT	FLORENCE	AZ	851327497	NULL	NULL	NULL
LACKEY TERRY LEE & DIANA M	NULL	NULL	11316 E SUNFLOWER CT	FLORENCE	AZ	851327703	NULL	NULL	NULL
NIXON DEREK L	NULL	NULL	11317 E ASTER LN	FLORENCE	AZ	851327666	NULL	NULL	NULL
RANDALL GABRIEL	NULL	NULL	11317 E CLIFFROSE LN	FLORENCE	AZ	851327648	NULL	NULL	NULL
SNYDER NICHOLAS L & VALENCIA MARISSA	NULL	NULL	11320 E WALLFLOWER LN	FLORENCE	AZ	851327688	NULL	NULL	NULL
SANFORD CHARLES J & BYNUM JEWEL D	NULL	NULL	11326 E ASTER LN	FLORENCE	AZ	851327661	NULL	NULL	NULL
PFEIFFER STEVEN & ELVIRA A	NULL	NULL	11327 E MARIGOLD LN	FLORENCE	AZ	851327655	NULL	NULL	NULL
MODERHAK EVAN	NULL	NULL	11328 E MARIGOLD LN	FLORENCE	AZ	851327651	NULL	NULL	NULL
BUTLER MICHAEL PAUL & JENNIFER	NULL	NULL	11332 E CLIFFROSE LN	FLORENCE	AZ	851327643	NULL	NULL	NULL
MCGRADY JACQUELINE L	NULL	NULL	11332 E WALLFLOWER LN	FLORENCE	AZ	851327688	NULL	NULL	NULL
RIQUELME JENNIFER	VALTIERRA BRIAN	NULL	11333 E ASTER LN	FLORENCE	AZ	851327666	NULL	NULL	NULL
SCOTT DONOVON J	NULL	NULL	11333 E CLIFFROSE LN	FLORENCE	AZ	851327648	NULL	NULL	NULL
MUNOZ GONZALO BECERRA & CASSANDRA	NULL	NULL	11333 E PRIMROSE CT	FLORENCE	AZ	851327497	NULL	NULL	NULL
COLEMAN KELVIN D JR	NULL	NULL	11334 E PRIMROSE CT	FLORENCE	AZ	851327497	NULL	NULL	NULL
GARCIA VERONICA MARIE	MORINGLANE ROSALINA	NULL	11335 E MARIGOLD CT	FLORENCE	AZ	851327710	NULL	NULL	NULL
REDONDO DAVID CHRISTOPHER & SARAH ELIZABETH	NULL	NULL	11335 E SUNFLOWER CT	FLORENCE	AZ	851327704	NULL	NULL	NULL
LOHMAN ELDREN & MICHALEEN LIV TRUST	NULL	NULL	11335 E VERBINA LN	FLORENCE	AZ	851327682	NULL	NULL	NULL
BEANS IRENE & JORDAN	NULL	NULL	11337 E WALLFLOWER LN	FLORENCE	AZ	851327689	NULL	NULL	NULL
HOFER DALE & PAULETTE	NULL	NULL	11342 E MARIGOLD LN	FLORENCE	AZ	85132	NULL	NULL	NULL
SERVIN KRISTIAN	PAPADAKES MICHAELA C	NULL	11342 E VERBINA LN	FLORENCE	AZ	851327683	NULL	NULL	NULL
ROSADO ALBERT & MARY T	NULL	NULL	11343 E MARIGOLD LNB	FLORENCE	AZ	85132-7655	NULL	NULL	NULL
PARKS RODNEY DEAN	NULL	NULL	11344 E ASTER LN	FLORENCE	AZ	851327661	NULL	NULL	NULL
DAVIS NICOLE	NULL	NULL	11345 E VERBINA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
SMITH AUBRY N	SMITH TORELAND A & JENNIE L	NULL	11346 E SUNFLOWER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
GONZALEZ MARIO H & HEATHER J	NULL	NULL	11348 E SUNFLOWER CT	FLORENCE	AZ	851327703	NULL	NULL	NULL
SCHULTZ GEORGE	NULL	NULL	11350 E PRIMROSE LN	FLORENCE	AZ	851327673	NULL	NULL	NULL
SILVIA MARK W & MELINDA K	NULL	NULL	11351 E CLIFFROSE LN	FLORENCE	AZ	851327648	NULL	NULL	NULL
ANDERSON MICHAEL T & DEBORAH E	NULL	NULL	11351 E WALLFLOWER LN	FLORENCE	AZ	851327689	NULL	NULL	NULL
WOOD BODDAN	NULL	NULL	11352 E VERBINA LN	FLORENCE	AZ	851327683	NULL	NULL	NULL
VALENTINO JASON & MISTI	NULL	NULL	11354 E PRIMROSE CT	FLORENCE	AZ	85132	NULL	NULL	NULL
THATCHER WILLARD I	NULL	NULL	11355 E MAGMA RD	FLORENCE	AZ	851329431	NULL	NULL	NULL
MIYAHARA AMANDA ELIZABETH	MADEWELL PAMELA MAE	NULL	11355 E VERBINA LN	FLORENCE	AZ	851327682	NULL	NULL	NULL
TUCKER JARED B	ROMAN JULIE ANN	NULL	11359 E MARIGOLD LN	FLORENCE	AZ	851327655	NULL	NULL	NULL
CHARLES JAYLON JOSIAH	NULL	NULL	11360 E ASTER LN	FLORENCE	AZ	85132-7661	NULL	NULL	NULL
TITUS JACOB A & AMELIA D	NULL	NULL	11364 E WALLFLOWER LN	FLORENCE	AZ	851327688	NULL	NULL	NULL
SCHROEDER SANDRA	NULL	NULL	11365 E SUNFLOWER LN	FLORENCE	AZ	851327676	NULL	NULL	NULL
PERRY ISAAC	CRANE KADENCE	NULL	11365 E WALLFLOWER LN	FLORENCE	AZ	851327689	NULL	NULL	NULL
BLAS TANNER	NULL	NULL	11367 E SUNFLOWER CT	FLORENCE	AZ	851327704	NULL	NULL	NULL
MCLAUGHLIN BRIAN G & PHYLLIS A	NULL	NULL	11367 E VERBINA LN	FLORENCE	AZ	851327682	NULL	NULL	NULL
JOHNSON KYLE ANDREW & CHRISTY	NULL	NULL	11369 E ASTER LN	FLORENCE	AZ	851327666	NULL	NULL	NULL
BOLDEN VERONICA	NULL	NULL	11369 E CLIFFROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
ROACH DENICE R	NULL	NULL	11374 E PRIMROSE LN	FLORENCE	AZ	851327673	NULL	NULL	NULL
MOTTOLA PAIGE	ANDERSEN LARRY VINCENT II	NULL	11379 E SUNFLOWER LN	FLORENCE	AZ	851327676	NULL	NULL	NULL
BEAN MICHAEL E	PRIMOZICH LINDA J	NULL	1138 N 115TH PL	MESA	AZ	85207	NULL	NULL	NULL
HURTADO MONICA	NULL	NULL	11381 E PRIMROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
CALDER SCOTT DEE & TONJA FAWN	NULL	NULL	11386 E CLIFFROSE LN	FLORENCE	AZ	851327643	NULL	NULL	NULL
JOYNT JORYANN	NULL	NULL	11387 E ASTER LN	FLORENCE	AZ	851327666	NULL	NULL	NULL
GIL ANGEL	NULL	NULL	11387 E CLIFFROSE LN	FLORENCE	AZ	851327648	NULL	NULL	NULL
WHITAKER DENISE LORRAINE	NULL	NULL	11392 E ASTER LN	FLORENCE	AZ	851327661	NULL	NULL	NULL
DAUGHERTY DENISE	NULL	NULL	11392 E PRIMROSE LN	FLORENCE	AZ	851327673	NULL	NULL	NULL
BROWN KELSEY	NULL	NULL	11392 E SUNFLOWER LN	FLORENCE	AZ	85132-7678	NULL	NULL	NULL
WALKER TAMEISHA	NULL	NULL	11393 E SUNFLOWER LN	FLORENCE	AZ	851327676	NULL	NULL	NULL
ENSLE ERNEST G & CAROL L TRS	ENSLE TRUST	NULL	11397 E PRIMROSE LN	FLORENCE	AZ	851327670	NULL	NULL	NULL
GARCIA RAFAEL MANUEL	NULL	NULL	11397 E WALLFLOWER LN	FLORENCE	AZ	851327600	NULL	NULL	NULL
LANSINK JOHN B	BITTNER DEANNA	NULL	114 55230 RR10	STURGEON COUNTY	NULL	NULL	AB	T8R OK4	CANADA
PAINE JOSHUA	NULL	NULL	114 S PIEDRA NEGRA DR	QUEEN VALLEY	AZ	85118	NULL	NULL	NULL
LOEPER DAVID R JR	NULL	NULL	11402 E WALLFLOWER LN	FLORENCE	AZ	851327604	NULL	NULL	NULL
MADDOX SARAH & DEREK	NULL	NULL	11410 E ASTER LN	FLORENCE	AZ	851327662	NULL	NULL	NULL
DEWISPELAERE STEVEN R & SANDRA M	NULL	NULL	11410 E PRIMROSE LN	FLORENCE	AZ	851327672	NULL	NULL	NULL
BRAVO FELIPE JR	NULL	NULL	11412 E SUNFLOWER LN	FLORENCE	AZ	851327677	NULL	NULL	NULL
DOOLEY ROBYN WOOD & DANIEL JOSEPH	NULL	NULL	11413 E PRIMROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
MCGIVEN SEAN	NULL	NULL	11413 E WALLFLOWER LN	FLORENCE	AZ	851327601	NULL	NULL	NULL
CHIARAVALLOTI TODD & MICHELE	NULL	NULL	11418 E LUPINE LN	FLORENCE	AZ	851327649	NULL	NULL	NULL
SANDOVAL ELOSA	ALVAREZ YAHAIRA	NULL	11418 E WALLFLOWER LN	FLORENCE	AZ	851327604	NULL	NULL	NULL
LIANG RICHARD ANTHONY & CONTRERAS PRISCILLA INEZ	CONTRERAS BRIANNA MARIE	NULL	11419 E ASTER LN	FLORENCE	AZ	85132-7665	NULL	NULL	NULL
VALLES EDUARDO JR & TAWNIE M	NULL	NULL	11419 E CLIFFROSE LN	FLORENCE	AZ	851327640	NULL	NULL	NULL
DEES VERLYNN & JILL	NULL	NULL	11425 E PANDA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
ZION JOHN THOMAS IV	NULL	NULL	11426 E ASTER LN	FLORENCE	AZ	851327662	NULL	NULL	NULL
DOUCET PAUL JOSEPH	NULL	NULL	11428 E PRIMROSE LN	FLORENCE	AZ	851327672	NULL	NULL	NULL
MOORE AUTUMN LENAY	NULL	NULL	11429 E PRIMROSE LN	FLORENCE	AZ	851327671	NULL	NULL	NULL
MORERA AMY RENEE & GABRIEL JOSE PUJOL	NULL	NULL	11430 E SUNFLOWER LN	FLORENCE	AZ	851327677	NULL	NULL	NULL
ROBINSON PHYL KENDRIX	NULL	NULL	11436 E LUPINE LN	FLORENCE	AZ	851327649	NULL	NULL	NULL
MCCURDY REBECCA LYNN & BROWN MITCHELL AARON	NULL	NULL	11436 E WALLFLOWER LN	FLORENCE	AZ	851327604	NULL	NULL	NULL
EZRRE EDGAR A & JACKELINE	NULL	NULL	11437 E ASTER LN	FLORENCE	AZ	851327665	NULL	NULL	NULL
ROCCO ALETHA KIMBERLY DELLA	NULL	NULL	11437 E CLIFFROSE LN	FLORENCE	AZ	851327640	NULL	NULL	NULL
OTT RANDAL & HOLZ AMANDA	NULL	NULL	11441 E WALLFLOWER LN	FLORENCE	AZ	851327601	NULL	NULL	NULL
BROWN LISA	NULL	NULL	11445 E PRIMROSE LN	FLORENCE	AZ	851327671	NULL	NULL	NULL
GARCIA JAMES M & ANN M	NULL	NULL	11448 E SUNFLOWER LN	FLORENCE	AZ	851327677	NULL	NULL	NULL
MORRIE DOROTHY A & CHRISTOPHER L	NULL	NULL	11450 E CLIFFROSE LN	FLORENCE	AZ	851327639	NULL	NULL	NULL

VENALONZO VICTOR HUGO & CHRISTINA ELIZABETH	NULL	NULL	11452 E LUPINE LN	FLORENCE	AZ	851327649	NULL	NULL	NULL
MELLO DANIEL H REV LIV TRUST	NULL	NULL	11453 E CLIFFROSE LN	FLORENCE	AZ	85132-7640	NULL	NULL	NULL
FLORES MARBIN	ARAUJO GUADALUPE FLORES	NULL	11454 E WALLFLOWER LN	FLORENCE	AZ	851327604	NULL	NULL	NULL
TARVER CATHERINE R	NULL	NULL	11455 E ASTER LN	FLORENCE	AZ	851327665	NULL	NULL	NULL
ROSALES JUDITH HERNANDEZ	HERNANDEZ FABIAN	NULL	11457 E WALLFLOWER LN	FLORENCE	AZ	851327601	NULL	NULL	NULL
TESSMANN RONALD W	NULL	NULL	11458 E ASTER LN	FLORENCE	AZ	851327662	NULL	NULL	NULL
ABNEY RICHARD T JR & JOCILYN R	NULL	NULL	11461 E PRIMROSE LN	FLORENCE	AZ	851327671	NULL	NULL	NULL
GEORGE TROY & CYNTHIA	NULL	NULL	11468 E CLIFFROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
FAUST EDITH ELLEN	NULL	NULL	11468 E SUNFLOWER LN	FLORENCE	AZ	851327677	NULL	NULL	NULL
LANDERS SCOTT	ATHERTON KRISTINA	NULL	11470 E WALLFLOWER LN	FLORENCE	AZ	85132-7604	NULL	NULL	NULL
GARMAN ROGER J & KATHY S	NULL	NULL	11471 E CLIFFROSE LN	FLORENCE	AZ	851327640	NULL	NULL	NULL
BOYNTON ROSEMARIE & BONNIE LYNN TYRREL	NULL	NULL	11483 E VERBINA LN	FLORENCE	AZ	851327606	NULL	NULL	NULL
WILLIAMS ANTHONY LANE	NULL	NULL	11484 E CLIFFROSE LN	FLORENCE	AZ	851327639	NULL	NULL	NULL
YAZZIE FI THERMAN	NULL	NULL	11484 E PRIMROSE LN	FLORENCE	AZ	851327672	NULL	NULL	NULL
MORAGA CORINA HERRERA	NULL	NULL	11486 E LUPINE LN	FLORENCE	AZ	851327649	NULL	NULL	NULL
MCEVOY MARIAN FAMILY TRUST	NULL	NULL	11486 E SUNFLOWER LN	FLORENCE	AZ	85132-7677	NULL	NULL	NULL
DUBBS WILLIAM TOLBERT & DORA JEAN CO-TRS	DUBBS LIV TRUST	NULL	11486 E WALLFLOWER LN	FLORENCE	AZ	851327604	NULL	NULL	NULL
EASLEY WILLIAM T & AMANDA	NULL	NULL	11487 E CLIFFROSE LN	FLORENCE	AZ	851327640	NULL	NULL	NULL
MARCH ASHLEY TAYLOR	NULL	NULL	11487 E WALLFLOWER LN	FLORENCE	AZ	851327601	NULL	NULL	NULL
LOPEZ MIGUEL OCTAVIO CARDENAS	TERAN AALIYAH MERCEDEZ	NULL	11489 E ASTER LN	FLORENCE	AZ	851327665	NULL	NULL	NULL
ROSALES TIFFANY	NULL	NULL	11490 E ASTER LN	FLORENCE	AZ	851327662	NULL	NULL	NULL
RAMOS PEDRO & NAVARRO KENY CELESTE	NULL	NULL	11493 E PRIMROSE LN	FLORENCE	AZ	851327671	NULL	NULL	NULL
BANDARA BROOKE & BANDARA GARRETT	SWEENEY DAKOTA RHEA	NULL	11499 E VERBINA LN	FLORENCE	AZ	851327606	NULL	NULL	NULL
SOSA MELISSA & SOSA FELIPE	NULL	NULL	11500 E CLIFFROSE LN	FLORENCE	AZ	851327638	NULL	NULL	NULL
SHARP TODD DEVIN J & KAYLA DAWN	NULL	NULL	11500 W WALLFLOWER LN	FLORENCE	AZ	85132-7603	NULL	NULL	NULL
NGUYEN NO THI	MCABEE TIMOTHY ROBIN	NULL	11502 SE 226TH PL	KENT	WA	980312616	NULL	NULL	NULL
O NEAL ANTHONY & ANGEL	NULL	NULL	11503 E CLIFFROSE LN	FLORENCE	AZ	851327641	NULL	NULL	NULL
MARION JASON ALLEN	NULL	NULL	11503 E WALLFLOWER LN	FLORENCE	AZ	851327602	NULL	NULL	NULL
HASSELL MARLON & KARIMA	NULL	NULL	11504 E LUPINE LN	FLORENCE	AZ	851327650	NULL	NULL	NULL
ANDERSON GREGG A	NULL	NULL	11504 E PRIMROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
SCHNEIDER GABRIELLE D	NULL	NULL	11507 E ASTER LN	FLORENCE	AZ	851327664	NULL	NULL	NULL
OLLER JOSHUA KANE & ALICIA M	NULL	NULL	11508 E ASTER LN	FLORENCE	AZ	851327663	NULL	NULL	NULL
CLARKSON JEB & MAUREEN	NULL	NULL	11510 US HIGHWAY 212	BELLE FOURCHE	SD	577176144	NULL	NULL	NULL
KINCHLOW DAVID MELVIN	NULL	NULL	11514 E WALLFLOWER LN	FLORENCE	AZ	851327603	NULL	NULL	NULL
KNIGHT BRITTANY MARIE & CLUFF ETHAN JOSEPH	NULL	NULL	11515 E SUNFLOWER LN	FLORENCE	AZ	851327619	NULL	NULL	NULL
MANTELL ALYSSA	NULL	NULL	11516 E SUNFLOWER LN	FLORENCE	AZ	851327622	NULL	NULL	NULL
BRINSON CANDIDA MARIE	NULL	NULL	11518 E CLIFFROSE LN	FLORENCE	AZ	851327638	NULL	NULL	NULL
MALONIS-MOORE LEAMBER & ALEXANDER BYRON	NULL	NULL	11521 E CLIFFROSE LN	FLORENCE	AZ	851327641	NULL	NULL	NULL
DENOMIE DANELLE & JORDAN	NULL	NULL	11522 E LUPINE LN	FLORENCE	AZ	851327650	NULL	NULL	NULL
OH DONG YUL & CHRIS YOUNG RAN	NULL	NULL	11523 E PRIMROSE LN	FLORENCE	AZ	851327617	NULL	NULL	NULL
SWETT TROY M	NULL	NULL	11526 E ASTER LN	FLORENCE	AZ	851327663	NULL	NULL	NULL
PADILLA CYNTHIA ANN & PHILLIP DAVID	NULL	NULL	11526 E VERBINA LN	FLORENCE	AZ	85132-7609	NULL	NULL	NULL
GUTHRIE MARC BRENNAN	CAMMACK MAKENA L	NULL	11527 E SUNFLOWER LN	FLORENCE	AZ	851327619	NULL	NULL	NULL
PINEDO ANDY	NULL	NULL	11527 E VERBINA LN	FLORENCE	AZ	851327607	NULL	NULL	NULL
BORQUEZ TRACI F	NULL	NULL	11528 E WALLFLOWER LN	FLORENCE	AZ	851327603	NULL	NULL	NULL
HANNAH WILLIAM E	NULL	NULL	11530 E SUNFLOWER LN	FLORENCE	AZ	851327622	NULL	NULL	NULL
FONTES DANIEL J	NULL	NULL	11535 E WALLFLOWER LN	FLORENCE	AZ	851327602	NULL	NULL	NULL
YORK KARINA	NULL	NULL	11536 E PRIMROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
BURNETT SARAH ANNE	NULL	NULL	11538 E VERBINA LN	FLORENCE	AZ	851327609	NULL	NULL	NULL
FIGULI MARANDA JEAN	NULL	NULL	11539 E SUNFLOWER LN	FLORENCE	AZ	851327619	NULL	NULL	NULL
TITUS WILSON III	NULL	NULL	11541 E PRIMROSE LN	FLORENCE	AZ	851327617	NULL	NULL	NULL
BARNETT COURTNEY D	NULL	NULL	11541 E VERBINA LN	FLORENCE	AZ	851327607	NULL	NULL	NULL
MARTINEZ DENNISE	NULL	NULL	11542 E WALLFLOWER LN	FLORENCE	AZ	851327603	NULL	NULL	NULL
DENNING GALEN B & LUCINDA A	NULL	NULL	11543 E MAGMA RD	FLORENCE	AZ	85132	NULL	NULL	NULL
PERCIVAL GREGORY MARK & DEBRA LYNN	NULL	NULL	11544 E SUNFLOWER LN	FLORENCE	AZ	851327622	NULL	NULL	NULL
BELL JC	NULL	NULL	11545 E ASTER LN	FLORENCE	AZ	851327664	NULL	NULL	NULL
HILGER PAUL & KARIN	NULL	NULL	11546 E ASTER LN	FLORENCE	AZ	851327663	NULL	NULL	NULL
TOWERS JONATHAN J & STEPHANIE D	NULL	NULL	11550 E PRIMROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
KUHN KERWIN E & LILIANA	NULL	NULL	11551 E CLIFFROSE LN	FLORENCE	AZ	851327641	NULL	NULL	NULL
VOGEL KIM ANN	NULL	NULL	11551 E LUPINE LN	FLORENCE	AZ	851327633	NULL	NULL	NULL
JOHNSON JEFFERY V	JOHNSON RHONDA	NULL	11551 E PANDA LN	FLORENCE	AZ	851328113	NULL	NULL	NULL
LABOR AARON NATHAN & LAUREN DANIELLE	NULL	NULL	11551 E WALLFLOWER LN	FLORENCE	AZ	851327602	NULL	NULL	NULL
REICHLEY ROBERT A & MARY A	NULL	NULL	11552 E LUPINE LN	FLORENCE	AZ	851327634	NULL	NULL	NULL
MARINO EDWARD M & JANICE A	NULL	NULL	11552 E MARIGOLD LN	FLORENCE	AZ	851327630	NULL	NULL	NULL
JIMENEZ STEVEN BURKE	NULL	NULL	11552 E VERBINA LN	FLORENCE	AZ	851327609	NULL	NULL	NULL
COTTEN JACOB F	NULL	NULL	11553 E SUNFLOWER LN	FLORENCE	AZ	851327619	NULL	NULL	NULL
POTTER DAVID S & SANDRA L WOOD BILGER	NULL	NULL	11557 E PRIMROSE LN	FLORENCE	AZ	851327617	NULL	NULL	NULL
CERVANTES ALEJANDRA	NULL	NULL	11558 E SUNFLOWER LN	FLORENCE	AZ	851327622	NULL	NULL	NULL
STRADLING HEATH & JESSICA J	NULL	NULL	11566 E PRIMROSE LN	FLORENCE	AZ	851327616	NULL	NULL	NULL
JOHNSON DALLIN MAC	NULL	NULL	11566 E VERBINA LN	FLORENCE	AZ	851327609	NULL	NULL	NULL
BEST LARRY & JULIE	NULL	NULL	11567 E MARIGOLD LN	FLORENCE	AZ	851327629	NULL	NULL	NULL
SALAZAR JORDAN JOSEPH	NULL	NULL	11567 E SUNFLOWER LN	FLORENCE	AZ	851327619	NULL	NULL	NULL
GRADIZ VICTOR C & MELISA F	NULL	NULL	11567 E WALLFLOWER LN	FLORENCE	AZ	851327602	NULL	NULL	NULL
KING RICHELLE & ERIC	NULL	NULL	11568 E CLIFFROSE LN	FLORENCE	AZ	851327638	NULL	NULL	NULL
GREAVES DARLA	NULL	NULL	11569 E CLIFFROSE LN	FLORENCE	AZ	851327641	NULL	NULL	NULL
FRERKING GREGG W	NULL	NULL	11569 E PINE LN	FLORENCE	AZ	851327633	NULL	NULL	NULL
KOPP KELSEY L	NULL	NULL	11570 E LUPINE LN	FLORENCE	AZ	851327634	NULL	NULL	NULL
CIREY BRAXTON & KAYLIN	NULL	NULL	11570 E MARIGOLD LN	FLORENCE	AZ	851327630	NULL	NULL	NULL
CRISP MCKESSA & ALEX TIMOTHY	NULL	NULL	11572 E SUNFLOWER LN	FLORENCE	AZ	851327622	NULL	NULL	NULL
PRADO RAMON & NEFTALY	NULL	NULL	11573 E PRIMROSE LN	FLORENCE	AZ	851327617	NULL	NULL	NULL
HOPKINS JAMES MICHAEL	NULL	NULL	11580 E VERBINA LN	FLORENCE	AZ	851327609	NULL	NULL	NULL
HALEN KENNETH W	NULL	NULL	11581 E SUNFLOWER LN	FLORENCE	AZ	851327619	NULL	NULL	NULL
MORRIS DAVID J & LORRAINE	NULL	NULL	11583 E MARIGOLD LN	FLORENCE	AZ	851327629	NULL	NULL	NULL
NORTON AYAMI	NULL	NULL	11584 E CLIFFROSE LN	FLORENCE	AZ	851327638	NULL	NULL	NULL
GILES-BAHENA JESSE	COYOTI GRACIELA ROMERO	NULL	11587 E CLIFFROSE LN	FLORENCE	AZ	851327641	NULL	NULL	NULL
LUTEN DANNY DALE	NULL	NULL	11587 E LUPINE LN	FLORENCE	AZ	851327633	NULL	NULL	NULL
DOUGLAS KADEN & HARDIN KENDRA	NULL	NULL	11587 E VERBINA LN	FLORENCE	AZ	851327607	NULL	NULL	NULL
ROSSI JENNIFER L	NULL	NULL	11588 E LUPINE LN	FLORENCE	AZ	851327634	NULL	NULL	NULL
WEIGEL CHRISTOPHER GEORGE & DEBRA SUE	NULL	NULL	11588 E MARIGOLD LN	FLORENCE	AZ	85132	NULL	NULL	NULL
GRIFFIN SOPHIA MARIE	NULL	NULL	11588 E SUNFLOWER LN	FLORENCE	AZ	851327622	NULL	NULL	NULL
JOPLIN RUTH ANN	NULL	NULL	11589 E PRIMROSE LN	FLORENCE	AZ	851327617	NULL	NULL	NULL
KLEE KAREN RAE	NULL	NULL	11595 E SUNFLOWER LN	FLORENCE	AZ	851327619	NULL	NULL	NULL
TANNER HOWARD W & PHYLLIS J	NULL	NULL	11599 E MARIGOLD LN	FLORENCE	AZ	851327629	NULL	NULL	NULL
SPENCER WILLIAM SCOTT	NULL	NULL	11600 E CLIFFROSE LN	FLORENCE	AZ	851327637	NULL	NULL	NULL
MARTINEZ SARAH ANNA	WITT KRISTOFOR	NULL	11602 E SUNFLOWER LN	FLORENCE	AZ	851327621	NULL	NULL	NULL
LOW JENNIFER HELENE & JAY ALLEN	NULL	NULL	11603 E PRIMROSE LN	FLORENCE	AZ	851327618	NULL	NULL	NULL
ASHCROFT WILLIAM C & MEG E	NULL	NULL	11603 E VERBINA LN	FLORENCE	AZ	851327608	NULL	NULL	NULL
LANE SARAH A & BRYANT LAURA LEE	NULL	NULL	11605 E CLIFFROSE LN	FLORENCE	AZ	851327642	NULL	NULL	NULL
MATA TAYLOR M	NULL	NULL	11606 E LUPINE LN	FLORENCE	AZ	851327635	NULL	NULL	NULL
KING CHARLES E	NULL	NULL	11606 E MARIGOLD LN	FLORENCE	AZ	851327631	NULL	NULL	NULL
CANDELARIA MARIO DAVID	NULL	NULL	11608 E VERBINA LN	FLORENCE	AZ	851327610	NULL	NULL	NULL
STAMPS CHARLES ALLEN JR	NULL	NULL	11609 E SUNFLOWER LN	FLORENCE	AZ	851327620	NULL	NULL	NULL
WILKIN KARL JR	NULL	NULL	11610 E PRIMROSE LN	FLORENCE	AZ	851327615	NULL	NULL	NULL
HILLIARDS ANTHONY II	NULL	NULL	11618 E CLIFFROSE LN	FLORENCE	AZ	851327637	NULL	NULL	NULL
MASSEY JONI DAWN	NULL	NULL	11618 E SUNFLOWER LN	FLORENCE	AZ	851327621	NULL	NULL	NULL
FLATMO GREGORY O & CYNTHIA M	NULL	NULL	11619 E PRIMROSE LN	FLORENCE	AZ	851327618	NULL	NULL	NULL
TOUBY CARRIE E & ALBERT A JR	NULL	NULL	11619 E VERBINA LN	FLORENCE	AZ	851327608	NULL	NULL	NULL
HORVATH DONALD	NULL	NULL	11622 E VERBINA LN	FLORENCE	AZ	851327610	NULL	NULL	NULL
BAILEY SUSAN D & BATCH JOHN F	NULL	NULL	11623 E CLIFFROSE LN	FLORENCE	AZ	851327642	NULL	NULL	NULL
GARRATT JACOB M	NULL	NULL	11623 E LUPINE LN	FLORENCE	AZ	851327632	NULL	NULL	NULL
RAUCH LOGAN	NULL	NULL	11623 E SUNFLOWER LN	FLORENCE	AZ	85132-7620	NULL	NULL	NULL
BORNE DENISE C	BORNE KATHERINE M	NULL	11624 E LUPINE LN	FLORENCE	AZ	851327635	NULL	NULL	NULL
PERRY CHRISTINE	NULL	NULL	11624 E MARIGOLD LN	FLORENCE	AZ	851327631	NULL	NULL	NULL
COX KEVIN W & MARESA LIV TRUST	NULL	NULL	11626 E PRIMROSE LN	FLORENCE	AZ	851327615	NULL	NULL	NULL
DILLARD ALFRED & JACQUELINE H	NULL	NULL	11632 E SUNFLOWER LN	FLORENCE	AZ	851327621	NULL	NULL	NULL
LOPEZ VIVIAN	NULL	NULL	11633 E MARIGOLD LN	FLORENCE	AZ	851327628	NULL	NULL	NULL
JAY-NESAHKLUAH ALLISON KATHLEEN & KYLE MOSES	NULL	NULL	11633 E PRIMROSE LN	FLORENCE	AZ	851327618	NULL	NULL	NULL
MADRID OSVALDO LEBRON & JESSICA MARIE	NULL	NULL	11634 E CLIFFROSE LN	FLORENCE	AZ	851327637	NULL	NULL	NULL
SIMMONS GARRETT DANIEL	NULL	NULL	11635 E VERBINA LN	FLORENCE	AZ	851327608	NULL	NULL	NULL
LARA JOSE & VIVIANNA	NULL	NULL	11636 E VERBINA LN	FLORENCE	AZ	851327610	NULL	NULL	NULL
SILFIES CHERYL ANN	NULL	NULL	11637 E SUNFLOWER LN	FLORENCE	AZ	851327620	NULL	NULL	NULL
WHITAKER ANDREW R	NULL	NULL	11639 E CLIFFROSE LN	FLORENCE	AZ	851327642	NULL	NULL	NULL
THOMAS MATTHEW R & CAITLIN J REV TRUST	NULL	NULL	11639 E LUPINE LN	FLORENCE	AZ	851327632	NULL	NULL	NULL
METZGER VICTORIA LYNNE	NULL	NULL	11640 E LUPINE LN	FLORENCE	AZ	851327635	NULL	NULL	NULL
WELLS WILLIAM	CABELLO-FLORES LESLIE A	NULL	11640 E MARIGOLD LN	FLORENCE	AZ	851327631	NULL	NULL	NULL
OBREY TRAVIS & STEPHANIE	NULL	NULL	11642 E PRIMROSE LN	FLORENCE	AZ	851327615	NULL	NULL	NULL
JONES JAMES EDWARD JR & FE D	NULL	NULL	11648 E SUNFLOWER LN	FLORENCE	AZ	851327621	NULL	NULL	NULL
STELL MONTE D & SHERRI L	NULL	NULL	11649 E MARIGOLD LN	FLORENCE	AZ	851327628	NULL	NULL	NULL
SANTOS DEBRA KAY	NULL	NULL	11649 E PRIMROSE LN	FLORENCE	AZ	851327618	NULL	NULL	NULL
OVERTON BRYAN B & JOEY L	NULL	NULL	11650 E CLIFFROSE LN	FLORENCE	AZ	851327637	NULL	NULL	NULL
GONZALES NATHANIEL MATTHEW	NULL	NULL	11650 E VERBINA LN	FLORENCE	AZ	851327610	NULL	NULL	NULL
LUTGEN-SANDVIK PAMELA E TR	LUTGEN-SANDVIK TRUST	NULL	11651 E SUNFLOWER LN	FLORENCE	AZ	85132-7620	NULL	NULL	NULL
HAILEY CHRISTINA V	NULL	NULL	11651 E VERBINA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
HOWARD KEYOME M	NULL	NULL	11657 E CLIFFROSE LN	FLORENCE	AZ	851327642	NULL	NULL	NULL
FERNANDEZ LOURDES	NULL	NULL	11657 E LUPINE LN	FLORENCE	AZ	851327632	NULL	NULL	NULL
SUTTON YVONNE MARIE	NULL	NULL	11658 E LUPINE LN	FLORENCE	AZ	851327635	NULL	NULL	NULL
CRUZ ANDRES QUINTANA DE LA	JURADO EVA RODRIGUEZ	NULL	11658 E MARIGOLD LN	FLORENCE	AZ	851327631	NULL	NULL	NULL
DOMINGUEZ EMA	NULL	NULL	11658 E PRIMROSE LN	FLORENCE	AZ	851327615	NULL	NULL	NULL
SCHEER CRAIG M	NULL	NULL	11662 E SUNFLOWER LN	FLORENCE	AZ	851327621	NULL	NULL	NULL
GRIMES SHELIA Y	NULL	NULL	11663 E PRIMROSE LN	FLORENCE	AZ	851327618	NULL	NULL	NULL
GUTIERREZ PEDRO JOSE	NULL	NULL	11664 E VERBINA LN	FLORENCE	AZ	851327610	NULL	NULL	NULL
KOLOWICH JUDY LYNN & RORY JAMES	NULL	NULL	11665 E SUNFLOWER LN	FLORENCE	AZ	851327620	NULL	NULL	NULL
KESS FRED A & DONNA FAYE	NULL	NULL	11667 E MARIGOLD LN	FLORENCE	AZ	851327628	NULL	NULL	NULL
LOPEZ YUDID L	NULL	NULL	11667 E VERBINA LN	FLORENCE	AZ	851327608	NULL	NULL	NULL
HOLLAND LESLIE O JR & DEBORAH A	NULL	NULL	11672 E PRIMROSE LN	FLORENCE	AZ	851327615	NULL	NULL	NULL
FLICK JOHN STEPHEN & PHYLLIS	NULL	NULL	11675 E CLIFFROSE LN	FLORENCE	AZ	851327642	NULL	NULL	NULL
GRIFFIN JENNIFER RENEE & SEAN J	NULL	NULL	11675 E LUPINE LN	FLORENCE	AZ	851327632	NULL	NULL	NULL
SANCHEZ ESTEBAN	TURVILLE CHEYANNE	NULL	11676 E LUPINE LN	FLORENCE	AZ	851327635	NULL	NULL	NULL
KAN TONGKANG & LU RUQING	NULL	NULL	11676 E MARIGOLD LN	FLORENCE	AZ	851327631	NULL	NULL	NULL
EVENSEN MELISSA	PADWORSKI JOHN J & LUMSDEN ELIZABETH J	NULL	11676 E SUNFLOWER LN	FLORENCE	AZ	851327621	NULL	NULL	NULL

CUMMINGS MARK JAMES & TINA MARIE	NULL	NULL	11677 E PRIMROSE LN	FLORENCE	AZ	851327618	NULL	NULL	NULL
CALDERA EDUARDO MANUEL & KAITLIN SUE	NULL	NULL	11678 E VERBINA LN	FLORENCE	AZ	851327610	NULL	NULL	NULL
BRIONGOS CARL ANTHONY	REYES CHRISTELLE DELOS	NULL	11679 E SUNFLOWER LN	FLORENCE	AZ	851327620	NULL	NULL	NULL
DEVINE SHARON A & THOMAS J	NULL	NULL	11683 E MARIGOLD LN	FLORENCE	AZ	851327628	NULL	NULL	NULL
MUIR ERIC CHRISTOPHER & BLOEMAN JESSICA LYNN	NULL	NULL	11683 E VERBINA LN	FLORENCE	AZ	851327608	NULL	NULL	NULL
GALLARDO SANDRA MARINA & MARTINEZ RAFAELA	NULL	NULL	11686 E PRIMROSE LN	FLORENCE	AZ	851327615	NULL	NULL	NULL
SANCHEZ JOANN & NORQUIST JOHN	NULL	NULL	11688 N THUNDER MOUNTAIN RD	COOLIDGE	AZ	851289316	NULL	NULL	NULL
AHUMADA JENNIFER G	RODRIGUEZ PEDRO JR	NULL	11691 E CLIFFROSE LN	FLORENCE	AZ	851327642	NULL	NULL	NULL
VALENZANO JAMES D & MARY-JEAN D	VALENZANO JAMES D JR	NULL	11691 E LUPINE LN	FLORENCE	AZ	851327632	NULL	NULL	NULL
KORSEN KYLE NORRIS	NULL	NULL	11692 E SUNFLOWER LN	FLORENCE	AZ	851327621	NULL	NULL	NULL
OLIVAZ JONNI FRANCINE	NULL	NULL	11692 E VERBINA LN	FLORENCE	AZ	851327610	NULL	NULL	NULL
ROOT JEFFREY WAYNE & HOPE RUTH	NULL	NULL	11693 E PRIMROSE LN	FLORENCE	AZ	851327618	NULL	NULL	NULL
PRUITT PRECIOUS L	PRUITT PATRICK L	NULL	11693 E SUNFLOWER LN	FLORENCE	AZ	85132-7620	NULL	NULL	NULL
HARE CYNTHIA YVONNE	NULL	NULL	11699 E VERBINA LN	FLORENCE	AZ	851327608	NULL	NULL	NULL
SANDERS CLYDE A & CHRISTINE R	NULL	NULL	117 LINDEN OAKS DR	AULT	CO	806109101	NULL	NULL	NULL
PESQUEIRA RANDY & KARMELIA	NULL	NULL	11702 E PRIMROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
ONTIVEROS ALISSA ANN & PINO ORLANDO ROSS	NULL	NULL	11723 E VERBINA LN	FLORENCE	AZ	851327623	NULL	NULL	NULL
LANDGREN WILLIAM & JAMIE	NULL	NULL	11724 E CLIFFROSE LN	FLORENCE	AZ	851327636	NULL	NULL	NULL
WEEHLER JONATHAN JAMES	NULL	NULL	11724 E PRIMROSE LN	FLORENCE	AZ	851327614	NULL	NULL	NULL
SCHAAF BRIAN RICHARD & HITT-SCHAAF LISA MARIE	NULL	NULL	1180 REISLING DR	PERRIS	CA	925717338	NULL	NULL	NULL
GARRISON MATTHEW L & TAMARA M	NULL	NULL	11811 E MAGMA RD	FLORENCE	AZ	85132	NULL	NULL	NULL
ENTRADA DEL ORO PARTNERS LC	NULL	NULL	11811 N TATUM BLVD STE 1060	PHOENIX	AZ	850281618	NULL	NULL	USA
GOLD CANYON MANORS LC	NULL	NULL	11811 N TATUM BLVD STE 1060	PHOENIX	AZ	850281618	NULL	NULL	USA
THE ESTATES AT ENTRADA DEL ORO LC		NULL	11811 N TATUM BLVD STE 1060	PHOENIX	AZ	850281618	NULL	NULL	USA
HASTINGS BYRON H & FLYGARE AARON N	NULL	NULL	11830 E RHEA RD	FLORENCE	AZ	851327169	NULL	NULL	NULL
SCHWERD DANIEL & JASMINE	NULL	NULL	11832 E PRIMROSE LN	FLORENCE	AZ	851327788	NULL	NULL	NULL
STANDAGE JASON HOWARD & PAIGE GARBE	NULL	NULL	11835 E REKSOM RD	FLORENCE	AZ	85132	NULL	NULL	NULL
CAZARES SHANTEL	AGUIRRE NICHOLAS	NULL	11857 E SUNFLOWER LN	FLORENCE	AZ	851327793	NULL	NULL	NULL
ZEPEDA THERESA ANN & HECTOR M	NULL	NULL	11871 E MAGMA RD	FLORENCE	AZ	851321389	NULL	NULL	NULL
HUNSAKER KILYNNE CAPRI	NULL	NULL	11871 E SUNFLOWER LN	FLORENCE	AZ	851327793	NULL	NULL	NULL
FREDERICK CHAD B & CYNTHIA M	NULL	NULL	11873 COUNTY ROAD 33	VILLARD	MN	563852326	NULL	NULL	NULL
GLORIA MONICA	NULL	NULL	11885 E SUNFLOWER LN	FLORENCE	AZ	851327793	NULL	NULL	NULL
PICCIRILLI ALFRED & ROBIN	NULL	NULL	11889 E REKSOM RD	FLORENCE	AZ	851327165	NULL	NULL	NULL
FORNELLI LON JAMES	MCGINNIS MARY ELIZABETH	NULL	11897 E SUNFLOWER LN	FLORENCE	AZ	851327793	NULL	NULL	NULL
PEREZ ELIAS	NULL	NULL	11906 E RHEA RD	FLORENCE	AZ	851329461	NULL	NULL	NULL
YOUNG ELISHA TRAVON	CHAPMAN KELLI ELISE	NULL	11911 E SUNFLOWER LN	FLORENCE	AZ	851327795	NULL	NULL	NULL
WHINERY JONATHAN & MELANIE	NULL	NULL	11915 E MAGMA RD	FLORENCE	AZ	851329416	NULL	NULL	NULL
ROTHE ALAN LLOYD	NULL	NULL	1192 E CEDAR RIDGE RD	SANDY	UT	840945603	NULL	NULL	NULL
WIPPLINGER TRACY LEE TRS	WIPPLINGER LIV TRUST	NULL	11925 E SUNFLOWER LN	FLORENCE	AZ	851327795	NULL	NULL	NULL
POMEROY LARRY GENE & MAXINE ELSIE CO-TRS	NULL	NULL	11927 E REKSOM RD	FLORENCE	AZ	851327166	NULL	NULL	NULL
PULLEY ANDREW JR	NULL	NULL	11930 E SUNFLOWER LN	FLORENCE	AZ	851327794	NULL	NULL	NULL
GASICK KATHLEEN	NULL	NULL	11939 E SUNFLOWER LN	FLORENCE	AZ	851327795	NULL	NULL	NULL
MORRIS SADE MICHELLE	NULL	NULL	11944 E SUNFLOWER LN	FLORENCE	AZ	851327794	NULL	NULL	NULL
LOTT BRIAN	NULL	NULL	11950 E MAGMA RD	FLORENCE	AZ	85132	NULL	NULL	NULL
GLOVER PAYNE DONALD & MADELINE JOY	NULL	NULL	11953 E SUNFLOWER LN	FLORENCE	AZ	851327795	NULL	NULL	NULL
ROSE ELMO JOHN	ROSE DIANNE LYNN	NULL	11958 E SUNFLOWER LN	FLORENCE	AZ	851327794	NULL	NULL	NULL
VARGAS SYLVAIN KARAC	NULL	NULL	1196 S 11TH ST	COOLIDGE	AZ	851283865	NULL	NULL	NULL
LEIVDAL CARA J	SHAMHART FORREST W	NULL	11961 E MAGMA RD	FLORENCE	AZ	851329416	NULL	NULL	NULL
FLETCHER KRISTOPHER HEDLY	BEAUVAIS-FLETCHER MARYBETH LOUISE	NULL	11965 E SUNFLOWER LN	FLORENCE	AZ	851327795	NULL	NULL	NULL
PALMER NOEL DAWN	MOON GARY DALE	NULL	11972 E SUNFLOWER LN	FLORENCE	AZ	851327794	NULL	NULL	NULL
PARRA VANESSA SARAHI CAMACHO	CAMACHO LUIS ENRIQUE	NULL	11975 E REKSOM RD	FLORENCE	AZ	851327166	NULL	NULL	NULL
CHOE CHRISTINA	NULL	NULL	11979 E SUNFLOWER LN	FLORENCE	AZ	851327795	NULL	NULL	NULL
BRINAR JENNIFER LYNN REV LIV TRUST	NULL	NULL	11983 E TENNYSON RD	FLORENCE	AZ	851321221	NULL	NULL	NULL
FLORES YESENIA	NULL	NULL	11984 E SUNFLOWER LN	FLORENCE	AZ	851327794	NULL	NULL	NULL
LANCASTER SERENA R	NULL	NULL	11986 E MAGMA RD	FLORENCE	AZ	851329416	NULL	NULL	NULL
KEELER MICHELLE LYNN	NULL	NULL	11993 E SUNFLOWER LN	FLORENCE	AZ	851327795	NULL	NULL	NULL
BEAUDRY ROBERT	NULL	NULL	11998 E POT O GOLD TRL	FLORENCE	AZ	85132	NULL	NULL	NULL
GOMEZ ARIANA	FELAND CHRISTIAN ALEXANDER	NULL	11998 E SUNFLOWER LN	FLORENCE	AZ	851327794	NULL	NULL	NULL
HAUMONT MIKE & ANITA	NULL	NULL	120 N 15TH ST	GENEVA	NE	683612109	NULL	NULL	NULL
HPA US1 LLC	NULL	NULL	120 S RIVERSIDE PLZ STE 2000	CHICAGO	IL	606066995	NULL	NULL	NULL
SFR BORROWER 2022-A LLC	NULL	NULL	120 S RIVERSIDE PLZ STE 2000	CHICAGO	IL	606066995	NULL	NULL	NULL
SALMON ROBERT G & VONDA K	NULL	NULL	12003 E POT O GOLD TRL	FLORENCE	AZ	851327206	NULL	NULL	NULL
PEPPER LAYNA GRACE	SANCHEZ EVAN JAMES	NULL	12007 E SUNFLOWER LN	FLORENCE	AZ	851327797	NULL	NULL	NULL
BARBOUR LOGAN THOMAS & HAYLE AMANDA	NULL	NULL	12012 E SUNFLOWER LN	FLORENCE	AZ	851327796	NULL	NULL	NULL
HARE AMBER	NULL	NULL	12017 E MAGMA RD	FLORENCE	AZ	851329406	NULL	NULL	NULL
KRAUSE ANGELA	NULL	NULL	12021 E SUNFLOWER LN	FLORENCE	AZ	851327797	NULL	NULL	NULL
SIEWERT TYLER	NULL	NULL	12026 E SUNFLOWER LN	FLORENCE	AZ	851327796	NULL	NULL	NULL
RININGER RANDY SCOTT & CRISTY LYNN	NULL	NULL	12029 E REKSOM RD	FLORENCE	AZ	851327158	NULL	NULL	NULL
HARRIS YAFIT SHIRAN	HARRIS SOPHIA JUDE	NULL	12033 E SUNFLOWER LN	FLORENCE	AZ	851327797	NULL	NULL	NULL
CANEZ FRANCIS CECILIA	NULL	NULL	12035 E TENNYSON RD	FLORENCE	AZ	851321378	NULL	NULL	NULL
FLORES RIGOBERTO & HORTENSIA	NULL	NULL	12038 E SUNFLOWER LN	FLORENCE	AZ	851327796	NULL	NULL	NULL
MOLINA ROY & ALBA	NULL	NULL	12040 E POT O GOLD TRL	FLORENCE	AZ	85132	NULL	NULL	NULL
GOODMAN JACQUELINE MARIE	NULL	NULL	12041 E ASTER LN	FLORENCE	AZ	851327851	NULL	NULL	NULL
TORRES JIMMY	NULL	NULL	12047 E SUNFLOWER LN	FLORENCE	AZ	851327797	NULL	NULL	NULL
SAIN CONNOR	NULL	NULL	1205 W 10TH ST	TEMPE	AZ	852815318	NULL	NULL	NULL
AVERETT TAELIN NICHOLE	FERRAIOLI BLAKE JOSEPH	NULL	12057 E ASTER LN	FLORENCE	AZ	851327851	NULL	NULL	NULL
SKON LORI M	SKON TAMMY	NULL	12058 E RHEA RD	FLORENCE	AZ	851329432	NULL	NULL	NULL
SIMMONS RILEY RUSSELL	SIMMONS TABATHA RUTH	NULL	12060 E VERBINA LN	FLORENCE	AZ	851327780	NULL	NULL	NULL
HUNT TAYLOR & MAIGHAN	NULL	NULL	12061 E SUNFLOWER LN	FLORENCE	AZ	851327798	NULL	NULL	NULL
ACUNA LESLEY & BEESON ISAIAH LEE	NULL	NULL	12061 E WALLFLOWER LN	FLORENCE	AZ	851327763	NULL	NULL	NULL
GREENE PAUL DAVID II & HAYDEN JEREL	NULL	NULL	12065 E MAGMA RD	FLORENCE	AZ	851329406	NULL	NULL	NULL
DAVIS CAMERON & JESSICA	NULL	NULL	12069 E VERBINA LN	FLORENCE	AZ	851327780	NULL	NULL	NULL
HILL ANTHONY	NULL	NULL	12072 E SUNFLOWER LN	FLORENCE	AZ	851327798	NULL	NULL	NULL
BACASEGUA FRANCISCO JAVIER ESTUDILLO	NULL	NULL	12074 E VERBINA LN	FLORENCE	AZ	851327780	NULL	NULL	NULL
SALAZAR MARY LOZANO & RICHARD GARCIA	NULL	NULL	12075 E SUNFLOWER LN	FLORENCE	AZ	851327798	NULL	NULL	NULL
DENNIS PRESTON	NULL	NULL	12075 E WALLFLOWER LN	FLORENCE	AZ	851327763	NULL	NULL	NULL
NOE KATLYN NICOLE	SMITH JACOB HUNTER	NULL	12078 E ASTER LN	FLORENCE	AZ	851327850	NULL	NULL	NULL
MEYER AARON S	MEYER WENDY	NULL	12078 E POT O GOLD TR	FLORENCE	AZ	85132	NULL	NULL	NULL
O BRIEN JOSEPH & ROBYNN	NULL	NULL	12083 E POT O GOLD TRL	FLORENCE	AZ	851327206	NULL	NULL	NULL
KUNZ ANDRA	NULL	NULL	12088 E WALLFLOWER LN	FLORENCE	AZ	851327763	NULL	NULL	NULL
LOPEZ LYDIA	NULL	NULL	12089 E SUNFLOWER LN	FLORENCE	AZ	851327798	NULL	NULL	NULL
CALDERON JOHN MALICDEN JR	NULL	NULL	12089 E VERBINA LN	FLORENCE	AZ	851327780	NULL	NULL	NULL
GEORGE JONATHAN & CHERRY HANNAH	NULL	NULL	12089 E WALLFLOWER LN	FLORENCE	AZ	851327763	NULL	NULL	NULL
TENNEY BRIAN TODD II	NULL	NULL	12096 E ASTER LN	FLORENCE	AZ	851327850	NULL	NULL	NULL
DOMINGUEZ ARLEIGH	NULL	NULL	12100 E SUNFLOWER LN	FLORENCE	AZ	851327778	NULL	NULL	NULL
JACKSON BRIAN C	NULL	NULL	12101 E REKSOM RD	FLORENCE	AZ	85132	NULL	NULL	NULL
GUOLADDLE DEVIN SCOTT	OSIFE AMY REBECCA PADILLA	NULL	12102 E WALLFLOWER LN	FLORENCE	AZ	851327764	NULL	NULL	NULL
SMITH ZACHARY	GATES HONOR	NULL	12103 E SUNFLOWER LN	FLORENCE	AZ	851327778	NULL	NULL	NULL
MELENDEZ ALEC BLAKE	PETERSON BRITTANY STEPHANIE OLVERA	NULL	12103 E VERBINA LN	FLORENCE	AZ	851327781	NULL	NULL	NULL
FERRARA JAMES A JR & HEATHER B	NULL	NULL	12103 E WALLFLOWER LN	FLORENCE	AZ	851327764	NULL	NULL	NULL
RUIZ LEOBARDO	NULL	NULL	12112 E RHEA RD	FLORENCE	AZ	851329469	NULL	NULL	NULL
SMITH MICHAEL L	NULL	NULL	12113 E MAGMA RD	FLORENCE	AZ	85132	NULL	NULL	NULL
ROTH JOURDAN D	NULL	NULL	12114 E SUNFLOWER LN	FLORENCE	AZ	851327778	NULL	NULL	NULL
ALCARAZ JOSE ANGEL	DRVOSTEPOVA ALENA	NULL	12116 E WALLFLOWER LN	FLORENCE	AZ	851327764	NULL	NULL	NULL
JAMISON MASON	NULL	NULL	12117 E SUNFLOWER LN	FLORENCE	AZ	851327778	NULL	NULL	NULL
HEREDIA BRENDILYN KAYE	NULL	NULL	12117 E VERBINA LN	FLORENCE	AZ	851327781	NULL	NULL	NULL
THURSTON RONALD KENT & SUSAN JEAN	NULL	NULL	12117 E WALLFLOWER LN	FLORENCE	AZ	851327764	NULL	NULL	NULL
SNIDER JEREMY D & TARA L	NULL	NULL	12118 E POT O GOLD TRL	FLORENCE	AZ	851327225	NULL	NULL	NULL
SPRIGGS DAVID & DANIELLE	BUTTERWORTH PAULA	NULL	12121 E POT O GOLD TRL	FLORENCE	AZ	851327206	NULL	NULL	NULL
WALKER MARY LOUISE	NULL	NULL	12123 E ASTER AVE	FLORENCE	AZ	85132	NULL	NULL	NULL
HOFFMANN LUKAS	NULL	NULL	12128 E SUNFLOWER LN	FLORENCE	AZ	851327778	NULL	NULL	NULL
JONES AUSTIN MCKAY & BRYNDEE LARUE	NULL	NULL	12130 E VERBINA LN	FLORENCE	AZ	851327781	NULL	NULL	NULL
GARCIA JOSE M CHAVEZ	CHAVEZ RUBY	NULL	12130 E WALLFLOWER LN	FLORENCE	AZ	851327764	NULL	NULL	NULL
FRITZLER JACOB	NULL	NULL	12131 E SUNFLOWER LN	FLORENCE	AZ	851327778	NULL	NULL	NULL
HERNANDEZ JORGE LUIS CANO	NULL	NULL	12131 E VERBINA LN	FLORENCE	AZ	851327781	NULL	NULL	NULL
ARMER ETHYN	NULL	NULL	12131 E WALLFLOWER LN	FLORENCE	AZ	851327764	NULL	NULL	NULL
HORN BRADLEY K FAM TRUST	NULL	NULL	12132 E ASTER LN	FLORENCE	AZ	851327855	NULL	NULL	NULL
WATERS BRANDON PATRICK	NULL	NULL	12139 E ASTER LN	FLORENCE	AZ	851327856	NULL	NULL	NULL
WHITING KELSEY JORDAN	NULL	NULL	12144 E VERBINA LN	FLORENCE	AZ	851327781	NULL	NULL	NULL
CORTEZ DANIEL BENJAMIN	EVERHART KAYLA CHRISTINE	NULL	12144 E WALLFLOWER LN	FLORENCE	AZ	851327764	NULL	NULL	NULL
PITEO JEANNE A	NULL	NULL	12145 E SUNFLOWER LN	FLORENCE	AZ	851327778	NULL	NULL	NULL
KIRCHER KIM ANNE & RAYMOND ALLAN	NULL	NULL	12145 E VERBINA LN	FLORENCE	AZ	851327781	NULL	NULL	NULL
WIMER DARREL L & JUNE L	NULL	NULL	12145 E WALLFLOWER LN	FLORENCE	AZ	851327764	NULL	NULL	NULL
POCHIRO MICHAEL PAUL & SARAH LACIE	NULL	NULL	12148 E ASTER LN	FLORENCE	AZ	851327855	NULL	NULL	NULL
WHITE TERRY L JR & DANELLE	NULL	NULL	12152 E POT O GOLD TRL	FLORENCE	AZ	851327225	NULL	NULL	NULL
GONZALEZ SALOMON	NULL	NULL	12156 E SUNFLOWER LN	FLORENCE	AZ	851327778	NULL	NULL	NULL
VAILLANCOURT RANDY LEE & ELIZABETH NICOLE	NULL	NULL	12158 E VERBINA LN	FLORENCE	AZ	851327781	NULL	NULL	NULL
SINKFIELD KEBA ARNELL	NULL	NULL	12159 E SUNFLOWER LN	FLORENCE	AZ	851327778	NULL	NULL	NULL
KEASTER DAX WAYNE	NULL	NULL	12159 E WALLFLOWER LN	FLORENCE	AZ	851327764	NULL	NULL	NULL
MADSEN ROBERT BRIAN & COURTNEY LEIGH	NULL	NULL	12160 E MAGMA RD	FLORENCE	AZ	851329423	NULL	NULL	NULL
SCHUMANN JAMES & MARCHMAN TIFFANY	NULL	NULL	12168 E SUNFLOWER LN	FLORENCE	AZ	851327778	NULL	NULL	NULL
TRIGLETH GEOFFREY AUSTIN	NULL	NULL	12171 E ASTER LN	FLORENCE	AZ	851327856	NULL	NULL	NULL
DEROCCO NICKOLAS M	NULL	NULL	12171 E REKSOM RD	FLORENCE	AZ	851327160	NULL	NULL	NULL
ACOSTA ERIC MICHAEL & ADRIENNE BROOKE	NULL	NULL	12176 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
CASTILLA FELIPE	CASTILLA EUDELIA	NULL	12179 E POT O GOLD TRL	FLORENCE	AZ	851327206	NULL	NULL	NULL
EGGUM JACOB MONROE	NULL	NULL	12182 E POT O GOLD TRL	FLORENCE	AZ	851327225	NULL	NULL	NULL
BALL IAN	NULL	NULL	12182 E WALLFLOWER LN	FLORENCE	AZ	851327778	NULL	NULL	NULL
PEARCE MACKENZI ALYSSA	SMITH PAUL BRADFORD & SHERRIE JARDINE	NULL	12185 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
JOHNSON AUSTIN	NULL	NULL	12190 E POT O GOLD TRL	FLORENCE	AZ	851327225	NULL	NULL	NULL
BAGLEY JASMINE ALEXIS	BAGLEY JONATHAN MICHAEL JR	NULL	12192 E ASTER LN	FLORENCE	AZ	851327855	NULL	NULL	NULL
CLARIZA ROMEL	NULL	NULL	12192 E WALLFLOWER LN	FLORENCE	AZ	851327764	NULL	NULL	NULL
PEARSON SETH LAWRENCE	PEARSON JAYDEN SHAYLEN	NULL	12193 E SUNFLOWER LN	FLORENCE	AZ	851327778	NULL	NULL	NULL
ELSBERRY CHARITY	BAILEY-BONNER CAMERON & WEIL MORGAN	NULL	12193 E VERBINA LN	FLORENCE	AZ	851327781	NULL	NULL	NULL
ANDERSON CARL DAVID	PARADY ROBERTA JO	NULL	12193 E WALLFLOWER LN	FLORENCE	AZ	851327764	NULL	NULL	NULL
HARRIS SEAN MICHAEL	HARRIS BROOK-LYNN MARIE	NULL	12204 E WALLFLOWER LN	FLORENCE	AZ	851327765	NULL	NULL	NULL
LARSON KELLY & DINA	NULL	NULL	12205 E SUNFLOWER LN	FLORENCE	AZ	851327779	NULL	NULL	NULL
JAMAEL MICHAEL JOSEPH	MARTINEZ JOVANNA ANGEL & JAMAEL ROSIE MARY	NULL	12205 E WALLFLOWER LN	FLORENCE	AZ	851327766	NULL	NULL	NULL
CARPENTER ERIC JOHN	NECHVILLE KAREN J	NULL	12206 E ASTER LN	FLORENCE	AZ	851327857	NULL	NULL	NULL
RHOADES ROLAND	NULL	NULL	12208 E SUNFLOWER LN	FLORENCE	AZ	851327779	NULL	NULL	NULL
SEYMORE JAMES CODY & CORTNEY	NULL	NULL	12210 E POT O GOLD TRL	FLORENCE	AZ	85132	NULL	NULL	NULL

JONES JOSEPH ALAN & SAMIRA ANN	NULL	NULL	12215 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
HAGEN WILLIAM & SANOA	NULL	NULL	12218 E VERBINA LN	FLORENCE	AZ	851327782	NULL	NULL	NULL
CARBAJAL MANUEL ARMAND	NULL	NULL	12218 E WALLFLOWER LN	FLORENCE	AZ	851327765	NULL	NULL	NULL
GONZALEZ DE SALCEDA FEDERICO	GONZALEZ DE SALCEDA ANDRES	NULL	12219 E WALLFLOWER LN	FLORENCE	AZ	851327766	NULL	NULL	NULL
ARMENDARIZ-WILLIAMS JUANA	NULL	NULL	12220 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
POPPLE JACOB	NULL	NULL	12222 E SUNFLOWER LN	FLORENCE	AZ	851327779	NULL	NULL	NULL
CARUSO FERDINAND J JR & MICHELLE	NULL	NULL	12223 E REKSOM RD	FLORENCE	AZ	851327171	NULL	NULL	NULL
HOUSERIGHT PAUL T & AMANDA	NULL	NULL	12226 E ALEX WAY	FLORENCE	AZ	85132	NULL	NULL	NULL
BEAUDRY CRISTINA FAYE & BILLIE JO	NULL	NULL	12232 E VERBINA LN	FLORENCE	AZ	851327782	NULL	NULL	NULL
PADGETT JUSTIN PAUL	NULL	NULL	12232 E WALLFLOWER LN	FLORENCE	AZ	851327765	NULL	NULL	NULL
QUINTANA JUANA INEZ	CABALLERO ERICK FABIAN VILLA	NULL	12233 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
ESTRELLA RAMONA	ESTRELLA JOHNNY	NULL	12233 E VERBINA LN	FLORENCE	AZ	851327783	NULL	NULL	NULL
SUENDER GREGORY ALAN	NULL	NULL	12233 E WALLFLOWER LN	FLORENCE	AZ	851327766	NULL	NULL	NULL
RUSH BRANDON DANIEL & SKYLAR PRESLEY	NULL	NULL	12238 E ASTER LN	FLORENCE	AZ	851327857	NULL	NULL	NULL
BLACKWELL STEPHANIE	NULL	NULL	12244 E WALLFLOWER LN	FLORENCE	AZ	851327765	NULL	NULL	NULL
BERRY COTY & MARTIN	NULL	NULL	12245 E SUNFLOWER LN	FLORENCE	AZ	851327779	NULL	NULL	NULL
VALENCIA GILBERTO JR	CERVANTES SIANYA MARTINEZ	NULL	12245 E VERBINA LN	FLORENCE	AZ	851327783	NULL	NULL	NULL
OUELLETTE MEGAN	OUELLETTE JAMIE	NULL	12245 E WALLFLOWER LN	FLORENCE	AZ	851327766	NULL	NULL	NULL
STOUGH BIRGITTE & ANDREW	NULL	NULL	12250 E SUNFLOWER LN	FLORENCE	AZ	851327779	NULL	NULL	NULL
GORDON GREGORY MACK	NULL	NULL	12256 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
SAROL ANGELICA	NULL	NULL	12258 E VERBINA LN	FLORENCE	AZ	851327782	NULL	NULL	NULL
KELLY LAWRENCE JOHN	KELLY KATHLEEN MARY	NULL	12258 E WALLFLOWER LN	FLORENCE	AZ	851327765	NULL	NULL	NULL
EVERTON HALEY MICHELLE	RILEY RYAN RAY	NULL	12259 E SUNFLOWER LN	FLORENCE	AZ	851327779	NULL	NULL	NULL
ERICKSON CHRISTIAN	NULL	NULL	12259 E WALLFLOWER LN	FLORENCE	AZ	851327766	NULL	NULL	NULL
MARTIN NEIL B & BRANDI L	NULL	NULL	12271 E REKSOM RD	FLORENCE	AZ	85132	NULL	NULL	NULL
MURPHY JEANETTE	VAN DEVENTER JERRY C	NULL	12272 E VERBINA LN	FLORENCE	AZ	851327782	NULL	NULL	NULL
HASLAM STEVEN & DIANA	NULL	NULL	12272 E WALLFLOWER LN	FLORENCE	AZ	851327765	NULL	NULL	NULL
LEON ELIZABETH PALACIOS	PADILLA JESUS	NULL	12273 E ASTER LN	FLORENCE	AZ	851327858	NULL	NULL	NULL
BULGRIN KIMBERLY	NULL	NULL	12273 E VERBINA LN	FLORENCE	AZ	851327783	NULL	NULL	NULL
ASARO ALEXANDRIA RAE	NULL	NULL	12273 E WALLFLOWER LN	FLORENCE	AZ	851327766	NULL	NULL	NULL
GUERRERO JENNY JANETH GALVAN & SPANGLE FRANCISCO DANIEL	NULL	NULL	12274 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
HUDIS BILLIE JEAN & DANIEL SOLOMON	NULL	NULL	12286 E VERBINA LN	FLORENCE	AZ	851327782	NULL	NULL	NULL
MCLAUGHLIN CAROLYN GRACE	NULL	NULL	12286 E WALLFLOWER LN	FLORENCE	AZ	851327765	NULL	NULL	NULL
PASSARO ANNA JOSE	PASSARO MATTHEW JOHN	NULL	12287 E VERBINA LN	FLORENCE	AZ	851327783	NULL	NULL	NULL
HURST JOSHUA ANDREW	GENTRY JESSYE NICOLE	NULL	12287 E WALLFLOWER LN	FLORENCE	AZ	851327766	NULL	NULL	NULL
HOBBS KATELYNN ANN	NULL	NULL	12295 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
FLORES RIGOBERTO GABRIEL JR	NULL	NULL	12296 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
ANDERSON ALEXANDER JAMES	ANDERSON QUINCIE KAY	NULL	12300 E VERBINA LN	FLORENCE	AZ	851327784	NULL	NULL	NULL
DANIELS CAITLIN	NULL	NULL	12300 E WALLFLOWER LN	FLORENCE	AZ	851327767	NULL	NULL	NULL
VEST DAVID ANDREW	NULL	NULL	12301 E VERBINA LN	FLORENCE	AZ	851327785	NULL	NULL	NULL
CANTRELL BRADLEY PAUL	NULL	NULL	12301 E WALLFLOWER LN	FLORENCE	AZ	851327768	NULL	NULL	NULL
RICCOBONO NICK & TASHA	NULL	NULL	12306 E POT O GOLD TRL	FLORENCE	AZ	85132	NULL	NULL	NULL
RODRIGUEZ GUADALUPE F QUINTANA	QUINTANA DIANA EVELINE	NULL	1231 E SHARI ST	SAN TAN VALLEY	AZ	851405900	NULL	NULL	NULL
ANGUIANO BERENICE	OCAMPO RAUL & MARICELA	NULL	12314 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
FLORES LINA	NULL	NULL	12314 E VERBINA LN	FLORENCE	AZ	851327784	NULL	NULL	NULL
QUINTANA RUBEN ALEJANDRO & ALAINA MC CULLOCH	NULL	NULL	12314 E WALLFLOWER LN	FLORENCE	AZ	851327767	NULL	NULL	NULL
MCMANUS SEAN MICHAEL	NULL	NULL	12315 E REKSOM RD	FLORENCE	AZ	851327175	NULL	NULL	NULL
TALBOT KEYLEE A	RAMIREZ ENRIQUE JULIAN	NULL	12315 E VERBINA LN	FLORENCE	AZ	851327785	NULL	NULL	NULL
FLANIGAN RYAN	ARMER EVELYN	NULL	12315 E WALLFLOWER LN	FLORENCE	AZ	851327768	NULL	NULL	NULL
LAVENDER BOBBY	KIRKPATRICK ASHLEY	NULL	12321 E POT O GOLD TRL	FLORENCE	AZ	851327208	NULL	NULL	NULL
KOCHEL JAMES M & DIANE M	NULL	NULL	12326 E MAGMA RD	FLORENCE	AZ	851321344	NULL	NULL	NULL
PIERCE TAYLOR	POLANOWSKI CLAUDIA ROSE	NULL	12329 E VERBINA LN	FLORENCE	AZ	851327785	NULL	NULL	NULL
DELANEY NICHOLAS ANDREW	NULL	NULL	12330 E VERBINA LN	FLORENCE	AZ	851327784	NULL	NULL	NULL
GIBBS RANDY A	BELAND DJEDRA A	NULL	12331 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
GRIMES PAUL THOMAS	TRAUM LAURA	NULL	12332 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
WILLIAMS WESLEY WILBERT	NULL	NULL	12332 E WALLFLOWER LN	FLORENCE	AZ	851327767	NULL	NULL	NULL
GREEN REBEKAH MAY	NULL	NULL	12333 E WALLFLOWER LN	FLORENCE	AZ	851327768	NULL	NULL	NULL
HAUGHTON THOMAS	NULL	NULL	12342 E VERBINA LN	FLORENCE	AZ	851327784	NULL	NULL	NULL
GOODMAN AMANDA & ZACHARY	NULL	NULL	12343 E VERBINA LN	FLORENCE	AZ	851327785	NULL	NULL	NULL
DUNCAN JACOB RYAN	NULL	NULL	12350 E ASTER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
MARSH DOMINIC & ALEXIS	NULL	NULL	12354 E VERBINA LN	FLORENCE	AZ	851327771	NULL	NULL	NULL
MEDINA EDGAR J & GABRIELA	NULL	NULL	12356 E POT O GOLD TRL	FLORENCE	AZ	851327228	NULL	NULL	NULL
ZALDIVAR REBECCA	NULL	NULL	12356 E WALLFLOWER LN	FLORENCE	AZ	85132	NULL	NULL	NULL
GLINES HOWARD E JR & KRISTIE A	NULL	NULL	12357 E POT OF GOLD ST	FLORENCE	AZ	85132	NULL	NULL	NULL
HOLLYFIELD JACK	NULL	NULL	12357 E WALLFLOWER LN	FLORENCE	AZ	851327768	NULL	NULL	NULL
STEPHENS BRYCE TAYLOR	CHABOT KATHY	NULL	12361 E VERBINA LN	FLORENCE	AZ	851327772	NULL	NULL	NULL
PALMA MARK	GLORIA-PALMA THERESA	NULL	12366 E VERBINA LN	FLORENCE	AZ	851327771	NULL	NULL	NULL
WILCOX CLAUDIA DEANNA	NULL	NULL	12367 E BAHIA CT	FLORENCE	AZ	851320238	NULL	NULL	NULL
BAGLEY JANICE MAE	BAGLEY JONATHAN MICHAEL	NULL	12379 E BAHIA CT	FLORENCE	AZ	851320238	NULL	NULL	NULL
MESSINA COREEN CHAMBERS	MESSINA BRIAN	NULL	12380 E VERBINA LN	FLORENCE	AZ	851327771	NULL	NULL	NULL
SANDOVAL KAREN M	ROJAS SIMON A ROJAS	NULL	12380 E WALLFLOWER LN	FLORENCE	AZ	851327767	NULL	NULL	NULL
THORNTON TERESA MARY & DON JOSEPH JR	NULL	NULL	12381 E VERBINA LN	FLORENCE	AZ	851327772	NULL	NULL	NULL
FOX CHYNNA ELEXUS & SAWYER JOHN	NULL	NULL	12384 E BAHIA CT	FLORENCE	AZ	851320239	NULL	NULL	NULL
AGUILAR ERIC	NULL	NULL	12394 E VERBINA LN	FLORENCE	AZ	851327771	NULL	NULL	NULL
MCGREGOR DONNA J	NULL	NULL	1240 KELLY LN	LEBANON	TN	37087	NULL	NULL	NULL
SHEPPARD SHAUN MICHAEL	NULL	NULL	12401 E BAHIA CT	FLORENCE	AZ	851320240	NULL	NULL	NULL
JONES CHRISTI FAYE & CHARLES DAVE	NULL	NULL	12421 E BAHIA CT	FLORENCE	AZ	851320240	NULL	NULL	NULL
HENDERSON JOHN WILLIAM	HENDERSON DONNIS GAYE	NULL	12463 E REKSOM RD	FLORENCE	AZ	851327159	NULL	NULL	NULL
FISHER JODY NICOLE	COLLINS KELLY DANEEN	NULL	12483 E TENNYSON RD	FLORENCE	AZ	851321382	NULL	NULL	NULL
MILLER ERNEST TR	NULL	NULL	12551 E REKSOM RD	FLORENCE	AZ	851327142	NULL	NULL	NULL
RICHARDSON CHARLES A & NANCY	NULL	NULL	12628 82ND AVE NE	KIRKLAND	WA	980342575	NULL	NULL	NULL
COLLENTRO NICHOLAS	COLLENTRO VALERIE	NULL	12675 POINT LOOKOUT RD	SCOTLAND	MD	206873003	NULL	NULL	NULL
MORRIE ROGER L & JANICE	NULL	NULL	1272 SHADY OAK DR	LA VERNE	CA	917501538	NULL	NULL	NULL
SCHEBEN JANIE D & ROBERT E	NULL	NULL	1278 BEAR CREEK RD	BONNER	MT	598239551	NULL	NULL	NULL
WASHUT HARRY	NULL	NULL	1281 EAGLE VIEW DR	BUFFALO	WY	828341424	NULL	NULL	NULL
CLARK-MEDEL EARL DAMON	CLARK YONATAN LEONARDO MEDEL	NULL	12875 E LARREA LN	FLORENCE	AZ	851327746	NULL	NULL	NULL
VEGA RANDY & DANA SEXTON	NULL	NULL	12885 E LARREA LN	FLORENCE	AZ	851327746	NULL	NULL	NULL
GANIVET FERNANDO	NULL	NULL	12895 E LARREA LN	FLORENCE	AZ	851327746	NULL	NULL	NULL
NUNEZ HAYLIE MAKAY	NUNEZ ELVIN ENRIQUE	NULL	12905 E LARREA LN	FLORENCE	AZ	851327747	NULL	NULL	NULL
DAVIS WESLEY R & DESTINEE SUEANN	NULL	NULL	12915 E LARREA LN	FLORENCE	AZ	851327747	NULL	NULL	NULL
GREGORY CURTIS WAYNE & WATSON VANESSA IILEEN	NULL	NULL	12920 E LARREA LN	FLORENCE	AZ	851327748	NULL	NULL	NULL
ALVAREZ-BAZAN PEDRO & BAZAN ABIGAIL	NULL	NULL	12925 E LARREA LN	FLORENCE	AZ	851327747	NULL	NULL	NULL
KEALIHER BRETT ALAN & SANDRA DENISE	NULL	NULL	12930 E LARREA LN	FLORENCE	AZ	851327748	NULL	NULL	NULL
MIRABELLI LOUIS V	HUSER KATIE L	NULL	12935 E LARREA LN	FLORENCE	AZ	851327747	NULL	NULL	NULL
MAUTER GAVIN BLAKE	NULL	NULL	12942 E LARREA LN	FLORENCE	AZ	851327748	NULL	NULL	NULL
WIENKE NOMANDA LOUISE & WIENKE SUSAN KRISTINE	NULL	NULL	12947 E LARREA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
ODOM TEAHDAWN MARIE	HANSON SUSAN MARIE	NULL	12958 E LARREA LN	FLORENCE	AZ	851327748	NULL	NULL	NULL
MAINOR KATIE	WYSOCKI VICTOR	NULL	12959 E LARREA LN	FLORENCE	AZ	851327747	NULL	NULL	NULL
HERNANDEZ RAMON	NULL	NULL	1296 S KINGSTON ST	CHANDLER	AZ	852861011	NULL	NULL	NULL
KELLER RICHARD JR & SANDRA	NULL	NULL	12983 DEARBORN TRL	HUNTLEY	IL	60142	NULL	NULL	NULL
MACIVER WESLEY & VANESSA	NULL	NULL	12994 E PRIMROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
GARCIA LUIS W JR & FRANCES	NULL	NULL	12995 E MARIGOLD LN	FLORENCE	AZ	851327809	NULL	NULL	NULL
RUBALCAVA MELISSA KRIS-TINA & ALECC SCOTT	NULL	NULL	12996 E LARREA LN	FLORENCE	AZ	851327748	NULL	NULL	NULL
UGARTE ADRIAN & SANDOVAL JENNIFER	NULL	NULL	13011 E MARIGOLD LN	FLORENCE	AZ	851327811	NULL	NULL	NULL
LEONE BENJAMIN JAMES	MITCHELL HANNAH MICHELLE	NULL	13011 E SUNFLOWER LN	FLORENCE	AZ	851327755	NULL	NULL	NULL
BARNETT ERMEN RENE	NULL	NULL	13014 E SUNFLOWER LN	FLORENCE	AZ	851327756	NULL	NULL	NULL
RATIFF DEREK M	ROTH RYDER R	NULL	13016 E LARREA LN	FLORENCE	AZ	851327027	NULL	NULL	NULL
MOUSSEAU HAILEY N	NULL	NULL	13016 E TOO BROKE LN	FLORENCE	AZ	851324006	NULL	NULL	NULL
THOMAS TIMOTHY JAMES & KATIE ANN	NULL	NULL	13016 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
CANEZ MARCO ANTONIO NUNEZ	NORENA ARACELY GOMEZ	NULL	13023 E SUNFLOWER LN	FLORENCE	AZ	851327755	NULL	NULL	NULL
GRUBER SCOTT ROBERT	NULL	NULL	13024 E MARIGOLD LN	FLORENCE	AZ	851327810	NULL	NULL	NULL
FREEMAN ARTHUR R & ERIN	NULL	NULL	13024 E PRIMROSE LN	FLORENCE	AZ	851327801	NULL	NULL	NULL
MARTIN JAMES	NULL	NULL	13025 E MARIGOLD LN	FLORENCE	AZ	851327811	NULL	NULL	NULL
OCKER KENNETH ROBERT & OCKER NANCY A	NULL	NULL	13026 E SUNFLOWER LN	FLORENCE	AZ	851327756	NULL	NULL	NULL
NINO TRAVIS	NULL	NULL	13030 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
GHERITY JEFFREY T & LINDA I TRS	GHERITY FAM LIV TRUST	NULL	13032 E DESERT LILY LN	FLORENCE	AZ	851323313	NULL	NULL	NULL
JOHNSON DANIEL E	ARREOLA THALIA	NULL	13033 E SUNFLOWER LN	FLORENCE	AZ	85132-7755	NULL	NULL	NULL
JENKINS GREGORY M	ACKERMAN SILVANA	NULL	13035 E TUMBLEWEED LN	FLORENCE	AZ	851327815	NULL	NULL	NULL
WILDUNG BRENNA DAWN & TRACY ANDREA DANIELLE	TRACY CODY DREW	NULL	13036 E LARREA LN	FLORENCE	AZ	851327027	NULL	NULL	NULL
COMPTON KYLE P & JOHNSON MISHA L	NULL	NULL	13038 E MARIGOLD LN	FLORENCE	AZ	851327810	NULL	NULL	NULL
MARQUES AMY EHRMAN & JUSTIN	NULL	NULL	13038 E PRIMROSE LN	FLORENCE	AZ	851327801	NULL	NULL	NULL
CHAVEZ BRYAN	NULL	NULL	13039 E MARIGOLD LN	FLORENCE	AZ	851327811	NULL	NULL	NULL
LINDBERGH RONALD P & KRISTEN CAROL TRUST	NULL	NULL	13040 E SUNFLOWER LN	FLORENCE	AZ	851327756	NULL	NULL	NULL
STODDARD GARY RALPH & DEBRA BELLE	NULL	NULL	13043 E SUNFLOWER LN	FLORENCE	AZ	851327755	NULL	NULL	NULL
GAVIN JESSICA TR	GAVIN FAM REV TRUST	NULL	13044 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
GROSCHEL RONALD & SONIA	NULL	NULL	13052 E DESERT LILY LN	FLORENCE	AZ	851323313	NULL	NULL	NULL
COOPER WAYNE C & DENISE M	NULL	NULL	13052 E MARIGOLD LN	FLORENCE	AZ	851327810	NULL	NULL	NULL
JOSEPH DORIAN	NULL	NULL	13052 E PRIMROSE LN	FLORENCE	AZ	851327801	NULL	NULL	NULL
ROSALES-CORDER DAVIANA	CORDER ADAM & DANIELLE	NULL	13053 E MARIGOLD LN	FLORENCE	AZ	85132-7811	NULL	NULL	NULL
COLLIER SHELBY MARIE	KAVANAUGH BRANDON NICHOLAS	NULL	13053 E SUNFLOWER LN	FLORENCE	AZ	851327755	NULL	NULL	NULL
THOMAS LOGAN JACE	THOMAS JAEDON WANELL	NULL	13054 E SUNFLOWER LN	FLORENCE	AZ	851327756	NULL	NULL	NULL
SANDOVAL DANIEL JACOB & CALLIE ANN	NULL	NULL	13056 E LARREA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
PALACIOS ANDREW & TAHTIANA	NULL	NULL	13058 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
BRADY GUY & REBECCA	NULL	NULL	13060 E TOO BROKE LN	FLORENCE	AZ	851324006	NULL	NULL	NULL
CANNON SHAWN	NULL	NULL	13065 E ASTER LN	FLORENCE	AZ	85132-3307	NULL	NULL	NULL
ROSE JAMES BLAKE	NULL	NULL	13065 E SUNFLOWER LN	FLORENCE	AZ	851327755	NULL	NULL	NULL
SANTOS-ROJO FRANCISCO JAVIER III	ROSAS LORENA GUADALUPE AGUILAR	NULL	13066 E MARIGOLD LN	FLORENCE	AZ	851327810	NULL	NULL	NULL
LOPEZ ENRIQUE	GONZALEZ ERIKA F	NULL	13066 E PRIMROSE LN	FLORENCE	AZ	851327801	NULL	NULL	NULL
CLONTS JACOB W	NULL	NULL	13067 E MARIGOLD LN	FLORENCE	AZ	851327811	NULL	NULL	NULL
KIVALU TANIELA FAKALOLO	NULL	NULL	13069 E DESERT LILY LN	FLORENCE	AZ	851323314	NULL	NULL	NULL
ROBERT JEAN CLAUDE & MARIANGE	NULL	NULL	13070 E DESERT LILY LN	FLORENCE	AZ	851323313	NULL	NULL	NULL
TABUGA RODNEY	NULL	NULL	13072 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
KELLY KYLE REECE & CAPRIATO CHRISTINA ANN	NULL	NULL	13074 E LARREA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
ORTIZ MATTHEW JERICHO SAPANLAY	NULL	NULL	13077 E SUNFLOWER LN	FLORENCE	AZ	851327755	NULL	NULL	NULL
WAGNER DANIEL & MELANIE	NULL	NULL	13078 E CHUPAROSA LN	FLORENCE	AZ	851323302	NULL	NULL	NULL
MARTINEZ JUDITH L	NULL	NULL	13079 E ASTER LN	FLORENCE	AZ	851323307	NULL	NULL	NULL
VASQUEZ JOSEPH	NULL	NULL	13080 E ASTER LN	FLORENCE	AZ	851323308	NULL	NULL	NULL
SUSERUD KIM N & LYNN R	NULL	NULL	13080 E MARIGOLD LN	FLORENCE	AZ	851327810	NULL	NULL	NULL
STEGNER RONALD A & CARLA V	NULL	NULL	13080 E PRIMROSE LN	FLORENCE	AZ	851327801	NULL	NULL	NULL
ARRIAZA MIRTALA	ARRIAZA BLANCA	NULL	13081 E MARIGOLD LN	FLORENCE	AZ	851327811	NULL	NULL	NULL

FREEMAN PATRICK	ROBBEN JAMI LYNN	NULL	13081 E TUMBLEWEED LN	FLORENCE	AZ	851327815	NULL	NULL	NULL
HUMPHREY SABRINA UNIQUE	ESCALANTE NATHAN TORRECILLAS	NULL	13082 E SUNFLOWER LN	FLORENCE	AZ	851327756	NULL	NULL	NULL
NATION BENJAMIN	NULL	NULL	13083 E DESERT LILY LN	FLORENCE	AZ	851323314	NULL	NULL	NULL
BRUEGGERT CARL SR & SHARYN	NULL	NULL	13084 E DESERT LILY LN	FLORENCE	AZ	851323313	NULL	NULL	NULL
WALBORN RACHAEL MARIE	MIERAS GRACEN	NULL	13085 E SUNFLOWER LN	FLORENCE	AZ	851327755	NULL	NULL	NULL
HUFFMAN ILEATHA JANICE	NULL	NULL	13086 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
GARCIA CHRISTOPHER	OLIVER RICHARD AUBREY	NULL	13087 E CHUPAROSA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
PEREZ CARLOS FERNANDO PEREZ	SANDOVAL GUADALUPE ABURTO	NULL	13089 E VERBINA LN	FLORENCE	AZ	851327731	NULL	NULL	NULL
THAGGARD DONNIE LLOYD & WANDA JOYCE	NULL	NULL	13093 E ASTER LN	FLORENCE	AZ	851323307	NULL	NULL	NULL
WICKENS GRAHAM B	CHRISTENSON CASSANDRA	NULL	13094 E LARREA LN	FLORENCE	AZ	851327027	NULL	NULL	NULL
WILKINS TIMOTHY X & NORMITA HABON	NULL	NULL	13094 E MARIGOLD LN	FLORENCE	AZ	851327810	NULL	NULL	NULL
EBERLE LOUIS CHARLES JR & CARLA LEE	NULL	NULL	13094 E SUNFLOWER LN	FLORENCE	AZ	851327756	NULL	NULL	NULL
RYAN CHRISTIAN J	NULL	NULL	13095 E MARIGOLD LN	FLORENCE	AZ	851327811	NULL	NULL	NULL
WERNER STACEY MARIE	NULL	NULL	13095 E SUNFLOWER LN	FLORENCE	AZ	851327755	NULL	NULL	NULL
MOHAN CIARA L & BOEHNLEIN SYLVESTER	NULL	NULL	13096 E ASTER LN	FLORENCE	AZ	851323308	NULL	NULL	NULL
JOHNSON CHRISTOPHER ALAN	DENHAM BRITTANIE	NULL	13096 E CHUPAROSA LN	FLORENCE	AZ	851323302	NULL	NULL	NULL
GARNER SHANA & LOPEZ CARLOS	NULL	NULL	13097 E DESERT LILY LN	FLORENCE	AZ	851323314	NULL	NULL	NULL
RHODES DONALD D	NULL	NULL	13100 E DESERT LILY LN	FLORENCE	AZ	851323315	NULL	NULL	NULL
ALLEN ROSALEE NOTHEMA	NULL	NULL	13100 E TUMBLEWEED LN	FLORENCE	AZ	85132-7814	NULL	NULL	NULL
ENGLER KAREN V & RONALD E	NULL	NULL	13101 E CHUPAROSA LN	FLORENCE	AZ	85132-3304	NULL	NULL	NULL
MARTINEZ MARIA CONCEPCION GARCIA	NULL	NULL	13105 E VERBINA LN	FLORENCE	AZ	851327733	NULL	NULL	NULL
PALMER DONNA	BRANHAM SAXTON	NULL	13111 E DESERT LILY LN	FLORENCE	AZ	851323316	NULL	NULL	NULL
SIMMONS WILLIAM K & TIFFANY M	NULL	NULL	13112 E ASTER LN	FLORENCE	AZ	851323309	NULL	NULL	NULL
GONZALEZ DONICIO BAUMEA	BALDERRAMA-GONZALEZ MERCEDES	NULL	13112 E CHUPAROSA LN	FLORENCE	AZ	851323303	NULL	NULL	NULL
KNOX JACOB DYLAN	NULL	NULL	13112 E TOO BROKE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
HARPER JUSTIN J & DAPHNE C	NULL	NULL	13114 E DESERT LILY LN	FLORENCE	AZ	85132-3315	NULL	NULL	NULL
FAZIO MATTHEW & CAREY TIA	NULL	NULL	13114 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
SAAVEDRA RAMON JR	NULL	NULL	13115 E CHUPAROSA LN	FLORENCE	AZ	851323304	NULL	NULL	NULL
MADRID ELAUTERIO A	NULL	NULL	13121 E ASTER LN	FLORENCE	AZ	851323310	NULL	NULL	NULL
LAWSON MACKENZIE JOEN & MARISSA NIKOLE	NULL	NULL	13125 E DESERT LILY LN	FLORENCE	AZ	851323316	NULL	NULL	NULL
CRABTREE TIFFANY MICHELLE & JEROME ALLEN	NULL	NULL	13128 E ASTER LN	FLORENCE	AZ	851323309	NULL	NULL	NULL
LEWIS MICHAEL J	NULL	NULL	13128 E MARIGOLD LN	FLORENCE	AZ	851327812	NULL	NULL	NULL
LATHAM MALCOLM SIDNEY & FAITH ANN	NULL	NULL	13128 E SUNFLOWER LN	FLORENCE	AZ	851327760	NULL	NULL	NULL
DEEL DEWAYNE & LISA GAIL	NULL	NULL	13128 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
SIEMS JULIE	WIESELMAN CRAIG	NULL	13129 E CHUPAROSA LN	FLORENCE	AZ	851323304	NULL	NULL	NULL
MCVICKER ANGELA	NULL	NULL	13129 E PRIMROSE LN	FLORENCE	AZ	851327803	NULL	NULL	NULL
ENGEBRETSON ANDREW	ENGEBRETSON MARIA & ROBERT	NULL	13129 E SUNFLOWER LN	FLORENCE	AZ	851327757	NULL	NULL	NULL
RIOS NESTOR RODRIGUEZ & FRANCES ARLINE	NULL	NULL	13129 E TUMBLEWEED LN	FLORENCE	AZ	851327816	NULL	NULL	NULL
STRADER LINDA	NULL	NULL	13134 1200 EAST ST	WYANET	IL	613799439	NULL	NULL	NULL
SERRATO REYNA I	NULL	NULL	13135 E ASTER LN	FLORENCE	AZ	851323310	NULL	NULL	NULL
SCHROEDER CHRISTOPHER	NULL	NULL	13139 E DESERT LILY LN	FLORENCE	AZ	851323316	NULL	NULL	NULL
BOOTHE KYLE J & HARNER MAKENZI L	NULL	NULL	13142 E ASTER LN	FLORENCE	AZ	851323309	NULL	NULL	NULL
ELSWICK KEVIN & VANESSA	NULL	NULL	13142 E CHUPAROSA LN	FLORENCE	AZ	851323303	NULL	NULL	NULL
DI DOMENICO STEVE LOUIS & MARY LYNN	OLSON MARJORIE	NULL	13142 E LARREA LN	FLORENCE	AZ	851327750	NULL	NULL	NULL
TORNQUIST KYLE DAVID	NULL	NULL	13142 E MARIGOLD LN	FLORENCE	AZ	851327812	NULL	NULL	NULL
TIGER JASMINE	NULL	NULL	13142 E SUNFLOWER LN	FLORENCE	AZ	851327760	NULL	NULL	NULL
CRONIN ALLEN LENFIELD & ANGELA LYNN LIV TR	NULL	NULL	13142 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
SANTIS CHAD	NULL	NULL	13143 E CHUPAROSA LN	FLORENCE	AZ	851323304	NULL	NULL	NULL
JOHNSTON WENDY R	NULL	NULL	13143 E PRIMROSE LN	FLORENCE	AZ	851327803	NULL	NULL	NULL
DAVIS DEVYNN HAILEY	LYONS JOSHUA JAMES	NULL	13143 E SUNFLOWER LN	FLORENCE	AZ	851327757	NULL	NULL	NULL
BAGBY MARCUS A & MARINA R TRS	BAGBY FAM LIV TRUST	NULL	13143 E TUMBLEWEED LN	FLORENCE	AZ	85132-7816	NULL	NULL	NULL
WALLING JEREMY SCOTT	NULL	NULL	13146 E DESERT LILY LN	FLORENCE	AZ	851323315	NULL	NULL	NULL
DENETDEAL COREY	NULL	NULL	13149 E ASTER LN	FLORENCE	AZ	851323310	NULL	NULL	NULL
MARCHESSEAULT CHRISTOPHER P & JOANNE W TRS	MARCHESSEAULT TRUST	NULL	1315 PINE VALLEY RD	SOUTH LAKE TAHOE	CA	961505939	NULL	NULL	NULL
JIMENEZ ADRIAN	MONTGOMERY MARCHELLO	NULL	13153 E DESERT LILY LN	FLORENCE	AZ	851323316	NULL	NULL	NULL
MANUEL ODALYS IVETTE	NULL	NULL	13156 E MARIGOLD LN	FLORENCE	AZ	851327812	NULL	NULL	NULL
WOODY JOHN C & CAMPBELL ANGIE L	WILSON PATRICK II	NULL	13156 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
CROUCH ERICA	NULL	NULL	13157 E CHUPAROSA LN	FLORENCE	AZ	851323304	NULL	NULL	NULL
THOMPSON ALBERT A	THOMPSON GEORGIA MELETIA	NULL	13157 E SUNFLOWER LN	FLORENCE	AZ	851327757	NULL	NULL	NULL
MUNOZ JAVIER SANTAMARIA & VARGAS LILIANA	VARGAS GLADYS & SANTAMARIA ANGEL	NULL	13158 E ASTER LN	FLORENCE	AZ	85132-3309	NULL	NULL	NULL
WILLIAMS TIMOTHY ALLEN	ROGERS EMILY BETH	NULL	13158 E SUNFLOWER LN	FLORENCE	AZ	851327760	NULL	NULL	NULL
THOMAS LACHELLE & MICHAEL	NULL	NULL	13160 E CHUPAROSA LN	FLORENCE	AZ	851323303	NULL	NULL	NULL
AUSTIN ROBERT & MARTHA SUSAN	NULL	NULL	13160 E DESERT LILY LN	FLORENCE	AZ	851323315	NULL	NULL	NULL
CHAMBERS JEFFREY R & TAMI L	NULL	NULL	13162 E TOO BROKE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
SCHAEFFER BRANDON LEE & KRISTYNA MARIE	NULL	NULL	13163 E ASTER LN	FLORENCE	AZ	851323310	NULL	NULL	NULL
RIVERA ROSA	NULL	NULL	13167 E DESERT LILY LN	FLORENCE	AZ	851323316	NULL	NULL	NULL
DA SILVA ANABELA S & SIMS ROBERT	NULL	NULL	13170 E MARIGOLD LN	FLORENCE	AZ	851327812	NULL	NULL	NULL
HARRIS AMY D	NULL	NULL	13170 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
DANCASKY ZACHARIAH	NULL	NULL	13171 E CHUPAROSA LN	FLORENCE	AZ	851323304	NULL	NULL	NULL
LIN MING REN	LAN LILY	NULL	13171 E SUNFLOWER LN	FLORENCE	AZ	851327757	NULL	NULL	NULL
CARPENTER KHALID AKIL	NULL	NULL	13171 E TUMBLEWEED LN	FLORENCE	AZ	851327816	NULL	NULL	NULL
TAYLOR JONATHAN MICHAEL	TAYLOR STEPHANIE C	NULL	13172 E SUNFLOWER LN	FLORENCE	AZ	851327760	NULL	NULL	NULL
HAWKINS CHASE RUSSELL	BUGARIN ANGELINA D	NULL	13174 E ASTER LN	FLORENCE	AZ	851323309	NULL	NULL	NULL
DANIELS CAROL	NULL	NULL	13174 E CHUPAROSA LN	FLORENCE	AZ	851323303	NULL	NULL	NULL
MASON THOMAS M & JUDITH J	NULL	NULL	13174 E DESERT LILY LN	FLORENCE	AZ	851323315	NULL	NULL	NULL
JONES THEODORE	NULL	NULL	13179 E DESERT LILY LN	FLORENCE	AZ	851323316	NULL	NULL	NULL
ZARATE CARLOS ENRIQUE RODRIGUEZ	NULL	NULL	13184 E LARREA LN	FLORENCE	AZ	851327750	NULL	NULL	NULL
RODRIGUEZ YVETTE ANTONIA	NULL	NULL	13184 E MARIGOLD LN	FLORENCE	AZ	851327812	NULL	NULL	NULL
KIRK RONALD J & ELIZABETH A	NULL	NULL	13184 E PRIMROSE LN	FLORENCE	AZ	851327802	NULL	NULL	NULL
MACQUE KARA ROSE	NULL	NULL	13184 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
NORRIS KRISTINA SHANEI	NULL	NULL	13184 E VERBINA LN	FLORENCE	AZ	851327732	NULL	NULL	NULL
HARTY AARON MICHAEL & SUSANNA KHUON	NULL	NULL	13185 E CHUPAROSA LN	FLORENCE	AZ	851323304	NULL	NULL	NULL
BORING BRIAN E & CINDY J	NULL	NULL	13185 E LARREA LN	FLORENCE	AZ	851327749	NULL	NULL	NULL
FUENTES SUMMER DAWN	NULL	NULL	13185 E SUNFLOWER LN	FLORENCE	AZ	851327757	NULL	NULL	NULL
ORTEGA NORA SILVIA	NULL	NULL	13185 E TUMBLEWEED LN	FLORENCE	AZ	851327816	NULL	NULL	NULL
DUNVILLE BRENT M & ANDREA R	NULL	NULL	13186 E SUNFLOWER LN	FLORENCE	AZ	851327760	NULL	NULL	NULL
HARWOOD BOB J & JEANETTE L	NULL	NULL	13187 E PRIMROSE LN	FLORENCE	AZ	851327803	NULL	NULL	NULL
WHELEN NICHOLAS & SOPHIA A	NULL	NULL	13188 E ASTER LN	FLORENCE	AZ	851323309	NULL	NULL	NULL
THORSON LOGAN MICHAEL & BOYCE MAKAYLA DANIELLE	NULL	NULL	13189 E ASTER LN	FLORENCE	AZ	851323310	NULL	NULL	NULL
OCAMPO ARTHUR LUIS & CYNTHIA MICHELLE	NULL	NULL	13190 E CHUPAROSA LN	FLORENCE	AZ	851323303	NULL	NULL	NULL
SEKEL IAREN E & GARY M	NULL	NULL	13190 E DESERT LILY LN	FLORENCE	AZ	851323315	NULL	NULL	NULL
CUTLER ELISHA	NULL	NULL	13193 E DESERT LILY LN	FLORENCE	AZ	85132	NULL	NULL	NULL
APONTE FELIPE	NULL	NULL	13197 E CHUPAROSA LN	FLORENCE	AZ	851323304	NULL	NULL	NULL
KANJ MOHAMAD	FANDI QAMAR	NULL	13198 E MARIGOLD LN	FLORENCE	AZ	85132-7812	NULL	NULL	NULL
RACIOPPA CHRISTINA	WALKER STACEY	NULL	13198 E PRIMROSE LN	FLORENCE	AZ	851327802	NULL	NULL	NULL
SAIKEMAL ELMER & CHEEWEE	NULL	NULL	13198 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
REYNOLDS KELLY MARIE	BALCI AYDIN K	NULL	13199 E SUNFLOWER LN	FLORENCE	AZ	851327757	NULL	NULL	NULL
BEST TYLER	NULL	NULL	13199 E TUMBLEWEED LN	FLORENCE	AZ	851327816	NULL	NULL	NULL
COLEMAN ANTONIO JABARI	NULL	NULL	13200 E SUNFLOWER LN	FLORENCE	AZ	851327759	NULL	NULL	NULL
GANT KYMBRIEL	NULL	NULL	13201 E ASTER LN	FLORENCE	AZ	851323311	NULL	NULL	NULL
GAETA ANDREA M	NULL	NULL	13201 E PRIMROSE LN	FLORENCE	AZ	851327804	NULL	NULL	NULL
GOMEZ TANIA LISSETTE & AREVALO SHAKIRA M	NULL	NULL	13202 E ASTER LN	FLORENCE	AZ	851323312	NULL	NULL	NULL
OLSEN RILEY J & SARAH J	NULL	NULL	13202 E CHUPAROSA LN	FLORENCE	AZ	851323305	NULL	NULL	NULL
SOMOZA RACHEL & MICHAEL	NULL	NULL	13209 E CHUPAROSA LN	FLORENCE	AZ	851323306	NULL	NULL	NULL
AGUIRRE LINDA J	NULL	NULL	13210 E LUPINE LN	FLORENCE	AZ	851327818	NULL	NULL	NULL
STURGILL KURISTI & GARCIA KYLE RYAN	NULL	NULL	13212 E LARREA LN	FLORENCE	AZ	851327754	NULL	NULL	NULL
RIDENOUR MARK & GABRIELA	NULL	NULL	13212 E MARIGOLD LN	FLORENCE	AZ	851327812	NULL	NULL	NULL
HERNANDEZ ANASTACIO S	ARAGON SANDRA	NULL	13212 E PRIMROSE LN	FLORENCE	AZ	851327802	NULL	NULL	NULL
DRAPER BROQUE & LISMERY	NULL	NULL	13212 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
STIMSON LINDA	NULL	NULL	13213 E ASTER LN	FLORENCE	AZ	851323311	NULL	NULL	NULL
ERHARD THOMAS JR & DESPAIN HOLLY	NULL	NULL	13213 E MARIGOLD LN	FLORENCE	AZ	85132	NULL	NULL	NULL
ROBINSON NATHANIEL OWEN & EMILY MARIE	NULL	NULL	13213 E SUNFLOWER LN	FLORENCE	AZ	851327758	NULL	NULL	NULL
DIFFEN KATHERINE & LOWELL	NULL	NULL	13213 E TUMBLEWEED LN	FLORENCE	AZ	851327816	NULL	NULL	NULL
DEBAETS ERIC & JANE	NULL	NULL	13215 E PRIMROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
WINNER TIMOTHY & KATREENA	NULL	NULL	13216 E ASTER LN	FLORENCE	AZ	851323312	NULL	NULL	NULL
ANDERSON ASHLEE	NULL	NULL	13216 E SUNFLOWER LN	FLORENCE	AZ	851327759	NULL	NULL	NULL
MALABUYOC SUZAN LUMAE	NULL	NULL	13221 E CHUPAROSA LN	FLORENCE	AZ	851323306	NULL	NULL	NULL
BLYTHE ALEXIS OLIVIA	BLEDSOE MATTHEW JACK	NULL	13225 E ASTER LN	FLORENCE	AZ	85132-3311	NULL	NULL	NULL
LEE LILLIE A	NULL	NULL	13225 E LARREA LN	FLORENCE	AZ	851327751	NULL	NULL	NULL
CASSEL SAMANTHA JEAN	NULL	NULL	13226 E LUPINE LN	FLORENCE	AZ	851327818	NULL	NULL	NULL
CEBALLOS JAMIE A	CRUZ-NUNEZ MARIA GUADALUPE	NULL	13226 E MARIGOLD LN	FLORENCE	AZ	85132	NULL	NULL	NULL
ODDONE KIMBERLY JANE	NULL	NULL	13226 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
TIPPETT RAYMOND KELLY	NULL	NULL	13227 E LARREA LN	FLORENCE	AZ	851327751	NULL	NULL	NULL
TOTTY RICK	NULL	NULL	13227 E LUPINE LN	FLORENCE	AZ	851327817	NULL	NULL	NULL
REYES GABRIEL & ANDREA PAJE	NULL	NULL	13227 E MARIGOLD LN	FLORENCE	AZ	851327813	NULL	NULL	NULL
SCHERER ISABEL NIOME & ROGER LAWRENCE	NULL	NULL	13227 E SUNFLOWER LN	FLORENCE	AZ	851327758	NULL	NULL	NULL
ANDERSON JAMES D JR & HIXON STACEY L TRS	STACEY & JAMES LIVING TRUST	NULL	13227 E TUMBLEWEED LN	FLORENCE	AZ	85132-7816	NULL	NULL	NULL
BAZAN GREGORIO JAMES & JONNIE LYNN	NULL	NULL	13229 E PRIMROSE LN	FLORENCE	AZ	851327804	NULL	NULL	NULL
DAHL ELLISON & CHERI L	NULL	NULL	1323 9TH AVE S	GRAND FORKS	ND	582014345	NULL	NULL	NULL
BIEGEL EDITH G	NULL	NULL	13230 E ASTER LN	FLORENCE	AZ	851323312	NULL	NULL	NULL
FLUCKIGER COLLEEN & DONALD	NULL	NULL	13230 E SUNFLOWER LN	FLORENCE	AZ	851327759	NULL	NULL	NULL
BARTELS BRANDON & AMY	NULL	NULL	13232 E CHUPAROSA LN	FLORENCE	AZ	851323305	NULL	NULL	NULL
SANCHEZ LORENZO ORTEGA	NULL	NULL	13235 E CHUPAROSA LN	FLORENCE	AZ	851323306	NULL	NULL	NULL
GRIFFIN ALLEN	NULL	NULL	13237 E ASTER LN	FLORENCE	AZ	851323311	NULL	NULL	NULL
WILLIAMS DARROLL G	NULL	NULL	13240 E LARREA LN	FLORENCE	AZ	851327754	NULL	NULL	NULL
ROWLAND OCIE CHRISTOPHER	NULL	NULL	13240 E LUPINE LN	FLORENCE	AZ	851327818	NULL	NULL	NULL
PATO JOSEPH ABEL & DIAZ YESENIA TORRES	NULL	NULL	13240 E MARIGOLD LN	FLORENCE	AZ	851327812	NULL	NULL	NULL
SOBASZKIEWICZ MELISSA ELIZABETH	NULL	NULL	13240 E PRIMROSE LN	FLORENCE	AZ	851327802	NULL	NULL	NULL
JOSEPHS DAVID A	NULL	NULL	13240 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
RUTH CHRISTOPHER	NULL	NULL	13241 E LUPINE LN	FLORENCE	AZ	851327817	NULL	NULL	NULL
CRUZ BLANCA ARACELY RODRIGUEZ	NULL	NULL	13241 E SUNFLOWER LN	FLORENCE	AZ	851327758	NULL	NULL	NULL
BELISLE SKIPTON RENE & JULIE ANN	NULL	NULL	13241 E TUMBLEWEED LN	FLORENCE	AZ	851327816	NULL	NULL	NULL
BOUYSSOU JULIEN & CHARLOTTE	NULL	NULL	13242 E ASTER LN	FLORENCE	AZ	851323312	NULL	NULL	NULL
OCHOA FATIMA	NULL	NULL	13243 E PRIMROSE LN	FLORENCE	AZ	851327804	NULL	NULL	NULL
JACKSON DANIEL S	KEOHAVONG SAMANTHA A	NULL	13244 E SUNFLOWER LN	FLORENCE	AZ	851327759	NULL	NULL	NULL
CURTIS TRAVIS & NATASHA	NULL	NULL	13245 E JUDD RD	FLORENCE	AZ	851328581	NULL	NULL	NULL
GALINDO ROSA IS	NULL	NULL	13245 E JUDD RD	FLORENCE	AZ	85132	NULL	NULL	NULL
MAGEO JOSHUA	NULL	NULL	13249 E ASTER LN	FLORENCE	AZ	851323311	NULL	NULL	NULL
DUNCAN BRIAN JOSEPH	DUNCAN CRYSTAL DALENE	NULL	13254 E LARREA LN	FLORENCE	AZ	851327754	NULL	NULL	NULL
SNOW JAMES & KANDI	NULL	NULL	13254 E LUPINE LN	FLORENCE	AZ	851327818	NULL	NULL	NULL

RADU JOHN & MARGARETA	STANCU ALEXANDRA	NULL	13254 E MARIGOLD LN	FLORENCE	AZ	851327812	NULL	NULL	NULL
HOSCH CHRISTINA & ADAM	NULL	NULL	13254 E PRIMROSE LN	FLORENCE	AZ	851327802	NULL	NULL	NULL
HARVEY STEVE & RUTH-ANN	NULL	NULL	13254 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
AYON-MENDEZ CLAURISSA	NULL	NULL	13255 E LUPINE LN	FLORENCE	AZ	851327817	NULL	NULL	NULL
JORDAN DEBRA	NULL	NULL	13255 E MARIGOLD LN	FLORENCE	AZ	85132-7813	NULL	NULL	NULL
CAMACHO STEPHEN PAUL	CAMACHO SARAH MARIE-STACEY	NULL	13255 E SUNFLOWER LN	FLORENCE	AZ	851327758	NULL	NULL	NULL
PEREZ LAYDIA & RAFAEL M	NULL	NULL	13255 E TUMBLEWEED LN	FLORENCE	AZ	851327816	NULL	NULL	NULL
ROSENLOF MITCHELL	NULL	NULL	13256 E ASTER LN	FLORENCE	AZ	851323312	NULL	NULL	NULL
BROSCHART BRITTON & JACEE NISCHAN	NULL	NULL	13257 E PRIMROSE LN	FLORENCE	AZ	851327804	NULL	NULL	NULL
BENALLY DAMETRI R & TIARA A	NULL	NULL	13258 E SUNFLOWER LN	FLORENCE	AZ	851327759	NULL	NULL	NULL
CASTILLO JESUS FRANCISCO CHAVEZ	NULL	NULL	13261 E ASTER LN	FLORENCE	AZ	851323311	NULL	NULL	NULL
RICO ELONIE SHAWN	RICO LISA	NULL	13268 E LARREA LN	FLORENCE	AZ	851327754	NULL	NULL	NULL
SMITH ALEX J	NULL	NULL	13268 E LUPINE LN	FLORENCE	AZ	851327818	NULL	NULL	NULL
SAMANIEGO HERLINDA	NULL	NULL	13268 E PRIMROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
RAYMOND COLE WILLIAM & MACEY MARTIN	NULL	NULL	13269 E SUNFLOWER LN	FLORENCE	AZ	851327758	NULL	NULL	NULL
TRIGUEROS CARLOS & TIFFANI	NULL	NULL	13272 E ASTER LN	FLORENCE	AZ	851323312	NULL	NULL	NULL
BARNHILL SHANNA	NULL	NULL	13273 E PRIMROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
HANSEN SAMANTHA CLAIRE & JEFFERY SCOTT	NULL	NULL	13282 E LARREA LN	FLORENCE	AZ	851327754	NULL	NULL	NULL
EISELE STEVEN A	NULL	NULL	13282 E LUPINE LN	FLORENCE	AZ	851327818	NULL	NULL	NULL
ROBINS AMANDA & JASON	NULL	NULL	13282 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
ROBERTSON MICHAEL & STEPHANIE	NULL	NULL	13283 E LARREA LN	FLORENCE	AZ	851327751	NULL	NULL	NULL
FORTENBERRY MARKUS & WALKER AKEELA	RAMEY RENEE	NULL	13283 E LUPINE LN	FLORENCE	AZ	85132-7817	NULL	NULL	NULL
GARCIADELARA TAELAR & JOSE	NULL	NULL	13283 E MARIGOLD LN	FLORENCE	AZ	851327813	NULL	NULL	NULL
RAMIREZ MANUEL	NULL	NULL	13283 E SUNFLOWER LN	FLORENCE	AZ	851327758	NULL	NULL	NULL
MAYNE JOSHUA PAUL	NULL	NULL	13283 E TUMBLEWEED LN	FLORENCE	AZ	851327816	NULL	NULL	NULL
ONTIVEROS YARELLI	ONTIVEROS ALEJANDRA	NULL	13286 E SUNFLOWER LN	FLORENCE	AZ	851327759	NULL	NULL	NULL
GALLEGOS DAVID	NULL	NULL	13287 E PRIMROSE LN	FLORENCE	AZ	85132-7804	NULL	NULL	NULL
FAIRBANKS RHIANNON RAE	NULL	NULL	13296 E LARREA LN	FLORENCE	AZ	851327754	NULL	NULL	NULL
MIRANDA ROBERTO M VARGAS	NULL	NULL	13296 E LUPINE LN	FLORENCE	AZ	851327818	NULL	NULL	NULL
LOPEZ AGUSTIN & DESTINEE	NULL	NULL	13296 E MARIGOLD LN	FLORENCE	AZ	851327812	NULL	NULL	NULL
TRENIER CYNTHIA G	NULL	NULL	13296 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
BERNINGER CHRISTOPHER THOMAS	NULL	NULL	13297 E LARREA LN	FLORENCE	AZ	851327751	NULL	NULL	NULL
BRIGGS AMBER	NULL	NULL	13297 E LUPINE LN	FLORENCE	AZ	851327817	NULL	NULL	NULL
COON JESSE DEAN	COON SHAYE NICOLE-STEWART	NULL	13297 E SUNFLOWER LN	FLORENCE	AZ	851327758	NULL	NULL	NULL
WALKER NORMAN E & JEANNETTE L	NULL	NULL	13297 E TUMBLEWEED LN	FLORENCE	AZ	851327816	NULL	NULL	NULL
HIDALGO MIRANDA MARIE & SALAS JOHN MATTHEW	HIDALGO MADYSON MARGARET & SALAS ELIZABETH	NULL	13300 E SUNFLOWER LN	FLORENCE	AZ	851327762	NULL	NULL	NULL
WALKER JACKSON GREGORY	WALKER SHELBY LYNN	NULL	13310 E LARREA LN	FLORENCE	AZ	851327753	NULL	NULL	NULL
SCHMITZ ADAM DAVID & REBECCA	NULL	NULL	13310 E LUPINE LN	FLORENCE	AZ	851327819	NULL	NULL	NULL
BRICKMAN GENE & MARGARET	NULL	NULL	13310 E MARIGOLD LN	FLORENCE	AZ	851327812	NULL	NULL	NULL
CECIL GEORGE & & HALBERT CHERYL	NULL	NULL	13310 E TUMBLEWEED LN	FLORENCE	AZ	851327814	NULL	NULL	NULL
ANDRADE JACOB ANTHONY	ANDRADE GABRIEL EMMANUEL	NULL	13311 E LARREA LN	FLORENCE	AZ	851327752	NULL	NULL	NULL
BOWDISH ZAYNE A	SIMON KRISTIN R	NULL	13311 E LUPINE LN	FLORENCE	AZ	851327817	NULL	NULL	NULL
GYLES AMY	NULL	NULL	13311 E MARIGOLD LN	FLORENCE	AZ	851327813	NULL	NULL	NULL
FLORES ADRIAN	NULL	NULL	13311 E SUNFLOWER LN	FLORENCE	AZ	851327761	NULL	NULL	NULL
TAH MS BORROWER LLC	NULL	NULL	13315 E PRIMROSE LN	FLORENCE	AZ	85132	NULL	NULL	NULL
WELL MORGAN L	BALLEY-BONNER CAMERON A	NULL	13330 E SUNFLOWER LN	FLORENCE	AZ	851327762	NULL	NULL	NULL
NEYLON DAVID W & EVA I	NULL	NULL	13333 E PRIMROSE LN	FLORENCE	AZ	851327805	NULL	NULL	NULL
MAGMA RANCH III-PHOENIX LLC	NULL	NULL	1350 AVENUE OF THE AMERICAS STE 1600	NEW YORK	NY	100194702	NULL	NULL	NULL
CHEN HUANYU	NULL	NULL	1355 N ALISON WAY	CHANDLER	AZ	85226	NULL	NULL	NULL
NAVA DAMIAN TRUST	NULL	NULL	14 FRESA PL	SALINAS	CA	939053701	NULL	NULL	NULL
LISKA KRISTAL D & JACOB S	NULL	NULL	14066 GLACIER HWY	JUNEAU	AK	998018430	NULL	NULL	NULL
PRESUNKA PETER & CAROL TRS	PRESUNKA FAM TRUST	NULL	1410 EL SOLYO AVE	CAMPBELL	CA	950083310	NULL	NULL	NULL
DEMIRJIAN ARAM HAIGAZOUN	NULL	NULL	1413 BIRCH ST	MONTEBELLO	CA	906406404	NULL	NULL	NULL
COOPER MARK & SUSAN	NULL	NULL	1422 PINE ST	SILVERTON	OR	973811349	NULL	NULL	NULL
MAYNARD WILLIAM C	NULL	NULL	14294 WATERSEDGE TRL	PRIOR LAKE	MN	55312	NULL	NULL	NULL
RANCH 160 LLC	NULL	NULL	14425 N 7TH ST 101	PHOENIX	AZ	85022	NULL	NULL	NULL
BRENTON CRAIG CAREY & CINDY LEE	NULL	NULL	14435 NE VALLEY VIEW LN	BATTLE GROUND	WA	986047870	NULL	NULL	NULL
MCHENRY DAVID J FAM TR	NULL	NULL	1450 E INDIAN SCHOOL RD STE 104	PHOENIX	AZ	850144954	NULL	NULL	NULL
BIRD CHRISTINE J TRUST	NULL	NULL	150 W MONTE VISTA DR	QUEEN VALLEY	AZ	851189772	NULL	NULL	NULL
MCKELVIE CHANCE	NULL	NULL	15006 N 40TH LN	PHOENIX	AZ	850534512	NULL	NULL	NULL
BRIGHTLAND HOMES OF ARIZONA LLC	NULL	NULL	1501 W FOUNTAINHEAD PKWY STE 150	TEMPE	AZ	852821897	NULL	NULL	NULL
VAN RYSWYK DENNIS & PATRICIA	NULL	NULL	15018 SCOTCH RIDGE RD	CARLISLE	IA	500473135	NULL	NULL	NULL
SMITH TRAVIS W & LINDA J JOINT LIV TRUST	NULL	NULL	15102 WINGHEART	SAN ANTONIO	TX	782535517	NULL	NULL	NULL
MCKENNA JOSEPH & ANGELA	NULL	NULL	1515 640TH ST	STORM LAKE	IA	505887479		NULL	NULL
BOHANNON AUSTIN	NULL	NULL	1530 E MEGAN ST	GILBERT	AZ	85295	NULL	NULL	NULL
BLUE TUMBLEWEED LLC	NULL	NULL	15308 S 230TH PL	MESA	AZ	852128304	NULL	NULL	NULL
DARLING BERNARD & IRENE FAMILY TRUST	NULL	NULL	1533 ALLESANDRO ST	LOS ANGELES	CA	900262402	NULL	NULL	NULL
MCMICKEN JASON & NORDHAUSEN DIANA LYNN	DERRINGTON MARILYN JOYCE	NULL	15334 W ELM ST	GOODYEAR	AZ	853957728	NULL	NULL	NULL
RODMAN ROBERT G & CONNIE A	NULL	NULL	1546 WOODRIDGE LN	WEST FARGO	ND	580784032	NULL	NULL	NULL
BRODERSEN JANET	PETERSON MARK	NULL	1549 FAIR MEADOW LN	SOUTH SIOUX CITY	NE	687765409	NULL	NULL	NULL
YANEZ DAN ISAI AGUILAR	GUERRERO VIANNEY	NULL	1550 N STAPLEY DR UNIT 88	MESA	AZ	85203-3708	NULL	NULL	NULL
QUEEN VALLEY DOMESTIC WATER IMP DIST	NULL	NULL	1552 E QUEEN VALLEY DR	QUEEN VALLEY	AZ	85118	NULL	NULL	NULL
WATKO LUKE DANIEL	WATKO DANIEL JAMES & CLARA N	NULL	15561 AMBIANCE DR	NORTH POTOMAC	MD	208782355	NULL	NULL	NULL
MOREX PROPERTY MANAGEMENT LLC	NULL	NULL	15563 E US HIGHWAY 60	APACHE JUNCTION	AZ	851187410	NULL	NULL	NULL
TOMPKINS NORVALE & DONNA LIVING TRUST	NULL	NULL	15689 E 60 HWY	APACHE JUNCTION	AZ	85118	NULL	NULL	NULL
L H (LES) JAMES 2002 FAMILY TRUST	C/O TOMPKINS NORVALE	NULL	15689 E HWY 60	APACHE JUNCTION	AZ	85118	NULL	NULL	NULL
TOMPKINS FAMILY LIVING TRUST	NULL	NULL	15689 E HWY 60	APACHE JUNCTION	AZ	85118	NULL	NULL	NULL
TOMPKINS NORVALE R TRS	NULL	NULL	15689 E HWY 60	APACHE JUNCTION	AZ	85119	NULL	NULL	NULL
TOMPKINS FAMILY TRUST	C/O NORVALE R & DONNA M TOMPKINS	NULL	15689 E US HWY 60	APACHE JUNCTION	AZ	85118	NULL	NULL	NULL
APACHE JUNCTION UNIFIED SCHOOL DIST	C/O GROSVENOR HOLDINGS LC	NULL	1575 W SOUTHERN AVE #1	APACHE JUNCTION	AZ	851207456	NULL	NULL	NULL
LEWIS ERMA JEAN TRS	LEWIS FAM LIV TRUST	NULL	15775 E US HIGHWAY 60	APACHE JUNCTION	AZ	851189792	NULL	NULL	NULL
DHL FAMILY LLLP	NULL	NULL	160 40TH AVE SE	BENSON	MN	56215	NULL	NULL	NULL
CASTILLO FEDERICO R & JOCELYN A	NULL	NULL	160 N SILVER KING CT	QUEEN VALLEY	AZ	851189728	NULL	NULL	USA
ENTRADA DEL ORO COMMUNITY ASSOCIATION	C/O ASSOCIATED ASSET MANAGEMENT	NULL	1600 W BROADWAY RD STE 200	TEMPE	AZ	852821134	NULL	NULL	NULL
MAGMA RANCH II HOA	NULL	NULL	1600 W BROADWAY RD STE 200	TEMPE	AZ	852821136	NULL	NULL	NULL
SKOGEBO FAMILY LLC	NULL	C/O JULIE S TYLER & DAVID P SKOGEBO	1606 E ELMWOOD ST	MESA	AZ	852035811	NULL	NULL	NULL
AVILA ESTEBAN GARCIA TRUST	NULL	NULL	162 E PATTON AVE	COOLIDGE	AZ	851283756	NULL	NULL	NULL
WOOD ROBERT CHARLES	WOOD ESTHER RUTH	NULL	1620 W SOUTHERN AVE APT 42	MESA	AZ	852024859	NULL	NULL	NULL
SWENSON DEAN W & PAULA M	NULL	NULL	16385 COUNTY ROAD 2	WALCOTT	ND	580779586	NULL	NULL	NULL
MCCLASKEY KENDRA & KANE	NULL	NULL	1640 STACEY LN	RAMONA	CA	920653500	NULL	NULL	NULL
RICHMOND AMERICAN HOMES OF ARIZONA INC	NULL	NULL	16427 N SCOTTSDALE RD STE 300	SCOTTSDALE	AZ	852541597	NULL	NULL	NULL
FIDELITY NATIONAL TITLE AGENCY INC TRUST NO 60526	NULL	NULL	16427 N SCOTTSDALE RD, STE 300	SCOTTSDALE	AZ	852541597	NULL	NULL	NULL
EATON INVESTMENTS LLC	NULL	NULL	1647 E IVYGLEN ST	MESA	AZ	85203-2834	NULL	NULL	NULL
RICHINS KRISTEEN A	NULL	NULL	16526 E FAIRVIEW ST	GILBERT	AZ	852952015	NULL	NULL	NULL
STATE NON-NC/NON-WA PROPERTY OWNER LLC	NULL	C/O LENNAR ARIZONA LLC	1665 W ALAMEDA DR #130	TEMPE	AZ	85282-3221	NULL	NULL	NULL
LENNAR ARIZONA INC	NULL	NULL	1665 W ALAMEDA DR STE 130	TEMPE	AZ	852823221	NULL	NULL	NULL
SUORSA HELEN	NULL	NULL	1674 W VINEYARD PLAINS DR	QUEEN CREEK	AZ	851426375	NULL	NULL	NULL
BROST KENNETH R & CAROL A	NULL	NULL	1675 E 200 N	ANGOLA	IN	467038271	NULL	NULL	NULL
AUNGER BRUCE W & PENELOPE A	NULL	NULL	17 11442 BEST ST	MAPLE RIDGE	NULL	NULL	BC	V2X 7C7	CANADA
DESERT WELLS LLC	C/O HANKINS JAMES	NULL	170 W CULLUMBER AVE APT 1059	GILBERT	AZ	852334908	NULL	NULL	NULL
MACGAVINS DEV LLC	NULL	NULL	1703 N THORNTON RD	CASA GRANDE	AZ	851227805	NULL	NULL	NULL
DEBOW ROBERT EDWARD JR & ELAINE WANDA	NULL	NULL	1704 W RUNNING DEER DR	QUEEN VALLEY	AZ	851189056	NULL	NULL	USA
KHAMIS ALBERT	NULL	NULL	1712 S LEMON	MESA	AZ	85206	NULL	NULL	NULL
LIU LEI	NULL	NULL	17-2-602 KAILI TIANXIANG	JIAYUAN CHANGJIANG TIANJIN	NULL	NULL	NULL	NULL	CHINA
MAGMA RANCH HOME OWNERS ASSOCIATION, INC	NULL	NULL	17319 SAN PEDRO AVE STE 318	SAN ANTONIO	TX	782321443	NULL	NULL	NULL
SLUSAR JON S & ILENE D	NULL	NULL	17423 380TH AVE NW	WARREN	MN	567629048	NULL	NULL	NULL
CHAN LIONEL & ALICE	NULL	NULL	1743 30TH AVE	SAN FRANCISCO	CA	941224201	NULL	NULL	NULL
DUNN KATHLEEN F LIV TRUST	DUNN KENNETH C (EST)	NULL	17631 71ST AVE	TINLEY PARK	IL	604773817	NULL	NULL	NULL
WHITCOMB RONALD & ELAINE	NULL	NULL	1768 W WOODBURY RD	HARDWICK	VT	58439426	NULL	NULL	NULL
VAEILA SINAVAIMOA	NULL	NULL	1774 E OMEGA DR	SAN TAN VALLEY	AZ	851434440	NULL	NULL	USA
COWAN MICHAEL B & SHIRLEY E LIVING TRUST	NULL	NULL	17844 E PACANA CT	GOLD CANYON	AZ	851187511	NULL	NULL	NULL
ANDERS MARY ELLEN & ROBERT	NULL	NULL	17850 E JOVEN CT	GOLD CANYON	AZ	851187522	NULL	NULL	NULL
CUNNINGHAM DENNIS R & BARBARA J	NULL	NULL	17854 E FELLIPE CT	GOLD CANYON	AZ	851187506	NULL	NULL	NULL
FAJARDO JAMES	NULL	NULL	17855 E PACANA CT	GOLD CANYON	AZ	851187511	NULL	NULL	NULL
HAMMER MARY P REV TRUST	NULL	NULL	17855 E REPOSA CT	GOLD CANYON	AZ	851187513	NULL	NULL	NULL
OLSEN GARY L REV TRUST	NULL	NULL	17868 E PACANA CT	GOLD CANYON	AZ	851187511	NULL	NULL	NULL
STANEK MITCHELL A & CHRISTA J	NULL	NULL	17874 E JOVEN CT	GOLD CANYON	AZ	851187522	NULL	NULL	NULL
CURRY TINA	NULL	NULL	17876 E FELLIPE CT	GOLD CANYON	AZ	851187506	NULL	NULL	NULL
FISHER DEBBIE A	NULL	NULL	17879 E REPOSA CT	GOLD CANYON	AZ	851187513	NULL	NULL	NULL
LEGUS GLEN & SUZANNE	NULL	NULL	17885 E FELLIPE CT	GOLD CANYON	AZ	851187506	NULL	NULL	NULL
BRICKER JOHN & ANGELA	NULL	NULL	17892 E PACANA CT	GOLD CANYON	AZ	851187511	NULL	NULL	NULL
STRUBLE JAMES A REVOCABLE TRUST	NULL	NULL	17892 MUSKRAT RD	THREE RIVERS	MI	49093	NULL	NULL	NULL
LISHNER JULIE C & THOMAS M	NULL	NULL	17898 E FELLIPE CT	GOLD CANYON	AZ	851187506	NULL	NULL	NULL
STEWART RALPH W & ANGEAN	NULL	NULL	17898 E JOVEN CT	GOLD CANYON	AZ	851187522	NULL	NULL	NULL
ELMQUIST ERIC G & JUANITA	NULL	NULL	17911 E JOVEN CT	GOLD CANYON	AZ	851187522	NULL	NULL	NULL
WEIDNER DENNIS D & JANET TRUST	NULL	NULL	17916 E PACANA CT	GOLD CANYON	AZ	85118	NULL	NULL	NULL
ROTTER REBECCA D & JONATHAN G	NULL	NULL	17920 E FELLIPE CT	GOLD CANYON	AZ	851187506	NULL	NULL	NULL
RIPPY RICHARD RHEA & SUSAN EMILY	NULL	NULL	17921 E PACANA CT	GOLD CANYON	AZ	851187511	NULL	NULL	NULL
DARLING JOHN A & JANE A REV TRUST	NULL	NULL	17922 E JOVEN CT	GOLD CANYON	AZ	851187522	NULL	NULL	NULL
ESPESETH CRAIG A & LYNETTE M	NULL	NULL	17925 E FELLIPE CT	GOLD CANYON	AZ	851187506	NULL	NULL	NULL
THURMOND MICHAEL S	THURMOND MELISSA D	NULL	17927 E REPOSA CT	GOLD CANYON	AZ	851187513	NULL	NULL	NULL
KOHLENBERG STEVEN C & SHIRLEY J FAMILY LIVING TRUST	NULL	NULL	17933 E JOVEN CT	GOLD CANYON	AZ	851187522	NULL	NULL	NULL
BROWN GERALD G & KATHERINE	NULL	NULL	17940 E PACANA CT	GOLD CANYON	AZ	851187511	NULL	NULL	NULL
FLOYD JEFFREY D & MARGARITA I	NULL	NULL	17946 E JOVEN CT	GOLD CANYON	AZ	85118-7522	NULL	NULL	NULL
STEVENSON DAVE L & BECKIE D	NULL	NULL	17951 E REPOSA CT	GOLD CANYON	AZ	851187513	NULL	NULL	NULL
STOWERS ESTON L & DEBORAH SUE HANDY TRS	STOWERS FAMILY LIVING TRUST	NULL	17955 E JOVEN CT	GOLD CANYON	AZ	851187522	NULL	NULL	NULL
BECKER MARK W & WENDY A	NULL	NULL	17963 E PASEO DEL CANTO	GOLD CANYON	AZ	851187512	NULL	NULL	NULL
MORALES RICHARD A & JAIME M	NULL	NULL	17963 E VIA RUBIO	GOLD CANYON	AZ	851187500	NULL	NULL	NULL
SWANSON JAMES L	NULL	NULL	17970 E JOVEN CT	GOLD CANYON	AZ	85118-7522	NULL	NULL	NULL
VERTREES KEITH	NULL	NULL	17975 E REPOSA CT	GOLD CANYON	AZ	851187513	NULL	NULL	NULL
GINES CARLOS ENRIQUE FREYTES	NULL	NULL	17978 E PASEO DEL CANTO	GOLD CANYON	AZ	851187512	NULL	NULL	NULL
LAMORA NATHAN & KATELYN	NULL	NULL	17981 E PASEO DEL CANTO	GOLD CANYON	AZ	851187512	NULL	NULL	NULL
FELIX ADRIAN R & DENISE A	NULL	NULL	17983 E VIA RUBIO	GOLD CANYON	AZ	851187500	NULL	NULL	NULL
CABRERA DUBLAS PAUL & LUZ DEL CARMEN	NULL	NULL	17986 E VIA RUBIO	GOLD CANYON	AZ	85118	NULL	NULL	NULL
ANDREYKA GAIL R	NULL	NULL	17998 E PASEO DEL CANTO	GOLD CANYON	AZ	851187512	NULL	NULL	NULL
MEADOWS JAMES P & OLGA M	NULL	NULL	17999 E PASEO DEL CANTO	GOLD CANYON	AZ	851187512	NULL	NULL	NULL
ENGELHART HARRY C	ELKINS DARBI J	NULL	18001 E SAN LUIS DR	GOLD CANYON	AZ	851187534	NULL	NULL	NULL
DEKKER LAURA J	NULL	NULL	18003 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
ROGERS RICK A	GOUVEIA SUSANA M	NULL	18003 E VIA RUBIO	GOLD CANYON	AZ	851187537	NULL	NULL	NULL
AVALOS LEONARD & BARBARA	NULL	NULL	18006 E VIA RUBIO	GOLD CANYON	AZ	851187523	NULL	NULL	NULL

COTTEW GERALD B & JOSEPHINE	NULL	NULL	1801 12TH AVE NW	BACKUS	MN	564352133	NULL	NULL	NULL
PAGE KIMBERLY ANN & DAVID W	NULL	NULL	18010 E SAN LUIS DR	GOLD CANYON	AZ	851187535	NULL	NULL	NULL
OSBAKKEN KATHI J TRUST	NULL	NULL	18010 E VIA MARGARITA	GOLD CANYON	AZ	851187519	NULL	NULL	NULL
BROWN JASON	NULL	NULL	18011 E VIA MARGARITA	GOLD CANYON	AZ	85118	NULL	NULL	NULL
BUECHLER BRENDA J	NULL	NULL	18017 E PASEO DEL CANTO	GOLD CANYON	AZ	851187512	NULL	NULL	NULL
NELSON WARREN B & GRETCHEN S	NULL	NULL	18018 E PASEO DEL CANTO	GOLD CANYON	AZ	851187512	NULL	NULL	NULL
WOOD MARK A & MARY ELLEN	NULL	NULL	18019 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
GREGORY DARRELL B & LINDA A TRS	NULL	NULL	18021 E SAN LUIS DR	GOLD CANYON	AZ	851187534	NULL	NULL	NULL
SCHOENICK DEB A & ROBERT L	NULL	NULL	18023 E VIA RUBIO	GOLD CANYON	AZ	851187537	NULL	NULL	NULL
BREWER SHANDA	NULL	NULL	18026 E VIA RUBIO	GOLD CANYON	AZ	851187523	NULL	NULL	NULL
ORTIZ ROBERT M & SAMANTHA H	NULL	NULL	18028 E VIA MARGARITA	GOLD CANYON	AZ	851187519	NULL	NULL	NULL
SAWYER RAYMOND & REBECCA TRUST	NULL	NULL	18029 E VIA MARGARITA	GOLD CANYON	AZ	851187519	NULL	NULL	NULL
CANALE CRAIG & JENNIFER	NULL	NULL	18035 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
GAHN MICHAEL WILLIAM & MARLYS MARIE	NULL	NULL	18041 E SAN LUIS DR	GOLD CANYON	AZ	851187534	NULL	NULL	NULL
VASQUEZ ALFREDO	NULL	NULL	18043 E VIA RUBIO	GOLD CANYON	AZ	85118	NULL	NULL	NULL
MAZER DEBORAH S	NULL	NULL	18046 E VIA MARGARITA	GOLD CANYON	AZ	851187519	NULL	NULL	NULL
BENDER GERALD W & DORIS J TRS	NULL	NULL	18046 E VIA RUBIO	GOLD CANYON	AZ	851187523	NULL	NULL	NULL
TASCOFF EDWARD JAMES	NULL	NULL	18047 E VIA MARGARITA	GOLD CANYON	AZ	851187519	NULL	NULL	NULL
FERGASON ELIJAH AARON	NULL	NULL	18051 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
JOHANSSON PER ANDERS	NULL	NULL	18061 E SAN LUIS DR	GOLD CANYON	AZ	851187534	NULL	NULL	NULL
JOHNSON DENNIS NORMAN LIV TRS	NULL	NULL	18064 E VIA MARGARITA	GOLD CANYON	AZ	851187519	NULL	NULL	NULL
SAIGEON STEVEN EDWARD	NULL	NULL	18065 E VIA MARGARITA	GOLD CANYON	AZ	851187519	NULL	NULL	NULL
ACOSTA DEAVER A	NULL	NULL	18066 E VIA RUBIO	GOLD CANYON	AZ	851187523	NULL	NULL	NULL
MILLER CECIL R & JAMIE D	NULL	NULL	18067 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
MIKALACKI DRAGOMIR	MIKALACKI SLAVICA	NULL	1807 E MENLO ST	MESA	AZ	852031336	NULL	NULL	USA
BENNETT KORY JOHN & CHEMAIN LEA TRS	NULL	NULL	18070 E SAN LUIS DR	GOLD CANYON	AZ	851187535	NULL	NULL	NULL
NEWMAN RYAN P & JANNA M	NULL	NULL	18078 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
MACKENSTADT ROBERT & HEATHER	NULL	NULL	18081 E SAN LUIS DR	GOLD CANYON	AZ	851187534	NULL	NULL	NULL
ECKMAN CHRISTOPHER AARON	NULL	NULL	18082 E VIA MARGARITA	GOLD CANYON	AZ	851187519	NULL	NULL	NULL
NACUA JERRY & CONSTANCE MARIE LIV TRUST	NULL	NULL	18083 E LA POSADA CT	GOLD CANYON	AZ	85118-7507	NULL	NULL	NULL
CONLEE ROBERT G & JEANINE	NULL	NULL	18083 E VIA MARGARITA	GOLD CANYON	AZ	851187519	NULL	NULL	NULL
REYFF MICHAEL R JR & ROBYN MICHELLE	NULL	NULL	18085 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187504	NULL	NULL	NULL
GRAY RICK L & JODI P TRS	NULL	NULL	18086 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187532	NULL	NULL	NULL
STANLEY ETHAN & K'LYN	NULL	NULL	18086 E VIA RUBIO	GOLD CANYON	AZ	851187523	NULL	NULL	NULL
SIEBERT WAYNE & MARY	NULL	NULL	18089 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187530	NULL	NULL	NULL
VIERRA STEVE & DEBORAH	NULL	NULL	18090 E SAN LUIS DR	GOLD CANYON	AZ	851187535	NULL	NULL	NULL
GRIGGS JODY L & WEAVER PENNY A	NULL	NULL	18094 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
POLSON KENNETH GERALD & KIMBERLY ANN	NULL	NULL	18099 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
TUMILSON DAVID ROBERT JR & MISTY MARIE	NULL	NULL	18101 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187525	NULL	NULL	NULL
GECHT MARTIN & ELAINE	NULL	NULL	18101 E SAN LUIS DR	GOLD CANYON	AZ	851187516	NULL	NULL	NULL
PRICHARD MARCUS ETAL	NULL	NULL	18101 E VIA MARGARITA	GOLD CANYON	AZ	851187519	NULL	NULL	NULL
BERRYHILL JOSHUA & ALEXANDRA	NULL	NULL	18102 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187532	NULL	NULL	NULL
POTTER IRENE E	NULL	NULL	18105 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187530	NULL	NULL	NULL
HARVEY WILLIAM SCOTT	NULL	NULL	18106 E VIA RUBIO	GOLD CANYON	AZ	851187536	NULL	NULL	NULL
CHANDLER STEPHEN C & PATRICIA J	NULL	NULL	18110 E LA POSADA CRT	GOLD CANYON	AZ	85118	NULL	NULL	NULL
THURMAN HARRY D & GEORGIANNA	NULL	NULL	18110 E SAN LUIS DR	GOLD CANYON	AZ	851187516	NULL	NULL	NULL
JAMES KIM L & VERONICA	NULL	NULL	18115 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
BISCHOF KENNETH W	NULL	NULL	18117 E EL BUHO PEQUENO	GOLD CANYON	AZ	85118-7525	NULL	NULL	NULL
OLIVEIRA TIFFINY	NULL	NULL	18118 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187532	NULL	NULL	NULL
THOMAS RICHARD D & MARSHA A	NULL	NULL	18118 E VIA MARGARITA	GOLD CANYON	AZ	851187519	NULL	NULL	NULL
ERB SHANE	NULL	NULL	18119 E VIA MARGARITA	GOLD CANYON	AZ	851187519	NULL	NULL	NULL
WINTERSOLE NICOLE & JON	NULL	NULL	18121 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187530	NULL	NULL	NULL
CISSNA DAVID R ETAL	NULL	NULL	18121 E SAN LUIS DR	GOLD CANYON	AZ	851187516	NULL	NULL	NULL
TIRADO DAVID	NULL	NULL	18126 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
BUTLER PATRICK POWERS & CAROLYN JUNE REV LIV TRUST	NULL	NULL	18130 E SAN LUIS DR	GOLD CANYON	AZ	851187516	NULL	NULL	NULL
MEDINA ROBERT R	MEDINA DEBRA L	NULL	18131 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
NARDINI JOHN D & ELMA	NULL	NULL	18133 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187525	NULL	NULL	NULL
LINNELL JOHN	NULL	NULL	18134 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187532	NULL	NULL	NULL
PONCELET SCOTT R	NULL	NULL	18137 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187530	NULL	NULL	NULL
MCKAY WILLIAM R	MCKAY REBECCA C	NULL	18137 E VIA MARGARITA	GOLD CANYON	AZ	851187519	NULL	NULL	NULL
MILLER TERRY & MARY ELLEN	NULL	NULL	18142 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
STEINHOFF ROBERT P & ELLEN M TRS	NULL	NULL	18147 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
WURDEN EILEEN	VAN AUSDOLL DAVID	NULL	18149 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187525	NULL	NULL	NULL
OSBORN LONNE P II & ANNEMARIA H	NULL	NULL	18150 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187532	NULL	NULL	NULL
SLADE RASHAE & ARNOLD J JR	NULL	NULL	18151 E VIA JARDIN	GOLD CANYON	AZ	851187518	NULL	NULL	NULL
DAVID LORI D	HANLEY SHAWNA M	NULL	18153 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187530	NULL	NULL	NULL
VAN HOUTEN JAMES & DELIA	NULL	NULL	18154 E VIA MARGARITA	GOLD CANYON	AZ	851187519	NULL	NULL	NULL
TRIBLE LEE TIMOTHY	NULL	NULL	18158 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
SMITH JAMES & CHELSEA	NULL	NULL	18163 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
VON STRAUSSENBURG LAURIE A	NULL	NULL	18165 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187525	NULL	NULL	NULL
MILLER ROBERT ERNEST & ANNA MARIE	NULL	NULL	18166 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187532	NULL	NULL	NULL
VIETH THERESA & RONALD MARTIN SR	NULL	NULL	18169 E VIA JARDIN	GOLD CANYON	AZ	851187518	NULL	NULL	NULL
CUMMING SANDRA C & DAVID W	NULL	NULL	18172 E VIA MARGARITA	GOLD CANYON	AZ	851187519	NULL	NULL	NULL
KELLEY RYAN TAYLOR	BROOKS MADISON	NULL	18174 E LA POSADA CT	GOLD CANYON	AZ	85118-7507	NULL	NULL	NULL
STEIL TIA	NULL	NULL	18178 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187524	NULL	NULL	NULL
IEBELIAN BARBARA L	NULL	NULL	18179 E POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
BENNETT STANLEY & CAROLYN	LUJAN KATI ANN	NULL	18181 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187525	NULL	NULL	NULL
COUCHON TIFFANY LEE	PALLEJA AARON JOSEPH	NULL	18182 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187532	NULL	NULL	NULL
BAIRD DONALD J	NULL	NULL	18185 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187530	NULL	NULL	NULL
TESSNESS JAMIE STAIR	NULL	NULL	18187 E VIA JARDIN	GOLD CANYON	AZ	851187518	NULL	NULL	NULL
THE JEITO FOUNDATION	C/O CARDON WILFORD TR	NULL	1819 E SOUTHERN AVE STE B10	MESA	AZ	85204	NULL	NULL	NULL
BACCUS KRISTOPHER & CAROLINE	NULL	NULL	18190 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
KALLAS DONALD & FAYE LIV TRUST	NULL	NULL	18194 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187524	NULL	NULL	NULL
KIELSRUD CLIFFORD E & PATSY A TRS	NULL	NULL	18195 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
KERNS KENNETH A & TAHANA A TRS	NULL	NULL	18196 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
JAMISON AMELIA R TR	ARW LIV TRUST	NULL	18197 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187525	NULL	NULL	NULL
KNIGHT CHRISTOPHER D & CRYSTAL F TRS	KNIGHT FAM LIV TRUST	NULL	18198 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187532	NULL	NULL	NULL
BACKSTROM LARRY D ETAL	NULL	NULL	182 S POMEROY RD	QUEEN VALLEY	AZ	851189770	NULL	NULL	NULL
MOORE RICHARD L	MOORE MARY B	NULL	182 W MONTE VISTA DR	QUEEN VALLEY	AZ	851189772	NULL	NULL	USA
KLEEWEIN LOUIS J JR & LEOTA E TRS	NULL	NULL	1820 E PHILIP AVE	NORTH PLATTE	NE	691016600	NULL	NULL	NULL
BASSETT CORY L	BARTUCCI LORRETTA L	NULL	18201 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187531	NULL	NULL	NULL
REASONS TELENA SHEA & HAROLD JOSHUA	NULL	NULL	18206 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
CLASEMAN SHAUN & VAN COMPERNOLLE DIANE	NULL	NULL	18210 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187524	NULL	NULL	NULL
HIRMAN DONALD J TR	HIRMAN LIV TRUST	NULL	18211 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
LEISHMAN RICHARD	NULL	NULL	18213 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187525	NULL	NULL	NULL
TOVAR-TORRES EUSEBIO	TOVAR MARIA A	NULL	18214 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187533	NULL	NULL	NULL
DECKER DOUGLAS A SR	NULL	NULL	18217 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187531	NULL	NULL	NULL
ROCCO ARTHUR TORRES LIV TRUST	NULL	NULL	18226 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187524	NULL	NULL	NULL
LARSEN STEVE & TERRY	NULL	NULL	18227 E LA POSADA CT	GOLD CANYON	AZ	85118-7507	NULL	NULL	NULL
PARTYKA JOSEPH A JR & LINDA S REV TRUST	NULL	NULL	18228 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
MAIER MASON & MILLETT ALEXANNA	NULL	NULL	18229 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187525	NULL	NULL	NULL
ST JOHN KEVIN CHRISTOPHER & KIM ELIZABETH	NULL	NULL	18230 E EL VIEJO DESIERTO	GOLD CANYON	AZ	85118-7533	NULL	NULL	NULL
PLOENSE BART D	PLOENSE MARY R	NULL	18233 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
SHUCK MICHAEL A & ELISSA L	NULL	NULL	18233 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187531	NULL	NULL	NULL
OKAMOTO CHERYL L & HOWARD S	NULL	NULL	18238 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
CIGGIA CHARLES	NULL	NULL	18242 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187524	NULL	NULL	NULL
COTE JEFFREY U & MARY O LIV TRUST	NULL	NULL	18243 E LA POSADA CT	GOLD CANYON	AZ	85118-7507	NULL	NULL	NULL
ZAMORA ELIZABETH MCMAHON	MCMAHON ROBERT	NULL	18244 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
MAIN FAULENE K	NULL	NULL	18245 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187525	NULL	NULL	NULL
ACUNA DIANA	NULL	NULL	18246 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187533	NULL	NULL	NULL
ENGELMELER NICHOLAS	NULL	NULL	18249 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
RICHARDSON WESLEY	NULL	NULL	18249 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187531	NULL	NULL	NULL
FAZEKAS-SALYER BRADFORD S & CAROLYN J	NULL	NULL	18254 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
MARRS RICHARD STEPHENS & CAROL LYNN	NULL	NULL	18258 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187524	NULL	NULL	NULL
HANSON KIMBERLIE ANNE & DAVID LANCE	NULL	NULL	18261 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187525	NULL	NULL	NULL
WAGNER ERIC P & DIANA	NULL	NULL	18262 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187533	NULL	NULL	NULL
CORDER JOHN A & JANET A	NULL	NULL	18265 E EL VIEJO DESIERTO	GOLD CANYON	AZ	85118	NULL	NULL	NULL
HARVEY ETHAN S & KAELIE A	NULL	NULL	18265 E ELOISA DR	GOLD CANYON	AZ	851180830	NULL	NULL	NULL
MYERS WALTER & ROBIN FAM TRUST	NULL	NULL	18270 E LA POSADA CT	GOLD CANYON	AZ	85118-7507	NULL	NULL	NULL
MOLINA SARA M	NULL	NULL	18273 E ELOISA DR	GOLD CANYON	AZ	851180830	NULL	NULL	NULL
DANLEY SHEILA G & RANDY W	NULL	NULL	18274 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187524	NULL	NULL	NULL
ROBERTS LARRY G & JERRIE L	NULL	NULL	18275 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
DOLATSHAHI FARAMARAZ	NULL	NULL	18276 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
HATTENDORF TRACEY J	NULL	NULL	18276 E ELOISA DR	GOLD CANYON	AZ	851180829	NULL	NULL	NULL
SYKES PHILLIP P	SYKES JENNIFER J	NULL	18277 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187525	NULL	NULL	NULL
LERNER ADRIEL	MARSH NICOLE	NULL	18278 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187533	NULL	NULL	NULL
KERR BRYCE & KATRINA	NULL	NULL	18278 E SAN IGNACIO CT	GOLD CANYON	AZ	851187515	NULL	NULL	NULL
WHEATON WILLIAM J & KRISTINE	NULL	NULL	18281 E EL AMANCER	GOLD CANYON	AZ	85118-7521	NULL	NULL	NULL
GRAY MARCIA & LAWRENCE G	NULL	NULL	18281 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187531	NULL	NULL	NULL
MCCREERY AARON & MELANIE	NULL	NULL	18282 E LOS CORALES	GOLD CANYON	AZ	851187509	NULL	NULL	NULL
GEORGIOU JENNIFER & ANDREW	NULL	NULL	18286 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
MCKINNEY CHARLES R & AMY L	NULL	NULL	18290 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187524	NULL	NULL	NULL
SCHNEIDER FRITZ & MARY K	NULL	NULL	18290 E ELOISA DR	GOLD CANYON	AZ	851180829	NULL	NULL	NULL
PETERS DANIEL JM & ELIZABETH C	NULL	NULL	18291 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
FISCHER ELMER W & COLLEEN K CO-TRS	NULL	NULL	18292 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
EVANS JEFFREY D & SHIRLEY M	NULL	NULL	18293 E LOS CORALES	GOLD CANYON	AZ	851187509	NULL	NULL	NULL
PENNOCK STEVEN & CAROL	NULL	NULL	18294 E VIEJO DESIERTO	APACHE JUNCTION	AZ	851187533	NULL	NULL	NULL
SHAHEEN WILLIAM J LIV TRUST	NULL	NULL	18295 E SAN IGNACIO CT	GOLD CANYON	AZ	851187515	NULL	NULL	NULL
WIESE CONNIE	SEEVER CHRIS	NULL	18297 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
TORMAN DANNY K & DEBORA B	NULL	NULL	18297 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187531	NULL	NULL	NULL
BLAINE BRUCE L & JEANETTE M	NULL	NULL	1830 SEMINARY HILL RD	CENTRALIA	WA	985318928	NULL	NULL	NULL
CROPPER STEVEN M & DEBRA	NULL	NULL	18301 E EMILIA DR	GOLD CANYON	AZ	851180838	NULL	NULL	NULL
OCCHINO JAMES J & BONNIE A	NULL	NULL	18302 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
GODFREY TREVOR ERIC	ALDEN REBECCA G	NULL	18303 E ELOISA DR	GOLD CANYON	AZ	851180832	NULL	NULL	NULL
CASTEL COLE & MAKENNA	NULL	NULL	18304 E EMILIA DR	GOLD CANYON	AZ	851180837	NULL	NULL	NULL
BRODEUR MICHAEL JOHN & AMANDA M	NULL	NULL	18306 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187526	NULL	NULL	NULL
ALLEN JACOB & MELISSA	NULL	NULL	18306 E ELOISA DR	GOLD CANYON	AZ	851180831	NULL	NULL	NULL
ROUSH MARTIN MICHAEL & JEANNE MARIE CO-TRS	NULL	NULL	18307 E LA POSADA CT	GOLD CANYON	AZ	85118	NULL	NULL	NULL
PADILLA RONALD J	NULL	NULL	18308 E LOS CORALES	GOLD CANYON	AZ	851187509	NULL	NULL	NULL
KELLY THOMAS S & JOY E TRS	KELLY FAM TRUST	NULL	18309 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187527	NULL	NULL	NULL

CHRISTENSEN ROBERT	NULL	NULL	18311 E SAN IGNACIO CT	GOLD CANYON	AZ	851187515	NULL	NULL	NULL
NOGALES DARVINA	NULL	NULL	18313 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
ALLEN CHARLES H IV	NULL	NULL	18313 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187531	NULL	NULL	NULL
HEBERT DEXTER J & LOUISE M	NULL	NULL	18317 E EMILIA DR	GOLD CANYON	AZ	851180838	NULL	NULL	NULL
SKIDMORE LARRY JAMES & REBECCA RENE	NULL	NULL	18318 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
MONTANO MARIA G & VICTOR J	NULL	NULL	18320 E ELOISA DR	GOLD CANYON	AZ	851180831	NULL	NULL	NULL
DANIELS SHARLEEN MARIE & SHIELDS DYLAN GILBERT	NULL	NULL	18322 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187526	NULL	NULL	NULL
WOODS REGINA	NULL	NULL	18322 E EMILIA DR	GOLD CANYON	AZ	851180837	NULL	NULL	NULL
MATTINGLY MASE W ETAL	NULL	NULL	18324 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
BRIGHAM JEREMY & DANIELLE	NULL	NULL	18325 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187527	NULL	NULL	NULL
ZUFELT ANTHONY J	NULL	NULL	18325 E LOS CORALES	GOLD CANYON	AZ	851187509	NULL	NULL	NULL
THOMPSON LARRY & LESA LIV TRUST	NULL	NULL	18326 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187533	NULL	NULL	NULL
MOORE CHARLES KENNETH	NULL	NULL	18326 E SAN IGNACIO CT	GOLD CANYON	AZ	851187515	NULL	NULL	NULL
LAGROW JOHN C & JUDY A	NULL	NULL	18327 E SAN IGNACIO CT	GOLD CANYON	AZ	851187515	NULL	NULL	NULL
GREYEAGLE ANDREW TALYYN	NULL	NULL	18329 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
WHITESEL JAMES D & THERESA V	NULL	NULL	18329 E EL VIEJO DESIERTO	APACHE JUNCTION	AZ	851187531	NULL	NULL	NULL
WARNER JAMES A	SCHARDYN PRISCILLA	NULL	18333 E ELOISA DR	GOLD CANYON	AZ	851180832	NULL	NULL	NULL
KELLOGG MICHAEL J & DEBORAH	NULL	NULL	18333 E EMILIA DR	GOLD CANYON	AZ	851180838	NULL	NULL	NULL
ASHLEY JOHN II	NULL	NULL	18334 E LOS CORALES	GOLD CANYON	AZ	851187509	NULL	NULL	NULL
BARNUM MITCHELL HOWARD	SUMMERS ASHLEY J	NULL	18336 E DONATO DR	GOLD CANYON	AZ	851180842	NULL	NULL	NULL
BARRON GLADIS JANETT MAYORGA	CAMACHO JONATHAN RIGOBERTO TORRES	NULL	18337 E DONATO DR	GOLD CANYON	AZ	851180843	NULL	NULL	NULL
MULLIKIN RYAN & BRIANNA	NULL	NULL	18338 E ELOISA DR	GOLD CANYON	AZ	851180831	NULL	NULL	NULL
SETTECASE PAUL A & MICHELLE A	NULL	NULL	18338 E EMILIA DR	GOLD CANYON	AZ	851180837	NULL	NULL	NULL
D'ESPOSITO ANDREW	NULL	NULL	18340 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
COX BARBARA M	NULL	NULL	18341 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187527	NULL	NULL	NULL
PARTYKA DANIEL	NULL	NULL	18341 E LOS CORALES	GOLD CANYON	AZ	851187509	NULL	NULL	NULL
STELENE ROBERT D & CHRISTINA E	NULL	NULL	18342 E SAN IGNACIO CT	GOLD CANYON	AZ	851187515	NULL	NULL	NULL
GRAYBILL JIMMY R & SAUNDRA	NULL	NULL	18343 E SAN IGNACIO CT	GOLD CANYON	AZ	851187515	NULL	NULL	NULL
REBENSTORF RICHARD ALFRED & ABIGAIL	NULL	NULL	18345 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
NEEDHAM DONNIE RAY & DARLENE S TRS;	NEEDHAM DONNIE FAMILY TRUST	NULL	18345 E EL VIEJO DESIERTO	GOLD CANYON	AZ	851187531	NULL	NULL	NULL
ROUSH KIRBY RYAN	VAUGHN CAITLIN ELISABETH	NULL	18347 E ELOISA DR	GOLD CANYON	AZ	851180832	NULL	NULL	NULL
DORPAT JAMESON	NULL	NULL	18347 E EMILIA DR	GOLD CANYON	AZ	851180838	NULL	NULL	NULL
WATSON STEPHEN R & CHERYL D	NULL	NULL	18351 E DONATO DR	GOLD CANYON	AZ	851180843	NULL	NULL	NULL
BULLARD BROOKE HARLI	DEWEY-BARWICK JARECK SALYERS	NULL	18354 E DONATO DR	GOLD CANYON	AZ	851180842	NULL	NULL	NULL
MAHONEY KEVIN DAVID & MELISSA ANN TRS	MAHONEY FAMILY TRUST	NULL	18354 E EL BUHO PEQUENO	GOLD CANYON	AZ	85118-7526	NULL	NULL	NULL
ROBB ERNEST E	NULL	NULL	18355 E LA POSADA CT	GOLD CANYON	AZ	851187507	NULL	NULL	NULL
DILLON MARY CATHERINE & DILLON DONNA PARKS	NULL	NULL	18356 E CAMILA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
ADAIR MIKEL D & PAGE R	NULL	NULL	18356 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
KABAT MICHAEL & LORETTA	NULL	NULL	18358 E SAN IGNACIO CT	GOLD CANYON	AZ	851187515	NULL	NULL	NULL
PUCKETT STEPHEN THOMAS & LAUREN PATRICIA	NULL	NULL	18360 E LOS CORALES	GOLD CANYON	AZ	851187509	NULL	NULL	NULL
SMITH LEE I	COLLINS MARK A	NULL	18363 E EMILIA DR	GOLD CANYON	AZ	851180838	NULL	NULL	NULL
ZIGGY LIV TRUST	BIASCOECHEA GUILLERMO E III & MONICA JEAN	NULL	18366 E ELOISA DR	GOLD CANYON	AZ	851180831	NULL	NULL	NULL
HOFFMAN TODD D & MIRANDI L	NULL	NULL	18367 E CAMILA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
SMITH KAREN A & PINA DALLAS EMERSON	NULL	NULL	18367 E DONATO DR	GOLD CANYON	AZ	851180843	NULL	NULL	NULL
CHAIREZ DAVID	NULL	NULL	18368 E CAMILA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
SELBY ARON J & HEATHER L	NULL	NULL	18370 E DONATO DR	GOLD CANYON	AZ	851180842	NULL	NULL	NULL
QUINTERO RAY V	RIVAS LISA R	NULL	18370 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187526	NULL	NULL	NULL
GONZALEZ OSCAR	NULL	NULL	18372 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
MORENO JOHNNY M	NULL	NULL	18373 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187528	NULL	NULL	NULL
PAGANINI PIETRO C & DAWNA E	NULL	NULL	18374 E SAN IGNACIO CT	GOLD CANYON	AZ	851187515	NULL	NULL	NULL
ELY THEODORE S JR & GRACIELA NICOLETTI	NULL	NULL	18374 E VERDE CT	GOLD CANYON	AZ	851187517	NULL	NULL	NULL
HERNANDEZ MICHELLE & GONZALEZ CARLOS GARCIA	NULL	NULL	18375 E ELOISA DR	GOLD CANYON	AZ	851180832	NULL	NULL	NULL
PATTON STEPHEN	MASON DEANNA	NULL	18379 E EMILIA DR	GOLD CANYON	AZ	851180838	NULL	NULL	NULL
SMITH NOAL SCOTT II & RACHEL	NULL	NULL	18381 E CAMILA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
METCALF GERALD & NANCY	NULL	NULL	18382 E AZUL CT	GOLD CANYON	AZ	851187501	NULL	NULL	NULL
HILL ROBERT WAYNE & TAMERA SUE	NULL	NULL	18384 E DONATO DR	GOLD CANYON	AZ	851180842	NULL	NULL	NULL
BERQUIST BRYAN C	NULL	NULL	18386 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187526	NULL	NULL	NULL
BOYER MATTHEW & ANGELA	NULL	NULL	18388 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
TAGLIERI SUSAN M & WILLIAM J	NULL	NULL	18389 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187528	NULL	NULL	NULL
ROBERTSON DAVID L & JUDY A	NULL	NULL	18389 E LOS CORALES	GOLD CANYON	AZ	851187509	NULL	NULL	NULL
NORRIS DAVID DOYLE	NORRIS JOY CHRISTINE	NULL	18390 E ANITA WAY	GOLD CANYON	AZ	85118	NULL	NULL	NULL
GRAHAM BARRY GLENN & PEGGY LOU	NULL	NULL	18390 E EMILIA DR	GOLD CANYON	AZ	851180837	NULL	NULL	NULL
DWIGHT NATALIE D	NULL	NULL	18390 E VERDE CT	GOLD CANYON	AZ	851187517	NULL	NULL	NULL
MISELIS JUDY C		NULL	18391 E AZUL CT	GOLD CANYON	AZ	851187501	NULL	NULL	NULL
EVERINGHAM MARILYN M	NULL	NULL	18391 E ELOISA DR	GOLD CANYON	AZ	851180832	NULL	NULL	NULL
HERRICK PAUL & SUSAN	NULL	NULL	18391 E SAN IGNACIO CT	GOLD CANYON	AZ	851187515	NULL	NULL	NULL
ARAS DENN ANGELO	NULL	NULL	18393 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
SHANE LARRY & MARIA	NULL	NULL	18395 E EMILIA DR	GOLD CANYON	AZ	851180838	NULL	NULL	NULL
MANIFOLD LISA M	NULL	NULL	18395 E VERDE CT	GOLD CANYON	AZ	851187517	NULL	NULL	NULL
MILBOURN WILLIAM	SYKES TAMARA JACQUELINE	NULL	18397 E CAMILA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
JUSKO ZENON & JOLANTA T	NULL	NULL	18398 E ELOISA DR	GOLD CANYON	AZ	851180831	NULL	NULL	NULL
GOOD KYLE DAVID	NULL	NULL	18399 E ANITA WAY	GOLD CANYON	AZ	85118	NULL	NULL	NULL
HOUSE TREVOR OWAIN	NULL	NULL	18400 E DONATO DR	GOLD CANYON	AZ	851180844	NULL	NULL	NULL
BOUCHER CAROLYN	HOUGHTON ADAM & BRENDA	NULL	18402 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187526	NULL	NULL	NULL
SUPLICK JOHN TRUST	NULL	NULL	18404 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
WHISENANT LAWRENCE D III & TANYA	NULL	NULL	18405 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187528	NULL	NULL	NULL
SPANGLER LINDA M	NULL	NULL	18406 E VERDE CT	GOLD CANYON	AZ	851187517	NULL	NULL	NULL
CAMMON DOYLE R & SANDRA K	NULL	NULL	18407 E ELOISA DR	GOLD CANYON	AZ	851180834	NULL	NULL	NULL
FRARY MERRY L	NULL	NULL	18407 E SAN IGNACIO CT	GOLD CANYON	AZ	851187515	NULL	NULL	NULL
GLOWACKI PATRICK STANLEY & DEBRA	NULL	NULL	18408 E EMILIA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
HUSSAIN TINA LOUISE & SHIEKH NABEEL	NULL	NULL	18409 E ANITA WAY	GOLD CANYON	AZ	85118	NULL	NULL	NULL
HERBERT JIM J	HERBERT BETH E	NULL	18409 E AZUL CT	GOLD CANYON	AZ	851187501	NULL	NULL	NULL
EVANS HARRISON PATRICK & FOSTER CHLOE ISABEL	NULL	NULL	18409 E DONATO DR	GOLD CANYON	AZ	851180845	NULL	NULL	NULL
HOPS CAMERON	NULL	NULL	18409 E EMILIA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
MCKAY GARY G LIV TRUST	NULL	NULL	18411 E VERDE CT	GOLD CANYON	AZ	851187517	NULL	NULL	NULL
CLARK MITCHELL A	NULL	NULL	18413 E CAMILA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
GUSTAFSON LORRAINE M	NULL	NULL	18414 E AZUL CT	GOLD CANYON	AZ	851187501	NULL	NULL	NULL
CORTES MARIA & MARTINEZ JESUS	NULL	NULL	18416 E DONATO DR	GOLD CANYON	AZ	851180844	NULL	NULL	NULL
LEHMAN PAIGE JACQUELINE & CORY ALLEN	NULL	NULL	18416 E ELOISA DR	GOLD CANYON	AZ	851180833	NULL	NULL	NULL
DENNIS ELAINE CAROL & MARVIN BRUCE REV LIV TRUST	NULL	NULL	18418 EL BUHO PEQUENO	GOLD CANYON	AZ	85118-7526	NULL	NULL	NULL
LOZA APRIL TRUST	NULL	NULL	18421 E EL BUHO PEQUENO	GOLD CANYON	AZ	85118-7528	NULL	NULL	NULL
MOLNAR JOSEPH A & PAMELA JO	NULL	NULL	18421 E ELOISA DR	GOLD CANYON	AZ	851180834	NULL	NULL	NULL
WEBER ANN MARIE & MARK A	NULL	NULL	18422 E EMILIA DR	GOLD CANYON	AZ	851180839	NULL	NULL	NULL
DWIGHT CURTIS D & DENISE H	NULL	NULL	18423 E SAN IGNACIO CT	GOLD CANYON	AZ	85118	NULL	NULL	NULL
OCHOA DAVID	NULL	NULL	18425 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
POPA HADRIAN & NOLL SARAH	NULL	NULL	18427 E AZUL CT	GOLD CANYON	AZ	851187501	NULL	NULL	NULL
CALLAHAN MICHAEL	NULL	NULL	18427 E VERDE CT	GOLD CANYON	AZ	85118	NULL	NULL	NULL
SALINAS ROBERT J & MELISSA L	NULL	NULL	18430 E ELOISA DR	GOLD CANYON	AZ	851180833	NULL	NULL	NULL
HEALY MATTHEW PAUL	NULL	NULL	18434 E CAMILA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
AUVINEN JONI JUSSI & LORRAINE C	NULL	NULL	18435 E ELOISA DR	GOLD CANYON	AZ	851180834	NULL	NULL	NULL
ROUSH CRISTI	NULL	NULL	18436 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
FACCIOLA TIMOTHY	CONLON COLLEEN ANNE	NULL	18437 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187528	NULL	NULL	NULL
HOLT LEONARD J & CONNIE J TRS	HOLT FAMILY TRUST	NULL	18438 E VERDE CT	GOLD CANYON	AZ	85118-7517	NULL	NULL	NULL
BREMER AMBER	NULL	NULL	18439 E EMILIA DR	GOLD CANYON	AZ	851180840	NULL	NULL	NULL
EDMONDS TYLER JOHN & QUOYA KEYANNA	NULL	NULL	18441 E DONATO DR	GOLD CANYON	AZ	851180845	NULL	NULL	NULL
MOORE ETHAN D	MOORE JOCELYNE ALEXA PARTIDA	NULL	18441 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
GOOCH ADAM & KATHERINE ALYCE	NULL	NULL	18442 E EMILIA DR	GOLD CANYON	AZ	851180839	NULL	NULL	NULL
TABER JAN L	NULL	NULL	18445 E AZUL CT	GOLD CANYON	AZ	851187501	NULL	NULL	NULL
HAMBLIN AUSTIN & ALYCIA	NULL	NULL	18445 E CAMILA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
MATTEI DAVID & INGE	NULL	NULL	18446 E AZUL CT	GOLD CANYON	AZ	851187501	NULL	NULL	NULL
CROZIER NATHAN & CROZIER ROSALEE M	NULL	NULL	18446 E DONATO DR	GOLD CANYON	AZ	851180844	NULL	NULL	NULL
MACIAS HUGO JR & CORRINA M	NULL	NULL	18446 E ELOISA DR	GOLD CANYON	AZ	851180833	NULL	NULL	NULL
TARDIFF WENDI L	NULL	NULL	18449 E ELOISA DR	GOLD CANYON	AZ	851180834	NULL	NULL	NULL
NEKVINDA PAUL JR & JUDY	NULL	NULL	18450 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187526	NULL	NULL	NULL
EDWARDS TILEA M	NULL	NULL	18453 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187528	NULL	NULL	NULL
VILLARD JAMES EARL	NULL	NULL	18454 E VERDE CT	GOLD CANYON	AZ	851187517	NULL	NULL	NULL
HARMON LAUREN E	NULL	NULL	18455 E DONATO DR	GOLD CANYON	AZ	851180845	NULL	NULL	NULL
BARSHAK MARK S & JANELLE R CO-TRS	BARSHAK FAM TRUST	NULL	18455 E EMILIA DR	GOLD CANYON	AZ	85118-0840	NULL	NULL	NULL
BRENNAN GERALD & JOHNSON ANGELA	NULL	NULL	18457 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
BELLINI CARRIE A	NULL	NULL	18458 E EMILIA DR	GOLD CANYON	AZ	851180839	NULL	NULL	NULL
WENGER DOUGLAS REV LIV TR	WENGER KAREN K REV TR	NULL	18459 E VERDE CT	GOLD CANYON	AZ	85118	NULL	NULL	NULL
WEISENBURGER TIMOTHY R	NULL	NULL	18460 E DONATO DR	GOLD CANYON	AZ	851180844	NULL	NULL	NULL
WRIGHT RYAN MICHAEL	WRIGHT ELISHA DENISE	NULL	18461 E CAMILA DR	GOLD CANYON	AZ	851180041	NULL	NULL	NULL
FORWARD TROY S	NULL	NULL	18462 E AZUL CT	GOLD CANYON	AZ	851187501	NULL	NULL	NULL
GRAY JOHN & KAIAH	NULL	NULL	18462 E ELOISA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
FRYE JUSTIN T & NICOLE L	NULL	NULL	18463 E AZUL CT	GOLD CANYON	AZ	851187501	NULL	NULL	NULL
PAGE ROLLAND & JOAN	NULL	NULL	18464 E CAMILA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
GREGORY BLAKE	NULL	NULL	18465 E ELOISA DR	GOLD CANYON	AZ	851180834	NULL	NULL	NULL
PALADINO ROBERT J & CINDY MARIE	NULL	NULL	18468 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
VERES MELISSA ANN	NULL	NULL	18469 E EL BUHO PEQUENO	GOLDEN VALLEY	AZ	85118-7528	NULL	NULL	NULL
TREANTAFELES NICHOLAS M	TREANTAFELES NICHOLAS D	NULL	18469 E EMILIA DR	GOLD CANYON	AZ	851180840	NULL	NULL	NULL
COX TYLER BEAU	NULL	NULL	18471 E DONATO DR	GOLD CANYON	AZ	851180845	NULL	NULL	NULL
AVERY GERALD C & VIRGINIA A CO-TRS	AVERY FAMILY LIV TRUST	NULL	18473 E EL AMANCER	GOLD CANYON	AZ	851187521	NULL	NULL	NULL
MILLER RHONDA	NULL	NULL	18474 E EMILIA DR	GOLD CANYON	AZ	851180839	NULL	NULL	NULL
SWEENEY MICHAEL E & BETTY M REV TRUST	NULL	NULL	18475 E VERDE CT	GOLD CANYON	AZ	851187517	NULL	NULL	NULL
BELASCO KATHRYN	NULL	NULL	18476 E DONATO DR	GOLD CANYON	AZ	851180844	NULL	NULL	NULL
HUBER RALPH J JR & MARILYN MARIE	NULL	NULL	18477 E CAMILA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
COUTTS ARTHUR COLLIE & MARIE	NULL	NULL	18478 E AZUL CT	GOLD CANYON	AZ	851187501	NULL	NULL	NULL
MCDONALD PHILIP LEE	KOSIER KANDICE RENE	NULL	18478 E ELOISA DR	GOLD CANYON	AZ	851180833	NULL	NULL	NULL
WIDDER JOHN A	ROBERTS SHELLEY	NULL	18479 E ELOISA DR	GOLD CANYON	AZ	851180834	NULL	NULL	NULL
HUMBARGER JANICE L & WILLIAM D	NULL	NULL	1848 W SCISSOR TAIL PL	QUEEN VALLEY	AZ	851187420	NULL	NULL	NULL
DAIGNEAULT JOSEPH & KATHY	NULL	NULL	18480 E CAMILA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
FREAM JAMES S & NELSON JULIE A	NULL	NULL	18481 E AZUL CT	GOLD CANYON	AZ	851187501	NULL	NULL	NULL
BISHOP JAMES M	BRAHMS BRITTANY NICOLE	NULL	18485 E DONATO DR	GOLD CANYON	AZ	851180845	NULL	NULL	NULL
SUTHERLAND CHRIS M & JULIE	NULL	NULL	18485 E EL BUHO PEQUENO	GOLD CANYON	AZ	851187528	NULL	NULL	NULL
TOWNSEND DANIELLE L	NULL	NULL	18485 E EMILIA DR	GOLD CANYON	AZ	851180840	NULL	NULL	NULL
BARNES DAVID H	NULL	NULL	18490 E EMILIA DR	GOLD CANYON	AZ	851180839	NULL	NULL	NULL
MATA MISTY DALE & HAYES GEOFFREY ALLEN	NULL	NULL	18491 E VERDE CT	GOLD CANYON	AZ	851187517	NULL	NULL	NULL
STECK KEATON J & KAELI M	NULL	NULL	18492 E DONATO DR	GOLD CANYON	AZ	851180844	NULL	NULL	NULL
BATES JAMES LEE IV	NULL	NULL	18494 E AZUL CT	GOLD CANYON	AZ	851187501	NULL	NULL	NULL

GARCIA-FONSECA JOSE MARIA D	NULL	NULL	18494 E ELOISA DR	GOLD CANYON	AZ	851180833	NULL	NULL	NULL
PARSHALL MICHAEL ANDREW	NULL	NULL	18498 E CAMILA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
MCDERMOTT JOSEPH T & MCDERMOTT EILEEN	NULL	NULL	18499 E EMILIA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
KLOHR JOHN & & CARMEN	NULL	NULL	18504 E EMILIA DR	GOLD CANYON	AZ	851180841	NULL	NULL	NULL
CAMPBELL BRIAN & TINA	NULL	NULL	18506 E DONATO DR	GOLD CANYON	AZ	851180846	NULL	NULL	NULL
NESHEIM ERIK & DEBORAH	NULL	NULL	18515 E DONATO DR	GOLD CANYON	AZ	851180847	NULL	NULL	NULL
HALL MARY LOUISE	NULL	NULL	18516 E CAMILA DR	GOLD CANYON	AZ	851180042	NULL	NULL	NULL
COLE HOLLY & JOHNNY JR	NULL	NULL	18525 E CAMILA DR	GOLD CANYON	AZ	851180043	NULL	NULL	NULL
FINAU MAKISI TATAFU	FINAU MIKAELE WILLIAM TATAFU	NULL	18532 E CAMILA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
FABERT JAY & KYRIE REV TRUST	NULL	NULL	18542 E EL AMANCER	GOLD CANYON	AZ	85118-7521	NULL	NULL	NULL
EDWARDS STEVE & SUSAN FAMILY TRUST	NULL	NULL	1855 W RUNNING DEER DR	QUEEN VALLEY	AZ	851189076	NULL	NULL	NULL
EDWARDS STEVE & SUSAN FAMILY TRUST	NULL	NULL	1855 W RUNNING DEER RD	QUEEN VALLEY	AZ	85118	NULL	NULL	NULL
ARROYO CAP II-2 LLC	NULL	NULL	18575 JAMBOREE RD STE 350	IRVINE	CA	926122551	NULL	NULL	NULL
PATTEN DANIEL J & CARINA C TRS	PATTEN FAMILY TRUST	NULL	1859 W SCISSOR TAIL PL	QUEEN VALLEY	AZ	851187420	NULL	NULL	NULL
LCT VENTURES SIX LLC	NULL	NULL	18716 E OLD BEAU TRL	QUEEN CREEK	AZ	85142	NULL	NULL	NULL
WALKER ROBERT N	WALKER ELOISA	NULL	1873 E PARKHURST CT	EAGLE	ID	836166803	NULL	NULL	NULL
VANCE DAVID B & VICTORIA G	NULL	NULL	1874 RIVERWALK PKWY	COLORADO SPRINGS	CO	809519763	NULL	NULL	NULL
MARYNIUK WAYNE ANDREW & TAMI MARLENE SUZANNE	NULL	NULL	18765 E BRUNO DR	GOLD CANYON	AZ	851180055	NULL	NULL	NULL
BACA JOSEPHINE S	NULL	NULL	18869 E MALENA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
HOYOS GERMAN ADRIAN & GINA MARIE	NULL	NULL	18879 E MALENA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
MEYER GREGORY PAUL & LISA ANN	NULL	NULL	18891 E MALENA DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
LINDEN KEITH M & SIEFFERMAN ALEXIS M	NULL	NULL	18899 E KENT PL	AURORA	CO	800133639	NULL	NULL	NULL
RODRIGUEZ DION MARIE & JUAN MANUEL	NULL	NULL	18901 E MALENA DR	GOLD CANYON	AZ	851180066	NULL	NULL	NULL
MUNROE KELANDRA MJ	NULL	NULL	18907 E BRUNO DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
MILLER DEREK CHRISTOPHER	BAUER JESSICA JOLIE	NULL	18911 E MALENA DR	GOLD CANYON	AZ	851180066	NULL	NULL	NULL
HOVERSON LYLE CLAYTON	HOVERSON DEBRA LAURINE	NULL	18923 E MALENA DR	GOLD CANYON	AZ	851180066	NULL	NULL	NULL
RUSSELL ERIKA EILEEN	NULL	NULL	18924 E BRUNO DR	GOLD CANYON	AZ	85118	NULL	NULL	NULL
SOLIE TRENTON & RITCHIE ALYSSA	NULL	NULL	1894 W SCISSOR TAIL PL	QUEEN VALLEY	AZ	851187420	NULL	NULL	NULL
SHULTZ JERRY D	NULL	NULL	1900 W RUNNING DEER DR	QUEEN VALLEY	AZ	851189015	NULL	NULL	NULL
RAMIREZ OSCAR	NULL	NULL	19011 E CHANDLER HEIGHTS RD	QUEEN CREEK	AZ	851424096	NULL	NULL	NULL
DELENE INVESTMENTS LP	NULL	NULL	1909 DICEY RD	WEATHERFORD	TX	760853607	NULL	NULL	NULL
HARTMAN JOHN K ETAL	NULL	NULL	19120 E CANARY WAY	QUEEN CREEK	AZ	851426856	NULL	NULL	NULL
SOWELL STEVEN R	NULL	NULL	1929 E LIBRA DR	TEMPE	AZ	85283	NULL	NULL	NULL
FARLEY EMMA	GRENIER JOHN	NULL	19346 E RAVEN DR	QUEEN CREEK	AZ	851428638	NULL	NULL	NULL
ELLIS ALYSSA	NULL	NULL	19412 E CLOUD RD	QUEEN CREEK	AZ	851429737	NULL	NULL	NULL
RAINWATER TROY DEAN & BARBARA JEAN TRS	RAINWATER LIV TRUST	NULL	1945 N BROAD ST	GLOBE	AZ	855019717	NULL	NULL	NULL
SMITH KENNETH W JR & NICOLE L	NULL	NULL	1945 W SCISSOR TAIL PL	QUEEN VALLEY	AZ	851187411	NULL	NULL	NULL
PAGAYA SMARTRESI F1 FUND PROPERTY OWNER II LLC	NULL	NULL	1950 E GREYHOUND PASS, STE 18-355	CARMEL	IN	460327787	NULL	NULL	NULL
CUMMING RON & VAL	NULL	NULL	2 FOX PLACE	BRANDON	NULL	NULL	MB	R7B 3H3	CANADA
CITY OF MESA	NULL	NULL	20 E MAIN ST STE 500	MESA	AZ	852017425	NULL	NULL	NULL
CHEN YEN-LI	NULL	NULL	200 S DOBSON RD	CHANDLER	AZ	852246129	NULL	NULL	NULL
CHRISTIANSON TREVOR & KAREN	NULL	NULL	200 SPRUCE LN	CAVALIER	ND	582204429	NULL	NULL	NULL
SECRETARY OF HOUSING & URBAN DEVELOPMENT	NULL	C/O INFORMATION SYSTEM NETWORKS	2000 N CLASSEN BLVD STE 3200	OKLAHOMA CITY	OK	731066034	NULL	NULL	NULL
CASTANEDA RAUL & ROSA MONTIEL	NULL	NULL	2000 W SUNSHINE BUTTE DR	SAN TAN VALLEY	AZ	851424791	NULL	NULL	NULL
GM GABRYCH FAMILY LTD PSHIP	NULL	NULL	2006 OLD US HIGHWAY 395	FALLBROOK	CA	920288816	NULL	NULL	USA
LUCAS VINCENT & KATHLEAN ANN	NULL	NULL	2006 W RUNNING DEER DR	QUEEN VALLEY	AZ	851189016	NULL	NULL	NULL
REDMAN ASHLEY DELORES	NULL	NULL	2013 E WILLOW WICK RD	GILBERT	AZ	852962747	NULL	NULL	NULL
RUPE MICHAEL J	RUPE DEIRDRE M	NULL	2015 HIGH NOON RD	ELKO	NV	898017940	NULL	NULL	NULL
BRIAN ROBERTS LLC	NULL	NULL	20161 N KLAMATH DR	MARICOPA	AZ	851392651	NULL	NULL	NULL
MOORE RANIE J	NULL	NULL	202 FOUNDERS ST	LAFAYETTE	LA	705087758	NULL	NULL	NULL
FISCHER FREDERIC F JR & LORI A	BOWERS PEGGY A & GREGORY A	NULL	20312 N 82ND LN	PEORIA	AZ	853825483	NULL	NULL	NULL
SIMON NICHOLAS P & LANGE JACKLYNN A	NULL	NULL	2038 W PENINSULA CIR	CHANDLER	AZ	852483523	NULL	NULL	NULL
LAKE ROBERT A ETAL	NULL	NULL	205 S PIEDRA NEGRA DR	QUEEN VALLEY	AZ	851189707	NULL	NULL	NULL
MASON DOUGLAS DEAN & MARY M *	NULL	NULL	2053 MARYANNE RD	SHOW LOW	AZ	859017425	NULL	NULL	NULL
BAYER DANIEL F	NULL	NULL	206 ALAMO CT	LONG BEACH	CA	908025016	NULL	NULL	NULL
FISCHER CURTIS R TRUST	NULL	NULL	20610 KAISER CIR	LAKEVILLE	MN	550446370	NULL	NULL	NULL
SMITH ROBERT MAC & PEGGY MARIE CO-TRS	SMITH REV TRUST	NULL	20890 W 1500 S	HOLBROOK	ID	832435140	NULL	NULL	NULL
PATTERSON DOUGLAS & ROCHELLE	NULL	NULL	20940 E ARROWHEAD TRL	QUEEN CREEK	AZ	851423794	NULL	NULL	NULL
RASKOVIC ALEXSANDAR	NULL	NULL	210 LILAC LN	BREA	CA	928237030	NULL	NULL	NULL
AANC HOLDING LLC	NULL	NULL	21168 E OCOTILLO RD # 1135	QUEEN CREEK	AZ	851426175	NULL	NULL	NULL
FARRINGTON RONALD & NANCY TRS	NULL	NULL	212 OAK TERRACE CT	LENA	IL	610488720	NULL	NULL	NULL
LIS INVESTMENTS AZ LLC	NULL	C/O SASSMAN LINDSEY	21260 E CAMACHO RD	QUEEN CREEK	AZ	851425487	NULL	NULL	NULL
SCHERER KAREN	NULL	NULL	213 W MORRIS DR	QUEEN VALLEY	AZ	85118-9784	NULL	NULL	NULL
DOYLE ANNE & JOSEPH	NULL	NULL	2137 W SCISSOR TAIL PL	QUEEN VALLEY	AZ	851189072	NULL	NULL	NULL
FINLEY PATRICK M & KAREN L	NULL	NULL	2141 W SCISSOR TAIL PL	GOLD CANYON	AZ	851189072	NULL	NULL	NULL
KORESCONI LLC	NULL	NULL	21424 E SUNSET DR	QUEEN CREEK	AZ	851425195	NULL	NULL	USA
OFFERPAD SPV BORROWER G LLC	NULL	NULL	2150 E GERMANN RD STE 1	CHANDLER	AZ	852861662	NULL	NULL	NULL
EDWARDS FAMILY TRUST	EDWARDS WAYNE C & VIRGINIA A COTRS	NULL	2165 E COCHISE AVE	APACHE JUNCTION	AZ	851196707	NULL	NULL	NULL
SCHMIDT FREDERICK E & BARBARA M	NULL	NULL	21698 WHIPPOORWILL RD	MISSOURI VALLEY	IA	515553026	NULL	NULL	NULL
RUYGROK ANDREA	NULL	NULL	2171 W RUNNING DEER DR	QUEEN VALLEY	AZ	851189017	NULL	NULL	NULL
BERKELEY PATRICIA	NULL	NULL	2173 W RUNNING DEER DR	QUEEN VALLEY	AZ	851189017	NULL	NULL	NULL
PEYMANN STEFANIE S	NULL	NULL	2185 W RUNNING DEER DR	QUEEN VALLEY	AZ	851189017	NULL	NULL	NULL
COOK STANLEY	NULL	NULL	219 S PIEDRA NEGRA DR	QUEEN VALLEY	AZ	85118-9707	NULL	NULL	NULL
SCHWIENEBART THOMAS	NULL	NULL	2190 W RIDGE VIEW LN	QUEEN VALLEY	AZ	85118	NULL	NULL	NULL
FOLLIS ALLEN J & SUSAN M	NULL	NULL	220 S 89TH AVE	YAKIMA	WA	989084525	NULL	NULL	NULL
WEST MONROE PROPERTY INC	NULL	NULL	2201 W DESERT COVE AVE	PHOENIX	AZ	85028	NULL	NULL	NULL
COX JOANNE H	NULL	NULL	2202 E 24TH ST N	SNOWFLAKE	AZ	859375655	NULL	NULL	NULL
MANCUSO MICHELLE	NULL	NULL	2204 W RUNNING DEER DR	QUEEN VALLEY	AZ	851189075	NULL	NULL	NULL
BARNES JOHN RUSSELL JR	BUNKER JAN MARIE	NULL	2208 E GILLCREST RD	GILBERT	AZ	852989760	NULL	NULL	NULL
MCLEAN DANIEL WILLIAM	NULL	NULL	22352 E CALLE DE FLORES	QUEEN CREEK	AZ	851423222	NULL	NULL	NULL
MENDENHALL GREGG	NULL	NULL	22791 E PARKSIDE DR	QUEEN CREEK	AZ	851428925	NULL	NULL	NULL
CROSBY BRETT & ELIZABETH	NULL	NULL	22863 E QUINTERO RD	QUEEN CREEK	AZ	851422802	NULL	NULL	NULL
CALDERON ADAM & BRITTNEY	CALDERON SANTIAGO	NULL	22915 E ESTRELLA RD	QUEEN CREEK	AZ	851422023	NULL	NULL	NULL
VARELAS ESTANISLAO JR & ANDREA MARIE	NULL	NULL	2309 N SMITHSONIAN DR	FLORENCE	AZ	851326709	NULL	NULL	NULL
DAVIS DAWNETTE	KUHENS BRENDA L & STOLLE TAMARA L	NULL	231 E SADDLE BUTTE ST	APACHE JUNCTION	AZ	851198900	NULL	NULL	NULL
PAYNE WILLIAM BRUCE & SUSAN MOSELEY	NULL	NULL	2310 BOTELER RD	BROWNSVILLE	MD	217152006	NULL	NULL	NULL
SHETH ASHVINKUMAR & PRAGNA TRS	NULL	NULL	2310 E MINTON ST	MESA	AZ	852131428	NULL	NULL	NULL
OHAVER RUSSELL JOEL & WANDA LENETTE	NULL	NULL	23118 E MUNOZ ST	QUEEN CREEK	AZ	851429337	NULL	NULL	NULL
CASALE GENE J	NULL	NULL	2327 CIELO VISTA DR	SPARKS	NV	894419220	NULL	NULL	NULL
KILPATRICK RALPH	VALLEJOS BAMBI	NULL	2330 W HAYDEN PEAK DR	QUEEN CREEK	AZ	851424653	NULL	NULL	NULL
VREDENBURG RONALD S TRUST	NULL	NULL	23351 285TH AVE BOX 76	AKELEY	MN	564338162	NULL	NULL	NULL
JESSEE TROY E	NULL	NULL	2340 W RUNNING DEER DR	QUEEN VALLEY	AZ	851189079	NULL	NULL	NULL
TOWNSEND JAMES & RENAE TRS	RJT TRUST	NULL	2346 E ESCONDIDO PL	GILBERT	AZ	852345023	NULL	NULL	NULL
SHANE MICHEAL R	NULL	NULL	235 S PIEDRA NEGRA DR	QUEEN VALLEY	AZ	851189707	NULL	NULL	NULL
BOWDEN JAMES JR	BOWDEN EARLINA E	NULL	2360 INCLINATION DR	FAIRBANKS	AK	997096228	NULL	NULL	NULL
CUPP KERRY L	BETTS ANNE E	NULL	23872 N ANGLING RD	CENTREVILLE	MI	490329787	NULL	NULL	NULL
ENTITLEMENTS LLC	NULL	NULL	23911 S 205TH CT	QUEEN CREEK	AZ	851427021	NULL	NULL	NULL
AH4R PROPERTIES TWO LLC	NULL	NULL	23975 PARK SORRENTO STE 300	CALABASAS	CA	913024012	NULL	NULL	NULL
SCALES GABRIEL A	NULL	NULL	24 S PIEDRA NEGRA DR	QUEEN VALLEY	AZ	851189739	NULL	NULL	NULL
MCCRACKEN CHRISTOPHER G	NULL	NULL	24085 N CORN CIR	FLORENCE	AZ	851327399	NULL	NULL	NULL
NORRIS DUSTIN	NULL	NULL	2411 SW 11TH ST	BATTLE GROUND	WA	986043073	NULL	NULL	NULL
ROBINSON RYAN & CLELAND KAIDIANCE	NULL	NULL	242 S POMEROY RD	QUEEN VALLEY	AZ	851189764	NULL	NULL	NULL
LANGEFELD ROBERT	NULL	NULL	244 W MONTE VISTA DR	QUEEN VALLEY	AZ	851189720	NULL	NULL	NULL
PHILLIPS SCOTT K	NULL	NULL	244 W SAHUARO DR	GOLD CANYON	AZ	851189781	NULL	NULL	NULL
PIAT RENTAL LLC	NULL	NULL	2443 FILLMORE ST APT 308-14201	SAN FRANCISCO	CA	941151814	NULL	NULL	NULL
JOHNSON SCOTT F & MARY JANE	WATKINS COURTNEY	NULL	247 PARADISO LN	CENTERVILLE	UT	84014	NULL	NULL	NULL
CANN JOE G & CARMEN LETICIA	NULL	NULL	247 S PIEDRA NEGRA DR	QUEEN VALLEY	AZ	851189707	NULL	NULL	NULL
ARMSTRONG FITZROY RICHARD	NULL	NULL	2478 N CRESTWOOD DR	FLORENCE	AZ	851326983	NULL	NULL	NULL
BIRRENKOTT THOMAS & CATHY	NULL	NULL	2508 14TH ST W	WEST FARGO	ND	580788440	NULL	NULL	NULL
HOWARD JONATHAN T	NULL	NULL	2521 W DESERT SPRING WAY	QUEEN CREEK	AZ	851425905	NULL	NULL	NULL
D R HORTON INC	NULL	NULL	2525 W FRYE RD STE 100	CHANDLER	AZ	852246286	NULL	NULL	NULL
DR HORTON INC	NULL	NULL	2525 W FRYE RD STE STE 100	CHANDLER	AZ	852246285	NULL	NULL	NULL
RINES DAVID	NULL	NULL	2540 E JENSEN CIR	MESA	AZ	85213	NULL	NULL	NULL
DAVIS GARY LAYMAN	NULL	NULL	2550 S ELLSWORTH RD UNIT 749	MESA	AZ	852092221	NULL	NULL	NULL
CROSBY GLENADINE A	NULL	NULL	256 W MORRIS DR	QUEEN VALLEY	AZ	851189784	NULL	NULL	NULL
WOOD RHONDA R	WOOD CHRISTOPHER R	NULL	259 E LAZIO RD	SAN TAN VALLEY	AZ	851409003	NULL	NULL	NULL
HOSTETLER LONNY D	NULL	NULL	260 S PIEDRA NEGRA DR	QUEEN VALLEY	AZ	851189702	NULL	NULL	NULL
BOKENFOHR JEFFREY JOSEPH	BOKENFOHR JANET FAYE	NULL	26025 TOWNSHIP RD 562	STURGEON COUNTY	NULL	NULL	AB	T8R 0V3	CANADA
LINGU MARIUS	NULL	NULL	2605 ARTESIA BLVD STE B	REDONDO BEACH	CA	902783380	NULL	NULL	NULL
KRYWKO BRIAN & CORA	NULL	NULL	26215 SH 642	STURGEON COUNTY	NULL	NULL	AB	T8R 2A6	CACANADA
RIALS JILL E	NULL	NULL	2639 S BRISTOL	MESA	AZ	852092581	NULL	NULL	NULL
WILLIAM MAY PLLC	NULL	NULL	2655 E COUNTRY SHADOWS CT	GILBERT	AZ	852989253	NULL	NULL	NULL
SUN VALLEY FARMS UNIT V POA	NULL	NULL	26728 N COOPER RD	FLORENCE	AZ	85132	NULL	NULL	NULL
DOBSON PINAL INVESTMENTS I LLC	NULL	NULL	2705 S ALMA SCHOOL RD STE 2	CHANDLER	AZ	852864400	NULL	NULL	NULL
PRICE JAMES	NULL	NULL	271 W KIRK DR	QUEEN VALLEY	AZ	851189786	NULL	NULL	NULL
SULLIVAN EDWIN F & CONNIE TRS	NULL	NULL	2712 YORDI DR	NORWALK	IA	502111373	NULL	NULL	NULL
PIETRZAK PAUL JR & JACI	NULL	NULL	27134 N COOPER RD	FLORENCE	AZ	851329456	NULL	NULL	NULL
INZUNZA ROSALENA PALACIO	NULL	NULL	2721 S PALM CT	GILBERT	AZ	852951547	NULL	NULL	NULL
HM LLC	NULL	NULL	2726 E BELLA VISTA RD	SAN TAN VALLEY	AZ	851438402	NULL	NULL	NULL
GABLE & HARDISON FARMING	NULL	NULL	2726 EAST BELLA VISTA ROAD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
JOHN C & CHRISTY L COOLIDGE TRS	NULL	NULL	273 S PIEDRA NEGRA DR	QUEEN VALLEY	AZ	851189707	NULL	NULL	NULL
JAMISON GROUP LLC	NULL	NULL	2733 N POWER RD STE 102 PMB 207	MESA	AZ	85215	NULL	NULL	NULL
BRIONGOS CARL ANTHONY	NULL	NULL	2737 W SEAVER AVE	APACHE JUNCTION	AZ	85120	NULL	NULL	NULL
LANGLEY COOPER LLC	NULL	NULL	2738 E GUADALUPE RD	GILBERT	AZ	852345100	NULL	NULL	NULL
LANGLEY JUDD 5 LLC	NULL	NULL	2738 E GUADALUPE RD	GILBERT	AZ	852345100	NULL	NULL	NULL
LANGLEY PARK LLC	NULL	NULL	2738 E GUADALUPE RD	GILBERT	AZ	852345100	NULL	NULL	NULL
LARSON KEVIN A & BRENDA D TRS	LARSON FAM REV LIV TRUST	NULL	27392 HOLLY RD	PARK RAPIDS	MN	564706368	NULL	NULL	NULL
VLCEK JAMES LEE SR & APRIL DAWN	NULL	NULL	27410 N COOPER RD	FLORENCE	AZ	85132	NULL	NULL	NULL
QUICK LARRY L & NEDRA N TRS	QUICK FAMILY TRUST	NULL	27410 N DESERT SKY RD	FLORENCE	AZ	851329420	NULL	NULL	USA
CHAFEE CURTIS & CHELSEA L	NULL	NULL	27521 N ALADDIN RD	FLORENCE	AZ	85132	NULL	NULL	NULL
HAUTH SHERYL & STEVEN	NULL	NULL	27550 N COOPER RD	FLORENCE	AZ	851329474	NULL	NULL	NULL
CASON JAMES LUCAS	GARRETT LINDSAY	NULL	27572 N DESERT SKY RD	FLORENCE	AZ	851326542	NULL	NULL	NULL
BENNETT MOLLIE	NULL	NULL	276 W MORRIS DR	QUEEN VALLEY	AZ	851189784	NULL	NULL	NULL
BOSCAMP VINCENT W	BOSCAMP JEFFERY A	NULL	27662 N DESERT SKY RD	FLORENCE	AZ	851328574	NULL	NULL	NULL
GASTON ROSARIO P	NULL	NULL	277 W MORRIS DR	QUEEN VALLEY	AZ	851189784	NULL	NULL	NULL
BALDERRAMA LAURA L	GARCIA-HERNANDEZ DANIEL A	NULL	27718 N DESERT SKY RD	FLORENCE	AZ	851329404	NULL	NULL	NULL
BALDERRAMA REYNALDO	BALDERRAMA MARIA	NULL	27718 N DESERT SKY RD	FLORENCE	AZ	851329404	NULL	NULL	USA
PEARCE DANIEL J & NATALI O	NULL	NULL	27728 N DESERT SKY RD	FLORENCE	AZ	851329404	NULL	NULL	NULL
GRATZ ROBERTS TRUST	NULL	NULL	27741 N ALADDIN RD	FLORENCE	AZ	85132	NULL	NULL	NULL
PETERSON JEROMY	NULL	NULL	27784 N COOPER RD	FLORENCE	AZ	851329454	NULL	NULL	USA

PLATT ROSS & ABBY	NULL	NULL	27784 N COOPER RD	FLORENCE	AZ	851329454	NULL	NULL	USA
SANDOVAL JOSE & CALZADA GUADALUPE	NULL	NULL	2780 221ST ST	FORT MADISON	IA	526279572	NULL	NULL	NULL
LANGLEY FREEDOM FARMS LLC	NULL	NULL	2783 E GUADALUPE RD	GILBERT	AZ	85234	NULL	NULL	NULL
HERRERA JESUS J & OPHELIA J	NULL	NULL	27944 N ALADDIN RD	FLORENCE	AZ	851328573	NULL	NULL	NULL
SCHMITT ROBERT & SEELY JANA	NULL	NULL	27967 N LIMESTONE LN	SAN TAN VALLEY	AZ	851435986	NULL	NULL	NULL
BLAIR STUART F & VALERIE J TRS	BLAIR REV LIV TRUST	NULL	27995 N COOPER RD	FLORENCE	AZ	851329447	NULL	NULL	NULL
HUCKABA MUREL E & TAMARA S	NULL	NULL	28012 N PALOS DR	FLORENCE	AZ	85132	NULL	NULL	NULL
FARRELL ROBERT M JR	NULL	NULL	28013 N PALOS DR	FLORENCE	AZ	85132	NULL	NULL	NULL
BLACK THOMAS M & NORMA R TRS	BLACK FAMILY LIVING TRUST	NULL	28085 N PALOS DR	FLORENCE	AZ	851327455	NULL	NULL	NULL
PLUES TODD	CHOVANEC-PLUES TRACI	NULL	28086 N PALOS DR	FLORENCE	AZ	851327455	NULL	NULL	NULL
SEBRING FRANCES RUTH TRUST	NULL	NULL	28093 N COOPER RD	FLORENCE	AZ	851329422	NULL	NULL	NULL
QUEEN VALLEY SANITARY DISTRICT	NULL	NULL	281 W MONTE VISTA DR	QUEEN VALLEY	AZ	851189720	NULL	NULL	NULL
ACOSTA ROBERT & REBECCA	NULL	NULL	28143 N PALOS DR	FLORENCE	AZ	851327540	NULL	NULL	NULL
FAULTNER ADAM D	FAULTNER AQUILINA	NULL	28144 N ANDY PERRY DR	FLORENCE	AZ	851327500	NULL	NULL	NULL
ESCORCIA LEONARDO SOSA	NULL	NULL	28219 N COOPER RD	FLORENCE	AZ	85132	NULL	NULL	NULL
SOSA LEONARDO	NULL	NULL	28219 N COOPER RD	FLORENCE	AZ	851329470	NULL	NULL	NULL
HART JUSTIN H & LORINDA M TRS	HART PASTOR FAM LIV TRUST	NULL	2834 N 89TH ST	MESA	AZ	852074278	NULL	NULL	NULL
TRAVIS LONNIE TYRELL & CHRISTINA LEE	NULL	NULL	28353 N COOPER RD	FLORENCE	AZ	85132	NULL	NULL	NULL
HOFFMAN SHIRLEY J REV LIV TRUST	NULL	NULL	28372 190TH ST	AKELEY	MN	56433	NULL	NULL	NULL
FERNANDEZ ANDREW J	NULL	NULL	28375 N COOPER RD	FLORENCE	AZ	85132	NULL	NULL	NULL
TORAKIS KATIE	NULL	NULL	2840 COURVILLE DR	BLOOMFIELD HILLS	MI	483021019	NULL	NULL	NULL
GILFILLAN GREGG	NULL	NULL	28416 N ANDY PERRY DR	FLORENCE	AZ	85132	NULL	NULL	NULL
KELLY DANIEL	GOLDEN K LEIGH	NULL	28425 N COOPER RD	FLORENCE	AZ	851329139	NULL	NULL	NULL
LEITER JEREMY R & SUSAN K	NULL	NULL	28489 N ROSES WAY	FLORENCE	AZ	851329435	NULL	NULL	NULL
PETTY THOMAS L & LINDA J	NULL	NULL	28495 N COOPER RD	FLORENCE	AZ	85132	NULL	NULL	NULL
RIVERA JORGE JR & LANA R	NULL	NULL	28507 N ANDY PERRY DR	FLORENCE	AZ	85132	NULL	NULL	NULL
SHOEMAKE RANDY W	NULL	NULL	28539 N ROSES WAY	FLORENCE	AZ	85132	NULL	NULL	NULL
SNYDER LARRY W & LORIE	NULL	NULL	28551 N ANDY PERRY DR	FLORENCE	AZ	85132	NULL	NULL	NULL
BEAT VEN	SMITH DIANE	NULL	28568 N ANDY PERRY DR	FLORENCE	AZ	851327168	NULL	NULL	NULL
HURST BRETT & JAQULYN	NULL	NULL	28621 N SPUR DR	SAN TAN VALLEY	AZ	851436157	NULL	NULL	NULL
PEACE RUSSELL LEE & SARAH EMILY	NULL	NULL	28624 N ROSES WAY	FLORENCE	AZ	85132	NULL	NULL	NULL
MONTANO CYNTHIA M	BARCELO ERIK MONTANO	NULL	28624 N SUSAN LN	FLORENCE	AZ	85132	NULL	NULL	NULL
HORNE MICHAEL S	NULL	NULL	28631 N ANDY PERRY DR	FLORENCE	AZ	851327161	NULL	NULL	NULL
OCHOA CLEMENTINA MORENO	NULL	NULL	28655 N ANDY PERRY DR	FLORENCE	AZ	851327161	NULL	NULL	NULL
ALEXANDER MARK	NULL	NULL	28672 N ROSES WAY	FLORENCE	AZ	851329444	NULL	NULL	NULL
ELCOX DAX JAMES & ANDREA	NULL	NULL	28709 N COOPER RD	FLORENCE	AZ	851321229	NULL	NULL	NULL
CONKLIN JEREMY & RACHEL	NULL	NULL	28725 N ANDY PERRY DR	FLORENCE	AZ	851327163	NULL	NULL	NULL
LUDWIG JACK N & LINDA R	NULL	NULL	28791 N ANDY PERRY DR	FLORENCE	AZ	851327163	NULL	NULL	NULL
BARNEY CONNER BRIAN	NULL	NULL	288 W ORO VIEJO DR	QUEEN VALLEY	AZ	851189021	NULL	NULL	NULL
ARRENDONDO JOSE G	NULL	NULL	28853 N ANDY PERRY DR	FLORENCE	AZ	851327217	NULL	NULL	NULL
JOHNSON RICHARD L TRS	DOG GONE TRUST	NULL	289 94TH ST NW	SOURIS	ND	58783	NULL	NULL	NULL
WERNETT RAMON ANTONIO	NULL	NULL	28905 N PALOS DR	FLORENCE	AZ	851327454	NULL	NULL	NULL
DEL CID MIRNA & RICARDO	NULL	NULL	28942 N BROKEN SHALE DR	SAN TAN VALLEY	AZ	851435300	NULL	NULL	NULL
DAWSON JASON & JENNIFER	NULL	NULL	28945 N ANDY PERRY DR	FLORENCE	AZ	851327152	NULL	NULL	NULL
LARA JOSE JESUS GUILLEN	NULL	NULL	29005 N BEGONIA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
MENDENHALL VITA	NULL	NULL	29013 N COOPER RD	FLORENCE	AZ	851321391	NULL	NULL	NULL
RUIZ-HERRERA JAVIER JOVANNY	NULL	NULL	29015 N SUNSHINE WAY	FLORENCE	AZ	851328882	NULL	NULL	NULL
FERNANDEZ MONIQUE A	NULL	NULL	29017 N TORI LN	FLORENCE	AZ	85132	NULL	NULL	NULL
DELORENZO JASON FRANK	NULL	NULL	29049 N TORI LN	FLORENCE	AZ	85132	NULL	NULL	NULL
SMALLWOOD AMANDA	NULL	NULL	29051 N SUNSHINE WAY	FLORENCE	AZ	851328882	NULL	NULL	NULL
MCKINNEY TROY M & ASHLEY E	NULL	NULL	29055 N COOPER RD	FLORENCE	AZ	851321391	NULL	NULL	NULL
MARTIN CORY D & LISA M	NULL	NULL	29085 N COOPER RD	FLORENCE	AZ	851321391	NULL	NULL	NULL
CHRISTIE KOLBY & GLAZEWSKI BROOKE	NULL	NULL	29087 N SUNSHINE WAY	FLORENCE	AZ	85132	NULL	NULL	NULL
LASSWELL STACY J & DIANE	NULL	NULL	29093 N BEGONIA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
DUNLAP LAURA ASHLIN TR	ASHLIN LAURA TRUST	NULL	29123 N BEGGAR'S CANYON DR	FLORENCE	AZ	85132	NULL	NULL	NULL
DANLEY WENDY	NULL	NULL	29123 N SUNSHINE WAY	FLORENCE	AZ	85132	NULL	NULL	NULL
MARTIN JOSHUA ALFRED	KEKUNA AMANDA J	NULL	29125 NORTH TORI LANE	FLORENCE	AZ	85132	NULL	NULL	NULL
HOYLE WESLEY	NULL	NULL	29137 N COOPER RD	FLORENCE	AZ	851321381	NULL	NULL	NULL
MCGILL KYLE MATTHEW	NULL	NULL	29141 N TORI LN	FLORENCE	AZ	851327003	NULL	NULL	NULL
OROZCO BLANCA	NULL	NULL	29149 N SUNSHINE WAY	FLORENCE	AZ	851328883	NULL	NULL	NULL
JOHNSON THOMAS J & JESSICA	NULL	NULL	29161 N COOPER RD	FLORENCE	AZ	85132	NULL	NULL	NULL
KOLOAMATANGI WILLIAM I	KOLOAMATANGI ISILELI KAMIPELI	NULL	2920 N VAL VISTA DR	MESA	AZ	852139725	NULL	NULL	NULL
INACIO FRANK	NULL	NULL	29214 N YUCCA TRL	FLORENCE	AZ	851329464	NULL	NULL	NULL
PHELPS BUCK & MA CHONA	NULL	NULL	29221 N AZ HIGHWAY 188 LOT 7	ROOSEVELT	AZ	855458146	NULL	NULL	NULL
ZAMBRANO BANESA GOMEZ & MARTINEZ EDGAR IVAN GOMEZ	NULL	NULL	29269 N BEGONIA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
RAFTER D CATTLE COMPANY INC	NULL	NULL	2929 N 44TH ST STE 120	PHOENIX	AZ	850187239	NULL	NULL	NULL
BERUMEN DANNY JOEL	NULL	NULL	29293 N WOLFE TRL	FLORENCE	AZ	85132	NULL	NULL	NULL
STRICKLAND HENRY L & BETH L	NULL	NULL	29345 N BEGONIA LN	FLORENCE	AZ	85132	NULL	NULL	NULL
SCHUCH FRANK & SHARON	NULL	NULL	2935 TANGLEWOOD DR	WAYNE	MI	481842816	NULL	NULL	NULL
STEVENS JUSTIN RYAN & JESSICA DAWN	NULL	NULL	29399 N CHEROKEE TRL	FLORENCE	AZ	851325424	NULL	NULL	NULL
GILL-WILLIAMS NADIA	WILLIAMS PHILLIP D	NULL	29451 N WOLFE TRL	FLORENCE	AZ	851327215	NULL	NULL	NULL
MCCRACKEN CHRISTOPHER G	MCCRACKEN DORLISA	NULL	29455 N BRANDON LN	FLORENCE	AZ	851329762	NULL	NULL	USA
MCCRACKEN JOAN	NULL	NULL	29455 N BRANDON LN	FLORENCE	AZ	851329762	NULL	NULL	NULL
ROWE HELENE	NULL	NULL	29455 N CHEROKEE TRL	FLORENCE	AZ	851325425	NULL	NULL	NULL
TORRES JOSE LUIS MENDOZA	NULL	NULL	29476 N WOLFE TRL	FLORENCE	AZ	851327250	NULL	NULL	NULL
MAROK BRIENNA	NULL	NULL	29549 N WOLFE TRL	FLORENCE	AZ	851327232	NULL	NULL	NULL
PAYNE DANIEL L & LESLIE D	NULL	NULL	29652 N VARNUM RD	SAN TAN VALLEY	AZ	851437062	NULL	NULL	NULL
CAMPOS SAMUEL ISAI VARGAS	VALENCIA VIRGINIA ELIZABETH	NULL	29743 N YUCCA DR	FLORENCE	AZ	851327611	NULL	NULL	NULL
MCGUIRE IAN THOMAS	NULL	NULL	29765 N YUCCA DR	FLORENCE	AZ	851327611	NULL	NULL	NULL
DEAN PHILLIP VICTOR TRUST	NULL	NULL	29783 N YUCCA DR	FLORENCE	AZ	851327611	NULL	NULL	NULL
SINKS YESENIA & WILLIAM EARL JR	NULL	NULL	29797 N YUCCA DR	FLORENCE	AZ	851327611	NULL	NULL	NULL
YATES LYDIA	NULL	NULL	298 W SAHUARO DR	QUEEN CREEK	AZ	85118-9781	NULL	NULL	NULL
BERRY DONALD W & BETHANI L	NULL	NULL	29801 E OCOTILLO CIR	FLORENCE	AZ	85132	NULL	NULL	NULL
BOYD DANIEL ARTHUR & TAWNIE TERESA	NULL	NULL	29811 N YUCCA DR	FLORENCE	AZ	851327612	NULL	NULL	NULL
DE LA ROSA DIANA MARIE	NULL	NULL	29819 N MESQUITE CIR	FLORENCE	AZ	851327317	NULL	NULL	NULL
JOHNSTON BOBBY	NULL	NULL	29820 N MESQUITE CIR	FLORENCE	AZ	851327316	NULL	NULL	NULL
DUNBAR JONATHAN	NULL	NULL	29822 N OCOTILLO CIR	FLORENCE	AZ	85132	NULL	NULL	NULL
MCNULTY LAURIE A & KEITH	NULL	NULL	29823 E OCOTILLO CIR	FLORENCE	AZ	851327687	NULL	NULL	NULL
TYRA-DAVIS JOSH	NULL	NULL	29824 N CHOLLA DR	FLORENCE	AZ	851327471	NULL	NULL	NULL
DIAZ XAVIER MARKEL & JESSIKA ANN	NULL	NULL	29825 N YUCCA DR	FLORENCE	AZ	851327612	NULL	NULL	NULL
TARVER ERIC L	NULL	NULL	29833 N MESQUITE CIR	FLORENCE	AZ	851327317	NULL	NULL	NULL
MARINEZ JESUS ALBERTO	NULL	NULL	29839 N YUCCA DR	FLORENCE	AZ	851327612	NULL	NULL	NULL
PHILLIPS JORDAN K & DEJAH S	NULL	NULL	29840 N CHOLLA DR	FLORENCE	AZ	851327471	NULL	NULL	NULL
DELIO DEON	NULL	NULL	29842 N OCOTILLO CIR	FLORENCE	AZ	851327687	NULL	NULL	NULL
HART SKYLER	SIKORSKI ANTHONY JAN	NULL	29843 E OCOTILLO CIR	FLORENCE	AZ	851327687	NULL	NULL	NULL
GARCIA ROBERT A & LORENA LORRAINE	NULL	NULL	29843 N OAK DR	FLORENCE	AZ	851327829	NULL	NULL	NULL
SOLIS MEDWIN	SOLIS JEFFREY E	NULL	29850 N MESQUITE CIR	FLORENCE	AZ	851327316	NULL	NULL	NULL
PADILLA ALEX ORLANDO & GUTIERREZ JULIE LYNN	NULL	NULL	29853 N YUCCA DR	FLORENCE	AZ	851327612	NULL	NULL	NULL
RODRIGUEZ HUGO G QUINTANA	NULL	NULL	29854 N CHOLLA DR	FLORENCE	AZ	851327471	NULL	NULL	NULL
JOHNSON JEREMIAH W & ANDRIA N	NULL	NULL	29856 N MESQUITE CIR	FLORENCE	AZ	851327316	NULL	NULL	NULL
ANDERSON JILL MARIE	NULL	NULL	29857 N OAK DR	FLORENCE	AZ	851327829	NULL	NULL	NULL
KUBIAK ASHLEY M & WILLIAMS AUGUST BENJAMIN	NULL	NULL	29858 N OCOTILLO CIR	FLORENCE	AZ	85132	NULL	NULL	NULL
JENSEN JASON & MORIAH	NULL	NULL	29869 N OAK DR	FLORENCE	AZ	851327829	NULL	NULL	NULL
CARLSON RONALD & ANA M	NULL	NULL	29870 N CHOLLA DR	FLORENCE	AZ	851327471	NULL	NULL	NULL
GARRETT GARY PATRICK	NULL	NULL	29874 N ACACIA DR	FLORENCE	AZ	851327786	NULL	NULL	NULL
HAGBERG ROBERT & SANDRA	NULL	NULL	29883 N OAK	FLORENCE	AZ	85132-7829	NULL	NULL	NULL
LAWSON RODNEY EUGENE & CHRISTINE M	NULL	NULL	29886 N CHOLLA DR	FLORENCE	AZ	851327471	NULL	NULL	NULL
LONG IAN ROBERT MCFARLAND & GRACE LORYNN	NULL	NULL	29888 N ACACIA DR	FLORENCE	AZ	851327786	NULL	NULL	NULL
MARTINEZ BRIAN & ALEXANDRA	NULL	NULL	29895 N YUCCA DR	FLORENCE	AZ	851327612	NULL	NULL	NULL
CONTRERAS ALONSO MATAMOROS	MORENO LAISA	NULL	29897 N OAK DR	FLORENCE	AZ	851327829	NULL	NULL	NULL
MORGAN ANDREW	NULL	NULL	2990 IRONWOOD LN	LINCOLN	CA	956489642	NULL	NULL	NULL
PEREZ JUAN	JACOBSEN EMILY	NULL	29900 N CHOLLA DR	FLORENCE	AZ	851327472	NULL	NULL	NULL
GARCIA DAVID & BEATRIZ	NULL	NULL	29902 N ACACIA DR	FLORENCE	AZ	85132	NULL	NULL	NULL
LUTZ GAGE MATHEW	NULL	NULL	29909 N YUCCA DR	FLORENCE	AZ	851327613	NULL	NULL	NULL
MOSES GEORGE DAVID & LOUISE FIERRO	NULL	NULL	29911 N OAK DR	FLORENCE	AZ	851327744	NULL	NULL	NULL
MASON DANIEL K	NULL	NULL	29916 N CHOLLA DR	FLORENCE	AZ	851327472	NULL	NULL	NULL
JONES KENDALL K	NULL	NULL	29920 N PALOVERDE DR	FLORENCE	AZ	851327674	NULL	NULL	NULL
OLVERA HILDA	NULL	NULL	29922 N JUNIPER DR	FLORENCE	AZ	851327745	NULL	NULL	NULL
HORTA JEREMY R	SHAW LAURA N	NULL	29925 N YUCCA DR	FLORENCE	AZ	851327613	NULL	NULL	NULL
SPICER MATTHEW THOMAS	NULL	NULL	29929 N OAK DR	FLORENCE	AZ	851327744	NULL	NULL	NULL
VISBAL CHRISTOPHER ALLEN	VISBAL AMIE SUZANNE	NULL	29930 N ACACIA DR	FLORENCE	AZ	851327787	NULL	NULL	NULL
NICHOLS COLTAN MATTHEW & APRIL	NULL	NULL	29932 N HOLLA DR	FLORENCE	AZ	851327472	NULL	NULL	NULL
WATKINS ZACHARY	NULL	NULL	29932 N PALOVERDE DR	FLORENCE	AZ	851327674	NULL	NULL	NULL
RODRIGUEZ JUSTINE CRYSTAL & ORTEGA NORA SILVIA	ORTEGA FREDDIE BARBA	NULL	29934 N JUNIPER DR	FLORENCE	AZ	851327745	NULL	NULL	NULL
BRATEK ADAM JOSEPH	BRATEK SARA BRIEANNE	NULL	29946 N JUNIPER DR	FLORENCE	AZ	851327745	NULL	NULL	NULL
TOUMBERLIN RUSSELL LEE & DANIELLE N	NULL	NULL	29947 N YUCCA DR	FLORENCE	AZ	851327613	NULL	NULL	NULL
GIBSON ZACHARY R	NULL	NULL	29952 N PALOVERDE DR	FLORENCE	AZ	851327674	NULL	NULL	NULL
PHINNEY JASON A & MEGAN RENE	NULL	NULL	29974 N PALOVERDE DR	FLORENCE	AZ	851327674	NULL	NULL	NULL
HUFFMAN MICHAEL WILLIAM	NULL	NULL	29996 N PALOVERDE DR	FLORENCE	AZ	851327674	NULL	NULL	NULL
KASKAID ENTERPRISES INC	NULL	NULL	300 BISCAYNE BOULEVARD WAY APT 5001	MIAMI	FL	331314052	NULL	NULL	USA
TALEBI KAM	NULL	NULL	300 BISCAYNE BOULEVARD WAY APT 5001	MIAMI	FL	331314052	NULL	NULL	NULL
BENDA AARON MITCHELL	NULL	NULL	30013 N OAK DR	FLORENCE	AZ	851327806	NULL	NULL	NULL
COOK BREANNA	NULL	NULL	30024 N CHOLLA DR	FLORENCE	AZ	851327179	NULL	NULL	NULL
WILDER DERECK & JESSICA	NULL	NULL	30027 N OAK DR	FLORENCE	AZ	851327806	NULL	NULL	NULL
NUTTING NEIL E & ASHLEY D	NULL	NULL	30041 N OAK DR	FLORENCE	AZ	851327806	NULL	NULL	NULL
RIVERA ARIANNA	NULL	NULL	30042 N CHOLLA DR	FLORENCE	AZ	851327179	NULL	NULL	NULL
ROBERTS JASON M	NULL	NULL	30047 N YUCCA DR	FLORENCE	AZ	851327624	NULL	NULL	NULL
MUNOZ RENE RAMIRO	NULL	NULL	30055 N OAK DR	FLORENCE	AZ	851327806	NULL	NULL	NULL
CRAIG MICHAEL J & DIVINA B	NULL	NULL	30060 N CHOLLA DR	FLORENCE	AZ	851327179	NULL	NULL	NULL
WILLOWS DEVYN	WILLOWS BARRY & JENNIFER	NULL	30067 N YUCCA DR	FLORENCE	AZ	85132-7624	NULL	NULL	NULL
ARROYO LEONARDO RIVERA & RIVERA LOLA	NULL	NULL	30069 N OAK DR	FLORENCE	AZ	851327806	NULL	NULL	NULL
MOTA VICTOR MURILLO	NULL	NULL	30080 N CHOLLA DR	FLORENCE	AZ	851327179	NULL	NULL	NULL
DIMES DJENABA	NULL	NULL	30083 N OAK DR	FLORENCE	AZ	851327806	NULL	NULL	NULL
ZAKLIT ALFRED & JESSY B	NULL	NULL	30085 N YUCCA DR	FLORENCE	AZ	851327624	NULL	NULL	NULL
SALAZAR MIKAEL ANTHONY	HERNANDEZ ROSARIO	NULL	30097 N OAK DR	FLORENCE	AZ	851327806	NULL	NULL	NULL
JORDAN GREGORY B	DARNELL DIANE L	NULL	301 S PIEDRA NEGRA DR	QUEEN VALLEY	AZ	851189760	NULL	NULL	NULL
MITTLEIDER SUZETTE	KLEMIN JAMES	NULL	301 S RIO VISTA DR	QUEEN VALLEY	AZ	851189761	NULL	NULL	NULL
RINER NATHANIEL JOSEPH & ALISANDA IVANA	NULL	NULL	30116 N CHOLLA DR	FLORENCE	AZ	851327180	NULL	NULL	NULL
HEINTZ CARL & KARLA FAM TRUST	NULL	NULL	30121 N YUCCA DR	FLORENCE	AZ	851327625	NULL	NULL	NULL
IKE HELENE	NULL	NULL	30139 N YUCCA DR	FLORENCE	AZ	851327625	NULL	NULL	NULL

PRICE DESTINEE & JONES CARLOS	NULL	NULL	30141 N OAK DR	FLORENCE	AZ	851327807	NULL	NULL	NULL
ESCARENO LUIS GERARDO ANTONIO ESCARENO	NULL	NULL	30154 N CHOLLA DR	FLORENCE	AZ	851327180	NULL	NULL	NULL
GETZ BRIANNA	ROSETTE VICENTI	NULL	30155 N OAK DR	FLORENCE	AZ	851327807	NULL	NULL	NULL
BURGE CHRISTOPHER THOMAS	NULL	NULL	30157 N YUCCA DR	FLORENCE	AZ	851327625	NULL	NULL	NULL
KOLZOW DEANNE	NULL	NULL	30169 N OAK DR	FLORENCE	AZ	851327807	NULL	NULL	NULL
DEANDA VICTOR & MORGAN	NULL	NULL	30172 N CHOLLA DR	FLORENCE	AZ	851327180	NULL	NULL	NULL
SILVERS ALBERT W & RHONDA J LIV TRUST	NULL	NULL	30173 N YUCCA DR	FLORENCE	AZ	85132-7625	NULL	NULL	NULL
FLAKE JOHN E SR & FRANCES B	NULL	NULL	30183 N OAK DR	FLORENCE	AZ	851327807	NULL	NULL	NULL
BISCAYART CHRISTIANN & CHEYANNE	NULL	NULL	30185 N MESQUITE DR	FLORENCE	AZ	85132-7339	NULL	NULL	NULL
CLARK NATHANIEL R & JENNIFER V	NULL	NULL	30186 E OCOTILLO DR	FLORENCE	AZ	851327656	NULL	NULL	NULL
ELDER KYRA & RYAN	NULL	NULL	30190 N CHOLLA DR	FLORENCE	AZ	851327180	NULL	NULL	NULL
WILMOTH ALLAN D & ANGELA	NULL	NULL	30191 N YUCCA DR	FLORENCE	AZ	851327625	NULL	NULL	NULL
GARCIA NICHOLAS	NULL	NULL	30197 N OAK DR	FLORENCE	AZ	851327807	NULL	NULL	NULL
COVINGTON BETTY J	NULL	NULL	302 S ALTA VISTA DR	QUEEN VALLEY	AZ	851189719	NULL	NULL	NULL
HERNANDEZ SERGIO FRANCISCO G	NULL	NULL	30203 N MESQUITE DR	FLORENCE	AZ	851327340	NULL	NULL	NULL
SEGOVIA MARCOS J	MORALES ARIELA	NULL	30204 N OCOTILLO DR	FLORENCE	AZ	851327657	NULL	NULL	NULL
WHITAKER JOHN H & WENDY K	NULL	NULL	30208 N CHOLLA DR	FLORENCE	AZ	851327181	NULL	NULL	NULL
GRAY ROBERT P & PETERSEN BRITTANEE N	NULL	NULL	30209 N YUCCA DR	FLORENCE	AZ	851327626	NULL	NULL	NULL
PEREZ GENARO GAMA	NULL	NULL	30211 N OAK DR	FLORENCE	AZ	851327808	NULL	NULL	NULL
BREMONT RICHARD M & VICKIE V	NULL	NULL	30214 N MESQUITE DR	FLORENCE	AZ	851327338	NULL	NULL	NULL
MARTIN JEFFREY	NULL	NULL	30215 N JOSHUA TREE DR	FLORENCE	AZ	851327343	NULL	NULL	NULL
JOACHIM ARTHUR	NULL	NULL	3022 S EASTVIEW AVE	TUCSON	AZ	857302906	NULL	NULL	NULL
GOWENS ZACHARY ALAN	DAWSON MICHELLE RACHEL	NULL	30221 N MESQUITE DR	FLORENCE	AZ	851327340	NULL	NULL	NULL
BALDONADO JACEY ARRON & RICHARDS THERESA LOUISE	NULL	NULL	30222 N OCOTILLO DR	FLORENCE	AZ	851327657	NULL	NULL	NULL
REYES ERNESTO R	NULL	NULL	30227 N YUCCA DR	FLORENCE	AZ	851327626	NULL	NULL	NULL
GIPP TIREY HUNTER & SASHA ANN	NULL	NULL	30228 N CHOLLA DR	FLORENCE	AZ	851327181	NULL	NULL	NULL
FITCH DAVID & AMBER	NULL	NULL	30231 N JOSHUA TREE DR	FLORENCE	AZ	851327343	NULL	NULL	NULL
TORRES SALVADOR JESUS & PATRICIA GOMEZ	NULL	NULL	30238 N OCOTILLO DR	FLORENCE	AZ	851327657	NULL	NULL	NULL
LESSER KEVIN M	NULL	NULL	30239 N MESQUITE DR	FLORENCE	AZ	85132	NULL	NULL	NULL
STADING VALORIE	NULL	NULL	30241 N OAK DR	FLORENCE	AZ	851327808	NULL	NULL	NULL
STOKEN TANIA & NATHAN	NULL	NULL	30247 N YUCCA DR	FLORENCE	AZ	851327626	NULL	NULL	NULL
IABONI SILVANO & MARA	IABONI GIUSTINA & VANESSA	NULL	30248 N MESQUITE DR	FLORENCE	AZ	851327338	NULL	NULL	NULL
DAILY DOROTHY GAIL	NULL	NULL	30249 N JOSHUA TREE DR	FLORENCE	AZ	851327343	NULL	NULL	NULL
JENKINS SHEMECIA SHNAY	NULL	NULL	30254 N OCOTILLO DR	FLORENCE	AZ	851327657	NULL	NULL	NULL
HUFFMAN MICHAEL & JUNE CONVERSE	NULL	NULL	30255 N MESQUITE DR	FLORENCE	AZ	851327340	NULL	NULL	NULL
SOTO HECTOR	NULL	NULL	30255 N OAK DR	FLORENCE	AZ	85132	NULL	NULL	NULL
SOUSA PATRICIA A	NULL	NULL	30256 OAKBROOK RD	HAYWARD	CA	945446670	NULL	NULL	NULL
MCCUTCHAN DWIGHT & SUSAN LIV TRUST	NULL	NULL	30264 N MESQUITE DR	FLORENCE	AZ	851327338	NULL	NULL	NULL
TREANOR DANNY PATRICK LIV TRUST	NULL	NULL	30265 N JOSHUA TREE DR	FLORENCE	AZ	851327343	NULL	NULL	NULL
AGUILAR JOSE MENDOZA	GUDINO YADIRA CEJA	NULL	30266 N EMILY DR	QUEEN CREEK	AZ	851423251	NULL	NULL	NULL
CONTRERAS ANDREW & CATINA	NULL	NULL	30269 N OAK DR	FLORENCE	AZ	851327808	NULL	NULL	NULL
KENNEDY HEATHER AZYALEA	NULL	NULL	30270 N OCOTILLO DR	FLORENCE	AZ	851327657	NULL	NULL	NULL
GUIDERA MARTIN & BEVERLY	NULL	NULL	30271 N MESQUITE DR	FLORENCE	AZ	851327340	NULL	NULL	NULL
BRAG MELVIN RANDY & RACHEL L	NULL	NULL	3028 PROMONTORY DR	BISMARCK	ND	585030978	NULL	NULL	NULL
RIGGS CHRISTOPHER	MCKECHNIE SAMANTHA	NULL	30280 N MESQUITE DR	FLORENCE	AZ	851327338	NULL	NULL	NULL
CASON JOHNATHON R & ROMERO-CASON JENNIE	NULL	NULL	30281 N JOSHUA TREE DR	FLORENCE	AZ	851327343	NULL	NULL	NULL
CUNDIFF ONEY R & KAREN J	NULL	NULL	30284 N CHOLLA DR	FLORENCE	AZ	851327181	NULL	NULL	NULL
MOORE RUSSELL G	NULL	NULL	30286 N OCOTILLO DR	FLORENCE	AZ	851327657	NULL	NULL	NULL
ESQUIVEL ALEXIS & ALEXZANDRA	NULL	NULL	30289 N MESQUITE DR	FLORENCE	AZ	851327340	NULL	NULL	NULL
MANN CHARLES M	IANITA KIMBERLY A	NULL	30297 N OAK DR	FLORENCE	AZ	851327808	NULL	NULL	NULL
ISMAEL SIMANE	NULL	NULL	30299 N JOSHUA TREE DR	FLORENCE	AZ	851327343	NULL	NULL	NULL
ALLISON KEVIN	NULL	NULL	303 S ALTA VISTA DR	QUEEN VALLEY	AZ	851189775	NULL	NULL	NULL
EMERY HAYDEE MARIE	BUCKMASTER BRUCE V	NULL	30302 N CHOLLA DR	FLORENCE	AZ	851327182	NULL	NULL	NULL
BARNETT KIMBERLY M	NULL	NULL	30304 N OCOTILLO DR	FLORENCE	AZ	851327658	NULL	NULL	NULL
CLAXTON RONALD L & RUTHANN C TRS CLAXTON FAM TR	NULL	NULL	30305 N MESQUITE DR	FLORENCE	AZ	851327341	NULL	NULL	NULL
TIELKING LANDON & REBECCA	NULL	NULL	30311 N OAK DR	FLORENCE	AZ	851327820	NULL	NULL	NULL
GASKILL TYLER	NULL	NULL	30314 N MESQUITE DR	FLORENCE	AZ	851327337	NULL	NULL	NULL
BOYD ROBERT & TERESA	NULL	NULL	30315 N JOSHUA TREE DR	FLORENCE	AZ	851327342	NULL	NULL	NULL
MOLINA MARIA V	NULL	NULL	30316 N JUNIPER DR	FLORENCE	AZ	851323317	NULL	NULL	NULL
RABIDEAU JEREMIAH & BROOKE	NULL	NULL	30322 N OCOTILLO DR	FLORENCE	AZ	851327658	NULL	NULL	NULL
MEJIA JESUS VIRQILIO C JR & KLAUDYA A	NULL	NULL	30323 N MESQUITE DR	FLORENCE	AZ	851327341	NULL	NULL	NULL
GREULICH DAVID A	NULL	NULL	30327 N OAK DR	FLORENCE	AZ	851327820	NULL	NULL	NULL
NIEPOETTER AARON J JR	NULL	NULL	30328 N JUNIPER DR	FLORENCE	AZ	851323317	NULL	NULL	NULL
CARRIER NELSON & GLORIA	NULL	NULL	30340 N CHOLLA DR	FLORENCE	AZ	85132	NULL	NULL	NULL
LINCOLN PATRICK	NULL	NULL	30341 N MESQUITE DR	FLORENCE	AZ	851327341	NULL	NULL	NULL
HOUSER CHARLES R & JULIE A	NULL	NULL	30342 N OCOTILLO DR	FLORENCE	AZ	85132	NULL	NULL	NULL
SPRING DYLAN & DESTINY	NULL	NULL	30344 N JUNIPER DR	FLORENCE	AZ	851323317	NULL	NULL	NULL
JERRELL ROBERT ELWOOD JR & TRACEY JEAN	NULL	NULL	30345 N OAK DR	FLORENCE	AZ	85132-7820	NULL	NULL	NULL
ARDILA ALEXANDER & CAMPILLO KAYLA ANN	NULL	NULL	30358 N JUNIPER DR	FLORENCE	AZ	851323317	NULL	NULL	NULL
JACKSON AMY E	NULL	NULL	30361 N OAK DR	FLORENCE	AZ	851327820	NULL	NULL	NULL
WALLACE WARREN A & KATHERINE E	NULL	NULL	30372 N JUNIPER DR	FLORENCE	AZ	851323317	NULL	NULL	NULL
BATTAGLIA MICHAEL & ASHLYNE	NULL	NULL	30385 N OAK DR	FLORENCE	AZ	851327820	NULL	NULL	NULL
MERCADO JAMIE	NULL	NULL	30386 N JUNIPER DR	FLORENCE	AZ	851323317	NULL	NULL	NULL
YEPIZ BORBON MARTHA C & JIMENEZ FAUSTO J FLORES	FLORES MARTHA A	NULL	30390 N COOPER RD	FLORENCE	AZ	851329462	NULL	NULL	NULL
BRIGHT KIMBERLY ELAINE	NULL	NULL	30397 N OAK DR	FLORENCE	AZ	851327820	NULL	NULL	NULL
WILDISAN KEVIN	NULL	NULL	30400 N JUNIPER DR	FLORENCE	AZ	851323318	NULL	NULL	NULL
BRYANT LINDSAY MARIE & NICHOL TAMMY LEAH	NULL	NULL	30409 N OAK DR	FLORENCE	AZ	851327821	NULL	NULL	NULL
CORONA-GARCIA KIMBERLY	GARCIA MARTHA	NULL	30421 N OAK DR	FLORENCE	AZ	851327821	NULL	NULL	NULL
BAXTER JESSE & SAMANTHA	NULL	NULL	30433 N OAK DR	FLORENCE	AZ	851327821	NULL	NULL	NULL
PLOUFFE MARC MICHAEL & PATRICIA	NULL	NULL	30434 N JUNIPER DR	FLORENCE	AZ	851323318	NULL	NULL	NULL
ROACH ALISA	NULL	NULL	30445 N OAK DR	FLORENCE	AZ	851327821	NULL	NULL	NULL
GONZALEZ ANDREW DOUGLAS & ROSE LINDY JEAN	NULL	NULL	30448 N JUNIPER DR	FLORENCE	AZ	851323318	NULL	NULL	NULL
REYES-GONZALEZ MARTIN & REYES JOSEFINA T	NULL	NULL	30457 N OAK DR	FLORENCE	AZ	851327821	NULL	NULL	NULL
GALINDO ESTEBAN	NULL	NULL	30462 N JUNIPER DR	FLORENCE	AZ	851323318	NULL	NULL	NULL
ZALESKI NADINE	NULL	NULL	30469 N OAK DR	FLORENCE	AZ	851327821	NULL	NULL	NULL
GREER LARRY JR & WILLIS MALEENA	NULL	NULL	30476 N JUNIPER DR	FLORENCE	AZ	851323318	NULL	NULL	NULL
STUDER JAMES III & MCANALLY MADISON	NULL	NULL	30481 N OAK DR	FLORENCE	AZ	851327821	NULL	NULL	NULL
SCHRINER JESSE WYATT & MADELYNNE MARIA	NULL	NULL	30490 N JUNIPER DR	FLORENCE	AZ	851323318	NULL	NULL	NULL
WILLIAMS ROBERT & RACHEL	NULL	NULL	30493 N OAK DR	FLORENCE	AZ	851327821	NULL	NULL	NULL
POLFLIET THOMAS JOSEPH	NULL	NULL	305 ATHENS AVE	MARSHALL	MN	562583151	NULL	NULL	NULL
FERNANDES JENNIFER	NULL	NULL	30505 N OAK DR	FLORENCE	AZ	851327822	NULL	NULL	NULL
HUDSON ALICIA LOIS & DEXTER M II	NULL	NULL	30508 N JUNIPER DR	FLORENCE	AZ	851323319	NULL	NULL	NULL
COHEN JACLYN	NULL	NULL	30517 N OAK DR	FLORENCE	AZ	851327822	NULL	NULL	NULL
MASKELL PHILLIP S	NULL	NULL	30529 N OAK DR	FLORENCE	AZ	851327822	NULL	NULL	NULL
STREET TRACEY DINARD JR	NULL	NULL	30541 N OAK DR	FLORENCE	AZ	851327822	NULL	NULL	NULL
BOTTEMILLER GREGORY & PHYLLIS	NULL	NULL	30553 N OAK DR	FLORENCE	AZ	851327822	NULL	NULL	NULL
CANO FELIPE PERALTA & PERALTA ELOISA	PERALTA SAMIR RAMOS	NULL	30559 N NIGHTINGALE RD	SAN TAN VALLEY	AZ	851434491	NULL	NULL	NULL
FISHER JERRY WAYNE	WILEY SONIA RYNAE	NULL	30565 N OAK DR	FLORENCE	AZ	851327822	NULL	NULL	NULL
BEDSOLE DAVID	WRIGHT CASSIE	NULL	30577 N OAK DR	FLORENCE	AZ	851327822	NULL	NULL	NULL
THOMASSON GREGORY C & KATHY	NULL	NULL	30589 N OAK DR	FLORENCE	AZ	851327822	NULL	NULL	NULL
SAMUELS AISHA	PHILLIPS BRIANNA A	NULL	30601 N OAK DR	FLORENCE	AZ	851327823	NULL	NULL	NULL
DICK BRUCE GERARD	NULL	NULL	307 W KIRK DR	QUEEN VALLEY	AZ	851189787	NULL	NULL	NULL
RAMIRAEZ RAFAEL A & ALVAREZ GLORIA	NULL	NULL	30886 N DESERT HONEYSUCKLE DR	SAN TAN VALLEY	AZ	851434480	NULL	NULL	NULL
RUSH CHRISTOPHER	NULL	NULL	309 S ALTA VISTA DR	QUEEN VALLEY	AZ	851189775	NULL	NULL	NULL
DOMINGUEZ RUBEN A	ALVAREZ MONIQUE D	NULL	30900 N DESERT HONEYSUCKLE DR	SAN TAN VALLEY	AZ	851434480	NULL	NULL	NULL
THOMSEN THOMAS M & KATHLEEN DIANE	NULL	NULL	310 S ALTA VISTA DR	QUEEN VALLEY	AZ	851189756	NULL	NULL	NULL
MARISCAL CATTLE & CONSTRUCTION LLC	NULL	NULL	3108 E SILVERSMITH TRL	SAN TAN VALLEY	AZ	851433303	NULL	NULL	NULL
GRAD KAE E HENTGES	NULL	NULL	311 S PIEDRA NEGRA DR	QUEEN VALLEY	AZ	851189760	NULL	NULL	NULL
HERNANDEZ JUAN D	NULL	NULL	31175 N MESQUITE WAY	SAN TAN VALLEY	AZ	851437256	NULL	NULL	NULL
WATKINS CHRISTIAN J	WATKINS ALEXIS GONZALEZ	NULL	31224 N WATKINS LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
WAGNER WILLIAM JAMES III & STEPHANIE MARIE	NULL	NULL	31279 N CLARIDGE CIR	SAN TAN VALLEY	AZ	851434195	NULL	NULL	NULL
HANSEN KEVIN D & ROCHELLE I	NULL	NULL	3129 JUNIPER AVE	LAKESIDE	AZ	859296263	NULL	NULL	NULL
WATKINS BOBBY	WATKINS LISA	NULL	31298 N WATKINS LN	SAN TAN VALLEY	AZ	851434042	NULL	NULL	NULL
MORRIS FAMILY TRUST	NULL	C/O GEORGE MORRIS	31408 N GECKO TRL	SAN TAN VALLEY	AZ	851434156	NULL	NULL	NULL
HAIGH JENIFER ROSE	NULL	NULL	31477 N FELIX RD	SAN TAN VALLEY	AZ	851438422	NULL	NULL	NULL
RITTER ZACHARY	NULL	NULL	31559 N FELIX RD	SAN TAN VALLEY	AZ	851438488	NULL	NULL	NULL
TUGCU KADIR & EMINE IPEK	NULL	NULL	3161 E ATHENA CT # T	GILBERT	AZ	852978112	NULL	NULL	NULL
HALTER TYLER	NULL	NULL	31643 N ATTAWAY RD	SAN TAN VALLEY	AZ	851438354	NULL	NULL	NULL
REEDER STEPHEN	NULL	NULL	31655 N FELIX RD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
DARYL SCOTT DARGER LLC	NULL	NULL	31661 N ATTAWAY RD	SAN TAN VALLEY	AZ	851438354	NULL	NULL	NULL
CECELIC JUSTIN EDWARD	RODRIGUEZ MARA DE CECELIC	NULL	31667 N JUDYS RD	SAN TAN VALLEY	AZ	851439101	NULL	NULL	NULL
MERCADO MICHAEL MARQUEZ	MERCADO JOSE MARQUEZ & CANALES ITZMALZIN ISLAS	NULL	31691 N NOBLE FIR RD	SAN TAN VALLEY	AZ	851437302	NULL	NULL	NULL
FOX MICHAEL & CONNIE	NULL	NULL	31699 N FELIX RD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
FROST LEVI & NICHOLE	NULL	NULL	31711 N NOBLE FIR RD	SAN TAN VALLEY	AZ	851437303	NULL	NULL	NULL
LOPEZ-FLOREZ JAIME	NULL	NULL	31718 N FELIX RD	SAN TAN VALLEY	AZ	851435559	NULL	NULL	NULL
TAURMAN ALEX EVANS & TY-ANNE	NULL	NULL	31725 N PHYLLIS PL	SAN TAN VALLEY	AZ	851436414	NULL	NULL	NULL
CONTRERAS HECTOR MENDIVIL	MAREZ-LOZANO MARIA LUCIA	NULL	31742 N FELIX RD	SAN TAN VALLEY	AZ	851435559	NULL	NULL	NULL
TINKHAM JUDY K	NULL	NULL	31747 N FELIX RD	SAN TAN VALLEY	AZ	851435559	NULL	NULL	NULL
WOOD JASON & RICKIE	NULL	NULL	31774 N FELIX RD	SAN TAN VALLEY	AZ	851435559	NULL	NULL	NULL
JACOVIDES WILLIAM N	NULL	NULL	31791 N PHYLLIS PL	SAN TAN VALLEY	AZ	851436414	NULL	NULL	NULL
TRUJILLO THOMAS JASON & SMIT-TRUJILLO NANCY	NULL	NULL	31799 N PHYLLIS PL	SAN TAN VALLEY	AZ	851436414	NULL	NULL	NULL
WOOD GAVIN & REYCHEL	NULL	NULL	31804 N FELIX RD	SAN TAN VALLEY	AZ	851439177	NULL	NULL	NULL
PARKER TRISTAN & SERENA	PARKER KELLY	NULL	31815 N PHYLLIS PL	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
MARISCAL CATTLE & CONSTRUCTION LLC	NULL	NULL	31865 N JUDYS RD	SAN TAN VALLEY	AZ	851439104	NULL	NULL	NULL
STOUT MARY LIVING TRUST	NULL	NULL	31877 N JUDY'S RD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
SOUNDARARAJAN GOVINDARAJAN	NULL	NULL	3196 ALICE DR	NEWBURY PARK	CA	913202938	NULL	NULL	NULL
MILES DELSA ANN & LAVERN ALLEN	NULL	NULL	32020 N PARTRIDGE CT	SAN TAN VALLEY	AZ	851437446	NULL	NULL	NULL
EDWARDS STEVEN A & KAREN K	NULL	NULL	32021 N TABER TRL	SAN TAN VALLEY	AZ	851437635	NULL	NULL	NULL
ALEXANDER TINA A	NULL	NULL	32060 N TABER TRL	SAN TAN VALLEY	AZ	851437635	NULL	NULL	NULL
COLE PRESTON	NULL	NULL	32083 N PARTRIDGE CT	SAN TAN VALLEY	AZ	851437685	NULL	NULL	NULL
SUTHANN JAMES L & NANCY L	NULL	NULL	32087 N RUTIN WAY	SAN TAN VALLEY	AZ	851437857	NULL	NULL	NULL
KARSTETTER BRAD & AUTUMN	NULL	NULL	32093 N TABER TRL	SAN TAN VALLEY	AZ	851437635	NULL	NULL	NULL
MARTINEZ BYRON & MOHRWEISS NATALIE	NULL	NULL	32098 N PARTRIDGE CT	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
PLANET HOME LENDING LLC	NULL	NULL	321 RESEARCH PKWY STE 303	MERIDEN	CT	06450-8301	NULL	NULL	NULL
JONES KIM R	BISSON JOSEPH MARC	NULL	321 W MORRIS DR	QUEEN VALLEY	AZ	851189785	NULL	NULL	NULL
BEARD SHANE	NULL	NULL	3210 SUNNYBROOK LN	IDAHO FALLS	ID	834047483	NULL	NULL	NULL
RUVALCABA JESUS EDUARDO & MONTIEL IVONNE PENA	NULL	NULL	32100 N RUTIN WAY	SAN TAN VALLEY	AZ	851437224	NULL	NULL	NULL
RUVALCABA JUAN CARLOS	NULL	NULL	32100 N RUTIN WAY	SAN TAN VALLEY	AZ	851437224	NULL	NULL	NULL
LOGAN JUSTIN	NULL	NULL	32106 N TABER TRL	SAN TAN VALLEY	AZ	851437603	NULL	NULL	NULL
BRADSHAW PAUL MARIE	DUKE THOMAS E & LOUANNA K	NULL	32150 N PARTRIDGE CT	SAN TAN VALLEY	AZ	851437636	NULL	NULL	NULL

ANTOKAL RYAN & ASHLEY E	NULL	NULL	32157 N TABER TRL	SAN TAN VALLEY	AZ	851437676	NULL	NULL	NULL
KEARNEY JERRY	NULL	NULL	3221 E SMITH RD	BELLINGHAM	WA	982269574	NULL	NULL	NULL
ANDUJO JOSE	ZENDEJAS MARIA D RICO	NULL	32215 N RUTIN WAY	SAN TAN VALLEY	AZ	851437969	NULL	NULL	NULL
WALKER DENNIS L & LANA D	NULL	NULL	3222 16TH ST	COLUMBUS	NE	686014206	NULL	NULL	NULL
VEGA ROMUALDO CALZADIAS	VARELA EDNYA JUDITH BENCOMO	NULL	32236 N TABER TRL	SAN TAN VALLEY	AZ	851437664	NULL	NULL	NULL
ATLAS 2005 LLC	NULL	NULL	3225 MCLEOD DR STE 100	LAS VEGAS	NV	891212257	NULL	NULL	NULL
KAPALARAN LLC	NULL	NULL	3225 MCLEOD DR STE 100	LAS VEGAS	NV	891212257	NULL	NULL	NULL
BRADLEY MARK	NULL	NULL	32266 N RUTIN WAY	SAN TAN VALLEY	AZ	851437969	NULL	NULL	NULL
SMITH GEORGE L	NULL	NULL	32281 N TABER TRL UNIT A	SAN TAN VALLEY	AZ	851437664	NULL	NULL	NULL
GALVAN AMBER NICOLE	NULL	NULL	323 S PIEDRA NEGRA DR	QUEEN VALLEY	AZ	851189760	NULL	NULL	NULL
KU BERNIE & MICHOLE	TAMANAHA LILLIAN & CLYDE	NULL	32300 N KEFFER RD	SAN TAN VALLEY	AZ	851437600	NULL	NULL	NULL
RIFE COLTON L	NULL	NULL	32320 N RUTIN WAY	SAN TAN VALLEY	AZ	851437977	NULL	NULL	NULL
MCADAMS SONJA E	NULL	NULL	32339 N RUTIN WAY	SAN TAN VALLEY	AZ	851437977	NULL	NULL	NULL
RUSCH RICHARD A & TANYA L TRS	RUSCH FAMILY TRUST	NULL	32356 N PARTRIDGE CT	SAN TAN VALLEY	AZ	851437483	NULL	NULL	NULL
RAPP SAMANTHA SUE	NULL	NULL	32366 N TABER TRL	SAN TAN VALLEY	AZ	851438567	NULL	NULL	NULL
FAUST HEATHER & CHAD	NULL	NULL	32380 N FELIX RD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
MCGILLIVARY-CARONE CHERYL	C/O DOROTHY MCIVOR	NULL	324 S ALTA VISTA DR	QUEEN VALLEY	AZ	851189756	NULL	NULL	NULL
KAPLAN AMBER	KAPLAN MONICA	NULL	3245 SIERRA CREST WAY	RENO	NV	895198041	NULL	NULL	NULL
STEWART SHERRY A	NULL	NULL	32456 N KEFFER RD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
BEHRMANN ASHLEY	BEHRMANN KEILLOR	NULL	32551 N FELIX RD # B-1	SAN TAN VALLEY	AZ	851437606	NULL	NULL	NULL
WEGERT JOSEPH & HEATHER	NULL	NULL	32556 N KEFFER RD	SAN TAN VALLEY	AZ	851437368	NULL	NULL	NULL
THOMPSON RICK & LISA L	NULL	NULL	32561 N FELIX RD	SAN TAN VALLEY	AZ	851437606	NULL	NULL	NULL
FOX JOSHUA & TESSA	NULL	NULL	32583 N FELIX RD	SAN TAN VALLEY	AZ	851437606	NULL	NULL	NULL
MILLER COLLIN J & HALEY LYNNETTE	NULL	NULL	326 WYBURN PL	BURNS	TN	370295112	NULL	NULL	NULL
ANDREWS RANDY D & CARRIE L	NULL	NULL	32652 N FELIX RD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
GOLLIHER KATHLEEN G	NULL	NULL	327 W KIRK DR	QUEEN VALLEY	AZ	851189787	NULL	NULL	NULL
FERREIRA FELIPE V & OLWYN JODI J	NULL	NULL	3271 48TH ST APT 1L	ASTORIA	NY	111031428	NULL	NULL	NULL
COOPER JASON & THIEL CHRISTINE	NULL	NULL	32714 N KEFFER RD	SAN TAN VALLEY	AZ	851437215	NULL	NULL	NULL
MALTON DAVID ROSS	NULL	NULL	32716 N FELIX RD	SAN TAN VALLEY	AZ	851437908	NULL	NULL	NULL
CASTRO JOSE A	NULL	NULL	3272 GARFIELD ST	SAN BERNARDINO	CA	924071903	NULL	NULL	NULL
E MARIGOLD INVESTMENTS LLC	NULL	NULL	3272 GARFIELD ST	SAN BERNARDINO	CA	924071903	NULL	NULL	NULL
E PRIMROSE INVESTMENTS LLC	NULL	NULL	3272 GARFIELD ST	SAN BERNARDINO	CA	924071903	NULL	NULL	NULL
E WALLFLOWER INVESTMENTS LLC	NULL	NULL	3272 GARFIELD ST	SAN BERNARDINO	CA	924071903	NULL	NULL	NULL
JC CHOLLA INVESTMENTS LLC	NULL	NULL	3272 GARFIELD ST	SAN BERNARDINO	CA	924071903	NULL	NULL	NULL
RIEDERER JULIE ANN & JEFFREY SCOTT	NULL	NULL	32721 N 23RD AVE	PHOENIX	AZ	850858034	NULL	NULL	NULL
RAMIREZ JORGE J AHUMADA	NULL	NULL	32767 N DONNELLY WASH WAY	SAN TAN VALLEY	AZ	851424756	NULL	NULL	NULL
CLARK BRENT	NULL	NULL	32794 N KAREN LN	SAN TAN VALLEY	AZ	851435453	NULL	NULL	NULL
BOLINI ZACHARY WILLIAM	NULL	NULL	32817 N BAILEY LN	SAN TAN VALLEY	AZ	851436447	NULL	NULL	NULL
CUMMINS KANDY	CARLOS BRANDI K	NULL	32825 N KAREN LN	SAN TAN VALLEY	AZ	851435447	NULL	NULL	NULL
NEUBAUER TRISTAN WERNER & DAKOTA LEE	NULL	NULL	32888 N JOEL RD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
BERNAL GERARDO	NULL	NULL	32890 N KAREN LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
GUTIERREZ ESTELVINA	NULL	NULL	32903 N BAILEY LN	SAN TAN VALLEY	AZ	851436448	NULL	NULL	NULL
GONZALES TONY	NULL	NULL	32911 N KAREN LN	SAN TAN VALLEY	AZ	851434949	NULL	NULL	NULL
TOMASETTI MATTHEW CODY	NULL	NULL	32914 N JOEL RD	SAN TAN VALLEY	AZ	851437608	NULL	NULL	NULL
WETTER JOSHUA	NULL	NULL	32918 N BRINLEE LN	SAN TAN VALLEY	AZ	851436404	NULL	NULL	NULL
ALVAREZ ANTONIO SANCHEZ & SANCHEZ MARIA L	NULL	NULL	32943 N JOEL RD	SAN TAN VALLEY	AZ	851437608	NULL	NULL	NULL
PETROV NICOLA & LUDMILA TRS	PETROV FAMILY LIVING TRUST	NULL	32950 N KAREN LN	SAN TAN VALLEY	AZ	851434949	NULL	NULL	NULL
VORE DOUGLAS P	NULL	NULL	32959 N BAILEY LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
GIUNTA JOSEPH TR	GIUNTA TRUST	NULL	32966 N BRINLEE LN	SAN TAN VALLEY	AZ	851436404	NULL	NULL	NULL
DELEON JAMES	NULL	NULL	32995 N FELIX RD	SAN TAN VALLEY	AZ	851433050	NULL	NULL	NULL
STRUYCK JUSTIN & DEBORAH	NULL	NULL	32996 N KAREN LN	SAN TAN VALLEY	AZ	851434949	NULL	NULL	NULL
GUERRERO MICHAEL ANGEL	GUERRERO CHRISTOPHER MICHAEL	NULL	33029 N JOEL RD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
PERRIN MITCHELL	NULL	NULL	33031 N KAREN LN	SAN TAN VALLEY	AZ	851434950	NULL	NULL	NULL
WHITE BRAD	NULL	NULL	33040 N KAREN LN	SAN TAN VALLEY	AZ	851434951	NULL	NULL	NULL
WEBSTER JEREMY K & JENNIFER LYNN	NULL	NULL	33055 N BRINLEE LN	SAN TAN VALLEY	AZ	851436400	NULL	NULL	NULL
CAZARES NORMA A	NULL	NULL	33061 N FELIX RD	SAN TAN VALLEY	AZ	851437961	NULL	NULL	NULL
CLUFF KYLE LAWRENCE & AUBREY MARIE	NULL	NULL	33066 N BRINLEE LN	SAN TAN VALLEY	AZ	851436400	NULL	NULL	NULL
VANDERPOOL MARY A	NULL	NULL	331 S RIO VISTA DR	QUEEN VALLEY	AZ	851189761	NULL	NULL	NULL
BROWN TONY & JESSICA M	NULL	NULL	33114 N BRINLEE LN	SAN TAN VALLEY	AZ	851436401	NULL	NULL	NULL
WEISS LEANN M	NULL	NULL	33117 N BRINLEE LN	SAN TAN VALLEY	AZ	851436401	NULL	NULL	NULL
HUDSON RICHARD WILLIAM & GIDGET	NULL	NULL	33117 N KAREN LN	SAN TAN VALLEY	AZ	851436446	NULL	NULL	NULL
BUTTON BROOKE	BOERS ZACHARY	NULL	33121 N JOEL RD	SAN TAN VALLEY	AZ	851437607	NULL	NULL	NULL
ARMAS ARELY ELIDETH CANSECO	NULL	NULL	33129 N NORTH BUTTE DR	QUEEN CREEK	AZ	851424658	NULL	NULL	NULL
RODEN URSELA RENEE & TIMOTHY EUGENE	NULL	NULL	33151 N JOEL RD	SAN TAN VALLEY	AZ	851437607	NULL	NULL	NULL
CUTLER PATTI J	NULL	NULL	33178 N BRINLEE LN	SAN TAN VALLEY	AZ	851436401	NULL	NULL	NULL
GILLIAM RANDY T	GILLIAM TINA M	NULL	33191 N BRINLEE LN	SAN TAN VALLEY	AZ	851436401	NULL	NULL	NULL
REED DELIA M	NULL	NULL	33207 N BRINLEE LN	SAN TAN VALLEY	AZ	851436450	NULL	NULL	NULL
CORTEZ ALEX SCOTT	MONRIAL MARISSA MARIE	NULL	33250 N BRINLEE LN	SAN TAN VALLEY	AZ	851436450	NULL	NULL	NULL
GILES ETTA ELAINE	NULL	NULL	33297 N BRINLEE LN	SAN TAN VALLEY	AZ	851436450	NULL	NULL	NULL
SANCHEZ PEDRO & GRISELDA VARGAS	NULL	NULL	3338 W ROANOKE AVE	PHOENIX	AZ	850091413	NULL	NULL	NULL
HALL JONATHAN	NULL	NULL	33399 N KAREN LN	SAN TAN VALLEY	AZ	851435106	NULL	NULL	NULL
THOLIUS INVESTMENTS LLC	NULL	MICHAEL CHAVEZ	334 W MONROE ST # 610	PHOENIX	AZ	850031645	NULL	NULL	NULL
SMITH JAMES J	NULL	NULL	33457 N KAREN LN	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
FARLEY DEONNA & JOSHUA	NULL	NULL	33487 N KAREN LN	SAN TAN VALLEY	AZ	851435093	NULL	NULL	NULL
HOKE DARLENE M	NULL	NULL	33547 N LAINE RD	SAN TAN VALLEY	AZ	851435866	NULL	NULL	NULL
SWAINSTON KEITH SCOTT	NULL	NULL	33620 N LAINE RD	SAN TAN VALLEY	AZ	851435857	NULL	NULL	NULL
WOOD WANDA JEAN	WOOD SHANNON LEA	NULL	33673 N TABIRA CT	SAN TAN VALLEY	AZ	851436084	NULL	NULL	NULL
WICKWIRE SHAYNA	GOMEZ TIMOTHY	NULL	337 S ALTA VISTA DR	QUEEN VALLEY	AZ	851189775	NULL	NULL	NULL
REITZ TODD R	NULL	NULL	33907 N FELIX RD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
AIRTH GERALD L & MARY ANN	NULL	NULL	340 W MONTE VISTA DR	QUEEN VALLEY	AZ	851189773	NULL	NULL	NULL
MCLAUGHLIN GERALD W JR	NULL	NULL	340 W MORRIS DR	QUEEN VALLEY	AZ	851189785	NULL	NULL	NULL
KNIGHT CHAD	DEROSA SERENA	NULL	340 W SAHUARO DR	QUEEN VALLEY	AZ	85118-9782	NULL	NULL	NULL
YOUNG JASON & JAMIE	NULL	NULL	3427 E BLUE RIDGE WAY	GILBERT	AZ	852984206	NULL	NULL	NULL
MAIZ ERNESTO HUERTA	NULL	NULL	34348 N BARZONA TRL	SAN TAN VALLEY	AZ	851435400	NULL	NULL	NULL
KOPP JEREMY H & CHRISTINE M	NULL	NULL	34394 N ELK RUN RD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
YOUNG DANIEL J & BONNIE J TRS	YOUNG FAMILY TRUST	NULL	34499 N ELK RUN RD	SAN TAN VALLEY	AZ	851437804	NULL	NULL	NULL
REEVES ORVAL JOE	NULL	NULL	345 W KIRK DR	QUEEN VALLEY	AZ	851189787	NULL	NULL	NULL
CHAPPELLE WILLIAM E & DAWN A	NULL	NULL	34545 N ELK RUN RD	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
STOVER DIANA	NULL	NULL	346 S ALTA VISTA DR	QUEEN VALLEY	AZ	851189756	NULL	NULL	NULL
ALEXANDER PROPERTIES LLC	NULL	NULL	3475 S 159TH ST	GILBERT	AZ	852972055	NULL	NULL	NULL
ANDERSON FRASER & JODI	NULL	NULL	348 RUE CHEVAL NOIR	TOBIANO	NULL	NULL	BC	V1S 0G2	CANADA
MARTIN MATTHEW PAUL & BROOKE MARIE	NULL	NULL	34831 N MASHONA TRL	SAN TAN VALLEY	AZ	851435475	NULL	NULL	NULL
FUNK FAMILY EDUCATION FUND LLC	NULL	NULL	3488 FOOTHILL DR	PROVO	UT	846044859	NULL	NULL	NULL
EVANS THOMAS CHARLES & JOANN	NULL	NULL	34977 N KARAN SWISS CIR	SAN TAN VALLEY	AZ	851434856	NULL	NULL	NULL
VENN PAUL CHRISTOPHER & MICHELE ANNE	NULL	NULL	35 COLBOURNE DR	WINNIPEG	NULL	NULL	MB	R3Y 0K8	CANADA
CUSTER RUSSELL S & KIMBERLY A TRS	CUSTER FAMILY LIVING TRUST	NULL	35228 N ZACHARY RD	QUEEN CREEK	AZ	851425816	NULL	NULL	NULL
BEAL JENNIFER & MICHAEL	NULL	NULL	35251 N BANDOLIER DR	QUEEN CREEK	AZ	851425893	NULL	NULL	NULL
RODRIGUEZ PETE III & LINDA S	NULL	NULL	35263 N GHOST RIDER ST	SAN TAN VALLEY	AZ	851407468	NULL	NULL	NULL
KELLY ROBERT & REBECCA	NULL	NULL	355 S RIO VISTA DR	QUEEN VALLEY	AZ	851189761	NULL	NULL	NULL
ARIZONA QUALITY RV & BOAT STORAGE LLC	NULL	NULL	355 W CULLUMBER AVE	GILBERT	AZ	852334930	NULL	NULL	NULL
HOLGUIN YESENEA C	NULL	NULL	35700 N POMMEL PL	QUEEN CREEK	AZ	851423151	NULL	NULL	NULL
ESTOPELLAN JUAN G & AMERICA	NULL	NULL	35705 N WILD HORSE DR	SAN TAN VALLEY	AZ	851421469	NULL	NULL	NULL
GUTIERREZ JENNETTE	NULL	NULL	35871 N HANGING TREE ST	SAN TAN VALLEY	AZ	851408979	NULL	NULL	NULL
ROMERO DAVID	NULL	NULL	3592 E SANDWICK DR	SAN TAN VALLEY	AZ	851405059	NULL	NULL	NULL
HERNANDEZ-GONZALEZ SERGIO HERNANDEZ	MARQUEZ ISABEL ALEJANDRA HERNANDEZ	NULL	36088 N QUICK DRAW LN	SAN TAN VALLEY	AZ	851407379	NULL	NULL	NULL
YOCHELSON BORIS & SYLVIA	NULL	NULL	362 W MORRIS DR	QUEEN VALLEY	AZ	851189785	NULL	NULL	NULL
SYROWSKI MICHAEL & TERESA	NULL	NULL	362 W SAHUARO DR	QUEEN VALLEY	AZ	851189782	NULL	NULL	NULL
ZAMPKO JOSEPH A	MOLLETT JENESSA NICHOLE	NULL	36632 SW LAURELWOOD RD	HILLSBORO	OR	971239046	NULL	NULL	NULL
AUSICH SHIRLEY A TR	AUSICH FAM REV TRUST	NULL	36817 N STONEWARE DR	SAN TAN VALLEY	AZ	851405315	NULL	NULL	NULL
RANDALL CLINTON & SUE FAMILY TRUST	NULL	NULL	3756 E MEADOW CREEK WAY	SAN TAN VALLEY	AZ	851405340	NULL	NULL	NULL
YUBETA MATILDA B	NULL	NULL	376 S ALTA VISTA DR	QUEEN VALLEY	AZ	851189756	NULL	NULL	NULL
CHAMBERLAIN TRISTAN	NULL	NULL	3799 E HASH KNIFE DRAW RD	SAN TAN VALLEY	AZ	851408244	NULL	NULL	NULL
ARIZONA WATER COMPANY	NULL	NULL	3805 N BLACK CANYON HWY	PHOENIX	AZ	85015	NULL	NULL	NULL
MAGMA RANCH III - PHOENIX LLC	NULL	NULL	3808 N SULLIVAN RD BLDG N15 STE 202	SPOKANE VALLEY	WA	992161608	NULL	NULL	USA
NAVEL LAND & CATTLE CO LLC	NULL	NULL	381 NAVEL LN	SNOWFLAKE	AZ	859375515	NULL	NULL	NULL
J-P CATTLE CO LLC	NULL	NULL	381 W NAVEL LN	SNOWFLAKE	AZ	85937	NULL	NULL	NULL
LESUEUR INVESTMENT VIII LLC ETAL	NULL	NULL	3850 E BASELINE RD STE 114	MESA	AZ	852064403	NULL	NULL	NULL
MAGMA FLOOD CONTROL DISTRICT	NULL	NULL	3850 E BASELINE RD STE 114	MESA	AZ	852064403	NULL	NULL	NULL
WOLFKIN FARMS LLC	NULL	NULL	3850 E BASELINE RD STE 123	MESA	AZ	852064404	NULL	NULL	USA
BRASFIELD BRADLEY O & DIANA	BRASFIELD CRIST LANELLE	NULL	3861 W DUBLIN ST	CHANDLER	AZ	852262284	NULL	NULL	NULL
HOLDEN CLARK R	HOLDEN LYNN M	NULL	38762 251ST ST	PLANKINTON	SD	573685746	NULL	NULL	NULL
KENDALL JAMES W	NULL	NULL	389 S RIO VISTA DR	QUEEN VALLEY	AZ	85118	NULL	NULL	NULL
32959 N FELIX ROAD LLC	NULL	NULL	3911 COZY DR	WICHITA	KS	672201928	NULL	NULL	NULL
KUHL MAUREEN & JOSEPH	NULL	NULL	39147 N LUKE LN	SAN TAN VALLEY	AZ	851405685	NULL	NULL	NULL
WELTON WENDI KATHERYN & NICKLAUS EUGENE	NULL	NULL	3916 STIRRUP CIR	KINGMAN	AZ	864096954	NULL	NULL	NULL
SCHMIDT GORDON JR & KIMBERLY SCHWAN TRS	SCHMIDT-SCHWAN ARIZONA TRUST	NULL	39318 133RD ST	BATH	SD	574275809	NULL	NULL	NULL
PEREZ ANTHONY & TINA M	NULL	NULL	3998 E 100 N	RIGBY	ID	834425715	NULL	NULL	NULL
PARADISE RANCH HOLDINGS LLC	NULL	NULL	401 E 8TH ST STE 214	SIOUX FALLS	SD	571037049	NULL	NULL	NULL
CROWN ATLANTIC COMPANY LLC	NULL	NULL	4017 WASHINGTON RD PMB 353	MC MURRAY	PA	153172520	NULL	NULL	NULL
WISE THOMAS A & FRANZISKA K FAM TRUST	NULL	NULL	403 S ALTA VISTA DR	QUEEN VALLEY	AZ	851189777	NULL	NULL	NULL
LEMUS JOSE & OCHOA SONIA	NULL	NULL	40416 N ORKNEY WAY	SAN TAN VALLEY	AZ	851403153	NULL	NULL	NULL
PRIDE GEORGE & JENIECE	NULL	NULL	406 S ALTA VISTA DR	QUEEN VALLEY	AZ	851189776	NULL	NULL	NULL
TULKAN PAMELA JEAN	NULL	NULL	4061 N POINT RIDGE RD	BUCKEYE	AZ	853967673	NULL	NULL	NULL
WEBER BRENT ERWIN & MELEASHIA JEAN	NULL	NULL	4061 N POINT RIDGE RD	BUCKEYE	AZ	853967673	NULL	NULL	NULL
OPENDOOR PROPERTY TRUST I	NULL	NULL	410 N SCOTTSDALE RD STE 1600	TEMPE	AZ	852880976	NULL	NULL	NULL
YATES AMY	NULL	NULL	411 S RIO VISTA DR	QUEEN VALLEY	AZ	851189716	NULL	NULL	NULL
WILCOX BRYANT REID	NULL	NULL	41213 N YORKTOWN TRL	ANTHEM	AZ	850864909	NULL	NULL	NULL
GONZALEZ MARIO A	GONZALEZ JONATHAN ALBERTO	NULL	414 S 98TH ST	MESA	AZ	852082544	NULL	NULL	NULL
ZJP VENTURES LLC	NULL	NULL	4258 E SANTA CLARA DR	SAN TAN VALLEY	AZ	851407948	NULL	NULL	NULL
GUARDIAN ANGEL HOLDINGS LLC	NULL	NULL	4261 S DANIELSON WAY	CHANDLER	AZ	852492927	NULL	NULL	NULL
FORRER ANTONIO & HOLLY	NULL	NULL	42656 N SUBURBAN AVE	SAN TAN VALLEY	AZ	851408239	NULL	NULL	NULL
MCGURN JOHN B & WOODIEL CAROL R	TATE TESSA N	NULL	428 S CHOLLA DR	QUEEN VALLEY	AZ	851189778	NULL	NULL	NULL
MAURER AARON	NULL	NULL	42871 N SUBURBAN AVE	SAN TAN VALLEY	AZ	851409836	NULL	NULL	NULL
REDDY GITA JAKKAM & SATISH JAKKAM	NULL	NULL	429 MIREY DAM RD	MIDDLEBURY	CT	67621437	NULL	NULL	NULL
PETERS JAKE & KIM	NULL	NULL	43 FOREST CREEK RD	WINNIPEG	NULL	NULL	MB	R3Y 0H7	CANADA
PRIDE GEORGE MA	NULL	NULL	430 S ALTA VISTA DR	QUEEN VALLEY	AZ	851189776	NULL	NULL	NULL
BASTAIN GARY L	BASTAIN MARY	NULL	4305 NILES HILL RD	WELLSVILLE	NY	148959609	NULL	NULL	NULL
HERMAN DERRILL	HERMAN LIIA	NULL	4307 49TH ST	INNISFALL	NULL	NULL	AB	T4G 1P3	CANADA
MANEK RONAK B & POONAM	NULL	NULL	4341 S BINARY	MESA	AZ	852128779	NULL	NULL	NULL
REINESCH CHRISTOPHER JOHN SR	REINESCH CLINT	NULL	4344 S AVENIDA DE ANGELES	GOLD CANYON	AZ	851182976	NULL	NULL	NULL

AMUNDSON CURTIS R & BETTY J	NULL	NULL	43507 120TH ST SW	EAST GRAND FORKS	MN	567219102	NULL	NULL	NULL
FENDLEY JAMIE RAE	NULL	NULL	436 W MORRIS CIR	QUEEN VALLEY	AZ	851189722	NULL	NULL	NULL
RONIX HOLDINGS LLC	NULL	NULL	4365 E PECOS RD STE 108	GILBERT	AZ	852957888	NULL	NULL	NULL
DANE PETER & LYNN	NULL	NULL	4405 NE 25TH CT	RENTON	WA	980593536	NULL	NULL	NULL
KO KENSON & LI CHUN YAN	NULL	NULL	4408 STONE CANYON DR	SAN JOSE	CA	951362424	NULL	NULL	NULL
SOLDAVINI DANIEL	NULL	NULL	441 RENPOINT CT	ROSEVILLE	CA	956614081	NULL	NULL	NULL
HALAL MARCOPOLO B & CONNIE ROSE	NULL	NULL	445 W MORRIS CIR	QUEEN VALLEY	AZ	851189722	NULL	NULL	NULL
MOUNTAIN ISLAND DEVELOPMENT LLC	NULL	NULL	4474 E ROLLING RIDGE RD	SAN TAN VALLEY	AZ	851408761	NULL	NULL	USA
PACHECO RITO MANUEL SR AND JUANA	NULL	NULL	451 E GLADE	MESA	AZ	85204	NULL	NULL	NULL
PACHECO RITO MANUEL & JUANA	NULL	NULL	451 E GLADE AVE	MESA	AZ	85204	NULL	NULL	NULL
HEATH B LEE TRS	THE BLH TRUST	NULL	4541 E VERMONT AVE N	PHOENIX	AZ	850181726	NULL	NULL	USA
KEREK MARCUS & SUSAN E	NULL	NULL	456 W MORRIS CIR	QUEEN VALLEY	AZ	851189722	NULL	NULL	NULL
BALL LAURINE 2015 FAM TRUST	NULL	NULL	4634 PASEO DE LA VIS	BONITA	CA	91902-1257	NULL	NULL	NULL
MCMINN GLENN S & LINETTE KAE	MCMINN ROY G & JUDY A ETAL	NULL	464 S MULESHOE RD	APACHE JUNCTION	AZ	851199651	NULL	NULL	NULL
MOTA JUAN P & JUANA TR	THE MOTA FAMILY TRUST	NULL	4645 W GOLDMINE MOUNTAIN DR	QUEEN CREEK	AZ	851427546	NULL	NULL	NULL
MCLARTY PROPERTIES LLC	NULL	NULL	4649 W SALIX DR	MERIDIAN	ID	836467707	NULL	NULL	NULL
LEIGHTY RICHARD E	NULL	NULL	468 W MORRIS CIR	QUEEN VALLEY	AZ	85118	NULL	NULL	NULL
ANSSON RICHARD SR & PATRICIA	NULL	NULL	4688 S WINSOR DR	BATTLEFIELD	MO	656198309	NULL	NULL	NULL
REED RICHARD R & HOLLY R TRS	NULL	NULL	469 W MORRIS CIR	QUEEN VALLEY	AZ	851189722	NULL	NULL	NULL
AZ RE PROPERTIES LLC	NULL	NULL	47 S DEVOE AVE	YONKERS	NY	107054729	NULL	NULL	NULL
MAGMA ARIZONA RAILROAD COMPANY	C/O RTSS TAX SERVICES	NULL	4700 DAYBREAK PKWY	SOUTH JORDAN	UT	84095	NULL	NULL	NULL
LOPEZ ENRIQUE CAZARES	NULL	NULL	4715 E SANTA RITA DR	SAN TAN VALLEY	AZ	851407076	NULL	NULL	NULL
PHOENIX LOAN COMPANY LLC	NULL	NULL	4762 E HARMONY CIR	MESA	AZ	852063332	NULL	NULL	NULL
NELSON DON & MARCIA REV TRUST	NULL	NULL	47687 N CAMINO DEL SOL	GOLD CANYON	AZ	85118-7502	NULL	NULL	NULL
WITTMAN JAMES A & LAURIE	NULL	NULL	477 S CHOLLA DR	QUEEN VALLEY	AZ	851189779	NULL	NULL	NULL
BOWER MOLLY	NULL	NULL	477 W KIRK DR	QUEEN VALLEY	AZ	851189788	NULL	NULL	NULL
RUSSELL DAVID M	D ANTONI LATITIA	NULL	47703 N CAMINO DEL SOL	GOLD CANYON	AZ	851187502	NULL	NULL	NULL
SAPP MADISON LACEY	HALL ALEXANDER CONRAD	NULL	47719 N CAMINO DEL SOL	GOLD CANYON	AZ	851187502	NULL	NULL	NULL
LARRISON KIM L	NULL	NULL	47751 N CAMINO DEL SOL	GOLD CANYON	AZ	851187502	NULL	NULL	NULL
JENKINS WILLIAM	NULL	NULL	47767 N CAMINO DEL SOL	GOLD CANYON	AZ	85118-7502	NULL	NULL	NULL
KIRK RICKY L & GLENNDA A FAM TRUST	NULL	NULL	47860 N NAVIDAD CT	GOLD CANYON	AZ	851187510	NULL	NULL	NULL
SOPER JOHN FRANKLIN TR	EVANS-SOPER SHARYN LEE TR	NULL	47904 N NAVIDAD CT	GOLD CANYON	AZ	851187510	NULL	NULL	NULL
SCHMIDT FRANK V & ELAINE BONNIE	NULL	NULL	47927 N NAVIDAD CT	GOLD CANYON	AZ	851187510	NULL	NULL	NULL
BROWN JEFFREY M	BROWN KAREN W	NULL	47951 N NAVIDAD CT	GOLD CANYON	AZ	851187510	NULL	NULL	NULL
MOLEK JANUSZ & MARIA	NULL	NULL	47970 N NAVIDAD CT	GOLD CANYON	AZ	851187510	NULL	NULL	NULL
PLUMMER MARGO	NULL	NULL	47975 N NAVIDAD CT	GOLD CANYON	AZ	851187510	NULL	NULL	NULL
FORD JOHN G	FORD MARGARET J	NULL	47992 N NAVIDAD CT	GOLD CANYON	AZ	851187510	NULL	NULL	NULL
ALBERTSEN MARK WILLIAM	ALBERTSEN MISTY LYN	NULL	47999 N NAVIDAD CT	GOLD CANYON	AZ	851187510	NULL	NULL	NULL
JONES MICHAEL D & DEBORAH K TRS	NULL	NULL	48014 N NAVIDAD CT	GOLD CANYON	AZ	851187510	NULL	NULL	NULL
DUBOIS ROBERT FRANCIS & SHARON LEE DUBOIS CO-TRS	DUBOIS FAM TRUST	NULL	48017 N LA SOLEDED	GOLD CANYON	AZ	85118-7508	NULL	NULL	NULL
GRIFFIN WILLIAM JR & CYNTHIA A REV TRUST	NULL	NULL	48023 N NAVIDAD CT	GOLD CANYON	AZ	851187510	NULL	NULL	NULL
MAGDA JOSEPH REV LIV TRUST	NULL	NULL	48031 N LA SOLEDAD	GOLD CANYON	AZ	851187508	NULL	NULL	NULL
SCHRIFT GERALD & REBECCA	NULL	NULL	48036 N NAVIDAD CT	GOLD CANYON	AZ	851187510	NULL	NULL	NULL
PICKUP AUTUMN	EINSEL GARY L DAVID	NULL	48041 N RICO WAY	GOLD CANYON	AZ	851187514	NULL	NULL	NULL
BADISH JAY	NULL	NULL	48055 N RICO WAY	GOLD CANYON	AZ	851187514	NULL	NULL	NULL
QUINN TERENCE J TRS	QUINN C SUZANNE TRS	NULL	48058 N NAVIDAD CT	GOLD CANYON	AZ	851187510	NULL	NULL	NULL
WILLIAMS PAUL J	NULL	NULL	48059 N LA SOLEDAD	GOLD CANYON	AZ	851187508	NULL	NULL	NULL
GRAHAM SHEA MICHAEL	NULL	NULL	48069 N RICO WAY	GOLD CANYON	AZ	851187514	NULL	NULL	NULL
BANKS ROBERT T	NULL	NULL	48073 N LA SOLEDAD	GOLD CANYON	AZ	851187508	NULL	NULL	NULL
KOSEL ERIC & CORA	NULL	NULL	48083 N EL BUHO PEQUENO	GOLD CANYON	AZ	851187505	NULL	NULL	NULL
TEEPLES LARRY A & SANDRA J	NULL	NULL	48083 N RICO WAY	GOLD CANYON	AZ	851187514	NULL	NULL	NULL
CREBS DAVID M & BARBARA LYNN	NULL	NULL	48097 N RICO WAY	GOLD CANYON	AZ	851187514	NULL	NULL	NULL
SCOTT HOWARD M & CARLA CO-TRS	NULL	NULL	481 W KIRK DR	QUEEN VALLEY	AZ	851189788	NULL	NULL	NULL
SMITH EDD L & CRYSTAL	NULL	NULL	48101 N LA SOLEDAD	GOLD CANYON	AZ	85118-7508	NULL	NULL	NULL
KOPASKIE MARY & BROWN WILLIE FRANK	NULL	NULL	48103 N EL BUHO PEQUENO	GOLD CANYON	AZ	851187505	NULL	NULL	NULL
MUNDEN SAVANNAH MAHRIE	VANCE CURTIS MATHEW	NULL	48115 N LA SOLEDAD	GOLD CANYON	AZ	851180835	NULL	NULL	NULL
GUTIERREZ JULIAN RODRIGO CUSTODIO	NULL	NULL	48139 N LA SOLEDAD	GOLD CANYON	AZ	851180835	NULL	NULL	NULL
GRAMS-HABEDANK TESSA PEYTON	STAPLETON STEVEN JEFFREY	NULL	48159 N LA SOLEDAD	GOLD CANYON	AZ	851180835	NULL	NULL	NULL
KING DANIELA SERENELA	NULL	NULL	48171 N LA SOLEDAD	GOLD CANYON	AZ	851180835	NULL	NULL	NULL
BEJARANO ZAIRA MARILYN QUIROGA	COTA FRANCISCO JAVIER Q & CALIXTRO MARICELA B	NULL	48187 N LA SOLEDAD	GOLD CANYON	AZ	851180835	NULL	NULL	NULL
BURKES DARRYL & AMY LIV TRUST	NULL	NULL	48212 N BASILIO ST	GOLD CANYON	AZ	851180827	NULL	NULL	NULL
MARTIN SEAN & MELISSA	NULL	NULL	48219 N LA SOLEDAD	GOLD CANYON	AZ	851180836	NULL	NULL	NULL
BERNAL GWENDOLYN & MARTIN	NULL	NULL	48224 N BASILIO ST	GOLD CANYON	AZ	851180827	NULL	NULL	NULL
HILDEBRANDT MATTHEW W & JULIE	NULL	NULL	48231 N LA SOLEDAD	GOLD CANYON	AZ	851180836	NULL	NULL	NULL
UNRUH JOEL JAMES III & GLENNA DIANE	NULL	NULL	48238 N BASILIO ST	GOLD CANYON	AZ	851180827	NULL	NULL	NULL
WAX KAITLYN MICHELLE ANN	STEWART WESLEY G	NULL	48282 N BASILIO ST	GOLD CANYON	AZ	851180827	NULL	NULL	NULL
BENJAMIN LESLIE K	NULL	NULL	48296 N BASILIO ST	GOLD CANYON	AZ	851180827	NULL	NULL	NULL
BRAZEAL ALEXANDER	MACFALL TAYLOR	NULL	48324 N BASILIO ST	GOLD CANYON	AZ	851180828	NULL	NULL	NULL
GORTON FRED & TARA	NULL	NULL	48333 N DOROTEA WAY	GOLD CANYON	AZ	85118	NULL	NULL	NULL
ERICKSON JEFFREY & TAMMIE	NULL	NULL	48336 N BASILIO ST	GOLD CANYON	AZ	851180828	NULL	NULL	NULL
RICHARDSON SHAWN D & GWENNA	NULL	NULL	4834 N TONGASS HWY	KETCHIKAN	AK	999019002	NULL	NULL	NULL
TRAUTMAN ROXANNE	BIGGERSTAFF MARK	NULL	48343 N DOROTEA WAY	GOLD CANYON	AZ	851187421	NULL	NULL	NULL
REGAN MICHAEL & SARAH	NULL	NULL	48361 N DOROTEA WAY	GOLD CANYON	AZ	85118	NULL	NULL	NULL
FLORES JAVIER & LAURA	NULL	NULL	48364 N BASILIO ST	GOLD CANYON	AZ	85118-0828	NULL	NULL	NULL
SPAETH DAVID & KATHLEEN	NULL	NULL	48376 N BASILIO ST	GOLD CANYON	AZ	851180828	NULL	NULL	NULL
OLMOS ELIAS ANTHONY	VALDEZ YUVITHZIA D ROMERO	NULL	48379 N DOROTEA WAY	GOLD CANYON	AZ	85118	NULL	NULL	NULL
RANDALL LACEY RAE & TUFFLY ANTHONY	RANDALL VONNIE	NULL	48402 N BASILIO ST	GOLD CANYON	AZ	85118	NULL	NULL	NULL
GARDNER KIMBERLY W	NULL	NULL	48416 N BASILIO ST	GOLD CANYON	AZ	85118	NULL	NULL	NULL
LOEFFLER TERYL & OLIVIA	NULL	NULL	48424 N BASILIO ST	GOLD CANYON	AZ	85118	NULL	NULL	NULL
HIGUERA JOSE & KATHLEEN RAE	NULL	NULL	48443 N DOROTEA WAY	GOLD CANYON	AZ	851187424	NULL	NULL	NULL
NIESLEY WILLIAM CURTIS & VICKIE CARLENE	NULL	NULL	4845 N JOSHUA WAY	CHINO VALLEY	AZ	863235268	NULL	NULL	NULL
LARSON CHRISTINE	NULL	NULL	48461 N DOROTEA WAY	GOLD CANYON	AZ	851187424	NULL	NULL	NULL
HALSEY ROBERT C & SARAH GRACE	NULL	NULL	48473 N DOROTEA WAY	GOLD CANYON	AZ	851187424	NULL	NULL	NULL
VALDEZ ALYCIA C	NULL	NULL	48479 N DURAN WAY	GOLD CANYON	AZ	85118	NULL	NULL	NULL
MACIEJACK EUGENE JAMES	VALENZUELA TINA L	NULL	48489 N DURAN WAY	GOLD CANYON	AZ	85118	NULL	NULL	NULL
PHASLEY ANNA M & JOE	NULL	NULL	485 E WINDSOR DR	GILBERT	AZ	852964156	NULL	NULL	NULL
MULLEN LEONARD & CHRISTY	NULL	NULL	488 E TAYLOR TRL	SAN TAN VALLEY	AZ	851435599	NULL	NULL	NULL
HASELHORST JOSHUA & TIFFANY	NULL	NULL	490 S TORNADO TRL	GOLD CANYON	AZ	851187422	NULL	NULL	NULL
MCCARTHY DANIEL P	NULL	NULL	4920 W KASTLER LN	NEW RIVER	AZ	850873085	NULL	NULL	NULL
VALDEZ SERENA DESIREE	NULL	NULL	501 E RAY RD LOT 232	CHANDLER	AZ	852253383	NULL	NULL	NULL
LARSON WADE A & STACEY	NULL	NULL	501 OAKMONT DR	VERMILLION	SD	570693463	NULL	NULL	NULL
YANG NENG HUI	LIN SHAN	NULL	507 GRAFTON AVE	ALMA	MI	488012707	NULL	NULL	NULL
VIDZIUNAS RIMGAUDAS PETRAS	NULL	NULL	51 W CHORRITO CT	QUEEN VALLEY	AZ	851189718	NULL	NULL	NULL
SHERWOOD WAYNE CARL	NULL	NULL	515 GAME RIDGE RD	SELAH	WA	989429097	NULL	NULL	NULL
FARRER ROB & DEBBY FAM TRUST	NULL	NULL	5232 DEL NORTE CIR	LA PALMA	CA	906232206	NULL	NULL	NULL
SHADOWROCK LLC	NULL	NULL	524 S SHADE ROCK LANE	QUEEN VALLEY	AZ	85118	NULL	NULL	NULL
MILLER TED & CAROL JEANNE MAPSON	NULL	NULL	524 S SHADE ROCK LN	QUEEN VALLEY	AZ	85118	NULL	NULL	NULL
HUDY GERALD L & JEANNE CAPLIS TRS	NULL	NULL	527 S TORNADO TRL	QUEEN VALLEY	AZ	851187447	NULL	NULL	NULL
HTD TRUST	PARKER DONALD JAMES TRS	NULL	530 E HUNT HWY APT 103-105	SAN TAN VALLEY	AZ	851436581	NULL	NULL	NULL
SANCHEZ RYAN	NULL	NULL	530 E HUNT HWY STE 103 BOX 305	SAN TAN VALLEY	AZ	851436581	NULL	NULL	NULL
MORGADO MARIA MARQUEZ	NULL	NULL	5330 E SHADOW LN	QUEEN CREEK	AZ	851405844	NULL	NULL	NULL
BECK ROBERT & SUSAN P	NULL	NULL	5438 FAIRLAWN SHORES TRL SE	PRIOR LAKE	MN	553721925	NULL	NULL	NULL
BOISACQ SHAWN & LAURA	NULL	NULL	549 W SWEET SHRUB AVE	SAN TAN VALLEY	AZ	851406648	NULL	NULL	NULL
KB HOME PHOENIX INC	NULL	NULL	58 S RIVER DR STE 250	TEMPE	AZ	852883700	NULL	NULL	NULL
ADVANI PRITI D	NULL	NULL	5834 INSPIRATION TER	BRADENTON	FL	342104094	NULL	NULL	NULL
MAGWILI ROMEO JR	NULL	NULL	591 STAGHORN PASS AVE	LAS VEGAS	NV	891834962	NULL	NULL	NULL
STAR 2022-SFR3 BORROWER LP	C/O STARWOOD CAPITAL GROUP	NULL	591 W PUTNAM AVE	GREENWICH	CT	68306005	NULL	NULL	NULL
WILLIAMS MARK & DONNA	NULL	NULL	6 LAMERSON CIR	BUDD LAKE	NJ	78282460	NULL	NULL	NULL
HOMES FOR OUR TROOPS INC	NULL	NULL	6 MAIN ST	TAUNTON	MA	27802733	NULL	NULL	NULL
FKH SFR LLP	NULL	C/O FIRSTKEY HOMES	600 GALLERIA PARKWAY STE 300	MARIETTA	GA	30339	NULL	NULL	NULL
RM1 SFR PROPCO A LP	NULL	C/O FIRSTKEY HOMES	600 GALLERIA PKWY SE STE 300	ATLANTA	GA	303395994	NULL	NULL	NULL
RM1 SFR PROPCO B LP	NULL	C/O FIRSTKEY HOMES	600 GALLERIA PKWY SE STE 300	ATLANTA	GA	303395994	NULL	NULL	NULL
RM2 SFR A LP	NULL	NULL	600 GALLERIA PKWY SE STE 300	ATLANTA	GA	303398146	NULL	NULL	NULL
MORENO LORENZO & VILLEGAS SYLVIA	NULL	NULL	604 S UDALL APT 1	MESA	AZ	852047539	NULL	NULL	NULL
MADSEN DONALD J & CAROL A	NULL	NULL	6043 E HILLVIEW ST	MESA	AZ	852054512	NULL	NULL	NULL
7 GIRLS AZ HOMES 1 LLC	7 GIRLS AZ HOMES 2 LLC	NULL	606 MILL POND RD	ROCK RAPIDS	IA	512462040	NULL	NULL	NULL
MORRILL DELANEY A & STORM JOSEPH R	NULL	NULL	612 W TALLULA TRL	SAN TAN VALLEY	AZ	851401306	NULL	NULL	NULL
MCENTEE KYLEE J TRS	MCENTEE DESCENDANTS FAM TRUST	NULL	615 W AVIARY WAY	GILBERT	AZ	852334807	NULL	NULL	NULL
EHLEBRACHT MERLE	EHLEBRACHT MARILYN J	NULL	619 S TORNADO TRL	QUEEN VALLEY	AZ	851187419	NULL	NULL	NULL
DILULLO ROBIN LUKE & CHERYL LYNN	NULL	NULL	621 N SABINO DR	GILBERT	AZ	852347523	NULL	NULL	NULL
LIU XIANG	CHEN SHUIZHEN	NULL	624 W CANTEBRIA DR	GILBERT	AZ	852331009	NULL	NULL	NULL
PARENT KENNETH J	NULL	NULL	6315 BUCK RIDGE LN	DANBURY	WI	548304400	NULL	NULL	NULL
DURKIN GLEN A	DURKIN LAURA E	NULL	632 S TORNADO TRL	QUEEN VALLEY	AZ	85118	NULL	NULL	NULL
MOFFAT REBECCA	NULL	NULL	633 S LOMA VISTA CIR	MESA	AZ	852043113	NULL	NULL	NULL
ROSENDALE JEFFREY D & TERESA A	NULL	NULL	636 KNOX ST	WINNIPEG	NULL	NULL	MB	R2Y 1L5	CANADA
MELTON KMIBERLY ANN	MELTON DAVID WAYNE	NULL	636 THISTLE DR	SPRING CREEK	NV	898156920	NULL	NULL	NULL
SALGADO DEYCI	SALGADO JENNIFER	NULL	6405 E PONY TRACK LN	QUEEN CREEK	AZ	851409118	NULL	NULL	NULL
JENCKS SUNFLOWER LLC	NULL	NULL	6428 S TROPHY CT	GILBERT	AZ	852984892	NULL	NULL	NULL
HUKILL THOMAS L & CHRISTIE LIV TRUST	NULL	NULL	6599 S LAKESHORE DR	PENTWATER	MI	494499642	NULL	NULL	NULL
PIPPETT GEORGE MASON JR	NULL	NULL	66 S POMEROY RD	QUEEN VALLEY	AZ	851189714	NULL	NULL	NULL
SWAINSTON WADE COLBERT TR	SWAINSTON FAM TRUST	NULL	6601 E US HIGHWAY 60 SPC 75	GOLD CANYON	AZ	851187407	NULL	NULL	NULL
DESERT ROSE CORPORATION	NULL	NULL	6607 S KINGS RANCH RD	GOLD CANYON	AZ	851186874	NULL	NULL	NULL
SHAHBAZIAN ROBERT	NULL	NULL	6634 E BARSTOW ST	MESA	AZ	852058401	NULL	NULL	NULL
MR REAL ESTATE HOLDINGS LLC	NULL	NULL	6658 S ST ANDREWS CT	GILBERT	AZ	852984114	NULL	NULL	NULL
PARADISE RANCH HOLDINGS LLC	NULL	NULL	6658 S ST ANDREWS CT	GILBERT	AZ	852984114	NULL	NULL	NULL
CASDORPH KELLY G	NULL	NULL	6686 E FLYNN AVE	FLORENCE	AZ	851325107	NULL	NULL	NULL
TEYECHEA OMAR A	TELLECHEA HECTOR R	NULL	6689 E ROLLING RIDGE RD	SAN TAN VALLEY	AZ	851408720	NULL	NULL	USA
BROWN CARMELITA P & DWAYNE D	NULL	NULL	6787 E SAN TAN WAY	FLORENCE	AZ	851328015	NULL	NULL	NULL
JACKSON BRANDON M	NULL	NULL	68 HARRIET ST UNIT 7	SAN FRANCISCO	CA	941034094	NULL	NULL	NULL
LACAMERA JOHN R JR & MARGARET MARY CO-TRS; N&P TRUST	PENNELL MICHAEL B & NANCY H TRUST	NULL	6801 E PORTLAND ST	SCOTTSDALE	AZ	852573261	NULL	NULL	NULL
LUNA MARIA	NULL	NULL	6804 E HERITAGE RD	FLORENCE	AZ	851327214	NULL	NULL	NULL
POWELL ANNET ROSE-WERNER	POWELL MICHAEL DAVID SR	NULL	685 CUNNINGHAM LN	EL CAJON	CA	920193504	NULL	NULL	NULL
MARTIN LAURENCE & CINDA	NULL	NULL	687 ARRAN WAY	GRAND JUNCTION	CO	815044747	NULL	NULL	NULL
LOFGREN RANDAL & TONI MARIE	NULL	NULL	694 S TORNADO TRL	QUEEN VALLEY	AZ	851187419	NULL	NULL	NULL
HOFFMASTER MARGARET & JAMES R	NULL	NULL	694 W TWIN PEAKS PKWY	SAN TAN VALLEY	AZ	851435830	NULL	NULL	NULL
CLAPP PAUL A & CAROL J MURPHY	HARMON JENNIFER L	NULL	6955 NE 8TH CT	ANKENY	IA	500238820	NULL	NULL	NULL
KACZANOWSKI LINDSEY	KACZANOWSKI KAREN	NULL	6963 E CULVER ST	MESA	AZ	852071043	NULL	NULL	NULL
ADERHOLDT STEPHEN M	ADERHOLDT SHARON M	NULL	6995 E GAMEBIRD WAY	SAN TAN VALLEY	AZ	851431243	NULL	NULL	NULL
FOGARTY CHERYL	MCCORMICK ELIZABETH	NULL	701 WHITE SPAR RD APT 214	PRESCOTT	AZ	863034697	NULL	NULL	NULL
HERRERA BENJAMIN & MARIA G	NULL	NULL	704 E MESQUITE AVE	GILBERT	AZ	852961720	NULL	NULL	NULL

SOMMER JOHN A & KAREN K	NULL	NULL	711 ASH AVE	GIBBON	MN	553352154	NULL	NULL	NULL
MAGMA RANCH II HOA INC	NULL	C/O AREAD MANAGEMENT INC	7150 E CAMELBACK RD STE 400	SCOTTSDALE	AZ	85251-1225	NULL	NULL	NULL
VP MRV LLC	NULL	C/O AREAD MANAGEMENT INC	7150 E CAMELBACK RD STE 400	SCOTTSDALE	AZ	852511225	NULL	NULL	NULL
RS XII NM PHOENIX OWNER 1 LP	NULL	NULL	717 N HARWOOD ST STE 2800	DALLAS	TX	752016525	NULL	NULL	NULL
32617 N KEFFER LLC	NULL	NULL	719 W VINE AVE	MESA	AZ	852102331	NULL	NULL	NULL
JOLLY JAMES & DEBRA	NULL	NULL	73 CEDAR HILLS DR	POCATELLO	ID	83204	NULL	NULL	NULL
DESOE CHERYL & STEVEN	NULL	NULL	7309 S 173RD ST	OMAHA	NE	681361123	NULL	NULL	NULL
PEARSON ROBERT K & SHARON BETH TRS	PEARSON REV TRUST	NULL	7324 W QUAIL TRACK DR	PEORIA	AZ	853836364	NULL	NULL	NULL
CARTER TODD WILLIAM & MELINDA SHADOWEN TRS	CARTER LIV TRUST	NULL	735 S TORNADO TRL	QUEEN VALLEY	AZ	851187425	NULL	NULL	NULL
GRACIANO JOSE MANUEL	NULL	NULL	7461 E CALYPSO CIR	MESA	AZ	852082056	NULL	NULL	NULL
LOPEZ EVA REV TRUST	NULL	NULL	7461 SKYLINE DR	STANTON	CA	906802161	NULL	NULL	NULL
NEW MAGMA RANCH II LLC	NULL	NULL	7600 E DOUBLETREE RANCH RD STE 150	SCOTTSDALE	AZ	852582156	NULL	NULL	NULL
MARTIN JAMIE & DIAMOND	NULL	NULL	7609 GLYNOAKS DR	LINCOLN	NE	685166721	NULL	NULL	NULL
VARELA MANUEL M & MARIBEL	NULL	NULL	7613 S 69TH LN	LAVEEN	AZ	853393435	NULL	NULL	NULL
SULLIVAN MICHAEL	NULL	NULL	7624 W MILLERTON WAY	FLORENCE	AZ	851326767	NULL	NULL	NULL
CENTURY COMMUNITIES OF ARIZONA LLC	NULL	NULL	7720 E DOUBLETREE RANCH RD STE 140	SCOTTSDALE	AZ	852582059	NULL	NULL	NULL
MATHESON N & J FAMILY TRUST	NULL	NULL	782 W SILVER KING RD	QUEEN VALLEY	AZ	851189085	NULL	NULL	NULL
PEARCY TOBY D & MELINDA E	NULL	NULL	7921 CENTERSTONE WAY	INDIANAPOLIS	IN	462591484	NULL	NULL	NULL
ESCOBEDO EDUARDO MACIAS	RANGEL YURIDIA GALLEGOS	NULL	8027 E 4TH AVE	MESA	AZ	852081419	NULL	NULL	NULL
NORTH FLORENCE 80 LLC	NULL	NULL	8120 E CACTUS RD STE 300	SCOTTSDALE	AZ	852605261	NULL	NULL	NULL
DUSTY COOL LTD PSHIP	NULL	NULL	817 E SAN ANGELO AVE	GILBERT	AZ	85234	NULL	NULL	NULL
PURPLE ROSE LLC	NULL	NULL	817 E SAN ANGELO AVE	GILBERT	AZ	852343513	NULL	NULL	NULL
GROGAN MICHAEL D & DONNA K REV TRUST	NULL	NULL	826 BANBURY LN	MILLBRAE	CA	940301007	NULL	NULL	NULL
GARCIA BRIANA MARIA & CRISPIN RODOLFO IBARRA	NULL	NULL	8270 ASPEN ST	RANCHO CUCAMONGA	CA	917303271	NULL	NULL	NULL
HARRY PAUL T	NULL	NULL	8310 E DALEA WAY	GOLD CANYON	AZ	851185919	NULL	NULL	NULL
PARKER LINDSEY	NOVAKOVIC DAVOR	NULL	836 LEGACY GROVE DR	LASALLE	NULL	NULL	ON	N9J 2J7	CANADA
PROTONENTIS CHRISTOPHER JAY	DUBOSE TONI LENAE	NULL	839 W BUNKER HILL DR	FLORENCE	AZ	851329349	NULL	NULL	NULL
BENHAM JAMES TR	BELLA VISTA QUALIFIED PERSONAL RESIDENCE TRUST	NULL	8493 E BELLA VISTA RD	SAN TAN VALLEY	AZ	851439114	NULL	NULL	NULL
FELLENZ JERALD M & SHARYN G TRS	FELLENZ FAMILY TRUST	NULL	85 W COMBS RD STE 101-#291	SAN TAN VALLEY	AZ	85140	NULL	NULL	NULL
ARIZONA EMPIRE LLC	NULL	NULL	85 W COMBS RD STE 101-408	SAN TAN VALLEY	AZ	851409154	NULL	NULL	NULL
STALK LLC 401K PSP TRUST	NULL	NULL	85 W COMBS RD STE 101-409	SAN TAN VALLEY	AZ	851409154	NULL	NULL	NULL
OROZCO NOE AMILCAR GODINEZ	NULL	NULL	85 W GALVESTON ST	CHANDLER	AZ	852256704	NULL	NULL	NULL
CASA BUCHLI 2006 LLC	NULL	NULL	8550 E LAKE RD	SAN TAN VALLEY	AZ	851439437	NULL	NULL	USA
LOT I LLC		NULL	8550 E LAKE RD	SAN TAN VALLEY	AZ	851439437	NULL	NULL	USA
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PHILLIPS DAVID THOMAS & JANE TAYLOR TRS	DJP TRUST	NULL	8560 E LAKE RD	SAN TAN VALLEY	AZ	851439437	NULL	NULL	USA
SNOW KRISTINA N & JACK H	NULL	NULL	8564 E LAKE RD	SAN TAN VALLEY	AZ	851439437	NULL	NULL	NULL
WALDRON SANDRA	NULL	NULL	86 S POMEROY RD	QUEEN VALLEY	AZ	851189714	NULL	NULL	NULL
SADLER RYAN M	NULL	NULL	8604 161ST ST E	PUYALLUP	WA	983756102	NULL	NULL	NULL
STARLIGHT HOMES ARIZONA LLC	NULL	NULL	8655 E VIA DE VENTURA STE F250	SCOTTSDALE	AZ	852583598	NULL	NULL	NULL
DESERT GOLD LAND HOLDINGS LLC	NULL	NULL	8660 E WATERFORD CIR	MESA	AZ	852129370	NULL	NULL	USA
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TRI POWER PROPERTY LLC	NULL	NULL	8868 E CANYON CREEK DR	GOLD CANYON	AZ	851180008	NULL	NULL	NULL
KEITH RALPH W & BONNIE A	NULL	NULL	9 CARRIAGE LN	YARMOUTH	ME	40965778	NULL	NULL	NULL
PAGAYA SMARTRESI F1 FUND PROP OWNER II LLC	NULL	NULL	90 PARK AVE # LEVEL 31	NEW YORK	NY	100161301	NULL	NULL	NULL
TRULL BRIAN & MARIA C	NULL	NULL	900 W 16TH ST	TEMPE	AZ	852816410	NULL	NULL	NULL
PUDDLE OF SAND LTD PSHIP	NULL	NULL	9001 115TH ST	GRAND PRAIRIE	NULL	NULL	AB	T8V 5Z3	CANADA
FERCHAU KEVIN T	NULL	NULL	9091 W GARNET MOUNTAIN DR	CASA GRANDE	AZ	851947912	NULL	NULL	NULL
ANDERSON MARSHA FAMILY TRUST	NULL	NULL	9095 E TANQUE VERDE RD STE 171-301	TUCSON	AZ	857498821	NULL	NULL	NULL
VASKO RICKY S	NULL	NULL	915 E DIVERSION DAM RD	FLORENCE	AZ	851328082	NULL	NULL	NULL
QUAM DANIEL L & CANDICE D	NULL	NULL	9192 367TH ST	NORTH BRANCH	MN	550565736	NULL	NULL	NULL
LIWONJO COSMAS MOKI & MARY MELINGE EPSE	NULL	NULL	925 E DUST DEVIL DR	SAN TAN VALLEY	AZ	851434279	NULL	NULL	NULL
MULLENBERG MARK D	NULL	NULL	94 W CHORRITO CT	QUEEN VALLEY	AZ	851189718	NULL	NULL	NULL
10490 SUNFLOWER LLC	NULL	NULL	9414 E MONUMENT DR	SCOTTSDALE	AZ	852622342	NULL	NULL	NULL
LOUIE DALE & ELLEN	NULL	NULL	9450 VANDERGRIFF RD	INDIANAPOLIS	IN	462399601	NULL	NULL	NULL
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PALACIO PETER TROY	NULL	NULL	953 W SILVER KING RD	QUEEN VALLEY	AZ	851187423	NULL	NULL	USA
LE AND JACQUE SMITH TRUST	MILTON L SMITH AND JACQUE SMITH, TRUSTEES	NULL	9531 E NORA CIR	MESA	AZ	852072560	NULL	NULL	NULL
ADELMAN PARKER L & KATHI K	NULL	NULL	955 E COBBLE STONE DR	SAN TAN VALLEY	AZ	851405495	NULL	NULL	NULL
GRAY ROGER D	LEON GRAY DAMARIS D	NULL	971 S EL CAMINO VIEJO	QUEEN VALLEY	AZ	851189014	NULL	NULL	NULL
MANISCALCO MARIO & BETH	NULL	NULL	9715 E ASBURY AVE	SAN TAN VALLEY	AZ	851438806	NULL	NULL	NULL
KUFFEL JON JACOB & KRUEGER LILLIAN	NULL	NULL	9728 E ASBURY AVE	SAN TAN VALLEY	AZ	851438806	NULL	NULL	NULL
GOOD DAVID S & DEBBIE M COTRS	DSDM LIVING TRUST	NULL	9742 E CLOUDVIEW AVE	GOLD CANYON	AZ	851184990	NULL	NULL	NULL
MERRILL HYRUM & STEPHANIE	NULL	NULL	9769 E PARKER TRL	SAN TAN VALLEY	AZ	851437376	NULL	NULL	NULL
MUNOZ EDUARDO H	NULL	NULL	9801 E PARKER TRL	SAN TAN VALLEY	AZ	851437369	NULL	NULL	NULL
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FLOCKHART SCOTT A & MICHELLE	NULL	NULL	9836 E PARKER TRL	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
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WILDER LINDA JEAN	NULL	NULL	9928 E WESLEY WAY	SAN TAN VALLEY	AZ	851437675	NULL	NULL	NULL
GRANTHAM FRED B JR & LORI H	NULL	NULL	9940 E ASBURY AVE	SAN TAN VALLEY	AZ	851438805	NULL	NULL	NULL
MONDAY KATHRYN	NULL	NULL	9951 E ROBERTS RD	SAN TAN VALLEY	AZ	851437292	NULL	NULL	NULL
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BATES MICHAEL	BATES RAYLENE	NULL	9966 E WESLEY WAY	SAN TAN VALLEY	AZ	851437675	NULL	NULL	NULL
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TORRES ROSARIO	OSUNA VERONICA	NULL	9989 E PARKER TRL	SAN TAN VALLEY	AZ	851437300	NULL	NULL	NULL
FOSTER CONRAD	NULL	NULL	9990 E PARKER TRL	SAN TAN VALLEY	AZ	85143	NULL	NULL	NULL
LARSON DAVID & MARY	NULL	NULL	BOX 1911125	SIOUX FALLS	SD	57186	NULL	NULL	NULL
DUFRESNE STEPHEN	GRAY CHRISTIAN	NULL	HC 61 BOX 852	RAMAH	NM	873219611	NULL	NULL	NULL
BLOOMQUIST DIANE L	NULL	NULL	N6385 OLD LAKE RD	SHAWANO	WI	541664031	NULL	NULL	NULL
SARGENT WAYNE E & ROSEANN REV TRUST	NULL	NULL	N6516 HILLSIDE RD	SHEBOYGAN FALLS	WI	530852037	NULL	NULL	NULL
THE VERA GROUP LLC	NULL	NULL	NO ADDRESS GIVEN	NULL	NULL	NULL	NULL	NULL	NULL
CABARELLO DEVELOPMENT LLC	NULL	C/O VICTOR W RICHES	PO BOX 10476	PHOENIX	AZ	850640476	NULL	NULL	NULL
PONCE ABEL	PONCE REBECCA B	NULL	PO BOX 1197	FLORENCE	AZ	851323024	NULL	NULL	NULL
ZEN FOCUS LLC	NULL	NULL	PO BOX 1216	MARICOPA	AZ	851390377	NULL	NULL	NULL
RHINE PARACO PROPERTIES OF GROVELAND LLC	NULL	NULL	PO BOX 1268	DACULA	GA	300190022	NULL	NULL	NULL
VANCE C KENNETH	VANCE TAMARA J	NULL	PO BOX 131	VERNON	AZ	859400131	NULL	NULL	NULL
BALDERRAMA LUIS C	NULL	NULL	PO BOX 13370	MESA	AZ	852163370	NULL	NULL	NULL
STATE OF ARIZONA	NULL	C/O PINAL COUNTY SPECIAL SERVICES	PO BOX 1348	FLORENCE	AZ	851323027	NULL	NULL	NULL
FLORES JOSE M	NULL	NULL	PO BOX 1406	QUEEN CREEK	AZ	85142	NULL	NULL	NULL
INTEGRITY LAND & CATTLE LLC	NULL	NULL	PO BOX 1944	SUPERIOR	AZ	851731944	NULL	NULL	NULL
MARTIN RONALD A TRUST	NULL	NULL	PO BOX 1985	YUMA	AZ	853662391	NULL	NULL	NULL
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SMALLCOMB KAYLE L & QUINCY C	NULL	NULL	PO BOX 2319	UKIAH	CA	954822319	NULL	NULL	NULL
MEFFORD THOMAS L	SALZER CHERYL L	NULL	PO BOX 233	HARDIN	MT	590340233	NULL	NULL	NULL
THOMPSON TRAVIS J & MISTY	NULL	NULL	PO BOX 2445	FLORENCE	AZ	851323046	NULL	NULL	NULL
MILAM STACY & DIXON GABRIEL	NULL	NULL	PO BOX 2652	CLAYPOOL	AZ	855322652	NULL	NULL	NULL
MCCLEVE LENNARD R & BONNIE M REV LIV TRUST	MCCLEVE SHARON	NULL	PO BOX 285	TAYLOR	AZ	859390285	NULL	NULL	NULL
FLORENCE UNIFIED SCHOOL DIST 1	NULL	NULL	PO BOX 2850	FLORENCE	AZ	851323053	NULL	NULL	NULL
ARIZONIAN TRAVEL TRAILER RESORT LLC	NULL	NULL	PO BOX 28507	SANTA ANA	CA	927998507	NULL	NULL	NULL
ATICA INC	NULL	NULL	PO BOX 28507	SANTA ANNA	CA	92799	NULL	NULL	NULL
WESTOVER KENNETH T & VERNA L	NULL	NULL	PO BOX 3043	WHITERIVER	AZ	859413043	NULL	NULL	NULL
ROSARIO LAWRENCE	NULL	NULL	PO BOX 316	SUPERIOR	AZ	851731305	NULL	NULL	NULL
RIVAS RAVONA O	NULL	NULL	PO BOX 32173	MESA	AZ	852752173	NULL	NULL	NULL
BOWMAN WM & ME REV TRUST	NULL	NULL	PO BOX 327	SNOWFLAKE	AZ	859370327	NULL	NULL	NULL
AP CATTLE COMPANY LLC	NULL	NULL	PO BOX 33338	PHOENIX	AZ	850673338	NULL	NULL	NULL
UNDERHILL JASON L LIV TRUST	NULL	NULL	PO BOX 3513	ARIZONA CITY	AZ	851230439	NULL	NULL	NULL
1218238 ALBERTA LTD	NULL	NULL	PO BOX 3704 STN MAIN	VERMILION	NULL	NULL	AB	T9X 2B7	CANADA
MILE HIGH BORROWER 1 (VALUE) LLC	NULL	NULL	PO BOX 4090	SCOTTSDALE	AZ	852614090	NULL	NULL	NULL
RESIDENTIAL HOME BUYER PHOENIX LLC	NULL	NULL	PO BOX 4090	SCOTTSDALE	AZ	852614090	NULL	NULL	NULL
PAGAYA SMARTRESI F1 FUND PROPERTY OWNER II LLC	NULL	NULL	PO BOX 4900	SCOTTSDALE	AZ	852614900	NULL	NULL	NULL
SRP SUB LLC	NULL	INVITATION HOMES C/O RYAN LLC	PO BOX 4900	SCOTTSDALE	AZ	852614900	NULL	NULL	NULL
BUFFALO VALLEY RESORT INC	NULL	NULL	PO BOX 495	STORY	WY	828420495	NULL	NULL	NULL
BRIGGS ALLEN TOWNSEND & LUCAS-BRIGGS SARA ANN	NULL	NULL	PO BOX 503	JONESPORT	ME	46490503	NULL	NULL	NULL
85143 LLC	NULL	NULL	PO BOX 5119	SCOTTSDALE	AZ	852615119	NULL	NULL	NULL
SALT RIVER PROJECT AG IMP & POWER DIST	NULL	NULL	PO BOX 52025	PHOENIX	AZ	85072	NULL	NULL	NULL
JOHNSON DAVID	NULL	NULL	PO BOX 520417	BIG LAKE	AK	996520417	NULL	NULL	NULL
TUDAHL DANIEL L & DEBBIE S	NULL	NULL	PO BOX 5231	MISSOULA	MT	598065231	NULL	NULL	NULL
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BIGGER TERRANCE LYLE REV TRUST	NULL	NULL	PO BOX 682	OWOSSO	MI	488670682	NULL	NULL	NULL
FERRIN LARRY K & DIANA	NULL	NULL	PO BOX 699	HIGLEY	AZ	852360699	NULL	NULL	NULL
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PINAL COUNTY	NULL	NULL	PO BOX 827	FLORENCE	AZ	851323016	NULL	NULL	USA
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SV PROPERTIES AZ LLC	NULL	NULL	PO BOX 953	QUEEN CREEK	AZ	851421819	NULL	NULL	NULL
HERNANDEZ CARLOS & SHERRI L	NULL	NULL	PO BOX 989	QUEEN CREEK	AZ	851421820	NULL	NULL	NULL
RUIZ RANGE LLC	NULL	NULL	PO BOX BC	SUPERIOR	AZ	851731926	NULL	NULL	USA
KERN FARMS CORPORATION	NULL	NULL	POST OFFICE BOX 3035	VERMILLION	NULL	NULL	AB	T9X 2B1	CANADA
LAROSE TERRANCE ALLEN & GLENDA LYNN	LAROSE JAMES ANDREW & SCOTT RYAN	NULL	RR5 SITE 16 BOX 111	PRINCE ALBERT	NULL	NULL	SK	S6V 5R3	CANADA
KLIPPENSTEIN TERRANCE W & LYNZEE J	NULL	NULL	RURAL ROUTE 1	PILOT MOUND	NULL	NULL	MB	R0G 1P0	CANADA
PRENTISS JAMES K & CATHERINE L JOINT REV LIV TRUST	NULL	NULL	S100W35830 EAGLES PRESERVE DR	EAGLE	WI	531192610	NULL	NULL	NULL
MEYER HENRY W JR	SCHLENDER JULIA ANN	NULL	S1504A RINGLING RD	BARABOO	WI	539139436	NULL	NULL	NULL
LESLIE MCFADDEN	NULL	NULL	5626 S SAILORS REEF RD	TEMPE	AZ	85283	NULL	NULL	NULL

Silver King Solar and Storage Project

Upcoming Open House Meeting

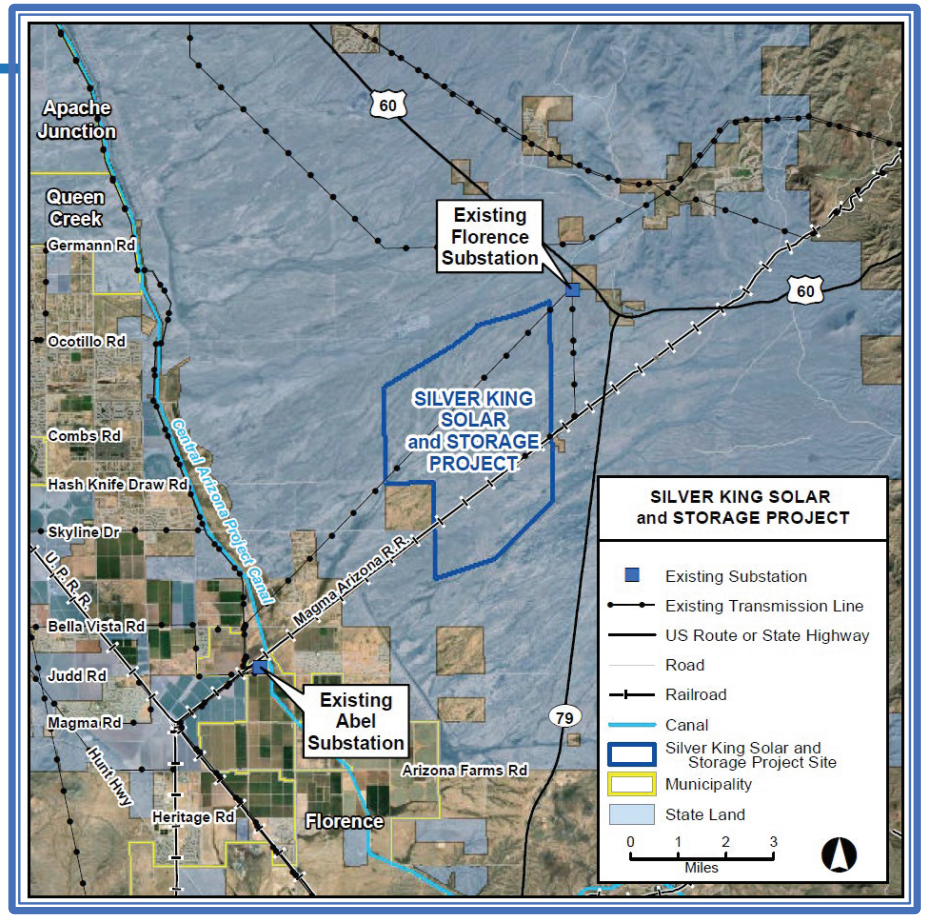
The proposed Silver King Solar and Storage Project (Project) is a photovoltaic solar generation and battery storage site being developed on **State Trust Land** north of the Town of Florence, AZ.

The Project would include a solar photovoltaic generating facility, battery energy storage system (BESS), project substation and generation tie-line along the existing transmission line through the site to interconnect into the Abel Substation.

The project will require a Major Comprehensive Plan Amendment with Pinal County and will also seek a Certificate of Environmental Compatibility (CEC) with the Arizona Corporation Commission. Both the County and State processes will involve public hearings.

The Silver King Solar and Storage Project team is hosting an open house to invite the public to learn about the Project and provide input.

Details are on the back.



In-Person Open House Meeting

Wednesday, April 30, 2025
4:30-6:30 PM

Magma Ranch School
10980 E Desert Mountain Blvd
Florence, AZ 85132

This will be an open house format and registration for this event is encouraged but not required.

To learn more about this project or to comment with questions or feedback, visit www.silverkingsolarproject.com

Toll Free Project Information Line:
1-833-310-6345
Email Contact: sjustus@kpenvironmental.com

To register, use QR Code, visit Project Website or call Toll Free Information Line

Silver King Solar and Storage Project
P. O. Box 357,
Higley, AZ 85236

STAMP

Address Label

APPENDIX B


BATTLE OF THE BOOKS DISTRICT CHAMPIONS 2013-14
WE WANT TO HEAR FROM YOU!
Please Fill Out A Comment Form


SOFTBALL DISTRICT CHAMPIONS 2016-17 PERFECT SEASON
FOOTBALL DISTRICT CHAMPIONS 2016-17
GIRLS BASKETBALL DISTRICT CHAMPIONS 2016-2017 PERFECT SEASON
WRESTLING DISTRICT CHAMPIONS 2016-2017
BASEBALL DISTRICT CHAMPIONS 2017-2018
SOFTBALL DISTRICT CHAMPIONS 2017-2018 PERFECT SEASON
GIRLS SOCCER DISTRICT CHAMPIONS 2017-18
MUSTANGS
WHO'S NEXT?
BOYS BASKETBALL DISTRICT CHAMPIONS
SOFTBALL DISTRICT CHAMPIONS


FOOTBALL DISTRICT CHAMPIONS 2016-17
GIRLS BASKETBALL DISTRICT CHAMPIONS 2016-2017 DISTRICT SEASON
WRESTLING DISTRICT CHAMPIONS 2016-2017
BASEBALL DISTRICT CHAMPIONS 2017-2018
SOFTBALL DISTRICT CHAMPION 2017-2018 DISTRICT SEASON
GIRLS SOCCER DISTRICT CHAMPIONS 2017-18
MUSTANGS
WHO'S NEXT?
BOYS BASKETBALL DISTRICT CHAMPIONS
SOFTBALL DISTRICT CHAMPIONS
GIRLS SOCCER DISTRICT CHAMPIONS
BOYS SOCCER DISTRICT CHAMPIONS
BATTLE OF THE BOOKS DISTRICT CHAMPIONS 2013-14
SPELLING BEE DISTRICT CHAMPION 2015-2016 ANDREW BALMACIO


VOLLEYBALL DISTRICT CHAMPIONS 2014-15
WRESTLING DISTRICT CHAMPIONS 2014-15
BOYS SOCCER DISTRICT CHAMPIONS 2015-16
WRESTLING DISTRICT CHAMPIONS 2015-16
SOFTBALL DISTRICT CHAMPIONS 2016-17
FOOTBALL DISTRICT CHAMPIONS 2016-17
MUSTANGS
PERIOD
GUEST
MUSTANGS
WHO'S NEXT?
SOFTBALL DISTRICT CHAMPIONS
GIRLS SOCCER DISTRICT CHAMPIONS
BOYS SOCCER DISTRICT CHAMPIONS
Silver King Solar and Storage Project
Project Overview
Project Overview

APPENDIX C

Silver King Solar and Storage Project

Open House

AREVIA POWER

Silver King Solar and Storage Project

Welcome

Please Sign In

AREVIA POWER

Project Overview

AREVIA POWER

Who we are

Arevia Power

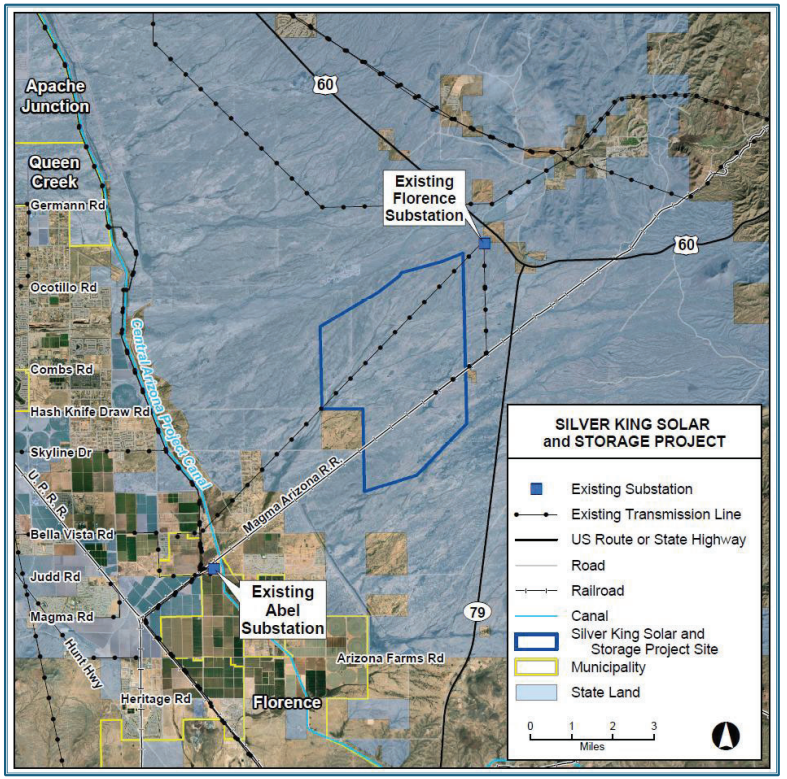


- US based company established in 2016
- Develop Utility Scale Solar and Battery Energy Storage Systems (BESS) primarily in the Western US
- Successfully developed the Gemini Solar and Libra Solar Projects in Nevada

AREVIA POWER

Project Overview

- The Project will generate and store renewable energy to support the regional power grid
- Sited entirely on Arizona State Trust Land in Unincorporated Pinal County
- Solar lease payments directed by state to support public education
- Project could produce up to 1,100 MW of energy
    - Permitting: 2025 - 2026
    - Construction: 2027 - 2030



AREVIA POWER

Project Schedule

2021

Project development initiated

2025

Permitting Begins with Pinal County and State Agencies

2026

Anticipated Permit Approvals

2027 - 2030

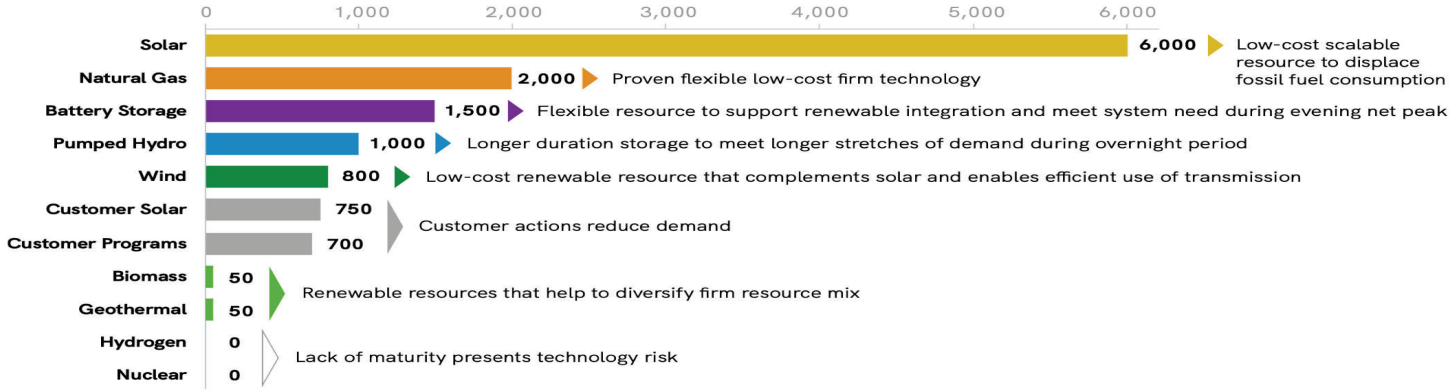
Anticipated construction

AREVIA POWER

Project Need and Benefit

- Meet growing electric demand in Pinal County and support grid reliability
- Generate energy for use in Pinal County and Arizona
- Prevent energy disruptions and promote economic development
- Generate hundreds of construction jobs and provide millions of dollars in tax revenues and lease payments, benefitting Pinal County and local Schools

SRP 2023 Integrated System Plan – Balanced System Additional Resource Needs Over Ten Years (MW)



AREVIA POWER

Project Components and Design

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Project Components

Solar Array

- Panels track with the sun
- Connect to Project Substation with Underground Cable



AREVIA POWER

Project Components

Battery Energy Storage System (BESS)

- Self contained batteries
- Store energy to provide back to grid when needed



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Project Components

Generation Tie Line (Gen-Tie)

- Transmission line connecting solar and BESS power to the grid at Abel Substation
- Will run parallel to existing infrastructure



Example pole type, design may vary

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Environmental and Permitting Process

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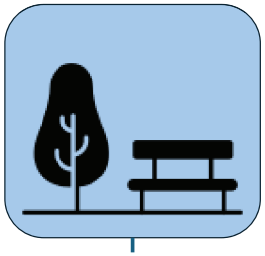
Environmental Studies

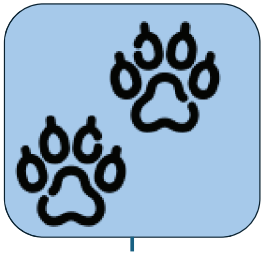
Wetlands and Aquatic Resources



Recreation Resources

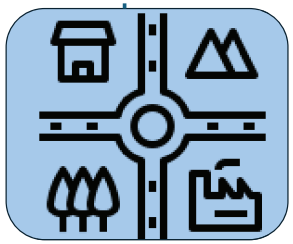


Threatened and Endangered Species Studies: Recon & Protocol Level Surveys

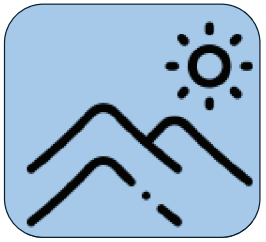


Cultural (Archeological) Resources Investigation





Land Use and Planned Developments



Visual and Viewshed Analysis

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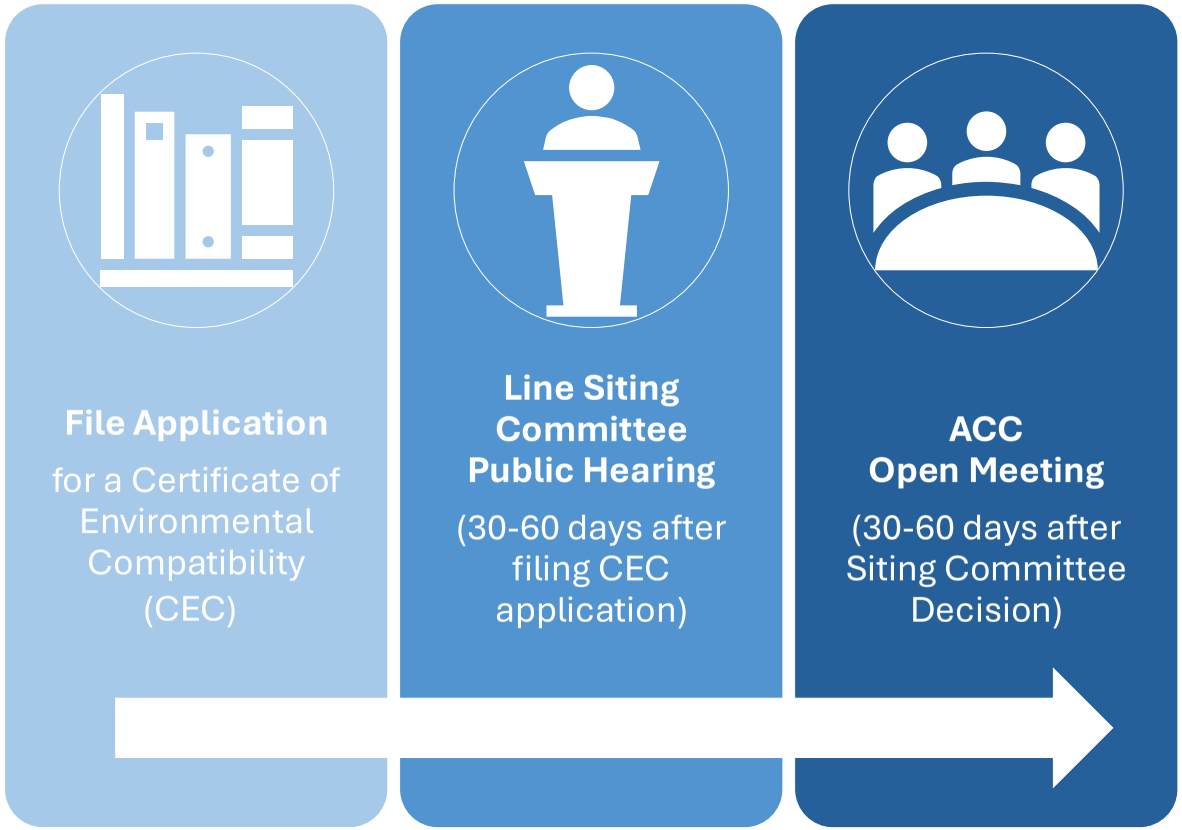
State Regulatory Process



Arizona Corporation Commission Process Applies only to the Gen-Tie Line

Filing: Week of December 8, 2025
Hearings: Week of January 19, 2026 (will include public hearing)
ACC Open Meeting: March/April 2026
ACC Decision: April/May 2026

AREVIA POWER

County Regulatory Process



AREVIA POWER

Silver King Solar and Storage Project

WE WANT TO HEAR FROM YOU!

Please Fill Out A Comment Form

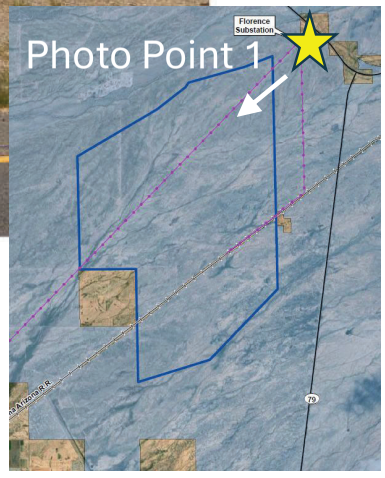
Or comment on the Project website
silverkingsolarproject.com

AREVIA POWER

Existing Conditions Photo Point 1



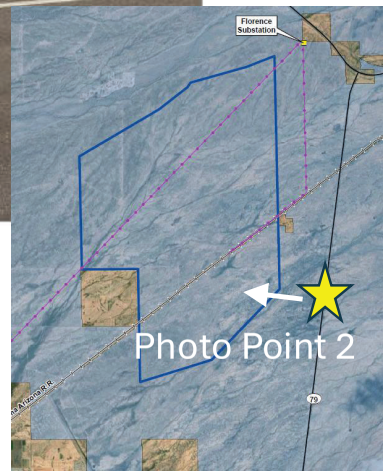
Looking Southwest from Highway 60



Existing Conditions Photo Point 2



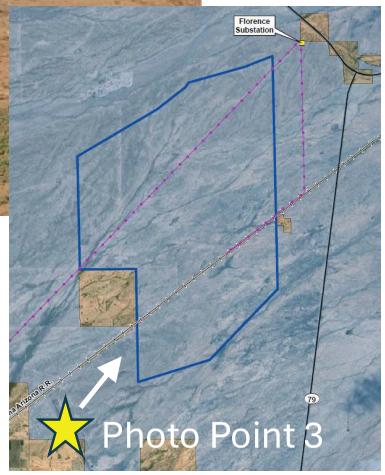
Looking Northwest from Highway 79

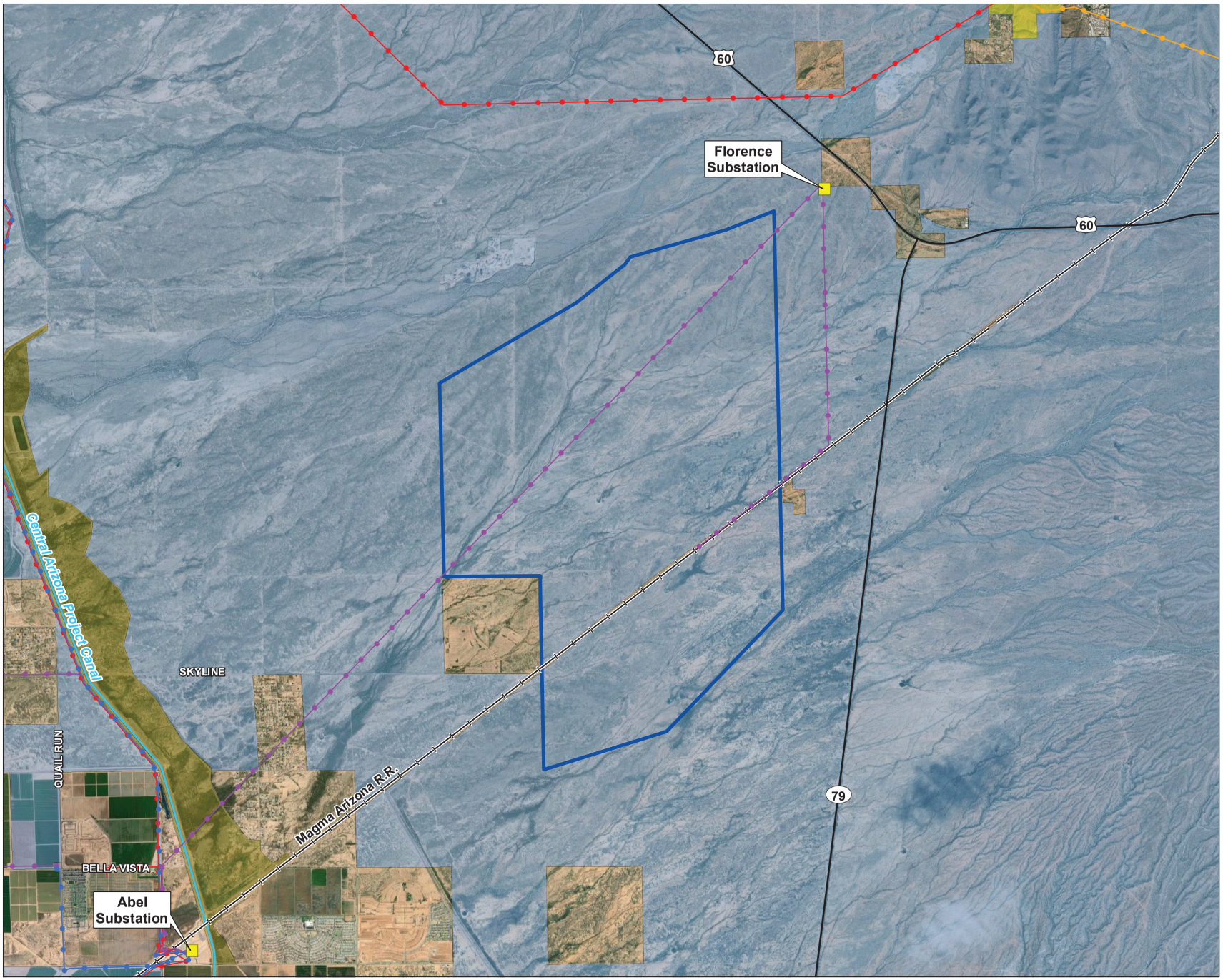


Existing Conditions Photo Point 3



Looking Northeast from Northeast Corner of Magma Ranch





Legend

Project Features

- Silver King Solar and Storage Project Site

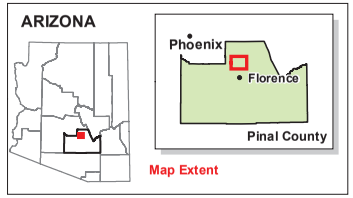
General Features

- Existing Substation
- Existing 500 kV Transmission Line
- Existing 230 kV Transmission Line
- Existing 115 kV Transmission Line
- Existing 69 kV Transmission Line
- US Route or State Highway
- Railroad
- Canal

Jurisdictional Land Ownership

- Bureau of Land Management Land
- Bureau of Reclamation Land
- State Land

0 0.5 1 1.5 2
Miles

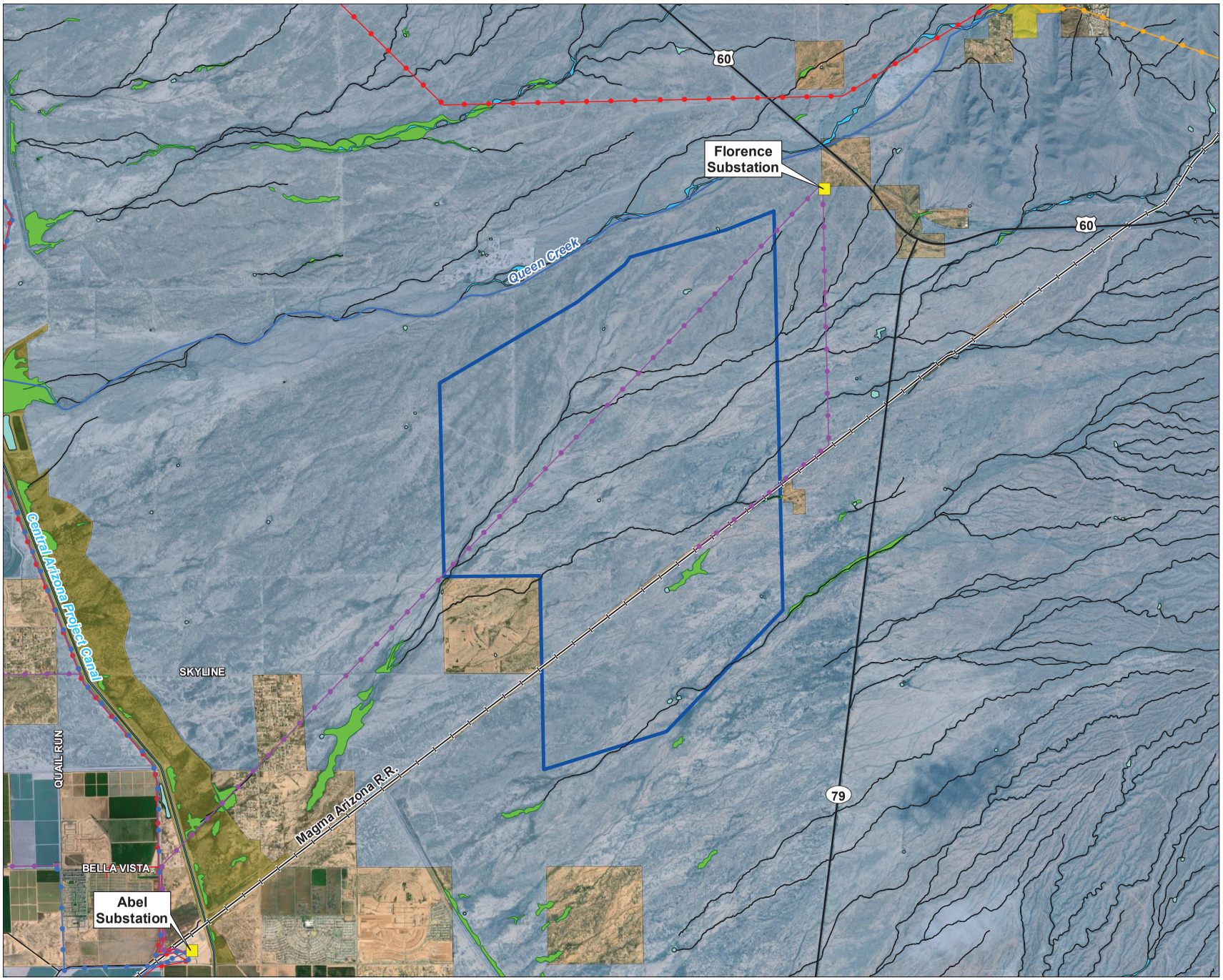


SILVER KING SOLAR and STORAGE PROJECT

FIGURE 1 SITE BOUNDARY

Map Extent: Pinal County, AZ

Date: 4.08.25 | Author: sjw



Legend

Project Features

- Silver King Solar and Storage Project Site

General Features

- Existing Substation
- Existing 500 kV Transmission Line
- Existing 230 kV Transmission Line
- Existing 115 kV Transmission Line
- Existing 69 kV Transmission Line
- US Route or State Highway
- Railroad

USGS NHD Streams

- NHD Stream

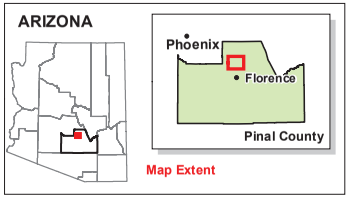
USFWI NWI Wetlands

- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

Jurisdictional Land Ownership

- Bureau of Land Management Land
- Bureau of Reclamation Land
- State Land

0 0.5 1 1.5 2
Miles

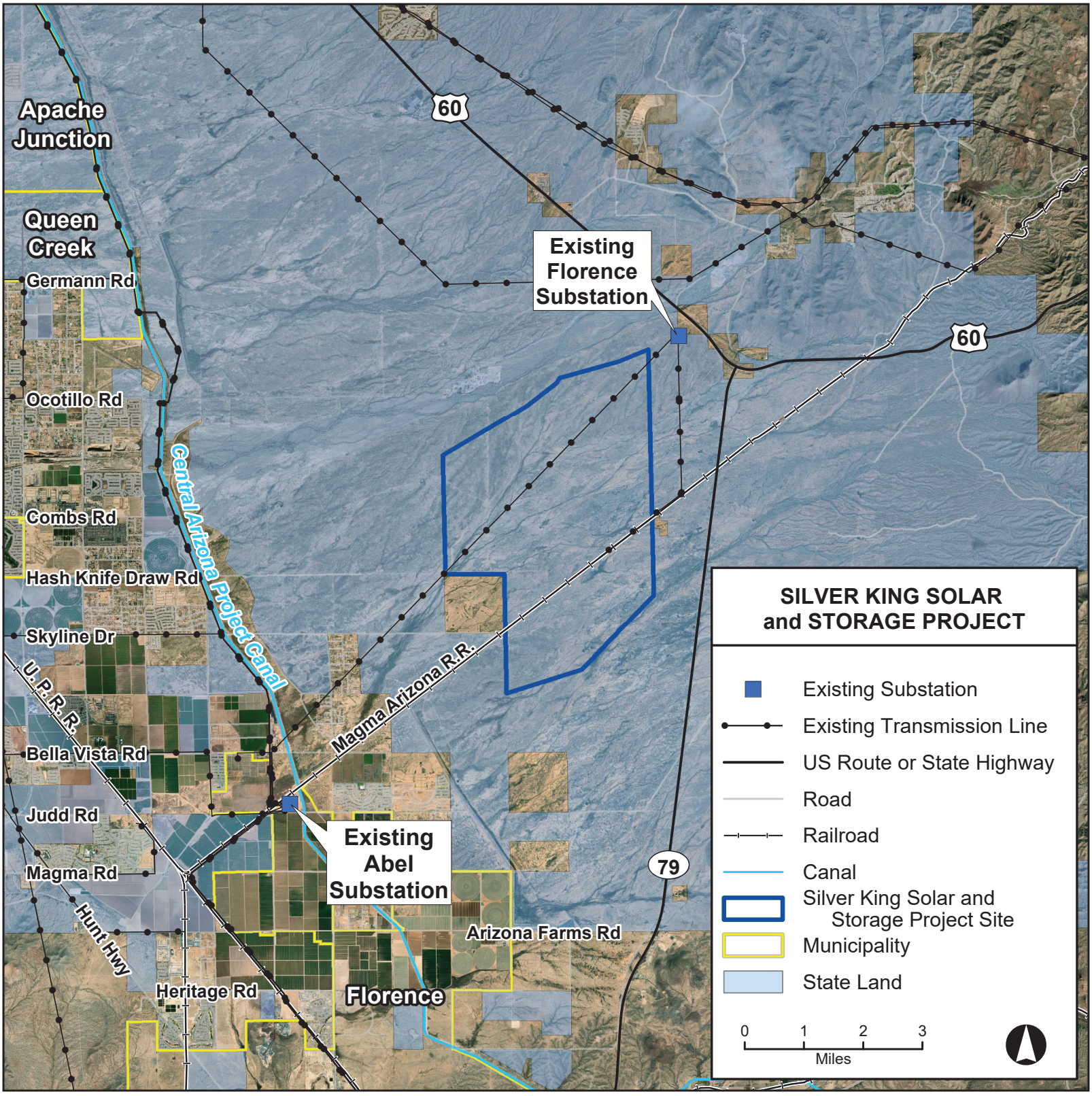


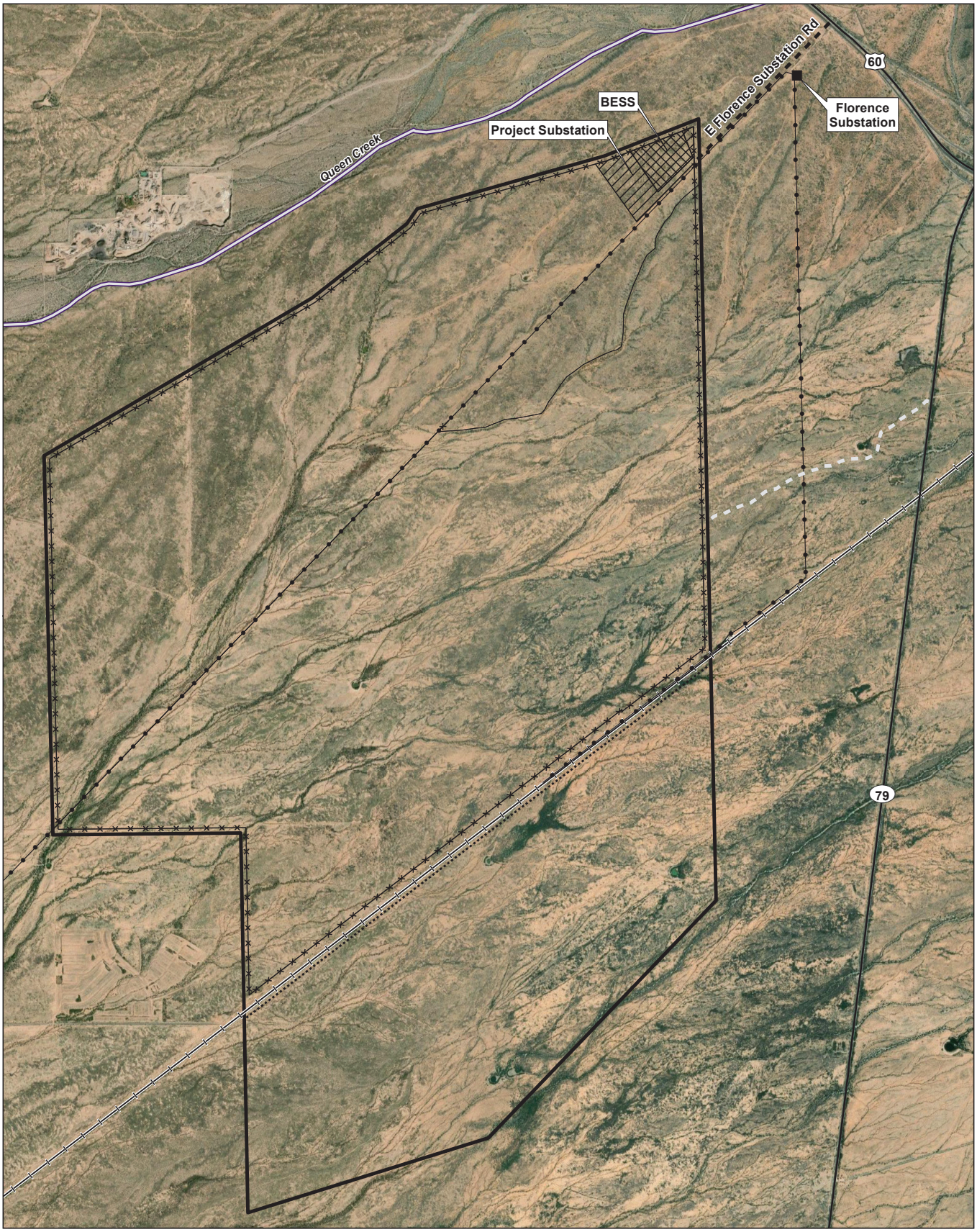
SILVER KING SOLAR and STORAGE PROJECT

FIGURE 2 NWI AND NHD

Map Extent: Pinal County, AZ

Date: 4.08.25 | Author: sjw


Apache Junction
Queen Creek
Germann Rd
Ocotillo Rd
Combs Rd
Hash Knife Draw Rd
Skyline Dr
U.P.R.R.
Bella Vista Rd
Judd Rd
Magma Rd
Hunt Hwy
Heritage Rd
Florence
Arizona Farms Rd
Central Arizona Project Canal
Magma Arizona R.R.
60
60
79
Existing Florence Substation
Existing Abel Substation
SILVER KING SOLAR and STORAGE PROJECT
Existing Substation
Existing Transmission Line
US Route or State Highway
Road
Railroad
Canal
Silver King Solar and Storage Project Site
Municipality
State Land
0 1 2 3
Miles

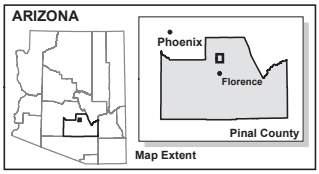


SILVER KING SOLAR PROJECT

PRELIMINARY SITE PLAN

Map Extent: Pinal County, AZ

Date: 4.09.25 | Author: sjw



Legend

Project Features

- Fenceline
- Existing Access Road
- Proposed Access Road
- Proposed Recreational Trail
- BESS
- Project Substation
- Silver King Solar and Storage Project Boundary

General Features

- Existing Substation
- Existing 69kV Transmission Line
- US Route or State Highway
- Railroad
- Stream

0 0.25 0.5 0.75

Miles

State Plane Coordinate System
NAD 83, Arizona Central
Linear Unit: Foot US

Preliminary design subject to change

Data Sources: ADOT, AGIC, BLM, ESRI, Pinal Co., USGS.
F\\Silver King Notification 031925.mxd

APPENDIX D

Silver King Solar and Storage Project
Open House | April 30, 2025

7

Please Sign In

Name	Organization	Address	Email	Phone
Becky Dunn	WNRCD	P.O. Box 468 Kearny Az 85137		
Bill Dunn	WNRCD	"		
Dawn Schroyer	GGCI		dawnray18@yahoo	480-313-4118
Dave Coward	GCCI		dbcoward@gmail.com	480-678-1756
Pam BRADSHAW	D5		AzPRB@Aol.com	
Vicky McLaughlin	Pinal District 5	4293 N. Winchester Rd Apache Junction AZ. 85119		480.318.5164
Donna Carr		2178 W. Virginia Apache. Jct, AZ 85120		480.709.0266

Please visit www.silverkingsolarproject.com or call 1-833-310-6345 for more information

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2

8

Name	Organization	Address	Email	Phone
ROY IRELAND		5518 S MOHAVE STE GOLD CANYON	rland1965@gmail.com	
Phil TODD		10634 E. CORDOVA ST., GOLD CANYON	PhilipTodd1@CS.COM	480-370-5243
DOTTIE TODD		"	"	"
STEVE Edwards	Adobe	1855 West RUNNING Deer	Steve@MilerRanch.com	6029996853
Susan Edwards	Adobe	1855 West RUNNING Deer	SusanEMilerRanch.com	6029203400
MARK OCHS	ADOBE	10813 E. BASELINE AVE. GOLD CANYON, AZ	MARKOCHS92 47@MSN.COM	480-288-9039
Jody Stahl	ADOBE	6700 S Coffee Flat Trail Gold Canyon 85118	jstahlcounselor@yahoo.com	907-350-6417
Michael Stahl	ADOBE	6700 S. Coffee Flat Tr. Gold Canyon AZ 85118	mrspc@hotmail.com	907 360 9286

3

(7)

Silver King Storage Project
Open House | April 30, 2025

Please Sign In

Name	Organization	Address	Email	Phone
Jeff O'Sheil		6188 S. Mesa Vista Dr Gold Canyon	jeffmidwesterner@gmail.com	480 252 1109
Curt Shannon		5284 S CASA PRIETO DR	shannon.curt@gmail.com	480.652.5547
Craig Shelley			cshelley11@yahoo.com	928-864-8897
Lynnda Haupert-		Gold Canyon	lahaupert@gmail.com	
Glenn Walp	ADOBE	4798 S. Las Manantias Tal. Gold Canyon, AZ	@yahoo PSPColonel	~~480 5~~ 480-584-9623
Diana Walp	"	"	"	"
Gwen Walp	"	"	"	"

Please visit www.silverkingsolarproject.com or call 1-833-310-6345 for more information

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4

(9)

Name	Organization	Address	Email	Phone
Tony Bellis		15458, E. Emile		480-620-3707
Kim Grady Wayne Bush		3956 N. Sunset Rd AJ	Kime freedomrings.com	480-748-8019
Gary Knapp		49585 Nighthawk Dr Gold Canyon	garynsusank @gmail.com	602 499 1164
Vivian Lopez		11633 E. Marigold Lane Florence, AZ 85132	vdj007@aol.com	718-548, 4285
Jeff Farris	Cowboy	N/A	N/A	520-499-6400
D Stowers			debbiehstowers5@gmail.com	
Ken Reycraft	Flashlight Land	2312 E. Prescott Place Chandler AZ	reycraft@insightland.com	602-616-5532
Gwen Kindermann		6926 E Hacienda La Noria Ln Gold Canyon, AZ	Gwen@cableone.net	505-231-5735

(7)

Name	Organization	Address	Email	Phone
BETTY KAY BETTY KAY	Gold Canyon	11223 E New Frontier Ct	RobbBettykay@gmail.com	
Haydn Reycraft	Insight Land	7400 E McDonald Scottsdale AZ		602-810-2071
James HAWKINS	Desert Wells C.C.	170 W. Cullumber #1059 Gilbert, AZ 85233	Contactapce@gmail	
Kyle Root	Insight Land	7400 E McDonald Scottsdale AZ		480-800-9456
JAMIE ADDISON	RUMMEL CONSTRUCTION		jaddison@RUMMELCONSTRUCTION.com	
Charles Goff	SALT	9788 E Windy Pass Trail Gold Canyon, AZ	hollygoff@yahoo.com	719-539-6928
Sherry Borchelt	Self	10842 E Larson Ct Santan Valley AZ	cylidesigns@comcast.net	408-605-2274

8

Name	Organization	Address	Email	Phone
Ralph Heap	AZ Legislator	2743 N Brice Cir	rtheap@yahoo.com	602 527 3860
Elizabeth Fitzgerald	D5	2206 E. 37½ Ave AV, AZ 85114	lizfitz1011@gmail.com	480-395-3940
Bill Staples	AZ Water Co	2380 W Southern A.V. AZ	bstaples@azwater.com	480-982-2201
Steve Dulaney			sdulaney01@sprynet.com	480.435.6417
Todd Pryor	Town of Superior	PO Box 218 Superior AZ 85173	manager@superioraz.gov	520 827-0176
Diana Walp	ADOBE	4798 S. Las Manan Gold Canyon 85118	diana walp@yahoo.com	(480) 662-757R
Glenn Walp	ADOBE	" "	pspcolonel@yahoo.com	(480) 584-9623
Allison Williams	Tetra Tech, Inc		allison.williams@tetratech.com	520-216-0655

Name	Organization	Address	Email	Phone
[illegible]	Eborn Hardt Ranch	Queen Creek AZ		520-979-1356
[illegible]	Self	Queen Valley		480 293 4410
[illegible]	Mt Brook [illegible]	Mt Brook		253-988-3277
[illegible]	Mt Brook Village	Mt Brook Gold Canyon		605-685-8337
S Irwin	Pinal Co	Apache Jct		480-231-4875
Makine Brown	Superstition Area Land Trust (SALT)	Gold Canyon		480-322-1626
BILL KELL	SELF	1734 W 11TH AVE AJ		480.703-4749

Name	Organization	Address	Email	Phone
Julie Helsel	Self	10807 e. Larson Ct.	Juliehelsel9@gmail.com	425 268-2610
Fred Miller	—	10842 E Larson Ct	m_fred@att.net	630 309 5936

*Please visit **www.silverkingsolarproject.com** or call **1-833-310-6345** for more information*

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APPENDIX E

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Phil Todd Phone: 480-370-5243

Address GOLD CANYON

Organization: _____

Email: Philip Todd1@cs.com

Comments: HOW MUCH WATER "MIGHT" BE USED PER YEAR, TO CLEAN THE PANELS.

WHAT % of THE PANELS WILL NEED TO BE REPLACED PER YEAR.

HOW WILL THE DIRT (DUST) BE REDUCED? CRUSH ROCK? GRASS?

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Phil TODD Phone: 480-370-5243

Address GOLD CANYON, AZ.

Organization:

Email: PhilipTodd1@cs.com

Comments: HOW MUCH BOND MONEY WILL BE ESTABLISHED FOR PINAL COUNTY TO ENSURE SITE IS RETURNED TO CURRENT STATUS?

WHY ARE YOU NOT BUILDING A SOLAR FARM ON THE 14,000 ACRES IN CALIFORNIA. BRUSH, TREES & HOUSES ARE GONE NOW. JUST LEVEL THE AREA & INSTALL SOLAR PANELS

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: L. Haupert Phone: _____

Address _____

Organization: _____

Email: lahaupert@gmail.com

Comments: I tried to register on line — your Web site is particularly unfriendly — after clicking "attend", then "next", it wanted me to ~~enter~~ generate a password & agree to pages of terms — I backed out of the online registry —

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Diana Walp Phone: (480) 662-7578

Address 4798 S Las Mananitas Trail, Gold Canyon, AZ 85118

Organization: ADOBE

Email: dianawalp@yahoo.com

Comments: NO solar farm in our area!!!

NO - NO - NO - NO -

We want to keep our area BEAUTIFUL

Please give the border a try!!!

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Gwen Kinderkmann Phone: 505-231-5738

Address 6926 E Hacienda La Noria Ln, Gold Canyon, AZ 85118

Organization: _____

Email: Gwen ~~K~~e CNSP.net

Comments: Do not want more eyesores in our beautiful area. Why not put on the California border?

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: GARY KNAPP Phone: 602-499-1167

Address 4958 S. NIGHTHAWK DR. GOLD CANYON, AZ 85118

Organization: _____

Email: GARYN@SEASONSK@GMAIL.COM

Comments: PLEASE DO NOT BUILD. WE DON'T NEED ANOTHER SOLAR FIELD.

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: GLENN WARP Phone: _____

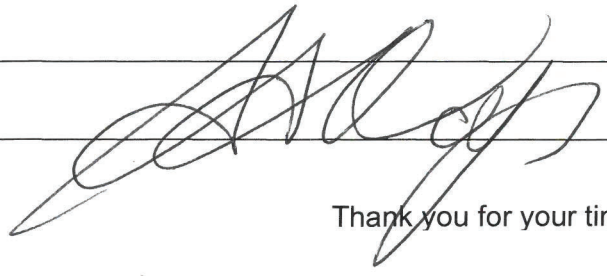
Address ADOBE

Organization: _____

Email: PSPColonel@yahoo.com

Comments: 480-584-9623

Will work on getting a location for a Gold Canyon Community Meeting.



Thank you for your time and interest!

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*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Jody Stahl Phone: 907-250-6417

Address 16700 S Coffee Flat Trail Gold Canyon 85118

Organization: ADOBE

Email: jStahlcounselor

Comments: I am opposed to this Solar farm. I ~~do not~~ think the damage that will be done to the ecosystem will be counter productive to what is supposed to be alternative energy to save the environment. There are to many factors including ranchers, environment, (water tables, birds, soil) etc. that will be adversely affected. This is designed mostly for Big business rather than individuals.

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Peter MORIN Phone: 765-619-6893

Address 7373 E US 460 #68, GOLD CANYON 85118

Organization: Member of ADOBE

Email: PeterJ MORIN @ icloud.com

Comments: I oppose this project. it will spoil the land, it will be unsightly & it will only Benefit California

Peter J Morin

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Roy IRELAND Phone: 605-685-8337

Address GOLD CANYON

Organization: _____

Email: rland1965@gmail.com

Comments: _____

TOO MUCH DESERT BEING RUINED FOR POWER SUPPLY, NEED TO CONSIDER Nuclear OR MORE Hydro

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

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Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: S. Irwin Phone: do not call me

Address Apache Junction

Organization: Pinal County

Email: NO!

Comments: put your solar panels up over parking lots.

Do NOT tear up the desert for no reason other than corporate greed

Thank you for your time and interest!

Who is getting rich from this?

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Steve Edwards Phone: 602-999-6853

Address 1855 West Running Deer

Organization: ADobe

Email: steve@mdevarch.com

Comments: NO Solar FARM
Why Destroy the RANCHER Living

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Jeffrey O'Shei/ Phone: 480-252-1109

Address 6188 S. Mesa Vista Drive, Gold Canyon, AZ 85118

Organization:

Email: jeffmidwesterner@gmail.com

Comments: 1) Environmental impact to wildlife and land.

2) Air + Water impacts.

3) Your alternate land choices in less populated areas with less population growth potential?

4) Effects on home values?

5) Take away from our Natural beauty!

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Robyn Morin Phone: 715-308-2354

Address 7575 E Hwy 60

Organization: ADoBe

Email: RobynRealty@gmail.com

Comments: I don't want it - go home to CA - don't ruin our beauty for your monetary greed - you will ruin the environment in no time & the panels will be useless in 10-20 yrs & the ground will be ruined forever

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Ken Reycraft Phone: 602-616-5552

Address 3312 E Prescott Place Chandler AZ 85249

Organization: Insight Land

Email: kreycraft@insightland.com

Comments: I support this project to ensure the GRID in AZ will be effective for it's residences in the future.

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Susan Edwards Phone: _____

Address 1855 W Running Deer Dr. Queen Valley AZ 85118

Organization: X

Email: susan@muleranch.com

Comments: Need more info - will look up more inf ~~The~~ ~~list~~ at this point I oppose this project.

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: MARK OCHS Phone: 480-288-9039

Address 10813 E. BASELINE AVENUE / GOLD CANYON, AZ 85118

Organization: ADOBE

Email: MARKOCHS92@MSN.COM

Comments: FOURTEEN SQUARE MILES OF SOLAR PANELS IN ARIZONA'S FINEST TRUST LAND DOES NOT MAKE SENSE. ADDITIONALLY, IT WILL HAMPER NEARBY HOME DEVELOPMENT IN THE FUTURE, SINCE PEOPLE ARE GOING TO BE LESS INTERESTED IN A SOLAR FARM THAN OTHER HOUSING.

Thank you for your time and interest!

THERE HAVE TO BE A LOT OF OTHER CANDIDATES FOR THIS PROJECT BETWEEN HERE AND CALIFORNIA THAT WON'T SPOIL PRIME SONORAN DESERT.

THANK YOU —

Please visit ***www.silverkingsolarproject.com*** *or call* ***1-833-310-6345*** *for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: JAMIE ADDISON Phone: 602-663-2170

Address 7520 E ADOBE DR. SCOTTSDALE, AZ 85255

Organization: RUMMEL CONSTRUCTION

Email: jaddison@rummelconstruction.com

Comments: WE ARE A HEAVY CIVIL CONTRACTOR THAT THRIVES IN THE ENERGY SECTOR ESPECIALLY RENEWABLE. THIS WOULD BE A GREAT PROJECT FOR PINAL COUNTY.

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

Silver King Solar and Storage Project
Open House | April 30, 2025

FOR DAVE

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Glenn Walp Phone: 480-584-9623

Address 4798 S. Las Manantas Trl,

Organization: Gold Canyon, AZ - 85118

Email: PSPColonel@Yahoo.com

Comments: The FULL Gold Canyon ORGANIZATION (3000+ Citizen) ARE Absolutely opposed to This Solar Farm FOR A host of Reasons. I will Attempt to get A Meeting Setup in Gold Canyon For A Community Meeting.

Thank you for your time and interest!

Please visit
www.silverkingsolarproject.com
*or call **1-833-310-6345** for more information*

AREVIA POWER

I am expressing serious concerns regarding the proposed solar development projects and the associated disposition of approximately 9,000 acres of public land currently managed by the State of Arizona. The environmental, ecological, and public trust implications of these proposals warrant careful scrutiny and robust public engagement.

Solar photovoltaic panels installed in Arizona are subject to extreme surface temperatures, often reaching approximately 149°F. These conditions substantially exceed the optimal operational range of solar panels, typically between 59°F and 95°F. Deployment of solar facilities under such conditions poses a direct threat to local wildlife, particularly birds and bats native to the region, which may become disoriented by the reflective surfaces of the panels, mistaking them for bodies of water. This confusion could result in substantial and irreversible harm to these vulnerable species.

Furthermore, the maintenance of large-scale solar installations requires significant water resources. Industry estimates indicate that approximately 20 gallons of water per megawatt-hour (MWh) are necessary for routine panel cleaning. Given Arizona's ongoing water scarcity challenges, the additional demand associated with these facilities will place further strain on already limited water supplies.

Of additional concern is the proposed development of battery storage facilities, which may require millions of gallons of water daily for manufacturing and operational purposes. The specific sources of this water have not been disclosed. Large-scale battery production facilities, or gigafactories, have substantial water footprints, and there is currently no effective recycling method for lithium-ion batteries at scale. This raises critical questions about the long-term environmental stewardship and waste management strategies associated with these projects.

Equally troubling is the proposed conveyance of approximately 9,000 acres of public land—an area equivalent to 6,000 to 7,000 football fields. The state has traditionally refrained from selling or disposing of public land to individual, but only to developers or companies. Therefore, this proposed action demands full transparency regarding the parties who stand to benefit financially, as well as a thorough analysis of how this action aligns with the public interest and the states mission.

This will so place this solar and storage project over an underground aquifer and if any of these batteries leak it will be devastating to the environment and the people all the way to Tuson.

Given the magnitude of the potential impacts, I respectfully urge the State and other relevant authorities to halt the building of this plant.

THIS PROJECT NEEDS TO BE HALTED IMMEDIATELY

Please come to the Pinal County Zoning Board meeting to oppose this construction. We need your voice.

Donna Carr

APPENDIX D

Comprehensive Plan
Compliance Checklist

Appendix A: Comprehensive Plan Compliance Checklist

Purpose:

Provide guidance to ensure conformity of development proposals with the Pinal County Comprehensive Plan.

Intent:

1. Explain how to determine if development proposals are compatible with the Comprehensive Plan.
2. Explain why unique conditions exist to deviate from the Plan.

The Pinal County Comprehensive Plan graphics, Land Use, Circulation (two graphics), and Economic Development, are not intended to be zoning maps that outlines specific locations and parcel-by-parcel determination for land uses and facilities. The Comprehensive Plan's intent is to provide policy direction and a framework for how the Pinal County "development form" or layout should occur over time. It is not the intent to predetermine specifically where land uses must occur. Guidelines within the Land Use element provide direction on development and how it relates to transportation corridors, surrounding land uses, public facilities, and natural environment.

Determination:

Comprehensive Plan Compliance is determined by the development's conformity with the Comprehensive Plan's land use designations (Land Use graphic and Land Use element text) and activity centers (Land Use and Economic Development graphics and Economic Development element text) as well as the goals, objectives, policies and guidelines outlined in the Pinal County Comprehensive Plan. Planning guidelines for each of the land use designations and Activity Centers are also included in the Land Use element. It is important to note that all components and concepts may not apply to every potential proposal.

Organization:

The Compliance Checklist focuses on two major components:

1. Consistency with Pinal County's Vision Components
2. Consistency with the Plan's Key Concepts illustrated on Land Use, Circulation, and Economic Development graphics.

How Is the Checklist Used?

Various concepts are discussed and a "YES" checkbox is provided to indicate if the proposal complies with the key concepts of the Plan.

- If a project complies, it receives a ✓ in the appropriate box.
- If it does not comply, the checkbox will remain blank, and additional information would need to be provided to explain the unique circumstance, if applicable.

- If a project has no relation to a particular check list item, a "non applicable" response is acceptable with a brief explanation.

Who Should Use the Checklist?

Developers, staff, and decision-makers should use the Comprehensive Plan Compliance Checklist.

- ✓ Developers should use this checklist as a guide to the Plan's policies in the early stages of a development proposal and when submitting an application for review.
- ✓ Staff should use it to review development proposals and to make recommendations to decision-makers. The checklist can assist in developing the staff report.
- ✓ Decision-makers can use the checklist to better understand how well a proposal does or does not comply with the Pinal County Comprehensive Plan.

PART ONE

Consistency with Pinal County's Vision Components

The Pinal County Comprehensive Plan is a vision-based plan that provides the framework that all decisions related to growth and development are measured against. The following is intended to describe how the proposal meets the various vision components.

Pinal County Vision The County recognizes the importance of the region's strategic location between the Phoenix and Tucson Metropolitan Areas and its relationship to the overall well-being of the state of Arizona. What happens in Pinal County does not stay in Pinal County; the decisions made here will impact the entire state on many levels: business development, mobility, land management, air quality, water, and overall quality of life. People choose Pinal County for the diverse opportunities it offers; this diversity is what makes Pinal County unique but also represents a challenge as Pinal County continues to grow and change.

Pinal County is a place where history, culture and heritage are the foundation for its future. Pinal County will be seen as a leader in environmental stewardship and conservation practices by ensuring that the natural environment is preserved, yet still available to be discovered. Pinal County provides quality educational and training opportunities placing residents in cutting edge, environmentally-compatible jobs within the County. While communities within Pinal County retain and celebrate their unique qualities, governments and agencies share a collaborative spirit to ensure successes across Pinal County and remain responsive and accountable to their constituents.

Sense of Community—Pinal County is a collection of unique communities, each of which has something special to offer residents and visitors. Balancing emerging urban centers and Pinal County's rural character is important to residents; ensuring that the threads of Pinal County's history, heritage, and culture are woven into its future is what makes Pinal County unique from other regions. Ensuring places exist for people to gather and for communities to showcase the diversity of places, people, lifestyles, cultures, and opportunities will help to define Pinal County's identity.

The proposal:

✓ Is consistent with the **Sense of Community** vision component

Please explain:

Sense of Community is reflected in the mix of residential and commercial land uses in the area. The Project is in an undeveloped area where a utility-scale solar facility is unlikely to interfere with other pending developments or sensitive land uses.

Mobility and Connectivity—Ensuring Pinal County has adequate transportation corridors and a variety of multimodal transportation options addressing all populations is essential for moving goods and people throughout the County and State with minimal affect on Pinal County's native wildlife. Offering multiple mobility and communication options, to effectively connect communities and activity centers throughout the County, will reduce congestion and improve air quality while enhancing the area's quality of life.

The proposal:

✓ Is consistent with the **Mobility and Connectivity** vision component

Please explain:
The MCPA is consistent with the Mobility and Connectivity vision component. Development of power generation facilities in the Project Area would have minimal impact on planned land uses from traffic and the goals that address this vision.

Economic Sustainability—Expanding opportunities for residents to live, work, learn, and play in close proximity promotes long-term economic viability. Pinal County desires activity centers that serve the current and future residents' needs offering services, businesses and employment opportunities, including high-tech and environmentally-friendly employers who champion Pinal County's conservation philosophy. The creation of the full range of quality jobs that allow residents to start their career, raise a family, and move up instead of out of Pinal County for career advancement is essential. (This may not apply to all projects)

The proposal:

✓ Is consistent with the **Economic Sustainability** vision component

Please explain:
The MCPA is consistent with the Economic Sustainability vision component. The MCPA would further promote economic diversity and employment opportunities in the area by providing direct and indirect employment during the construction and operational life of the proposed facility. Additionally, power generated by the proposed facility will support residential growth and job creation in Pinal County by providing clean, safe, affordable, and efficient electricity to local communities and the region.

Open Spaces and Places—Residents value the large connected open spaces and unique places of Pinal County, not only as part of their quality of life, but as an important resource to sustain the region's immense wildlife habitat and their corridors. From the majestic mountains rising from the desert floor in the west to the high desert and rugged mountain terrain to the east, enjoyment of and respect for the natural surroundings is a big part of why people choose Pinal County to live and visit.

The proposal:

✓ Is consistent with the **Open Spaces and Places** vision component

Please explain:

The MCPA is consistent with the Open Spaces and Places vision component. The Project would not limit development of any currently proposed trails.The Applicant will work with Pinal County and ASLD to determine the most appropriate way to ensure that Pinal County's interests in the recreation trail and preserve.

Environmental Stewardship—People value the views of the mountains and open vistas during the day and the stars at night. These values have translated to a strong conservation ethic that stresses the importance of maintaining the quality of Pinal County's natural resources for future generations. Pinal County is the leader in environmental stewardship, and rewards and encourages sustainable practices such as innovative land use planning, sustainable agriculture, water conservation, green building development, and the use of renewable and alternative energy sources.

The proposal:

✓ Is consistent with the **Environmental Stewardship** vision component

Please explain:

The MCPA is consistent with the Environmental Stewardship goals of the Comprehensive Plan and Environmental Vision. During Project development, the Applicant has studied and analyzed the potential for environmental impacts. The Applicant has consulted with a number of agencies including Pinal County, ASLD and information from Arizona Game and Fish Department (AGFD) to understand best practices and requirements for solar project development. The Project will comply with all applicable federal, state, and local laws, regulations, and guidelines and will work with agencies and stakeholders to consider best practices and proposed mitigation of environmental impacts.

Healthy, Happy Residents—Access to quality healthcare and healthy lifestyle choices is a priority. Pinal County is a healthy, safe place where residents can walk or ride to activity centers and where interaction in Pinal County's clean, natural environment is encouraged. Ensuring residents are healthy, safe and happy in their community is a priority for Pinal County.

The proposal:

✓ Is consistent with the **Healthy, Happy Residents** vision component

Please explain:

The MCPA is consistent with the Healthy, Happy Residents vision component. The proposed Project and related MCPA would be consistent with this vision and would improve economic stability (Goal 8.4) by investing significant capital, creating jobs and increasing tax revenue for both Pinal County and the State of Arizona.

Quality Educational Opportunities—Quality, community-based Pre k-12 programs that provide youth with a competitive edge along with a wide variety of post-secondary educational opportunities and technical or specialized workforce training are necessities. Pinal County residents seek out life-long opportunities that help to expand their minds and diversify their experiences. (This may not apply to all projects)

The proposal:

✓ Is consistent with the **Quality Educational Opportunities** vision component

Please explain:

There are no educational facilities or impacts associated with the proposed Project. As noted in the Comprehensive Plan Checklist, this element will not apply to some projects.

PART TWO

Consistency with the Plan's Key Concepts illustrated on Land Use, Economic, and Circulation graphics

Consistency with the Land Use Designation shown on the graphics

The project land uses:

☐ Are shown as indicated on the Land Use and Economic Development graphic
☑ Are not shown as indicated on the Land Use and Economic Development graphic

The designated land use of the Project Area in the Pinal County Comprehensive Plan is Moderate Low Density Residential which allows for 1-3.5 du/ac. The land use designations within a one- mile area surrounding the Project include Moderate Low Density Residential, Very Low Density Residential (0-1 du/ ac), High Intensity Residential, High Intensity Activity Center, Green Energy Production, and Employment.

This MCPA seeks to amend the Comprehensive Plan designation for the Project Site to Green Energy Production.

Consistency with the Mixed Use Activity Center Concept

The project land uses:

☐ Meet the Mixed Use Activity Center requirements

☑ Are not shown within a Mixed Use Activity Center

If shown within a Mixed Use Activity Center, explain how it meets the planning guidelines outlined in the Land Use element.

Not Applicable. The MCPA is not for a mixed-use project or in an existing Mixed-Use Activity Center.

The land use proposal includes a Mixed Use project, not shown in a Mixed Use Activity Center; explain how it meets the planning guidelines and intent of the Plan.

Not Applicable. The MCPA is not for a mixed-use project or in an existing Mixed-Use Activity Center.

Consistency with the Planning Guidelines described in the Land Use element

The project land uses:

✓ Are consistent with the applicable Planning Guidelines described in the Land Use element

The Project is sited on land owned by ASLD and anticipated to be under a solar lease. ASLD has approved of the submittal of this MCPA. In addition, per Pinal County staff comments, the Project is required to obtain approval from Luke Airforce Base and the Department of Defense due to proximity to the Florence Military Reservation. Preliminary approval has been received and any updates to the necessary approvals will be made to remain in compliance.

Quality Employment Opportunities County-wide

The Comprehensive Plan stresses the importance of increasing the number of opportunities to locate quality jobs County-wide in order to increase the jobs-to-population ratio.

The proposal:

✓ Is consistent with the Economic Development element

☐ Includes additional information about how the development addresses the Economic Development Vision embodied in the Comprehensive Plan.

Please explain:

The Project is consistent with this element as it will create over 300 construction jobs on average per year for the first phase of construction and upwards of 1,000 construction jobs for the full build out over a 4-5 year construction period. The Project will also create permanent operations jobs located in Pinal County.

Viable Agriculture, Equestrian and Rural Lifestyle

Historically, agriculture has played an important role in Pinal County's economy and lifestyle. Encouraging the continuation of viable agriculture and protecting it is an important component of the Plan. Additionally, supporting an equestrian and rural lifestyle has a place in Pinal County as it continues to urbanize.

The proposal:

☐ Clusters development to protect open space and agriculture

✓ Includes additional information about how the development addresses Viable Agriculture, Equestrian, and Rural Lifestyle.

Please explain:

The ASLD land that is identified as the Project area is currently vacant with the exception of electric and railroad infrastructure. There are no buildings. There is minimal grazing on the land, but no food production. None of the lands surrounding the Project have the water rights or ability to become a productive agricultural area. To the extent that this Project is sited on vacant land it may offset additional development elsewhere in areas more suitable to agriculture.

System of Connected Trails and Preservation of Open Space

Pinal County is committed to the preservation of large swaths of open space and the development of a connected system of trails. This applies to <u>all</u> projects/proposals/actions.

The proposal:

✓ Is consistent with *Pinal County Trails and Open Space Master Plan* and Comprehensive Plan Open Space and Places Chapter

☐ Includes additional information about how the development addresses the open space Vision and goals

Please explain:

This MCPA is consistent with the Open Space and Trails Master Plan. The Project site is not designated currently for Recreation/Conservation. No trails are currently located within the Project Area. The Applicant will develop a trail per the Development Services Code which will be consistent with Pinal County's Standards.

Natural and Cultural Resource Conservation

The Comprehensive Plan strives to protect natural/cultural resources, wildlife corridors and environmentally-sensitive areas such as mountains and foothills, major washes, and vistas. These areas are predominantly undeveloped and contain sensitive resources or natural hazard areas.

The proposal:

✓ Address environmentally sensitive areas it may impact.

☐ Includes additional information about how the development addresses the natural and cultural resource conservation.

Please explain:

The Applicant has considered potential environmental impacts of the Project and would mitigate impacts to the natural and cultural environment by minimizing ground disturbance where possible, including avoiding major washes which would allow for wildlife movement across the site. The development would comply with all applicable federal, state and local environmental laws, regulations and guidelines, as required. Based on preliminary review, the Project Area is in an area with minimal sensitive environmental resources, however, environmentally sensitive areas that the Project may impact are described within the narrative of the application.

Water Resources, Public Facilities/Services, and Infrastructure Support

All developments must bring adequate water resources and the necessary infrastructure to support the intensity of development in order to minimize the impact on the County's ability to provide public services. All development and growth, public and private, must acknowledge its impacts and pay its own way.

The proposal:

✓ Ensures that adequate public facilities are in place or planned for within a reasonable time of the start of the new development

Please explain:

Adequate services are in place or are planned for within a reasonable time of the start of the new development. No new or additional public services are anticipated. Regional Fire and Rescue services are subscription based. No public improvements to sewer or water systems would be needed. Any proposed road construction needed to access the site would be paid by the Applicant. Development of the Project would not impact water quality. Site design that is sensitive to existing topography and drainage patterns would function to protect surface water quality. All stormwater would be retained on site to comply with Arizona Department of Environmental Quality requirements.

APPENDIX E

U.S. Fish and Wildlife Service
Site-specific IPaC Resource
List

IPaC Information for Planning and Consultation **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically g as *trust resources*) under the U.S. Fish and Wildlife Service's ed below. The list may also include trust resources that occu ctivities in the project area. However, determining the likelih additional site-specific (e.g., vegetation/species surveys) and

Please note that the Federal Highways Programmatic Consultation for Transportation Projects affecting NLEB or Indiana Bat Determination Key is temporarily offline for updates and will be available soon. We apologize for any inconvenience this may cause.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Pinal County, Arizona



Local office

Arizona Ecological Services Field Office

(602) 242-0210
(602) 242-2513

9828 North 31st Ave
#c3
Phoenix, AZ 85051-2517

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.

NOT FOR CONSULTATION

5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Mexican Wolf Canis lupus baileyi No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3916	EXPN
Ocelot Leopardus (=Felis) pardalis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4474	Endangered

Birds

NAME	STATUS
Cactus Ferruginous Pygmy-owl Glaucidium brasilianum cactorum Wherever found There is **final** critical habitat for this species. https://ecos.fws.gov/ecp/species/1225	Threatened
Southwestern Willow Flycatcher Empidonax traillii extimus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered
Yellow-billed Cuckoo Coccyzus americanus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3911	Threatened

Fishes

NAME	STATUS
Gila Topminnow (incl. Yaqui) Poeciliopsis occidentalis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1116	Endangered

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs
The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

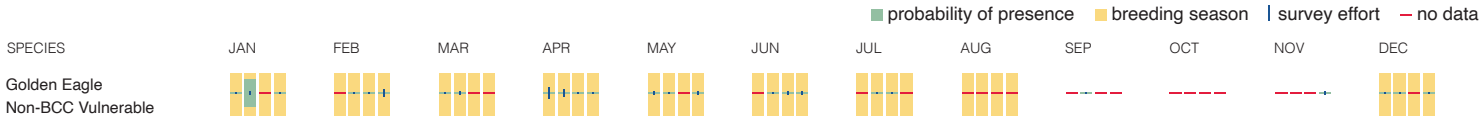
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report
On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs
The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bendire's Thrasher Toxostoma bendirei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9435	Breeds Mar 15 to Jul 31

Costa's Hummingbird Calypte costae — Breeds Jan 15 to Jun 10
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9470

Gila Woodpecker Melanerpes uropygialis — Breeds Apr 1 to Aug 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/5960

Golden Eagle Aquila chrysaetos — Breeds Dec 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

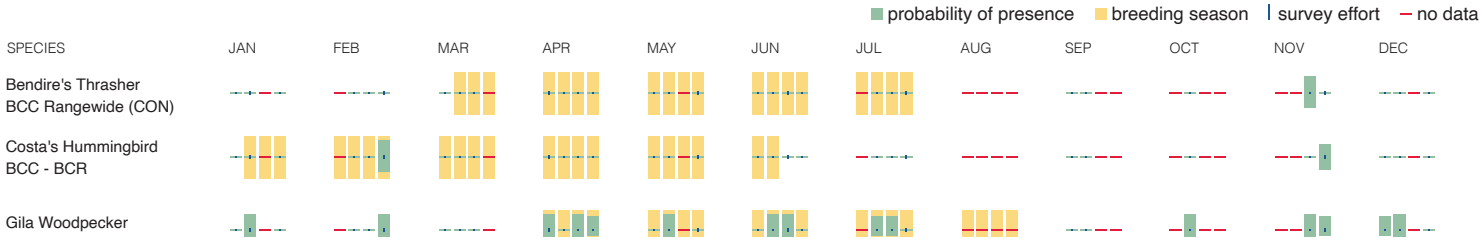
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

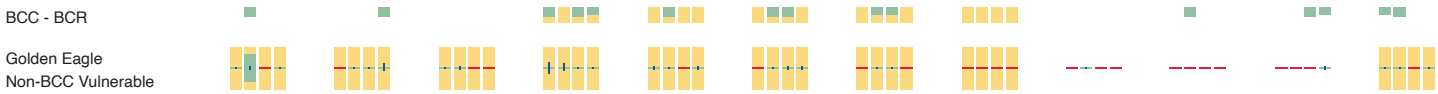
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as “Vulnerable”. See the FAQ “What are the levels of concern for migratory birds?” for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ “Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds”.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs
Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND
- PSS1Ah
- PSS1A

FRESHWATER POND
- PUSCx

RIVERINE
- R4SBJ

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

APPENDIX F

Arizona Environmental Online Review Tool Report

Arizona Environmental Online Review Tool Report

Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department requests further coordination to provide project/species specific recommendations. Please use the Project Evaluation Form to submit your project to the Project Evaluation Program at PEP@azgfd.gov.

Project Name:
Silver King Solar

Project Type:
Energy Production/Storage/Transfer, Energy Production (generation), concentrated solar facility (new/expansion)

Project ID:
HGIS-24695

Project Description:
Proposed PV solar installation.

Contact Person:
Patrick Golden

Organization:
Heritage Environmental Consultants

On Behalf Of:
CONSULTING

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. Arizona Wildlife Conservation Strategy (AWCS), specifically Species of Greatest Conservation Need (SGCN), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies.

Silver King Solar

USA Topo Basemap With Locator Map



Buffered Project Boundary

Project Boundary

Project Size (acres): 9,086.46

Lat/Long (DD): 33.2194 / -111.3901

County(s): Pinal

AGFD Region(s): Mesa

Township/Range(s): T2S, R10E; T2S, R9E; T3S, R10E +

USGS Quad(s): FLORENCE JUNCTION; FLORENCE NE +



County of Yavapai, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Copyright:© 2013 National Geographic Society, i-cubed
Esri, USGS

Silver King Solar

Web Map As Submitted By User



Buffered Project Boundary

Project Boundary

Project Size (acres): 9,086.46

Lat/Long (DD): 33.2194 / -111.3901

County(s): Pinal

AGFD Region(s): Mesa

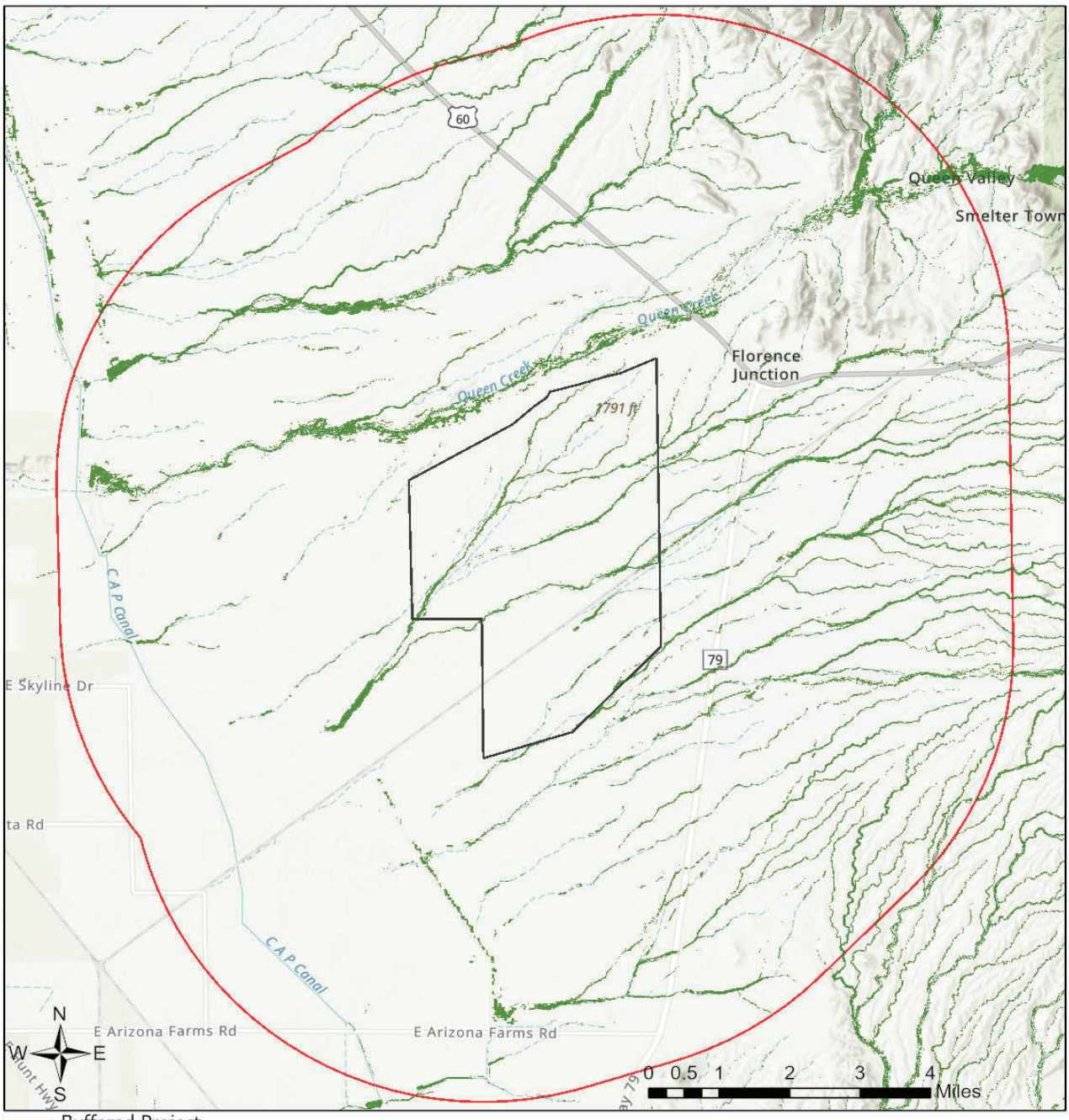
Township/Range(s): T2S, R10E; T2S, R9E; T3S, R10E +

USGS Quad(s): FLORENCE JUNCTION; FLORENCE NE +

Esri, NASA, NGA, USGS

Silver King Solar

Important Areas



- Buffered Project Boundary
- Project Boundary
- Important Bird Areas
- Critical Habitat
- Pinal County Riparian
- Wildlife Connectivity

Project Size (acres): 9,086.46

Lat/Long (DD): 33.2194 / -111.3901

County(s): Pinal

AGFD Region(s): Mesa

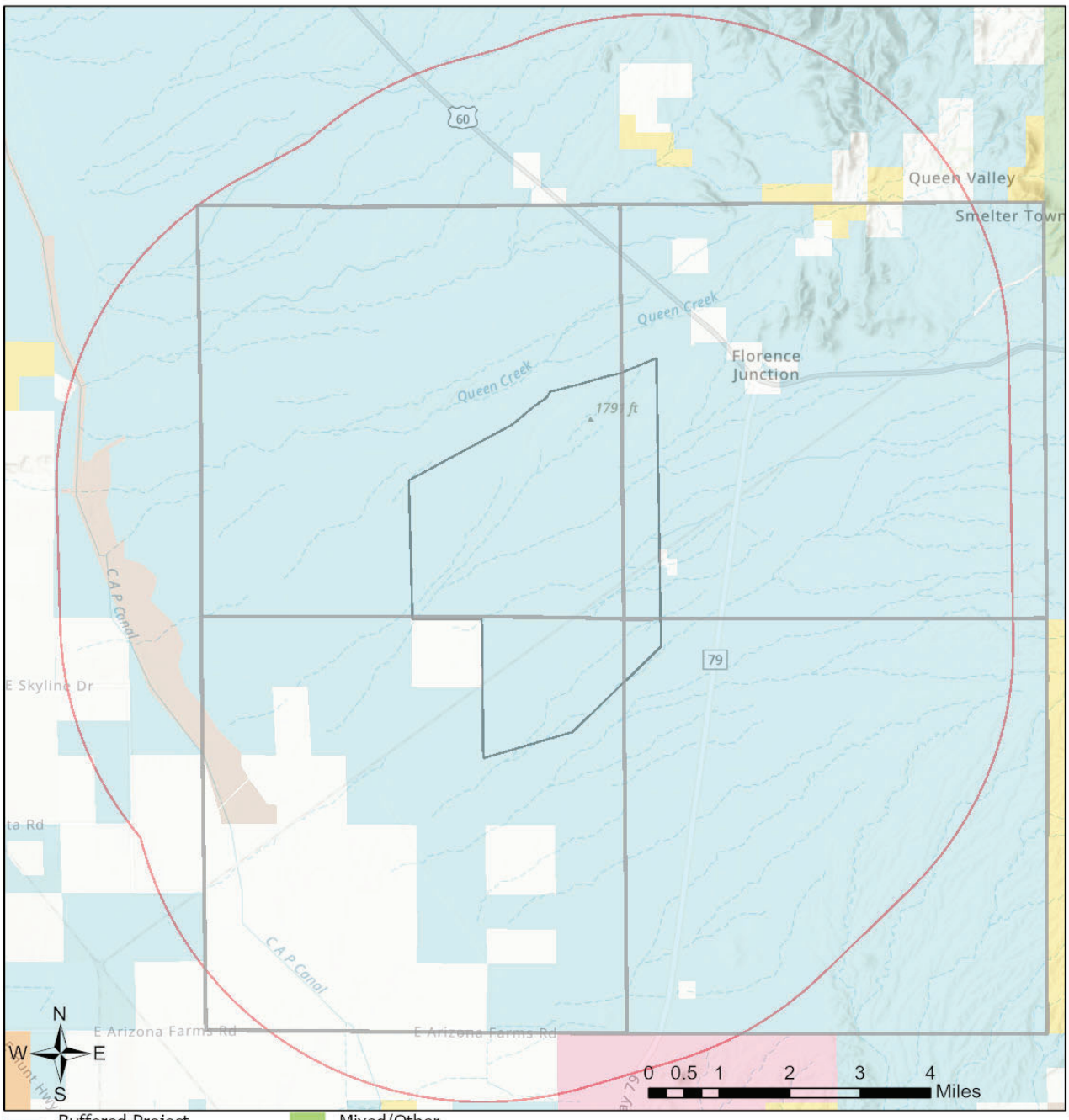
Township/Range(s): T2S, R10E; T2S, R9E; T3S, R10E +

USGS Quad(s): FLORENCE JUNCTION; FLORENCE NE +

Esri, NASA, NGA, USGS
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

Silver King Solar

Township/Ranges and Land Ownership



- Buffered Project Boundary
- Project Boundary
- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State & Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge
- Township/Ranges

Project Size (acres): 9,086.46

Lat/Long (DD): 33.2194 / -111.3901

County(s): Pinal

AGFD Region(s): Mesa

Township/Range(s): T2S, R10E; T2S, R9E; T3S, R10E +

USGS Quad(s): FLORENCE JUNCTION; FLORENCE NE +

Esri, NASA, NGA, USGS
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

Special Status Species Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Ammospermophilus harrisii	Harris' Antelope Squirrel					2
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		2
Chaetodipus baileyi	Bailey's Pocket Mouse					2
Chilomeniscus cinctus	Banded Sandsnake					2
Crotalus tigris	Tiger Rattlesnake					2
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1
Heloderma suspectum	Gila Monster					1
Incilius alvarius	Sonoran Desert Toad					2
Lasiurus cinereus	Hoary Bat					2
Lepus alleni	Antelope Jackrabbit					2
Micruroides euryxanthus	Sonoran Coralsnake					2
Parabuteo unicinctus	Harris's Hawk					2
Perognathus amplus	Arizona Pocket Mouse					2
Phrynosoma solare	Regal Horned Lizard					2
Phyllorhynchus browni	Saddled Leaf-nosed Snake					2

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Queen Creek - Gila River Indian Community	Maricopa County Wildlife Movement Area - Riparian/Wash					
Queen Creek - Gila River Indian Community	Pinal County Wildlife Movement Area - Riparian/Wash					
Queen Creek	Conservation Opportunity Area					
Riparian Area	Riparian Area					
Valley north and east of the San Tan Mountains	Pinal County Wildlife Movement Area - Landscape					

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Ammospermophilus harrisii	Harris' Antelope Squirrel					2
Anthus spragueii	Sprague's Pipit					2
Aquila chrysaetos	Golden Eagle	BGA		S		2
Artemisiospiza nevadensis	Sagebrush Sparrow					3
Asio otus	Long-eared Owl					2

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Aspidoscelis sonorae	Sonoran Spotted Whiptail					2
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Auriparus flaviceps	Verdin					2
Botaurus lentiginosus	American Bittern					2
Buteo regalis	Ferruginous Hawk			S		2
Buteo swainsoni	Swainson's Hawk					2
Calypte costae	Costa's Hummingbird					2
Campylorhynchus brunneicapillus	Cactus Wren					2
Catharus ustulatus	Swainson's Thrush					2
Chaetodipus baileyi	Bailey's Pocket Mouse					2
Chilomeniscus cinctus	Variable Sandsnake					2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1
Colaptes chrysoides	Gilded Flicker			S		2
Columbina inca	Inca Dove					2
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat		S	S		1
Crotalus tigris	Tiger Rattlesnake					2
Cynanthus latirostris	Broad-billed Hummingbird		S			2
Empidonax wrightii	Gray Flycatcher					2
Eumops perotis californicus	Greater Western Bonneted Bat			S		2
Falco mexicanus	Prairie Falcon					2
Falco peregrinus anatum	American Peregrine Falcon		S	S		1
Falco sparverius	American Kestrel					2
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1
Heloderma suspectum	Gila Monster					1
Icterus bullockii	Bullock's Oriole					2
Incilius alvarius	Sonoran Desert Toad					2
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		2
Lanius ludovicianus	Loggerhead Shrike					2
Lasiurus cinereus	Hoary Bat					2
Lasiurus frantzii	Desert Red Bat		S			2
Lasiurus xanthinus	Western Yellow Bat		S			2
Lepus alleni	Antelope Jackrabbit					2
Macrotus californicus	California Leaf-nosed Bat			S		2
Megascops kennicottii	Western Screech-owl					2
Melanerpes uropygialis	Gila Woodpecker					2
Melospiza lincolnii	Lincoln's Sparrow					2
Micrathene whitneyi	Elf Owl					3
Micruroides euryxanthus	Sonoran Coralsnake					2
Myotis auriculus	Southwestern Myotis					2

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Myotis velifer	Cave Myotis			S		2
Myotis yumanensis	Yuma Myotis					2
Neotamias cinereicollis	Gray-collared Chipmunk					2
Neotamias minimus	Least Chipmunk		S			2
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					2
Nyctinomops macrotis	Big Free-tailed Bat					2
Parabuteo unicinctus	Harris's Hawk					2
Passerculus sandwichensis	Savannah Sparrow					2
Perognathus amplus	Arizona Pocket Mouse					2
Phrynosoma solare	Regal Horned Lizard					2
Phyllorhynchus browni	Saddled Leaf-nosed Snake					2
Pooecetes gramineus	Vesper Sparrow					2
Rana yavapaiensis	Lowland Leopard Frog		S	S		1
Sigmodon arizonae cienegae	Arizona Cotton Rat					2
Spizella breweri	Brewer's Sparrow					2
Tadarida brasiliensis	Brazilian Free-tailed Bat					2
Toxostoma bendirei	Bendire's Thrasher					2

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Odocoileus hemionus	Mule Deer					
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Energy Production/Storage/Transfer, Energy Production (generation), concentrated solar facility (new/expansion)

Project Type Recommendations:
During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations. The Department recommends using only the minimum amount of light needed for safety,especially in areas immediately adjacent to open space or undeveloped lands. The Department encourages the use of motion sensing lighting and narrow spectrum lighting (amber or warm tones typically 2700 Kelvin or lower) wherever possible to lower the range of species affected by lighting. Also, please consider shielding, canting, or cutting all lighting, where possible, to ensure that light reaches only areas needing illumination and to minimize impacts to nocturnal wildlife.

Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at https://www.invasivespeciesinfo.gov/ and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control these species. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at https://imap.natureserve.org/imap/services/page/map.html.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select “See What’s Here” for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

For any powerlines built, proper design and construction of the transmission line is necessary to prevent or minimize risk of electrocution of raptors, owls, vultures, and golden or bald eagles, which are protected under state and federal laws. Limit project activities during the breeding season for birds, generally March through late August, depending on species in the local area (raptors breed in early February through May). Conduct avian surveys to determine bird species that may be utilizing the area and develop a plan to avoid disturbance during the nesting season. For underground powerlines, trenches should be covered or back-filled as soon as possible. Incorporate escape ramps in ditches or fencing along the perimeter to deter small mammals and herpetofauna (snakes, lizards, tortoise) from entering ditches. In addition, indirect affects to wildlife due to construction (timing of activity, clearing of rights-of-way, associated bridges and culverts, affects to wetlands, fences) should also be considered and mitigated.

Based on the project type entered, coordination with U.S. Fish and Wildlife Service (Migratory Bird Treaty Act) may be required (https://www.fws.gov/office/arizona-ecological-services).

Avoid/minimize wildlife impacts related to contacting hazardous and other human-made substances in facility water collection/storage basins, evaporation or settling ponds and/or facility storage yards. Design slopes to discourage wading birds and use fencing, netting, hazing or other measures to exclude wildlife.

The Department encourages the use of technology that requires minimal amounts of water, preferably dry cooling. In the desert, water is very scarce and reducing consumption will lessen impacts on wildlife as well as the public.

Project Location and/or Species Recommendations:
Analysis indicates that your project is located in the vicinity of an identified **Conservation Opportunity Area (COA)**. While there are many areas in Arizona that present abundant conservation opportunities, COAs are specific areas on the landscape that the Department identified as having the greatest potential for conservation efforts. COAs were identified using species and habitat data, the presence of unique landscape features, and Departmental expertise. COAs range in size, scope, and focal species and/or habitats and are strictly a non-regulatory conservation tool for the public and our conservation partners to consider. For more information regarding this particular COA near your project area and the Department's suggestions for potential conservation efforts, please visit the COA profile at https://awcs.azgfd.com/conservation-opportunity-areas.

Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat connectivity feature***. The **County-level Stakeholder Assessments** contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-identifying-corridors/.
Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

HDMS records indicate that one or more **Listed, Proposed, or Candidate** species or **Critical Habitat** (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at https://www.fws.gov/office/arizona-ecological-services or:

Phoenix Main Office
9828 North 31st Avenue #C3
Phoenix, AZ 85051-2517
Phone: 602-242-0210
Fax: 602-242-2513

Tucson Sub-Office
201 N. Bonita Suite 141
Tucson, AZ 85745
Phone: 520-670-6144
Fax: 520-670-6155

Flagstaff Sub-Office
SW Forest Science Complex
2500 S. Pine Knoll Dr.
Flagstaff, AZ 86001
Phone: 928-556-2157
Fax: 928-556-2121

This review has identified **riparian areas** within the vicinity of your project. During the planning stage of your project, avoid, minimize, or mitigate any potential impacts to riparian areas identified in this report. Riparian areas play an important role in maintaining the functional integrity of the landscape, primarily by acting as natural drainages that convey water through an area, thereby reducing flood events. In addition, riparian areas provide important movement corridors and habitat for fish and wildlife. Riparian areas are channels that contain water year-round or at least part of the year. Riparian areas also include those channels which are dry most of the year, but may contain or convey water following rain events. All types of riparian areas offer vital habitats, resources, and movement corridors for wildlife. The Pinal County Comprehensive Plan (i.e. policies *6.1.2.1* and *7.1.2.4*), Open Space and Trails Master Plan, Drainage Ordinance, and Drainage Design Manual all identify riparian area considerations, guidance, and policies. Guidelines to avoid, minimize, or mitigate impacts to riparian habitat can be found at https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/.
Further consultation with the Arizona Game and Fish Department and Pinal County may be warranted.

HDMS records indicate that **Sonoran Desert Tortoise** have been documented within the vicinity of your project area. Please review the Tortoise Handling Guidelines found at https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/2014%20Tortoise%20handling%20guidelines.pdf.

HDMS records indicate that **Western Burrowing Owls** have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at https://www.azgfd.com/wildlife-conservation/conservation-and-endangered-species-programs/burrowing-owl-management/.

APPENDIX G

Biological Technical Memorandum

Silver King Solar

Biological Resources Memo

May 2025

Prepared For:

Silver King Solar LLC

Prepared By:

Heritage Environmental Consultants

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1.0 Introduction

Silver King Solar LLC (Applicant) is requesting a major comprehensive plan amendment (MCPA) to the 2019 Pinal County Comprehensive Plan (Comprehensive Plan) (Pinal County 2021) to construct and operate the Silver King Solar Project (Project). The Project would include solar photovoltaic (PV) panels, a Project substation, Battery Energy Storage Systems (BESS) and a generation-tie (gen-tie) transmission line. The Project includes a total of 11 parcels, in whole or in part, on approximately 9,000 acres near Florence in unincorporated Pinal County, Arizona (herein referred to as the Project Area) (**Figure 1**).

In order to support the above-described Project planning efforts, a desktop biological resources investigation and site reconnaissance surveys to confirm habitat types were conducted. This memo documents the methods, results, and conclusions of the pre-field desktop review and reconnaissance surveys to document if sensitive species could be present in the Project Area.

2.0 Field Surveys

Two separate field surveys were conducted to analyze the habitat types and potential for special status species to occur on the Project site. The first survey was conducted on March 11 and 12, 2025 and the second was conducted concurrently with jurisdictional waters surveys on May 12, 13, and 14, 2025. During both surveys biologists walked and drove throughout the Project site documenting vegetation communities, observed species, and potential for special status species to occur.

3.0 Soils

Natural Resource Conservation Service (NRCS) soil survey data was acquired for the Project area (NRCS 2025). The NRCS soil survey data indicates that the Project area consists of five soil associations: Beardsley-Suncity complex, Denure sandy loam, Denure-Mohall complex, Mohall clay loam, and Mohall sandy loam. Overall, these soils are deep, well-drained sands formed in alluvial fans (**Figure 2**).

4.0 Vegetation Communities

The United States Geological Survey (USGS) Gap Analysis Project (GAP) has identified five vegetation communities in the Project area (USGS 2025) (**Figure 3**). The majority of the Project area contains Sonora-Mojave Creosotebush-White Bursage Desert Scrub and Sonoran Paloverde-Mixed Cacti Desert Scrub habitats. The remaining three only occur sporadically and include Apacherian-Chihuahuan Mesquite Upland Scrub, North American Warm Desert Riparian Woodland and Shrubland and Open Water. These habitat types were generally confirmed during the habitat assessment surveys. No open water was observed during the site reconnaissance surveys. Descriptions of the two largest habitat types that dominate the Project area is included below. A list of plant species that were observed during field surveys is included in **Table 1**.

Sonora-Mojave Creosotebush-White Bursage Desert Scrub

This ecological system forms a desert scrub matrix blanketing broad valleys, lower bajadas, plains and low hills in the Mojave and lower Sonoran deserts. This desert scrub is characterized by a sparse to moderately dense layer (2-50% cover) of xeromorphic microphyllous and broad-leaved shrubs. *Larrea tridentata* and *Ambrosia dumosa* are typically dominants, but many different shrubs, dwarf-shrubs, and cacti may codominate or form typically sparse understories. Associated species may include *Atriplex canescens, Atriplex hymenelytra, Encelia farinosa, Ephedra nevadensis, Fouquieria splendens, Lycium andersonii, and Opuntia basilaris*. The herbaceous layer is typically sparse but may have abundant seasonal ephemerals. Herbaceous species such as *Chamaesyce* spp., *Eriogonum inflatum, Dasyochloa pulchella, Aristida* spp., *Cryptantha* spp., *Nama* spp., and *Phacelia* spp. are common. This system can often appear

as very open sparse vegetation, with the mostly barren ground surface being the predominant feature (Natureserve 2025).

Sonoran Paloverde-Mixed Cacti Desert Scrub

This group occurs on hillsides, mesas and upper bajadas in southern Arizona and extreme southeastern California. The vegetation is characterized by a diagnostic sparse, emergent tree layer of *Carnegiea gigantea* (3-16 m tall) and/or a sparse to moderately dense canopy codominated by xeromorphic, summer deciduous tall shrub *Parkinsonia microphylla* and evergreen *Larrea tridentata*, with *Prosopis* sp., *Olneya tesota*, and *Fouquieria splendens* less prominent. Other common shrubs and dwarf-shrubs include *Acacia greggii*, *Ambrosia deltoidea*, *Ambrosia dumosa* (in drier sites), *Calliandra eriophylla*, *Jatropha cardiophylla*, *Krameria erecta*, *Lycium* spp., *Menodora scabra*, *Simmondsia chinensis*, and many cacti, including *Ferocactus* spp., *Echinocereus* spp., and *Opuntia* spp. (both cholla and prickly-pear). The sparse herbaceous layer is composed of perennial grasses and forbs with annuals seasonally present and occasionally abundant. On slopes, plants are often distributed in patches around rock outcrops where suitable habitat is present. Outliers of this succulent-dominated group occur as "Cholla Gardens" in the southern and eastern Mojave Desert in California. In this area, the group is characterized by *Cylindropuntia bigelovii*, *Fouquieria splendens*, and other succulents, but it lacks *Carnegiea gigantea* and P*arkinsonia microphylla*, which are typical farther east (Natureserve 2025).

Table 1 - Observed Plant Species

Common Name	**Scientific Name**
Creosote Bush	*Larrea tridentata*
Saguaro	*Carnegiea gigantea*
Jumping Cholla	*Cylindropuntia fulgida*
Cane Cholla	*Cylindropuntia spinosior*
Hedgehog Cactus	*Echinocereus engelmannii*
Fishhook Barrel Cactus	*Ferocactus wislizeni*
White Bursage	*Ambrosia dumosa*
Triangle Bursage	*Ambrosia deltoidea*
Whitethorn Acacia	*Vachellia constricta*
Honey Mesquite	*Prosopis glandulosa*
Blue Paloverde	*Parkinsonia florida*
Velvet Mesquite	*Prosopis velutina*
Goodding’s Willow	*Salix gooddingii*
Desert Ironwood	*Olneya tesota*
Lotebush	*Sarcomphalus obtusifolius*
Desert Hackberry	*Celtis ehrenbergiana*
Crucifixion Thorn	*Castela emoryi*
Woolly Tidestromia	*Tidestromia lanuginose*
Stinknet	*Oncosiphon piluliferum*
Cheeseweed	*Malva parviflora*
Ram’s Horn	*Proboscidea louisianica*
Canyon Ragweed	*Ambrosia ambrosiodes*
Desert Mistletoe	*Phoradendron californicum*
Tamarisk	*Tamarix ramosissima*
Red Brome	*Bromus rubens*
Tumblemustard	*Sysimbrium altissimum*

5.0 Federally Protected Species

The U.S. Fish and Wildlife Service (USFWS) maintains a list of protected species and the critical habitat known to occur in each Arizona county. These species are currently listed or are proposed for listing as endangered or threatened under the Endangered Species Act (ESA) (16 United States Code [USC] 1531 et seq.). The list also includes candidate species proposed as threatened or endangered, species delisted from protection under the ESA, and species delisted from protection under the ESA but currently proposed for relisting. The ESA specifically prohibits the "take" of listed endangered and listed threatened wildlife species if an ESA Section 4(d) rule was designated at the time of listing. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to engage in any such conduct," but the ESA does not provide the same take protections of plant species (except on federal land). Some bird species also receive legal protection under the federal Migratory Bird Treaty Act (MBTA) (16 USC 703–712). Only species listed by the USFWS are afforded protection under the ESA. The special-status species evaluated in this document were based on the list of endangered, threatened, and proposed delisted species for Pinal County, Arizona, available in the USFWS Information for Planning and Consultation (IPaC) system (USFWS 2025).

Data from the IPaC system, Ecological Conservation Online System (ECOS) (USFWS 2025), Arizona Game and Fish Department (AZGFD) Online Environmental Review Tool (AZGFD 2025), USGS National Hydrography Dataset (USGS 2025), recent aerial photography imagery available online and site reconnaissance surveys in March and May, 2025 were reviewed to assess the potential for occurrence of federally protected species and their habitat.

No designated or proposed critical habitat for federally protected species is known to occur in or within five miles of the Project Area (USFWS 2025 and AZGFD 2025a).

The USFWS IPaC system identified seven federally listed (or candidate for listing) species with the potential to occur in the Project Area: Mexican wolf (*Canis lupus baileyi*; Experimental Population), ocelot (*Leopardus pardalis*; Endangered), cactus ferruginous pygmy-owl (*Glaucidium brasilianum cactorum*; Threatened), southwestern willow flycatcher (*Empidonax traillii extimus*; Endangered), yellow-billed cuckoo (*Coccyzus americanus*; Threatened), Gila topminnow (*Poeciliopsis occidentalis*; Endangered), and monarch butterfly (*Danaus Plexippus*; Candidate)(**Appendix B**). The habitat requirements and potential to occur are described in more detail in **Appendix D**. The Project area lacks suitable habitat for six of the seven species, are distant from the nearest known populations, or both. Monarch butterfly, a candidate species for listing, may occur in or near the Project area wherever flowering plants are present for foraging or where milkweed plants (family *Asclepiadaceae*) are present for breeding. No milkweed species were observed during field surveys in March and May 2025, but other species of flowering plants were observed.

To help validate IPaC findings, the AZGFD Heritage Data Management System (HDMS), which tracks records for federally listed species and other species of special concern database, was accessed through the AZGFD Arizona Heritage Geographic Information System (AZHGIS) online environmental review tool to determine whether any federally proposed or designated critical habitat or special-status species have been documented on or near the Project area (AZGFD 2025a). The environmental online review tool report is included in **Appendix C**. According to AZHGIS, there are no records for seven listed species within 5 miles of the Project Area.

5.1 Other Federally Protected Species

The MBTA provides federal protection to nearly all birds native to North America, including their nests and eggs, on all lands (public or private). The MBTA does not protect nonnative bird species, and it does not protect certain native birds (quails, grouse, or turkeys, or their relatives). Numerous species protected by the MBTA are expected to forage and nest in the Project area and its vicinity and/or migrate through

area. Bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*) are protected under both the MBTA and the Bald and Golden Eagle Protection Act (BGEPA) on all lands (public or private). The golden eagle has the potential to forage within the Project area or move across it. The bald eagle has potential to move across the Project area. There is no potential bald eagle nesting habitat (i.e., cliffs or tall trees) within the Project area or immediate vicinity. There is potential golden eagle nesting habitat approximately 2 miles northeast of the Project area, which is a sufficient distance away that nesting golden eagles would not likely be affected by the Project.

6.0 State Protected Species

The State of Arizona does not have an equivalent counterpart to the federal ESA, and there is no comparable permitting process for harm to wildlife during development. AZGFD can provide an advisory role during the planning and permitting of energy infrastructure projects and may provide formal comments during state and local permitting processes. Species of Greatest Conservation Need (SGCN) is a nonregulatory AZGFD status that lists wildlife of conservation priority in the state of Arizona (described nationally as Wildlife of Greatest Conservation Need). SGCN are species of vertebrates, crustaceans, and mollusks that rank high in the AZGFD vulnerability assessment and have been identified as priorities for immediate conservation action, as detailed in The Arizona Wildlife Conservation Strategy (2022–2032)(AZGFD 2022). Each species is assessed by AZGFD in terms of vulnerability and assigned a Tier 1, 2, or 3 ranking, with Tier 1 representing the highest threat level (AZGFD 2022). The SGCN list may overlap species already discussed above under relevant federal laws. SGCNs not otherwise protected by federal laws are not given additional protection under state law except that generally no hunting or capture of SGCN is allowed with some exceptions for managed recreational fisheries of native fish (AZGFD 2017) and recreational capture of certain reptiles (AZGFD 2015). Species that are labelled as Tier 1 species by the AZGFD (AZGFD 2025b) are analyzed in **Appendix D**.

According to AZHGIS, there are records for 16 SGCN listed wildlife species within 5 miles of the Project Area, including two amphibian species, two bird species, five mammal species, and seven reptile species (AZGFD 2025)(**Appendix C**). Many of these species records likely occur in Queen Creek, which is approximately 0.5 miles north of the Project area; however, many of the species use upland or xeroriparian habitat and have the potential to occur in the Project area. Harris' hawk (*Parabuteo unicinctus*; SGCN 2) and Harris' antelope squirrel (*Ammospermophilus harrisii;* SGCN 2) were observed within the Project area during the field surveys.

The Sonoran desert tortoise (*Gopherus morafkai*), an SGCN Tier 1 species additionally protected under ARS 17-306 and 17-309, has occurrence records within 5 miles of the Project area (**Appendix C**) (AZGFD 2025). The Project area does not contain suitable rocky slope habitat for the Sonoran desert tortoise, though it does contain incised washes with caliche caves suitable for use by this species. The Bureau of Land Management (BLM) has a map that shows suitable desert tortoise habitat split by importance categories. The closest potentially suitable habitat is approximately 4 miles northeast of the Project area. However, this habitat is designated as "Other Habitat" and the Project is not located in close proximity to any "High Importance" or "Medium Importance" habitats (BLM 2016). Sonoran desert tortoises may disperse into the Project area from these mountainous bajadas, but are more likely to disperse within Queen Creek, 0.5 miles north of the Project area. In the event a Sonoran desert tortoise is encountered during construction activities, the Guidelines for Handling Sonoran Desert Tortoises (AZGFD 2014) would be followed.

The Arizona Native Plant Law (ANPL) (Arizona Revised Statutes 3-904) protects certain native plants on private and public lands in Arizona (Arizona Department of Agriculture [AZDA] 2024). The only exception to this law is for plant removal on federal and Tribal lands, in which case the federal land management agency or Tribe must be contacted directly for guidance on their requirements for native plants. Harvest and transport of native plants or native plant materials from any land, including private land, requires permission from the landowner and a permit from the AZDA. The AZDA also requires notification before

land clearing is undertaken, even if the plants would be destroyed or salvaged and replanted off-site. Projects of 40 acres or more require written submittal of the Notice of Intent to Clear Land to the AZDA 60 days prior to construction plant clearance. A separate application is required for the permits necessary to salvage and transport protected native plants off-site. The landowner has the right to transplant on-site or to destroy any plants occurring on the property without permits. On state lands, ASLD Instructional Memo No. 12.05 requires that a native plant survey be conducted for projects larger than 20 acres to estimate the number of trees, cacti and succulents that will be removed. The Applicant will ensure this survey is implemented and data are provided to ASLD in a timely fashion.

The ANPL also designates certain species as Highly Safeguarded and Salvage Restricted species. The Pinal County Highly Safeguarded and Salvage Restricted species (AZGFD 2025b) were researched and it was determined that only the saguaro (*Carnegiea gigantea*), stag-horn cholla (*Opuntia versicolor*), and desert barrel cactus (*Ferocactus cylindraceus*) have the potential to occur within the Project area. Saguaros were observed during field surveys, but the other two were not, but they have a low to moderate potential to occur. The rest of the species either do not occur in the habitat types within the Project area, do not occur in the elevation ranges within the Project area, are only known to occur in areas that are not near the Project area, or some combination of these factors.

7.0 Observed Species

The species that were observed during field surveys are included in **Table 2**.

Table 2 – Species Observed During Field Surveys

Common Name	Scientific Name	Status
American Kestrel	*Falco sparverius*	MBTA
Ash-throated Flycatcher	*Myiarchus cinerascens*	MBTA
Black-tailed Gnatcatcher	*Polioptila melanura*	MBTA
Cactus Wren	*Campylorhynchus brunneicapillus*	MBTA
Common Raven	*Corvus corax*	MBTA
Crissal Thrasher	*Toxostoma crissale*	MBTA
Curve-billed Thrasher	*Toxostoma curvirostre*	MBTA
Gambel's Quail	*Callipepla gambelii*	MBTA
Gilded Flicker	*Colaptes chrysoides*	MBTA
Harris' Hawk	*Parabuteo unicinctus*	SGCN 2
House Finch	*Haemorhous mexicanus*	MBTA
Loggerhead Shrike	*Lanius ludovicianus*	MBTA
Lucy's Warbler	*Leiothlypis luciae*	MBTA
Mourning Dove	*Zeneida macroura*	MBTA
Northern Cardinal	*Cardinalis cardinalis*	MBTA
Northern Mockingbird	*Mimus polyglottos*	MBTA
Red-tailed Hawk	*Buteo jamaicensis*	MBTA
Red-winged Blackbird	*Agelaius phoeniceus*	MBTA
Say's Phoebe	*Sayornis saya*	MBTA
Turkey Vulture	*Cathartes aura*	MBTA
Verdin	*Auriparus flaviceps*	MBTA
Vermilion Flycatcher	*Pyrocephalus rubinus*	MBTA
Western Meadowlark	*Sturnella neglecta*	MBTA
White-throated Swift	*Aeronautes saxatalis*	MBTA
Black-tailed Jackrabbit	*Lepus californicus*	None
Collared Peccary (Javelina)	*Pecari tajacu*	Game Mammal
Desert Cottontail Rabbit	*Sylvilagus audobonii*	None
Coyote	*Canis latrans*	None
Desert Kit Fox	*Vulpes macrotis*	None
Harris' Antelope Squirrel	*Ammospermophilus harrisii*	SGCN 2
Round-tailed Ground Squirrel	*Xerospermophilus tereticaudus*	None
Common side-blotched	*Uta stansburiana*	None
Western Whiptail Lizard	*Aspidoscelis tigris*	None

8.0 Wildlife Connectivity

Based on comments provided by the Pinal County Open Space, Trails and Regional Parks Department, the Project may fall within an area with increased wildlife connectivity. In particular, Queen Creek, located approximately 0.5 miles north of and outside of the Project, has been identified as an important wildlife

movement corridor. There are also several smaller xeroriparian areas identified by the AZGFD (AZGFD 2025a) that traverse the Project. The Project would not impact wildlife movement in the Queen Creek corridor because of its distance from the corridor and because it is located on the plateau above Queen Creek. The Project will also avoid the corridors identified by the AZGFD to the extent feasible to avoid and minimize impacts to those corridors. The Project will also comply with the Guidelines for Solar development within Arizona (AZGFD 2010).

9.0 Noxious Weeds

The AZDA defines three classes of noxious weeds in the state of Arizona (Arizona Administrative Code R3-4-245) (AZDA 2024):

- Class A is categorized as a species of plant that is not known to exist or that is of limited distribution in the state and is a high-priority pest for quarantine, control, or mitigation.
- Class B is categorized as a species of plant that is known to occur but that is of limited distribution in the state and may be a high-priority pest for quarantine, control, or mitigation if a significant threat to a crop, commodity, or habitat is known to exist.
- Class C is categorized as a species of plant that is widespread but may be recommended for active control based on risk assessment.

Two restrictions have been developed to control noxious weeds in Arizona: 1) a Class A, B, or C noxious weed or a commodity infested or contaminated with a Class A, B, or C noxious weed cannot be admitted into the state unless otherwise authorized by the AZDA and 2) the AZDA may quarantine and abate an area infested or contaminated with a Class A or Class B noxious weed if it has been determined that an imminent threat to agriculture or horticulture exists.

Noxious weeds including buffelgrass (*Pennisetum ciliare*), Bermuda grass (*Cynodon dactylon*), Mediterranean grass (*Schismus barbatus*), redstem stork's bill (*Erodium cicutarium*), Sahara mustard (*Brassica tournefortii*) and wild oats (*Avena fatua*) have been observed along U.S. Highway 60 near the Project Area (iMapInvasives 2025). No noxious weeds were observed within the Project area, though surveys were conducted during times when weed species may not be growing and easily visible. The Project would prepare an invasive/noxious weed management plan that would be implemented to reduce or eliminate the spread of weeds during construction, operations and decommissioning activities.

10.0 Pinal County Riparian Habitat

The County has existing policies, codes, and regulations that stress the importance of riparian areas and provide guidance toward protecting them including the Comprehensive Plan, Open Space and Trails Master Plan, and P Development Services Code. The *Pinal County Riparian Area Guidelines* provide a description of riparian areas and mitigation measures should a project be expected to impact a riparian area.

The AZHGIS online environmental review tool response also indicated that riparian areas occur in the Project Area (AZGFD 2025; Pinal County 2019). The mapped riparian areas in the Project Area are closely associated with xeroriparian desert scrub vegetation and could be impacted if Project development impacts the xeroriparian washes within the Project area. The Applicant will work with the County and AZGFD to avoid riparian area impacts where feasible.

11.0 Future Biological Surveys

Based on the results of the habitat assessment and field surveys, it is not anticipated that any further surveys are needed at this time due to the lack of suitable habitat for special status species for which surveys would be required. However, pre-construction surveys for relevant species covered under the MBTA and an inventory or cacti and other native plants protected under the ASLD Instructional Memo No. 12.05 will occur prior to ground disturbing activities.

12.0 References

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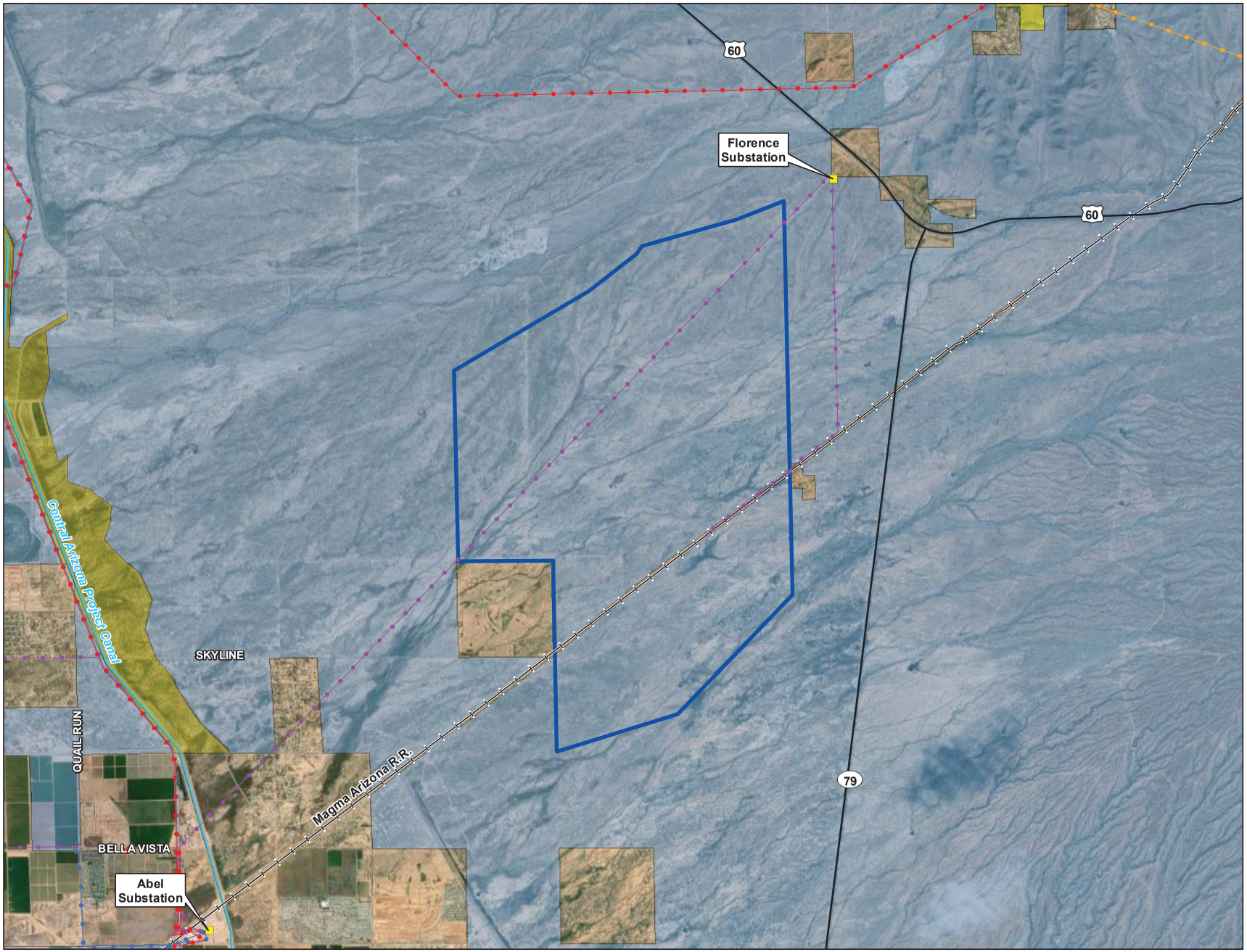
Appendix A Figures



Legend

Project Features

- Silver King Solar and Storage Project Site

General Features

- Existing Substation
- Existing 500kV Transmission Line
- Existing 230kV Transmission Line
- Existing 69kV Transmission Line
- US Route or State Highway
- Railroad
- Canal

Jurisdictional Land Ownership

- Bureau of Land Management Land
- Bureau of Reclamation Land
- State Land

0 0.5 1 1.5 2
Miles

ARIZONA

Phoenix
Florence
Pinal County

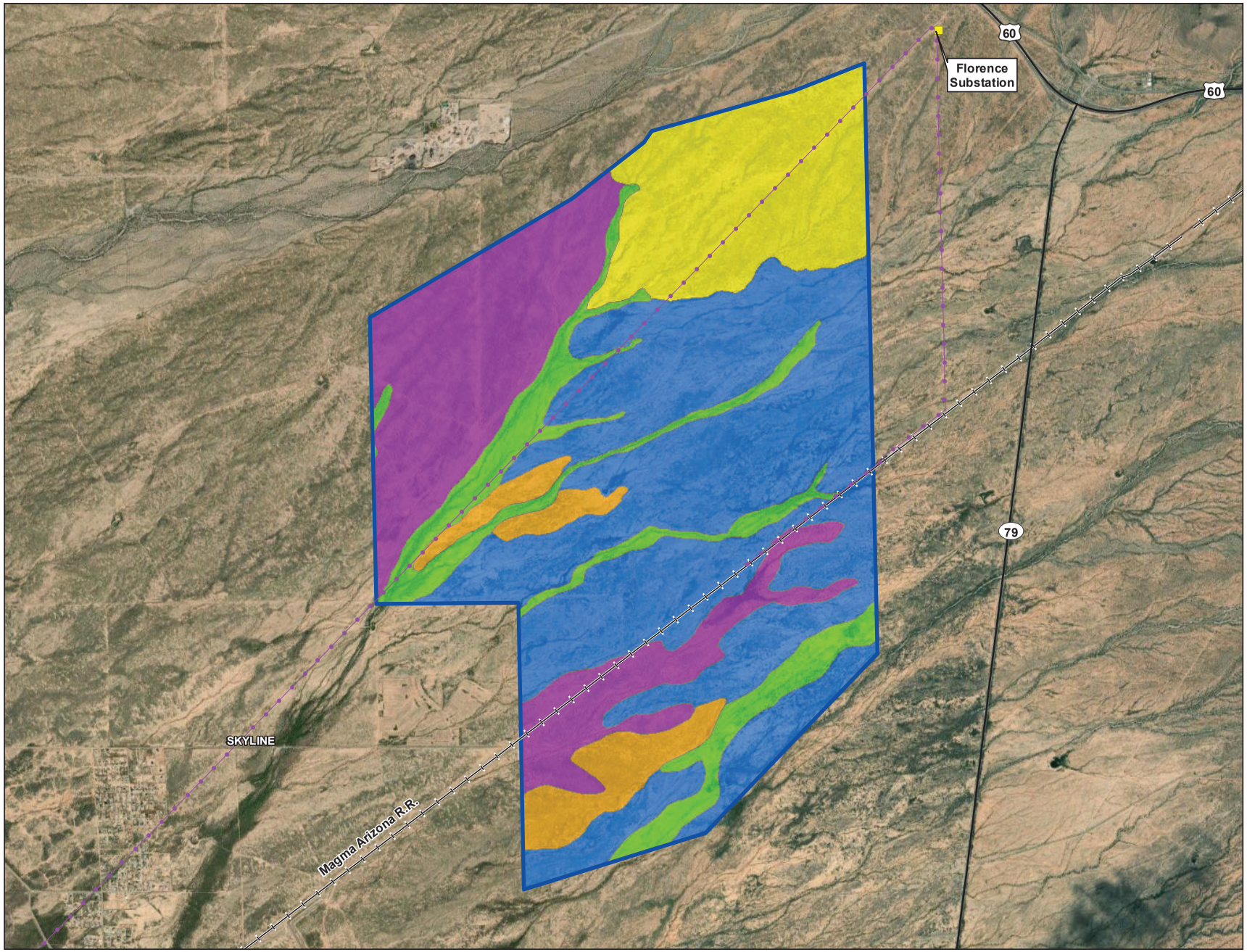
Map Extent

SILVER KING SOLAR and STORAGE PROJECT

FIGURE 1 SITE BOUNDARY

Map Extent: Pinal County, AZ

Date: 4.08.25 | Author: sjw



Legend

Project Features

- Silver King Solar and Storage Project Site

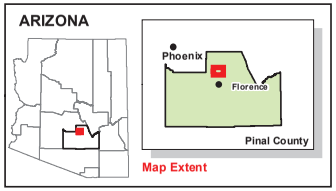
General Features

- Existing Substation
- Existing 69kV Transmission Line
- US Route or State Highway
- Railroad

Soils

- Beardsley-Suncity complex, 1-10% slopes
- Denure sandy loam, 1-3% slopes
- Denure-Mohall complex, 1-5% slopes
- Mohall clay loam, 0-5% slopes
- Mohall sandy loam, 0-3% slopes

0 0.25 0.5 0.75 1
Miles

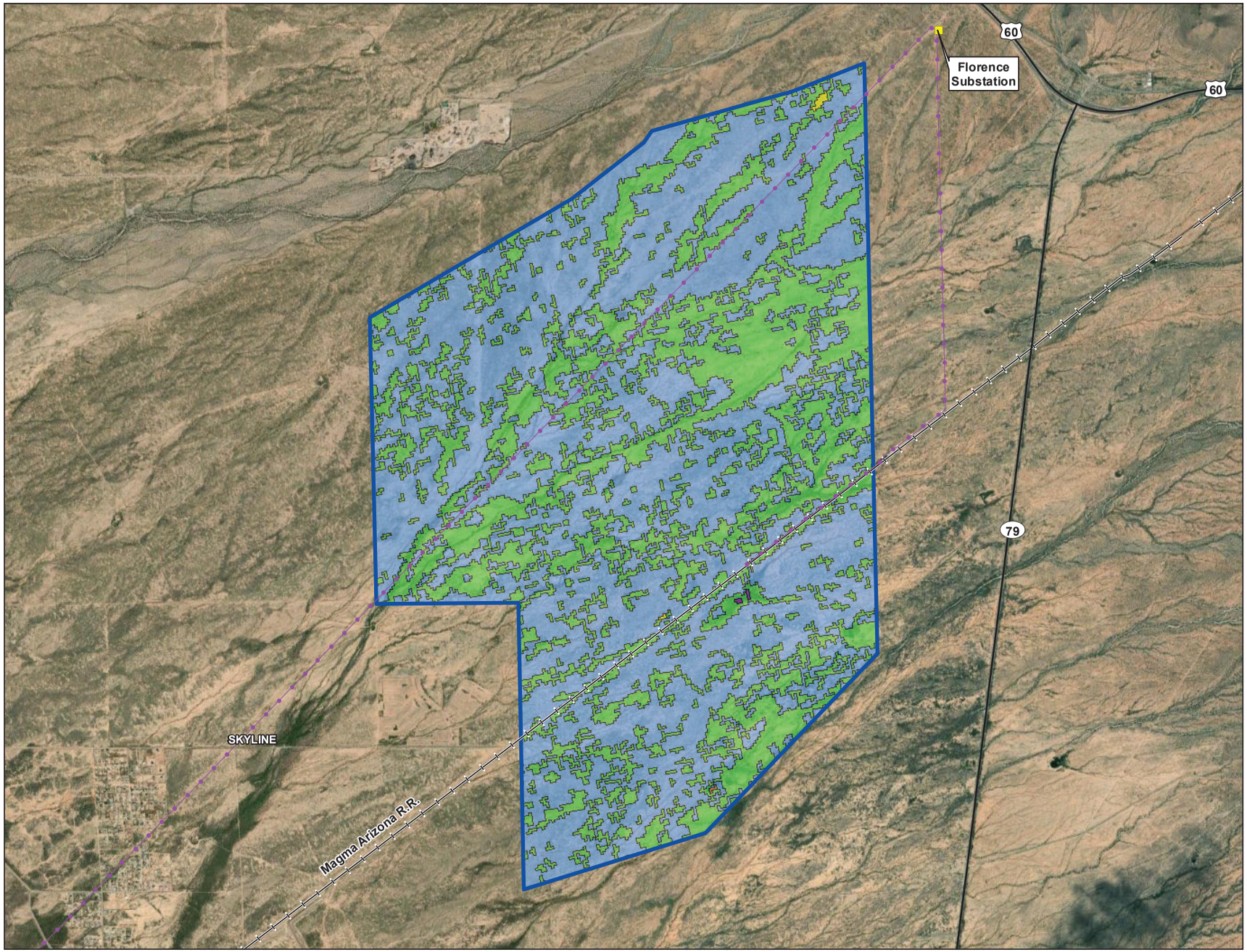


SILVER KING SOLAR and STORAGE PROJECT

FIGURE 2 SOILS

Map Extent: Pinal County, AZ

Date: 4.08.25 | Author: sjw



Legend

Project Features

- Silver King Solar and Storage Project Site

General Features

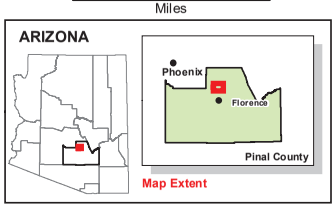
- Existing Substation
- Existing 69kV Transmission Line
- US Route or State Highway
- Railroad

GAP Vegetation

- Apacherian-Chihuahuan Mesquite Upland Scrub
- North American Warm Desert Riparian Woodland and Shrubland
- Open Water (Fresh)
- Sonora-Mojave Creosotebush-White Bursage Desert Scrub
- Sonoran Paloverde-Mixed Cacti Desert Scrub

0 0.25 0.5 0.75 1

Miles



SILVER KING SOLAR and STORAGE PROJECT

FIGURE 3 GAP VEGETATION

Map Extent: Pinal County, AZ

Date: 4.08.25 | Author: sjw

Appendix B - IPaC

IPaC Information for Planning and Consultation **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically g as *trust resources*) under the U.S. Fish and Wildlife Service's ed below. The list may also include trust resources that occu ctivities in the project area. However, determining the likelih additional site-specific (e.g., vegetation/species surveys) and

Please note that the Federal Highways Programmatic Consultation for Transportation Projects affecting NLEB or Indiana Bat Determination Key is temporarily offline for updates and will be available soon. We apologize for any inconvenience this may cause.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Pinal County, Arizona



Local office

Arizona Ecological Services Field Office

(602) 242-0210
(602) 242-2513

9828 North 31st Ave
#c3
Phoenix, AZ 85051-2517

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.

NOT FOR CONSULTATION

5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Mexican Wolf Canis lupus baileyi No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3916	EXPN
Ocelot Leopardus (=Felis) pardalis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4474	Endangered

Birds

NAME	STATUS
Cactus Ferruginous Pygmy-owl Glaucidium brasilianum cactorum Wherever found There is **final** critical habitat for this species. https://ecos.fws.gov/ecp/species/1225	Threatened
Southwestern Willow Flycatcher Empidonax traillii extimus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered
Yellow-billed Cuckoo Coccyzus americanus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3911	Threatened

Fishes

NAME	STATUS
Gila Topminnow (incl. Yaqui) Poeciliopsis occidentalis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1116	Endangered

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs
The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

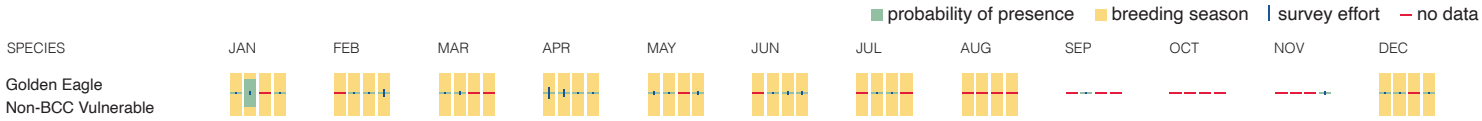
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report
On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs
The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bendire's Thrasher Toxostoma bendirei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9435	Breeds Mar 15 to Jul 31

Costa's Hummingbird Calypte costae — Breeds Jan 15 to Jun 10
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9470

Gila Woodpecker Melanerpes uropygialis — Breeds Apr 1 to Aug 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/5960

Golden Eagle Aquila chrysaetos — Breeds Dec 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

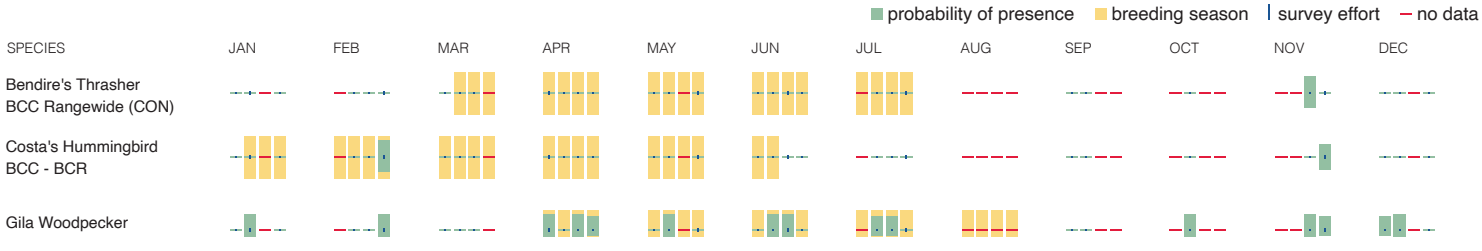
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

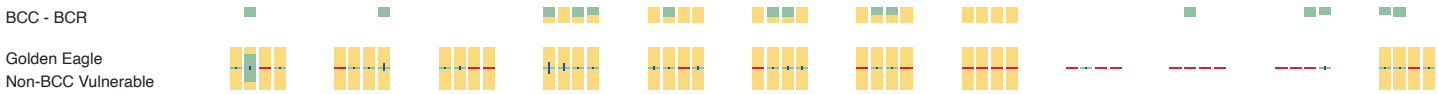
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as “Vulnerable”. See the FAQ “What are the levels of concern for migratory birds?” for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ “Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds”.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs
Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND
- PSS1Ah
- PSS1A

FRESHWATER POND
- PUSCx

RIVERINE
- R4SBJ

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix C – AZGFD Online Reporting Tool

Arizona Environmental Online Review Tool Report

Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department requests further coordination to provide project/species specific recommendations. Please use the Project Evaluation Form to submit your project to the Project Evaluation Program at PEP@azgfd.gov.

Project Name:
Silver King Solar

Project Type:
Energy Production/Storage/Transfer, Energy Production (generation), concentrated solar facility (new/expansion)

Project ID:
HGIS-24695

Project Description:
Proposed PV solar installation.

Contact Person:
Patrick Golden

Organization:
Heritage Environmental Consultants

On Behalf Of:
CONSULTING

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. Arizona Wildlife Conservation Strategy (AWCS), specifically Species of Greatest Conservation Need (SGCN), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies.

Silver King Solar

USA Topo Basemap With Locator Map



Buffered Project Boundary

Project Boundary

Project Size (acres): 9,086.46

Lat/Long (DD): 33.2194 / -111.3901

County(s): Pinal

AGFD Region(s): Mesa

Township/Range(s): T2S, R10E; T2S, R9E; T3S, R10E +

USGS Quad(s): FLORENCE JUNCTION; FLORENCE NE +



County of Yavapai, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Copyright:© 2013 National Geographic Society, i-cubed
Esri, USGS

Silver King Solar

Web Map As Submitted By User



Buffered Project Boundary

Project Boundary

Project Size (acres): 9,086.46

Lat/Long (DD): 33.2194 / -111.3901

County(s): Pinal

AGFD Region(s): Mesa

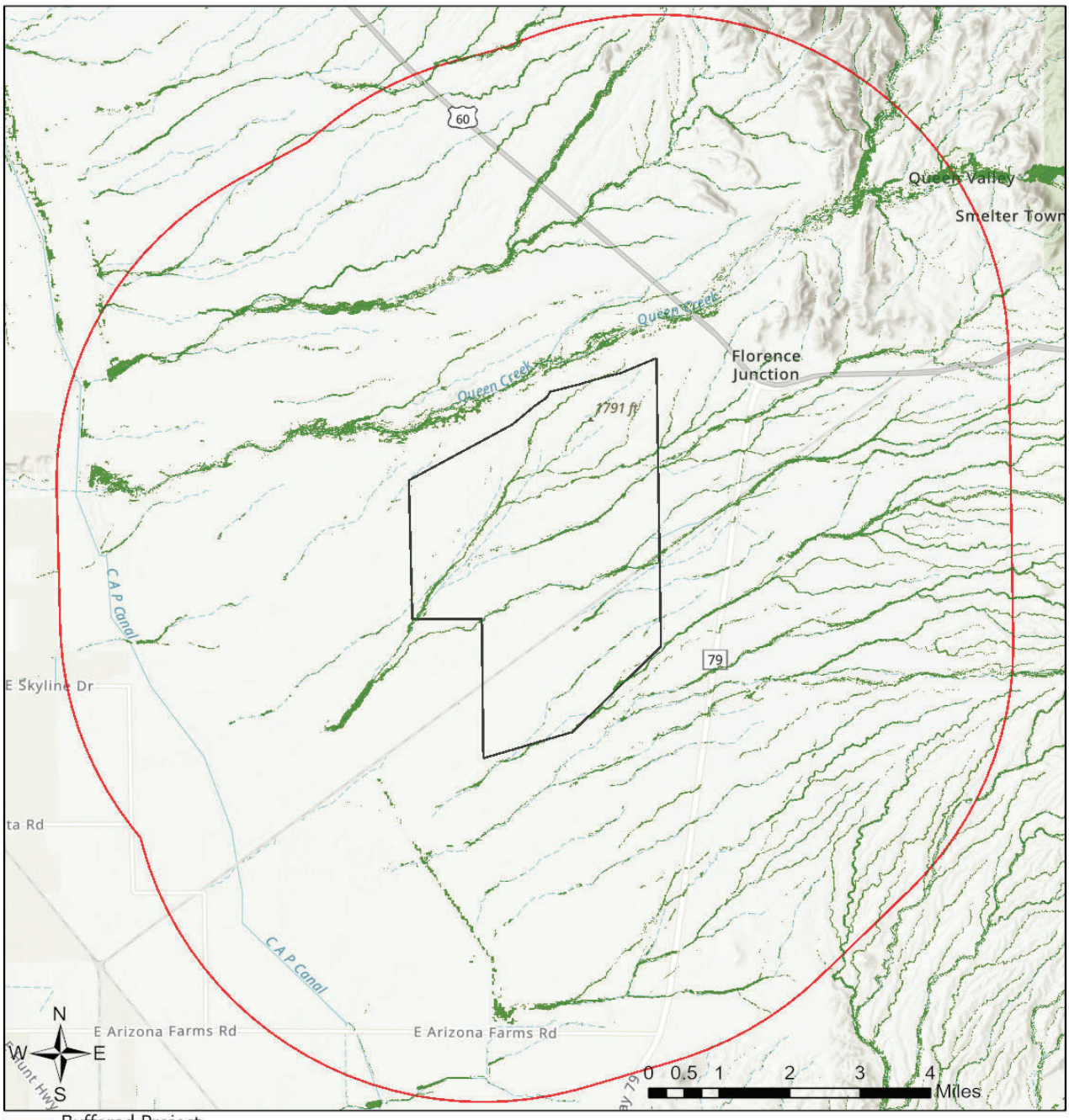
Township/Range(s): T2S, R10E; T2S, R9E; T3S, R10E +

USGS Quad(s): FLORENCE JUNCTION; FLORENCE NE +

Esri, NASA, NGA, USGS

Silver King Solar

Important Areas



- Buffered Project Boundary
- Project Boundary
- Important Bird Areas
- Critical Habitat
- Pinal County Riparian
- Wildlife Connectivity

Project Size (acres): 9,086.46

Lat/Long (DD): 33.2194 / -111.3901

County(s): Pinal

AGFD Region(s): Mesa

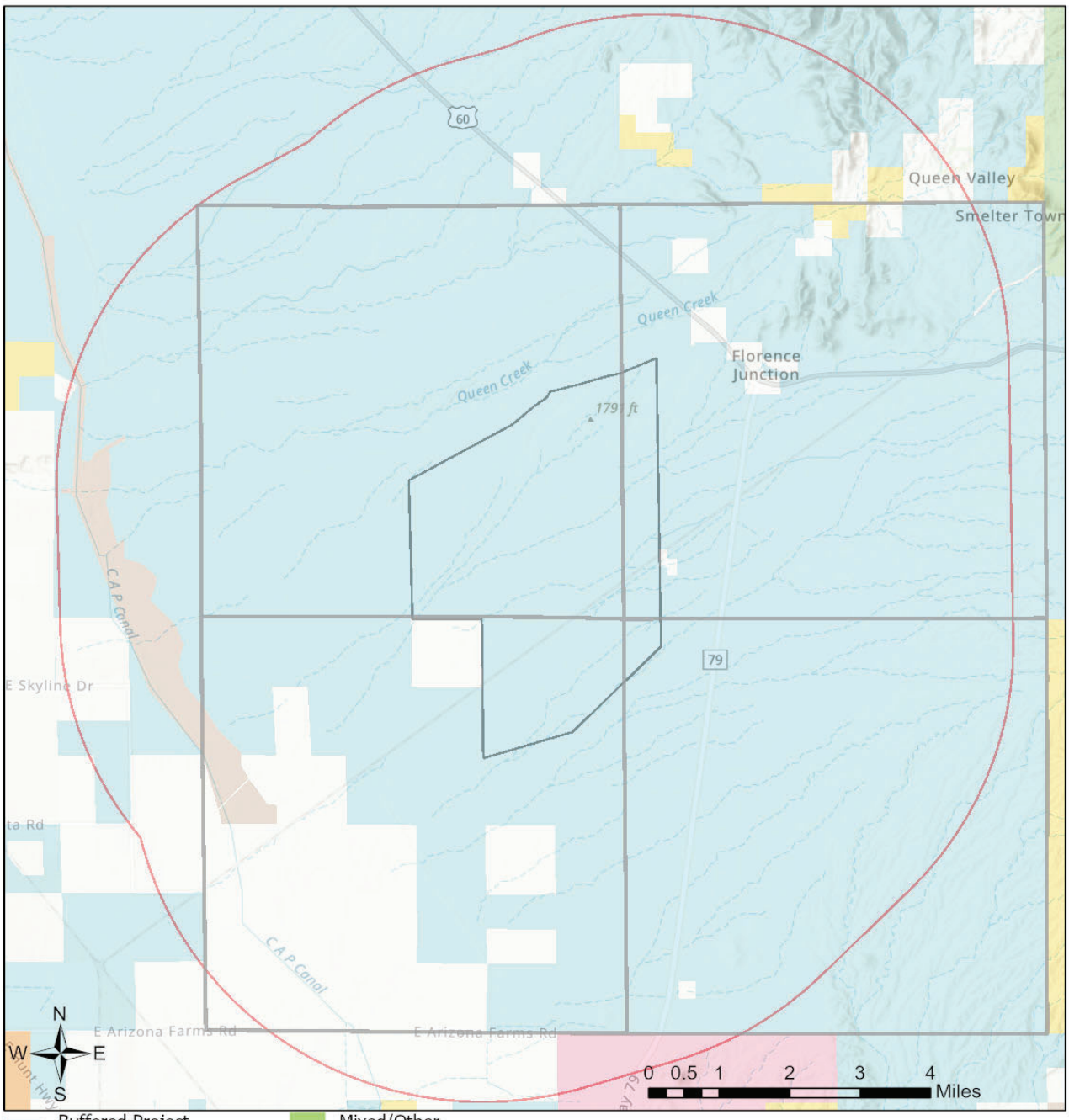
Township/Range(s): T2S, R10E; T2S, R9E; T3S, R10E +

USGS Quad(s): FLORENCE JUNCTION; FLORENCE NE +

Esri, NASA, NGA, USGS
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

Silver King Solar

Township/Ranges and Land Ownership



- Buffered Project Boundary
- Project Boundary
- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State & Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge
- Township/Ranges

Project Size (acres): 9,086.46

Lat/Long (DD): 33.2194 / -111.3901

County(s): Pinal

AGFD Region(s): Mesa

Township/Range(s): T2S, R10E; T2S, R9E; T3S, R10E +

USGS Quad(s): FLORENCE JUNCTION; FLORENCE NE +

Esri, NASA, NGA, USGS
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

Special Status Species Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Ammospermophilus harrisii	Harris' Antelope Squirrel					2
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		2
Chaetodipus baileyi	Bailey's Pocket Mouse					2
Chilomeniscus cinctus	Banded Sandsnake					2
Crotalus tigris	Tiger Rattlesnake					2
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1
Heloderma suspectum	Gila Monster					1
Incilius alvarius	Sonoran Desert Toad					2
Lasiurus cinereus	Hoary Bat					2
Lepus alleni	Antelope Jackrabbit					2
Micruroides euryxanthus	Sonoran Coralsnake					2
Parabuteo unicinctus	Harris's Hawk					2
Perognathus amplus	Arizona Pocket Mouse					2
Phrynosoma solare	Regal Horned Lizard					2
Phyllorhynchus browni	Saddled Leaf-nosed Snake					2

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Queen Creek - Gila River Indian Community	Maricopa County Wildlife Movement Area - Riparian/Wash					
Queen Creek - Gila River Indian Community	Pinal County Wildlife Movement Area - Riparian/Wash					
Queen Creek	Conservation Opportunity Area					
Riparian Area	Riparian Area					
Valley north and east of the San Tan Mountains	Pinal County Wildlife Movement Area - Landscape					

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Ammospermophilus harrisii	Harris' Antelope Squirrel					2
Anthus spragueii	Sprague's Pipit					2
Aquila chrysaetos	Golden Eagle	BGA		S		2
Artemisiospiza nevadensis	Sagebrush Sparrow					3
Asio otus	Long-eared Owl					2

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Aspidoscelis sonorae	Sonoran Spotted Whiptail					2
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Auriparus flaviceps	Verdin					2
Botaurus lentiginosus	American Bittern					2
Buteo regalis	Ferruginous Hawk			S		2
Buteo swainsoni	Swainson's Hawk					2
Calypte costae	Costa's Hummingbird					2
Campylorhynchus brunneicapillus	Cactus Wren					2
Catharus ustulatus	Swainson's Thrush					2
Chaetodipus baileyi	Bailey's Pocket Mouse					2
Chilomeniscus cinctus	Variable Sandsnake					2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1
Colaptes chrysoides	Gilded Flicker			S		2
Columbina inca	Inca Dove					2
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat		S	S		1
Crotalus tigris	Tiger Rattlesnake					2
Cynanthus latirostris	Broad-billed Hummingbird		S			2
Empidonax wrightii	Gray Flycatcher					2
Eumops perotis californicus	Greater Western Bonneted Bat			S		2
Falco mexicanus	Prairie Falcon					2
Falco peregrinus anatum	American Peregrine Falcon		S	S		1
Falco sparverius	American Kestrel					2
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1
Heloderma suspectum	Gila Monster					1
Icterus bullockii	Bullock's Oriole					2
Incilius alvarius	Sonoran Desert Toad					2
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		2
Lanius ludovicianus	Loggerhead Shrike					2
Lasiurus cinereus	Hoary Bat					2
Lasiurus frantzii	Desert Red Bat		S			2
Lasiurus xanthinus	Western Yellow Bat		S			2
Lepus alleni	Antelope Jackrabbit					2
Macrotus californicus	California Leaf-nosed Bat			S		2
Megascops kennicottii	Western Screech-owl					2
Melanerpes uropygialis	Gila Woodpecker					2
Melospiza lincolnii	Lincoln's Sparrow					2
Micrathene whitneyi	Elf Owl					3
Micruroides euryxanthus	Sonoran Coralsnake					2
Myotis auriculus	Southwestern Myotis					2

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Myotis velifer	Cave Myotis			S		2
Myotis yumanensis	Yuma Myotis					2
Neotamias cinereicollis	Gray-collared Chipmunk					2
Neotamias minimus	Least Chipmunk		S			2
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					2
Nyctinomops macrotis	Big Free-tailed Bat					2
Parabuteo unicinctus	Harris's Hawk					2
Passerculus sandwichensis	Savannah Sparrow					2
Perognathus amplus	Arizona Pocket Mouse					2
Phrynosoma solare	Regal Horned Lizard					2
Phyllorhynchus browni	Saddled Leaf-nosed Snake					2
Pooecetes gramineus	Vesper Sparrow					2
Rana yavapaiensis	Lowland Leopard Frog		S	S		1
Sigmodon arizonae cienegae	Arizona Cotton Rat					2
Spizella breweri	Brewer's Sparrow					2
Tadarida brasiliensis	Brazilian Free-tailed Bat					2
Toxostoma bendirei	Bendire's Thrasher					2

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Odocoileus hemionus	Mule Deer					
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Energy Production/Storage/Transfer, Energy Production (generation), concentrated solar facility (new/expansion)

Project Type Recommendations:
During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations. The Department recommends using only the minimum amount of light needed for safety,especially in areas immediately adjacent to open space or undeveloped lands. The Department encourages the use of motion sensing lighting and narrow spectrum lighting (amber or warm tones typically 2700 Kelvin or lower) wherever possible to lower the range of species affected by lighting. Also, please consider shielding, canting, or cutting all lighting, where possible, to ensure that light reaches only areas needing illumination and to minimize impacts to nocturnal wildlife.

Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at https://www.invasivespeciesinfo.gov/ and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control these species. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at https://imap.natureserve.org/imap/services/page/map.html.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select “See What’s Here” for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

For any powerlines built, proper design and construction of the transmission line is necessary to prevent or minimize risk of electrocution of raptors, owls, vultures, and golden or bald eagles, which are protected under state and federal laws. Limit project activities during the breeding season for birds, generally March through late August, depending on species in the local area (raptors breed in early February through May). Conduct avian surveys to determine bird species that may be utilizing the area and develop a plan to avoid disturbance during the nesting season. For underground powerlines, trenches should be covered or back-filled as soon as possible. Incorporate escape ramps in ditches or fencing along the perimeter to deter small mammals and herpetofauna (snakes, lizards, tortoise) from entering ditches. In addition, indirect affects to wildlife due to construction (timing of activity, clearing of rights-of-way, associated bridges and culverts, affects to wetlands, fences) should also be considered and mitigated.

Based on the project type entered, coordination with U.S. Fish and Wildlife Service (Migratory Bird Treaty Act) may be required (https://www.fws.gov/office/arizona-ecological-services).

Avoid/minimize wildlife impacts related to contacting hazardous and other human-made substances in facility water collection/storage basins, evaporation or settling ponds and/or facility storage yards. Design slopes to discourage wading birds and use fencing, netting, hazing or other measures to exclude wildlife.

The Department encourages the use of technology that requires minimal amounts of water, preferably dry cooling. In the desert, water is very scarce and reducing consumption will lessen impacts on wildlife as well as the public.

Project Location and/or Species Recommendations:
Analysis indicates that your project is located in the vicinity of an identified **Conservation Opportunity Area (COA)**. While there are many areas in Arizona that present abundant conservation opportunities, COAs are specific areas on the landscape that the Department identified as having the greatest potential for conservation efforts. COAs were identified using species and habitat data, the presence of unique landscape features, and Departmental expertise. COAs range in size, scope, and focal species and/or habitats and are strictly a non-regulatory conservation tool for the public and our conservation partners to consider. For more information regarding this particular COA near your project area and the Department's suggestions for potential conservation efforts, please visit the COA profile at https://awcs.azgfd.com/conservation-opportunity-areas.

Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat connectivity feature***. The **County-level Stakeholder Assessments** contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-identifying-corridors/.
Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

HDMS records indicate that one or more **Listed, Proposed, or Candidate** species or **Critical Habitat** (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at https://www.fws.gov/office/arizona-ecological-services or:

Phoenix Main Office
9828 North 31st Avenue #C3
Phoenix, AZ 85051-2517
Phone: 602-242-0210
Fax: 602-242-2513

Tucson Sub-Office
201 N. Bonita Suite 141
Tucson, AZ 85745
Phone: 520-670-6144
Fax: 520-670-6155

Flagstaff Sub-Office
SW Forest Science Complex
2500 S. Pine Knoll Dr.
Flagstaff, AZ 86001
Phone: 928-556-2157
Fax: 928-556-2121

This review has identified **riparian areas** within the vicinity of your project. During the planning stage of your project, avoid, minimize, or mitigate any potential impacts to riparian areas identified in this report. Riparian areas play an important role in maintaining the functional integrity of the landscape, primarily by acting as natural drainages that convey water through an area, thereby reducing flood events. In addition, riparian areas provide important movement corridors and habitat for fish and wildlife. Riparian areas are channels that contain water year-round or at least part of the year. Riparian areas also include those channels which are dry most of the year, but may contain or convey water following rain events. All types of riparian areas offer vital habitats, resources, and movement corridors for wildlife. The Pinal County Comprehensive Plan (i.e. policies *6.1.2.1* and *7.1.2.4*), Open Space and Trails Master Plan, Drainage Ordinance, and Drainage Design Manual all identify riparian area considerations, guidance, and policies. Guidelines to avoid, minimize, or mitigate impacts to riparian habitat can be found at https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/.
Further consultation with the Arizona Game and Fish Department and Pinal County may be warranted.

HDMS records indicate that **Sonoran Desert Tortoise** have been documented within the vicinity of your project area. Please review the Tortoise Handling Guidelines found at https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/2014%20Tortoise%20handling%20guidelines.pdf.

HDMS records indicate that **Western Burrowing Owls** have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at https://www.azgfd.com/wildlife-conservation/conservation-and-endangered-species-programs/burrowing-owl-management/.

Appendix D – Potential to Occur Table

Potential to Occur Table – Silver King Solar Project

Species		Status		Range or Habitat Requirements	Potential to Occur
Common Name	Scientific Name	Federal	State		
Invertebrates					
Monarch Butterfly	*Danaus plexippus*	FC	n/a	A migratory species found in a variety of habitats; requires milkweed (Family *Asclepiadaceae*) for breeding. During fall migration in Arizona, monarchs favor nectar from a variety of native plants and garden plants. Populations in Arizona can migrate either to California or Mexico for winter or may overwinter in the low deserts in California or Arizona. In the southwestern United States, migrating monarchs often occur near water sources (e.g., rivers, creeks, riparian corridors, roadside ditches, irrigated gardens). In the low deserts of Arizona, monarchs breed in late August to early September.	Potential to occur as a migratory stopover habitat. Potential to occur depends on species of milkweeds that are found and species of flowering plants. No milkweeds or monarchs were observed during habitat assessment surveys.
Birds					
American Peregrine Falcon	*Falco peregrinus anatum*	n/a	SGCN-1	Cliffs for nesting. Open habitat for foraging.	No potential for nesting, but moderate likelihood for foraging in the area
Yellow-billed Cuckoo (Western DPS)	*Coccyzus americanus*	FT	SGCN-1	Riparian woodland vegetation with a dense understory.	Low potential to occur in the vicinity of Queen Creek but unlikely to use the Project area due to a lack of riparian woodlands.
Southwestern Willow Flycatcher	*Empidonax traillii extimus*	FE	SGCN-1	Dense riparian habitats with saturated soils, standing water, or nearby streams, pools, or cienegas for breeding. Migrate south during the winter and may use large riparian corridors during migration.	Low potential to occur in the vicinity of Queen Creek but unlikely to use the Project area due to a lack of riparian habitats.
Golden Eagle	*Aquila chrysaetos*	BGEPA	SGCN-2	Cliffs and tall trees for nesting. Open habitat for foraging.	No potential for nesting, but moderate likelihood for foraging in the area.
Cactus Ferruginous Pygmy Owl	*Glaucidium brasilianum cactorum*	FT	SGCN-1	Found in heavily wooded xeroriparian washes with large saguaros (*Carnegiea gigantea*) or trees with suitable cavities in Sonoran desertscrub or semidesert grassland. This species' distribution is currently limited to portions of Pima County in Arizona. In addition, pygmy-owls continue to be absent from Pinal County and around Tucson where they were found as recently as the early 2000s (USFWS 2022). This species still occupies	Low potential to occur based on known range of the species, though suitable habitat does exist in the Project area.

				historical locations in the Altar Valley, Avra Valley, and Organ Pipe Cactus National Monument, and it is known to occur on the Tohono O'odham Nation.	
Western Burrowing Owl	*Athene cunicularia hypugaea*	SC	SGCN-2	Habitat includes open, treeless areas with low, sparse vegetation. Uses small mammal burrows for nesting.	Low potential to occur. Vegetation is too tall and thick in most areas.
Raptors	*n/a*	Various	Various	Various, some examples include Harris' hawk, Mississippi kite, common black hawk, Swainson's hawk – All SGCN-2. Also non-listed raptors – red-tailed hawk, ferruginous hawk, American kestrel, prairie falcon, northern harrier.	Raptors were observed during surveys (Harris' hawk, red-tailed hawk, turkey vulture, American kestrel) and several potentially active raptor nests were observed in saguaros
Reptiles					
Sonoran Desert Tortoise	*Gopherus morafkai*	FC	SGCN-1	Occupies rocky, steep slopes and bajadas of mountain ranges within Sonoran Desertscrub habitats. Primarily occur in sandy loam soils for burrowing along with rocky outcrops and wash sidewalls. The Arizona BLM has a map that shows suitable desert tortoise habitat split by importance categories. The Project is located to the southwest of an area labeled as "Other Habitat" and is not located in close proximity to any "High Importance" or "Medium Importance" habitats (BLM 2016).	Low potential to occur due to a lack of steep and rocky slopes. May disperse into the Project Area from mountainous bajadas to the northeast, but are more likely to disperse within Queen Creek.
Gila Monster	*Holoderma suspectum*	n/a	SGCN-1	Typically found in desert scrub, desert grasslands, and rocky foothills. Prefer rocky areas and rely on burrows for shelter.	Low potential to occur due to a lack of rocky areas.
Desert Box Turtle	*Terrapene ornata luteola*	n/a	SGCN-1	Inhabits low valleys, plains and bajadas within desert grassland and desertscrub communities. Prefer arid, open prairies in grassland regions.	Low potential to occur due to a lack of grasslands.
Mammals					
Sonoran Pronghorn	*Antilocapra americana sonoriensis*	FE, EXPN	SGCN-1	In winter, prefer sparsely vegetated, flat, open spaces that are ideal for swift running and visual detection of predators. However, in summer they require denser vegetation that offers thermal cover and moister forage. Currently only known to occur in southwestern Arizona.	No potential to occur based on known species range.
Mexican Wolf	*Canis lupus baileyi*	EXPN	n/a	In Arizona, most individuals only occur within the Mexican Wolf Experimental Population Area south of Interstate 40 to the United States–Mexico border; however, individuals have been documented infrequently traveling outside of this	No potential to occur due to known range and lack of suitable habitat.

				area. Mexican wolves are found in a variety of Southwestern habitats; however, they are absent from the desert areas and prefer mountain woodlands.	
Ocelot	*Leopardus pardalis*	FE	SGCN-1	In Arizona, this species has typically been observed in subtropical thorn forest, thornscrub, and dense, brushy thickets at elevations below 8,000 feet and is often found in riparian bottomlands. The essential habitat component is dense cover near the ground and complete avoidance of open country. Most recently, this species has only been detected in the Huachuca Mountain range in southeastern Arizona.	Very low potential to occur. Would more likely use Queen Creek if moving in the vicinity of the Project area due to the lack of thick, dense cover.
Bats	*n/a*	Various	Various	Various, some examples include lesser long-nosed bat, pale Townsend's big-eared bat – SGCN-1 and greater western bonneted bat, hoary bat, desert red bat, western yellow bat, California leaf-nosed bat, cave myotis, Yuma myotis, pocketed free-tailed bat, Brazilian free-tailed bat – SGCN-2.	Moderate potential to occur – may roost in trees and cactus in the Project are and may forage in all areas but especially along ephemeral washes.
Amphibians					
Lowland Leopard Frog	*Rana yavapaiensis*	n/a	SGCN-1	Live around aquatic habitats in arid canyons and desert scrubland.	No potential to occur. No aquatic habitats are located in the Project area.
Plants					
Cactus Species and Species Protected by Arizona Native Plant Law (ANPL)	*Various*	n/a	ANPL	Numerous species of cactus were observed including Saguaro, jumping cholla, cane cholla, hedgehog cactus, and fishhook barrel cactus. Other species protected by ANPL were observed and are likely to occur, but no Salvage Restricted or Highly Safeguarded Species except the saguaro, desert barrel cactus, and stag-horn cholla are likely to occur.	High potential to occur.
Fish					
Gila Topminnow	*Poeciliopsis occidentalis*	FE	SGCN-1	Waterways	No potential to occur. No perennial water sources are located in the Project area.

APPENDIX H

Cultural Survey Technical Memorandum

CHRONICLE™ HERITAGE

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PHOENIX, ARIZONA
319 East Palm Lane
Phoenix, Arizona 11201

April 7, 2025

Rafik Albert
Silver King Solar, LLC
500 North Central Avenue Ste 600
Glendale, California 91203

RE: Class I Literature Review of 9,093 Acres of Arizona State Trust Land for the Proposed Silver King Solar Project, Near Queen Valley, Pinal County, Arizona

Dear Rafik Albert:

Silver King Solar, LLC is proposing to develop 9,093 acres (ac) of Arizona State Trust land administered by the Arizona State Land Department (ASLD) for the proposed Silver King Solar Project, a proposed solar field (Project) east of Queen Valley, Pinal County, Arizona. Activities within the Project area will include vegetation removal, raking, mass grading, and the installation of roads, utilities, and foundations. As the Project area is on lands managed by the ASLD, the Project is subject to compliance with the Arizona Antiquities Act (AAA), Arizona Revised Statutes (A.R.S.) §41-841 et seq., the Arizona State Historic Preservation Act (SHPA) of 1982 (A.R.S. §41-861 et seq.), and may be subject to Section 106 of the National Historic Preservation Act if a Clean Waters Act permit is required from the U.S. Army Corps of Engineers.

Project Description

The Project area consists of two irregularly shaped parcels encompassing 9,093 ac of Arizona State Trust land and separated by a railroad corridor (Figure 1). The northern parcel is approximately 3.4 miles (mi) north–south × 3.85 mi east–west, at maximum extents, and encompasses 6,985.5 ac. The southern parcel is approximately 1.53 mi north–south × 2,57 mi east–west and encompasses 2,107.5 ac. The Project area consists of mostly undeveloped land, which has historically been used for cattle ranching.

Setting

Understanding the environmental context of the Project area provides valuable insights into the climatic conditions and the availability of floral, faunal, and mineralogical resources that would have attracted and affected the lifeways of the people who traversed, used, and lived on the landscape. In addition, understanding soil characteristics, erosion, and sedimentation enables the evaluation of the preservation of archaeological materials and provides insights into assessing potential site types and below-ground deposits potentially present in the Project area. The following briefly describes the local geological conditions, biological settings, and modern built environment.

The Project area is in the Basin and Range physiographic province, characterized by north–south trending mountain ranges and deep alluvial valleys. The Project area is within the Queen Valley and is surrounded to the north and east by the Mogollon Rim and mountainous terrain. The Project area



is approximately 0.4 mi (0.6 kilometers [km]) south of the Queen Creek waterway, 4.3 mi (6.9 km) northeast of the Central Arizona Project (CAP) Canal Fannin–McFarland Aqueduct, and 7.6 mi (12.2 km) north–northwest of the Gila River. Numerous unnamed drainages and seasonal tributaries transect the Project area, flowing from the northeast to the southwest into the CAP Canal. Dromedary Peak—3,008 feet (ft) above mean sea level (amsl)—is 5.9 mi (9.6 km) east of the Project area, and Picket Post Mountain—4,363 ft amsl—is 11.6 mi (18.7 km) east of the Project area. Elevations in the Project area are approximately 1,670–1,870 ft amsl. Underlying geomorphology is characterized by Holocene surficial deposits, typified by unconsolidated deposits associated with modern fluvial systems and Late and Middle Pleistocene surficial deposits of unconsolidated to weakly consolidated alluvial fan, terrace, and basin-floor deposits with moderate to strong soil development (Arizona Geological Survey 2024).

The Project area is within the Sonoran Desertscrub biotic community in the Basin and Range physiographic province, characterized by mountain ranges separated by debris-filled desert valleys (Chronic 1983). The Sonoran Desertscrub biotic community exists on broad alluvial plains, fans, and bajadas near the higher relief mountain ranges (Griffith et al. 2014). The Project area is on a broad alluvial plain incised by several small drainages that continuously change course, resulting in active erosional and depositional processes. Reflecting the geology of the area, the soils within the Project area are all derived from flood plains, alluvial fans, stream terraces, and fan terraces (Soil Survey Staff 2025). Specific soil types within the Project area are detailed in Table 1.

Table 1. Soils Within the Project Area

Soil Type	Parent Material	Landform
Beardsley-Suncity complex, 1–10% slopes	Mixed fan alluvium	Fan terraces
Denure sandy loam, 1–3% slopes	Mixed fan alluvium	Fan terraces
Denure-Mohall complex, 1–5% slopes	Mixed fan alluvium	Fan terraces
Mohall clay loam, 0–5% slopes	Mixed fan alluvium	Basin floors and fan terraces
Mohall sandy loam, 0–3% slopes	Mixed fan alluvium	Basin floors and fan terraces
Tremant–Pinamt complex, 1–10% slopes	Mixed fan and stream alluvium	Stream terraces and fan terraces

The typical vegetation of the area consists of Sonoran creosote bush (*Larrea tridentata*) transitioning into succulent scrub with ocotillo (*Fouquieria splendens*) and numerous cacti. Species typical of this region include senita cactus (*Lophocereus schottii*), jumping cholla (*Cylindropuntia fulgida*), teddybear cholla (*C. bigelovii*), Engelmann's prickly pear (*Opuntia engelmannii*), and candy barrelcactus (*Ferocactus wislizeni*). Trees include mesquite (*Prosopis* sp.) and yellow paloverde (*Parkinsonia microphylla*). Shrubs, grasses, and forbs consist of creosote bush (*Larrea tridentata*), sangre de cristo (*Jatropha cardiophylla*), littleleaf ratany (*Krameria erecta*), silverleaf nightshade (*Solanum elaeagnifolium*), desert zinnia (*Zinnia acerosa*), broom snakeweed (*Gutierrezia sarothrae*), bush dalea (*Dalea pulchra*), cane bluestem (*Bothriochloa barbinodis*), turpentine bush (*Ericameria laricifolia*), fairyduster (*Calliandra eriophylla*), feather fingergrass (*Chloris virgata*), lovegrass (*Eragrostis* sp.), lupine (*Lupinus* sp.), tanglehead (*Heteropogon contortus*), desert globemallow (*Sphaeralcea ambigua*), and Coues' cassia (*Senna covesii*) (Brown et al. 2017; Brown and Lowe 1994; Griffith et al. 2014). Nonnative invasive species, such as saltcedar (*Tamarix ramosissima*), stinknet (*Oncosiphon pilulifer*), and Bermudagrass (*Cynodon dactylon*) are also probable (Brown 1994; Griffith

et al. 2014). Other vegetation in the region includes various types of cacti, including giant saguaro, cholla, prickly pear, and organ pipe cacti.

A thriving wildlife community is present in the area that includes black-tailed jackrabbit (*Lepus californicus*), spotted ground squirrel (*Spermophilus spilosoma*), Gambel's quail (*Callipepla squamata* and *Lophortyx gambelii*), red-tailed hawk (*Buteo jamaicensis*), raven (*Corvus corax*), mule deer (*Odocoileus hemionus*), and coyote (*Canis latrans*).

The Project area is within a mostly undeveloped desert environment (Figure 2). The built environment in the surrounding vicinity includes Florence Junction; East Skyline Road, immediately west of the Project area; U.S. Highway 60, approximately 1.2 km (0.75 mi) northeast of the Project area; State Route 79, approximately 1.3 km (0.82 mi) east of the Project area; an asphalt plant, approximately 1.2 km (0.75 mi) north of the Project area; and other miscellaneous infrastructure. The historical alignment of the Magma Arizona Railroad (today owned and managed by Resolution Copper) crosses northeast–southwest through the southern portion of the Project area.

Previous Research

Chronicle Heritage consulted records from AZSITE, the National Register Information System database, and Arizona State Museum (ASM) Archaeological Records Office (ARO) to determine if any previous projects and previously recorded cultural resources are within a 1-mi radius of the Project area (Figure 3). General Land Office (GLO) maps and historical U.S. Geological Survey (USGS) topographic maps were also reviewed to evaluate the possible presence of historical Euro-American infrastructure in and near the Project area.

Eight previous projects extend into the current Project area (Table 2). These projects surveyed 221.8 ac, or 2.44 percent, of the Project area. Four of these previous projects were conducted within the past 10 years and account for 10.6 ac, or less than 1 percent, of the Project area. Because of improvements in survey methods and the moving 50-year window for eligibility for inclusion in the Arizona Register of Historic Places (ARHP) and National Register of Historic Places (NRHP), jurisdictions within Arizona vary in how long they consider an archaeological survey to remain valid. In keeping with Arizona State Historic Preservation Office (SHPO) Guidance Point No. 5 (Arizona SHPO 2004) and the requirements of ASM, Chronicle Heritage considers surveys conducted in the past 10 years to be accurate and up-to-date. Surveys older than this are not considered valid. Because less than 1 percent of the Project area was surveyed in the past 10 years, Chronicle Heritage was contracted to conduct a survey of the entire project area.

Fifty-one previously recorded cultural resources were identified within the 1-mi search radius. Twelve of these resources intersect the Project area (Table 3). Of these sites, 11 date to the prehistoric period, and one site dates to the historical period.

Prehistoric sites within the Project area include prehistoric artifact scatters, village sites, and rock feature sites. Three of the 11 prehistoric sites, AZ U:15:895(ASM), AZ U:15:896(ASM), and AZ U:15:900(ASM), are Hohokam late Pioneer to Sedentary Period thermal feature sites with associated artifact scatters that are previously unevaluated for listing in the NRHP; three sites, AZ U:15:128(ASM), AZ U:15:898(ASM), and AZ U:15:899(ASM), are late Pioneer to Sedentary Period feature sites with associated artifact scatters that were previously recommended eligible for listing in the NRHP under Criterion D; one site, AZ U:15:886(ASM), is a Colonial to Sedentary Period habitation site that was previously recommended eligible for listing in the NRHP under Criterion D; one site, AZ U:15:869(ASM), is a Hohokam Ceramic Period rock feature site with an associated

artifact scatter that has been previously determined eligible for inclusion in the NRHP under Criterion D (2016-1269.ASM); Three sites, AZ U:15:870(ASM), AZ U:15:871(ASM), and AZ U:15:894(ASM), are Hohokam artifact scatters. AZ U:15:894(ASM) is a late Pioneer to Sedentary Period artifact scatter that was previously unevaluated for inclusion in the NRHP, and AZ U:15:870(ASM) and AZ U:15:871(ASM) are Hohokam Ceramic Period artifact scatters that have both been determined eligible for inclusion in the NRHP under Criterion D .

One historic-period sites, AZ U:15:868(ASM), is a Euro-American site consisting of the remnants of Ellsworth Ranch. This site has been previously determined ineligible for inclusion in the NRHP.

In additional to the sites documented by previous projects, Chronicle Heritage was contracted to complete a survey of the full Project area. Fieldwork for this project is complete, but the findings have not yet been submitted for agency review and should be considered provisional. Of the 63 sites found in the Project area, seven have been previously recorded, and the remaining 56 are newly recorded. Overall, 57 are prehistoric Hohokam sites, three are historical Euro-American sites, and three are multicomponent sites, which include prehistoric Hohokam and historical Euro-American components. The prehistoric Hohokam sites and components are associated with habitations, resource procurement, and resource processing. The historical Euro-American sites and components are associated with cattle ranching, temporary camp sites, and vehicle travel.

Of the 63 total sites recorded within the Project area, five have previous NRHP determinations: one has been determined ineligible for the ARHP and NRHP designation by SHPO, and two have been determined eligible for the ARHP and NRHP SHPO; no changes are recommended to these sites. One site was previously determined unevaluated by SHPO and is now recommended ineligible for the ARHP and NRHP. Finally, there are two sites determined eligible for the ARHP and NRHP and three sites determined unevaluated sites, which are now collectively recommended eligible for the ARHP and NRHP. Of the remaining 58 sites, 32 sites are recommended eligible for the ARHP and NRHP, 24 are recommended ineligible for the ARHP and NRHP, and two are recommended unevaluated.

The 40 remaining previously documented sites outside of the Project area include 17 historical Euro-American sites consisting of 1 refuse dump, 4 roads, 3 artifact scatters, 1 rock feature with an associated artifact scatter, 7 sites of unknown function, and the Magma Arizona Railroad, a late historic-period railroad site (AZ U:15:388 (ASM)) that was previously determined an eligible contributor for inclusion in the NRHP under Criteria A and D (2016-1269.ASM); this site is currently owned by Resolution Copper and is in use or is projected to be in use in the future. In addition to the historic-period sites, 19 sites are Hohokam habitation sites, which include 3 village sites with canals, 1 village site with mounds, 11 artifact scatters, and 4 features with associated artifact scatters. Other prehistoric sites include a rock feature with an associated artifact scatter that is associated with the Archaic Period. Three other prehistoric artifact scatters are not associated with a specific cultural group.

The National Register Information System database indicates that no NRHP-listed properties intersect the Project area or are within the search radius.

General Land Office (GLO) plats, on file with the Bureau of Land Management (BLM), were reviewed (BLM GLO 2025). Four plats cover the Project area (Table 4): Plat No. 1436 (T2S, R9E, DM Id. 202422, filed February 19. 1885); Plat No. 1437 (T2S, R10E, filed February 19, 1885); Plat No. 1484 (T3S, R9E, DM Id. 202528, filed October 5, 1869); and Plat No. 1485 (T3S, R10E, filed February 19, 1885). Plats 1436 and 1437 show an unnamed road intersecting the Project area in Section 36, T2S, R9E, and Sections 30 and 31, T2S, R10E, which cannot be correlated to a modern road. Cultural resources that do not intersect the Project area but are within the 1-mi search radius include a branching

road alignment labeled "Old Phoenix and Pinal Roads." This road cannot be correlated with any modern alignments.

Chronicle Heritage reviewed the following historical USGS topographic maps (Table 5): USGS 1:24,000 Magma, Arizona, 1956; USGS 1:24,000 Florence NE, Arizona, 1966; USGS 1:24,000 Florence Junction, Arizona, 1966; USGS 1:24,000 Superstition Mountains, Arizona, 1956; USGS 1:100,000 Florence, Arizona, 1900 and 1902; and USGS 1:250,000 Mesa, Arizona, 1954, 1957, 1958, 1960, and 1964. Resources intersecting the Project area include four unnamed roads depicted in the USGS 1:100,000 Florence, Arizona, 1900 and 1902 quadrangles and three unnamed roads, the Magma Arizona Railroad, and one telephone line depicted in the USGS 1:24,000 Magma, Arizona, 1956 quadrangle. Resources within the 1-mi search radius that do not intersect the Project area include a landing strip, Highway 80, Highway 89, three cattle tanks, and three wells depicted on the USGS 1:24,000 Florence NE, Arizona, 1966 and USGS 1:24,000 Florence Junction, Arizona, 1966 quadrangles and Highway 60 on the USGS 1:24,000 Magma, Arizona, 1956 quadrangle, USGS 1:24,000 Florence NE, Arizona, 1966, and USGS 1:24,000 Florence Junction, Arizona, 1966 quadrangles.

Historical aerials from 1961, 1962, and 1963 depict an alignment corresponding to the Magma Arizona Railroad with no associated features within the Project area and Ellsworth Ranch with two to three structures and up to seven fenced-in areas or pastures approximately 1.17 mi north of an earthen cattle tank (Nationwide Environmental Title Research Online [NETROnline] 2025).

Historic Context

The Project area is within the Middle Gila River valley. Overall, there is very little archeological evidence of Paleoindian Period activity in the region and none in the vicinity of the Project area. Known human use of the area, therefore, spans the Archaic Period to the present day. The transition from the Paleoindian to Archaic periods occurred around 8500 B.C. when a ground stone tool industry centered on handstones and netherstones appeared across the Southwest (Huckell 1996:306, 327). Although Archaic Period sites have been documented throughout southeastern Arizona (Clark 2004; Freeman 1999; Hackbarth 1995; Huckell 1978, 1995; Mabry and Archer 1997), Archaic Period sites are relatively rare within the vicinity of the Project area and in the Phoenix Basin generally. Deaver and Altschul (1994:87–89) found evidence of one potential Late Archaic component at a site south of the Project area that contained petroglyphs, one of which appeared to be more deeply patinated and Archaic in style than the others. East of the Project area, Chamorro et al. (2018) recorded evidence of several Middle to Late Archaic Period campsites and a residential hamlet. Use of the area likely continued to follow typical Archaic Period patterns of mobile, kin-related groups occupying limited-use field camps and seasonal residential bases, employing an all-encompassing subsistence strategy that included harvesting a wide variety of wild plant foods and hunting large game animals. Unlike the Tucson Basin, where agriculture developed during the Late Archaic Period (also referred to as the Early Agricultural Period), people of the Phoenix Basin appear to have maintained a more mobile subsistence strategy than their Tucson Basin counterparts during the same time.

Similar to the Archaic Period, evidence of occupation during the Red Mountain Phase and the Hohokam Pioneer Period in the vicinity of the Project area is sparse. The Red Mountain Phase dates from about A.D. 1–450 and appears to be a continuation of the developments that took place during the preceding Late Archaic/Early Agricultural Period with a gradual shift to permanent architecture and more permanent settlements (Van West and Deaver 2001; Wallace et al. 1995). The Pioneer Period is divided into four phases: the Vahki (A.D. 450–650), Estrella (A.D. 650–675),

Sweetwater (A.D. 675–700), and Snaketown (A.D. 700–750). Painted pottery resembling contemporary Mogollon wares appeared by the Vahki Phase (Anyon et al. 1981; Sayles 1945), and soon a distinctive pottery type identified with the Hohokam, Snaketown Red-on-buff, appeared in the Phoenix Basin (Abbott et al. 2012). Wallace and Lindeman (2012) argue that during the Pioneer Period, "founding villages" were established with central plazas and cemeteries where ancestors were venerated and ceremonies were performed. These sites were part of a settlement system that continued in place for the next 600 years. Toward the end of the Pioneer Period, traits typifying Hohokam culture, including pithouse settlements, canals, the intentional caliche plastering of trash mounds, and the continued production of red-on-buff pottery, had been well established (Fish 1989; Haury 1976).

The largest proportion of the previously recorded archaeological resources identified in the Project area are attributed to the Hohokam Colonial, Sedentary, and Classic periods. During the Colonial Period (A.D. 750–950), the Hohokam achieved their highest level of sophistication in the production of ceramics and shell items. Hohokam villages had been established throughout southern and central Arizona, and habitations were generally organized as courtyard groups that consisted of several pithouses surrounding a common workspace or communal area (Mabry 1998; Wilcox et al. 1981). Ballcourts were built in larger villages by A.D. 800. The Sedentary Period (A.D. 950–1150) saw a general decline in the quality of Hohokam material culture and a collapse of the regional system of interconnected ballcourt villages (Abbott 2006). Migration and reorganization were happening throughout the Southwest during this time. By the end of the Sedentary Period, few ballcourts were being built, and the construction of capped mounds or platform mounds became more common. Houses were more closely packed and organized in courtyard groups or village segments (Wilcox et al. 1981). By the beginning of the Classic Period (A.D. 1150–1450), Hohokam culture had undergone substantial changes, including the increased practice of inhumation, the development of new residential and public architecture, and the reduction in the scale of their trade network (Abbott 2000).

The Classic Period is divided into the Soho (A.D. 1150–1300) and the Civano (A.D. 1300–1450) phases, separated primarily by differences in ceramic decoration and architectural styles. Low frequencies of red-on-buff ceramics continued to be produced during the Soho Phase, even as red wares were becoming increasingly common. Structures with post-reinforced adobe walls and surface structures were common during the Soho Phase. These were replaced by solid, adobe-walled surface rooms in the Civano Phase, although the use of some pithouses continued. Houses were more closely spaced or contiguous and surrounded by compound walls that often enclosed small plazas. There was a significant increase in the construction and use of platform mounds, and the construction of ballcourts declined to its lowest point during the Classic Period. The apex of Hohokam public architecture was achieved during the Civano Phase with the building of "big houses." These structures, which often co-occur with platform mounds, likely served multiple functions and may have been symbols of elite status in Hohokam society (Wilcox and Shenk 1977). Additionally, red wares and the reduction of buff wares mark the Civano Phase, although plain wares continue to dominate the total ceramic assemblage. The arrival of polychrome pottery during the Civano Phase may have reflected a change from traditional Hohokam beliefs (Crown 1994) and a cultural trend conceptualized as the Salado. Crown (1994) argued that the use of Salado Polychromes, or Roosevelt Red Ware, communicated membership in a new belief system she referred to as the "Southwestern Cult." According to Crown, the decorative motifs on the pottery symbolized new religious ideas and concepts. Abbott (2000) suggests that a new belief system may have been adopted to mediate environmental and social stressors during the late Soho to early Civano phases.

Previous studies have identified several large Hohokam sites and numerous smaller sites near the Project area, particularly on the bajada of the mountainous region to the east. Examples include AZ U:15:392(ASM), also known as the Escalante or Buell site; a Classic Period farmstead (Smithwick 2001:10–11; AZ U:15:453(ASM)), a large multicomponent site in which the Hohokam component includes two reservoirs and almost 250 rock features (Twilling 2004); and AZ U:15:200(ASM), a large habitation area that dates to the Colonial and Sedentary periods and may include a ballcourt (Deaver and Altschul 1994).

The post-Classic Period (or Polvorón Phase [A.D. 1450–1540]) in the Phoenix Basin is a transition between the Late Classic Period Hohokam and the arrival of the first Europeans (Bayman 2001). The Polvorón Phase is defined by jacal structures, polychrome ceramics, and an abundance of obsidian (Sires 1984). Many argue that these characteristics, as well as available chronometric dates (Dean 1991:87), are not sufficient to distinguish them from the late Civano Phase. Others have suggested that the Hohokam may have persisted until the early 1500s and that the Hohokam and Salado peoples may have been directly encountered by the Spanish (Bayman 2001). The debate over the cause or causes for the decline and disappearance of the Hohokam has not been resolved.

Following the collapse of the Hohokam regional system, Akimel O'odham (Pima) and Tohono O'odham (Papago) groups lived in the Middle Gila River valley. Akimel O'odham and Tohono O'odham groups lived in small rancherias and subsisting on agricultural products, wild plant foods, and game.

Father Eusebio Kino's *entrada* into southern Arizona in 1694 brought the first non-Natives into the Salt and Gila River valleys (Wells 2006). Although Coronado, Marcos de Niza, and the Spanish army may have traveled up the San Pedro River in 1542, there is no evidence that they came into the Phoenix Basin (Flint and Flint 2003; Hartmann 1997). Spanish, Mexican, and Anglo factions began to arrive in appreciable numbers in the nineteenth century. The ensuing period of exploitation was marked by mining, ranching, and homesteading interests.

During the historic period, the Queen Creek Delta and nearby areas were used or occupied by the Apache, Yavapai, and Akimel O'odham. Conversely, there is no record of significant Spanish or Mexican activities in the Queen Creek Delta. Ongoing conflicts with Apache and Yavapai bands played a role in delaying Euro-American intrusion into the region until the creation of Fort McDowell near the confluence of the Verde and Salt Rivers in the 1860s. The Queen Creek area was settled even later, probably because of a lack of permanent surface water in the drainage. The Queen Creek area was settled at the time of the construction of the Chandler-to-Magma branch of the Arizona–Eastern railroad along the current route of the Union Pacific Railroad. The old alignment of Rittenhouse Road followed sometime after the construction of the railroad.

GLO records indicate that settlement of the area began in earnest sometime before the 1920s (Henderson 2006:5), mostly near the contemporaneous channel of Queen Creek. Settlers were largely dependent on pumped groundwater for agriculture and ranching, lowering the water table to as much as 700 ft (200 m) below the modern ground surface (Gasser et al. 1984; Lee 1905). Farming activities continue to depend exclusively on groundwater exploitation southeast of the Roosevelt Canal. Aside from localized rock and gravel operations and a series of experimental geothermal wells, mining and the exploitation of minerals have played little role in the historical and modern occupation of the Queen Creek Delta, although the Magma Arizona Railroad served to transport ore from mines in the area around Superior to Webster (later named Magma) on the Southern Pacific line beginning in the 1920s (Baxter 2024). Although not its primary purpose, the Magma Arizona Railroad also transported cattle for ranchers running herds in the Superstition Mountains area and surrounding regions.

Recommendations

The initial records review found that most of the Project area had not been previously surveyed, and survey of the full Project Area was recommended. The activities within the Project area will include vegetation removal, raking, mass grading, and the installation of roads, utilities, and foundations. The Project is subject to compliance with the AAA (A.R.S. §41-841 et seq.), the SHPA of 1982 (A.R.S. §41-861 et seq.), and may be subject to Section 106 of the National Historic Preservation Act if a Clean Waters Act permit is required from the U.S. Army Corps of Engineers. Given that the Project area is on Arizona State Trust lands, an intensive cultural resource survey is required to support compliance with the AAA, Section 106, and SHPA.

Chronicle Heritage conducted a full Class III survey of the Project area, but the resulting report has not yet been submitted for agency review. The preliminary results of this project indicate that there are 63 sites found in the Project area.

Of the 63 sites found in the Project Area, seven have been previously recorded, and the remaining 56 are newly recorded. Overall, 57 are prehistoric Hohokam sites, three are historical Euro-American sites, and three are multicomponent sites, which include both prehistoric Hohokam and historical Euro-American components. The prehistoric Hohokam sites and components are associated with habitations, resource procurement, and resource processing. The historical Euro-American sites and components are associated with cattle ranching, temporary camp sites, and vehicle travel.

Of the 63 total sites recorded within the Project area, five have previous NRHP determinations: one site has been determined ineligible for the ARHP and NRHP by Arizona SHPO, and two sites have been determined eligible for the ARHP and NRHP by SHPO;, no changes are recommended to these sites. One site was previously determined unevaluated by SHPO and is now recommended ineligible for the ARHP and NRHP. Finally, one site is a combination of two sites determined eligible for the ARHP and NRHP and three sites determined unevaluated sites, which are now collectively recommended eligible for the ARHP and NRHP. Of the remaining 58 sites, 32 sites are recommended eligible for the ARHP and NRHP, 24 are recommended ineligible for the ARHP and NRHP, and two are recommended unevaluated.

Sincerely,
Chronicle Heritage



Scott Yost, M.A. RPA | Arizona Team Lead | Southwest Lead SME

Table 2. Previous Projects Intersecting the Project Area

Project Reference No.	Project Name	Authors	Year
1989-5.ASM	Florence-Quail 69kV Transmission Line	K. Adams	1989
2004-789.ASM	560 ac Silverado Ranch	Ryden, Ronald, John M. Lindly, Cara Schmidt, and Douglas R. Mitchell	2004
2012-122.ASM	Magma Arizona Railroad Right of Way	Buckles, Avi, Christine Jerla and Christopher Dore	2007
2012-327.ASM	Quail to Florence Junction Transmission Line Survey	Darby, Connie A.	2012
2015-453.ASM	Superstition Vistas Well Sites Survey	Darby, Connie A.	2015
2016-339.ASM*	Skyline Drive	Barr, David	2016
2018-0218.ASM*	BHP Florence Junction	Gruner, Erina, and Alan L. Bartholomew	2018
2021-0016.ASM*	Arch Survey of 330 Acres of ASLD Land in Queen Creek	Unknown	2021

* Conducted within the past 10 years.

Table 3. Previously Recorded Sites within the Project Area

Site No./Name	Affiliation	Site Type	Eligibility Status	Associated Reference
AZ U:15:128(ASM)	Hohokam; Ceramic Period (A.D. 200–1450)	Rock feature with associated artifact scatter	Recommended eligible, Criterion D	Adams 1989
AZ U:15:868(ASM)	Euro-American; historic period (A.D. 1880–present)	Remnants of Ellsworth Ranch	Determined not eligible Individually (2016-1269.ASM)	Barr 2016
AZ U:15:869(ASM)	Hohokam; Ceramic Period (A.D. 200–1450)	Rock feature with associated artifact scatter	Determined eligible individually, Criterion D (2016-1269.ASM)	Barr 2016
AZ U:15:870(ASM)	Hohokam; Ceramic Period (A.D. 200–1500)	Artifact scatter	Determined eligible individually, Criterion D (2016-1269.ASM)	Barr 2016
AZ U:15:871(ASM)	Hohokam; Ceramic Period (A.D. 200–1500)	Artifact scatter	Determined eligible individually, Criterion D (2016-1269.ASM)	Barr 2016
AZ U:15:886(ASM)	Hohokam; Colonial–Sedentary periods (A.D. 750–1150)	Habitation	Recommended eligible, Criterion D	Gruner and Bartholomew 2018
AZ U:15:894(ASM)	Hohokam; Late Pioneer–Sedentary periods (A.D. 700–1150)	Artifact scatter	Unevaluated	Gruner and Bartholomew 2018

Site No./Name	Affiliation	Site Type	Eligibility Status	Associated Reference
AZ U:15:895(ASM)	Hohokam; Late Pioneer–Sedentary periods (A.D. 700–1150)	Thermal features with artifacts	Unevaluated	Gruner and Bartholomew 2018
AZ U:15:896(ASM)	Hohokam; Late Pioneer–Sedentary periods (A.D. 700–1150)	Thermal features with artifacts	Unevaluated	Gruner and Bartholomew 2018
AZ U:15:898(ASM)	Hohokam; Late Pioneer–Sedentary periods (A.D. 700–1150)	Features with associated artifact scatter	Recommended eligible, Criterion D	Gruner and Bartholomew 2018
AZ U:15:899(ASM)	Hohokam; Late Pioneer–Sedentary periods (A.D. 700–1150)	Features with associated artifact scatter	Recommended eligible, Criterion D	Gruner and Bartholomew 2018
AZ U:15:900(ASM)	Hohokam; Late Pioneer–Sedentary periods (A.D. 700–1150)	Thermal features with associated artifact scatter	Unevaluated	Gruner and Bartholomew 2018

Table 4. Historic GLO Properties Within the Project Area and Search Radius

Property Description	Intersects Project Area	Map Year
Unnamed road (1)	Yes	1885 (Plat No. 1436); 1885 (Plat No. 1437)
Branching road labeled "Old Phoenix and Pinal Road (1)	No	1885 (Plat No. 1436); 1885 (Plat No. 1437)

Table 5. Historical USGS Map Properties Within the Project Area and 1-Mile Search Radius

Property Description	Intersects Project Area	Map Year
Magma Arizona Railroad (*n* = 1)	Yes	1956
Telephone line (*n* = 1)	Yes	1956
Unnamed roads (n = 7)	Yes	1901, 1902, 1956
Landing strip (*n* = 1)	No	1966
Highway 60 (*n* = 1)	No	1956, 1966
Highway 89 (*n* = 1)	No	1966
Highway 90 (*n* = 1)	No	1966
Stock tanks (*n* = 3)	No	1966
Well (*n* = 1)	No	1966

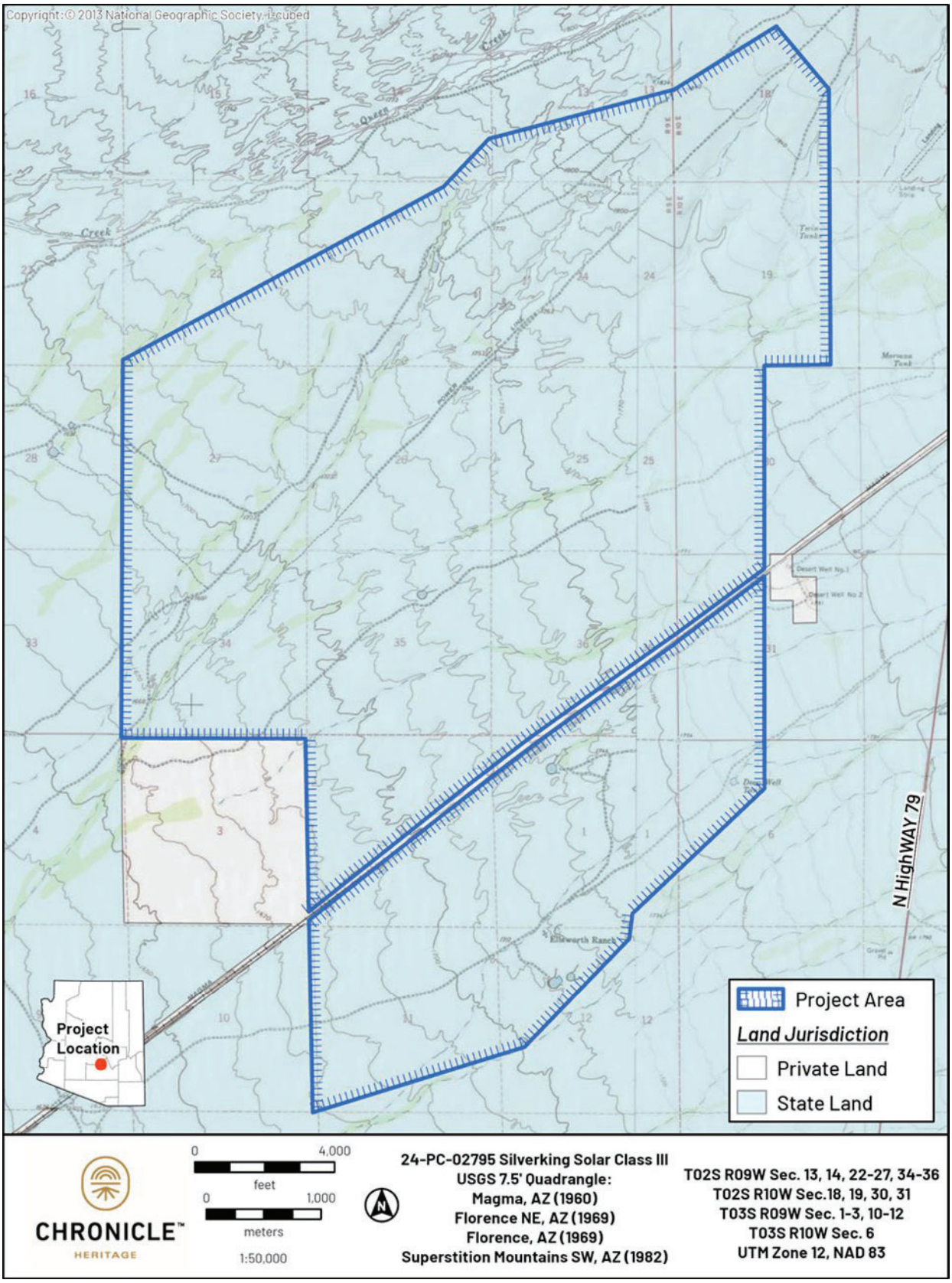

Figure 1. Project location overview showing land jurisdiction,



Figure 2. Project area overview, facing southeast.

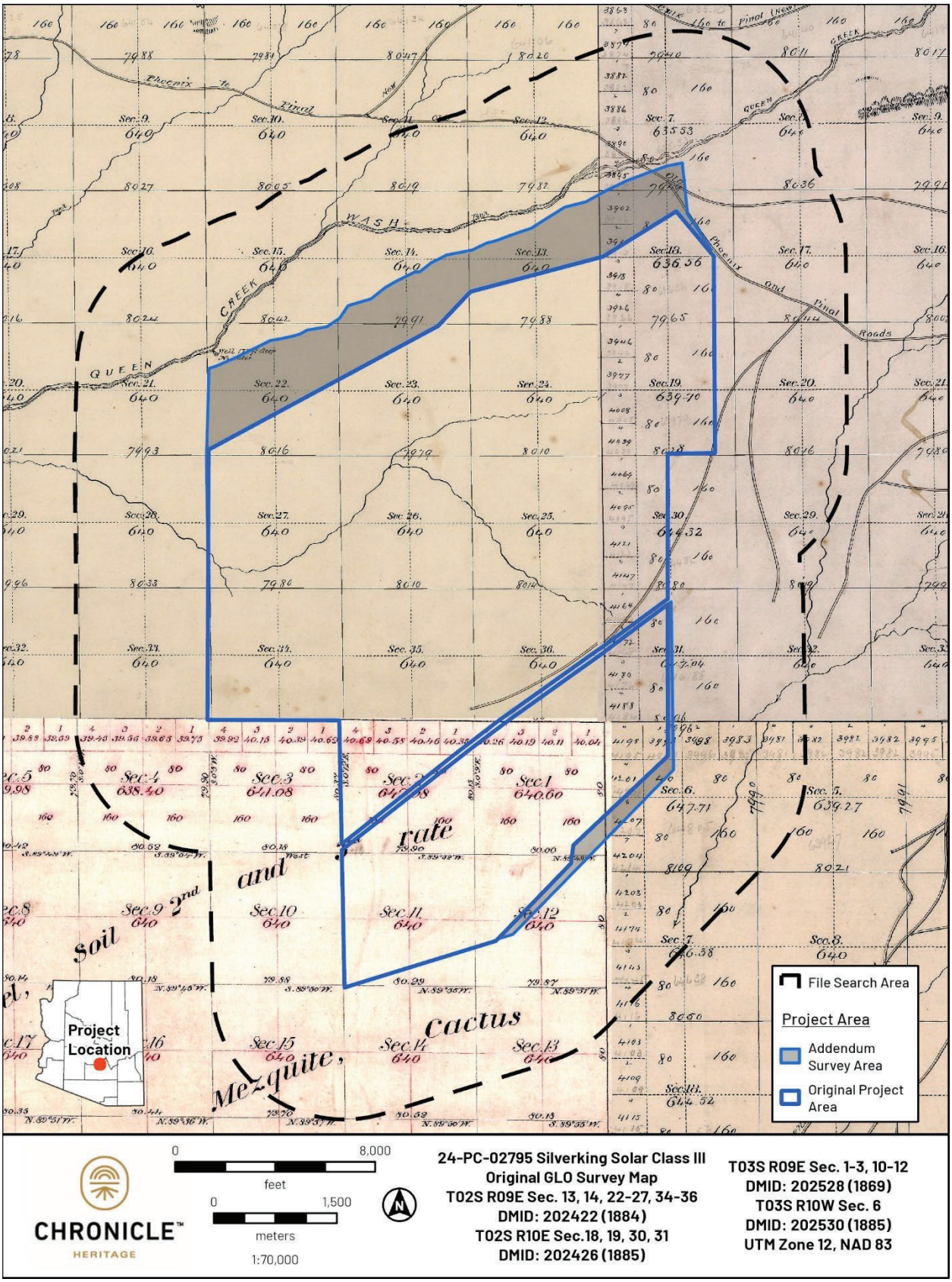

Figure 3. Project map showing GLO resources within the Project area.

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APPENDIX I

Aquatic Resources Technical Memorandum

Silver King Solar

Aquatic Resources Memo

May 2025

Prepared For:

Silver King Solar LLC

Prepared By:

Heritage Environmental Consultants

Introduction

Silver King Solar LLC (Applicant) is proposing to construct and operate the Silver King Solar Project (Project). The Project would include solar photovoltaic (PV) panels, a Project substation, Battery Energy Storage Systems (BESS) and a generation-tie (gen-tie) transmission line. The Project includes a total of 11 parcels, in whole or in part, on approximately 9,000 acres near Florence in unincorporated Pinal County, Arizona (herein referred to as the Project area) (**Figure 1**).

In order to support the above-described Project planning efforts, a desktop aquatic resources investigation and field jurisdictional waters and wetlands mapping surveys were conducted. This memo documents the results of a pre-field desktop review and field surveys to determine if and where potentially jurisdictional wetlands and other Waters of the U. S. (WOTUS) could be present in the Project area.

Jurisdictional Framework

The U.S. Army Corps of Engineers (USACE) South Pacific Division, Los Angeles District, Arizona Regulatory Branch administers Section 404 of the *Clean Water Act* (CWA) in the area where the Project is located, and issues permits for the discharge of dredged or fill material into WOTUS. On August 29, 2023, the U.S. Environmental Protection Agency (USEPA) and USACE announced a final rule to amend the final "Revised Definition of 'Waters of the United States'' rule, published in the Federal Register on January 18, 2023 (USEPA and USACE 2023). This final rule conforms the definition of "waters of the United States" to the U.S. Supreme Court's May 23, 2023, decision in the case of Sackett v. Environmental Protection Agency. The conforming rule, "Revised Definition of 'Waters of the United States,' Conforming," became effective on September 8, 2023 upon publication in the Federal Register.

The final rule WOTUS definition establishes the scope of USACE and USEPA and includes five categories of jurisdictional WOTUS (codified at 33 CFR 328.3(a)(1) – (5)) as follows:

1. All waters which are
    i. Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide (33 CFR 328.3(a)(1)(i));
    ii. The territorial seas (33 CFR 328.3(a)(1)(ii)); or
    iii. Interstate waters (33 CFR 328.3(a)(1)(iii);
2. Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section (33 CFR 328.3(a)(2));
3. Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent (relatively permanent waters [RPWs]), standing or continuously flowing bodies of water (CFR 328.(a)(3)):
4. Wetlands adjacent to the following waters (33 CFR 328.3(a)(4));
    i. Waters identified in paragraph (a)(1) of this section (33 CFR 328.3(a)(4)(i); or
    ii. Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (3)(i) of this section and with a continuous surface connection to those waters (33 CFR 328.3 (a)(4)(ii); or
5. Intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section (33 CFR 328.3 (a)(5)).

The term “Adjacent” is defined at (c)(2) as “having a continuous surface connection”.

The new rule excludes the following features from the definition of WOTUS:

- Water treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the CWA;
- Prior converted cropland so long as there is no change of use;
- Ditches excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;
- Artificially irrigated areas that would revert to dry land if the irrigation ceased;
- Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
- Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;
- Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until construction or excavation operation is abandoned and the resulting body of water meets the definition of WOTUS; and
- Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.

Desktop Review

The Project area is located within the Sonoran Desert. U.S. Geologic Survey (USGS) quadrangle maps (Magma, Florence, Florence Junction, and Superstition Mountains SW) were reviewed for the general locations of drainages and overall surface water flows. The Project area is relatively flat with an overall drainage direction of northeast to southwest and it ranges in elevation from approximately 1,660 to 1,860 feet above mean sea level. Geographic Information Systems (GIS) data from the National Wetlands Inventory (NWI) and National Hydrology Dataset (NHD) were overlaid on the Project area to identify a set of preliminary potential waters (USGS 2025, USFWS 2025, **Figure 3**). A majority of the Project area falls within the 10th-level HUC Lower Queen Creek watershed (HUC10 - 1505010008) and Paisano Wash - Gila River watershed (HUC10 – 1505010007). The extreme northwestern portion of the Project area fall within the 10th-level HUC Middle Queen Creek watershed (HUC10 - 15050100009). All of the NHD and NWI flowlines that run through the Project area terminate downstream (southwest) of the Project area prior to hitting the Central Arizona Project canal southwest of the Project area.

Aerial photographs (available through ArcGIS online services) were reviewed to determine if there were any other features in the Project area that appeared to be waters. The purpose of this review was to identify features in addition to those shown in the NWI and NHD datasets that should be investigated for the presence of wetland or OHWM indicators during the field survey.

There are several precipitation gauges located in the vicinity of the Project area: Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) gauge AZ-PN-77 Queen Valley and AZ-PN-35 Apache Junction. Approximately 4.5 months of precipitation data were reviewed (January 1 – May 14, 2025) and between approximately 2.27 and 3.72 inches of precipitation was recorded at the gauges for 2025 leading up to the field survey on May 13 and 14, 2025 (CoCoRaHS 2025). The Queen Valley gauge is located approximately 5 miles northeast of the Project area and it recorded 3.72 inches of precipitation.

The Antecedent Precipitation Tool (APT) (USACE 2025b) was used to compare precipitation in the 90 days prior to the field survey against normal precipitation. The APT results showed that the Project area was in normal conditions during this 90-day period, but is still in extreme drought (**Attachment B**); conditions during wetter periods typically create more obvious indicators of active channel flow that are easily observable in the field.

Natural Resource Conservation Service (NRCS) soil survey data was acquired for the Project area (NRCS 2025). The NRCS soil survey data indicates that the Project area consists of five soil associations: Beardsley-Suncity complex, Denure sandy loam, Denure-Mohall complex, Mohall clay loam, and Mohall sandy loam. Overall, these soils are deep, well-drained sands and clays formed in alluvium and located on alluvial fans, stream terraces, and basin floors (NRCS 2025, **Figure 2**).

Field Survey

Goals. The field survey was conducted on May 13 and 14, 2025. The goals of the survey included:

- Investigate potential waters shown in the NWI and NHD datasets to determine if wetland or OHWM indicators are present
- Investigate additional potential waters that were identified on aerial images to determine if wetland or OHWM indicators are present
- For all features with wetland or OHWM indicators, determine hydrologic regime (ephemeral, intermittent, or perennial)

Methodology. Methodology for identification of wetlands followed the USACE (2008) Arid West Manual. No wetlands were observed in the Project area. Methodology for identification of the OHWM followed the Wetlands Delineation Manual (USACE 1987), the Arid West Manual (USACE 2008), Lichvar and McColley (2008) with the 2010 update (Curtis and Lichvar 2010).

Technical Findings. The Project area lies within the Middle Gila Subbasin and has multiple NHD or NWI flowlines (bluelines) that are shown flowing through the Project area as well as several NWI wetlands shown within the Project area. The Project area lies downstream (southwest) of the Superstition Mountains and north of the Gila River. The Project is located on a plateau above Queen Creek which is located approximately 0.5 miles north of the Project area. The Central Arizona Project (CAP) canal is located to the south and west of the Project upstream of the Gila River. Based on aerial imagery, all waters that would exit the Project area would either stop at housing developments, agricultural fields, or berms protecting the developments/fields, spread out and infiltrate into the well-drained sandy soils, or hit the CAP canal berm and pool, evaporate and infiltrate; none of the waters would reach the Gila River downstream.

The Project area exists within an alluvial fan created by washes that originate to the northeast in the Superstition Mountains. Both active and relict washes were observed. Many washes originate within or immediately upstream of the Project area while others appear to flow from the Superstition Mountains. The only water features that were mapped were ephemeral washes that only flow in response to local precipitation and are characterized by low volume, infrequent or short duration flow; they are all non-RPWs.

The ephemeral washes within the Project area range from approximately 2-foot-wide single channels to approximately 50-foot-wide washes with multiple braided channels. OHWM indicators included bed and bank, erosion scour and shelving, sediment sorting and change in particle size distribution, lack of vegetation in the channel, change in vegetation along the margins of the channels (including a higher proportion of honey mesquite [*Prosopis glandulosa*], velvet mesquite [*Prosopis velutina*], ironwood [*Olneya tesota*], and blue palo verde [*Parkinsonia florida*]), debris accumulations consisting of both woody and leafy material, debris wracking, ripples, and mud cracking. Observed indicators of abandoned channels

included lack of debris accumulations, lack of clear bed and bank, and mud cracking (indicating that water doesn't flow).

No wetlands were encountered within the Study Area. Insufficient amounts of precipitation, coupled with well-drained soils, preclude the development of hydric soils and the establishment of hydric vegetation. Seven stock tanks were observed within the Project area that periodically collect and hold waters for livestock from upstream ephemeral drainages. These stock tanks are all shown as "Freshwater Forested/Shrub Wetland" on the NWI data (**Figure 3**). All of them were investigated and no water or hydric, wetland obligate vegetation was observed. The tanks are surrounded by mesquite, palo verde, and ironwood trees which have established due to the more frequent influx of water. One tank had some tamarisk (*Tamarix ramosissima*) and one had a single Goodding's willow (*Salix gooddingii*). Mesquite is a facultative upland species, meaning that it usually occur in non-wetlands, but may occur in wetlands, and Goodding's willow is a facultative wetland species meaning that it usually occurs in wetlands, but may occur in non-wetlands. Even though the Goodding's willow was observed, there was no other hydric vegetation and no hydric soils were observed, meaning that this area would not qualify as a wetland.

The ephemeral washes are shown in blue on **Figure 4** and the stock tanks are shown in green.

Jurisdictional Assessment

This memo addresses the potential jurisdictional status of the ephemeral washes in the Project area under the current regulatory framework. It concludes that no wetlands were present and numerous ephemeral washes exhibiting an OHWM were present, but none of these ephemeral washes were considered to be RPWs because they do not have flowing or standing water year-round or continuously during certain times of the year and hence would likely be considered non-jurisdictional under the current USACE WOTUS regulatory framework; however, only the USACE can make determinations regarding jurisdictional status. Additionally, all of the ephemeral washes with OHWMs within the Project area would not reach a TNW downstream of the Project area, and are therefore isolated, further enforcing the lack of USACE WOTUS on the Project. No wetlands were observed, and even if there were wetlands in the Project area, they would also be isolated and non-jurisdictional.

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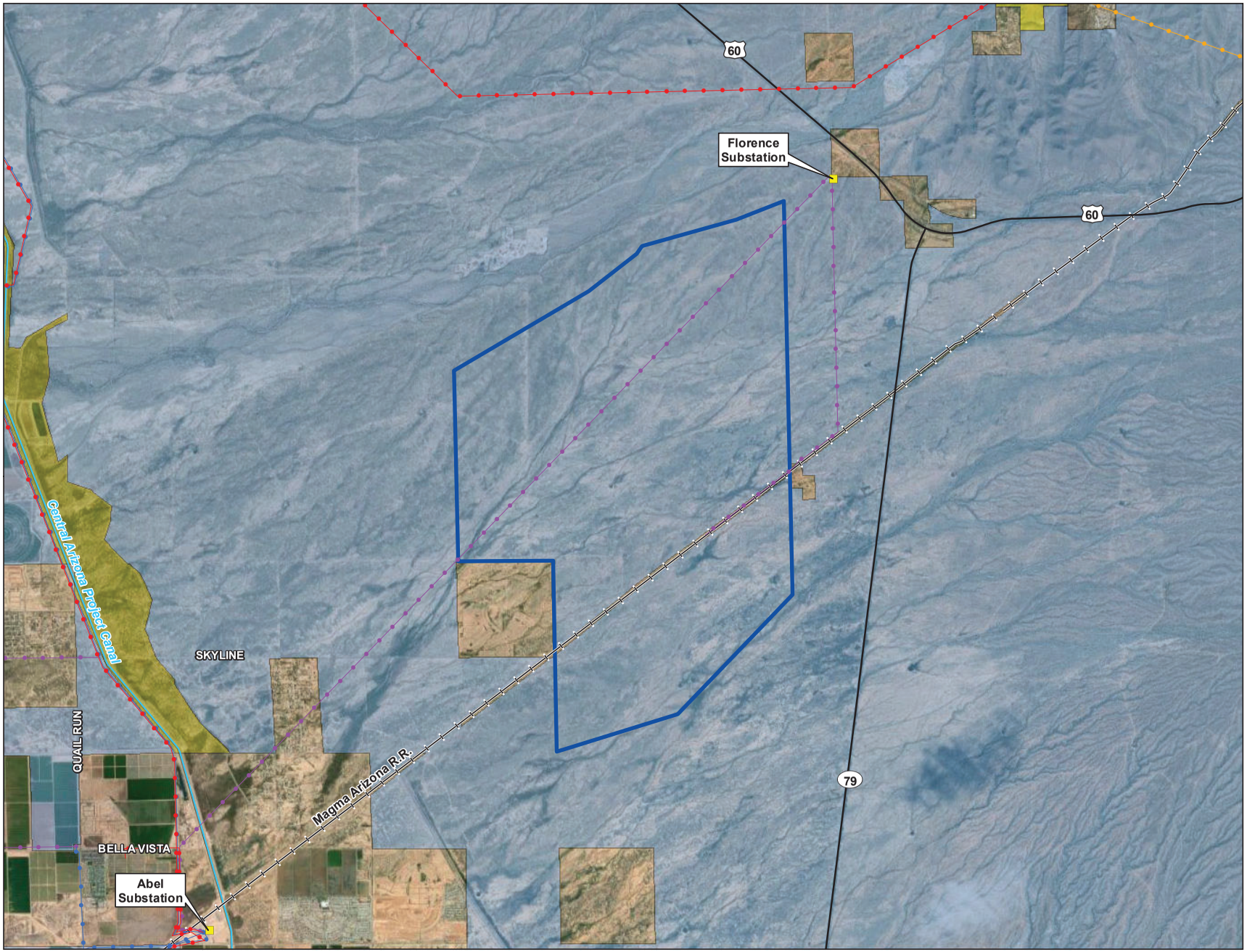
Appendix A Figures



Legend

Project Features

- Silver King Solar and Storage Project Site

General Features

- Existing Substation
- Existing 500kV Transmission Line
- Existing 230kV Transmission Line
- Existing 69kV Transmission Line
- US Route or State Highway
- Railroad
- Canal

Jurisdictional Land Ownership

- Bureau of Land Management Land
- Bureau of Reclamation Land
- State Land

0 0.5 1 1.5 2
Miles

ARIZONA

Phoenix
Florence
Pinal County

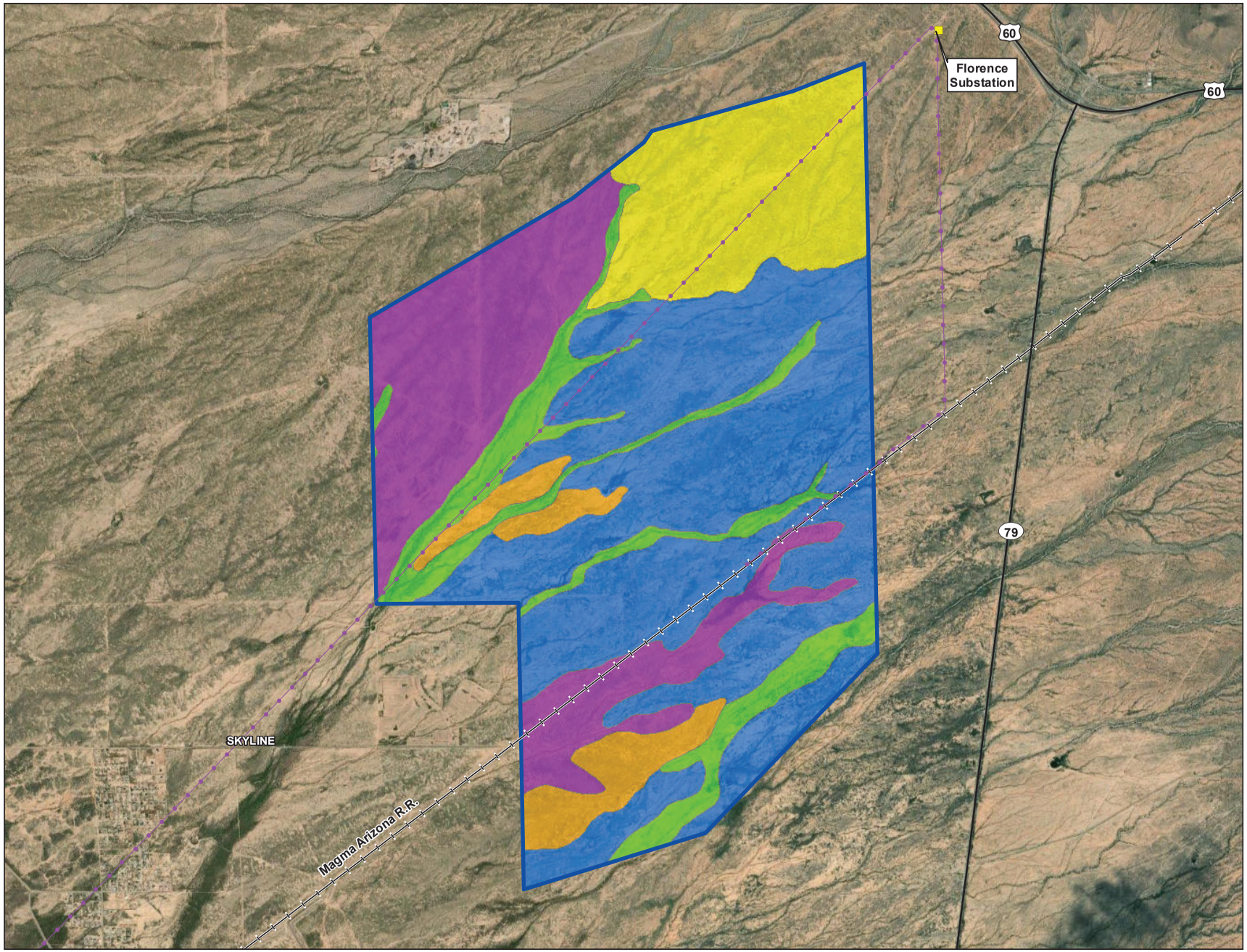
Map Extent

SILVER KING SOLAR and STORAGE PROJECT

FIGURE 1 SITE BOUNDARY

Map Extent: Pinal County, AZ

Date: 4.08.25 | Author: sjw



Legend

Project Features

- Silver King Solar and Storage Project Site

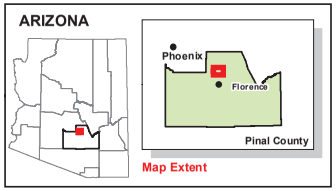
General Features

- Existing Substation
- Existing 69kV Transmission Line
- US Route or State Highway
- Railroad

Soils

- Beardsley-Suncity complex, 1-10% slopes
- Denure sandy loam, 1-3% slopes
- Denure-Mohall complex, 1-5% slopes
- Mohall clay loam, 0-5% slopes
- Mohall sandy loam, 0-3% slopes

0 0.25 0.5 0.75 1
Miles

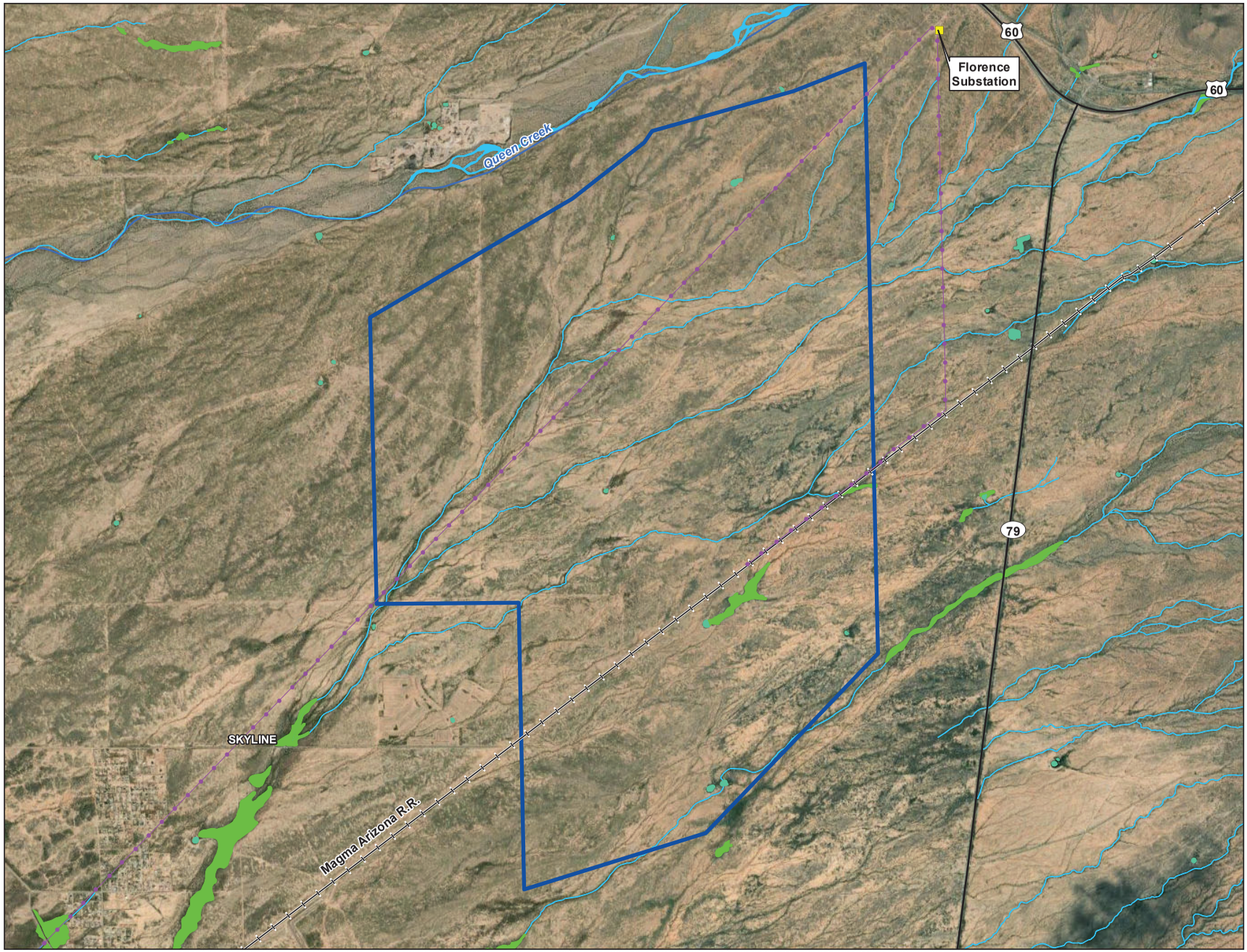


SILVER KING SOLAR and STORAGE PROJECT

FIGURE 2 SOILS

Map Extent: Pinal County, AZ

Date: 4.08.25 | Author: sjw



Legend

Project Features

- Silver King Solar and Storage Project Site

General Features

- Existing Substation
- Existing 69kV Transmission Line
- US Route or State Highway
- Railroad

USGS NHD Streams

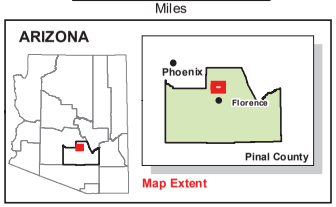
- NHD Stream

USFWI NWI Wetlands

- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

0 0.25 0.5 0.75 1

Miles

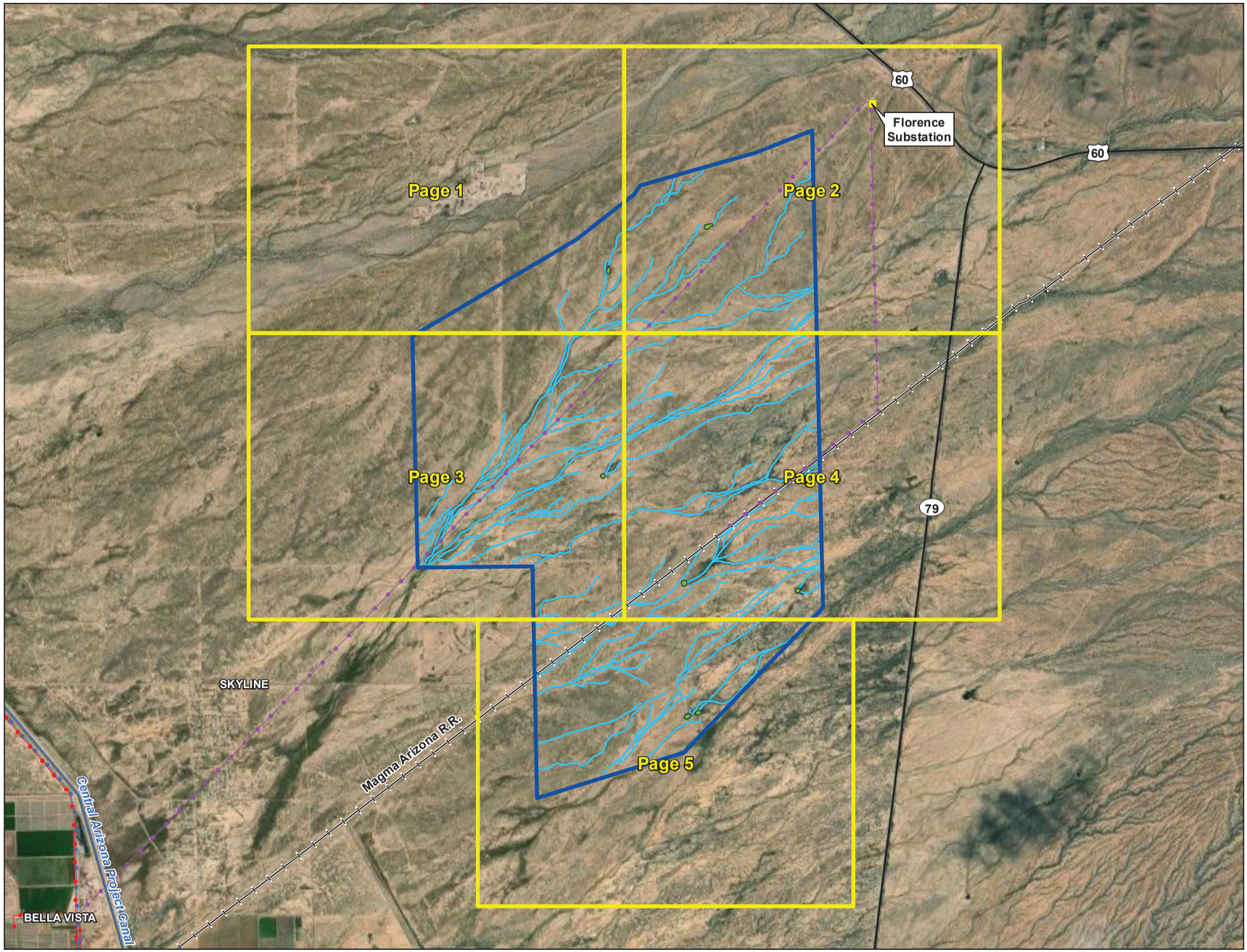


SILVER KING SOLAR and STORAGE PROJECT

FIGURE 2 NWI and NHD

Map Extent: Pinal County, AZ

Date: 5.16.25 | Author: sjw



Legend

Project Features

- Silver King Solar and Storage Project Site

Survey Results

- Ephemeral Wash
- Stock Tank

General Features

- Existing Substation
- Existing 500kV Transmission Line
- Existing 230kV Transmission Line
- Existing 69kV Transmission Line
- US Route or State Highway
- Railroad
- Canal
- Mapbook Page

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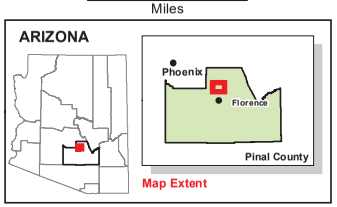
Miles



SILVER KING SOLAR and STORAGE PROJECT

FIGURE 4 SURVEY RESULTS

Map Extent: Pinal County, AZ

Date: 5.19.25 | Author: sjw



Legend

Project Features

- Silver King Solar and Storage Project Site

Survey Results

- Ephemeral Wash
- Stock Tank

General Features

- Existing Substation
- Existing 69kV Transmission Line
- US Route or State Highway
- Railroad

0 500 1,000 1,500 2,000
Feet

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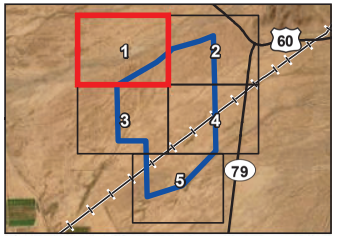
Miles

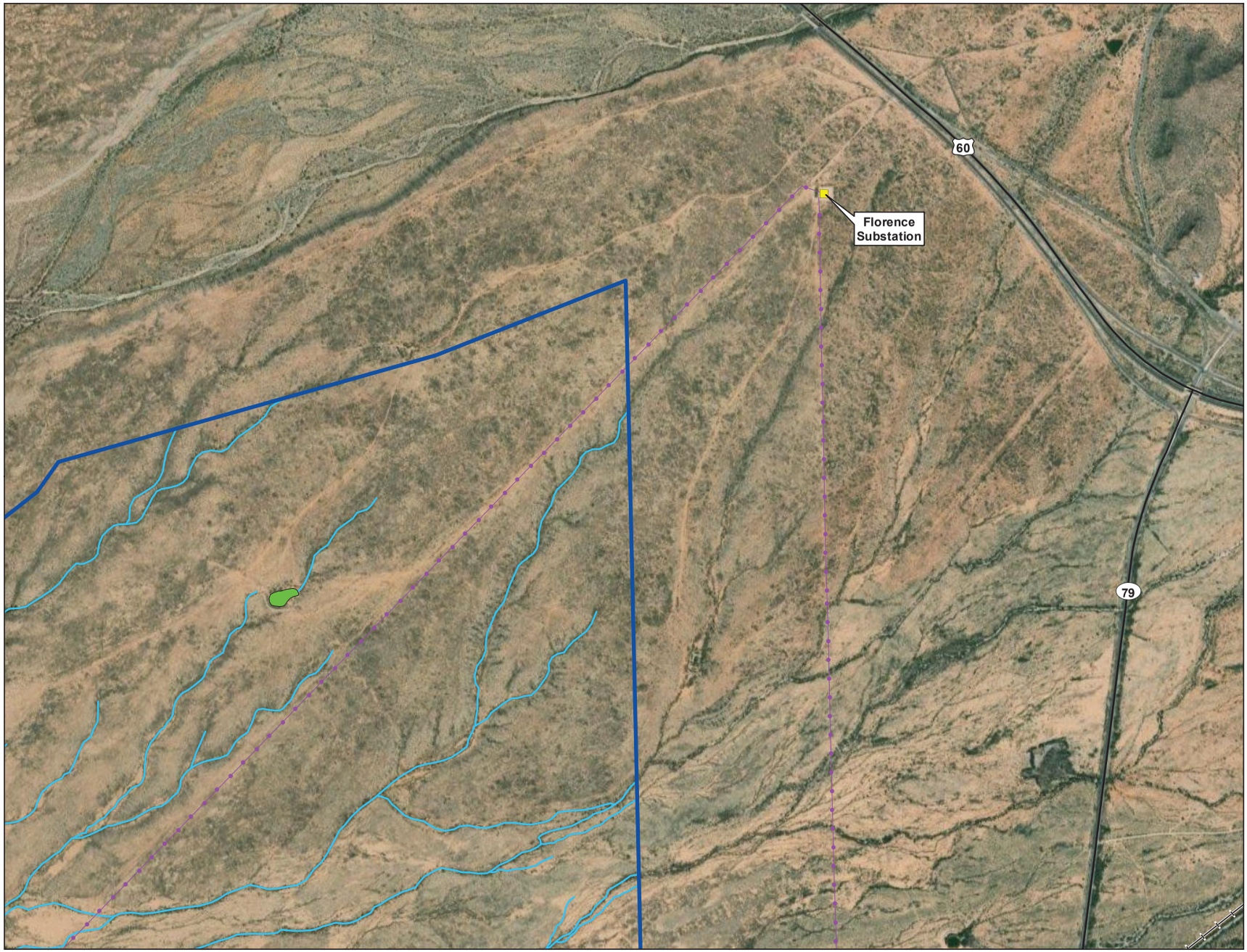


SILVER KING SOLAR and STORAGE PROJECT

FIGURE 4 SURVEY RESULTS

Map Extent: Pinal County, AZ

Date: 5.19.25 | Author: sjw



Legend

Project Features

- Silver King Solar and Storage Project Site

Survey Results

- Ephemeral Wash
- Stock Tank

General Features

- Existing Substation
- Existing 69kV Transmission Line
- US Route or State Highway
- Railroad

0 500 1,000 1,500 2,000
Feet

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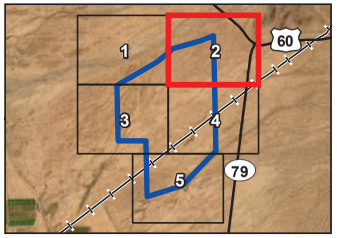
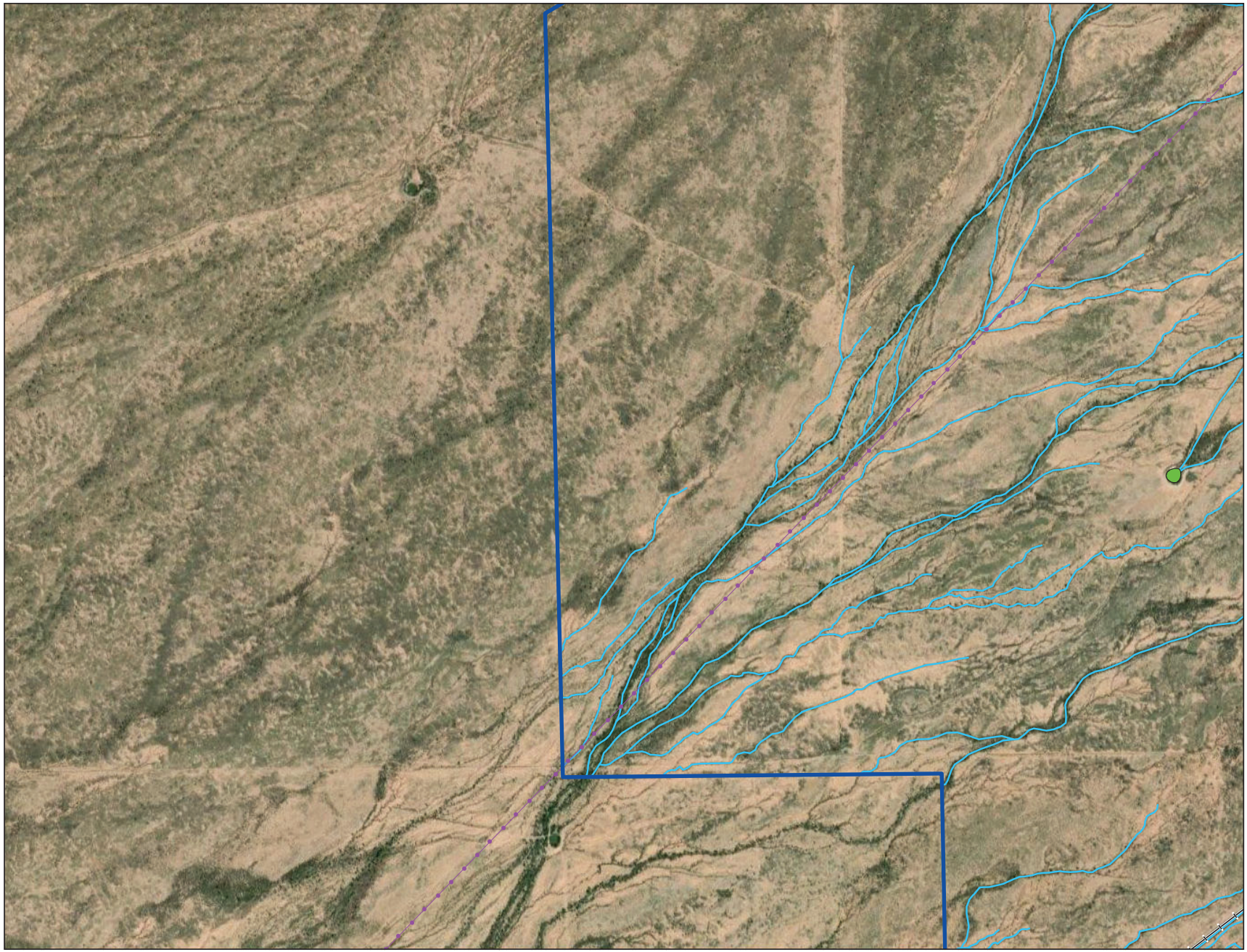


SILVER KING SOLAR and STORAGE PROJECT

FIGURE 4 SURVEY RESULTS

Map Extent: Pinal County, AZ

Date: 5.19.25 | Author: sjw



Legend

Project Features

- Silver King Solar and Storage Project Site

Survey Results

- Ephemeral Wash
- Stock Tank

General Features

- Existing Substation
- Existing 69kV Transmission Line
- US Route or State Highway
- Railroad

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Feet

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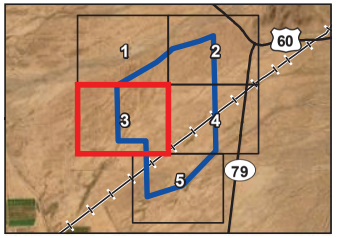
Miles

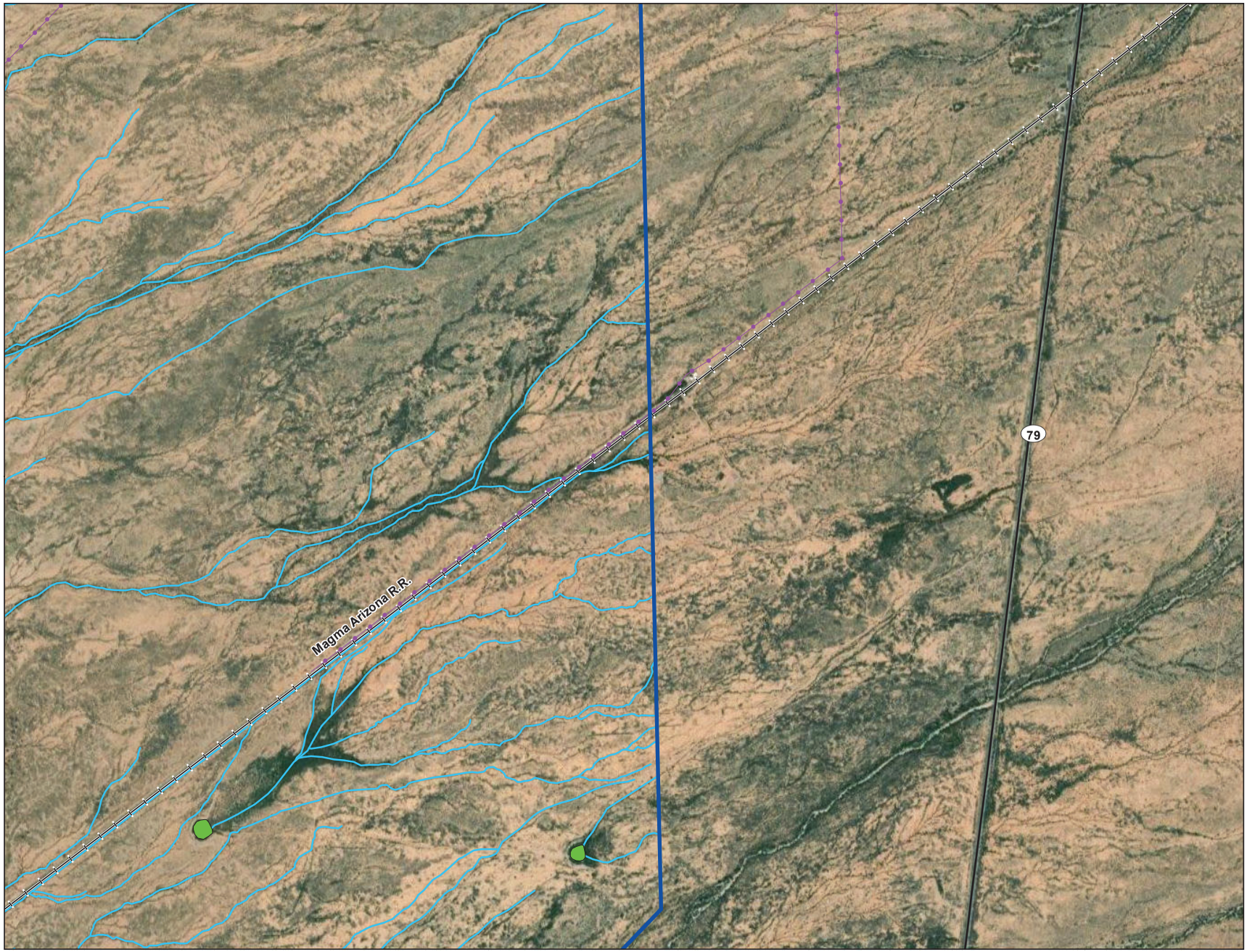


SILVER KING SOLAR and STORAGE PROJECT

FIGURE 4 SURVEY RESULTS

Map Extent: Pinal County, AZ

Date: 5.19.25 | Author: sjw



Legend

Project Features

- Silver King Solar and Storage Project Site

Survey Results

- Ephemeral Wash
- Stock Tank

General Features

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- Existing 69kV Transmission Line
- US Route or State Highway
- Railroad

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Feet

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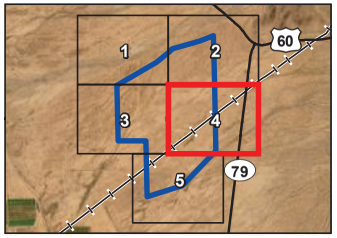
Miles

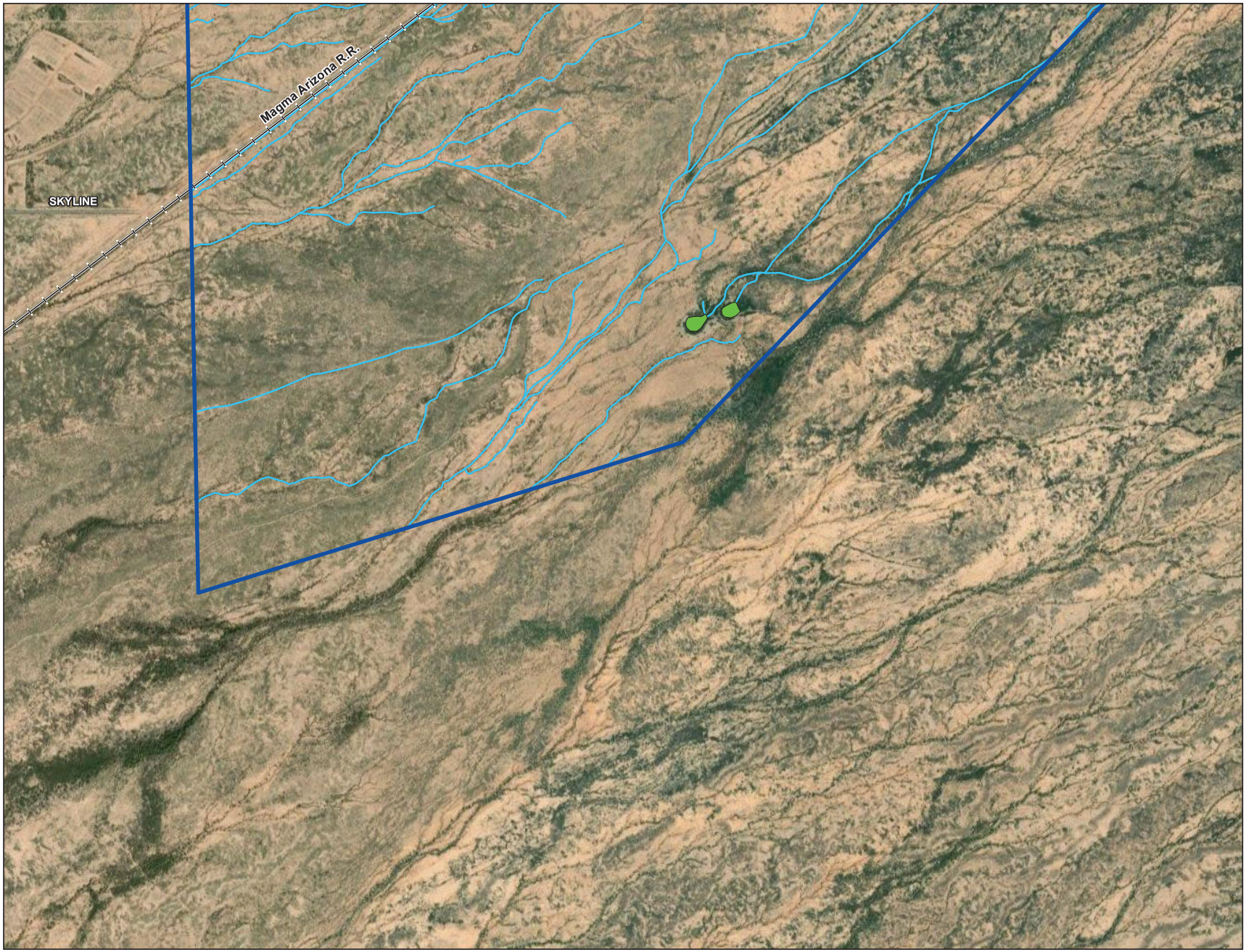


SILVER KING SOLAR and STORAGE PROJECT

FIGURE 4 SURVEY RESULTS

Map Extent: Pinal County, AZ

Date: 5.19.25 | Author: sjw



Legend

Project Features

- Silver King Solar and Storage Project Site

Survey Results

- Ephemeral Wash
- Stock Tank

General Features

- Existing Substation
- Existing 69kV Transmission Line
- US Route or State Highway
- Railroad

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Feet

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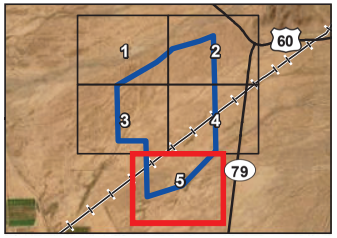
Miles



SILVER KING SOLAR and STORAGE PROJECT

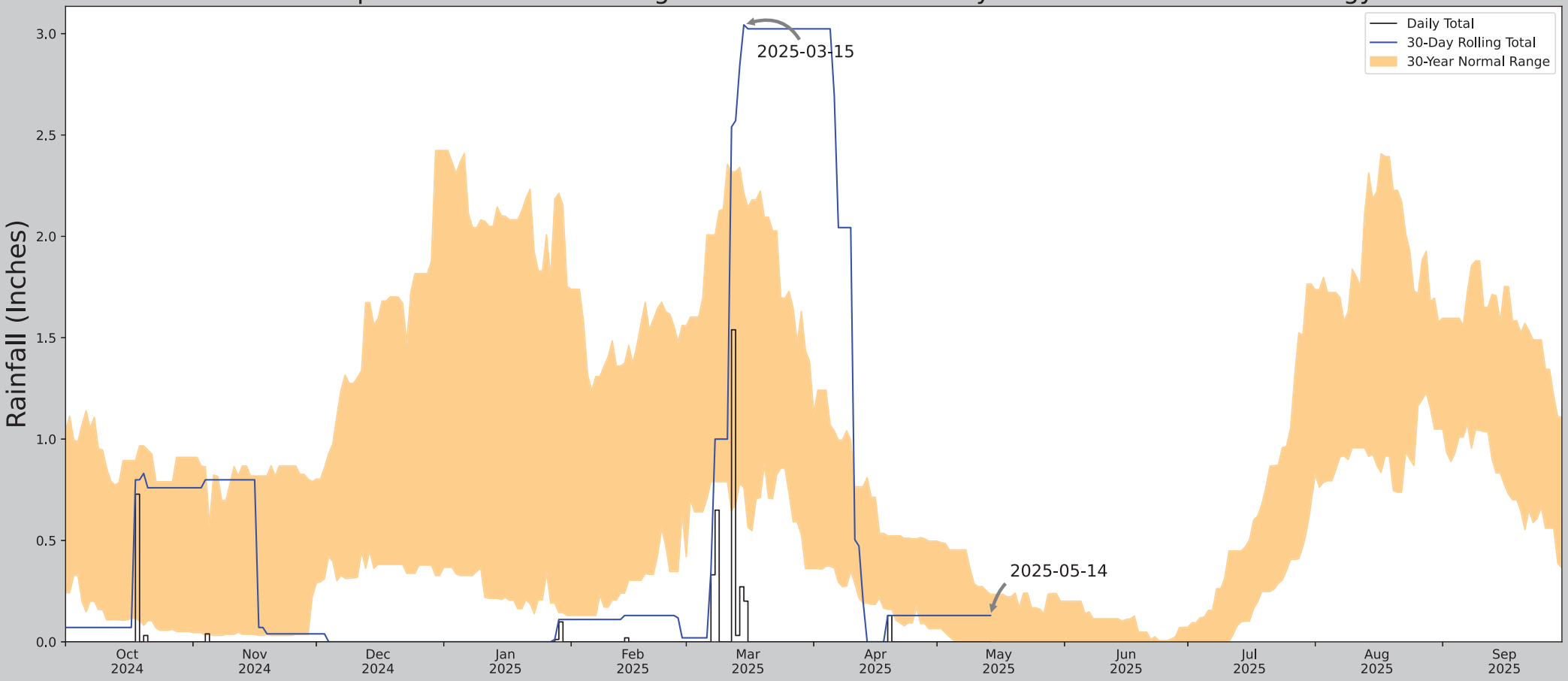
FIGURE 4 SURVEY RESULTS

Map Extent: Pinal County, AZ

Date: 5.19.25 | Author: sjw

Appendix B – APT Results

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	33.218528, -111.390725
Observation Date	2025-05-14
Elevation (ft)	1730.755
Drought Index (PDSI)	Extreme drought (2025-04)
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-05-14	0.0	0.234252	0.129921	Normal	2	3	6
2025-04-14	0.190945	0.809843	0.0	Dry	1	2	2
2025-03-15	0.762205	2.214961	3.043307	Wet	3	1	3
Result							Normal Conditions - 11

Figure and tables made by the **Antecedent Precipitation Tool** Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
APACHE JUNCTION 5 NE	33.4625, -111.4814	2069.882	17.651	339.127	13.929	11142	78
APACHE JUNCTION 3.2 N	33.4563, -111.5425	1910.105	3.548	159.777	2.163	131	0
GOLD CANYON 1.4 NNW	33.3816, -111.4535	1895.997	5.817	173.885	3.629	1	0
APACHE JUNCTION 3.0 ESE	33.3916, -111.4928	1719.16	4.943	350.722	3.958	12	11
APACHE JUNCTION 3.5 ESE	33.3843, -111.4879	1735.892	5.416	333.99	4.246	0	1
MORMON FLAT	33.5536, -111.4453	1705.053	6.629	364.829	5.402	52	0
STEWART MTN DAM	33.5589, -111.5367	1421.916	7.383	647.966	8.106	15	0

Figure 3. Existing land use.

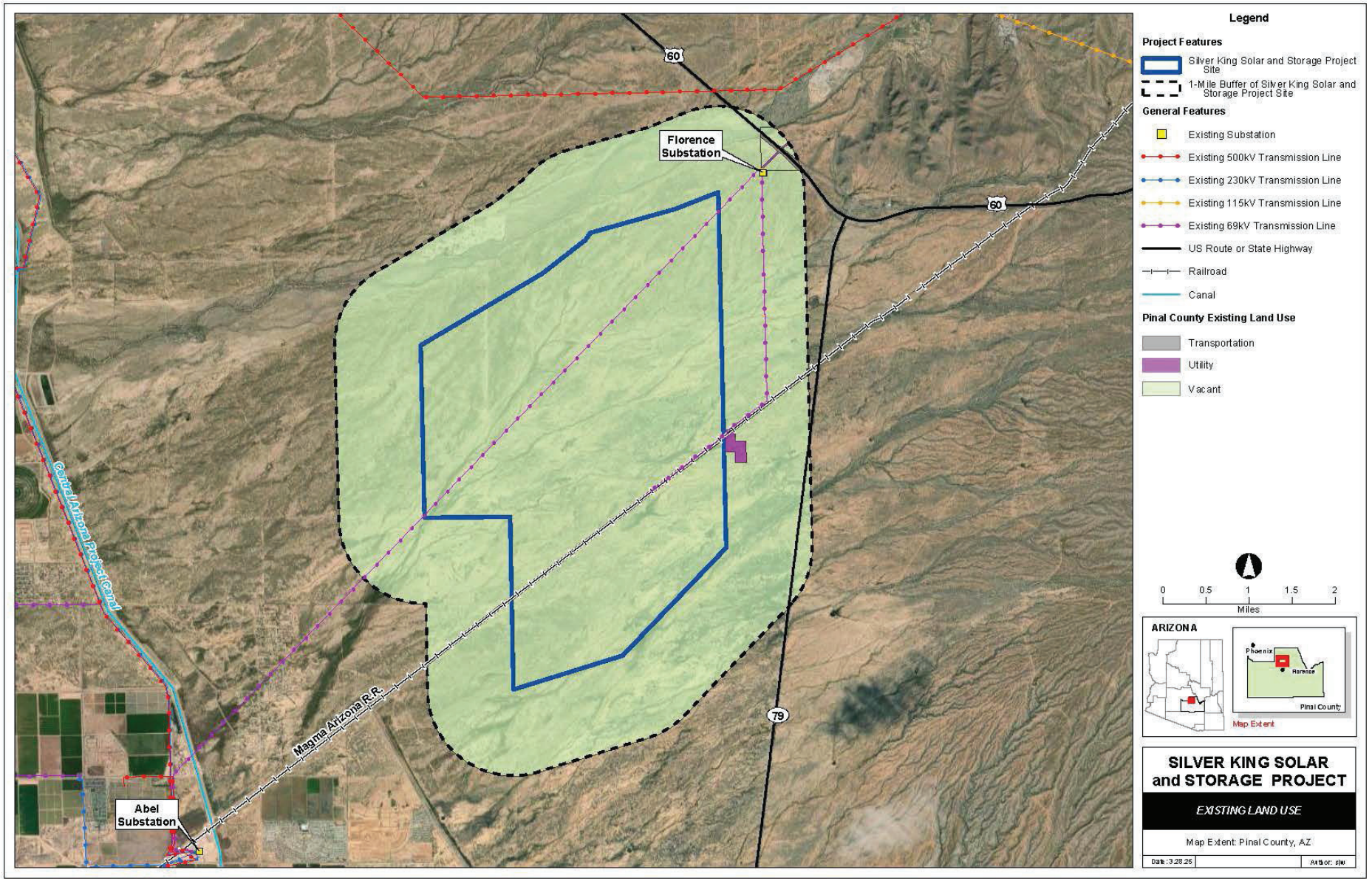
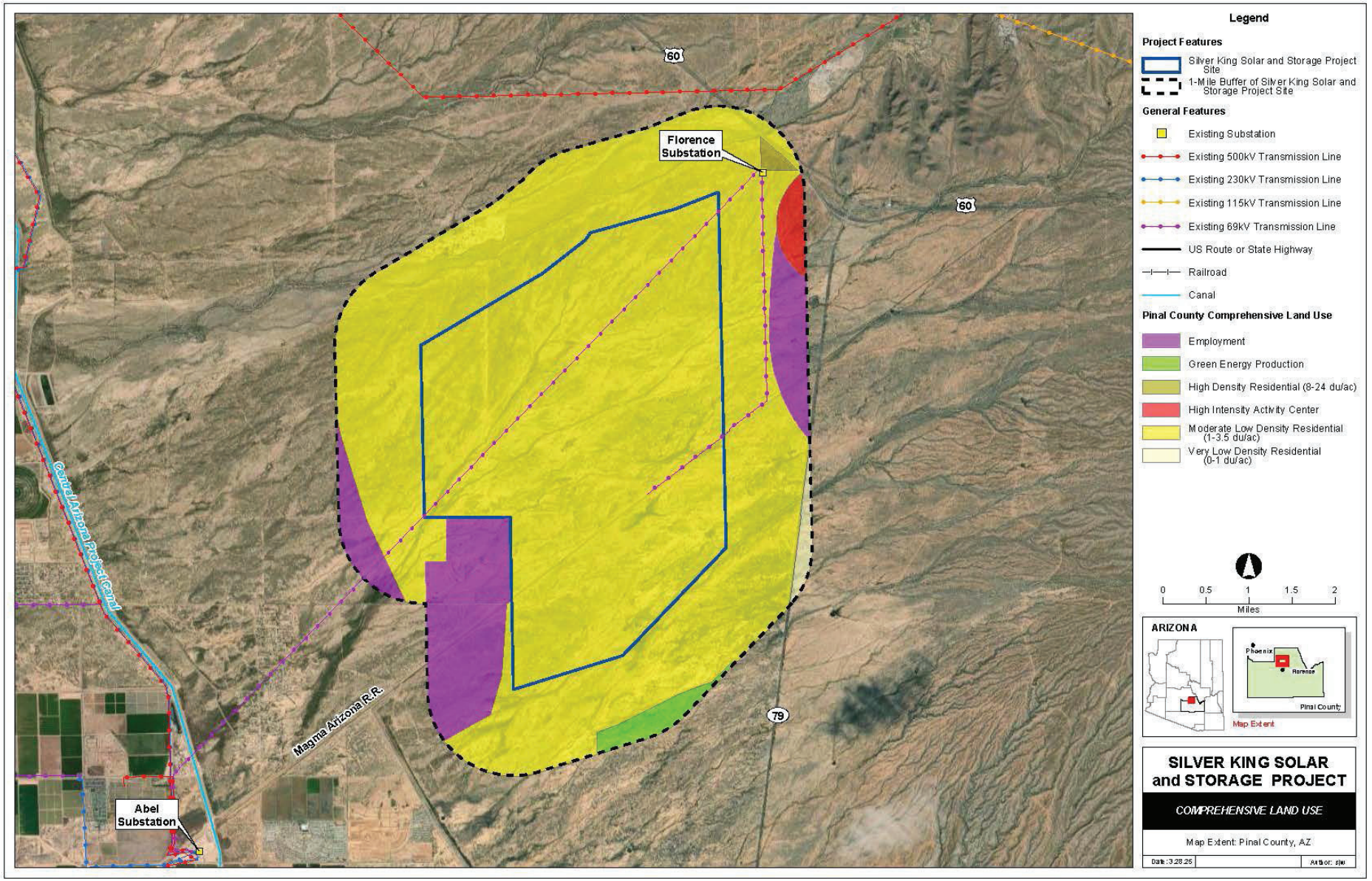
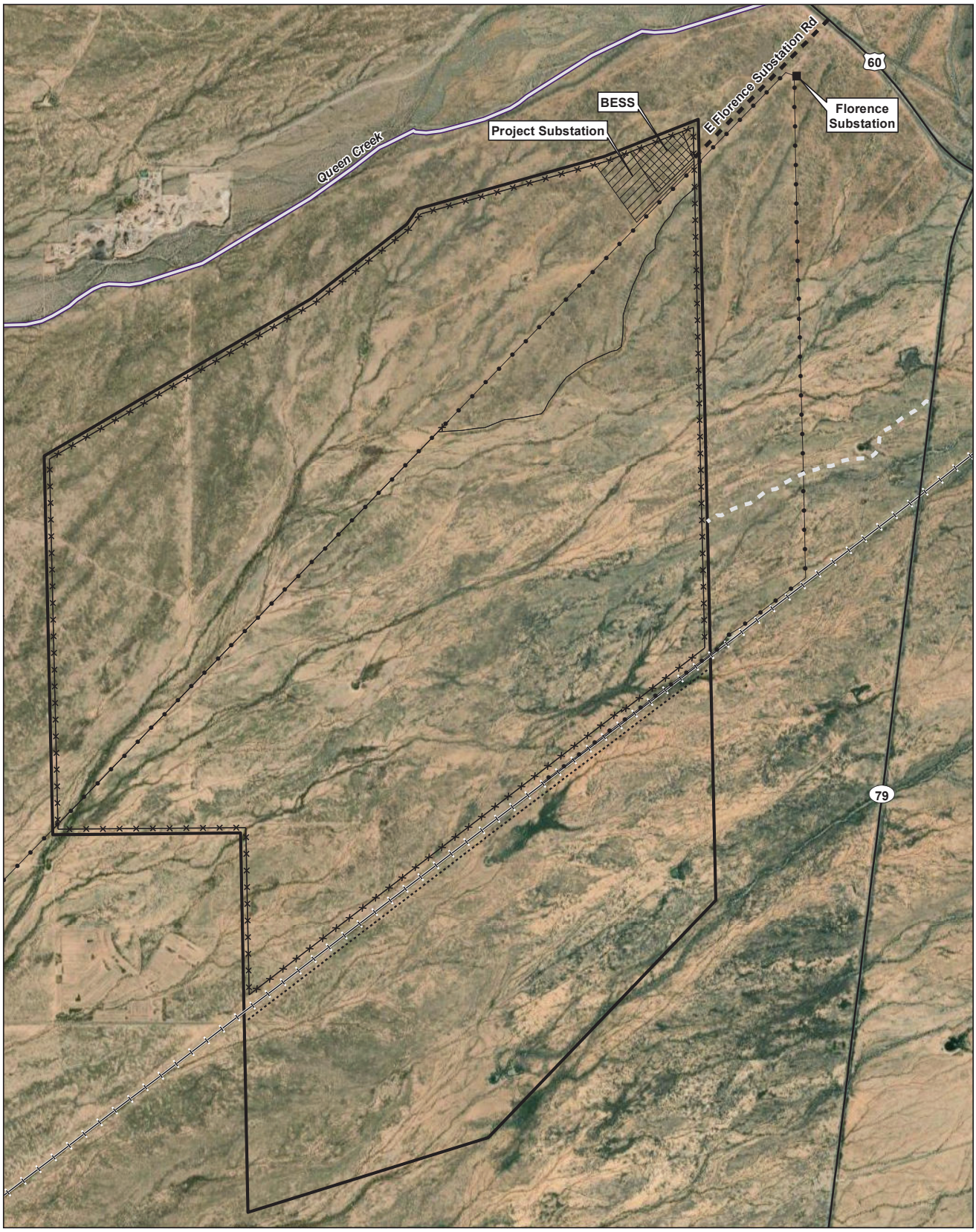


Figure 4. Planned land use.



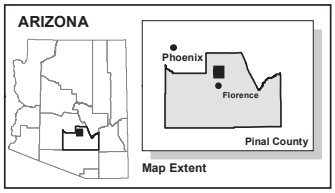


SILVER KING SOLAR and STORAGE PROJECT

PRELIMINARY SITE PLAN

Map Extent: Pinal County, AZ

Date: 4.09.25 | Author: sjw



Legend

Project Features

- Fenceline
- Existing Access Road
- Proposed Access Road
- Proposed Recreational Trail
- BESS
- Project Substation
- Silver King Solar and Storage Project Boundary

General Features

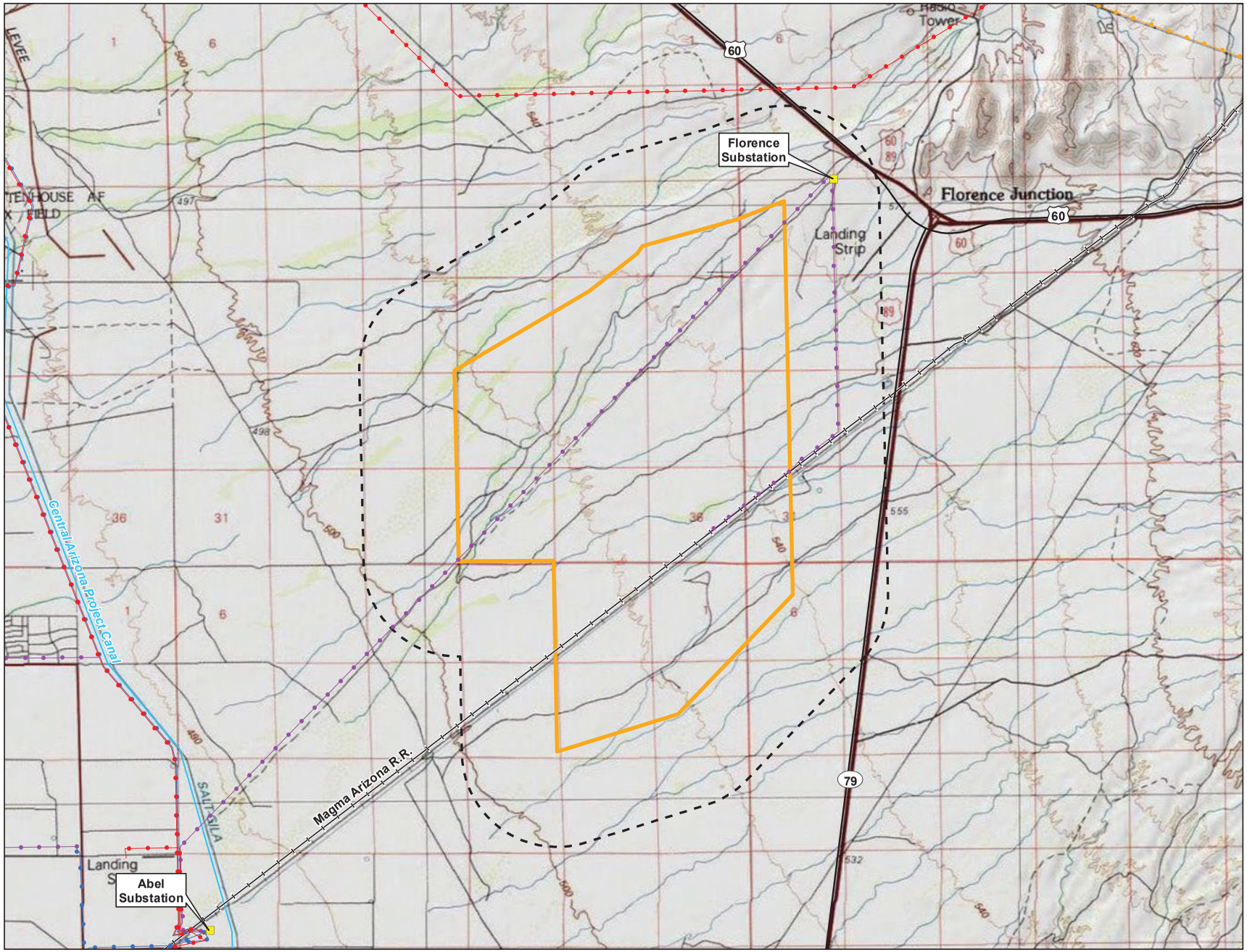
- Existing Substation
- Existing 69kV Transmission Line
- US Route or State Highway
- Railroad
- Stream

0 0.25 0.5 0.75
Miles

State Plane Coordinate System
NAD 83, Arizona Central
Linear Unit: Foot US

Data Sources: ADOT, AGIC, BLM, ESRI, Pinal Co., USGS.
F\\Silver King Notification 031925.mxd

Preliminary design subject to change



SILVER KING SOLAR PROJECT

TOPOGRAPHIC

Map Extent: Pinal County, AZ

Date: 3.28.25 | Author: sjw

Katie Hobbs
Governor

ARIZONA
STATE LAND DEPARTMENT
1110 West Washington Street | Phoenix, AZ 85007
(602) 542-4631

Robyn Sahid
Commissioner

May 14, 2025

Rafik Albert
Silver King Solar, LLC
500 N. Central Ave., No. 600
Glendale, AZ 91203

RE: State Trust land located in Pinal County in portions or all of:
T2S R9E, Sec. 13-14, 22-27, 34-36; T2S R10E, Sec. 18, 19, 30, 31; T3S R9E, Sec. 1, 2, 11, 12; T3S R10E, Sec. 6
ASLD KE# 03-121277-99-100 - Silver King Solar, LLC – Major Comprehensive Plan Amendment Land Use Designation Change from Moderate Low Density Residential to Green Energy Production

Dear Rafik Albert:

The Arizona State Land Department ("ASLD") has received your request representing Silver King Solar, LLC for permission to act as authorized agent for ASLD to apply to Pinal County (the "Jurisdiction") for a Major Comprehensive Plan Amendment Land Use Designation change from Moderate Low Density Residential to Green Energy Production (the "Entitlements") as identified in the attached Silver King Solar and Storage Application for a Major Comprehensive Plan Amendment Narrative Report, dated May 2025, on State Trust land described above.

Silver King Solar, LLC, its employees, representatives, agents, and/or consultants (hereinafter "Applicant") therefore, has permission to file for the Major General Plan Amendment Land Use Designation change from Moderate Low Density Residential to Green Energy Production as required by the Jurisdiction.

Please be advised the following conditions and understandings accompany this approval:

1. Applicant shall pay all costs associated with the Entitlements and shall not be reimbursed by ASLD or by any subsequent purchaser at auction.

2. Applicant, their employees, representatives, agents, and/or consultants shall be permitted to act as ASLD's agents to procure the Entitlements and any related permits or approvals which may be required (the "Entitlement Process"), subject to final review and approval by ASLD.

3. Applicant shall diligently pursue the satisfaction of all Entitlements. Further, it shall respond to all inquiries by ASLD as to the status of the Entitlement Process and provide regular updates without formal request.

4. Prior to beginning the Entitlement Process, the Applicant shall provide ASLD with an outline of the proposal and a timeline for the process which identifies key dates with the Jurisdiction or other jurisdictional agency staff and project hearing dates with any agency or jurisdiction. All documentation, including, but not limited to: land use plans, engineering drawings, application materials and development agreements, shall be submitted to ASLD for approval prior to the date the documentation is filed with the approving jurisdiction. A copy of the application shall be submitted to ASLD on the same day it is filed with the Jurisdiction or other jurisdictional agency.

5. ASLD staff shall be invited, but not required to attend, all meetings with the various agencies, elected officials, and the Jurisdiction as the Entitlements are processed through relevant hearings. A minimum of five (5) business days' notice shall be provided to Department staff in advance of any meeting.

6. Applicant shall submit to ASLD all staff reports and draft stipulations that will be considered by the Jurisdiction on the day they are received by the Applicant, and at least ten (10) business days before each public meeting or hearing, if possible.

7. As additional consideration for the grant of this permission, all Entitlements and/or rights and permits obtained pursuant to the described applications are the property of ASLD and will only be transferred to the successful bidder, if any, at the time the land is auctioned for sale or lease at some point in the future.

8. The Jurisdiction is authorized to enter and inspect the subject property.

9. This authorization may be revoked at any time without notice and in no way creates an obligation on the part of ASLD of any kind.

10. The terms of the solar lease allow the lessee to grant easements through the leased parcel only if those easements support the purpose of the lease.

All information will be provided to Ray Moore, ASLD Sales and Commercial Leasing with a copy to Rhonda Buss, ASLD Planning and Engineering Section. ASLD appreciates your consideration in this matter and looks forward to working with you through this process. Please contact Ray Moore at 602-364-1126 or rmoore@azland.gov or Rhonda Buss at 602-542-3126 or rbuss@azland.gov if you have any questions.

Sincerely,

Karen Dada, AICP
Assistant Director, Real Estate Division

cc: Ray Moore, ASLD Sales and Commercial Leasing
Rhonda Buss, ASLD Planning and Engineering

Silver King Energy Center

Traffic Impact Statement

PZ-PA-010-25

JULY 2025



Prepared By:

Kimley»Horn

Kimley-Horn Project Number: 292140000

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1 EXISTING CONDITIONS

The following Traffic Impact Statement (TIS) has been prepared to identify the potential traffic impacts associated with the operations of the Silver King Energy Center.

1.1 SITE LOCATION

The Project location consists of +/- 8,983 acres of undeveloped vacant land in Pinal County near Queen Valley, AZ. The project is located southwest of U.S. Route 60 (US 60) and west of State Route 79 (SR 79). **Figure 2** depicts the project location with a regional context.



Figure 1: Regional Vicinity Map

1.2 SURROUNDING LAND USE

The land immediately surrounding the proposed site area consists of vacant land in an arid climate with desert brush vegetation and natural washes. There is an existing substation directly northeast of the site that accesses US 60 west of SR 79 at E. Florence Substation Road.

1.3 EXISTING ROADWAYS

Because the site is within vacant land, some of the roadways adjacent to the project site are unpaved. The remainder of this section describes the roadways near the project site and other major roadways in the area that are expected to be used to access the site once the site is built out.

U.S. Route 60 is located approximately one mile north of the project site with a general northwest-southeast alignment in this vicinity. US 60 is a four-lane divided freeway with a 70-foot dirt median with paved shoulders in this vicinity. The posted speed limit is 65 mph. US 60 is classified by ADOT's Federal Functional Classification system as a Principal Arterial – Freeway.

State Route 79 is located approximately 1.2 miles east of the project site with a general north-south alignment in this vicinity. SR 79 is a two-lane highway with paved shoulders. The posted speed limit is 45 mph in the vicinity of US 60/SR 79 traffic interchange (TI) and changes to 65 mph approximately 0.75 miles south of the TI. SR 79 is classified by ADOT's Federal Functional Classification system as an Other Principal Arterial.

Florence Substation Road is not classified and is assumed to be a private road. It is an unpaved road with no posted speed limit and is aligned northeast-southwest in the vicinity of the project site. This is one of the proposed access locations.

Unnamed Dirt Road is not classified and is not a Forest Service road. The roadway has access to SR 79 approximately 1.15 miles south of the US 60/SR 79 TI and provides a route to Mormon Tank, a reservoir. This is the second proposed access location.

Daily traffic volumes for roadways in the vicinity of the site were obtained using the Maricopa Association of Governments (MAG) Transportation Data Management System (TDMS) database. The most recent average annual daily traffic (AADT) traffic volumes where counts were available are summarized in **Table 1**. **Appendix A** contains a more detailed breakdown of the count station information for each location ID.

Table 1: Existing Average Daily Traffic Volumes

Roadway and Segment Location	Location ID	2024 NB/EB AADT	2024 SB/WB AADT	2024 Total AADT
US 60 Two-Way, west of SR 79	34623	9,028	9,148	18,175
SR 79 Two-Way, south of US 60	35563	3,886 *	3,965 *	7,852 *

~ The directional counts were not reported
* Counts are from 2019

2 PROPOSED CONDITIONS

The proposed site plan includes generation of approximately 1,100 megawatts (MW) from a combination of solar photovoltaic (PV), Battery Energy Storage System (BESS), and thermal generation systems.

2.1 SITE ACCESS, DRIVEWAY SPACING, AND SIGHT DISTANCE

Primary site access is proposed to be provided along U.S. Route 60 and State Route 79. All deliveries and heavy vehicle traffic are expected to use these primary access routes to access the project site.

Access into the different parts of the site is proposed at the two existing driveways shown in **Figure 3**.

- Driveway 1 is located on US 60 approximately 1 mile west of SR 79 and will be right-in-right-out access only. This is a private driveway and coordination with the property owner will need to occur.
- Driveway 2 is located on SR 79 approximately 1 mile south of US 60 and will be full access.

Section 2.5 of the *Pinal County Roadway Design Manual* requires that driveways be spaced a minimum of 275 feet from adjacent intersections and driveways on roads with speed limits of 50 mph. Based on the site plan for the development, the proposed driveway locations meet this spacing requirement. The area surrounding the proposed site is relatively flat with little to no vegetation to interfere with sight distance at intersections. As the site is designed and constructed, proper sight triangles shall be provided to allow for adequate sight visibility at intersections and driveways.

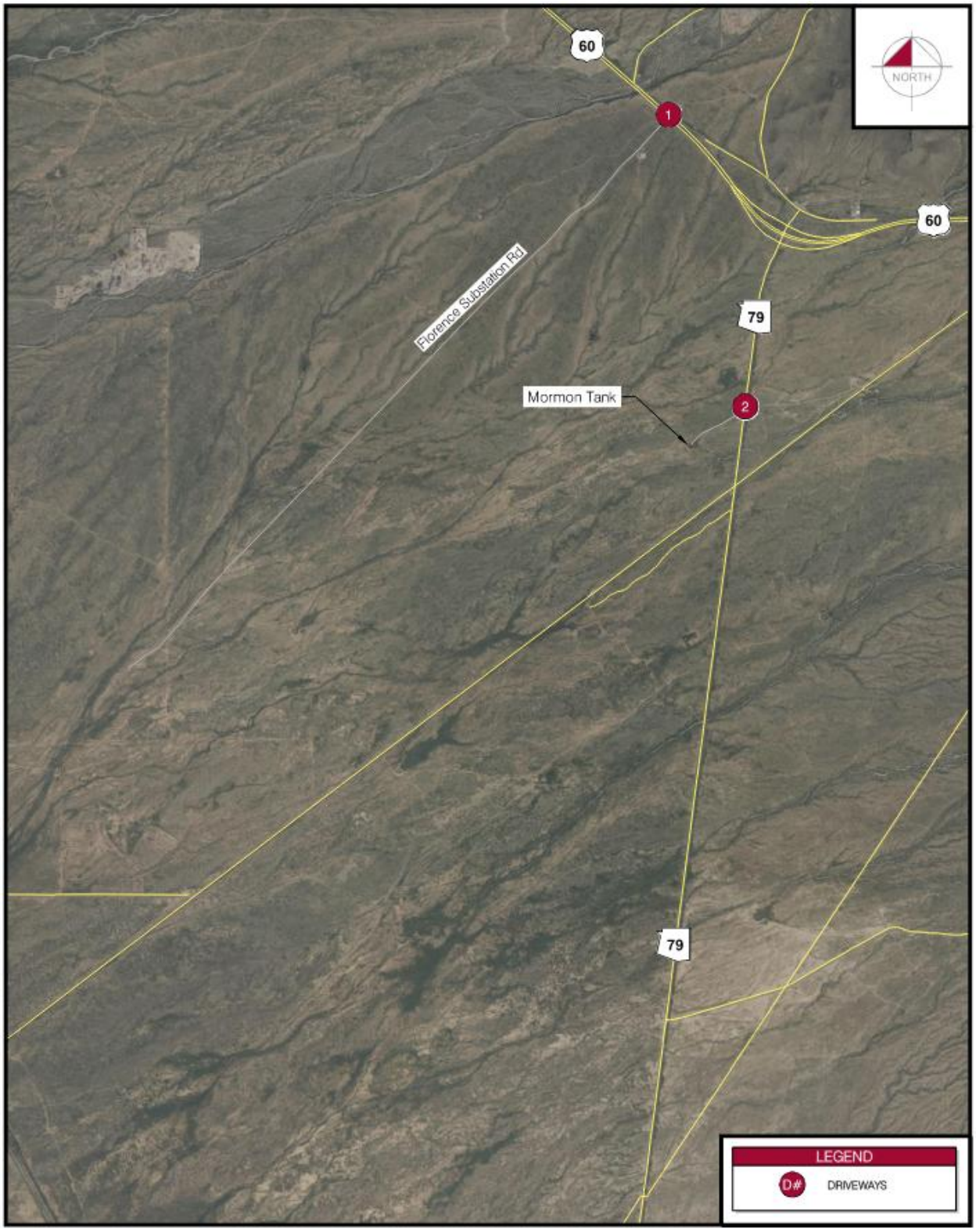

Figure 3: Site Access Locations

2.2 TRIP GENERATION

Based on the existing roadway network and surrounding area, it is assumed that the Project traffic will access the site from the west via U.S. Route 60 and State Route 79. It is assumed that Project traffic will be equal at both driveways.

The energy center will generally be unmanned during typical operations. However, it is anticipated that workers will access the site periodically for regular maintenance and related activities. For purposes of this TIS, it is anticipated that the site could generate up to two visits to and from the site during a typical day. It is assumed that one of these visits would occur in the AM peak hour and the other in the PM peak hour.

Due to the site layout, it may require workers to access both site driveways during a single visit to the facility. For example, maintenance activities may require a worker to access driveways 1 and 2 (see **Figure 3**) during a single visit resulting in one trip in and one trip out at each driveway, or a total of four trips. The worst-case scenario would be one trip in and one trip out at each driveway for each visit with 5 separate vehicles making the trips each day. This would result in 40 total daily trips (20 occurring in the AM peak hour and 20 occurring in the PM peak hour). The worst-case trip generation is summarized in **Table 2**.

Table 2 : Trip Generation Summary

Trip Destination	Daily Trips	AM Trips		PM Trips	
		Inbound	Outbound	Inbound	Outbound
Driveway 1 Trips	20	5	5	5	5
Driveway 2 Trips	20	5	5	5	5
Total Potential Driveway Trips	**40**	**10**	**10**	**10**	**10**

3 IMPACTS TO ADJACENT EXISTING INFRASTRUCTURE

The following sections discuss potential traffic impacts or needs based on anticipated development traffic.

3.1 AUXILIARY LANES

The ADOT Traffic Engineering Guidelines and Processes (TGP) provides criteria for when right turn auxiliary lanes and left turn auxiliary lanes are to be provided at site access driveways.

ADOT requires the installation of a right turn lane at a project access drive when the following is met:

- A right-turn lane is warranted when the number of right turns exceeds the minimum right-turn traffic volume corresponding to the volume of traffic in the advancing direction, the number of thru lanes per direction, and the posted speed limit

Peak Hour Traffic Volume on the Highway in Advancing Direction	Minimum Peak Hour Right-turn Traffic Volume				
	# of thru lanes per direction				
	1		2		3
	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed	All Speeds
≤ 200					
201 – 300	-	30	-	-	-
301 – 400	-	19	-	55	-
401 – 500	85	14	-	30	-
501 – 600	58	12	140	25	-
601 – 700	27	9	80	18	-
701 – 800	20	8	53	15	-
801 – 900	12	7	40	12	-
901 – 1000	9	6	30	11	-
1001 – 1100	8	5	23	9	18
1101 – 1200	7	5	18	8	16
1201 – 1300	6	4	14	8	15
1301 – 1400	6	4	11	6	12
1400+	5	3	8	6	10

Source: ADOT TGP

Figure 4: ADOT Right Turn Lane Warrant Volume Criteria

It is not anticipated that either of the site driveways will have more than 20 total daily trips (10 inbound / 10 outbound). According to the MAG TDMS, the collected daily eastbound traffic volume on US 60 west of SR 79 was 9,028. Assuming a 10% K-factor, the existing peak hour volume is about 903 vehicles. The predicted number of peak-hour right turns is 5, which does not exceed the threshold of 11, as seen in **Figure 4**. As for the driveway on SR 79, the collected daily southbound traffic volume on SR 79 south of US 60 was 3,965. Assuming a 10% K-factor, the existing peak hour volume is about 397 vehicles. The predicted number of peak-hour right turns is 5, which also does not exceed the threshold of 19, as seen in **Figure 4**. As such, right turn lanes are not warranted at either site access driveway.

ADOT requires the installation of a left turn lane at a project access drive when the following are met:

- A left-turn lane is warranted when the number of left turns exceeds the minimum left-turn traffic volume corresponding to the volume of traffic in the advancing direction, the number of thru lanes per direction, and the posted speed limit

Peak Hour Traffic Volume on the Highway in Advancing Direction	Minimum Peak Hour Left-turn Traffic Volume			
	# of thru lanes per direction			
	1		2 (Undivided)*	
	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed
≤ 200	30	15	-	-
201 – 300	12	12	40	30
301 – 400	12	12	30	25
401 – 500	12	12	25	18
501 – 600	12	12	15	12
601 – 1000	12	12	10	8
1000+	12	8	10	8

*On non-freeway divided highways, left-turn or U-turn lanes should be provided at median breaks.

Source: ADOT TGP

Figure 5: ADOT TGP Left Turn Lane Warrant

It is not anticipated that any one of the site driveways will have more than 20 total daily trips (10 inbound / 10 outbound). The collected daily northbound traffic volume on SR 79 south of US 60 was 3,886. Assuming a 10% K-factor, the existing peak hour volume is about 389 vehicles. The number of predicted left turns is below the threshold of 12, as seen in **Figure 4**.

It is not recommended to include left-turn access into Driveway 1 from US 60 because that would require crossing a divided highway with two lanes in each direction, and such a crossing would not be warranted with the number of left turns that would take place. Therefore, left turn lanes are not warranted at any site access driveways.

3.2 POTENTIAL TRAFFIC IMPACTS

Pinal County currently does not have established daily thresholds for achieving desired levels of service (LOS). Therefore, Maricopa County Department of Transportation (MCDOT) daily volume thresholds were used for this site. As part of the *MCDOT Roadway Design Manual*, MCDOT has developed daily volume thresholds to achieve the desired LOS for various types of urban and rural roadways. The MCDOT table is provided in **Appendix B**.

Using this MCDOT table, **Table 3** summarizes the existing traffic volume on US 60 and SR 79 which are expected to be used by the project traffic to access the site during normal operations after buildout of the site.

The roadways being evaluated have the following federal classifications and correlating *MCDOT Roadway Design Manual* classifications:

- US 60
  - Federal Functional Class. Principal Arterial – Freeway
  - MCDOT Functional Class. Rural Parkway
  - Desired LOS C or better
- SR 79
  - Federal Functional Class. Other Principal Arterial
  - MCDOT Functional Class. Rural Principal Arterial
  - Desired LOS C or better

Table 3 : Summary of Potential Daily Traffic

Roadway	Road Classification (per Major Streets Plan map)	No. of Lanes	Median	VPD Max to Achieve Desired LOS	Existing Daily Volume	Segment LOS
U.S. Route 60	Principal Arterial Freeway	4	Divided	36,900	18,175	B
State Route 79	Other Principal Arterial	2	Undivided	10,600	7,852	C

The *MCDOT Roadway Design Manual* and *ADOT Traffic Guidelines and Processes* recommend that roadways operate at LOS C or higher. The most recent AADT for both roadways are below the design threshold for principal arterials in existing conditions. In addition, the combination of the existing daily volumes and anticipated trips generated from the development is still considerably less than this design threshold.

The traffic generated by this development is not anticipated to increase the existing daily volume above the maximum daily volume required to achieve an acceptable LOS on the roadways anticipated to carry project traffic. Therefore, it is anticipated that no traffic mitigation will be needed for either roadway.

4 CONSTRUCTION TRAFFIC ESTIMATION

Based on similar energy facilities construction trip generation estimates and assuming a single phase to construct the development, it is expected that the project site will generate approximately 2,740 vehicles per day (vpd) with 459 heavy vehicle trips per day during peak construction.

An estimated 723 trips will occur during both the AM and PM peak hours. Of those trips there are 92 heavy vehicles trips during each of the AM and PM peak hours (46 trips in and 46 trips out during each peak hour). It is expected that heavy vehicle trips will be primarily for deliveries. Additionally, it is expected that the project site will generate approximately 631 additional vehicles trips in during the AM peak hour and 631 additional vehicle trips out during the PM peak hour.

It is assumed that all workers will enter the site via US Route 60 and exit the site via State Route 79. **Table 3** of this TIS shows that the existing daily volume on SR 79 in the project vicinity is 7,852 vpd. The construction traffic generated by this site is anticipated to add 1,370 daily trips to SR 79 from vehicles leaving the construction site and heading north to US 60. If all the out trips are added to SR 79, this will bring the total volume on SR 79 to 9,222 vpd, which is under the 10,600 vpd threshold for LOS C.

US Route 60 is anticipated to have 2,740 vpd added to it during peak construction. The increased traffic is not anticipated to change the current LOS B with peak construction traffic. The existing daily volume (18,175 vpd) is 18,725 vpd under the desired maximum (36,900 vpd) for LOS C.

Based on the roadway capacities construction traffic, it is not anticipated that the surrounding roadways will require mitigations to accommodate site traffic volume during construction.

5 CONCLUSIONS

Based on the current roadway network conditions, existing traffic volumes, and anticipated project traffic, all study roadways within the study area are anticipated to provide access to the site without creating/worsening unwanted traffic operations issues. Additionally, based on Pinal County standards, auxiliary turning lanes are not anticipated to be required at the project access driveways. However, appropriate sight triangles should be maintained at all driveways and other intersections within the project site.

APPENDIX A – MAG TDMS STATION DATA

Record 1 of 1 Goto Record go

Location ID	34623	MPO ID	
Type	LINK	HPMS ID	
On NHS	No	On HPMS	No
LRS ID	U 060	LRS Loc Pt.	175.1792
SF Group	R2-7-MAG (2024)	Route Type	
AF Group	R2-7-MAG (2024)	Route	
GF Group	R2-7-MAG (2024)	Active	Yes
Class Dist Grp		Category	
Seas Clss Grp	R2-7-MAG (2024)		
WIM Group			
QC Group	Default		
Fnct'l Class	(3) Other Principal Arterial	Milepost	
Located On	US-60		
Loc On Alias			
From Road	E Peralta Rd SB		
To Road	E El Camino Viejo		

More Detail

STATION DATA

Directions: 2-WAY EB WB

AADT

	Year	AADT	DHV-30	K %	D %	PA	BC	Src
	2024	18,175[3]						Grown from 2023
	2023	18,067	1,416	8	51			
	2022	14,772[3]						Grown from 2021
	2021	14,328[3]						Grown from 2020
	2020	12,635[3]						Grown from 2019

|<< < > >>| 1-5 of 11

Directions: 2-WAY EB WB

AADT

	Year	AADT	DHV-30	K %	D %	PA	BC	Src
	2024	9,028[3]						Grown from 2023
	2023	8,974	721	8				
	2022	7,446[3]						Grown from 2021
	2021	7,222[3]						Grown from 2020
	2020	6,369[3]						Grown from 2019

|<< < > >>| 1-5 of 11

Directions: 2-WAY EB WB

AADT

	Year	AADT	DHV-30	K %	D %	PA	BC	Src
	2024	9,148[3]						Grown from 2023
	2023	9,093	695	8				
	2022	7,328[3]						Grown from 2021
	2021	7,108[3]						Grown from 2020
	2020	6,268[3]						Grown from 2019

|<< < > >>| 1-5 of 11

Record 1 of 1 Goto Record go

Location ID	35563	MPO ID	
Type	LINK	HPMS ID	
On NHS	No	On HPMS	No
LRS ID	S 079	LRS Loc Pt.	57.8409
SF Group	R2-7-MAG (2024)	Route Type	
AF Group	R2-7-MAG (2024)	Route	
GF Group	R2-7-MAG (2024)	Active	Yes
Class Dist Grp		Category	
Seas Clss Grp	R2-7-MAG (2024)		
WIM Group			
QC Group	Default		
Fnct'l Class	(3) Other Principal Arterial	Milepost	
Located On	SR-79		
Loc On Alias			
From Road	N Highway 79		
To Road	E Old Us-60		

More Detail

STATION DATA

Directions: 2-WAY NB SB

AADT

	Year	AADT	DHV-30	K %	D %	PA	BC	Src
	2024	7,852[3]						Grown from 2023
	2023	7,805[3]						Grown from 2022
	2022	7,462[3]						Grown from 2021
	2021	7,238[3]						Grown from 2020
	2020	6,383[3]						Grown from 2019

|<< < > >>| 1-5 of 6

Directions: 2-WAY NB SB

AADT

	Year	AADT	DHV-30	K %	D %	PA	BC	Src
	2024	3,886[3]						Grown from 2023
	2023	3,863[3]						Grown from 2022
	2022	3,693[3]						Grown from 2021
	2021	3,582[3]						Grown from 2020
	2020	3,159[3]						Grown from 2019

|<< < > >>| 1-5 of 6

Directions: 2-WAY NB SB

AADT

	Year	AADT	DHV-30	K %	D %	PA	BC	Src
	2024	3,965[3]						Grown from 2023
	2023	3,941[3]						Grown from 2022
	2022	3,768[3]						Grown from 2021
	2021	3,655[3]						Grown from 2020
	2020	3,223[3]						Grown from 2019

|<< < > >>| 1-5 of 6

APPENDIX B – MCDOT ROADWAY DESIGN GUIDE LOS TABLE

MCDOT Roadway Design Manual

Rural Roadway Planning Level Traffic							
Functional Classification	**Lanes**	**Median**	**LOS B**	**LOS C**	**LOS D**	**LOS E**	**Peak Hour/ ADT% (K)**
Parkway	4	Divided	23,600	36,900	47,600	54,400	8
	6	Divided	35,400	55,500	71,300	81,500	
Principal Arterial	2	Undivided	6,700	10,600	11,500	12,000	8
	2	Divided	7,100	11,200	12,200	12,700	
	3	Undivided	10,300	16,800	17,900	18,600	
	3	Divided	11,000	17,800	19,000	19,700	
	4	Undivided	13,900	22,900	24,200	25,100	
	4	Divided	14,800	24,400	25,700	26,700	
	5	Undivided	17,600	28,800	30,400	31,800	
	5	Divided	18,800	30,700	32,300	33,800	
	6	Undivided	21,300	34,700	36,500	38,400	
	6	Divided	22,700	36,900	38,800	40,800	
Minor Arterial	2	Undivided	6,000	9,500	10,400	10,800	8
	2	Divided	6,400	10,100	11,000	11,400	
	3	Undivided	9,300	15,100	16,100	16,700	
	3	Divided	9,900	16,100	17,100	17,700	
	4	Undivided	12,600	20,700	21,700	22,600	
	4	Divided	13,400	22,000	23,100	24,000	
	5	Undivided	15,900	26,000	27,300	28,600	
	5	Divided	16,900	27,600	29,000	30,400	
	6	Undivided	19,200	31,200	32,800	34,500	
	6	Divided	20,400	33,210	34,920	36,720	
Major Collector	2	Undivided	5,600	8,800	9,300	10,000	10
	2	Divided	5,900	9,300	9,900	10,600	
	3	Undivided	8,600	13,800	14,500	15,400	
	3	Divided	9,100	14,600	15,400	16,300	
	4	Undivided	11,500	18,700	19,600	20,700	
	4	Divided	12,200	19,900	20,800	22,000	
	5	Undivided	14,200	23,000	24,100	25,500	
	5	Divided	15,000	24,500	25,600	27,100	
	6	Undivided	16,800	27,300	28,600	30,300	
	6	Divided	17,889	29,000	30,400	32,200	
Minor Collector	2	Undivided	5,000	7,900	8,400	9,000	12
	2	Divided	5,300	8,400	8,900	9,500	
	3	Undivided	5,500	9,000	9,400	9,900	
	3	Divided	8,200	13,200	13,800	14,700	
	4	Undivided	10,300	16,800	17,600	18,600	
	4	Divided	11,000	17,900	18,700	19,800	
Local	2	Undivided	1,100	1,800	1,900	2,000	15

Existing Conditions Hydrology Study

Silver King Energy Center
Pinal County, Arizona

Application #: PZ-PA-010-25

Prepared For

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EXECUTIVE SUMMARY

Silver King Solar LLC has retained the services of Kimley-Horn and Associates, Inc. to conduct hydrologic and hydraulic analyses for the proposed Silver King Energy Center ±8,983 acres consisting of an up to 1,100 megawatts (MW) from a combination of solar photovoltaic (PV), Battery Energy Storage System (BESS), and thermal generation systems. The project site is located approximately thirteen (13) miles north of the Town of Florence in Pinal County, Arizona on land owned by the Arizona State Land Department (ASLD).

The purpose of this analysis is to understand the peak inundation depths, velocities, and scour potential associated with the 100-year, 25-year, 10-year and 2-year design storm events on the subject property in existing conditions. The following report describes the methodology used to perform this analysis and existing drainage patterns.

To understand flooding in the existing conditions, hydrologic and hydraulic analyses were performed using the U.S. Army Corps of Engineers HEC-RAS 2-D (version 6.5) hydrologic/hydraulic modeling software. One (1) offsite stage hydrograph for Queen Creek was developed from the *Queen Creek Floodplain Delineation Study Letter of Map Revision (LOMR) Case No. 12-09-1236P*, effective January 7, 2013.

Results of the analysis are detailed in the figures included in **Appendix A** and summarized in the *Results* section.

INTRODUCTION

Silver King Solar LLC has retained the services of Kimley-Horn and Associates, Inc. (Kimley-Horn) to prepare an Existing Conditions Drainage Analysis for the Silver King Energy Center. The purpose of this drainage analysis is to identify potential inundation limits, velocity, and scour potential during the 100-year storm event within this location. The following report describes the methodology used to perform this analysis and existing drainage patterns.

Site Description

The project site is located approximately thirteen (13) miles north of the Town of Florence in Pinal County, Arizona on land owned by the Arizona State Land Department (ASLD). The project is generally bound by US Route 60 (Superstition Freeway) to the north, Arizona State Route 79 (AZ-79) to the east, Skyline Drive to the southwest, Arizona Farms Road to the south with the existing Magma Arizona Railroad bisecting the project site. The project has an overall project boundary area of approximately ±8,983 acres. The majority of the site consists of existing desert shrub and existing natural channels. The site generally slopes from the northeast to the southwest. The Project is made up of twenty (20) parcels within Sections 13, 14, 22, 23, 24, 25, 26, 27, 34, 35, 36 in Township 2 South, Range 9 East; Sections 18, 19, 30, and 31 in Township 2 South, Range 10 East; Sections 1, 2, 11, and 12 in Township 3 South, Range 9 East; and Section 6 in Township 3 South, Range 10 East of the Gila and Salt River Meridian in Pinal County, Arizona. **A Vicinity Map** showing the location and project site limits of Frontier West Solar is included in **Appendix A**.

Land Use Conditions

The project site has a zoning classification of Moderate Low Density Residential; therefore, the proposed improvements will require a zone change.

Flood Hazard Designation

A majority of the project site lies within a **FEMA-designated Zone X** with a **FEMA-designated Zone A** (**Magma Wash**) traversing the project site as determined by FIRM Panel Numbers **04021C0225E**, **04021C0240E**, **04021C0500E, 04021C0525E** effective, **December 3, 2007**. **Zone X** is described to be outside the 2% annual chance flood (500-year). Additionally, the site lies south of the **FEMA-designated Zone A** (Queen Creek). **Zone A** is described to be a Special Flood Hazard Area (SFHA) subject to inundation by the 1% annual chance flood (100-year) with no base flood elevations determined. Refer to **Figure 7 - FEMA Flood Hazard Map** in **Appendix A**. The project site is located within the Pinal County **Queen Creek** and **Gila River North Watersheds**. Queen Creek is located approximately 2,000 feet north of the project and the effective FEMA floodplain delineation does not impact the site. A small portion of the southern area of the project site is impacted by the FEMA-designated **Zone A**. The tributary watershed for the project site flows from the northeast to the southwest. Approximately **±40 square miles of the project watershed** drains directly through the project site from the northeast. In sheet flow conditions, off-site flows will combine with on-site flows to maintain the historical outflow condition.

HYDROLOGIC / HYDRAULIC METHODOLOGY

The hydrologic/hydraulic model and design of this site development are in compliance with local requirements.

The project area was modeled using **HEC-RAS v. 6.5** hydrologic and hydraulic modeling software. Refer to **Figure 3** for the **Drainage Area Map** in **Appendix A**. A two-dimensional (2D) overland flow analysis was prepared for the site. More specifically:

- The **SCS Type II Distribution for the 24-hour duration** and **Maricopa County Pattern No.4 distribution for the 6-hour duration**, was used to estimate the **100-year** rainfall distributions, rainfall losses, and direct runoff.
- Watershed delineations and the terrain for the 2D Analysis was established using the United States Geological Survey (USGS) 2020 **1-meter cell size LiDAR.**
- Hydrologic Soil Data was collected from the **USDA NRCS Web Soil Survey** and Arizona Department of Transportation website. See **Figure 5** for NRCS Soils.
- The **Green-Ampt method** was used to estimate rainfall losses, percolation, and runoff. Green-Ampt parameters were derived from NRCS Soil Survey information, the *ADOT Manual* and the *HEC-RAS River Analysis System 2D Modeling User's Manual v.6.5*.
- Rainfall data for the **100-year, 25-year, 10-year and 2-year 24-hour** and **6-hour** rainfall events were obtained from National Oceanic and Atmospheric Administration **(NOAA) Atlas 14**. See **Figures 6A** through **6H** for Precipitation depths.
- Existing land use was delineated using the **2023 National Land Cover Database** (NLCD) and available aerial imagery. See **Figure 4** for **Landuses**.
- Manning's "n" values were assigned based on existing land uses as defined by aerial imagery and the National Land Cover Database and the *HEC-RAS River Analysis System 2D Modeling User's Manual v.6.5*.
- A two-dimensional **(2D) HEC-RAS v. 6.5 model** with a **50 ft x 50 ft grid** was prepared with one (1) stage hydrograph location to estimate depth and velocity across the watershed (**2DMODELAREA**).
- The peak inflows for Queen Creek located upstream of the project location were referenced from the *Queen Creek Floodplain Delineation Study Letter of Map Revision (LOMR) Case No. 12-09-1236P*, effective January 7, 2013. A triangular 24-hour stage hydrograph with the peak 100-year water surface elevation of **1,935 feet** at 12-hours was used at the inflow boundary.

HYDROLOGY

Drainage Areas and Flow Patterns

The subbasins and flow patterns used for the hydrologic and hydraulic modeling were determined from elevations established for the project site in a master grading digital file. 1-meter USGS topographic data has been used for the analysis. Refer to **Figure 2** in **Appendix A** for the **Topographic Map**.

Model Description

Hydrologic modeling was performed using the U.S. Army Corps of Engineers' (USACE) **HEC-RAS version 6.5** for onsite runoff peak discharges.

Infiltration losses and excess precipitation for the two-dimensional (2D) model area were calculated using the **Green-Ampt method**. Green-Ampt loss parameters were used to generate an infiltration layer within HEC-RAS based on variations in soil type. The infiltration layer allows for spatially varied infiltration losses of precipitation within the HEC-RAS Model. Rainfall that does not infiltrate is converted to surface runoff.

Hydraulic modeling of the site was performed using the U.S. Army Corps of Engineers **HEC-RAS v. 6.5** hydraulic modeling software using the standard methods required by the program for two-dimensional (2D) modeling. HEC-RAS 2D is a two-dimensional hydrodynamic routing model that performs hydraulic routing using the Implicit Finite Volume solution to the 2D unsteady flow equations. This type of model is generally used to estimate flooding limits and velocity distributions for both confined and unconfined flow. A 2D computational mesh covering the site extents uses cells to establish a water surface elevation using the topography and applies the flow across the networks of geometrical cells or 2D mesh to run unsteady hydraulic calculations, compute water surface profiles, and create inundation mapping.

A 2D computational mesh based on the composite topographic information was generated in HEC-RAS 2D to perform onsite hydraulic modeling. A digital elevation model (DEM) surface for the project was imported into HEC-RAS. A computational grid was created for the surface to develop rating tables for the elevation-volume relationship of each grid cell. HEC-RAS also cuts cross sections at each cell face of the computational grid to simulate flow more accurately between cells. The 2D model area consists of the project site and offsite areas that drain through the project site. A **grid size of 50'x50'** was used for the study model area. Refer to **Figure 8** for the **Model Schematic Map** in **Appendix A**.

The computational grid mesh was refined by adding breaklines to subdivide cells along important hydraulic features such as channels, roads, culverts, and berms. Cells immediately adjacent to breaklines have a 10'x10' cell size at minimum. As the distance from their respective breakline increases, cells increase in size until they reach the maximum cell size of the model.

Inflow and outflow boundary conditions were defined at the limits of the 2D model area. The 100-year peak stage hydrograph for Queen Creek was applied to the HEC-RAS **2DMODELAREA** as a boundary condition at the offsite inflow location. The 100-year peak water surface elevation of 1,935 feet for Queen Creek was referenced from the *Queen Creek Floodplain Delineation Study Letter of Map Revision (LOMR) Case No. 12-09-1236P*,effective January 7, 2013. Outflow boundary conditions were set to a normal depth condition.

Sixty-three (**63**) existing culverts were modeled using a combination of aerial imagery, available LiDAR information, and data from the Arizona Department of Transportation (ADOT). Engineering judgement was used to set entrance and exit loss coefficients for culvert pipes.

The flow direction, depth, and velocity are based on several factors, including topography and surface roughness. Manning's "n" values were assigned within the project area based on the existing land use, aerial imagery of the project site and available LiDAR information. **Roughness coefficients** (**Manning's "n")** listed in **Table 1** were assigned for shallow flow friction losses according to land cover and level of ground cover. Refer to **Figure 4** for the **Land Use Map** in **Appendix A**. Details of the flow sources and methodologies are provided in the *Existing Conditions* section of this report.

Table 1. Land Use Parameters and Manning's n-Values

Land Use Classification	Manning's n-Value
Barren Land	0.030
Cultivated Crops	0.050
Developed, High Intensity	0.150
Developed, Low Intensity	0.080
Developed, Open Space	0.040
Grassland-Herbaceous	0.050
Gravel Road	0.030
Paved Road	0.030
Shrub-Scrub	0.080
Woody Wetlands	0.120

Precipitation Data

The 100-year, 25-year, 10-year and 2-year, 24-hour and 6-hour, storm events were modeled for this analysis to determine the controlling storm duration for the site. When comparing the model results, the 24-hour storm duration is the controlling storm duration for the subject tract due to the size of the contributing drainage watershed. Rainfall data for the subject tract was determined from **NOAA Atlas 14** at the centroid of the study area. Refer to **Figures 6A** through **6H** for the **Precipitation Map** in **Appendix A.**

Table 2. Rainfall for Model Area

Storm Event	Rainfall [in]
100-Year, 24-Hour	4.02
100-Year, 6-Hour	2.76

Storm Event	Rainfall [in]
25-Year, 24-Hour	3.15
25-Year, 6-Hour	2.18
10-Year, 24-Hour	2.62
10-Year, 6-Hour	1.82
2-Year, 24-Hour	1.75
2-Year, 6-Hour	1.22

Design storm distributions were developed for the rainfall distribution region using the **SCS Type II distribution for the 24-hour duration** and the **Pattern No.4 distribution for the 6-hour duration**, obtained from the *Drainage Design Manual for Maricopa County - Hydrology*. The rainfall timeseries were distributed evenly across the HEC-RAS 2-D mesh as a rain on grid boundary condition. No transform method was applied to the runoff hyetograph since routing is performed by the 2-D hydraulic model.

Soils Data

The soils information for the project watershed was referenced from the ***Soil Survey of Eastern Pinal and Southern Gila Counties, Arizona*** (**AZ661**) and ***Tonto National Forest, Arizona, Parts of Gila, Maricopa, Pinal and Yavapai Counties*** (**AZ687**) prepared by the United States Department of Agriculture Natural Resources Conservation Services (USDA:NRCS). *Custom Soil Resource Reports* for the project site and offsite areas are included in **Appendix B**. Note that the easternmost portion of the watershed identifies Soil Type "NOTCOM" indicating there is no digital data available; therefore, the properties of the adjacent Soil Type 150 from Soil Survey AZ661 were assumed for areas identified as "NOTCOM". Refer to **Figure 5** for the **Soils Map** in **Appendix A**.

Rainfall Losses

The Green and Ampt method was utilized to account for infiltration losses. The Green & Ampt parameters for the property were determined using detailed soils data from the *NRCS Soil Survey* Geographic Database (**Figure 5**) and infiltration parameters obtained from *Arizona Department of Transportation (ADOT)* Soil Data shape files and the *HEC-RAS 2D Manual*. Refer to **Appendix B**). Green and Ampt rainfall loss parameters were assigned in HEC-RAS for wetting front suction (PSIF), hydraulic conductivity (XKSAT), initial soil water content (WPOINT), saturated soil water content (SAT), residual soil water content, and pore size distribution index. See **Table 3** for a summary of the rainfall loss parameters used for this analysis.

Table 3. Soils Rainfall Loss Parameters

NRCS Soil Survey	Map Unit Symbol	Soil Texture	PSIF [in]	XKSAT [in/hr]	WPOINT	SAT (Volume Ratio)	Residual Soil Water Content	Pore Size Distribution Index
AZ661	3	Beardsley-Hickiwan complex, 1 to 8 percent slopes	0.19	0.43	16.34	0.06	0.09	0.165
AZ661	4	Beardsley-Suncity complex, 1 to 10 percent slopes	0.19	0.43	16.61	0.07	0.09	0.165
AZ661	11	Carrizo family-Brios-Riverwash complex, 0 to 5 percent slopes	0.06	0.4	4.46	0.84	0.02	0.694
AZ661	15	Cellar-Anklam-Rock outcrop complex, 20 to 70 percent slopes	0.07	0.4	4.29	0.44	0.041	0.378
AZ661	16	Cellar-Rock outcrop complex, 5 to 70 percent slopes	0.07	0.39	4.42	0.36	0.041	0.378
AZ661	24	Contine loam, 0 to 3 percent slopes	0.21	0.44	17.55	0.04	0.09	0.165
AZ661	26	Dateland loam, 0 to 2 percent slopes	0.08	0.39	13.78	0.38	0.027	0.252

NRCS Soil Survey	Map Unit Symbol	Soil Texture	PSIF [in]	XKSAT [in/hr]	WPOINT	SAT (Volume Ratio)	Residual Soil Water Content	Pore Size Distribution Index
AZ661	27	Delnorte-Nahda complex, 3 to 20 percent slopes	0.17	0.44	8.27	0.07	0.041	0.378
AZ661	31	Denure sandy loam, 1 to 3 percent slopes	0.06	0.39	4.55	0.8	0.041	0.378
AZ661	32	Dateland-Denure complex, 0 to 3 percent slopes	0.06	0.4	3.87	0.82	0.041	0.378
AZ661	33	Denure-Mohall complex, 1 to 5 percent slopes	0.11	0.4	8.68	0.3	0.041	0.378
AZ661	34	Denure-Momoli complex, 1 to 10 percent slopes	0.07	0.4	4.66	0.71	0.041	0.378
AZ661	36	Ebon-Carrizo family complex, 0 to 10 percent slopes	0.1	0.41	10.95	0.28	0.09	0.165
AZ661	53	Hickiwan-Ajolito-Ajo complex, 3 to 20 percent slopes	0.17	0.43	12.99	0.06	0.027	0.252
AZ661	54	Hickiwan-Gunsight complex, 1 to 15 percent slopes	0.07	0.4	5.3	0.49	0.041	0.378
AZ661	61	Lehmans-Rock outcrop complex, 8 to 50 percent slopes	0.09	0.4	4.97	0.28	0.09	0.165
AZ661	63	Maripo sandy loam, 0 to 3 percent slopes	0.08	0.4	4.04	0.69	0.02	0.694
AZ661	64	Mined Land	0.3	0.48	11.42	0.01	0.109	0.223

NRCS Soil Survey	Map Unit Symbol	Soil Texture	PSIF [in]	XKSAT [in/hr]	WPOINT	SAT (Volume Ratio)	Residual Soil Water Content	Pore Size Distribution Index
AZ661	66	Mohall sandy loam, 0 to 3 percent slopes	0.06	0.4	4.06	0.84	0.075	0.242
AZ661	82	Rock outcrop-Lajitas complex, 5 to 60 percent slopes	0.12	0.4	15.65	0.09	0.027	0.252
AZ661	97	Tremant-Pinamt complex, 1 to 10 percent slopes	0.11	0.4	5.87	0.31	0.068	0.319
AZ661	105	Wikieup family very channery sandy loam, 10 to 60 percent slopes	0.09	0.39	5.2	0.33	0.041	0.378
AZ687	NOTCOM*	Wikieup family very channery sandy loam, 10 to 60 percent slopes	0.09	0.39	5.2	0.33	0.041	0.378

*NOTCOM= No Digital Data Available. Assumed adjacent Soil Type 150 from Soil Survey AZ661.

HYDROLOGY/HYDRAULICS - EXISTING CONDITIONS

The project specific existing conditions hydrology consists of the local rainfall-runoff generated within the 2D Model area (**2DMODELAREA**). **Figure 3 - Drainage Area Map** depicts the model domain and drainage patterns used in the existing conditions hydrologic analysis for this project (see **Appendix A**). Hydrologic calculations have been included in **Appendix B**.

A HEC-RAS 2D model was prepared with the 100-year, 25-year, 10-year and 2-year, 24-hour and 6-hour, offsite 100-year peak stage hydrograph for Queen Creek was conservatively inserted as the upstream boundary condition for all storm events. Note that the Queen Creek inundation limits do not impact the project site. The 100-year, 25-year, 10-year and 2-year, 24-hour and 6-hour, inundation depths and velocities were mapped based on the HEC-RAS model results. Refer to **Figures 9A** through **9H** for the maximum inundation depth exhibits for the 100-year, 25-year, 10-year and 2-year, 24-hour and 6-hour storm events. Refer to **Figures 10A** through **10H** for the maximum velocity exhibits for the 100-year, 25-year, 10-year and 2-year, 24-hour and 6-hour storm events.

Onsite Inundation Depth Summary

Flow is predominantly characterized within the watershed as overland flow. The 100-year, 24-hour and 6-hour peak inundation map shows limits of peak inundation for the site. The majority of the project site will not experience inundation depths greater than **0.5 feet**. The channelized areas adjacent to the project site show **2.0 to 3.0 feet** of inundation with a maximum of **13.0 feet** of ponding in the existing channels. Refer to **Figures 9A** through 9**H** for the Peak Inundation Maps. The 100-Year, 24-hour storm event generally causes higher levels of inundation.

Onsite Velocity Summary

The 100-year, 25-year, 10-year and 2-year, 24-hour and 6-hour, peak velocity maps show the range and limit of peak velocities for the respective storm events. The peak velocities experienced on the project site are generally less than **1.0 feet per second (ft/s)** in non-channelized portions of the project site. Transitional areas between non-channelized and channelized areas of the project site experience peak velocities of **1.0 ft/s to 2.0 ft/s**. Within channelized areas, peak velocities generally range between **2.0 ft/s to 3.0 ft/s** with some steeper channelized areas that exhibit velocities **greater than 5 ft/s**. Refer to **Figures 10A** through **10H** for the Peak Velocity Maps. The 100-Year, 24-hour storm event generally causes higher velocities.

Local Scour

The entire site is located in an area where flow naturally slopes from the northeast to the southwest. During storm events, sediment deposition is expected to be the dominant process on the site. However, localized zones of erosion and deposition could occur in and around the site during minor and major storms. Channels and gullies may form during storm events.

Calculations were performed to estimate the potential local scour depth at pile foundations during a 100-year, 25-year, 10-year and 2-year storm events. The basic mechanism causing scour around an obstruction, such as a pier or panel foundation, are flow jets which result from the backup of water on the upstream edge and subsequent acceleration of the flow around the nose of the obstruction. The spatial distribution of expected scour for existing conditions during a 100-year storm event are shown in **Figures 11A** through **11H** - **Existing Peak Scour Potential Maps**. The calculated pier scour depth is based on the modeled proposed maximum flow velocity and maximum flow depth. While the flow depth and flow velocity may not reach their maximum levels at the same time and location, this assumption produces a conservative estimate of scour for the entire site.

To estimate local scour, **Equation 7.1** of the FHWA HEC No. 18 "*Evaluating Scour at Bridges*" (April 2012) was used:

$$Ys = 2 * K_1 * K_2 * K_3 * a^{0.65} * y^{0.35} * Fr^{0.43}$$

Where:

Ys = Scour depth below existing ground

K_1 = Correction factor for pier nose shape (assumed Square Nose K_1 = 1.0)

K_2 = Correction factor for angle of attack (assumed 45 degrees K_2 = 1.3)

K_3 = Correction factor for pier nose shape (assumed Plane Bed K_1 = 1.1)

a = Pier width

y = Upstream flow depth

Fr = Upstream Froude Number

Correction factors were applied to account for the shape of the obstruction, angle of attack of the flow, and bed condition. Flow velocities and depths were obtained from the proposed HEC-RAS 2D model results. See **Appendix C** for scour calculations based on incremental maximum depths and velocities.

The type of pile foundation for the purposes of the local scour computations were conservatively assumed to consist of steel "c" posts having a flat face with a dimension of 6 inches normal to the flow direction.

It is anticipated that the local pier scour depth within the proposed area of work will be minimal due to the generally low velocities across the site; however, scour may occur over time from soil loss due to wind and rain events, particularly along existing draws within the project boundary. If areas of scour are evident during these inspections, they should be addressed as part of typical Operations and Management (O&M).

CONCLUSIONS AND RECOMMENDATIONS

Existing conditions hydrologic and hydraulic conditions during the 100-year storm event for **Silver King Energy Center** show that the principal areas of concern are within existing natural washes, local depressions, and places where flow from the natural washes are impounded by a roadway crossing. The following are recommended:

1. Project should be designed to be in compliance with the applicable drainage standards established by Pinal County and follow drainage laws recognized by the State of Arizona.

2. A portion of the project lies within a **FEMA-designated Special Flood Hazard Area (SFHA) Zone A** and a Shaded **Zone X.** Improvements in the Flood Zone are to be constructed at grade and shall not alter the Flood Zone A water surface elevation. Additionally, all sensitive electrical equipment shall be elevated to **12-inches above the 100-year water surface elevation.**

3. Offsite runoff from the 100-year storm shall be allowed to pass safely around and through the site. It is recommended that natural drainage features be maintained as much as possible. Ponding locations may be filled.

4. The 100-year 24-hour storm duration is the controlling storm duration for the subject tract due to the size of the contributing drainage watershed.

5. Drainage features should be avoided as locations for solar facilities.

6. Final Design should account for expected flood depths, velocities, and scour to protect infrastructure.

7. Depth at infrastructure locations should be identified. Any proposed solar facilities, including PV arrays at full tilt, within this project should be elevated a minimum of 12-inches above the 100-year water surface elevation across the project site and should be designed based upon generally accepted engineering practices and in accordance with local requirements.

8. Culvert crossings may be required to accommodate onsite access road crossings where they cross existing ditches.

9. All foundation designs shall assume unsupported depths accounting to the scour depths summarized on the scour exhibit. Regular and routine maintenance should be utilized where scour depths are less than 0.5 feet.

10. Stormwater management for sediment deposition before and after every measurable storm event should be addressed and incorporated into the final design. Regular and frequent monitoring of sediment and deposition following storm events is recommended after construction to ensure removal of deposition material and to fill areas of scour to re-establish the finish grade as necessary.

11. Developed onsite drainage flows will be managed by implementing retention facilities to store stormwater generated onsite to accommodate the 100-year, 2-hour storm runoff volume and limit the post-development peak discharges in accordance with Pinal County drainage design standards. Retention basins will include maximum basin side slopes of 4:1 for grassed areas and maximum side slopes of 3:1 where other protection measures are intended, such as shrub planting, rock riprap, or other structural measures. The geometry and location of the retention basins will be refined with construction documents. Retention basins within the development will be designed so stored runoff is disposed of within thirty-six (36) hours. The dewatering of the basins will be accomplished by bleeding off to adjacent watercourses or by percolation/infiltration into the ground. Drywells will be constructed as necessary based on soil percolation tests. All necessary drywells will be registered with the Arizona Department of Environmental Quality (ADEQ). Flows from the basins shall be in the location and direction of the historical flows. All drainage designs will adhere to the applicable design standards for Pinal County.

12. The overall site is suitable for the planned development by avoiding high flood depths and velocities within the natural washes and irrigation canal areas.

REFERENCES

1. Pinal County, *Drainage Manual Volume I Design Criteria*, August 2004.
2. Pinal County, *Drainage Manual Volume II Design Methodology and Procedures*, August 2004.
3. Arizona Department of Transportation, *Highway Drainage Design Manual Volume 2 Hydrology*, Second Edition, 2014.
4. United States Geological Survey. 1-meter DEMs, https://datagateway.nrcs.usda.gov/GDGOrder.aspx, Date Accessed June 2025.
5. U.S. Department of Agriculture, Natural Resources Conservation Service, *Soil Survey Geographic (SSURGO) database for Eastern Pinal and Southern Gila Counties, Arizona .*
6. U.S. Department of Agriculture, Natural Resources Conservation Service, *Soil Survey Geographic (SSURGO) database for Tonto National Forest, Arizona, Parts of Gila, Maricopa, Pinal and Yavapai Counties*
7. National Land Cover Database (NLCD), *NLCD 2023 Land Cover (CONUS)*, Multi-Resolution Land Characteristics (MRLC) Consortium, 2023.
8. NOAA Atlas 14, Point Precipitation Frequency (PF) Data Server. https://hdsc.nws.noaa.gov/hdsc/pfds/ Date Accessed March 2025.
9. U.S. Army Corps of Engineers. HEC-RAS v. 6.5 (software package), Hydrologic Engineering Center, February 2024.
10. FHWA, 2012. Hydraulic Engineering Circular No. 18, "*Evaluating Scour at Bridges*. Fifth Edition" prepared by U.S. Department of Transportation, Federal Highway Administration, April 2012.
11. Federal Emergency Management Agency. (2025). FEMA Flood Map Service Center. Retrieved from https://msc.fema.gov/portal/advanceSearch
12. Federal Emergency Management Agency, *Queen Creek Floodplain Delineation Study Letter of Map Revision Case No. 12-09-1236P,* Effective January 7, 2013.
13. Flood Control District of Maricopa County, *Drainage Design Manual for Maricopa County–Hydrology,* revised July 6, 2023.

APPENDIX A – FIGURES



0 10,000 20,000 40,000 Feet

Legend

- Project Location
- Project Site

Queen Valley
Florence Junction
E US
Reymer
E Skyline Dr
E Bella Vista Rd
N Highway 79
E Arizona Farms Rd
E Arizona Farms Rd
E Hunt Hwy
N Pinal Pkwy
Price
Anthem at Merrill Ranch
W Hunt Hwy
W Hunt Hwy
N Attaway Rd
Florence
Adamsville
E Highway 287
N Highway 79

DATE:	JULY 2025
DESIGN:	CZ
DRAWN:	ZD
CHECKED:	RRD
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VICINITY MAP

Pinal County, AZ

SILVER KING ENERGY CENTER

N

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SHEET 1

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0 7,000 14,000 28,000 Feet

Legend

- Project Site
- Study Area
- Major Contours (100')
- Minor Contours (25')

Elevation (ft)

3713

1593

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TOPOGRAPHIC MAP

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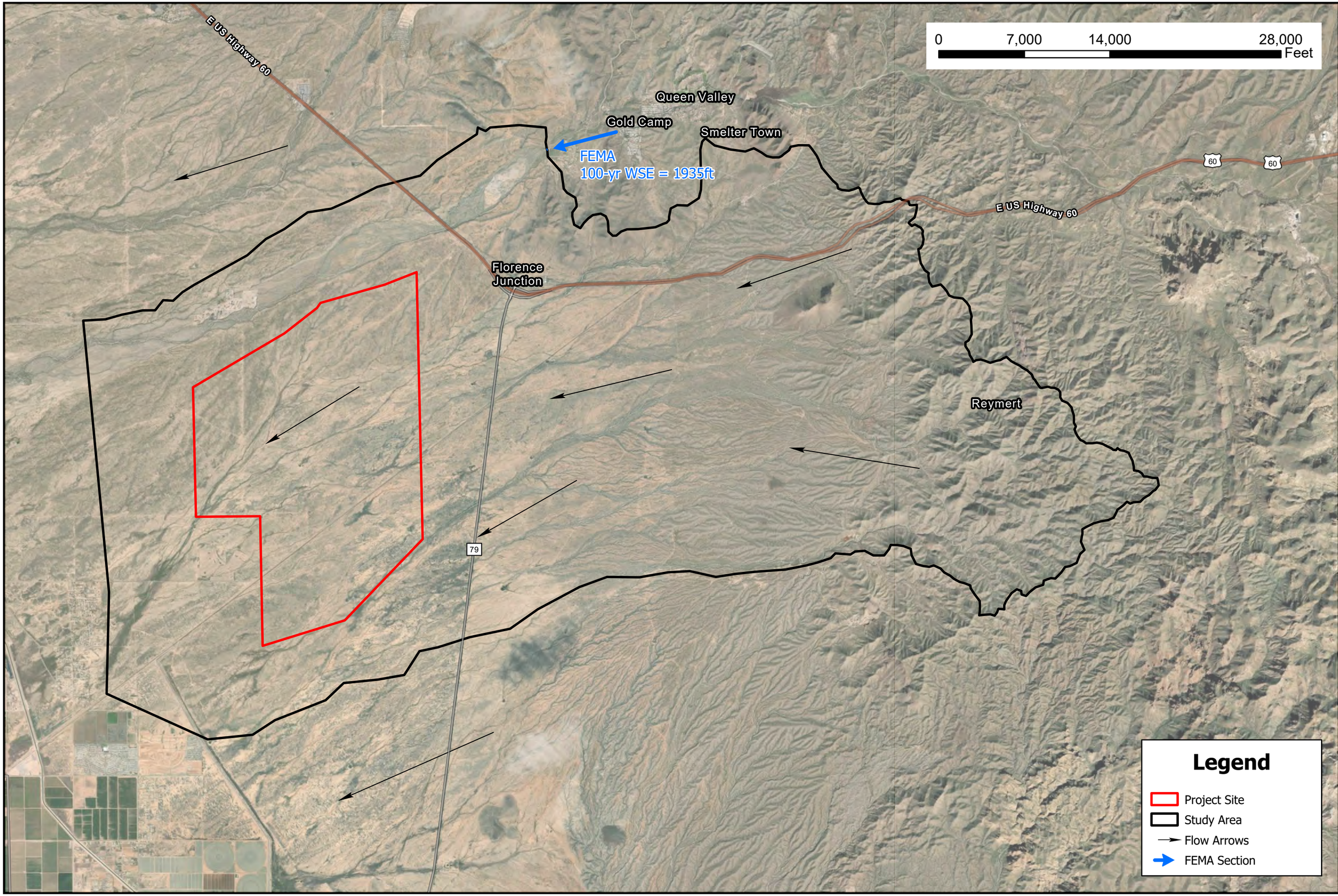

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DRAINAGE AREA MAP

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0 7,000 14,000 28,000
Feet

Legend

- Project Site
- Study Area

LandUse

- Barren Land (Rock/ Sand/Clay)
- Cultivated Crops
- Developed High Intensity
- Developed, Low Intensity
- Developed, Open Space
- Grassland/Herbaceous
- Gravel Road
- Paved Road
- Shrub/Scrub
- Woody Wetlands

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LAND USE MAP

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0 7,000 14,000 28,000 Feet

15
82
NOTCOM
16
97
11
4
61
26
64
27
66
33
36
3
105
54
53
34
63
32
31
65
24

Legend

- Project Site
- Study Area

HSG

- A
- C
- D
- D - No Survey Available

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SOILS MAP

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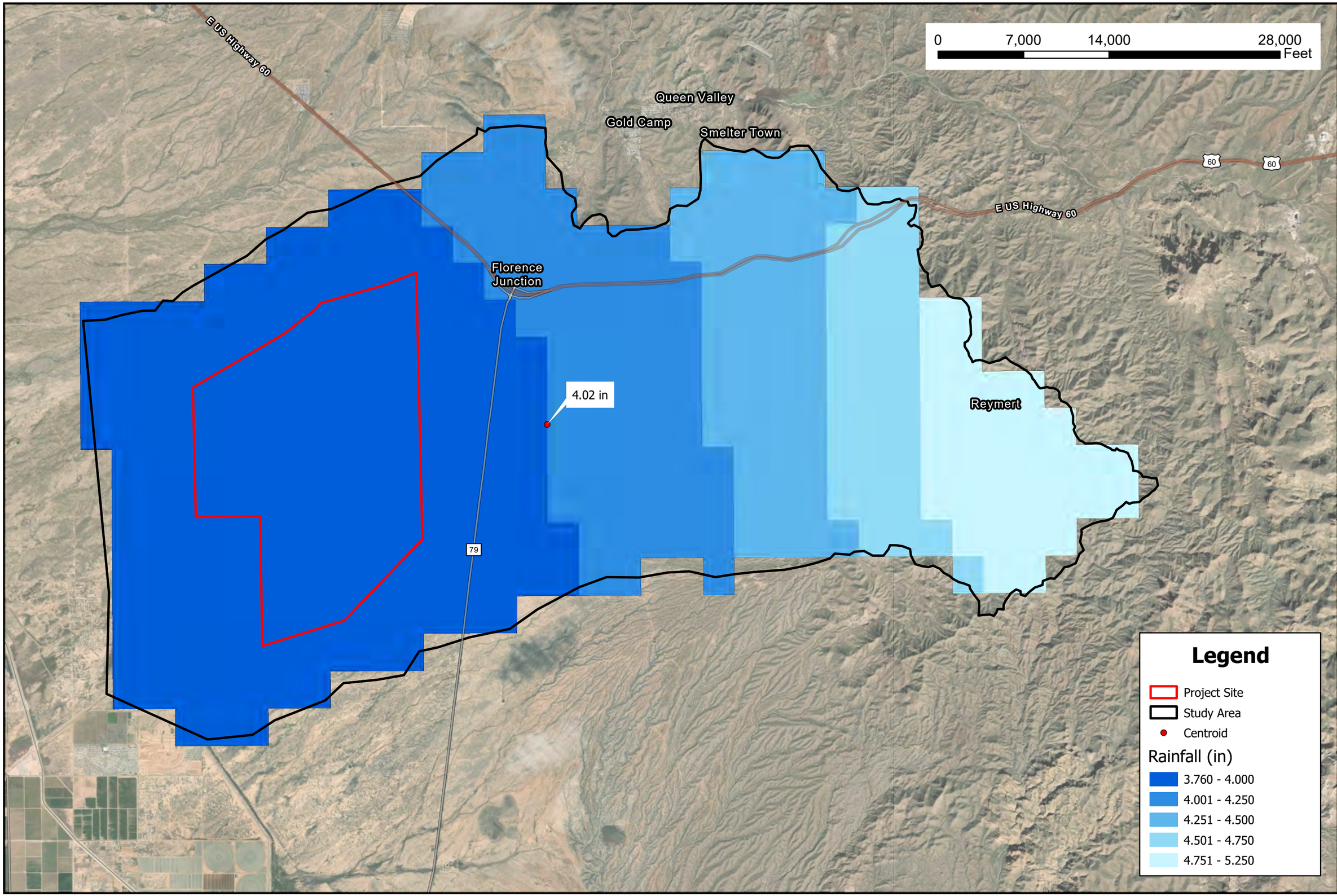

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SILVER KING ENERGY CENTER

PRECIPITATION MAP
100-YEAR 24-HOUR

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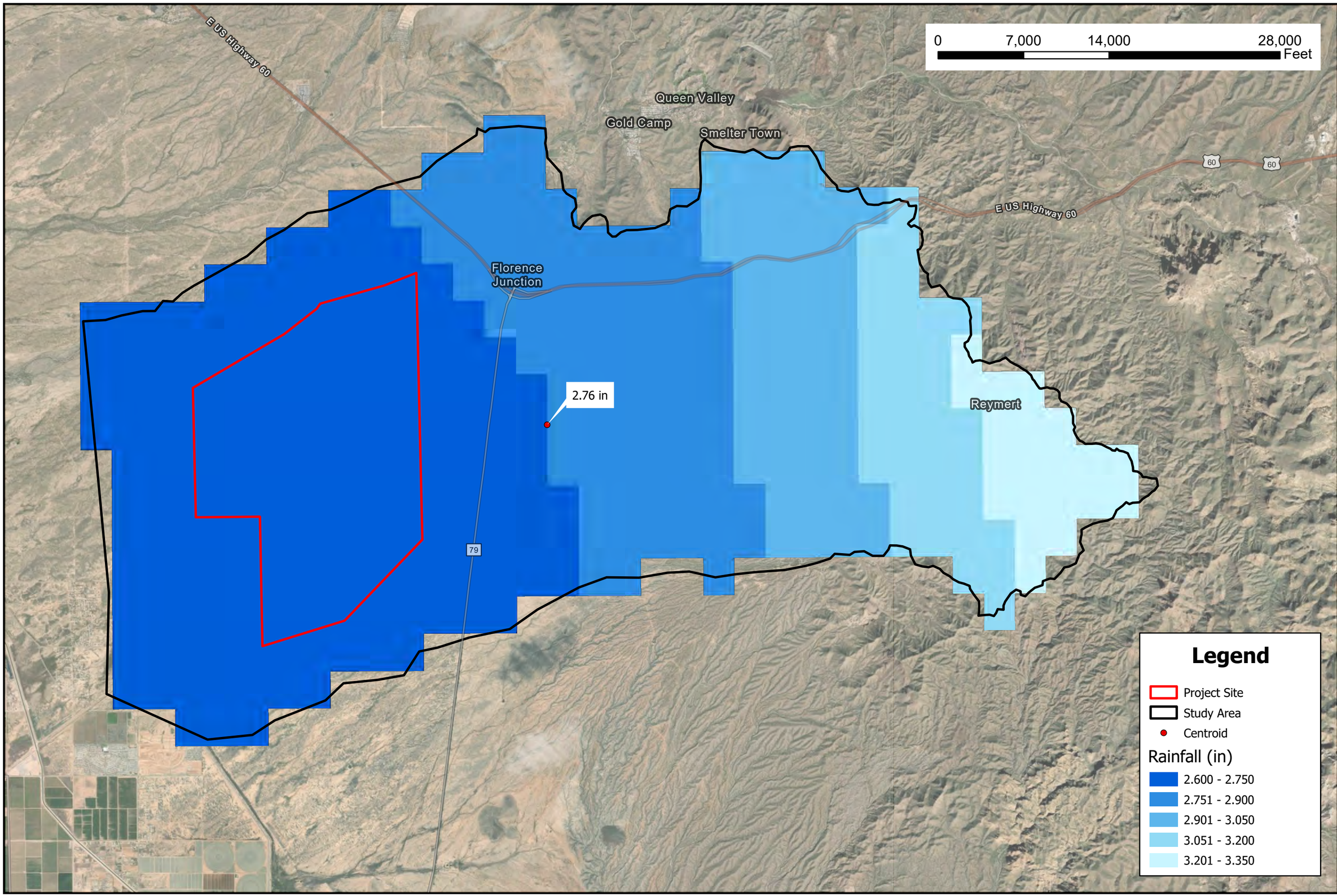

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SILVER KING ENERGY CENTER

PRECIPITATION MAP 100-YEAR 6-HOUR

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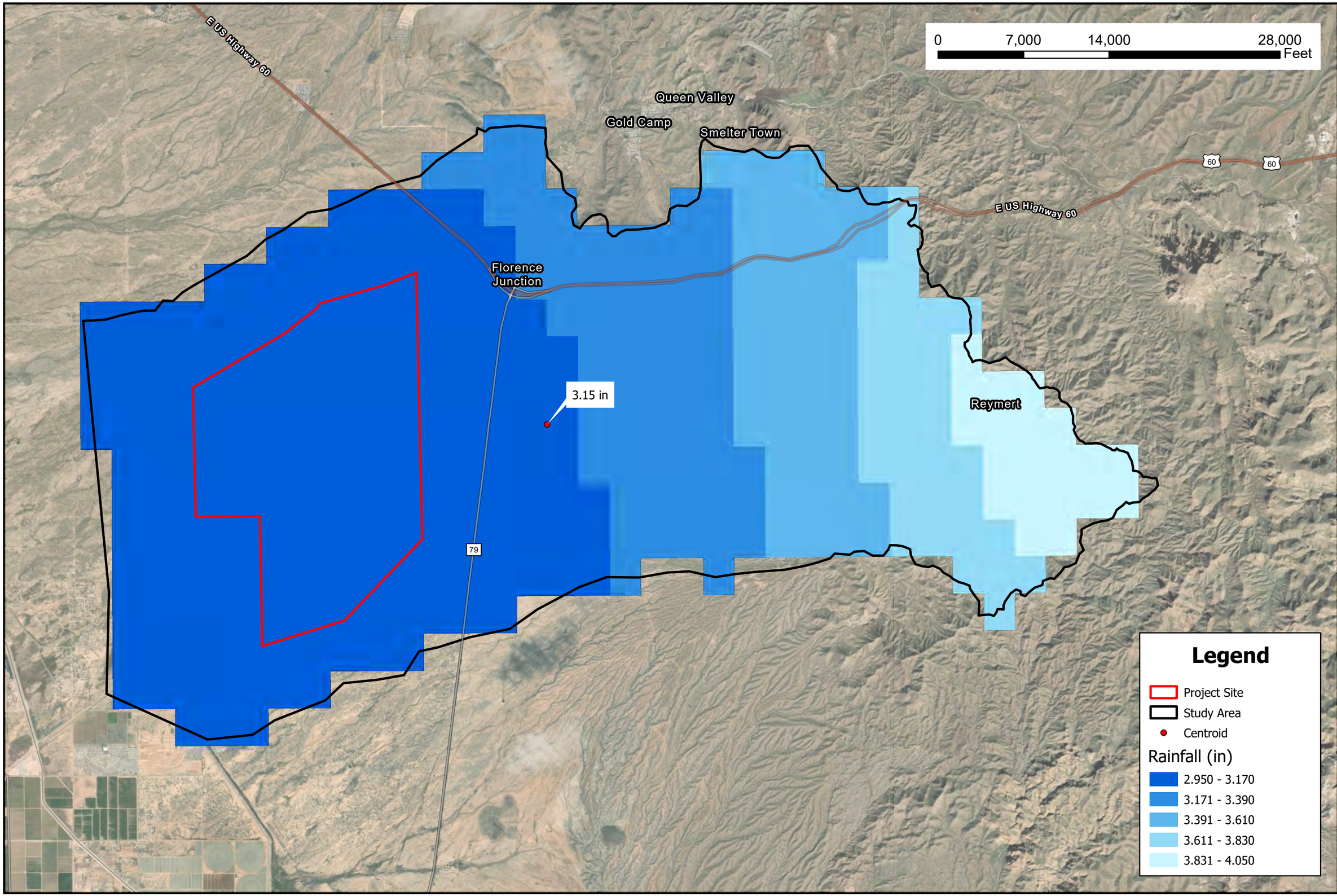

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PRECIPITATION MAP
25-YEAR 24-HOUR

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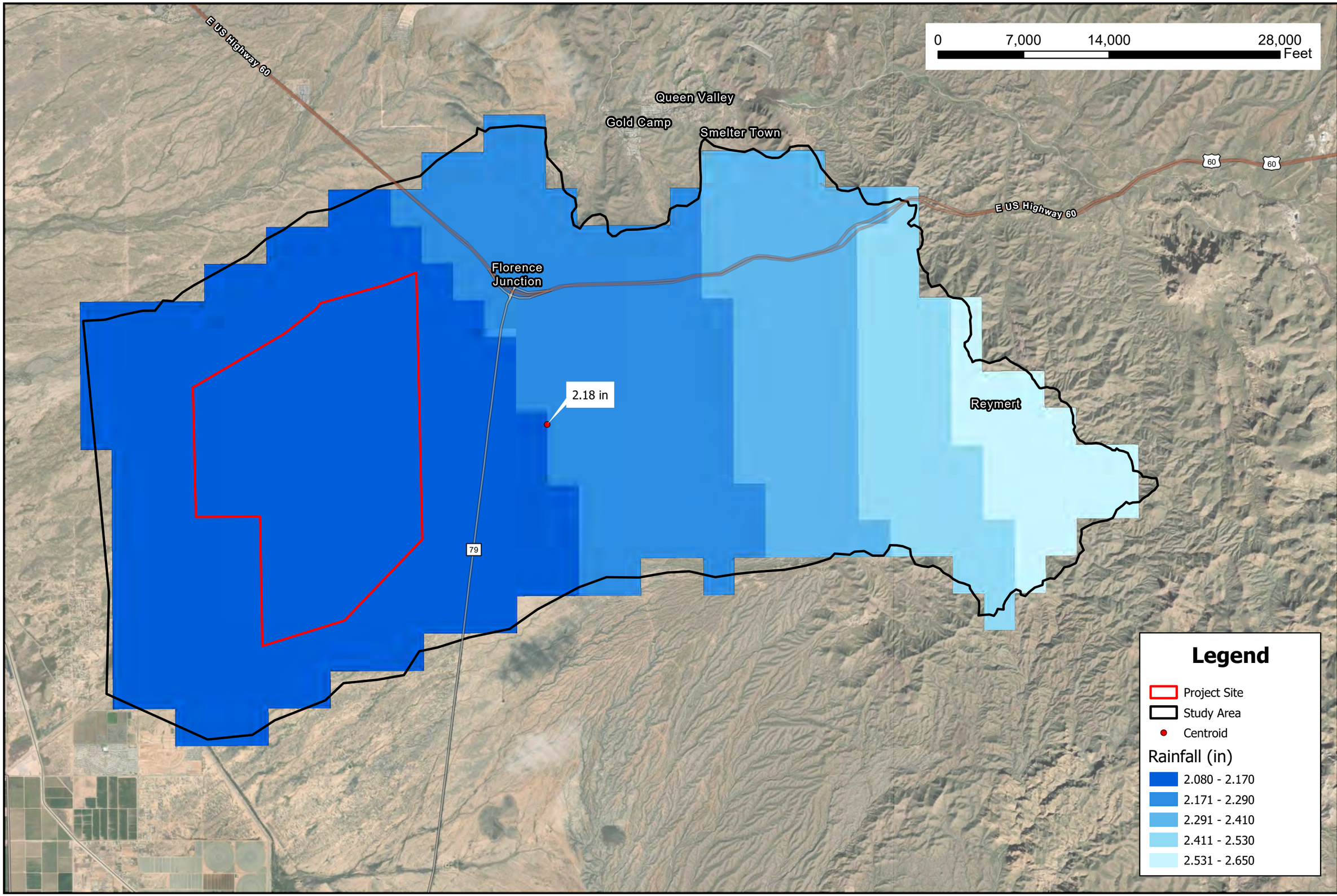

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25-YEAR 6-HOUR

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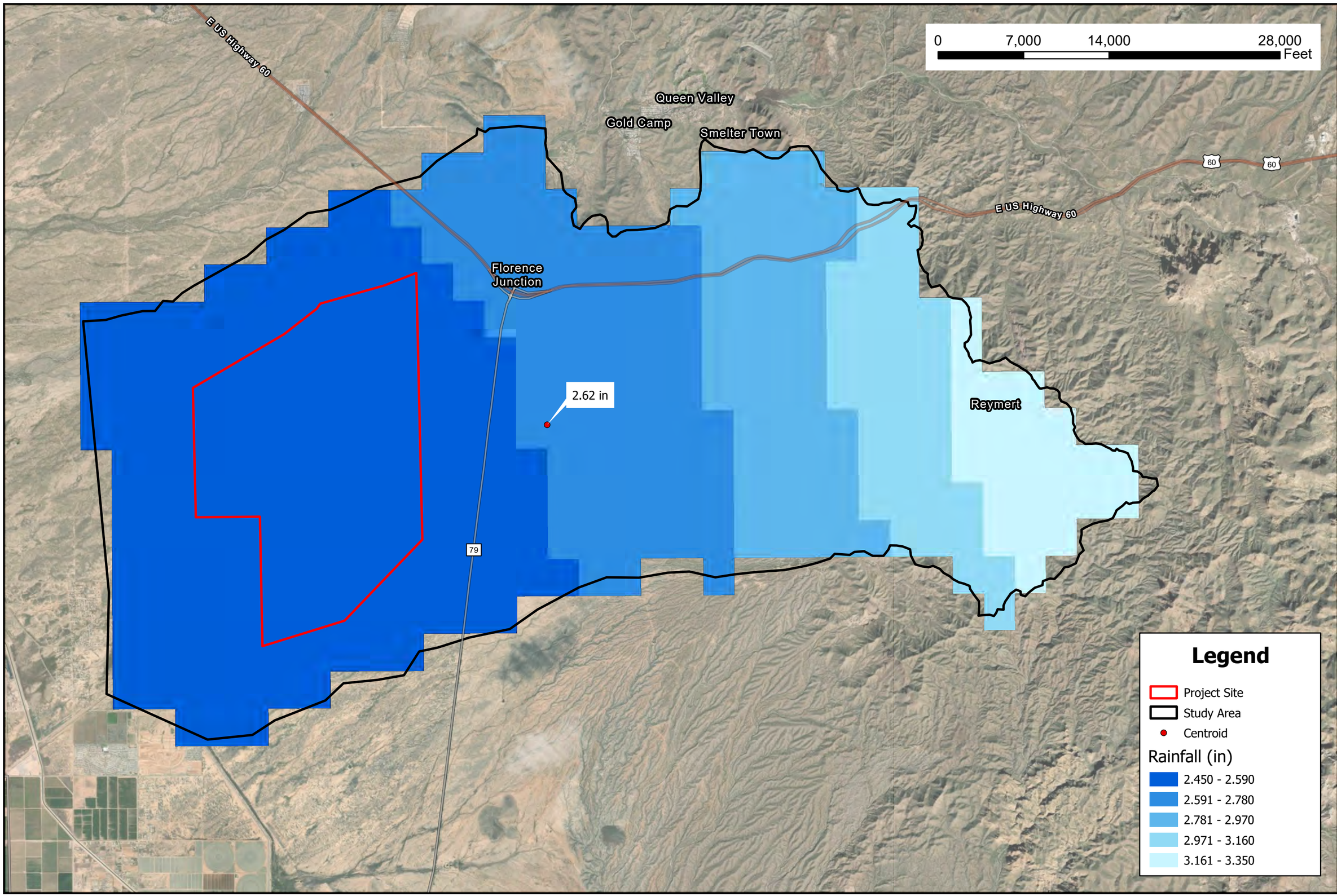

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PRECIPITATION MAP 10-YEAR 24-HOUR

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E US Highway 60

Queen Valley

Gold Camp

Smelter Town

Florence Junction

E US Highway 60

Reymert

1.82 in

79

0 7,000 14,000 28,000 Feet

N

Legend

- Project Site
- Study Area
- Centroid

Rainfall (in)

- 1.741 - 1.800
- 1.801 - 1.900
- 1.901 - 2.000
- 2.001 - 2.100
- 2.101 - 2.220

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PRECIPITATION MAP 10-YEAR 6-HOUR

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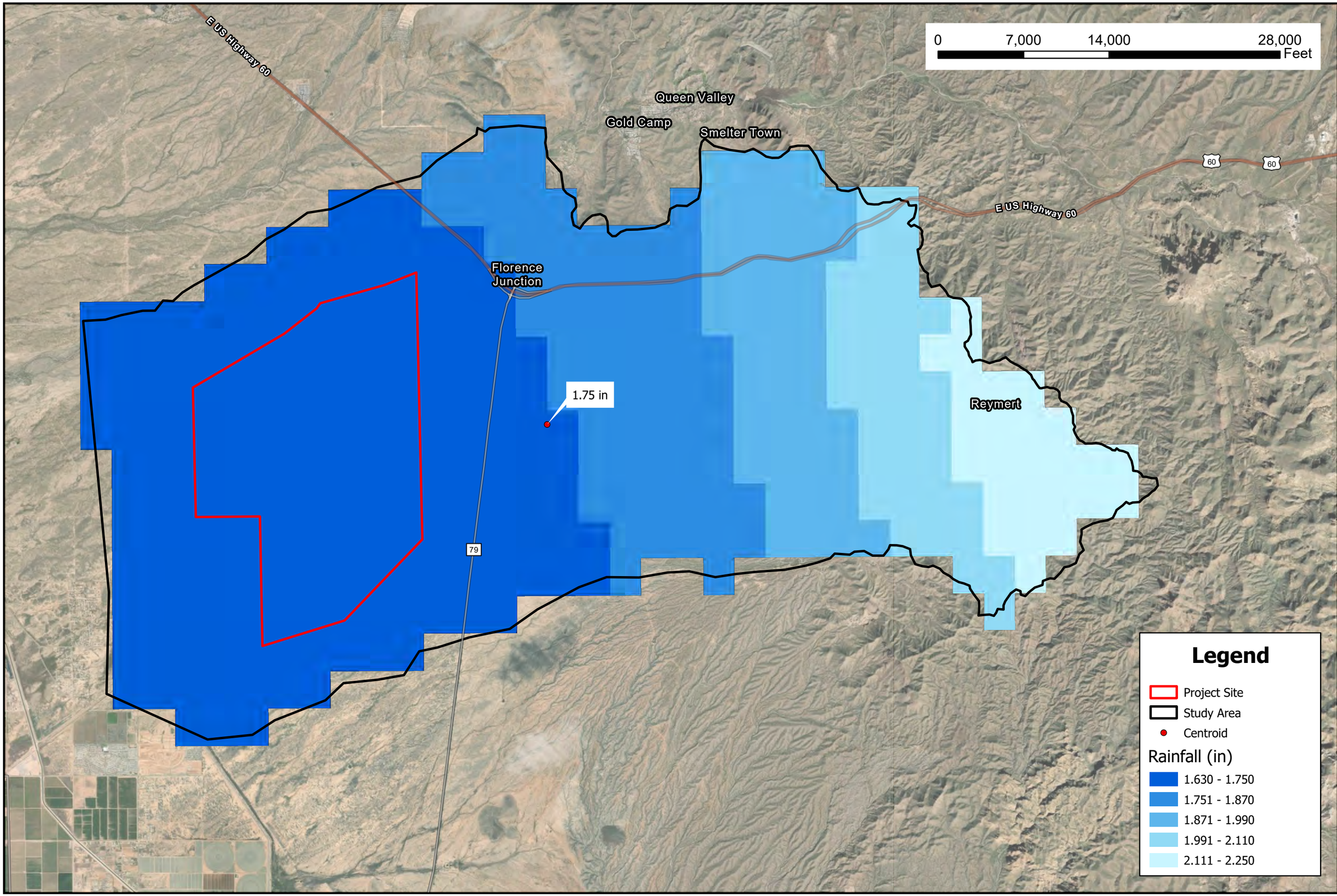

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SILVER KING ENERGY CENTER

PRECIPITATION MAP 2-YEAR 24-HOUR

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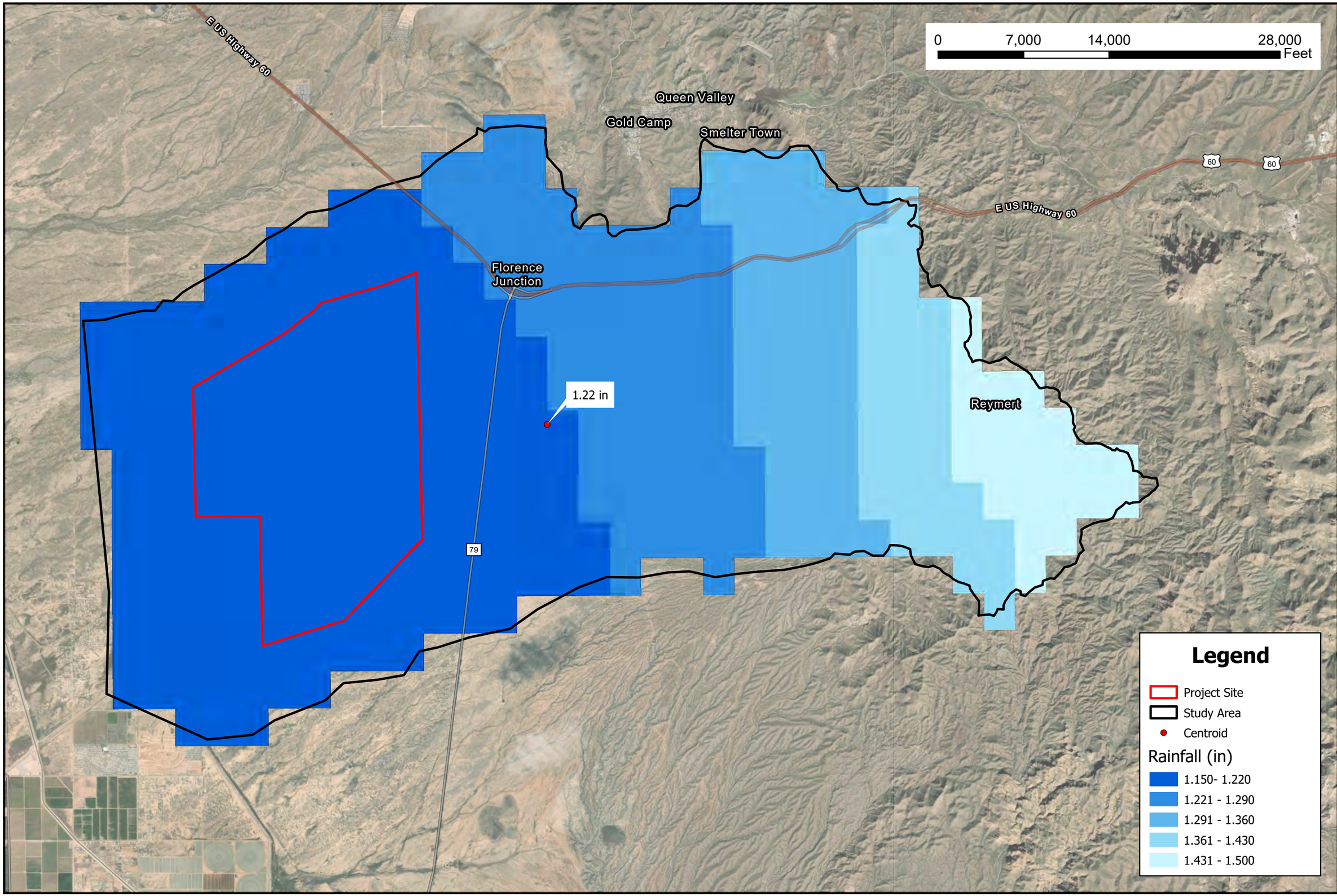

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PRECIPITATION MAP
2-YEAR 6-HOUR

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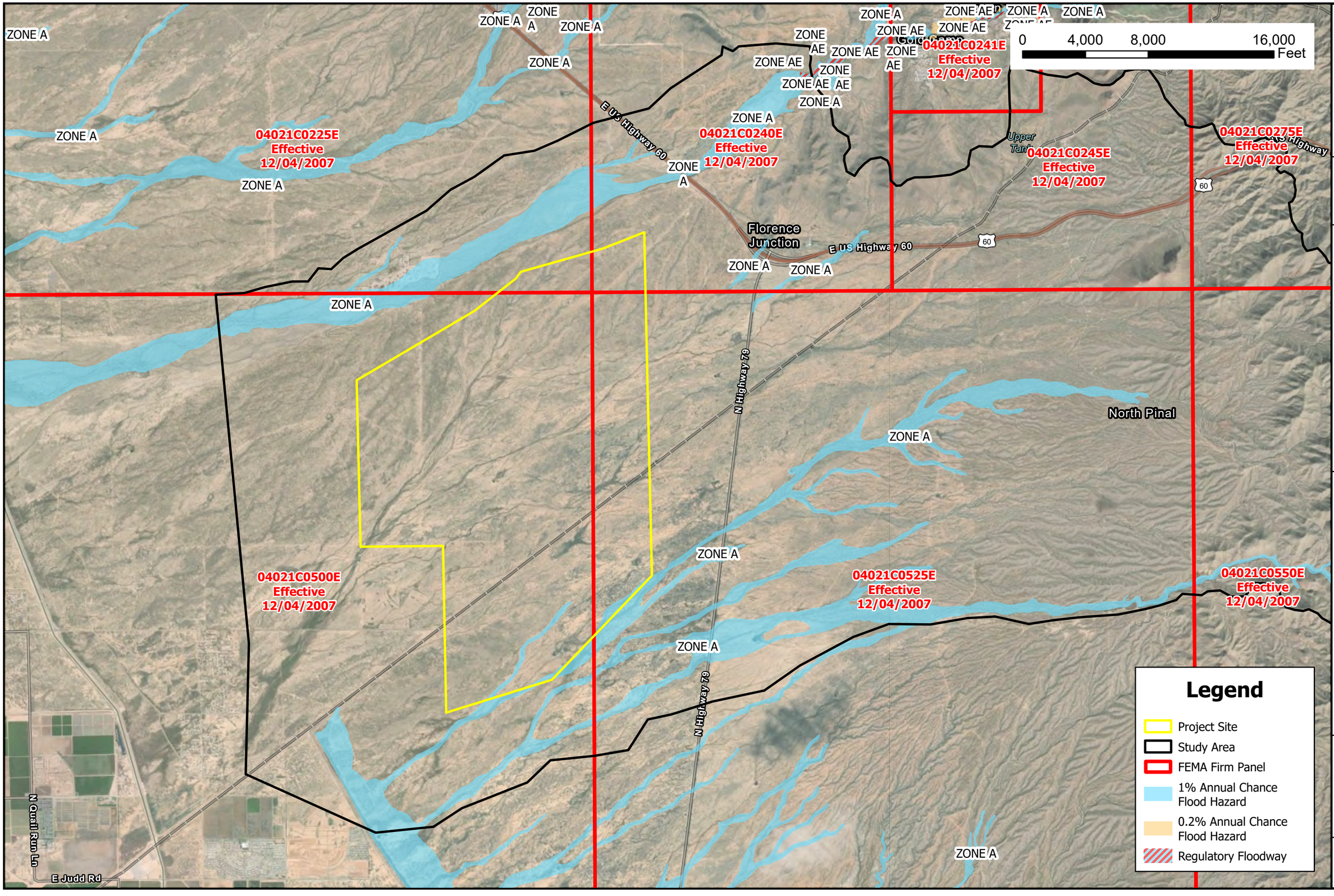

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FEMA FLOOD ZONE MAP

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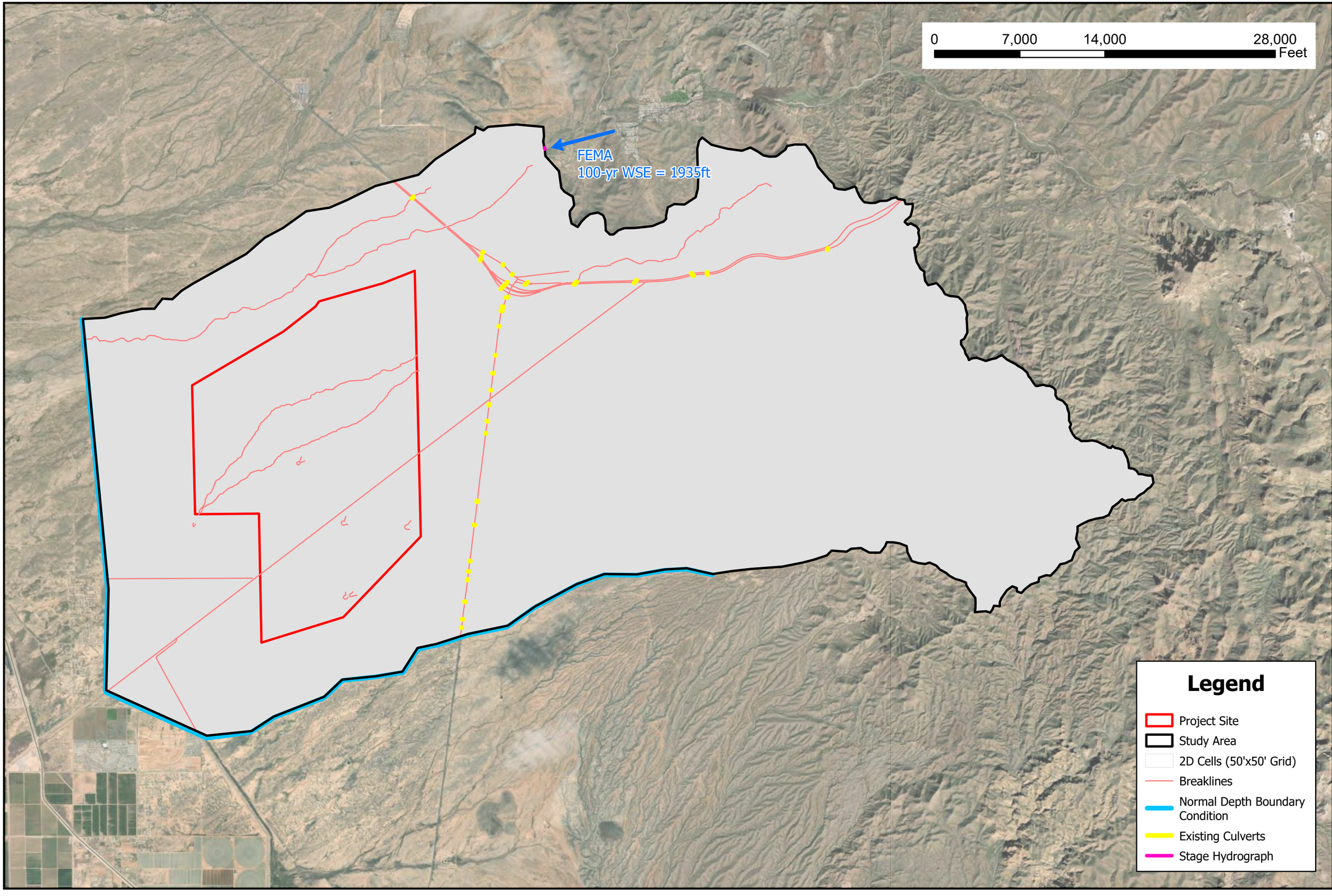

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SILVER KING ENERGY CENTER

EXISTING MODEL SCHEMATIC MAP

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0 3,500 7,000 14,000 Feet

Legend

- Project Site
- Study Area
- 1% Annual Chance Flood Hazard

Depth (ft)

- 0.25 - 0.5
- 0.51 - 1
- 1.01 - 1.5
- 1.51 - 2
- 2.01 - 2.5
- 2.51 - 3
- 3.01 - 4
- 4.01 - 5
- 5.01 - 6
- 6.01 - 7
- >7

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SILVER KING ENERGY CENTER

EXISTING CONDITION 100-YEAR 24-HOUR PEAK INUNDATION MAP

DATE:	JULY 2025
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CHECKED:	RRD
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SHEET
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0 3,500 7,000 14,000 Feet

Legend

- Project Site
- Study Area
- 1% Annual Chance Flood Hazard

Depth (ft)

- 0.25 - 0.5
- 0.51 - 1
- 1.01 - 1.5
- 1.51 - 2
- 2.01 - 2.5
- 2.51 - 3
- 3.01 - 4
- 4.01 - 5
- 5.01 - 6
- 6.01 - 7
- >7

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SILVER KING ENERGY CENTER

EXISTING CONDITION 100-YEAR 6-HOUR PEAK INUNDATION MAP

DATE:	JULY 2025
DESIGN:	CZ
DRAWN:	ZD
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SHEET 9B

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0 3,500 7,000 14,000
Feet

Legend

- Project Site
- Study Area
- 1% Annual Chance Flood Hazard

Depth (ft)

- 0.25 - 0.5
- 0.51 - 1
- 1.01 - 1.5
- 1.51 - 2
- 2.01 - 2.5
- 2.51 - 3
- 3.01 - 4
- 4.01 - 5
- 5.01 - 6
- 6.01 - 7
- >7

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SILVER KING ENERGY CENTER

EXISTING CONDITION 25-YEAR 24-HOUR PEAK INUNDATION MAP

DATE:	JULY 2025
DESIGN:	CZ
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KH NO.:	292140000

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0 3,500 7,000 14,000 Feet

Legend

- Project Site
- Study Area
- 1% Annual Chance Flood Hazard

Depth (ft)

- 0.25 - 0.5
- 0.51 - 1
- 1.01 - 1.5
- 1.51 - 2
- 2.01 - 2.5
- 2.51 - 3
- 3.01 - 4
- 4.01 - 5
- 5.01 - 6
- 6.01 - 7
- >7

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SILVER KING ENERGY CENTER

EXISTING CONDITION 25-YEAR 6-HOUR PEAK INUNDATION MAP

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0 3,500 7,000 14,000 Feet

Legend

- Project Site
- Study Area
- 1% Annual Chance Flood Hazard

Depth (ft)

- 0.25 - 0.5
- 0.51 - 1
- 1.01 - 1.5
- 1.51 - 2
- 2.01 - 2.5
- 2.51 - 3
- 3.01 - 4
- 4.01 - 5
- 5.01 - 6
- 6.01 - 7
- >7

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SILVER KING ENERGY CENTER

EXISTING CONDITION 10-YEAR 24-HOUR PEAK INUNDATION MAP

DATE:	JULY 2025
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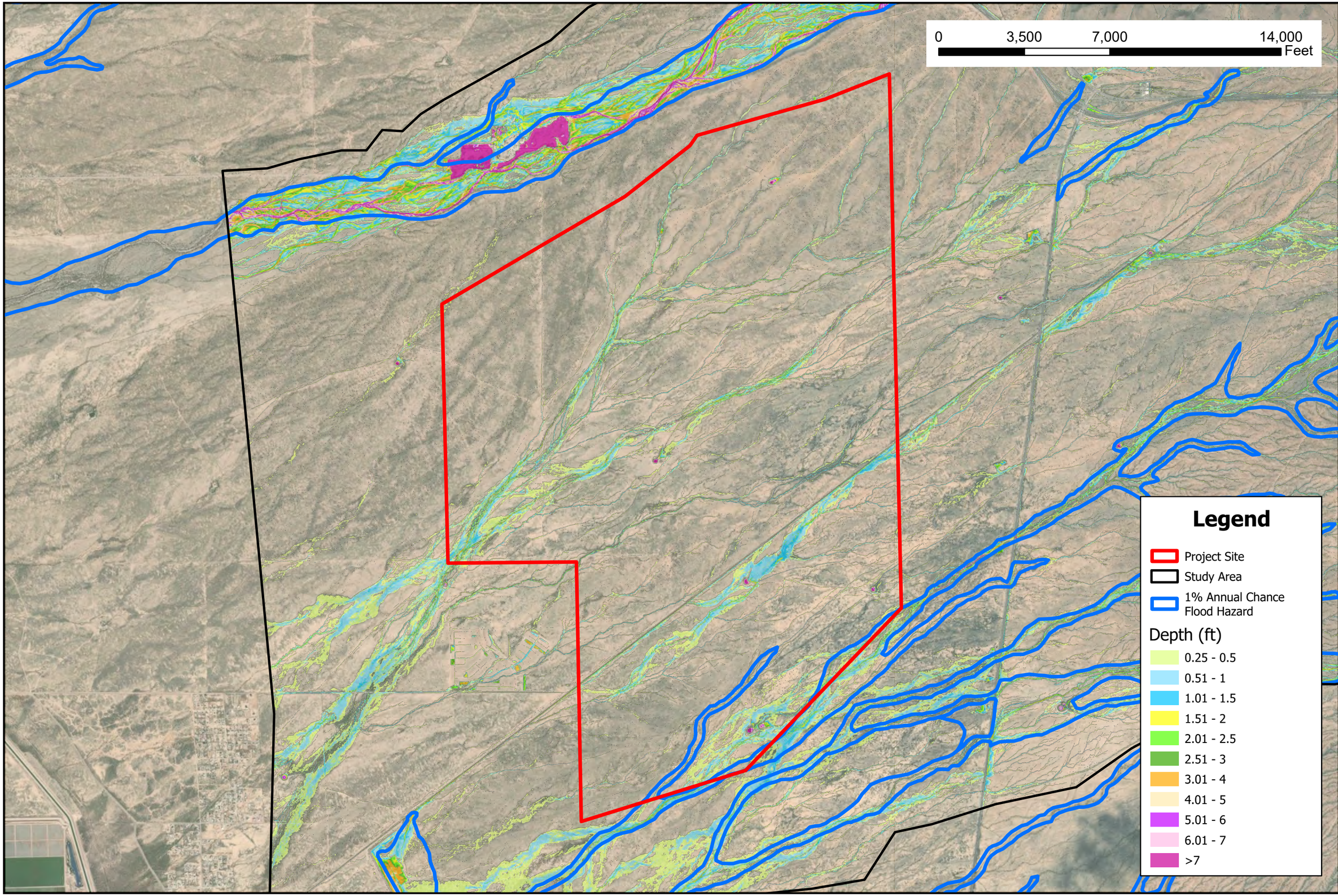

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SILVER KING ENERGY CENTER

EXISTING CONDITION
10-YEAR 6-HOUR PEAK INUNDATION MAP

DATE:	JULY 2025
DESIGN:	CZ
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0 3,500 7,000 14,000 Feet

Legend

- Project Site
- Study Area
- 1% Annual Chance Flood Hazard

Depth (ft)

- 0.25 - 0.5
- 0.51 - 1
- 1.01 - 1.5
- 1.51 - 2
- 2.01 - 2.5
- 2.51 - 3
- 3.01 - 4
- 4.01 - 5
- 5.01 - 6
- 6.01 - 7
- >7

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SILVER KING ENERGY CENTER

EXISTING CONDITION 2-YEAR 24-HOUR PEAK INUNDATION MAP

DATE:	JULY 2025		
DESIGN:	CZ		
DRAWN:	ZD		
CHECKED:	RRD		
KH NO.:	292140000		

SHEET
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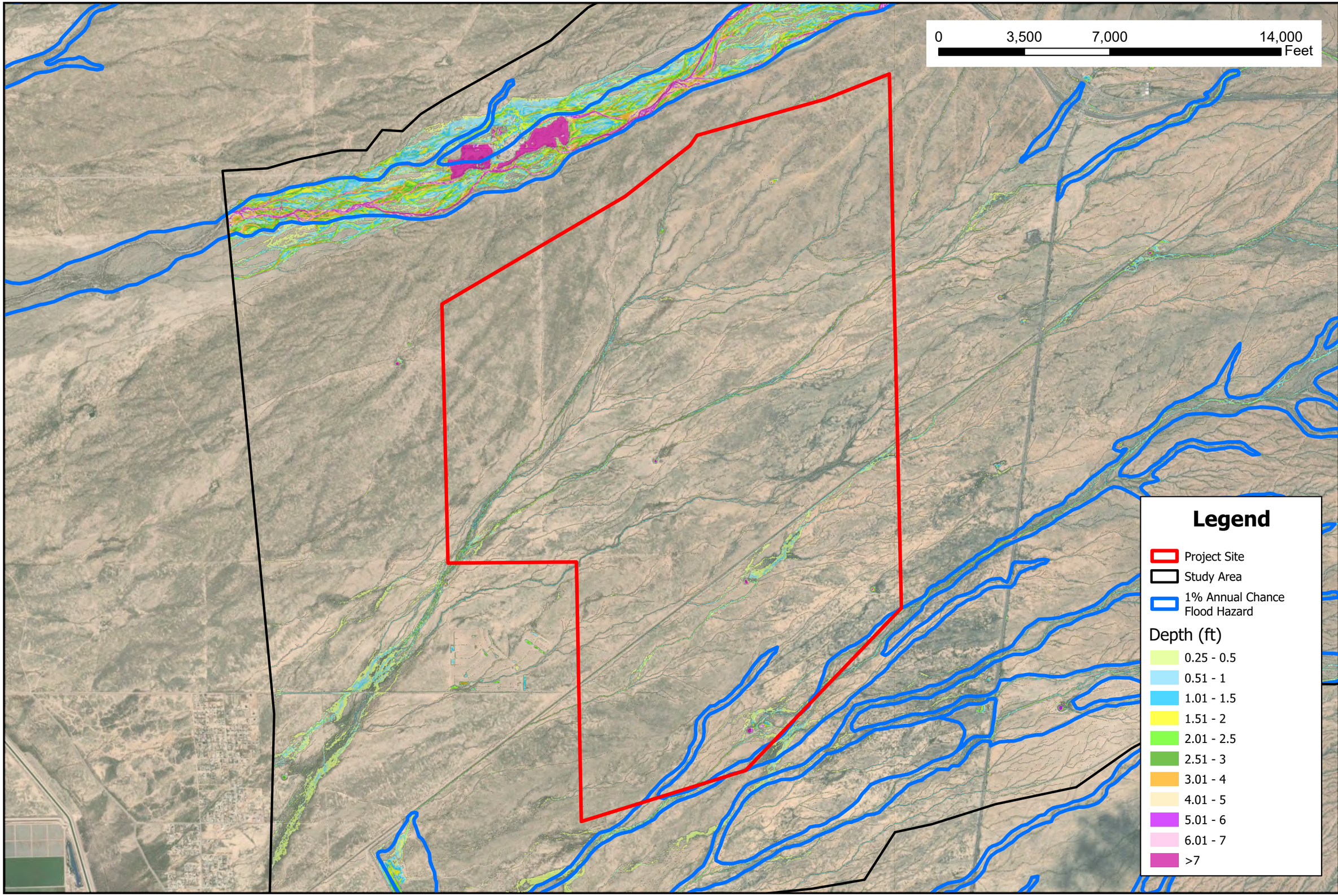

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SILVER KING ENERGY CENTER

EXISTING CONDITION
2-YEAR 6-HOUR PEAK INUNDATION MAP

DATE:	JULY 2025		
DESIGN:	CZ		
DRAWN:	ZD		
CHECKED:	RRD		
KH NO.:	292140000		

SHEET
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0 3,500 7,000 14,000
Feet

Legend

- Project Site
- Study Area
- 1% Annual Chance Flood Hazard

Velocity (ft/s)

- 0.51 - 1
- 1.01 - 2
- 2.01 - 3
- > 3

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SILVER KING ENERGY CENTER

EXISTING CONDITION
100-YEAR 24-HOUR PEAK VELOCITY MAP

DATE:	JULY 2025
DESIGN:	CZ
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KH NO.:	292140000

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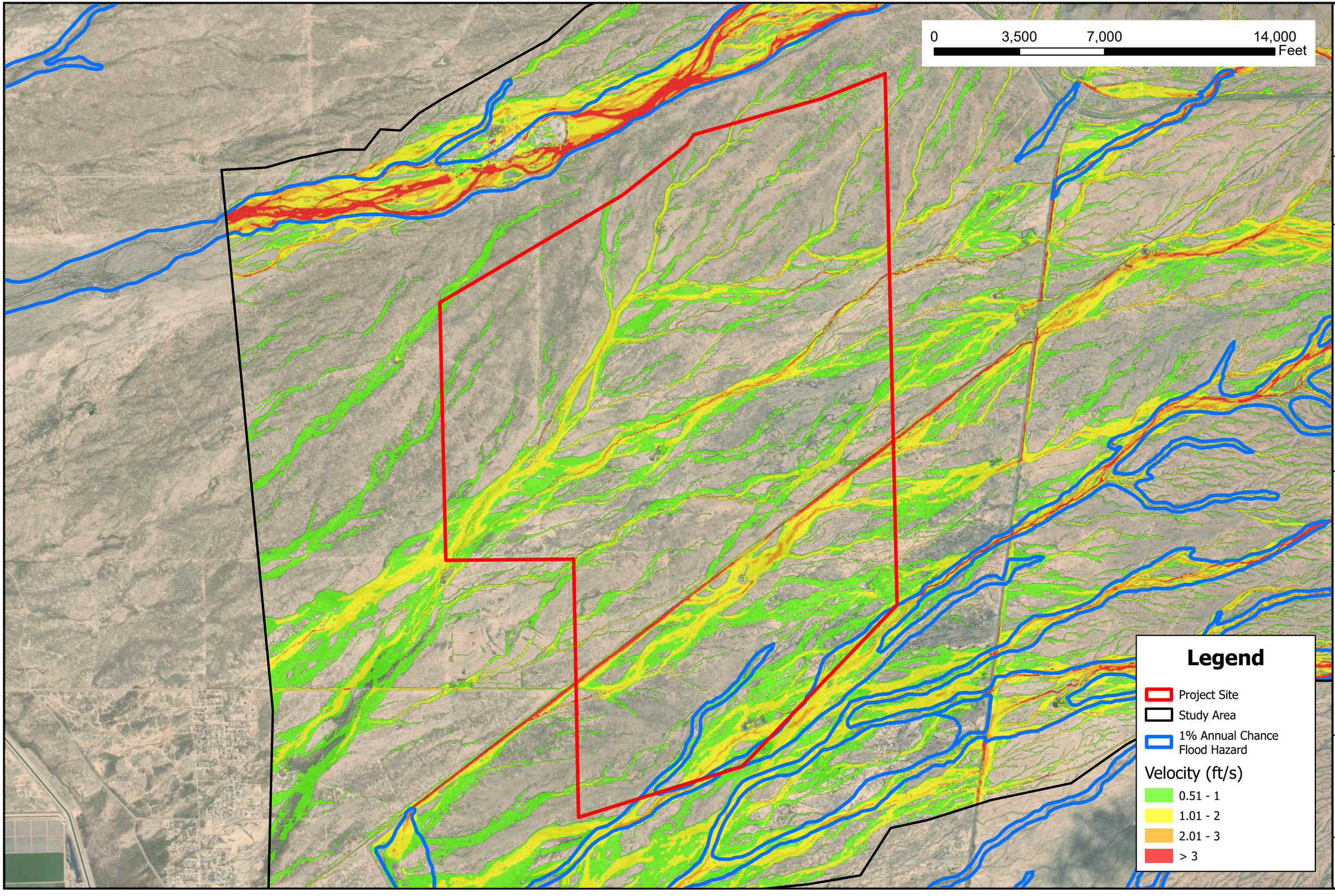

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Pinal County, AZ

SILVER KING ENERGY CENTER

EXISTING CONDITION
100-YEAR 6-HOUR PEAK VELOCITY MAP

DATE:	JULY 2025
DESIGN:	CZ
DRAWN:	ZD
CHECKED:	RRD
KH NO.:	292140000

SHEET
10B

K:\LAV_GIS\292140000_Silver_King_SolarSilver_King_Figures.aprx

0 3,500 7,000 14,000
Feet

Legend

- Project Site
- Study Area
- 1% Annual Chance Flood Hazard

Velocity (ft/s)

- 0.51 - 1
- 1.01 - 2
- 2.01 - 3
- > 3

Kimley»Horn
1001 West Southern Avenue
Suite 131
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Pinal County, AZ

SILVER KING ENERGY CENTER

EXISTING CONDITION 25-YEAR 24-HOUR PEAK VELOCITY MAP

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CHECKED:	RRD
KH NO.:	292140000

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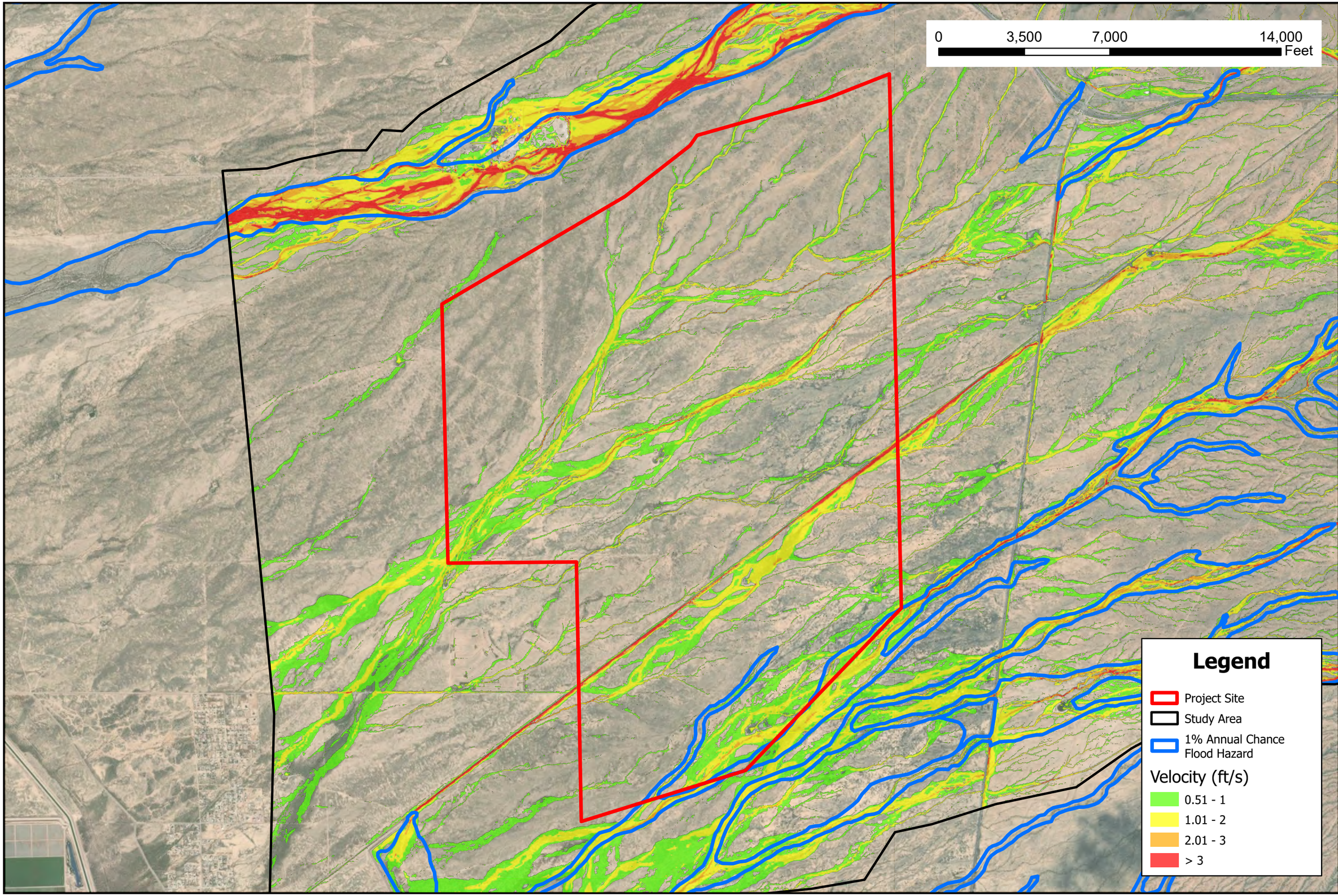

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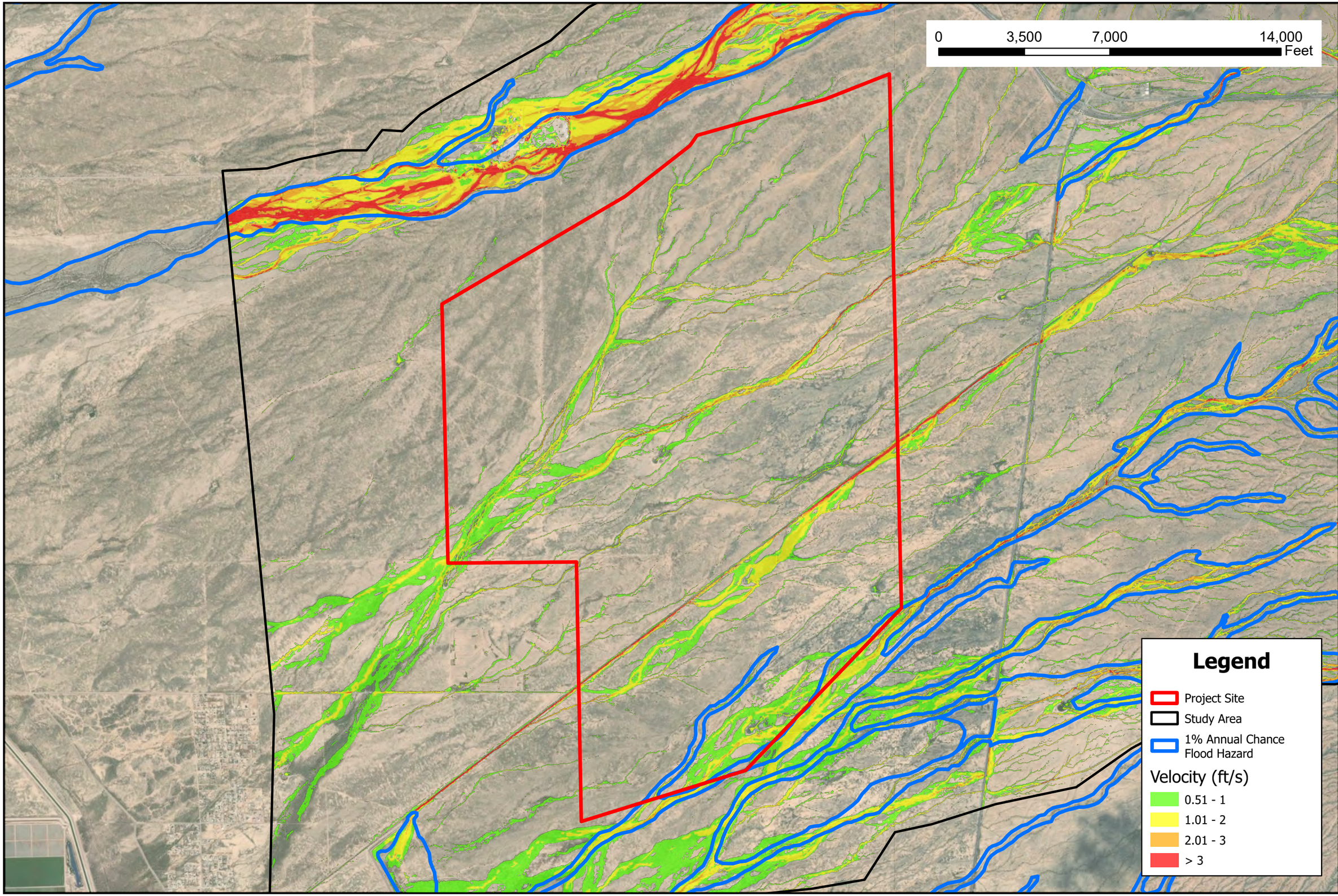

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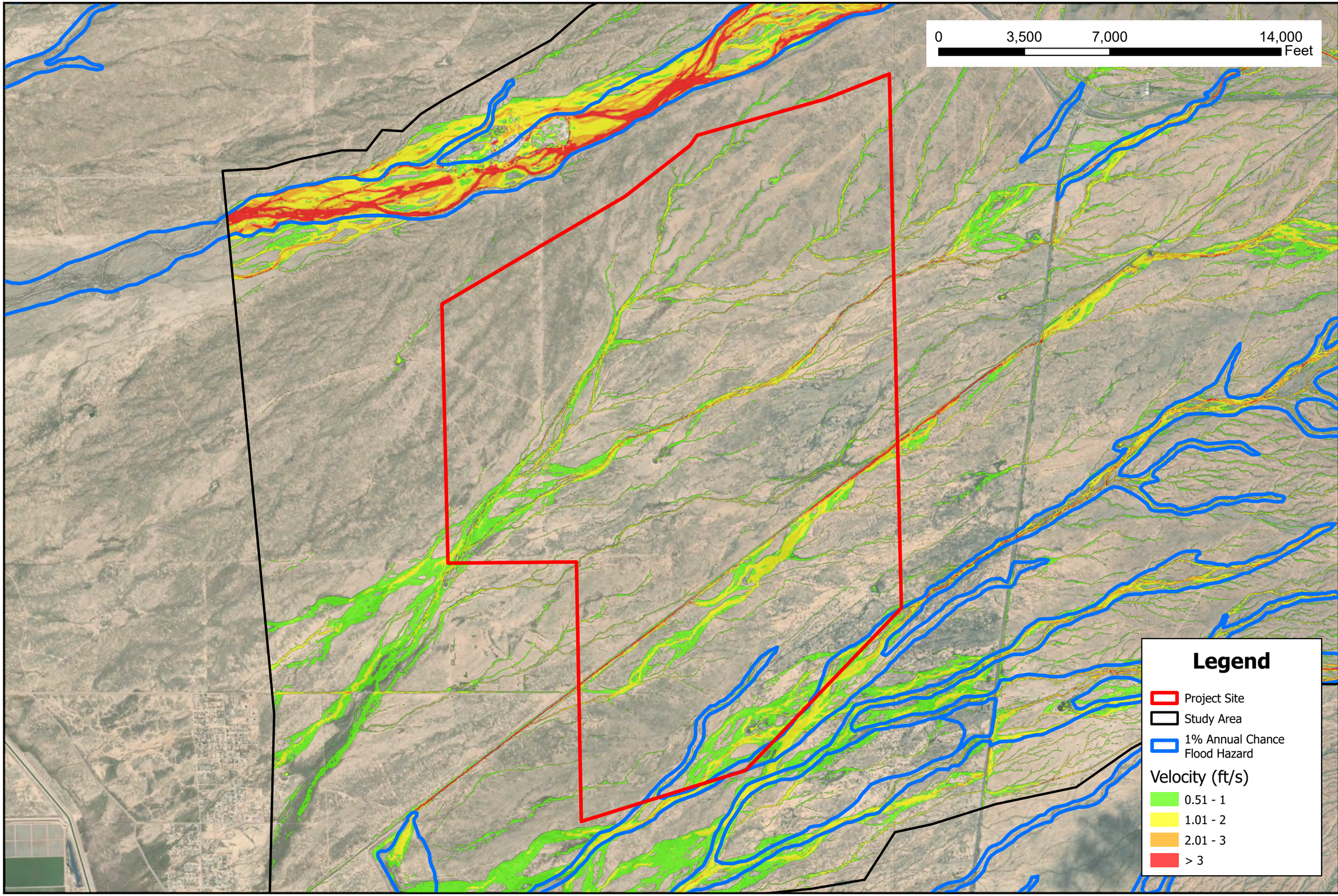

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SILVER KING ENERGY CENTER

EXISTING CONDITION
2-YEAR 24-HOUR PEAK VELOCITY MAP

DATE:	JULY 2025
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Feet

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0 3,500 7,000 14,000
Feet

Legend

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- Study Area
- 1% Annual Chance Flood Hazard

Scour Potential (ft)

- 1.01 - 1.5
- 1.51 - 2.5
- > 2.51

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SHEET
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0 3,500 7,000 14,000
Feet

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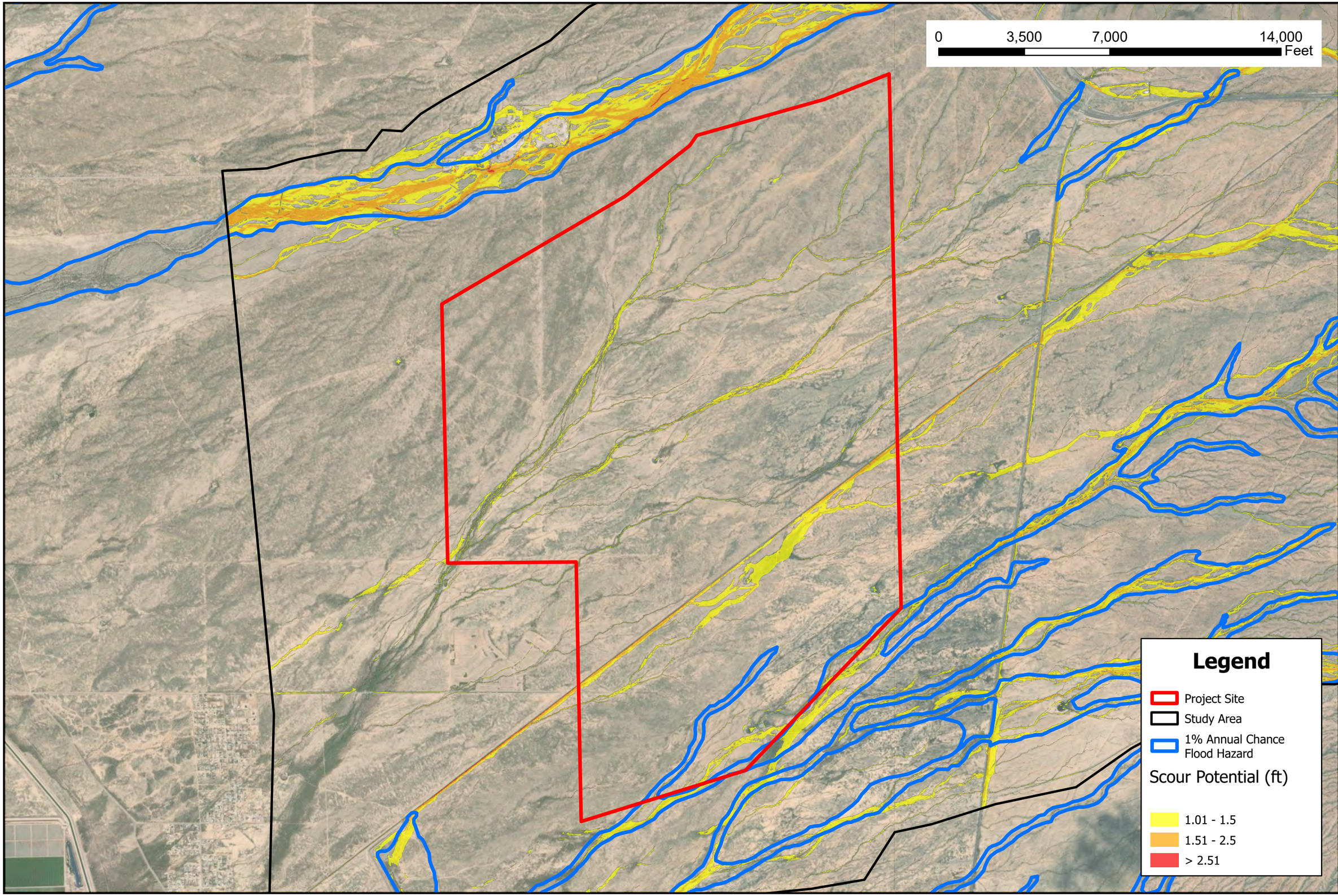

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SILVER KING ENERGY CENTER

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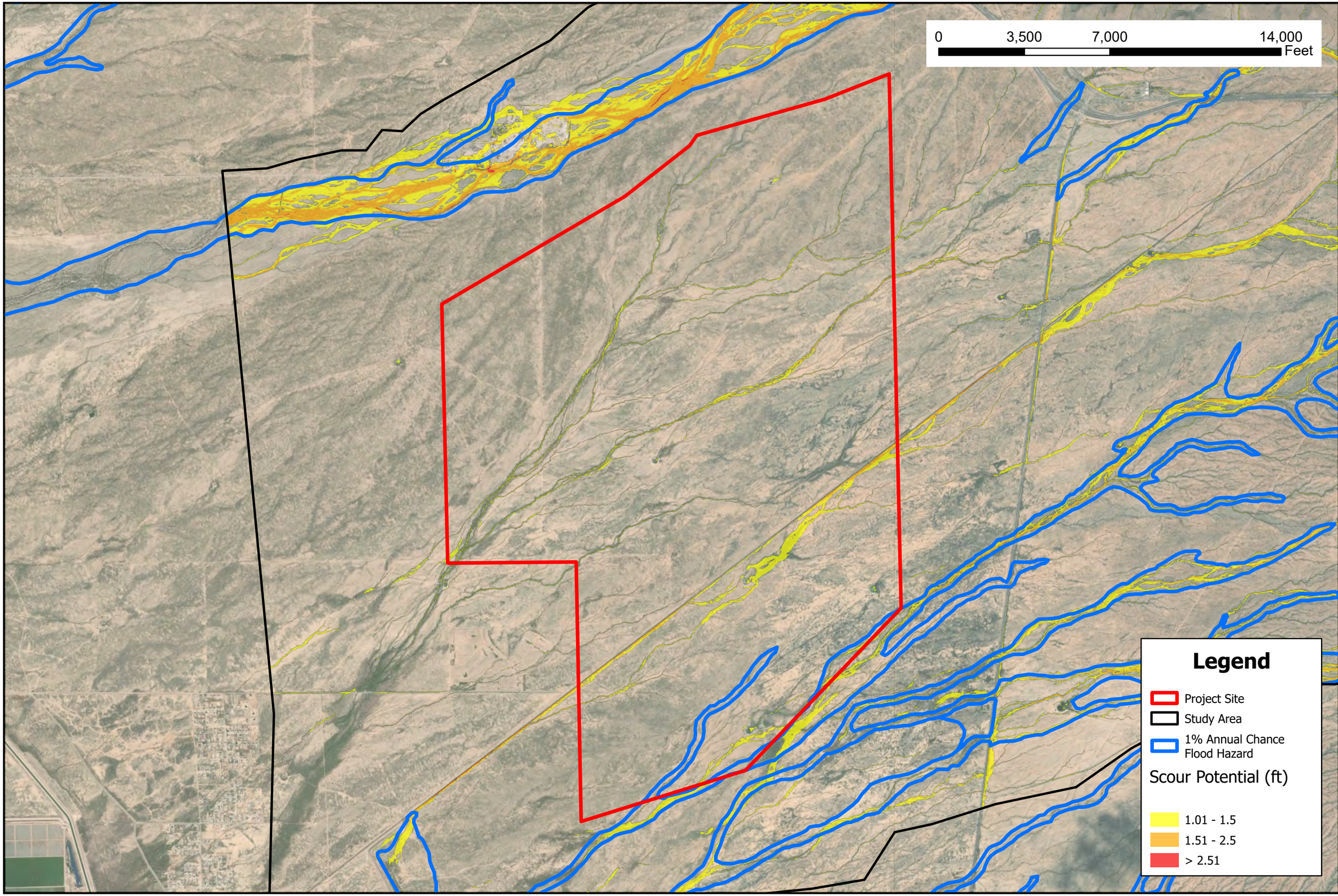

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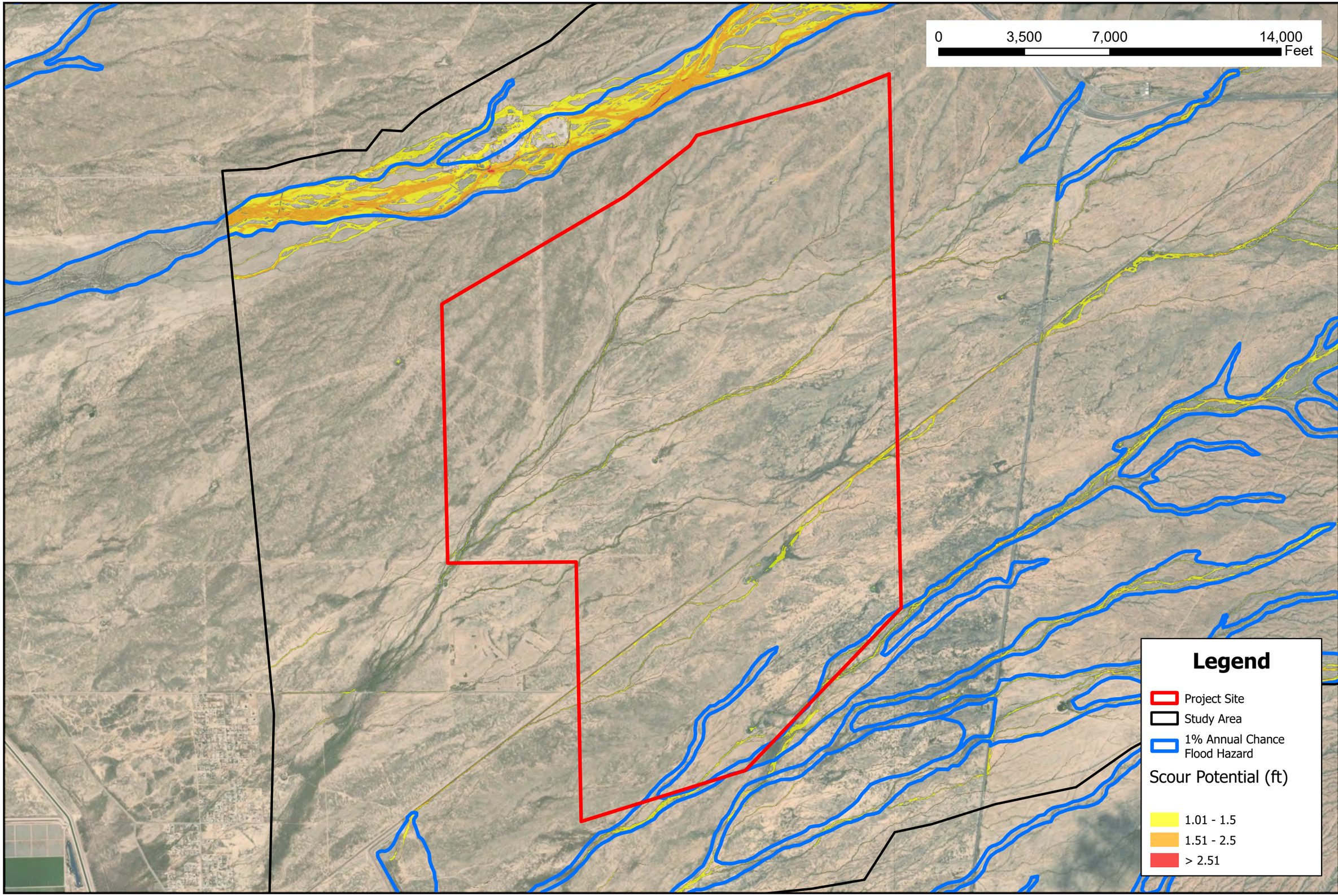

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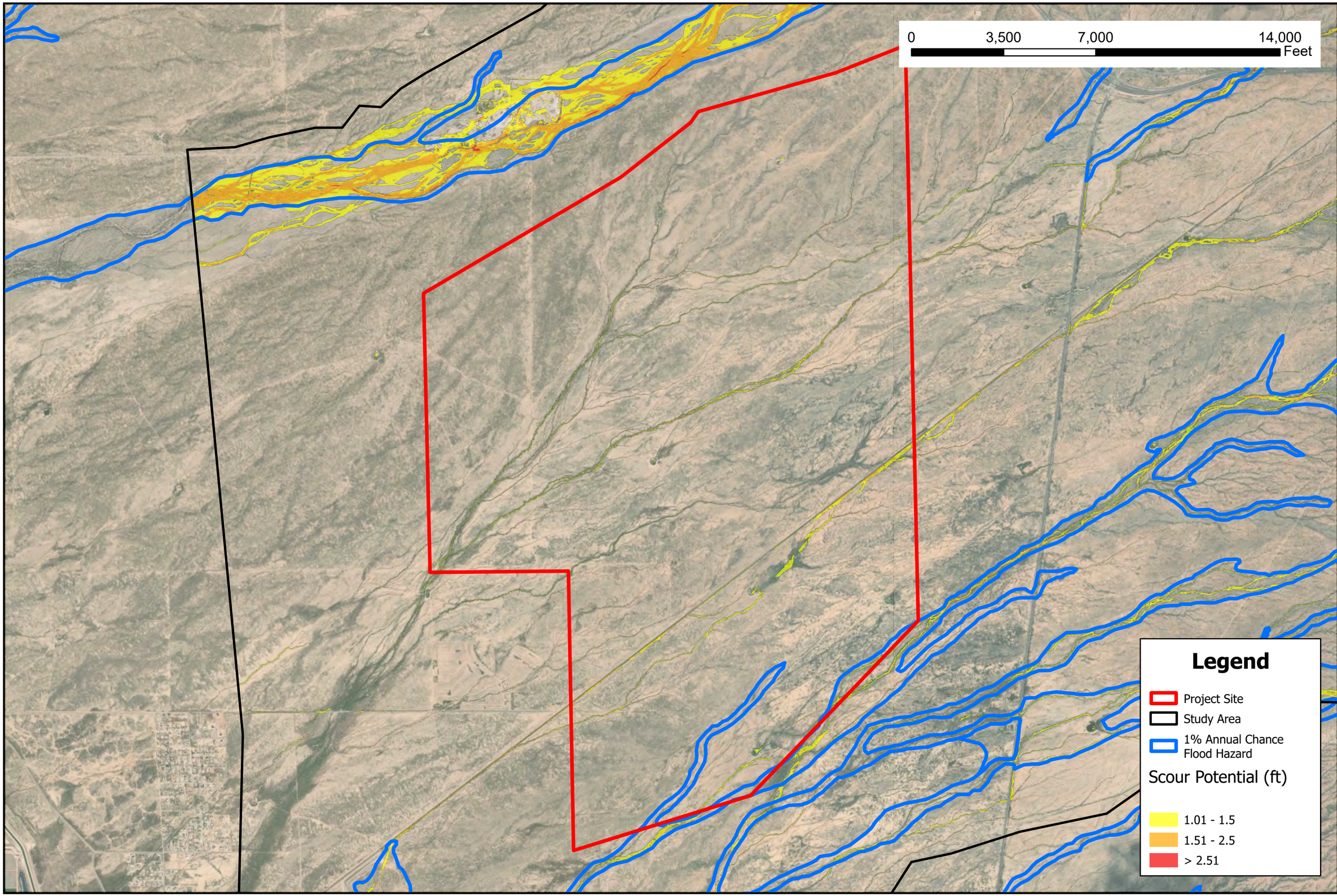

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0 3,500 7,000 14,000 Feet

Legend

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Scour Potential (ft)

- 1.01 - 1.5
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APPENDIX B – HYDROLOGIC CALCULATIONS

NOAA Atlas 14, Volume 1, Version 5
Location name: Superior, Arizona, USA*
Latitude: 33.2261°, Longitude: -111.329°
Elevation: 1875 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.212** (0.178-0.259)	**0.277** (0.234-0.337)	**0.374** (0.312-0.452)	**0.448** (0.371-0.539)	**0.547** (0.447-0.655)	**0.623** (0.503-0.746)	**0.701** (0.556-0.837)	**0.779** (0.609-0.930)	**0.884** (0.673-1.06)	**0.964** (0.718-1.16)
10-min	**0.323** (0.271-0.393)	**0.422** (0.356-0.514)	**0.570** (0.475-0.688)	**0.681** (0.565-0.820)	**0.832** (0.680-0.998)	**0.949** (0.766-1.14)	**1.07** (0.846-1.27)	**1.19** (0.926-1.42)	**1.34** (1.02-1.61)	**1.47** (1.09-1.76)
15-min	**0.401** (0.336-0.488)	**0.523** (0.441-0.637)	**0.706** (0.589-0.853)	**0.844** (0.700-1.02)	**1.03** (0.843-1.24)	**1.18** (0.950-1.41)	**1.32** (1.05-1.58)	**1.47** (1.15-1.75)	**1.67** (1.27-1.99)	**1.82** (1.36-2.18)
30-min	**0.540** (0.453-0.657)	**0.704** (0.594-0.857)	**0.950** (0.793-1.15)	**1.14** (0.943-1.37)	**1.39** (1.14-1.66)	**1.58** (1.28-1.90)	**1.78** (1.41-2.12)	**1.98** (1.55-2.36)	**2.24** (1.71-2.68)	**2.45** (1.83-2.94)
60-min	**0.668** (0.560-0.813)	**0.871** (0.736-1.06)	**1.18** (0.981-1.42)	**1.41** (1.17-1.70)	**1.72** (1.40-2.06)	**1.96** (1.58-2.35)	**2.20** (1.75-2.63)	**2.45** (1.91-2.92)	**2.78** (2.11-3.32)	**3.03** (2.26-3.64)
2-hr	**0.761** (0.644-0.913)	**0.984** (0.834-1.18)	**1.31** (1.10-1.57)	**1.55** (1.30-1.86)	**1.88** (1.55-2.24)	**2.14** (1.74-2.55)	**2.41** (1.92-2.86)	**2.68** (2.10-3.18)	**3.03** (2.32-3.61)	**3.31** (2.48-3.96)
3-hr	**0.799** (0.678-0.971)	**1.02** (0.866-1.25)	**1.34** (1.13-1.63)	**1.59** (1.33-1.93)	**1.94** (1.59-2.33)	**2.21** (1.79-2.65)	**2.50** (1.99-2.99)	**2.79** (2.18-3.34)	**3.21** (2.43-3.85)	**3.54** (2.62-4.26)
6-hr	**0.966** (0.837-1.14)	**1.22** (1.06-1.44)	**1.55** (1.34-1.83)	**1.82** (1.56-2.13)	**2.18** (1.84-2.54)	**2.46** (2.05-2.87)	**2.76** (2.25-3.21)	**3.06** (2.46-3.57)	**3.48** (2.72-4.05)	**3.81** (2.90-4.45)
12-hr	**1.13** (0.992-1.30)	**1.42** (1.25-1.64)	**1.79** (1.56-2.06)	**2.08** (1.80-2.38)	**2.47** (2.12-2.82)	**2.77** (2.36-3.15)	**3.08** (2.58-3.50)	**3.39** (2.80-3.86)	**3.81** (3.07-4.36)	**4.14** (3.27-4.76)
24-hr	**1.38** (1.25-1.55)	**1.75** (1.58-1.96)	**2.23** (2.01-2.49)	**2.62** (2.35-2.92)	**3.15** (2.80-3.51)	**3.57** (3.15-3.98)	**4.02** (3.50-4.47)	**4.47** (3.85-4.99)	**5.10** (4.31-5.71)	**5.59** (4.66-6.30)
2-day	**1.50** (1.35-1.67)	**1.90** (1.71-2.12)	**2.45** (2.20-2.73)	**2.88** (2.59-3.22)	**3.49** (3.11-3.88)	**3.97** (3.51-4.41)	**4.47** (3.92-4.98)	**4.99** (4.32-5.58)	**5.70** (4.85-6.41)	**6.27** (5.26-7.10)
3-day	**1.65** (1.50-1.82)	**2.09** (1.90-2.31)	**2.70** (2.45-2.99)	**3.20** (2.90-3.53)	**3.90** (3.51-4.30)	**4.46** (3.98-4.93)	**5.06** (4.48-5.60)	**5.69** (4.98-6.30)	**6.56** (5.65-7.32)	**7.26** (6.17-8.16)
4-day	**1.80** (1.64-1.97)	**2.28** (2.08-2.50)	**2.96** (2.70-3.25)	**3.52** (3.20-3.85)	**4.32** (3.90-4.73)	**4.96** (4.46-5.44)	**5.65** (5.04-6.21)	**6.38** (5.63-7.03)	**7.42** (6.45-8.22)	**8.26** (7.09-9.22)
7-day	**2.00** (1.83-2.20)	**2.54** (2.32-2.78)	**3.31** (3.02-3.63)	**3.95** (3.59-4.33)	**4.87** (4.39-5.33)	**5.62** (5.03-6.16)	**6.42** (5.70-7.06)	**7.28** (6.40-8.04)	**8.52** (7.36-9.47)	**9.52** (8.13-10.7)
10-day	**2.19** (2.01-2.40)	**2.78** (2.55-3.05)	**3.62** (3.30-3.96)	**4.30** (3.92-4.71)	**5.27** (4.77-5.77)	**6.05** (5.44-6.64)	**6.89** (6.14-7.58)	**7.78** (6.87-8.58)	**9.04** (7.86-10.0)	**10.1** (8.64-11.2)
20-day	**2.72** (2.49-2.97)	**3.48** (3.18-3.79)	**4.52** (4.13-4.94)	**5.34** (4.86-5.82)	**6.45** (5.84-7.03)	**7.30** (6.59-7.98)	**8.19** (7.35-8.97)	**9.10** (8.10-9.99)	**10.3** (9.10-11.4)	**11.3** (9.86-12.5)
30-day	**3.22** (2.96-3.50)	**4.11** (3.78-4.46)	**5.33** (4.89-5.79)	**6.28** (5.75-6.82)	**7.57** (6.89-8.23)	**8.57** (7.76-9.33)	**9.61** (8.64-10.5)	**10.7** (9.53-11.7)	**12.1** (10.7-13.3)	**13.2** (11.6-14.7)
45-day	**3.79** (3.49-4.14)	**4.85** (4.45-5.29)	**6.28** (5.75-6.85)	**7.36** (6.73-8.03)	**8.80** (8.01-9.59)	**9.90** (8.96-10.8)	**11.0** (9.92-12.0)	**12.1** (10.9-13.3)	**13.6** (12.1-15.0)	**14.7** (13.0-16.3)
60-day	**4.29** (3.95-4.67)	**5.48** (5.04-5.97)	**7.07** (6.48-7.69)	**8.24** (7.54-8.97)	**9.78** (8.92-10.6)	**10.9** (9.93-11.9)	**12.1** (10.9-13.2)	**13.2** (11.9-14.5)	**14.8** (13.1-16.2)	**15.9** (14.0-17.5)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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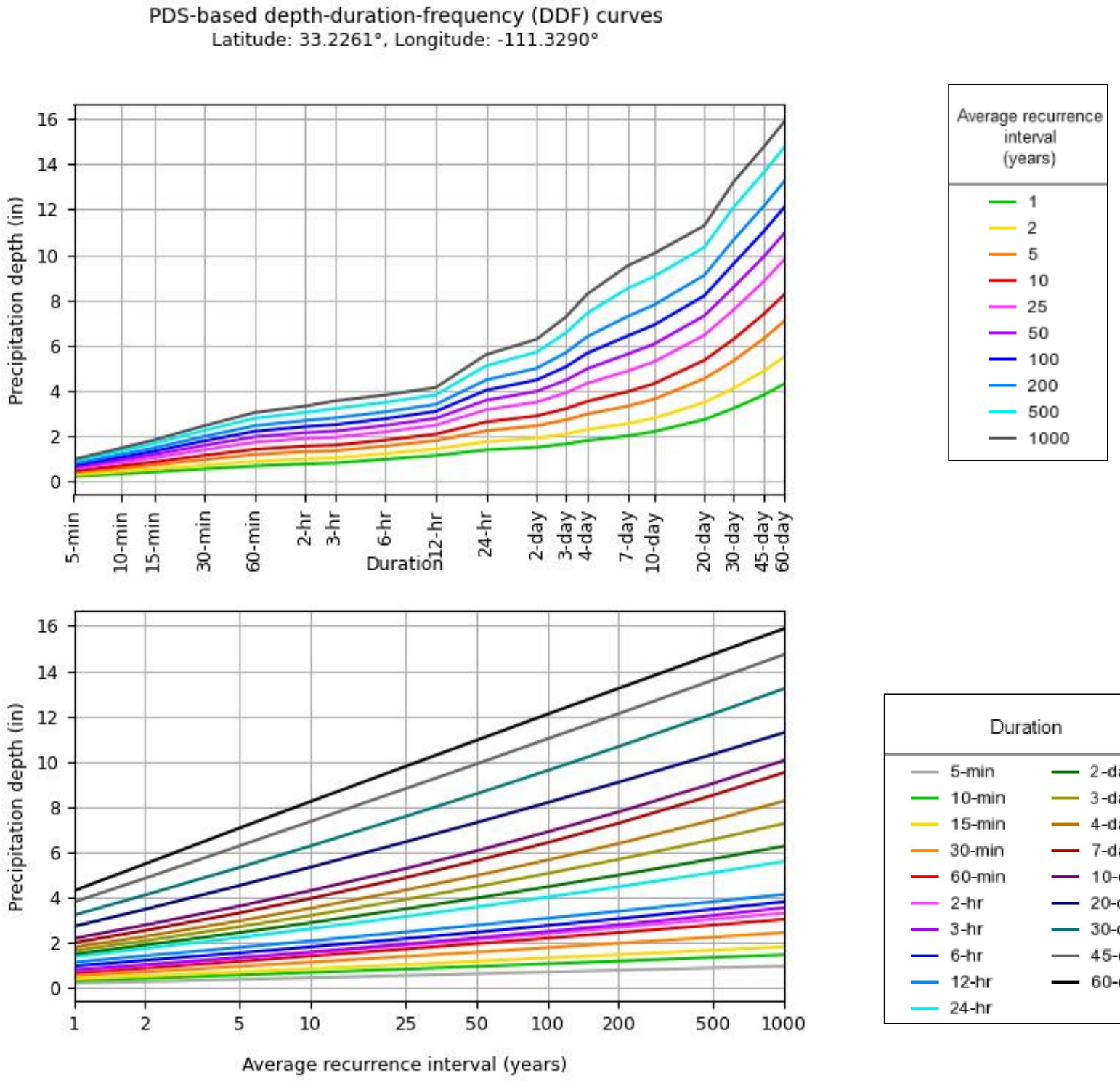
PF graphical



NOAA Atlas 14, Volume 1, Version 5 Created (GMT): Tue Jun 24 17:09:42 2025

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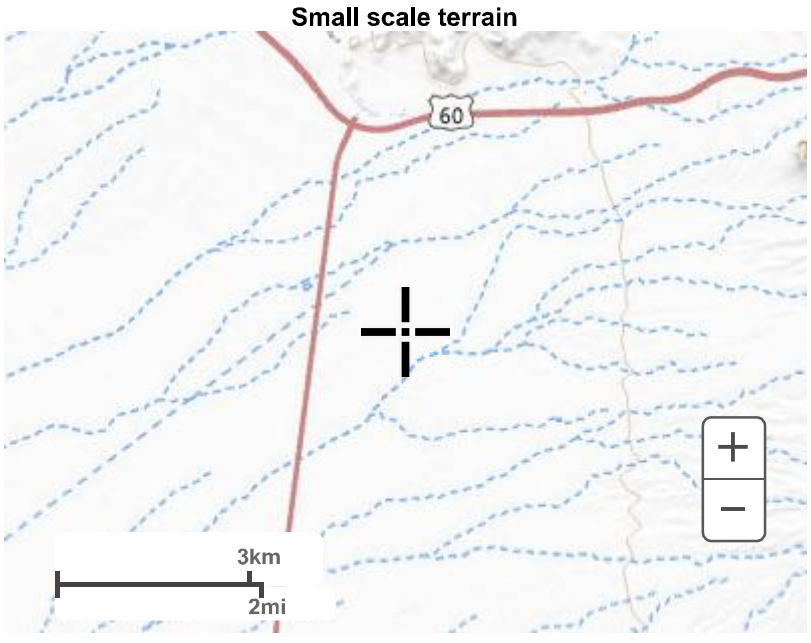
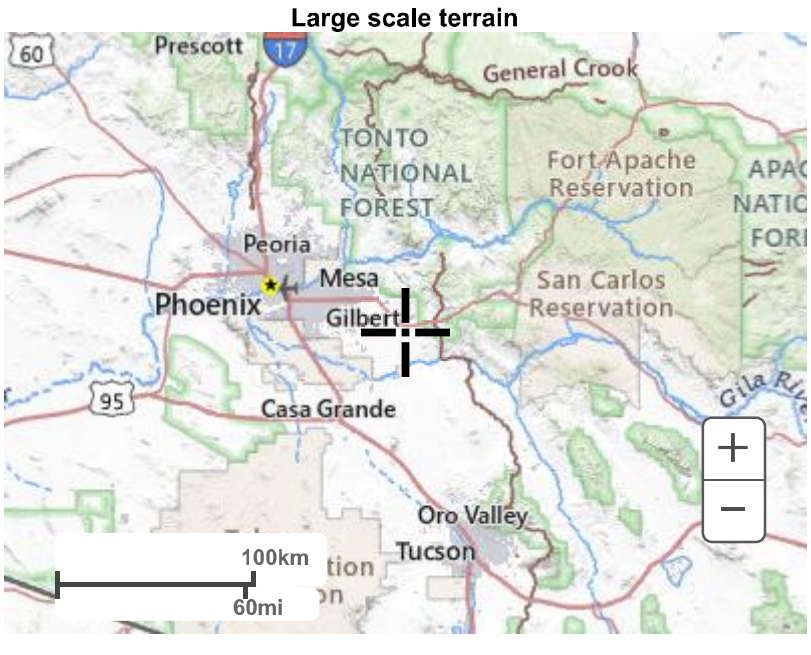
Maps & aerials

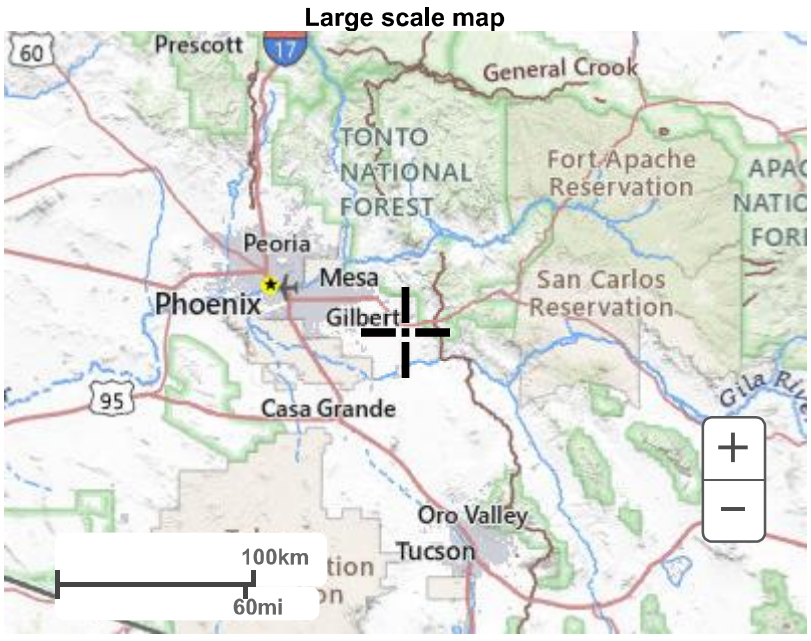
Small scale terrain



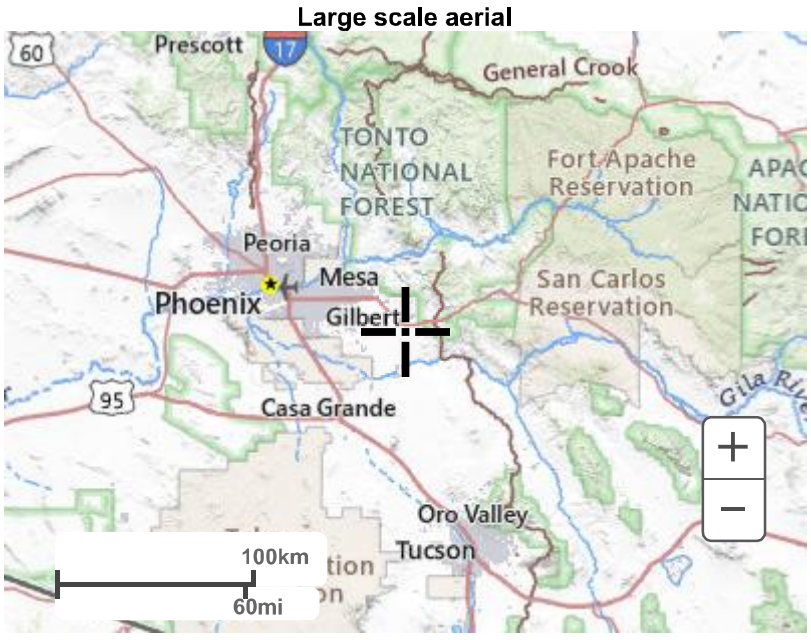
Large scale terrain



Large scale map



Large scale aerial



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US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

Standard 24-hour NRCS rainfall distributions

6-minute interval | 100yr

time (hours) | type II 24-hour | 4.02

CHECK 4.020

0.0	0.00000	0	0	0.000
0.1	0.00101	0.0040602	0.0040602	0.004
0.2	0.00202	0.0081204	0.0040602	0.004
0.3	0.00305	0.012261	0.0041406	0.004
0.4	0.00408	0.0164016	0.0041406	0.004
0.5	0.00513	0.0206226	0.004221	0.004
0.6	0.00618	0.0248436	0.004221	0.004
0.7	0.00725	0.029145	0.0043014	0.004
0.8	0.00832	0.0334464	0.0043014	0.004
0.9	0.00941	0.0378282	0.0043818	0.004
1.0	0.01050	0.04221	0.0043818	0.004
1.1	0.01161	0.0466722	0.0044622	0.004
1.2	0.01272	0.0511344	0.0044622	0.004
1.3	0.01385	0.055677	0.0045426	0.005
1.4	0.01498	0.0602196	0.0045426	0.005
1.5	0.01613	0.0648426	0.004623	0.005
1.6	0.01728	0.0694656	0.004623	0.005
1.7	0.01845	0.074169	0.0047034	0.005
1.8	0.01962	0.0788724	0.0047034	0.005
1.9	0.02081	0.0836562	0.0047838	0.005
2.0	0.02200	0.08844	0.0047838	0.005
2.1	0.02321	0.0933042	0.0048642	0.005
2.2	0.02442	0.0981684	0.0048642	0.005
2.3	0.02565	0.103113	0.0049446	0.005
2.4	0.02688	0.1080576	0.0049446	0.005
2.5	0.02813	0.1130826	0.005025	0.005
2.6	0.02938	0.1181076	0.005025	0.005
2.7	0.03065	0.123213	0.0051054	0.005
2.8	0.03192	0.1283184	0.0051054	0.005
2.9	0.03321	0.1335042	0.0051858	0.005
3.0	0.03450	0.13869	0.0051858	0.005
3.1	0.03581	0.1439562	0.0052662	0.005
3.2	0.03712	0.1492224	0.0052662	0.005
3.3	0.03845	0.154569	0.0053466	0.005
3.4	0.03978	0.1599156	0.0053466	0.005
3.5	0.04113	0.1653426	0.005427	0.005
3.6	0.04248	0.1707696	0.005427	0.005
3.7	0.04385	0.176277	0.0055074	0.006
3.8	0.04522	0.1817844	0.0055074	0.006
3.9	0.04661	0.1873722	0.0055878	0.006
4.0	0.04800	0.19296	0.0055878	0.006
4.1	0.04941	0.1986282	0.0056682	0.006
4.2	0.05084	0.2043768	0.0057486	0.006
4.3	0.05229	0.2102058	0.005829	0.006
4.4	0.05376	0.2161152	0.0059094	0.006

4.5	0.05525	0.222105	0.0059898	0.006
4.6	0.05676	0.2281752	0.0060702	0.006
4.7	0.05829	0.2343258	0.0061506	0.006
4.8	0.05984	0.2405568	0.006231	0.006
4.9	0.06141	0.2468682	0.0063114	0.006
5.0	0.06300	0.25326	0.0063918	0.006
5.1	0.06461	0.2597322	0.0064722	0.006
5.2	0.06624	0.2662848	0.0065526	0.007
5.3	0.06789	0.2729178	0.006633	0.007
5.4	0.06956	0.2796312	0.0067134	0.007
5.5	0.07125	0.286425	0.0067938	0.007
5.6	0.07296	0.2932992	0.0068742	0.007
5.7	0.07469	0.3002538	0.0069546	0.007
5.8	0.07644	0.3072888	0.007035	0.007
5.9	0.07821	0.3144042	0.0071154	0.007
6.0	0.08000	0.3216	0.0071958	0.007
6.1	0.08181	0.3288762	0.0072762	0.007
6.2	0.08364	0.3362328	0.0073566	0.007
6.3	0.08549	0.3436698	0.007437	0.007
6.4	0.08736	0.3511872	0.0075174	0.008
6.5	0.08925	0.358785	0.0075978	0.008
6.6	0.09116	0.3664632	0.0076782	0.008
6.7	0.09309	0.3742218	0.0077586	0.008
6.8	0.09504	0.3820608	0.007839	0.008
6.9	0.09701	0.3899802	0.0079194	0.008
7.0	0.09900	0.39798	0.0079998	0.008
7.1	0.10101	0.4060602	0.0080802	0.008
7.2	0.10304	0.4142208	0.0081606	0.008
7.3	0.10509	0.4224618	0.008241	0.008
7.4	0.10716	0.4307832	0.0083214	0.008
7.5	0.10925	0.439185	0.0084018	0.008
7.6	0.11136	0.4476672	0.0084822	0.008
7.7	0.11349	0.4562298	0.0085626	0.009
7.8	0.11564	0.4648728	0.008643	0.009
7.9	0.11781	0.4735962	0.0087234	0.009
8.0	0.12000	0.4824	0.0088038	0.009
8.1	0.12225	0.491445	0.009045	0.009
8.2	0.12460	0.500892	0.009447	0.009
8.3	0.12705	0.510741	0.009849	0.010
8.4	0.12960	0.520992	0.010251	0.010
8.5	0.13225	0.531645	0.010653	0.011
8.6	0.13500	0.5427	0.011055	0.011
8.7	0.13785	0.554157	0.011457	0.011
8.8	0.14080	0.566016	0.011859	0.012
8.9	0.14385	0.578277	0.012261	0.012
9.0	0.14700	0.59094	0.012663	0.013
9.1	0.15020	0.603804	0.012864	0.013
9.2	0.15340	0.616668	0.012864	0.013
9.3	0.15660	0.629532	0.012864	0.013
9.4	0.15980	0.642396	0.012864	0.013
9.5	0.16300	0.65526	0.012864	0.013
9.6	0.16628	0.6684456	0.0131856	0.013

9.7	0.16972	0.6822744	0.0138288	0.014
9.8	0.17332	0.6967464	0.014472	0.014
9.9	0.17708	0.7118616	0.0151152	0.015
10.0	0.18100	0.72762	0.0157584	0.016
10.1	0.18512	0.7441824	0.0165624	0.017
10.2	0.18948	0.7617096	0.0175272	0.018
10.3	0.19408	0.7802016	0.018492	0.018
10.4	0.19892	0.7996584	0.0194568	0.019
10.5	0.20400	0.82008	0.0204216	0.020
10.6	0.20940	0.841788	0.021708	0.022
10.7	0.21520	0.865104	0.023316	0.023
10.8	0.22140	0.890028	0.024924	0.025
10.9	0.22800	0.91656	0.026532	0.027
11.0	0.23500	0.9447	0.02814	0.028
11.1	0.24268	0.9755736	0.0308736	0.031
11.2	0.25132	1.0103064	0.0347328	0.035
11.3	0.26092	1.0488984	0.038592	0.039
11.4	0.27148	1.0913496	0.0424512	0.042
11.5	0.28300	1.13766	0.0463104	0.046
11.6	0.30684	1.2334968	0.0958368	0.096
11.7	0.35436	1.4245272	0.1910304	0.191
11.8	0.43079	1.7317758	0.3072486	0.307
11.9	0.56786	2.2827972	0.5510214	0.551
12.0	0.66300	2.66526	0.3824628	0.382
12.1	0.68196	2.7414792	0.0762192	0.076
12.2	0.69864	2.8085328	0.0670536	0.067
12.3	0.71304	2.8664208	0.057888	0.058
12.4	0.72516	2.9151432	0.0487224	0.049
12.5	0.73500	2.9547	0.0395568	0.040
12.6	0.74344	2.9886288	0.0339288	0.034
12.7	0.75136	3.0204672	0.0318384	0.032
12.8	0.75876	3.0502152	0.029748	0.030
12.9	0.76564	3.0778728	0.0276576	0.028
13.0	0.77200	3.10344	0.0255672	0.026
13.1	0.77796	3.1273992	0.0239592	0.024
13.2	0.78364	3.1502328	0.0228336	0.023
13.3	0.78904	3.1719408	0.021708	0.022
13.4	0.79416	3.1925232	0.0205824	0.021
13.5	0.79900	3.21198	0.0194568	0.019
13.6	0.80360	3.230472	0.018492	0.018
13.7	0.80800	3.24816	0.017688	0.018
13.8	0.81220	3.265044	0.016884	0.017
13.9	0.81620	3.281124	0.01608	0.016
14.0	0.82000	3.2964	0.015276	0.015
14.1	0.82367	3.3111534	0.0147534	0.015
14.2	0.82726	3.3255852	0.0144318	0.014
14.3	0.83079	3.3397758	0.0141906	0.014
14.4	0.83424	3.3536448	0.013869	0.014
14.5	0.83763	3.3672726	0.0136278	0.014
14.6	0.84094	3.3805788	0.0133062	0.013
14.7	0.84419	3.3936438	0.013065	0.013
14.8	0.84736	3.4063872	0.0127434	0.013

14.9	0.85047	3.4188894	0.0125022	0.013
15.0	0.85350	3.43107	0.0121806	0.012
15.1	0.85647	3.4430094	0.0119394	0.012
15.2	0.85936	3.4546272	0.0116178	0.012
15.3	0.86219	3.4660038	0.0113766	0.011
15.4	0.86494	3.4770588	0.011055	0.011
15.5	0.86763	3.4878726	0.0108138	0.011
15.6	0.87024	3.4983648	0.0104922	0.010
15.7	0.87279	3.5086158	0.010251	0.010
15.8	0.87526	3.5185452	0.0099294	0.010
15.9	0.87767	3.5282334	0.0096882	0.010
16.0	0.88000	3.5376	0.0093666	0.009
16.1	0.88229	3.5468058	0.0092058	0.009
16.2	0.88455	3.555891	0.0090852	0.009
16.3	0.88679	3.5648958	0.0090048	0.009
16.4	0.88900	3.57378	0.0088842	0.009
16.5	0.89119	3.5825838	0.0088038	0.009
16.6	0.89335	3.591267	0.0086832	0.009
16.7	0.89549	3.5998698	0.0086028	0.009
16.8	0.89760	3.608352	0.0084822	0.008
16.9	0.89969	3.6167538	0.0084018	0.008
17.0	0.90175	3.625035	0.0082812	0.008
17.1	0.90379	3.6332358	0.0082008	0.008
17.2	0.90580	3.641316	0.0080802	0.008
17.3	0.90779	3.6493158	0.0079998	0.008
17.4	0.90975	3.657195	0.0078792	0.008
17.5	0.91169	3.6649938	0.0077988	0.008
17.6	0.91360	3.672672	0.0076782	0.008
17.7	0.91549	3.6802698	0.0075978	0.008
17.8	0.91735	3.687747	0.0074772	0.007
17.9	0.91919	3.6951438	0.0073968	0.007
18.0	0.92100	3.70242	0.0072762	0.007
18.1	0.92279	3.7096158	0.0071958	0.007
18.2	0.92455	3.716691	0.0070752	0.007
18.3	0.92629	3.7236858	0.0069948	0.007
18.4	0.92800	3.73056	0.0068742	0.007
18.5	0.92969	3.7373538	0.0067938	0.007
18.6	0.93135	3.744027	0.0066732	0.007
18.7	0.93299	3.7506198	0.0065928	0.007
18.8	0.93460	3.757092	0.0064722	0.006
18.9	0.93619	3.7634838	0.0063918	0.006
19.0	0.93775	3.769755	0.0062712	0.006
19.1	0.93929	3.7759458	0.0061908	0.006
19.2	0.94080	3.782016	0.0060702	0.006
19.3	0.94229	3.7880058	0.0059898	0.006
19.4	0.94375	3.793875	0.0058692	0.006
19.5	0.94519	3.7996638	0.0057888	0.006
19.6	0.94660	3.805332	0.0056682	0.006
19.7	0.94799	3.8109198	0.0055878	0.006
19.8	0.94935	3.816387	0.0054672	0.005
19.9	0.95069	3.8217738	0.0053868	0.005
20.0	0.95200	3.82704	0.0052662	0.005

20.1	0.95330	3.832266	0.005226	0.005
20.2	0.95459	3.8374518	0.0051858	0.005
20.3	0.95588	3.8426376	0.0051858	0.005
20.4	0.95716	3.8477832	0.0051456	0.005
20.5	0.95844	3.8529288	0.0051456	0.005
20.6	0.95971	3.8580342	0.0051054	0.005
20.7	0.96098	3.8631396	0.0051054	0.005
20.8	0.96224	3.8682048	0.0050652	0.005
20.9	0.96350	3.87327	0.0050652	0.005
21.0	0.96475	3.878295	0.005025	0.005
21.1	0.96600	3.88332	0.005025	0.005
21.2	0.96724	3.8883048	0.0049848	0.005
21.3	0.96848	3.8932896	0.0049848	0.005
21.4	0.96971	3.8982342	0.0049446	0.005
21.5	0.97094	3.9031788	0.0049446	0.005
21.6	0.97216	3.9080832	0.0049044	0.005
21.7	0.97338	3.9129876	0.0049044	0.005
21.8	0.97459	3.9178518	0.0048642	0.005
21.9	0.97580	3.922716	0.0048642	0.005
22.0	0.97700	3.92754	0.004824	0.005
22.1	0.97820	3.932364	0.004824	0.005
22.2	0.97939	3.9371478	0.0047838	0.005
22.3	0.98058	3.9419316	0.0047838	0.005
22.4	0.98176	3.9466752	0.0047436	0.005
22.5	0.98294	3.9514188	0.0047436	0.005
22.6	0.98411	3.9561222	0.0047034	0.005
22.7	0.98528	3.9608256	0.0047034	0.005
22.8	0.98644	3.9654888	0.0046632	0.005
22.9	0.98760	3.970152	0.0046632	0.005
23.0	0.98875	3.974775	0.004623	0.005
23.1	0.98990	3.979398	0.004623	0.005
23.2	0.99104	3.9839808	0.0045828	0.005
23.3	0.99218	3.9885636	0.0045828	0.005
23.4	0.99331	3.9931062	0.0045426	0.005
23.5	0.99444	3.9976488	0.0045426	0.005
23.6	0.99556	4.0021512	0.0045024	0.005
23.7	0.99668	4.0066536	0.0045024	0.005
23.8	0.99779	4.0111158	0.0044622	0.004
23.9	0.99890	4.015578	0.0044622	0.004
24.0	1.0000	4.02	0.004422	0.004

Standard 24-hour NRCS rainfall distributions

6-minute interval time (hours)	type II 24-hour	25yr 3.15			CHECK	3.150
0.0	0.00000	0	0	0.000		
0.1	0.00101	0.0031815	0.0031815	0.003		
0.2	0.00202	0.006363	0.0031815	0.003		
0.3	0.00305	0.0096075	0.0032445	0.003		
0.4	0.00408	0.012852	0.0032445	0.003		
0.5	0.00513	0.0161595	0.0033075	0.003		
0.6	0.00618	0.019467	0.0033075	0.003		
0.7	0.00725	0.0228375	0.0033705	0.003		
0.8	0.00832	0.026208	0.0033705	0.003		
0.9	0.00941	0.0296415	0.0034335	0.003		
1.0	0.01050	0.033075	0.0034335	0.003		
1.1	0.01161	0.0365715	0.0034965	0.003		
1.2	0.01272	0.040068	0.0034965	0.003		
1.3	0.01385	0.0436275	0.0035595	0.004		
1.4	0.01498	0.047187	0.0035595	0.004		
1.5	0.01613	0.0508095	0.0036225	0.004		
1.6	0.01728	0.054432	0.0036225	0.004		
1.7	0.01845	0.0581175	0.0036855	0.004		
1.8	0.01962	0.061803	0.0036855	0.004		
1.9	0.02081	0.0655515	0.0037485	0.004		
2.0	0.02200	0.0693	0.0037485	0.004		
2.1	0.02321	0.0731115	0.0038115	0.004		
2.2	0.02442	0.076923	0.0038115	0.004		
2.3	0.02565	0.0807975	0.0038745	0.004		
2.4	0.02688	0.084672	0.0038745	0.004		
2.5	0.02813	0.0886095	0.0039375	0.004		
2.6	0.02938	0.092547	0.0039375	0.004		
2.7	0.03065	0.0965475	0.0040005	0.004		
2.8	0.03192	0.100548	0.0040005	0.004		
2.9	0.03321	0.1046115	0.0040635	0.004		
3.0	0.03450	0.108675	0.0040635	0.004		
3.1	0.03581	0.1128015	0.0041265	0.004		
3.2	0.03712	0.116928	0.0041265	0.004		
3.3	0.03845	0.1211175	0.0041895	0.004		
3.4	0.03978	0.125307	0.0041895	0.004		
3.5	0.04113	0.1295595	0.0042525	0.004		
3.6	0.04248	0.133812	0.0042525	0.004		
3.7	0.04385	0.1381275	0.0043155	0.004		
3.8	0.04522	0.142443	0.0043155	0.004		
3.9	0.04661	0.1468215	0.0043785	0.004		
4.0	0.04800	0.1512	0.0043785	0.004		
4.1	0.04941	0.1556415	0.0044415	0.004		
4.2	0.05084	0.160146	0.0045045	0.005		
4.3	0.05229	0.1647135	0.0045675	0.005		
4.4	0.05376	0.169344	0.0046305	0.005		
4.5	0.05525	0.1740375	0.0046935	0.005		

4.6	0.05676	0.178794	0.0047565	0.005
4.7	0.05829	0.1836135	0.0048195	0.005
4.8	0.05984	0.188496	0.0048825	0.005
4.9	0.06141	0.1934415	0.0049455	0.005
5.0	0.06300	0.19845	0.0050085	0.005
5.1	0.06461	0.2035215	0.0050715	0.005
5.2	0.06624	0.208656	0.0051345	0.005
5.3	0.06789	0.2138535	0.0051975	0.005
5.4	0.06956	0.219114	0.0052605	0.005
5.5	0.07125	0.2244375	0.0053235	0.005
5.6	0.07296	0.229824	0.0053865	0.005
5.7	0.07469	0.2352735	0.0054495	0.005
5.8	0.07644	0.240786	0.0055125	0.006
5.9	0.07821	0.2463615	0.0055755	0.006
6.0	0.08000	0.252	0.0056385	0.006
6.1	0.08181	0.2577015	0.0057015	0.006
6.2	0.08364	0.263466	0.0057645	0.006
6.3	0.08549	0.2692935	0.0058275	0.006
6.4	0.08736	0.275184	0.0058905	0.006
6.5	0.08925	0.2811375	0.0059535	0.006
6.6	0.09116	0.287154	0.0060165	0.006
6.7	0.09309	0.2932335	0.0060795	0.006
6.8	0.09504	0.299376	0.0061425	0.006
6.9	0.09701	0.3055815	0.0062055	0.006
7.0	0.09900	0.31185	0.0062685	0.006
7.1	0.10101	0.3181815	0.0063315	0.006
7.2	0.10304	0.324576	0.0063945	0.006
7.3	0.10509	0.3310335	0.0064575	0.006
7.4	0.10716	0.337554	0.0065205	0.007
7.5	0.10925	0.3441375	0.0065835	0.007
7.6	0.11136	0.350784	0.0066465	0.007
7.7	0.11349	0.3574935	0.0067095	0.007
7.8	0.11564	0.364266	0.0067725	0.007
7.9	0.11781	0.3711015	0.0068355	0.007
8.0	0.12000	0.378	0.0068985	0.007
8.1	0.12225	0.3850875	0.0070875	0.007
8.2	0.12460	0.39249	0.0074025	0.007
8.3	0.12705	0.4002075	0.0077175	0.008
8.4	0.12960	0.40824	0.0080325	0.008
8.5	0.13225	0.4165875	0.0083475	0.008
8.6	0.13500	0.42525	0.0086625	0.009
8.7	0.13785	0.4342275	0.0089775	0.009
8.8	0.14080	0.44352	0.0092925	0.009
8.9	0.14385	0.4531275	0.0096075	0.010
9.0	0.14700	0.46305	0.0099225	0.010
9.1	0.15020	0.47313	0.01008	0.010
9.2	0.15340	0.48321	0.01008	0.010
9.3	0.15660	0.49329	0.01008	0.010
9.4	0.15980	0.50337	0.01008	0.010
9.5	0.16300	0.51345	0.01008	0.010
9.6	0.16628	0.523782	0.010332	0.010
9.7	0.16972	0.534618	0.010836	0.011

9.8	0.17332	0.545958	0.01134	0.011
9.9	0.17708	0.557802	0.011844	0.012
10.0	0.18100	0.57015	0.012348	0.012
10.1	0.18512	0.583128	0.012978	0.013
10.2	0.18948	0.596862	0.013734	0.014
10.3	0.19408	0.611352	0.01449	0.014
10.4	0.19892	0.626598	0.015246	0.015
10.5	0.20400	0.6426	0.016002	0.016
10.6	0.20940	0.65961	0.01701	0.017
10.7	0.21520	0.67788	0.01827	0.018
10.8	0.22140	0.69741	0.01953	0.020
10.9	0.22800	0.7182	0.02079	0.021
11.0	0.23500	0.74025	0.02205	0.022
11.1	0.24268	0.764442	0.024192	0.024
11.2	0.25132	0.791658	0.027216	0.027
11.3	0.26092	0.821898	0.03024	0.030
11.4	0.27148	0.855162	0.033264	0.033
11.5	0.28300	0.89145	0.036288	0.036
11.6	0.30684	0.966546	0.075096	0.075
11.7	0.35436	1.116234	0.149688	0.150
11.8	0.43079	1.3569885	0.2407545	0.241
11.9	0.56786	1.788759	0.4317705	0.432
12.0	0.66300	2.08845	0.299691	0.300
12.1	0.68196	2.148174	0.059724	0.060
12.2	0.69864	2.200716	0.052542	0.053
12.3	0.71304	2.246076	0.04536	0.045
12.4	0.72516	2.284254	0.038178	0.038
12.5	0.73500	2.31525	0.030996	0.031
12.6	0.74344	2.341836	0.026586	0.027
12.7	0.75136	2.366784	0.024948	0.025
12.8	0.75876	2.390094	0.02331	0.023
12.9	0.76564	2.411766	0.021672	0.022
13.0	0.77200	2.4318	0.020034	0.020
13.1	0.77796	2.450574	0.018774	0.019
13.2	0.78364	2.468466	0.017892	0.018
13.3	0.78904	2.485476	0.01701	0.017
13.4	0.79416	2.501604	0.016128	0.016
13.5	0.79900	2.51685	0.015246	0.015
13.6	0.80360	2.53134	0.01449	0.014
13.7	0.80800	2.5452	0.01386	0.014
13.8	0.81220	2.55843	0.01323	0.013
13.9	0.81620	2.57103	0.0126	0.013
14.0	0.82000	2.583	0.01197	0.012
14.1	0.82367	2.5945605	0.0115605	0.012
14.2	0.82726	2.605869	0.0113085	0.011
14.3	0.83079	2.6169885	0.0111195	0.011
14.4	0.83424	2.627856	0.0108675	0.011
14.5	0.83763	2.6385345	0.0106785	0.011
14.6	0.84094	2.648961	0.0104265	0.010
14.7	0.84419	2.6591985	0.0102375	0.010
14.8	0.84736	2.669184	0.0099855	0.010
14.9	0.85047	2.6789805	0.0097965	0.010

15.0	0.85350	2.688525	0.0095445	0.010
15.1	0.85647	2.6978805	0.0093555	0.009
15.2	0.85936	2.706984	0.0091035	0.009
15.3	0.86219	2.7158985	0.0089145	0.009
15.4	0.86494	2.724561	0.0086625	0.009
15.5	0.86763	2.7330345	0.0084735	0.008
15.6	0.87024	2.741256	0.0082215	0.008
15.7	0.87279	2.7492885	0.0080325	0.008
15.8	0.87526	2.757069	0.0077805	0.008
15.9	0.87767	2.7646605	0.0075915	0.008
16.0	0.88000	2.772	0.0073395	0.007
16.1	0.88229	2.7792135	0.0072135	0.007
16.2	0.88455	2.7863325	0.007119	0.007
16.3	0.88679	2.7933885	0.007056	0.007
16.4	0.88900	2.80035	0.0069615	0.007
16.5	0.89119	2.8072485	0.0068985	0.007
16.6	0.89335	2.8140525	0.006804	0.007
16.7	0.89549	2.8207935	0.006741	0.007
16.8	0.89760	2.82744	0.0066465	0.007
16.9	0.89969	2.8340235	0.0065835	0.007
17.0	0.90175	2.8405125	0.006489	0.006
17.1	0.90379	2.8469385	0.006426	0.006
17.2	0.90580	2.85327	0.0063315	0.006
17.3	0.90779	2.8595385	0.0062685	0.006
17.4	0.90975	2.8657125	0.006174	0.006
17.5	0.91169	2.8718235	0.006111	0.006
17.6	0.91360	2.87784	0.0060165	0.006
17.7	0.91549	2.8837935	0.0059535	0.006
17.8	0.91735	2.8896525	0.005859	0.006
17.9	0.91919	2.8954485	0.005796	0.006
18.0	0.92100	2.90115	0.0057015	0.006
18.1	0.92279	2.9067885	0.0056385	0.006
18.2	0.92455	2.9123325	0.005544	0.006
18.3	0.92629	2.9178135	0.005481	0.005
18.4	0.92800	2.9232	0.0053865	0.005
18.5	0.92969	2.9285235	0.0053235	0.005
18.6	0.93135	2.9337525	0.005229	0.005
18.7	0.93299	2.9389185	0.005166	0.005
18.8	0.93460	2.94399	0.0050715	0.005
18.9	0.93619	2.9489985	0.0050085	0.005
19.0	0.93775	2.9539125	0.004914	0.005
19.1	0.93929	2.9587635	0.004851	0.005
19.2	0.94080	2.96352	0.0047565	0.005
19.3	0.94229	2.9682135	0.0046935	0.005
19.4	0.94375	2.9728125	0.004599	0.005
19.5	0.94519	2.9773485	0.004536	0.005
19.6	0.94660	2.98179	0.0044415	0.004
19.7	0.94799	2.9861685	0.0043785	0.004
19.8	0.94935	2.9904525	0.004284	0.004
19.9	0.95069	2.9946735	0.004221	0.004
20.0	0.95200	2.9988	0.0041265	0.004
20.1	0.95330	3.002895	0.004095	0.004

20.2	0.95459	3.0069585	0.0040635	0.004
20.3	0.95588	3.011022	0.0040635	0.004
20.4	0.95716	3.015054	0.004032	0.004
20.5	0.95844	3.019086	0.004032	0.004
20.6	0.95971	3.0230865	0.0040005	0.004
20.7	0.96098	3.027087	0.0040005	0.004
20.8	0.96224	3.031056	0.003969	0.004
20.9	0.96350	3.035025	0.003969	0.004
21.0	0.96475	3.0389625	0.0039375	0.004
21.1	0.96600	3.0429	0.0039375	0.004
21.2	0.96724	3.046806	0.003906	0.004
21.3	0.96848	3.050712	0.003906	0.004
21.4	0.96971	3.0545865	0.0038745	0.004
21.5	0.97094	3.058461	0.0038745	0.004
21.6	0.97216	3.062304	0.003843	0.004
21.7	0.97338	3.066147	0.003843	0.004
21.8	0.97459	3.0699585	0.0038115	0.004
21.9	0.97580	3.07377	0.0038115	0.004
22.0	0.97700	3.07755	0.00378	0.004
22.1	0.97820	3.08133	0.00378	0.004
22.2	0.97939	3.0850785	0.0037485	0.004
22.3	0.98058	3.088827	0.0037485	0.004
22.4	0.98176	3.092544	0.003717	0.004
22.5	0.98294	3.096261	0.003717	0.004
22.6	0.98411	3.0999465	0.0036855	0.004
22.7	0.98528	3.103632	0.0036855	0.004
22.8	0.98644	3.107286	0.003654	0.004
22.9	0.98760	3.11094	0.003654	0.004
23.0	0.98875	3.1145625	0.0036225	0.004
23.1	0.98990	3.118185	0.0036225	0.004
23.2	0.99104	3.121776	0.003591	0.004
23.3	0.99218	3.125367	0.003591	0.004
23.4	0.99331	3.1289265	0.0035595	0.004
23.5	0.99444	3.132486	0.0035595	0.004
23.6	0.99556	3.136014	0.003528	0.004
23.7	0.99668	3.139542	0.003528	0.004
23.8	0.99779	3.1430385	0.0034965	0.003
23.9	0.99890	3.146535	0.0034965	0.003
24.0	1.0000	3.15	0.003465	0.003

Standard 24-hour NRCS rainfall distributions

6-minute interval time (hours)	type II 24-hour	10yr 2.62			CHECK	2.620
0.0	0.00000	0	0	0.000		
0.1	0.00101	0.0026462	0.0026462	0.003		
0.2	0.00202	0.0052924	0.0026462	0.003		
0.3	0.00305	0.007991	0.0026986	0.003		
0.4	0.00408	0.0106896	0.0026986	0.003		
0.5	0.00513	0.0134406	0.002751	0.003		
0.6	0.00618	0.0161916	0.002751	0.003		
0.7	0.00725	0.018995	0.0028034	0.003		
0.8	0.00832	0.0217984	0.0028034	0.003		
0.9	0.00941	0.0246542	0.0028558	0.003		
1.0	0.01050	0.02751	0.0028558	0.003		
1.1	0.01161	0.0304182	0.0029082	0.003		
1.2	0.01272	0.0333264	0.0029082	0.003		
1.3	0.01385	0.036287	0.0029606	0.003		
1.4	0.01498	0.0392476	0.0029606	0.003		
1.5	0.01613	0.0422606	0.003013	0.003		
1.6	0.01728	0.0452736	0.003013	0.003		
1.7	0.01845	0.048339	0.0030654	0.003		
1.8	0.01962	0.0514044	0.0030654	0.003		
1.9	0.02081	0.0545222	0.0031178	0.003		
2.0	0.02200	0.05764	0.0031178	0.003		
2.1	0.02321	0.0608102	0.0031702	0.003		
2.2	0.02442	0.0639804	0.0031702	0.003		
2.3	0.02565	0.067203	0.0032226	0.003		
2.4	0.02688	0.0704256	0.0032226	0.003		
2.5	0.02813	0.0737006	0.003275	0.003		
2.6	0.02938	0.0769756	0.003275	0.003		
2.7	0.03065	0.080303	0.0033274	0.003		
2.8	0.03192	0.0836304	0.0033274	0.003		
2.9	0.03321	0.0870102	0.0033798	0.003		
3.0	0.03450	0.09039	0.0033798	0.003		
3.1	0.03581	0.0938222	0.0034322	0.003		
3.2	0.03712	0.0972544	0.0034322	0.003		
3.3	0.03845	0.100739	0.0034846	0.003		
3.4	0.03978	0.1042236	0.0034846	0.003		
3.5	0.04113	0.1077606	0.003537	0.004		
3.6	0.04248	0.1112976	0.003537	0.004		
3.7	0.04385	0.114887	0.0035894	0.004		
3.8	0.04522	0.1184764	0.0035894	0.004		
3.9	0.04661	0.1221182	0.0036418	0.004		
4.0	0.04800	0.12576	0.0036418	0.004		
4.1	0.04941	0.1294542	0.0036942	0.004		
4.2	0.05084	0.1332008	0.0037466	0.004		
4.3	0.05229	0.1369998	0.003799	0.004		
4.4	0.05376	0.1408512	0.0038514	0.004		
4.5	0.05525	0.144755	0.0039038	0.004		

4.6	0.05676	0.1487112	0.0039562	0.004
4.7	0.05829	0.1527198	0.0040086	0.004
4.8	0.05984	0.1567808	0.004061	0.004
4.9	0.06141	0.1608942	0.0041134	0.004
5.0	0.06300	0.16506	0.0041658	0.004
5.1	0.06461	0.1692782	0.0042182	0.004
5.2	0.06624	0.1735488	0.0042706	0.004
5.3	0.06789	0.1778718	0.004323	0.004
5.4	0.06956	0.1822472	0.0043754	0.004
5.5	0.07125	0.186675	0.0044278	0.004
5.6	0.07296	0.1911552	0.0044802	0.004
5.7	0.07469	0.1956878	0.0045326	0.005
5.8	0.07644	0.2002728	0.004585	0.005
5.9	0.07821	0.2049102	0.0046374	0.005
6.0	0.08000	0.2096	0.0046898	0.005
6.1	0.08181	0.2143422	0.0047422	0.005
6.2	0.08364	0.2191368	0.0047946	0.005
6.3	0.08549	0.2239838	0.004847	0.005
6.4	0.08736	0.2288832	0.0048994	0.005
6.5	0.08925	0.233835	0.0049518	0.005
6.6	0.09116	0.2388392	0.0050042	0.005
6.7	0.09309	0.2438958	0.0050566	0.005
6.8	0.09504	0.2490048	0.005109	0.005
6.9	0.09701	0.2541662	0.0051614	0.005
7.0	0.09900	0.25938	0.0052138	0.005
7.1	0.10101	0.2646462	0.0052662	0.005
7.2	0.10304	0.2699648	0.0053186	0.005
7.3	0.10509	0.2753358	0.005371	0.005
7.4	0.10716	0.2807592	0.0054234	0.005
7.5	0.10925	0.286235	0.0054758	0.005
7.6	0.11136	0.2917632	0.0055282	0.006
7.7	0.11349	0.2973438	0.0055806	0.006
7.8	0.11564	0.3029768	0.005633	0.006
7.9	0.11781	0.3086622	0.0056854	0.006
8.0	0.12000	0.3144	0.0057378	0.006
8.1	0.12225	0.320295	0.005895	0.006
8.2	0.12460	0.326452	0.006157	0.006
8.3	0.12705	0.332871	0.006419	0.006
8.4	0.12960	0.339552	0.006681	0.007
8.5	0.13225	0.346495	0.006943	0.007
8.6	0.13500	0.3537	0.007205	0.007
8.7	0.13785	0.361167	0.007467	0.007
8.8	0.14080	0.368896	0.007729	0.008
8.9	0.14385	0.376887	0.007991	0.008
9.0	0.14700	0.38514	0.008253	0.008
9.1	0.15020	0.393524	0.008384	0.008
9.2	0.15340	0.401908	0.008384	0.008
9.3	0.15660	0.410292	0.008384	0.008
9.4	0.15980	0.418676	0.008384	0.008
9.5	0.16300	0.42706	0.008384	0.008
9.6	0.16628	0.4356536	0.0085936	0.009
9.7	0.16972	0.4446664	0.0090128	0.009

9.8	0.17332	0.4540984	0.009432	0.009
9.9	0.17708	0.4639496	0.0098512	0.010
10.0	0.18100	0.47422	0.0102704	0.010
10.1	0.18512	0.4850144	0.0107944	0.011
10.2	0.18948	0.4964376	0.0114232	0.011
10.3	0.19408	0.5084896	0.012052	0.012
10.4	0.19892	0.5211704	0.0126808	0.013
10.5	0.20400	0.53448	0.0133096	0.013
10.6	0.20940	0.548628	0.014148	0.014
10.7	0.21520	0.563824	0.015196	0.015
10.8	0.22140	0.580068	0.016244	0.016
10.9	0.22800	0.59736	0.017292	0.017
11.0	0.23500	0.6157	0.01834	0.018
11.1	0.24268	0.6358216	0.0201216	0.020
11.2	0.25132	0.6584584	0.0226368	0.023
11.3	0.26092	0.6836104	0.025152	0.025
11.4	0.27148	0.7112776	0.0276672	0.028
11.5	0.28300	0.74146	0.0301824	0.030
11.6	0.30684	0.8039208	0.0624608	0.062
11.7	0.35436	0.9284232	0.1245024	0.125
11.8	0.43079	1.1286698	0.2002466	0.200
11.9	0.56786	1.4877932	0.3591234	0.359
12.0	0.66300	1.73706	0.2492668	0.249
12.1	0.68196	1.7867352	0.0496752	0.050
12.2	0.69864	1.8304368	0.0437016	0.044
12.3	0.71304	1.8681648	0.037728	0.038
12.4	0.72516	1.8999192	0.0317544	0.032
12.5	0.73500	1.9257	0.0257808	0.026
12.6	0.74344	1.9478128	0.0221128	0.022
12.7	0.75136	1.9685632	0.0207504	0.021
12.8	0.75876	1.9879512	0.019388	0.019
12.9	0.76564	2.0059768	0.0180256	0.018
13.0	0.77200	2.02264	0.0166632	0.017
13.1	0.77796	2.0382552	0.0156152	0.016
13.2	0.78364	2.0531368	0.0148816	0.015
13.3	0.78904	2.0672848	0.014148	0.014
13.4	0.79416	2.0806992	0.0134144	0.013
13.5	0.79900	2.09338	0.0126808	0.013
13.6	0.80360	2.105432	0.012052	0.012
13.7	0.80800	2.11696	0.011528	0.012
13.8	0.81220	2.127964	0.011004	0.011
13.9	0.81620	2.138444	0.01048	0.010
14.0	0.82000	2.1484	0.009956	0.010
14.1	0.82367	2.1580154	0.0096154	0.010
14.2	0.82726	2.1674212	0.0094058	0.009
14.3	0.83079	2.1766698	0.0092486	0.009
14.4	0.83424	2.1857088	0.009039	0.009
14.5	0.83763	2.1945906	0.0088818	0.009
14.6	0.84094	2.2032628	0.0086722	0.009
14.7	0.84419	2.2117778	0.008515	0.009
14.8	0.84736	2.2200832	0.0083054	0.008
14.9	0.85047	2.2282314	0.0081482	0.008

15.0	0.85350	2.23617	0.0079386	0.008
15.1	0.85647	2.2439514	0.0077814	0.008
15.2	0.85936	2.2515232	0.0075718	0.008
15.3	0.86219	2.2589378	0.0074146	0.007
15.4	0.86494	2.2661428	0.007205	0.007
15.5	0.86763	2.2731906	0.0070478	0.007
15.6	0.87024	2.2800288	0.0068382	0.007
15.7	0.87279	2.2867098	0.006681	0.007
15.8	0.87526	2.2931812	0.0064714	0.006
15.9	0.87767	2.2994954	0.0063142	0.006
16.0	0.88000	2.3056	0.0061046	0.006
16.1	0.88229	2.3115998	0.0059998	0.006
16.2	0.88455	2.317521	0.0059212	0.006
16.3	0.88679	2.3233898	0.0058688	0.006
16.4	0.88900	2.32918	0.0057902	0.006
16.5	0.89119	2.3349178	0.0057378	0.006
16.6	0.89335	2.340577	0.0056592	0.006
16.7	0.89549	2.3461838	0.0056068	0.006
16.8	0.89760	2.351712	0.0055282	0.006
16.9	0.89969	2.3571878	0.0054758	0.005
17.0	0.90175	2.362585	0.0053972	0.005
17.1	0.90379	2.3679298	0.0053448	0.005
17.2	0.90580	2.373196	0.0052662	0.005
17.3	0.90779	2.3784098	0.0052138	0.005
17.4	0.90975	2.383545	0.0051352	0.005
17.5	0.91169	2.3886278	0.0050828	0.005
17.6	0.91360	2.393632	0.0050042	0.005
17.7	0.91549	2.3985838	0.0049518	0.005
17.8	0.91735	2.403457	0.0048732	0.005
17.9	0.91919	2.4082778	0.0048208	0.005
18.0	0.92100	2.41302	0.0047422	0.005
18.1	0.92279	2.4177098	0.0046898	0.005
18.2	0.92455	2.422321	0.0046112	0.005
18.3	0.92629	2.4268798	0.0045588	0.005
18.4	0.92800	2.43136	0.0044802	0.004
18.5	0.92969	2.4357878	0.0044278	0.004
18.6	0.93135	2.440137	0.0043492	0.004
18.7	0.93299	2.4444338	0.0042968	0.004
18.8	0.93460	2.448652	0.0042182	0.004
18.9	0.93619	2.4528178	0.0041658	0.004
19.0	0.93775	2.456905	0.0040872	0.004
19.1	0.93929	2.4609398	0.0040348	0.004
19.2	0.94080	2.464896	0.0039562	0.004
19.3	0.94229	2.4687998	0.0039038	0.004
19.4	0.94375	2.472625	0.0038252	0.004
19.5	0.94519	2.4763978	0.0037728	0.004
19.6	0.94660	2.480092	0.0036942	0.004
19.7	0.94799	2.4837338	0.0036418	0.004
19.8	0.94935	2.487297	0.0035632	0.004
19.9	0.95069	2.4908078	0.0035108	0.004
20.0	0.95200	2.49424	0.0034322	0.003
20.1	0.95330	2.497646	0.003406	0.003

20.2	0.95459	2.5010258	0.0033798	0.003
20.3	0.95588	2.5044056	0.0033798	0.003
20.4	0.95716	2.5077592	0.0033536	0.003
20.5	0.95844	2.5111128	0.0033536	0.003
20.6	0.95971	2.5144402	0.0033274	0.003
20.7	0.96098	2.5177676	0.0033274	0.003
20.8	0.96224	2.5210688	0.0033012	0.003
20.9	0.96350	2.52437	0.0033012	0.003
21.0	0.96475	2.527645	0.003275	0.003
21.1	0.96600	2.53092	0.003275	0.003
21.2	0.96724	2.5341688	0.0032488	0.003
21.3	0.96848	2.5374176	0.0032488	0.003
21.4	0.96971	2.5406402	0.0032226	0.003
21.5	0.97094	2.5438628	0.0032226	0.003
21.6	0.97216	2.5470592	0.0031964	0.003
21.7	0.97338	2.5502556	0.0031964	0.003
21.8	0.97459	2.5534258	0.0031702	0.003
21.9	0.97580	2.556596	0.0031702	0.003
22.0	0.97700	2.55974	0.003144	0.003
22.1	0.97820	2.562884	0.003144	0.003
22.2	0.97939	2.5660018	0.0031178	0.003
22.3	0.98058	2.5691196	0.0031178	0.003
22.4	0.98176	2.5722112	0.0030916	0.003
22.5	0.98294	2.5753028	0.0030916	0.003
22.6	0.98411	2.5783682	0.0030654	0.003
22.7	0.98528	2.5814336	0.0030654	0.003
22.8	0.98644	2.5844728	0.0030392	0.003
22.9	0.98760	2.587512	0.0030392	0.003
23.0	0.98875	2.590525	0.003013	0.003
23.1	0.98990	2.593538	0.003013	0.003
23.2	0.99104	2.5965248	0.0029868	0.003
23.3	0.99218	2.5995116	0.0029868	0.003
23.4	0.99331	2.6024722	0.0029606	0.003
23.5	0.99444	2.6054328	0.0029606	0.003
23.6	0.99556	2.6083672	0.0029344	0.003
23.7	0.99668	2.6113016	0.0029344	0.003
23.8	0.99779	2.6142098	0.0029082	0.003
23.9	0.99890	2.617118	0.0029082	0.003
24.0	1.0000	2.62	0.002882	0.003

Standard 24-hour NRCS rainfall distributions

6-minute interval time (hours)	2yr type II 24-hour	1.75			CHECK	1.750
0.0	0.00000	0	0	0.000		
0.1	0.00101	0.0017675	0.0017675	0.002		
0.2	0.00202	0.003535	0.0017675	0.002		
0.3	0.00305	0.0053375	0.0018025	0.002		
0.4	0.00408	0.00714	0.0018025	0.002		
0.5	0.00513	0.0089775	0.0018375	0.002		
0.6	0.00618	0.010815	0.0018375	0.002		
0.7	0.00725	0.0126875	0.0018725	0.002		
0.8	0.00832	0.01456	0.0018725	0.002		
0.9	0.00941	0.0164675	0.0019075	0.002		
1.0	0.01050	0.018375	0.0019075	0.002		
1.1	0.01161	0.0203175	0.0019425	0.002		
1.2	0.01272	0.02226	0.0019425	0.002		
1.3	0.01385	0.0242375	0.0019775	0.002		
1.4	0.01498	0.026215	0.0019775	0.002		
1.5	0.01613	0.0282275	0.0020125	0.002		
1.6	0.01728	0.03024	0.0020125	0.002		
1.7	0.01845	0.0322875	0.0020475	0.002		
1.8	0.01962	0.034335	0.0020475	0.002		
1.9	0.02081	0.0364175	0.0020825	0.002		
2.0	0.02200	0.0385	0.0020825	0.002		
2.1	0.02321	0.0406175	0.0021175	0.002		
2.2	0.02442	0.042735	0.0021175	0.002		
2.3	0.02565	0.0448875	0.0021525	0.002		
2.4	0.02688	0.04704	0.0021525	0.002		
2.5	0.02813	0.0492275	0.0021875	0.002		
2.6	0.02938	0.051415	0.0021875	0.002		
2.7	0.03065	0.0536375	0.0022225	0.002		
2.8	0.03192	0.05586	0.0022225	0.002		
2.9	0.03321	0.0581175	0.0022575	0.002		
3.0	0.03450	0.060375	0.0022575	0.002		
3.1	0.03581	0.0626675	0.0022925	0.002		
3.2	0.03712	0.06496	0.0022925	0.002		
3.3	0.03845	0.0672875	0.0023275	0.002		
3.4	0.03978	0.069615	0.0023275	0.002		
3.5	0.04113	0.0719775	0.0023625	0.002		
3.6	0.04248	0.07434	0.0023625	0.002		
3.7	0.04385	0.0767375	0.0023975	0.002		
3.8	0.04522	0.079135	0.0023975	0.002		
3.9	0.04661	0.0815675	0.0024325	0.002		
4.0	0.04800	0.084	0.0024325	0.002		
4.1	0.04941	0.0864675	0.0024675	0.002		
4.2	0.05084	0.08897	0.0025025	0.003		
4.3	0.05229	0.0915075	0.0025375	0.003		
4.4	0.05376	0.09408	0.0025725	0.003		
4.5	0.05525	0.0966875	0.0026075	0.003		

4.6	0.05676	0.09933	0.0026425	0.003
4.7	0.05829	0.1020075	0.0026775	0.003
4.8	0.05984	0.10472	0.0027125	0.003
4.9	0.06141	0.1074675	0.0027475	0.003
5.0	0.06300	0.11025	0.0027825	0.003
5.1	0.06461	0.1130675	0.0028175	0.003
5.2	0.06624	0.11592	0.0028525	0.003
5.3	0.06789	0.1188075	0.0028875	0.003
5.4	0.06956	0.12173	0.0029225	0.003
5.5	0.07125	0.1246875	0.0029575	0.003
5.6	0.07296	0.12768	0.0029925	0.003
5.7	0.07469	0.1307075	0.0030275	0.003
5.8	0.07644	0.13377	0.0030625	0.003
5.9	0.07821	0.1368675	0.0030975	0.003
6.0	0.08000	0.14	0.0031325	0.003
6.1	0.08181	0.1431675	0.0031675	0.003
6.2	0.08364	0.14637	0.0032025	0.003
6.3	0.08549	0.1496075	0.0032375	0.003
6.4	0.08736	0.15288	0.0032725	0.003
6.5	0.08925	0.1561875	0.0033075	0.003
6.6	0.09116	0.15953	0.0033425	0.003
6.7	0.09309	0.1629075	0.0033775	0.003
6.8	0.09504	0.16632	0.0034125	0.003
6.9	0.09701	0.1697675	0.0034475	0.003
7.0	0.09900	0.17325	0.0034825	0.003
7.1	0.10101	0.1767675	0.0035175	0.004
7.2	0.10304	0.18032	0.0035525	0.004
7.3	0.10509	0.1839075	0.0035875	0.004
7.4	0.10716	0.18753	0.0036225	0.004
7.5	0.10925	0.1911875	0.0036575	0.004
7.6	0.11136	0.19488	0.0036925	0.004
7.7	0.11349	0.1986075	0.0037275	0.004
7.8	0.11564	0.20237	0.0037625	0.004
7.9	0.11781	0.2061675	0.0037975	0.004
8.0	0.12000	0.21	0.0038325	0.004
8.1	0.12225	0.2139375	0.0039375	0.004
8.2	0.12460	0.21805	0.0041125	0.004
8.3	0.12705	0.2223375	0.0042875	0.004
8.4	0.12960	0.2268	0.0044625	0.004
8.5	0.13225	0.2314375	0.0046375	0.005
8.6	0.13500	0.23625	0.0048125	0.005
8.7	0.13785	0.2412375	0.0049875	0.005
8.8	0.14080	0.2464	0.0051625	0.005
8.9	0.14385	0.2517375	0.0053375	0.005
9.0	0.14700	0.25725	0.0055125	0.006
9.1	0.15020	0.26285	0.0056	0.006
9.2	0.15340	0.26845	0.0056	0.006
9.3	0.15660	0.27405	0.0056	0.006
9.4	0.15980	0.27965	0.0056	0.006
9.5	0.16300	0.28525	0.0056	0.006
9.6	0.16628	0.29099	0.00574	0.006
9.7	0.16972	0.29701	0.00602	0.006

9.8	0.17332	0.30331	0.0063	0.006
9.9	0.17708	0.30989	0.00658	0.007
10.0	0.18100	0.31675	0.00686	0.007
10.1	0.18512	0.32396	0.00721	0.007
10.2	0.18948	0.33159	0.00763	0.008
10.3	0.19408	0.33964	0.00805	0.008
10.4	0.19892	0.34811	0.00847	0.008
10.5	0.20400	0.357	0.00889	0.009
10.6	0.20940	0.36645	0.00945	0.009
10.7	0.21520	0.3766	0.01015	0.010
10.8	0.22140	0.38745	0.01085	0.011
10.9	0.22800	0.399	0.01155	0.012
11.0	0.23500	0.41125	0.01225	0.012
11.1	0.24268	0.42469	0.01344	0.013
11.2	0.25132	0.43981	0.01512	0.015
11.3	0.26092	0.45661	0.0168	0.017
11.4	0.27148	0.47509	0.01848	0.018
11.5	0.28300	0.49525	0.02016	0.020
11.6	0.30684	0.53697	0.04172	0.042
11.7	0.35436	0.62013	0.08316	0.083
11.8	0.43079	0.7538825	0.1337525	0.134
11.9	0.56786	0.993755	0.2398725	0.240
12.0	0.66300	1.16025	0.166495	0.166
12.1	0.68196	1.19343	0.03318	0.033
12.2	0.69864	1.22262	0.02919	0.029
12.3	0.71304	1.24782	0.0252	0.025
12.4	0.72516	1.26903	0.02121	0.021
12.5	0.73500	1.28625	0.01722	0.017
12.6	0.74344	1.30102	0.01477	0.015
12.7	0.75136	1.31488	0.01386	0.014
12.8	0.75876	1.32783	0.01295	0.013
12.9	0.76564	1.33987	0.01204	0.012
13.0	0.77200	1.351	0.01113	0.011
13.1	0.77796	1.36143	0.01043	0.010
13.2	0.78364	1.37137	0.00994	0.010
13.3	0.78904	1.38082	0.00945	0.009
13.4	0.79416	1.38978	0.00896	0.009
13.5	0.79900	1.39825	0.00847	0.008
13.6	0.80360	1.4063	0.00805	0.008
13.7	0.80800	1.414	0.0077	0.008
13.8	0.81220	1.42135	0.00735	0.007
13.9	0.81620	1.42835	0.007	0.007
14.0	0.82000	1.435	0.00665	0.007
14.1	0.82367	1.4414225	0.0064225	0.006
14.2	0.82726	1.447705	0.0062825	0.006
14.3	0.83079	1.4538825	0.0061775	0.006
14.4	0.83424	1.45992	0.0060375	0.006
14.5	0.83763	1.4658525	0.0059325	0.006
14.6	0.84094	1.471645	0.0057925	0.006
14.7	0.84419	1.4773325	0.0056875	0.006
14.8	0.84736	1.48288	0.0055475	0.006
14.9	0.85047	1.4883225	0.0054425	0.005

15.0	0.85350	1.493625	0.0053025	0.005
15.1	0.85647	1.4988225	0.0051975	0.005
15.2	0.85936	1.50388	0.0050575	0.005
15.3	0.86219	1.5088325	0.0049525	0.005
15.4	0.86494	1.513645	0.0048125	0.005
15.5	0.86763	1.5183525	0.0047075	0.005
15.6	0.87024	1.52292	0.0045675	0.005
15.7	0.87279	1.5273825	0.0044625	0.004
15.8	0.87526	1.531705	0.0043225	0.004
15.9	0.87767	1.5359225	0.0042175	0.004
16.0	0.88000	1.54	0.0040775	0.004
16.1	0.88229	1.5440075	0.0040075	0.004
16.2	0.88455	1.5479625	0.003955	0.004
16.3	0.88679	1.5518825	0.00392	0.004
16.4	0.88900	1.55575	0.0038675	0.004
16.5	0.89119	1.5595825	0.0038325	0.004
16.6	0.89335	1.5633625	0.00378	0.004
16.7	0.89549	1.5671075	0.003745	0.004
16.8	0.89760	1.5708	0.0036925	0.004
16.9	0.89969	1.5744575	0.0036575	0.004
17.0	0.90175	1.5780625	0.003605	0.004
17.1	0.90379	1.5816325	0.00357	0.004
17.2	0.90580	1.58515	0.0035175	0.004
17.3	0.90779	1.5886325	0.0034825	0.003
17.4	0.90975	1.5920625	0.00343	0.003
17.5	0.91169	1.5954575	0.003395	0.003
17.6	0.91360	1.5988	0.0033425	0.003
17.7	0.91549	1.6021075	0.0033075	0.003
17.8	0.91735	1.6053625	0.003255	0.003
17.9	0.91919	1.6085825	0.00322	0.003
18.0	0.92100	1.61175	0.0031675	0.003
18.1	0.92279	1.6148825	0.0031325	0.003
18.2	0.92455	1.6179625	0.00308	0.003
18.3	0.92629	1.6210075	0.003045	0.003
18.4	0.92800	1.624	0.0029925	0.003
18.5	0.92969	1.6269575	0.0029575	0.003
18.6	0.93135	1.6298625	0.002905	0.003
18.7	0.93299	1.6327325	0.00287	0.003
18.8	0.93460	1.63555	0.0028175	0.003
18.9	0.93619	1.6383325	0.0027825	0.003
19.0	0.93775	1.6410625	0.00273	0.003
19.1	0.93929	1.6437575	0.002695	0.003
19.2	0.94080	1.6464	0.0026425	0.003
19.3	0.94229	1.6490075	0.0026075	0.003
19.4	0.94375	1.6515625	0.002555	0.003
19.5	0.94519	1.6540825	0.00252	0.003
19.6	0.94660	1.65655	0.0024675	0.002
19.7	0.94799	1.6589825	0.0024325	0.002
19.8	0.94935	1.6613625	0.00238	0.002
19.9	0.95069	1.6637075	0.002345	0.002
20.0	0.95200	1.666	0.0022925	0.002
20.1	0.95330	1.668275	0.002275	0.002

20.2	0.95459	1.6705325	0.0022575	0.002
20.3	0.95588	1.67279	0.0022575	0.002
20.4	0.95716	1.67503	0.00224	0.002
20.5	0.95844	1.67727	0.00224	0.002
20.6	0.95971	1.6794925	0.0022225	0.002
20.7	0.96098	1.681715	0.0022225	0.002
20.8	0.96224	1.68392	0.002205	0.002
20.9	0.96350	1.686125	0.002205	0.002
21.0	0.96475	1.6883125	0.0021875	0.002
21.1	0.96600	1.6905	0.0021875	0.002
21.2	0.96724	1.69267	0.00217	0.002
21.3	0.96848	1.69484	0.00217	0.002
21.4	0.96971	1.6969925	0.0021525	0.002
21.5	0.97094	1.699145	0.0021525	0.002
21.6	0.97216	1.70128	0.002135	0.002
21.7	0.97338	1.703415	0.002135	0.002
21.8	0.97459	1.7055325	0.0021175	0.002
21.9	0.97580	1.70765	0.0021175	0.002
22.0	0.97700	1.70975	0.0021	0.002
22.1	0.97820	1.71185	0.0021	0.002
22.2	0.97939	1.7139325	0.0020825	0.002
22.3	0.98058	1.716015	0.0020825	0.002
22.4	0.98176	1.71808	0.002065	0.002
22.5	0.98294	1.720145	0.002065	0.002
22.6	0.98411	1.7221925	0.0020475	0.002
22.7	0.98528	1.72424	0.0020475	0.002
22.8	0.98644	1.72627	0.00203	0.002
22.9	0.98760	1.7283	0.00203	0.002
23.0	0.98875	1.7303125	0.0020125	0.002
23.1	0.98990	1.732325	0.0020125	0.002
23.2	0.99104	1.73432	0.001995	0.002
23.3	0.99218	1.736315	0.001995	0.002
23.4	0.99331	1.7382925	0.0019775	0.002
23.5	0.99444	1.74027	0.0019775	0.002
23.6	0.99556	1.74223	0.00196	0.002
23.7	0.99668	1.74419	0.00196	0.002
23.8	0.99779	1.7461325	0.0019425	0.002
23.9	0.99890	1.748075	0.0019425	0.002
24.0	1.0000	1.75	0.001925	0.002

Maricopa 6-hour rainfall distributions

15-minute interval time (hours)	100yr 6-hour						
R	.	0	0	Max 6HR	2.76	0	0
R	0.25	2.1	0.021			0.25	0.05796
R	0.5	3.5	0.035			0.5	0.03864
R	0.75	5.1	0.051			0.75	0.04416
R	1	7.1	0.071			1	0.0552
R	1.25	8.7	0.087			1.25	0.04416
R	1.5	10.5	0.105			1.5	0.04968
R	1.75	12.5	0.125			1.75	0.0552
R	2	14.3	0.143			2	0.04968
R	2.25	16	0.16			2.25	0.04692
R	2.5	17.9	0.179			2.5	0.05244
R	2.75	20.1	0.201			2.75	0.06072
R	3	23.2	0.232			3	0.08556
R	3.25	28.1	0.281			3.25	0.13524
R	3.5	36.4	0.364			3.5	0.22908
R	3.75	50	0.5			3.75	0.37536
R	4	65.8	0.658			4	0.43608
R	4.25	77.3	0.773			4.25	0.3174
R	4.5	84.1	0.841			4.5	0.18768
R	4.75	88.8	0.888			4.75	0.12972
R	5	92.7	0.927			5	0.10764
R	5.25	94.5	0.945			5.25	0.04968
R	5.5	96.4	0.964			5.5	0.05244
R	5.75	98.2	0.982			5.75	0.04968
R	6	100	1			6	0.04968

Maricopa 6-hour rainfall distributions

15-minute interval 25yr

time (hours)	6-hour						
R	0	0	0	Max 6HR	2.18	0	0
R	0.25	2.1	0.021			0.25	0.04578
R	0.5	3.5	0.035			0.5	0.03052
R	0.75	5.1	0.051			0.75	0.03488
R	1	7.1	0.071			1	0.0436
R	1.25	8.7	0.087			1.25	0.03488
R	1.5	10.5	0.105			1.5	0.03924
R	1.75	12.5	0.125			1.75	0.0436
R	2	14.3	0.143			2	0.03924
R	2.25	16	0.16			2.25	0.03706
R	2.5	17.9	0.179			2.5	0.04142
R	2.75	20.1	0.201			2.75	0.04796
R	3	23.2	0.232			3	0.06758
R	3.25	28.1	0.281			3.25	0.10682
R	3.5	36.4	0.364			3.5	0.18094
R	3.75	50	0.5			3.75	0.29648
R	4	65.8	0.658			4	0.34444
R	4.25	77.3	0.773			4.25	0.2507
R	4.5	84.1	0.841			4.5	0.14824
R	4.75	88.8	0.888			4.75	0.10246
R	5	92.7	0.927			5	0.08502
R	5.25	94.5	0.945			5.25	0.03924
R	5.5	96.4	0.964			5.5	0.04142
R	5.75	98.2	0.982			5.75	0.03924
R	6	100	1			6	0.03924

Maricopa 6-hour rainfall distributions

15-minute interval time (hours)	6-hour	10yr					
R		0	0	0	Max 6HR	1.82	
R		0.25	2.1	0.021			
R		0.5	3.5	0.035			
R		0.75	5.1	0.051			
R		1	7.1	0.071			
R		1.25	8.7	0.087			
R		1.5	10.5	0.105			
R		1.75	12.5	0.125			
R		2	14.3	0.143			
R		2.25	16	0.16			
R		2.5	17.9	0.179			
R		2.75	20.1	0.201			
R		3	23.2	0.232			
R		3.25	28.1	0.281			
R		3.5	36.4	0.364			
R		3.75	50	0.5			
R		4	65.8	0.658			
R		4.25	77.3	0.773			
R		4.5	84.1	0.841			
R		4.75	88.8	0.888			
R		5	92.7	0.927			
R		5.25	94.5	0.945			
R		5.5	96.4	0.964			
R		5.75	98.2	0.982			
R		6	100	1			

0	0		
0.25	0.03822		
0.5	0.02548		
0.75	0.02912		
1	0.0364		
1.25	0.02912		
1.5	0.03276		
1.75	0.0364		
2	0.03276		
2.25	0.03094		
2.5	0.03458		
2.75	0.04004		
3	0.05642		
3.25	0.08918		
3.5	0.15106		
3.75	0.24752		
4	0.28756		
4.25	0.2093		
4.5	0.12376		
4.75	0.08554		
5	0.07098		
5.25	0.03276		
5.5	0.03458		
5.75	0.03276		
6	0.03276		

Maricopa 6-hour rainfall distributions

15-minute interval time (hours)	2yr 6-hour						
R	0	0	0	Max 6HR	1.22	0	0
R	0.25	2.1	0.021			0.25	0.02562
R	0.5	3.5	0.035			0.5	0.01708
R	0.75	5.1	0.051			0.75	0.01952
R	1	7.1	0.071			1	0.0244
R	1.25	8.7	0.087			1.25	0.01952
R	1.5	10.5	0.105			1.5	0.02196
R	1.75	12.5	0.125			1.75	0.0244
R	2	14.3	0.143			2	0.02196
R	2.25	16	0.16			2.25	0.02074
R	2.5	17.9	0.179			2.5	0.02318
R	2.75	20.1	0.201			2.75	0.02684
R	3	23.2	0.232			3	0.03782
R	3.25	28.1	0.281			3.25	0.05978
R	3.5	36.4	0.364			3.5	0.10126
R	3.75	50	0.5			3.75	0.16592
R	4	65.8	0.658			4	0.19276
R	4.25	77.3	0.773			4.25	0.1403
R	4.5	84.1	0.841			4.5	0.08296
R	4.75	88.8	0.888			4.75	0.05734
R	5	92.7	0.927			5	0.04758
R	5.25	94.5	0.945			5.25	0.02196
R	5.5	96.4	0.964			5.5	0.02318
R	5.75	98.2	0.982			5.75	0.02196
R	6	100	1			6	0.02196

Figure 2.5
AREA VERSUS PATTERN NUMBER FOR MARICOPA COUNTY

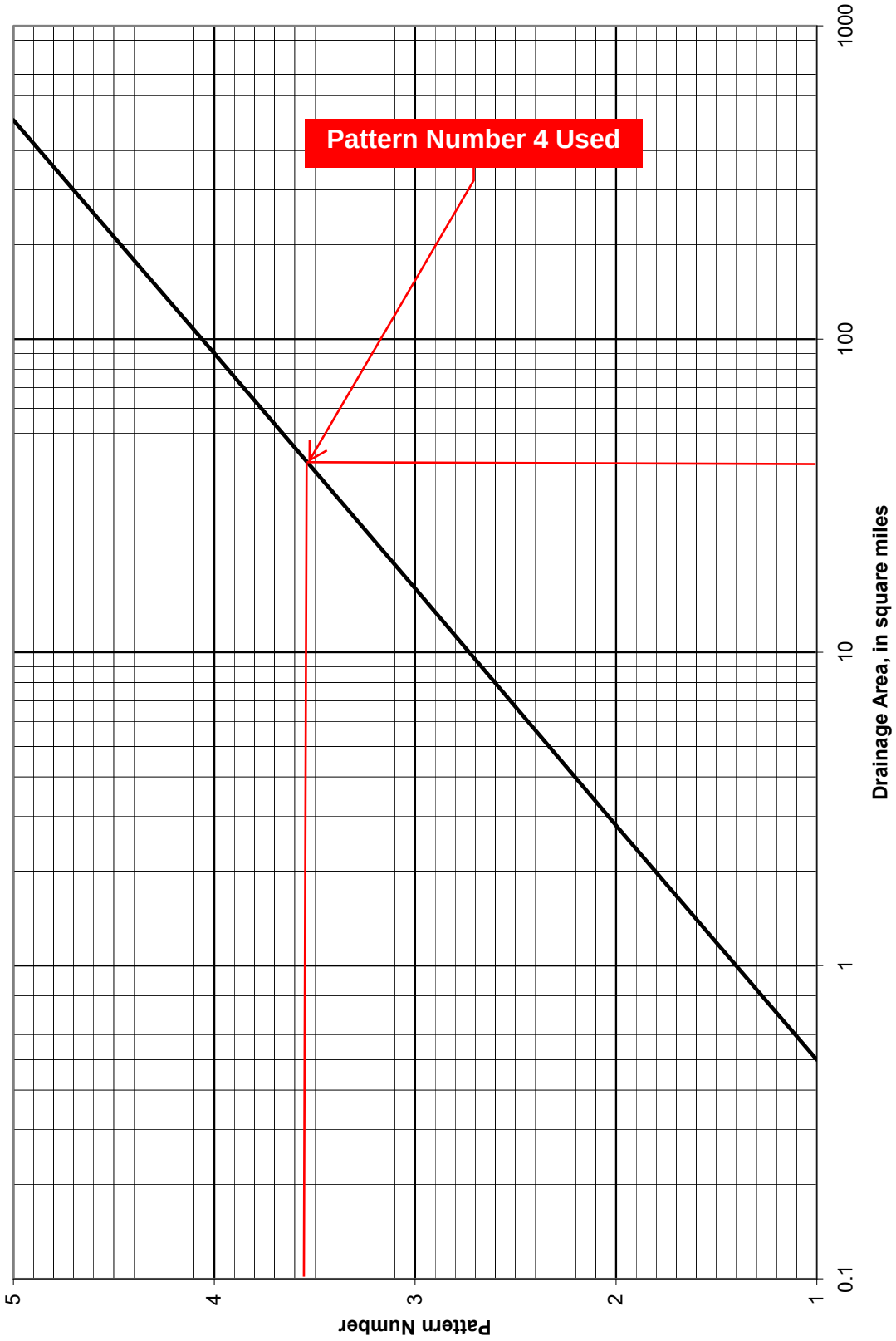

Table 2.4
6-HOUR DISTRIBUTIONS

Time, in hours	Percent of Rainfall Depth				
	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5
0.00	0.0	0.0	0.0	0.0	0.0
0.25	0.8	0.9	1.5	2.1	2.4
0.50	1.6	1.6	2.0	3.5	4.3
0.75	2.5	2.5	3.0	5.1	5.9
1.00	3.3	3.4	4.8	7.1	7.8
1.25	4.1	4.2	6.3	8.7	9.8
1.50	5.0	5.1	7.6	10.5	11.9
1.75	5.8	5.9	9.0	12.5	14.1
2.00	6.6	6.7	10.5	14.3	16.2
2.25	7.4	7.6	11.9	16.0	18.6
2.50	8.7	8.7	13.5	17.9	21.2
2.75	9.9	10.0	15.2	20.1	23.9
3.00	11.8	12.0	17.5	23.2	27.1
3.25	13.8	16.3	22.2	28.1	32.1
3.50	21.6	25.2	30.4	36.4	40.8
3.75	37.7	45.1	47.2	50.0	51.5
4.00	83.4	69.4	67.0	65.8	62.7
4.25	91.1	83.7	79.6	77.3	73.5
4.50	93.1	90.0	86.8	84.1	81.4
4.75	95.0	93.8	91.2	88.8	86.4
5.00	96.2	95.0	94.6	92.7	90.7
5.25	97.2	96.3	96.0	94.5	93.0
5.50	98.3	97.5	97.3	96.4	95.4
5.75	99.1	98.8	98.7	98.2	97.7
6.00	100.0	100.0	100.0	100.0	100.0

Current Class Names	TR-55		Manning's n
	Cover type	Hydrologic Condition	
Barren Land	Fallow - Bare Soils		0.030
Cultivated Crops	Straight row (SR)		0.050
Developed/Low Intensity	Farmsteads		0.080
Developed/High Intensity	Commercial and business		0.150
Developed/Open Space	Open Space	Poor	0.040
Grassland/Herbaceous	Herbaceous	Poor	0.050
Shrub/Scrub	Desert Shrub	Poor	0.080
Woody Wetlands	Water		0.120
Gravel Roads	Street and roads: Gravel		0.030
Paved Roads	Street and roads: Paved		0.030

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	Pinal County Arizona (Unincorporated Areas)	NO PROJECT	FLOODWAY HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS NEW TOPOGRAPHIC DATA
	COMMUNITY NO.: 040077		
IDENTIFIER	Queen Creek Floodplain Delineation Study	APPROXIMATE LATITUDE & LONGITUDE: 33.293, -111.319 SOURCE: USGS QUADRANGLE DATUM: NAD 83	

ANNOTATED MAPPING ENCLOSURES	ANNOTATED STUDY ENCLOSURES
TYPE: FIRM* NO.: 04021C0240E DATE: December 4, 2007 TYPE: FIRM* NO.: 04021C0241E DATE: December 4, 2007	DATE OF EFFECTIVE FLOOD INSURANCE STUDY: December 04, 2007 PROFILE(S): 36P(a) AND 36P(b) FLOODWAY DATA TABLE: 11 SUMMARY OF DISCHARGES TABLE: 8

Enclosures reflect changes to flooding sources affected by this revision.
* FIRM - Flood Insurance Rate Map; ** FBFM - Flood Boundary and Floodway Map; *** FHBM - Flood Hazard Boundary Map

FLOODING SOURCE(S) & REVISED REACH(ES)

Queen Creek - from approximately 1,150 feet downstream to approximately 8,170 feet upstream of El Camino Viejo

SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Queen Creek	Zone A	Zone AE	YES	YES
	No BFEs*	BFEs	YES	NONE
	No Floodway	Floodway	YES	NONE

* BFEs - Base Flood Elevations

DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

Siamak Esfandiary, Ph.D., P.E., Program Specialist
Engineering Management Branch
Federal Insurance and Mitigation Administration

125360 PT202.BKR.12091236P.H17 102-I-A-C

Federal Emergency Management Agency
Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

We provide the floodway designation to your community as a tool to regulate floodplain development. Therefore, the floodway revision we have described in this letter, while acceptable to us, must also be acceptable to your community and adopted by appropriate community action, as specified in Paragraph 60.3(d) of the NFIP regulations.

COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance discharges computed in the submitted hydrologic analysis. Future development of projects upstream could cause increased discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on discharges and could, therefore, indicate that greater flood hazards exist in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State/Commonwealth law have been obtained. State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

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Engineering Management Branch
Federal Insurance and Mitigation Administration

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Ms. Sally M. Ziolkowski
Director, Mitigation Division
Federal Emergency Management Agency, Region IX
1111 Broadway Street, Suite 1200
Oakland, CA 94607-4052
(510) 627-7175

STATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM and FIS report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panel(s) and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

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Engineering Management Branch
Federal Insurance and Mitigation Administration

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

PUBLIC NOTIFICATION OF REVISION

A notice of changes will be published in the *Federal Register*. This information also will be published in your local newspaper on or about the dates listed below and through FEMA's Flood Hazard Mapping website at https://www.floodmaps.fema.gov/fhm/Scripts/bfe_main.asp.

LOCAL NEWSPAPER Name: *The Casa Grande Dispatch*
Dates: August 31, 2012 and September 7, 2012

Within 90 days of the second publication in the local newspaper, a citizen may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. Therefore, this letter will be effective only after the 90-day appeal period has elapsed and we have resolved any appeals that we receive during this appeal period. Until this LOMR is effective, the revised flood hazard determination information presented in this LOMR may be changed.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

Siamak Esfandiary, Ph.D., P.E., Program Specialist
Engineering Management Branch
Federal Insurance and Mitigation Administration

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Queen Creek								
AA	144,820	262	1,548	8.3	1,929.0	1,929.0	1,929.1	0.1
AB	145,730	392	3,079	4.2	1,937.7	1,937.7	1,937.8	0.1
AC	147,280	318	1,579	8.1	1,943.6	1,943.6	1,943.6	0.0
AD	148,060	284	1,291	9.9	1,946.9	1,946.9	1,947.5	0.6
AE	149,260	185	1,004	12.8	1,955.3	1,955.3	1,955.8	0.5
AF	150,660	413	1,560	8.2	1,964.1	1,964.1	1,964.6	0.5
AG	152,570	69	275	10.7	1,971.0	1,971.0	1,971.1	0.1

REVISED TO
REFLECT LOMR
EFFECTIVE: January 7, 2013

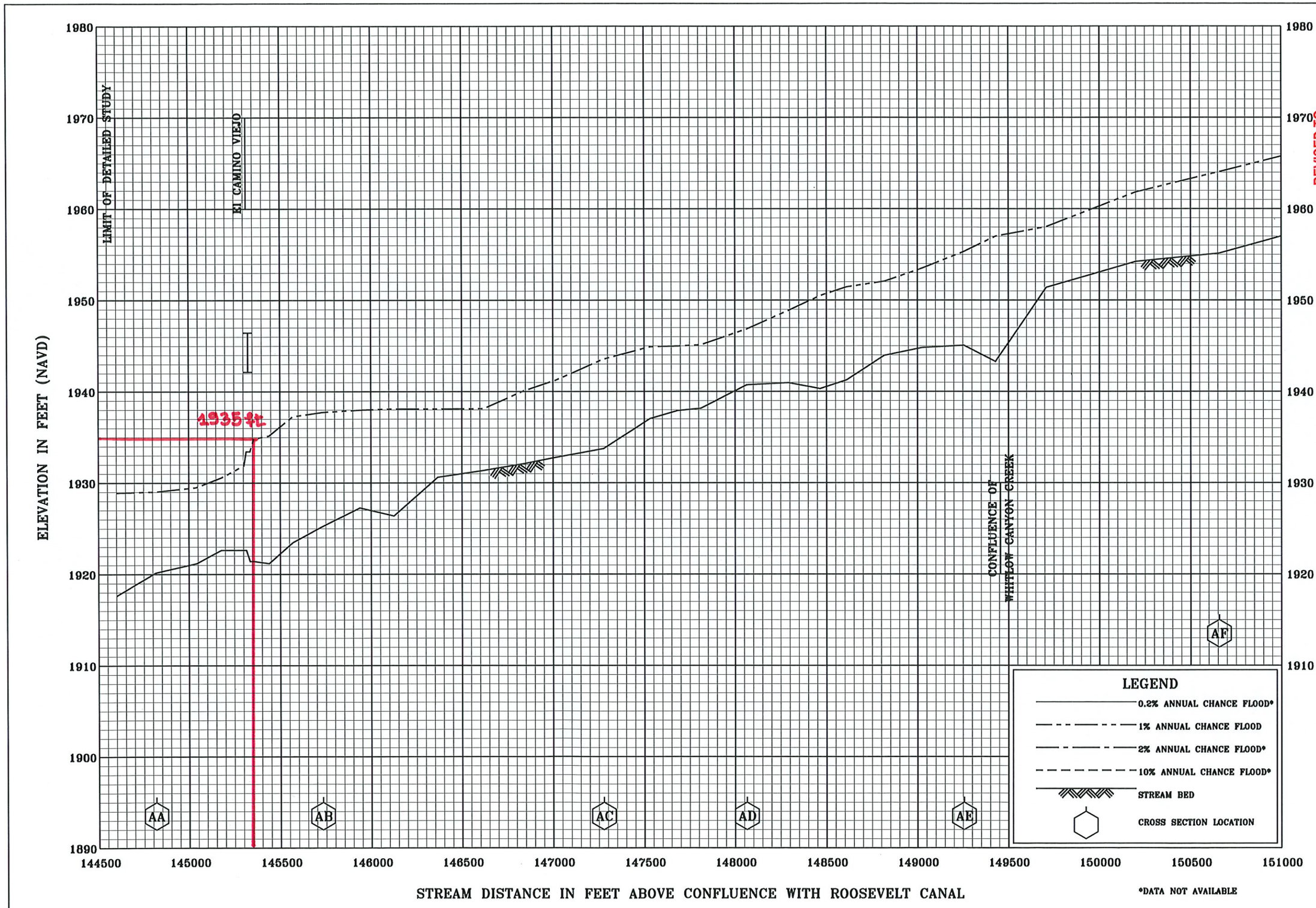
[1] Feet Above Confluence with Roosevelt Canal

TABLE 11

FEDERAL EMERGENCY MANAGEMENT AGENCY
PINAL COUNTY, ARIZONA
AND INCORPORATED AREAS

FLOODWAY DATA

QUEEN CREEK



REVISED TO REFLECT LOMR EFFECTIVE:January 7, 2013

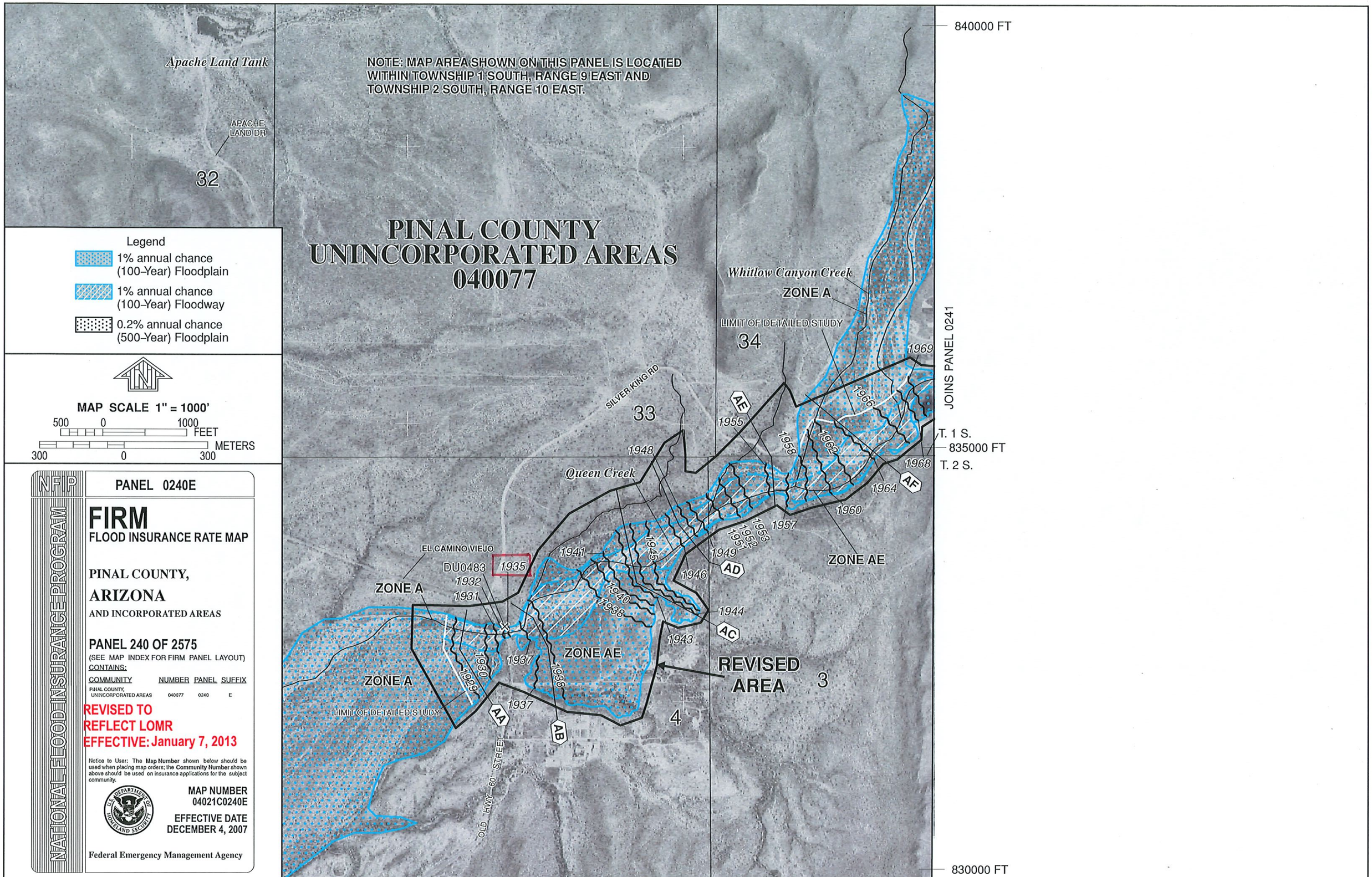
FLOOD PROFILES

QUEEN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

PINAL COUNTY, AZ
AND INCORPORATED AREAS

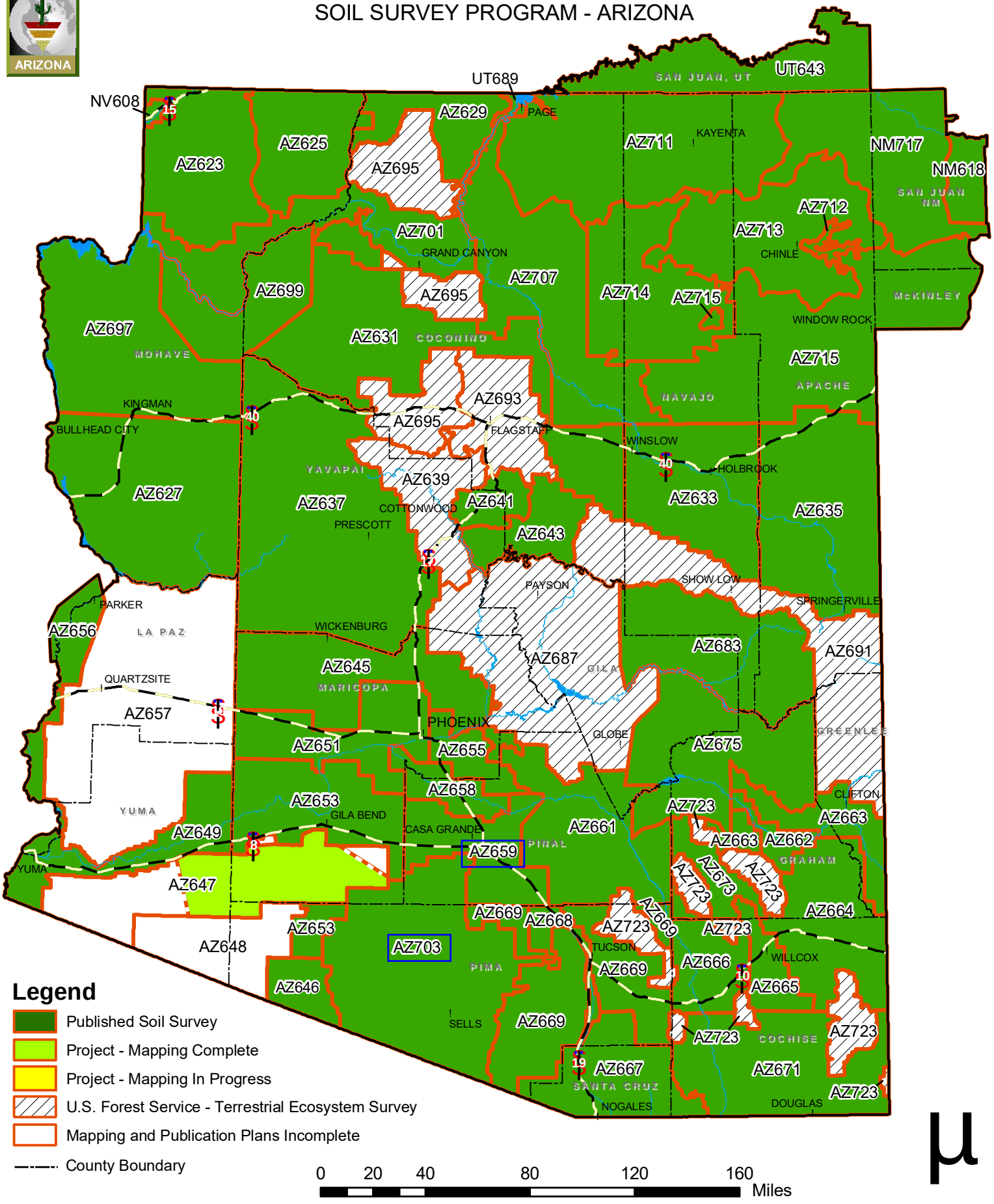
36P(a)



Apache Land Tank
APACHE LAND DR
32
NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 1 SOUTH, RANGE 9 EAST AND TOWNSHIP 2 SOUTH, RANGE 10 EAST.
PINAL COUNTY
UNINCORPORATED AREAS
040077
Whitlow Canyon Creek
ZONE A
LIMIT OF DETAILED STUDY
34
SILVER KING RD
33
Queen Creek
EL CAMINO VIEJO
DU0483
ZONE A
ZONE AE
REVISED AREA
3
4
LIMIT OF DETAILED STUDY
OLD HWY 60 STREET
AA
AB
AC
AD
AE
AF
1929
1930
1931
1932
1935
1937
1938
1940
1941
1943
1944
1945
1946
1948
1949
1951
1952
1953
1955
1957
1958
1960
1962
1964
1966
1968
1969
840000 FT
835000 FT
830000 FT
T. 1 S.
T. 2 S.
JOINS PANEL 0241
Legend
1% annual chance (100-Year) Floodplain
1% annual chance (100-Year) Floodway
0.2% annual chance (500-Year) Floodplain
MAP SCALE 1" = 1000'
500 0 1000 FEET
300 0 300 METERS
NFIP
NATIONAL FLOOD INSURANCE PROGRAM
PANEL 0240E
FIRM
FLOOD INSURANCE RATE MAP
PINAL COUNTY,
ARIZONA
AND INCORPORATED AREAS
PANEL 240 OF 2575
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:
COMMUNITY NUMBER PANEL SUFFIX
PINAL COUNTY, UNINCORPORATED AREAS 040077 0240 E
REVISED TO REFLECT LOMR EFFECTIVE: January 7, 2013
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.
MAP NUMBER 04021C0240E
EFFECTIVE DATE DECEMBER 4, 2007
Federal Emergency Management Agency

STATUS OF SOIL SURVEYS - PUBLICATION

SOIL SURVEY PROGRAM - ARIZONA



October 2011

NRCS Natural Resources Conservation Service

SOIL SURVEY AREAS

	Soil Survey Area Name	Approximate Area (Acres)	
NV608	Virgin River Area, NV-AZ, Parts of Clark and Lincoln Counties, NV and Part of Mohave County, AZ	1,068,616	*9
NM618	San Juan County, New Mexico, Eastern Part	315,800	*6,*11
AZ623	Shivwits Area, AZ, Part of Mohave County	1,547,000	
AZ625	Mohave County Area, AZ, Northeastern Part and Part of Coconino County	1,038,145	
AZ627	Mohave County, AZ, Southern Part	2,492,300	
AZ629	Coconino County Area, AZ, North Kaibab Part	697,780	
AZ631	Coconino County Area, AZ, Central Part	2,314,000	
AZ633	Navajo County Area, AZ, Central Part	1,504,900	
AZ635	Apache County, AZ, Central Part	2,113,800	
AZ637	Yavapai County, AZ, Western Part	3,774,500	
AZ639	Black Hills-Sedona Area, AZ, Parts of Coconino and Yavapai Counties	824,500	*10
AZ641	Beaver Creek Area, AZ	302,205	
AZ643	Long Valley Area, AZ	626,623	
UT643	Navajo Indian Reservation, San Juan County, Utah	1,336,185	*7,*11
AZ645	Aguila-Carefree Area, Parts of Maricopa and Pinal Counties, AZ	1,629,120	
AZ646	Organ Pipe Cactus National Monument	330,689	
AZ647	Luke Air Force Range, AZ, Parts of Maricopa, Pima and Yuma Counties	1,940,000	
AZ648	Cabeza Prieta Area, AZ, Parts of Pima and Yuma Counties	909,311	
AZ649	Yuma-Wellton Area, Parts of Yuma County, AZ, and Imperial County, CA	1,042,429	*1
AZ651	Maricopa County, AZ, Central Part	1,076,330	
AZ653	Gila Bend-Ajo Area, AZ, Parts of Maricopa and Pima Counties	1,432,320	
AZ655	Eastern Maricopa and Northern Pinal Counties Area, AZ	348,025	
AZ656	Colorado River Indian Reservation, Parts of La Paz County, AZ, and Riverside and San Bernardino Counties, CA	268,850	*2
AZ657	Kofa Area, AZ, Parts of La Paz and Yuma Counties	3,806,931	
AZ658	Gila River Indian Reservation, AZ, Parts of Maricopa and Pinal Counties	371,913	
AZ659	Pinal County, AZ, Western Part	937,020	
AZ661	Eastern Pinal and Southern Gila Counties, AZ	1,699,900	
AZ662	Safford Area, AZ	208,500	
AZ663	Gila-Duncan Area, AZ, Parts of Graham and Greenlee Counties	770,000	
AZ664	San Simon Area, AZ, Parts of Cochise, Graham and Greenlee Counties	1,220,996	
AZ665	Willcox Area, AZ, Parts of Cochise and Graham Counties	367,370	
AZ666	Cochise County, AZ, Northwestern Part	625,000	
AZ667	Santa Cruz and Parts of Cochise and Pima Counties, AZ	1,098,300	
AZ668	Tucson-Avra Valley Area, AZ	214,100	
AZ669	Pima County, AZ, Eastern Part	1,900,000	
AZ671	Cochise County, AZ, Douglas-Tombstone Part	1,714,300	
AZ673	Graham County, AZ, Southwestern Part	410,000	
AZ675	San Carlos Indian Reservation, AZ, Parts of Gila and Graham Counties	1,827,421	
AZ683	Fort Apache Indian Reservation, AZ, Parts of Apache, Gila and Navajo Counties	1,664,972	
UT689	Glen Canyon National Recreation Area	1,254,306	*12
AZ687	Tonto National Forest, AZ, Parts of Gila, Maricopa, Pinal and Yavapai Counties	2,873,295	*10
AZ691	Apache-Sitgreaves National Forests, AZ, Parts of Apache, Coconino, Greenlee and Navajo Counties	2,112,320	*10
AZ693	Oak Creek-San Francisco Peaks Area, AZ, Part of Coconino County	859,000	*10
AZ695	Kaibab National Forest, AZ, Parts of Coconino, Mohave and Yavapai Counties	1,554,797	*10
AZ697	Mohave County, AZ, Central Part	2,431,200	
AZ699	Hualapai-Havasupai Area, AZ, Parts of Coconino, Mohave and Yavapai Counties	1,180,540	
AZ701	Grand Canyon Area, AZ, Parts of Coconino and Mohave Counties	1,450,620	
AZ703	Tohono O'odham Nation, AZ, Parts of Maricopa, Pima and Pinal Counties	2,855,032	
AZ707	Little Colorado River Area, AZ, Parts of Coconino and Navajo Counties	2,240,000	*11
AZ711	Navajo Mountain Area, AZ, Parts of Apache, Coconino, and Navajo Counties	2,553,933	*11
AZ712	Canyon de Chelly National Monument, AZ	94,255	*11
AZ713	Chinle Area, Parts of Apache and Navajo Counties, AZ, and San Juan County, NM	1,930,000	*3,*11
AZ714	Hopi Area, AZ, Parts of Coconino and Navajo Counties	1,561,054	
AZ715	Fort Defiance Area, Parts of Apache and Navajo Counties, AZ, and McKinley and San Juan Counties, NM	3,210,000	*4,*11
NM717	Shiprock Area, Parts of Apache County, AZ and San Juan County, NM	1,835,230	*5,*11
AZ723	Coronado National Forest, AZ, Parts of Cochise, Graham, Pima and Pinal Counties	1,090,135	*10
	Total:	**78,761,613**	*8

*1 *Total includes 24,817 acres from Imperial County, CA*

*2 *Total includes 26938 acres from San Bernardino County, CA and 16,000 acres from Riverside County, CA*

*3 *Total includes 12,200 acres from San Juan County, NM*

*4 *Bureau of Indian Affairs has responsibility for this area. Total includes 227,000 acres from San Juan County, NM and 549,240 acres from McKinley County, NM*

*5 *NRCS New Mexico has responsibility for this area. Total includes 780,430 acres from Apache County, AZ*

*6 *NRCS New Mexico has responsibility for this area. All acres are in San Juan County, NM*

*7 *NRCS Utah has responsibility for this area. All acres are in San Juan County, UT*

*8 *Total includes 67,753 acres from California, 2,159,040 acres from New Mexico, 2,590,491 acres from Utah, 72,960,038 acres from Arizona, and 1,031,068 acres from Nevada*

*9 *NRCS Nevada has responsibility for this area. Total includes 37,548 acres from Arizona*

*10 *U.S. Forest Service has responsibility for this area*

*11 *Part of the Navajo Nation*

*12 *NRCS Arizona has responsibility for mapping this area. Total includes 46,777 acres from Arizona*

Back revised
January 1, 2011

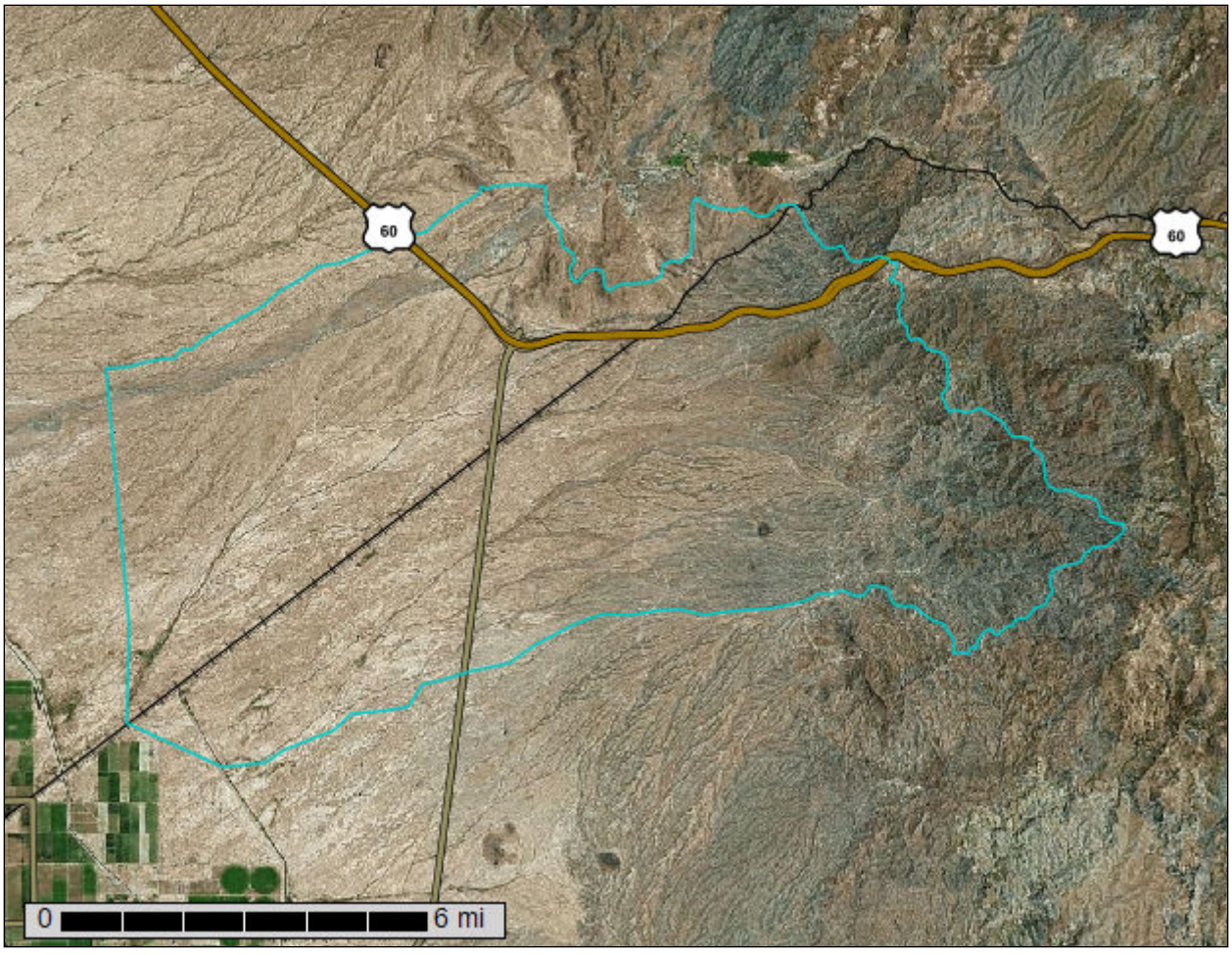
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Eastern Pinal and Southern Gila Counties, Arizona; and Tonto National Forest, Arizona, Parts of Gila, Maricopa, Pinal and Yavapai Counties



June 25, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

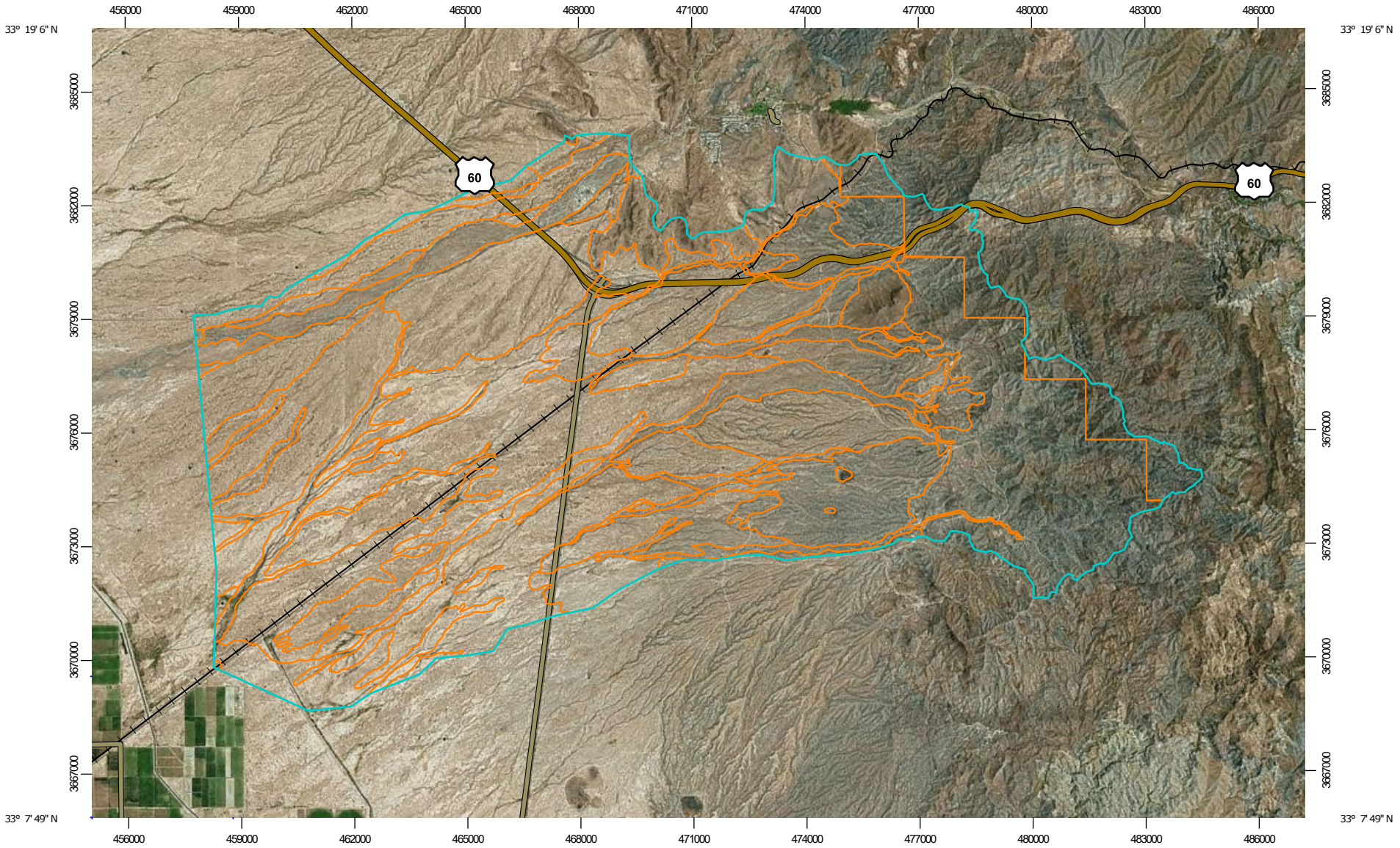
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:147,000 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 2000 4000 8000 12000

Feet
0 5000 10000 20000 30000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 12N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eastern Pinal and Southern Gila Counties, Arizona
Survey Area Data: Version 20, Aug 30, 2024

Soil Survey Area: Tonto National Forest, Arizona, Parts of Gila, Maricopa, Pinal and Yavapai Counties
Survey Area Data: Version 14, Sep 3, 2024

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2024—Mar 29, 2024

MAP LEGEND

MAP INFORMATION

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3	Beardsley-Hickiwan complex, 1 to 8 percent slopes	955.5	1.6%
4	Beardsley-Suncity complex, 1 to 10 percent slopes	6,271.9	10.3%
11	Carrizo family-Brios-Riverwash complex, 0 to 5 percent slopes	4,371.0	7.2%
15	Cellar-Anklam-Rock outcrop complex, 20 to 70 percent slopes	33.7	0.1%
16	Cellar-Rock outcrop complex, 5 to 70 percent slopes	1,027.3	1.7%
24	Contine loam, 0 to 3 percent slopes	1,722.2	2.8%
26	Dateland loam, 0 to 2 percent slopes	721.9	1.2%
27	Delnorte-Nahda complex, 3 to 20 percent slopes	2,767.3	4.6%
31	Denure sandy loam, 1 to 3 percent slopes	899.8	1.5%
32	Dateland-Denure complex, 0 to 3 percent slopes	1,272.0	2.1%
33	Denure-Mohall complex, 1 to 5 percent slopes	11,236.5	18.5%
34	Denure-Momoli complex, 1 to 10 percent slopes	2,186.4	3.6%
36	Ebon-Carrizo family complex, 0 to 10 percent slopes	2,062.7	3.4%
53	Hickiwan-Ajolito-Ajo complex, 3 to 20 percent slopes	2,442.8	4.0%
54	Hickiwan-Gunsight complex, 1 to 15 percent slopes	86.6	0.1%
61	Lehmans-Rock outcrop complex, 8 to 50 percent slopes	568.7	0.9%
63	Maripo sandy loam, 0 to 3 percent slopes	124.4	0.2%
64	Mined land	15.3	0.0%
65	Mohall clay loam, 0 to 5 percent slopes	2,269.9	3.7%
66	Mohall sandy loam, 0 to 3 percent slopes	5,472.0	9.0%
82	Rock outcrop-Lajitas complex, 5 to 60 percent slopes	773.7	1.3%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
97	Tremant-Pinamt complex, 1 to 10 percent slopes	3,042.7	5.0%
105	Wikieup family very channery sandy loam, 10 to 60 percent slopes	8,004.5	13.2%
Subtotals for Soil Survey Area		**58,328.7**	**96.1%**
Totals for Area of Interest		**60,682.4**	**100.0%**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
NOTCOM	No Digital Data Available	2,353.6	3.9%
Subtotals for Soil Survey Area		**2,353.6**	**3.9%**
Totals for Area of Interest		**60,682.4**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Eastern Pinal and Southern Gila Counties, Arizona

3—Beardsley-Hickiwan complex, 1 to 8 percent slopes

Map Unit Setting

National map unit symbol: 20j9
Elevation: 1,650 to 2,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F
Frost-free period: 240 to 325 days
Farmland classification: Not prime farmland

Map Unit Composition

Beardsley and similar soils: 70 percent
Hickiwan and similar soils: 20 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Beardsley

Setting

Landform: Fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 3 inches: clay loam
Bt - 3 to 11 inches: clay
Btk - 11 to 27 inches: clay
2Bkqm - 27 to 60 inches: cemented material

Properties and qualities

Slope: 1 to 8 percent
Depth to restrictive feature: 20 to 40 inches to duripan
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: R040XB213AZ - Loamy Upland 7"-10" p.z.
Other vegetative classification: Limy Upland 7-10" p.z. (040XB210AZ)
Hydric soil rating: No

Description of Hickiwan

Setting

Landform: Fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 2 inches: cobbly loam
Bk - 2 to 9 inches: very gravelly loam
Bkm - 9 to 60 inches: cemented material

Properties and qualities

Slope: 1 to 8 percent
Depth to restrictive feature: 8 to 20 inches to petrocalcic
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: R040XB210AZ - Limy Upland 7"-10" p.z.
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 10 percent
Hydric soil rating: No

4—Beardsley-Suncity complex, 1 to 10 percent slopes

Map Unit Setting

National map unit symbol: rycs
Elevation: 1,650 to 2,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F

Frost-free period: 240 to 325 days
Farmland classification: Not prime farmland

Map Unit Composition

Beardsley and similar soils: 60 percent
Suncity and similar soils: 30 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Beardsley

Setting

Landform: Fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 3 inches: clay loam
Bt - 3 to 11 inches: clay
Btk - 11 to 27 inches: clay
Bkqm - 27 to 60 inches: cemented material

Properties and qualities

Slope: 1 to 10 percent
Depth to restrictive feature: 20 to 40 inches to duripan
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: R040XB213AZ - Loamy Upland 7"-10" p.z.
Hydric soil rating: No

Description of Suncity

Setting

Landform: Fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 2 inches: loam
Bt - 2 to 10 inches: loam
Bkqm - 10 to 60 inches: cemented material

Properties and qualities

Slope: 1 to 10 percent
Depth to restrictive feature: 8 to 20 inches to duripan
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: R040XB220AZ - Granitic Upland 7"-10" p.z.
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 10 percent
Hydric soil rating: No

11—Carrizo family-Brios-Riverwash complex, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 20jt
Elevation: 1,500 to 2,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F
Frost-free period: 240 to 325 days
Farmland classification: Not prime farmland

Map Unit Composition

Carrizo family and similar soils: 45 percent
Brios and similar soils: 30 percent
Riverwash: 15 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Carrizo Family

Setting

Landform: Flood plains
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Mixed stream alluvium

Typical profile

C1 - 0 to 3 inches: fine sandy loam
C2 - 3 to 41 inches: very gravelly coarse sand
C3 - 41 to 60 inches: extremely cobbly coarse sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: A
Ecological site: R040XB216AZ - Sandy Wash 7"-10" p.z.
Hydric soil rating: No

Description of Brios

Setting

Landform: Flood plains
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Mixed stream alluvium

Typical profile

C1 - 0 to 2 inches: fine sandy loam
C2 - 2 to 8 inches: very fine sandy loam
C3 - 8 to 25 inches: sand
C4 - 25 to 39 inches: very gravelly coarse sand
C5 - 39 to 60 inches: gravelly coarse sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.8 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: A
Ecological site: R040XB216AZ - Sandy Wash 7"-10" p.z.
Hydric soil rating: No

Description of Riverwash

Setting
Landform: Channels

Properties and qualities
Drainage class: Excessively drained
Frequency of flooding: Frequent

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8

Minor Components

Unnamed soils
Percent of map unit: 10 percent
Hydric soil rating: No

15—Cellar-Anklam-Rock outcrop complex, 20 to 70 percent slopes

Map Unit Setting
National map unit symbol: 1r44m
Elevation: 1,900 to 3,390 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 64 to 70 degrees F
Frost-free period: 220 to 280 days
Farmland classification: Not prime farmland

Map Unit Composition
Cellar and similar soils: 45 percent
Anklam and similar soils: 30 percent
Rock outcrop, granite: 20 percent

Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cellar

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Mountainflank, mountaintop, side slope, crest
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Slope alluvium and/or residuum weathered from granite

Typical profile

A - 0 to 1 inches: very gravelly sandy loam
C - 1 to 11 inches: very gravelly sandy loam
R - 11 to 60 inches: bedrock

Properties and qualities

Slope: 20 to 70 percent
Surface area covered with cobbles, stones or boulders: 10.0 percent
Depth to restrictive feature: 6 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 0.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: R040XA105AZ - Shallow Hills 10"-13" p.z.
Hydric soil rating: No

Description of Anklam

Setting

Landform: Hills
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Slope alluvium and/or residuum weathered from granite

Typical profile

A - 0 to 4 inches: gravelly sandy loam
Bt - 4 to 14 inches: very gravelly sandy clay loam
Crt - 14 to 20 inches: bedrock
R - 20 to 60 inches: bedrock

Properties and qualities

Slope: 20 to 50 percent

Depth to restrictive feature: 10 to 20 inches to paralithic bedrock; 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: R040XA105AZ - Shallow Hills 10"-13" p.z.
Hydric soil rating: No

Description of Rock Outcrop, Granite

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8

Minor Components

Unnamed soils

Percent of map unit: 5 percent
Hydric soil rating: No

16—Cellar-Rock outcrop complex, 5 to 70 percent slopes

Map Unit Setting

National map unit symbol: 2tdt8
Elevation: 1,900 to 4,190 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 64 to 70 degrees F
Frost-free period: 220 to 280 days
Farmland classification: Not prime farmland

Map Unit Composition

Cellar and similar soils: 60 percent
Rock outcrop, granite: 20 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cellar

Setting

Landform: Mountains
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Mountainflank, mountaintop
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Slope alluvium and/or residuum weathered from granite

Typical profile

A - 0 to 2 inches: very gravelly sandy loam
C - 2 to 12 inches: extremely gravelly sandy loam
Cr - 12 to 14 inches: bedrock
R - 14 to 60 inches: bedrock

Properties and qualities

Slope: 5 to 70 percent
Depth to restrictive feature: 6 to 14 inches to paralithic bedrock; 8 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 0.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: R040XA105AZ - Shallow Hills 10"-13" p.z.
Hydric soil rating: No

Description of Rock Outcrop, Granite

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8

Minor Components

Unnamed soils

Percent of map unit: 20 percent
Hydric soil rating: No

24—Contine loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: plj9
Elevation: 1,540 to 2,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F
Frost-free period: 240 to 325 days
Farmland classification: Not prime farmland

Map Unit Composition

Contine and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Contine

Setting

Landform: Fan terraces, basin floors
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest, dip, rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 2 inches: loam
Bt - 2 to 25 inches: clay loam
Btk1 - 25 to 35 inches: clay
Btk2 - 35 to 60 inches: clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Very rare
Frequency of ponding: None
Calcium carbonate, maximum content: 35 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: C

Ecological site: R040XB213AZ - Loamy Upland 7"-10" p.z.
Hydric soil rating: No

Minor Components

Unnamed soils
Percent of map unit: 10 percent
Hydric soil rating: No

26—Dateland loam, 0 to 2 percent slopes

Map Unit Setting
National map unit symbol: 20hr
Elevation: 1,500 to 1,880 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F
Frost-free period: 240 to 325 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition
Dateland and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dateland

Setting
Landform: Fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile
Ap1 - 0 to 6 inches: loam
Ap2 - 6 to 17 inches: loam
Bk1 - 17 to 32 inches: loam
Bk2 - 32 to 60 inches: fine sandy loam

Properties and qualities
Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: A
Ecological site: R040XB207AZ - Limy Fan 7"-10" p.z.
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 10 percent
Hydric soil rating: No

27—Delnorte-Nahda complex, 3 to 20 percent slopes

Map Unit Setting

National map unit symbol: 2lr71
Elevation: 2,500 to 3,400 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 64 to 70 degrees F
Frost-free period: 220 to 280 days
Farmland classification: Not prime farmland

Map Unit Composition

Delnorte and similar soils: 50 percent
Nahda and similar soils: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Delnorte

Setting

Landform: Fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 2 inches: very gravelly sandy loam
Bk - 2 to 12 inches: very gravelly sandy loam
Bkm - 12 to 60 inches: cemented material

Properties and qualities

Slope: 8 to 20 percent
Depth to restrictive feature: 7 to 20 inches to petrocalcic
Drainage class: Somewhat excessively drained

Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 0.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: R040XA111AZ - Limy Upland 10"-13" p.z.
Hydric soil rating: No

Description of Nahda

Setting

Landform: Fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 1 inches: very gravelly clay loam
Bt1 - 1 to 10 inches: extremely gravelly clay
Bt2 - 10 to 24 inches: very gravelly clay
Bkm - 24 to 60 inches: cemented material

Properties and qualities

Slope: 3 to 10 percent
Depth to restrictive feature: 20 to 40 inches to petrocalcic
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: R040XA120AZ - Clay Loam Upland 10"-13" p.z.
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 10 percent
Hydric soil rating: No

31—Denure sandy loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 20jb
Elevation: 1,440 to 2,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F
Frost-free period: 240 to 325 days
Farmland classification: Not prime farmland

Map Unit Composition

Denure and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Denure

Setting

Landform: Fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 2 inches: sandy loam
Bw - 2 to 14 inches: sandy loam
Bk1 - 14 to 29 inches: sandy loam
Bk2 - 29 to 51 inches: sandy loam
2Btkb - 51 to 60 inches: loam

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: A
Ecological site: R040XB218AZ - Sandy Loam Upland 7"-10" p.z.
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 20 percent
Hydric soil rating: No

32—Dateland-Denure complex, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2rzmv
Elevation: 1,310 to 2,200 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F
Frost-free period: 240 to 325 days
Farmland classification: Not prime farmland

Map Unit Composition

Dateland and similar soils: 41 percent
Denure and similar soils: 40 percent
Minor components: 19 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dateland

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 2 inches: fine sandy loam
Bw1 - 2 to 7 inches: fine sandy loam
Bw2 - 7 to 15 inches: loam
Bw3 - 15 to 30 inches: loam
2Bk - 30 to 52 inches: silt loam
2Btkb - 52 to 60 inches: loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 7 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R040XB207AZ - Limy Fan 7"-10" p.z.
Hydric soil rating: No

Description of Denure

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 2 inches: sandy loam
Bw1 - 2 to 11 inches: fine sandy loam
Bw2 - 11 to 23 inches: sandy loam
Bw3 - 23 to 35 inches: fine sandy loam
Bk - 35 to 60 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 7 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 6.9 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R040XB207AZ - Limy Fan 7"-10" p.z.
Hydric soil rating: No

Minor Components

Unnamed soils
Percent of map unit: 19 percent
Hydric soil rating: No

33—Denure-Mohall complex, 1 to 5 percent slopes

Map Unit Setting
National map unit symbol: rycv
Elevation: 1,550 to 2,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F
Frost-free period: 240 to 325 days
Farmland classification: Not prime farmland

Map Unit Composition
Denure and similar soils: 50 percent
Mohall and similar soils: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Denure

Setting
Landform: Fan terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile
A - 0 to 2 inches: sandy loam
Bw1 - 2 to 15 inches: sandy loam
Bw2 - 15 to 37 inches: sandy loam
Bk - 37 to 60 inches: gravelly sandy loam

Properties and qualities
Slope: 1 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 4 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: A
Ecological site: R040XB218AZ - Sandy Loam Upland 7"-10" p.z.
Hydric soil rating: No

Description of Mohall

Setting

Landform: Fan terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 2 inches: sandy loam
Bt - 2 to 15 inches: loam
Btk1 - 15 to 27 inches: loam
Btk2 - 27 to 51 inches: sandy loam
Bk - 51 to 60 inches: gravelly sandy loam

Properties and qualities

Slope: 1 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: B
Ecological site: R040XB213AZ - Loamy Upland 7"-10" p.z.
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 10 percent
Hydric soil rating: No

34—Denure-Momoli complex, 1 to 10 percent slopes

Map Unit Setting

National map unit symbol: 20hn
Elevation: 1,740 to 2,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F
Frost-free period: 240 to 325 days
Farmland classification: Not prime farmland

Map Unit Composition

Denure and similar soils: 50 percent
Momoli and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Denure

Setting

Landform: Fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 2 inches: sandy loam
Bw - 2 to 28 inches: sandy loam
Bk1 - 28 to 53 inches: sandy loam
Bk2 - 53 to 60 inches: gravelly sandy loam

Properties and qualities

Slope: 1 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 4 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c

Hydrologic Soil Group: A
Ecological site: R040XB218AZ - Sandy Loam Upland 7"-10" p.z.
Hydric soil rating: No

Description of Momoli

Setting

Landform: Fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 3 inches: sandy loam
Bw1 - 3 to 14 inches: sandy loam
Bw2 - 14 to 42 inches: very gravelly sandy loam
Bk - 42 to 60 inches: very gravelly loamy sand

Properties and qualities

Slope: 1 to 10 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 4 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: A
Ecological site: R040XB213AZ - Loamy Upland 7"-10" p.z.
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 15 percent
Hydric soil rating: No

36—Ebon-Carrizo family complex, 0 to 10 percent slopes

Map Unit Setting

National map unit symbol: 20jd
Elevation: 1,650 to 2,290 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F
Frost-free period: 240 to 325 days
Farmland classification: Not prime farmland

Map Unit Composition

Ebon and similar soils: 75 percent
Carrizo family and similar soils: 15 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ebon

Setting

Landform: Fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 3 inches: gravelly loam
BA - 3 to 13 inches: cobbly clay loam
Bt - 13 to 23 inches: very gravelly clay
Btk - 23 to 40 inches: very gravelly clay
BCk - 40 to 60 inches: extremely cobbly sandy clay loam

Properties and qualities

Slope: 5 to 10 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: C
Ecological site: R040XB205AZ - Clay Loam Upland 7"-10" p.z.
Hydric soil rating: No

Description of Carrizo Family

Setting

Landform: Flood plains
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Mixed stream alluvium

Typical profile

C1 - 0 to 10 inches: very gravelly sand
C2 - 10 to 20 inches: extremely gravelly coarse sand
C3 - 20 to 60 inches: very gravelly coarse sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: A
Ecological site: R040XB216AZ - Sandy Wash 7"-10" p.z.
Other vegetative classification: Sandy Bottom 7-10" p.z. (040XB216AZ)
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 10 percent
Hydric soil rating: No

53—Hickiwan-Ajolito-Ajo complex, 3 to 20 percent slopes

Map Unit Setting

National map unit symbol: 20jv
Elevation: 1,550 to 2,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F
Frost-free period: 240 to 325 days
Farmland classification: Not prime farmland

Map Unit Composition

Hickiwan and similar soils: 35 percent
Ajolito and similar soils: 30 percent
Ajo and similar soils: 25 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hickiwan

Setting

Landform: Fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 2 inches: loam
Bk - 2 to 13 inches: very gravelly loam
Bkqm - 13 to 60 inches: cemented material

Properties and qualities

Slope: 5 to 20 percent
Depth to restrictive feature: 8 to 20 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c

Hydrologic Soil Group: D
Ecological site: R040XB210AZ - Limy Upland 7"-10" p.z.
Hydric soil rating: No

Description of Ajolito

Setting

Landform: Fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 2 inches: loam
Bt - 2 to 12 inches: very gravelly clay
Bkm - 12 to 60 inches: cemented material

Properties and qualities

Slope: 3 to 10 percent
Depth to restrictive feature: 8 to 20 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: R040XB213AZ - Loamy Upland 7"-10" p.z.
Hydric soil rating: No

Description of Ajo

Setting

Landform: Fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 2 inches: sandy loam
Bt - 2 to 12 inches: gravelly sandy clay loam
Btk - 12 to 25 inches: extremely gravelly sandy clay loam
Bk - 25 to 40 inches: very gravelly loamy sand
Bkm - 40 to 60 inches: cemented material

Properties and qualities

Slope: 3 to 20 percent
Depth to restrictive feature: 20 to 45 inches to petrocalcic
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: C
Ecological site: R040XB213AZ - Loamy Upland 7"-10" p.z.
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 10 percent
Hydric soil rating: No

54—Hickiwan-Gunsight complex, 1 to 15 percent slopes

Map Unit Setting

National map unit symbol: 20jk
Elevation: 1,480 to 2,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F
Frost-free period: 240 to 325 days
Farmland classification: Not prime farmland

Map Unit Composition

Hickiwan and similar soils: 50 percent
Gunsight and similar soils: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hickiwan

Setting

Landform: Fan terraces

Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 1 inches: gravelly sandy loam
Bk1 - 1 to 6 inches: very gravelly sandy loam
Bk2 - 6 to 11 inches: very gravelly sandy loam
Bk3 - 11 to 17 inches: very gravelly sandy loam
Bkm - 17 to 60 inches: cemented material

Properties and qualities

Slope: 1 to 15 percent
Depth to restrictive feature: 8 to 20 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 35 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: R040XB210AZ - Limy Upland 7"-10" p.z.
Other vegetative classification: Limy Upland 7-10" p.z. (040XB210AZ)
Hydric soil rating: No

Description of Gunsight

Setting

Landform: Fan terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 4 inches: very fine sandy loam
Bk1 - 4 to 27 inches: very gravelly sandy loam
Bk2 - 27 to 60 inches: very gravelly sandy loam

Properties and qualities

Slope: 1 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Gypsum, maximum content: 4 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: A
Ecological site: R040XB210AZ - Limy Upland 7"-10" p.z.
Other vegetative classification: Limy Upland 7-10" p.z. (040XB210AZ)
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 10 percent
Hydric soil rating: No

61—Lehmans-Rock outcrop complex, 8 to 50 percent slopes

Map Unit Setting

National map unit symbol: 1r474
Elevation: 2,790 to 3,390 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 64 to 70 degrees F
Frost-free period: 220 to 280 days
Farmland classification: Not prime farmland

Map Unit Composition

Lehmans and similar soils: 60 percent
Rock outcrop: 30 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lehmans

Setting

Landform: Hills
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Slope alluvium and/or residuum weathered from andesite

Typical profile

A - 0 to 3 inches: very gravelly sandy loam

Bt - 3 to 12 inches: very gravelly clay
R - 12 to 60 inches: bedrock

Properties and qualities

Slope: 8 to 50 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: R040XA123AZ - Volcanic Hills 10"-13" P.Z.
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 10 percent
Hydric soil rating: No

63—Maripo sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 20jp
Elevation: 1,650 to 2,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F
Frost-free period: 240 to 325 days
Farmland classification: Not prime farmland

Map Unit Composition

Maripo and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Maripo

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear

Across-slope shape: Linear
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 12 inches: sandy loam
C - 12 to 26 inches: stratified sandy loam
2C - 26 to 60 inches: stratified very gravelly sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: A
Ecological site: R040XB218AZ - Sandy Loam Upland 7"-10" p.z.
Other vegetative classification: Sandy Loam Upland 7-10" p.z. (040XB218AZ_2)
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 20 percent
Hydric soil rating: No

64—Mined land

Map Unit Setting

National map unit symbol: 17njx
Elevation: 1,800 to 3,440 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 64 to 70 degrees F
Frost-free period: 220 to 280 days
Farmland classification: Not prime farmland

Map Unit Composition

Mined land: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mined Land

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

65—Mohall clay loam, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: plj8
Elevation: 1,440 to 2,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F
Frost-free period: 240 to 325 days
Farmland classification: Not prime farmland

Map Unit Composition

Mohall and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mohall

Setting

Landform: Basin floors, fan terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest, dip, rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 2 inches: clay loam
Bt - 2 to 19 inches: clay loam
Btk1 - 19 to 32 inches: sandy clay loam
Btk2 - 32 to 48 inches: loam
Btk3 - 48 to 60 inches: loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: C
Ecological site: R040XB211AZ - Loamy Swale 7"-10" p.z.
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 15 percent
Hydric soil rating: No

66—Mohall sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 20jn
Elevation: 1,440 to 2,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F
Frost-free period: 240 to 325 days
Farmland classification: Not prime farmland

Map Unit Composition

Mohall and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mohall

Setting

Landform: Basin floors, fan terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest, talf
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan alluvium

Typical profile

A - 0 to 3 inches: sandy loam
Bt1 - 3 to 15 inches: sandy clay loam
Bt2 - 15 to 30 inches: sandy clay loam
Btk - 30 to 60 inches: clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: C
Ecological site: R040XB213AZ - Loamy Upland 7"-10" p.z.
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 10 percent
Hydric soil rating: No

82—Rock outcrop-Lajitas complex, 5 to 60 percent slopes

Map Unit Setting

National map unit symbol: 2t2dr
Elevation: 2,000 to 3,600 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 62 to 70 degrees F
Frost-free period: 190 to 280 days
Farmland classification: Not prime farmland

Map Unit Composition

Rock outcrop: 45 percent
Lajitas and similar soils: 35 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rock Outcrop

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8

Description of Lajitas

Setting

Landform: Mountains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex

Across-slope shape: Convex
Parent material: Colluvium and/or residuum weathered from volcanic rock

Typical profile

A1 - 0 to 1 inches: very cobbly sandy loam
A2 - 1 to 11 inches: extremely cobbly loam
R - 11 to 60 inches: bedrock

Properties and qualities

Slope: 5 to 60 percent
Surface area covered with cobbles, stones or boulders: 5.0 percent
Depth to restrictive feature: 4 to 20 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 0.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: R040XA123AZ - Volcanic Hills 10"-13" P.Z.
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 20 percent
Hydric soil rating: No

97—Tremant-Pinamt complex, 1 to 10 percent slopes

Map Unit Setting

National map unit symbol: pljb
Elevation: 1,570 to 2,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 70 to 72 degrees F
Frost-free period: 240 to 325 days
Farmland classification: Not prime farmland

Map Unit Composition

Tremant and similar soils: 50 percent
Pinamt and similar soils: 35 percent
Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tremant

Setting

Landform: Stream terraces, fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope, crest, tread
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan and stream alluvium

Typical profile

A - 0 to 3 inches: sandy loam
Bt - 3 to 15 inches: gravelly sandy clay loam
Btk1 - 15 to 38 inches: gravelly sandy clay loam
Btk2 - 38 to 60 inches: very gravelly sandy loam

Properties and qualities

Slope: 1 to 10 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: C
Ecological site: R040XB207AZ - Limy Fan 7"-10" p.z.
Hydric soil rating: No

Description of Pinamt

Setting

Landform: Stream terraces, fan terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Crest, side slope, tread
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed fan and stream alluvium

Typical profile

A - 0 to 2 inches: sandy loam
Bt - 2 to 10 inches: sandy clay loam
Btk1 - 10 to 35 inches: very gravelly sandy clay loam
Btk2 - 35 to 60 inches: very cobbly sandy loam

Properties and qualities

Slope: 1 to 10 percent
Depth to restrictive feature: More than 80 inches

Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: C
Ecological site: R040XB207AZ - Limy Fan 7"-10" p.z.
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 15 percent
Hydric soil rating: No

105—Wikieup family very channery sandy loam, 10 to 60 percent slopes

Map Unit Setting

National map unit symbol: 2l0dz
Elevation: 2,190 to 3,290 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 64 to 70 degrees F
Frost-free period: 220 to 280 days
Farmland classification: Not prime farmland

Map Unit Composition

Wikieup family and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wikieup Family

Setting

Landform: Mountains
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Mountaintop, mountainflank
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Slope alluvium and/or residuum weathered from schist

Typical profile

A - 0 to 1 inches: very channery sandy loam
C - 1 to 8 inches: very channery sandy loam
Cr - 8 to 15 inches: bedrock
R - 15 to 60 inches: bedrock

Properties and qualities

Slope: 10 to 60 percent
Surface area covered with cobbles, stones or boulders: 11.0 percent
Depth to restrictive feature: 5 to 15 inches to paralithic bedrock; 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 0.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: D
Ecological site: R040XA119AZ - Schist Hills 10"-13" p.z.
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 20 percent
Hydric soil rating: No

Tonto National Forest, Arizona, Parts of Gila, Maricopa, Pinal and Yavapai Counties

NOTCOM—No Digital Data Available

Map Unit Composition

Notcom: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Notcom

Properties and qualities

Soil Information for All Uses

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Soil Physical Properties

This folder contains a collection of tabular reports that present soil physical properties. The reports (tables) include all selected map units and components for each map unit. Soil physical properties are measured or inferred from direct observations in the field or laboratory. Examples of soil physical properties include percent clay, organic matter, saturated hydraulic conductivity, available water capacity, and bulk density.

Engineering Properties (Soils Report)

This table gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

Hydrologic soil group is a group of soils having similar runoff potential under similar storm and cover conditions. The criteria for determining Hydrologic soil group is found in the National Engineering Handbook, Chapter 7 issued May 2007(http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17757.wba). Listing HSGs by soil map unit component and not by soil series is a new concept for the engineers. Past engineering references contained lists of HSGs by soil series. Soil series are continually being defined and redefined, and the list of soil series names changes so frequently as to make the task of maintaining a single national list virtually impossible. Therefore, the criteria is now used to calculate the HSG using the component soil properties and no such national series lists will be maintained. All such references are obsolete and their use should be discontinued. Soil properties that influence runoff potential are those that influence the minimum rate of infiltration for a bare soil after prolonged wetting and when not frozen. These properties are depth to a seasonal high water table, saturated hydraulic conductivity after prolonged wetting, and depth to a layer with a very slow water transmission

rate. Changes in soil properties caused by land management or climate changes also cause the hydrologic soil group to change. The influence of ground cover is treated independently. There are four hydrologic soil groups, A, B, C, and D, and three dual groups, A/D, B/D, and C/D. In the dual groups, the first letter is for drained areas and the second letter is for undrained areas.

The four hydrologic soil groups are described in the following paragraphs:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly."

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group

index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Percentage of rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage. Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field. Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination. Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

References:

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash. The criteria for determining the hydrologic soil group for individual soil components is found in the National Engineering Handbook, Chapter 7 issued May 2007(http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17757.wba). Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Engineering Properties–Eastern Pinal and Southern Gila Counties, Arizona														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
3—Beardsley-Hickiwan complex, 1 to 8 percent slopes														
Beardsley	70	D	0-3	Clay loam	CL	A-6, A-4	0- 0- 0	0- 0- 0	95-98-100	90-95-100	80-90-100	60-70-80	35-38-40	10-15-20
			3-11	Clay	CL	A-6, A-7	0- 0- 0	0- 0- 0	95-98-100	90-95-100	85-93-100	70-83-95	40-45-50	20-28-30
			11-27	Clay	CH, CL	A-6, A-7	0- 0- 0	0- 0- 0	100-100-100	100-100-100	90-95-100	75-85-95	40-50-60	20-38-45
			27-60	Cemented material	—	—	—	—	—	—	—	—	—	—
Hickiwan	20	D	0-2	Cobbly loam	SC-SM, CL	A-4	0- 3- 5	20-30-40	75-80-85	70-75-80	60-68-75	40-50-60	25-28-30	5-8 -10
			2-9	Very gravelly loam	GC-GM, GC	A-4, A-2, A-1	0- 0- 0	0- 3- 5	45-50-55	40-45-50	35-43-50	25-33-40	25-28-30	5-8 -10
			9-60	Cemented material	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Eastern Pinal and Southern Gila Counties, Arizona														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
4—Beardsley-Suncity complex, 1 to 10 percent slopes														
Beardsley	60	D	0-3	Clay loam	CL	A-4, A-6	0- 0- 0	0- 0- 0	95-98-100	90-95-100	80-90-100	60-70-80	35-38-40	10-15-20
			3-11	Clay	CL	A-6, A-7	0- 0- 0	0- 0- 0	95-98-100	90-95-100	85-93-100	70-83-95	40-45-50	20-25-30
			11-27	Clay	CH, CL	A-6, A-7	0- 0- 0	0- 0- 0	100-100-100	100-100-100	90-95-100	75-85-95	40-50-60	20-30-45
			27-60	Cemented material	—	—	—	—	—	—	—	—	—	—
Suncity	30	D	0-2	Loam	ML, CL, CL-ML	A-4	0- 0- 0	0- 0- 0	100-100-100	95-98-100	80-88-95	60-68-75	25-30-35	5-8 -10
			2-10	Loam	ML, CL	A-4	0- 0- 0	0- 0- 0	90-95-100	85-90-95	70-75-80	50-60-70	30-33-35	5-8 -10
			10-60	Cemented material	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Eastern Pinal and Southern Gila Counties, Arizona														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
11—Carrizo family-Brios-Riverwash complex, 0 to 5 percent slopes														
Carrizo family	45	A	0-3	Fine sandy loam	SM	A-4, A-2	0- 0- 0	0- 0- 0	95-98-100	90-95-100	60-72-85	35-45-55	20-23-25	NP-3 -5
			3-41	Very gravelly coarse sand	GP-GM, GP	A-1	0- 5- 10	20-25-30	40-45-50	35-40-45	20-25-30	2- 5- 7	15-18-20	NP
			41-60	Extremely cobbly coarse sand	GW, GP-GM, GP	A-1	10-15-20	20-25-30	30-35-40	25-30-35	10-18-25	1- 3- 5	15-18-20	NP
Brios	30	A	0-2	Fine sandy loam	SM	A-4, A-2	0- 0- 0	0- 0- 0	95-98-100	90-95-100	60-73-85	35-45-55	20-23-25	NP-3 -5
			2-8	Very fine sandy loam	ML	A-4	0- 0- 0	0- 0- 0	100-100-100	100-100-100	90-93-95	50-58-65	20-23-25	NP-3 -5
			8-25	Sand	SM, SP-SM	A-2, A-1	0- 0- 0	0- 0- 0	85-90-95	80-85-90	40-50-60	5-10- 15	15-18-20	NP
			25-39	Very gravelly coarse sand	GP-GM, GP	A-1	0- 0- 0	0- 0- 0	40-43-45	35-38-40	20-25-30	2- 5- 10	15-18-20	NP
			39-60	Gravelly coarse sand	SP-SM, SP	A-1	0- 0- 0	0- 0- 0	60-65-70	55-60-65	30-38-45	3- 5- 10	15-18-20	NP

Engineering Properties–Eastern Pinal and Southern Gila Counties, Arizona														
Map unit symbol and soil name	**Pct. of map unit**	**Hydrologic group**	**Depth**	**USDA texture**	**Classification**		**Pct Fragments**		**Percentage passing sieve number—**				**Liquid limit**	**Plasticity index**
					Unified	**AASHTO**	**>10 inches**	**3-10 inches**	**4**	**10**	**40**	**200**		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
15—Cellar-Anklam-Rock outcrop complex, 20 to 70 percent slopes														
Cellar	45	D	0-1	Very gravelly sandy loam	GP-GM, GC-GM, GM	A-1	0- 0- 0	0- 0- 0	45-50-55	40-45-50	25-30-35	10-15-20	20-23-25	NP-3 -5
			1-11	Very gravelly sandy loam	GC-GM, GM, GW-GM	A-1	0- 0- 0	0- 0- 0	40-45-50	35-40-45	20-25-30	10-15-20	20-23-25	NP-3 -5
			11-60	Bedrock	—	—	—	—	—	—	—	—	—	—
Anklam	30	D	0-4	Gravelly sandy loam	SM	A-1	0- 0- 0	5-10- 15	60-65-70	55-60-65	30-40-45	15-20-25	20-23-25	NP-3 -5
			4-14	Very gravelly sandy clay loam	GC	A-2	0- 0- 0	5-10- 15	40-45-50	35-40-45	30-35-40	15-20-25	30-35-40	10-13-15
			14-20	Bedrock	—	—	—	—	—	—	—	—	—	—
			20-60	Bedrock	—	—	—	—	—	—	—	—	—	—
16—Cellar-Rock outcrop complex, 5 to 70 percent slopes														
Cellar	60	D	0-2	Very gravelly sandy loam	GC-GM	A-2-4	0- 0- 0	0- 6- 12	31-36-39	29-33-37	20-25-30	9-13- 16	17-24-30	2-7 -12
			2-12	Extremely gravelly sandy loam	GP-GC	A-2-4	0- 0- 0	0- 5- 11	19-20-23	16-17-20	11-13-16	5- 6- 9	16-23-28	2-8 -12
			12-14	Bedrock	—	—	—	—	—	—	—	—	—	—
			14-60	Bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Eastern Pinal and Southern Gila Counties, Arizona														
Map unit symbol and soil name	**Pct. of map unit**	**Hydrologic group**	**Depth**	**USDA texture**	**Classification**		**Pct Fragments**		**Percentage passing sieve number—**				**Liquid limit**	**Plasticity index**
					Unified	**AASHTO**	**>10 inches**	**3-10 inches**	**4**	**10**	**40**	**200**		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
24—Contine loam, 0 to 3 percent slopes														
Contine	90	C	0-2	Loam	ML	A-4	0- 0- 0	0- 0- 0	100-100 -100	100-100 -100	85-90-95	60-68-75	30-33 -35	5-8 -10
			2-25	Clay loam	CL	A-6, A-4	0- 0- 0	0- 0- 0	100-100 -100	100-100 -100	90-95-100	70-75-80	35-38 -40	10-15-20
			25-35	Clay	CH, CL	A-7, A-6	0- 0- 0	0- 0- 0	100-100 -100	100-100 -100	90-95-100	75-85-95	40-45 -55	20-25-35
			35-60	Clay	CH, CL	A-7, A-6	0- 0- 0	0- 0- 0	100-100 -100	100-100 -100	90-95-100	75-85-95	40-45 -55	20-25-35
26—Dateland loam, 0 to 2 percent slopes														
Dateland	90	A	0-6	Loam	ML	A-4	0- 0- 0	0- 0- 0	100-100 -100	95-97-100	80-87-95	60-67-75	20-23 -25	NP-3 -5
			6-17	Loam	ML	A-4	0- 0- 0	0- 0- 0	100-100 -100	95-97-100	80-87-95	60-67-75	25-28 -30	NP-3 -5
			17-32	Loam	ML	A-4	0- 0- 0	0- 0- 0	100-100 -100	95-97-100	80-87-95	60-67-75	25-28 -30	NP-3 -5
			32-60	Fine sandy loam	SM, ML	A-4, A-2	0- 0- 0	0- 0- 0	100-100 -100	90-95-100	60-77-85	35-45-55	20-25 -30	NP-3 -5

Engineering Properties–Eastern Pinal and Southern Gila Counties, Arizona														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
27—Delnorte-Nahda complex, 3 to 20 percent slopes														
Delnorte	50	D	0-2	Very gravelly sandy loam	GM, GC-GM, GP-GM	A-1	0- 0- 0	0- 3- 5	45-50-55	40-45-50	25-30-35	10-15-20	20-23-25	NP-3 -5
			2-12	Very gravelly sandy loam	GW-GM, GM, GC-GM	A-1	0- 0- 0	10-15-20	40-45-50	35-40-45	20-25-30	10-15-20	20-23-25	NP-3 -5
			12-60	Cemented material	—	—	—	—	—	—	—	—	—	—
Nahda	40	D	0-1	Very gravelly clay loam	GC	A-2	0- 0- 0	0- 5- 10	40-45-50	35-40-45	30-38-45	25-30-35	35-38-40	10-15-20
			1-10	Extremely gravelly clay	GC	A-7, A-2	0- 0- 0	25-30-35	35-40-45	30-35-40	30-35-40	25-33-40	40-50-60	20-30-45
			10-24	Very gravelly clay	GC	A-6, A-7	0- 0- 0	0- 3- 5	35-40-45	30-35-40	30-35-40	25-33-40	40-55-65	20-35-50
			24-60	Cemented material	—	—	—	—	—	—	—	—	—	—
31—Denure sandy loam, 1 to 3 percent slopes														
Denure	80	A	0-2	Sandy loam	SM	A-4, A-2	0- 0- 0	0- 0- 0	100-100-100	95-98-100	60-65-70	30-35-40	20-23-25	NP-3 -5
			2-14	Sandy loam	SM	A-4, A-2	0- 0- 0	0- 0- 0	100-100-100	95-98-100	60-65-70	30-35-40	20-23-25	NP-3 -5
			14-29	Sandy loam	SM	A-4, A-2	0- 0- 0	0- 0- 0	100-100-100	95-98-100	60-65-70	30-35-40	20-23-25	NP-3 -5
			29-51	Sandy loam	SM	A-2, A-1	0- 0- 0	0- 2- 5	85-90-95	80-85-90	50-55-60	25-30-35	20-23-25	NP-3 -5
			51-60	Loam	CL-ML, CL	A-4	0- 0- 0	0- 0- 0	100-100-100	95-98-100	80-88-95	60-68-75	25-28-30	5-8 -10

Engineering Properties–Eastern Pinal and Southern Gila Counties, Arizona														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
32—Dateland-Denure complex, 0 to 3 percent slopes														
Dateland	41	A	0-2	Fine sandy loam	SC-SM, SM	A-2-4	0- 0- 0	0- 0- 0	79-89-100	78-89-100	70-81-95	30-35-44	18-21-25	3-5 -7
			2-7	Fine sandy loam	SC-SM, SM	A-4	0- 0- 0	0- 0- 0	80-89-100	79-89-100	70-81-95	30-36-45	18-20-24	3-4 -7
			7-15	Loam	CL-ML, SC-SM, CL	A-4	0- 0- 0	0- 0- 0	78-84-100	77-83-100	66-73-93	49-54-70	19-21-26	4-6 -10
			15-30	Loam	CL-ML, CL, SC-SM	A-4	0- 0- 0	0- 0- 0	78-84-100	77-83-100	66-73-93	49-54-70	19-21-26	4-6 -10
			30-52	Silt loam	CL, CL-ML	A-4	0- 0- 0	0- 0- 0	78-84-100	77-83-100	71-80-99	59-68-84	21-26-29	6-10-12
			52-60	Loam	CL, SC-SM	A-6	0- 0- 0	0- 0- 0	79-85-100	78-84-100	65-75-95	48-57-75	22-29-36	7-12-17
Denure	40	A	0-2	Sandy loam	SM, SC-SM	A-2-4	0- 0- 0	0- 0- 0	79-89-100	79-89-100	59-68-82	30-35-45	17-20-25	2-4 -7
			2-11	Fine sandy loam	SC-SM, SC, SM	A-4	0- 0- 0	0- 0- 0	79-89-100	79-89-100	68-81-96	30-38-47	18-22-27	3-6 -10
			11-23	Sandy loam	SC, SC-SM	A-2-4	0- 0- 0	0- 0- 0	79-85-100	78-84-100	57-64-79	27-32-41	19-23-26	4-7 -10
			23-35	Fine sandy loam	SC-SM, SC	A-2-4	0- 0- 0	0- 0- 0	79-85-100	79-84-100	70-78-96	27-33-42	19-23-26	4-7 -10
			35-60	Fine sandy loam	SC-SM, SC	A-2-4	0- 0- 0	0- 0- 0	79-85-100	79-84-100	70-78-99	29-34-47	19-23-29	4-7 -12

Engineering Properties–Eastern Pinal and Southern Gila Counties, Arizona														
Map unit symbol and soil name	**Pct. of map unit**	**Hydrologic group**	**Depth**	**USDA texture**	**Classification**		**Pct Fragments**		**Percentage passing sieve number—**				**Liquid limit**	**Plasticity index**
					Unified	**AASHTO**	**>10 inches**	**3-10 inches**	**4**	**10**	**40**	**200**		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
33—Denure-Mohall complex, 1 to 5 percent slopes														
Denure	50	A	0-2	Sandy loam	SM	A-4, A-2	0- 0- 0	0- 0- 0	100-100-100	95-98-100	60-65-70	30-35-40	20-23-25	NP-3 -5
			2-15	Sandy loam	SM	A-1, A-4, A-2	0- 0- 0	0- 0- 0	90-95-100	85-90-95	50-55-60	25-33-40	20-23-25	NP-3 -5
			15-37	Sandy loam	SM	A-1, A-2	0- 0- 0	0- 0- 0	85-90-95	80-85-90	50-55-60	25-30-35	20-23-25	NP-3 -5
			37-60	Gravelly sandy loam	SM	A-1, A-2	0- 0- 0	0- 0- 0	70-75-80	65-70-75	40-45-50	20-25-30	20-23-25	NP-3 -5
Mohall	40	B	0-2	Sandy loam	SM	A-4, A-2	0- 0- 0	0- 0- 0	100-100-100	95-98-100	60-65-70	30-35-40	20-23-25	NP-3 -5
			2-15	Loam	ML	A-4	0- 0- 0	0- 0- 0	100-100-100	95-98-100	80-88-95	60-68-75	30-33-35	5-8 -10
			15-27	Loam	ML	A-4	0- 0- 0	0- 0- 0	100-100-100	95-98-100	80-88-95	60-68-75	30-33-35	5-8 -10
			27-51	Sandy loam	SM	A-2, A-4	0- 0- 0	0- 0- 0	100-100-100	95-98-100	60-65-70	30-35-40	20-25-30	NP-3 -5
			51-60	Gravelly sandy loam	SM	A-2, A-1	0- 0- 0	0- 0- 0	70-75-80	65-70-75	40-45-50	20-25-30	20-23-25	NP-3 -5

Engineering Properties–Eastern Pinal and Southern Gila Counties, Arizona														
Map unit symbol and soil name	**Pct. of map unit**	**Hydrologic group**	**Depth**	**USDA texture**	**Classification**		**Pct Fragments**		**Percentage passing sieve number—**				**Liquid limit**	**Plasticity index**
					Unified	**AASHTO**	**>10 inches**	**3-10 inches**	**4**	**10**	**40**	**200**		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
34—Denure-Momoli complex, 1 to 10 percent slopes														
Denure	50	A	0-2	Sandy loam	SM	A-1, A-2, A-4	0- 0- 0	0- 0- 0	90-95-100	85-90-95	50-55-60	25-33-40	20-23-25	NP-3 -5
			2-28	Sandy loam	SM	A-2, A-4	0- 0- 0	0- 0- 0	100-100-100	95-98-100	60-65-70	30-35-40	20-23-25	NP-3 -5
			28-53	Sandy loam	SM	A-1, A-2, A-4	0- 0- 0	0- 0- 0	90-95-100	85-90-95	50-55-60	25-33-40	20-25-30	NP-3 -5
			53-60	Gravelly sandy loam	SM	A-1	0- 0- 0	0- 0- 0	60-65-70	55-60-65	30-35-40	15-20-25	20-25-30	NP-3 -5
Momoli	35	A	0-3	Sandy loam	SM	A-1, A-2, A-4	0- 0- 0	0- 0- 0	90-95-100	85-90-95	50-55-60	25-33-40	20-23-25	NP-3 -5
			3-14	Sandy loam	SM	A-1, A-2	0- 0- 0	0- 0- 0	85-90-95	80-85-90	50-55-60	25-30-35	20-23-25	NP-3 -5
			14-42	Very gravelly sandy loam	GC-GM, GM, GW-GM	A-1	0- 0- 0	0- 0- 0	40-45-50	35-40-45	20-25-30	10-15-20	20-23-25	NP-3 -5
			42-60	Very gravelly loamy sand	GM, GC-GM, GW-GM	A-1	0- 0- 0	0- 5- 10	35-40-45	30-35-40	20-25-30	10-13-15	20-23-25	NP-3 -5

Engineering Properties–Eastern Pinal and Southern Gila Counties, Arizona														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
36—Ebon-Carrizo family complex, 0 to 10 percent slopes														
Ebon	75	C	0-3	Gravelly loam	SC, GC-GM	A-4	0- 0- 0	0- 5- 10	70-75-80	65-70-75	55-63-70	40-48-55	25-28-35	5-8 -10
			3-13	Cobbly clay loam	CL	A-6, A-4	0- 0- 0	20-25-30	70-75-80	65-70-75	60-68-75	45-53-60	35-38-40	10-15-20
			13-23	Very gravelly clay	CH, GC	A-6, A-7	0- 0- 0	40-45-50	55-60-65	50-55-60	45-53-60	40-48-55	40-50-60	20-30-45
			23-40	Very gravelly clay	CH, GC	A-7, A-6	0- 0- 0	40-45-50	55-60-65	50-55-60	45-53-60	40-48-55	40-50-60	20-30-45
			40-60	Extremely cobbly sandy clay loam	GC, GW-GC	A-2	0- 0- 0	50-60-70	35-40-45	30-35-40	25-30-35	10-15-20	30-35-40	10-13-15
Carrizo family	15	A	0-10	Very gravelly sand	GP-GM, GW, GP	A-1	0- 0- 5	0- 0- 5	30-35-40	25-30-35	10-18-25	1- 3- 5	15-18-20	NP
			10-20	Extremely gravelly coarse sand	GP	A-1	0- 0- 5	0- 0- 5	20-25-30	15-20-25	8-14- 20	1- 3- 4	15-18-20	NP
			20-60	Very gravelly coarse sand	GP-GM, GP	A-1	0- 0- 5	0- 0- 5	35-40-45	30-35-40	15-23-30	2- 4- 6	15-18-20	NP

Engineering Properties–Eastern Pinal and Southern Gila Counties, Arizona														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
53—Hickiwan-Ajolito-Ajo complex, 3 to 20 percent slopes														
Hickiwan	35	D	0-2	Loam	ML	A-4	0- 0- 0	0- 0- 0	90-93-95	80-88-95	60-78-95	60-68-75	20-25-30	NP-3 -5
			2-13	Very gravelly loam	GM	A-2, A-1	0- 0- 0	0- 5- 10	35-43-50	35-40-45	20-33-45	20-28-35	20-25-30	NP-3 -5
			13-60	Cemented material	—	—	—	—	—	—	—	—	—	—
Ajolito	30	D	0-2	Loam	CL-ML, CL	A-4	0- 0- 0	0- 0- 0	85-90-95	80-85-90	70-78-85	50-60-70	25-30-35	5-8 -10
			2-12	Very gravelly clay	GC	A-7, A-2	0- 0- 0	0- 0- 0	40-45-50	35-40-45	30-38-45	25-33-40	40-50-60	20-30-45
			12-60	Cemented material	—	—	—	—	—	—	—	—	—	—
Ajo	25	C	0-2	Sandy loam	SM	A-1, A-2	0- 0- 0	0- 0- 0	85-90-95	80-85-90	50-55-60	25-30-35	20-25-30	NP-3 -5
			2-12	Gravelly sandy clay loam	SC	A-2, A-6	0- 0- 0	0- 0- 0	70-75-80	65-70-75	50-60-70	25-33-40	30-35-40	10-13-15
			12-25	Extremely gravelly sandy clay loam	GC, GP-GC	A-2	0- 0- 0	0- 0- 0	20-25-30	15-20-25	10-15-20	5-10- 15	30-35-40	10-13-15
			25-40	Very gravelly loamy sand	GP-GM, GP-GC, GP	A-1	0- 0- 0	0- 0- 0	35-40-45	30-35-40	15-18-20	4- 7- 10	20-23-25	NP-3 -5
			40-60	Cemented material	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Eastern Pinal and Southern Gila Counties, Arizona														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
54—Hickiwan-Gunsight complex, 1 to 15 percent slopes														
Hickiwan	50	D	0-1	Gravelly sandy loam	SM	A-2, A-1	0- 0- 0	0- 0- 0	70-75-80	65-70-75	40-45-50	20-25-30	20-23-25	NP-3 -5
			1-6	Very gravelly sandy loam	GP-GM, GC-GM, GM	A-1	0- 0- 0	0- 0- 0	45-50-55	40-45-50	25-30-35	10-15-20	20-23-25	NP-3 -5
			6-11	Very gravelly sandy loam	GC-GM, GM, GW-GM	A-1	0- 0- 0	0- 0- 0	35-40-45	30-35-40	20-25-30	10-13-15	20-23-25	NP-3 -5
			11-17	Very gravelly sandy loam	GP-GM, GW-GM, GC-GM	A-1	0- 0- 0	0- 0- 0	30-35-40	25-30-35	15-20-25	8-12- 15	20-23-25	NP-3 -5
			17-60	Cemented material	—	—	—	—	—	—	—	—	—	—
Gunsight	40	A	0-4	Very fine sandy loam	CL-ML, ML	A-4	0- 0- 0	0- 0- 0	100-100-100	95-98-100	80-88-95	50-58-65	20-23-25	NP-3 -5
			4-27	Very gravelly sandy loam	GW-GM, GC-GM, GM	A-1	0- 0- 0	0- 2- 5	35-40-45	30-35-40	20-25-30	10-13-15	20-23-25	NP-3 -5
			27-60	Very gravelly sandy loam	GC-GM, GW-GM, GM	A-1	0- 0- 0	0-15- 20	40-45-50	35-40-45	20-25-30	10-15-20	20-23-25	NP-3 -5
61—Lehmans-Rock outcrop complex, 8 to 50 percent slopes														
Lehmans	60	D	0-3	Very gravelly sandy loam	GM, GW-GM	A-1	0- 0- 0	0-10- 15	35-40-45	30-35-40	20-25-30	10-15-20	25-28-30	NP-3 -5
			3-12	Very gravelly clay	GC	A-2, A-7	0- 0- 0	0-10- 15	35-40-45	30-35-40	30-35-40	20-30-40	40-45-55	20-28-35
			12-60	Bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Eastern Pinal and Southern Gila Counties, Arizona														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
63—Maripo sandy loam, 0 to 3 percent slopes														
Maripo	80	A	0-12	Sandy loam	SM	A-2, A-4	0- 0- 0	0- 5- 10	95-98-100	90-95-100	55-63-70	30-35-40	20-25-30	NP-3 -5
			12-26	Stratified sandy loam	SM	A-2, A-4	0- 0- 0	0- 5- 10	95-98-100	90-95-100	55-63-70	30-35-40	20-25-30	NP-3 -5
			26-60	Stratified very gravelly sand	GP-GC, GP	A-1	0- 0- 0	0-10- 20	35-40-45	30-35-40	15-23-30	2- 4- 5	15-20-25	NP-3 -5
65—Mohall clay loam, 0 to 5 percent slopes														
Mohall	85	C	0-2	Clay loam	CL, ML	A-6, A-4	0- 0- 0	0- 0- 0	100-100-100	100-100-100	90-95-100	70-75-80	35-35-40	10-13-15
			2-19	Clay loam	CL, ML	A-6, A-4	0- 0- 0	0- 0- 0	100-100-100	100-100-100	90-95-100	70-75-80	35-35-40	10-13-15
			19-32	Sandy clay loam	SC, CL	A-6, A-2	0- 0- 0	0- 0- 0	95-98-100	90-95-100	70-80-90	30-43-55	30-35-40	10-13-15
			32-48	Loam	CL-ML, ML, CL	A-4	0- 0- 0	0- 0- 0	95-98-100	90-95-100	75-85-95	55-65-75	25-30-35	5-8 -10
			48-60	Loam	CL-ML, CL	A-4	0- 0- 0	0- 0- 0	95-98-100	90-95-100	75-85-95	55-65-75	25-28-30	5-8 -10

Engineering Properties–Eastern Pinal and Southern Gila Counties, Arizona														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
66—Mohall sandy loam, 0 to 3 percent slopes														
Mohall	90	C	0-3	Sandy loam	SM	A-4, A-2	0- 0- 0	0- 0- 0	100-100-100	95-98-100	60-65-70	30-35-40	20-23-30	NP-3 -5
			3-15	Sandy clay loam	SM, CL	A-6, A-2	0- 0- 0	0- 0- 0	100-100-100	100-100-100	80-85-90	35-45-55	35-38-40	10-13-15
			15-30	Sandy clay loam	SM, CL	A-6, A-2	0- 0- 0	0- 0- 0	100-100-100	100-100-100	80-85-90	35-45-55	35-38-40	10-13-15
			30-60	Clay loam	CL, ML	A-6, A-4	0- 0- 0	0- 0- 0	100-100-100	95-98-100	85-93-100	65-73-80	35-38-40	10-13-15
82—Rock outcrop-Lajitas complex, 5 to 60 percent slopes														
Lajitas	35	D	0-1	Very cobbly sandy loam	SC	A-2-4	0- 0- 0	45-49-54	55-65-71	53-63-70	37-49-56	17-25-30	19-27-31	3-9 -12
			1-11	Extremely cobbly loam	GC	A-6	0- 0- 0	57-60-63	55-70-70	53-69-69	43-61-65	30-45-48	22-30-35	7-13-17
			11-60	Bedrock	—	—	—	—	—	—	—	—	—	—

Engineering Properties–Eastern Pinal and Southern Gila Counties, Arizona														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			In				*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*	*L-R-H*
97—Tremant-Pinamt complex, 1 to 10 percent slopes														
Tremant	50	C	0-3	Sandy loam	SM	A-4, A-2	0- 0- 0	0- 0- 0	95-98-100	90-95-100	55-63-70	30-35-40	20-25-30	NP-3 -5
			3-15	Gravelly sandy clay loam	SC	A-2, A-6	0- 0- 0	0- 0- 0	75-80-85	70-75-80	55-63-70	25-35-45	30-35-40	10-13-15
			15-38	Gravelly sandy clay loam	GC, SC	A-6, A-2	0- 0- 0	0- 0- 0	65-70-75	60-65-70	50-58-65	20-30-40	30-35-40	10-13-15
			38-60	Very gravelly sandy loam	GP-GM, GM	A-1	0- 0- 0	0-10- 20	45-50-55	40-45-50	25-30-35	10-15-20	20-25-30	NP-3 -5
Pinamt	35	C	0-2	Sandy loam	SM	A-2, A-4	0- 0- 0	0- 0- 0	95-98-100	90-95-100	55-63-70	30-35-40	20-23-25	NP-3 -5
			2-10	Sandy clay loam	SC	A-6, A-2	0- 0- 0	0- 0- 0	85-90-95	80-85-90	65-73-80	30-40-50	30-35-40	10-13-15
			10-35	Very gravelly sandy clay loam	GC	A-2	0- 0- 0	25-30-35	45-50-55	40-45-50	30-38-45	15-23-30	30-35-40	10-13-15
			35-60	Very cobbly sandy loam	GM	A-1	0- 0- 0	40-45-50	50-55-60	45-50-55	30-35-40	15-18-20	20-25-30	NP-3 -5
105—Wikieup family very channery sandy loam, 10 to 60 percent slopes														
Wikieup family	80	D	0-1	Very channery sandy loam	GP-GM, SM	A-1	0- 0- 0	0-10- 10	50-60-70	45-55-65	20-30-40	10-15-20	20-23-25	NP-3 -5
			1-8	Very channery sandy loam	GP-GM, SM	A-1	0- 0- 0	0-10- 10	50-60-70	45-55-65	20-30-40	10-15-20	20-23-25	NP-3 -5
			8-15	Bedrock	—	—	—	—	—	—	—	—	—	—
			15-60	Bedrock	—	—	—	—	—	—	—	—	—	—

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Table B-4 Recommended Green and Ampt Values

NRCS Soil Survey	MUSYM	Name	Initial Content (volume ratio)		Saturated Content (volume ratio)	Suction (in)	Conductivity (in/hr)	Natural Imp. %
			Wilting Point (dry)	Field Capacity (normal)				
AZ659	42	Sasco silt loam	0.1	0.3	0.42	34.51	0.12	0
AZ659	43	Toltec fine sandy loam	0.09	0.17	0.4	4.13	0.52	0
AZ659	44	Tremant-Denure complex*	0.14	0.25	0.41	10.78	0.13	0
AZ659	45	Trix clay loam	0.21	0.35	0.44	16.65	0.05	0
AZ659	46	Vaiva-Rock outcrop complex, 2 to 15 percent slopes	0.13	0.26	0.41	14.57	0.14	20
AZ659	47	Vaiva-Rock outcrop complex, 15 to 50 percent slopes	0.08	0.16	0.4	4.04	0.38	30
AZ659	48	Valencia sandy loam	0.06	0.15	0.4	4.06	0.84	0
AZ659	49	Why sandy loam	0.07	0.15	0.39	4.52	0.6	0
AZ659	50	Water	0.3	0.42	0.48	11.42	0.01	100
AZ661	1	Agustin-Kokan-Queencreek complex, 1 to 8 percent slopes	0.08	0.15	0.4	3.24	0.5	0
AZ661	2	Ajo-Guvo-Rock outcrop complex, 15 to 60 percent slopes	0.18	0.32	0.43	16.47	0.06	20
AZ661	3	Beardsley-Hickiwan complex, 1 to 8 percent slopes	0.19	0.32	0.43	16.34	0.06	0
AZ661	4	Beardsley-Suncity complex, 1 to 10 percent slopes	0.19	0.32	0.43	16.61	0.07	0
AZ661	5	Beaumain-Rock outcrop-Cherrycow complex, 5 to 60 percent slopes	0.19	0.32	0.46	11.44	0.09	20
AZ661	6	Bodecker soils and riverwash, 0 to 5 percent slopes	0.04	0.13	0.41	3.54	0.87	0
AZ661	7	Brewster-Rock outcrop-Woodcutter complex, 10 to 60 percent slopes	0.15	0.28	0.45	12.11	0.14	30
AZ661	8	Brunkcow-Chiricahua complex, 10 to 60 percent slopes	0.18	0.31	0.45	14.89	0.09	0

Table B-4 Recommended Green and Ampt Values

NRCS Soil Survey	MUSYM	Name	Initial Content (volume ratio)		Saturated Content (volume ratio)	Suction (in)	Conductivity (in/hr)	Natural Imp. %
			Wilting Point (dry)	Field Capacity (normal)				
AZ661	9	Bucklebar-Hayhook complex, 1 to 10 percent slopes	0.08	0.16	0.4	4.6	0.66	0
AZ661	10	Caracara-Delthorny complex, 3 to 45 percent slopes	0.24	0.35	0.46	11.19	0.03	0
AZ661	11	Carrizo family-Brios-Riverwash complex, 0 to 5 percent slopes	0.06	0.14	0.4	4.46	0.84	0
AZ661	12	Casa Grande fine sandy loam, 0 to 3 percent slopes	0.08	0.15	0.4	3.27	0.77	0
AZ661	13	Cascabel soils, wetrock soils, and riverwash, 0 to 5 percent slopes	0.05	0.15	0.4	4.72	0.83	0
AZ661	14	Cascabel soils, wetrock soils, and water, 0 to 5 percent slopes	0.07	0.19	0.4	10.06	0.5	33.3
AZ661	15	Cellar-Anklam-Rock outcrop complex, 20 to 70 percent slopes	0.07	0.16	0.4	4.29	0.44	20
AZ661	16	Cellar-Rock outcrop complex, 20 to 70 percent slopes	0.07	0.15	0.39	4.42	0.36	35
AZ661	17	Cellar-Rock outcrop complex, 5 to 20 percent slopes	0.06	0.14	0.39	4.55	0.5	30
AZ661	18	Cherioni-Rock outcrop complex, 3 to 30 percent slopes	0.1	0.2	0.39	8.05	0.18	20
AZ661	19	Chiricahua, Deloro, and Lampshire soils, 5 to 60 percent slopes	0.14	0.25	0.45	5.14	0.15	0
AZ661	20	Chiricahua-deloro-leyte soils, 10 to 50 percent slopes	0.21	0.34	0.45	15.41	0.04	0
AZ661	21	Chiricahua-Mallet complex, 1 to 15 percent slopes	0.19	0.3	0.44	9.6	0.07	0

Table B-4 Recommended Green and Ampt Values

NRCS Soil Survey	MUSYM	Name	Initial Content (volume ratio)		Saturated Content (volume ratio)	Suction (in)	Conductivity (in/hr)	Natural Imp. %
			Wilting Point (dry)	Field Capacity (normal)				
AZ661	22	Collarbutton-Rock outcrop-Cherrycow complex, 10 to 60 percent slopes	0.21	0.32	0.45	9.36	0.07	30
AZ661	23	Combate coarse sandy loam, 1 to 5 percent slopes	0.08	0.17	0.41	3.81	0.61	0
AZ661	24	Contine loam, 0 to 3 percent slopes	0.21	0.34	0.44	17.55	0.04	0
AZ661	25	Coolidge-Gunsight complex, 1 to 5 percent slopes	0.07	0.16	0.4	4.04	0.66	0
AZ661	26	Dateland loam, 0 to 2 percent slopes	0.08	0.2	0.39	13.78	0.38	0
AZ661	27	Delnorte-Nahda complex, 3 to 20 percent slopes	0.17	0.28	0.44	8.27	0.07	0
AZ661	28	Denied access	0.3	0.42	0.48	11.42	0.01	0
AZ661	29	Denure gravelly sandy loam, 0 to 2 percent slopes	0.06	0.15	0.4	4.06	0.69	0
AZ661	30	Denure sandy loam, 0 to 2 percent slopes	0.06	0.15	0.4	4.06	0.76	0
AZ661	31	Denure sandy loam, 1 to 3 percent slopes	0.06	0.14	0.39	4.55	0.8	0
AZ661	32	Denure-Dateland complex, 0 to 3 percent slopes	0.06	0.14	0.4	3.87	0.82	0
AZ661	33	Denure-Mohall complex, 1 to 5 percent slopes	0.11	0.21	0.4	8.68	0.3	0
AZ661	34	Denure-Momoli complex, 1 to 10 percent slopes	0.07	0.15	0.4	4.66	0.71	0
AZ661	35	Ebon very gravelly loam, 1 to 8 percent slopes	0.27	0.4	0.47	16.56	0.01	0
AZ661	36	Ebon-Carrizo family complex, 0 to 10 percent slopes	0.1	0.21	0.41	10.95	0.28	0
AZ661	37	Eskiminzin-Rock outcrop complex, 35 to 75 percent slopes	0.28	0.41	0.49	14.47	0.01	30
AZ661	38	Eskiminzin-Rock outcrop-Sontag complex, tuff, 5 to 45 percent slopes	0.22	0.34	0.45	9.98	0.05	30

Table B-4 Recommended Green and Ampt Values

NRCS Soil Survey	MUSYM	Name	Initial Content (volume ratio)		Saturated Content (volume ratio)	Suction (in)	Conductivity (in/hr)	Natural Imp. %
			Wilting Point (dry)	Field Capacity (normal)				
AZ661	39	Eskiminzin-Sontag-Rock outcrop complex, 2 to 45 percent slopes	0.21	0.34	0.46	13.7	0.05	20
AZ661	40	Fig family-Topock complex, 5 to 50 percent slopes	0.16	0.25	0.41	6.85	0.08	0
AZ661	41	Gachado-Lomitas-Rock outcrop complex, 7 to 55 percent slopes	0.14	0.24	0.4	8.33	0.09	20
AZ661	42	Gadsden clay, 0 to 2 percent slopes	0.27	0.4	0.48	15.73	0.02	0
AZ661	43	Gila-Vinton complex, 0 to 5 percent slopes	0.04	0.12	0.41	1.79	1.34	0
AZ661	44	Gilman fine sandy loam, 0 to 2 percent slopes	0.08	0.16	0.39	4.15	0.6	0
AZ661	45	Gilman loam, 0 to 2 percent slopes	0.09	0.22	0.39	14.89	0.28	0
AZ661	46	Glenbar clay loam, 0 to 2 percent slopes	0.22	0.36	0.45	19.89	0.04	0
AZ661	47	Glendale-Hantz complex, 0 to 5 percent slopes	0.24	0.4	0.49	20.58	0.05	0
AZ661	48	Gran-Rock outcrop-Pantano complex, 20 to 60 percent slopes	0.27	0.39	0.48	11.8	0.02	20
AZ661	49	Granolite-Rock outcrop-Akela complex, 5 to 45 percent slopes	0.25	0.38	0.47	14.98	0.02	25
AZ661	50	Haplogypsids, 0 to 5 percent slopes	0.07	0.2	0.39	13.76	0.41	0
AZ661	51	Haplogypsids-Whitecliff-Badlands complex, 1 to 80 percent slopes	0.09	0.19	0.39	7.66	0.39	0
AZ661	52	Hayhook-Riverwash complex, 1 to 5 percent slopes	0.07	0.15	0.4	4.62	0.72	0
AZ661	53	Hickiwan-Ajolito-Ajo complex, 3 to 20 percent slopes	0.17	0.3	0.43	12.99	0.06	0

Table B-4 Recommended Green and Ampt Values

NRCS Soil Survey	MUSYM	Name	Initial Content (volume ratio)		Saturated Content (volume ratio)	Suction (in)	Conductivity (in/hr)	Natural Imp. %
			Wilting Point (dry)	Field Capacity (normal)				
AZ661	54	Hickiwan-Gunsight complex, 1 to 15 percent slopes	0.07	0.16	0.4	5.3	0.49	0
AZ661	55	Holguin-Rock outcrop complex, 15 to 60 percent slopes	0.16	0.3	0.44	14.36	0.08	35
AZ661	56	Jawbone family-Rock outcrop-Chimenea complex, 15 to 80 percent slopes	0.05	0.1	0.42	3.63	1.04	20
AZ661	57	Kimrose-Sasabe complex, 3 to 45 percent slopes	0.21	0.34	0.45	14.17	0.05	0
AZ661	58	Lanque family-Turquoise complex, 1 to 20 percent slopes	0.08	0.17	0.42	3.7	0.69	0
AZ661	59	Laveen fine sandy loam, 0 to 2 percent slopes	0.08	0.15	0.4	3.35	0.76	0
AZ661	60	Laveen loam, 0 to 3 percent slopes	0.08	0.21	0.4	12.52	0.41	0
AZ661	61	Lehmans-Rock outcrop complex, 8 to 50 percent slopes	0.09	0.18	0.4	4.97	0.28	30
AZ661	62	Mabray-Rock outcrop complex, 20 to 75 percent slopes	0.13	0.26	0.43	12.81	0.16	35
AZ661	63	Maripo sandy loam, 0 to 3 percent slopes	0.08	0.16	0.4	4.04	0.69	0
AZ661	64	Mined land	0.3	0.42	0.48	11.42	0.01	0
AZ661	65	Mohall clay loam, 0 to 5 percent slopes	0.19	0.32	0.42	17.71	0.06	0
AZ661	66	Mohall sandy loam, 0 to 3 percent slopes	0.06	0.15	0.4	4.06	0.84	0
AZ661	67	Mohall-Contine complex, 0 to 5 percent slopes	0.18	0.34	0.45	19.86	0.07	0
AZ661	68	Momoli-Carrizo family complex, 1 to 8 percent slopes	0.07	0.14	0.41	4.55	0.6	0
AZ661	69	Nahda-Delnorte complex, 1 to 10 percent slopes	0.22	0.34	0.46	10.49	0.03	0

Table B-4 Recommended Green and Ampt Values

NRCS Soil Survey	MUSYM	Name	Initial Content (volume ratio)		Saturated Content (volume ratio)	Suction (in)	Conductivity (in/hr)	Natural Imp. %
			Wilting Point (dry)	Field Capacity (normal)				
AZ661	70	Ohaco-Cave complex, 1 to 15 percent slopes	0.15	0.24	0.41	6.56	0.17	0
AZ661	71	Oracle-Romero-Combate complex, 1 to 20 percent slopes	0.09	0.18	0.42	4	0.49	0
AZ661	72	Oxyaquic Torrifluvents-Riverwash complex, 0 to 5 percent slopes	0.06	0.15	0.41	3.66	0.65	0
AZ661	73	Pantak-Rock outcrop-Lampshire complex, 5 to 60 percent slopes	0.13	0.26	0.43	12.96	0.13	35
AZ661	74	Pantano-Anklam-Rock outcrop complex, 3 to 20 percent slopes	0.13	0.22	0.4	6.76	0.14	20
AZ661	75	Pinamt-Gunsight complex, 1 to 8 percent slopes	0.15	0.27	0.42	11.53	0.07	0
AZ661	76	Pinamt-Momoli complex, 1 to 8 percent slopes	0.16	0.27	0.42	9.77	0.09	0
AZ661	77	Powerline-Kimrose family complex, 10 to 35 percent slopes	0.09	0.21	0.42	6.56	0.31	0
AZ661	78	Queencreek soils and riverwash, 0 to 5 percent slopes	0.03	0.12	0.39	3.89	0.87	0
AZ661	79	Quiburi-Gila complex, 0 to 3 percent slopes	0.07	0.19	0.4	8.87	0.56	0
AZ661	80	Ripsey-Rock outcrop complex, 15 to 70 percent slopes	0.09	0.17	0.39	5.44	0.45	30
AZ661	81	Rock outcrop-Garzona family complex, 15 to 70 percent slopes	0.19	0.32	0.44	16.9	0.04	50
AZ661	82	Rock outcrop-Lajitas complex, 5 to 60 percent slopes	0.12	0.25	0.4	15.65	0.09	45
AZ661	83	Rock outcrop-Lampshire complex, 10 to 60 percent slopes	0.1	0.19	0.42	4.26	0.34	55

Table B-4 Recommended Green and Ampt Values

NRCS Soil Survey	MUSYM	Name	Initial Content (volume ratio)		Saturated Content (volume ratio)	Suction (in)	Conductivity (in/hr)	Natural Imp. %
			Wilting Point (dry)	Field Capacity (normal)				
AZ661	84	Rock outcrop-Lampshire complex, chaparral, 5 to 50 percent slopes	0.08	0.18	0.4	8.44	0.48	65
AZ661	85	Rock outcrop-Stagecoach complex, 5 to 35 percent slopes	0.08	0.16	0.4	4.04	0.45	45
AZ661	86	Rock outcrop-Surge complex, 3 to 45 percent slopes	0.1	0.19	0.41	4.49	0.56	60
AZ661	87	Romero-Rock outcrop-Oracle complex, 10 to 45 percent slopes	0.11	0.2	0.42	5.13	0.31	25
AZ661	88	Sasabe-Stronghold complex, 1 to 15 percent slopes	0.16	0.27	0.43	8.71	0.16	0
AZ661	89	Schiefflin-Rock outcrop complex, 5 to 45 percent slopes	0.06	0.12	0.43	0.38	0.76	30
AZ661	90	Schrap-Rock outcrop complex, 5 to 60 percent slopes	0.16	0.26	0.41	8.28	0.1	25
AZ661	91	Selevin-Tombstone-Saddlebrook complex, 3 to 45 percent slopes	0.17	0.27	0.44	7.02	0.12	0
AZ661	92	Stagecoach-Delnorte complex, 5 to 45 percent slopes	0.07	0.15	0.4	4.2	0.4	0
AZ661	93	Stagecoach-Haplogypsids-Delnorte complex, 5 to 80 percent slopes	0.08	0.19	0.39	8.38	0.3	0
AZ661	94	Stanford soils and water, 0 to 5 percent slopes	0.12	0.26	0.44	11.15	0.3	50
AZ661	95	Terrarossa-Blacktail complex, 5 to 60 percent slopes	0.3	0.42	0.5	13.14	0.02	0
AZ661	96	Topawa very gravelly sandy loam, 5 to 20 percent slopes	0.24	0.35	0.43	10.77	0.01	0
AZ661	97	Tremant-Pinamt complex, 1 to 10 percent slopes	0.11	0.2	0.4	5.87	0.31	0

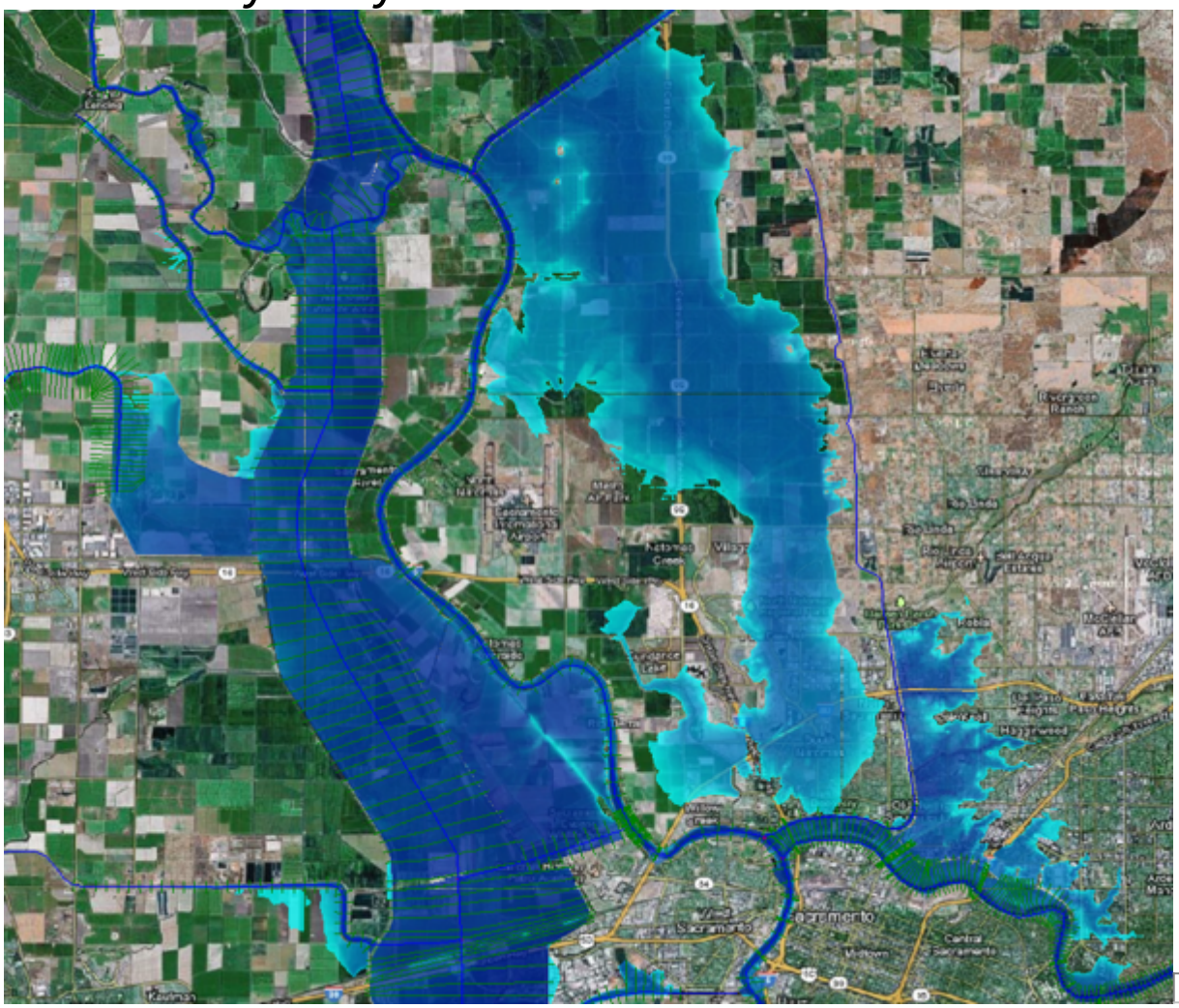
Table B-4 Recommended Green and Ampt Values

NRCS Soil Survey	MUSYM	Name	Initial Content (volume ratio)		Saturated Content (volume ratio)	Suction (in)	Conductivity (in/hr)	Natural Imp. %
			Wilting Point (dry)	Field Capacity (normal)				
AZ661	98	Tubac-Rillino complex, 3 to 25 percent slopes	0.21	0.33	0.46	9.11	0.05	0
AZ661	99	Turquoise-Coppercan complex, 5 to 45 percent slopes	0.16	0.25	0.45	4.8	0.21	0
AZ661	100	Turquoise-Nugget-Rock outcrop complex, 5 to 45 percent slopes	0.1	0.19	0.42	4.25	0.42	20
AZ661	101	Typic Fluvaquents, wetrock soils, and water, 0 to 3 percent slopes	0.11	0.21	0.44	8.58	0.27	33.3
AZ661	102	Ugyp-Whitecliff complex, eroded, 1 to 5 percent slopes	0.1	0.23	0.41	14.01	0.3	0
AZ661	103	Vint loamy fine sand, 0 to 2 percent slopes	0.03	0.1	0.4	1.63	1.46	0
AZ661	104	White House-Stronghold complex, 5 to 60 percent slopes	0.16	0.27	0.42	9.74	0.14	0
AZ661	105	Wikieup family very channery sandy loam, 10 to 60 percent slopes	0.09	0.18	0.39	5.2	0.33	0
AZ661	106	Yarbam-Rock outcrop complex, 20 to 60 percent slopes	0.1	0.23	0.43	11.24	0.23	10
AZ662	Ac	Agua clay loam	0.21	0.35	0.44	16.65	0.05	0
AZ662	Ag	Agua loam	0.13	0.26	0.41	14.57	0.2	0
AZ662	AhA	Anthony clay loam, 0 to 2 percent slopes	0.19	0.32	0.43	16.63	0.07	0
AZ662	AlB	Anthony gravelly sandy loam, 0 to 5 percent slopes	0.11	0.19	0.39	5.1	0.38	0
AZ662	AmA	Anthony loam, 0 to 2 percent slopes	0.13	0.26	0.41	14.57	0.2	0
AZ662	AnA	Anthony sandy loam, 0 to 2 percent slopes	0.11	0.19	0.39	5.1	0.38	0

US Army Corps of Engineers®
Hydrologic Engineering Center

HEC-RAS

River Analysis System



HEC-RAS 2D User's Manual

Version 6.6
Exported - September 2024

Approved for Public Release. Distribution Unlimited.

1. Cumulative excess (per cell) [in or mm]
2. Cumulative precipitation (per cell) [in or mm]
3. Infiltration rate (per cell) [in/hr or mm/hr]
4. Infiltration depth (per cell) [in or mm]
5. Soil moisture deficit (per cell) [in or mm]
6. Percolation rate (per cell) [in/hr or mm/hr]
7. Percolation depth (per cell) [in/hr or mm/hr]
8. Evapotranspiration rate (per cell) [in/hr or mm/hr]

Green-Ampt

Green and Ampt (1911) presented a physics-based approach to computing soil infiltration.

For the first implementation of Green-Ampt in HEC-RAS, a simple approach will be used for recovery. The approach assumes that the upper layer of the soil remains saturated even during a hiatus period and solves a simple water balance equation to compute the cumulative infiltration depth. Although simplified, the approach has several important characteristics. Specifically, it is volume conservative and represents soil infiltration, evapotranspiration, and unsaturated gravity driven flow.

The input data required for the Green-Ampt (GA) method are (Table 2-5):

1. Wetting front suction (scalar value for each cell) [in or mm]
2. Saturated hydraulic conductivity (scalar value for each cell) [in/hr or mm/hr]
3. Initial soil water content (scalar value for each cell) [-]
4. Saturated soil water content (scalar value for each cell) [-]
5. Soil Potential Evapotranspiration (time series for each cell) [in/hr or mm/hr]

The initial water content should be set by the user based upon the antecedent moisture condition of the soils. The Soil Field Capacity is the amount of water content remaining after the excess water has been drained by gravity. Technically, the soil field capacity is the water remaining in the soil after being subjected to an atmospheric pressure of -0.33 bar (or -4.8 psi). The wilting point is the amount of water that is so tightly bound to soil particles that is cannot be evaporated or transpired. Technically, the wilting point is the water remaining in the soil after being subjected to an atmospheric pressure of -15 bar (or -217.5 psi). The wilting point must be less than the field capacity.

To utilize the Green-Ampt with Redistribution (GAR) the following additional input parameters are required in HEC-RAS (Table 2-5):

1. Residual soil water content (scalar value for each cell) [in or cm]
2. Pore-size distribution index (scalar value for each cell) [in or cm]

Table 2-5. Green-Ampt Parameter Estimates and Ranges based on Soil Texture (from Gowdish and Muñoz-Carpena 2009; Rawls and Brakensiek 1982 and Rawls et al. 1982).

Soil Texture	Residual Water Content	Wilting Point	Field Capacity	Total Porosity	Pore-size Distribution Index	Saturated Hydraulic Conductivity (mm/hr)	Wetting Front Suction(mm)
Sand	0.02	0.033	0.048	0.437	0.694	210 – 235.6	96.2 – 106

Soil Texture	Residual Water Content	Wilting Point	Field Capacity	Total Porosity	Pore-size Distribution Index	Saturated Hydraulic Conductivity (mm/hr)	Wetting Front Suction(mm)
Loamy sand	0.035	0.055	0.084	0.437	0.553	59.8 – 61.1	119.6 – 142
Sandy loam	0.041	0.095	0.155	0.453	0.378	21.8 – 25.9	215.3 – 222
Loam	0.027	0.117	0.20	0.463	0.252	13.2	175.0 – 315
Silt loam	0.015	0.133	0.261	0.501	0.234	6.8	329.6 – 404
Sandy clay loam	0.068	0.148	0.187	0.398	0.319	3.0 – 4.3	449 – 538.3
Clay loam	0.075	0.197	0.245	0.464	0.242	2.0 – 2.3	408.9 – 446
Silty clay loam	0.040	0.208	0.30	0.471	0.177	1.5 – 2.0	538.3 – 581
Sandy clay	0.109	0.239	0.232	0.430	0.223	1.2	466.5 – 636
Silty clay	0.056	0.250	0.317	0.479	0.150	0.9 – 1.0	577.7 – 647
Clay	0.09.	0.272	0.296	0.475	0.165	0.6	622.5 – 714

Note on Parameter Estimation

The values presented here are meant as **initial estimates**. This is the same for all sources of similar data including Engineer Manual 1110-2-1417 Flood-Runoff Analysis and the Introduction to Loss Rate Tutorials. Regardless of the source, these initial estimates **must be calibrated and validated**.

Creating a Porosity and Flow Drag Layer

The **Porosity and Flow Drag Layer** is a new feature in HEC-RAS 6.6. It is used to specify surface classifications which are assigned porosity and flow drag parameters. The approach is similar to how the Manning's roughness coefficient is specified in HEC-RAS. A surface classification layer is created which can be a mix of raster and vector data. Each classification is then assigned specific porosity and flow drag parameters which are then interpolated onto the computational mesh cells and faces.

Create a new RAS Layer

The **Porosity and Flow Drag Layer** is created in **RAS Mapper** by right-clicking on **Map layers** and selecting the drop down **Create a new RAS Layer | Porosity and Flow Drag Layer.**

Kimley»Horn

APPENDIX C – HYDRAULIC CALCULATIONS

HEC-RAS - River Analysis System

Project File: k:\LAV_WaterResources\SilverKingSolar\HECRAS_v_6.5_100yr_24hr\HECRAS_v_6.prj

Project Name: HECRAS_v_6.5_Project

Plan Name: EX_100yr_24hr

Short ID: EX_100yr_24hr

Starting Time: 31Dec2024 2400

Ending Time: 02Jan2025 2400

```
################################################
#                                              #
#                                              #
#       1D and 2D Unsteady Flow Module         #
#                                              #
#                                              #
#          HEC-RAS 6.5 February 2024           #
#                                              #
#             02JUL25 at 05:45:29              #
#                                              #
################################################
```

US Inflow	DS Outflow	Lat Hydro	SA Hydro	Groundwater	Diversions	Precip Excess (Inches)	Precip Excess (Acre Feet)
*********	**********	*********	********	**********	**********	**********	**********

0.0000000000

Start 1D Reach	Final 1D Reach	Starting SA's	Final SA's
**********	**********	**********	**********

*** Volume Accounting for 2D Flow Area in Acre Feet ***

2D Area	Starting Vol (Acre Feet)	Ending Vol	Cum Inflow (incl. precip)	Cum Outflow	Error	Percent Error	Precip Excess (Inches)	Precip Excess
*******	**********	**********	**********	**********	*****	**********	**********	**********
Perimeter 1	0.01217	6275.	52442.	46170.	2.872	0.005477	7170.	1.418

*** Total Volume Accounting (for the entire model) in Acre Feet ***

Total Boundary Flux of Water In	52442.
Total Boundary Flux of Water Out	46170.
Starting Volume	0.01217

Ending Volume	6275.
Precipitation Excess (Acre Feet)	7170.
Precipitation Excess (inches)	1.418

Error	Percent Error
*****	**********
2.872	0.005477

HEC-RAS - River Analysis System

Project File: k:\LAV_WaterResources\SilverKingSolar\HECRAS_v_6.5_25yr_24hr\HECRAS_v_6.prj

Project Name: HECRAS_v_6.5_Project

Plan Name: EX_25yr_24hr

Short ID: EX_25yr_24hr

Starting Time: 31Dec2024 2400

Ending Time: 02Jan2025 2400

```
################################################
#                                              #
#                                              #
#       1D and 2D Unsteady Flow Module         #
#                                              #
#                                              #
#          HEC-RAS 6.5 February 2024           #
#                                              #
#             02JUL25 at 05:46:40              #
#                                              #
################################################
```

US Inflow	DS Outflow	Lat Hydro	SA Hydro	Groundwater	Diversions	Precip Excess	Precip Excess
							(Acre Feet)
(Inches)							
*********	**********	*********	********	**********	**********	**********	**********

0.0000000000

Start 1D Reach	Final 1D Reach	Starting SA's	Final SA's
**********	**********	**********	**********

*** Volume Accounting for 2D Flow Area in Acre Feet ***

2D Area	Starting Vol	Ending Vol	Cum Inflow	Cum Outflow	Error	Percent Error	Precip Excess	Precip Excess
			(incl. precip)					
(Acre Feet)	(Inches)							
*******	**********	**********	**********	**********	*****	**********	**********	**********
Perimeter 1	0.01217	6253.	50485.	44235.	2.877	0.005700		
5211.	1.031							

*** Total Volume Accounting (for the entire model) in Acre Feet ***

Total Boundary Flux of Water In	50485.
Total Boundary Flux of Water Out	44235.
Starting Volume	0.01217

Ending Volume	6253.
Precipitation Excess (Acre Feet)	5211.
Precipitation Excess (inches)	1.031

Error	Percent Error
*****	**********
2.877	0.005700

HEC-RAS - River Analysis System

Project File: k:\LAV_WaterResources\SilverKingSolar\HECRAS_v_6.5_10yr_24hr\HECRAS_v_6.prj

Project Name: HECRAS_v_6.5_Project

Plan Name: EX_10yr_24hr

Short ID: EX_10yr_24hr

Starting Time: 31Dec2024 2400

Ending Time: 02Jan2025 2400

```
################################################
#                                              #
#                                              #
#       1D and 2D Unsteady Flow Module         #
#                                              #
#                                              #
#          HEC-RAS 6.5 February 2024           #
#                                              #
#             02JUL25 at 05:47:10              #
#                                              #
################################################
```

US Inflow	DS Outflow	Lat Hydro	SA Hydro	Groundwater	Diversions	Precip Excess	Precip Excess
							(Acre Feet)
(Inches)							
*********	**********	*********	********	**********	**********	**********	**********

0.0000000000

Start 1D Reach	Final 1D Reach	Starting SA's	Final SA's
**********	**********	**********	**********

*** Volume Accounting for 2D Flow Area in Acre Feet ***

2D Area	Starting Vol	Ending Vol	Cum Inflow	Cum Outflow	Error	Percent Error	Precip Excess
			(incl. precip)				
(Acre Feet)	(Inches)						
*******	**********	**********	**********	**********	*****	**********	**********
Perimeter 1	0.01217	6238.	49342.	43108.	3.367	0.006823	
4067.	0.8043						

*** Total Volume Accounting (for the entire model) in Acre Feet ***

Total Boundary Flux of Water In	49342.
Total Boundary Flux of Water Out	43108.
Starting Volume	0.01217

Ending Volume	6238.
Precipitation Excess (Acre Feet)	4067.
Precipitation Excess (inches)	0.8043

Error	Percent Error
*****	**********
3.367	0.006823

HEC-RAS - River Analysis System

Project File: k:\LAV_WaterResources\SilverKingSolar\HECRAS_v_6.5_2yr_24hr\HECRAS_v_6.prj

Project Name: HECRAS_v_6.5_Project

Plan Name: EX_2yr_24hr

Short ID: EX_2yr_24hr

Starting Time: 31Dec2024 2400

Ending Time: 02Jan2025 2400

```
################################################
#                                              #
#                                              #
#       1D and 2D Unsteady Flow Module         #
#                                              #
#                                              #
#          HEC-RAS 6.5 February 2024           #
#                                              #
#             02JUL25 at 05:44:19              #
#                                              #
################################################
```

US Inflow	DS Outflow	Lat Hydro	SA Hydro	Groundwater	Diversions	Precip Excess (Inches)	Precip Excess (Acre Feet)
*********	**********	*********	********	**********	**********	**********	**********

0.0000000000

Start 1D Reach	Final 1D Reach	Starting SA's	Final SA's
**********	**********	**********	**********

*** Volume Accounting for 2D Flow Area in Acre Feet ***

2D Area	Starting Vol (Acre Feet)	Ending Vol	Cum Inflow (incl. precip)	Cum Outflow	Error	Percent Error	Precip Excess (Inches)	Precip Excess (Acre Feet)
*******	**********	**********	**********	**********	*****	**********	**********	**********
Perimeter 1	0.01217	6198.	47613.	41417.	2.981	0.006261	2336.	0.4620

*** Total Volume Accounting (for the entire model) in Acre Feet ***

Total Boundary Flux of Water In	47613.
Total Boundary Flux of Water Out	41417.
Starting Volume	0.01217

Ending Volume	6198.
Precipitation Excess (Acre Feet)	2336.
Precipitation Excess (inches)	0.4620

Error	Percent Error
*****	**********
2.981	0.006261

HEC-RAS - River Analysis System

Project File: k:\LAV_WaterResources\SilverKingSolar\HECRAS_v_6.5_100yr_6hr\HECRAS_v_6.prj

Project Name: HECRAS_v_6.5_Project

Plan Name: EX_100yr_6hr

Short ID: EX_100yr_6hr

Starting Time: 31Dec2024 2400

Ending Time: 02Jan2025 2400

```
################################################
#                                              #
#                                              #
#       1D and 2D Unsteady Flow Module         #
#                                              #
#                                              #
#          HEC-RAS 6.5 February 2024           #
#                                              #
#             02JUL25 at 14:04:04              #
#                                              #
################################################
```

US Inflow	DS Outflow	Lat Hydro	SA Hydro	Groundwater	Diversions	Precip Excess (Inches)	Precip Excess (Acre Feet)
*********	**********	*********	********	**********	**********	**********	**********

0.0000000000

Start 1D Reach	Final 1D Reach	Starting SA's	Final SA's
**********	**********	**********	**********

*** Volume Accounting for 2D Flow Area in Acre Feet ***

2D Area	Starting Vol (Acre Feet)	Ending Vol	Cum Inflow (incl. precip)	Cum Outflow	Error	Percent Error	Precip Excess (Inches)	Precip Excess (Acre Feet)
*******	**********	**********	**********	**********	*****	**********	**********	**********
Perimeter 1	0.01217	6235.	50813.	44584.	6.058	0.01192	1.105	5587.

*** Total Volume Accounting (for the entire model) in Acre Feet ***

Total Boundary Flux of Water In	50813.
Total Boundary Flux of Water Out	44584.
Starting Volume	0.01217

Ending Volume	6235.
Precipitation Excess (Acre Feet)	5587.
Precipitation Excess (inches)	1.105

Error	Percent Error
*****	**********
6.058	0.01192

HEC-RAS - River Analysis System

Project File: k:\LAV_WaterResources\SilverKingSolar\HECRAS_v_6.5_25yr_6hr\HECRAS_v_6.prj

Project Name: HECRAS_v_6.5_Project

Plan Name: EX_25yr_6hr

Short ID: EX_25yr_6hr

Starting Time: 31Dec2024 2400

Ending Time: 02Jan2025 2400

```
################################################
#                                              #
#                                              #
#       1D and 2D Unsteady Flow Module         #
#                                              #
#                                              #
#          HEC-RAS 6.5 February 2024           #
#                                              #
#             02JUL25 at 13:59:20              #
#                                              #
################################################
```

US Inflow	DS Outflow	Lat Hydro	SA Hydro	Groundwater	Diversions	Precip Excess (Inches)	Precip Excess (Acre Feet)
*********	**********	*********	********	**********	**********	**********	**********

0.0000000000

Start 1D Reach	Final 1D Reach	Starting SA's	Final SA's
**********	**********	**********	**********

*** Volume Accounting for 2D Flow Area in Acre Feet ***

2D Area	Starting Vol (Acre Feet)	Ending Vol	Cum Inflow (incl. precip)	Cum Outflow	Error	Percent Error	Precip Excess (Inches)	Precip Excess (Acre Feet)
*******	**********	**********	**********	**********	*****	**********	**********	**********
Perimeter 1	0.01217	6208.	48868.	42667.	7.122	0.01457	0.7202	3641.

*** Total Volume Accounting (for the entire model) in Acre Feet ***

Total Boundary Flux of Water In	48868.
Total Boundary Flux of Water Out	42667.
Starting Volume	0.01217

Ending Volume	6208.
Precipitation Excess (Acre Feet)	3641.
Precipitation Excess (inches)	0.7202

Error	Percent Error
*****	**********
7.122	0.01457

HEC-RAS - River Analysis System

Project File: k:\LAV_WaterResources\SilverKingSolar\HECRAS_v_6.5_10yr_6hr\HECRAS_v_6.prj

Project Name: HECRAS_v_6.5_Project

Plan Name: EX_10yr_6hr

Short ID: EX_10yr_6hr

Starting Time: 31Dec2024 2400

Ending Time: 02Jan2025 2400

```
################################################
#                                              #
#                                              #
#       1D and 2D Unsteady Flow Module         #
#                                              #
#                                              #
#          HEC-RAS 6.5 February 2024           #
#                                              #
#             02JUL25 at 13:48:04              #
#                                              #
################################################
```

US Inflow	DS Outflow	Lat Hydro	SA Hydro	Groundwater	Diversions	Precip Excess (Inches)	Precip Excess (Acre Feet)
*********	**********	*********	********	**********	**********	**********	**********

0.0000000000

Start 1D Reach	Final 1D Reach	Starting SA's	Final SA's
**********	**********	**********	**********

*** Volume Accounting for 2D Flow Area in Acre Feet ***

2D Area	Starting Vol (Acre Feet)	Ending Vol	Cum Inflow (incl. precip)	Cum Outflow	Error	Percent Error	Precip Excess (Inches)	Precip Excess
*******	**********	**********	**********	**********	*****	**********	**********	**********
Perimeter 1	0.01217	6184.	47810.	41631.	4.692	0.009814	2583.	0.5108

*** Total Volume Accounting (for the entire model) in Acre Feet ***

Total Boundary Flux of Water In	47810.
Total Boundary Flux of Water Out	41631.
Starting Volume	0.01217

Ending Volume	6184.
Precipitation Excess (Acre Feet)	2583.
Precipitation Excess (inches)	0.5108

Error	Percent Error
*****	**********
4.692	0.009814

HEC-RAS - River Analysis System

Project File: k:\LAV_WaterResources\SilverKingSolar\HECRAS_v_6.5_2yr_6hr\HECRAS_v_6.prj

Project Name: HECRAS_v_6.5_Project

Plan Name: EX_2yr_6hr

Short ID: EX_2yr_6hr

Starting Time: 31Dec2024 2400

Ending Time: 02Jan2025 2400

```
################################################
#                                              #
#                                              #
#       1D and 2D Unsteady Flow Module         #
#                                              #
#                                              #
#          HEC-RAS 6.5 February 2024           #
#                                              #
#             02JUL25 at 14:13:49              #
#                                              #
################################################
```

US Inflow	DS Outflow	Lat Hydro	SA Hydro	Groundwater	Diversions	Precip Excess	Precip Excess
							(Acre Feet)
(Inches)							
*********	**********	*********	********	**********	**********	**********	**********

0.0000000000

Start 1D Reach	Final 1D Reach	Starting SA's	Final SA's
**********	**********	**********	**********

*** Volume Accounting for 2D Flow Area in Acre Feet ***

2D Area	Starting Vol	Ending Vol	Cum Inflow	Cum Outflow	Error	Percent Error	Precip Excess	Precip Excess
			(incl. precip)					
(Acre Feet)							(Inches)	
*******	**********	**********	**********	**********	*****	**********	**********	**********
Perimeter 1	0.01217	6127.	46215.	40095.	7.373	0.01595	987.8	0.1954

*** Total Volume Accounting (for the entire model) in Acre Feet ***

Total Boundary Flux of Water In	46215.
Total Boundary Flux of Water Out	40095.
Starting Volume	0.01217

Ending Volume	6127.
Precipitation Excess (Acre Feet)	987.8
Precipitation Excess (inches)	0.1954

Error	Percent Error
*****	**********
7.373	0.01595

Kimley»Horn

Existing Conditions Scour Values for HEC-18 equation

General Project Information			
Project	Silver King Energy Center		
Project #	292140000		
Designed by	CZ	Date	7/3/2025

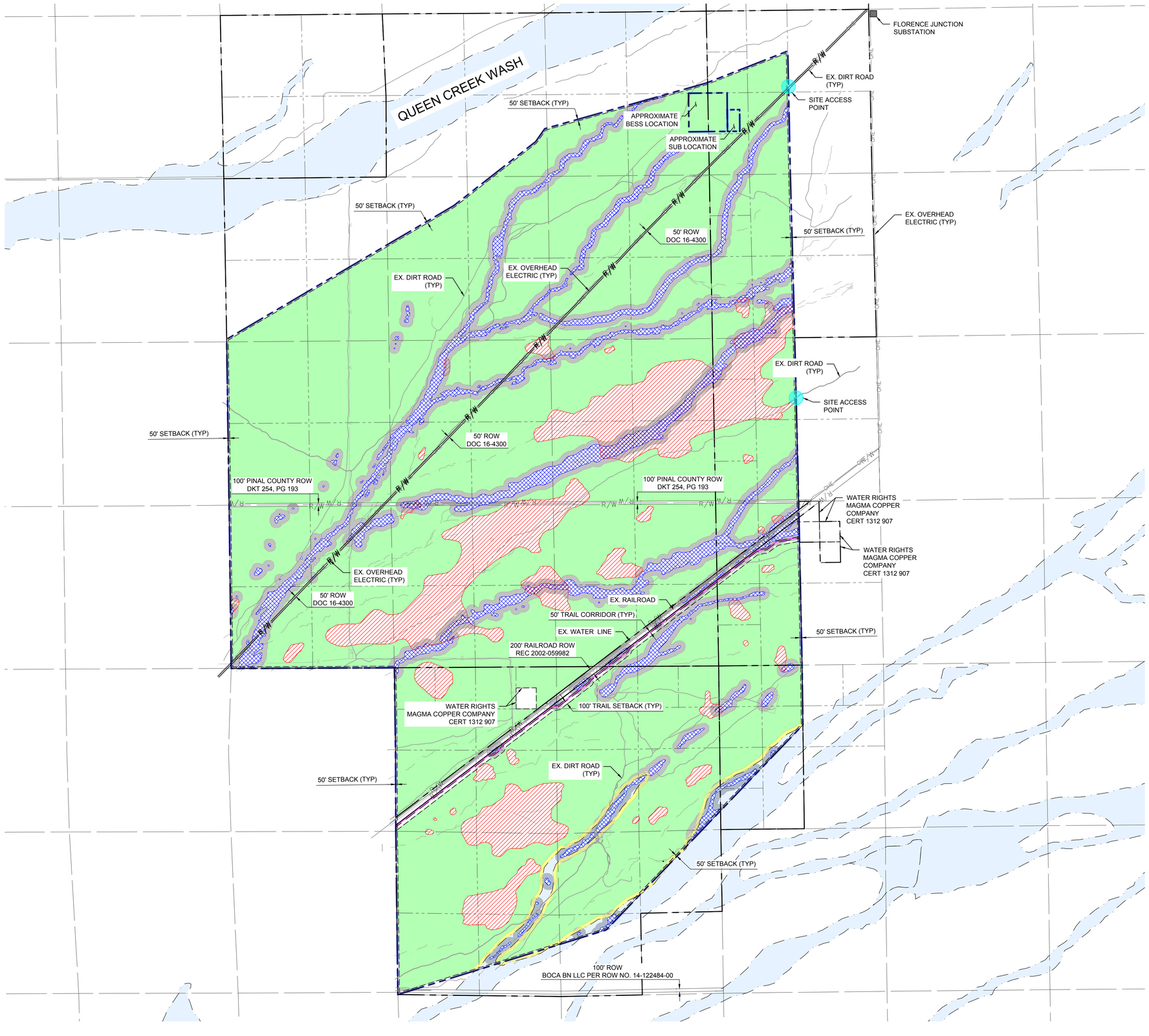
Variable	Value	
K_1	1.0	Square Nose (with angle > 5 degrees)
K_2	1.3	Square Nose
K_3	1.1	Plane Bed
a	6.0	[in]
L	6.0	[in]
θ	45.0	[deg]
θ	0.8	[rad]

$$\frac{y_s}{a} = 2.0\, K_1\, K_2\, K_3 \left(\frac{y_1}{a}\right)^{0.35} Fr_1^{0.43}$$

$$K_2 = (\text{Cos}\ \theta + \frac{L}{a}\ \text{Sin}\ \theta)^{0.65}$$

y_s = Scour depth, ft (m)
y_1 = Flow depth directly upstream of the pier, ft (m)
K_1 = Correction factor for pier nose shape from Figure 7.3 and Table 7.1
K_2 = Correction factor for angle of attack of flow from Table 7.2 or Equation 7.4
K_3 = Correction factor for bed condition from Table 7.3
a = Pier width, ft (m)
L = Length of pier, ft (m)
Fr_1 = Froude Number directly upstream of the pier = $V_1/(gy_1)^{1/2}$
V_1 = Mean velocity of flow directly upstream of the pier, ft/s (m/s)
g = Acceleration of gravity (32.2 ft/s^2) (9.81 m/s^2)

Anticipated Pier Scour for W6x15 Wide Flange Beam							
Flow Depth (ft)	Flow Velocity (ft/s)	K1	K2 (45 deg angle)	K3	a (in)	Fr	Scour Depth (ft)
0.50	0.50	1.0	1.30	1.1	6.0	0.12	0.58
0.50	1.00	1.0	1.30	1.1	6.0	0.25	0.79
0.50	1.50	1.0	1.30	1.1	6.0	0.37	0.94
0.50	2.00	1.0	1.30	1.1	6.0	0.50	1.06
0.50	2.50	1.0	1.30	1.1	6.0	0.62	1.17
0.50	3.00	1.0	1.30	1.1	6.0	0.75	1.26
1.00	0.50	1.0	1.30	1.1	6.0	0.09	0.64
1.00	1.00	1.0	1.30	1.1	6.0	0.18	0.86
1.00	1.50	1.0	1.30	1.1	6.0	0.26	1.03
1.00	2.00	1.0	1.30	1.1	6.0	0.35	1.16
1.00	2.50	1.0	1.30	1.1	6.0	0.44	1.28
1.00	3.00	1.0	1.30	1.1	6.0	0.53	1.39
1.50	0.50	1.0	1.30	1.1	6.0	0.07	0.68
1.50	1.00	1.0	1.30	1.1	6.0	0.14	0.91
1.50	1.50	1.0	1.30	1.1	6.0	0.22	1.09
1.50	2.00	1.0	1.30	1.1	6.0	0.29	1.23
1.50	2.50	1.0	1.30	1.1	6.0	0.36	1.35
1.50	3.00	1.0	1.30	1.1	6.0	0.43	1.46
2.00	0.50	1.0	1.30	1.1	6.0	0.06	0.70
2.00	1.00	1.0	1.30	1.1	6.0	0.12	0.95
2.00	1.50	1.0	1.30	1.1	6.0	0.19	1.13
2.00	2.00	1.0	1.30	1.1	6.0	0.25	1.28
2.00	2.50	1.0	1.30	1.1	6.0	0.31	1.41
2.50	3.00	1.0	1.30	1.1	6.0	0.33	1.57
2.50	0.50	1.0	1.30	1.1	6.0	0.06	0.73
2.50	1.00	1.0	1.30	1.1	6.0	0.11	0.98
2.50	1.50	1.0	1.30	1.1	6.0	0.17	1.16
2.50	2.00	1.0	1.30	1.1	6.0	0.22	1.32
2.50	2.50	1.0	1.30	1.1	6.0	0.28	1.45
2.50	3.00	1.0	1.30	1.1	6.0	0.33	1.57
3.00	0.50	1.0	1.30	1.1	6.0	0.05	0.74
3.00	1.00	1.0	1.30	1.1	6.0	0.10	1.00
3.00	1.50	1.0	1.30	1.1	6.0	0.15	1.19
3.00	2.00	1.0	1.30	1.1	6.0	0.20	1.35
3.00	2.50	1.0	1.30	1.1	6.0	0.25	1.49
3.00	3.00	1.0	1.30	1.1	6.0	0.31	1.61



LEGEND

- PROPERTY LINE
- EXISTING EASEMENT LINE
- SECTION LINES
- QUARTER SECTION LINES
- OHE — EXISTING OVERHEAD POWER LINE
- W — EXISTING WATER LINE
- X — EXISTING STANDARD CHAIN-LINK SECURITY FENCE
- EXISTING RAILROAD
- EXISTING ROAD
- EXISTING WASH
- R/W — EXISTING RIGHT OF WAY
- SITE ACCESS POINT
- AVOIDANCE AREA
- RIPARIAN AREA
- RIPARIAN AREA SETBACK (150')
- FEMA ZONE A - EROSION SETBACK
- TRAIL CORRIDOR (50')
- BUILDABLE AREA
- FEMA ZONE A

GENERAL NOTES

1. PROJECT BOUNDARY IS APPROXIMATELY 8,966 AC (390,554,778 SF).
2. EXISTING BOUNDARY SURVEY INFORMATION SHOWN FROM AN ALTA/NSPS LAND TITLE SURVEY, DATED 04/25/2025, LOCATED IN PINAL COUNTY, AZ; PROVIDED BY WESTWOOD PROFESSIONAL SERVICES, INC.
3. 50-FT INDUSTRIAL BUFFER (SETBACK) SHOWN ALONG PROPERTY BOUNDARY AND ARTERIAL OR COLLECTOR STREETS PER PINAL COUNTY ORDINANCE 2.340.040 AND 2.340.050.
4. APPROXIMATE RIPARIAN AREAS SHOWN BASED ON THE ARIZONA GAME AND FISH DEPARTMENT (AZGFD) ENVIRONMENTAL REVIEW TOOL (ERT).

No.	REVISIONS	DATE	BY

SILVER KING SOLAR, LLC

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
2046 RIVERVIEW AUTO DRIVE, SUITE 400
MESA, AZ 85201
PHONE: 480-207-2666
WWW.KIMLEY-HORN.COM

PRELIMINARY - NOT FOR CONSTRUCTION

KHA PROJECT	292140000
DATE	7/22/25
SCALE	AS SHOWN
DESIGNED BY	MAM
DRAWN BY	MAM
CHECKED BY	SRJ

SITE PLAN

1100 MW SOLAR PHOTOVOLTAIC AND THERMAL GENERATING FACILITY AND ASSOCIATED FACILITIES LOCATED IN FLORENCE AND WEST OF SR-79, PINAL COUNTY, AZ

SILVER KING ENERGY CENTER

PZ#: PZ-PA-010-25

SHEET NUMBER
EX-1

Plotted By:Murillo, Mare Sheet Set:King Layout:EX-1 July 22, 2025 03:41:33pm K:\EAV_Civil\Solar\292140000 - Arevia Silver King Solar\Cadd\Exhibits\CPA Site Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Pinal County

AFFIDAVIT OF POSTING BROADCAST SIGN

I, the applicant's representative for case # PZ-PA-010-25, personally caused at least one sign to be posted in a visible place on or near the proposed project site at SWC HWY 60 & AZ-79, at least 28 days before the Planning and Zoning Commission Public Hearing, in Pinal County.

See attached photo exhibit.

Dynamite Signs
Sign Company Name

Sign Company Representative

Subscribed and sworn to be on 08/13/25 by Meghan Liggett.

IN WITNESS WHEREOF, I Hereto set my hand and official seal.

Notary Public

MARYBETH CONRAD
Notary Public - Arizona
Maricopa County
Commission # 673441
My Comm. Expires Oct 25, 2028

My Commission expires: 10-25-28



Sign Location 1 updated



Sign Location 2 updated



Sign Location 3 updated



Sign Location 4 updated

AFFIDAVIT OF Mailing of Notice of Hearing*

I, Ferris Leathery, Applicant for case PZ-PA-010-25, personally caused to be mailed 6 mailer(s) by first class post regarding the public hearing associated with case PZ-PA-01025 on 8/18/2025 (Date), on a form prescribed by the planning division at least 15 days before the the Citizens Advisory Committee Public Hearing, regarding the Major CPA (Type proposed of application), in unincorporated Pinal County.

The notice(s) and mailing lists were mailed as attached.

Ferris Leathery
Applicant

STATE OF ~~ARIZONA~~ CA)
San Diego) ss:
COUNTY OF ~~PINAL~~)

Subscribed and sworn to me by Ferris Leathery this 18 day of August, 2025.

Notary Public
My Commission Expires: 1/7/2026

ARTHUR PATRICK ARQUILLA
COMM. #2386204
NOTARY PUBLIC-CALIFORNIA
SAN DIEGO COUNTY
My Comm Expires January 7 2026

*** as directed by your staff Coordinator**
*** please attach the mailer and the list addresses**

AFFIDAVIT OF POSTING OF BROADCAST SIGN (and Notice of Hearing)*

I, Roger Biede, Applicant for case PZ-PA-010-25 (Case number), personally caused ten (10) sign(s) to be posted in a visible place on or near the proposed project site on August 18, 2025 (Date), at least 15 days before the Citizens Advisory Committee Public Hearing, regarding the proposed Major Comprehensive Plan Amendmend (Type of application), in unincorporated Pinal County

The notice(s) was posted as indicated on the attached map and photograph.

Applicant

STATE OF ARIZONA)
) ss:
COUNTY OF PINAL)

Subscribed and sworn to me by Roger Biede this 19 day of August, 2025

Robyn Villalobos
Notary Public
My Commission Expires:

ROBYN VILLALOBOS
Notary Public - State of Arizona
PINAL COUNTY
Commission # 662325
Expires March 04, 2028

*** as directed by your staff Coordinator**

Ver. 5/21

1 Broadcast sign	33.267366519700126, -111.35184320298944
2 Broadcast sign	33.253444061136335, -111.33996551190177
3 Broadcast sign	33.215125190726525, -111.3467033733907
4 Broadcast sign	33.23247630189129, -111.3440418881375

Small signs (in addition to placing on the broadcast signs)

5	33.269905627104166, -111.35524526298117
6	33.263792977687444, -111.34742335545515
7	33.24434345824136, -111.34221546131111
8	33.238668222640754, -111.34309528586894
9	33.22880513156889, -111.3445534424348
10	33.222072459400835, -111.34559855283848




PINAL COUNTY
Public Hearings
Public Hearing Information
NOTICE
Applicant Name: Silver King Solar, LLC
Applicant Phone Number: 1-833-316-4345


NOTICE


NOTICE


PINAL COUNTY
Public Hearings
Public Hearing Information
NOTICE
Applicant Name: Silver King Solar, LLC
Applicant Phone Number: 1-833-319-4348


PINAL COUNTY
Public Hearings
Case Number: PZ-PA-010-25
Existing Comprehensive Plan Designation:
Moderate-Low Density Residential
Proposed Comprehensive Plan Designation:
Green Energy Production
Acreage: 9,000
Applicant Name: Silver King Solar, LLC
Applicant Phone Number: 1-833-310-6345
Case Information Available at Pinal County Planning and Development Services
(520) 866-6442 or www.pinalcountyaz.gov
Public Hearing Information
NOTICE


NOTICE


NOTICE


NOTICE


PINAL COUNTY
Public Hearings
Case Number: PZ-PA-010-25
Existing Comprehensive Plan Designation:
Moderate-Low Density Residential
Proposed Comprehensive Plan Designation:
Green Energy Production
Acreage: 9,000
Applicant Name: Silver King Solar, LLC
Applicant Phone Number: 1-833-310-6345
Case Information Available at Pinal County Planning and Development Services
(520) 866-6442 or www.pinalcountyaz.gov
Public Hearing Information
NOTICE


NOTICE

azcentral.

Public Notices

Originally published at azcentral.com on 08/19/2025

Public Notice
NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT 6:00 P.M. ON THE 4TH DAY OF SEPTEMBER 2025, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 311 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR MAJOR COMPREHENSIVE PLAN AMENDMENT TO THE PINAL COUNTY COMPREHENSIVE PLAN.

PZ-PA-010-25*PUBLIC HEARING/ACTION: Silver King Solar, LLC, Dave Lundgren, applicant/agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 8,965± acres of land from Moderate Low Density Residential (MLDR, 1-3.5 du/ac) to Green Energy Production for photovoltaic solar generation facility, a Battery Energy Storage System (BESS), substation and a generation-tie (gen-tie) transmission line, situated on a portions of sections 13, 14, 22, 23, 24, 25, 26, 27, 34, 35, 36 of range 09E, T02D, and sections 18, 19, 30, 31 of range 10E, T02S, and sections 1, 2, 11, 12 of range 09E, T03S, and section 6 of range 10E, T03S of the Gila and Salt River Base and Meridian tax parcels on file for reference, located to the south-west of Florence Junction, south of Queen Creek wash, north-east of Town of Florence, and five (5) miles to the north of E Arizona Farms Rd in unincorporated area of Pinal County.

ALL PERSONS INTERESTED IN THIS MATTER MAY APPEAR AND SPEAK AT THE PUBLIC HEARING AT THE DATE, TIME, AND PLACE DESIGNATED ABOVE.

DOCUMENTS PERTAINING TO THIS CASE CAN BE FOUND ON THE NOTICE OF HEARING PAGE FOR THE P&Z COMMISSION AT:
https://www.pinal.gov/236/Notice-of-Hearings

DATED THIS 5th DAY OF AUGUST 2025, by Pinal County Development Services

TO QUALIFY FOR FURTHER NOTIFICATION IN THIS LAND USE MATTER YOU MUST FILE WITH THE PLANNING DEPARTMENT A WRITTEN STATEMENT OF SUPPORT OR OPPOSITION TO THE SUBJECT APPLICATION. YOUR STATEMENT MUST CONTAIN THE FOLLOWING INFORMATION:

1) Planning Case Number (see above)

2) Your name, address, telephone number and property tax parcel number (Print or type)
3) A brief statement of reasons for supporting or opposing the request
4) Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:
PINAL COUNTY

COMMUNITY DEVELOPMENT DEPARTMENT

85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132

Contact for this matter: Valentyn Panchenko, Planner
E-mail address: valentyn.panchenko@pinal.gov
Phone # (520) 866-6414
August 19 2025
LAZS0353565

LINK: https://www.azcentral.com/public-notices/notice/08/19/2025/public-notice-notice-of-public-hearing-2025-08-19-arizona-central-arizona-198c1dbe037

Notice of Hearing

Published in Casa Grande Dispatch on August 21, 2025

Location

Pinal County, Arizona

Notice Text

NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT 6:00 P.M. ON THE **4TH** DAY OF **SEPTEMBER 2025**, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 311 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR **MAJOR COMPREHENSIVE PLAN AMENDMENT** TO THE PINAL COUNTY COMPREHENSIVE PLAN.

PZ-PA-010-25 PUBLIC HEARING/ACTION: Silver King Solar, LLC, Dave Lundgren, applicant/agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 8,965 acres of land from Moderate Low Density Residential (MLDR, 1-3.5 du/ac) to Green Energy Production for photovoltaic solar generation facility, a Battery Energy Storage System (BESS), substation and a generation-tie (gen-tie) transmission line, situated on a portions of sections 13, 14, 22, 23, 24, 25, 26, 27, 34, 35, 36 of range 09E, T02D, and sections 18, 19, 30, 31 of range 10E, T02S, and sections 1, 2, 11, 12 of range 09E, T03S, and section 6 of range 10E, T03S of the Gila and Salt River Base and Meridian tax parcels on file for reference, located to the south-west of Florence Junction, south of Queen Creek wash, north-east of Town of Florence, and five (5) miles to the north of E Arizona Farms Rd in unincorporated area of Pinal County.

ALL PERSONS INTERESTED IN THIS MATTER MAY APPEAR AND SPEAK AT THE PUBLIC HEARING AT THE DATE, TIME, AND PLACE DESIGNATED ABOVE.

DOCUMENTS PERTAINING TO THIS CASE CAN BE FOUND ON THE NOTICE OF HEARING PAGE FOR THE P&Z COMMISSION AT:
https://www.pinal.gov/236/Notice-of-Hearings

DATED THIS **5th** DAY OF **AUGUST 2025**, by Pinal County Development Services

TO QUALIFY FOR FURTHER NOTIFICATION IN THIS LAND USE MATTER YOU MUST FILE WITH THE PLANNING DEPARTMENT A WRITTEN STATEMENT OF SUPPORT OR OPPOSITION TO THE SUBJECT APPLICATION.

YOUR STATEMENT **MUST** CONTAIN THE FOLLOWING INFORMATION:

1) Planning Case Number (see above)
2) Your name, address, telephone number and property tax parcel number **(Print or type)**
3) A brief statement of reasons for supporting or opposing the request
4) Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:
PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT
85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132

FLORENCE, AZ 85132
Contact for this matter: Valentyn Panchenko, Planner
E-mail address: valentyn.panchenko@pinal.gov
Phone # (520) 866-6414
Published 8/21/25

Location

Pinal County, Arizona

LINK: https://casagrandedispatch.column.us/search?activeNotice=59WjJnD8qqMDhp3BeVZO-0

Notice of Hearing

Published in Pinal Central Dispatch on August 21, 2025

Location

Pinal County, Arizona

Notice Text

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https://www.pinal.gov/236/Notice-of-Hearings

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85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132

FLORENCE, AZ 85132
Contact for this matter: Valentyn Panchenko, Planner
E-mail address: valentyn.panchenko@pinal.gov
Phone # (520) 866-6414
No. of publications: 1: date of publication: Aug 21, 2025

Location

Pinal County, Arizona

LINK: https://pinalcentraldispatch.column.us/search?activeNotice=Li1YNwlmoU8LQl41SRCE-0

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Mary Ellen Sheppard
Deputy County Manager

Himanshu Patel
Deputy County Manager

Open Space, Trails & Regional Parks Department
Development Review Comment Letter

Project Name: Silver King Solar
Case Number: PZ-PA-010-25
Reviewed By: Kelley Fox
Review Type: Major Comprehensive Plan Amendment
07/07/2025

Comment #	RESPOND TO ALL COMMENTS
1	There is substantial riparian habitat that transects the project area. The AZGFD ERT mapping tool can be used to view the recorded riparian habitat within the project area. Information and guidelines concerning riparian habitat within Pinal County can be found below: https://s3-us-west-2.amazonaws.com/azgfd-portal-wordpress-pantheon/wp-content/uploads/archive/PinalCounty_RiparianGuides_FINAL.pdf
2	Riparian habitat is considered to be of critical environmental importance, and is to be protected during development. Its protection is supported by Pinal County's Comprehensive Plan policies 3.1.4.1, 3.9.1.4, and 7.1.2.4, along with Development services code 2.176.100C, 2.176.100D, and 2.176.100E.
3	A buffer of 50 ft. around all documented riparian habitat within the development site should be incorporated into the site plan. Setbacks or buffers may be increased or decreased if not prohibited by another county ordinance or regulation, and if approved by the supervisors.
4	Two planned regional multi-use trails, supported by Pinal County's Comprehensive Plan, are located adjacent to/transecting the project area. According to Development Services code 2.176.170 B it is the applicant's responsibility to develop the trail according to Pinal County's standards.
5	Trail corridor requirements would include: • Signage would need to be approved by the Open Space and Trails Department. • Decomposed granite pedestrian paths would consist of natural subsoil compacted to 95%. • The corridor would need to be dedicated to the County in a form acceptable to the County. ○ If the project is in a lease agreement with a land manager that is not the applicant, a trail agreement tied to the length of the

	project's use between the applicant and the County could be acceptable pending legal review
6	Tread width and setbacks will be determined by the distance listed in our department-published Open Space and Recreation Area Design Guidelines Manual
7	Minimization of impacts to the multi-use trail corridors will be achieved through coordination between the Project and the Open Space and Trails department during trail development and the adherence to trail corridor requirements.
8	Due to the location of the proposed trail along the Magma Railway and the housing developments southwest of the project are, it is requested that the applicant develop trail on both sides of the railway to ensure user safety and connectivity
9	Noxious weeds have become increasingly problematic in areas of development and on large projects where vegetation management plans are not created or maintained. Due to the increasing threat noxious weeds have on the Sonoran desert and Pinal County landscape it is recommended that the applicant incorporate invasive species/noxious weed management plans for development. Information regarding noxious weeds can be found on the Arizona Department of Agriculture's website.
10	It is highly recommended that applicants limit the disturbance of soils and biological soil crusts in areas that are already level and suitable for array installation, thus limiting areas where noxious weeds can proliferate while simultaneously preserving important ecological aspects of the county's natural desert.
11	Guidelines for Solar development within Arizona provided by Arizona Game and Fish Department can be found at https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FinalSolarGuidelines03122010.pdf
12	Review AZGFD fencing guidelines which are in consonance with Pinal County expectations below: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/110125_AGFD_fencing_guidelines.pdf
13	Review and incorporate department guidelines regarding development within/around designated and proposed open space. https://www.pinal.gov/DocumentCenter/View/662/Open-Space-and-Recreation-Area-Design-Guidelines-Manual-PDF

14	Any clarifications regarding these comments or recommended guidelines can be directed towards Kelley Fox via email Kelley.fox@pinal.gov or via phone at 520-866-6661

Pinal County Planning and Zoning Commission
301 E. 11th St.
Florence, Arizona 85132

August 20, 2025

Re: 2025 Major Amendments to the Pinal County Comprehensive Plan

Dear Commissioners,

As president and CEO of the Arizona Technology Council, the state's premier trade association representing more than 750 science and technology companies, I am writing to express our strong support for projects that make up the proposed 2025 major amendments to the Pinal County Comprehensive Plan. Specifically, I'm referring to PZ-PA-010-25 (Silver King Solar and BESS), PZ-PA-011-25 (La Osa Energy Generating Facilities), PZ-PA-012-25 (Silver Reef Solar), PZ-PA-014-25 (Griffin Energy) and PZ-PA-015-25 (Energy Generation and Technology Campus).

Pinal County has experienced tremendous population growth in the past decade, reaching more than 522,000 residents—an estimated increase of 3.81% since 2024. The county has become an employment magnet for industries such as semiconductor manufacturing, electric vehicle battery plant construction, copper mining and health care, with advanced manufacturers such as LG Energy Solution, Lucid Motors and Procter & Gamble establishing operations throughout the county.

Each of the five proposed renewable energy projects named above present transformative economic development opportunities for Pinal County. They would create good-paying jobs and generate millions of dollars in tax revenues to fund schools, roads and emergency services. For instance, the Silver King Solar and BESS Project would create more than 300 construction jobs and generate more than $20 million in sales tax revenue during construction, with approximately $5.3 million going to the county.

Furthermore, the major amendments would ensure Pinal County remains a leader in renewable energy development and environmental stewardship. These projects collectively support the county's goal to meet current and future energy needs and decrease the county's dependence on non-renewable energy sources, improving air quality and residents' quality of life. They are also key to a broader energy transition initiated countywide, including increasing battery storage facilities, implementing critical grid upgrades and ensuring smarter energy use. Each project is also responsibly sited, minimizing impact on key visual resources.

On behalf of the Council and our members, I respectfully encourage you to support these critical projects.

Sincerely,

Steve

ARIZONA TECHNOLOGY COUNCIL & SCITECH INSTITUTE



Steven G. Zylstra
President & CEO

PINAL COUNTY
WIDE OPEN OPPORTUNITY

BOARDS AND COMMISSIONS
AGENDA ITEM

09/04/2025
Citizen Advisory Committee

Funds #:
Dept. #:
Dept. Name: Development Services
Requested By:

AGENDA ITEM AND REQUESTED BOARD ACTION:

PZ-PA-011-25 -- PUBLIC HEARING/ACTION: Vermaland LLC, Rob Clang, applicant/agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate **3,374± acres** of land from **Very Low Density Residential** (VLDR, 0-1 du/ac), **Moderate Low Density Residential** (MLDR, 1-3.5 du/ac), **and Proposed Open Space to 1,910± acres Employment, 480± acres General Public Facilities/Services, and 983± acres of Proposed Open Space** for industrial, office, business park and natural gas fired power plant, situated on portions of sections 3,4,7,10,11,12,13,17,18, 20, 21,and 29, T09S and T10S, R08E and R09E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 409-11-0040; -0050; -006C; -002E; -002F; -002G; -002H; -003D; -013C; -015C; -015E; -0160; -018A; -0190; 409-14-002D; -002F; -004A; -005A; -005E; 409-24-001C; 409-25-001E; -001D; -001C; -002F; -002G; -003G; -003E; 409-26-0010; -002A; -002B; -0240; -0220; -0250; -0260; -0270; -0490; -0480; 409-30-0020; 409-31-0010; and -0330 located along Greene Canal of Santa Cruz wash, south of Baumgartner road, and east of eleven mile corner road, south of the City of Eloy in unincorporated area of Pinal County.

MOTION:

Attachments

Packet

PZ-PA-011-25

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Leo Lew
County Manager

MEETING DATE: SEPTEMBER 4, 2025

TO: CITIZENS ADVISORY COMMITTEE

CASE NO(S): **PZ-PA-011-25 LA OSA PROJECT**

CASE COORDINATOR(s): SANGEETA DEOKAR, PLANNING SUPERVISOR

***Executive Summary**: La Osa Project, a request by Vermaland LLC, applicant is to re-designate 3,374± acres from Very Low Density Residential (VLDR, 0-1 du/ac), Moderate Low Density Residential (MLDR, 1-3.5 du/ac) and Proposed Open Space to Employment, General Public Facilities/Services, and Proposed Open Space for industrial, office, business park, and energy generating facilities, located along the Greene Wash of Santa Cruz Wash, in the extended planning boundary south of the City of Eloy, in the unincorporated area of Pinal County.*

If this request is approved:
If this major amendment to the Pinal County Comprehensive Plan is approved, the action will allow the applicant to begin the process of rezoning the property to develop for an industrial complex including office, a business park, and supporting energy generating facilities.

LEGAL DESCRIPTION: 3,374± acres, situated on a portions of sections 3, 4, 7,10,11,12,13,17,18, 20, 21, and 29, T09S and T10S, R08E and R09E of the Gila and Salt River Base and Meridian (legal on file)

TAX PARCELS: 409-11-0040; -0050; -006C; -002E; -002F; -002G; -002H; -003D; -013C; -015C; -015E; -0160; -018A; -0190; 409-14-002D; -002F; -004A; -005A; -005E; 409-24-001C; 409-25-001E; -001D; -001C; -002F; -002G; -003G; -003E; 409-26-0010; -002A; -002B; -0240; -0220; -0250; -0260; -0270; -0490; -0480; 409-30-0020; 409-31-0010; and -0330

APPLICANT/AGENT: Vermaland LLC, LLC, Robert Clang

REQUESTED ACTION & PURPOSE **PZ-PA-011-25 – PUBLIC HEARING/ACTION:** Vermaland LLC, Rob Clang, applicant/agent, is requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and to re-designate 3,374± acres of land from Very Low Density Residential (VLDR, 0-1 du/ac), Moderate Low Density Residential (MLDR, 1-3.5 du/ac), and Proposed Open Space to 1,910± acres Employment, to 480± acres General Public Facilities/Services, and 983± acres of Proposed Open Space for industrial, office, business park and natural gas fired power plant, situated on a portions of sections 3,4,7,10,11,12,13,17,18, 20, 21,and 29, T09S and T10S, R08E and R09E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 409-11-0040; -0050; -006C; -002E; -002F; -002G; -002H; -003D; -013C; -015C; -015E; -0160; -018A; -0190; 409-14-002D; -002F; -004A; -005A; -005E; 409-24-001C; 409-25-001E; -001D; -001C; -002F; -002G; -003G; -003E; 409-26-0010; -002A; -002B; -0240; -0220; -0250; -

0260; -0270; -0490; -0480; 409-30-0020; 409-31-0010; and -0330 located along Greene Wash of Santa Cruz wash, south of Baumgartner road, and east of eleven mile corner road, and south of the City of Eloy in unincorporated area of Pinal County.

LOCATION: Located along Greene Wash of Santa Cruz wash, south of Baumgartner road, and east of eleven mile corner road, south of the City of Eloy in unincorporated area of Pinal County.

SIZE: 3,374± acres.

STAFF FINDINGS-

PUBLIC COMMENT:
To date one public comment has been received from surrounding property owners.

PUBLIC PARTICIPATION:

60 day review period:	6/9/2025 to 8/8/2025
Newspaper Publication:	08/14/2025 & 08/15/25
Site Posting:	Week 11th Aug
Property mail out:	Week 18th Aug
Web posting:	Week 18th Aug

OTHER REVIEW AGENCY COMMENTS:
As of the writing of this report AZ Game and Fish agency comments has been received. These have been included in the discussion and recommendations. Additionally, staff also received comments from Arizona Technology Council and SciTech Institute.

PLAN AMENDMENT DISCUSSION:

Request
The applicant is requesting a major amendment of the Pinal County Comprehensive Plan to amend the Land Use Plan for 3,374± acres from **Very Low Density Residential (VLDR, 0-1du/ac), Moderate Low Density Residential (MLDR, 1-3.5 du/ac)** and **Proposed Open Space** to **1,910± acres Employment**, to **480± acres of General Public Facilities/Services** and **983± acres of Proposed Open Space.** The property is currently zoned General Rural (GR) and is ribboned south along the Greene Wash south of the city of Eloy, in unincorporated area of Pinal County.

Land use change.
Energy demand in Pinal County is increasing due to rapid population and industrial growth, and Pinal County is experiencing significant industrial development, including manufacturing hubs for electric vehicles and batteries, impacting energy consumption. Energy demand is projected to increase significantly, with estimates reaching 31,000-44,000 aMW (Average Megawatt) by 2026[1]

To provide sustainable energy and meet the growing demands of Pinal County, Vermaland, LLC is seeking a land use change to facilitate the development of a project known as "La Osa Project," comprising of Data Centers and thermal gas-fired generation facilities and Battery Energy Storage Systems (BESS). The location along Greene Wash is a flood prone area. This restricts the applicant to develop portions that are outside of the floodplain with sufficient buffers as determined by Pinal County. These areas will be

the 'Proposed open space 'conserved with its natural habitat. Currently the project area is designated for very low residential and moderate low residential development.

La Osa Project which comprises the following:

1. Data Centers

Data Centers are specialized facilities that house computer systems and associated components such as servers, networking equipment, storage systems, power supplies, cooling systems, and security infrastructure. Data Centers are the backbone of the internet, cloud computing, and large-scale enterprise IT operations. (Examples are Google Data Centers, Amazon Web Services, Microsoft Azure, Facebook/Meta, and Equinix)

2. Gas Fired Power Plant with BESS

Gas fired power plants generate electricity by burning natural gas as its fuel. Natural gas is one of the cleaner option for burning compared to coal. These utilize lesser footprint compared to the Utility scale power plants.

The project area is intersected with existing energy infrastructure: two 115 kV Power lines (WAPA) and cross the parcels in the center and a 230 kV power line (APS) crosses the parcels to the southern edge of the project. An extension of the Gas pipeline will be required to the project area.

Location and Accessibility

Access to the proposed project would be from Baumgartner Road, a Principal Arterial Road, located on the northern edge of the project boundary. The proposal for land use change involves forty parcels situated south of Baumgartner road, and east of eleven mile corner road, south of the City of Eloy.

Site Data

The property is currently undeveloped and is surrounded by undeveloped General Rural (GR) zoned land to the north, south, east and west. Southeast of the property, there are smaller parcels zoned GR along La Osa Ranch Road and along Sasco Road to the southeast edge of the property. The project boundary is along the south edge of the Greene Wash.

Flood Zone

The project area is located on land that generally slopes to the northwest. Per preliminary Hydrology study provided by the applicant, the land cover is primarily shrub land and has soils that exhibit low filtration rates. The project area including the Greene Wash lies in FEMA Zone A with flood hazards. A complete flood analysis will be required prior to the site plan approval after the rezoning process.

Greene Wash serves as the primary drainage feature for the region, extending several miles upstream to the north and west. It functions as the regional outfall for the project and surrounding areas. During regular and low-flow events, storm water remains within the channel. Onsite drainage management will require to include the construction of retention basins designed to store storm water generated on the site, in accordance with plans determined by the Pinal County Flood division during the site planning stage.

Environmental study

The property has remain undeveloped. The Arizona Game and Fish environmental assessment tool was employed to identify potential sensitive species on the property. The assessment identified wildlife habitat linkage corridor in the vicinity. The report provides recommendations to preserve and enhance

permeability. The project lies in the vicinity of an identified Conservation Opportunity Area along with identified riparian areas. The applicant plans to continue identifying and developing mitigation measures as necessary.

Additionally, a Class 1 cultural resource inventory search is recommended to locate if any recorded archaeological sites are identified within the project area. Mitigation measures aimed at minimizing impacts to cultural resources will be identified and implemented during the project's progression.

The project will also require to ensure that all regulations per Arizona Department of Environmental Quality, Aquifer Protection standards are met.

STAFF ANALYSIS AND FINDINGS:

La Osa Project is proposed in a distinctive location along existing natural infrastructure- the Greene Wash. Two transmission lines of Western Area Power Administration's (WAPA's) 115kV cross the central area of the project from east to west. Furthermore, the property to the south has another transmission line 230 kV crossing along south parcels of the project area. This project necessitates additional extensions of natural gas pipeline required into the project area for the Gas fired power plants proposed.

Data Centers require power availability and stable climate. Access to major network infrastructure like fiber optics, internet exchange points and availability of energy. To be able to sustain the high energy demand of the Data Center, the Gas Fired power plant ta is proposed in conjunction with the Data Centers that would assist with the uninterrupted power requirements.

The advantages of a natural gas-fired power plant in comparison with the traditional coal-fired power generation facilities include:

- Lower emissions of air pollutants compared to traditional coal-fired power plants, as natural gas is a relatively cleaner-burning fossil fuel.
- Higher energy efficiency and lower construction costs compared to other thermal power technologies.
- Enhanced flexibility and reliability, ensuring a secure power supply.

The project site is adjacent and south along Greene Wash, necessitating buffers to protect this natural feature, which may reduce the usable area for the project. Mitigation measures for regional drainage and outfall into the Greene Wash, as well as on-site drainage, will be implemented based on recommendations from the Pinal County Flood division.

Open Space and Trail division identified in the Pinal County Master plan, the canal corridor and irrigation systems as 'existing/planned' open space in the Greene Wash. Washes provide movement corridors and habitat for wildlife. There is substantial riparian habitat that transects the project area. Riparian habitat is considered to be of critical importance and needs to be protected during development. A minimum of 50ft buffer around the riparian habitat (including Xeri-riparian) and wildlife friendly fencing is recommended to be incorporated into the project development plan.

Currently the land has not been developed as there are multiple challenges for residential development due to the Green Wash. Portions of south and west edge of the project are impacted during storm events that render the southern portion difficult to develop for houses. The project parcels do not fall along

major arterials for residential or commercial development. With transmission lines centrally passing along the east-west direct these work in favor for the proposed gas fired power generation project that requires the existing electrical infrastructure on site to directly tap into it.

After a detailed review of the request, Pinal County Comprehensive Plan and Pinal County Development Services Code, staff shares the following findings for the proposed project:

1. Proposal for a Data Center paired with a Gas-Fired Power Plant will help meet the rising energy demands of Pinal County's growing population by providing power in a sustainable, low-carbon way.
2. Site is currently undeveloped with no residential development surrounding.
3. Existing Employment land use to the east of the project area along Sasco Road.
4. Location of existing electrical transmission lines: 2 -WAPA- 115 kV lines, one 230 kV line to the south
5. Alternate development for residential would not be financially marketable and therefore unsustainable.

However, should the Citizen Advisory Committee find, after the presentation by the applicant and together with the testimony and evidence presented at the public hearing, that this Major Comprehensive Plan amendment is needed and necessary at this location and time, will not negatively impact adjacent properties, will promote orderly growth and development of the County and will be compatible and consistent with the applicable goals and policies of the Pinal County Comprehensive Plan, then staff will recommend that the Citizen Advisory Committee forward **PZ-PA-011-25**, to the Planning and Zoning Commission with a favorable recommendation. If the Citizen Advisory Committee cannot find all of the factors listed above grounds for approval, then staff recommends that the Citizen Advisory Committee forward this case to the Planning and Zoning Commission with recommendation of denial.

Date Prepared: 08/18/25 SD

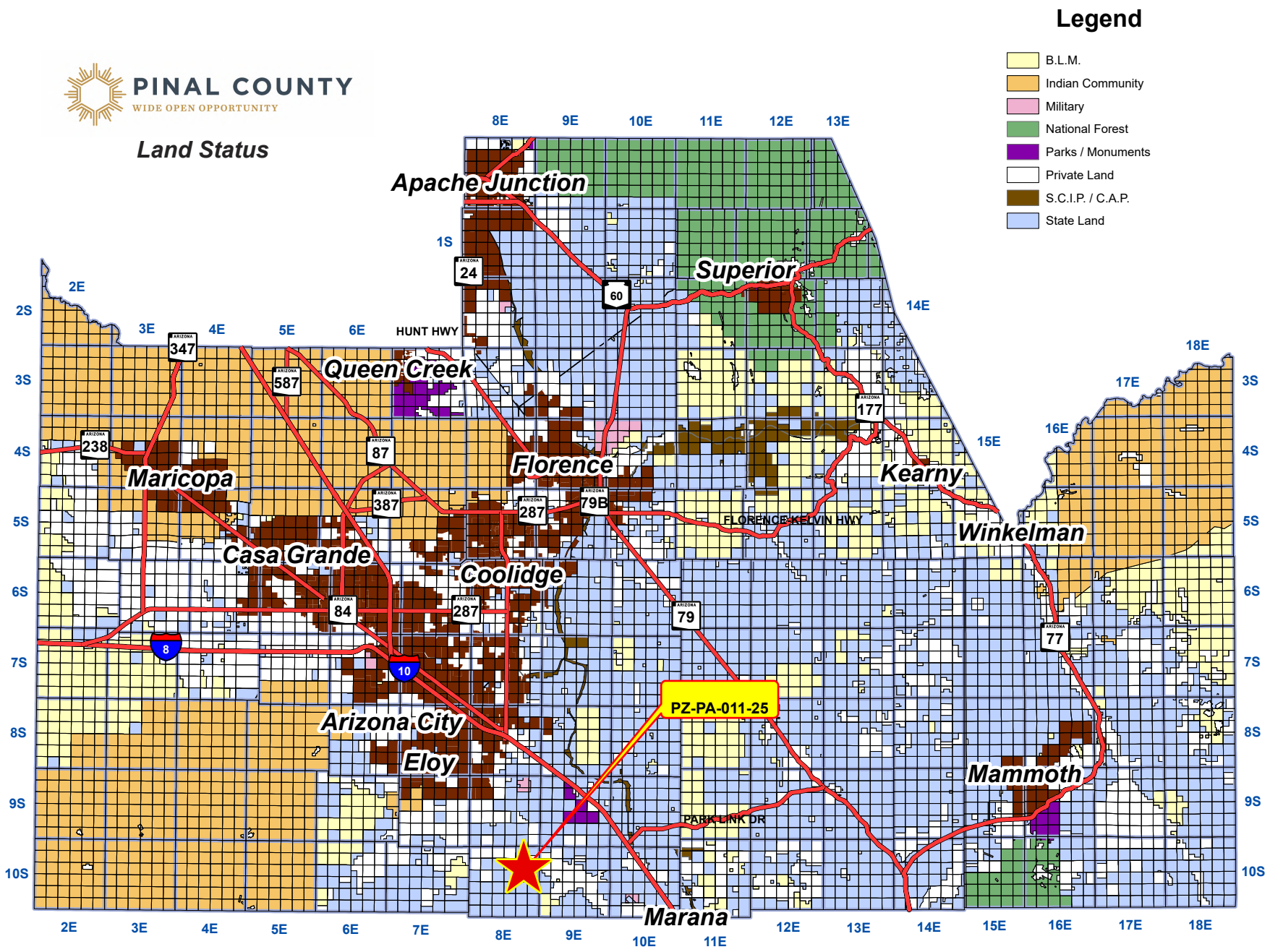
References:

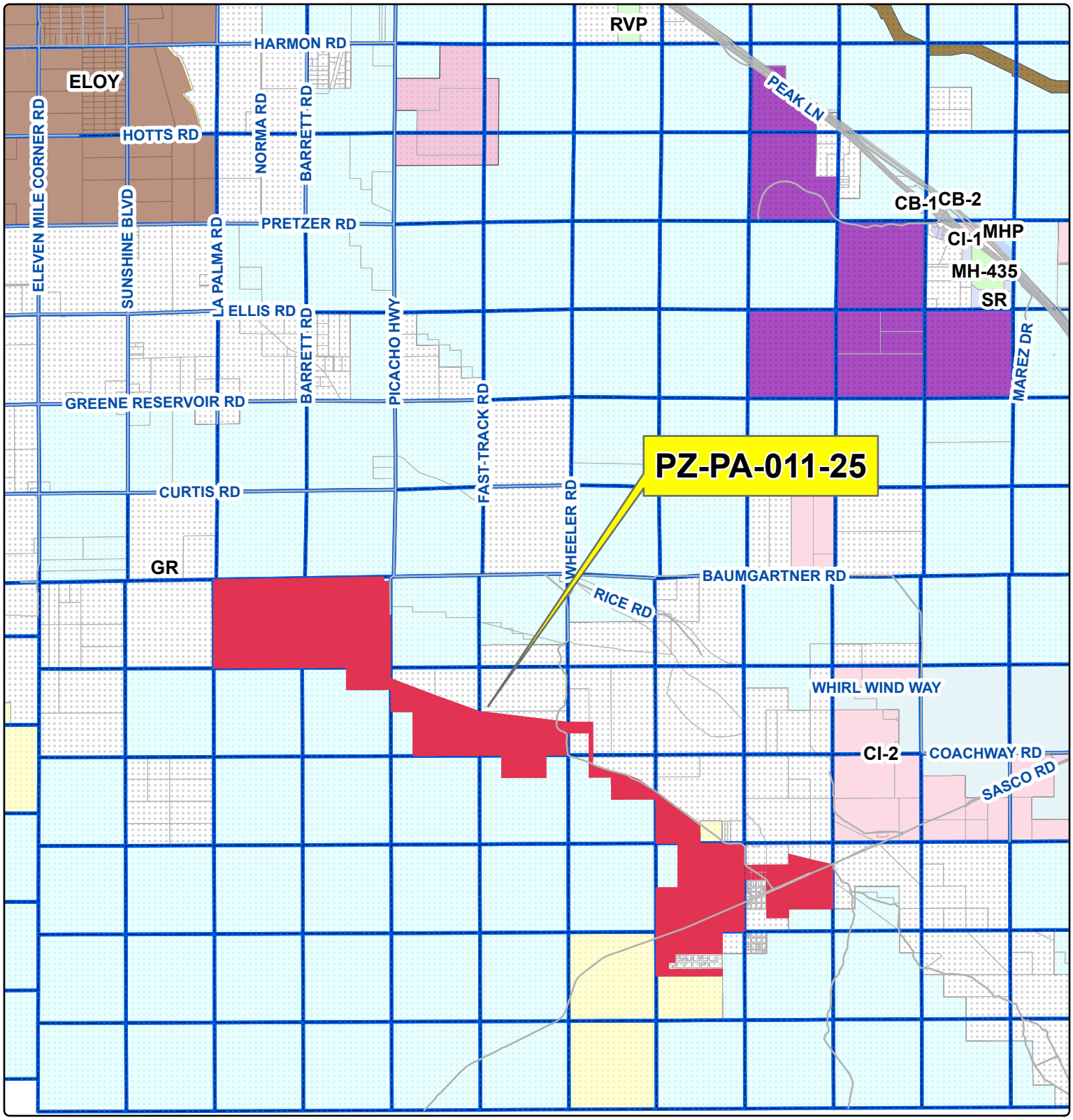
1. American Public Power Association

https://www.publicpower.org/periodical/article/council-releases-initial-20-year-forecast-pacific-northwest-electricity-demand#:~:text=The%20forecast%20projects%20annual%20energy%20demand%20growth,winter%20peak%20of%2035%2C100%20MW%20in%202023.

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Land Status





Community Development

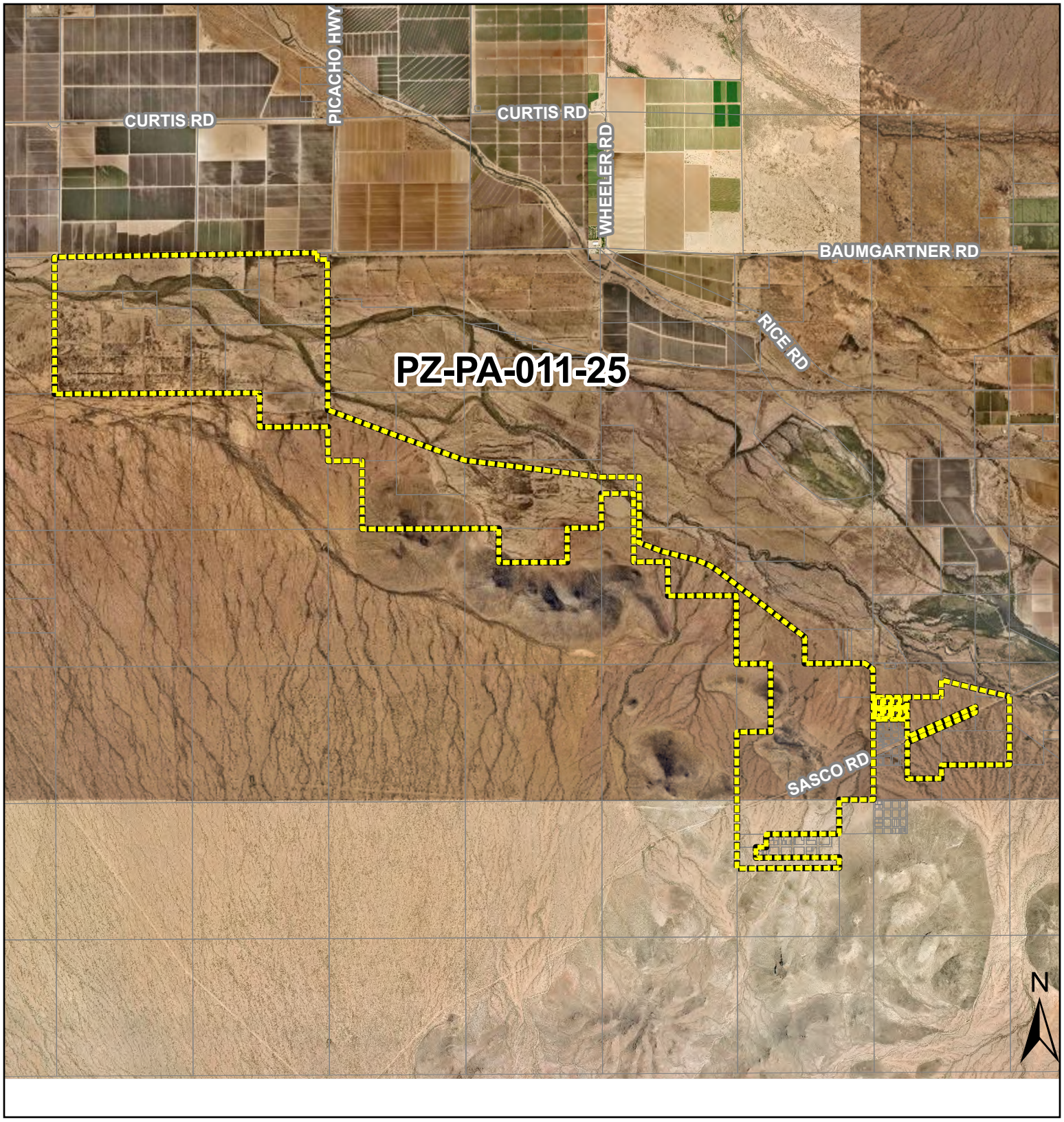
PINAL COUNTY
WIDE OPEN OPPORTUNITY

Legal Description:

Situated on a portions of sections 3,4,7,10,11,12,13,17,18, 20, 21,and 29, T09S and T10S, R08E and R09E of the Gila and Salt River Base and Meridian (legal on file) located along Greene Canal of Santa Cruz wash, south of Baumgartner road, and east of eleven mile corner road, south of the City of Eloy in unincorporated area of Pinal County.

SEC 3,4,7,10,11,12,13,17,18, 20, 21,and 29,
T09S and T10S, R08E and R09E

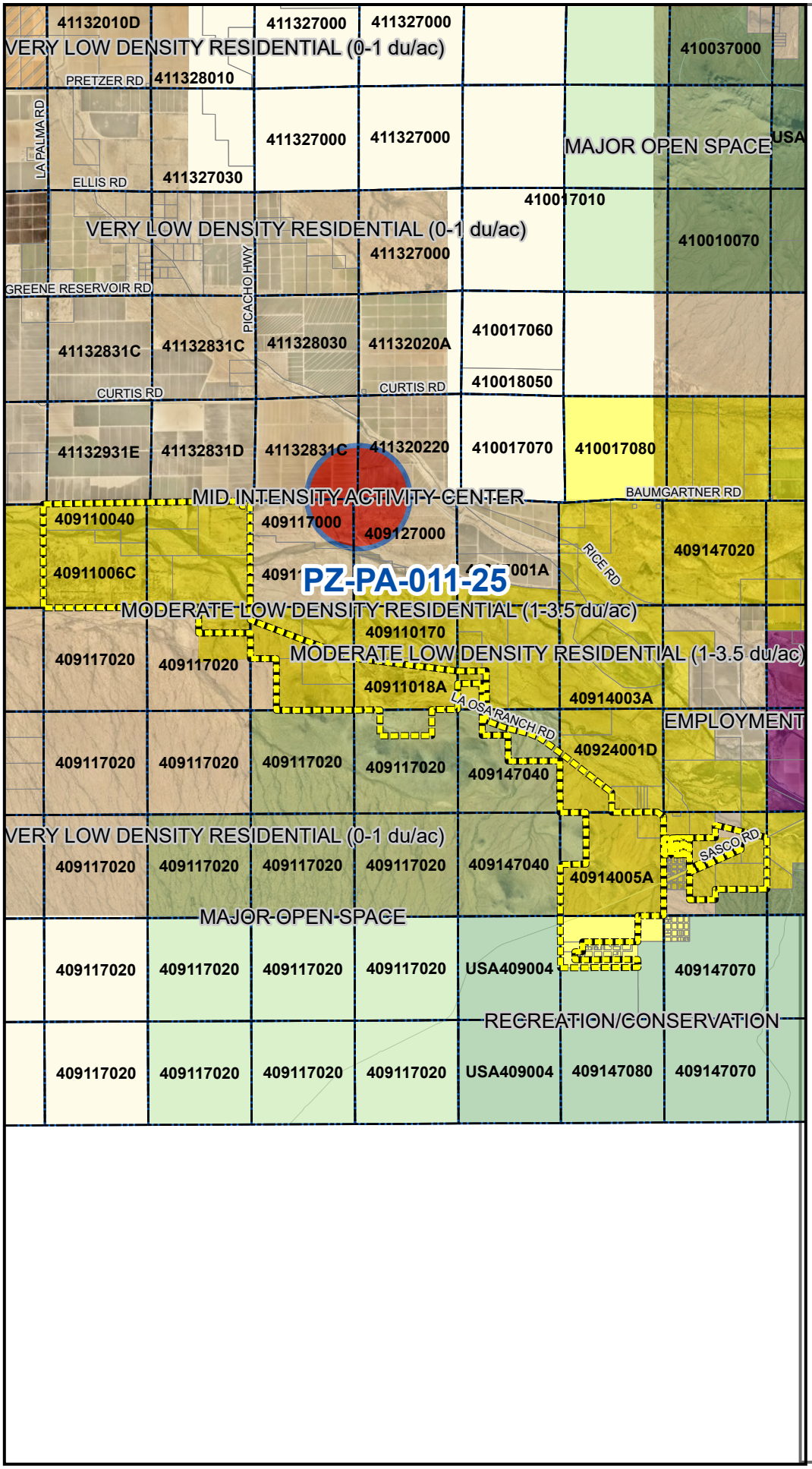
Sheet No. 1 of 1	Owner/Applicant: VERMALAND LLC, ROB CLANG		
	Drawn By: GIS / IT / LJT		Date: 07/09/2025
	Section 3,4,7,10-18, 20, 21, 29	Township T09S and T10S	Range R08E and R09E
	Case Number: PZ-PA-011-25		



Community Development

PINAL COUNTY
WIDE OPEN OPPORTUNITY

PZ-PA-011-25



PINAL COUNTY
WIDE OPEN OPPORTUNITY

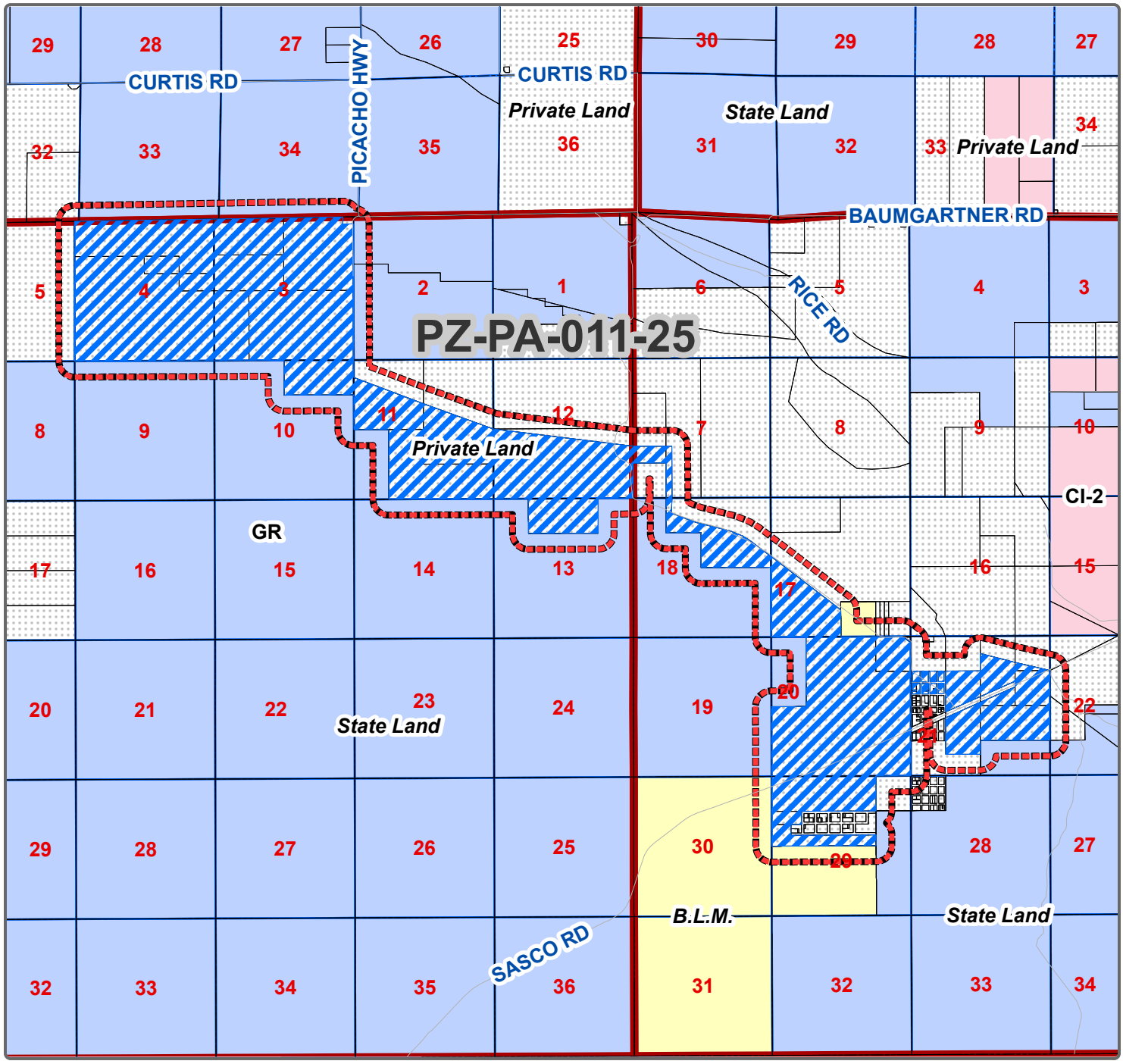
PZ-PA-011-25

FROM:

Very Low Density Residential, Moderate Low Density Residential, Proposed Open Space

TO:

Employment, General Public Facilities/Services, Proposed Open Space



Community Development

PZ-PA-011-25 – PUBLIC HEARING/ACTION: Vermaland LLC, Rob Clang, applicant/agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 3,374± acres of land from Very Low Density Residential (VLDR, 0-1 du/ac) Moderate Low Density Residential (MLDR, 1-3.5 du/ac), and Proposed Open Space to Employment, General Public Facilities/Services, and Proposed Open Space for industrial, office, business park and natural gas fired power plant, situated on a portions of sections 3,4,7,10,11,12,13,17,18, 20, 21,and 29, T09S and T10S, R08E and R09E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 409-11-0040; -0050; -006C; -002E; -002F; -002G; -002H; -003D; -013C; -015C; -015E; -0160; -018A; -0190; 409-14-002D; -002F; -004A; -005A; -005E; 409-24-001C; 409-25-001E; -001D; -001C; -002F; -002G; -003G; -003E; 409-26-0010; -002A; -002B; -0240; -0220; -0250; -0260; -0270; -0490; -0480; 409-30-0020; 409-31-0010; and -0330 located along Greene Canal of Santa Cruz wash, south of Baumgartner road, and east of eleven mile corner road, south of the City of Eloy in unincorporated area of Pinal County

Current Zoning: GR | Requested Zoning: Rezone | Current Land Use: MLDR. VLDR, Proposed Open Space

PINAL COUNTY
WIDE OPEN OPPORTUNITY

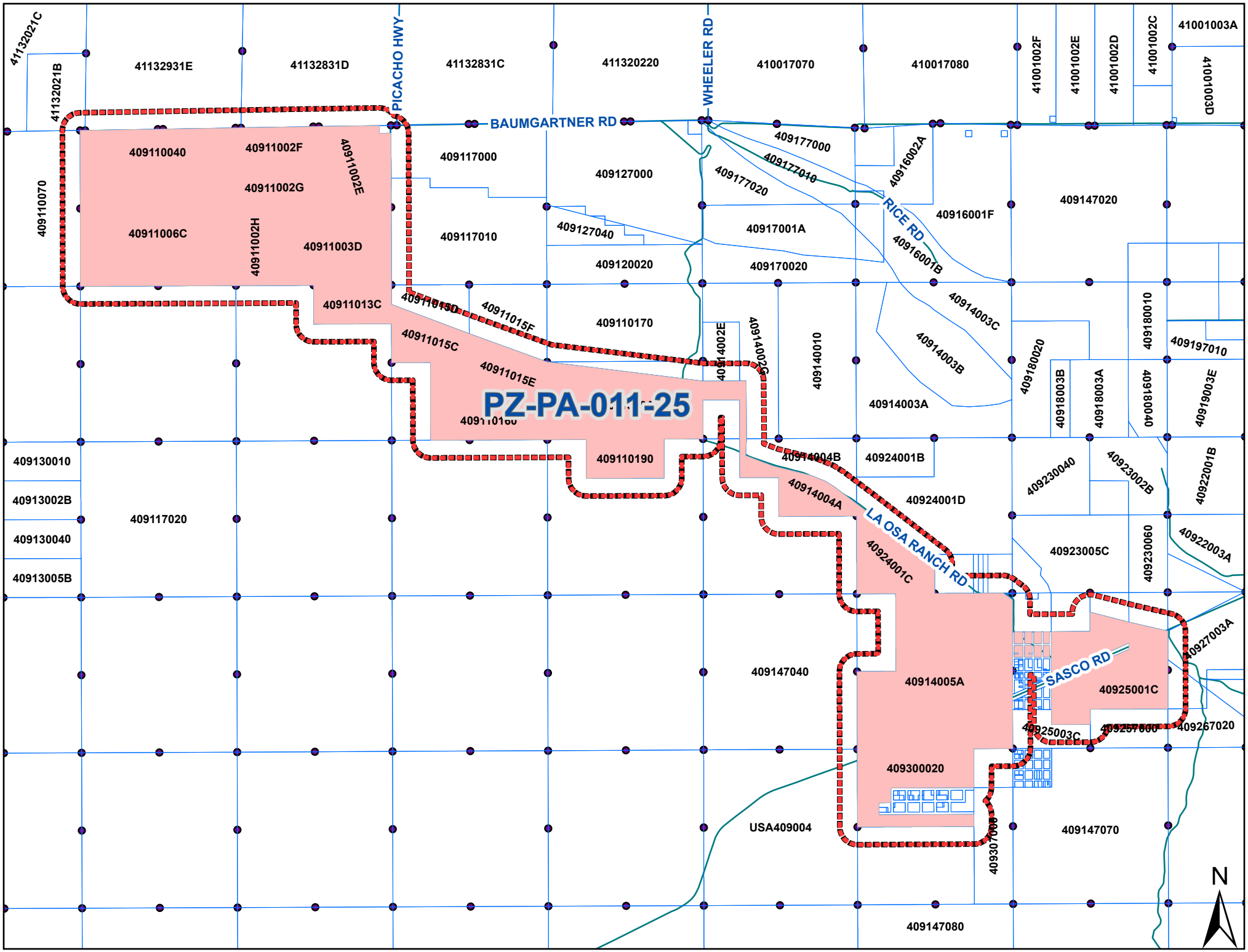
Legal Description:

Situated on a portions of sections 3,4,7,10,11,12,13,17,18, 20, 21,and 29, T09S and T10S, R08E and R09E of the Gila and Salt River Base and Meridian (legal on file) located along Greene Canal of Santa Cruz wash, south of Baumgartner road, and east of eleven mile corner road, south of the City of Eloy in unincorporated area of Pinal County.

SEC 3,4,7,10,11,12,13,17,18, 20, 21,and 29, T09S and T10S, R08E and R09E

Sheet No. 1 of 1

Owner/Applicant: VERMALAND LLC, ROB CLANG			
Drawn By: GIS / IT /LJT			Date: 07/09/2025
Section 3,4,7,10-18, 20, 21, 29	Township T09S and T10S	Range R08E and R09E	
Case Number: PZ-PA-011-25			


PZ-PA-011-25
BAUMGARTNER RD
PICACHO HWY
WHEELER RD
RICE RD
LA OSA RANCH RD
SASCO RD
N
41132021C
41132021B
41132931E
41132831D
41132831C
411320220
410017070
410017080
41001002F
41001002E
41001002D
41001002C
41001003A
410010030
409110040
40911002F
40911002E
40911002G
40911002H
40911006C
40911003D
409110070
409117000
409127000
409177000
409177010
409177020
40916002A
40916001B
40916001F
409147020
409117010
409127040
40917001A
409120020
409170020
40911013C
40911013D
40911015F
40911015C
40911015E
409110170
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40914002C
409140010
40914003C
40914003B
40914003A
409180020
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409197010
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40918003A
409180040
40919003E
409110190
40914004B
40924001B
40914004A
40924001D
409230040
40923002B
40922001B
40922003A
409230060
40923005C
40924001C
409130010
40913002B
409130040
40913005B
409117020
409147040
40914005A
40925001C
409257000
409267020
40925003C
409300020
USA409004
409307000
409147070
409147080
40927003A

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

PROCEDURE AND APPLICATION FOR A PROPOSED NON-MAJOR COMPREHENSIVE PLAN AMENDMENT

A. Attend a Concept Review (Zoning pre-application (Z-PA)) meeting with the Planning Department and affected County agencies.

B. File an application and all required supporting documentation for a Comprehensive Plan Amendment. Please use the attached application forms.

C. Public hearing before the Planning Commission with Commission recommendation to the Board of Supervisors. Time frame is approximately 10 to 15 weeks from application acceptance by the Planning Department.

D. Public hearing, (approximately 4 to 8 weeks after Planning Commission hearing), before the Board of Supervisors.

PROCEDURE FOR A PROPOSED MAJOR COMPREHENSIVE PLAN AMENDMENT

A. Attend a Concept Review (Zoning Pre-Application (Z-PA)) meeting with the Planning Department and affected County agencies.

B. File an application and all required supporting documentation for a Comprehensive Plan Amendment. Please use the attached application forms.

C. Public meeting with the Citizens Advisory Committee.

D. Public hearing before the Planning Commission with Commission recommendation to the Board of Supervisors.

E. Public hearing before the Board of Supervisors.

*Public hearing schedule will be made available in June.

FEE SCHEDULE FOR MAJOR AND NON-MAJOR AMENDMENTS

A. Major Comprehensive Plan Amendment: $5,091.00

B. Non-major Comprehensive Plan Amendment:

a. 0-499 mailouts: $4,478.00
b. 500 or more mailouts: $4,824.00
c. With accompanying zone change: $3,354.00

COMMUNITY DEVELOPMENT
Planning Division

85 N. Florence St., PO Box 2973, Florence, AZ 85132 T 520-866-6442 FREE 888-431-1311 F 520-866-6530
www.pinalcountyaz.gov

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT IN AN UNINCORPORATED AREA OF PINAL COUNTY, ARIZONA
(All Applications Must Be Typed or Written in Ink)

Comprehensive Plan Amendment unincorporated & Property Information:
(Feel free to include answers and to these questions in a Supplementary Narrative, when doing so write see narrative on the space provided)

1. The legal description of the property: Please see legal description included with this application.

2. Parcel Number(s): _____ Total Acreage: _____

3. Current Land Use Designation: _____

4. Requested Land Use Designation: _____

5. Date of Concept Review: _____ Concept Review Number: _____

6. Why is this Comprehensive Plan Amendment being requested? (You must provide a summary of the anticipated development on this page, if not provided, the application cannot be processed.): _____

7. Discuss any recent changes in the area that would support your application. _____

8. Explain why the proposed amendment is needed and necessary at this time. _____

INV#: _____ AMT: _____ DATE: _____ CASE: _____ Xref: _____

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

- ☐ A. **Certified Boundary Survey,** including legal descriptions of the proposed designations
- ☐ B. Location map which identifies the property and its relationship to Pinal Countyenvirons.
- ☐ C. Map showing the topography of the property.
- ☐ D. Site map which specifically identifies the property including parcels under separate ownership.
- ☐ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ☐ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ☐ G. Non-refundable filing fee as shown on the cover page.
- ☐ H. Narrative in PDF format.
- ☐ I. Neighborhood meeting report

Your application must be submitted digitally via the online submittal portal site at https://citizenaccess.pinalcountyaz.gov/CitizenAccess/Default.aspx

Please call or email the Planning Division for more information.

I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information, as requested. I understand if the information submitted is incomplete, this application cannot be processed.

Vermaland, LLC	2375 E Camelback Rd, Ste 600, Phoenix, AZ 85016	602-274-0700
Name of Landowner (Applicant)	Address	Phone Number

Ken Verma (Ken Verma) kverma@vermaland-com robclang@vermaland.com

Signature of Landowner (Applicant) E-Mail Address

Josh Hannon	1130 N Alma School Road, Ste 120, Mesa, AZ 85201	480-503-2250
Name of Agent	Address	Phone Number

josh.hannon@epsgroupinc.com

Signature of Agent E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

AGENCY AUTHORIZATION

(To be completed by landowners of subject property when landowners do not represent themselves. Instructions for completing required information are in bold and brackets below lines. If applicant is a company, corporation, partnership, joint venture, trustee, etc., please use the corporate signature block and have the notary fill in the notarization section for corporations not individuals and cannot be submitted digitally)

TO: Pinal County Planning & Development Services
P.O. Box 2973
Florence, AZ 85132

Verma La Osa Ranch I-10/Sasco 3700 LLC & Verma La Osa Ranch I-10/Sasco Rd Casa Grande 3677 Acres LLC
[Insert Name -- If a Corporation, Partnership or Association, Include State of Incorporation]

hereinafter referred to as "Owner," is/are the owner(s) of +/-3,374 acres located at along La Osa Ranch Road, roughly between Baumgartner Road and the Continental Avenue alignment, and further identified
[Insert Address of Property]

as assessor parcel number (please see attached list) and legally described as follows:
[Insert Parcel Number]

[Legal Description is attached hereto as Exhibit A]

Said property is hereinafter referred to as the "Property."

Owner hereby appoints EPS Group, Inc.
[Insert Agent's Name. If the Agent Is a Company, Insert Company Name Only]

hereinafter referred to as "Agent," to act on Owner's behalf in relation to the Property in obtaining approvals from Pinal County for any necessary amendment to Pinal County's Comprehensive Plan; zone changes; planned area development overlay districts; platting of the subject property; special use permit or industrial use permit; and to file applications and make the necessary submittals for such approvals.

Owner consents and agrees to be bound by all stipulations agreed to by this Agent in connection with any of above-referenced processes.

[Individual PROPERTY OWNER signature block and acknowledgment. DO NOT SIGN HERE IF SIGNING AS AN OFFICER OF A CORPORATION ON THE NEXT PAGE.]

_____	_____
[Signature]	***[Signature]***
_____	_____
[Address]	***[Address]***
Dated: _____	Dated: _____

STATE OF _____)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ____ day of _____, _____ by _____.
[Insert Name of Signor(s)]

My commission expires _____

_____	_____
Printed Name of Notary	Signature of Notary Public

Corporate PROPERTY OWNER signature block and acknowledgment the appropriate corporate officer or trustee signs this signature block NOT the block on the previous page.

Vermaland, LLC
[Insert Company or Trustee's Name]

By: Kuldip Manager
[Signature of Authorized Officer or Trustee]

Its: Manager
[Insert Title]

Dated: 5/29/2025

STATE OF Arizona)
) ss.
COUNTY OF Maricopa)

The foregoing instrument was acknowledged before me, this 29 day of May, 2025, by Kuldip Verma, Manager of Vermaland, LLC, an Arizona Limited Liability Company

[Insert Signor's Name] *[Insert Title]* *[Insert Name of Company or Trust]* *[Insert State of Incorporation, if applicable]*

and who being authorized to do so, executed the foregoing instrument on behalf of said entity for the purposes stated therein.

My commission expires: 7/29/2028

Notary Public

ALTERNATE: Use the following acknowledgment only when a second company is signing on behalf of the owner:

STATE OF _____)
) ss.
COUNTY OF _____)

JENNIFER SULTZABERGER
Notary Public - State of Arizona
MARICOPA COUNTY
Commission # 670907
Expires July 29, 2028

On this _____ day of _____, _____, before me, the undersigned, personally appeared

_____ Who acknowledged himself/herself to be
[Insert Signor's Name]

_____ of _____
[Title of Office Held] *[Second Company]*

As _____ for _____, and who being
[i.e, member, manager, etc.] *[Owner's Name]*

Authorized to do so, executed the foregoing instrument on behalf of said entities for the purposes stated therein.

My commission expires: _____

_____ _____
Printed Name of Notary Signature of Notary

La Osa Employment Center

Major Comprehensive Plan Amendment Narrative Case

No. _____

1st Submittal: May 29,2025

Developer:
Vermaland, LLC
Rob Clang
2375 E Camelback Rd, Ste 600
Phoenix, AZ 85016

Land Owners:
Verma La Osa Ranch I-10/Sasco 3700 LLC
Contact: Vermaland LLC
2375 E Camelback Rd, Ste 600
Phoenix, AZ 85016

Verma La Osa Ranch I-10/Sasco Rd Casa Grande 3677 Acres LLC
Contact: Vermaland LLC
2375 E Camelback Rd, Ste 600
Phoenix, AZ 85016

Civil Engineer and Planner:
EPS Group Inc.
Dan “Ox” Auxier
1130 N. Alma School Rd, Ste 120
Mesa, AZ 85201

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D. REQUEST 4
E. PROJECT OVERVIEW 5
F. COMPREHENSIVE PLAN AMENDMENT CRITERIA 7
G. SUMMARY 11

LIST OF EXHIBITS

EXISTING COMPREHENSIVE PLAN MAP ..... A
EXISTING ZONING MAP ..... B
PROPOSED COMPREHENSIVE PLAN MAP C
GAME AND FISH ERT ..... D

A. Introduction

On behalf of Vermaland LLC (the "Applicant"), this application is a request for a major comprehensive plan amendment for approximately +/- 3,374 acres located roughly along La Osa Ranch Road between the Baumgartner Road and Continental Avenue road alignments within Pinal County, Arizona. The site is identified as a Pinal County Assessor Parcel Numbers (APNs): 409-11-0040; -0050; -006C; -002E; -002F; -002G; -002H; -003D; -013C; -015C; -015E; -0160; -018A; -0190; 409-14-002D; -002F; -004A; -005A; -005E; 409-24-001C; 409-25-001E; -001D; -001C; -002F; -002G; -003G; -003E; 409-26-0010; -002A; -002B; -0240; -0220; -0250; -0260; -0270; -0490; -0480; 409-30-0020; 409-31-0010; and -0330 (the "Property"). See **Exhibit A, Existing Comprehensive Plan Map**.

The request will modify the existing comprehensive plan designation from Moderate Low Density Residential, Very Low Density Residential, and Major Open Space Use to Employment, General Public Facilities/Services and Major Open Space.

B. Location and Site Conditions

The Property is located entirely within unincorporated Pinal County and along Greene Canal – Santa Cruz Was. The parcels are also within the Extended Planning Boundary for the City of Eloy. The Property is approximately 3,374 acres and is currently undeveloped. In addition, a notable portion of the Property is within a major Zone A floodplain area, also known as Greene Wash watershed. The proposed land use designation is appropriate adjacent to this floodplain area, as other uses such as residential and commercial may not be viable.

The Property is bordered to the north by the Greene Wash. To the west, south, and east includes undeveloped and/or agricultural land that is zoned General Rural (GR).

C. Comprehensive Plan and Zoning

The Property has a Comprehensive Plan land use designation of Moderate Low Density Residential, Very Low Density Residential and Major Open Space. **See Exhibit A, Existing Comprehensive Plan Map.** The Property is zoned GR. **See Exhibit B, Existing Zoning Map.**

D. Request

Vermaland requests to amend the existing comprehensive plan designation from Moderate Low Density Residential, Very Low Density Residential, and Major Open Space to Employment, General Public Facilities/Services, and Major Open Space (no changes are proposed for existing

Major Open Space). See **Exhibit C, Proposed Comprehensive Plan Map**. This amendment will allow uses that are more viable on the Property given the significant floodplain on much of the site. The Moderate Low and Very Low Density Residential encourages residential uses. However, the floodplain would impede these uses from occurring due to the real risk of flooding. Therefore, Employment uses would be more appropriate where it can be mitigated adjacent to the floodplain area. In addition, located nearby east of the Property there is an existing land use designation of Employment. This would be a continuation of that existing land use designation. The intent of the General Public Facilities/Services is to provide energy generation to support the proposed employment.

The Employment designation as noted in the Pinal County Comprehensive Plan "as areas that can support a variety of employment-generating business activities such as industrial, office, business park, and warehousing and distribution."

E. Project Overview

The comprehensive plan amendment will encompass approximately 3,374 acres. The nature of this use allows a viable use of the land without worrying about the negative impacts of a floodplain that would otherwise exist if building structures were built. Approximately 1,910 acres are designated to become Employment, 480 acres are designated to become General Public Facilities/Services, and the existing Major Open Space parcels, approximately 983 acres, will remain Major Open Space.

I. Relationship to Immediate Surroundings

The proposed development will have a positive impact on the surrounding area. This development activates underutilized parcels with an appropriate. Data centers, battery storage, and gas energy generation facilities are an appropriate use in otherwise difficult to access parcels, especially adjacent to a significant floodplain area. In addition, there is no development surrounding the Property and it will be appropriately screened for any future development that occurs around the site. The Property has not been developed since the historic mining operations, and this development will promote growth in this area.

II. Site Circulation and Traffic Impact

A Traffic Impact Analysis (TIA) will be provided due to the scale of the proposed development and anticipated traffic construction. The TIA will analyze the effect on the connectivity of the potentially impact areas. The project TIA will be submitted to the County Engineer at the time of the Tentative Plat of Site Plan submittal for review and approval.

The proposed development consists of sections of E. Baumgartner Road. It is identified as a Regionally Significant Route (Principal Arterial) per the "Regionally Significant Routes for Safety and Mobility, Final Report". All half-street right-of-way (ROW) will be a minimum of 75 feet. Additionally, the 75-foot right-of-way and any right-of-way outlined by Engineering dedication will be free and unencumbered through the Warranty Deed.

The site area is located within the Arizona Department of Transportation (ADOT) and Pinal County preferred alignments for the future Interstate-11 Freeway. Therefore, it will have a full street right-of-way width of 400 feet. Additional right-of-way dedication will be provided for this location per ADOT guidelines. The traffic report will be provided to ADOT for information.

Sasco Road is identified as a Minor Arterial per the Red Rock Small Area Transportation Study thus an important roadway connection for future developments. Sasco Road will have a 55-foot right-of-way along the development's frontage and a 110-foot right-of-way where the road passes through the property.

The proposed development TIA will identify all required infrastructure improvements such as deceleration lanes and turn lanes. Additional right-of-way will be provided for all identified infrastructure improvements. All roadway and infrastructure improvements follow the project TIA to mitigate impacts on the surrounding roadways and are completed at the developer's costs. All roadway and infrastructure improvements will follow the current Pinal County Subdivision Standards or as approved by the County Engineer. The TIA will follow current Pinal County TIA Guidelines and Procedures and will be approved before approval of the Tentative Plat.

Road improvements for the proposed development include paved, all-weather, 28-foot wide public access to and from the development. A minimum of two permanent access points will be provided for the ingress and egress from the development to existing public roads. All access improvements approval by the County Engineer will be a condition of approval of the plat by the board.

All right-of-way dedication will be free and unencumbered. All roadway sections, alignments, access locations, and access movements shown in the rezoning application will be approved by the Pinal County Engineer. Drainage, irrigation canals, and ditches in project-dedicated ROW will be undergrounded before dedication. Any potential offsite improvements required to be completed by the project will follow the TIA or Drainage Report and be accompanied by an offsite improvement plan for submittal.

III. Drainage Statement

The drainage pattern for the project site flows from the northwest to the southeast. A portion

of the project is within a Zone A Floodplain. Any improvements within the floodplain will determine the requirement of a Floodplain Use Permit or CLOMR/LOMR. If improvements are required, requirements such as structure elevation and floodproofing will be imposed on the project.

The Area Drainage Master Plan for Pinal County indicates the property is subject to offsite flows. The offsite flow is estimated to be approximately 10,000 cfs of the Casa Grande-Eloy Watershed of the Greene Wash. The offsite flow will be analyzed to determine the impact on the proposed development plan. Analysis of the offsite flow determines the need for required accommodation to collect, convey, and discharge the offsite runoff through the development or additional requirements. The offsite flow analysis will be reviewed as part of the hydrologic analysis for the proposed project. Per the Floodplain Ordinance, the storage or processing of materials injurious to human, animal, or plant life, if released due to damage from flooding, is prohibited in regulatory floodplain and erosion hazard zones. The project will provide a Grading and Drainage Plan with the Site Plan Review (SPR) formal submittal. The Grading and Drainage Plan will follow the Pinal County Drainage Ordinance and Drainage Manual, and a copy will be provided within the project Drainage Report. The property owner maintains retention areas and the common retention area will be maintained by property management. The project Drainage Report will be submitted for review and approval with the SPR formal submittal. On-site drainage analysis will follow the Pinal County Drainage Ordinance and Drainage Manual.

IV. Utility and Public Services

The proposed development is within Pinal County Electrical District 5 within APS Service Territory. Sewer utility service is not required for the site.

F. Comprehensive Plan Amendment Criteria

Pinal County understands that its Comprehensive Plan is "intended to be a dynamic document that must be periodically updated in response to changing regional needs." Nevertheless, proposed amendments must still be consistent with the Plans goals, policies, and objectives. To that end, Pinal County provides a Compliance Checklist, which is attached here as **Exhibit E** and discussed in detail below.

PART ONE: Consistency with Pinal County's Vision Components

1. Is the proposal consistent with the Sense of Community vision component?

This proposed industrial use is located in a rural area, away from any existing or emerging urban centers, and will seek to preserve the rural character and promote compatibility with the surrounding area through the site design process.

2. *Is the proposal consistent with the Mobility and Connectivity vision component?*

Access to this site will be provided by Baumgartner Road to the north, Sasco Road to the south, and La Osa Ranch Road, which bisects the property. In addition, the project is within the ADOT and Pinal County preferred alignment for Interstate 11 Freeway/Expressway with a 400' right-of-way designation. Newly constructed roadways would be internal to the project site and developed in accordance with state or local building requirements as needed.

3. *Is the proposal consistent with the Economic Sustainability vision component?*

Development of this project will provide construction, high-tech, and environmentally friendly employment opportunities in information technology and energy production throughout the life of the operation. Investing in cleaner natural gas energy generation promotes local economic opportunity rather than reliance on distant energy sources.

4. Is the proposal consistent with the Open Spaces and Places vision component?

A riparian habitat transects the project area and is considered to be of critical environmental importance and will be protected during development. In addition, the project will provide open spaces throughout the development and in accordance with Pinal County standards. Parcels designated by the Comprehensive Plan as Major Open Space will remain undeveloped to minimize ecological disturbance.

5. Is the proposal consistent with the Environmental Stewardship vision component?

The applicant will consider the potential environmental impacts in the project plans and is committed to minimizing impacts to the human, natural, and cultural environments resulting from the proposed development. The project will comply with any and all applicable federal, state, and local laws, regulations, and guidelines, as required.

6. *Is the proposal consistent with the Healthy, Happy Residents vision component?*

The applicant is committed to paying its reasonable share of the costs of new infrastructure, services and other public improvements that may be required for the project. The project would generate revenues and contribute to the tax base for Pinal County, and would allow for the use of clean, safe, affordable, and efficient energy.

7. Is the proposal consistent with the Quality Educational Opportunities vision component?

The proposal will have little impact on access to educational opportunities at any level, but can provide employment and other workforce learning opportunities with the Employment designation.

PART TWO: Consistency with the Plan's Key Concepts illustrated on Land Use, Economic, and Circulation Graphics

1. Consistency with the Land Use Designation shown on the graphics

The proposal requires a Major Comprehensive Plan Amendment to change the land use designation of the Property from Moderate Low Density Residential, Very Low Density Residential, and Major Open Space to Employment, General Public Facilities/Services and Major Open Space.

2. Consistency with the Mixed Use Activity Center Concept

The proposal is not currently within a mixed use activity center.

3. Consistency with the Planning Guidelines described in the Land Use element

The proposal requires a Major Comprehensive Plan Amendment to change the land use designation of the Property from Moderate Low Density Residential, Very Low Density Residential and Major Open Space to Employment, General Public Facilities/Services, and Major Open Space .

4. Quality Employment Opportunities County-Wide

The Comprehensive Plan does not indicate any particular economic development in the project site area. The proposed development will add jobs to the County in the information technology and energy generation sectors in alignment with the County's economic growth and environmental stewardship goals.

5. Viable Agriculture, Equestrian and Rural Lifestyle

The proposed development does not threaten any existing agriculture. The amendment would cluster industrial development into areas that best support the proposed industrial uses, thus limiting dispersed impacts to open space, agriculture or sprawl.

6. System of Connected Trails and Preservation of Open Space

The proposed development will preserve the adopted County trail corridor along the Santa Cruz River and Greene Wash and proposed limited changes to the flood plain area.

7. Natural and Cultural Resource Conservation

The applicant will consider potential environmental impacts of the project and will mitigate impacts to the natural and cultural environment by minimizing ground disturbance, where possible. Development of the project will comply with all applicable federal, state, and local environmental laws, regulations, and guidelines, as required.

8. Water Resources, Public Facilities/Services, and Infrastructure Support

This development will provide the necessary infrastructure to support the proposed uses in accordance with Pinal County standards.

G. Summary

This application requests a major comprehensive plan amendment for approximately +/- 3,374 acres located along La Osa Ranch Road between Baumgartner Road and Sasco Road within Pinal County, Arizona. The request will modify the existing comprehensive plan designation from Moderate Low Density Residential, Very Low Density Residential, and Major Open Space Use to Employment, General Public Facilities/Services and Major Open Space.

The proposed development is a logical fit for the location due to several factors. The property is currently undeveloped and situated within a major Zone A floodplain area, known as Greene Wash watershed. The proposed land use designation is appropriate adjacent to this floodplain area, as other uses such as residential and commercial may not be viable. The property is bordered to the north by Greene Wash and to the west, south, and east by undeveloped and/or agricultural land zoned General Rural (GR). The employment designation will allow for uses that

are more viable on the property given the significant floodplain on much of the site. The Employment designation supports a variety of employment-generating business activities such as industrial, office, business park, and warehousing and distribution.

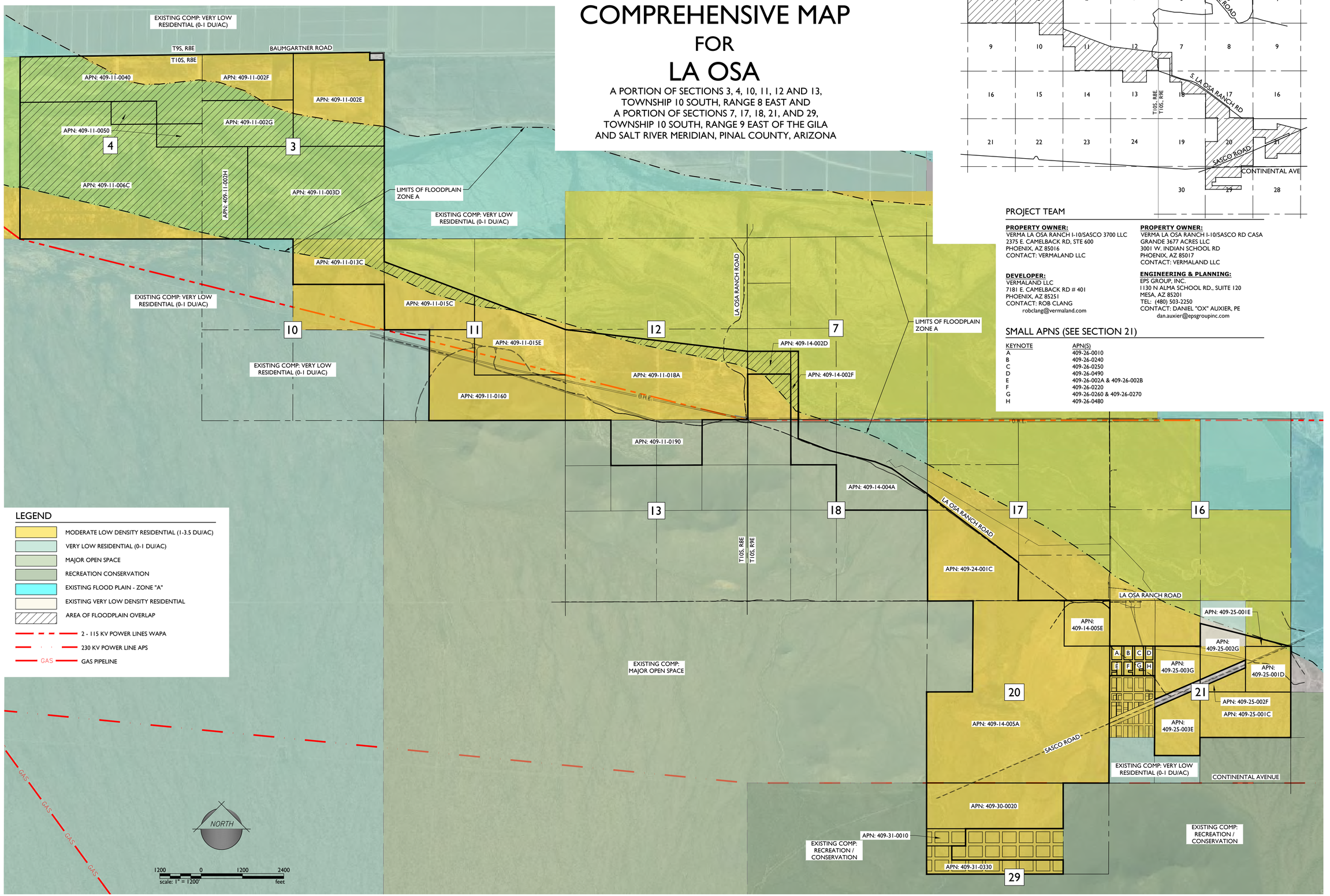
The benefits to Pinal County include the activation of underutilized parcels with appropriate uses such as data centers, battery storage, and gas energy generation facilities. This development will promote growth in the area and provide construction, high-tech, and environmentally friendly employment opportunities in information technology and energy production. The project will also preserve the adopted county trail corridor along the Santa Cruz River and Greene Wash and propose limited changes to the floodplain area. Additionally, the project will comply with all applicable federal, state, and local environmental laws, regulations, and guidelines.

In conclusion, the re-designation of the property from Moderate Low Density Residential, Very Low Density Residential, and Major Open Space to Employment, General Public Facilities, and Major Open Space offers a more pragmatic and sustainable approach to land use, considering the site's unique environmental constraints. The applicant is committed to working with Pinal County to make this amendment achievable and beneficial to everyone involved.

Exhibit A

EXISTING COMPREHENSIVE MAP
FOR
LA OSA

A PORTION OF SECTIONS 3, 4, 10, 11, 12 AND 13,
TOWNSHIP 10 SOUTH, RANGE 8 EAST AND
A PORTION OF SECTIONS 7, 17, 18, 21, AND 29,
TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA
AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA



LEGEND

- MODERATE LOW DENSITY RESIDENTIAL (1-3.5 DU/AC)
- VERY LOW RESIDENTIAL (0-1 DU/AC)
- MAJOR OPEN SPACE
- RECREATION CONSERVATION
- EXISTING FLOOD PLAIN - ZONE "A"
- EXISTING VERY LOW DENSITY RESIDENTIAL
- AREA OF FLOODPLAIN OVERLAP
- 2 - 115 KV POWER LINES WAPA
- 230 KV POWER LINE APS
- GAS GAS PIPELINE

VICINITY MAP

PROJECT TEAM

PROPERTY OWNER:
VERMA LA OSA RANCH I-10/SASCO 3700 LLC
2375 E. CAMELBACK RD, STE 600
PHOENIX, AZ 85016
CONTACT: VERMALAND LLC

PROPERTY OWNER:
VERMA LA OSA RANCH I-10/SASCO RD CASA GRANDE 3677 ACRES LLC
3001 W. INDIAN SCHOOL RD
PHOENIX, AZ 85017
CONTACT: VERMALAND LLC

DEVELOPER:
VERMALAND LLC
7181 E. CAMELBACK RD # 401
PHOENIX, AZ 85251
CONTACT: ROB CLANG
robclang@vermaland.com

ENGINEERING & PLANNING:
EPS GROUP, INC.
1130 N ALMA SCHOOL RD., SUITE 120
MESA, AZ 85201
TEL: (480) 503-2250
CONTACT: DANIEL "OX" AUXIER, PE
dan.auxier@epsgroupinc.com

SMALL APNS (SEE SECTION 21)

KEYNOTE	APN(S)
A	409-26-0010
B	409-26-0240
C	409-26-0250
D	409-26-0490
E	409-26-002A & 409-26-002B
F	409-26-0220
G	409-26-0260 & 409-26-0270
H	409-26-0480

1130 N Alma School Road
Suite 120
Mesa, AZ 85201
T:480.503.2250 | F:480.503.2258
www.epsgroupinc.com
EPS GROUP

Project:
La Osa
Pinal County, Arizona

Existing Cmprehensive Map

Revisions:
SEPTEMBER 17, 2024 - 1ST SUBMITTAL

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

Designer: STAFF
Drawn by: STAFF

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Or
Recording

Job No.
24-0542

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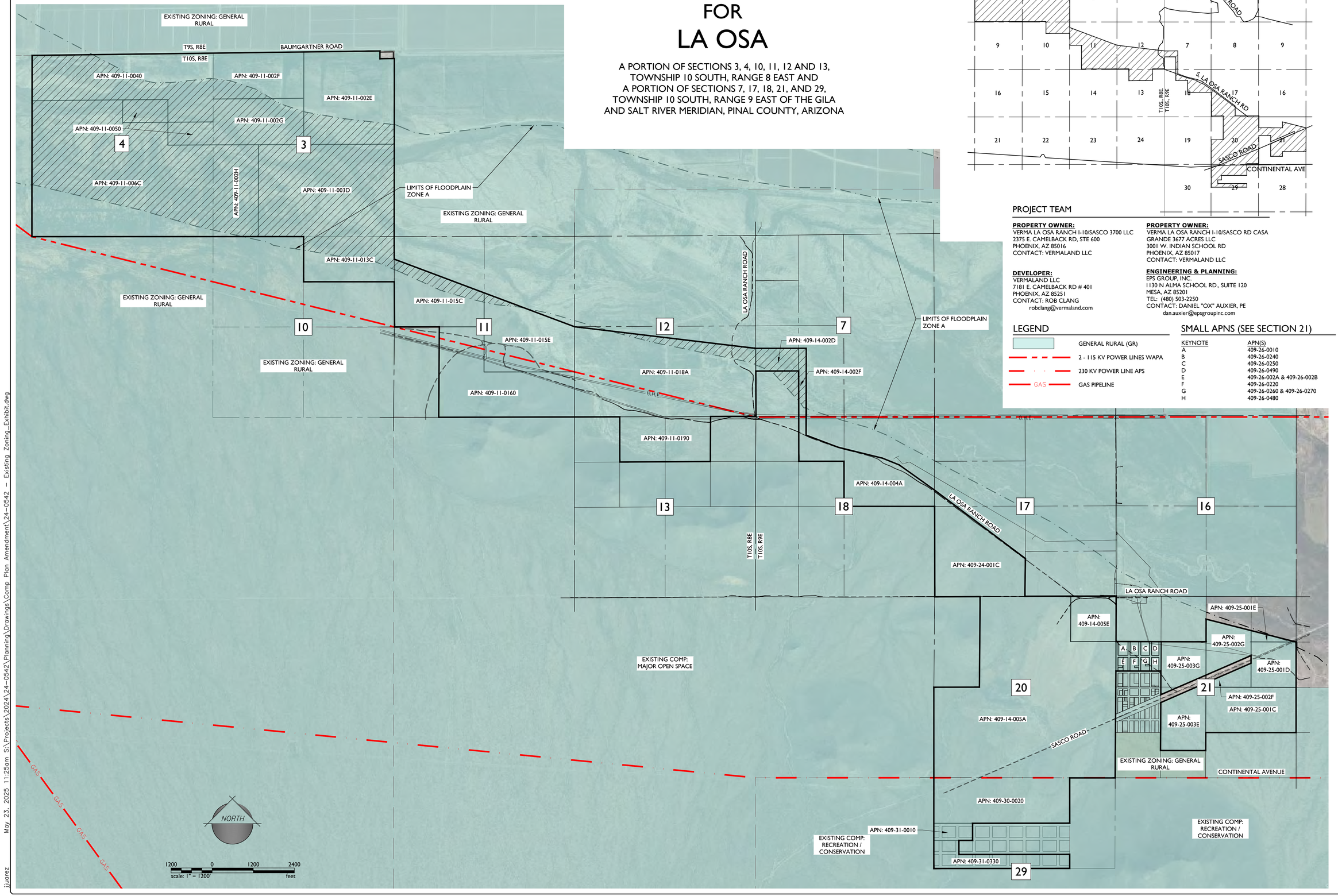
jjuarez

Exhibit B

EXISTING ZONING MAP
FOR
LA OSA

A PORTION OF SECTIONS 3, 4, 10, 11, 12 AND 13,
TOWNSHIP 10 SOUTH, RANGE 8 EAST AND
A PORTION OF SECTIONS 7, 17, 18, 21, AND 29,
TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA
AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA



VICINITY MAP

PROJECT TEAM

PROPERTY OWNER:
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2375 E. CAMELBACK RD, STE 600
PHOENIX, AZ 85016
CONTACT: VERMALAND LLC

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MESA, AZ 85201
TEL: (480) 503-2250
CONTACT: DANIEL "OX" AUXIER, PE
dan.auxier@epsgroupinc.com

LEGEND

- GENERAL RURAL (GR)
- 2 - 115 KV POWER LINES WAPA
- 230 KV POWER LINE APS
- GAS — GAS PIPELINE

SMALL APNS (SEE SECTION 21)

KEYNOTE	APN(S)
A	409-26-0010
B	409-26-0240
C	409-26-0250
D	409-26-0490
E	409-26-002A & 409-26-002B
F	409-26-0220
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H	409-26-0480

1130 N Alma School Road
Suite 120
Mesa, AZ 85201
T:480.503.2250 | F:480.503.2258
www.epsgroupinc.com

EPS GROUP

La Osa
Pinal County, Arizona

Existing Zoning Map

Project:

Revisions:

MAY XXX, 2025 - 1ST SUBMITTAL

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ARIZONA811
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In Maricopa County: (602)263-1100

Designer: STAFF
Drawn by: STAFF

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Job No.
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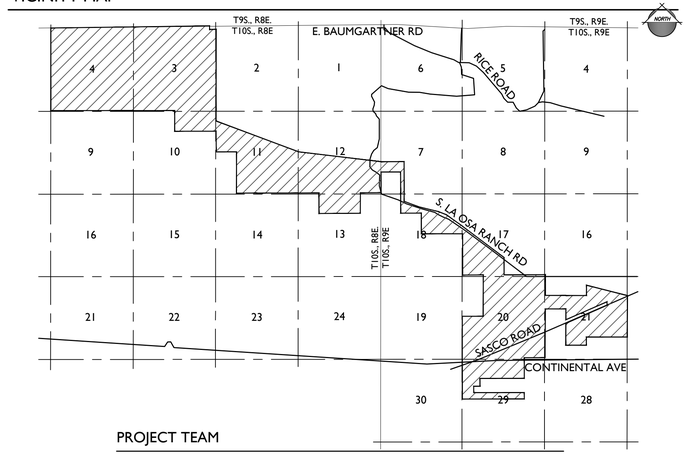
Exhibit C

PROPOSED COMPREHENSIVE MAP
FOR
LA OSA

A PORTION OF SECTIONS 3, 4, 10, 11, 12 AND 13,
TOWNSHIP 10 SOUTH, RANGE 8 EAST AND
A PORTION OF SECTIONS 7, 17, 18, 21, AND 29,
TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA
AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA

VICINITY MAP



PROJECT TEAM

PROPERTY OWNER:
VERMA LA OSA RANCH I-10/SASCO 3700 LLC
2375 E. CAMELBACK RD, STE 600
PHOENIX, AZ 85016
CONTACT: VERMALAND LLC

PROPERTY OWNER:
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CONTACT: VERMALAND LLC

DEVELOPER:
VERMALAND LLC
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PHOENIX, AZ 85251
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ENGINEERING & PLANNING:
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MESA, AZ 85201
TEL: (480) 503-2250
CONTACT: DANIEL "OX" AUXIER, PE
dan.auxier@epsgroupinc.com

SMALL APNS (SEE SECTION 21)

KEYNOTE	APN(S)
A	409-26-0010
B	409-26-0240
C	409-26-0250
D	409-26-0490
E	409-26-002A & 409-26-002B
F	409-26-0220
G	409-26-0260 & 409-26-0270
H	409-26-0480

LEGEND

- MODERATE LOW DENSITY RESIDENTIAL (1-3.5 DU/AC)
- VERY LOW RESIDENTIAL (0-1 DU/AC)
- MAJOR OPEN SPACE
- RECREATION CONSERVATION
- EXISTING FLOOD PLAIN - ZONE "A"
- EXISTING VERY LOW DENSITY RESIDENTIAL
- AREA OF FLOODPLAIN OVERLAP
- GENERAL PUBLIC FACILITIES / SERVICES
- EMPLOYMENT
- 2 - 115 KV POWER LINES WAPA
- 230 KV POWER LINE APS
- GAS GAS PIPELINE

NORTH

1200 0 1200 2400
scale: 1" = 1200' feet

1130 N Alma School Road
Suite 120
Mesa, AZ 85201
T:480.503.2250 | F:480.503.2258
www.epsgroupinc.com
EPS GROUP

Project: La Osa
Pinal County, Arizona

Proposed Comprehensive Map

Revisions:
MAY 29, 2025 - 1ST SUBMITTAL

Call at least two full working days before you begin excavation.
ARIZONA811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

Designer: STAFF
Drawn by: STAFF

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jjuarez

Exhibit D

Arizona Environmental Online Review Tool Report

Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department requests further coordination to provide project/species specific recommendations. Please use the Project Evaluation Form to submit your project to the Project Evaluation Program at PEP@azgfd.gov.

Project Name:
La Osa Comp Plan

Project Type:
Development Within Municipalities (Urban Growth), Commercial/industrial (mall) and associated infrastructure, New construction or expansion

Project ID:
HGIS-25146

User Project Number:
24-0542

Project Description:
24-0542 La Osa Comp Plan Report

Contact Person:
Kristen Javier

Organization:
EPS Group Inc.

On Behalf Of:
CONSULTING

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. Arizona Wildlife Conservation Strategy (AWCS), specifically Species of Greatest Conservation Need (SGCN), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

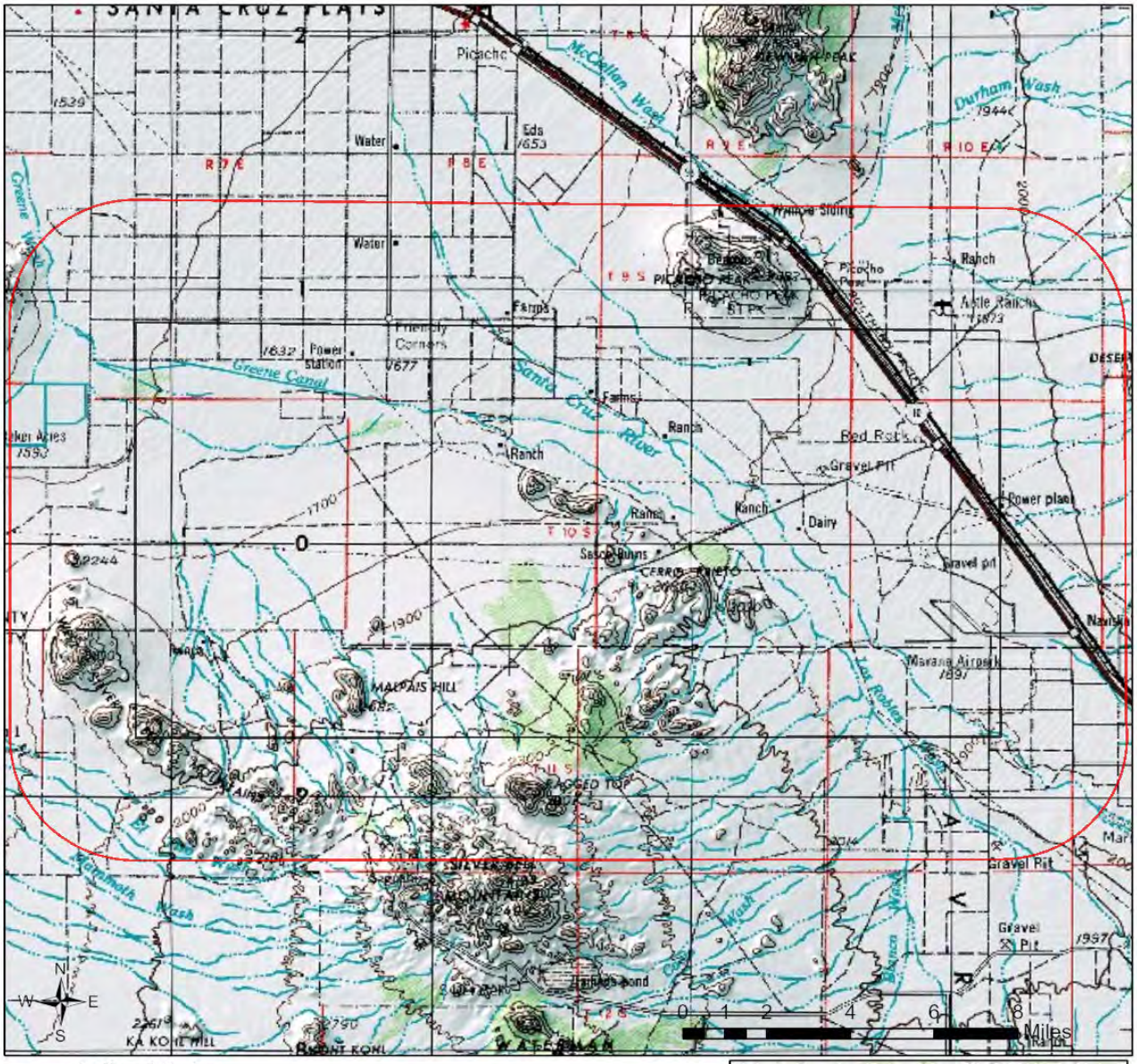
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies.

La Osa Comp Plan

USA Topo Basemap With Locator Map



Buffered Project Boundary

Project Boundary

Project Size (acres): 132,903.74

Lat/Long (DD): 32.5421 / -111.4776

County(s): Pima; Pinal

AGFD Region(s): Tucson

Township/Range(s): T10S, R10E; T10S, R7E; T10S, R8E +

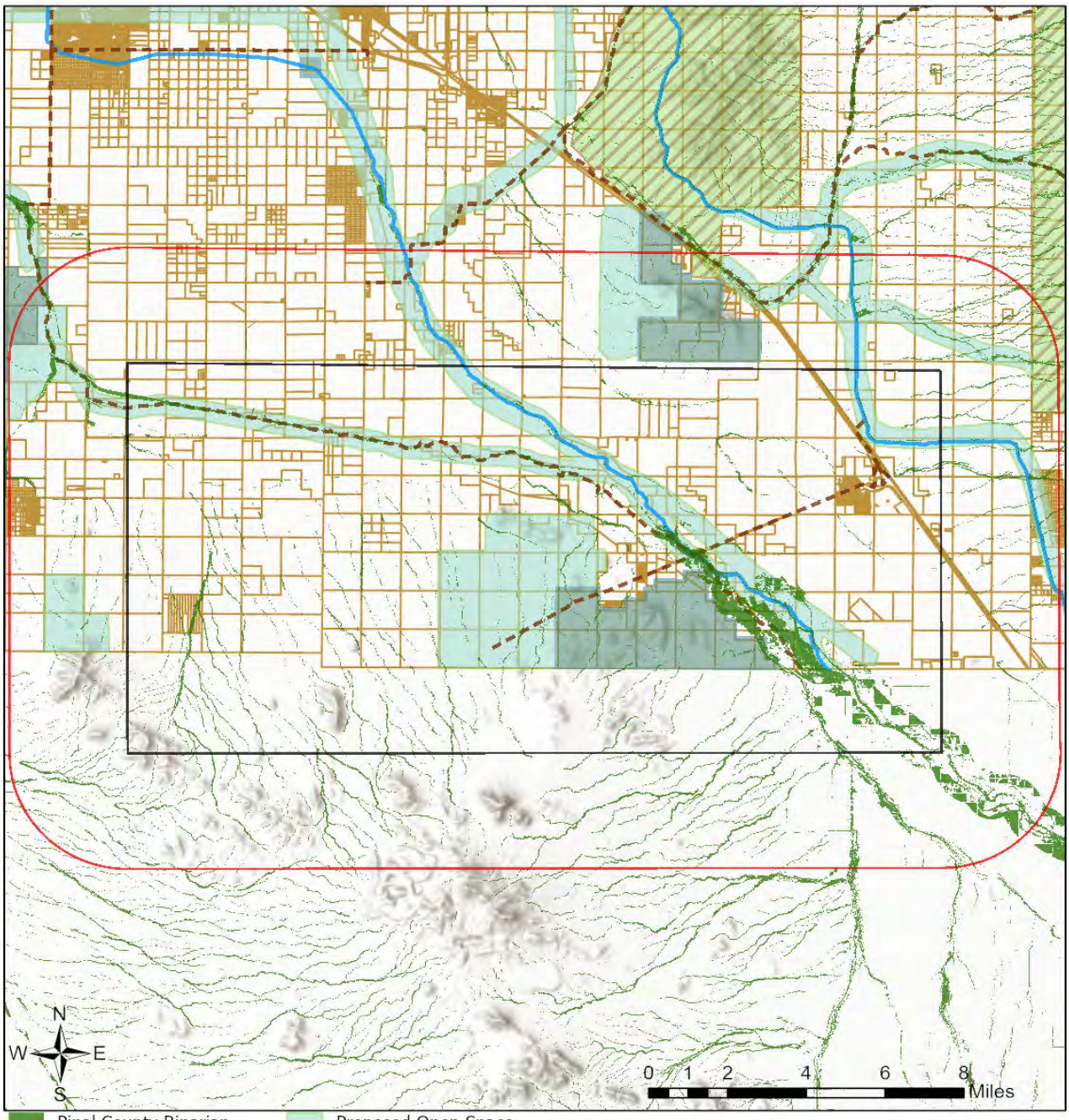
USGS Quad(s): FRIENDLY CORNERS; GAP TANK +



County of Yavapai, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Copyright:© 2013 National Geographic Society, i-cubed
Esri, USGS

La Osa Comp Plan

Web Map As Submitted By User



- Pinal County Riparian
- Existing/Planned Multi-Use Trail Corr
- Proposed Multi-Use Trail Corridor
- Adopted County Trail Corridor
- Planned/Existing OHV Trail
- Proposed OHV Trail
- Proposed Open Space
- Existing/Planned Open Space
- Existing/Planned/ Proposed Regional Park
- Restricted Use Open Space
- Buffered Project Boundary
- Project Boundary

Project Size (acres): 132,903.74

Lat/Long (DD): 32.5421 / -111.4776

County(s): Pima; Pinal

AGFD Region(s): Tucson

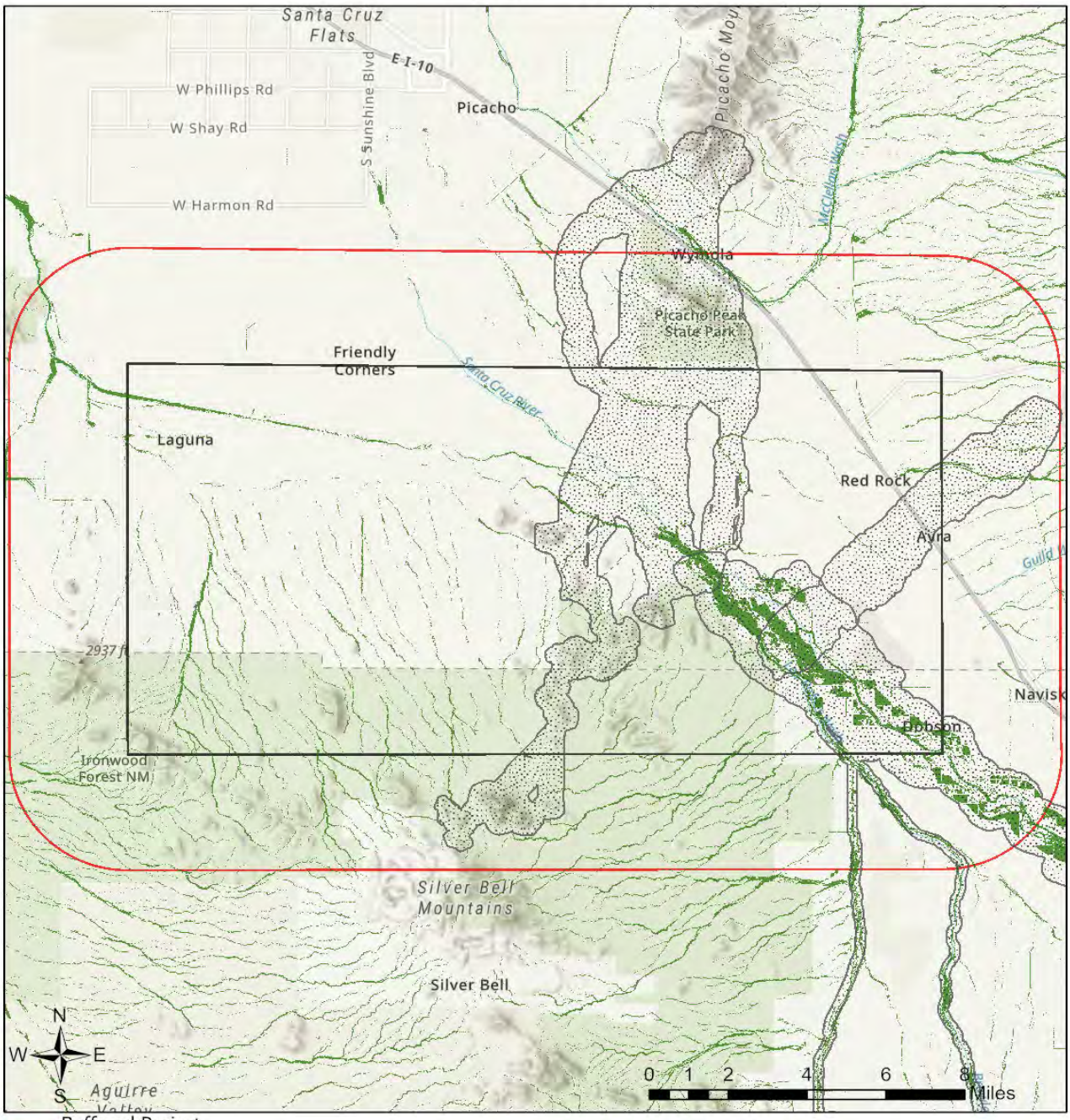
Township/Range(s): T10S, R10E; T10S, R7E; T10S, R8E +

USGS Quad(s): FRIENDLY CORNERS; GAP TANK +

Esri, NASA, NGA, USGS

La Osa Comp Plan

Important Areas



- Buffered Project Boundary
- Project Boundary
- Important Bird Areas
- Critical Habitat
- Pinal County Riparian
- Wildlife Connectivity

Project Size (acres): 132,903.74

Lat/Long (DD): 32.5421 / -111.4776

County(s): Pima; Pinal

AGFD Region(s): Tucson

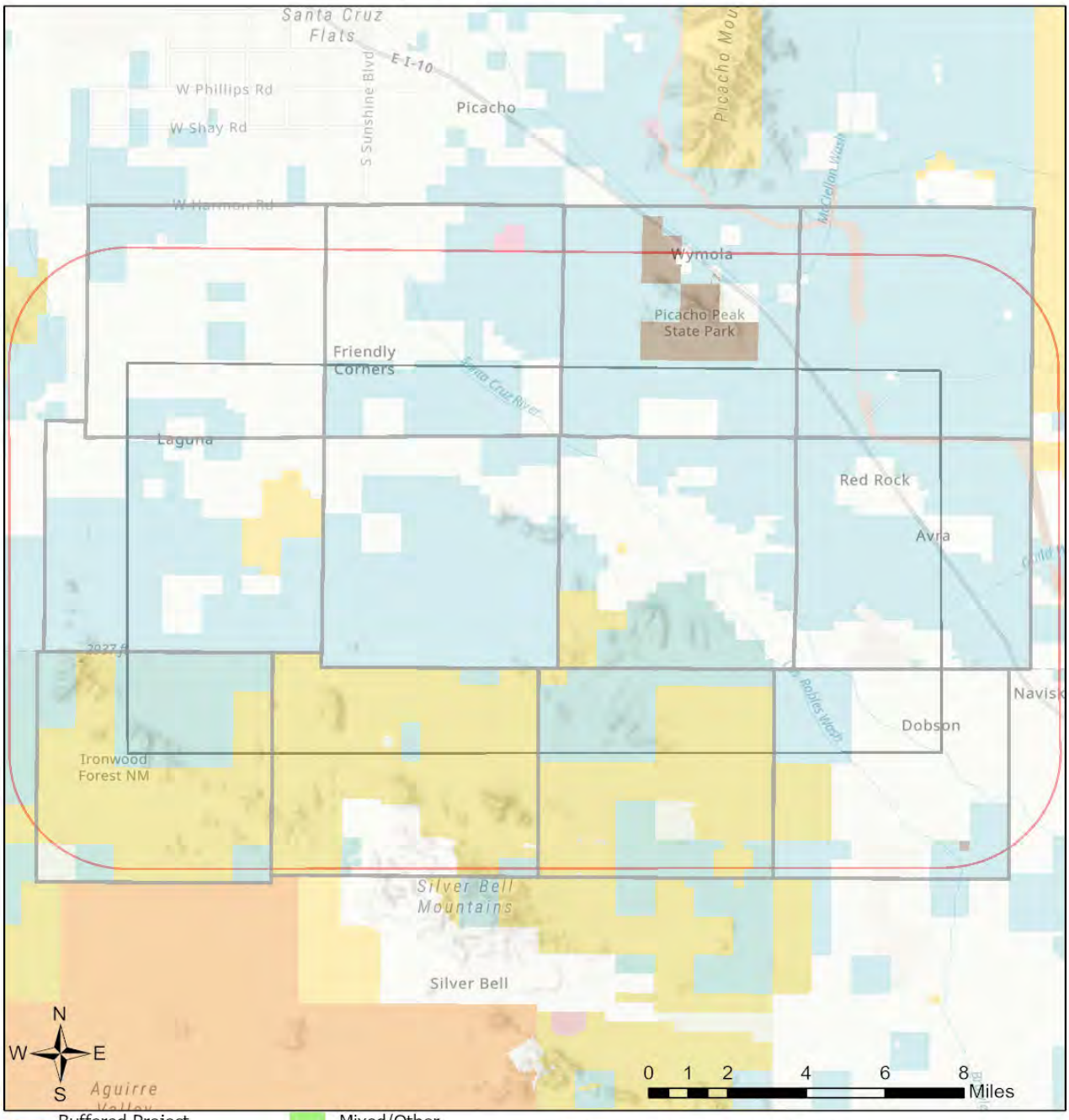
Township/Range(s): T10S, R10E; T10S, R7E; T10S, R8E +

USGS Quad(s): FRIENDLY CORNERS; GAP TANK +

Esri, NASA, NGA, USGS
CONANP, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

La Osa Comp Plan

Township/Ranges and Land Ownership



- Buffered Project Boundary
- Project Boundary
- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State & Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge
- Township/Ranges

Project Size (acres): 132,903.74

Lat/Long (DD): 32.5421 / -111.4776

County(s): Pima; Pinal

AGFD Region(s): Tucson

Township/Range(s): T10S, R10E; T10S, R7E; T10S, R8E +

USGS Quad(s): FRIENDLY CORNERS; GAP TANK +

Esri, NASA, NGA, USGS
CONANP, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Abutilon parishii	Pima Indian Mallow	SC	S	S	SR	
Agelaius phoeniceus	Red-winged Blackbird					2
Aphelocoma woodhouseii	Woodhouse's Scrub-Jay					2
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		2
Auriparus flaviceps	Verdin					2
Bat Colony						
Buteo regalis	Ferruginous Hawk			S		2
Buteo swainsoni	Swainson's Hawk					2
Calamospiza melanocorys	Lark Bunting					2
Calypte costae	Costa's Hummingbird					2
Camptostoma imberbe	Northern Beardless-Tyrannulet		S			2
Campylorhynchus brunneicapillus	Cactus Wren					2
Cardinalis sinuatus	Pyrrhuloxia					2
Catharus guttatus	Hermit Thrush					2
Catharus ustulatus	Swainson's Thrush					2
Charadrius vociferus	Killdeer					2
Chilomeniscus cinctus	Banded Sandsnake					2
Circus hudsonius	Northern Harrier					2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1
Coluber bilineatus	Sonoran Whipsnake					2
Columbina inca	Inca Dove					2
Contopus cooperi	Olive-sided Flycatcher					2
Contopus sordidulus	Western Wood-Pewee					2
Corvus cryptoleucus	Chihuahuan Raven					2
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat		S	S		1
Crotalus tigris	Tiger Rattlesnake					2
Crotaphytus nebrius	Sonoran Collared Lizard					2
Cynanthus latirostris	Broad-billed Hummingbird		S			2
Danaus plexippus	Monarch	C, PT		S		
Dendrocygna autumnalis	Black-bellied Whistling-Duck					2
Echinocactus horizonthalonius var. nicholii	Nichol Turk's Head Cactus	LE		S	HS	
Echinocereus fasciculatus	Magenta-flower Hedgehog-cactus				SR	
Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		S		1
Empidonax wrightii	Gray Flycatcher					2
Eremophila alpestris	Horned Lark					2
Euphagus cyanocephalus	Brewer's Blackbird					2
Falco mexicanus	Prairie Falcon					2
Falco peregrinus anatum	American Peregrine Falcon		S	S		1

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Falco sparverius	American Kestrel					2
Geothlypis tolmiei	MacGillivray's Warbler					2
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1
Heloderma suspectum	Gila Monster					1
Icterus bullockii	Bullock's Oriole					2
Icterus cucullatus	Hooded Oriole					2
Incilius alvarius	Sonoran Desert Toad					2
Lanius ludovicianus	Loggerhead Shrike					2
Lasiurus cinereus	Hoary Bat					2
Leptonycteris yerbabuenae	Lesser Long-nosed Bat			S		1
Leptonycteris yerbabuenae	Lesser Long-nosed Bat	SC		S		1
Lepus alleni	Antelope Jackrabbit					2
Macrotus californicus	California Leaf-nosed Bat			S		2
Macrotus californicus	California Leaf-nosed Bat	SC		S		2
Melanerpes uropygialis	Gila Woodpecker					2
Melospiza lincolnii	Lincoln's Sparrow					2
Melozone aberti	Abert's Towhee		S			2
Melozone fusca	Canyon Towhee					2
Micruroides euryxanthus	Sonoran Coralsnake					2
Myotis velifer	Cave Myotis			S		2
Myotis velifer	Cave Myotis	SC		S		2
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					2
Opuntia versicolor	Stag-horn Cholla				SR	
Oreoscoptes montanus	Sage Thrasher					2
Parabuteo unicinctus	Harris's Hawk					2
Passerculus sandwichensis	Savannah Sparrow					2
Perognathus amplus	Arizona Pocket Mouse					2
Peucaea carpalis	Rufous-winged Sparrow					2
Phrynosoma solare	Regal Horned Lizard					2
Phyllorhynchus browni	Saddled Leaf-nosed Snake					2
Pooecetes gramineus	Vesper Sparrow					2
Selasphorus platycercus	Broad-tailed Hummingbird					2
Setophaga nigrescens	Black-throated Gray Warbler					2
Sonorella simmonsi	Picacho Talussnail					2
Spizella breweri	Brewer's Sparrow					2
Tadarida brasiliensis	Brazilian Free-tailed Bat					2
Toxostoma bendirei	Bendire's Thrasher					2
Tumamoca macdougalii	Tumamoc Globeberry	SC	S	S	SR	
Vauquelinia californica ssp. sonorensis	Arizona Sonoran Rosewood			S		

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Blanco Wash	Pima County Wildlife Movement Area - Riparian/Wash					
Brawley Wash	Pima County Wildlife Movement Area - Riparian/Wash					
CAP Canal	Pima County Wildlife Crossing Area					
Coyote - Ironwood - Tucson Linkage Design	Wildlife Connectivity					
Greene Wash and Reservoir	Pinal County Wildlife Movement Area - Riparian/Wash					
Ironwood - Picacho Linkage Design	Wildlife Connectivity					
Ironwood National Monument	Conservation Opportunity Area					
Picacho Peak - Silverbell Mountains - Sawtooth Mountains	Pima County Wildlife Movement Area - Landscape					
Picacho Peak - Silverbell Mountains - Sawtooth Mountains	Pinal County Wildlife Movement Area - Landscape					
Riparian Area	Riparian Area					
Santa Cruz River	Pima County Wildlife Movement Area - Riparian/Wash					
Silver Bell/Waterman Mountains/Samaniego Hills Wildland Block	Pima County Wildlife Movement Area - Diffuse					
Tortolita Mountains - Picacho Peak	Pinal County Wildlife Movement Area - Landscape					

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Ammodramus savannarum perpallidus	Western Grasshopper Sparrow					2
Ammospermophilus harrisii	Harris' Antelope Squirrel					2
Anaxyrus retiformis	Sonoran Green Toad			S		2
Anthus spragueii	Sprague's Pipit					2
Aquila chrysaetos	Golden Eagle	BGA		S		2
Artemisiospiza nevadensis	Sagebrush Sparrow					3
Asio otus	Long-eared Owl					2
Aspidoscelis sonorae	Sonoran Spotted Whiptail					2

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Aspidoscelis xanthonotus	Red-backed Whiptail		S			2
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Auriparus flaviceps	Verdin					2
Botaurus lentiginosus	American Bittern					2
Buteo regalis	Ferruginous Hawk			S		2
Buteo swainsoni	Swainson's Hawk					2
Calcarius ornatus	Chestnut-collared Longspur					2
Calypte costae	Costa's Hummingbird					2
Campylorhynchus brunneicapillus	Cactus Wren					2
Catharus ustulatus	Swainson's Thrush					2
Chaetodipus baileyi	Bailey's Pocket Mouse					2
Charadrius montanus	Mountain Plover					2
Chilomeniscus cinctus	Variable Sandsnake					2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1
Colaptes chrysoides	Gilded Flicker			S		2
Coluber bilineatus	Sonoran Whipsnake					2
Columbina inca	Inca Dove					2
Corvus cryptoleucus	Chihuahuan Raven					2
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat		S	S		1
Crotalus tigris	Tiger Rattlesnake					2
Crotaphytus nebrius	Sonoran Collared Lizard					2
Cynanthus latirostris	Broad-billed Hummingbird		S			2
Dendrocygna autumnalis	Black-bellied Whistling-Duck					2
Empidonax wrightii	Gray Flycatcher					2
Eumops perotis californicus	Greater Western Bonneted Bat			S		2
Falco mexicanus	Prairie Falcon					2
Falco peregrinus anatum	American Peregrine Falcon		S	S		1
Falco sparverius	American Kestrel					2
Gastrophryne mazatlanensis	Sinoloan Narrow-mouthed Toad			S		2
Glaucidium brasilianum cactorum	Cactus Ferruginous Pygmy-owl	LT	S	S		1
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1
Heloderma suspectum	Gila Monster					1
Icterus bullockii	Bullock's Oriole					2
Icterus cucullatus	Hooded Oriole					2
Icterus parisorum	Scott's Oriole					2
Incilius alvarius	Sonoran Desert Toad					2
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		2

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Lanius ludovicianus	Loggerhead Shrike					2
Lasiurus cinereus	Hoary Bat					2
Lasiurus frantzii	Desert Red Bat		S			2
Lasiurus xanthinus	Western Yellow Bat		S			2
Leptonycteris yerbabuenae	Lesser Long-nosed Bat			S		1
Lepus alleni	Antelope Jackrabbit					2
Lichanura trivirgata	Three-Lined Boa					2
Macrotus californicus	California Leaf-nosed Bat			S		2
Megascops kennicottii	Western Screech-owl					2
Melanerpes uropygialis	Gila Woodpecker					2
Melospiza lincolnii	Lincoln's Sparrow					2
Melozone aberti	Abert's Towhee		S			2
Micrathene whitneyi	Elf Owl					3
Micruroides euryxanthus	Sonoran Coralsnake					2
Myadestes townsendi	Townsend's Solitaire					2
Myotis velifer	Cave Myotis			S		2
Myotis yumanensis	Yuma Myotis					2
Neotamias cinereicollis	Gray-collared Chipmunk					2
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					2
Nyctinomops macrotis	Big Free-tailed Bat					2
Parabuteo unicinctus	Harris's Hawk					2
Passerculus sandwichensis	Savannah Sparrow					2
Perognathus amplus	Arizona Pocket Mouse					2
Peucaea carpalis	Rufous-winged Sparrow					2
Phrynosoma solare	Regal Horned Lizard					2
Phyllorhynchus browni	Saddled Leaf-nosed Snake					2
Pooecetes gramineus	Vesper Sparrow					2
Progne subis hesperia	Desert Purple Martin			S		2
Rana yavapaiensis	Lowland Leopard Frog		S	S		1
Sonorella simmonsi	Picacho Talussnail					2
Spizella breweri	Brewer's Sparrow					2
Tadarida brasiliensis	Brazilian Free-tailed Bat					2
Toxostoma bendirei	Bendire's Thrasher					2
Toxostoma lecontei	LeConte's Thrasher			S		2

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Odocoileus hemionus	Mule Deer					
Ovis canadensis mexicana	Mexicana Desert Bighorn Sheep					
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Development Within Municipalities (Urban Growth), Commercial/industrial (mall) and associated infrastructure, New construction or expansion

Project Type Recommendations:
Evaluate potential impacts to wildlife and fish species due to changes in access to water, water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods). Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing the project to minimize impacts to spawning fish and other aquatic species. Wash, drain, and dry equipment to reduce the spread of exotic invasive species. AZGFD recommends early coordination with the Project Evaluation Program (PEP@azgfd.gov) for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

Project Location and/or Species Recommendations:
Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat linkage corridor***. The **Arizona Missing Linkages** represent ideal connections within or between intact blocks or core habitats. The blocks are currently disconnected or isolated and the linkages should be examined for improving permeability, or are currently intact and in need of preservation and/or enhancement. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://www.azgfd.com/wildlife/planning/habitatconnectivity/identifying-corridors/. Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

HDMS records indicate that one or more native plants listed on the **Arizona Native Plant Law and Antiquities Act** have been documented within the vicinity of your project area. Please contact:
Arizona Department of Agriculture
1688 W Adams St.
Phoenix, AZ 85007
Phone: 602.542.4373
https://agriculture.az.gov/sites/default/files/Native%20Plant%20Rules%20-%20AZ%20Dept%20of%20Ag.pdf starts on page 44

Analysis indicates that your project is located in the vicinity of an identified **Conservation Opportunity Area (COA)**. While there are many areas in Arizona that present abundant conservation opportunities, COAs are specific areas on the landscape that the Department identified as having the greatest potential for conservation efforts. COAs were identified using species and habitat data, the presence of unique landscape features, and Departmental expertise. COAs range in size, scope, and focal species and/or habitats and are strictly a non-regulatory conservation tool for the public and our conservation partners to consider. For more information regarding this particular COA near your project area and the Department's suggestions for potential conservation efforts, please visit the COA profile at https://awcs.azgfd.com/conservation-opportunity-areas.

Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat connectivity feature***. The **County-level Stakeholder Assessments** contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-identifying-corridors/.
Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat connectivity feature***. The **Detailed Wildlife Connectivity Assessments** represent ideal connections within or between intact blocks or core habitats. The blocks are currently disconnected or isolated and the linkages should be examined for improving permeability, or are currently intact and in need of preservation and/or enhancement. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://www.azgfd.com/wildlife/planning/habitatconnectivity/identifying-corridors/
Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

HDMS records indicate that **Lesser Long-nosed Bats** have been documented within the vicinity of your project area. Please review the Lesser Long-nosed Bat Management Guidelines at: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FINALlecuyeHabitatGdln.pdf

HDMS records indicate that one or more **Listed, Proposed, or Candidate** species or **Critical Habitat** (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at https://www.fws.gov/office/arizona-ecological-services or:

Phoenix Main Office
9828 North 31st Avenue #C3
Phoenix, AZ 85051-2517
Phone: 602-242-0210
Fax: 602-242-2513

Tucson Sub-Office
201 N. Bonita Suite 141
Tucson, AZ 85745
Phone: 520-670-6144
Fax: 520-670-6155

Flagstaff Sub-Office
SW Forest Science Complex
2500 S. Pine Knoll Dr.
Flagstaff, AZ 86001
Phone: 928-556-2157
Fax: 928-556-2121

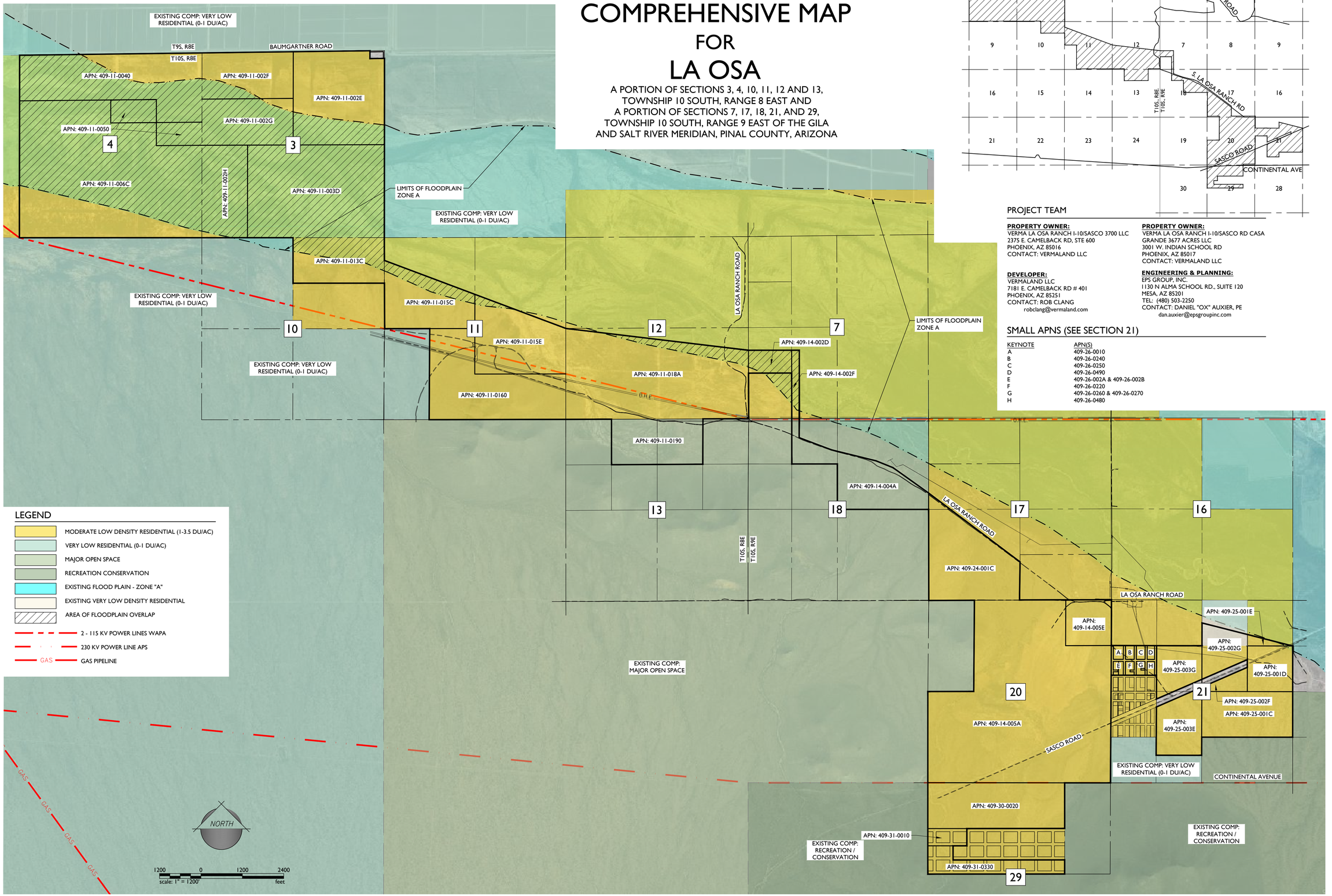
This review has identified **riparian areas** within the vicinity of your project. During the planning stage of your project, avoid, minimize, or mitigate any potential impacts to riparian areas identified in this report. Riparian areas play an important role in maintaining the functional integrity of the landscape, primarily by acting as natural drainages that convey water through an area, thereby reducing flood events. In addition, riparian areas provide important movement corridors and habitat for fish and wildlife. Riparian areas are channels that contain water year-round or at least part of the year. Riparian areas also include those channels which are dry most of the year, but may contain or convey water following rain events. All types of riparian areas offer vital habitats, resources, and movement corridors for wildlife. The Pinal County Comprehensive Plan (i.e. policies *6.1.2.1* and *7.1.2.4*), Open Space and Trails Master Plan, Drainage Ordinance, and Drainage Design Manual all identify riparian area considerations, guidance, and policies. Guidelines to avoid, minimize, or mitigate impacts to riparian habitat can be found at https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/. Further consultation with the Arizona Game and Fish Department and Pinal County may be warranted.

HDMS records indicate that **Sonoran Desert Tortoise** have been documented within the vicinity of your project area. Please review the Tortoise Handling Guidelines found at https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/2014%20Tortoise%20handling%20guidelines.pdf.

HDMS records indicate that **Western Burrowing Owls** have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at https://www.azgfd.com/wildlife-conservation/conservation-and-endangered-species-programs/burrowing-owl-management/.

EXISTING COMPREHENSIVE MAP
FOR
LA OSA

A PORTION OF SECTIONS 3, 4, 10, 11, 12 AND 13,
TOWNSHIP 10 SOUTH, RANGE 8 EAST AND
A PORTION OF SECTIONS 7, 17, 18, 21, AND 29,
TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA
AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA



LEGEND

- MODERATE LOW DENSITY RESIDENTIAL (1-3.5 DU/AC)
- VERY LOW RESIDENTIAL (0-1 DU/AC)
- MAJOR OPEN SPACE
- RECREATION CONSERVATION
- EXISTING FLOOD PLAIN - ZONE "A"
- EXISTING VERY LOW DENSITY RESIDENTIAL
- AREA OF FLOODPLAIN OVERLAP
- 2 - 115 KV POWER LINES WAPA
- 230 KV POWER LINE APS
- GAS — GAS PIPELINE

VICINITY MAP

PROJECT TEAM

PROPERTY OWNER:
VERMA LA OSA RANCH I-10/SASCO 3700 LLC
2375 E. CAMELBACK RD, STE 600
PHOENIX, AZ 85016
CONTACT: VERMALAND LLC

PROPERTY OWNER:
VERMA LA OSA RANCH I-10/SASCO RD CASA GRANDE 3677 ACRES LLC
3001 W. INDIAN SCHOOL RD
PHOENIX, AZ 85017
CONTACT: VERMALAND LLC

DEVELOPER:
VERMALAND LLC
7181 E. CAMELBACK RD # 401
PHOENIX, AZ 85251
CONTACT: ROB CLANG
robclang@vermaland.com

ENGINEERING & PLANNING:
EPS GROUP, INC.
1130 N ALMA SCHOOL RD., SUITE 120
MESA, AZ 85201
TEL: (480) 503-2250
CONTACT: DANIEL "OX" AUXIER, PE
dan.auxier@epsgroupinc.com

SMALL APNS (SEE SECTION 21)

KEYNOTE	APN(S)
A	409-26-0010
B	409-26-0240
C	409-26-0250
D	409-26-0490
E	409-26-002A & 409-26-002B
F	409-26-0220
G	409-26-0260 & 409-26-0270
H	409-26-0480

1130 N Alma School Road
Suite 120
Mesa, AZ 85201
T:480.503.2250 | F:480.503.2258
www.epsgroupinc.com
EPS GROUP

Project:
La Osa
Pinal County, Arizona

Existing Cmprehensive Map

Revisions:
SEPTEMBER 17, 2024 - 1ST SUBMITTAL

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

Designer: STAFF
Drawn by: STAFF

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Or
Recording

Job No.
24-0542

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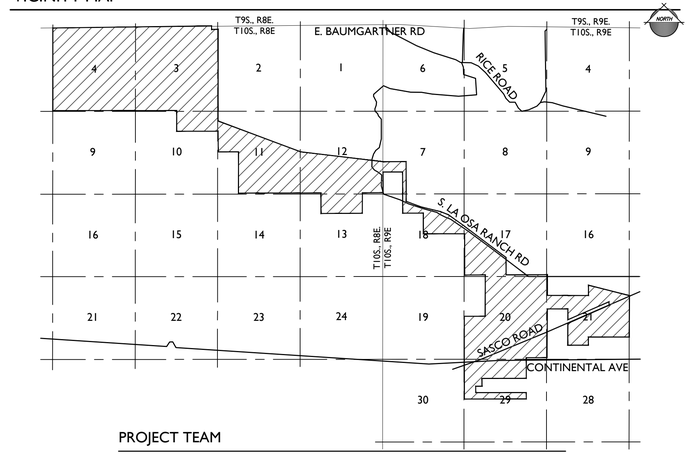
PROPOSED COMPREHENSIVE MAP
FOR
LA OSA

A PORTION OF SECTIONS 3, 4, 10, 11, 12 AND 13,
TOWNSHIP 10 SOUTH, RANGE 8 EAST AND
A PORTION OF SECTIONS 7, 17, 18, 21, AND 29,
TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA
AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA

VICINITY MAP



EXISTING COMP: VERY LOW RESIDENTIAL (0-1 DU/AC)

T9S, R8E
T10S, R8E

BAUMGARTNER ROAD

APN: 409-11-0040
APN: 409-11-002F
APN: 409-11-002E
APN: 409-11-002G
APN: 409-11-0050
APN: 409-11-006C
APN: 409-11-002H
APN: 409-11-003D
APN: 409-11-013C
APN: 409-11-015C
APN: 409-11-015E
APN: 409-11-0160
APN: 409-11-0190
APN: 409-11-018A
APN: 409-14-002D
APN: 409-14-002F
APN: 409-14-004A
APN: 409-24-001C
APN: 409-14-005E
APN: 409-14-005A
APN: 409-30-0020
APN: 409-31-0010
APN: 409-31-0330
APN: 409-25-001E
APN: 409-25-002G
APN: 409-25-003G
APN: 409-25-001D
APN: 409-25-002F
APN: 409-25-001C
APN: 409-25-003E

4 3 10 11 12 7 13 18 17 16 20 21 29

LIMITS OF FLOODPLAIN ZONE A

EXISTING COMP: VERY LOW RESIDENTIAL (0-1 DU/AC)

EXISTING COMP: VERY LOW RESIDENTIAL (0-1 DU/AC)

EXISTING COMP: VERY LOW RESIDENTIAL (0-1 DU/AC)

EXISTING COMP: MAJOR OPEN SPACE

EXISTING COMP: RECREATION / CONSERVATION

EXISTING COMP: RECREATION / CONSERVATION

EXISTING COMP: VERY LOW RESIDENTIAL (0-1 DU/AC)

LA OSA RANCH ROAD

LA OSA RANCH ROAD

LA OSA RANCH ROAD

SASCO ROAD

CONTINENTAL AVENUE

T10S, R8E
T10S, R9E

A B C D E F G H

GAS

GAS

GAS

GAS

LEGEND

- MODERATE LOW DENSITY RESIDENTIAL (1-3.5 DU/AC)
- VERY LOW RESIDENTIAL (0-1 DU/AC)
- MAJOR OPEN SPACE
- RECREATION CONSERVATION
- EXISTING FLOOD PLAIN - ZONE "A"
- EXISTING VERY LOW DENSITY RESIDENTIAL
- AREA OF FLOODPLAIN OVERLAP
- GENERAL PUBLIC FACILITIES / SERVICES
- EMPLOYMENT
- 2 - 115 KV POWER LINES WAPA
- 230 KV POWER LINE APS
- GAS PIPELINE

NORTH

1200 0 1200 2400
scale: 1" = 1200' feet

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TEL: (480) 503-2250
CONTACT: DANIEL "OX" AUXIER, PE
dan.auxier@epsgroupinc.com

SMALL APNS (SEE SECTION 21)

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E	409-26-002A & 409-26-002B
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H	409-26-0480

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www.epsgroupinc.com

EPS GROUP

Project:
La Osa
Pinal County, Arizona

Proposed Comprehensive Map

Revisions:
MAY 29, 2025 - 1ST SUBMITTAL

Call at least two full working days before you begin excavation.
ARIZONA811
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

Designer: STAFF
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of 1

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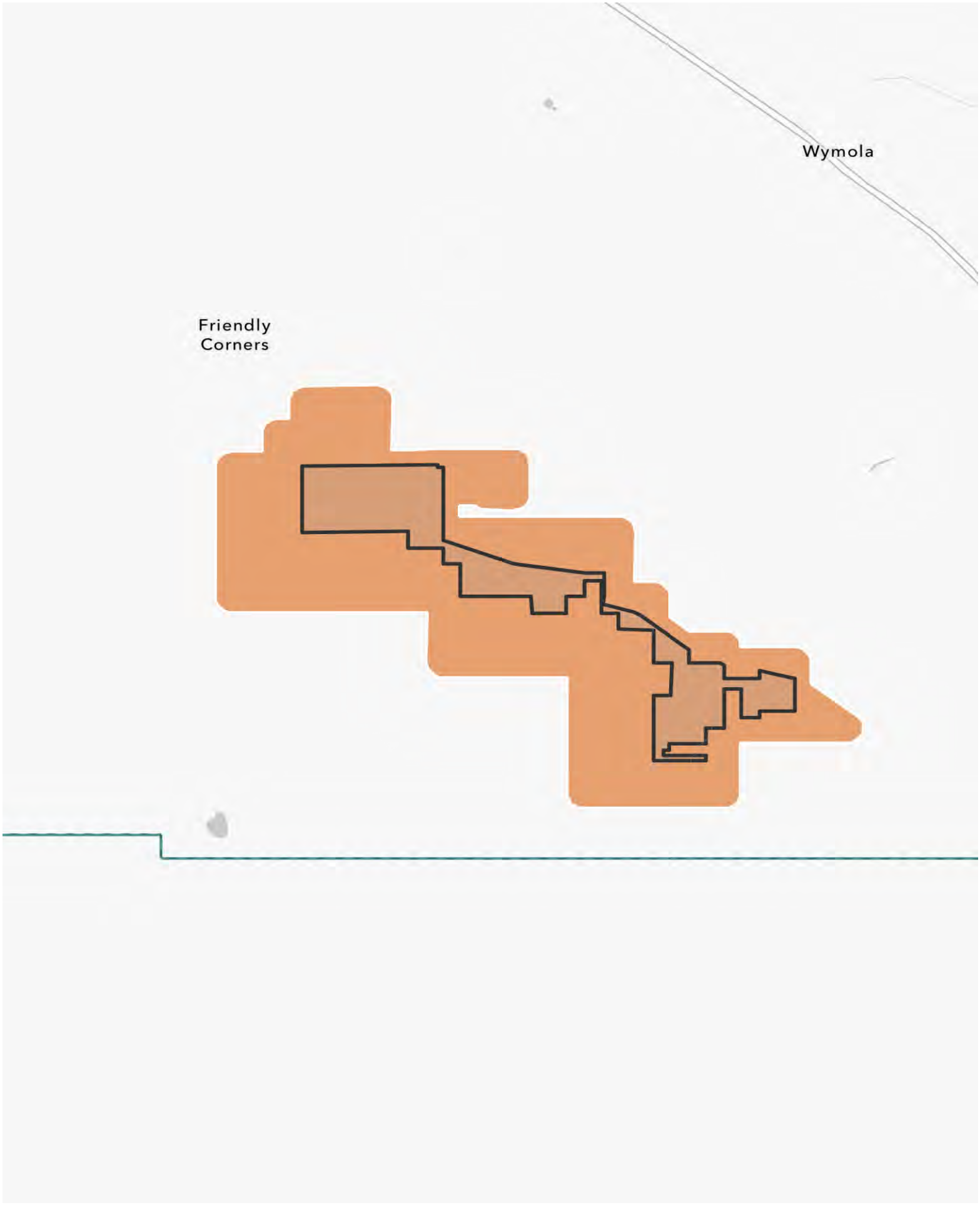
La Osa - 1,200' Buffer Map



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TUCSON, AZ 85715-5300

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11670 TIMBERLAKE DR
SAN DIEGO, CA 92131-9213

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3146 CHARLES MACDONALD DR
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3412 N 62ND ST
SCOTTSDALE, AZ 85251-1543

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1789 E HATFIELD RD
CASA GRANDE, AZ 85193-3961

NAP
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409310290
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409310100
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2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409117020
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409310270
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310090
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
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PHOENIX , AZ 85016-6349

USA409004
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409310260
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409147080
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409310200
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PHOENIX , AZ 85016-6349

409147070
, -

409310240
CHAVEZ TOMAS
12849 N OAKHURST LOOP
ORO VALLEY , AZ 85755-5000

409310020
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310310
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310250
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310030
VARNEY & POTTER
MAIL RETURN
, -

409310320
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310060
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310040
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310330
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310050
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310070
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310300
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
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PHOENIX , AZ 85016-6349

409310120
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
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PHOENIX , AZ 85016-6349

409310080
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310280
VARNEY & POTTER
MAIL RETURN
, -

409310110
LA OSA LIVESTOCK COMPANY
MAIL RETURN
, -

409310130
LA OSA LIVESTOCK CO
MAIL RETURN
, -

409310140
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310150
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310170
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310180
KELLY JAMES P
MAIL RETURN
, -

409310190
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310210
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310220
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310010
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409307000
, -

409290190
WILT JANELLE C
3035 S SHIELA AVE
TUCSON , AZ 85735-8573

40929018B
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40929018A
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40929017B
MAHLE ERNEST E
PO BOX 21239
WICKENBURG , AZ 85358-8535

40929017C
MAYNEZ M ANTONIO VISENTE
4209 HAMPSHIRE LN
EL PASO , TX 79902-2133

40929017A
HAASCO MEDIA LLC
8200 CANNON CT
LAGO VISTA , TX 78645-5481

40929011A
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40929011B
SPINDLER REGINALD A
MAIL RETURN
, -

409290120
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409290130
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409290140
PIONTKOWSKI KRISTIE C
2065 E CIRCLE RIDGE DR
SAINT GEORGE , UT 84790-8479

409290150
HAASCO MEDIA LLC
15715 WHITEWATER LN
HOUSTON , TX 77079-9254

409290160
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409290100
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409290090
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409290080
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409290070
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40929001A
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40929002B
OLMSTEAD PAUL (EST OF)
2865 E NANCE ST
MESA , AZ 85213-3164

40929002A
BRIGGS JAMES E JR
5901 E MIRAMAR DR
TUCSON , AZ 85715-5300

40929001B
AMARAL JOSEPH & JOAN
11670 TIMBERLAKE DR
SAN DIEGO , CA 92131-9213

409290030
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409290040
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409290050
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409290060
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409300020
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409300010
WADINA GILBERT S & JUDY
3146 CHARLES MACDONALD DR
SARASOTA , FL 34240-0871

409140140
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40925003C
JAMES LAURENCE P
917 N COLLEGE AVE
CLAREMONT , CA 91711-1392

409257000
, -

409260150
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40926014B
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409270040
WHITE RONELLA T
MAIL RETURN
, -

409260360
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409260130
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40926014A
STATE OF ARIZONA
1616 W ADAMS ST
PHOENIX , AZ 85007-7261

409260160
KETOLA MARGARET H TR
MAIL RETURN
, -

409260170
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409260350
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409260370
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409260120
LA OSA LIVESTOCK CO
MAIL RETURN
, -

409260190
HAASCO MEDIA LLC
8200 CANNON CT
LAGO VISTA , TX 78645-5481

409267020
, -

409260340
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409260110
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260380
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40926018B
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260090
LA OSA LIVESTOCK CO
MAIL RETURN
, -

409260080
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260100
LA OSA LIVESTOCK CO
MAIL RETURN
, -

40926018A
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260300
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260310
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260320
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260330
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409267010
, -

409260400
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260410
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

40926006A
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260070
LA OSA LIVESTOCK CO
MAIL RETURN
, -

409260420
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

40926006C
COUNTRY STORE GALLERY INC
MAIL RETURN
, -

40926006B
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260200
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260290
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260390
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260430
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

40925001C
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409260460
LA OSA LIVESTOCK CO
MAIL RETURN
, -

409260470
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409267000
, -

409260450
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

40926004C
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

40925003E
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40926004B
666ISMONEY LC
PO BOX 666
TUCSON , AZ 85702-2066

40926004F
BROWN CAROL
2114 W GRANT RD 42
TUCSON , AZ 85745-8574

409260050
LA OSA LIVESTOCK CO
MAIL RETURN
, -

40926004E
BROWN HARLEY
2114 W GRANT RD 42
TUCSON , AZ 85745-8574

40927003B
WHITE RONELLA T
MAIL RETURN
, -

40926004D
ARIZONA BOARD OF REGENTS
PO BOX 210186
TUCSON , AZ 85721-1018

40926004G
HARRIS MURREL (EST OF)
MAIL RETURN
, -

40926021B
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

40926021A
HAASCO MEDIA LLC
15715 WHITEWATER LN
HOUSTON , TX 77079-9254

40926028B
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

40926028A
HAASCO MEDIA LLC
15715 WHITEWATER LN
HOUSTON , TX 77079-9254

409260440
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260030
LA OSA LIVESTOCK CO
MAIL RETURN
, -

409260230
LA OSA LIVESTOCK CO
MAIL RETURN
, -

409260270
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

40926002A
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

40926002B
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260220
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260260
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260480
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260010
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260240
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260250
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409260490
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

40925001D
VERMA LA OSA RANCH 1-10/SASCO RD, CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

409147040
, -

40914005C
SASCO CEMETERY LLC
PO BOX 1009
RED ROCK , AZ 85145-5100

40914005A
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409250040
WOEHLECKE KARL A
PO BOX 1009
RED ROCK , AZ 85145-5100

40925002D
WOEHLECKE KARL A & LISA F
PO BOX 1009
RED ROCK , AZ 85145-5100

40925002B
CADMAN TONI
540 S OTIS ST
LAKEWOOD , CO 80226-6344

409270020
WHITE RONELLA T
12010 E RICE RD
RED ROCK , AZ 85145-8514

40927003A
WHITE RONELLA T
MAIL RETURN
, -

409240050
BENEDETTO ANTHONY & ERNESTINE FAMILY TR
PO BOX 1027
RED ROCK , AZ 85145-5100

409240040
BENEDETTO ANTHONY
PO BOX 1027
RED ROCK , AZ 85145-5100

409240030
BENEDETTO ANTHONY & ERNESTINE FAMILY TR
PO BOX 1027
RED ROCK , AZ 85145-5100

409240020
BENEDETTO ANTHONY
PO BOX 1027
RED ROCK , AZ 85145-5100

409220040
WHITE RONELLA T
MAIL RETURN
, -

40923005B
WOEHLECKE KARL A
PO BOX 1009
RED ROCK , AZ 85145-5100

40923005C
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

409230060
WHITE RONELLA T
MAIL RETURN
, -

40922003A
D&S LAND & CATTLE LLC
14901 N AGUIRRE RD
MARANA , AZ 85653-3910

409130010
SKYBRIDGE LENDING LLC
MAIL RETURN
, -

409110190
VERMA LA OSA RANCH 1-10/SASCO RD, CASA GRANDE 3677 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40924001B
WHITE RONELLA T
MAIL RETURN
, -

40914002B
ABA LLC
7240 N DREAMY DRAW DR UNIT 110
PHOENIX , AZ 85020-0526

409110120
SKYBRIDGE LENDING LLC
3412 N 62ND ST
SCOTTSDALE , AZ 85251-1543

409110160
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40911011A
VERMA LA OSA RANCH I-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40911013C
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409110170
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

409140010
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40914003A
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40941002A
VERMA LA OSA RANCH I-10/SASCO CASA GRANDE 3677 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409120020
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

409170020
WHITE RONELLA T
MAIL RETURN
, -

40941002B
VERMA LA OSA RANCH I-10/SASCO CASA GRANDE 3677 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40911002H
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40911003D
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409127020
, -

409127040
, -

40917001A
ENGLAND DON A JR
1789 E HATFIELD RD
CASA GRANDE , AZ 85193-3961

409110050
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409117010
, -

40911006C
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40911002G
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409410010
JVERMA PINAL 156 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409110070
VERMA LA OSA RANCH 1-10/
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409110040
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40911002F
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40911002E
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40911001B
GOBEA FRANK
6229 E BAUMGARTNER RD
ELOY , AZ 85131-1954

409117000
, -

409127000
, -

411327140
, -

411327130
, -

41132021B
DONLEY FAM TRUST
10475 W QUARTZ DR
CASA GRANDE , AZ 85193-3914

41132931E
, -

41132831D
ARIZONA ORGANIC BEANS LLLP
PO BOX 68437
TUCSON , AZ 85737-7843

41132831C
, -

411320220
PECAN CREEK RANCH FARM LLC
1955 S LINDSAY RD
GILBERT , AZ 85295-5472

41132831B
, -

40913002C
WAGNER LOUIS EDWARD AND MARY JANE CO-TRS
101 RAINBOW DR # 4548
LIVINGSTON , TX 77399-9930

40913002D
WAGNER LOUIS EDWARD AND MARY JANE CO-TRS
101 RAINBOW DR 4548
LIVINGSTON , TX 77399-9104

41132021D
CENTRAL ARIZONA IRRIGATION & DRAINAGE DISTRICT
231 S SUNSHINE BLVD
ELOY , AZ 85131-1245

41132021C
DONLEY FAMILY TRUST
10475 W QUARTZ DR
CASA GRANDE , AZ 85193-3914

40925002F
VERMA LA OSA RANCH I-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40911015C
VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40911015D
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40911015E
VERMA LA OSA RANCH 1-10/SASCO RD, CASA GRANDE 3677 ACRES LLC
3301 W INDIAN SCHOOL RD
PHOENIX , AZ 85017-7385

40911015F
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40911018A
VERMA LA OSA RANCH 1-10/SASCO RD, CASA GRANDE 3677 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40911018B
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40914002D
VERMA LA OSA RANCH 1-10/SASCO RD; CASA GRANDE 3677 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40914002E
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40914002F
VERMA LA OSA RANCH I-10/SASCO RD, CASA GRANDE 3677 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40914002G
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40914004A
VERMA LA OSA RANCH 1-10/SASCO RD, CASA GRANDE 3677 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40914004B
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40924001C
VERMA LA OSA RANCH 1-10/SASCO RD, CASA GRANDE 3677 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40924001D
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40914005E
VERMA LA OSA RANCH 1-10/SASCO RD, CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

40914005F
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40925002H
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40925002J
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40925002G
VERMA LA OSA RANCH 1-10/SASCO RD, CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

40925001E
VERMA LA OSA RANCH 1-10/SASCO RD, CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

40925001F
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40925003H
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40925003G
VERMA LA OSA RANCH 1-10; CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

JVERMA PINAL 156 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX, AZ 85016-6349

VERMA LA OSA RANCH 1-10/
2375 E CAMELBACK RD STE 600
PHOENIX, AZ 85016-6349

GOBEA FRANK
6229 E BAUMGARTNER RD
ELOY, AZ 85131-1954

DONLEY FAM TRUST
10475 W QUARTZ DR
CASA GRANDE, AZ 85193-3914

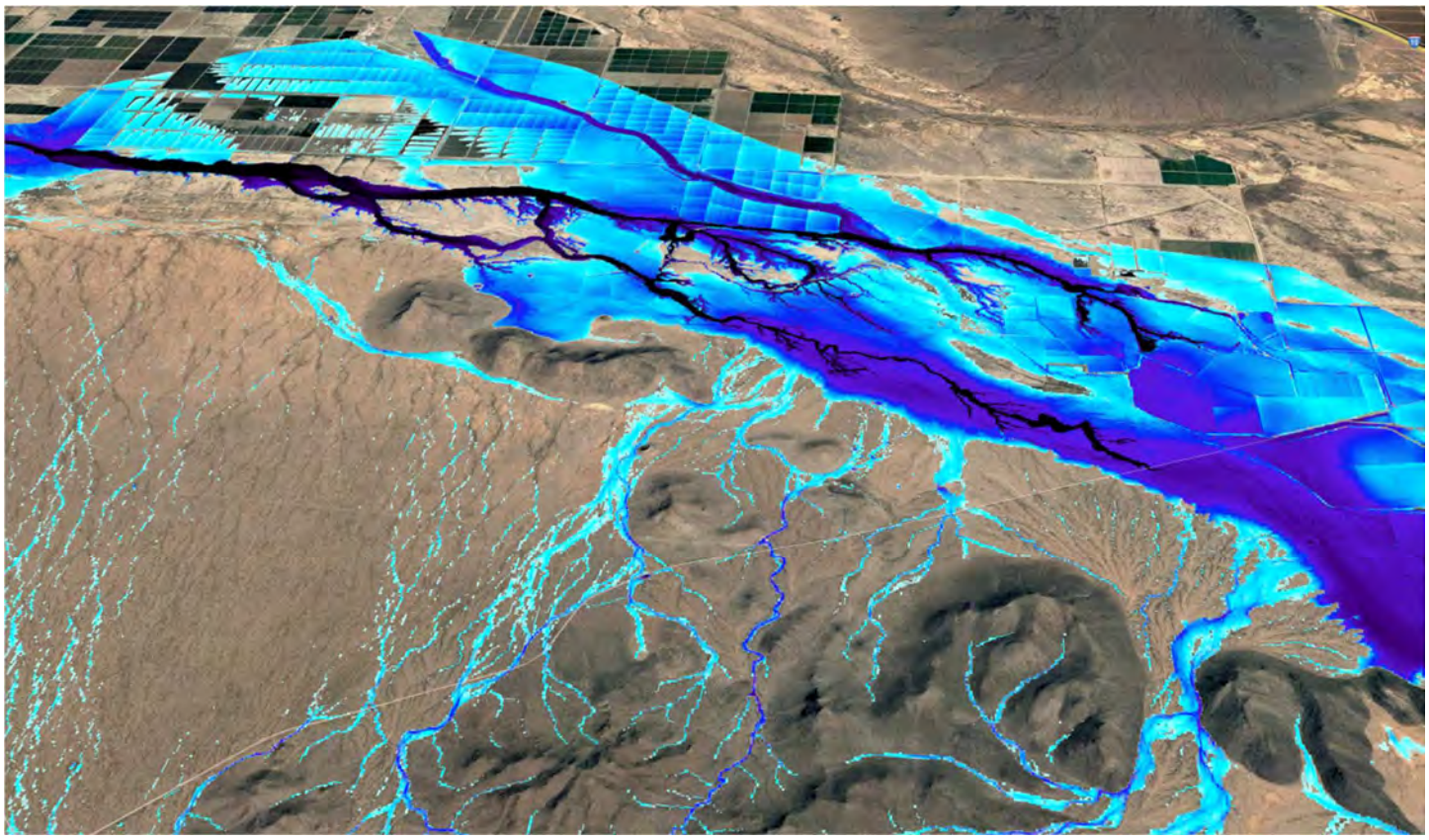
ARIZONA ORGANIC BEANS LLLP
PO BOX 68437
TUCSON, AZ 85737-7843

PECAN CREEK RANCH FARM LLC
1955 S LINDSAY RD
GILBERT, AZ 85295-5472

WAGNER LOUIS EDWARD AND MARY JANE CO-TRS
101 RAINBOW DR 4548
LIVINGSTON, TX 77399-9104

CENTRAL ARIZONA IRRIGATION & DRAINAGE DISTRICT
231 S SUNSHINE BLVD
ELOY, AZ 85131-1245

VERMA LA OSA RANCH 1-10/SASCO RD, CASA GRANDE 3677 ACRES LLC
3301 W INDIAN SCHOOL RD
PHOENIX, AZ 85017-7385



PRELIMINARY HYDROLOGY STUDY

Pinal Solar Project

Pinal County, Arizona

JULY 11, 2023

PREPARED FOR:

STELLAR
RENEWABLE POWER

PREPARED BY:

Westwood

Westwood

Preliminary Hydrology Study

Pinal Solar Project

Pinal County, Arizona

Prepared For:

Stellar Renewable Power

Prepared By:

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Project Number: R0044731.00
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Executive Summary

The purpose of this study is to analyze and review the existing hydrology of the Pinal Solar Project (Project or Site) and any impacts that the hydrology may play in the design of the proposed solar array. This report was prepared to be used by the Project Team in the design and layout of the Project and not intended for submittal to reviewing agencies for stormwater permitting.

The Project Site is proposed on approximately 3,100 acres and is located within Pinal County, Arizona, approximately 10 miles west of Red Rock, Arizona. The majority of the Site is located on land that generally slopes to the northwest. However, the center and southeast portions of the Site are located on hillsides with steep slopes that generally slope north and northeast. The modeled watershed area encompasses approximately 155 square miles and generally drains towards the northwest.

The analysis shows varying water depths and velocities across the majority of the Site (Exhibits 6 through 7A). Higher flood depths exist within the Greene Canal and its surrounding areas located in the northern portion of the Site. Higher flood depths are also found along the Los Robles Wash which flows adjacent to the Site, and through portions of the east side of the Site. High velocities and scour are found in the northern and central portions of the Site, and along the eastern portion of the Site within the Greene Canal, Los Robles Wash, and their adjoining tributaries.

Based on experience with similar projects, portions of the Site are suitable for the planned development by avoiding or designing to areas of high flood depths.

1.0 Data Sources

Table 1 – Data Sources

Task	Format	Source	Use
Elevation	1-meter Tiff 1-meter Lidar	The National Map The National Map	FLO-2D Model Elevations
Crop Data	Shapefile	USDA 2021 Cropland Data Layer	Landcover
Soils	Shapefile	USGS SSURGO Dataset	Curve Numbers
Precipitation	PDF File	NOAA Atlas 14	Design Storms
HUC-12 Drainage Boundary	Shapefile	USGS	Define Model Extents
Site Boundary	Layout AZ Pinal County 221.25 MWp0.34_GCR.kml	Stellar Renewable Power	Define Model Extents
2014 Aerial Photography	ArcGIS Map Service	USDA FSA	Reference
FEMA Flood Zones	PDF; Shapefile	FEMA	Reference

2.0 Coordinate System

Table 2 – Coordinate System Used

Projection	State Plane Coordinate System
Zone	Arizona Central (FIPS 202)
Datum	NAD83
Planar Units	Feet (International)

3.0 Existing Conditions

3.1 Project Location

The Project Site covers approximately 3,100 acres and is located within Pinal County, Arizona (Exhibit 1). The Project Site is located approximately 35 miles northwest of Tucson, Arizona, and is located near Red Rock, Arizona. Red Rock is located 10 miles east of the Project Area (Exhibit 1).

3.2 Watershed Hydrology

The modeled watershed area encompasses approximately 155 square miles that generally drains to the northwest. However, in the southwest section of the modeled watershed, an alluvial fan causes water to drain to the north and northeast. In the southeast section of the modeled watershed, the Santa Cruz River flows northwest. North of the project boundary, the Santa Cruz River branches off to form the Greene Canal, which flows through the northern portion of the Site and exits the modeled watershed in the northwest. Also in the southeast section of the watershed, Blanco Wash flows to the north and connects to the Los Robles Wash which then flows northwest into the eastern portion of the Site. In the northern section of the Site, the Los Robles Wash and Greene Canal combine and flow northwest to exit the modeled watershed.

3.3 Onsite Conditions

The majority of the Project is located on the Greene Canal HUC-12 Boundary, with the exception of the northeastern most section of the Site, which is located on the Silver Bell Wash HUC-12 Boundary. The Site generally drains to the north and northwest toward the Greene Canal, with the exception of the central portion of the Site which is located on a steep hill and drains north and northeast. In general, the Site has slopes of less than 3%, although the southernmost portion of the Site can reach slopes greater than 10%, and on the hilltop in the central portion of the Site, slopes can exceed 30%.

US Fish and Wildlife Service National Wetlands Inventory (NWI Wetlands) provides information on the distribution of US wetlands and are shown in Exhibit 2. The NWI Wetlands dataset is not all-inclusive and other wetlands not shown may exist. The landcover on the Project area is primarily shrubland (Exhibit 4) and has soils that are primarily belonging to Hydrologic Soil Group (HSG) C (Exhibit 3). Typically, C soils are Clay Loams. Soils belonging to Hydrologic Soil Group C exhibit low infiltration rates; therefore, standing water will be slow to infiltrate during and after storm events when compared to soils belonging to Hydrologic Soil Groups A or B.

The main potential hydrologic issues on Site are flooding and erosive velocities.

3.4 FEMA Flood Zones

FEMA has completed a study to determine flood hazards for the selected location; the project area is covered by FIRM panels 04021C2375E and 04021C2350E (Appendix C). The Project contains areas of FEMA Zone A flood hazards (Exhibits 2 and 6). The FEMA Zone A covers the majority of the northern portion of the Site and cuts through the entirety of the northeast side of the Site. A FEMA Zone A flood hazard is a 100-year flood hazard with no defined base flood elevation. No preliminary or pending FEMA changes are proposed within the project area.

4.0 Proposed Conditions

4.1 Proposed Conditions

The majority of the proposed solar facility will consist of above ground mounted solar modules. A small amount of impervious surface will be added from the gravel access roads and electrical equipment pads. The Project should be designed to minimize grading and maintain existing drainage patterns. A flood analysis of pre-development and post development depths may need to be completed once civil design is finalized for permitting purposes.

4.2 Post-Construction Stormwater Management

A desktop review of Pinal County Stormwater Management and Drainage Requirements did not reveal any solar-specific regional or county requirements. The Project therefore should comply with all state stormwater management requirements, as applicable. As the Project design progresses, local stormwater management requirements should be reviewed to confirm that all applicable requirements have been identified and met.

5.0 FLO-2D Modeling

5.1 FLO-2D Modeling Overview

FLO-2D is a physical process model that routes rainfall runoff and flood hydrographs over flow surfaces or in channels using the dynamic wave approximation to the momentum equation. FLO-2D offers advantages over 1-D models and unit hydrograph methods by allowing for breakout flows and visualization of flows across a potential site. The primary inputs are a DTM (elevation data), curve numbers, and precipitation.

A FLO-2D model with 50-foot grid cells was utilized to model the watershed within and directly impacting the Project Site.

5.2 Elevation Data

The elevation data input into the FLO-2D model was a blend of 1m Tiff data from The National Map and 1m Lidar data from The National Map (Exhibit 5). The 1m Tiff data was used for topographic coverage of the 50,000 acres, and the 1m Lidar data was used for topographic coverage of the 49,000 acres (Exhibit 5). This data was exported as a single digital terrain model (DTM), which is read directly into FLO-2D.

5.3 Watershed Soils and Land Cover

USDA-NRCS SSURGO soil data provides soil types within the Project boundary and full coverage of the contributing watershed. Soils are primarily classified as Hydrologic Soil Group (HSG) C within the Project boundary (Exhibit 3). Land cover was obtained from the USDA 2021 Cropland Data Layer. Exhibit 4 displays the land cover classes for the entire watershed. Curve numbers were applied to each grid cell in the FLO-2D model based on intersecting the grid with the curve numbers (Exhibit 5).

5.4 Precipitation

Precipitation data was downloaded from NOAA Atlas 14 (Appendix A) and used for the FLO-2D analysis for the 100-year, 24-hour storm event. Using the 100-year rainfall depth of 3.84 inches for this location allows for the best initial analysis in order to determine the worst areas of flooding and erosion during the storm event. Rainfall inputs were distributed based on a site-specific nested Atlas 14 distribution pattern.

5.5 Inflows

Inflow 1 represents Blanco Wash which enters the modeled watershed from the southeast and flows approximately 2 miles north before joining the Los Robles Wash, which continues to the east of the Project area. Inflow 2 represents Los Robles wash which also enters the modeled watershed from the southeast. The Pima County FEMA Flood Insurance Study reports a 100-year peak flood of 35,000 cfs for the Los Robles Wash and 17,000 cfs for Blanco Wash (Appendix D). Also in the southeast of the modeled watershed, Inflow 3 represents the Santa Cruz River which flows northwest to the east of the Project area. StreamStats data reports a 100-year peak flood of 29,600 cfs for the Santa Cruz River (Appendix F). Inflow 4 was added to the southeast side of the modeled watershed, north of the Santa Cruz inflow, to model the potential effects of an alluvial fan approximately 3 miles away from the modeled watershed boundary. This additional inflow has a 100-year peak flood of 10,900 cfs according to StreamStats data (Appendix E). Inflow hydrographs were created using this data and added to the model (Exhibit 6).

6.0 Flood Analysis Results

6.1 Existing Conditions Flood Analysis

The analysis shows varying water depths and velocities across the majority of the Site (Exhibits 6 through 7A). During a 100-year storm, the flood depths across the majority of the Site are less than 0.5 feet with velocities less than 1 foot/second. However, widespread flooding occurs in the central portion of the Site where an unnamed creek flows. In this area, flood depths can exceed 4 feet and velocities can exceed 1.5 feet/second. Additionally, within and adjacent to the Greene Canal and Los Robles Wash, flood depths and velocities can exceed 10 feet and 8 feet/second, respectively. See Table 3 below for a breakdown of flood depths within the Project Site.

Table 3 – Flood Depths Onsite

Peak Flow Depth (ft)	Percentage of Project Area Covered by Peak Flow Depths
0.00 - 0.49	56.3%
0.50 - 1.00	5.1%
1.01 - 1.50	2.9%
1.51 - 2.00	3.4%
2.01 - 2.50	6.8%
2.51 - 3.00	3.7%
3.01 - 4.00	2.8%
4.01 - 6.00	3.1%
6.01+	15.9%

See Exhibits 6 through 7A for areas within the Project with higher flood depths and velocities.

6.2 Scour

Minimal scour is expected onsite, except for the northern portion and east side of the Site where scour can exceed 2 feet along the Green Canal and Los Robles Wash (Exhibit 8). Scour will also exceed 2 feet in the center portion of the Site where an unnamed tributary flows northwest into the Los Robles Wash. The scour depths calculated for this Project are based on HEC-18 Pier Scour Equations of a 6-inch-wide pile perpendicular to flow. Scour calculations consist of local scour only with unarmored soils and pile bases to provide the conservative local scour results. These scour results do not account for general, rill, or gully scour.

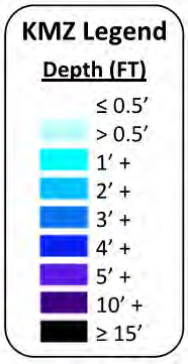
7.0 Recommendations

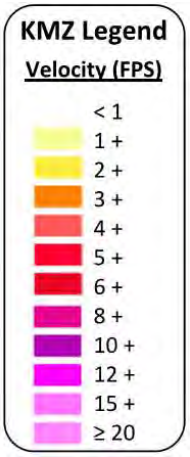
Based on experience on similar projects, portions of the Site are suitable for the planned development and hydrologic concerns can be addressed by either avoiding areas of high flood depths or through detailed engineering design.

8.0 Next Steps

1. Final engineering design should account for the flood depths and velocities presented in Exhibits 6-7A.
2. Facilities to be elevated 1' above the 100-year, 24-hour peak flood elevations.
3. Proposed facilities should avoid FEMA Flood Zones located onsite.
4. Stormwater management should be revisited to ensure the final design meets the local and state requirements.

9.0 Included Output Files





1. Shapefile of 100-Year Rain Event Flow Depth
   2023-07-11_Pinal_PrelimFlowDepthatCell.shp
   Attribute "ID" = Grid Cell Number
   Attribute "VAR" = Max Flow Depth (Feet)

2. Shapefile of 100-Year Rain Event Velocity
   2023-07-11_Pinal_PrelimVelocityatCell.shp
   Attribute "ID" = Grid Cell Number
   Attribute "VAR" = Max Velocity (Feet)

3. KMZ of FLO-2D Results
   2023-07-11_Pinal_PrelimFLO-2D.kmz
   Overlay in Google Earth for graphical representation.

10.0 References Cited

National Engineering Handbook, Part 630 Hydrology. Chapter 9 Hydrologic Soil-Cover Complexes. USDA. NRCS. 210-VI-NEH, July 2004

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Exhibits

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Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary

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N

0 Miles 1.75

Pinal County Solar Project

Pinal County, Arizona

Exhibit 1: Location Map

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01-Location Map - Location Map | 7/10/2023 2:23 PM | mjennings

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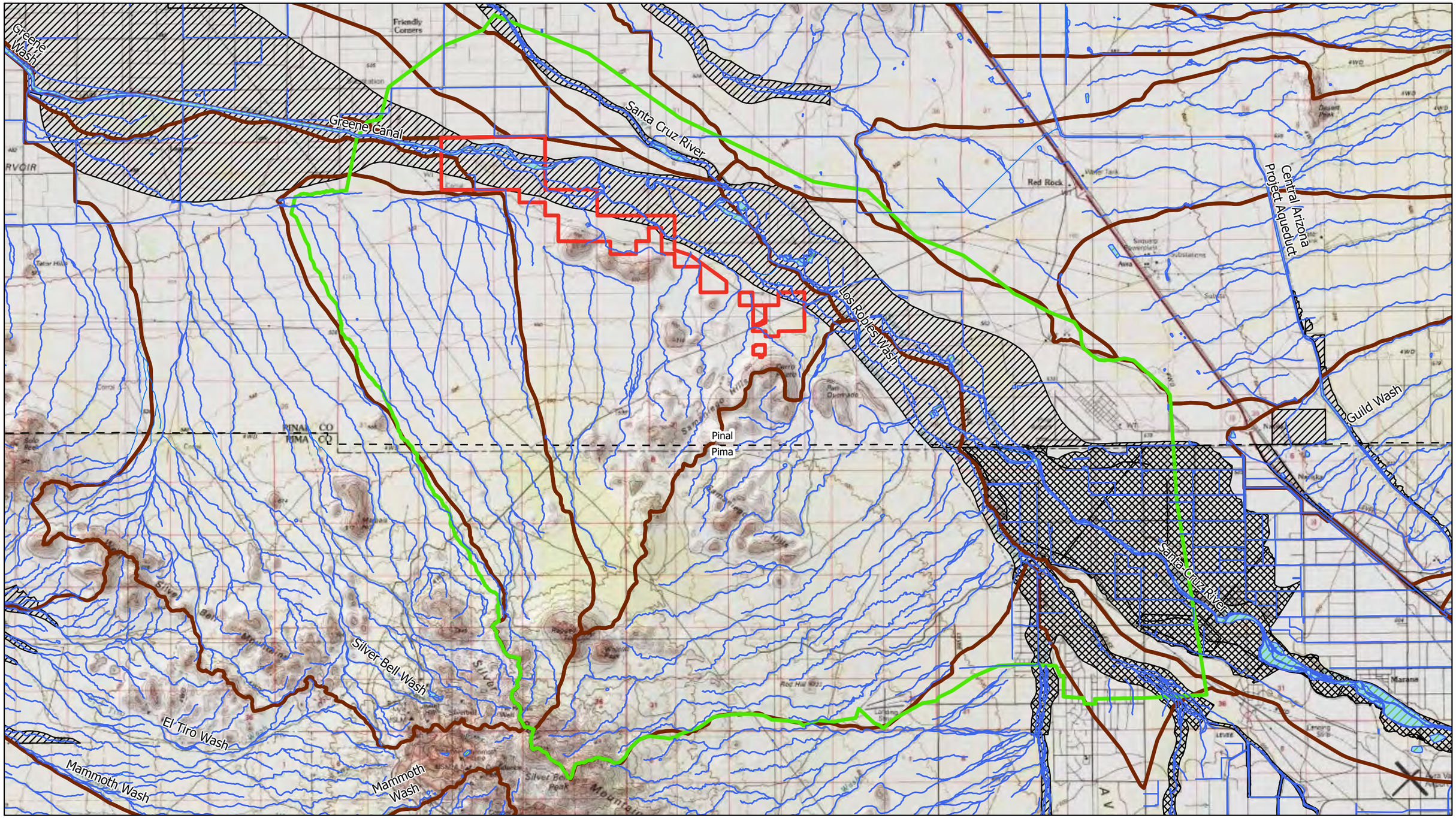

Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- HUC-12 Boundary
- County Boundary
- FEMA Zone A
- FEMA Zone AE
- NWI Wetlands
- NHD Flowlines

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N

0 Miles 1.75

Pinal County Solar Project

Pinal County, Arizona

Exhibit 2: Base Hydrologic Map

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02-Base Hydrologic Map - USGS, FEMA, and NWI Wetlands Map | 7/10/2023 2:23 PM | tgeringe

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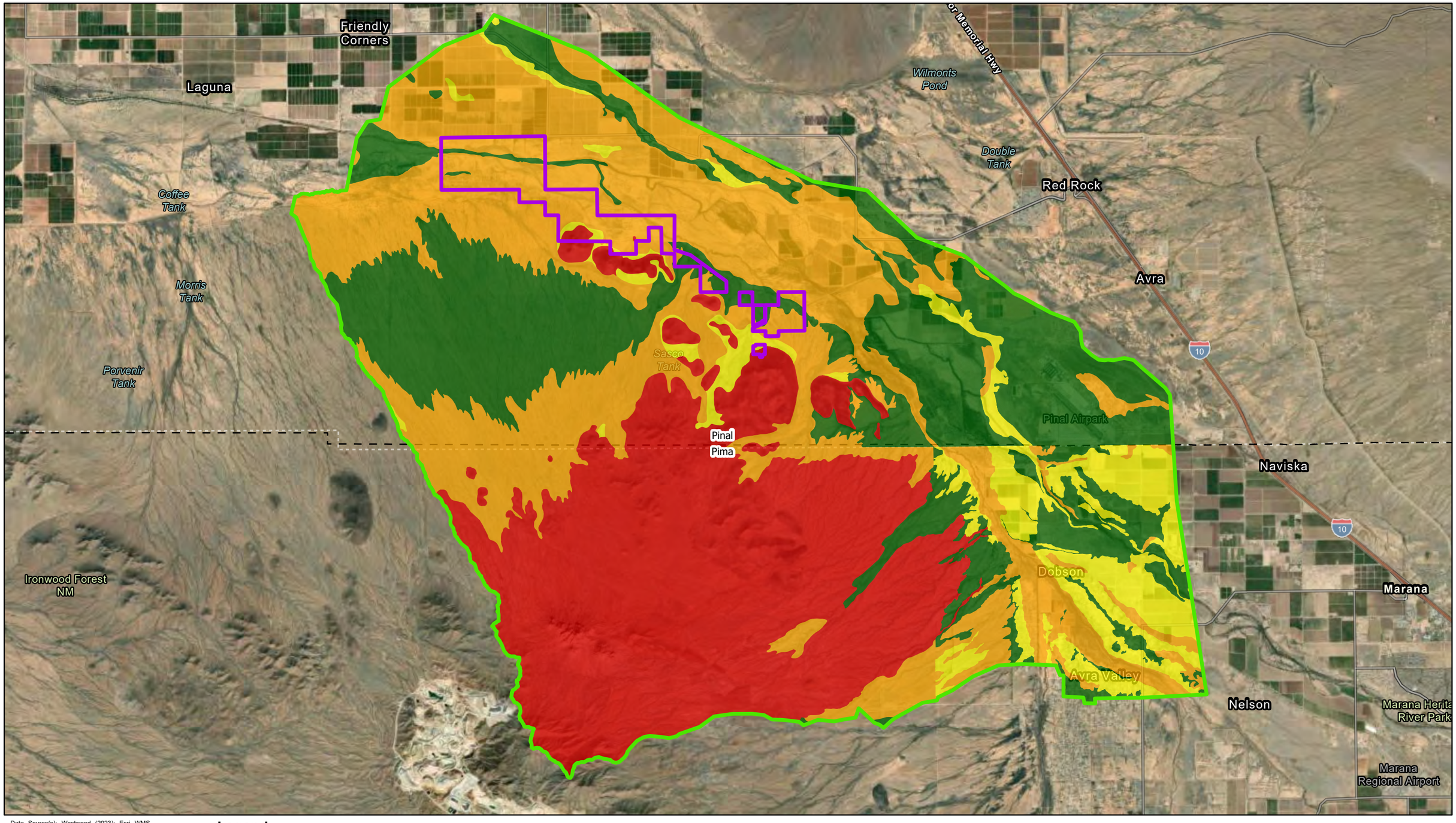

Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary

Hydrologoic Soil Group

- A
- B
- C
- D

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N

0 Miles 1.75

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Pinal County, Arizona

Exhibit 3: Soils Map

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03-Soils Map - Soils Map | 7/10/2023 2:23 PM | mjennings

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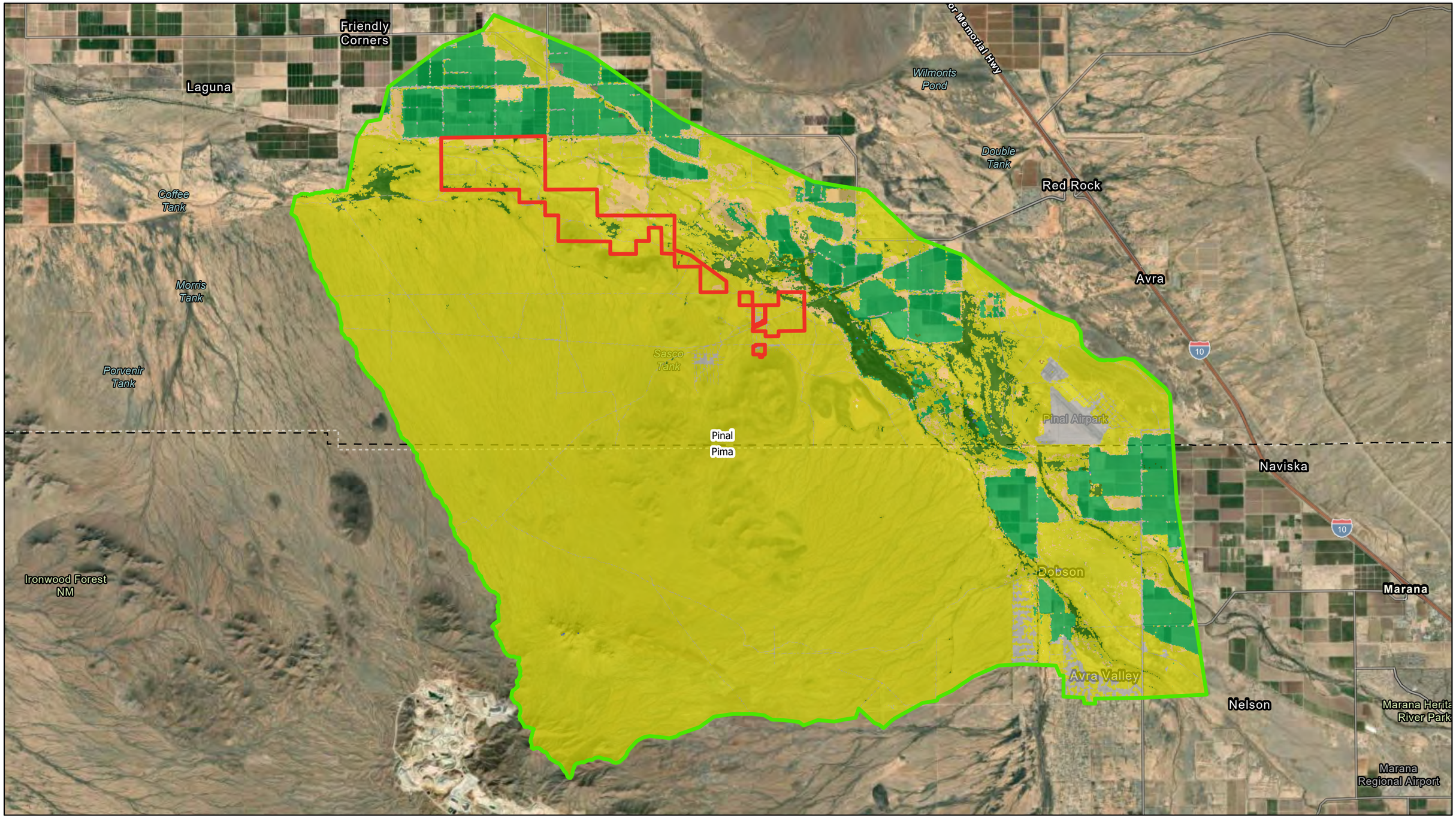

Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary

Landcover

- Barren
- Cultivated
- Developed
- Fallow
- Woods
- Pastureland
- Shrubland
- Water
- Wetland

N

0 Miles 1.75

Pinal County Solar Project

Pinal County, Arizona

Exhibit 4: Landcover Map

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04-Landcover Map - Landcover 7/10/2023 2:23 PM mjennings

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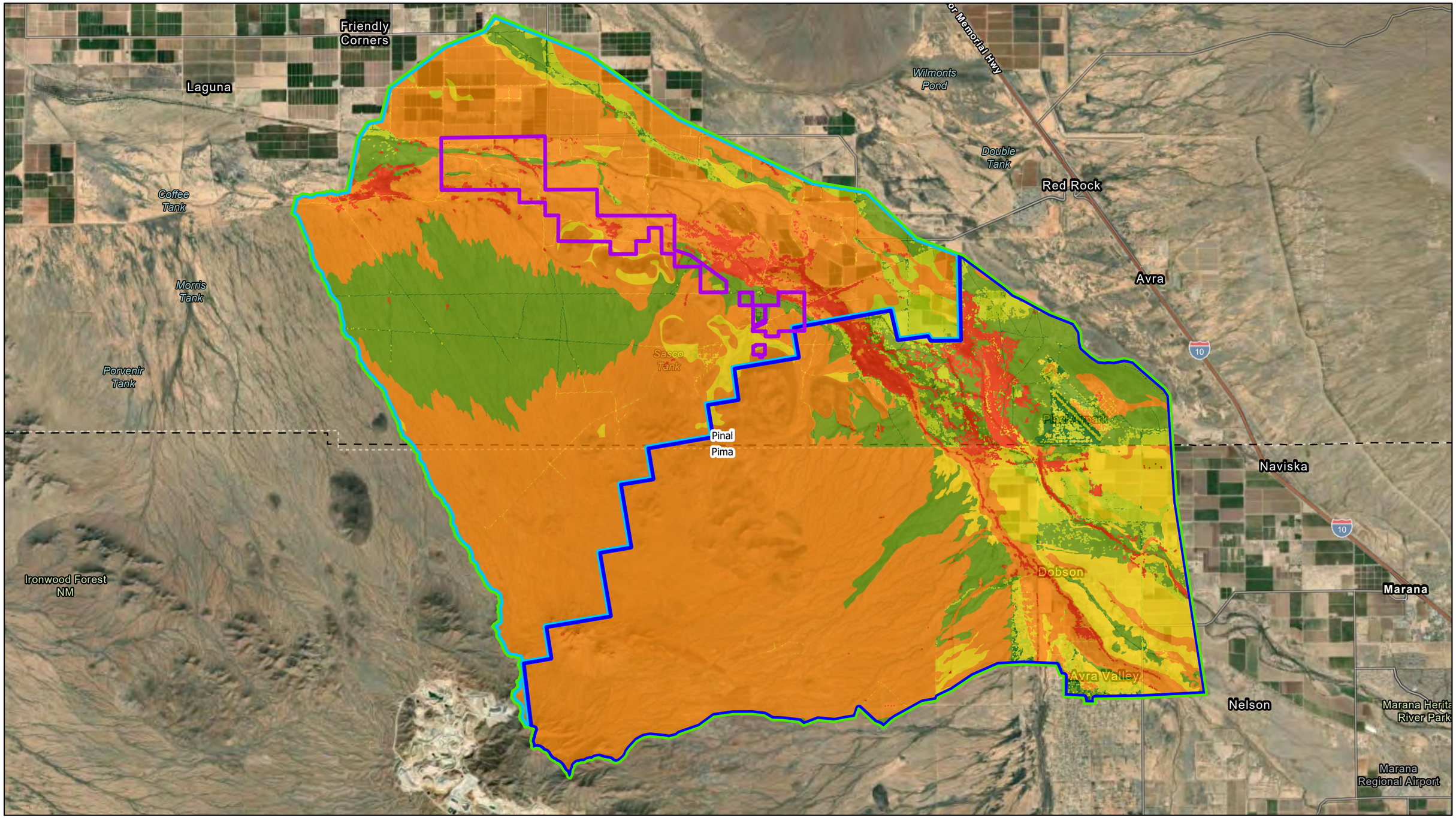

Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary
- 1m TNM Topography Coverage
- 1m Lidar TNM Topography Coverage

Curve Number

- 40 - 49
- 50 - 59
- 60 - 69
- 70 - 79
- 80 - 89
- 90 - 99

N

0 1.75 Miles

Pinal County Solar Project

Pinal County, Arizona

Exhibit 5: Curve Number and Topographic Source Map

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Friendly Corners
Laguna
Wilmonts Pond
Double Tank
Red Rock
Coffee Tank
Morris Tank
Avra
Porvenir Tank
Pinal
Pima
Inflow 4: 10,900 cfs
Naviska
Ironwood Forest NM
Inflow 3: 29,600 cfs
Marana
Inflow 1: 17,000 cfs
Inflow 2: 35,000 cfs
Nelson
Marana Regional Airport

Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary
- Modeled Inflows
- FEMA Zone A
- FEMA Zone AE
- Max Water Depth (ft)
  - 0.50 - 1.00
  - 1.01 - 1.50
  - 1.51 - 2.00
  - 2.01 - 2.50
  - 2.51 - 3.00
  - 3.01 - 4.00
  - 4.01 - 6.00
  - 6.01 +

N

0 Miles 1.75

Pinal County Solar Project

Pinal County, Arizona

Exhibit 6: 100-Year Max Water Depth Map

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06-100 YR Max Water Depth Map - 100 Yr Max Water Depth | 7/7/2023 2:23 PM | mjennings

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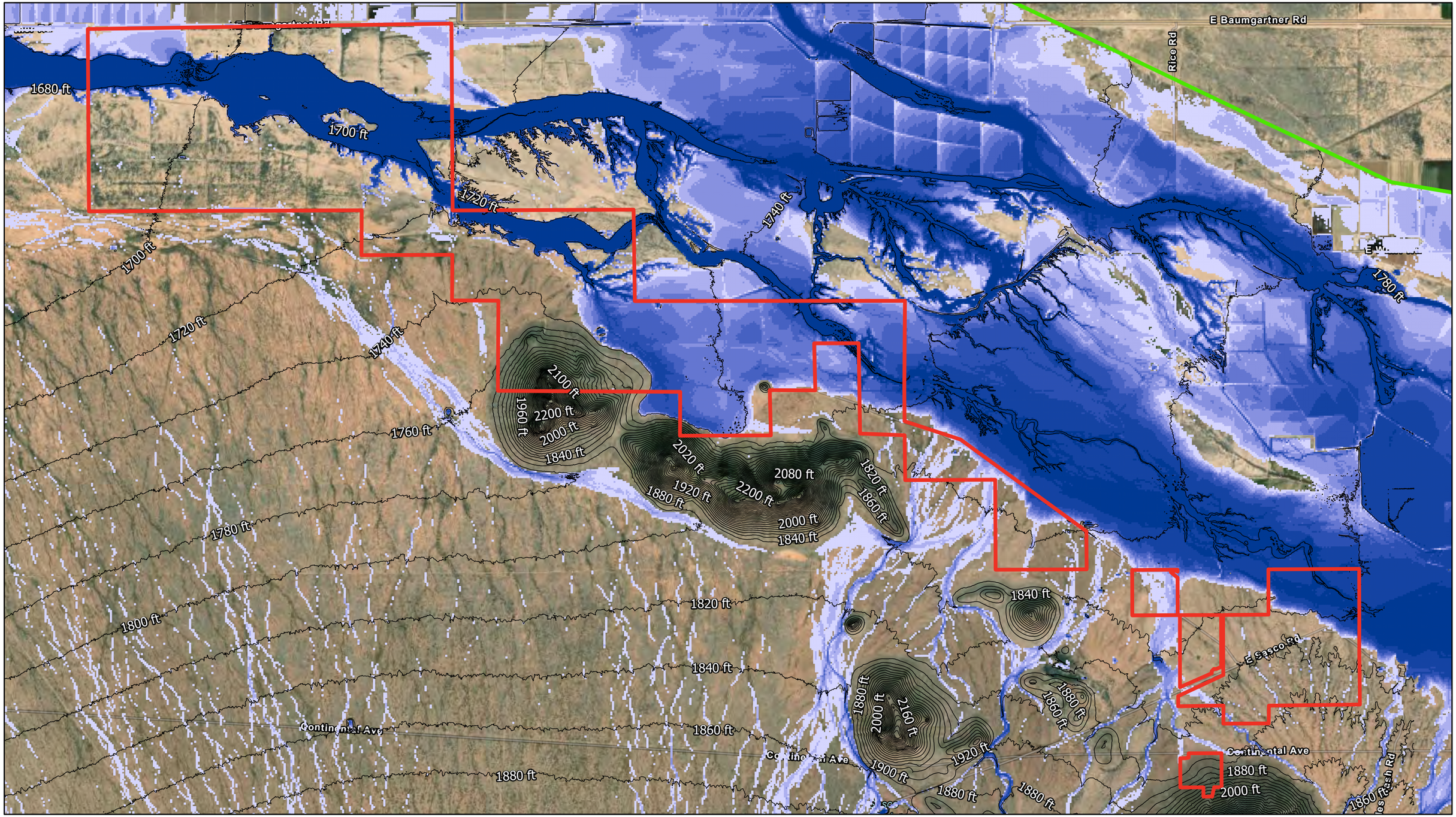

Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary
- 20' Contours

Max Water Depth (ft)

- 0.50 - 1.00
- 1.01 - 1.50
- 1.51 - 2.00
- 2.01 - 2.50
- 2.51 - 3.00
- 3.01 - 4.00
- 4.01 - 6.00
- 6.01 +

N

0 Miles 0.5

Pinal County Solar Project

Pinal County, Arizona

Exhibit 6A: 100-Year Max Water Depth Project Area Map

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06-14-07 Yr Max Water Depth Project Area Maps - 100 Yr Max Water Depth Project Area | 7/10/2023 2:20 PM | tjennings

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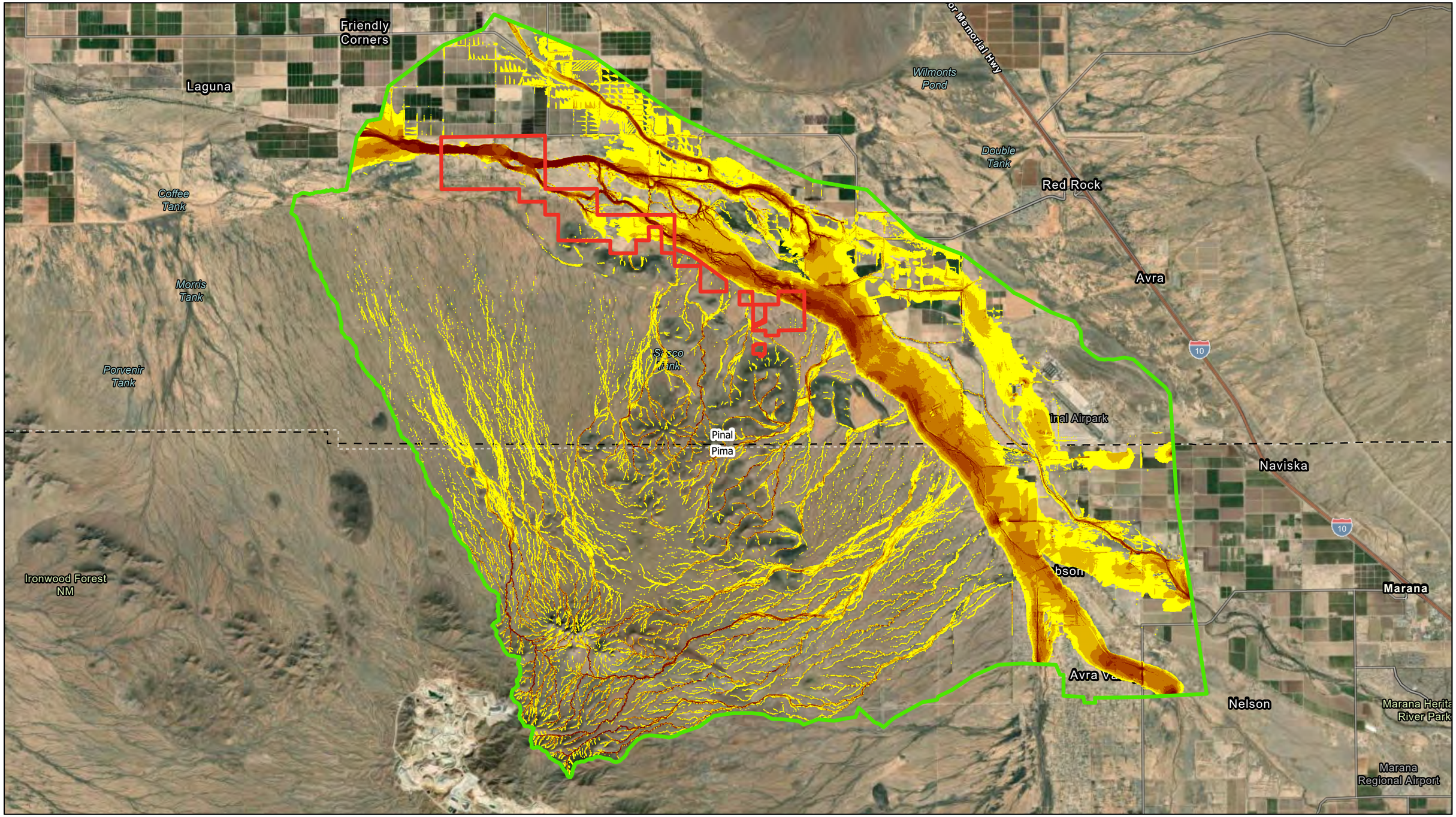

Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary

Peak Velocity (fps)

- 1.00 - 1.50
- 1.51 - 2.00
- 2.01 - 2.50
- 2.51 - 3.00
- 3.01 - 4.00
- 4.01 +

N

0 Miles 1.75

Pinal County Solar Project

Pinal County, Arizona

Exhibit 7: 100-Year Peak Velocity Map

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07:100 Yr Peak Velocity Maps - 100 Yr Peak Velocity | 7/10/2023 2:22 PM | mseniss

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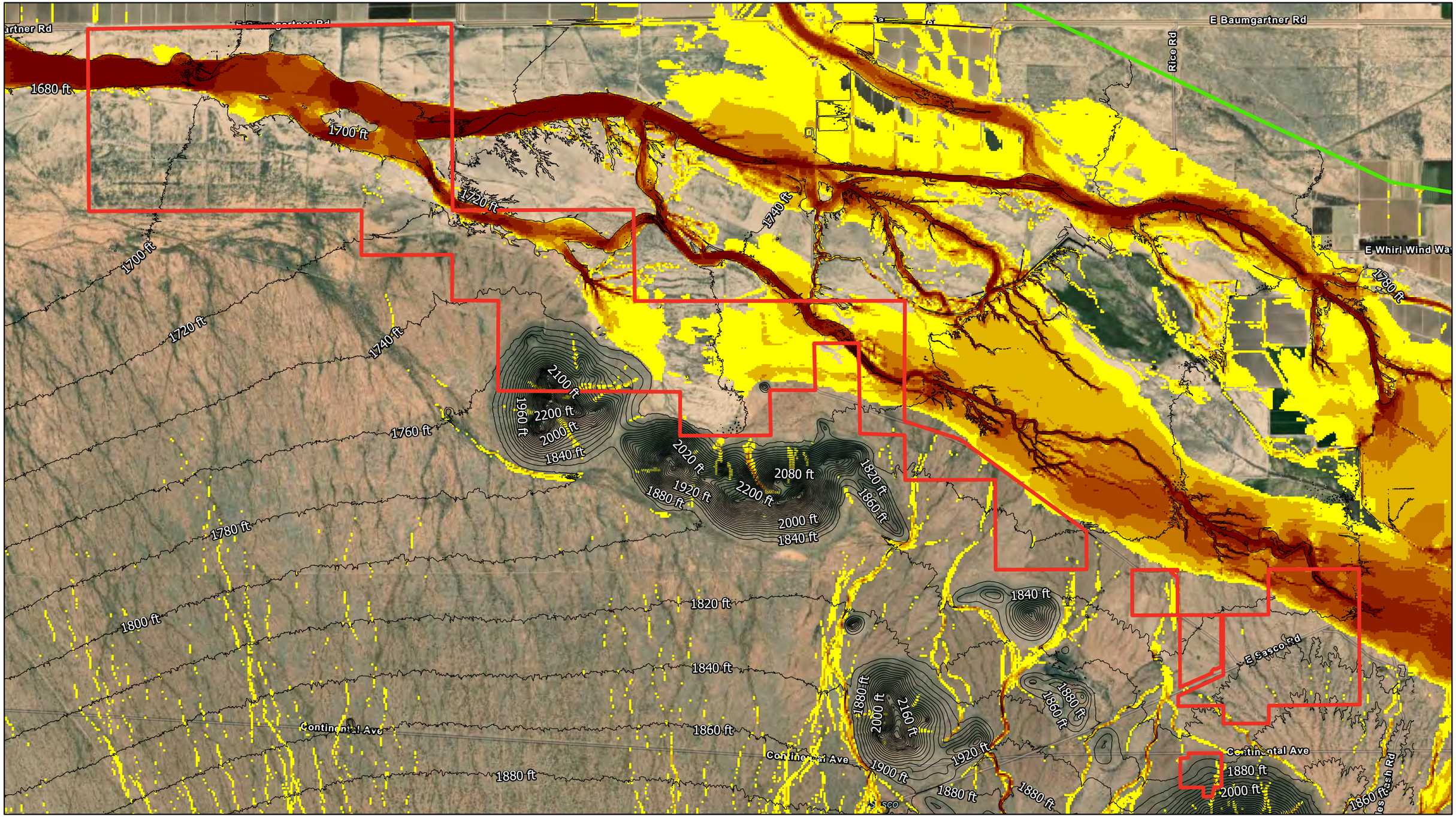

Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary
- 20' Contours

Peak Velocity (fps)

- 1.00 - 1.50
- 1.51 - 2.00
- 2.01 - 2.50
- 2.51 - 3.00
- 3.01 - 4.00
- 4.01 +

N

0 0.5 Miles

Pinal County Solar Project

Pinal County, Arizona

Exhibit 7A: 100-Year Peak Velocity Project Area Map

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07A-100 Yr Peak Velocity Project Area Map - 100 Yr Peak Velocity Project Area | 7/10/2023 2:23 PM | mjennings

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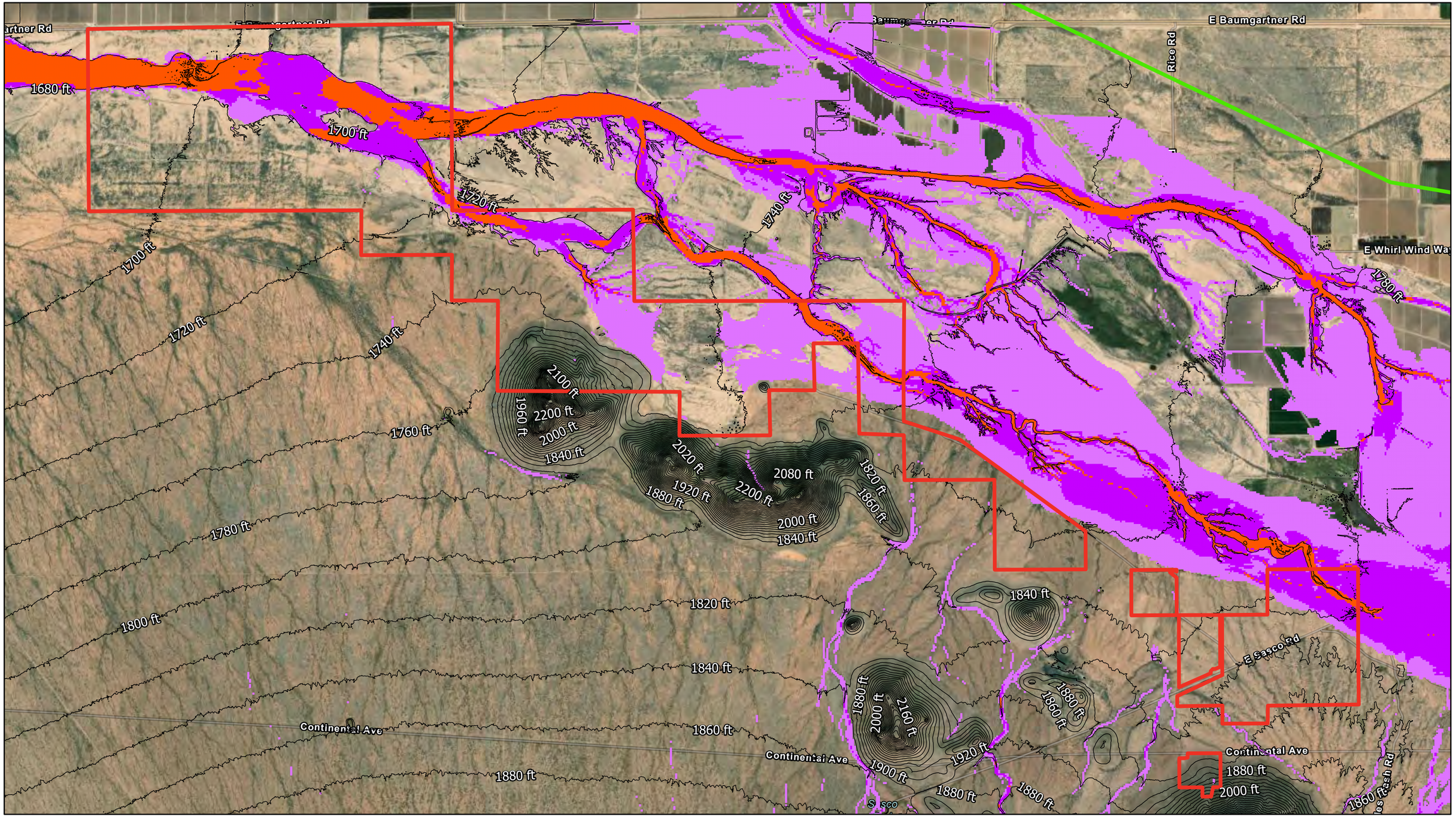

Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary
- 20' Contours
- Scour (ft)
  - 1.00 - 1.50
  - 1.51 - 2.00
  - 2.01 +

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N

0 0.5 Miles

Pinal County Solar Project

Pinal County, Arizona

Exhibit 8: 100-Year Scour Map

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06-100 YR Scour Map - 100 YR Scour | 7/10/2023 2:21 PM | bjennings

Appendix A

NOAA Atlas 14 Precipitation Data

NOAA Atlas 14, Volume 1, Version 5
Location name: Red Rock, Arizona, USA*
Latitude: 32.5657°, Longitude: -111.4847°
Elevation: 1732 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.206** (0.177-0.246)	**0.268** (0.231-0.321)	**0.362** (0.309-0.431)	**0.433** (0.367-0.512)	**0.529** (0.443-0.623)	**0.604** (0.498-0.709)	**0.679** (0.551-0.798)	**0.756** (0.603-0.889)	**0.857** (0.667-1.01)	**0.935** (0.712-1.11)
10-min	**0.314** (0.270-0.374)	**0.408** (0.352-0.488)	**0.552** (0.470-0.655)	**0.659** (0.559-0.779)	**0.806** (0.675-0.949)	**0.919** (0.759-1.08)	**1.03** (0.839-1.22)	**1.15** (0.918-1.35)	**1.30** (1.02-1.54)	**1.42** (1.08-1.69)
15-min	**0.389** (0.335-0.464)	**0.507** (0.436-0.605)	**0.684** (0.583-0.812)	**0.817** (0.693-0.966)	**0.999** (0.836-1.18)	**1.14** (0.941-1.34)	**1.28** (1.04-1.51)	**1.43** (1.14-1.68)	**1.62** (1.26-1.91)	**1.76** (1.34-2.10)
30-min	**0.524** (0.451-0.625)	**0.682** (0.587-0.815)	**0.921** (0.786-1.09)	**1.10** (0.933-1.30)	**1.35** (1.13-1.58)	**1.53** (1.27-1.80)	**1.73** (1.40-2.03)	**1.92** (1.53-2.26)	**2.18** (1.70-2.58)	**2.38** (1.81-2.82)
60-min	**0.649** (0.558-0.773)	**0.844** (0.727-1.01)	**1.14** (0.973-1.35)	**1.36** (1.16-1.61)	**1.66** (1.39-1.96)	**1.90** (1.57-2.23)	**2.14** (1.73-2.51)	**2.38** (1.90-2.80)	**2.70** (2.10-3.19)	**2.94** (2.24-3.49)
2-hr	**0.744** (0.645-0.872)	**0.963** (0.832-1.13)	**1.28** (1.10-1.50)	**1.52** (1.29-1.78)	**1.85** (1.56-2.15)	**2.11** (1.75-2.45)	**2.37** (1.94-2.76)	**2.64** (2.12-3.08)	**3.01** (2.35-3.53)	**3.30** (2.51-3.89)
3-hr	**0.802** (0.697-0.942)	**1.02** (0.891-1.21)	**1.34** (1.16-1.58)	**1.59** (1.36-1.86)	**1.95** (1.64-2.27)	**2.22** (1.85-2.59)	**2.52** (2.06-2.94)	**2.83** (2.26-3.30)	**3.26** (2.53-3.83)	**3.61** (2.73-4.26)
6-hr	**0.960** (0.847-1.10)	**1.21** (1.07-1.39)	**1.55** (1.36-1.78)	**1.82** (1.59-2.08)	**2.19** (1.89-2.49)	**2.49** (2.11-2.83)	**2.80** (2.33-3.18)	**3.12** (2.55-3.56)	**3.57** (2.83-4.08)	**3.92** (3.04-4.51)
12-hr	**1.09** (0.974-1.23)	**1.37** (1.23-1.55)	**1.74** (1.54-1.95)	**2.02** (1.79-2.27)	**2.42** (2.12-2.70)	**2.72** (2.36-3.04)	**3.04** (2.59-3.41)	**3.36** (2.82-3.78)	**3.81** (3.11-4.32)	**4.15** (3.32-4.75)
24-hr	**1.29** (1.17-1.43)	**1.64** (1.49-1.81)	**2.11** (1.91-2.32)	**2.48** (2.24-2.73)	**3.00** (2.70-3.30)	**3.41** (3.05-3.75)	**3.84** (3.41-4.22)	**4.28** (3.77-4.72)	**4.89** (4.26-5.40)	**5.38** (4.63-5.94)
2-day	**1.39** (1.26-1.54)	**1.77** (1.61-1.96)	**2.31** (2.08-2.54)	**2.73** (2.46-3.01)	**3.33** (2.98-3.66)	**3.80** (3.38-4.18)	**4.30** (3.80-4.73)	**4.82** (4.23-5.33)	**5.54** (4.81-6.14)	**6.12** (5.25-6.82)
3-day	**1.48** (1.34-1.64)	**1.88** (1.71-2.08)	**2.46** (2.22-2.71)	**2.92** (2.63-3.22)	**3.57** (3.19-3.93)	**4.09** (3.64-4.50)	**4.65** (4.10-5.12)	**5.23** (4.58-5.78)	**6.05** (5.23-6.72)	**6.71** (5.74-7.49)
4-day	**1.57** (1.42-1.74)	**1.99** (1.81-2.21)	**2.61** (2.36-2.89)	**3.10** (2.80-3.43)	**3.81** (3.41-4.20)	**4.38** (3.90-4.83)	**4.99** (4.40-5.51)	**5.64** (4.93-6.24)	**6.56** (5.65-7.28)	**7.30** (6.22-8.15)
7-day	**1.76** (1.58-1.96)	**2.23** (2.02-2.49)	**2.92** (2.63-3.25)	**3.48** (3.13-3.87)	**4.28** (3.82-4.74)	**4.92** (4.36-5.46)	**5.61** (4.93-6.23)	**6.34** (5.53-7.05)	**7.38** (6.34-8.24)	**8.22** (6.98-9.23)
10-day	**1.94** (1.75-2.16)	**2.47** (2.22-2.75)	**3.22** (2.90-3.58)	**3.83** (3.44-4.26)	**4.69** (4.19-5.21)	**5.39** (4.78-5.98)	**6.13** (5.40-6.81)	**6.90** (6.03-7.69)	**8.00** (6.89-8.94)	**8.89** (7.57-9.98)
20-day	**2.38** (2.14-2.64)	**3.04** (2.74-3.37)	**3.98** (3.58-4.40)	**4.69** (4.21-5.19)	**5.66** (5.06-6.26)	**6.41** (5.70-7.09)	**7.18** (6.36-7.96)	**7.97** (7.01-8.83)	**9.03** (7.86-10.1)	**9.85** (8.50-11.0)
30-day	**2.84** (2.58-3.12)	**3.63** (3.30-4.00)	**4.73** (4.29-5.19)	**5.56** (5.04-6.10)	**6.69** (6.03-7.34)	**7.56** (6.78-8.28)	**8.45** (7.53-9.26)	**9.35** (8.29-10.3)	**10.6** (9.27-11.7)	**11.5** (10.0-12.8)
45-day	**3.36** (3.05-3.68)	**4.30** (3.91-4.71)	**5.58** (5.07-6.11)	**6.53** (5.92-7.15)	**7.77** (7.02-8.49)	**8.70** (7.83-9.51)	**9.64** (8.64-10.5)	**10.6** (9.42-11.6)	**11.8** (10.4-13.0)	**12.7** (11.2-14.0)
60-day	**3.73** (3.40-4.09)	**4.78** (4.35-5.24)	**6.19** (5.64-6.78)	**7.23** (6.58-7.91)	**8.58** (7.77-9.38)	**9.58** (8.64-10.5)	**10.6** (9.50-11.6)	**11.5** (10.3-12.7)	**12.8** (11.4-14.1)	**13.7** (12.1-15.2)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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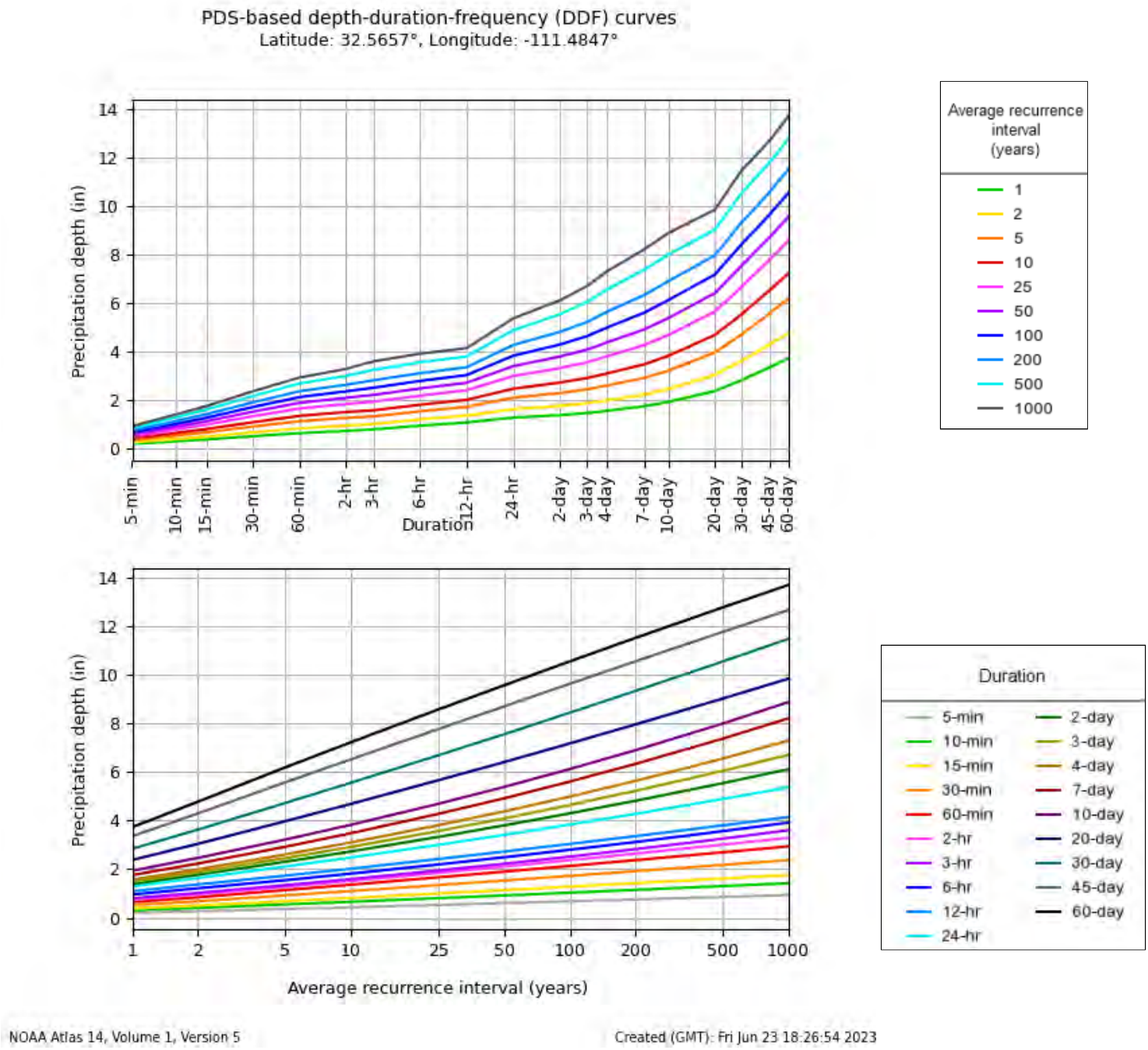
PF graphical



NOAA Atlas 14, Volume 1, Version 5

Created (GMT): Fri Jun 23 18:26:54 2023

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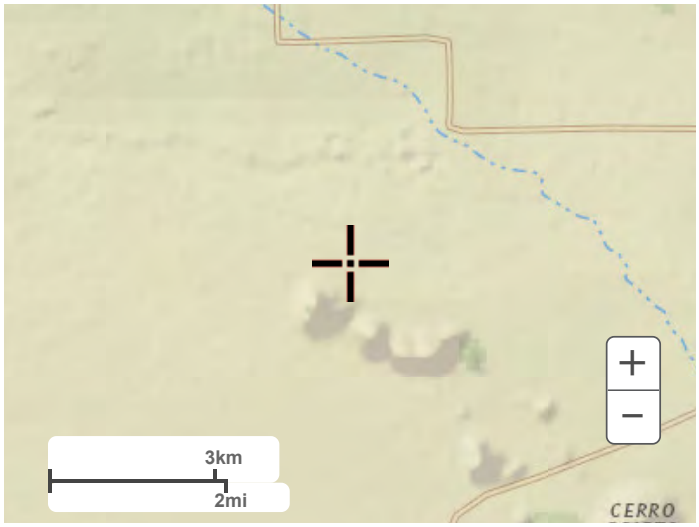
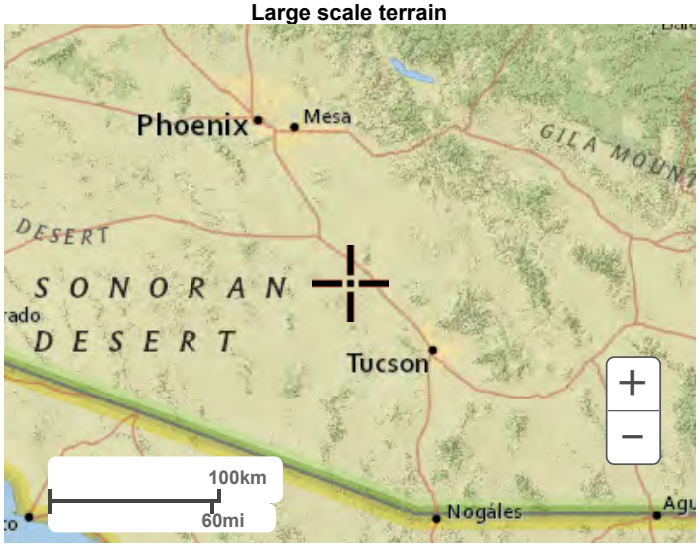
Maps & aerials

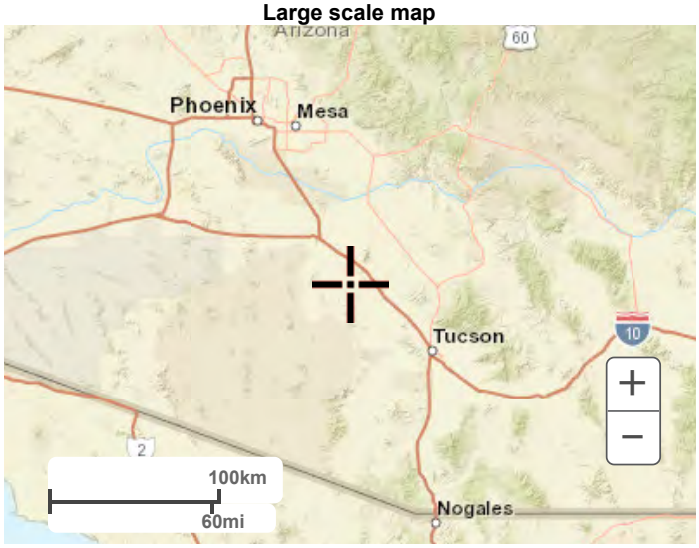
Small scale terrain



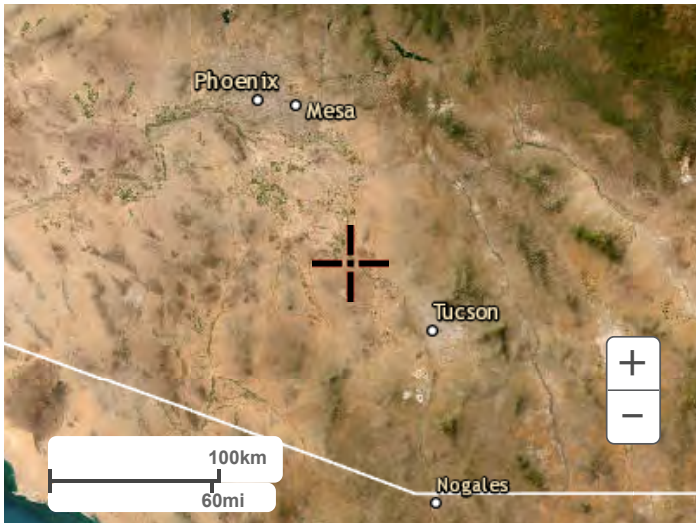
Large scale terrain



Large scale map



Large scale aerial



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US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

Appendix B

Curve Number Table

Table 2. Semi-Arid Curve Numbers (adapted from NEH 630)

Class	Value	Classification Description	Curve Number				
			Soil Type*				
			A	B	C	D	W
Water	11	**Open Water** - areas of open water, generally with less than 25% cover of vegetation or soil.	98	98	98	98	100
	12	**Perennial Ice/Snow** - areas characterized by a perennial cover of ice and/or snow, generally greater than 25% of total cover.	98	98	98	98	100
Developed	21	**Developed, Open Space** - areas with a mixture of some constructed materials, but mostly vegetation in the form of lawn grasses. Impervious surfaces account for less than 20% of total cover. These areas most commonly include large-lot single-family housing units, parks, golf courses, and vegetation planted in developed settings for recreation, erosion control, or aesthetic purposes.	46	65	77	82	100
	22	**Developed, Low Intensity** - areas with a mixture of constructed materials and vegetation. Impervious surfaces account for 20% to 49% percent of total cover. These areas most commonly include single-family housing units.	61	75	83	87	100
	23	**Developed, Medium Intensity** – areas with a mixture of constructed materials and vegetation. Impervious surfaces account for 50% to 79% of the total cover. These areas most commonly include single-family housing units.	77	85	90	95	100
	24	**Developed High Intensity** -highly developed areas where people reside or work in high numbers. Examples include apartment complexes, row houses and commercial/industrial. Impervious surfaces account for 80% to 100% of the total cover.	89	92	94	95	100
Barren	31	**Barren Land (Rock/Sand/Clay)** - areas of bedrock, desert pavement, scarps, talus, slides, volcanic material, glacial debris, sand dunes, strip mines, gravel pits and other accumulations of earthen material. Generally, vegetation accounts for less than 15% of total cover.	77	86	91	94	100
Forest	41	**Deciduous Forest** - areas dominated by trees generally greater than 5 meters tall, and greater than 20% of total vegetation cover. More than 75% of the tree species shed foliage simultaneously in response to seasonal change.	43	55	70	77	100
	42	**Evergreen Forest** - areas dominated by trees generally greater than 5 meters tall, and greater than 20% of total vegetation cover. More than 75% of the tree species maintain their leaves all year. Canopy is never without green foliage.	43	55	70	77	100
	43	**Mixed Forest** - areas dominated by trees generally greater than 5 meters tall, and greater than 20% of total vegetation cover. Neither deciduous nor evergreen species are greater than 75% of total tree cover.	43	55	70	77	100
Shrubland	51	**Dwarf Scrub** - Alaska only areas dominated by shrubs less than 20 centimeters tall with shrub canopy typically greater than 20% of total vegetation. This type is often co-associated with grasses, sedges, herbs, and non-vascular vegetation.	55	71	81	89	100
	52	**Shrub/Scrub** - areas dominated by shrubs; less than 5 meters tall with shrub canopy typically greater than 20% of total vegetation. This class includes true shrubs, young trees in an early successional stage or trees stunted from environmental conditions.	55	71	81	89	100
Herbaceous	71	**Grassland/Herbaceous** - areas dominated by gramanoid or herbaceous vegetation, generally greater than 80% of total vegetation. These areas are not subject to intensive management such as tilling, but can be utilized for grazing.	55	71	81	89	100
	72	**Sedge/Herbaceous** - Alaska only areas dominated by sedges and forbs, generally greater than 80% of total vegetation. This type can occur with significant other grasses or other grass like plants, and includes sedge tundra, and sedge tussock tundra.	55	71	81	89	100
	73	**Lichens** - Alaska only areas dominated by fruticose or foliose lichens generally greater than 80% of total vegetation.	55	71	81	89	100
	74	**Moss** - Alaska only areas dominated by mosses, generally greater than 80% of total vegetation.	55	71	81	89	100
Planted/Cultivated	81	**Pasture/Hay** – areas of grasses, legumes, or grass-legume mixtures planted for livestock grazing or the production of seed or hay crops, typically on a perennial cycle. Pasture/hay vegetation accounts for greater than 20% of total vegetation.	55	71	81	89	100
	82	**Cultivated Crops** – areas used for the production of annual crops, such as corn, soybeans, vegetables, tobacco, and cotton, and also perennial woody crops such as orchards and vineyards. Crop vegetation accounts for greater than 20% of total vegetation. This class also includes all land being actively tilled.	67	78	85	89	100
	83	**Small Grains**	63	75	83	87	100
Wetlands	91	**Woody Wetlands** - areas where forest or shrubland vegetation accounts for greater than 20% of vegetative cover and the soil or substrate is periodically saturated with or covered with water.	45	66	77	83	100
	92	**Emergent Herbaceous Wetlands** - Areas where perennial herbaceous vegetation accounts for greater than 80% of vegetative cover and the soil or substrate is periodically saturated with or covered with water.	45	66	77	83	100

*A/D, B/D and C/D soils lumped as D soils, W denotes water

**Curve Numbers for NLCD Codes 41-43 have been increased from 30 to 43 as many of these areas are partially grazed Woods-grass combination.

Appendix C

FEMA Flood Insurance Rate Map (FIRM)

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' NAVD 88. Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations shown in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 12. The **horizontal datum** was NAD 83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1992 or later.

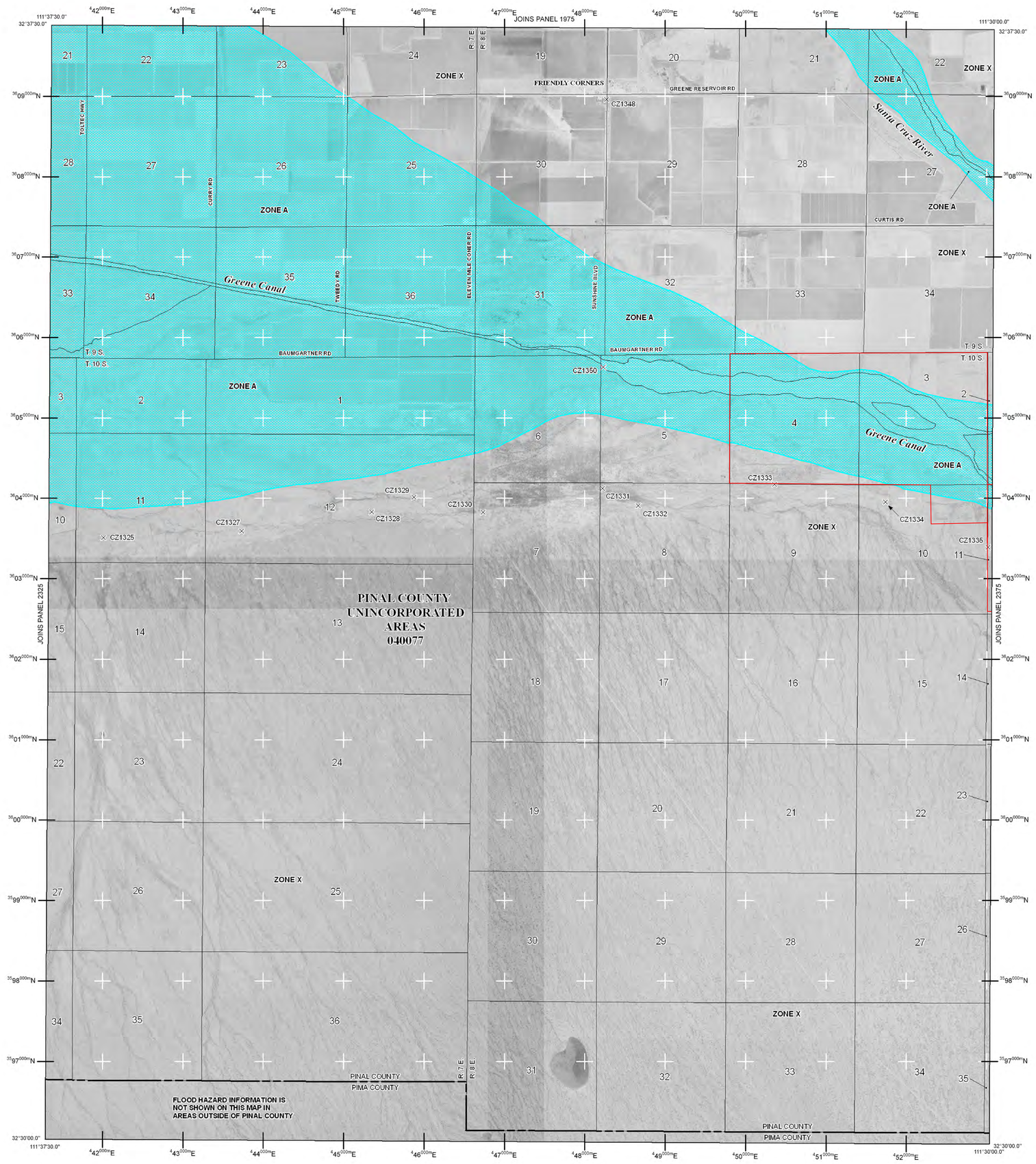
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, an accompanying Flood Insurance Study Report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://www.msc.fema.gov.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov.



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No base flood elevations determined.
ZONE AE	Base flood elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Area of Special Flood Hazard formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no base flood elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no base flood elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	1% annual chance floodplain boundary
	0.2% annual chance floodplain boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*
*Referenced to the North American Vertical Datum of 1988	
A — A	Cross section line
23 — 23	Transect line
97° 07' 30", 32° 22' 30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
4276000M	1000-meter Universal Transverse Mercator grid values, zone 12
600000 FT	5000-foot grid ticks: Arizona State Plane coordinate system, central zone (FIPSZONE 0202), Transverse Mercator
DX5510 x	Bench mark (see explanation in Notes to Users section of this FIRM panel)
●M1.5	River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
December 4, 2007
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 2000'
1000 0 2000 4000 FEET
600 0 600 1200 METERS

NFIP

PANEL 2350E

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP
PINAL COUNTY, ARIZONA
AND INCORPORATED AREAS

PANEL 2350 OF 2575

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
PINAL COUNTY, UNINCORPORATED AREAS	040077	2350	E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
04021C2350E

EFFECTIVE DATE
DECEMBER 4, 2007

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' NAVD 88. Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table shown in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 12. The **horizontal datum** was NAD 83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at http://www.ngs.noaa.gov/.

Base map information shown on this FIRM was derived from U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1992 or later.

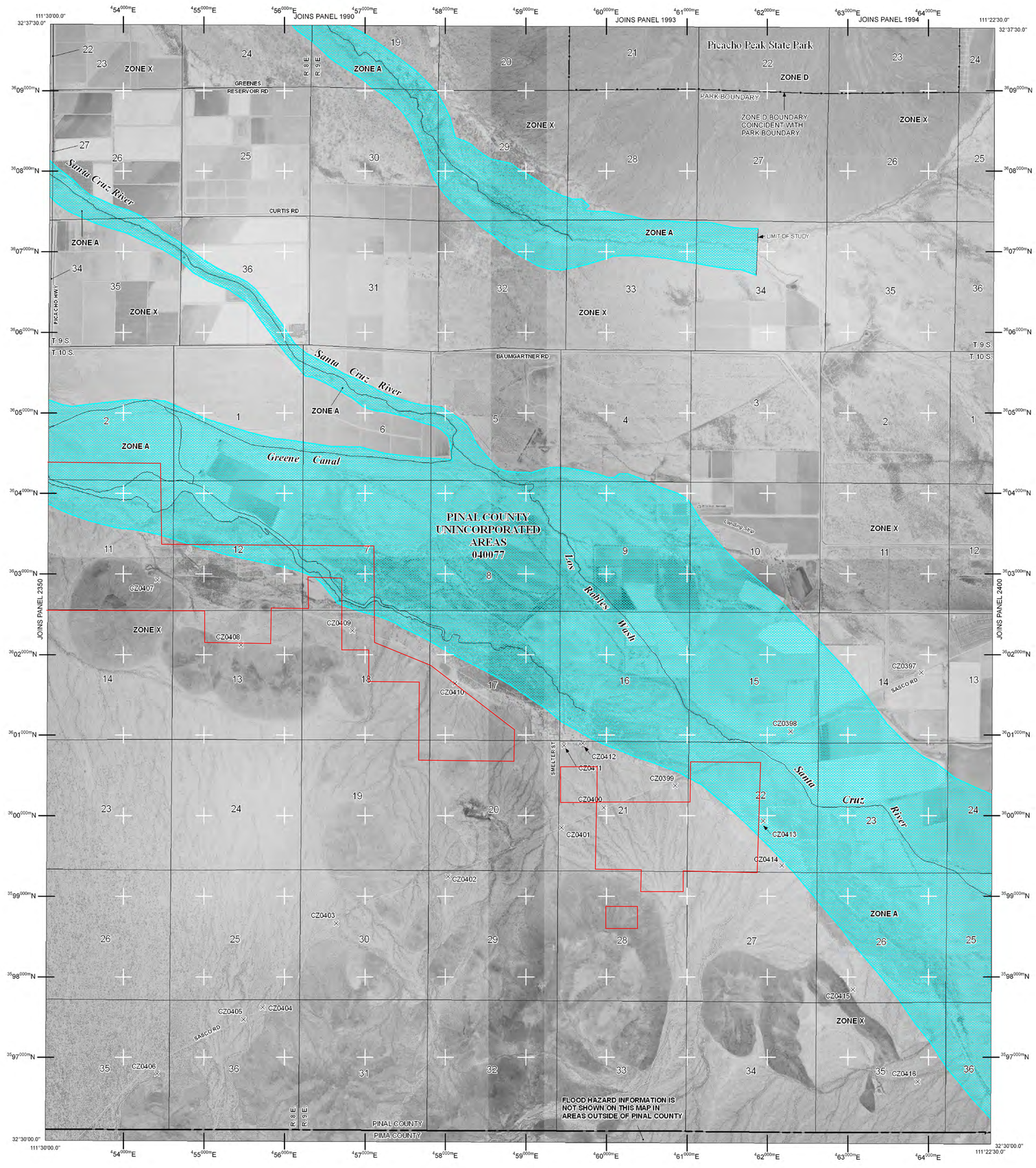
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, an accompanying Flood Insurance Study Report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://www.msc.fema.gov/.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No base flood elevations determined.
ZONE AE	Base flood elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no base flood elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no base flood elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	1% annual chance floodplain boundary
	0.2% annual chance floodplain boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

A—A	Cross section line
23—23	Transect line
97° 07' 30", 32° 22' 30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
4276000M	1000-meter Universal Transverse Mercator grid values, zone 12
600000 FT	5000-foot grid ticks: Arizona State Plane coordinate system, central zone (FIPSZONE 0202), Transverse Mercator
DX5510 x	Bench mark (see explanation in Notes to Users section of this FIRM panel)
●M1.5	River Mile

MAP REPOSITORIES
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
December 4, 2007
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 2000'
1000 0 2000 4000 FEET
600 0 600 1200 METERS

NFIP

PANEL 2375E

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

PINAL COUNTY, ARIZONA AND INCORPORATED AREAS

PANEL 2375 OF 2575

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
PINAL COUNTY UNINCORPORATED AREAS	040077	2375	E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
04021C2375E

EFFECTIVE DATE
DECEMBER 4, 2007

Federal Emergency Management Agency

Appendix D

Pima County FEMA Flood Insurance Study

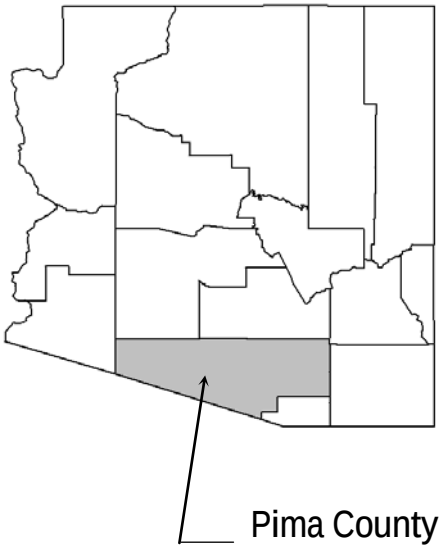
FLOOD INSURANCE STUDY



VOLUME 1 OF 5

PIMA COUNTY, ARIZONA
AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
MARANA, TOWN OF	040118
ORO VALLEY, TOWN OF	040109
PIMA COUNTY (UNINCORPORATED AREAS)	040073
SAHUARITA, TOWN OF	040137
SOUTH TUCSON, CITY OF	040075
TUCSON, CITY OF	040076



REVISED:
September 28, 2012

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
04019CV001B

NOTICE TO
FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study (FIS) may not contain all data available within the repository. It is advisable to contact the community repository for any additional data.

Part or all of this FIS may be revised and republished at any time. In addition, part of this FIS may be revised by the Letter of Map Revision process, which does not involve republication or redistribution of the FIS. It is, therefore, the responsibility of the user to consult with community officials and to check the community repository to obtain the most current FIS components.

This Preliminary revised Flood Insurance Study contains only profiles and floodway data tables added or revised as part of the restudy. These profiles are presented in a reduced scale to minimize reproduction costs. All profiles will be included and printed at full scale in the final published report.

Initial Countywide FIS Effective Date: February 8, 1999

Revised Countywide FIS Date: June 16, 2011 – to update corporate limits, to change Base Flood Elevations and Special Flood Hazard Areas, to update map format, to add roads and road names, and to incorporate previously issued Letters of Map Revision.

September 28, 2012 – to incorporate the Agua Caliente Wash Physical Map Revision case number 09-09-2642P and to revise the Summary of Discharges table for the Ventana Canyon Wash and Esperero Wash Letter of Map Revision case number 09-09-2406P, which was inadvertently omitted from the FIS report printed on June 16, 2011.

TABLE 6- SUMMARY OF DISCHARGES - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
BLACK WASH (continued)					
North of Drexel Road extended, west of Camino Verde Road	2.7	*	*	1,157	*
At intersection of Sunset Boulevard and Irvington Road	2.4	*	*	1,708	*
BLANCO WASH					
Upstream of confluence with Los Robles Wash	165.0	6,800	13,500	17,000	34,000
BRAWLEY WASH					
Upstream of confluence with Los Robles Wash	1,165.0	14,000	28,000	35,000	70,000
BRONX WASH					
At Santa Cruz River	1.2	*	*	2,548	*
At the Union Pacific Railroad	0.7	*	*	1,573	*
CANADA AGUA CANYON					
At East Apex	3.88	*	*	1,599	*
At West Apex	1.44	*	*	788	*
CANADA DEL ORO WASH					
Upstream of confluence with Santa Cruz River	256.0	8,300	17,300	22,400	37,200
Upstream of confluence with Big Wash	115.0	5,600	11,600	15,000	25,000
Upstream of confluence with Sutherland Wash	72.9	4,400	9,200	11,900	19,900
CEMETERY WASH					
At Fairview Avenue	1.7	*	*	2,700	*
At Oracle Road	1.1	*	*	1,983	*
CHOLLA WASH					
At confluence with West Branch Santa Cruz River	1.2	*	*	2,535	*
At Camino Santiago	0.6	*	*	1,380	*
CHRISTMAS WASH					
At Roger Road	3.1	*	*	2,334	*
At Fort Lowell Road	2.6	*	*	2,258	*
CITATION WASH					
At confluence with Arroyo Chico	0.9	*	*	1,611	*
At Country Club Road	0.8	*	*	1,154	*

*Data not available

TABLE 6- SUMMARY OF DISCHARGES - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-PERCENT	2-PERCENT	1-PERCENT	0.2-PERCENT
JULIAN WASH					
Approximately 950 feet upstream of Campbell Avenue	24.9	*	*	3,360	*
Just downstream of Wilmot Road	16.5	*	*	2,270	*
KENNISON WASH					
At Escalante Road	4.43	*	*	2,720	*
At Irvington Road	2.29	*	*	1,575	*
LOS ROBLES WASH					
Downstream of confluence with Blanco Wash	1,340.0	14,500	30,000	37,000	74,000
At Trico Road	1,175.0	14,000	28,000	35,000	70,000
MASSINGALE WASH					
At Massingale Road and Union Pacific Railroad	2.51	*	*	1,178	*
MIDWAY WASH					
At Speedway Boulevard	0.9	*	*	1,769	*
NAVAJO WASH					
At Oracle Road	3.4	*	*	2,104[1]	*
At Mountain Avenue	3.0	*	*	3,081	*
NAYLOR WASH					
At Reid Park	1.4	*	*	1,806	*
At Belvedere Avenue	0.8	*	*	1,150	*
OLD WEST BRANCH SANTA CRUZ RIVER					
At confluence with Ajo Wash	35.5	*	*	1,657	*
At confluence with Enchanted Hills Wash	35.5	*	*	3,614	*
At confluence with San Juan Wash	35.5	*	*	5,722	*
OLD WEST BRANCH SANTA CRUZ RIVER – continued					
At confluence with Cholla Wash	35.5	*	*	6,220	*
At confluence with Santa Cruz River	23.6	*	*	6,621	*

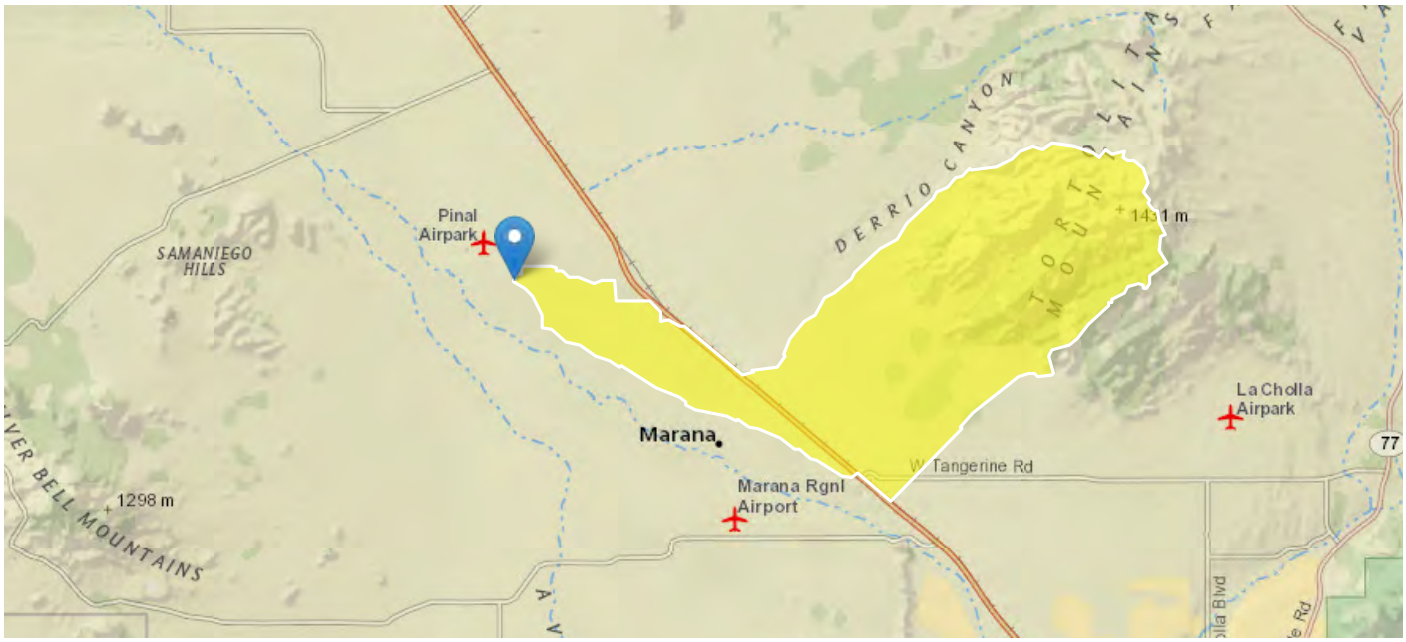
[1]Flow reduced due to the existence of storm sewers that intercept a portion of the runoff
*Data not available

Appendix E

Northern Watershed StreamStats Report

Northern Watershed StreamStats Report

Region ID: AZ
Workspace ID: AZ20230623155539608000
Clicked Point (Latitude, Longitude): 32.49697, -111.31494
Time: 2023-06-23 10:56:04 -0500



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CONTDA	Area that contributes flow to a point on a stream	59.1	square miles
ELEV	Mean Basin Elevation	2696.358	feet

Peak-Flow Statistics

Peak-Flow Statistics Parameters [Peak Region 5 SE Basin Range 2014 5211]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CONTDA	Contributing Drainage Area	59.1	square miles	0.155	2925
ELEV	Mean Basin Elevation	2696.358	feet		

Peak-Flow Statistics Flow Report [Peak Region 5 SE Basin Range 2014 5211]

PII: Prediction Interval-Lower, PIu: Prediction Interval-Upper, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	PII	PIu	ASEp
50-percent AEP flood	850	ft^3/s	155	4650	86.6

Statistic	Value	Unit	PII	Plu	ASEp
20-percent AEP flood	2180	ft^3/s	643	7390	61.5
10-percent AEP flood	3540	ft^3/s	1220	10200	52.4
4-percent AEP flood	5870	ft^3/s	2260	15200	45.8
2-percent AEP flood	8160	ft^3/s	3270	20400	43.5
1-percent AEP flood	10900	ft^3/s	4440	26800	42.6
0.5-percent AEP flood	13900	ft^3/s	5590	34500	42.4
0.2-percent AEP flood	19000	ft^3/s	7610	47500	43.2

Peak-Flow Statistics Citations

Paretti, N.V., Kennedy, J.R., Turney, L.A., and Veilleux, A.G.,2014, Methods for estimating magnitude and frequency of floods in Arizona, developed with unregulated and rural peak-flow data through water year 2010: U.S. Geological Survey Scientific Investigations Report 2014-5211, 61 p., http://dx.doi.org/10.3133/sir20145211. (http://pubs.usgs.gov/sir/2014/5211/)

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

USGS Software Disclaimer: This software has been approved for release by the U.S. Geological Survey (USGS). Although the software has been subjected to rigorous review, the USGS reserves the right to update the software as needed pursuant to further analysis and review. No warranty, expressed or implied, is made by the USGS or the U.S. Government as to the functionality of the software and related material nor shall the fact of release constitute any such warranty. Furthermore, the software is released on condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from its authorized or unauthorized use.

USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.15.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

Appendix F

Santa Cruz River StreamStats Report

StreamStats Data-Collection Station Report

Gage Information

Name	Value
USGS Station Number	**09486520 (https://waterdata.usgs.gov/monitoring-location/09486520)**
Station Name	SANTA CRUZ RIVER AT TRICO ROAD, NR MARANA, AZ.
Station Type	Gaging Station, continuous record
Latitude	32.47145874
Longitude	-111.30760736
NWIS Latitude	32.47145874
NWIS Longitude	-111.3076074
Is regulated?	false
Agency	United States Geological Survey
NWIS Discharge Period of Record	03/31/1989 - 06/13/2023

Physical Characteristics

Filter By Statistic Group: Select Filter By Citation: Select

Basin Dimensional Characteristics

Characteristic Name	Value	Units	Citation
Drainage Area	3641	square miles	**193**

Streamflow Statistics

Filter By Statistic Group: Select Filter By Citation: Select Show Only Preferred

Peak-Flow Statistics

Statistic Name	Value	Units	Preferred?	Years of Record	Standard Error, percent	Variance	Lower 90% Prediction Interval	Upper 90% Prediction Interval	Citation	Comments
50-percent AEP flood	5110	cubic feet per second	✓	21	17.98	0.006			**121**	Statistic Date Range 10/1/1988 - 9/30/2010
20-percent AEP flood	9860	cubic feet per second	✓	21	16.39	0.005			**121**	Statistic Date Range 10/1/1988 - 9/30/2010
10-percent AEP flood	13800	cubic feet per second	✓	21	17.98	0.006			**121**	Statistic Date Range 10/1/1988 - 9/30/2010
4-percent AEP flood	19500	cubic feet per second	✓	21	20.82	0.008			**121**	Statistic Date Range 10/1/1988 - 9/30/2010
2-percent AEP flood	24300	cubic feet per second	✓	21	23.33	0.01			**121**	Statistic Date Range 10/1/1988 - 9/30/2010
1-percent AEP flood	29600	cubic feet per second	✓	21	25.63	0.012			**121**	Statistic Date Range 10/1/1988 - 9/30/2010
0.5-percent AEP flood	35300	cubic feet per second	✓	21	27.76	0.014			**121**	Statistic Date Range 10/1/1988 - 9/30/2010
0.2-percent AEP flood	43600	cubic feet per second	✓	21	30.71	0.017			**121**	Statistic Date Range 10/1/1988 - 9/30/2010

Probability Statistics

Statistic Name	Value	Units	Preferred?	Years of Record	Standard Error, percent	Citation	Comments
Probability zero flow durations	0.168913	dimensionless	✓	26		**52**	Statistic Date Range 10/1/1989 - 9/30/2015

Citations

ID	Citation
193	**Imported from NWIS file (http://waterdata.usgs.gov/nwis/si)**
121	**Paretti, N.V., Kennedy, J.R., Turney, L.A., and Veilleux, A.G., 2014, Methods for estimating magnitude and frequency of floods in Arizona, developed with unregulated and rural peak-flow data through water year 2010: U.S. Geological Survey Scientific Investigations Report 2014-5211, 61 p., http://dx.doi.org/10.3133/sir20145211. (http://pubs.usgs.gov/sir/2014/5211/)**
52	**Granato G.E., Ries, K.G., III, and Steeves, P.A., 2017, Compilation of streamflow statistics calculated from daily mean streamflow data collected during water years 1901–2015 for selected U.S. Geological Survey streamgages: U.S. Geological Survey Open-File Report 2017-1108, 17 p. (https://pubs.er.usgs.gov/publication/ofr20171108)**
86	**Wolock, D.M., 2003, Flow characteristics at U.S. Geological Survey streamgages in the conterminous United States: U.S. Geological Survey Open-File Report 03-146, digital data set (http://water.usgs.gov/GIS/metadata/usgswrd/XML/qsitesdd.xml)**
87	**Wolock, D.M., 2003, Base-flow index grid for the conterminous United States: U.S. Geological Survey Open-File Report 03-263, digital data set (https://water.usgs.gov/GIS/metadata/usgswrd/XML/bfi48grd.xml)**

La Osa Employment Center
Traffic Statement

DATE: 5/29/2025

TO: Pinal County

FROM: Kelly Fletcher, P.E., PTOE
E-mail: Kelly.Fletcher@epsgroupinc.com
Office: 480.503.2250



INTRODUCTION

EPS Group has been retained to prepare a traffic statement for the proposed La Osa Employment Center. A major comprehensive plan amendment for approximately 3,374 acres is being requested. The site is located roughly along La Osa Ranch Road between the Baumgartner Road and Continental Avenue road alignments in Pinal County, Arizona.

EXISTING CONDITIONS

Existing Land Use and Zoning

The project site is currently undeveloped land. The existing zoning is Moderate Low Density Residential. In Pinal County, Moderate Low Density Residential zoning typically allows for a range of housing types, including single-family homes and attached homes, while also accommodating limited civic uses and urban services. This zoning is intended to create a smooth transition between lower and higher intensity residential development, catering to various income levels and lifestyles. The density in this zone is generally between 1 and 3.5 dwelling units per acre (du/ac).

Existing Transportation System

The proposed development consists of sections of E. Baumgartner Road. It is identified as a Regionally Significant Route (Principal Arterial) per the "Regionally Significant Routes for Safety and Mobility, Final Report". All half-street right-of-way (ROW) will be a minimum of 75 feet. Additionally, the 75-foot right-of way and any right-of-way outlined by Engineering dedication will be free and unencumbered through the Warranty Deed.

Sasco Road is identified as a Minor Arterial per the Red Rock Small Area Transportation Study thus an important roadway connection for future developments. Sasco Road will have a 55-foot right-of-way along the development's frontage and a 110-foot right-of-way where the road passes through the property.

The site area is located within the Arizona Department of Transportation (ADOT) and Pinal County preferred alignments for the future Interstate-11 Freeway. Therefore, it will have a full street right-of-way width of 400 feet. Additional right-of-way dedication will be provided for this location per ADOT guidelines.

DESCRIPTION OF DEVELOPMENT

The property is located entirely within unincorporated Pinal County and along Greene Canal – Santa Cruz Wash. The parcels are also within the Extended Planning Boundary for the City of Eloy. The Property is approximately 3,374 acres and is currently undeveloped. In addition, a notable portion of the property is within a major Zone A floodplain area, also known as Greene Wash watershed. The proposed development will consist of data centers, battery storage facilities, and gas energy generation facilities. A total of 500 employees are estimated. The proposed development will occupy approximately 2,720 acres for the employment facilities, 480 acres for the public/gas generation facilities, and 175 acres of open space. A comprehensive map for La Osa is included in **Attachment A**.

TRIP GENERATION

The trip generation for project was estimated utilizing the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition*. The manual contains data collected by various transportation professionals for a wide range of different land uses. The data summarized in the manual include average rates and equations that have been established correlating the relationship between an independent variable that describes the development size and generated trips for each categorized land use. The manual provides information for daily and peak hour trips. For purposes of this analysis, approximately 400 employees were assumed for the employment/data centers and approximately 100 employees were assumed for the utility land use. The 'Warehousing' (ITE LUC 150) land use was utilized for the employment/data center and the 'Utility' (ITE LUC 170) land use was utilized for the gas generation facilities. The 'Warehousing' and 'Utility' land uses generate more trips than the 'General Light Industrial' (ITE LUC 110) and 'Manufacturing' (LUC 140) land uses, and are therefore more conservative assumptions. The trip generation is summarized in **Table 1** and included in **Attachment B**.

Table 1: Trip Generation – La Osa Employment Center

DESCRIPTION OF LAND USE				WEEKDAY GENERATED TRIPS						
				DAILY	AM PEAK HOUR			PM PEAK HOUR		
LAND USE	ITE LUC	SIZE		TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
Warehousing	150	400	employees	2,020	176	68	244	95	169	264
Utility	170	100	employees	385	62	9	71	11	64	75
	TOTAL	**500**	**employees**	**2,405**	**238**	**77**	**315**	**106**	**233**	**339**

Based on 500 total employees, the proposed La Osa project is anticipated to generate 2,405 weekday daily trips entering/exiting) with 315 trips (entering/exiting) during the AM peak hour and 339 trips (entering/exiting) during the PM peak hour.

TRIP GENERATION COMPARISON

The existing zoning is Moderate Low Density Residential, which typically provides between 1 and 3.5 dwelling units per acre (du/ac). For this analysis, it was assumed that the project boundaries would result in 2,000 acres of viable residential land use. Assuming 2.0 dwelling units per acre, approximately 4,000 single family residential dwelling units could be constructed with the existing zoning.

Table 2 summarizes the trip generation comparison. When compared to the residential land use allowed under existing zoning, the proposed La Osa Employee Center is estimated to generate 27,642 fewer daily trips, 1,823 fewer AM peak hour trips, and 2,847 fewer PM peak hour trips.

Table 2: Trip Generation Comparison

DESCRIPTION OF LAND USE			WEEKDAY GENERATED TRIPS						
			Daily	AM Peak Hour			PM Peak Hour		
Land Use	SIZE		Total	Enter	Exit	Total	Enter	Exit	Total
Proposed La Osa Employee Center	500	employees	2,405	238	77	315	106	233	339
Single-family Detached Housing (~2,000 acres, 2.0 DU/acre)	4,000	DU	30,047	535	1,603	2,138	2,007	1,179	3,186
		Difference	***-27,642***	***-297***	***-1,526***	***-1,823***	***-1,901***	***-946***	***-2,847***

PROPOSED ROADWAY IMPROVEMENTS

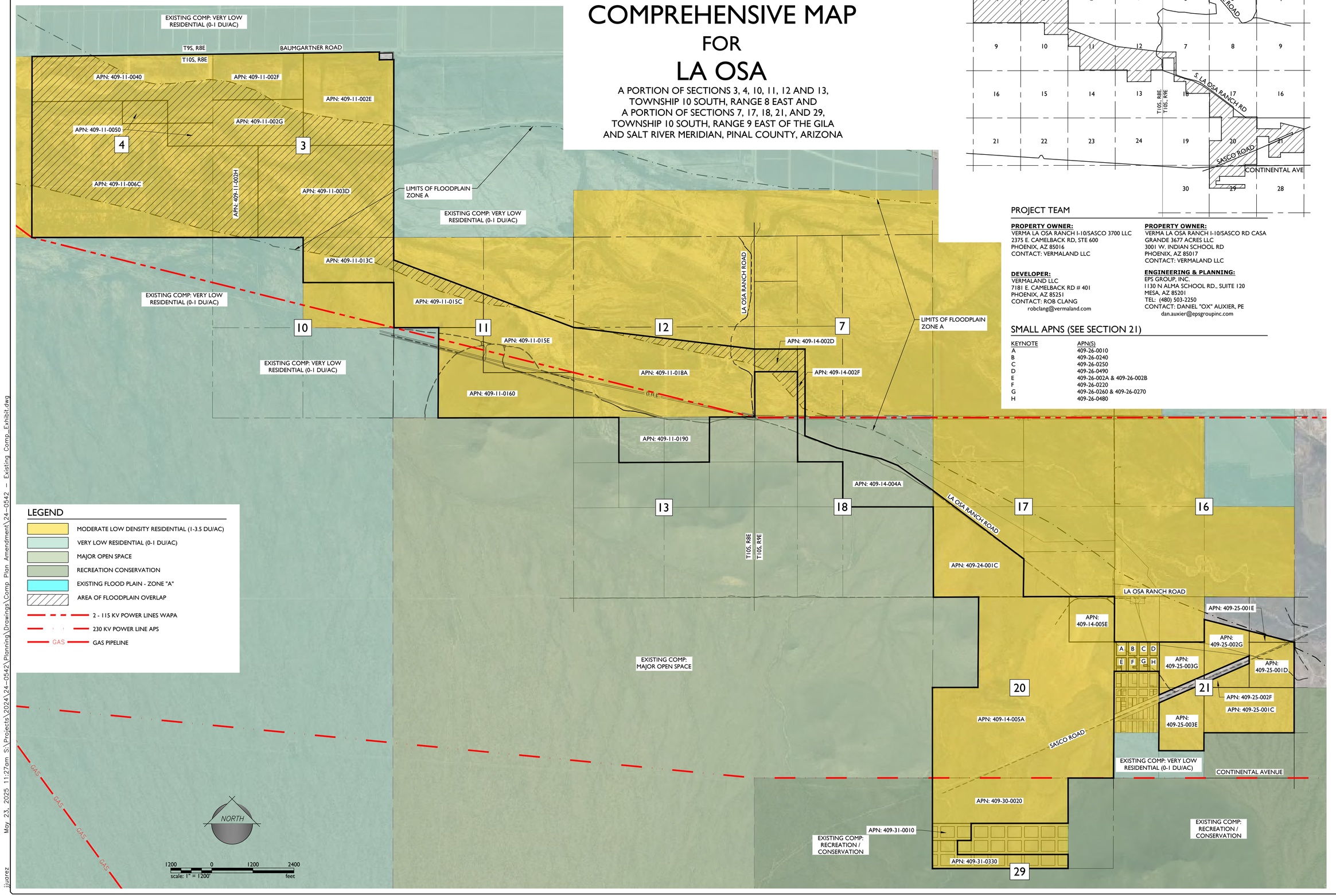
A full Traffic Impact Analysis (TIA) will be completed once detailed site planning is performed.

Road improvements for the proposed development will include paved, all-weather, 28-foot wide public access to and from the development. A minimum of two permanent access points will be provided for the ingress and egress from the development to existing public roads. All access improvements approval by the County Engineer will be a condition of approval of the plat by the board. Any potential offsite improvements required to be completed by the project will follow a future Traffic Impact Analysis (TIA) and be accompanied by an offsite improvement plan for submittal.

ATTACHMENT A: Comprehensive Map for La Osa

EXISTING COMPREHENSIVE MAP
FOR
LA OSA

A PORTION OF SECTIONS 3, 4, 10, 11, 12 AND 13,
TOWNSHIP 10 SOUTH, RANGE 8 EAST AND
A PORTION OF SECTIONS 7, 17, 18, 21, AND 29,
TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA
AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA



LEGEND

- MODERATE LOW DENSITY RESIDENTIAL (1-3.5 DU/AC)
- VERY LOW RESIDENTIAL (0-1 DU/AC)
- MAJOR OPEN SPACE
- RECREATION CONSERVATION
- EXISTING FLOOD PLAIN - ZONE "A"
- AREA OF FLOODPLAIN OVERLAP
- 2 - 115 KV POWER LINES WAPA
- 230 KV POWER LINE APS
- GAS — GAS PIPELINE

VICINITY MAP

PROJECT TEAM

PROPERTY OWNER:
VERMA LA OSA RANCH I-10/SASCO 3700 LLC
2375 E. CAMELBACK RD, STE 600
PHOENIX, AZ 85016
CONTACT: VERMALAND LLC

PROPERTY OWNER:
VERMA LA OSA RANCH I-10/SASCO RD CASA GRANDE 3677 ACRES LLC
3001 W. INDIAN SCHOOL RD
PHOENIX, AZ 85017
CONTACT: VERMALAND LLC

DEVELOPER:
VERMALAND LLC
7181 E. CAMELBACK RD # 401
PHOENIX, AZ 85251
CONTACT: ROB CLANG
robclang@vermaland.com

ENGINEERING & PLANNING:
EPS GROUP, INC.
1130 N ALMA SCHOOL RD., SUITE 120
MESA, AZ 85201
TEL: (480) 503-2250
CONTACT: DANIEL "OX" AUXIER, PE
dan.auxier@epsgroupinc.com

SMALL APNS (SEE SECTION 21)

KEYNOTE	APN(S)
A	409-26-0010
B	409-26-0240
C	409-26-0250
D	409-26-0490
E	409-26-002A & 409-26-002B
F	409-26-0220
G	409-26-0260 & 409-26-0270
H	409-26-0480

EPS GROUP
1130 N Alma School Road
Suite 120
Mesa, AZ 85201
T:480.503.2250 I F:480.503.2258
w w w . e p s g r o u p i n c . c o m

Project:
La Osa
Pinal County, Arizona

Existing Cmprehensive Map

Revisions:
SEPTEMBER 17, 2024 - 1ST SUBMITTAL

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

Designer: STAFF
Drawn by: STAFF

Preliminary
Not For
Construction
Or
Recording

Job No.
24-0542

EXCP

Sheet No.
1
of 1

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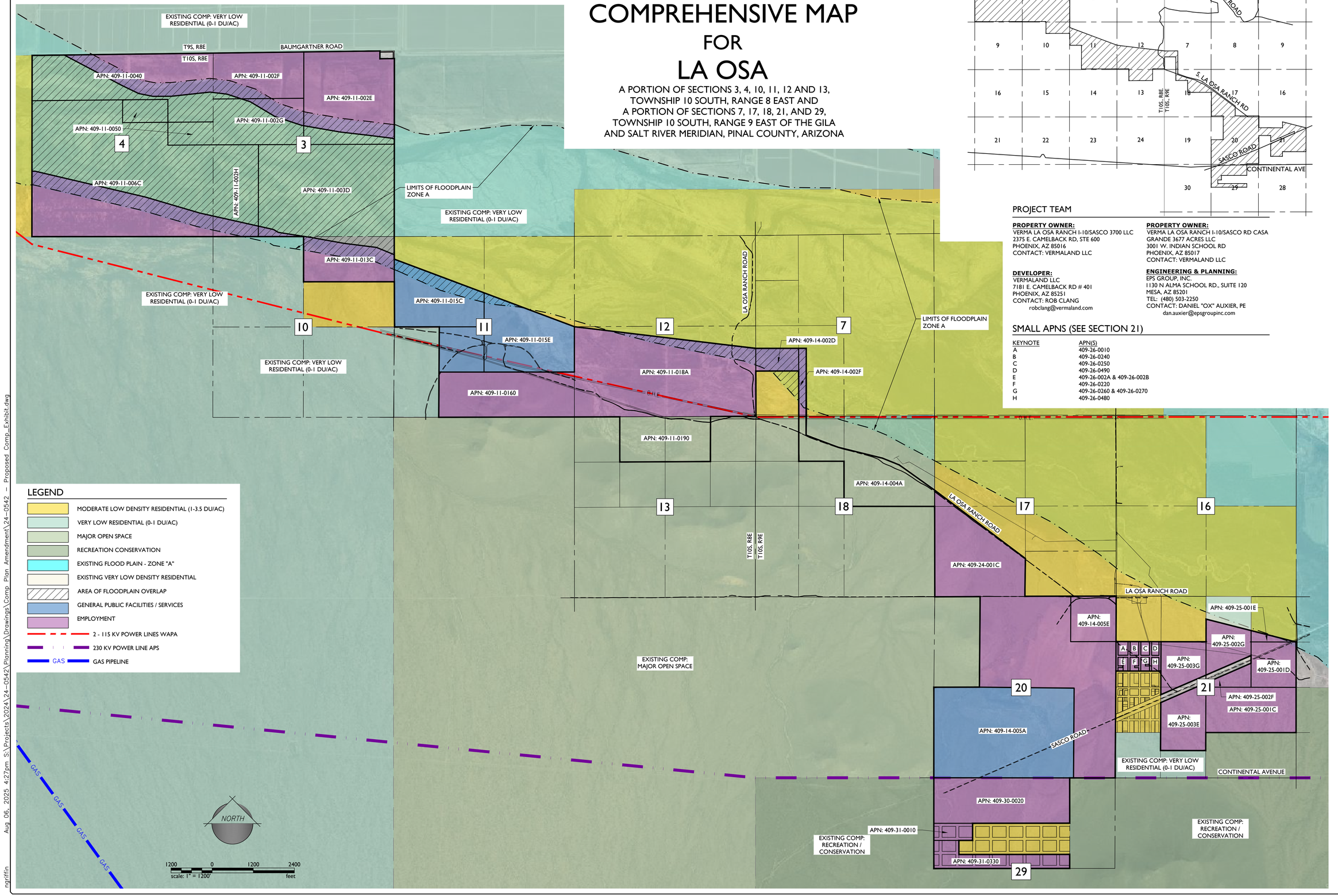
jjuarez

PROPOSED COMPREHENSIVE MAP
FOR
LA OSA

A PORTION OF SECTIONS 3, 4, 10, 11, 12 AND 13,
TOWNSHIP 10 SOUTH, RANGE 8 EAST AND
A PORTION OF SECTIONS 7, 17, 18, 21, AND 29,
TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA
AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA



LEGEND

- MODERATE LOW DENSITY RESIDENTIAL (1-3.5 DU/AC)
- VERY LOW RESIDENTIAL (0-1 DU/AC)
- MAJOR OPEN SPACE
- RECREATION CONSERVATION
- EXISTING FLOOD PLAIN - ZONE "A"
- EXISTING VERY LOW DENSITY RESIDENTIAL
- AREA OF FLOODPLAIN OVERLAP
- GENERAL PUBLIC FACILITIES / SERVICES
- EMPLOYMENT
- 2 - 115 KV POWER LINES WAPA
- 230 KV POWER LINE APS
- GAS PIPELINE

VICINITY MAP

PROJECT TEAM

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PHOENIX, AZ 85016
CONTACT: VERMALAND LLC

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robclang@vermaland.com

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EPS GROUP, INC.
1130 N ALMA SCHOOL RD., SUITE 120
MESA, AZ 85201
TEL: (480) 503-2250
CONTACT: DANIEL "OX" AUXIER, PE
dan.auxier@epsgroupinc.com

SMALL APNS (SEE SECTION 21)

KEYNOTE	APN(S)
A	409-26-0010
B	409-26-0240
C	409-26-0250
D	409-26-0490
E	409-26-002A & 409-26-002B
F	409-26-0220
G	409-26-0260 & 409-26-0270
H	409-26-0480

1130 N Alma School Road
Suite 120
Mesa, AZ 85201
T:480.503.2250 | F:480.503.2258
www.epsgroupinc.com
EPS GROUP

Project:
La Osa
Pinal County, Arizona

Proposed Comprehensive Map

Revisions:
MAY 29, 2025 - 1ST SUBMITTAL

Call at least two full working days before you begin excavation.
ARIZONA811
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

Designer: STAFF
Drawn by: STAFF

Preliminary
Not For
Construction
Or
Recording

Job No.
24-0542

PROPOSED

Sheet No.
1
of 1

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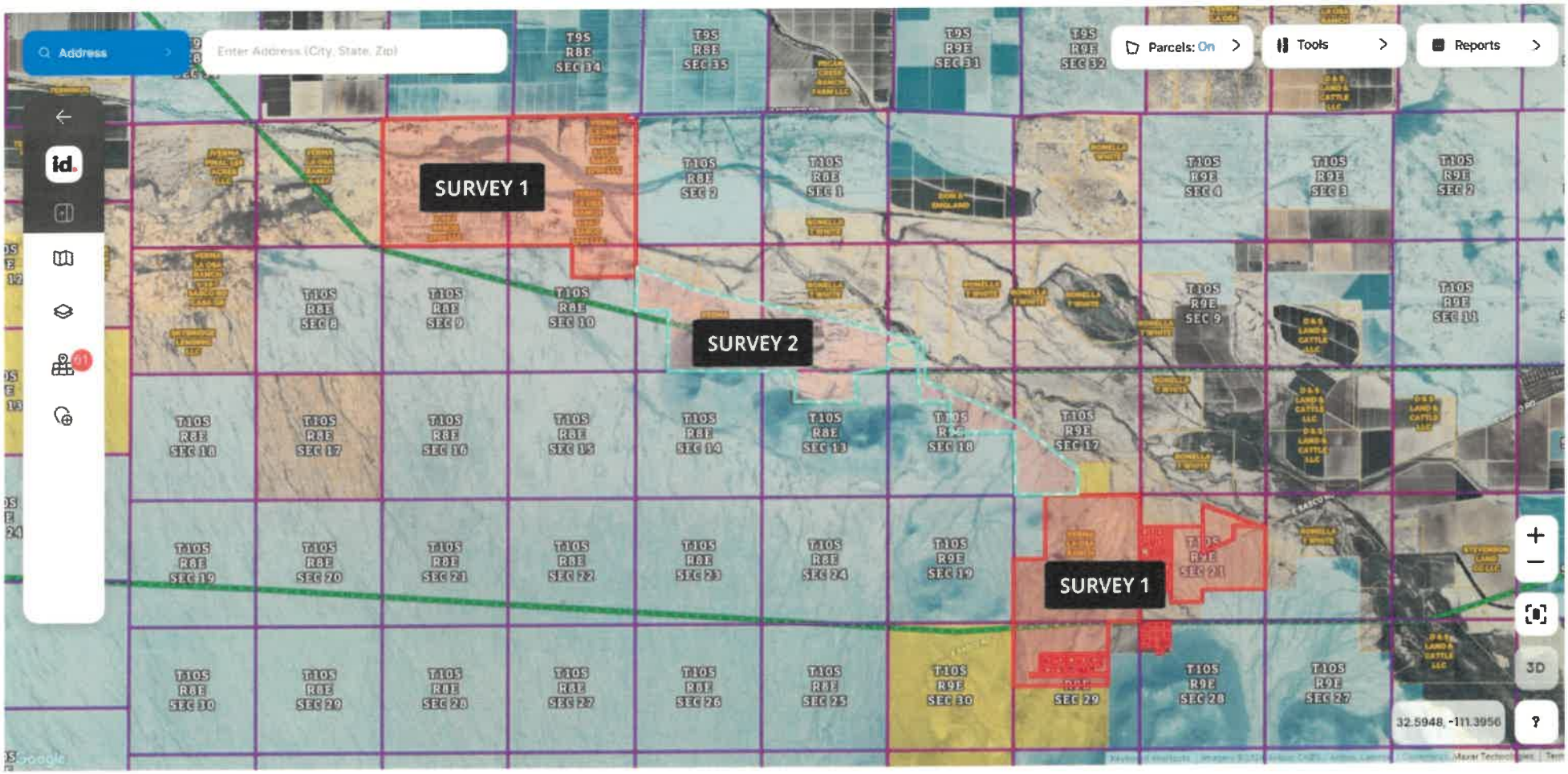
ngriffin

ATTACHMENT B: Trip Generation

La Osa Employee Center - Pinal County, AZ (24-0542)
May 29, 2025

DESCRIPTION OF LAND USE				VEHICLE GENERATED TRIPS									Data Points	AVERAGE RATE or EQUATION			DIRECTIONAL DISTRIBUTION					
				Daily			AM Peak Hour			PM Peak Hour							Daily		AM Peak Hour		PM Peak Hour	
Phase/Parcel	Land Use	ITE Land Use Code (LUC)	SIZE	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total		Daily	AM Peak Hour	PM Peak Hour	Enter	Exit	Enter	Exit	Enter	Exit
	Single Family	210 Single-family Detached Housing (~2,000 acres, 2.0 DU/acre)	4,000 DU	15,024	15,023	30,047	535	1,603	2,138	2,007	1,179	3,186		Ln(T)=0.92 Ln(X) + 2.68 95%	Ln(T)=0.91 Ln(X) + 0.12 90%	Ln(T)=0.94 Ln(X) + 0.27 92%	50%	50%	25%	75%	63%	37%
		140 Manufacturing	500 emp	628	627	1,255	117	43	160	57	98	155		2.51	0.32	0.31	50%	50%	73%	27%	37%	63%
		110 General Light Industrial	500 emp	775	775	1,550	220	45	265	54	191	245		3.1	0.53	0.49	50%	50%	83%	17%	22%	78%
		150 Warehousing	500 emp	1,263	1,262	2,525	220	85	305	119	211	330		5.05	0.61	0.66	50%	50%	72%	28%	36%	64%
		150 Warehousing	400 emp	1,010	1,010	2,020	176	68	244	95	169	264		5.05	0.61	0.66	50%	50%	72%	28%	36%	64%
		170 Utility	100 emp	193	192	385	62	9	71	11	64	75		3.85	0.71	0.75	50%	50%	87%	13%	14%	86%

Source: ITE Trip Generation Manual 11th Edition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Tools
Reports
SURVEY 1
SURVEY 2
SURVEY 1
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T10S R8E SEC 2
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T10S R9E SEC 28
T10S R9E SEC 27
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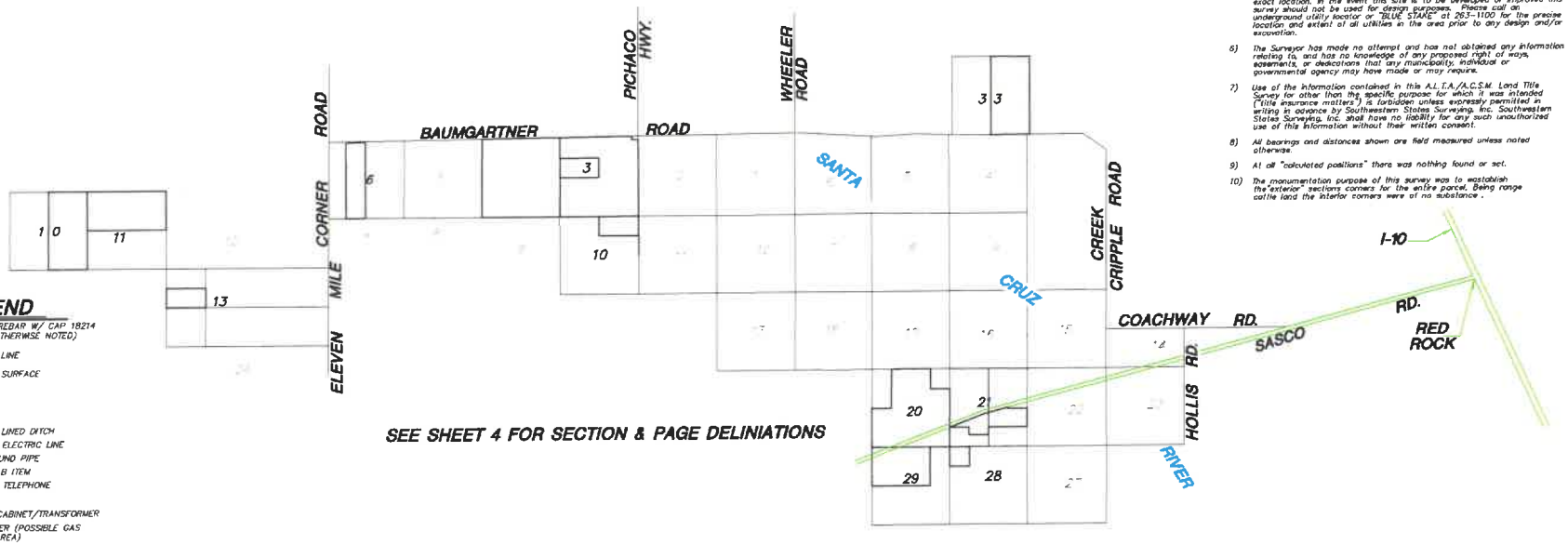
Google

A.L.T.A. / A.C.S.M.
LAND TITLE SURVEY

OF

SECTION 33, TOWNSHIP 9 SOUTH, RANGE 9 EAST; SECTIONS 10, 11 AND 13 IN TOWNSHIP 10 SOUTH, RANGE 7 EAST; SECTIONS 3, 4, 8, 10, IN TOWNSHIP 10 SOUTH, RANGE 8 EAST AND SECTIONS 20, 21, 28 AND 29 IN TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.



SEE SHEET 4 FOR SECTION & PAGE DELINIATIONS

LEGEND

- SET 1/2" REBAR W/ CAP 18214 (UNLESS OTHERWISE NOTED)
- PROPERTY LINE
- CONCRETE SURFACE
- WALL
- FENCE
- DIRT ROAD
- CONCRETE LINED DITCH
- OHE — OVERHEAD ELECTRIC LINE
- UNDERGROUND PIPE
- SCHEDULE B ITEM
- OT — OVERHEAD TELEPHONE
- DOWN GUY
- ELECTRIC CABINET/TRANSFORMER
- GAS MARKER (POSSIBLE GAS LINES IN AREA)
- GUARD POST / GATE POST
- IRRIGATION STANDPIPE
- LIGHT POLE
- MANHOLE
- MONITORING WELL
- POWER POLE
- POWER POLE W/ DROP ELECTRIC
- TELEPHONE RISER
- ELECTRIC METER/PEDASTAL
- I.S. — IRRIGATION STRUCTURE
- WELL LOCATION
- CEM. — CEMETARY
- R — RECORD PER ....
- D — RECORD PER DESCRIPTION
- A.C. — ALUMINUM CAP
- A.D.O.T. — ARIZONA DEPARTMENT OF TRANSPORTATION
- B.C.FL. — BRASS CAP FLUSH
- B.C.HH. — BRASS CAP IN HANDHOLE
- R.M. — REFERENCE MARK (A.C.)
- CALC. — CALCULATED
- CPD. — CAPPED
- COR. — CORNER
- FD. — FOUND
- G.L.O. — GOVERNMENT LAND OFFICE
- P.C. — PINAL COUNTY
- P.C.R. — PINAL COUNTY RECORDER
- SEC. — SECTION
- TGD — TAGGED
- 11 — SECTION NUMBER

NOTES

1) The basis of bearing is the North line of the Northeast quarter of Section 10, Township 10 South, Range 7 East, using a bearing of North degrees 89 degrees 59 minutes 13 seconds West
2) All title information and the description shown is based on a Commitment for Title Insurance issued by Thomas Title & Escrow as issuing Agent for First American Title Insurance Company (THIRD AMENDMENT) File Number 132157-33, dated April 10, 2013
3) There are no striped parking spaces on the subject property.
4) The building lines shown depict the building footprint at ground level. This information is intended to depict the general configuration of the building at ground level and may or may not depict the exact building foundation, the building offset distances shown are to actual building corners.
5) This survey shows visible evidence of underground utilities or facilities on the subject property. Many times in rural settings road graders, heavy equipment, vandalism or time will erase visable signs of these facilities. The fact that the survey may not show these signs is not an indication that facilities do not exist. No guarantee can be made as to the extent of the utilities available, either in service or abandoned, nor to their exact location. In the event this site is to be developed or improved this survey should not be used for design purposes. Please call an underground utility locator or "BLUE STAKE" at 263-1100 for the precise location and extent of all utilities in the area prior to any design and/or excavation.
6) The Surveyor has made no attempt and has not obtained any information relating to, and has no knowledge of any proposed right of ways, easements, or dedications that any municipality, individual or governmental agency may have made or may require.
7) Use of the information contained in this A.L.T.A./A.C.S.M. Land Title Survey for other than the specific purpose for which it was intended ("title insurance matters") is forbidden unless expressly permitted in writing in advance by Southwestern States Surveying, Inc. Southwestern States Surveying, Inc. shall have no liability for any such unauthorized use of this information without their written consent.
8) All bearings and distances shown are field measured unless noted otherwise.
9) At all "calculated positions" there was nothing found or set.
10) The monumentation purpose of this survey was to establish the "exterior" sections corners for the entire parcel. Being range cattle land the interior corners were of no substance .

REFERENCE DOCUMENTS

1) Record of Survey recorded in Book 7, page 203 P.C.R.
2) ALTA/ACSM LAND TITLE SURVEY recorded in Book 11, page 100 P.C.R
3) Unrecorded Survey by RST Land Surveying, Job No. 06-0061, 8-26-08
4) Greiner Engineering Plat recorded in Book 2, page 75, P.C.R.
4) G.L.O. Plats and Noted filed for each section in each Township & Range

AREA = 3,382,733 ACRES

CERTIFICATION

TO: First American Title Insurance Company and Verma La Osa Ranch I-10/Sasco 3700, LLC, an Arizona limited liability company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the "Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys," jointly established and adopted by ALTA and NSPS in 2005, and includes Items 2, 4, 8, 9, 10, 11(a), and 14 of Table A thereof. Pursuant to the Accuracy Standards as adopted by ALTA and NSPS and in effect on the date of this certification, undersigned further certifies that in my professional opinion, as a land surveyor registered in the State of Arizona, the Relative Positional Accuracy of this survey does not exceed that which is specified therein.

August 26, 2013
Randy S. Delbridge
R.L.S. 18214

18214 RANDY S. DELBRIDGE 8/26/13

EXPIRES 9/30/2014

Southwestern States Surveying, Inc.
Professional Land Surveying
1415 North 23rd Avenue, Phoenix, Arizona
Phone (623) 869-0223 Fax (877) 869-0133

ALTA/ACSM LAND TITLE SURVEY
LA OSA RANCH

REVISIONS		DRN. RD	SHEET 1 OF 16
DATE	DESCRIPTION	CHK: RD	
		DATE: 8-26-13	
		JOB NO.: 130381D	

Z: \DWG \2013 \130381D.DWG

DESCRIPTIONS

PARCEL NO. 1: (409-06-007D and 409-06-008D)
The East half of Section 10, and the North half of Section 11, all in Township 10 South, Range 7 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

EXCEPTING AND RESERVING unto the United States of America, pursuant to the provisions of the Act of December 29, 1916 (39 Stat. 862) all the coal and other minerals as set forth in the Patent to said land.

PARCEL NO. 2: (409-25-002C portion)
The West half of the Northeast quarter of Section 21, Township 10 South, Range 9 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

PARCEL NO. 3: (409-11-005D)
The North half of the Southwest quarter of the Northeast quarter, and the South half of the Southeast quarter of the Northeast quarter, all in Section 4, Township 10 South, Range 8 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

PARCEL NO. 4: (410-01-002D portion)
The West half of the East half of Section 33, Township 9 South, Range 9 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

PARCEL NO. 5: (409-11-013C and 409-11-003D)
The Southeast quarter and the East half of the Southwest quarter of Section 3, and the North half of the Northeast quarter of Section 10, Township 10 South, Range 8 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

PARCEL NO. 6: (Part of 409-11-002D portion)
The South half of the West half of the Southwest quarter of Section 3, Township 10 South, Range 8 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

PARCEL NO. 7: (Part of 409-11-006C)
The South half of the Southeast quarter of Section 4, Township 10 South, Range 8 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

PARCEL NO. 8: (Part of 409-11-002D portion)
Lots 3 and 4 of Section 3, Township 10 South, Range 8 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona;

EXCEPTING therefrom all uranium, thorium or any other material which is or may be determined to be peculiarly essential to the production of fissional materials as reserved in the Patent recorded in Docket 75, page 455.

PARCEL NO. 9: (Part of 409-11-002D portion)
The North half of the West half of the Southwest quarter of Section 3, Township 10 South, Range 8 East of the Gila and salt River Base and Meridian, Pinal County, Arizona.

PARCEL NO. 10: (Part of 409-11-006C)
The South half, and The South half of the Northwest quarter; and
The South half of the Southwest quarter of the Northeast quarter of Section 4, Township 10, South, Range 8 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona;
EXCEPT the South half of the Southeast quarter of said Section 4; and
EXCEPTING all coal, oil, gas and other mineral deposits as reserved unto the United States of America in the Patent of said land.

PARCEL NO. 11: (409-25-003D portion)
All that certain real property situate in the County of Pinal, State of Arizona, being a part of the East half of the West half of Section 21, Township 10 South, Range 9 East of the Gila and Salt River Base and Meridian, more particularly described as follows:
BEGINNING at a 3/4" inch diameter open pipe with an aluminum capped rebar inside, stamped RLS 7599 (accepted), marking the South quarter corner of said Section 21;
Thence from said Point of Beginning, Northerly along the East line of the Southwest quarter of said Section 21,
North 00 degrees 11 minutes 00 seconds East, 798.32 feet (calculated) to the TRUE POINT OF BEGINNING of Parcel "D" herein described, marked by a No. 4 rebar with registration tag RLS 26932 (set this survey);
Thence from said TRUE POINT OF BEGINNING, Westerly, North 89 degrees 55 minutes 04 seconds West 1317.84 feet (measured) to a point on the East line of the Southwest quarter of the Southwest quarter of said Section 21, being the Southwest corner of said Parcel "B", marked by an aluminum capped rebar stamped RLS 7599 (accepted);
Thence Northerly along said East line, North 00 degrees 13 minutes 46 seconds East, 526.62 feet (measured) to the Northeast corner of the Southwest quarter of the Southwest quarter of said Section 21, marked by an aluminum capped rebar stamped RLS 7599 (accepted);
Thence leaving said Northeast corner, Northerly along the West line of the Northeast quarter of the Southwest quarter of said Section 21, North 00 degrees 18 minutes 21 seconds East, 1326.85 feet (measured) to the Northwest corner thereof, marked by an aluminum capped rebar stamped RLS 7599 (accepted);
Thence leaving said Northwest corner, Northerly along the East line of the Southeast quarter of the Northwest quarter of said Section 21, North 00 degrees 12 minutes 56 seconds East, 1326.34 feet (measured) to the Northwest corner thereof, marked by an aluminum capped rebar stamped RLS 7599 (accepted);
Thence leaving said Northwest corner, South 89 degrees 48 minutes 11 seconds East 1313.95 feet (measured) to the Northeast corner of the Southeast quarter of the Northwest quarter of said Section 21, marked by an aluminum capped rebar stamped RLS 7599 (accepted),
Thence Southerly along the East line of the West half of said Section 21, South 00 degrees 11 minutes 08 seconds West 3177.15 feet (calculated) to the TRUE POINT OF BEGINNING.

PARCEL NO. 12: (409-41-003D; 409-41-004D; 409-41-005D and 409-41-009D)
The East half of the West half of Section 6, Township 10 South, Range 8 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

EXCEPT the North 50 feet thereof.

PARCEL NO. 13: (409-06-013D)
THE South half of the Northwest quarter of Section 13, Township 10 South, Range 7 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona;
EXCEPTING therefrom all coal, oil, gas and other mineral deposits as reserved in the Patent recorded in Book 38 of Deeds, page 572.

PARCEL NO. 14 (409-11-004D portion)
Lots 1, 2, 3 and 4 and the North half of the Southeast quarter of the Northeast quarter of Section 4, Township 10 South, Range 8 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona;

EXCEPT all coal and other minerals as reserved in Patent from United States of America.

PARCEL NO. 15:
The East half, The Southwest quarter; and the East half of the Northwest quarter of Section 20, Township 10 South, Range 9 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

PARCEL NO. 16: (409-25-001A portion)
The North half of the Southeast quarter of Section 21, Township 10 South, Range 9 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

PARCEL NO. 17: (409-30-002D)
The Northwest quarter of the Northeast quarter; and The North half of the Northwest quarter of Section 29, Township 10 South, Range 9 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

PARCEL NO. 18: (409-31-001D; 409-31-002D; 409-31-004D; 409-31-005D; 409-31-006D; 409-31-007D; 409-31-008D; 409-31-009D; 409-31-010D; 409-31-012D; 409-31-014D; 409-31-015D; 409-31-017D; 019D; 020D; 021D; 022D; 023D; 025D; 026D; 027D; 029D; 030D; 031D; 032D and 409-31-033D)
All of Blocks 1, 2, 3, 8, 9, 10, 11, 13, 14, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 and 27,
Lots 1, 2, 3, 5 through 16 inclusive of Block 4,
Lots 1 through 13 inclusive, and Lot 16 of Block 5;
Lots 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 of Block 6;
Lots 1, 3, 4, 5, 6, 7, 8, 8, 10, 11, 12, 13, 14, 15 and 16 of Block 7;
Lots 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16 of Block 12;
Lots 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16 of Block 15;
Lots 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16 of Block 16;
All in SASCO TOWNSITE, according to the plat of record in the office of the County Recorder of Pinal County, Arizona, recorded in Book 3 of Maps, page 17.

PARCEL NO. 19:
(409-26-013D; 409-26-014D; 409-26-015D; 409-26-017D; 409-26-034D; 409-26-035D; 409-26-036D; 409-26-037D; 409-26-038D;

Lots 1 through 8 inclusive, Block 6;
All of Block 7;
Lots 7 through 15 inclusive, Block 17; and all of
Blocks 18, 19 and 20;
of SMELTER ADDITION TO SASCO, ARIZONA in the Southwest quarter of the Northwest quarter and the Northwest quarter of the Southwest quarter of Section 21, Township 10 South, Range 9 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona, according to the plat in the office of the County Recorder of Pinal County, Arizona, according to Book 3 of Maps, pages 18 and 19.

PARCEL NO. 20: (409-29-001A; 409-29-003D through 409-29-010D inclusive; 409-29-011A; 409-29-012D; 409-29-013D; 409-29-016D; 409-29-018A and 409-29-018B)
Lots 6, 10, 11, 12, Block 1; Lots 1 through 12 inclusive, Block 2; Lots 1 through 12 inclusive, Block 3, Lots 1 through 16 inclusive, Block 4; Lots 1 through 16, Block 5; Lots 1 through 12 inclusive, Block 6; Lots 1 through 12 inclusive, Block 7; Lots 1 through 12 inclusive, Block 8; Lots 1 through 3 inclusive and Lots 7 through 12 inclusive, Block 9, Lots 1 through 12 inclusive, Block 10, Lots 1, 2, 11 and 12, Block 11; Lots 1 through 16 inclusive, Block 12; Lots 1 through 12 inclusive, Block 14 of DAILY ADDITION TO SASCO, ARIZONA, in the Northwest quarter of the Northwest quarter of Section 28, Township 10 South, Range 9 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona, recorded in Book 2 of Maps, page 6.

PARCEL NO. 21: (410-01-002C and 410-01-002B)
The East half of the East half of Section 33, Township 9 South, Range 9 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

PARCEL NO. 22: (409-11-002E)
GLO Lots 1 and 2 and the East half of the South half of the North half of Section 3, Township 10 South, Range 8 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

EXCEPT the North 227.00 feet of the East 423.00 feet of GLO Lot 1; and

EXCEPT all uranium, thorium or other materials which are or may be essential to the production of fissionable materials as reserved in Patent recorded in Docket 75, page 455



EXPIRES 9/30/2014

Southwestern States Surveying, Inc.
Professional Land Surveying
2415 North 23rd Avenue, Phoenix, Arizona
Phone (623) 869-0223 Fax (623) 869-0726

ALTA/ACSM LAND TITLE SURVEY
LA OSA RANCH

REVISIONS		DRW BY	SHEET 2 OF 10
DATE	DESCRIPTION	CHK BY	
		DATE:	5-28-13
		JOB NO.:	130381D

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SCHEDULE "B" ITEMS

7. An easement for electric transmission lines and incidental purposes recorded as Docket 114, page 187, of Official Records.

8. An easement for line of poles or steel towers, wires, cables, appurtenances, fixtures and incidental purposes recorded as Docket 537, page 268, of Official Records.
(affects Lot 6, Block 1; Lots 1 to 6, Block 2; Lots 1 to 6, Block 3 and Lots 1 to 8, Block 4 of Daily Addition to Sasco)
(Affects Subject Property – Undefined Location – Unable to Plot)

9. An easement for lines of poles, steel towers, appurtenance, fixtures and incidental purposes recorded as Docket 547, page 357, of Official Records.
(affects Parcel 17)

[illegible]

11. All matters as set forth in Notice of Exercise of Reserved Right of Way by the United States over certain Land Owned by the State of Arizona, recorded as Docket 1529, page 343, of Official Records. (affects Parcel 1)

12. All matters as set forth in Notice of Exercise of Reserved Right of Way by the United States recorded as Docket 1529, page 343, of Official Records.
(affects Parcel 4)

[illegible]

[illegible]

15. The terms, conditions and provisions contained in the document entitled Agreement Relating to Exercise of Reserved Right of Way recorded as Docket 1627, page 569, of Official Records.
(affects Parcels 4 and 21)

[illegible]

17. The terms, conditions and provisions contained in the document entitled Resolution and Order of the Board of Directors of Central Arizona Irrigation and Drainage District Granting Petitions for Exclusion and Inclusion of Lands in said District recorded as Docket 1731, page 540, of Official Records and rerecorded in Docket 1734, page 312, of Official Records.
(affects Parcel 3)
(Affects Subject Property – Nothing to Plot)

19. The terms, conditions and provisions contained in the document entitled Agreement to provide Electrical Service recorded February 25, 2005 as Fee 2005-19048, of Official Records.

20. The terms, conditions and provisions contained in the document entitled Infrastructure Coordination and Finance Agreement recorded October 15, 2008 as Fee 2008-98149, of Official Records.
(Affects Subject Property – Nothing to Plot)

21. All matters as set forth in Resolution and Order of the Board of Directors Granting the Petition to include Lands in the Greene Reservoir Flood Control District, recorded February 12, 2009, as Fee 2009-14200 and rerecorded February 13, 2009 as Fee 2009-14537, of Official Records.
(Affects Subject Property – Nothing to Plot)

22. The effect of a map purporting to show the land recorded as Book 7 of Surveys, page 203.
(Affects Subject Property – Nothing to Plot)



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[illegible]

ALTA/ACSM LAND TITLE SURVEY
LA OSA RANCH

REVISIONS		DWN. RD / CHK. RD	SHEET 3 OF 18
DATE	DESCRIPTION	DATE:	8-26-13
		JOB NO.:	130381D

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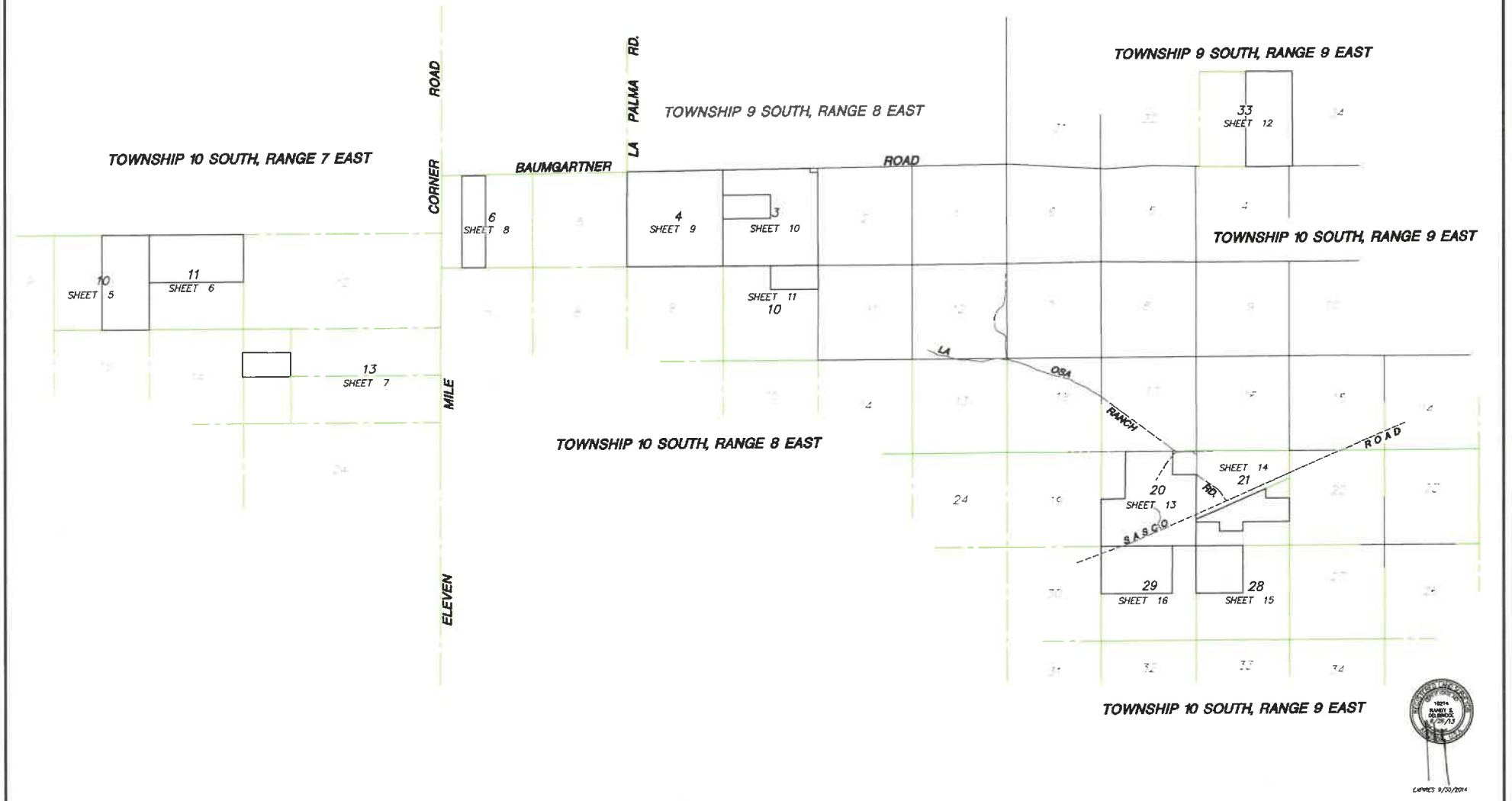

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Professional Land Surveying
21415 North 23rd Avenue, Phoenix, Arizona
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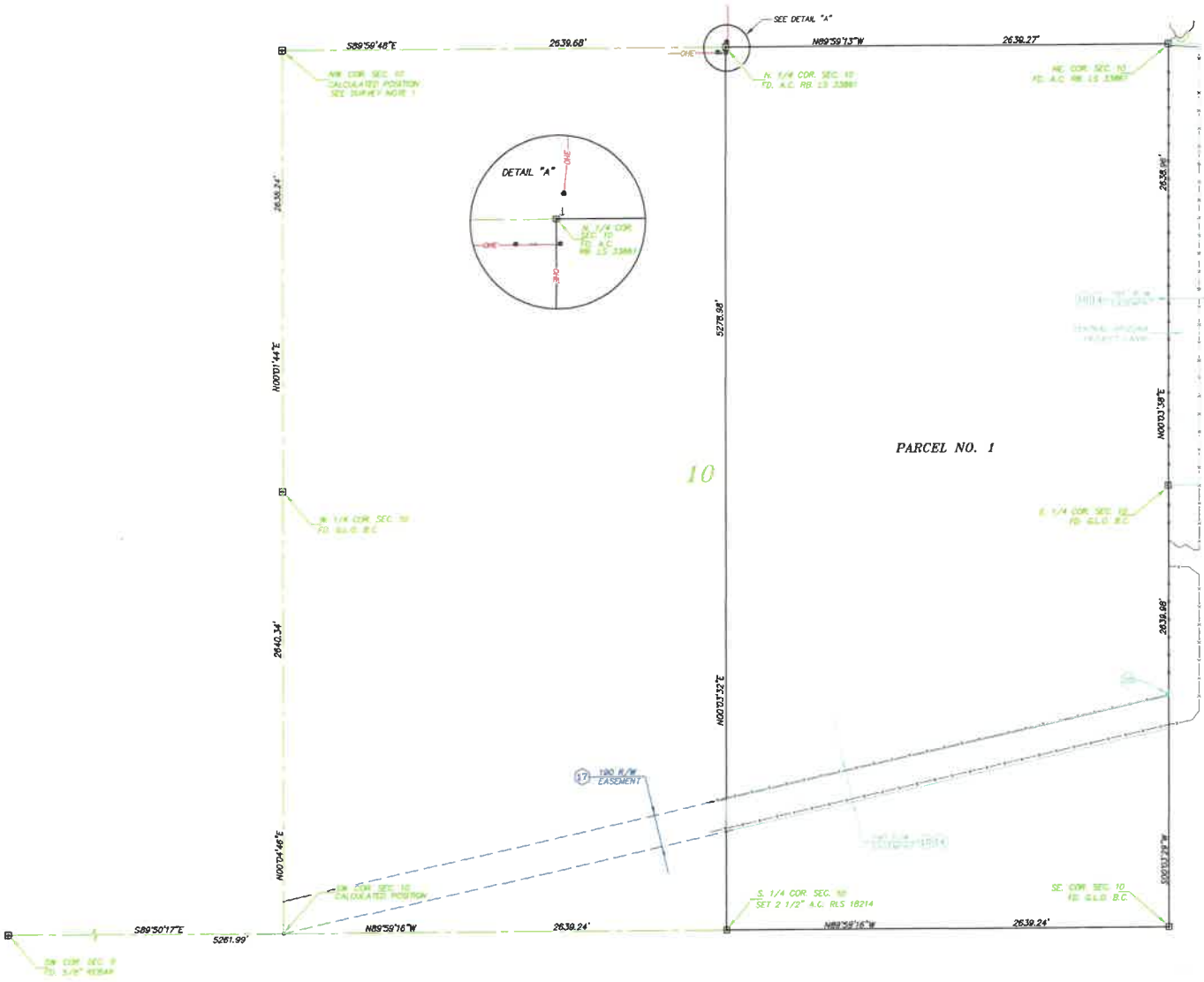
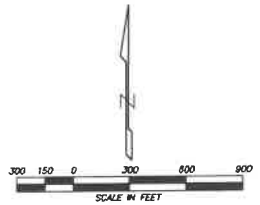
ALTA/ACSM LAND TITLE SURVEY

LA OSA RANCH

REVISIONS			
DATE	DESCRIPTION	DWN: RD	SHEET 4 OF 16
		CHK: RD	
		DATE: 5-26-13	
		JOB NO.: 130381D	

EXPIRES 9/30/2014





SCALE : 1" = 300'

SURVEY NOTES

1) Northwest corner is Nothing found or set. Position is calculated based on the PLT Survey which calculated the corner using the Dresser Engineering Plat recorded in Book 2, page 75 and the GLO Plat filed 1-4-1918.

AREA = 319.843 ACRES



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Professional Land Surveying
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Phone (623) 869-0223 Fax (623) 869-0720

ALTA/ACSM LAND TITLE SURVEY
LA OSA RANCH – SECTION 10, T. 10 S. – R. 7 E.

REVISIONS		DWN. RD / CHK. RD	SHEET 5 OF 18
DATE	DESCRIPTION	DATE:	8-26-13
		JOB NO.:	130381D

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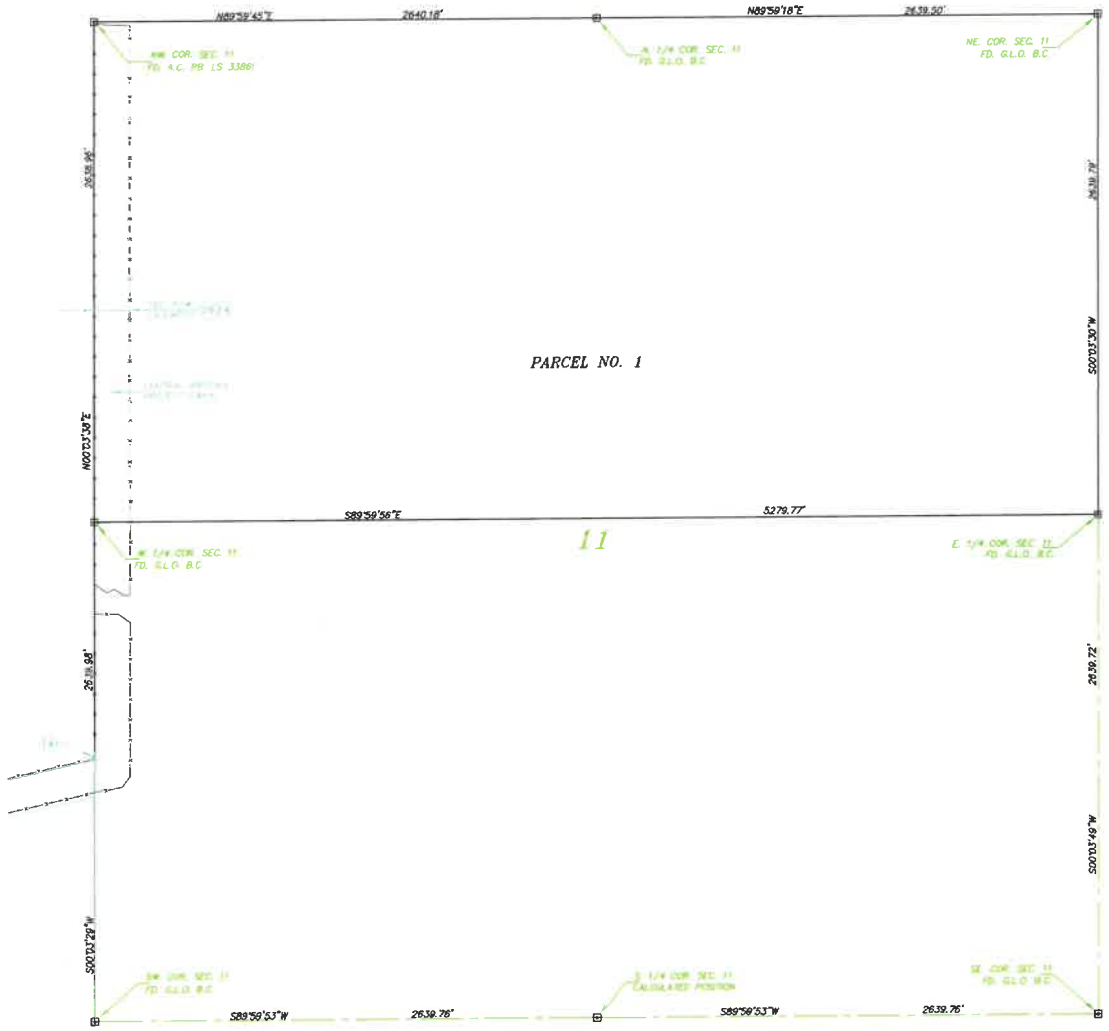

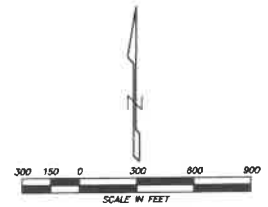

SCALE : 1" = 300'

AREA = 319.897 ACRES



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Professional Land Surveying
3141 North 23rd Avenue, Phoenix, Arizona 85017
Phone (623) 869-0223 Fax (623) 869-0726

ALTA/ACSM LAND TITLE SURVEY

LA OSA RANCH – SECTION 11, T. 10 S. – R. 7 E.

REVISIONS		DWN. RD	SHEET 6 OF 18
DATE	DESCRIPTION	CHK. RD	
		DATE:	5-28-13
		JOB NO.:	130381D

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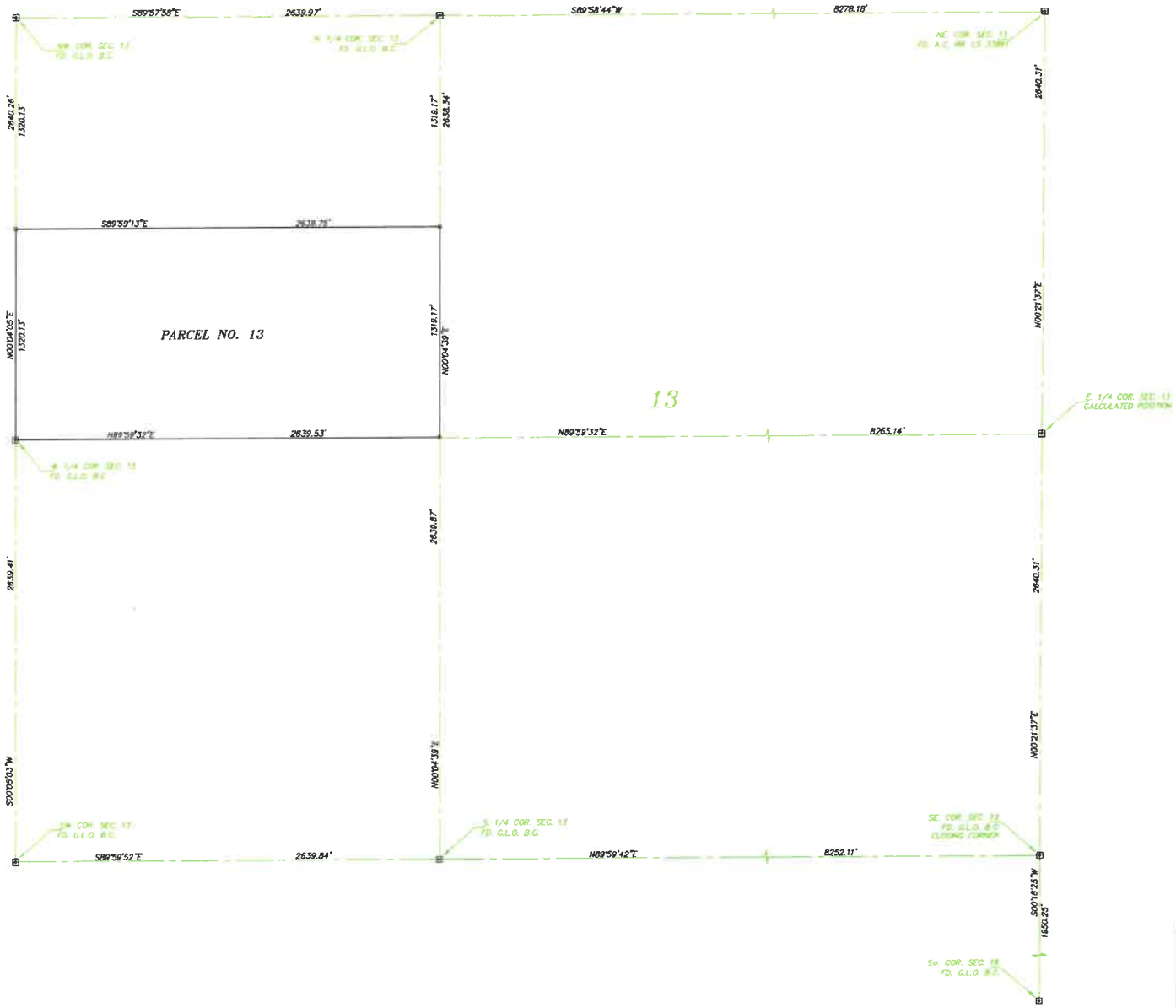

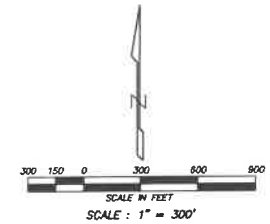

AREA = 79.967 ACRES



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21415 North 23rd Avenue, Phoenix, Arizona 85027
Phone (623) 869-[illegible] Fax (623) 869-[illegible]

ALTA/ACSM LAND TITLE SURVEY
LA OSA RANCH – SECTION 13, T. 10 S. – R. 7 E.

REVISIONS			
DATE	DESCRIPTION	DWN. RD / CHK. RD	SHEET 7 OF 16
		DATE:	8-26-13
		JOB NO.:	130381D

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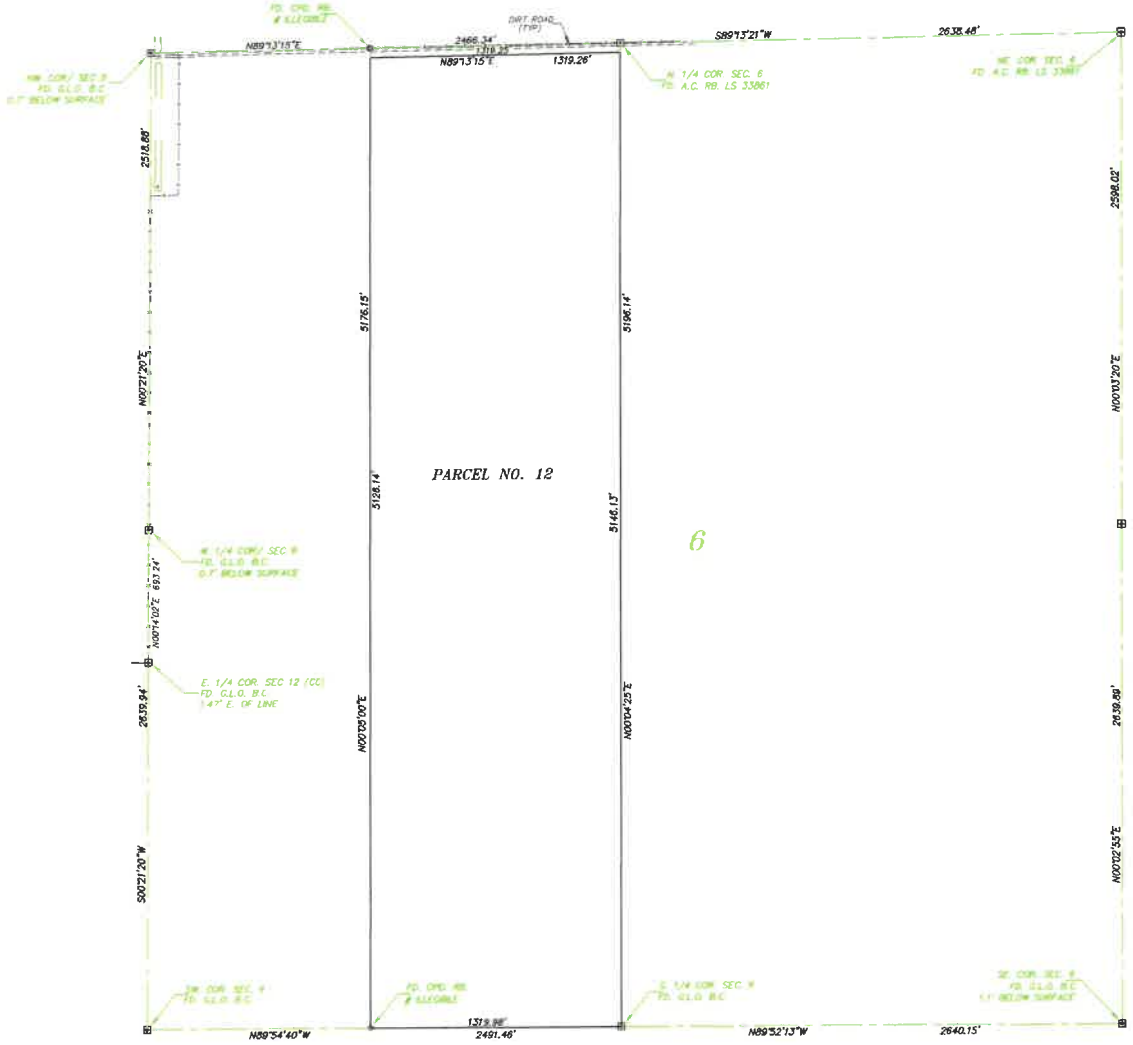

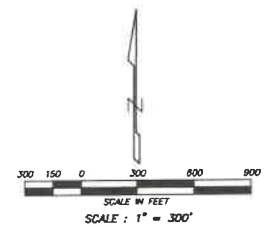

AREA = 155.587 ACRES



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ALTA/ACSM LAND TITLE SURVEY
LA OSA RANCH – SECTION 6, T. 10 S. – R. 8 E.

REVISIONS			
DATE	DESCRIPTION	DWN: RD CHK: PD	SHEET 8 OF 18
		DATE:	8-26-13
		JOB NO.:	130381D

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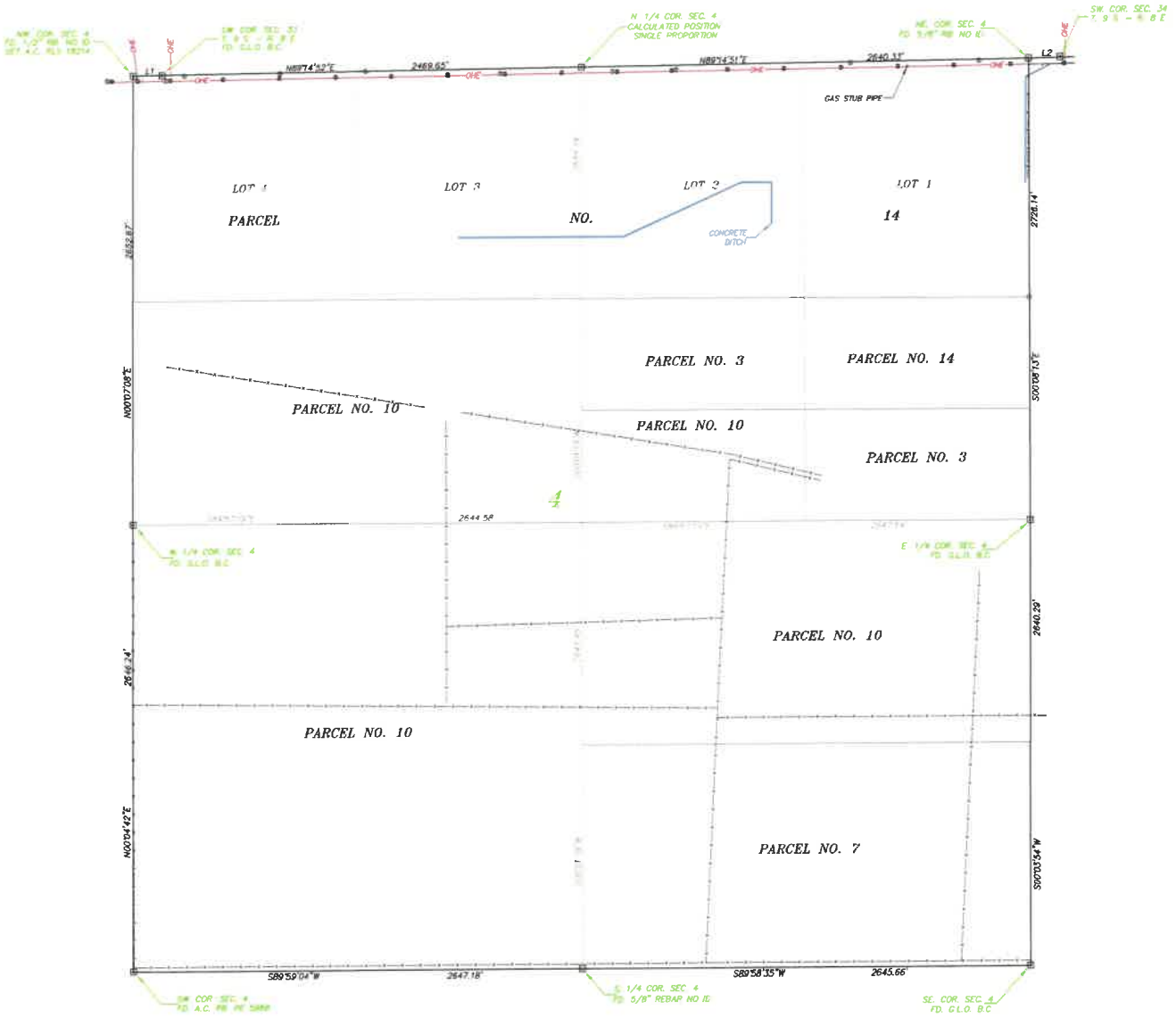

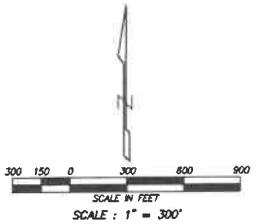

LINE TABLE		
LINE	BEARINGS	LENGTH
L1	N89°14'41"E	170.68'
L2	N89°10'37"E	183.92'

AREA = 647.539 ACRES



Southwestern States Surveying, Inc.
Professional Land Surveying
2141 S North 23rd Avenue, Phoenix, Arizona 85027
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ALTA/ACSM LAND TITLE SURVEY

LA OSA RANCH – SECTION 4 T. 10 S. – R. 8 E.

REVISIONS		DWN: RD CHK: RD	SHEET 9 OF 10
DATE	DESCRIPTION	DATE:	8-26-13
		JOB NO.:	1303810

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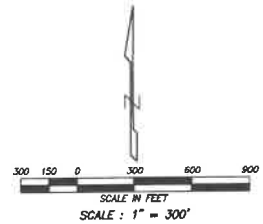
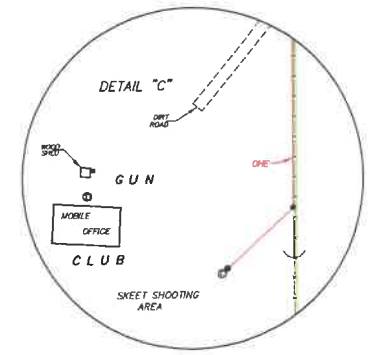
SURVEY NOTES

1) Northing found or set. Position is calculated based on the PST Survey which calculated this corner using the Gramer Engineering Plat recorded in Book 2, page 72 and the GLO Plat filed 7-4-1919.





LINE TABLE		
LINE	BEARINGS	LENGTH
L1	N 89°10'37" E	183.92'
L2	N89°15'54"E	190.73'
L3	N89°18'19"E	423.01'
L4	S00°16'39"E	227.01'
L5	S00°16'39"E	227.01'
L6	N89°18'19"E	423.01'
L7	N89°14'12"E	196.89'

AREA = 573.682 ACRES



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ALTA/ACSM LAND TITLE SURVEY

LA OSA RANCH – SECTION 3 T. 10 S. – R. 8 E.

REVISIONS			
DATE	DESCRIPTION	DWN: RD CHK: RD	SHEET 10 OF 16
		DATE:	8-26-13
		JOB NO.:	1303810

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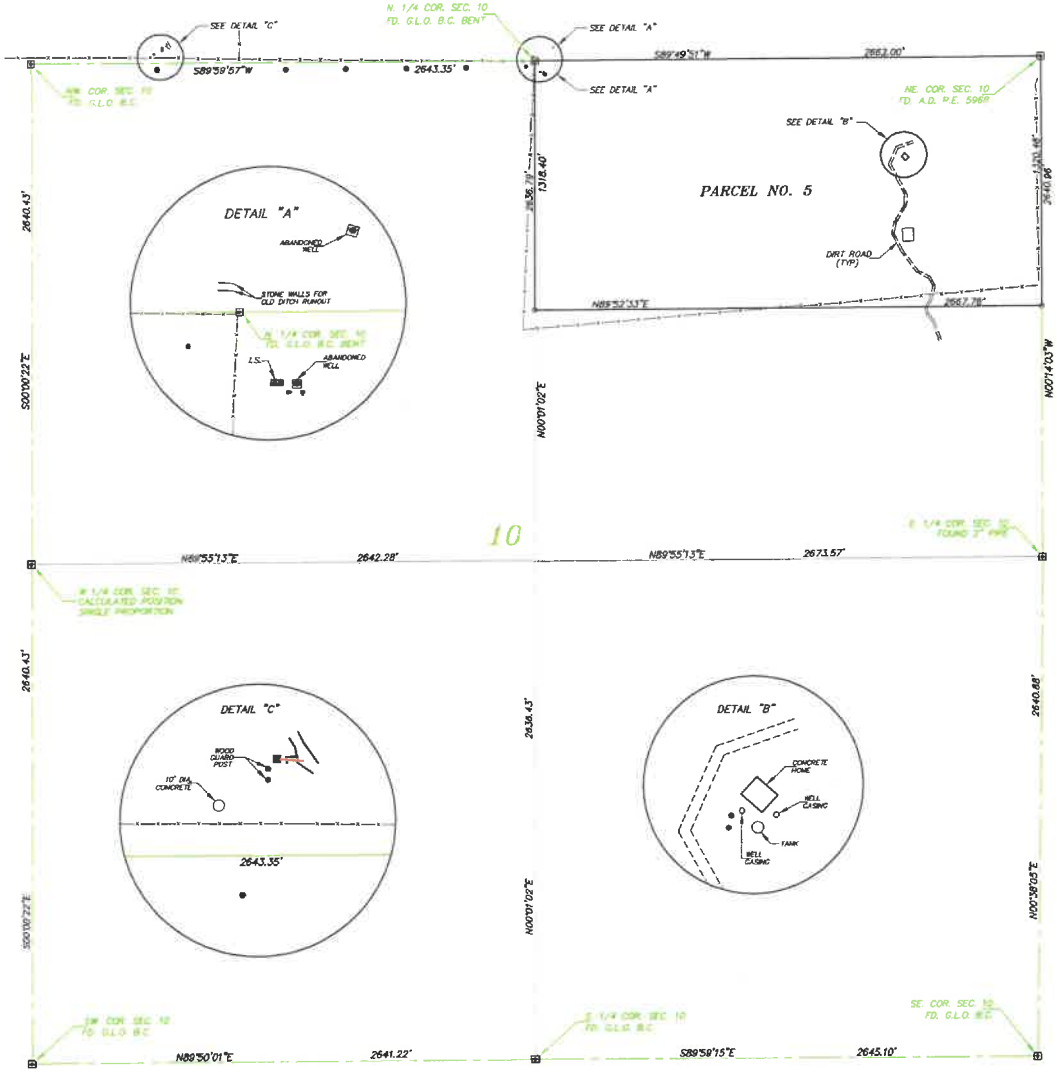

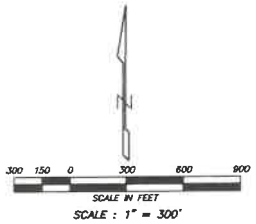

AREA = 80.719 ACRES



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3415 North 23rd Avenue, Phoenix, Arizona 85017
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ALTA/ACSM LAND TITLE SURVEY

LA OSA RANCH – SECTION 10 T. 10 S. – R. 8 E.

REVISIONS	DRW. RD	SHEET 11 OF 16
	CHK. RD	
	DATE:	8-26-13
	JOB NO.:	130381D

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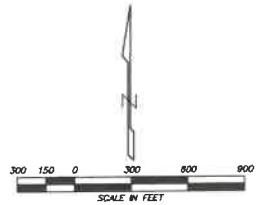

SCALE : 1" = 300'

SURVEY NOTES

1) Nothing found or set. Position is calculated based on the RSF Survey which had calculated the corner by double proportion measurement using the NE. Corner of Section 34, the NW. Corner of Section 33, the SW. Corner of Section 15 and a Rock Mound at the SW Cor. of Section 34

AREA = 319.429 ACRES



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ALTA/ACSM LAND TITLE SURVEY

LA OSA RANCH – SECTION 33 T. 9 S. – R. 9 E.

REVISIONS		DWG NO	SHEET 12 OF 16
DATE	DESCRIPTION	DWG NO	
		DATE:	8-26-13
		JOB NO.:	1303810

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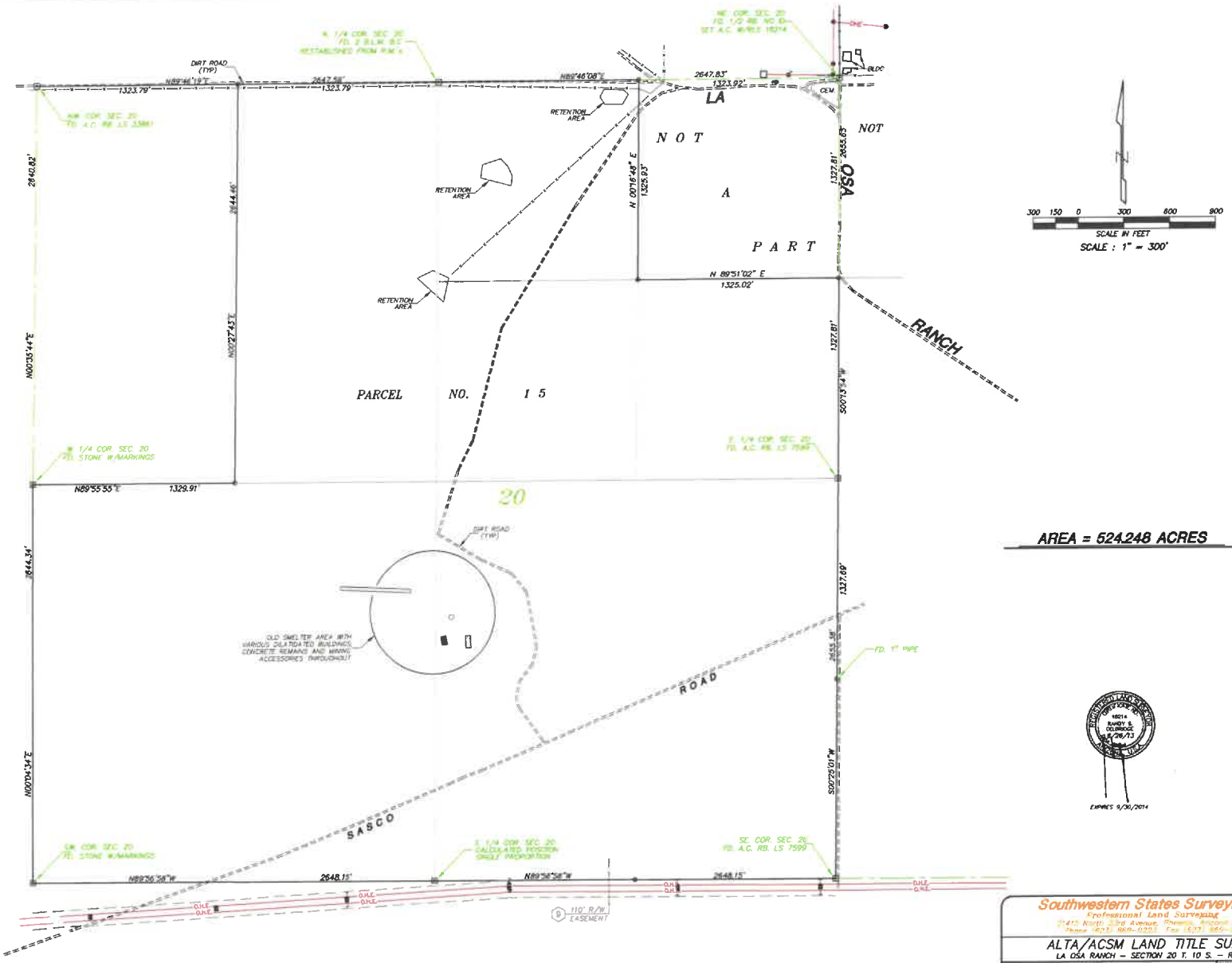

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ALTA/ACSM LAND TITLE SURVEY
LA OSA RANCH – SECTION 20 T. 10 S. – R. 9 E.

REVISIONS		DWN RD	SHEET 13 OF 16
DATE	DESCRIPTION	CHK RD	
		DATE:	8-26-13
		JOB NO.:	130381D

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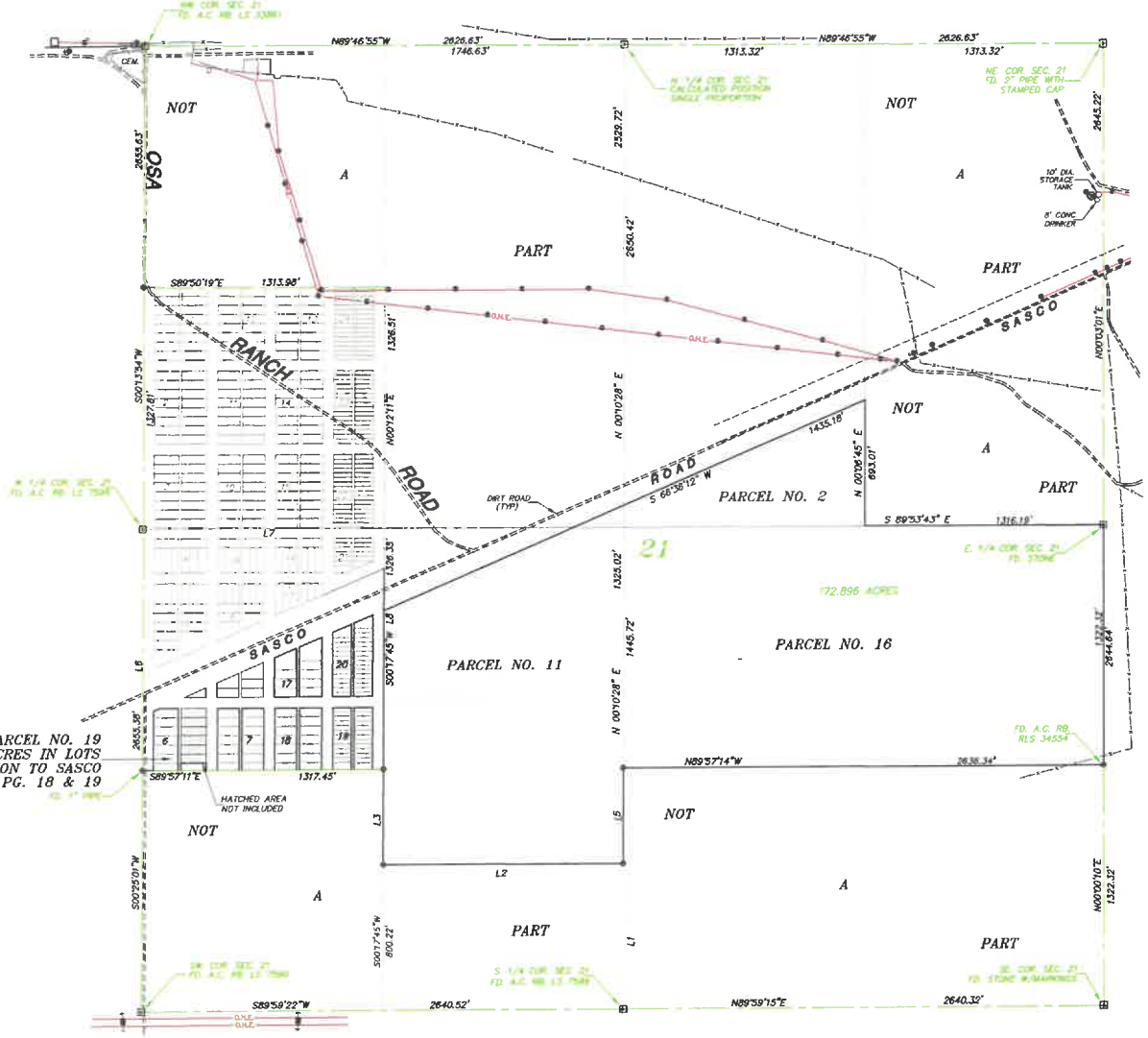

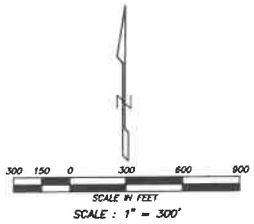

LINE TABLE		
LINE	BEARINGS	LENGTH
L1	N 00°10'28" E	798.32'
L1R	N 00°11'00" E	798.32'
L2	N 89°55'42" W	1318.56'
L2R	N 89°55'04" W	1317.84'
L3	N 00°17'45" E	526.13'
L3R	N 00°13'45" W	526.62'
L4	S 78°37'22" E	730.06'
L5	N00°10'28"E	526.70'
L6	N 00°12'11" E	1326.51'
L6R	N 00°12'56" E	1326.34'
L7	S 89°50'19" E	1313.98'
L7R	S 89°48'11" E	1313.85'
L8	S 00°17'45" W	3178.82'
L8R	S 00°11'08" W	3177.15'
L9	N 00°10'28" E	526.70'

AREA = 153.173 ACRES

EXPIRES 9/30/2014

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3141 S. 35th Avenue, Phoenix, Arizona 85027
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ALTA/ACSM LAND TITLE SURVEY
LA OSA RANCH – SECTION 21 T. 10 S. – R. 9 E.

REVISIONS		DWN. RD	SHEET 14 OF 18
DATE	DESCRIPTION	CHK. RD	
		DATE:	8-26-13
		JOB NO.:	130381D

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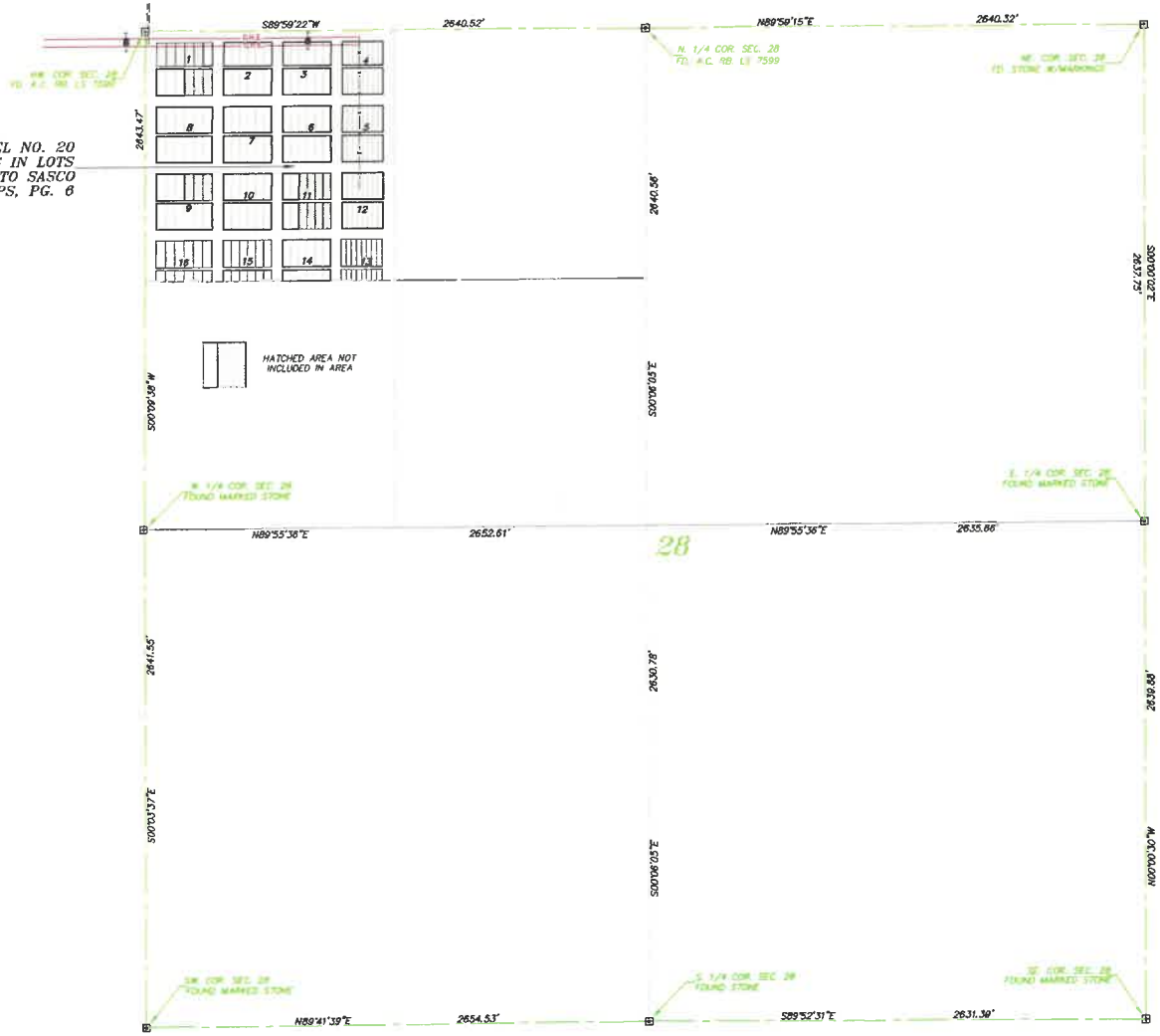
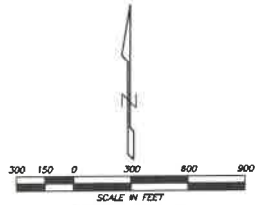
PARCEL NO. 20
17.77 ACRES IN LOTS
DAILY ADDITION TO SASCO
BOOK 2 OF MAPS, PG. 6





SCALE : 1" = 300'

AREA = 17.770 ACRES



Southwestern States Surveying, Inc.
Professional Land Surveyors
1415 North 52nd Avenue, Phoenix, Arizona
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ALTA/ACSM LAND TITLE SURVEY
LA OSA RANCH – SECTION 28 T. 10 S. – R. 9 E.

REVISIONS			
DATE	DESCRIPTION	DWN BY:	SHEET 15 OF 16
		CHK BY:	
		DATE:	8-26-13
		JOB NO.:	1303810

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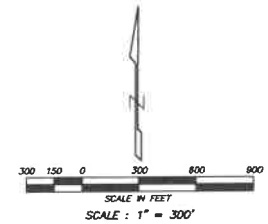

SURVEY NOTES

1) Nothing found or set. Position is calculated based on the PLS Survey which restored the position per double proportion using a stone at the NW Corner of Section 29, a stone W.C. at the East 1/4 Corner of Section 31 and a stone at the South 1/4 corner of Section 29.

AREA = 190.879 ACRES



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ALTA/ACSM LAND TITLE SURVEY
LA OSA RANCH – SECTION 29 T. 10 S. – R. 7 E.

REVISIONS			
DATE	DESCRIPTION	DWN: RD CHK: RD	SHEET 16 OF 16
		DATE:	8-26-13
		JOB NO.:	130381D

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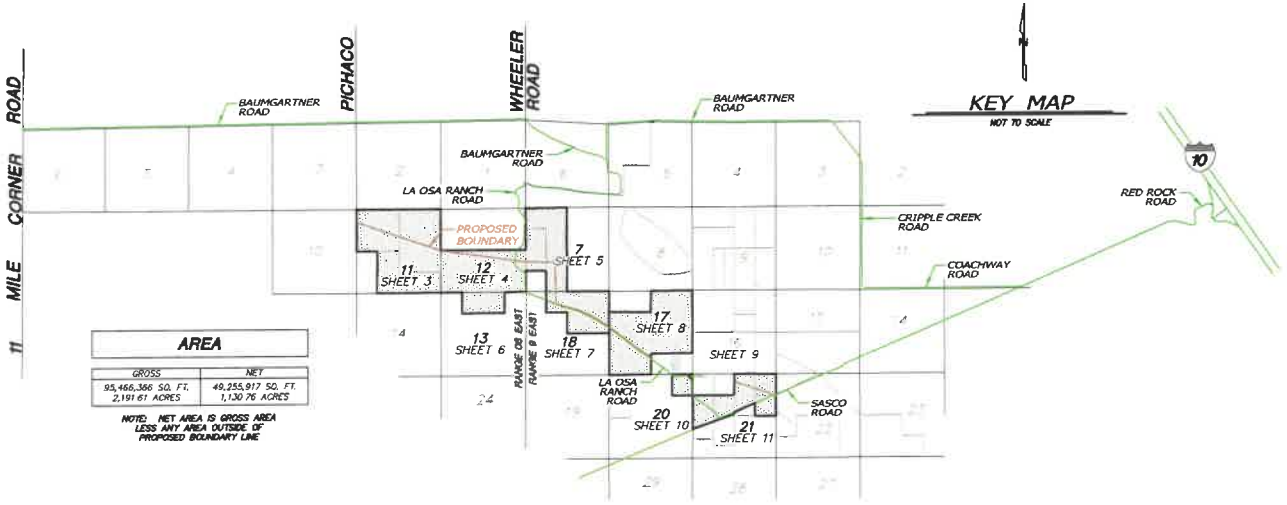
BOUNDARY SURVEY
LA OSA RANCH & SASCO ROAD

SECTIONS 11, 12 AND 13, TOWNSHIP 10 SOUTH, RANGE 8 EAST AND SECTIONS 7, 17, 18, 20, AND 21, TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.



KEY MAP
NOT TO SCALE

AREA

GROSS	NET
95,466,366 SQ. FT. 2,191.61 ACRES	49,255,917 SQ. FT. 1,130.76 ACRES

NOTE: NET AREA IS GROSS AREA LESS ANY AREA OUTSIDE OF PROPOSED BOUNDARY LINE

NOTES

1) THE BASIS OF BEARING IS THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 10, TOWNSHIP 10 SOUTH, RANGE 7 EAST, USING A BEARING OF NORTH DEGREES 89 DEGREES 59 MINUTES 13 SECONDS WEST.

2) ALL TITLE INFORMATION AND THE DESCRIPTION SHOWN IS BASED ON A COMMITMENT FOR TITLE INSURANCE ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY, COMMITMENT NUMBER 6002296937, DATED OCTOBER 03, 2022 AND THAT ALL EASEMENTS, COVENANTS AND RESTRICTIONS REFERENCED IN SAID TITLE COMMITMENT OR APPARENT FROM A PHYSICAL INSPECTION OF THE SITE OR OTHERWISE KNOWN TO ME HAVE BEEN PLOTTED HEREON OR OTHERWISE NOTED AS TO THEIR EFFECT ON THE SUBJECT PROPERTY.

3) THE SURVEYOR HAS NOT OBTAINED ANY INFORMATION RELATING TO, AND HAS NO KNOWLEDGE OF, ANY PROPOSED RIGHT OF WAYS, EASEMENTS, OR DEDICATIONS THAT ANY MUNICIPALITY, INDIVIDUAL OR GOVERNMENTAL AGENCY MAY REQUIRE.

4) USE OF THE INFORMATION CONTAINED IN THIS INSTRUMENT FOR OTHER THAN THE SPECIFIC PURPOSE FOR WHICH IT WAS INTENDED IS FORBIDDEN UNLESS EXPRESSLY PERMITTED IN WRITING IN ADVANCE BY SUPERIOR SURVEYING SERVICES, INC. SUPERIOR SURVEYING SERVICES, INC. SHALL HAVE NO LIABILITY FOR ANY SUCH UNAUTHORIZED USE OF THIS INFORMATION WITHOUT THEIR WRITTEN CONSENT.

REFERENCES

GENERAL LAND OFFICE RECORDS ON FILE WITH THE U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

UNRECORDED SURVEY BY RST LAND SURVEYING, JOB NO. 08-0061, 8-26-08

ALTA/ACSM LAND TITLE SURVEY RECORDED IN BOOK 11, PAGE 100 P.C.R.

RECORD OF SURVEY RECORDED IN BOOK 7, PAGE 203 P.C.R.

GREINER ENGINEERING PLAT RECORDED IN BOOK 2, PAGE 75, P.C.R.

G.L.O. PLATS AND NOTES FILED FOR EACH SECTION IN EACH TOWNSHIP & RANGE

SCHEDULE "B" ITEMS

(14) Restrictions, dedications, conditions, reservations, easements and other matters shown on the plat of Smelter Addition to Sasco, Arizona, as recorded in Plat Record Book 3 of Maps, Page(s) 18 and 19 , but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status or national origin to the extent such covenants, conditions or restrictions violate 42 USC 3604(c).
(Affects Parcel No. 12)
(NO PLOTTABLE EASEMENTS REFERENCING SURVEYED PROPERTY ARE CREATED BY THIS DOCUMENT)

(15) An easement for electric transmission lines and incidental purposes in the document recorded as Docket 114, Page 187.
(Affects Parcel Nos. 1, 2, 3 and 8)
(PLOTTED HEREON)

(16) An easement for lines of poles, steel towers, wires, cables, appurtenances, fixtures and incidental purposes in the document recorded as Docket 1029, Page 906.
(Affects Parcel No. 5)
(PLOTTED HEREON)

(17) An easement for lines of poles, steel towers, wires, cables, fixtures, appurtenances and incidental purposes in the document recorded as Docket 1064, Page 625.
(Affects Parcel No. 1)
(PLOTTED HEREON)

(18) An easement for lines of poles, steel towers, wires, cables, fixtures, appurtenances and incidental purposes in the document recorded as Docket 1064, Page 627.
(Affects Parcel No. 2)
(PLOTTED HEREON)

(19) The terms and provisions contained in the document entitled "Notice to Lands Included within Central Arizona Irrigation and Drainage District" recorded January 20, 1989 as Docket 1580, Page 919.
(Affects All Parcels)
(PERTAINS TO NOTICE TO LANDS WITHIN CENTRAL ARIZONA CENTRAL ARIZONA IRRIGATION AND DRAINAGE DISTRICT FOR WATER ELIGIBILITY CRITERIA – NOT PLOTTABLE)

(20) An easement for ingress, egress and utilities, both public and private and incidental purposes, recorded as 2003-012826 and recorded as 2003-012832, both of Official Records.
(Affects Parcel No. 11)
(PLOTTED HEREON)

(21) The terms and provisions contained in the document entitled "Agreement to provide Electrical Service" recorded February 25, 2005 as 2005-019048 of Official Records.
(Affects All Parcels)
(PERTAINS TO AGREEMENT FOR PROVIDING ELECTRICAL SERVICE TO LANDS OWNED BY JOHNSON INTERNATIONAL, INC AND ABCDW, L.L.C., WITHIN THE CENTRAL ARIZONA CENTRAL ARIZONA IRRIGATION AND DRAINAGE DISTRICT – NOT PLOTTABLE)

(22) The terms and provisions contained in the document entitled "Infrastructure Coordination and Finance Agreement" recorded October 13, 2006 as 2006-096140 of Official Records.
(Affects All Parcels)
(PERTAINS TO INFRASTRUCTURE COORDINATION AND FINANCE AGREEMENT BETWEEN GLOBAL WATER RESOURCES, L.L.C., ABCDW, L.L.C., TOWNY PINES DEVELOPMENT, L.L.C., RIGGS/QUEEN CREEK 480 L.L.C., ELLSWORTH/ROAD 180 L.L.C., VANDERBILT FARMS L.L.C., AND IRVINE LAND PARTNERS, L.L.C. – NOT PLOTTABLE)

(23) The terms and provisions contained in the document entitled "Resolution and Order of the Board of Directors Granting the Petition to Include Lands in the Greene Reservoir Flood Control District" recorded February 12, 2009 as 2009-014200 and re-recorded February 13, 2009 as 2009-014537, both of Official Records.
(Affects All Parcels)
(PERTAINS TO RESOLUTION AND ORDER OF THE BOARD OF DIRECTORS GRANTING THE PETITION TO INCLUDE LANDS IN THE GREENE RESERVOIR FLOOD CONTROL DISTRICT – NOT PLOTTABLE)

(24) All matters as set forth in Record of Survey, recorded as Book 7 of Surveys, Page 203.
(Affects Parcel No. 11)
(PLOTTED HEREON)

CERTIFICATION

I, DAVID S. KLEIN, HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR IN THE STATE OF ARIZONA AND THAT THE SURVEY SHOWN HEREON WAS COMPLETED UNDER MY DIRECT SUPERVISION DURING THE MONTH OF MARCH, 2023, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THE MONUMENTS SHOWN ACTUALLY EXIST.

DAVID S. KLEIN
R.L.S. #42137



BOUNDARY SURVEY
LA OSA RANCH & SASCO ROAD
RED ROCK, AZ 85145

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SUPERIOR SURVEYING SERVICES, INC.

DWN: KS CHK: DB
SHEET 1 OF 12
DATE: 3/14/2023
JOB: 202301005

DESCRIPTION

PARCEL NO. 1:
THE NORTH HALF AND THE SOUTHEAST QUARTER AND THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 11, TOWNSHIP 10 SOUTH, RANGE 8 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA;

EXCEPTING AND RESERVING TO THE UNITED STATES, PURSUANT TO THE PROVISIONS OF THE ACT OF AUGUST 1, 1946 (60 STAT. 755) ALL URANIUM, THORIUM OR ANY OTHER MATERIAL WHICH IS OR MAY BE DETERMINED TO BE PECULIARLY ESSENTIAL TO THE PRODUCTION OF FISSIONABLE MATERIALS, WHETHER OR NOT OF COMMERCIAL VALUE, AS SET FORTH IN THE PATENT TO SAID LAND. (AFFECTS THE EAST HALF OF THE SOUTHWEST QUARTER AND THE SOUTH HALF OF THE SOUTHEAST QUARTER OF SAID SECTION 11).

PARCEL NO. 2:
THE SOUTH HALF OF SECTION 12, TOWNSHIP 10 SOUTH, RANGE 8 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL NO. 3:
THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER AND THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 13, TOWNSHIP 10 SOUTH, RANGE 8 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL NO. 4:
THAT PORTION OF THE FOLLOWING PROPERTIES:
LOTS 2 AND 3 OF SECTION 7, TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL NO. 5:
THAT PORTION OF THE FOLLOWING PROPERTIES:
THE EAST HALF OF THE NORTHWEST QUARTER AND THE EAST HALF OF THE SOUTHWEST QUARTER AND ALL OF LOT 1 OF SECTION 7, TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL NO. 6:
THAT PORTION OF THE FOLLOWING PROPERTIES:
THE NORTHEAST QUARTER AND THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 18, TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL NO. 7:
THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

EXCEPTING THEREFROM A PORTION OF THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 20;
THENCE SOUTH 00 DEGREES 13 MINUTES 54 SECONDS WEST, ALONG THE EAST LINE OF SAID NORTHEAST QUARTER 54.78 FEET TO THE POINT OF BEGINNING;
THENCE NORTH 37 DEGREES 24 MINUTES 08 SECONDS WEST 38.98 FEET;
THENCE SOUTH 88 DEGREES 38 MINUTES 00 SECONDS WEST 156.86 FEET;
THENCE SOUTH 22 DEGREES 33 MINUTES 36 SECONDS WEST 41.86 FEET;
THENCE SOUTH 51 DEGREES 24 MINUTES 24 SECONDS EAST 248.49 FEET TO THE EAST LINE OF SAID NORTHEAST QUARTER;
THENCE NORTH 00 DEGREES 13 MINUTES 54 SECONDS EAST 173.51 FEET TO THE POINT OF BEGINNING.

PARCEL NO. 8:
THAT PORTION OF THE FOLLOWING PROPERTIES:
THE NORTH HALF, THE SOUTHWEST QUARTER AND THE NORTH HALF OF THE SOUTHEAST QUARTER OF SECTION 17, TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL NO. 9:
THAT PORTION OF THE FOLLOWING PROPERTY:
THE NORTH HALF OF THE EAST HALF OF THE NORTHEAST QUARTER OF SECTION 21, TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL NO. 10:
THE SOUTH HALF OF THE EAST HALF OF THE NORTHEAST QUARTER OF SECTION 21, TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL NO. 11:
ALL THAT CERTAIN REAL PROPERTY SITUATE IN THE COUNTY OF PINAL, STATE OF ARIZONA, BEING A PART OF THE EAST HALF OF THE WEST HALF OF SECTION 21, TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 3/4 INCH DIAMETER OPEN PIPE WITH AN ALUMINUM CAPPED REBAR INSIDE, STAMPED RLS 7589 (ACCEPTED), MARKING THE SOUTH QUARTER CORNER OF SAID SECTION 21;
THENCE FROM SAID POINT OF BEGINNING, NORTHERLY ALONG THE EAST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 21, NORTH 00 DEGREES 11 MINUTES 00 SECONDS EAST, 798.32 FEET (CALCULATED) TO THE TRUE POINT OF BEGINNING OF PARCEL "B" HEREIN DESCRIBED, MARKED BY A NO. 4 REBAR WITH REGISTRATION TAG RLS 29932 (SET THIS SURVEY);
THENCE FROM SAID TRUE POINT OF BEGINNING, WESTERLY, NORTH 89 DEGREES 55 MINUTES 04 SECONDS WEST 1317.84 FEET (MEASURED) TO A POINT ON THE EAST LINE OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 21, BEING THE SOUTHWEST CORNER OF SAID PARCEL "B", MARKED BY AN ALUMINUM CAPPED REBAR STAMPED RLS 7589 (ACCEPTED);
THENCE NORTHERLY ALONG SAID EAST LINE, NORTH 00 DEGREES 13 MINUTES 46 SECONDS EAST, 526.62 FEET (MEASURED) TO THE NORTHEAST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 21, MARKED BY AN ALUMINUM CAPPED REBAR STAMPED RLS 7589 (ACCEPTED);
THENCE LEAVING SAID NORTHEAST CORNER, NORTHERLY ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 21, NORTH 00 DEGREES 18 MINUTES 21 SECONDS EAST, 1326.85 FEET (MEASURED) TO THE NORTHWEST CORNER THEREOF, MARKED BY AN ALUMINUM CAPPED REBAR STAMPED RLS 7589 (ACCEPTED);
THENCE LEAVING SAID NORTHWEST CORNER, NORTHERLY ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 21, NORTH 00 DEGREES 12 MINUTES 56 SECONDS EAST, 1326.34 FEET (MEASURED) TO THE NORTHWEST CORNER THEREOF, MARKED BY AN ALUMINUM CAPPED REBAR STAMPED RLS 7589 (ACCEPTED);
THENCE LEAVING SAID NORTHWEST CORNER, SOUTH 89 DEGREES 48 MINUTES 11 SECONDS EAST 1313.85 FEET (MEASURED) TO THE NORTHEAST CORNER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 21, MARKED BY AN ALUMINUM CAPPED REBAR STAMPED RLS 7589 (ACCEPTED);
THENCE SOUTHERLY ALONG THE EAST LINE OF THE WEST HALF OF SAID SECTION 21, SOUTH 00 DEGREES 11 MINUTES 00 SECONDS WEST 3177.15 FEET (CALCULATED) TO THE TRUE POINT OF BEGINNING;

EXCEPT THAT PORTION LYING SOUTH OF THE SOUTHERLY LINE OF SASCO ROAD.

PARCEL NO. 12:
LOTS 1 THROUGH 18 INCLUSIVE, BLOCK 1;
LOTS 1 THROUGH 5 INCLUSIVE AND LOTS 7 THROUGH 18 INCLUSIVE, BLOCK 2;
LOTS 7 AND 8, BLOCK 3;
LOTS 3, 4, 5 AND 8, BLOCK 4;
LOTS 1, 2, 3, 5 AND 7 THROUGH 18 INCLUSIVE, BLOCK 5;
LOTS 1 THROUGH 11 INCLUSIVE, BLOCK 8;
LOTS 1 THROUGH 8 INCLUSIVE, BLOCK 9;
LOTS 1 THROUGH 10 INCLUSIVE, BLOCK 10;
LOTS 1 THROUGH 10 INCLUSIVE AND LOTS 12 THROUGH 18 INCLUSIVE, BLOCK 11;
LOTS 1 THROUGH 16 INCLUSIVE, BLOCK 12;
LOTS 1 THROUGH 16 INCLUSIVE, BLOCK 13;
LOTS 1 THROUGH 16 INCLUSIVE, BLOCK 14;
LOTS 1 THROUGH 10 INCLUSIVE, BLOCK 15;
LOTS 1 THROUGH 8 INCLUSIVE, BLOCK 16;
LOTS 1 THROUGH 8, INCLUSIVE, BLOCK 17;
LOTS 1 THROUGH 12 INCLUSIVE, BLOCK 21;
LOTS 1 THROUGH 15 INCLUSIVE AND LOTS 17 THROUGH 32 INCLUSIVE, BLOCK 22;
LOTS 1 THROUGH 32 INCLUSIVE, BLOCK 23;
LOTS 1 THROUGH 32 INCLUSIVE, BLOCK 24;

OF SMELTER ADDITION TO SASCO, ARIZONA IN THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER AND THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA, ACCORDING TO THE PLAT IN THE OFFICE OF THE COUNTY RECORDER OF PINAL COUNTY, ARIZONA, ACCORDING TO BOOK 3 OF MAPS, PAGES 18 AND 19.

PARCEL NO. 13:
THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 21, TOWNSHIP 10 SOUTH, RANGE 9 EASTOF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.EXCEPT THAT PORTION OF THE LAND CONVEYED IN SPECIAL WARRANTY DEED RECORDED MAY 03,2013 AS 2013-036558 OF OFFICIAL RECORDS.

ARIZONA BOARD OF REGISTRATION CERTIFICATE
42137
DAVID R. KLEIN
3/16/23
REGISTERED LAND SURVEYOR

BOUNDARY SURVEY
LA OSA RANCH & SASCO ROAD
RED ROCK, AZ 85145

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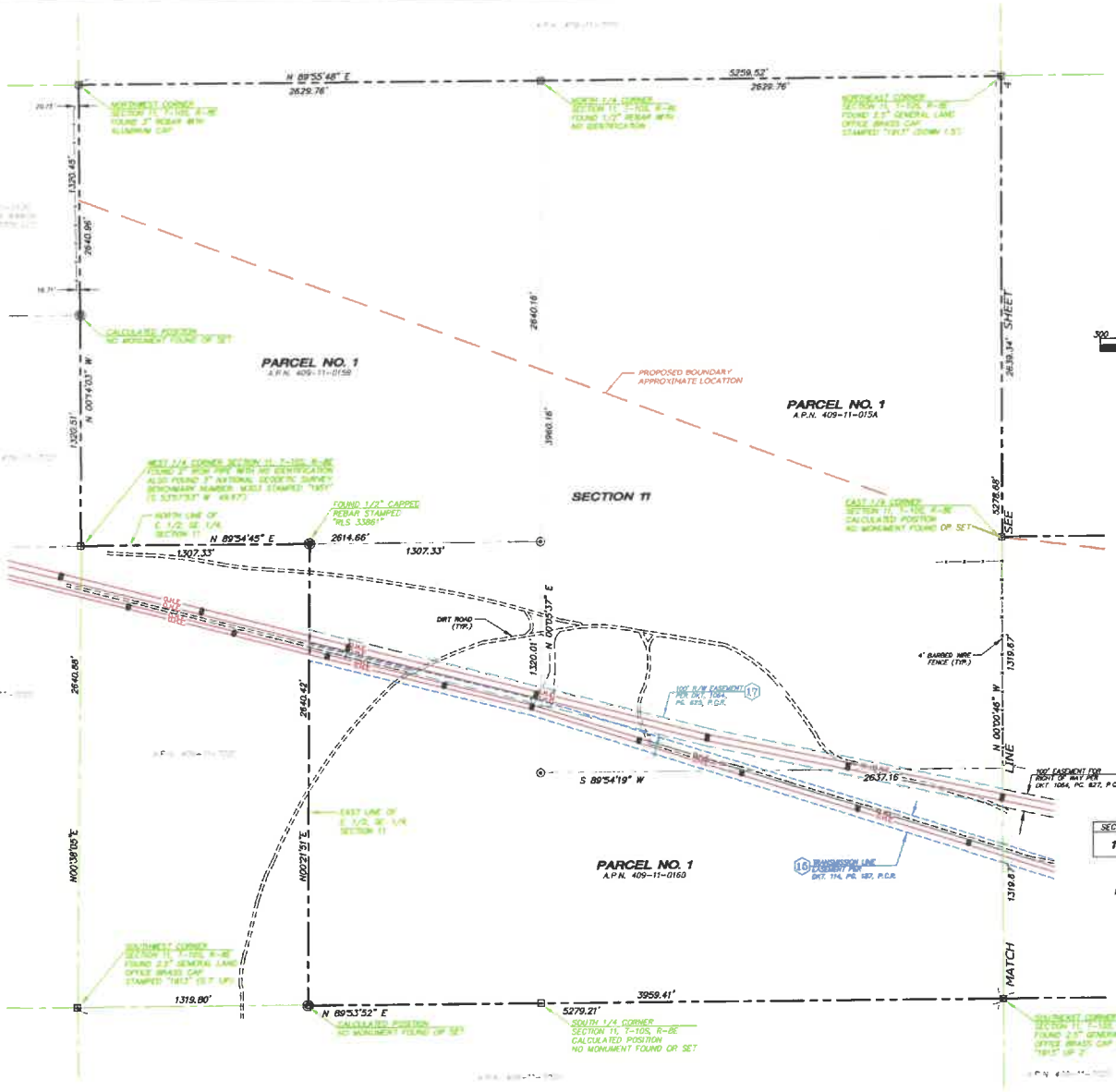
SUPERIOR
SURVEYING SERVICES, INC.

DWN: RS CHK: DB
SHEET 2 OF 12
DATE: 3/14/2023
JOB: 202301005



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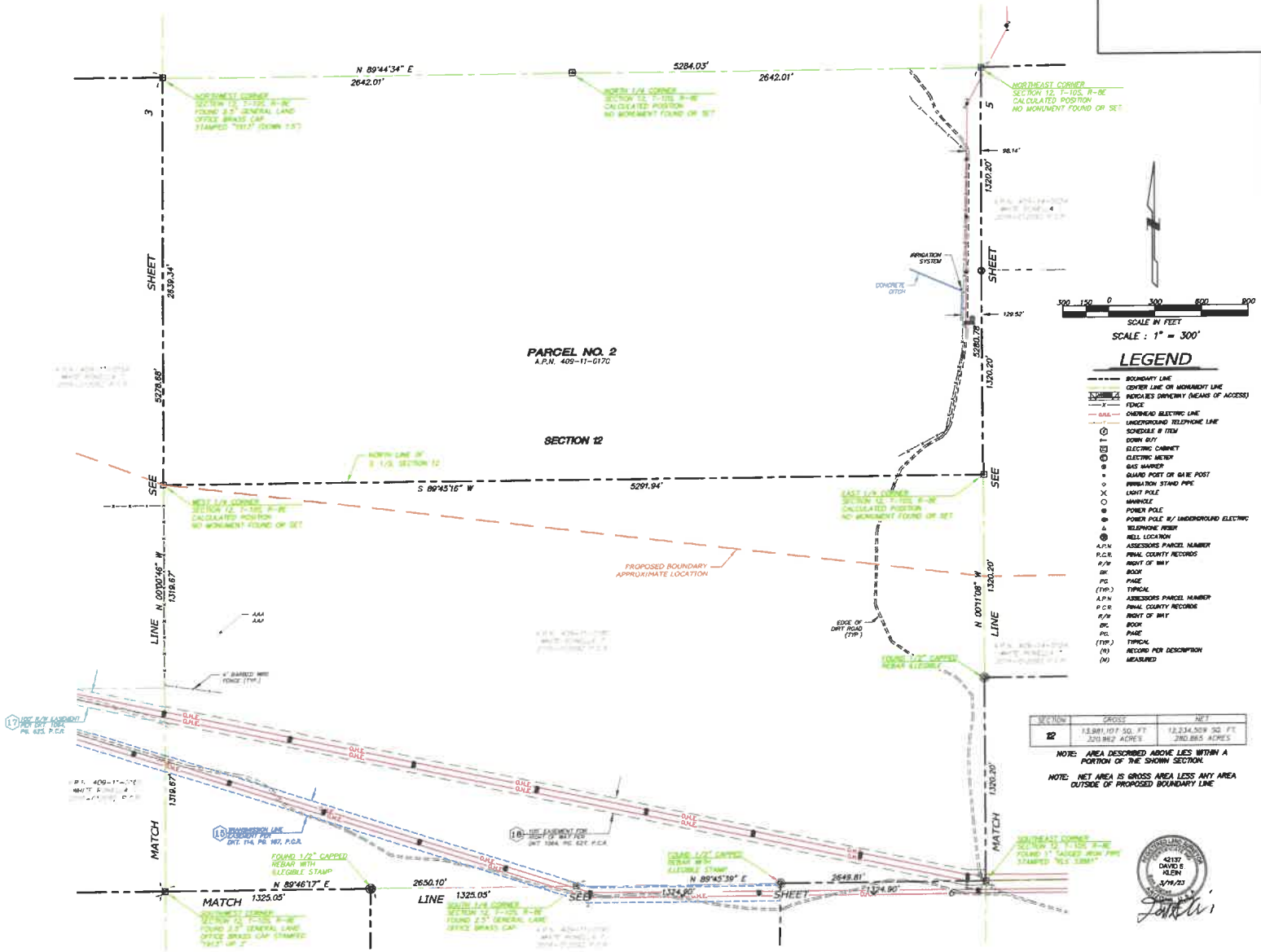
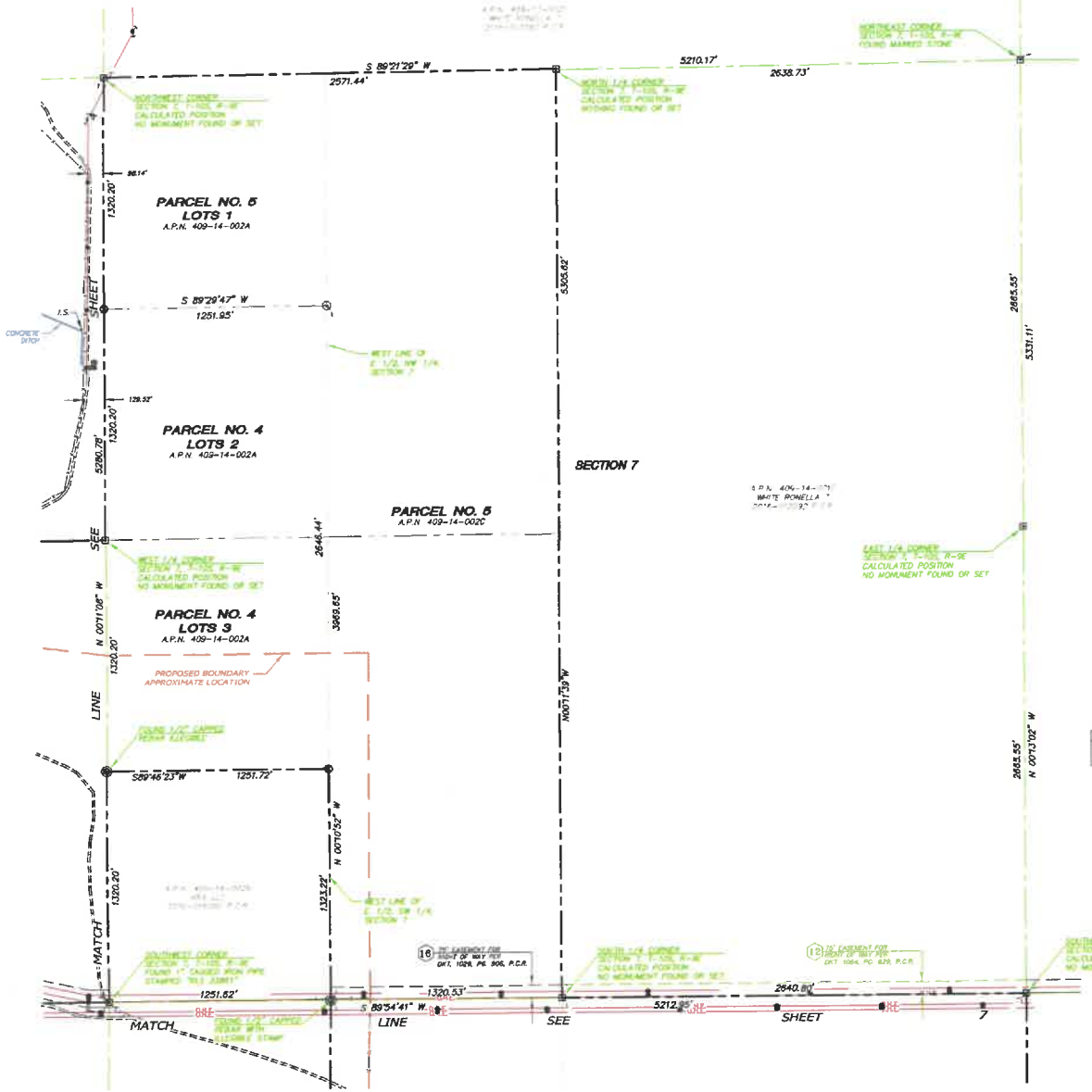

N 89°44'34" E
2642.01'
5284.03'
2642.01'
NORTHWEST CORNER
SECTION 12, T-10S, R-8E
FOUND 3.5" GENERAL LAND
OFFICE BRASS CAP
STAMPED "1917" (DOWN 1.5')
NORTH 1/4 CORNER
SECTION 12, T-10S, R-8E
CALCULATED POSITION
NO MONUMENT FOUND OR SET
NORTHEAST CORNER
SECTION 12, T-10S, R-8E
CALCULATED POSITION
NO MONUMENT FOUND OR SET
SHEET
3
2639.34'
5278.68'
SHEET
5
1320.20'
98.14'
129.52'
5280.72'
1320.20'
IRRIGATION SYSTEM
CONCRETE DITCH
PARCEL NO. 2
A.P.N. 409-11-017C
SECTION 12
NORTH LINE OF E 1/2, SECTION 12
S 89°45'16" W
5291.94'
SEE
SEE
WEST 1/4 CORNER
SECTION 12, T-10S, R-8E
CALCULATED POSITION
NO MONUMENT FOUND OR SET
EAST 1/4 CORNER
SECTION 12, T-10S, R-8E
CALCULATED POSITION
NO MONUMENT FOUND OR SET
PROPOSED BOUNDARY
APPROXIMATE LOCATION
LINE
N 00°10'46" W
1319.67'
LINE
N 00°11'08" W
1320.20'
EDGE OF DIRT ROAD (TYP.)
6' BARBED WIRE FENCE (TYP.)
FOUND 1/2" CAPPED REBAR ILLEGIBLE
O.H.E.
O.H.E.
O.H.E.



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DRAWN: KS CHK: DB
SHEET 5 OF 12
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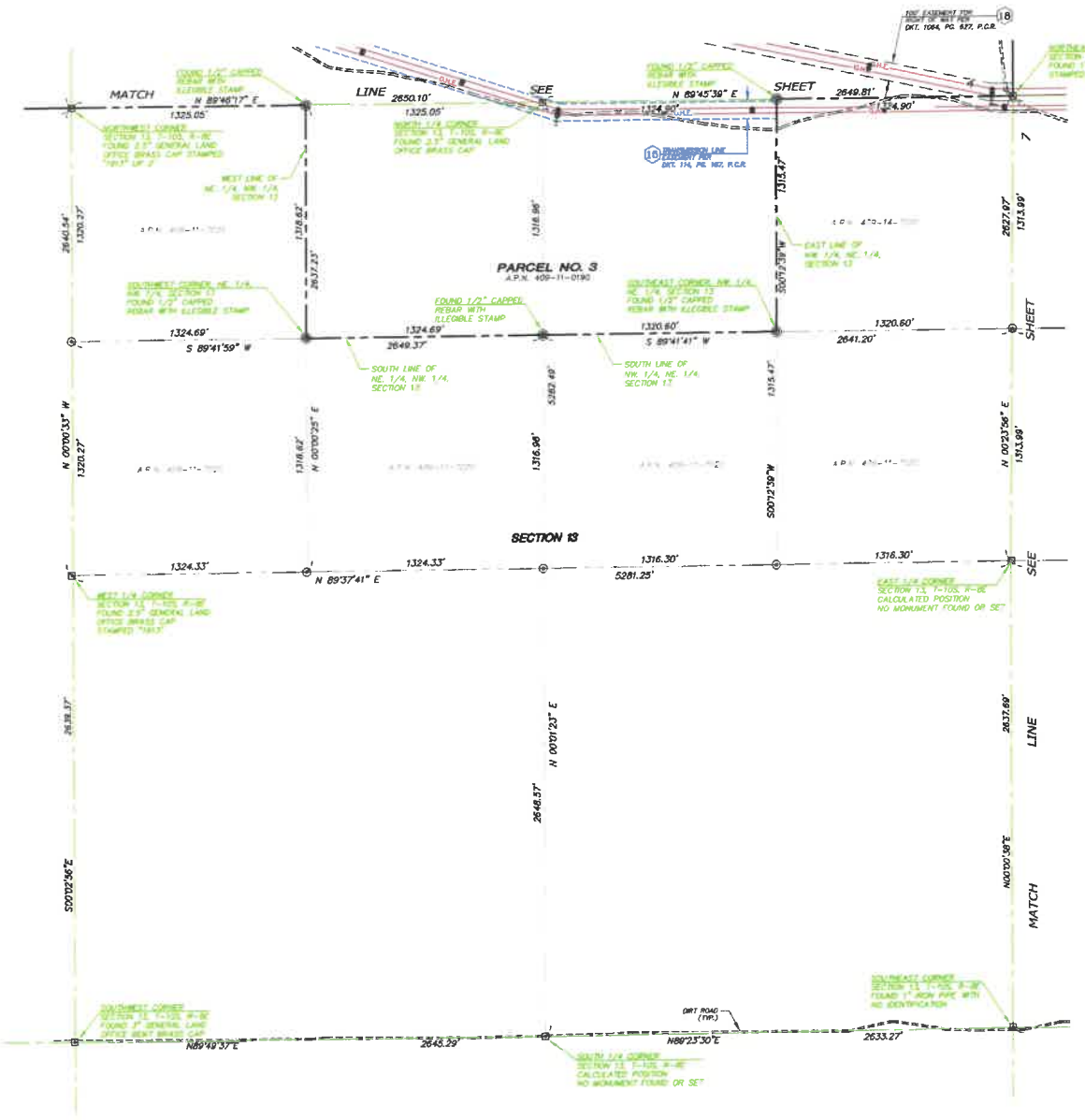

LEGEND

- BOUNDARY LINE
- COVER LINE OR MONUMENT LINE
- INDICATES DRIVEWAY (MEANS OF ACCESS)
- FENCE
- OHE — OVERHEAD ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- SCHEDULE B ITEM
- DOWN GUY
- ELECTRIC CABINET
- ELECTRIC METER
- GAS MARKER
- GUARD POST OR GATE POST
- IRRIGATION STAND PIPE
- LIGHT POLE
- MANHOLE
- POWER POLE
- POWER POLE W/ UNDERGROUND ELECTRIC
- TELEPHONE RISER
- WELL LOCATION
- A.P.N. ASSESSORS PARCEL NUMBER
- P.C.R. PINAL COUNTY RECORDS
- R/W RIGHT OF WAY
- BK. BOOK
- PG. PAGE
- (TYP.) TYPICAL
- A.P.N. ASSESSORS PARCEL NUMBER
- P.C.R. PINAL COUNTY RECORDS
- R/W RIGHT OF WAY
- BK. BOOK
- PG. PAGE
- (TYP.) TYPICAL
- (R) RECORD PER DESCRIPTION
- (M) MEASURED

SECTION	GROSS	NET
13	3,486,857 SQ. FT. 80.047 ACRES	3,486,857 SQ. FT. 80.047 ACRES

NOTE: AREA DESCRIBED ABOVE LIES WITHIN A PORTION OF THE SHOWN SECTION.

NOTE: NET AREA IS GROSS AREA LESS ANY AREA OUTSIDE OF PROPOSED BOUNDARY LINE

REGISTERED LAND SURVEYOR CERTIFICATE 42137 DAVID S. KLEIN 3/16/23 ARIZONA U.S.A.

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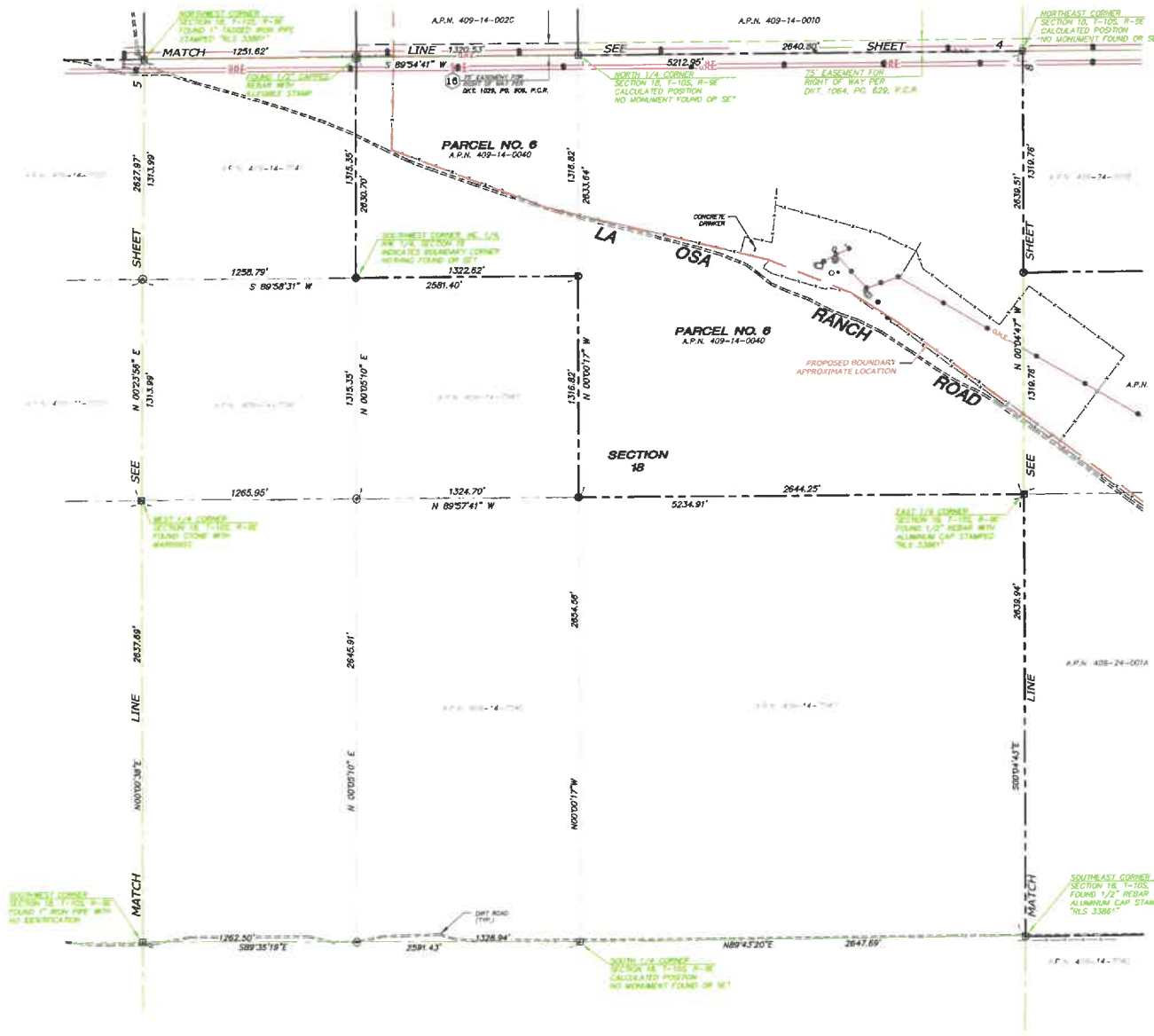

SECTION	GROSS	NET
18	8,706,510 SQ. FT. 199.874 ACRES	4,157,394 SQ. FT. 95.440 ACRES

NOTE: AREA DESCRIBED ABOVE LIES WITHIN A PORTION OF THE SHOWN SECTION.

NOTE: NET AREA IS GROSS AREA LESS ANY AREA OUTSIDE OF PROPOSED BOUNDARY LINE

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
42127
DAVID S. KLEIN
3/19/23
ARIZONA U.S.A.

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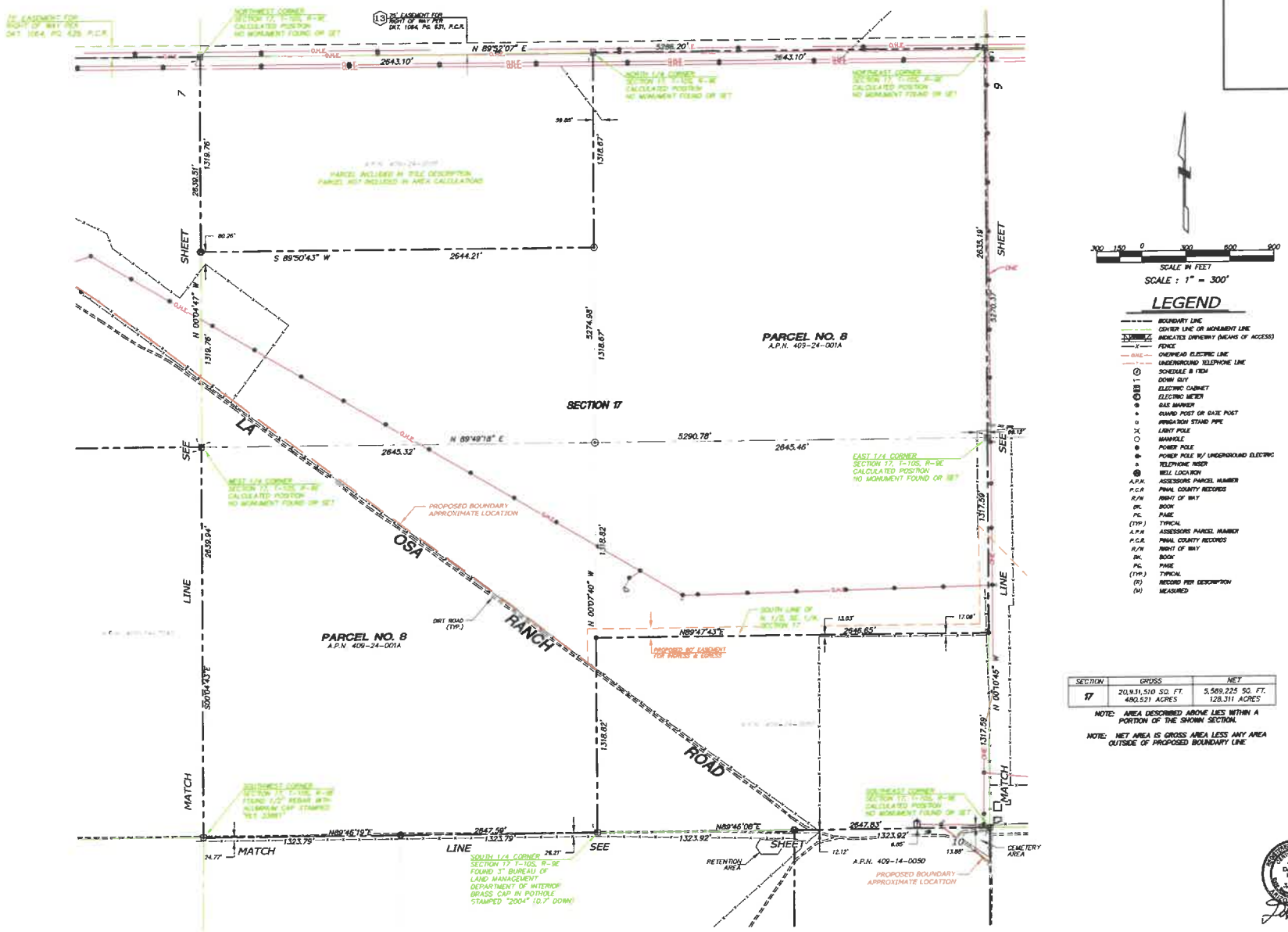

300 150 0 300 600 900

SCALE IN FEET

SCALE : 1" = 300'

LEGEND

- BOUNDARY LINE
- CENTER LINE OR MONUMENT LINE
- INDICATES DRIVEWAY (MEANS OF ACCESS)
- FENCE
- OHE — OVERHEAD ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- SCHEDULE B ITEM
- DOWN GUY
- ELECTRIC CABINET
- ELECTRIC METER
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- P.C.R. PINAL COUNTY RECORDS
- R/W RIGHT OF WAY
- BK. BOOK
- PG. PAGE
- (TYP.) TYPICAL
- (R) RECORD PER DESCRIPTION
- (M) MEASURED

SECTION	GROSS	NET
17	20,931,510 SQ. FT. 480.521 ACRES	5,589,225 SQ. FT. 128.311 ACRES

NOTE: AREA DESCRIBED ABOVE LIES WITHIN A PORTION OF THE SHOWN SECTION.

NOTE: NET AREA IS GROSS AREA LESS ANY AREA OUTSIDE OF PROPOSED BOUNDARY LINE

REGISTERED LAND SURVEYOR
62137
DAVID S. KLEIN
3/14/23
ARIZONA U.S.A.

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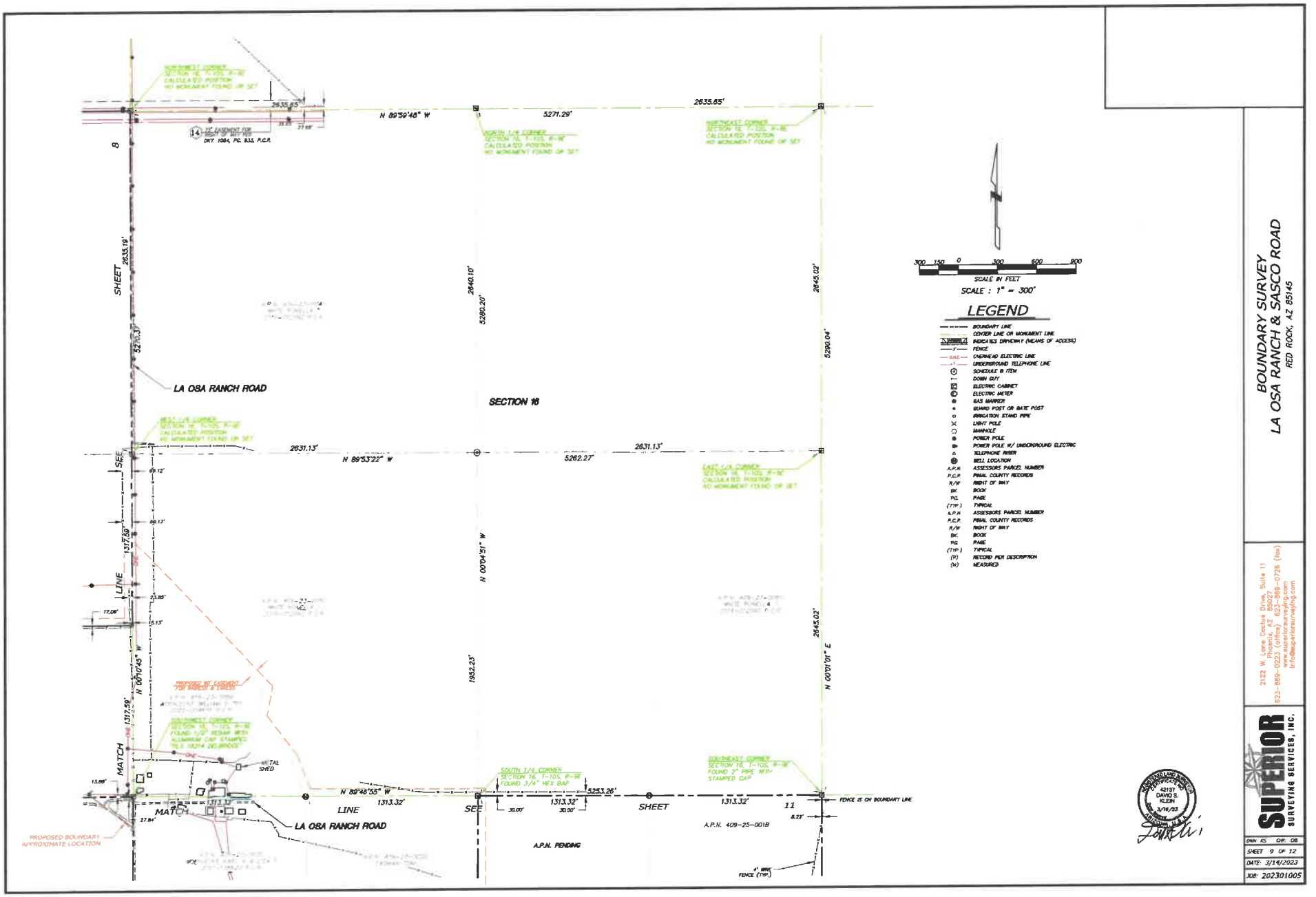

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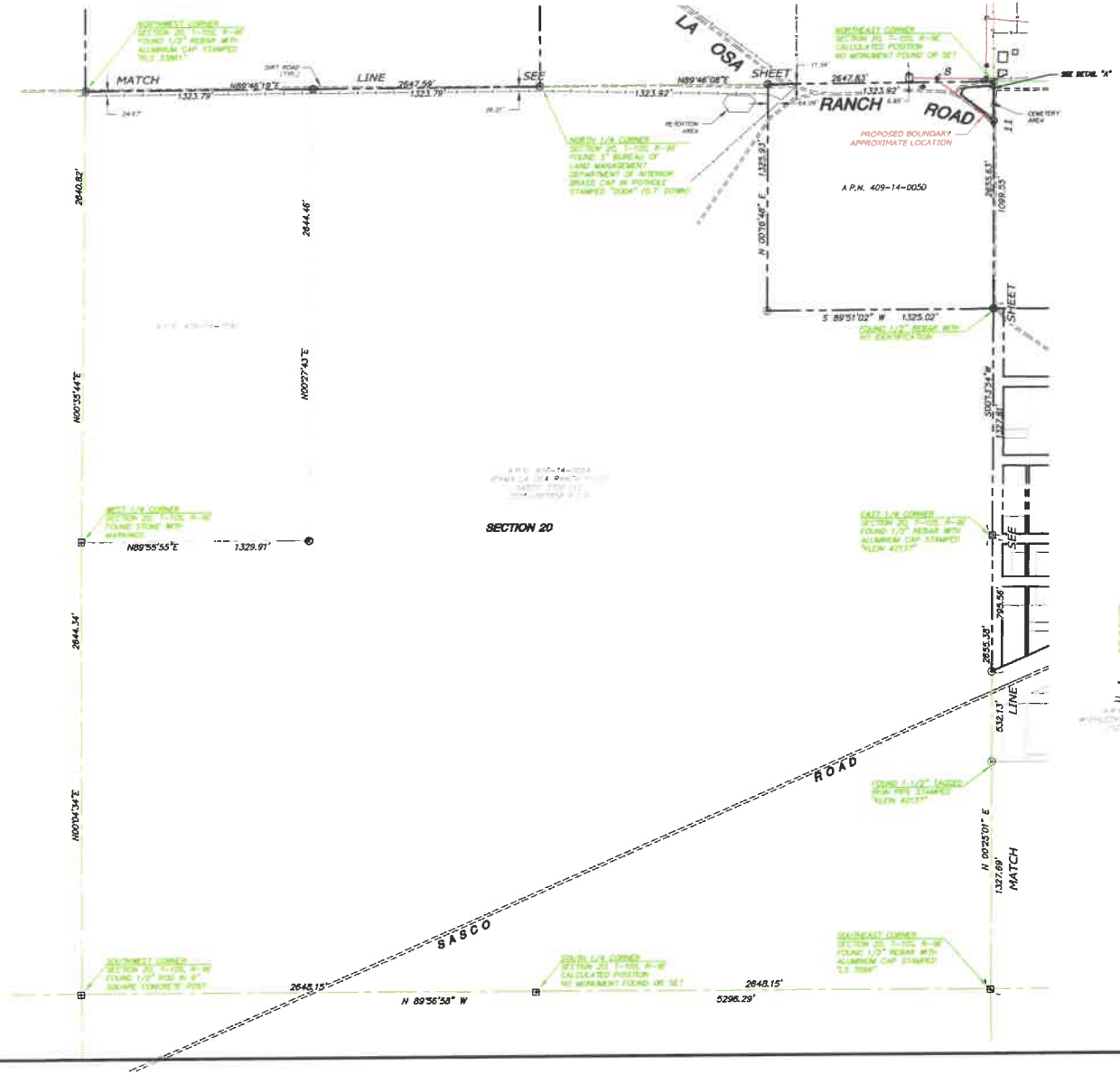


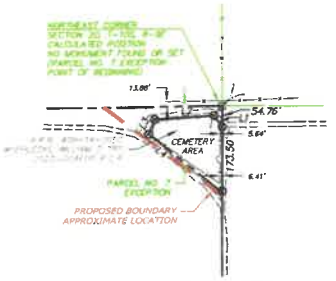
LEGEND

- BOUNDARY LINE
- CENTER LINE OR MONUMENT LINE
- INDICATES DRIVEWAY (MEANS OF ACCESS)
- FENCE
- OVERHEAD ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- SCHEDULE B ITEM
- DOWN GUY
- ELECTRIC CABINET
- ELECTRIC METER
- GAS MARKER
- GUARD POST OR GATE POST
- IRRIGATION STAND PIPE
- LIGHT POLE
- MANHOLE
- POWER POLE
- POWER POLE W/ UNDERGROUND ELECTRIC
- TELEPHONE RISER
- WELL LOCATION
- A.P.N. ASSESSORS PARCEL NUMBER
- P.C.R. PINAL COUNTY RECORDS
- R/ROW RIGHT OF WAY
- BK. BOOK
- PG. PAGE
- (TYP.) TYPICAL
- A.P.N. ASSESSORS PARCEL NUMBER
- P.C.R. PINAL COUNTY RECORDS
- R/W RIGHT OF WAY
- BK. BOOK
- PG. PAGE
- (TYP.) TYPICAL
- (R) RECORD PER DESCRIPTION
- (M) MEASURED

SECTION	GROSS	NET
20	1,734,427 SQ. FT. 39.817 ACRES	1,720,291 SQ. FT. 39.492 ACRES

NOTE: AREA DESCRIBED ABOVE LIES WITHIN A PORTION OF THE SHOWN SECTION.

NOTE: NET AREA IS GROSS AREA LESS ANY AREA OUTSIDE OF PROPOSED BOUNDARY LINE.



DETAIL "A"
NOT TO SCALE

SHEET NO. 9 LINE TABLE		
LINE	BEARING	DISTANCE
L1	N 37°24'06" W	56.90'
L2	S 86°38'00" W	156.66'
L3	N 42°39'56" E	41.88'
L4	S 51°24'24" E	248.49'

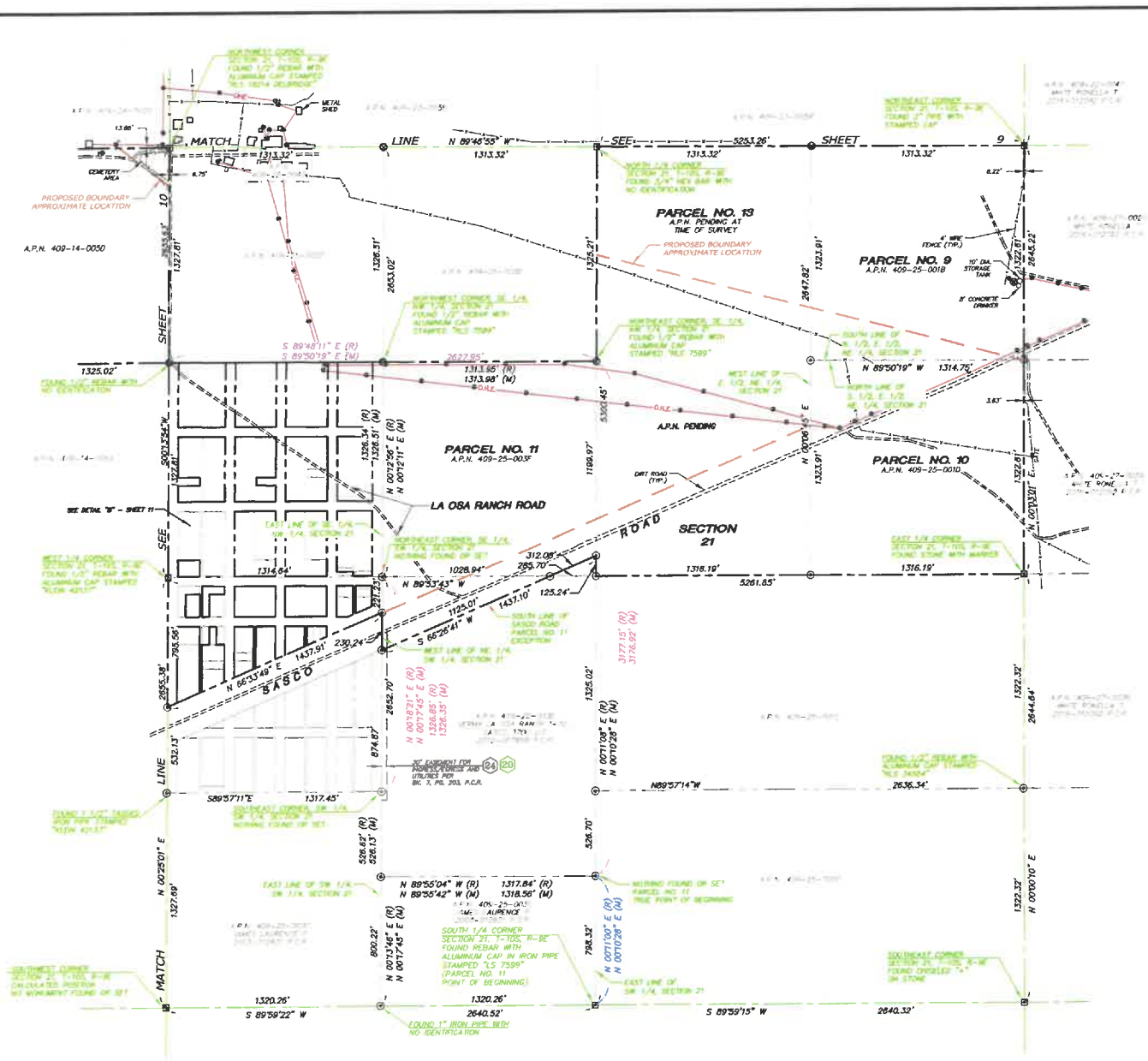
REGISTERED LAND SURVEYOR — CERTIFICATE NO. 42137 — DAVID S. KLEIN — 3/16/23 — RENEWAL: 9-30-24

BOUNDARY SURVEY
LA OSA RANCH & SASCO ROAD
RED ROCK, AZ 85145

2122 W. Lone Cactus Drive, Suite 11
Phoenix, AZ 85027
623-869-0223 (office) 623-869-0726 (fax)
www.superiorsurveying.com
info@superiorsurveying.com

SUPERIOR SURVEYING SERVICES, INC.

DWN: KS CHK: DK
SHEET: 10 OF 12
DATE: 3/14/2023
JOB: 202301005



LEGEND

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- FENCE
- O.H.E. OVERHEAD ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- SCHEDULE B ITEM
- DOWN GUY
- ELECTRIC CABINET
- ELECTRIC METER
- GAS MARKER
- GUARD POST OR GATE POST
- IRRIGATION STAND PIPE
- LIGHT POLE
- MANHOLE
- POWER POLE
- POWER POLE W/ UNDERGROUND ELECTRIC
- TELEPHONE RISER
- WELL LOCATION
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- BK. BOOK
- PG. PAGE
- (TYP.) TYPICAL
- (R) RECORD PER DESCRIPTION
- (M) MEASURED

SECTION	GROSS	NET
21	10,342,729 SQ. FEET 237.44 ACRES	5,170,637 SQ. FT. 118.70 ACRES

NOTE: AREA DESCRIBED ABOVE LIES WITHIN A PORTION OF THE SHOWN SECTION.

NOTE: NET AREA IS GROSS AREA LESS ANY AREA OUTSIDE OF PROPOSED BOUNDARY LINE

REGISTERED LAND SURVEYOR 42137 DAVID S. KLEIN 3/14/23 ARIZONA U.S.A.

BOUNDARY SURVEY
LA OSA RANCH & SASCO ROAD
RED ROCK, AZ 85145

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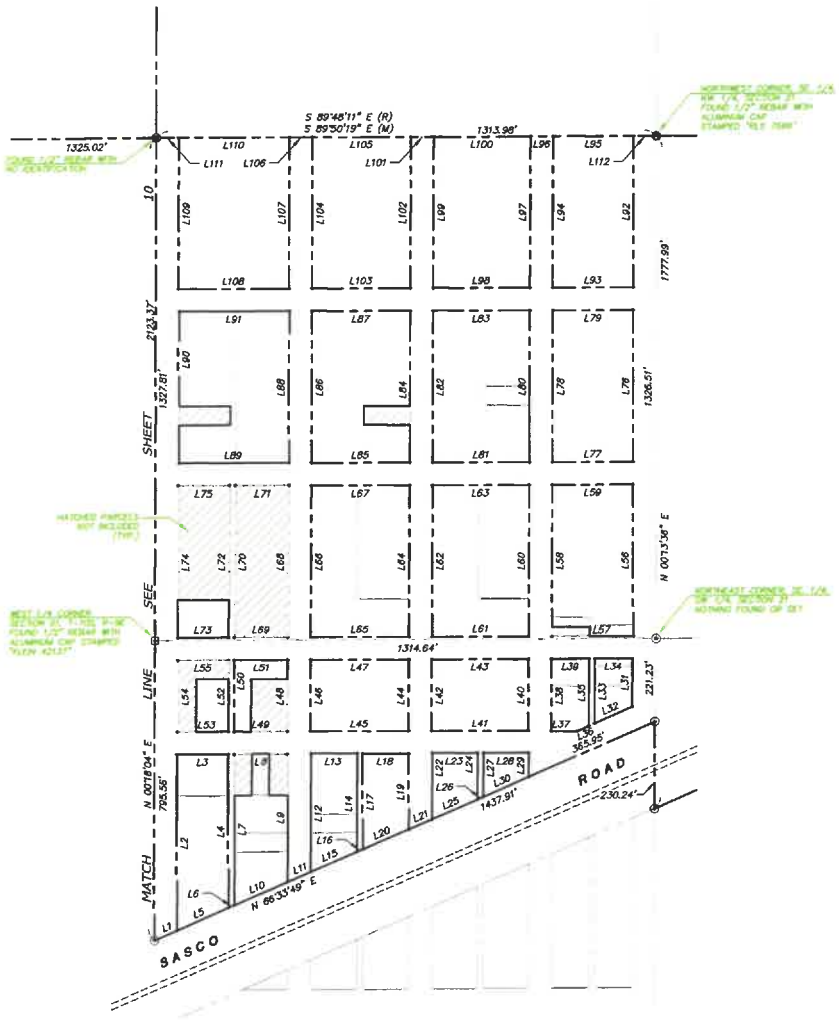
DWN: RS CHK: DB
SHEET 11 OF 12
DATE: 3/14/2023
JOB 202301005



DETAIL "B"
NOT TO SCALE

LINE	BEARING	DISTANCE
L1	S 66°33'49" W	65.80'
L2	N 00°25'01" E	467.10'
L3	N 89°50'19" W	155.27'
L4	S 00°17'45" W	407.53'
L5	N 66°33'49" E	148.64'
L6	S 66°33'49" W	16.39'
L7	N 00°17'45" E	400.96'
L8	N 89°50'19" W	45.00'
L9	N 00°17'45" E	338.74'
L10	S 66°33'49" W	132.93'
L11	S 66°33'49" W	65.54'
L12	N 00°17'45" E	313.50'
L13	S 89°50'19" E	120.00'
L14	S 00°17'45" W	281.02'
L15	S 66°33'49" W	131.09'
L16	S 66°33'49" W	16.39'
L17	N 00°17'45" E	254.46'
L18	S 89°50'19" E	120.00'
L19	S 00°17'45" W	201.99'
L20	S 66°33'49" W	131.09'
L21	N 66°33'49" E	65.54'
L22	N 00°17'45" E	175.75'
L23	S 89°50'19" E	120.00'
L24	S 00°17'45" W	143.17'
L25	N 66°33'49" E	131.09'
L26	S 66°33'49" W	16.39'
L27	N 00°17'45" E	116.72'
L28	S 89°50'19" E	120.14'
L29	N 00°17'45" E	54.74'
L30	S 66°33'49" W	131.09'
L31	S 00°17'45" W	122.70'
L32	S 66°26'41" W	109.34'
L33	S 00°17'45" W	171.68'
L34	N 89°50'19" W	100.00'
L35	S 00°17'45" W	178.27'
L36	S 66°26'41" W	35.87'
L37	N 89°50'19" W	66.45'
L38	N 00°17'45" E	192.70'
L39	N 89°50'19" W	99.75'
L40	S 00°17'45" W	190.00'
L41	N 66°33'49" E	253.00'
L42	N 00°17'45" E	253.00'
L43	N 89°50'19" W	253.00'
L44	S 00°17'45" W	190.00'
L45	N 89°50'19" W	253.00'
L46	S 00°17'45" W	190.00'
L47	S 89°50'19" E	253.00'
L48	S 00°17'45" W	190.00'
L49	N 89°50'19" W	140.00'
L50	N 00°17'45" E	190.00'
L51	S 89°50'19" E	140.00'
L52	S 00°17'45" W	190.00'
L53	N 89°50'19" W	85.00'
L54	N 00°25'01" E	190.00'
L55	N 89°50'19" W	134.74'
L56	N 00°12'11" E	400.00'
L57	N 89°50'19" W	214.62'
L58	N 00°17'45" E	400.00'
L59	N 89°50'19" W	213.60'
L60	S 00°17'45" W	400.00'
L61	S 89°50'19" E	253.00'
L62	S 00°08'28" W	400.00'
L63	N 89°50'19" W	253.00'
L64	N 00°17'45" E	400.00'
L65	N 89°50'19" W	253.00'
L66	N 00°17'45" E	400.00'
L67	N 89°50'19" W	253.00'
L68	N 00°17'45" E	400.00'
L69	N 89°50'19" W	140.00'
L70	N 00°17'45" E	400.00'
L71	N 89°50'19" W	140.00'
L72	S 00°17'45" W	400.00'
L73	S 89°50'19" E	134.44'
L74	N 00°12'24" E	400.00'
L75	N 89°50'19" W	133.09'
L76	S 00°12'11" E	400.00'
L77	N 89°50'19" W	213.59'
L78	N 00°18'41" E	400.00'
L79	S 89°50'19" E	213.88'
L80	S 00°17'45" W	400.00'
L81	S 89°50'19" E	253.00'
L82	N 00°17'45" E	400.00'
L83	N 89°50'19" W	253.00'
L84	S 00°17'45" W	400.00'
L85	N 89°50'19" W	253.00'
L86	S 00°17'45" W	400.00'
L87	S 89°50'19" E	253.00'
L88	S 00°17'45" W	400.00'
L89	N 89°50'19" W	290.18'
L90	N 00°13'34" E	400.00'
L91	N 89°50'19" W	290.61'
L92	N 00°12'11" E	400.00'
L93	N 89°50'19" W	213.50'
L94	N 00°17'45" E	400.00'
L95	N 89°50'19" W	213.88'
L96	N 89°50'19" W	60.00'
L97	S 00°17'45" W	400.00'
L98	N 89°50'19" W	253.00'
L99	N 00°17'45" E	400.00'
L100	S 89°50'19" E	253.00'
L101	S 89°50'19" E	60.00'
L102	S 00°17'45" W	400.00'
L103	S 89°50'19" E	253.00'
L104	N 00°17'45" E	400.00'
L105	S 89°50'19" E	253.00'
L106	N 89°50'19" W	60.00'
L107	S 00°17'45" W	400.00'
L108	S 89°50'19" E	290.67'
L109	N 00°13'34" E	400.00'
L110	N 89°50'19" W	291.12'
L111	N 89°50'19" W	60.00'
L112	N 89°50'19" W	60.00'

NOT TO SCALE

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42137
DAVID S. KLEIN
3/19/23

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SUPERIOR SURVEYING SERVICES, INC.

DWN: KS CHK: DB
SHEET 12 OF 12
DATE: 3/14/2023
JOB: 202301005

La Osa Employment Center APNs

409-11-004	409-25-001E	
409-11-005	409-25-001D	
409-11-006C	409-25-001C	
409-11-002E	409-25-002F	409-26-025
409-11-002F	409-25-002G	409-26-026
409-11-002G	409-25-003G	409-26-027
409-11-002H	409-25-003E	
409-11-003D	409-26-001	409-26-049
409-11-013C	409-26-002A	409-26-048
409-11-015C	409-26-002B	
409-11-015E		
409-11-016		
409-11-018A		
409-11-019		
409-14-002D		
409-14-002F	409-26-024	
409-14-004A	409-26-022	
409-24-001C		
409-14-005A		
409-14-005E		
409-30-002		
409-31-001		
409-31-033		

Meeting Minutes

Project Name: La Osa Employment Center Date: 8/21/2025
Project No.: PZ-AZ-011-25

Public Attendees:
12

Development Team Attendees:

Rob Clang	Vermaland LLC	robclang@vermaland.com

Meeting Location: RedRock Elementary School Cafeteria
Meeting Date: August 18th, 2025
Meeting Time: 5:30pm to 7:30pm

Meeting Summary:

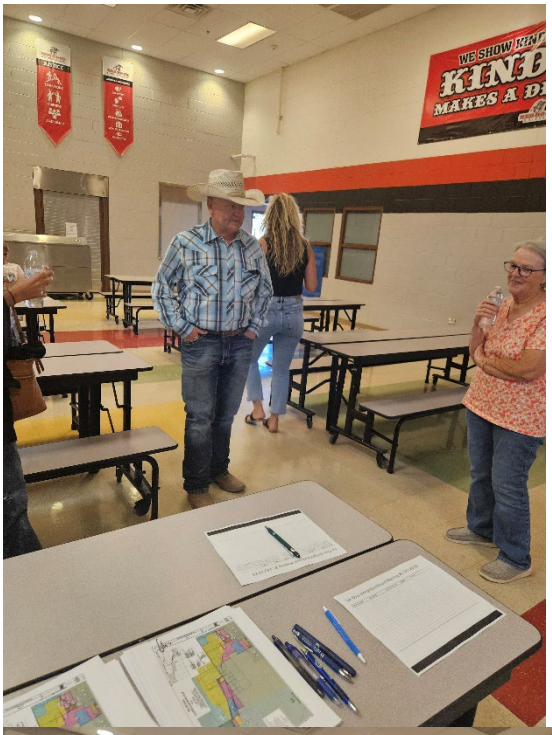
Guests started arriving at 5:15pm and continued arriving until 5:30pm at which point I had everyone who was willing to sign in with their information on the attached sign-in sheet. Each attendee was given the proposal for the amendment along with a map showing the proposed changes and the notice for the next public meeting to be held September 4th. I presented the plans for the project and explained where the power sources for the data center buildings would come from. I advised them of our intention to keep the properties open space and flood plain areas in their natural state. I explained how the project will be done in phases and how this will allow us to make improvements as we develop the properties. After a 30-minute presentation I opened the meeting to questions. Most questions centered around when the construction would begin and I explained how it would be done in phases and that we needed to finish the Major Comprehensive Plan Amendment and then next year we would have to have the zoning changed and that's when we would have more exact details about this project. The meeting was adjourned at 7:15pm. Most people stayed and conversed as they were all long time neighbors. The building attendant arrived at 7:30 and we asked people to leave and closed the building.

Conclusion:
The above is the author's recollection of items discussed and the decisions reached. If there are any corrections or additions to be made, please contact the author. These meeting notes shall become part of the project file.

By: Rob Clang VERMALAND, LLC RobClang@Vermaland.com

Meeting Minutes

Project Name: La Osa Employment Center Date: 8/21/2025
Project No.: PZ-AZ-011-25



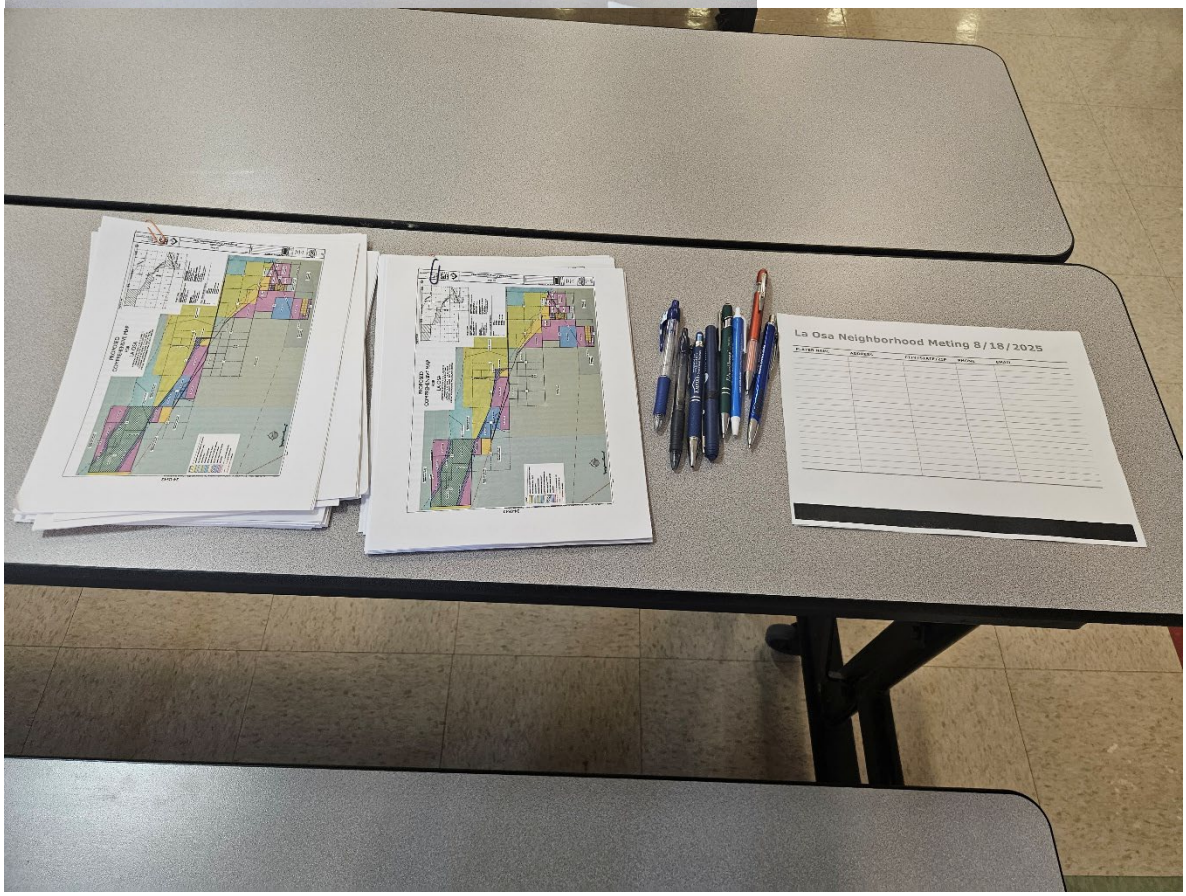


By: Rob Clang VERMALAND, LLC RobClang@Vermaland.com

Meeting Minutes

Project Name: La Osa Employment Center Date: 8/21/2025
Project No.: PZ-AZ-011-25

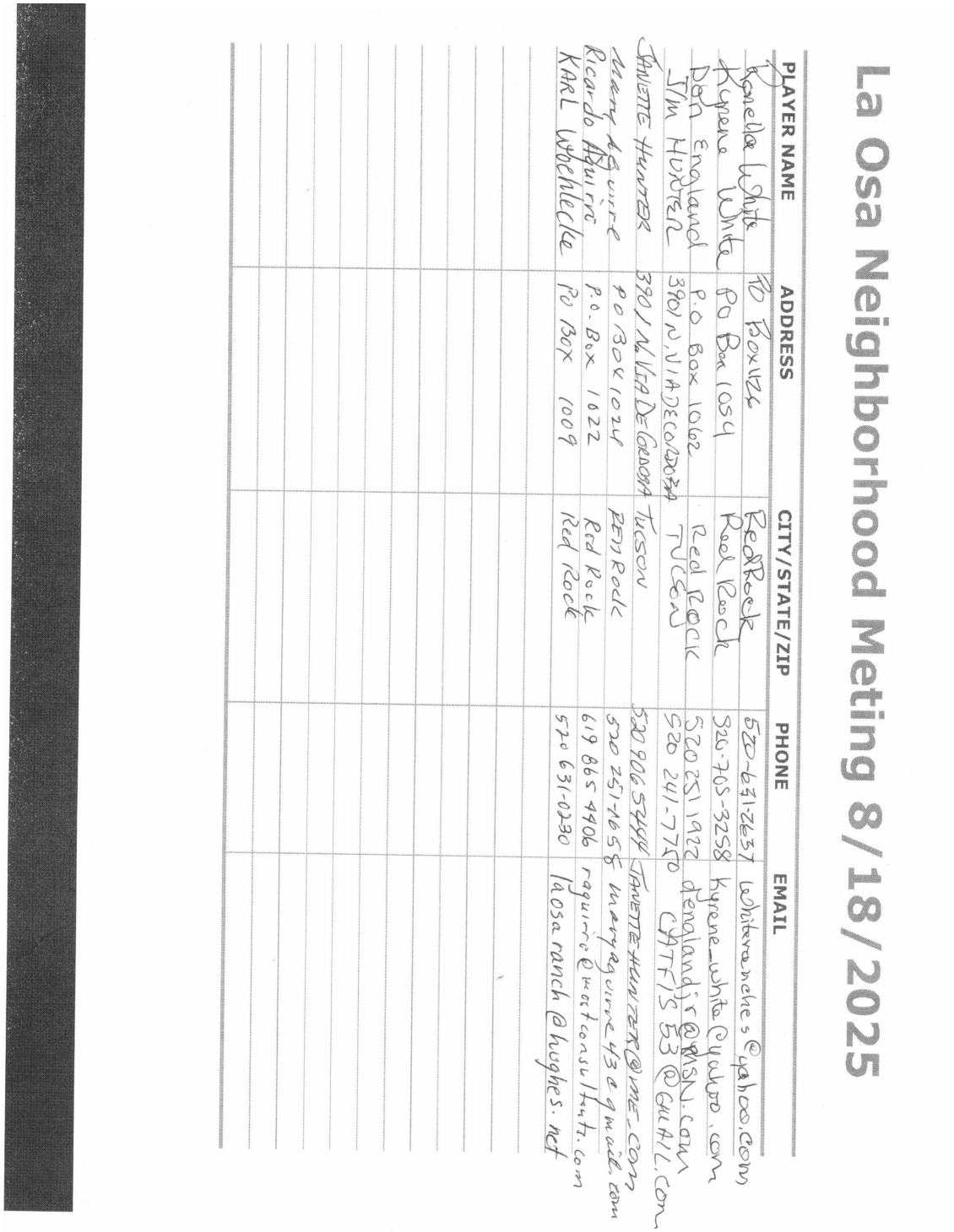




By: Rob Clang VERMALAND, LLC RobClang@Vermaland.com

Meeting Minutes

Project Name: La Osa Employment Center Date: 8/21/2025
Project No.: PZ-AZ-011-25



La Osa Neighborhood Meting 8/18/2025

PLAYER NAME	ADDRESS	CITY/STATE/ZIP	PHONE	EMAIL
Ronella White	PO Box 126	Red Rock	520-631-2637	whiteranches@yahoo.com
Kyrene White	PO Box 1054	Red Rock	520-705-3258	kyrene_white@yahoo.com
Don England	P.O Box 1062	Red Rock	520 251 1922	denglandjr@msn.com
Jim Hunter	3901 N. Via De Cordova	Tucson	520 241-7750	CATFIS53@GMAIL.com
Janette Hunter	390 / N. Via De Cordova	Tucson	520 906 5444	Janette Hunter@me.com
Mary Aguirre	PO Box 1024	Red Rock	520 251-1658	maryaguirre43@gmail.com
Ricardo Aguirre	P.O. Box 1022	Red Rock	619 865 4406	raguirre@mostconsultants.com
Karl Woehlecke	PO Box 1009	Red Rock	520 631-0230	laosaranch@hughes.net

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Mary Ellen Sheppard
Deputy County Manager

Himanshu Patel
Deputy County Manager

Open Space, Trails & Regional Parks Department
Development Review Comment Letter

Project Name: La Osa
Case Number: PZ-PZ-011-25
Reviewed By: Kelley Fox, Urban Wildlife Planner
Review Type: Major Comprehensive Plan Amendment
07/07/2025

Comment #	RESPOND TO ALL COMMENTS
1	Planned regional multi-use trails (Greene Wash and Sasco Rd), supported by Pinal County's Comprehensive Plan, is located transecting a portion of the project area. According to Development Services code 2.176.170 B it is the applicant's responsibility to develop the trail according to Pinal County's standards.
2	Trail corridor requirements would include: • Signage would need to be approved by the Open Space and Trails Department. • Decomposed granite pedestrian paths would consist of natural subsoil compacted to 95%. • The corridor would need to be dedicated to the County in a form acceptable to the County.
3	Tread width and setbacks will be determined by the distance listed in our department-published Open Space and Recreation Area Design Guidelines Manual
4	Minimization of impacts to the multi-use trail corridor and surrounding habitat will be achieved through coordination between the Project and the Open Space and Trails department during trail development and the adherence to trail corridor requirements.
5	Parcels included in the project area are located within proposed open space. This land use designation is due to the high-value habitat and biologically sensitive criteria found within the area. It is highly recommended that proposed open space be minimized/removed from the project's site plan. Please review and implement our guidelines regarding development within/around designated and proposed open space. https://www.pinal.gov/DocumentCenter/View/662/Open-Space-and-Recreation-Area-Design-Guidelines-Manual-PDF

6	There is substantial riparian habitat that transects the project area. The AZGFD ERT mapping tool can be used to view the recorded riparian habitat within the project area. Information and guidelines concerning riparian habitat within Pinal County can be found below: https://s3-us-west-2.amazonaws.com/azgfd-portal-wordpress-pantheon/wp-content/uploads/archive/PinalCounty_RiparianGuides_FINAL.pdf
7	Riparian habitat is considered to be of critical environmental importance, and is to be protected during development. Its protection is supported by Pinal County's Comprehensive Plan policies 3.1.4.1, 3.9.1.4, and 7.1.2.4, along with Development services code 2.176.100C, D, and E.
	A buffer of 50 ft. around all documented riparian habitat within the development site should be incorporated into the site plan. Setbacks or buffers may be increased or decreased if not prohibited by another county ordinance or regulation, and if approved by the supervisors.
8	Increased buffers (to 150 ft. minimum via Pinal County Riparian Guide)for the Santa Cruz River and Greene Wash were recommended by US Fish and Wildlife upon reviewing the Pinal County Open Space and Trails Masterplan to not only protect the main river reach but also the tributaries to protect the integrity of the watershed. Pg 125-126 https://www.pinal.gov/DocumentCenter/View/7115/Open-Space-and-Trails-Master-Plan-2007-PDF
9	Noxious weeds have become increasingly problematic in areas of development and on large projects where vegetation management plans are not created or maintained. Due to the increasing threat noxious weeds have on the Sonoran desert and Pinal County landscape it is recommended that the applicant incorporate invasive species/noxious weed management plans for development. Information regarding noxious weeds can be found on the Arizona Department of Agriculture's website.
10	Guidelines for Solar development within Arizona provided by Arizona Game and Fish Department can be found at https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FinalSolarGuidelines03122010.pdf
11	Review AZGFD fencing guidelines which are in consonance with Pinal County expectations below: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/110125_AGFD_fencing_guidelines.pdf
12	Review and incorporate department guidelines regarding development within/around designated and proposed open space.

	https://www.pinal.gov/DocumentCenter/View/662/Open-Space-and-Recreation-Area-Design-Guidelines-Manual-PDF
13	Any clarifications regarding these comments or recommended guidelines can be directed towards Kelley Fox via email Kelley.fox@pinal.gov or via phone at 520-866-6661

August 1, 2025

Pinal County Planning and Development Services
P.O. Box 2973
Florence, AZ 85132

Electronically submitted to: planningdivision@pinal.gov

RE: **La Osa Development, Major Comprehensive Plan Amendment**

Dear Pinal County Planning and Development Services,

The Arizona Game and Fish Department (Department) appreciates the opportunity to review and comment on the proposed major comprehensive plan amendment. The Department understands that the developer, Vermaland LLC, is requesting a major comprehensive plan amendment for approximately 3,374 acres of undeveloped property located in Pinal County. The request would modify the existing comprehensive plan designation from Moderate Low Density Residential, Very Low Density Residential, and Major Open Space Use to Employment, General Public Facilities/Services and Major Open Space. The Department also understands that the Major Open Space parcels, approximately 983 acres, will remain Major Open Space.

Under Title 17 of the Arizona Revised Statutes, the Department, by and through the Arizona Game and Fish Commission, has jurisdictional authority and public trust responsibilities to conserve and protect the state fish and wildlife resources. In addition, the Department manages threatened and endangered species through authorities of Section 6 of the Endangered Species Act and the Department's Section 10(a)(1)(A) permit. It is the mission of the Department to conserve and protect Arizona's diverse fish and wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations. For your consideration, the Department provides the following comments based on the agency's statutory authorities, public trust responsibilities, and special expertise related to wildlife resources and recreation.

The attached Arizona Online Environmental Review Tool[1] (ERT) report (HGIS-25146) identifies Species of Greatest Conservation Need (SGCN), as identified in Arizona's State Wildlife Action Plan (SWAP), and Species of Economic and Recreational Importance (SERI) that have been documented or predicted within the buffered Project footprint, as well as associated best management practice recommendations. Please note that the Department has an interactive

[1] https://ert.azgfd.gov/

website, Arizona Wildlife Conservation Strategy[2], that includes the most recent list of SGCN species statewide to help navigate and identify conservation opportunities. Additionally, should the project proceed, the Department provides the following recommendations for the Project to reduce potential impacts to wildlife and their habitats:

- The cactus ferruginous pygmy-owl, which is federally listed as Threatened under the Endangered Species Act (ESA), has been recorded in the vicinity of the project. Pre-construction surveys are recommended to determine species presence. If you are uncertain about the effects of your project to the cactus ferruginous pygmy owl, or if you anticipate your project will not be in compliance with the ESA, the Department recommends contacting the U.S. Fish and Wildlife Service (USFWS) for their Technical Assistance. The USFWS will provide options to comply with the ESA, such as conservation measures to avoid or minimize adverse effects to listed species.
- The yellow-billed cuckoo, which is federally listed as Threatened under the ESA, and the southwestern willow flycatcher, which is federally listed as Endangered under the ESA, have been documented within the project area. If you are uncertain about the effects of the project on this species or its respective critical habitat, or if you anticipate your project will not be in compliance with the ESA, the Department recommends contacting the USFWS for technical assistance and options to comply with the ESA, such as conservation measures to avoid or minimize adverse effects to listed species.
- The western burrowing owl, a special status species that is regulated under the Migratory Bird Treaty Act (MBTA), has been documented within the project area. The Department recommends conducting occupancy surveys for this species in advance of the design phase to understand distribution of burrowing owls in the project site; avoidance of a large burrowing owl population may be advisable over removal or other conservation measures. Guidelines for conducting this survey are found in *Burrowing Owl Project Clearance Guidance for Landowners*[3]. Please note that the survey should be conducted by a surveyor who is certified by the Department or has similar training and qualifications. If an active burrowing owl burrow is detected, please contact the Department and the USFWS for direction, in accordance with the guidelines.
- Breeding and wintering golden eagles, which are regulated under the Bald and Golden Eagle Protection Act (BGEPA), have been recorded within a three mile radius of your project. If you are uncertain about the effects of your project to eagles, or if you anticipate your project will not be in compliance with the BGEPA, the Department recommends you contact the USFWS for their Technical Assistance. The USFWS will provide options to comply with the BGEPA, such as conservation measures to avoid or minimize adverse effects to the eagles.
- The Sonoran desert tortoise, which is a federal and state species of special concern covered under a Candidate Conservation Agreement, has been documented within the project area. The Department recommends conducting pre-construction surveys for Sonoran desert tortoise within suitable habitat to determine the presence of this species.

[2] https://awcs.azgfd.com/
[3] https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/nongame/eagles/BurrowingOwlClearanceProtocol_2009.pdf

The *Sonoran Desert Tortoise Conservation Guidelines*[4] provide protocols for these surveys as well as guidelines for handling Sonoran desert tortoises and recommended avoidance, minimization, and mitigation measures if this species is detected.

- The Department also recommends conducting surveys for nesting birds prior to vegetation removal and/or construction activities that occur during the breeding season. The vegetation within the project area may provide nesting opportunities for avian species that are regulated under the Migratory Bird Treaty Act (MBTA). If it is anticipated the project will not be in compliance with MBTA, the Department recommends contacting the U.S. Fish and Wildlife Service[5] (USFWS) for technical assistance.
- Burrowing species could occur within the project area and could be influenced by construction activities and by loss of habitat. Surveys for these species are recommended to determine their presence and to inform pre-construction activities. Department staff are available to assist in identifying suitable conservation measures, such as one-way exclosures on burrows that allow wildlife to exit the burrows and disperse to adjacent lands in advance of construction.

Department analysis indicates that your project is located in the vicinity of an identified Conservation Opportunity Area (COA). The Department's Arizona Wildlife Conservation Strategy[6] identified COAs across the state that represent specific areas on the landscape where actions will most likely lead to substantial improvements for wildlife and their habitats. COAs were identified using species and habitat data, the presence of unique landscape features, and Departmental expertise. COAs range in size, scope, and focal species and/or habitats and should be considered voluntary guidance to prioritize areas where conservation efforts would be most effective. Please refer to the Department's website[7] for more conservation goals and actions specific to the COA near your project area and the Department's suggestions for potential conservation efforts.

This review has identified riparian areas within the vicinity of your project. During the planning stage of your project, the Department is available to recommend actions that can be taken to avoid, minimize, or offset any potential impacts to riparian areas identified in this report. The Department recognizes riparian habitats as areas of environmental importance to wildlife as they serve multiple functions in the ecosystem, including landscape-level conveyance corridors for wildlife movement. The Department encourages management practices that maintain current riparian areas such as maintaining a setback of 200 feet from ephemeral washes and ¼ mile from perennial waters. The Pinal County Comprehensive Plan[8] (i.e. policies 6.1.2.1 and 7.1.2.4), Open Space and Trails Master Plan, Drainage Ordinance, and Drainage Design Manual all identify riparian area considerations, guidance, and policies.

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[4] https://azgfd-portal-wordpress-pantheon.s3.us-west-2.amazonaws.com/wp-content/uploads/2025/01/16114611/Rubke-2024.-Sonoran-Desert-Tortoise-Conservation-Guidelines.pdf
[5] https://www.fws.gov/office/arizona-ecological-services/contact-us
[6] https://awcs.azgfd.com/what-is-the-awcs
[7] https://awcs.azgfd.com/conservation-opportunity-areas
[8] https://www.pinalcountyaz.gov/communitydevelopment/planning/pages/compplan.aspx

Maintaining habitat connectivity is a priority for the Department, and wildlife movement corridors are important for wildlife to respond to changing environmental conditions. Analysis indicates that your project is located in the vicinity of an identified wildlife habitat connectivity feature. The County-level Stakeholder Assessments contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please visit the Department's website[9].

The Department offers the following general recommendations to reduce potential impacts to wildlife and habitat during construction:

- A variety of other Arizona SGCN have the potential to occur within the project area. If wildlife are encountered during project activities, the Department recommends moving them out of harm's way, no more than ¼ mile outside the project boundary within similar habitat. Please note that the Department has an interactive website, Arizona Wildlife Conservation Strategy[10], that includes the most recent list of SGCN to help navigate and identify conservation opportunities.
- If trenching or digging of large holes will occur, the Department recommends that trenching/digging and backfilling crews work together to minimize the number of open holes/trenches at any given time. Where trenches/holes cannot be backfilled immediately, the Department recommends escape ramps be constructed in each hole and at least every 300 feet in trenches. Escape ramps can be short lateral trenches or wooden planks sloping to the surface, ramp slopes should be less than 45 degrees (1:1). Trenches or holes that have been left open should be inspected for animals and animals removed prior to backfilling.
- Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations (Davies et. al. 2013[11]). The Department recommends using only the minimum amount of light needed for safety. If feasible, "warmer" narrow spectrum lighting (amber, orange, red) is wildlife-friendly and should be used as often as possible to minimize the number of species affected by lighting. It is also beneficial that all lighting is shielded, canted, or cut to minimize the amount of upward shining light.
- If drainage/erosion structures are needed for the site, Department staff are available to assist in identifying potential impacts to wildlife and conservation measures to minimize potential impacts in development or construction of erosion structures. As an example, rip-rap is difficult for many species to traverse. If rip-rap is required for the construction of on-site retention basins or large-scale drainage needs, burying and back-filling with topsoil or other substrate would allow wildlife to move through the basins.

[9] https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/wildlife-and-habitat-connectivity/
[10] https://awcs.azgfd.com
[11] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3657119

- Please ensure the project complies with Arizona Native Plant Law[12] regulations. A Native Plant Inventory may need to be conducted to identify, record, and coordinate plant salvage efforts for species that are Protected under the Arizona Native Plant Law.
- To minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects, and pathogens, the Department encourages taking precautions to wash and/or decontaminate equipment before entering and leaving the site. See the Arizona Department of Agriculture website[13] for a list of prohibited and restricted noxious weeds and the Arizona Native Plant Society[14] for recommendations on control methods. To view a list of documented invasive species or to report invasive species in or near the project area, visit iMapInvasives[15], which is a national cloud-based application for tracking and managing invasive species.
    - Stinknet is a highly invasive noxious winter weed native to South Africa, and is extremely flammable when dry. Stinknet (also known as globe chamomile) has heavily infested Maricopa, Pinal, and Pima counties and is expanding into Yuma, Yavapai, and Gila counties. Infestations spread rapidly along highways and open fields in residential areas, with emergence starting in late November and plants continuing to germinate and emerge through May in wet years. In order to minimize the spread of this plant it is critical that any new infestations are identified and quickly managed. Additional information is available through the Southwest Vegetation Management Association[16], the Sonoran Desert Cooperative Weed Management Area[17], or the Arizona Native Plant Society[18].
- The Department recommends revegetating disturbed areas with native drought-tolerant species that represent the natural surrounding landscape. Landscaping with native plants can help support wildlife and pollinator species in the area while reducing dust and erosion. In addition, the applicable land management agencies should be consulted regarding guidelines for revegetation efforts.

[12] https://agriculture.az.gov/plantsproduce/native-plants
[13] https://agriculture.az.gov/pestspest-control/agriculture-pests/noxious-weeds
[14] https://aznps.com/invas
[15] https://imap.natureserve.org/imap/services/page/map.html
[16] https://www.swvma.org/
[17] https://www.sdcwma.org/species/stinknet.php
[18] http://aznps.com

Thank you for the opportunity to provide comment on this proposed Major Comprehensive Plan Amendment in Pinal County. If you have any questions or further coordination, please contact Katie Matthiesen, the Region V Habitat Specialist at kmatthiesen@azgfd.gov or 520-388-4442.

Sincerely,

Dave Daniels
Regional Supervisor, Tucson

cc: Callie Cavalcant, Habitat Branch Chief, AZGFD

Attachment: HGIS-25146

AZGFD #M25-06122932

Pinal County Planning and Zoning Commission
301 E. 11th St.
Florence, Arizona 85132

August 20, 2025

Re: 2025 Major Amendments to the Pinal County Comprehensive Plan

Dear Commissioners,

As president and CEO of the Arizona Technology Council, the state's premier trade association representing more than 750 science and technology companies, I am writing to express our strong support for projects that make up the proposed 2025 major amendments to the Pinal County Comprehensive Plan. Specifically, I'm referring to PZ-PA-010-25 (Silver King Solar and BESS), PZ-PA-011-25 (La Osa Energy Generating Facilities), PZ-PA-012-25 (Silver Reef Solar), PZ-PA-014-25 (Griffin Energy) and PZ-PA-015-25 (Energy Generation and Technology Campus).

Pinal County has experienced tremendous population growth in the past decade, reaching more than 522,000 residents—an estimated increase of 3.81% since 2024. The county has become an employment magnet for industries such as semiconductor manufacturing, electric vehicle battery plant construction, copper mining and health care, with advanced manufacturers such as LG Energy Solution, Lucid Motors and Procter & Gamble establishing operations throughout the county.

Each of the five proposed renewable energy projects named above present transformative economic development opportunities for Pinal County. They would create good-paying jobs and generate millions of dollars in tax revenues to fund schools, roads and emergency services. For instance, the Silver King Solar and BESS Project would create more than 300 construction jobs and generate more than $20 million in sales tax revenue during construction, with approximately $5.3 million going to the county.

Furthermore, the major amendments would ensure Pinal County remains a leader in renewable energy development and environmental stewardship. These projects collectively support the county's goal to meet current and future energy needs and decrease the county's dependence on non-renewable energy sources, improving air quality and residents' quality of life. They are also key to a broader energy transition initiated countywide, including increasing battery storage facilities, implementing critical grid upgrades and ensuring smarter energy use. Each project is also responsibly sited, minimizing impact on key visual resources.

On behalf of the Council and our members, I respectfully encourage you to support these critical projects.

Sincerely,

Steve

ARIZONA TECHNOLOGY COUNCIL & SCITECH INSTITUTE



Steven G. Zylstra
President & CEO

To: Pinal County staff; Citizen's Advisory Committee; Planning and Zoning Commission; Board of Supervisors

From: Cyndi Ruehl, Pinal County resident
Date: July 29, 2025
Re: Comment on the 2025 Major Amendments to the Pinal County Comprehensive Plan

La Osa Project (PZ-PA-011) and Griffin Energy Project (PZ-PA-014-25)
These two proposed Comprehensive Plan Major Amendments projects, propose to take, rezone and encompass designated open space. This is particularly concerning and needs very serious analysis and thoughtful, comprehensive consideration.

Pinal County Comprehensive Plan
Approved by the Board of Supervisors in 2007, the Pinal County Open Space and Trails Master Plan is based on county values, vision, goals as well as a careful countywide analysis and inventory of biological, abiotic and cultural resources, and natural systems. In other words, open space areas on the map were not just randomly plopped down where someone thought it might be nice to have a trail. These areas were thoughtfully analyzed and publicly vetted to be important areas. The taking of them and destroying, or at best altering, their natural systems should not be taken lightly and without careful debate (read Chapter 6 of the Pinal County Comprehensive Plan: Open Spaces and Places and Chapter 7: Environmental Stewardship).

The taking or altering of designated open space in these project areas would impact:

1) Important wildlife connectivity and habitat areas,
2) Critical riparian areas, and
3) Proposed regional trials.

Specifically:

<u>PZ-PA-011-25 the Osa Employment Center</u>
In the case of PZ-PA-011-25, the Osa Project, it may seem like an insignificant sliver of green transecting the project area, but rather its significance as a wildlife habitat and connectivity corridor, and critical riparian corridor is extremely important and impactful to all surrounding areas of the ecosystem. To pinch off a corridor can greatly diminish the health of the surrounding desert, wildlife populations, and movement of natural systems. Analysis from the AZ Environmental Review Tool indicates the project is in a Wildlife Habitat Linkage Corridor, impacting both Pima and Pinal Counties' wildlife. The Analysis identified the project would impact: 1) wildlife movement and connectivity, 2) CAP wildlife crossing and riparian washes important for wildlife movement, as well as 3)

all the other tremendous ecological services that natural ephemeral washes provide to the health of our ecosystem, water and air.

The project lies along the Green Canal and Santa Cruz wash, making some of the project in a Zone A floodplain and transects important wildlife connectivity and habitat. For these reasons that area is designated as “Major Open Space” in the Pinal County Open Space & Trails Master Plan.

The AZ Environmental Review Tool also states, “*Analysis indicates that the project is located in the vicinity of an identified Conservation Opportunity Area (COA). While there are many areas in Arizona that present abundant conservation opportunities, COAs are specific areas on the landscape that the Department identified as having the greatest potential for conservation efforts. COAs were identified using species and habitat data, the presence of unique landscape features, and Departmental expertise*.”

This project is also situated in habitat for endangered species, species of concern and endangered species candidates. These include: the lesser long-nose bat, burrowing owls and desert tortoise, as well as identified critical habitats.

The applicant suggests they will work with the open space, but as stated above, blocking corridors and connectivities cannot be corrected or mitigated by throwing in an equal acreage of land elsewhere on the property and calling it the same. **Wildlife do not travel through industrial zones.**

Impacts to water use, availability and projected demand are not discussed in this proposal.

PZ-PA-014-25 Griffin Power Project

The Pinal County Open Space and Trails Master Plan identifies the Santa Rosa Wash along the project’s western boundary and the Green Wash along the east as Open Space Corridors. The importance of wildlife connectivity and corridors, and their harmful impacts if pinched off, were discussed in the Osa Project earlier. Additionally, a proposed Multi-Use Trail Corridor cuts through this project property. Cutting off a trail corridor proposed to link into an entire trail system has the same effect as pinching off a piece - making the remainder wildlife corridor or trail corridor useless. **No hiker, equestrian or wildlife will walk through a solar field.**

Impacts to water use, availability and projected demand are not discussed in this proposal.

What is particularly disturbing about this proposal is the absence of the AZ Environmental Review Tool (ERT) analysis. The ERT is a valuable tool that analyzes environmental impacts and provides information on special status species and

Conservation Opportunity Areas (COAs), as described above in the Osa Project. The tool aids in assessment of land development impacts. This analysis is provided in the other 6 applications for major amendments, but this project is not transparent.

In Conclusion

I strongly believe in the advancement of sustainable, renewal energy. And what better place than Pinal County with its wide open, flat expanses of land and limitless sunshine. But there are some true values we must be committed to and not destroy or degrade in the name of industry: a few last pieces of some of the most biodiverse and unique pieces of the Sonoran Desert in the world, which we hold stewardship to in this county.

When it's gone….it's gone.

NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT 6:00 P.M. ON THE **4TH** DAY OF **SEPTEMBER 2025**, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 311 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR **MAJOR COMPREHENSIVE PLAN AMENDMENT** TO THE PINAL COUNTY COMPREHENSIVE PLAN.

PZ-PA-011-25 – PUBLIC HEARING/ACTION: Vermaland LLC, Rob Clang, applicant/agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 3,374± acres of land from Very Low Density Residential (VLDR, 0-1 du/ac) Moderate Low Density Residential (MLDR, 1-3.5 du/ac), and Proposed Open Space to 1,910± acres Employment,480± acres General Public Facilities/Services, and 983± acres of Proposed Open Space for industrial, office, business park and natural gas fired power plant, situated on a portions of sections 3,4,7,10,11,12,13,17,18, 20, 21,and 29, T09S and T10S, R08E and R09E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 409-11-0040; -0050; -006C; -002E; -002F; -002G; -002H; -003D; -013C; -015C; -015E; -0160; -018A; -0190; 409-14-002D; -002F; -004A; -005A; -005E; 409-24-001C; 409-25-001E; -001D; -001C; -002F; -002G; -003G; -003E; 409-26-0010; -002A; -002B; -0240; -0220; -0250; -0260; -0270; -0490; -0480; 409-30-0020; 409-31-0010; and -0330 located along Greene Canal of Santa Cruz wash, south of Baumgartner road, and east of eleven mile corner road, south of the City of Eloy in unincorporated area of Pinal County.

ALL PERSONS INTERESTED IN THIS MATTER MAY APPEAR AND SPEAK AT THE PUBLIC HEARING AT THE DATE, TIME, AND PLACE DESIGNATED ABOVE.

DOCUMENTS PERTAINING TO THIS CASE CAN BE FOUND ON THE NOTICE OF HEARING PAGE FOR THE P&Z COMMISSION AT:
https://www.pinal.gov/236/Notice-of-Hearings

DATED THIS **4th** DAY OF **AUGUST 2025**, by Pinal County Development Services

TO QUALIFY FOR FURTHER NOTIFICATION IN THIS LAND USE MATTER YOU MUST FILE WITH THE PLANNING DEPARTMENT A WRITTEN STATEMENT OF SUPPORT OR OPPOSITION TO THE SUBJECT APPLICATION. YOUR STATEMENT **MUST** CONTAIN THE FOLLOWING INFORMATION:

1) Planning Case Number (see above)
2) Your name, address, telephone number and property tax parcel number **(Print or type)**
3) A brief statement of reasons for supporting or opposing the request
4) Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:
PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT
85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132

Contact for this matter: Sangeeta Deokar, Planning Supervisor
E-mail address: Sangeeta.deokar@pinal.gov
Phone # (520) 866-6641

[*Anything below this line is not for publication.*]

Pinal Central Dispatch
Arizona Republic

PINAL COUNTY
WIDE OPEN OPPORTUNITY

BOARDS AND COMMISSIONS
AGENDA ITEM

09/04/2025
Citizen Advisory Committee

Funds #:
Dept. #:
Dept. Name: Development Services
Requested By:

AGENDA ITEM AND REQUESTED BOARD ACTION:

PZ-PA-012-25 -- PUBLIC HEARING/ACTION: Silver Reef Energy LLC, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate **801± acres** of land from **Very Low Density Residential** (VLDR, 0-1 du/ac) **to Green Energy Production** for a utility scale Solar Facility for a 150 megawatt photovoltaic solar and 200 megawatt Battery Energy Storage System, situated on a portions of section 14 T07S R03E, sections 12 & 13 T07S R03E, section 18 T07S R04E, and section 19 T07S R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-03-0040; 500-62-0160; -0200; -0230; -0310; -0320; -0330; -0340; 500-11-027G; -027H; -028D; and -028E; located 6.5 miles southwest of Casa Grande, south of Interstate 8 (I-8), in the unincorporated area of Pinal County.

MOTION:

Attachments

Packet

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

MEETING DATE: SEPTEMBER 4, 2025

TO: CITIZENS ADVISORY COMMITTEE

CASE NO(S): **PZ-PA-012-25 Silver Reef Solar**

SUPERVISOR DISTRICT: DISTRICT #1

CASE COORDINATOR(s): PATRICK ZAIA-ROBERTS, SENIOR PLANNER

Executive Summary: *A Pinal County Comprehensive Plan Amendment request by Silver Reef Energy LLC, applicants, requesting a Major Comprehensive Plan Amendment to the Pinal County Comprehensive Plan to re-designate ±801 acres of land from Very Low Density Residential (0-1 du/ac) to Green Energy Production, to develop a 150 Megawatt Photovoltaic Solar facility, and a 200 Megawatt Battery Energy Storage System (BESS), located 6.5 miles southwest of Casa Grande, south of Interstate 8 (I-8), in unincorporated Pinal County, AZ.*

If this request is approved:
If this major amendment to the Pinal County Comprehensive Plan is approved, the action will allow the applicant to pursue rezoning of the property to accommodate Green Energy uses on the total of the ±801 acre site.

LEGAL DESCRIPTION: ±801 acres, situated in Section 14, T07S, R03E, Sections 12 & 13, T07S, R03E, Section 18, T07S, R04E, and Section 19, T07S, R04E, of the Gila and Salt River Base and Meridian (legal on file)

TAX PARCELS: 500-03-0040; 500-62-0160; 500-62-0200; 500-62-0230; 500-62-0310; 500-62-0320; 500-62-0330; 500-62-0340; 500-11-027G; 500-11-027H; 500-11-028D; and 500-11-028E.

APPLICANT/AGENT: Silver Reef Energy LLC

LANDOWNERS:
AZNY Investments LLC,
Coassolo Daniel and Grace Living Trust,
Phillip W Coassolo Trust and Ida M Coassolo Trust,
Wesley C Ruybal,
Selma Partners LLC,
Andrew J Salontai and Lisa A Salontai,
Husam Abbu,
Jacob Garmo,
Mokhlis Shammami,
JMS Ranch Properties LLC

REQUESTED ACTION & PURPOSE: **PZ-PA-012-25:** Silver Reef Energy LLC, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 801± acres of land from Very Low Density Residential (VLDR, 0-1 du/ac) to Green Energy Production for a utility scale Solar Facility

for a 150 megawatt photovoltaic solar and 200 megawatt Battery Energy Storage System, situated on a portions of section 14 T07S R03E, sections 12 & 13 T07S R03E, section 18 T07S R04E, and section 19 T07S R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-03-0040; 500-62-0160; -0200; -0230; -0310; -0320; -0330; -0340; 500-11-027G; -027H; -028D; and -028E; located 6.5 miles southwest of Casa Grande, south of Interstate 8 (I-8), in the unincorporated area of Pinal County.

SIZE: ±801 acres

STAFF FINDINGS

Public Comment:
To date, no public comments from members of the public have been received by county staff.

PUBLIC PARTICIPATION:

60 Day Review Period:	6/9/2025 to 8/8/2025
Newspaper Publication:	8/14/2025
Site Posting:	8/13/2025
Property Mail-out:	8/20/2025
Web Posting:	8/18/2025

AGENCY REVIEW COMMENTS:
As of time of publication, comments have been received from Arizona Game and Fish Department and Pinal County Open Space and Trails Department. These comments have been included in the packet, and discussed within the case analysis. Staff has received a letter of support for this case from the Arizona Technology Council and SciTech Institute

WORK SESSION SUMMARY:
Staff has received an application for a Major Comprehensive Plan Amendment of ±801 acres from Very Low Density Residential (0-1 du/ac) to ±801 acres of Green Energy Production. Staff is in the process of gathering information from various agencies and County departments for further analysis of this site. Feedback from outside agencies, internal departments and public stakeholders shall be valuable in guiding staff and applicants to design and present policies for consideration to the Board of Supervisors.

Two work sessions were held regarding this case with the Planning and Zoning Commission and Board of Supervisors, respectively. On July 17th, this case was presented to the Planning and Zoning Commission as a work-session item for the purpose of providing background information to the Commission and collecting comments and questions for later research and analysis as the case progresses. Staff discussed the physical conditions on the site as described in this report, and opened the case for discussion from the Commission members. The Commission identified multiple questions of staff for analysis and consideration which have been incorporated into the report. These questions addressed the following topics: Loss of potential other energy generation sources from development; concerns regarding lot configurations and incongruous orientation; proximity to neighboring residences; solar property surrounding residential units; and, outreach beyond the 1,200 foot mailing requirements based on increased distance from residential neighbors and rural property configurations.

On August 13th, this item was proposed to the Board of Supervisors as a work session item soliciting comments and questions from the Board of Supervisors for their review and information. The board presented no additional questions or comments of concern for this project.

PLAN AMENDMENT DISCUSSION:

Background

The Pinal County Comprehensive Plan serves as a guiding framework for the growth and evolution of our community. In response to shifting growth patterns, the applicant is pursuing a major amendment to this plan. This amendment centers on changes to the land use plan for a selection of properties designating it for Green Energy Production purposes for development of a Photovoltaic Power Generating facility. The goal of the Citizens Advisory Committee is to provide the Planning and Zoning Commission and Board of Supervisors with valuable information and receive input on this plan to guide large scale changes to the Comprehensive Plan and identify ideal growth scenarios for the subject properties within Pinal County.

Project Proposal

This application is requesting a major amendment to the Pinal County Comprehensive Plan to amend ±801 acres of land from **Very Low Density Residential (0-1 du/ac)** to ±801 Acres of **Green Energy Production**, to develop a Photovoltaic Solar Facility and accompanying Battery Energy Storage System (BESS). The property is located 6.5 miles southwest of Casa Grande, south of Interstate 8 (I-8), in unincorporated Pinal County, AZ.

Location and Accessibility

The property is located south of Interstate-8 and southwest of the South Fuqua Road alignment in unincorporated Pinal County. The site comprises of twelve parcels, Access to the site is proposed from I-8 to Stanfield Road, with site access to be provided on Connelley Road.

Site Data

This site is comprised of vacant land. The property is extensively bounded by GR – General Rural Zoned properties, the majority of which are utilized as farmland. To the east of the site lies the Santa Rosa Wash, and north of the I-8 corridor alongside the Stanfield Road exit lies property designated CR-2 Single Residence, CR-3 Single Residence, CI-1 Light Industrial, SR Suburban Ranch and CB-2 General Business Zone. One residence lies approximately 600 feet east of the eastern boundary. Another residence lies 1800 feet north of Connelley Road, to the northeast of the subject site and distantly bounded by the subject area to the south and west.

An Army Corps of Engineers report dated from 2009 and provided by the applicant has indicated that the property was utilized as a bombing target range identified as the Williams Field Bomb Target Range #12. This range was identified to have been utilized from 1942 to 1946. The report has assessed soil conditions related to the historic utilization of the property. Results of this report identify evidence of munitions debris and target debris within the subject property, and presence of residual TNT and lead as a result of historic utilization. Such levels were found to not be unacceptable for human health. The applicant has further expressed that the results of the Formerly Utilized Defense Sites (FUDS) Report are idyllic for the proposed solar and BESS development on the basis that the potential contaminants will present lesser hazards to solar field development than other potential developments. This discussion capitalizes on the low occupancy nature of the proposed use.

Flood Zone
The project is located on vacant land. The property possesses generally flat topography and lies within Flood Zone X, of minimal floodplain hazard. While minor or regional flows impact portions of the site, the applicant has provided a detailed hydrology report describing how impact from this development will convey runoff concerns.

Environmental Study
The comments from the Arizona Game and Fish Department (AZGFD) reflect comments regarding the potential ecological impacts of the proposed developments upon wildlife within Pinal County. The Department describes the potential presence of sensitive species, such as the Sonoran Pronghorn, Sonoran Desert Tortoise and the Western Burrowing Owl, within these areas, which require careful consideration and protection. Based on proximity to instances of these species habitats, AZGFD recommends five listed wildlife surveys and additional recommendations to assess impacts of development upon protected species. The comments provide recommendations for development of wildlife movement corridors as part of the development plan as the project progresses. These corridors are encouraged to utilize wildlife friendly fencing or open fencing in areas to mitigate environmental impacts. The report further describes concerns for noxious weeds and mitigation methods, and discussion of vegetation preservation and minimization of site grading areas. The report indicates appreciation of the intention of the Silver Reef Energy project to avoid impacting local wash areas.

Infrastructure
The subject area lies both to the south of Interstate-8 (I-8). The property is crossed by White and Parker Road, Nelson Farm Road and Connelley Road. The site is accessible to the I-8 corridor by utilizing the I-8 Stanfield Road exit, and utilizing minor roadways to navigate to the subject properties. Traffic increase is proposed only during construction phases, with obligation from the applicant for a Traffic Impact Statement (TIS) at the time of zoning entitlement pursuit. A TIS has been provided for preliminary review for consideration of this Major Comprehensive Plan Amendment. Operational traffic is preliminarily anticipated to be minimal and inconsequential at project build-out, but may be anticipated depending if the proposed facilities are to be manned or remotely managed.

The location of the existing 230kv Santa Rosa to Tat Momoli is proposed to provide a gen-tie connection to the existing transmission line. This site has been proposed in order to minimize impacts of additional electrical transmission infrastructure and utilize existing infrastructure systems.

Land Suitability and Constraints
The subject property has remained vacant for the majority of its history. This property is located amongst surrounding farmland, and lies in a largely remote location. Utilization of the Arizona Game and Fish Environmental Review Tool noted no environmentally sensitive areas to this property. No areas were identified as critical habitats.

Impacts to the area along with analysis of the project alignment with the comprehensive plan goals and objectives will be evaluated in later sessions scheduled for the comprehensive plan process.

STAFF ANALYSIS:

The proposed amendment aligns with Pinal County's objectives of promoting economic development while ensuring land use compatibility with surrounding areas. This transition reflects a strategic shift towards accommodating modern infrastructure needs, by providing options for power generation and Battery Energy Storage Systems (BESS), which are essential for supporting the county's growing energy demands. The proposed layout of this facility promotes utilization of existing infrastructure connections associated with existing infrastructure. The remote character of this development provides a benefit for minimizing impacts to project neighbors.

Environmental concerns have been raised by the Arizona Game and Fish Department (AZGFD), particularly regarding the potential impacts on local wildlife, including sensitive species like the desert tortoise and the western burrowing owl. The site has proposed mitigation strategies through utilization of a land-use category contributing to preservation of riparian areas. Additional mitigation means should be considered to minimize environmental impact through implementation of sufficient buffers to wildlife corridors. Due to the nature of the proposed development, construction of a large-scale BESS systems may still have indirect effects on nearby ecosystems. To address these concerns, it is recommended that detailed environmental impact assessments be conducted, alongside the implementation of mitigation strategies to minimize habitat disruption during both construction and operation phases.

Should the Citizen Advisory Committee find, after the presentation of the applicant and together with the testimony and evidence presented at the public hearing, that this Major Comprehensive Plan amendment is needed and necessary at this location and time, will not negatively impact adjacent properties, will promote orderly growth and development of the County and will be compatible and consistent with the applicable goals and policies of the Pinal County Comprehensive Plan, then staff will recommend that the Citizen Advisory Committee forward **PZ-PA-012-25**, to the Planning and Zoning Commission with a favorable recommendation. If the Citizen Advisory Committee cannot find all of the factors listed above grounds for approval, then staff recommends that the Citizen Advisory Committee forward this case to the Planning and Zoning Commission with recommendation of denial.

Date Prepared: 8/21/25 PZR

NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT 6:00 P.M. ON THE **4TH** DAY OF **SEPTEMBER 2025**, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 301 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR **MAJOR COMPREHENSIVE PLAN AMENDMENT** TO THE PINAL COUNTY COMPREHENSIVE PLAN.

PZ-PA-012-25 – PUBLIC HEARING/ACTION: Silver Reef Energy LLC, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 801± acres of land from Very Low Density Residential (VLDR, 0-1 du/ac) to Green Energy Production for a utility scale Solar Facility for a 150 megawatt photovoltaic solar and 200 megawatt Battery Energy Storage System, situated on a portions of section 14 T07S R03E, sections 12 & 13 T07S R03E, section 18 T07S R04E, and section 19 T07S R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-03-0040; 500-62-0160; -0200; -0230; -0310; -0320; -0330; -0340; 500-11-027G; -027H; -028D; and -028E; located 6.5 miles southwest of Casa Grande, south of Interstate 8 (I-8), in the unincorporated area of Pinal County.

ALL PERSONS INTERESTED IN THIS MATTER MAY APPEAR AND SPEAK AT THE PUBLIC HEARING AT THE DATE, TIME, AND PLACE DESIGNATED ABOVE.

DOCUMENTS PERTAINING TO THIS CASE CAN BE FOUND ON THE NOTICE OF HEARING PAGE FOR THE P&Z COMMISSION AT:
https://www.pinal.gov/236/Notice-of-Hearings

DATED THIS **7th** DAY OF **AUGUST 2025**, by Pinal County Development Services

TO QUALIFY FOR FURTHER NOTIFICATION IN THIS LAND USE MATTER YOU MUST FILE WITH THE PLANNING DEPARTMENT A WRITTEN STATEMENT OF SUPPORT OR OPPOSITION TO THE SUBJECT APPLICATION. YOUR STATEMENT **MUST** CONTAIN THE FOLLOWING INFORMATION:

1) Planning Case Number (see above)
2) Your name, address, telephone number and property tax parcel number **(Print or type)**
3) A brief statement of reasons for supporting or opposing the request
4) Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:
PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT
85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132

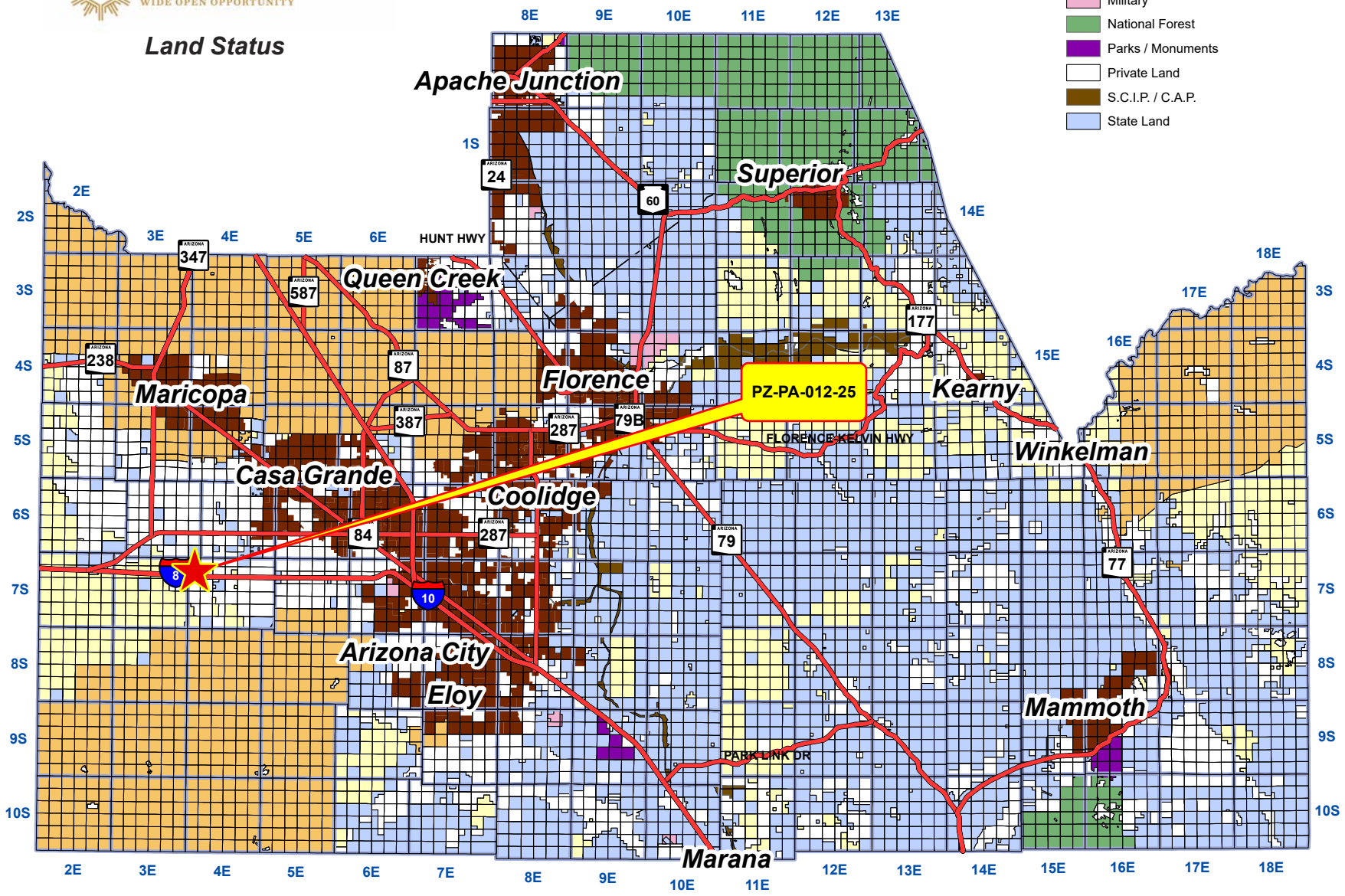
Contact for this matter: Patrick Zaia-Roberts, Senior Planner
E-mail address: Patrick.Roberts@pinal.gov
Phone # (520) 866-6409

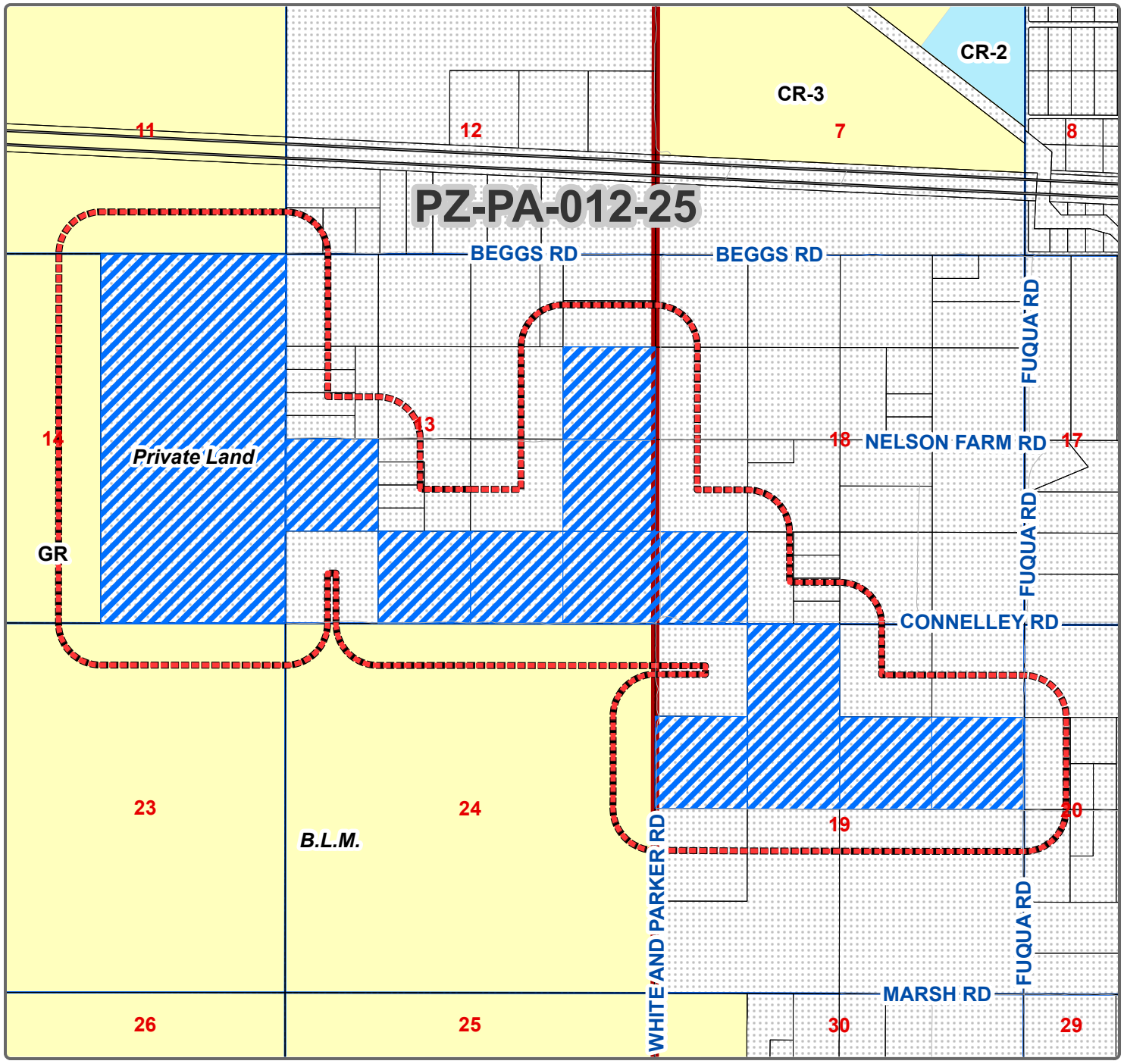
[*Anything below this line is not for publication*.]

TO BE PUBLISHED:
Casa Grande Dispatch
Arizona Republic

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Land Status





Community Development

PZ-PA-012-25 – PUBLIC HEARING/ACTION: Silver Reef Energy LLC, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 801± acres of land from Very Low Density Residential (VLDR, 0-1 du/ac) to Green Energy Production for a utility scale Solar Facility for a 150 megawatt photovoltaic solar and 200 megawatt Battery Energy Storage System, situated on a portions of section 14 T07S R03E, sections 12 & 13 T07S R03E, section 18 T07S R04E, and section 19 T07S R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-03-0040; 500-62-0160; -0200; -0230; -0310; -0320; -0330; -0340; 500-11-027G; -027H; -028D; and -028E; located 6.5 miles southwest of Casa Grande, south of Interstate 8 (I-8), in the unincorporated area of Pinal County.

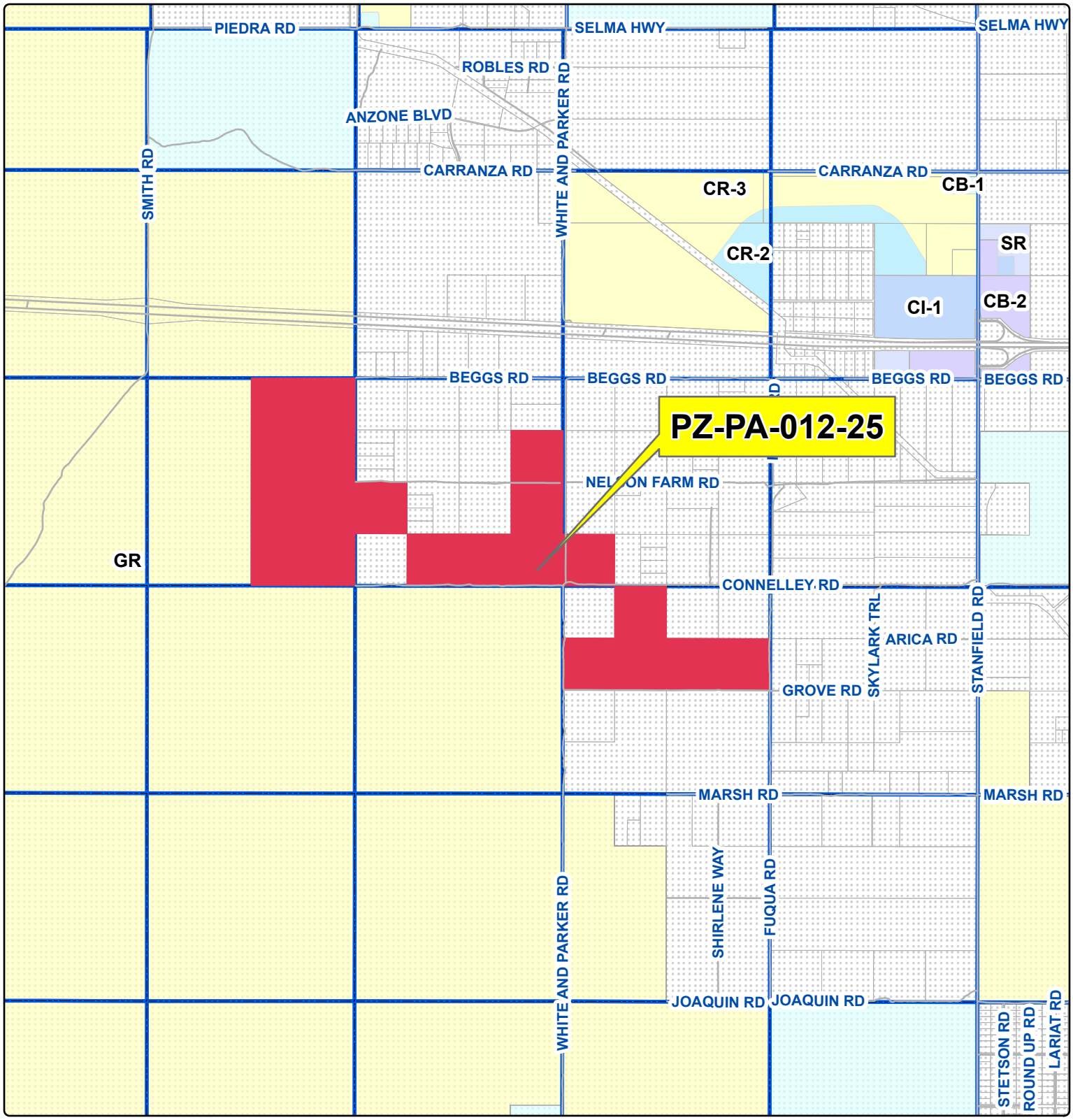
Current Zoning: GR	Requested Zoning: Rezone	Current Land Use: VLDR

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Legal Description: Situated on a portions of section 14 T07S R03E, sections 12 & 13 T07S R03E, section 18 T07S R04E, and section 19 T07S R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-03-0040; 500-62-0160; -0200; -0230; -0310; -0320; -0330; -0340; 500-11-027G; -027H; -028D; and -028E; located 6.5 miles southwest of Casa Grande, south of Interstate 8 (I-8), in the unincorporated area of Pinal County.
SEC 12, 13, 14, TWN 07S, RNG 03E
SEC 18, 19, TWN 07S, RNG 04E

Sheet No. 1 of 1

Owner/Applicant: SILVER REEF ENERGY LLC			
Drawn By: GIS / IT /RWH			Date: 07/09/2025
Section 12, 13, 14 18, 19	Township 07S	Range 03E, 04E	
Case Number: PZ-PA-012-25			



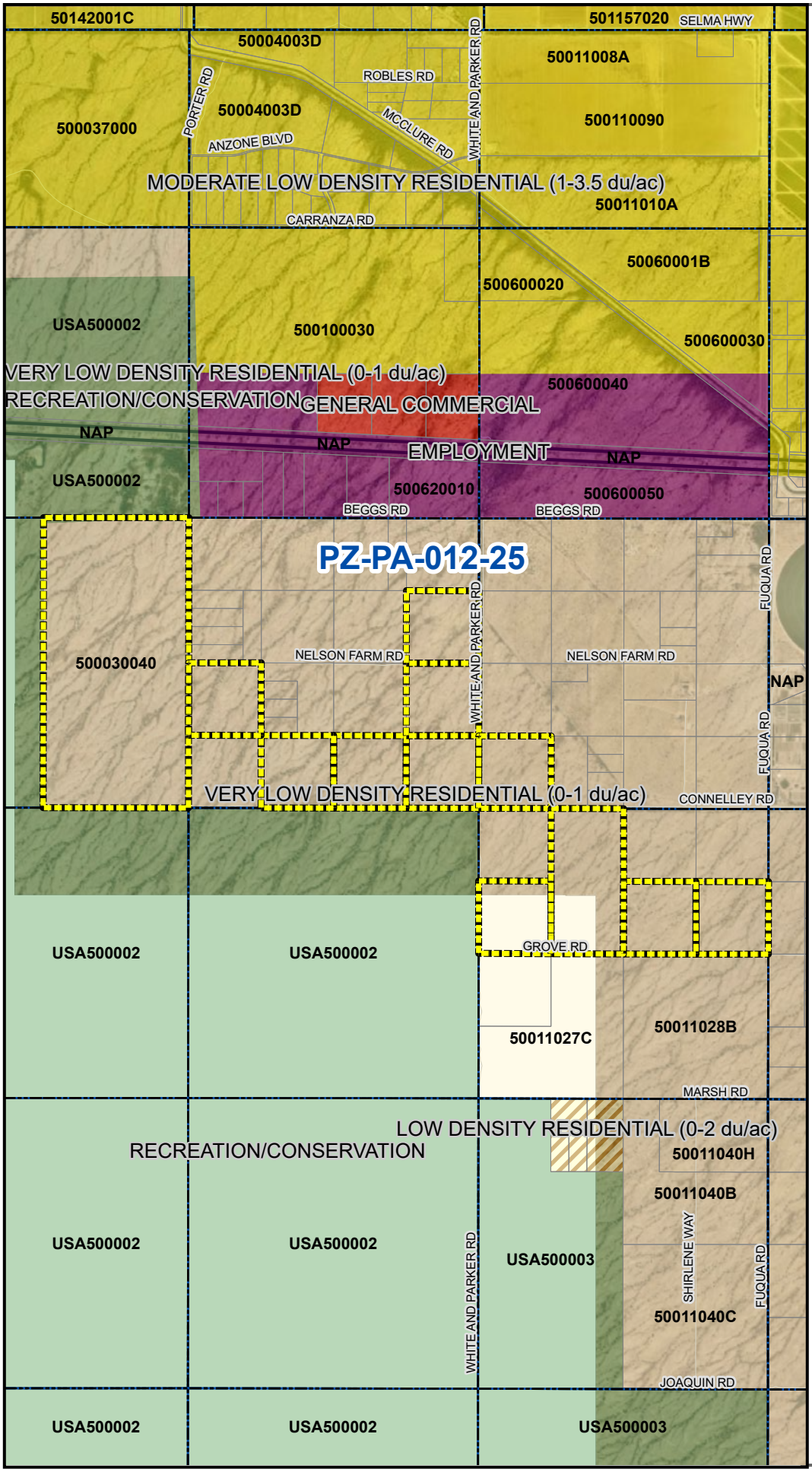
Community Development

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Legal Description: Situated on a portions of section 14 T07S R03E, sections 12 & 13 T07S R03E, section 18 T07S R04E, and section 19 T07S R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-03-0040; 500-62-0160; -0200; -0230; -0310; -0320; -0330; -0340; 500-11-027G; -027H; -028D; and -028E; located 6.5 miles southwest of Casa Grande, south of Interstate 8 (I-8), in the unincorporated area of Pinal County.

SEC 12, 13, 14, TWN 07S, RNG 03E
SEC 18, 19, TWN 07S, RNG 04E

Sheet No. 1 of 1	Owner/Applicant: SILVER REEF ENERGY LLC		
	Drawn By: GIS / IT / RWH		Date: 07/07/2025
	Section 12, 13, 14 18, 19	Township 08S	Range 03E, 04E
	Case Number: PZ-PA-012-25		



PINAL COUNTY
WIDE OPEN OPPORTUNITY

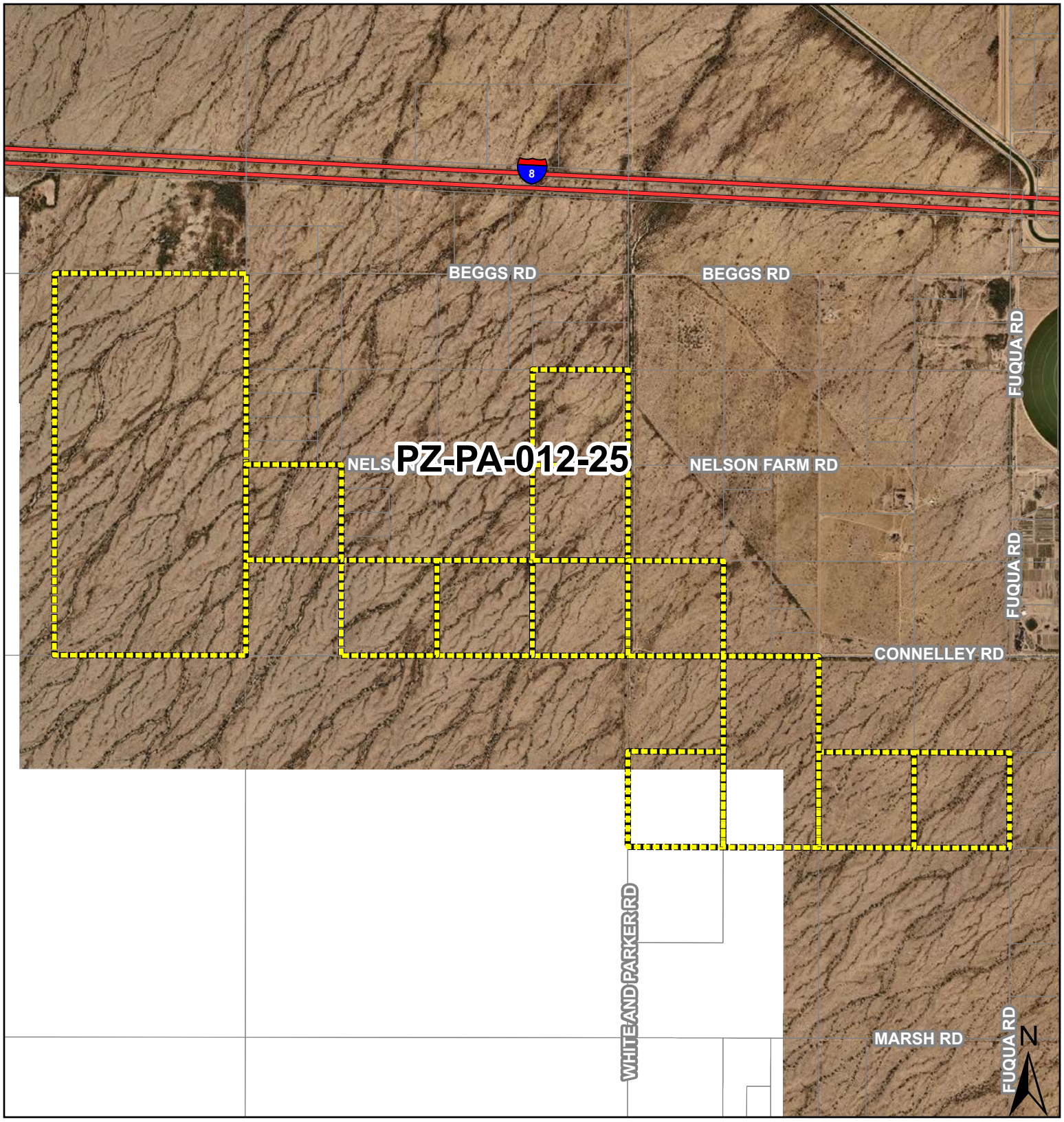
PZ-PA-012-25

FROM:

VERY LOW DENSITY RESIDENTIAL

TO:

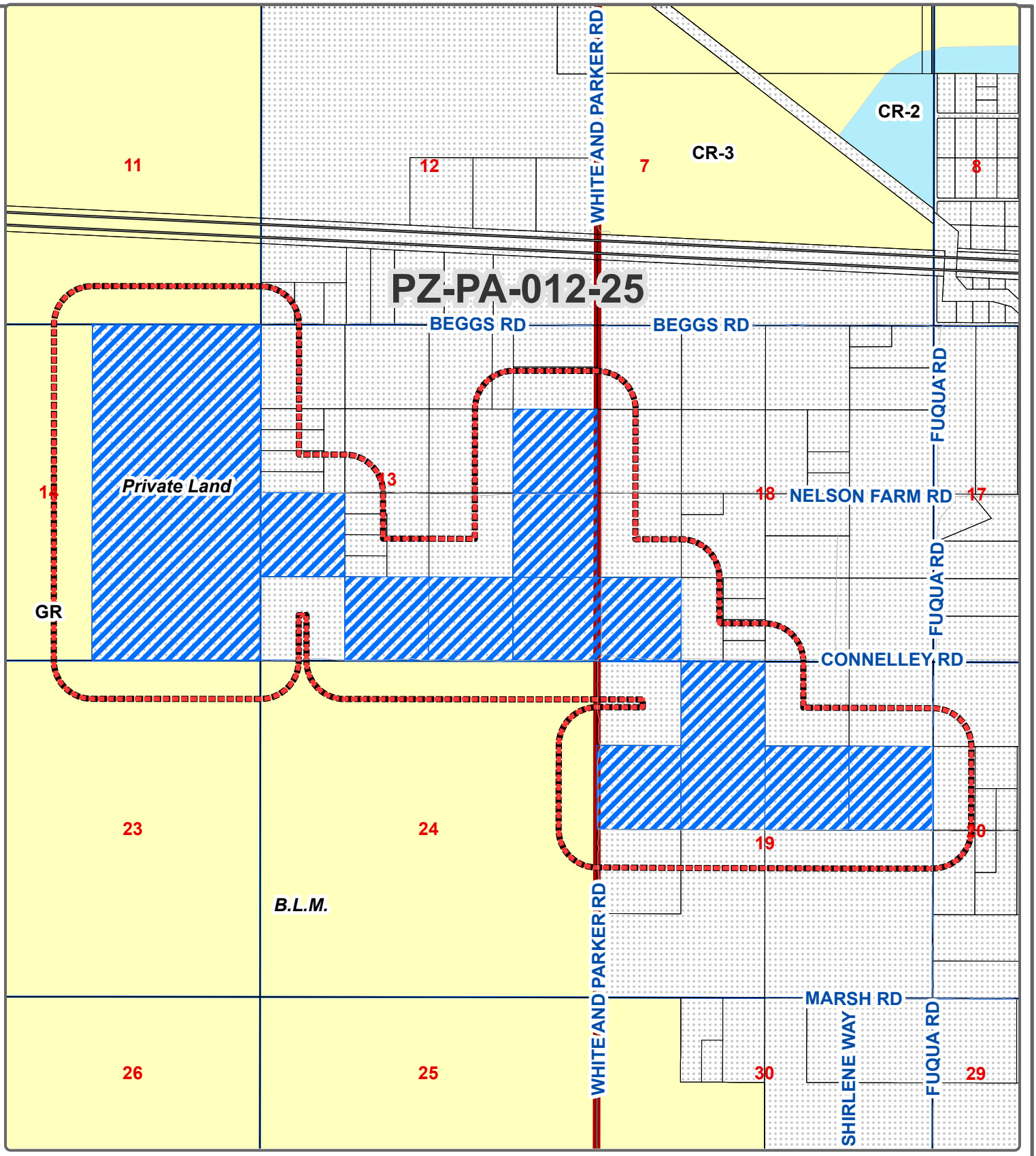
GREEN ENERGY PRODUCTION



Community Development

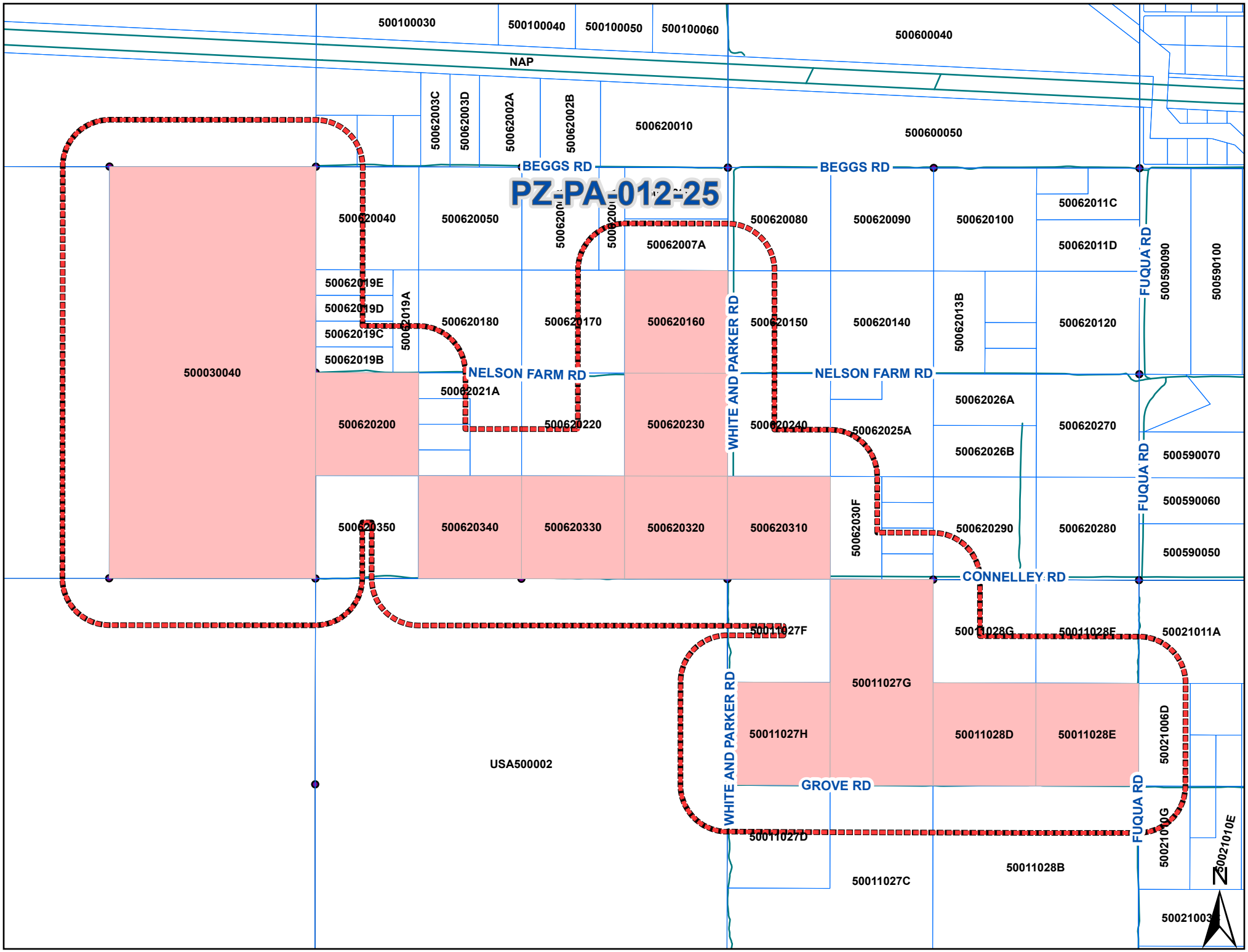
PINAL COUNTY
WIDE OPEN OPPORTUNITY

PZ-PA-012-25



Community Development

Owner/Applicant: Silver Reef Energy LLC	**Legal Description:** Situated on a portions of section 14 T07S R03E, sections 12 & 13 T07S R03E, section 18 T07S R04E, and section 19 T07S R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-03-0040; 500-62-0160; -0200; -0230; -0310; -0320; -0330; -0340; 500-11-027G; -027H; -028D; and -028E; located 6.5 miles southwest of Casa Grande, south of Interstate 8 (I-8), in the unincorporated area of Pinal County. SEC 12, 13, 14, TWN 07S, RNG 03E SEC 18, 19, TWN 07S, RNG 04E	Current Zoning: GR Request Zoning: Rezone Current Land Use: VLDR
Drawn By: GIS/IT - RWH; **Date:** 07/07/2025		
Section 12, 13, 14 18, 19; **Township** 07S; **Range** 03E, 04E		
Case Number: PZ-PA-012-25	**Sheet No.** 1 of 1	PINAL COUNTY WIDE OPEN OPPORTUNITY


PZ-PA-012-25
500100030
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500100050
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NAP
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500620010
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50062003D
50062002A
50062002B
BEGGS RD
BEGGS RD
500620040
500620050
50062007A
500620080
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500620100
50062011C
50062011D
FUQUA RD
500590090
500590100
50062019E
50062019D
50062019C
50062019B
50062019A
500620180
500620170
500620160
500620150
500620140
50062013B
500620120
500030040
NELSON FARM RD
NELSON FARM RD
50062021A
WHITE AND PARKER RD
50062026A
500620200
500620220
500620230
500620240
50062025A
50062026B
500620270
FUQUA RD
500590070
500590060
500620350
500620340
500620330
500620320
500620310
50062030F
500620290
500620280
500590050
CONNELLEY RD
50011027F
50011028G
50011028E
50021011A
50011027G
WHITE AND PARKER RD
50011027H
50011028D
50011028E
50021006D
USA500002
GROVE RD
FUQUA RD
50011027D
50011028B
50011027C
50021010E
N

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT IN AN UNINCORPORATED AREA OF PINAL COUNTY, ARIZONA
(All Applications Must Be Typed or Written in Ink)

Comprehensive Plan Amendment unincorporated & Property Information:
(Feel free to include answers and to these questions in a Supplementary Narrative, when doing so write see narrative on the space provided)

1. The legal description of the property: _____

_____

2. Parcel Number(s):_____ Total Acreage: _____

3. Current Land Use Designation: _____

4. Requested Land Use Designation: _____

5. Date of Concept Review: _____Concept Review Number: _____

6. Why is this Comprehensive Plan Amendment being requested? (You must provide a summary of the anticipated development on this page, if not provided, the application cannot be processed.): _____

_____
_____
_____
_____
_____

7. Discuss any recent changes in the area that would support your application. _____

_____
_____
_____
_____
_____

8. Explain why the proposed amendment is needed and necessary at this time.

INV#:_____AMT:_____DATE:_____CASE:_____Xref:_____

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

- ❑ A. **Certified Boundary Survey**, including legal descriptions of the proposed designations
- ❑ B. Location map which identifies the property and its relationship to Pinal Countyenvirons.
- ❑ C. Map showing the topography of the property.
- ❑ D. Site map which specifically identifies the property including parcels under separate ownership.
- ❑ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ❑ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ❑ G. Non-refundable filing fee as shown on the cover page.
- ❑ H. Narrative in PDF format.
- ❑ I. Neighborhood meeting report

Your application must be submitted digitally via the online submittal portal site at https://citizenaccess.pinalcountyaz.gov/CitizenAccess/Default.aspx

Please call or email the Planning Division for more information.

I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information, as requested. I understand if the information submitted is incomplete, this application cannot be processed.

See attached landowner forms.

Name of Landowner (Applicant) | Address | Phone Number

Signature of Landowner (Applicant) | E-Mail Address

Name of Agent | Address | Phone Number

Thomas Leahy

Signature of Agent | E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

AGENCY AUTHORIZATION

(To be completed by landowners of subject property when landowners do not represent themselves. Instructions for completing required information are in bold and brackets below lines. If applicant is a company, corporation, partnership, joint venture, trustee, etc., please use the corporate signature block and have the notary fill in the notarization section for corporations not individuals and cannot be submitted digitally)

TO: Pinal County Planning & Development Services
P.O. Box 2973
Florence, AZ 85132

_____

[Insert Name -- If a Corporation, Partnership or Association, Include State of Incorporation]

hereinafter referred to as "Owner," is/are the owner(s) of 40 acres located at _____, and further identified

[Insert Address of Property]

as assessor parcel number _____ and legally described as follows:

[Insert Parcel Number]

[Legal Description is attached hereto as Exhibit A]

Said property is hereinafter referred to as the "Property."

Owner hereby appoints _____

[Insert Agent's Name. If the Agent Is a Company, Insert Company Name Only]

hereinafter referred to as "Agent," to act on Owner's behalf in relation to the Property in obtaining approvals from Pinal County for any necessary amendment to Pinal County's Comprehensive Plan; zone changes; planned area development overlay districts; platting of the subject property; special use permit or industrial use permit; and to file applications and make the necessary submittals for such approvals.

Owner consents and agrees to be bound by all stipulations agreed to by this Agent in connection with any of above-referenced processes.

[Individual PROPERTY OWNER signature block and acknowledgment. DO NOT SIGN HERE IF SIGNING AS AN OFFICER OF A CORPORATION ON THE NEXT PAGE.]

_____ _____

[Signature] ***[Signature]***

_____ _____

[Address] ***[Address]***

Dated: _____ Dated: _____

STATE OF _____)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ____day of__, _____by _____.

[Insert Name of Signor(s)]

My commission expires _____

_____ _____

Printed Name of Notary Signature of Notary Public

Corporate PROPERTY OWNER signature block and acknowledgment the appropriate corporate officer or trustee signs this signature block NOT the block on the previous page.

_____
[Insert Company or Trustee's Name]

By: _____
[Signature of Authorized Officer or Trustee]

Its: _____
[Insert Title]

Dated: _____

STATE OF_____)
) ss.
COUNTY OF_____)

The foregoing instrument was acknowledged before me, this_____day of_____,
_____, by_____,_____of
[Insert Signor's Name] ***[Insert Title]***
_____, an _____
[Insert Name of Company or Trust] ***[Insert State of Incorporation, if applicable]***

and who being authorized to do so, executed the foregoing instrument on behalf of said entity for the purposes stated therein.

_____
Notary Public

My commission expires: _____

ALTERNATE: Use the following acknowledgment only when a second company is signing on behalf of the owner:
STATE OF_____)
) ss.
COUNTY OF_____)

On this_____day of_____, _____, before me, the undersigned, personally appeared

_____ Who acknowledged himself/herself to be
[Insert Signor's Name]

_____ of _____
[Title of Office Held] ***[Second Company]***
As_____for_____, and who being
[i.e, member, manager, etc.] ***[Owner's Name]***
Authorized to do so, executed the foregoing instrument on behalf of said entities for the purposes stated therein.

My commission expires: _____

_____ _____
Printed Name of Notary Signature of Notary

Lot Number	Legal Description
500030040, 50011027G, 50011028D, 50011028E	E2 SEC 14 7S 3E 320AC
50011027H	SW NW OF SEC 19-7S-4E 40.00 AC
500620160	LOT 16 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC
500620200	LOT 20 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC
500620230	HIGH CHAPARRAL RANCHES LOT 23 CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC
500620310	HIGH CHAPARRAL RANCHES LOT 31 CAB C SLD 170 SEC 18-7S-4E 1742400 SQ FT 40.00 AC
500620330, 500620320	500620330: LOT 33 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC; 500620320: LOT 32 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC
500620340	LOT 34 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT IN AN UNINCORPORATED AREA OF PINAL COUNTY, ARIZONA
(All Applications Must Be Typed or Written in Ink)

Comprehensive Plan Amendment unincorporated & Property Information:
(Feel free to include answers and to these questions in a Supplementary Narrative, when doing so write see narrative on the space provided)

1. The legal description of the property: LOT 34 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC

2. Parcel Number(s): 500620340 Total Acreage: 40

3. Current Land Use Designation: VERY LOW DENSITY RESIDENTIAL (0-1 du/ac)

4. Requested Land Use Designation: GREEN ENERGY

5. Date of Concept Review: 5/12/2025 Concept Review Number: CR-010-25

6. Why is this Comprehensive Plan Amendment being requested? (You must provide a summary of the anticipated development on this page, if not provided, the application cannot be processed.):
The Applicant is submitting a Formal Major CPA application with the goal to construct, operate, maintain, and decommission a 150 megawatt (MW) Photovoltaic (PV) solar and 200 MW Battery Energy Storage System (BESS) Project.

7. Discuss any recent changes in the area that would support yourapplication.
The proposed location and surrounding region is undeveloped / vacant land without recent changes. However, the planned I-11 corridor lies just to the north of APN 500-03-004.

8. Explain why the proposed amendment is needed and necessary at thistime.
The Project is located on approximately 801 acres of privately owned land. According to the Pinal County Comprehensive Plan (Plan) and Comprehensive Plan Viewer, the Project Area has a land use designation of Very Low-Density Residential. Per Chapter 10 of the Plan, a

INV#: AMT: DATE: CASE: Xref:

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

- ☐ A. **Certified Boundary Survey**, including legal descriptions of the proposed designations
- ☐ B. Location map which identifies the property and its relationship to Pinal County environs.
- ☐ C. Map showing the topography of the property.
- ☐ D. Site map which specifically identifies the property including parcels under separate ownership.
- ☐ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ☐ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ☐ G. Non-refundable filing fee as shown on the cover page.
- ☐ H. Narrative in PDF format.
- ☐ I. Neighborhood meeting report

Your application must be submitted digitally via the online submittal portal site at https://citizenaccess.pinalcountyaz.gov/CitizenAccess/Default.aspx

Please call or email the Planning Division for more information.

I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information as requested. I understand if the information submitted is incomplete, this application cannot be processed.

Name of Landowner (Applicant)	Address	Phone Number
AZNY INVESTMENTS LLC	10464 E Benjamin Dr Scottsdale, AZ 85255	602 770 5225

Signature of Landowner (Applicant) — bill@AZteamRealty.com — E-Mail Address

Name of Agent	Address	Phone Number

Signature of Agent — E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

AGENCY AUTHORIZATION

(To be completed by landowners of subject property when landowners do not represent themselves. Instructions for completing required information are in bold and brackets below lines. If applicant is a company, corporation, partnership, joint venture, trustee, etc., please use the corporate signature block and have the notary fill in the notarization section for corporations not individuals and cannot be submitted digitally)

TO: Pinal County Planning & Development Services
P.O. Box 2973
Florence, AZ 85132

AZNY INVESTMENTS LLC,ARIZONA
[Insert Name -- If a Corporation, Partnership or Association, Include State of Incorporation]

hereinafter referred to as "Owner," is/are the owner(s) of 40 acres located at N/A, and further identified
[Insert Address of Property]

as assessor parcel number 500620340 and legally described as follows:
[Insert Parcel Number]

LOT 34 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT

[Legal Description is attached hereto as Exhibit A]

Said property is hereinafter referred to as the "Property."

Owner hereby appoints Silver Reef Energy, LLC
[Insert Agent's Name. If the Agent Is a Company, Insert Company Name Only]

hereinafter referred to as "Agent," to act on Owner's behalf in relation to the Property in obtaining approvals from Pinal County for any necessary amendment to Pinal County's Comprehensive Plan; zone changes; planned area development overlay districts; platting of the subject property; special use permit or industrial use permit; and to file applications and make the necessary submittals for such approvals.

Owner consents and agrees to be bound by all stipulations agreed to by this Agent in connection with any of above-referenced processes.

[Individual PROPERTY OWNER signature block and acknowledgment. DO NOT SIGN HERE IF SIGNING AS AN OFFICER OF A CORPORATION ON THE NEXT PAGE.]

_____ _____
[Signature] ***[Signature]***

_____ _____
[Address] ***[Address]***

Dated: _____ Dated: _____

STATE OF _____)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ___day of_____, _____by _____.
[Insert Name of Signor(s)]

My commission expires_____

_____ _____
Printed Name of Notary Signature of Notary Public

Corporate PROPERTY OWNER signature block and acknowledgment the appropriate corporate officer or trustee signs this signature block NOT the block on the previous page.

AZNY INVESTMENTS LLC
[Insert Company or Trustee's Name]

By: _____
[Signature of Authorized Officer or Trustee]

Its: MANAGING MEMBER
[Insert Title]

Dated: 5/24/2025

DESHAWN C GOSS
NOTARY PUBLIC - ARIZONA
Maricopa County
Commission # 629672
My Commission Expires
April 09, 2026

STATE OF Arizona)
) ss.
COUNTY OF Maricopa)

The foregoing instrument was acknowledged before me, this 24th day of May, 2025, by William Calvoni, Member of
[Insert Signor's Name] *[Insert Title]*
AZNY INVESTMENTS LLC, an ARIZONA
[Insert Name of Company or Trust] *[Insert State of Incorporation, if applicable]*

and who being authorized to do so, executed the foregoing instrument on behalf of said entity for the purposes stated therein.

DeShawn C Goss
Notary Public

My commission expires: 04/09/2026

ALTERNATE: Use the following acknowledgment only when a second company is signing on behalf of the owner:

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____, _____, before me, the undersigned, personally appeared

_____ Who acknowledged himself/herself to be
[Insert Signor's Name]

_____ of _____
[Title of Office Held] *[Second Company]*

As _____ for _____, and who being
[i.e, member, manager, etc.] *[Owner's Name]*

Authorized to do so, executed the foregoing instrument on behalf of said entities for the purposes stated therein.

My commission expires: _____

_____ _____
Printed Name of Notary Signature of Notary

PINAL COUNTY

WIDE OPEN OPPORTUNITY

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT IN AN UNINCORPORATED AREA OF PINAL COUNTY, ARIZONA

(All Applications Must Be Typed or Written in Ink)

Comprehensive Plan Amendment unincorporated & Property Information:
(Feel free to include answers and to these questions in a Supplementary Narrative, when doing so write see narrative on the space provided)

1. The legal description of the property: HIGH CHAPARRAL RANCHES LOT 23 CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC

2. Parcel Number(s): 500620230 Total Acreage: 40

3. Current Land Use Designation: VERY LOW DENSITY RESIDENTIAL (0-1 du/ac)

4. Requested Land Use Designation: GREEN ENERGY

5. Date of Concept Review: 5/12/2025 Concept Review Number: CR-010-25

6. Why is this Comprehensive Plan Amendment being requested? (You must provide a summary of the anticipated development on this page, if not provided, the application cannot be processed.):

The Applicant is submitting a Formal Major CPA application with the goal to construct, operate, maintain, and decommission a 150 megawatt (MW) Photovoltaic (PV) solar and 200 MW Battery Energy Storage System (BESS) Project.

7. Discuss any recent changes in the area that would support yourapplication.

The proposed location and surrounding region is undeveloped / vacant land without recent changes. However, the planned I-11 corridor lies just to the north of APN 500-03-004.

8. Explain why the proposed amendment is needed and necessary at thistime.

The Project is located on approximately 801 acres of privately owned land. According to the Pinal County Comprehensive Plan (Plan) and Comprehensive Plan Viewer, the Project Area has a land use designation of Very Low-Density Residential. Per Chapter 10 of the Plan, a Major CPA is required for proposed changes from a residential or nonresidential land use to green energy production of 640 acres or more. Therefore, the Applicant is requesting a Major CPA to change the land use designation to Green Energy Production in accordance with Chapter 10 of the Plan.

INV#: AMT: DATE: CASE: Xref:

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

- ☐ A. **Certified Boundary Survey**, including legal descriptions of the proposed designations
- ☐ B. Location map which identifies the property and its relationship to Pinal Countyenvirons.
- ☐ C. Map showing the topography of the property.
- ☐ D. Site map which specifically identifies the property including parcels under separate ownership.
- ☐ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ☐ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ☐ G. Non-refundable filing fee as shown on the cover page.
- ☐ H. Narrative in PDF format.
- ☐ I. Neighborhood meeting report

Your application must be submitted digitally via the online submittal portal site at https://citizenaccess.pinalcountyaz.gov/CitizenAccess/Default.aspx

Please call or email the Planning Division for more information.

I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information, as requested. I understand if the information submitted is incomplete, this application cannot be processed.

COASSOLO DANIEL & GRACE LIV TRUST | 3540 CHINA RIDGE DR, Kimberly, ID 83341 | 208-4044638

Name of Landowner (Applicant) | Address | Phone Number

DANIEL PHILLIP COASSOLO | COASSOLO1@AOL.COM

Grace Coassolo | gracec77@aol.com

Signature of Landowner (Applicant) | E-Mail Address

Name of Agent | Address | Phone Number

Signature of Agent | E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

AGENCY AUTHORIZATION
(To be completed by landowners of subject property when landowners do not represent themselves. Instructions for completing required information are in bold and brackets below lines. If applicant is a company, corporation, partnership, joint venture, trustee, etc., please use the corporate signature block and have the notary fill in the notarization section for corporations not individuals and cannot be submitted digitally)

TO: Pinal County Planning & Development Services
P.O. Box 2973
Florence, AZ 85132

COASSOLO DANIEL & GRACE LIV TRUST
[Insert Name -- If a Corporation, Partnership or Association, Include State of Incorporation]

hereinafter referred to as "Owner," is/are the owner(s) of 40 acres located at
N/A
[Insert Address of Property]

as assessor parcel number 500620230 and legally described as follows:
[Insert Parcel Number]

HIGH CHAPARRAL RANCHES LOT 23 CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC

[Legal Description is attached hereto as Exhibit A]

Said property is hereinafter referred to as the "Property."
Owner hereby appoints Silver Reef Energy, LLC
[Insert Agent's Name. If the Agent Is a Company, Insert Company Name Only]

hereinafter referred to as "Agent," to act on Owner's behalf in relation to the Property in obtaining approvals from Pinal County for any necessary amendment to Pinal County's Comprehensive Plan; zone changes; planned area development overlay districts; platting of the subject property; special use permit or industrial use permit; and to file applications and make the necessary submittals for such approvals.

Owner consents and agrees to be bound by all stipulations agreed to by this Agent in connection with any of above-referenced processes.

[Individual PROPERTY OWNER signature block and acknowledgment. DO NOT SIGN HERE IF SIGNING AS AN OFFICER OF A CORPORATION ON THE NEXT PAGE.]

Daniel P Coassolo
[Signature]
3540 CHINA Ridge DR
[Address] KIMBERLY ID, 83341
Dated: 5-22-25

Grace Coassolo
[Signature]
3540 China Ridge Dr. Kimberly, ID 8-
[Address]
Dated: 5/23/2025

STATE OF Idaho)
) ss.
COUNTY OF Twin Falls)

The foregoing instrument was acknowledged before me this 23rd day of May by Daniel & Grace Coassolo
[Insert Name of Signor(s)]

My commission expires 1/27/2031

Sierra Aicher
Printed Name of Notary

Signature of Notary Public

SIERRA AICHER
COMM. #20250275
NOTARY PUBLIC
STATE OF IDAHO
MY COMMISSION EXPIRES 01/27/2031

Corporate PROPERTY OWNER signature block and acknowledgment the appropriate corporate officer or trustee signs this signature block NOT the block on the previous page.

_____
[Insert Company or Trustee's Name]

By: _____
[Signature of Authorized Officer or Trustee]

Its: _____
[Insert Title]

Dated: _____

STATE OF_____)
) ss.
COUNTY OF_____)

The foregoing instrument was acknowledged before me, this_____day of_____, _____, by_____, _____of _____, an _____
[Insert Signor's Name] *[Insert Title]* *[Insert Name of Company or Trust]* *[Insert State of Incorporation, if applicable]*

and who being authorized to do so, executed the foregoing instrument on behalf of said entity for the purposes stated therein.

_____
Notary Public

My commission expires: _____

ALTERNATE: Use the following acknowledgment only when a second company is signing on behalf of the owner:

STATE OF_____)
) ss.
COUNTY OF_____)

On this_____day of_____, _____, before me, the undersigned, personally appeared

_____ Who acknowledged himself/herself to be
[Insert Signor's Name]

_____ of _____
[Title of Office Held] *[Second Company]*

As_____for_____, and who being
[i.e, member, manager, etc.] *[Owner's Name]*

Authorized to do so, executed the foregoing instrument on behalf of said entities for the purposes stated therein.

My commission expires: _____

_____
Printed Name of Notary

_____
Signature of Notary

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT IN AN UNINCORPORATED AREA OF PINAL COUNTY, ARIZONA
(All Applications Must Be Typed or Written in Ink)

Comprehensive Plan Amendment unincorporated & Property Information:

(Feel free to include answers and to these questions in a Supplementary Narrative, when doing so write see narrative on the space provided)

1. The legal description of the property: 500620330: LOT 33 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC; 500620320: LOT 32 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC
2. Parcel Number(s): 500620330, 500620320 Total Acreage: 80
3. Current Land Use Designation: VERY LOW DENSITY RESIDENTIAL (0-1 du/ac)
4. Requested Land Use Designation: GREEN ENERGY
5. Date of Concept Review: 5/12/2025 Concept Review Number: CR-010-25
6. Why is this Comprehensive Plan Amendment being requested? (You must provide a summary of the anticipated development on this page, if not provided, the application cannot be processed.):

   The Applicant is submitting a Formal Major CPA application with the goal to construct, operate, maintain, and decommission a 150 megawatt (MW) Photovoltaic (PV) solar and 200 MW Battery Energy Storage System (BESS) Project.

7. Discuss any recent changes in the area that would support yourapplication.

   The proposed location and surrounding region is undeveloped / vacant land without recent changes. However, the planned I-11 corridor lies just to the north of APN 500-03-004.

8. Explain why the proposed amendment is needed and necessary at thistime.

   The Project is located on approximately 801 acres of privately owned land. According to the Pinal County Comprehensive Plan (Plan) and Comprehensive Plan Viewer, the Project Area has a land use designation of Very Low-Density Residential. Per Chapter 10 of the Plan, a Major CPA is required for proposed changes from a residential or nonresidential land use to green energy production of 640 acres or more. Therefore, the Applicant is requesting a Major CPA to change the land use designation to Green Energy Production in accordance with Chapter 10 of the Plan.

INV#: AMT: DATE: CASE: Xref:

COMMUNITY DEVELOPMENT
Planning Division

85 N. Florence, St, PO Box 2973, Florence, AZ 85132 T 520-866-6442 FREE 888-431-1311 F 520-866-6530
www.pinalcountyaz.gov

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

- ☐ A. **Certified Boundary Survey**, including legal descriptions of the proposed designations
- ☐ B. Location map which identifies the property and its relationship to Pinal County environs.
- ☐ C. Map showing the topography of the property.
- ☐ D. Site map which specifically identifies the property including parcels under separate ownership.
- ☐ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ☐ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ☐ G. Non-refundable filing fee as shown on the cover page.
- ☐ H. Narrative in PDF format.
- ☐ I. Neighborhood meeting report

Your application must be submitted digitally via the online submittal portal site at **https://citizenaccess.pinalcountyaz.gov/CitizenAccess/Default.aspx**

Please call or email the Planning Division for more information.

I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information, as requested. I understand if the information submitted is incomplete, this application cannot be processed.

Name of Landowner (Applicant)	Address	Phone Number
PHILLIP W COASSOLO TR AND IDA M COASSOLO TR	535 E MESQUITE ST, Gilbert, AZ 85296	480-239-9166

Phillip Coassolo — PhilCoassolo@gmail.com

Ida M. Coassolo — Coassoloida@gmail.com

Signature of Landowner (Applicant) — E-Mail Address

Name of Agent	Address	Phone Number

Signature of Agent — E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

AGENCY AUTHORIZATION

(To be completed by landowners of subject property when landowners do not represent themselves. Instructions for completing required information are in bold and brackets below lines. If applicant is a company, corporation, partnership, joint venture, trustee, etc., please use the corporate signature block and have the notary fill in the notarization section for corporations not individuals and cannot be submitted digitally)

TO: Pinal County Planning & Development Services
P.O. Box 2973
Florence, AZ 85132

PHILLIP W COASSOLO TR and IDA M COASSOLO TR
[Insert Name -- If a Corporation, Partnership or Association, Include State of Incorporation]

hereinafter referred to as "Owner," is/are the owner(s) of 80 acres located at N/A, and further identified
[Insert Address of Property]

as assessor parcel number 500620330, 500620320 and legally described as follows:
[Insert Parcel Number]

500620330: LOT 33 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC;
500620320: LOT 32 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC

[Legal Description is attached hereto as Exhibit A]

Said property is hereinafter referred to as the "Property."

Owner hereby appoints Silver Reef Energy, LLC
[Insert Agent's Name. If the Agent Is a Company, Insert Company Name Only]

hereinafter referred to as "Agent," to act on Owner's behalf in relation to the Property in obtaining approvals from Pinal County for any necessary amendment to Pinal County's Comprehensive Plan; zone changes; planned area development overlay districts; platting of the subject property; special use permit or industrial use permit; and to file applications and make the necessary submittals for such approvals.

Owner consents and agrees to be bound by all stipulations agreed to by this Agent in connection with any of above-referenced processes.

[Individual PROPERTY OWNER signature block and acknowledgment. DO NOT SIGN HERE IF SIGNING AS AN OFFICER OF A CORPORATION ON THE NEXT PAGE.]

Phillip Coassolo
[Signature]

535 E. MESQUITE AVE Gilbert AZ 85296
[Address]

Dated: 5/22/2025

Ida M. Coassolo
[Signature]

535 E. Mesquite Ave Gilbert AZ 85296
[Address]

Dated: 05/22/2025

STATE OF Arizona)
) ss.
COUNTY OF Maricopa)

The foregoing instrument was acknowledged before me this 22 day of May by Phillip & IDA Coassolo.
[Insert Name of Signor(s)]

My commission expires July 28, 2028

HOLLAND HENWOOD
Notary Public - Arizona
Maricopa County
Commission # 671403
My Expires July 28, 2028

Holland Henwood
Printed Name of Notary

Holland Henwood
Signature of Notary Public

Corporate PROPERTY OWNER signature block and acknowledgment the appropriate corporate officer or trustee signs this signature block NOT the block on the previous page.

_____
[Insert Company or Trustee's Name]

By: _____
[Signature of Authorized Officer or Trustee]

Its: _____
[Insert Title]

Dated: _____

STATE OF_____)
) ss.
COUNTY OF_____)

The foregoing instrument was acknowledged before me, this_____day of_____,
_____, by_____, _____of
[Insert Signor's Name] *[Insert Title]*
_____, an _____
[Insert Name of Company or Trust] *[Insert State of Incorporation, if applicable]*

and who being authorized to do so, executed the foregoing instrument on behalf of said entity for the purposes stated therein.

_____
Notary Public

My commission expires: _____

ALTERNATE: Use the following acknowledgment only when a second company is signing on behalf of the owner:

STATE OF_____)
) ss.
COUNTY OF_____)

On this_____day of_____, _____, before me, the undersigned, personally appeared

_____ Who acknowledged himself/herself to be
[Insert Signor's Name]

_____ of _____
[Title of Office Held] *[Second Company]*

As_____for_____, and who being
[i.e, member, manager, etc.] *[Owner's Name]*

Authorized to do so, executed the foregoing instrument on behalf of said entities for the purposes stated therein.

My commission expires: _____

_____ _____
Printed Name of Notary Signature of Notary

Leo Lew
County Manager

PINAL COUNTY

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT IN AN UNINCORPORATED AREA OF PINAL COUNTY, ARIZONA
(All Applications Must Be Typed or Written in Ink)

Comprehensive Plan Amendment unincorporated & Property Information:
(Feel free to include answers and to these questions in a Supplementary Narrative, when doing so write see narrative on the space provided)

1. The legal description of the property: LOT 20 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC

2. Parcel Number(s): 500620200 Total Acreage: 40

3. Current Land Use Designation: VERY LOW DENSITY RESIDENTIAL (0-1 du/ac)

4. Requested Land Use Designation: GREEN ENERGY

5. Date of Concept Review: 5/12/2025 Concept Review Number: CR-010-25

6. Why is this Comprehensive Plan Amendment being requested? (You must provide a summary of the anticipated development on this page, if not provided, the application cannot be processed.):
   The Applicant is submitting a Formal Major CPA application with the goal to construct, operate, maintain, and decommission a 150 megawatt (MW) Photovoltaic (PV) solar and 200 MW Battery Energy Storage System (BESS) Project.

7. Discuss any recent changes in the area that would support your application.
   The proposed location and surrounding region is undeveloped / vacant land without recent changes. However, the planned I-11 corridor lies just to the north of APN 500-03-004.

8. Explain why the proposed amendment is needed and necessary at this time.
   The Project is located on approximately 801 acres of privately owned land. According to the Pinal County Comprehensive Plan (Plan) and Comprehensive Plan Viewer, the Project Area has a land use designation of Very Low-Density Residential. Per Chapter 10 of the Plan, a

INV#: AMT: DATE: CASE: Xref:

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

- ☐ A. **Certified Boundary Survey**, including legal descriptions of the proposed designations
- ☐ B. Location map which identifies the property and its relationship to Pinal County environs.
- ☐ C. Map showing the topography of the property.
- ☐ D. Site map which specifically identifies the property including parcels under separate ownership.
- ☐ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ☐ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ☐ G. Non-refundable filing fee as shown on the cover page.
- ☐ H. Narrative in PDF format.
- ☐ I. Neighborhood meeting report

Your application must be submitted digitally via the online submittal portal site at

Please call or email the Planning Division for more information.

I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information, as requested. I understand if the information submitted is incomplete, this application cannot be processed.

WESLEY C RUYBAL

Name of Landowner (Applicant) | Address | Phone Number

Signature of Landowner (Applicant) | E-Mail Address

Name of Agent | Address | Phone Number

Signature of Agent | E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

AGENCY AUTHORIZATION

(To be completed by landowners of subject property when landowners do not represent themselves. Instructions for completing required information are in bold and brackets below lines. If applicant is a company, corporation, partnership, joint venture, trustee, etc., please use the corporate signature block and have the notary fill in the notarization section for corporations not individuals and cannot be submitted digitally)

TO: Pinal County Planning & Development Services
P.O. Box 2973
Florence, AZ 85132

WESLEY C RUYBAL

[Insert Name – If a Corporation, Partnership or Association, Include State of Incorporation]

hereinafter referred to as "Owner," is/are the owner(s) of 40 acres located at N/A, and further identified

[Insert Address of Property]

as assessor parcel number 500620200 and legally described as follows:

[Insert Parcel Number]

LOT 20 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC

[Legal Description is attached hereto as Exhibit A]

Said property is hereinafter referred to as the "Property."

Owner hereby appoints Silver Reef Energy, LLC

[Insert Agent's Name. If the Agent Is a Company, Insert Company Name Only]

hereinafter referred to as "Agent," to act on Owner's behalf in relation to the Property in obtaining approvals from Pinal County for any necessary amendment to Pinal County's Comprehensive Plan; zone changes; planned area development overlay districts; platting of the subject property; special use permit or industrial use permit; and to file applications and make the necessary submittals for such approvals.

Owner consents and agrees to be bound by all stipulations agreed to by this Agent in connection with any of above-referenced processes.

[Individual PROPERTY OWNER signature block and acknowledgment. DO NOT SIGN HERE IF SIGNING AS AN OFFICER OF A CORPORATION ON THE NEXT PAGE.]

[signature]
[Signature]

250 Young Rd Millsap TX 76066
[Address]

Dated: 5-23-25

[Signature]

[Address]

Dated: _____

STATE OF Texas)
) ss.
COUNTY OF Palo Pinto)

The foregoing instrument was acknowledged before me this 23rd day of May 2025 by Wesley C. Ruybal
[Insert Name of Signor(s)]

My commission expires 08/26/2026

Coral L. Albers
Printed Name of Notary

CORAL LEE ALBERS
NOTARY PUBLIC
STATE OF TEXAS
ID # 13393280-5
My Comm. Expires 08-26-2026

[signature]
Signature of Notary Public

Corporate PROPERTY OWNER signature block and acknowledgment the appropriate corporate officer or trustee signs this signature block NOT the block on the previous page.

Selma Partners, LLC
[Insert Company or Trustee's Name]

By: _____
[Signature of Authorized Officer or Trustee]

Its: Perry Mathis, as Manager of Cason Tyler Ventures LLC, its Manager
[Insert Title]

Dated: 5-22-25

STATE OF _____)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me, this _____ day of _____, _____, by _____, _____ of
[Insert Signor's Name] *[Insert Title]*
_____, an _____
[Insert Name of Company or Trust] *[Insert State of Incorporation, if applicable]*

and who being authorized to do so, executed the foregoing instrument on behalf of said entity for the purposes stated therein.

_____
Notary Public

My commission expires: _____

ALTERNATE: Use the following acknowledgment only when a second company is signing on behalf of the owner:

STATE OF Arizona)
) ss.
COUNTY OF Maricopa)

On this 22nd day of May, 2025, before me, the undersigned, personally appeared

Perry Mathis
[Insert Signor's Name]
Who acknowledged himself/herself to be

Manager of Cason Tyler Ventures, L.L.C.
[Title of Office Held] *[Second Company]*

As Manager for Selma Partners L.L.C., and who being
[i.e, member, manager, etc.] *[Owner's Name]*

Authorized to do so, executed the foregoing instrument on behalf of said entities for the purposes stated therein.

My commission expires: 10/25/2027

VICTORIA GARRETT
Notary Public - Arizona
Maricopa County
Commission # 657253
My Comm. Expires Oct 25, 2027

Victoria Garrett
Printed Name of Notary

_____
Signature of Notary

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT IN AN UNINCORPORATED AREA OF PINAL COUNTY, ARIZONA
(All Applications Must Be Typed or Written in Ink)

Comprehensive Plan Amendment unincorporated & Property Information:
(Feel free to include answers and to these questions in a Supplementary Narrative, when doing so write see narrative on the space provided)

1. The legal description of the property: LOT 16 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC

2. Parcel Number(s): 500620160 Total Acreage: 40

3. Current Land Use Designation: VERY LOW DENSITY RESIDENTIAL (0-1 du/ac)

4. Requested Land Use Designation: GREEN ENERGY

5. Date of Concept Review: 5/12/2025 Concept Review Number: CR-010-25

6. Why is this Comprehensive Plan Amendment being requested? (You must provide a summary of the anticipated development on this page, if not provided, the application cannot be processed.):

The Applicant is submitting a Formal Major CPA application with the goal to construct, operate, maintain, and decommission a 150 megawatt (MW) Photovoltaic (PV) solar and 200 MW Battery Energy Storage System (BESS) Project.

7. Discuss any recent changes in the area that would support yourapplication.

The proposed location and surrounding region is undeveloped / vacant land without recent changes. However, the planned I-11 corridor lies just to the north of APN 500-03-004.

8. Explain why the proposed amendment is needed and necessary at thistime.

The Project is located on approximately 801 acres of privately owned land. According to the Pinal County Comprehensive Plan (Plan) and Comprehensive Plan Viewer, the Project Area has a land use designation of Very Low-Density Residential. Per Chapter 10 of the Plan, a Major CPA is required for proposed changes from a residential or nonresidential land use to green energy production of 640 acres or more. Therefore, the Applicant is requesting a Major CPA to change the land use designation to Green Energy Production in accordance with Chapter 10 of the Plan.

INV#:_____ AMT:_____ DATE:_____ CASE:_____ Xref:_____

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

- ☐ A. **Certified Boundary Survey,** including legal descriptions of the proposed designations
- ☐ B. Location map which identifies the property and its relationship to Pinal Countyenvirons.
- ☐ C. Map showing the topography of the property.
- ☐ D. Site map which specifically identifies the property including parcels under separate ownership.
- ☐ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ☐ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ☐ G. Non-refundable filing fee as shown on the cover page.
- ☐ H. Narrative in PDF format.
- ☐ I. Neighborhood meeting report

Your application must be submitted digitally via the online submittal portal site at https://citizenaccess.pinalcountyaz.gov/CitizenAccess/Default.aspx

Please call or email the Planning Division for more information.

I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information, as requested. I understand if the information submitted is incomplete, this application cannot be processed.

ANDREW J SALONTAI and LISA A SALONTAI	9048 TUOLUMNE DR, Sacramento,CA 95826	916.606.6472
Name of Landowner (Applicant)	Address	Phone Number
Andrew J Salontai Lisa A. Salontai		LAS123@MSN.COM
Signature of Landowner (Applicant)		E-Mail Address
Name of Agent	Address	Phone Number
Signature of Agent		E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

AGENCY AUTHORIZATION

(To be completed by landowners of subject property when landowners do not represent themselves. Instructions for completing required information are in bold and brackets below lines. If applicant is a company, corporation, partnership, joint venture, trustee, etc., please use the corporate signature block and have the notary fill in the notarization section for corporations not individuals and cannot be submitted digitally)

TO: Pinal County Planning & Development Services
P.O. Box 2973
Florence, AZ 85132

ANDREW J SALONTAI and LISA A SALONTAI
[Insert Name -- If a Corporation, Partnership or Association, Include State of Incorporation]

hereinafter referred to as "Owner," is/are the owner(s) of 40 acres located at N/A, and further identified
[Insert Address of Property]

as assessor parcel number 500620160 and legally described as follows:
[Insert Parcel Number]

LOT 16 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E 1742400 SQ FT 40.00 AC

[Legal Description is attached hereto as Exhibit A]

Said property is hereinafter referred to as the "Property."

Owner hereby appoints Silver Reef Energy, LLC
[Insert Agent's Name. If the Agent Is a Company, Insert Company Name Only]

hereinafter referred to as "Agent," to act on Owner's behalf in relation to the Property in obtaining approvals from Pinal County for any necessary amendment to Pinal County's Comprehensive Plan; zone changes; planned area development overlay districts; platting of the subject property; special use permit or industrial use permit; and to file applications and make the necessary submittals for such approvals.

Owner consents and agrees to be bound by all stipulations agreed to by this Agent in connection with any of above-referenced processes.

[Individual PROPERTY OWNER signature block and acknowledgment. DO NOT SIGN HERE IF SIGNING AS AN OFFICER OF A CORPORATION ON THE NEXT PAGE.]

Andrew J Salontai
[Signature]
9048 TUOLUMNE DRIVE
[Address] SACTO., CA 95826
Dated: 05/24/25

Lisa A Salontai
[Signature]
9048 TUOLUMNE DRIVE
[Address] SACTO., CA 95826
Dated: 05/24/25

STATE OF CALIFORNIA)
) ss.
COUNTY OF SACRAMENTO)

R. ESGUERRA
COMM. # 2516607
NOTARY PUBLIC - CALIFORNIA
SACRAMENTO COUNTY
COMM. EXPIRES APRIL 6, 2029

The foregoing instrument was acknowledged before me this 24th day of May by Andrew J. Salontai & Lisa A Salontai
[Insert Name of Signor(s)]

My commission expires April 6, 2029

R. ESGUERRA, NOTARY PUBLIC
Printed Name of Notary

Signature of Notary Public

Corporate PROPERTY OWNER signature block and acknowledgment the appropriate corporate officer or trustee signs this signature block NOT the block on the previous page.

_____
[Insert Company or Trustee's Name]

By: _____
[Signature of Authorized Officer or Trustee]

Its: _____
[Insert Title]

Dated: _____

STATE OF_____)
) ss.
COUNTY OF_____)

The foregoing instrument was acknowledged before me, this_____day of_____, _____, by_____, _____of
[Insert Signor's Name] *[Insert Title]*
_____, an _____
[Insert Name of Company or Trust] *[Insert State of Incorporation, if applicable]*

and who being authorized to do so, executed the foregoing instrument on behalf of said entity for the purposes stated therein.

_____
Notary Public

My commission expires: _____

ALTERNATE: Use the following acknowledgment only when a second company is signing on behalf of the owner:
STATE OF_____)
) ss.
COUNTY OF_____)

On this_____day of_____, _____, before me, the undersigned, personally appeared

_____ Who acknowledged himself/herself to be
[Insert Signor's Name]

_____ of _____
[Title of Office Held] *[Second Company]*

As_____for_____, and who being
[i.e, member, manager, etc.] *[Owner's Name]*
Authorized to do so, executed the foregoing instrument on behalf of said entities for the purposes stated therein.

My commission expires: _____

_____ _____
Printed Name of Notary Signature of Notary

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT IN AN UNINCORPORATED AREA OF PINAL COUNTY, ARIZONA
(All Applications Must Be Typed or Written in Ink)

Comprehensive Plan Amendment unincorporated & Property Information:
(Feel free to include answers and to these questions in a Supplementary Narrative, when doing so write see narrative on the space provided)

1. The legal description of the property: HIGH CHAPARRAL RANCHES LOT 31 CAB C SLD 170 SEC 18-7S-4E 1742400 SQ FT 40.00 AC

2. Parcel Number(s): 500620310 Total Acreage: 40

3. Current Land Use Designation: VERY LOW DENSITY RESIDENTIAL (0-1 du/ac)

4. Requested Land Use Designation: GREEN ENERGY

5. Date of Concept Review: 5/12/2025 Concept Review Number: CR-010-25

6. Why is this Comprehensive Plan Amendment being requested? (You must provide a summary of the anticipated development on this page, if not provided, the application cannot be processed.):
The Applicant is submitting a Formal Major CPA application with the goal to construct, operate, maintain, and decommission a 150 megawatt (MW) Photovoltaic (PV) solar and 200 MW Battery Energy Storage System (BESS) Project.

7. Discuss any recent changes in the area that would support yourapplication.
The proposed location and surrounding region is undeveloped / vacant land without recent changes. However, the planned I-11 corridor lies just to the north of APN 500-03-004.

8. Explain why the proposed amendment is needed and necessary at thistime.
The Project is located on approximately 801 acres of privately owned land. According to the Pinal County Comprehensive Plan (Plan) and Comprehensive Plan Viewer, the Project Area has a land use designation of Very Low-Density Residential. Per Chapter 10 of the Plan, a

INV#: AMT: DATE: CASE: Xref:

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

- ☐ A. **Certified Boundary Survey**, including legal descriptions of the proposed designations
- ☐ B. Location map which identifies the property and its relationship to Pinal Countyenvirons.
- ☐ C. Map showing the topography of the property.
- ☐ D. Site map which specifically identifies the property including parcels under separate ownership.
- ☐ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ☐ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ☐ G. Non-refundable filing fee as shown on the cover page.
- ☐ H. Narrative in PDF format.
- ☐ I. Neighborhood meeting report

Your application must be submitted digitally via the online submittal portal site at **https://citizenaccess.pinalcountyaz.gov/CitizenAccess/Default.aspx**

Please call or email the Planning Division for more information.

I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information, as requested. I understand if the information submitted is incomplete, this application cannot be processed.

Husam Abbu	22692 Pontchartrain Dr, Southfield, MI 48034	248-229-7778
Name of Landowner (Applicant)	Address	Phone Number
Husam Abbu		samhabbu@gmail.com
Signature of Landowner (Applicant)		E-Mail Address
Name of Agent	Address	Phone Number
Signature of Agent		E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

AGENCY AUTHORIZATION

(To be completed by landowners of subject property when landowners do not represent themselves. Instructions for completing required information are in bold and brackets below lines. If applicant is a company, corporation, partnership, joint venture, trustee, etc., please use the corporate signature block and have the notary fill in the notarization section for corporations not individuals and cannot be submitted digitally)

TO: Pinal County Planning & Development Services
P.O. Box 2973
Florence, AZ 85132

Husam Abbu

[Insert Name -- If a Corporation, Partnership or Association, Include State of Incorporation]

hereinafter referred to as "Owner," is/are the owner(s) of 40 acres located at N/A, and further identified

[Insert Address of Property]

as assessor parcel number 500620310 and legally described as follows:

[Insert Parcel Number]

HIGH CHAPARRAL RANCHES LOT 31 CAB C SLD 170 SEC 18-7S-4E 1742400 SQ FT 40.00 AC

[Legal Description is attached hereto as Exhibit A]

Said property is hereinafter referred to as the "Property."

Owner hereby appoints Silver Reef Energy, LLC

[Insert Agent's Name. If the Agent Is a Company, Insert Company Name Only]

hereinafter referred to as "Agent," to act on Owner's behalf in relation to the Property in obtaining approvals from Pinal County for any necessary amendment to Pinal County's Comprehensive Plan; zone changes; planned area development overlay districts; platting of the subject property; special use permit or industrial use permit; and to file applications and make the necessary submittals for such approvals.

Owner consents and agrees to be bound by all stipulations agreed to by this Agent in connection with any of above-referenced processes.

[Individual PROPERTY OWNER signature block and acknowledgment. DO NOT SIGN HERE IF SIGNING AS AN OFFICER OF A CORPORATION ON THE NEXT PAGE.]

Husam Abbu
[Signature]

22692 Pontchartrain
[Address] Southfield MI 48034

Dated: 5-29-25

[Signature]

[Address]

Dated: _____

STATE OF Michigan)
) ss.
COUNTY OF Oakland)

The foregoing instrument was acknowledged before me this 29 day of May 2025 by Husam Abbu.
[Insert Name of Signor(s)]

My commission expires July 10, 2030

William Allen Fehse
Printed Name of Notary

William Allen Fehse
Signature of Notary Public

WILLIAM ALLEN FEHSE
NOTARY PUBLIC - STATE OF MICHIGAN
COUNTY OF MONROE
My Commission Expires July 10, 2030
Acting in the County of Oakland

Corporate PROPERTY OWNER signature block and acknowledgment the appropriate corporate officer or trustee signs this signature block NOT the block on the previous page.

_____
[Insert Company or Trustee's Name]

By: _____
[Signature of Authorized Officer or Trustee]

Its: _____
[Insert Title]

Dated: _____

STATE OF_____)
) ss.
COUNTY OF_____)

The foregoing instrument was acknowledged before me, this_____day of_____, _____, by_____, _____of
[Insert Signor's Name] *[Insert Title]*
_____, an _____
[Insert Name of Company or Trust] *[Insert State of Incorporation, if applicable]*

and who being authorized to do so, executed the foregoing instrument on behalf of said entity for the purposes stated therein.

_____
Notary Public

My commission expires: _____

ALTERNATE: Use the following acknowledgment only when a second company is signing on behalf of the owner:
STATE OF_____)
) ss.
COUNTY OF_____)

On this_____day of_____, _____, before me, the undersigned, personally appeared

_____ Who acknowledged himself/herself to be
[Insert Signor's Name]

_____ of _____
[Title of Office Held] *[Second Company]*
As_____for_____, and who being
[i.e, member, manager, etc.] *[Owner's Name]*
Authorized to do so, executed the foregoing instrument on behalf of said entities for the purposes stated therein.

My commission expires: _____

_____ _____
Printed Name of Notary Signature of Notary

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT IN AN UNINCORPORATED AREA OF PINAL COUNTY, ARIZONA
(All Applications Must Be Typed or Written in Ink)

Comprehensive Plan Amendment unincorporated & Property Information:
(Feel free to include answers and to these questions in a Supplementary Narrative, when doing so write see narrative on the space provided)

1. The legal description of the property: HIGH CHAPARRAL RANCHES LOT 31 CAB C SLD 170 SEC 18-7S-4E 1742400 SQ FT 40.00 AC

2. Parcel Number(s): 500620310 Total Acreage: 40

3. Current Land Use Designation: VERY LOW DENSITY RESIDENTIAL (0-1 du/ac)

4. Requested Land Use Designation: GREEN ENERGY

5. Date of Concept Review: 5/12/2025 Concept Review Number: CR-010-25

6. Why is this Comprehensive Plan Amendment being requested? (You must provide a summary of the anticipated development on this page, if not provided, the application cannot be processed.):
The Applicant is submitting a Formal Major CPA application with the goal to construct, operate, maintain, and decommission a 150 megawatt (MW) Photovoltaic (PV) solar and 200 MW Battery Energy Storage System (BESS) Project.

7. Discuss any recent changes in the area that would support your application.
The proposed location and surrounding region is undeveloped / vacant land without recent changes. However, the planned I-11 corridor lies just to the north of APN 500-03-004.

8. Explain why the proposed amendment is needed and necessary at this time.
The Project is located on approximately 801 acres of privately owned land. According to the Pinal County Comprehensive Plan (Plan) and Comprehensive Plan Viewer, the Project Area has a land use designation of Very Low-Density Residential. Per Chapter 10 of the Plan, a

INV#: AMT: DATE: CASE: Xref:

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

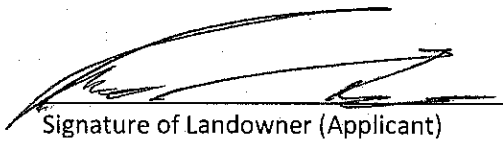
- ☐ A. **Certified Boundary Survey**, including legal descriptions of the proposed designations
- ☐ B. Location map which identifies the property and its relationship to Pinal Countyenvirons.
- ☐ C. Map showing the topography of the property.
- ☐ D. Site map which specifically identifies the property including parcels under separate ownership.
- ☐ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ☐ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ☐ G. Non-refundable filing fee as shown on the cover page.
- ☐ H. Narrative in PDF format.
- ☐ I. Neighborhood meeting report

Your application must be submitted digitally via the online submittal portal site at **https://citizenaccess.pinalcountyaz.gov/CitizenAccess/Default.aspx**

Please call or email the Planning Division for more information.

I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information, as requested. I understand if the information submitted is incomplete, this application cannot be processed.

JACOB GARMO	23300 TELEGRAPH RD, Southfield, MI 48033	248-878-5826
Name of Landowner (Applicant)	Address	Phone Number



	jacobgarmo11@yahoo.com
Signature of Landowner (Applicant)	E-Mail Address

Name of Agent	Address	Phone Number

Signature of Agent	E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

AGENCY AUTHORIZATION

(To be completed by landowners of subject property when landowners do not represent themselves. Instructions for completing required information are in bold and brackets below lines. If applicant is a company, corporation, partnership, joint venture, trustee, etc., please use the corporate signature block and have the notary fill in the notarization section for corporations not individuals and cannot be submitted digitally)

TO: Pinal County Planning & Development Services
P.O. Box 2973
Florence, AZ 85132

JACOB GARMO

[Insert Name -- If a Corporation, Partnership or Association, Include State of Incorporation]

hereinafter referred to as "Owner," is/are the owner(s) of 40 acres located at N/A, and further identified

[Insert Address of Property]

as assessor parcel number 500620310 and legally described as follows:

[Insert Parcel Number]

HIGH CHAPARRAL RANCHES LOT 31 CAB C SLD 170 SEC 18-7S-4E 1742400 SQ FT 40.00 AC

[Legal Description is attached hereto as Exhibit A]

Said property is hereinafter referred to as the "Property."

Owner hereby appoints Silver Reef Energy, LLC

[Insert Agent's Name. If the Agent Is a Company, Insert Company Name Only]

hereinafter referred to as "Agent," to act on Owner's behalf in relation to the Property in obtaining approvals from Pinal County for any necessary amendment to Pinal County's Comprehensive Plan; zone changes; planned area development overlay districts; platting of the subject property; special use permit or industrial use permit; and to file applications and make the necessary submittals for such approvals.

Owner consents and agrees to be bound by all stipulations agreed to by this Agent in connection with any of above-referenced processes.

[Individual PROPERTY OWNER signature block and acknowledgment. DO NOT SIGN HERE IF SIGNING AS AN OFFICER OF A CORPORATION ON THE NEXT PAGE.]

[Signature] _____ *[Signature]* _____

[Address] 7342 Pinewood Trail West Bloomfield MI 48322 *[Address]* _____

Dated: 5-29-25 Dated: _____

STATE OF Michigan)
) ss.
COUNTY OF Oakland)

The foregoing instrument was acknowledged before me this 29 day of May 2025 by Jacob Garmo.
[Insert Name of Signar(s)]

My commission expires July 10, 2030

William Allen Fehse
Printed Name of Notary

WILLIAM ALLEN FEHSE
NOTARY PUBLIC - STATE OF MICHIGAN
COUNTY OF MONROE
My Commission Expires July 10, 2030
Acting in the County of Oakland

William Allen Fehse
Signature of Notary Public

Corporate PROPERTY OWNER signature block and acknowledgment the appropriate corporate officer or trustee signs this signature block NOT the block on the previous page.

_____
[Insert Company or Trustee's Name]

By: _____
[Signature of Authorized Officer or Trustee]

Its: _____
[Insert Title]

Dated: _____

STATE OF_____)
) ss.
COUNTY OF_____)

The foregoing instrument was acknowledged before me, this_____day of_____, _____, by_____, _____of
[Insert Signor's Name] *[Insert Title]*
_____, an _____
[Insert Name of Company or Trust] *[Insert State of Incorporation, if applicable]*

and who being authorized to do so, executed the foregoing instrument on behalf of said entity for the purposes stated therein.

_____
Notary Public

My commission expires: _____

ALTERNATE: Use the following acknowledgment only when a second company is signing on behalf of the owner:
STATE OF_____)
) ss.
COUNTY OF_____)

On this_____day of_____, _____, before me, the undersigned, personally appeared

_____ Who acknowledged himself/herself to be
[Insert Signor's Name]

_____ of _____
[Title of Office Held] *[Second Company]*

As_____for_____, and who being
[i.e, member, manager, etc.] *[Owner's Name]*
Authorized to do so, executed the foregoing instrument on behalf of said entities for the purposes stated therein.

My commission expires: _____

_____ _____
Printed Name of Notary Signature of Notary

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT IN AN UNINCORPORATED AREA OF PINAL COUNTY, ARIZONA
(All Applications Must Be Typed or Written in Ink)

Comprehensive Plan Amendment unincorporated & Property Information:
(Feel free to include answers and to these questions in a Supplementary Narrative, when doing so write see narrative on the space provided)

1. The legal description of the property: HIGH CHAPARRAL RANCHES LOT 31 CAB C SLD 170 SEC 18-7S-4E 1742400 SQ FT 40.00 AC

2. Parcel Number(s): 500620310 Total Acreage: 40

3. Current Land Use Designation: VERY LOW DENSITY RESIDENTIAL (0-1 du/ac)

4. Requested Land Use Designation: GREEN ENERGY

5. Date of Concept Review: 5/12/2025 Concept Review Number: CR-010-25

6. Why is this Comprehensive Plan Amendment being requested? (You must provide a summary of the anticipated development on this page, if not provided, the application cannot be processed.):
The Applicant is submitting a Formal Major CPA application with the goal to construct, operate, maintain, and decommission a 150 megawatt (MW) Photovoltaic (PV) solar and 200 MW Battery Energy Storage System (BESS) Project.

7. Discuss any recent changes in the area that would support yourapplication.
The proposed location and surrounding region is undeveloped / vacant land without recent changes. However, the planned I-11 corridor lies just to the north of APN 500-03-004

8. Explain why the proposed amendment is needed and necessary at thistime.
The Project is located on approximately 801 acres of privately owned land. According to the Pinal County Comprehensive Plan (Plan) and Comprehensive Plan Viewer, the Project Area has a land use designation of Very Low-Density Residential. Per Chapter 10 of the Plan, a

INV#: AMT: DATE: CASE: Xref:

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

- ☐ A. **Certified Boundary Survey,** including legal descriptions of the proposed designations
- ☐ B. Location map which identifies the property and its relationship to Pinal County environs.
- ☐ C. Map showing the topography of the property.
- ☐ D. Site map which specifically identifies the property including parcels under separate ownership.
- ☐ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ☐ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ☐ G. Non-refundable filing fee as shown on the cover page.
- ☐ H. Narrative in PDF format.
- ☐ I. Neighborhood meeting report

Your application must be submitted digitally via the online submittal portal site at **https://citizenaccess.pinalcountyaz.gov/CitizenAccess/Default.aspx**

Please call or email the Planning Division for more information.

I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information, as requested. I understand if the information submitted is incomplete, this application cannot be processed.

Mokhlis Shammami	6334 Timberwood S. W Bloomfield, MI 48322	313-995-6600
Name of Landowner (Applicant)	Address	Phone Number
mokhlis Shammami		marks7001@icloud.com
Signature of Landowner (Applicant)		E-Mail Address
Name of Agent	Address	Phone Number
Signature of Agent		E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

AGENCY AUTHORIZATION

(To be completed by landowners of subject property when landowners do not represent themselves. Instructions for completing required information are in bold and brackets below lines. If applicant is a company, corporation, partnership, joint venture, trustee, etc., please use the corporate signature block and have the notary fill in the notarization section for corporations not individuals and cannot be submitted digitally)

TO: Pinal County Planning & Development Services
P.O. Box 2973
Florence, AZ 85132

Mokhlis Shammami
[Insert Name -- If a Corporation, Partnership or Association, Include State of Incorporation]

hereinafter referred to as "Owner," is/are the owner(s) of 40 acres located at N/A, and further identified
[Insert Address of Property]

as assessor parcel number 500620310 and legally described as follows:
[Insert Parcel Number]

HIGH CHAPARRAL RANCHES LOT 31 CAB C SLD 170 SEC 18-7S-4E 1742400 SQ FT 40.00 AC

[Legal Description is attached hereto as Exhibit A]

Said property is hereinafter referred to as the "Property."

Owner hereby appoints Silver Reef Energy, LLC
[Insert Agent's Name. If the Agent Is a Company, Insert Campany Name Only]

hereinafter referred to as "Agent," to act on Owner's behalf in relation to the Property in obtaining approvals from Pinal County for any necessary amendment to Pinal County's Comprehensive Plan; zone changes; planned area development overlay districts; platting of the subject property; special use permit or industrial use permit; and to file applications and make the necessary submittals for such approvals.

Owner consents and agrees to be bound by all stipulations agreed to by this Agent in connection with any of above-referenced processes.

[Individual PROPERTY OWNER signature block and acknowledgment. DO NOT SIGN HERE IF SIGNING AS AN OFFICER OF A CORPORATION ON THE NEXT PAGE.]

mokhlis Shammami
[Signature]

6334 Timberwood S.
[Address] West Bloomfield, MI 48322

Dated: 5-29-2025

[Signature]

[Address]

Dated: _____

STATE OF MICHIGAN)
) ss.
COUNTY OF OAKLAND)

The foregoing instrument was acknowledged before me this 29 day of MAY 2025 by MOKHLIS SHAMMAMI.
[Insert Name of Signor(s)]

My commission expires July 10, 2030

WILLIAM ALLEN FEHSE
Printed Name of Notary

WILLIAM ALLEN FEHSE
NOTARY PUBLIC - STATE OF MICHIGAN
COUNTY OF MONROE
My Commission Expires July 10, 2030
Acting in the County of Oakland

William Allen Fehse
Signature of Notary Public

Corporate PROPERTY OWNER signature block and acknowledgment the appropriate corporate officer or trustee signs this signature block NOT the block on the previous page.

_____
[Insert Company or Trustee's Name]

By: _____
[Signature of Authorized Officer or Trustee]

Its: _____
[Insert Title]

Dated: _____

STATE OF_____)
) ss.
COUNTY OF_____)

The foregoing instrument was acknowledged before me, this_____day of_____, _____, by_____, _____of
[Insert Signor's Name] *[Insert Title]*
_____, an _____
[Insert Name of Company or Trust] *[Insert State of Incorporation, if applicable]*

and who being authorized to do so, executed the foregoing instrument on behalf of said entity for the purposes stated therein.

_____
Notary Public

My commission expires: _____

ALTERNATE: Use the following acknowledgment only when a second company is signing on behalf of the owner:
STATE OF_____)
) ss.
COUNTY OF_____)

On this_____day of_____, _____, before me, the undersigned, personally appeared

_____ Who acknowledged himself/herself to be
[Insert Signor's Name]

_____ of _____
[Title of Office Held] *[Second Company]*
As_____for_____, and who being
[i.e, member, manager, etc.] *[Owner's Name]*
Authorized to do so, executed the foregoing instrument on behalf of said entities for the purposes stated therein.

My commission expires: _____

_____ _____
Printed Name of Notary Signature of Notary

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT IN AN UNINCORPORATED AREA OF PINAL COUNTY, ARIZONA
(All Applications Must Be Typed or Written in Ink)

Comprehensive Plan Amendment unincorporated & Property Information:
(Feel free to include answers and to these questions in a Supplementary Narrative, when doing so write see narrative on the space provided)

1. The legal description of the property: SW NW OF SEC 19-7S-4E 40.00 AC

2. Parcel Number(s): 50011027H Total Acreage: 40

3. Current Land Use Designation: VERY LOW DENSITY RESIDENTIAL (0-1 du/ac)

4. Requested Land Use Designation: GREEN ENERGY

5. Date of Concept Review: 5/12/2025 Concept Review Number: CR-010-25

6. Why is this Comprehensive Plan Amendment being requested? (You must provide a summary of the anticipated development on this page, if not provided, the application cannot be processed.):
The Applicant is submitting a Formal Major CPA application with the goal to construct, operate, maintain, and decommission a 150 megawatt (MW) Photovoltaic (PV) solar and 200 MW Battery Energy Storage System (BESS) Project.

7. Discuss any recent changes in the area that would support yourapplication.
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8. Explain why the proposed amendment is needed and necessary at thistime.
The Project is located on approximately 801 acres of privately owned land. According to the Pinal County Comprehensive Plan (Plan) and Comprehensive Plan Viewer, the Project Area has a land use designation of Very Low-Density Residential. Per Chapter 10 of the Plan, a

INV#: AMT: DATE: CASE: Xref:

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

- ☐ A. **Certified Boundary Survey**, including legal descriptions of the proposed designations
- ☐ B. Location map which identifies the property and its relationship to Pinal County environs.
- ☐ C. Map showing the topography of the property.
- ☐ D. Site map which specifically identifies the property including parcels under separate ownership.
- ☐ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ☐ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ☐ G. Non-refundable filing fee as shown on the cover page.
- ☐ H. Narrative in PDF format.
- ☐ I. Neighborhood meeting report

Your application must be submitted digitally via the online submittal portal site at https://citizenaccess.pinalcountyaz.gov/CitizenAccess/Default.aspx

Please call or email the Planning Division for more information.

I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information, as requested. I understand if the information submitted is incomplete, this application cannot be processed.

JMS RANCH PROPERTIES LLC	27500 NORTHWESTERN HWY, Southfield, MI 48034	313-995-6600
Name of Landowner (Applicant)	Address	Phone Number

[signature]	marks7001@icloud
Signature of Landowner (Applicant)	E-Mail Address

Name of Agent	Address	Phone Number

Signature of Agent	E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

AGENCY AUTHORIZATION

(To be completed by landowners of subject property when landowners do not represent themselves. Instructions for completing required information are in bold and brackets below lines. If applicant is a company, corporation, partnership, joint venture, trustee, etc., please use the corporate signature block and have the notary fill in the notarization section for corporations not individuals and cannot be submitted digitally)

TO: Pinal County Planning & Development Services
P.O. Box 2973
Florence, AZ 85132

JMS RANCH PROPERTIES LLC

[Insert Name -- If a Corporation, Partnership or Association, Include State of Incorporation]

hereinafter referred to as "Owner," is/are the owner(s) of 40 acres located at N/A, and further identified

[Insert Address of Property]

as assessor parcel number 50011027H and legally described as follows:

[Insert Parcel Number]

SW NW OF SEC 19-7S-4E 40.00 AC

[Legal Description is attached hereto as Exhibit A]

Said property is hereinafter referred to as the "Property."

Owner hereby appoints Silver Reef Energy, LLC

[Insert Agent's Name. If the Agent Is a Company, Insert Company Name Only]

hereinafter referred to as "Agent," to act on Owner's behalf in relation to the Property in obtaining approvals from Pinal County for any necessary amendment to Pinal County's Comprehensive Plan; zone changes; planned area development overlay districts; platting of the subject property; special use permit or industrial use permit; and to file applications and make the necessary submittals for such approvals.

Owner consents and agrees to be bound by all stipulations agreed to by this Agent in connection with any of above-referenced processes.

[Individual PROPERTY OWNER signature block and acknowledgment. DO NOT SIGN HERE IF SIGNING AS AN OFFICER OF A CORPORATION ON THE NEXT PAGE.]

[Signature]	***[Signature]***
[Address]	***[Address]***
Dated: _____	Dated: _____

STATE OF _____)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ____ day of _____, _____ by _____.
[Insert Name of Signor(s)]

My commission expires _____

Printed Name of Notary	Signature of Notary Public

Corporate PROPERTY OWNER signature block and acknowledgment the appropriate corporate officer or trustee signs this signature block NOT the block on the previous page.

JMS Ranch Properties LLC
[Insert Company or Trustee's Name]

By: Mokhtis Shammami
[Signature of Authorized Officer or Trustee]

Its: Member
[Insert Title]

Dated: 5/29/2025

WILLIAM ALLEN FEHSE
NOTARY PUBLIC - STATE OF MICHIGAN
COUNTY OF MONROE
My Commission Expires July 10, 2030
Acting in the County of OAKLAND

STATE OF Michigan)
) ss.
COUNTY OF Oakland)

The foregoing instrument was acknowledged before me, this 29 day of May, 2025, by Mokhtis Shammami, Member of JMS Ranch Properties, an Michigan Limited Liability Company

[Insert Signor's Name] *[Insert Title]* *[Insert Name of Company or Trust]* *[Insert State of Incorporation, if applicable]*

and who being authorized to do so, executed the foregoing instrument on behalf of said entity for the purposes stated therein.

William Allen Fehse
Notary Public

My commission expires: July 10, 2030

ALTERNATE: Use the following acknowledgment only when a second company is signing on behalf of the owner:

STATE OF_____)
) ss.
COUNTY OF_____)

On this_____day of_____, _____, before me, the undersigned, personally appeared

_____ Who acknowledged himself/herself to be
[Insert Signar's Name]

_____ of _____
[Title of Office Held] *[Secand Company]*

As_____for_____, and who being
[i.e, member, manager, etc.] *[Owner's Name]*

Authorized to do so, executed the foregoing instrument on behalf of said entities for the purposes stated therein.

My commission expires: _____

_____ _____
Printed Name of Notary Signature of Notary

Major Comprehensive Plan Amendment Application Narrative

Silver Reef Energy Solar and Storage Project

Pinal County, AZ

Revised June 2, 2025

Submitted to:
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Acronyms and Abbreviations

alternating current	AC
APN	Assessor Parcel Number
APS	Arizona Public Service
BESS	Battery Energy Storage System
CPA	Comprehensive Plan Amendment
COD	Commercial Operation Date
direct current	DC
MW	Megawatt
kilowatt	kV
O&M	Operations and Maintenance
Plan	Pinal County Comprehensive Plan
PV	Photovoltaic
Silver Reef Energy Solar and Storage Project	Project
801 acres of private land	Project Area

1.0 INTRODUCTION

Silver Reef Energy, LLC (Applicant) is requesting a Major Comprehensive Plan Amendment (CPA) for the Silver Reef Energy Solar and Storage Project (Project) in Pinal County, Arizona (Figure 1). The Applicant held a Major CPA Pre-Application Meeting with Pinal County on May 13, 2025. Following guidance received during the Pre-Application Meeting, the Applicant is submitting a Formal Major CPA application with the goal to construct, operate, maintain, and decommission a 150 megawatt (MW) Photovoltaic (PV) solar and 200 MW Battery Energy Storage System (BESS) Project.

The Project is located approximately 6.5 miles southwest of Casa Grande in Pinal County, Arizona on approximately 801 acres of privately owned land (Project Area). According to the Pinal County Comprehensive Plan (Plan) and Comprehensive Plan Viewer, the Project Area has a land use designation of Very Low-Density Residential. Per Chapter 10 of the Plan, a Major CPA is required for proposed changes from a residential or nonresidential land use to green energy production of 640 acres or more. Therefore, the Applicant is requesting a Major CPA to change the land use designation to Green Energy Production in accordance with Chapter 10 of the Plan.

The following narrative provides a description of the proposed Project (Section 3.0) and responses to the Comprehensive Plan Compliance Checklist (Section 4.0). Although not listed as a requirement on the Formal Major CPA application form, the Applicant was instructed by Pinal County staff to include responses to the Comprehensive Plan Compliance Checklist as part of this application narrative.

2.0 NEED, PURPOSE, AND JUSTIFICATION OF THE REQUEST

The Silver Reef Energy Solar and Storage Project is proposed to help meet Arizona's growing demand for reliable, clean energy by delivering renewable electricity to the grid. The Project was recently short-listed and is progressing into negotiations with a qualified off-taker, evidence that the Project will help address an important transmission need. Pinal County presents optimal conditions for utility-scale solar development due to its high solar irradiance and access to existing transmission infrastructure. Pairing solar generation with battery energy storage enhances the value and reliability of renewable energy. The storage system will capture excess solar energy during periods of low demand and discharge it when energy is needed most—particularly during evening hours or peak usage events. This ability to shift generation to match demand reduces reliance on inflexible baseload generation and supports overall grid efficiency. Energy storage is a critical enabling technology in the transition to a low-carbon energy system. It provides flexibility to balance supply and demand in real time, enhances system resilience, and can help avoid power disruptions. By stabilizing intermittent renewable output and supporting traditional power systems during ramp-up periods, energy storage strengthens grid performance and ensures consistent service to Arizona's electricity consumers.

3.0 PROJECT DESCRIPTION

The Project consists of a Photovoltaic (PV) solar array, Battery Energy Storage System (BESS), onsite project substation, an APS owned substation/switchyard, and ancillary facilities such as an access

road, and an operation and maintenance building (O&M). The BESS will have the capability to store energy generated by the solar array and may also be charged from the grid, allowing for flexible energy management and dispatch to the grid based on system needs. Detailed descriptions of the project components are provided in Section 3.3 of this narrative.

3.1 Project Location

The Project is located approximately 6.5 miles southwest of Casa Grande in Pinal County, Arizona on approximately 801 acres of privately owned land. The proposed Project is generally located south of Interstate 8 (I-8) and west of Standfield Road. **Table 1** provides the Assessor Parcel Numbers (APNs), legal descriptions and acreage of participating parcels within the Project. The Project is sited on currently undeveloped land characterized by undulating but generally flat topography (Figure 2). A significant portion of the Project Area is located on the former site of the U.S. Army South Pacific Division Williams Field Bomb Target Range #12, and munitions debris and munitions constituents were observed in a Site Inspection Report prepared for the U.S. Army Corps of Engineers in 2009. The main bomb and buffer area constituted 649 acres. Practice bombs, demolition bombs and spotting charges were detonated in the area between 1942 and 1946; TNT and lead, among other chemical constituents, were detected in surface soil samples. In 2015, Arizona Department of Environmental Quality concurred with a recommendation by the U.S. Army Corps of Engineers that no remedial action was necessary to protect public health, welfare, or the environment. The reuse of this previously impacted land for the Project represents a highly responsible siting choice. By transforming a legacy military training area into a productive hub for clean energy, the Project minimizes land-use conflicts, avoids sensitive habitat, and contributes to Arizona's clean energy transition while enhancing local grid reliability.

Table 1. APNs, Legal Description, and Acreage

APN	Legal Description	Acreage
500030040	E2 SEC 14 7S 3E	320
500620160	LOT 16 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E	40
500620200	LOT 20 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E	40
500620230	HIGH CHAPARRAL RANCHES LOT 23 CAB C SLD 170 SEC 12 & 13-7S-3E	40
500620310	HIGH CHAPARRAL RANCHES LOT 31 CAB C SLD 170 SEC 18-7S-4E	40
500620320	LOT 32 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E	40
500620330	LOT 33 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E	40
500620340	LOT 34 HIGH CHAPARRAL RANCHES CAB C SLD 170 SEC 12 & 13-7S-3E	40
50011027G	E1/2 NW OF SEC 19-7S-4E	80
50011027H	SW NW OF SEC 19-7S-4E	40
50011028D	SW NE OF SEC 19-7S-4E	40
50011028E	SE NE OF SEC 19-7S-4E	40

Source: Pinal County Assessor 2025

3.2 Project Schedule

The Project would be constructed as a single phase. Construction of the Project is anticipated to commence in the first quarter of 2028, pending approval of Pinal County permits. The construction

effort is anticipated to be complete in the second quarter of 2030, with facility testing and commissioning taking place during the third quarter of 2030 and the facility commercial operation date (COD) on October 1, 2030.

3.3 Project Components

The Project consists of a PV solar array, BESS, onsite project substation, and an APS owned substation/switchyard, and ancillary facilities such as an access road, and an operation and maintenance building (O&M) as shown on the Site Map (Figure 3). Details on these components are provided in the following sections.

3.3.1 Photovoltaic Solar Panels and Tracking System

The Project would use PV technology by which the sun's light energy is converted into direct current (DC) electrical energy within the PV panels, referred to as modules. The PV modules are configured in solar arrays by electrically connecting them in series and connecting lines at combiner boxes. The PV panels would be supported by single axis trackers that trace the sun's position during the day.

The exact model and quantity of panels would be finalized during the engineering phase. The panels would be installed on a racking system with support piles driven into the ground. For maximum efficiency, panels are typically installed between 5 to 8 feet off the ground when at their lowest point. At full tilt, the maximum proposed panel height would be 12 feet from the ground.

3.3.2 Electrical Collection System

All electrical interconnection and distribution lines within the Project Area boundary will be installed underground, with the exception of overhead lines located within the Project substation or those exiting the site for grid interconnection. All electrical infrastructure will be designed and constructed in accordance with applicable codes, industry standards, and public utility requirements, as required by Pinal County. The electrical collection system would be designed to convert the output power from the PV modules from DC to alternating current (AC), transform the power from low voltage to transmission-level voltage for connection to the grid, and supply auxiliary power to the tracking systems. The DC output from the PV arrays would be transmitted to inverters through underground electrical DC cables.

The resulting AC current from each inverter package would be routed through a medium-voltage step-up transformer. The output voltage from each inverter would increase to the desired substation feed voltage (34.5-kilovolts (kV)) by the step-up transformers. From the inverter pads, the collected 34.5-kV would be delivered to the Project substation, where the voltage is then stepped up to 230-kV.

3.3.3 Inverters and Transformers

The model and number of inverters will be determined at the time of final engineering. It is anticipated that the inverters would be bi-directional and would be connected to the solar arrays via a common connection to the Project substation medium voltage bus. Each integrated inverter/transformer is expected to have a footprint that occupies approximately 20 feet by 8 feet and does not exceed 10 feet in height.

3.3.4 Battery Energy Storage System

The BESS area would occupy approximately 15-20 acres adjacent to the Project substation, near the center of the Project area (see Site Map, Figure 3). It will provide up to 200 Megawatt hours (MWh) of instantaneous discharge capacity. The BESS will consist of containerized battery units—anticipated to be lithium iron phosphate chemistry—mounted on concrete pads, along with associated PCS units, cooling systems, fire suppression equipment, and medium-voltage transformers. The exact model and number of containers will be determined at the time of final engineering. The BESS will be charged from the solar facility array (and possibly from the grid) and dispatched to the grid when called upon.

3.3.5 Project Substation and Generation Tie Line

The Project substation will be located in the central portion of the site, near the existing 230 kV Santa Rosa to Tat Momoli transmission line. It will include power transformers, switchgear, overhead bus, protection systems, and metering equipment. The Project will interconnect directly to the APS-owned 230 kV line, eliminating the need for a new long-distance gen-tie. Because no new transmission line over one mile is proposed, a Certificate of Environmental Compatibility from the Arizona Corporation Commission will not be required.

3.3.6 Project Interconnection and Access

The Project site was selected based upon proximity to the existing energy infrastructure. The Project will supply electricity to the grid through a tap into the 230kV Santa Rosa to Tat Momoli transmission line which runs through the rough center of the Project. Siting analysis confirms the proposed site location is compatible with existing land uses. Access to the proposed Project will be from the east via Stanfield Road to Connelley Road.

3.3.7 Operations and Maintenance Building

The Project will include an onsite O&M building. The Project will require 10 to 20 long-term positions, including technicians for panel cleaning and maintenance, battery system monitoring, vegetation management, security, and general facility upkeep.

3.3.8 Fencing, Lighting & Warning Signage

As requested by the County during the Pre-Application Meeting, the Project components would be surrounded by a 6-foot-tall CMU Block Wall (or other acceptable alternative material) where the Project abuts rural or residentially zoned property. The site entry gates would be locked to ensure access is limited to authorized personnel. Warning signage would be posted at the entrance and along the fencing perimeter.

Temporary lighting would be provided at the site entrances and in the substation yard to ensure safety and security of the construction area. Temporary lighting would be replaced with security lighting to ensure the safety and security of the site during operations.

3.4 Traffic Impact Study

New development tends to increase traffic volumes (i.e. trip generation) and may result in impacts to traffic operations and roadway configurations. Therefore, a traffic study is required for all new developments that generate traffic within Pinal County. If approved by the Pinal County Traffic Engineer, the Applicant may be permitted to submit a Traffic Impact Statement (TIS) in lieu of a Traffic Impact Analysis (TIA). The Applicant will discuss this with the Pinal County Traffic Engineer, prior to commencing work, to determine which report type is acceptable. The Pinal County Engineer or Pinal County Traffic Engineer shall make the final decision on whether a Traffic Impact Statement (TIS) may be substituted for a Traffic Impact Analysis (TIA). Subsequently, the Applicant will prepare either the TIS or TIA that complies with the Pinal County requirements. The traffic study will be prepared under the direction of an appropriately licensed Professional Engineering in the state of Arizona.

3.5 Drainage Report

Accompanying the development of open areas, rate of runoff is expected to increase with the installation of added impervious surfaces. The Applicant will prepare a conceptual level drainage study to provide analysis for rate of runoff control as minimally required by the local jurisdiction for proposed development. Drainage analysis will provide an order of magnitude value for peak flows and retention/detention requirements. The drainage study will be prepared under the direction of an appropriately licensed Professional Engineering in the state of Arizona.

4.0 COMPREHENSIVE PLAN COMPLIANCE CHECKLIST

The following section provides the Applicant's responses to the Comprehensive Plan Compliance Checklist. The purpose of this checklist is to evaluate whether development proposals are compatible with the Comprehensive Plan.

4.1 Consistency with Pinal County's Vision Components

Sense of Community

Pinal County is a collection of unique communities, each of which has something special to offer residents and visitors. Balancing emerging urban centers and Pinal County's rural character is important to residents; ensuring that the threads of Pinal County's history, heritage, and culture are woven into its future is what makes Pinal County unique from other regions. Ensuring places exist for people to gather and for communities to showcase the diversity of places, people, lifestyles, cultures, and opportunities will help to define Pinal County's identity.

The proposal:

☒ *Is consistent with the Sense of Community vision component*

The Project is consistent with Pinal County's Sense of Community vision component. The Project is located next to existing agricultural operations and minimal residences and therefore will not contribute to adverse impacts on the rural character of Pinal County or emerging urban centers.

Mobility and Connectivity

Ensuring Pinal County has adequate transportation corridors and a variety of multimodal transportation options addressing all populations is essential for moving goods and people throughout the County and State with minimal effect on Pinal County's native wildlife. Offering multiple mobility and communication options, to effectively connect communities and activity centers throughout the County, will reduce congestion and improve air quality while enhancing the area's quality of life.

The proposal:

☒ *Is consistent with the Mobility and Connectivity vision component*

The Project is not anticipated to have an adverse impact on the County's transportation corridors. During construction there will be an increase in traffic in the immediate area from construction workers commuting to the site and delivery of materials; however, it is not anticipated this will have a significant impact on traffic. Upon completion of construction, there will be minimal to no increased traffic during Project operations. The Project does not utilize reflective components (e.g., exposed mirrors), and proposed infrastructure is less than thirty feet in height; therefore, glare impacts to traffic traveling on I-8 are not anticipated.

Economic Sustainability

Expanding opportunities for residents to live, work, learn, and play in close proximity promotes long-term economic viability. Pinal County desires activity centers that serve the current and future residents' needs offering services, businesses and employment opportunities, including high-tech and environmentally-friendly employers who champion Pinal County's conservation philosophy. The creation of the full range of quality jobs that allow residents to start their career, raise a family, and move up instead of out of Pinal County for career advancement is essential. (This may not apply to all projects)

The proposal:
☒ *Is consistent with the Economic Sustainability vision component*

The Project directly supports Pinal County's vision for long-term economic viability by introducing high-tech, environmentally responsible infrastructure that aligns with the County's conservation values. The Project will generate a range of employment opportunities throughout its lifecycle—from construction to ongoing operations and maintenance—including positions in solar array maintenance, battery system monitoring, vegetation management, security, and general facility operations.

The Project represents a strategic investment in Pinal County's clean energy economy and helps position the region as a hub for sustainable infrastructure. In addition to job creation, the Project will attract economic activity through procurement of local goods and services. By locating advanced energy systems near existing infrastructure in a rural setting, the Project exemplifies how innovative, low-impact development can bring economic opportunity while preserving the County's environmental character.

Open Spaces and Places

Residents value the large connected open spaces and unique places of Pinal County, not only as part of their quality of life, but as an important resource to sustain the region's immense wildlife habitat and their corridors. From the majestic mountains rising from the desert floor in the west to the high desert and rugged mountain terrain to the east, enjoyment of and respect for the natural surroundings is a big part of why people choose Pinal County to live and visit.

The proposal:
☒ *Is consistent with the Open Spaces and Places vision component*

The Project is located near existing agriculturally developed areas and therefore will not contribute to adverse impacts on Pinal County's open spaces. The surrounding area mainly includes private rural residential and agricultural crop land and feedlots. There are no known recreational uses of the land in the surrounding area. It is not anticipated that the Project will have an adverse impact on wildlife, habitat, or wildlife corridors.

Environmental Stewardship

People value the views of the mountains and open vistas during the day and the stars at night. These values have translated to a strong conservation ethic that stresses the importance of maintaining the quality of Pinal County's natural resources for future generations. Pinal County is the leader in environmental stewardship and rewards and encourages sustainable practices such as innovative land use planning, sustainable agriculture, water conservation, green building development, and the use of renewable and alternative energy sources.

The proposal:
☒ *Is consistent with the Environmental Stewardship vision component*

The Project is designed to uphold and advance Pinal County's commitment to environmental stewardship. The Project is not anticipated to adversely impact open vistas or natural resources. It is sited on undeveloped desert shrubland characterized by low-lying vegetation and ephemeral streambeds. The surrounding area includes existing rural development - such as roadways, agricultural operations, transmission infrastructure, and scattered residences - making the Project compatible with its visual and environmental context.

The Project's infrastructure is low-profile by design, with all structures under 40 feet in height and no reflective components (e.g., mirrors) that could impact surrounding viewsheds. By repurposing previously impacted lands and avoiding environmentally sensitive areas, the Project exemplifies responsible, conservation-minded land use planning.

Importantly, the integration of energy storage enhances the environmental value of the Project. Energy storage enables the capture and delivery of renewable energy when it is needed most—particularly during peak evening demand or system disruptions. This flexibility supports real-time balancing of supply and demand, improves system resilience, and reduces reliance on inflexible fossil-based generation.

Energy storage is a critical enabling technology in the clean energy transition. It ensures that when the sun isn't shining or the wind isn't blowing, renewable energy can still be reliably delivered to Arizona's homes and businesses. The Project demonstrates a forward-looking approach to sustainable development that aligns with the County's goals for conservation, resilience, and innovation in renewable energy.

Healthy, Happy Residents

Access to quality healthcare and healthy lifestyle choices is a priority. Pinal County is a healthy, safe place where residents can walk or ride to activity centers and where interaction in Pinal County's clean, natural environment is encouraged. Ensuring residents are healthy, safe and happy in their community is a priority for Pinal County.

The proposal:
☒ *Is consistent with the Healthy, Happy Residents vision component*

The Project does not pose a threat to the health and safety of Pinal County residents and measures would be taken to ensure the safety of residents. The nearest residentially zoned parcel is located northeast of the site, adjacent to Interstate 8, and is currently undeveloped. The Project will be fully enclosed with secure perimeter fencing, and access will be restricted through locked entry gates. Emergency personnel will have access via Knox boxes and designated keys provided at the site entrance. The Project is not located within a Pinal County Fire District; however, the nearest Fire District is the Stanfield Fire District located northeast of the proposed Project. The Applicant will coordinate closely with the Stanfield Fire District to ensure appropriate emergency preparedness. This includes offering on-site training specific to the operational characteristics and safety protocols associated with the Project. Ongoing site maintenance will include the removal of grasses, weeds, and other flammable materials, and vegetation management practices will prioritize groundwater protection by using environmentally responsible methods. These proactive safety and fire mitigation measures demonstrate the Applicant's commitment to protecting the wellbeing of nearby communities and ensuring the Project operates in harmony with the County's goals for health, safety, and environmental quality. The Applicant will also offer to facilitate training relating to the specific hazards of the BESS facility for local fire departments.

Quality Educational Opportunities

Quality, community-based Pre k-12 programs that provide youth with a competitive edge along with a wide variety of post-secondary educational opportunities and technical or specialized workforce training are necessities. Pinal County residents seek out life-long opportunities that help to expand their minds and diversify their experiences. (This may not apply to all projects)

The Vision Component of Quality Education Opportunities does not apply to the Silver Reef Energy Solar and Storage Project.

4.2 Consistency with the Plan's Key Concepts

Consistency with the Land Use Designation

The project land uses:

☐ *Are shown as indicated on the Land Use and Economic Development graphic.*

☒ *Are not shown as indicated on the Land Use and Economic Development graphic.*

The Project land uses are not shown as indicated on the Land Use and Economic Development Graphic. The Project footprint falls in the Very Low Density Residential (0-1 du/ac) land use designation. The Project land uses will consist of a PV solar and BESS facility, which will require a land use designation of Green Energy Production.

Consistency with the Mixed Use Activity Center Concept

The Project land uses:

☐ *Meet the Mixed Use Activity Center requirements.*

☒ *Are not shown within a Mixed Use Activity Center.*

The nearest Mixed Use Activity Center is the Mid Intensity Activity Center along I-8, north of the Project. The Project land use proposal does not include a Mixed Use Activity Center land use designation.

Consistency with the Planning Guidelines described in the Land Use Element

The Project land uses:

☒ *Are consistent with the applicable Planning Guidelines described in the Land Use element.*

The Project land uses will consist of a PV solar and BESS facility, which will require a land use designation of Green Energy Production. There are no planning guidelines listed for the Green Energy Production; however, the Project land uses are consistent with the definition of Green Energy Production in the Plan, "areas that are designated specifically for the location of large scale photovoltaic solar panel power generation facilities."

Quality Employment Opportunities County-wide

The Comprehensive Plan stresses the importance of increasing the number of opportunities to locate quality jobs County-wide in order to increase the jobs-to-population ratio.

The proposal:

☒ *Is consistent with the Economic Development element.*

☒ *Includes additional information about how the development addresses the Economic Development Vision embodied in the Comprehensive Plan.*

The proposed project is consistent with the Economic Development Vision in the Comprehensive Plan. The Project would provide temporary construction employment opportunities for qualified local populations in the trades. Over 150 temporary construction jobs are anticipated, and 10 to 20 employment positions would be filled for Project operations and maintenance post construction. The ongoing operation of the facility would more than likely include local citizens

who are based in close proximity to the facility. In addition, prior to and during construction, the Project would utilize both local and non-local consultants and contractors for the design and construction of the Project. The design and construction scopes of work are typically bid out to a range of consultants and contractors. Depending on the availability, experience, and qualifications of available local firms, it is the Applicant's preference to utilize local labor as much as is practicable and Applicant would instruct those acting on its behalf to utilize local labor when possible.

The economic stability of Pinal County hinges upon its ability to increase the jobs per capita ratio to a target of 500 jobs per 1,000 residents. The County can achieve this through sound economic development policies. The Project will augment capacity and stability of the electricity supply in Pinal County which is essential to attracting job creating businesses.

Viable Agriculture, Equestrian and Rural Lifestyle

Historically, agriculture has played an important role in Pinal County's economy and lifestyle. Encouraging the continuation of viable agriculture and protecting it is an important component of the Plan. Additionally, supporting an equestrian and rural lifestyle has a place in Pinal County as it continues to urbanize.

The proposal:
☒ *Clusters development to protect open space and agriculture.*
☒ *Includes additional information about how the development addresses Viable Agriculture, Equestrian, and Rural Lifestyle.*

The Project complies with the Viable Agriculture, Equestrian, and Rural Lifestyle of Pinal County as described in the Comprehensive Plan. The Project is a reasonable option for use of the subject property considering it is adjacent to an existing transmission line corridor. In addition, the Project is located less than half a mile from I-8. The Project is compatible with surrounding land uses and would provide an economic benefit to Pinal County to preserve land for agricultural, equestrian and rural uses elsewhere.

System of Connected Trails and Preservation of Open Space

Pinal County is committed to the preservation of large swaths of open space and the development of a connected system of trails. This applies to all projects/proposals/actions.

The proposal:
☒ *Is consistent with Pinal County Trails and Open Space Master Plan and Comprehensive Plan Open Space and Places Chapter.*
☒ *Includes additional information about how the development addresses the open space Vision and goals.*

Pinal County residents value the large connected open spaces and unique places of Pinal County, not only as part of their quality of life, but as an important resource to sustain the region's immense wildlife habitat and corridors. The proposed Project is consistent with the Pinal County

Trails and Open Space Master Plan. The Project would not interfere with any existing, planned or proposed multi-use trail corridors or off-highway vehicle trails as identified in the Pinal County Trails and Open Space Master Plan. The proposed Project location supports the preservation of open space in Pinal County and protection of the mountains, wildlife habitats, natural landmarks, rivers and sensitive areas.

Natural and Cultural Resource Conservation

The Comprehensive Plan strives to protect natural/cultural resources, wildlife corridors and environmentally-sensitive areas such as mountains and foothills, major washes, and vistas. These areas are predominantly undeveloped and contain sensitive resources or natural hazard areas.

The proposal:
☒ *Address environmentally sensitive areas it may impact.*
☒ *Includes additional information about how the development addresses the natural and cultural resource conservation.*

The Project has been designed to protect natural resources, wildlife corridors and environmentally sensitive areas and the Applicant does not anticipate any impacts. The proposed Project is not anticipated to have an impact on cultural resources. The Archaeological sensitivity of the Project Area is moderate. The Applicant will coordinate with the appropriate state agencies and obtain all necessary permits and approval as required by Arizona Department of Environmental Quality, Arizona Game and Fish Department and the Arizona State Historic Preservation Office.

Water Resources, Public Facilities/Services, and Infrastructure Support

All developments must bring adequate water resources and the necessary infrastructure to support the intensity of development in order to minimize the impact on the County's ability to provide public services. All development and growth, public and private, must acknowledge its impacts and pay its own way.

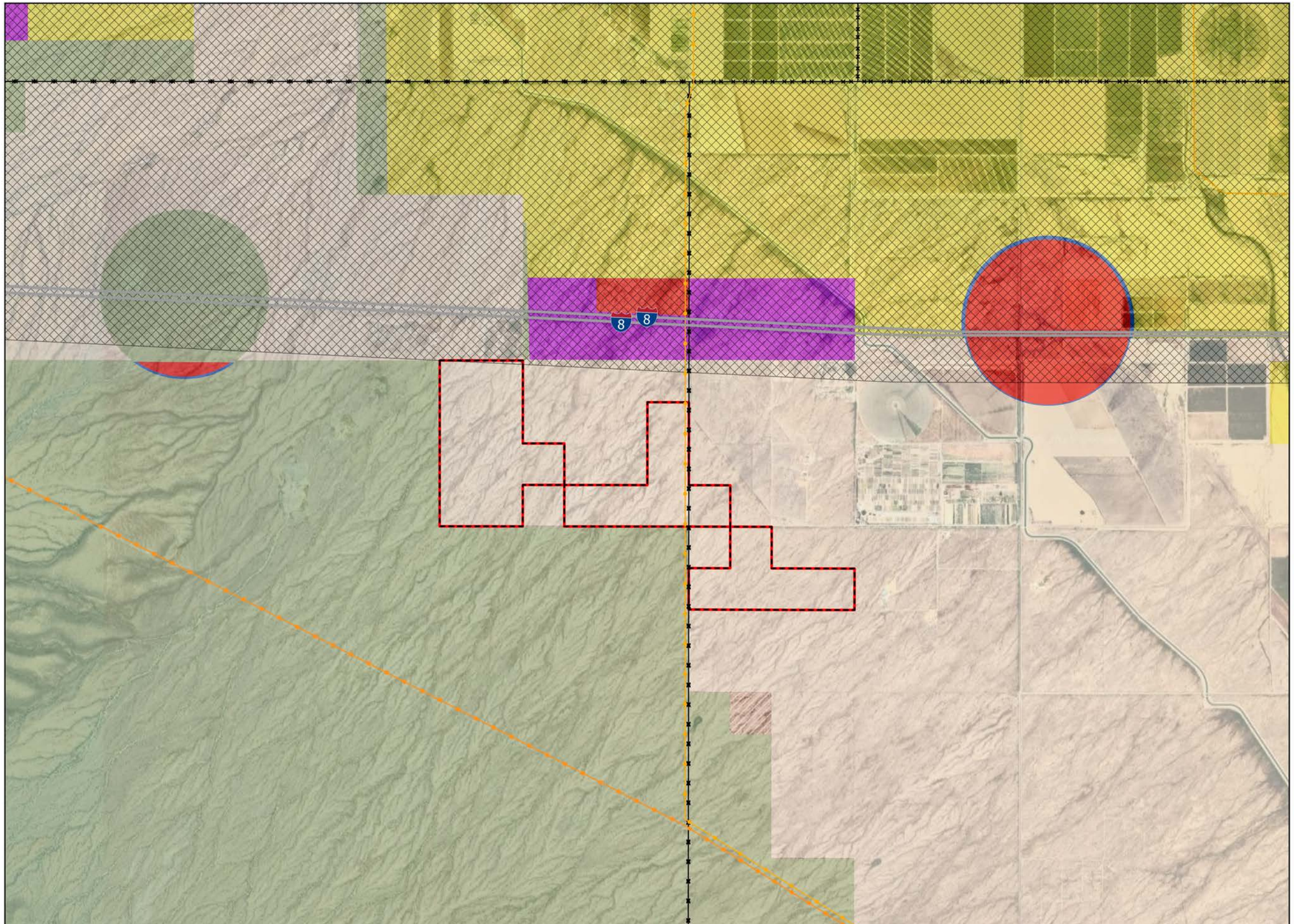
The proposal:
☒ *Ensures that adequate public facilities are in place or planned for within a reasonable time of the start of the new development.*

The Applicant will ensure that adequate public facilities are provided as needed for on-site personnel and the O&M facility. The Project would use no water resources to generate electricity. Water would be used during construction for hydration and compaction, backfill, cement stabilization, and dust control. The Applicant would obtain water from legally permitted water resources near the Project, which would be transported to the site as needed.

FIGURES

Silver Reef Solar
Pinal County, Arizona

Figure 1: Location Map



LEGEND

- Major Roads
- Project Area

Existing Transmission Lines

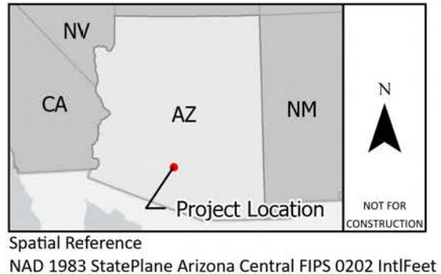
- 220-287 (Kilovolts)
- 345 (Kilovolts)
- 500 (kilovolts)
- I-11 Study Area
- PLSS (Township)

Land Use Category

- Employment
- General Commercial
- Low Density Residential (0-2 du/ac)
- Moderate Low Density Residential (1-3.5 du/ac)
- Mid Intensity Activity Center
- Recreation/Conservation
- Very Low Density Residential (0-1 du/ac)

Data Sources:
Google Aerial Imagery 2023; ADOT 2023; AZGEO 2024; Pinal County GIS 2025

Prepared for: Nadara North America, Inc.
Prepared by: Tetra Tech GIS Team (NB)
Updated: 5/20/2025



Spatial Reference
NAD 1983 StatePlane Arizona Central FIPS 0202 IntlFeet

Path: X:\CES_Nadara\Silver_Reef_Solar\APRXs\SilverReef_MCPA\SilverReef_MCPA.aprx

Silver Reef Solar
Pinal County, Arizona

Figure 2: Topographic Map

LEGEND

- Major Roads
- Project Area

Existing Transmission Lines

- 220-287 (Kilovolts)
- 345 (Kilovolts)
- 500 (kilovolts)
- I-11 Study Area
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Land Use Category

- Employment
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- Moderate Low Density Residential (1-3.5 du/ac)
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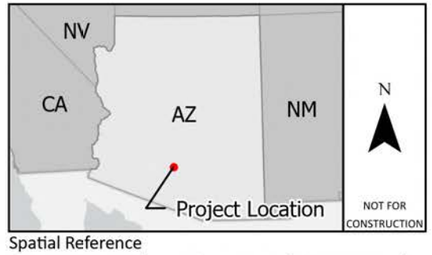
- Recreation/Conservation
- Very Low Density Residential (0-1 du/ac)

Data Sources:
USGS 7.5-Minute Indian Butte & Double Peak Topographic Quadrangle 2021; ADOT 2023; AZGEO 2024; Pinal County GIS 2025

Prepared for: Nadara North America, Inc.
Prepared by: Tetra Tech GIS Team (NB)
Updated: 5/20/2025



Spatial Reference
NAD 1983 StatePlane Arizona Central FIPS 0202 IntlFeet

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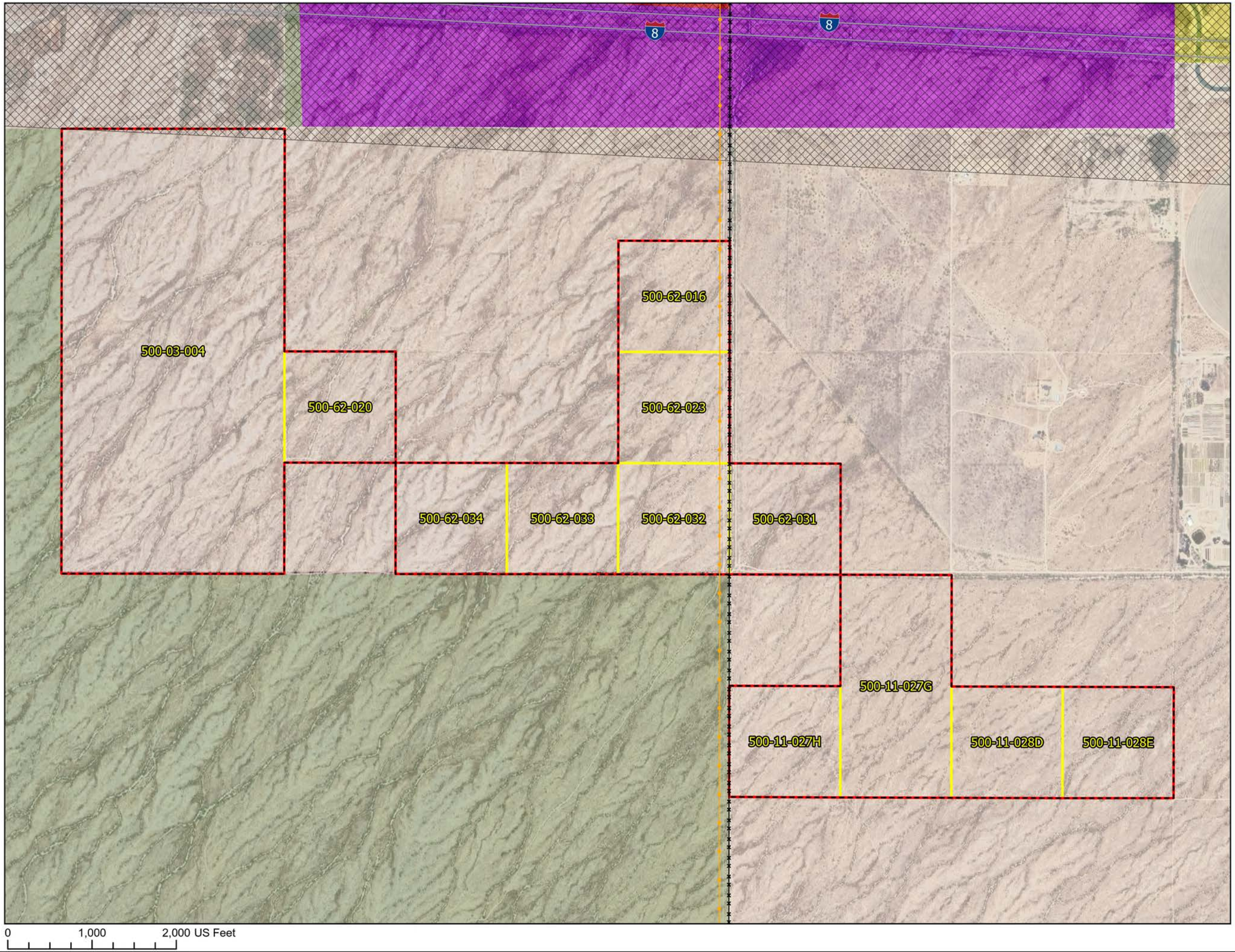
Silver Reef Solar
Pinal County, Arizona

Figure 3: Site Map



LEGEND

- Major Roads
- Project Area

Existing Transmission Lines

- 220-287 (Kilovolts)
- I-11 Study Area
- PLSS (Township)

Land Use Category

- Employment
- General Commercial
- Moderate Low Density Residential (1-3.5 du/ac)
- Recreation/Conservation
- Very Low Density Residential (0-1 du/ac)
- Parcel Boundary

Data Sources:
Google Aerial Imagery 2024; ADOT 2023; AZGEO 2024; Pinal County GIS 2025

Prepared for: Nadara North America, Inc.
Prepared by: Tetra Tech GIS Team (NB)
Updated: 5/20/2025



Spatial Reference
NAD 1983 StatePlane Arizona Central FIPS 0202 IntlFeet

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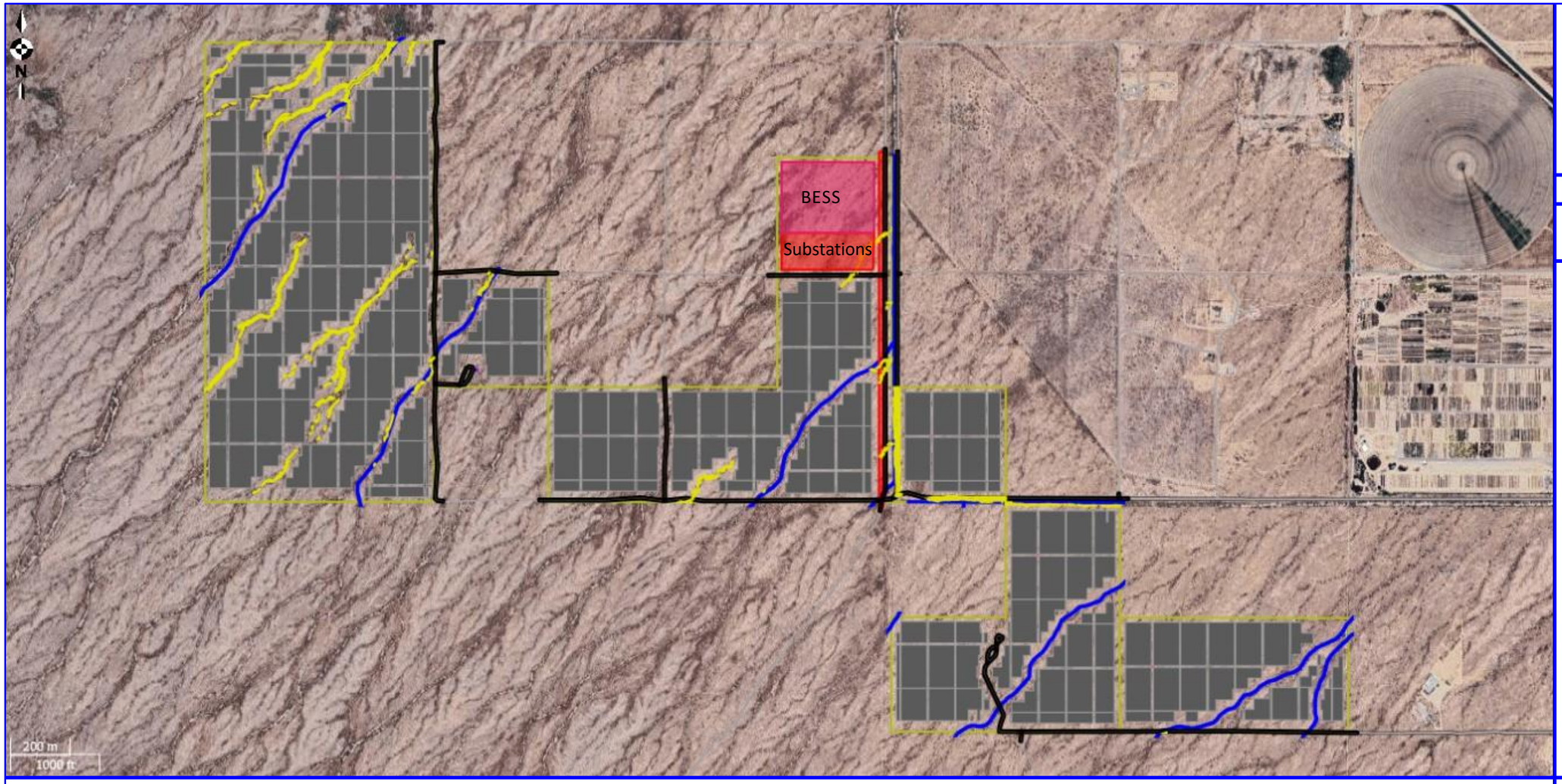

www.plantpredict.com

Novis - Silver Reef

Novis Silver Reef Site Eval Layout

AZ

United States

140 MWac Net Capacity



Location Map Scale NTS

Project Site Description

803.1 +/- Acre Site
476.73 +/- Acre Array
Latitude 32.815
Longitude -112.002
Elevation 445.67 meters

Solar Production

Tracker Mounting System
180 degrees Azimuth
1500 Volt DC PV System Design
40% Ground Coverage Ratio

Photovoltaic System Parameters

140 MWac LGIA Limit (POI)
146.3 MWac Inverter Capacity
184 MWdc Nominal Capacity
1.2577 DC:AC Ratio (Inverter Loading)
1.31 DC:AC Ratio (POI)

PRELIMINARY LAYOUT - THIS PRINT IS NOT TO BE USED FOR CONSTRUCTION

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THIS PLANTPREDICT LAYOUT IS PRELIMINARY AND SUBJECT TO REVISION BASED ON, AMONG OTHER THINGS, CHANGES IN PROJECT SCHEDULE, TECHNOLOGY, CAPACITY, AND/OR SITE SPECIFIC CONSTRAINTS.

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Designer: Denay Garay

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PlantPredict Layout

PLP-1000

Printed: 1/23/2025
ID: 964240

Citizen Participation Plan

Silver Reef Energy Solar & Storage Project

Pinal County, AZ

May 29, 2025

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3.8 Define Project Team Communications Protocols 3
3.9 Document Public Contact and Comment 3
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1.0 INTRODUCTION

This Citizen Participation Plan (CPP) was prepared to fulfill the neighborhood meeting report requirement listed on the Major Comprehensive Plan Amendment application for. The following CPP describes the objectives and methodology for holding the Neighborhood Meeting. Following the Neighborhood Meeting a report of the meeting will be provided to Pinal County.

2.0 OBJECTIVE OF THE CITIZEN PARTICIPATION PLAN

The objective the CPP is to develop and implement a public involvement program that will:

- Involve the public and the various stakeholders in defining how they will participate in the Project.
- Implement a public involvement program that meets Project requirements.
- Create distinct participation programs to recognize concerns and information needs of the widely diverse stakeholders throughout the Project Area.
- Provide participation opportunities that result in useful information for decision-makers at key milestones.

The goal of the CPP is to inform, involve, and collaborate with the interested and affected public, jurisdictions, agencies, and stakeholders. Stakeholders will be informed through a series of factsheets, media coverage, and meetings. The CPP will be flexible and may require periodic adjustments as the need to respond to specific issues arise. The CPP is designed so that members of the public can participate according to their interest and time available.

The CPP efforts will be decentralized, but targeted. We will focus the public participation effort around Project milestones – ranging from the early identification of issues and concerns to addressing these issues within the permitting effort. The entire process will be transparent and carefully documented.

The innovation in a Project of this scope is demonstrated in being able to completely integrate the CPP with the environmental planning process and to appropriately involve the public in resolving concerns early in the process.

3.0 METHODOLOGY

The following efforts will be employed to ensure execution of a comprehensive CPP for the Silver Reef Energy Solar and Storage Project:

3.1 Identify Key Issues and Stakeholders

The Applicant will hold a workshop with the Project team to fully understand the extent of their existing and past relationships with key stakeholders in the Project Area. The Applicant will brainstorm potential issues and stakeholders that may have an interest in the Project and assess the level of concern these stakeholders may have with the Project. Examples could include business owners or non-governmental organizations (NGOs), Native American communities, agricultural interests, and economic development interests.

3.2 Refine Citizen Participation Plan

From the Project initial team workshop, and other fact finding activities, a Final CPP will be developed. The Final CPP will document how stakeholders, including Native American communities, key agency staff, landowners, community organizations, and other potential stakeholders, will be involved. The Final CPP will clarify roles and responsibilities for both the Project team and the public.

3.3 Implement the Communications Plan

The communications program includes the media relations program, Project information, telephone line, development of key messages, and informational fact sheets. Additionally, protocols for team communications will be developed and Project internal communications will be coordinated, identifying single points of contact for stakeholders to communicate with.

3.4 Develop a Project Mailing List

A comprehensive Project mailing list will be developed and maintained throughout the Project, including both mailing addresses and email addresses where possible. It will include state, county and local elected officials and leaders of community groups and NGOs. Key stakeholder groups may include the following (in additional to others identified):

- Pinal County including Flood Control, Parks, Planning, and Transportation
- Pinal County Board of Supervisors
- Economic Development Leaders
- Various Chambers of Commerce
- Developers
- Landowners
- Public school districts
- NGOs
- Homeowner's associations
- Civic organizations
- Arizona Game and Fish Department
- US Army Corps of Engineers
- Arizona Department of Environmental Quality
- Arizona State Historic Preservation Office

3.5 Develop Fact Sheets

Two fact sheets will be developed for the Project to provide an overview of the need for the Project and the overall study process and schedule. The content will be brief but informative, addressing geographical boundaries, planning criteria, scope of the Project and timing of outreach activities. The format will be flexible to allow for a variety of distribution methods. The fact sheet would be mailed/emailed to those identified within the stakeholder mailing list. This list will be added to and

maintained as the MCPA process evolves. Fact sheets will be mailed/emailed three weeks and later 3 days (email) prior to public meetings.

3.6 Managing Media Relations

The Applicant will assist Pinal County with its ongoing program of contacting interested parties and providing information by developing draft material that would be reviewed and incorporated by the County into the CPP. The Applicant will prepare media materials and provide support and counsel, as needed. Tools will include a media kit, news releases, display ads, as well as conducting media briefings.

3.7 Coordinate Internal Communications for Pinal County

Once the informational materials are finalized, they will be sent to the County at least 30 days prior to the public meeting. This will help to ensure coordination and keep the messaging around the Project consistent. Key briefings will be held as appropriate to clarify intent and messaging within informational materials. The Applicant will revise draft materials as required.

3.8 Define Project Team Communications Protocols

The Project team will follow specific guidelines with regard to documentation of all contacts with the public and Project stakeholders. “Record of Conversation” forms, with a set distribution, will be used for this Project. Project spokesperson(s) will be designated and trained if necessary. Procedures for media contacts will also be clearly specified. Single points of contact will be identified.

3.9 Document Public Contact and Comment

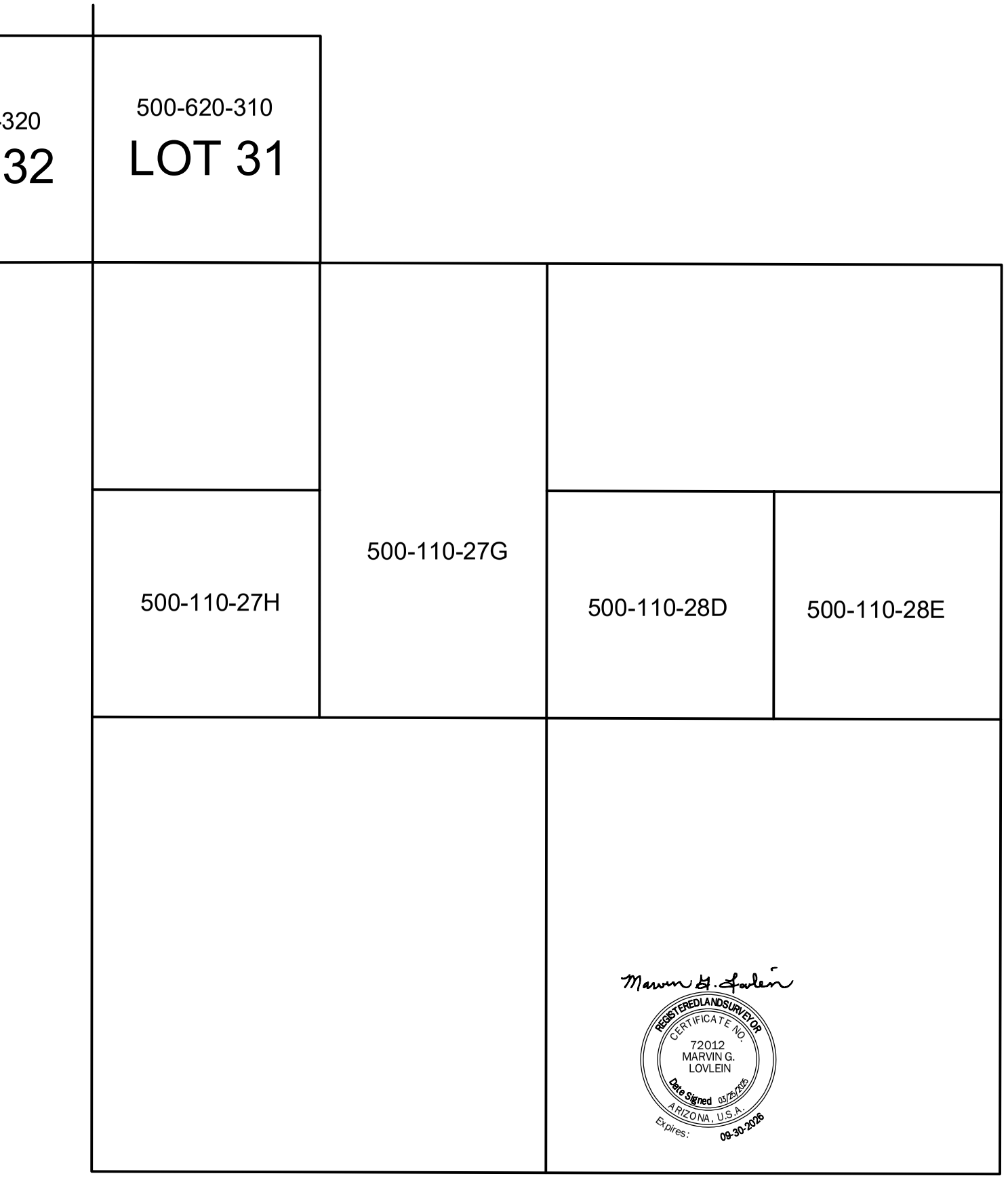
Written documentation is specified in the above tasks. Public comments made during the CPP will be catalogued in conformance with County requirements. Received comments will be analyzed, filed appropriately, and addressed, as required, within the MCPA process.

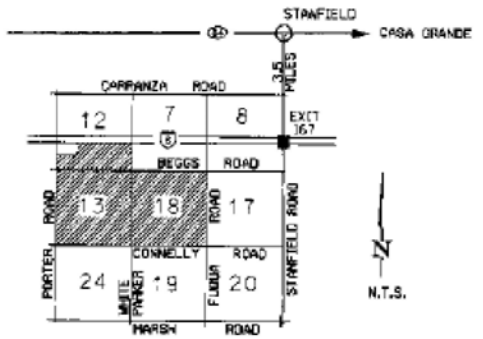
3.10 Hold Public Meeting

The CPP is used to identify and define the relevant Project issues and concerns that the MCPA permitting process will specifically address. It also provides the basis of determining the level of analysis necessary to address relevant issues and concern adequately within the CPP. Another important purpose is to inform the public of the details of the Project so that their input is based on an accurate perception of the Project as described within materials developed during the CPP.

For the Project, two public open houses will be held. These meetings will be noticed in local newspapers and local mailings (electronic and hard copies). Recommended locations for the public meetings are to be determined. The meetings would be held from 5 p.m. – 8 p.m. to allow people to come and go as their schedules allow. The room would be arranged with “stations” that focus on specific aspects of the Project. These stations could include: (1) purpose and need for the Project, (2) overview of the Project Area, (3) MCPA process (4) detailed maps of the Project Area showing key environmental resources, and (5) how people can stay involved in the CPP process. Public attendees would be able to visit the various stations and speak with Project team personnel and ask questions.

Comments from the public attendees will be taken in several ways. The Project team will organize and collate comments from both meetings and prepare a meeting report that will be provided to Pinal County.





LOCATION MAP
PROPERTY WITHIN
SECTION 13, 14, TOWNSHIP 7 SOUTH, RANGE 3 EAST,
SECTION 18, 19, TOWNSHIP 7 SOUTH, RANGE 4 EAST,
GILA AND SALT RIVER MERIDIAN
PIMA COUNTY, ARIZONA

LEGAL DESCRIPTIONS

PARCEL 500-110-28E

All that part of the Southeast Quarter of the Northeast Quarter of Section 19, Township 7 South, Range 4 East, of the Gila and Salt River Base and Meridian, Pinal County Arizona.
Containing 40 acres more or less.

PARCEL 500-110-28D

All that part of the Southwest Quarter of the Northeast Quarter of Section 19, Township 7 South, Range 4 East, of the Gila and Salt River Base and Meridian, Pinal County Arizona.
Containing 40 acres more or less.

PARCEL 500-110-27G

All that part of the East Half of the Northwest Quarter of Section 19, Township 7 South, Range 4
East, of the Gila and Salt River Base and Meridian, Pinal County Arizona.
Containing 80 acres more or less.

PARCEL 500-110-27H

All that part of the Southwest Quarter of the Northwest Quarter of Section 19, Township 7 South, Range 4 East, of the Gila and Salt River Base and Meridian, Pinal County Arizona.
Containing 40 acres more or less.

PARCEL 500-620-310

Lot 31, High Chaparral Ranches, according to the recorded plat thereof, Pinal County, Arizona.
Containing 40.013 Acres more or less.

PARCEL 500-620-320

Lot 32, High Chaparral Ranches, according to the recorded plat thereof, Pinal County, Arizona.
Containing 40.034 Acres more or less.

PARCEL 500-620-330

Lot 33, High Chaparral Ranches, according to the recorded plat thereof, Pinal County, Arizona.
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Containing 40.022 Acres more or less.

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PARCEL 500-620-160

Lot 16, High Chaparral Ranches, according to the recorded plat thereof, Pinal County, Arizona.
Containing 40.038 Acres more or less.

PARCEL 500-030-040

All that part of the East Half of Section 14, Township 7 South, Range 3 East, of the Gila and Salt River Base and Meridian, Pinal County Arizona.
Containing 320 Acres more or less.

Marvin G. Lovlein
REGISTERED LAND SURVEYOR
CERTIFICATE NO.
72012
MARVIN G.
LOVLEIN
Date Signed 03/25/2025
ARIZONA, U.S.A.
Expires: 09-30-2026

MAP REFERENCES:

R1) CATALINA ESTATES BK.29 PG.82

SCALE: 1"=200'
200 100 0 200 400

BOUNDARY SURVEY

OWNERS PROPERTY
APN: X BEING A PORTION OF
SECTION X,
TOWNSHIP X, RANGE X EAST,
GILA AND SALT RIVER MERIDIAN
PIMA COUNTY, ARIZONA

DARLING GEOMATICS
9040 S. RITA ROAD
SUITE 2350
TUCSON, AZ 85747
(520)-298-2725 (O)
(520)-298-2767 (F)
www.darlingltd.com

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SCALE: 1" = '
JOB NO:
REVISION DATE:

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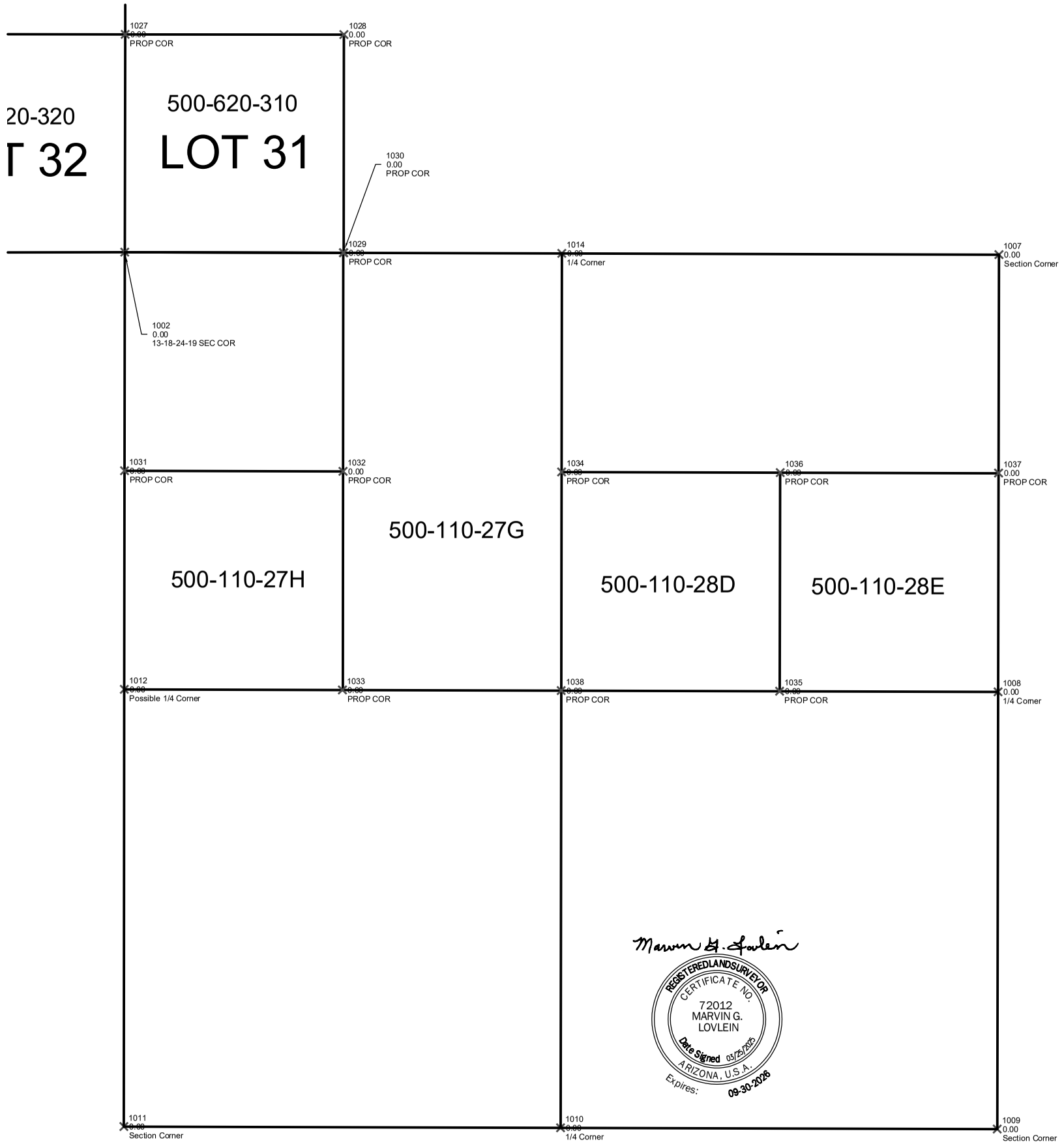

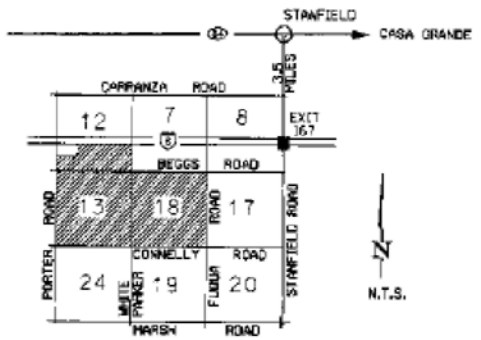

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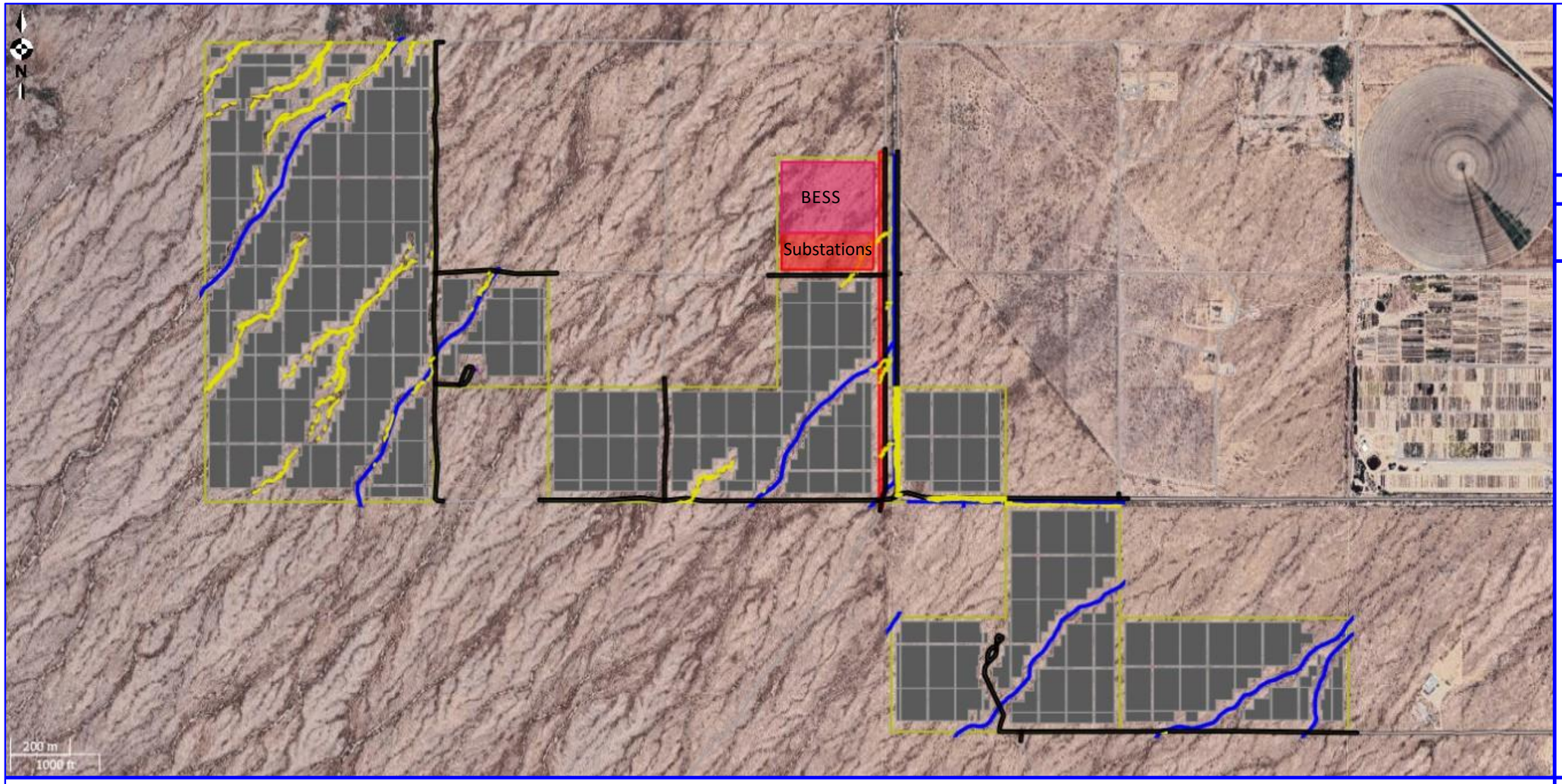

www.plantpredict.com

Novis - Silver Reef

Novis Silver Reef Site Eval Layout

AZ

United States

140 MWac Net Capacity



Location Map Scale NTS

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Designer: Denay Garay

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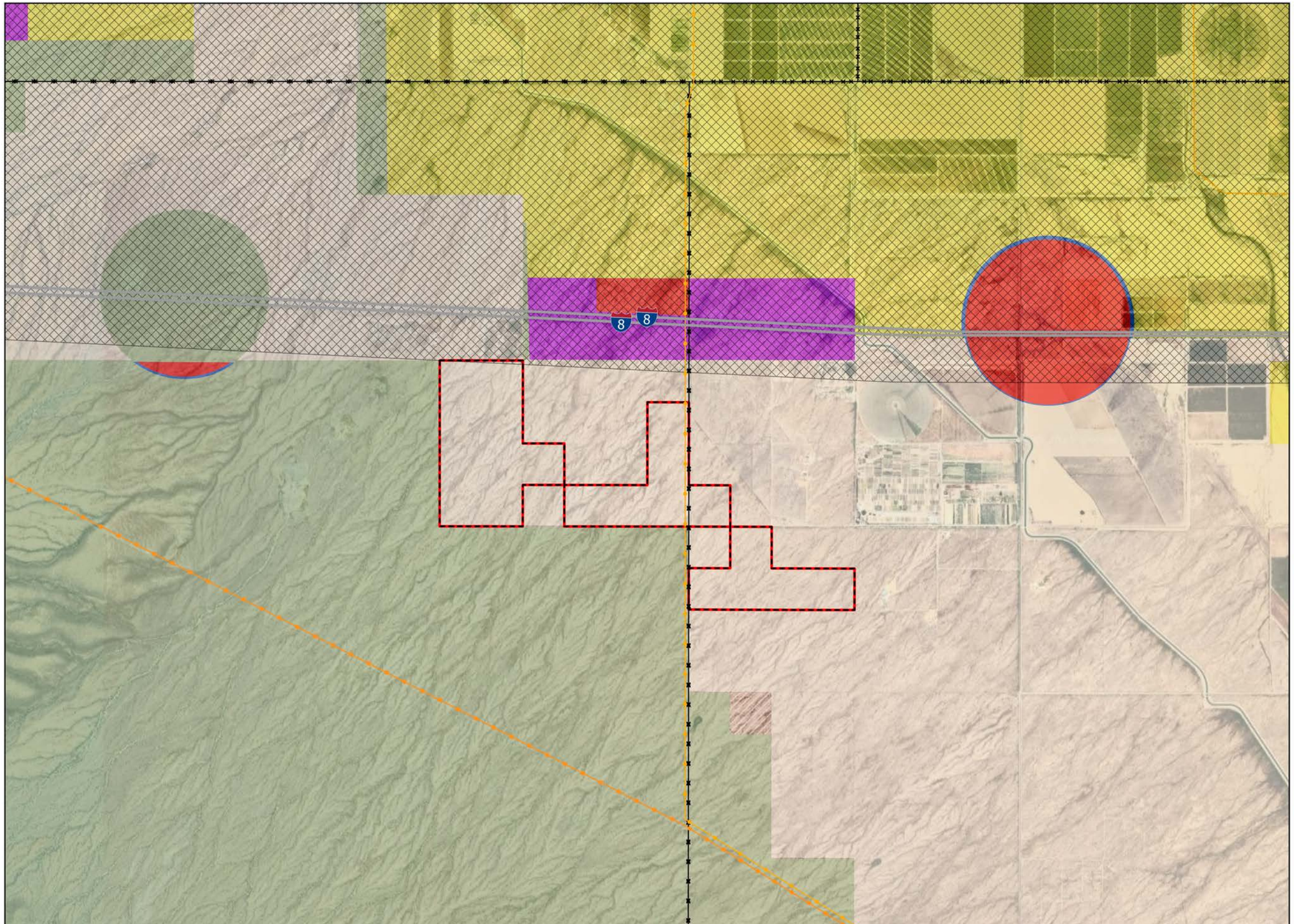
PlantPredict Layout

PLP-1000

Printed: 1/23/2025
ID: 964240

Silver Reef Solar
Pinal County, Arizona

Figure 1: Location Map



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- 345 (Kilovolts)
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- I-11 Study Area
- PLSS (Township)

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- General Commercial
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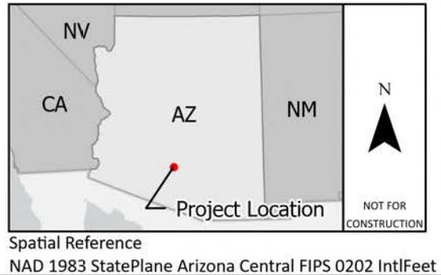
- Moderate Low Density Residential (1-3.5 du/ac)
- Mid Intensity Activity Center
- Recreation/Conservation
- Very Low Density Residential (0-1 du/ac)

Data Sources:
Google Aerial Imagery 2023; ADOT 2023; AZGEO 2024; Pinal County GIS 2025

Prepared for: Nadara North America, Inc.
Prepared by: Tetra Tech GIS Team (NB)
Updated: 5/20/2025



Spatial Reference
NAD 1983 StatePlane Arizona Central FIPS 0202 IntlFeet

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Silver Reef Solar
Pinal County, Arizona

Figure 2: Topographic Map

LEGEND

- Major Roads
- Project Area

Existing Transmission Lines

- 220-287 (Kilovolts)
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- Recreation/Conservation
- Very Low Density Residential (0-1 du/ac)

Data Sources:
USGS 7.5-Minute Indian Butte & Double Peak Topographic Quadrangle 2021; ADOT 2023; AZGEO 2024; Pinal County GIS 2025

Prepared for: Nadara North America, Inc.
Prepared by: Tetra Tech GIS Team (NB)
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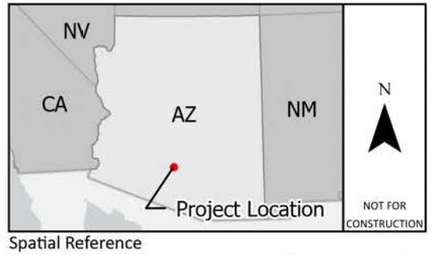

Spatial Reference
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Traffic Impact Statement

Silver Reef Solar and BESS Project

August 4, 2025

Prepared for

Silver Reef Energy, LLC
1 Bridge Street, Suite 11,
Irvington, NY 10533

Prepared by



Tetra Tech, Inc.
390 Union Boulevard, Suite 400,
Lakewood, CO 80228

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Figure 2: Project Driveway Map

Acronyms and Abbreviations

ADOT	Arizona Department of Transportation
AADT	Average Annual Daily Traffic
AZ	Arizona
BESS	battery energy storage system
BLM	Bureau of Land Management
Client	Nadara North America, Inc.
I-8	Interstate 8
I-10	Interstate 10
MW	Megawatt
Project	Silver Reef Solar and BESS Project
PV	photovoltaic
ROW	right-of-way
TIS	Traffic Impact Statement

1.0 INTRODUCTION

Tetra Tech, Inc. has prepared this This Traffic Impact Statement (TIS) on behalf of Silver Reef Energy, LLC (Client) to analyze the traffic impacts associated with the proposed Silver Reef Solar and Battery Energy Storage System (BESS) Project (Project) located in Pinal County, Arizona. The Pinal County TIS Guidelines were followed for the development of this TIS (Pinal County, 2025).

2.0 EXISTING CONDITIONS

2.1 Site Location

The site for the proposed project includes 800 acres of undeveloped arid shrubland that is largely privately owned. The Project site is located approximately a quarter mile south of Interstate 8 (I-8) and 14 miles west of Casa Grande, Arizona (AZ), within Pinal County, AZ. Please see Figure 1: Project Vicinity Map below showing the project footprint relative to nearby towns.

2.2 Existing Land Use

The parcels within the Project Area consist of undeveloped and vacant arid shrubland. Surrounding the project area, there are some developments to the east, as well as I-8 to the north. To the east, along the route project traffic will likely use to travel to and from the site, there is the Stanfield location of Whitfill Nursery, a large plant nursery that serves the Phoenix and Casa Grande metro areas. There are also some private parcels with developed structures to the east. To the south and west, surrounding parcels are either undeveloped shrubland that are privately owned, or public lands under the jurisdiction of the Bureau of Land Management (BLM). To the north lie more privately owned parcels of undeveloped shrubland with I-8 running east-west above those.

2.3 Existing Roadways

There are two named roadways of note for this study. These include Connelley Road and Stanfield Road. In addition, there is a grid of existing roadways, all single lane dirt roads, that provide access to the land parcels in the Project vicinity.

Connelley Road is a single lane dirt road that is approximately 13 feet wide. According to the Arizona Department of Transportation (ADOT) Functional Classification Map available online, Connelley Road is classified as a Rural Local route (ADOT, 2025a). It runs a total of 3 miles in length east to west and provides access to the north-south unnamed dirt, single lane roads that allow access to specific parcels north and south of Connelley Road.

Stanfield Road is a two-lane, paved, marked road with gravel shoulders. According to the ADOT Functional Classification Map available online, Stanfield Road is classified as a Rural Major Collector (ADOT, 2025). The section of roadway along the proposed haul route, from I-8 south to Connelley Road, appears to be in fair condition, with moderate longitudinal pavement cracking that is unsealed. There are occasional potholes visible on the Google Street View imagery date January 2025 via Google Maps (Google, 2025), notably worse near the driveway entrance to Whitfill Nursery coming from I-8.

Average Annual Daily Traffic Counts were available from ADOT's Traffic Count Database System available online for I-8 in the project vicinity as well as Stanfield Road (ADOT, 2025b). In 2023, I-8 adjacent to the exit to Stanfield Road saw around 12,098 vehicles per day. For Stanfield Road, an AADT of 174 vehicles per day was measured in 2024. No traffic count data is available for Connelley Road, but due to the low vehicle volume on Stanfield Road, it is reasonable to assume there is minimal traffic using that route.

3.0 PROPOSED CONDITIONS

3.1 Proposed Land Use

The proposed Project will be developed on 800 acres of private parcels previously described, while maintaining appropriate setbacks are required. It will have the ability to produce up to 150 megawatts (MW) via photovoltaic (PV) solar arrays, with an additional 200-MW battery energy storage system (BESS). These would be constructed simultaneously over the course of an approximately 18-month period.

3.2 Site Access and Haul Routes

The Project will be accessed via eight new driveway locations as shown on Figure 2 – Project Driveway Map. The distance between the driveways and the nearest driveway on the same road are shown in Figure 2 as well. The driveways will be designed to accommodate worker and truck traffic generated during the construction of the Project. In addition, the unnamed roads and Connelley Road may need to be widened and/or improved to provide sufficient width for trucks and two-way traffic as vehicles access the different areas of the Project site.

Traffic for workers and material deliveries during construction and operations are anticipated to originate from I-8. To the north lies the Pheonix metro area and to the southeast via I-8 to Interstate 10 (I-10) is the Tucson metro area. Some traffic could also originate from the west and arrive via I-8. From I-8, Project traffic will exit on to Stanfield Road and continue south 1.15 miles to Connelley Road, continuing west to reach the unnamed roads that reach the Project parcels and planned driveways.

3.3 Trip Generation

3.3.1 Construction

Estimates for the various stages of Project construction traffic are shown in Table 4. Values are not available in the Institute of Transportation Engineers Trip Generation Manual for solar projects; however, the values can be projected with reasonable accuracy based on the Client's and Tetra Tech's experience with constructing and operating solar projects nationwide. To be conservative, no carpooling was assumed for the Project. Because the Project is located near large population centers the amount of carpooling may be minimal.

Table 4. Construction Trip Generation

Project	Peak Daily			Trip Generation			
				AM Peak Hour		PM Peak Hour	
	Workers	Trucks	ADT*	in	out	in	out
Silver Reef Solar and BESS	300	30	660	304	0	0	304

* *The ADT value counts each worker trip, i.e., one inbound and one outbound for two trips a day. 1/8th of truck trips have been included in the Peak AM Hour and Peak PM Hour estimates.*

3.3.2 Operations and Decommissioning

Once all of the construction phases have been completed, the solar and BESS facility will transition into the production-operation phase, at which point monitoring and maintenance personnel accessing the site will be the only activities. It has been assumed there will be approximately 5 to 10 operations and maintenance personnel hired to work full time, which results in 10 to 20 one-way trips per day on a 7AM to 7PM work schedule. The operational phase traffic contributions are few enough in number to represent less than ADT fluctuations and are therefore a negligible and unquantifiable traffic impact. Solar panel cleaning operations may include water trucks on occasion, but this activity will be performed on an annual basis or less, and the number of trucks will be relatively few and infrequent.

Operational life expectancy for the solar projects is approximately 40 years. Following the conclusion of the production-operation phase of the Project, the site will be decommissioned. Decommissioning traffic was not estimated or analyzed as part of the TIS. It is assumed that some level of analysis will be required at that time; however, traffic volume associated with decommissioning is expected to be less than or similar to traffic volume associated with peak construction, so the analysis would have similar results to the findings of this study. Note that the time period for the decommissioning phase will be much shorter than the construction phase.

4.0 IMPACTS TO ADJACENT EXISTING INFRASTRUCTURE

The existing infrastructure for Connelley Road and the unnamed roads have insufficient width and surface condition to provide access to the volume of construction traffic that is anticipated. Use of the roadways as they are now would likely result in heavy rutting and potentially impassible conditions depending on weather. Recommendations for road surface improvements are discussed in 4.1.

The addition of peak hour trips to the Project site, while not insignificant, is anticipated to cause a minimal amount of disruption or delay to existing traffic patterns on Stanfield Road due to its existing low AADT. The traffic volume added by construction will not present safety concerns for existing road users due to generous lines of sight at intersections for stopping sight distance. Due to the low volume of AADT on the existing roads and the short-term conditions of construction traffic, no need for turn lanes is anticipated.

Of the eight driveways planned to provide access to the Project area, minimal disruption or spacing conflicts with other road users are anticipated. Connelley Road and the adjacent unnamed roads currently have very few existing driveways, allowing for ample spacing and flexibility in siting.

The most significant anticipated impact to the area is the potential degradation of pavement along Stanfield Road due to the heavy truck and vehicle traffic during construction of the Project that exceeds the typical usage Mitigation measures for this impact are discussed below.

4.1 Impact Mitigation and Recommendations

To preserve the existing condition of Stanfield Road, the Client should enter into an agreement with Pinal County to document the existing condition of the road surface and return it to that condition when construction is completed. Additionally, the Client should improve Connelley Road and the unnamed roads that will be used to access the Project to two-lane gravel roads capable of handling the anticipated construction traffic volume. Coordination with Pinal County will be necessary to ensure compliance with all requirements for right-of-way (ROW) access and to obtain any necessary permits to complete construction on or adjacent to county roadways.

Once operational, the Project will have a minimal impact to the local road network due to its very low operational trip generation.

5.0 CONCLUSION

The Silver Reef Solar and BESS Project is expected to have minimal adverse impacts to local traffic during both construction and operation. At the peak of construction, around 660 one-way trips per day will be generated by workers and trucks traveling to and from the site. Once operational, around 20 one-way trips per day will be generated by workers travelling to and from the site. To accommodate Project traffic road improvements to Connelley Road and unnamed roads will be necessary. Client should enter into an agreement with Pinal County to return Stanfield Road to its original condition when construction is completed. With these measures in place, potential negative impacts to the local transportation network will be effectively mitigated.

6.0 REFERENCES

ADOT, 2025a. *Functionally Classified Roads*. Available online at: https://experience.arcgis.com/experience/e28f77ad6cfc4c14ae8cb20a0e944fc4/page/Page/?org=azgeo#data_s=id%3AdataSource_1-18de88fff32-layer-19%3A25875. Accessed 07/24/2025.

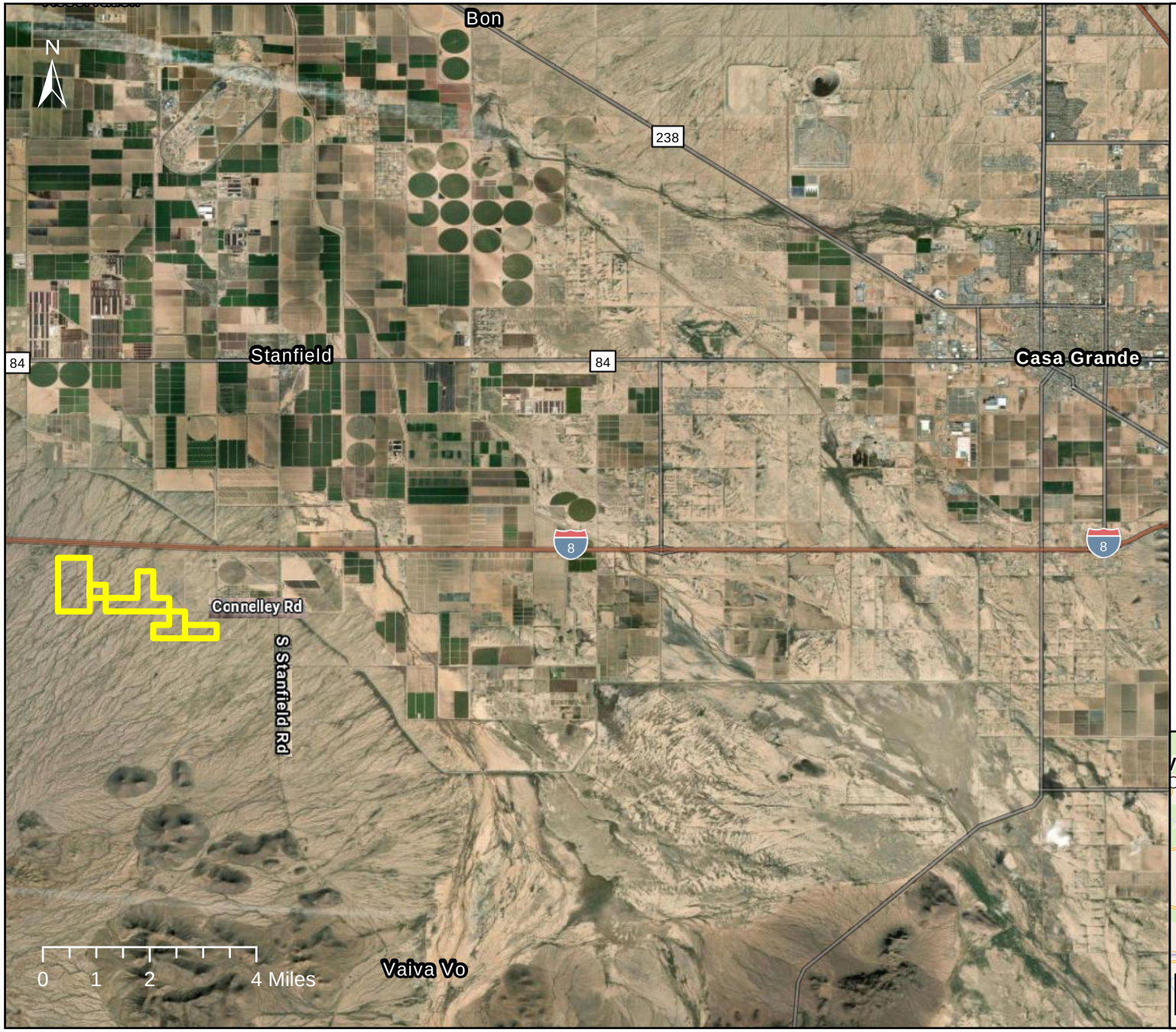
ADOT 2025b. Traffic Count Database System, Available online at: https://adot.public.ms2soft.com/tcds/tsearch.asp?loc=Adot&mod=TCDS. Accessed 07/24/2025.

Google. 2025. Google Street View, Stanfield Road Imagery from January 2025. Available online at: https://maps.app.goo.gl/gEvV6QKnN44zbeUv7. Accessed 07/25/2025.

Pinal County. 2025. Traffic Impact Statement (TIS) Guidelines. Available online at: https://www.pinal.gov/DocumentCenter/View/538/Traffic-Impact-Statement-Guidelines-PDF?bidId=. Accessed 07/23/2025.

FIGURES

FIGURE 1: PROJECT VICINITY MAP



SILVER REEF SOLAR AND BESS PROJECT

FIGURE 1: PROJECT VICINITY MAP

PINAL COUNTY, ARIZONA

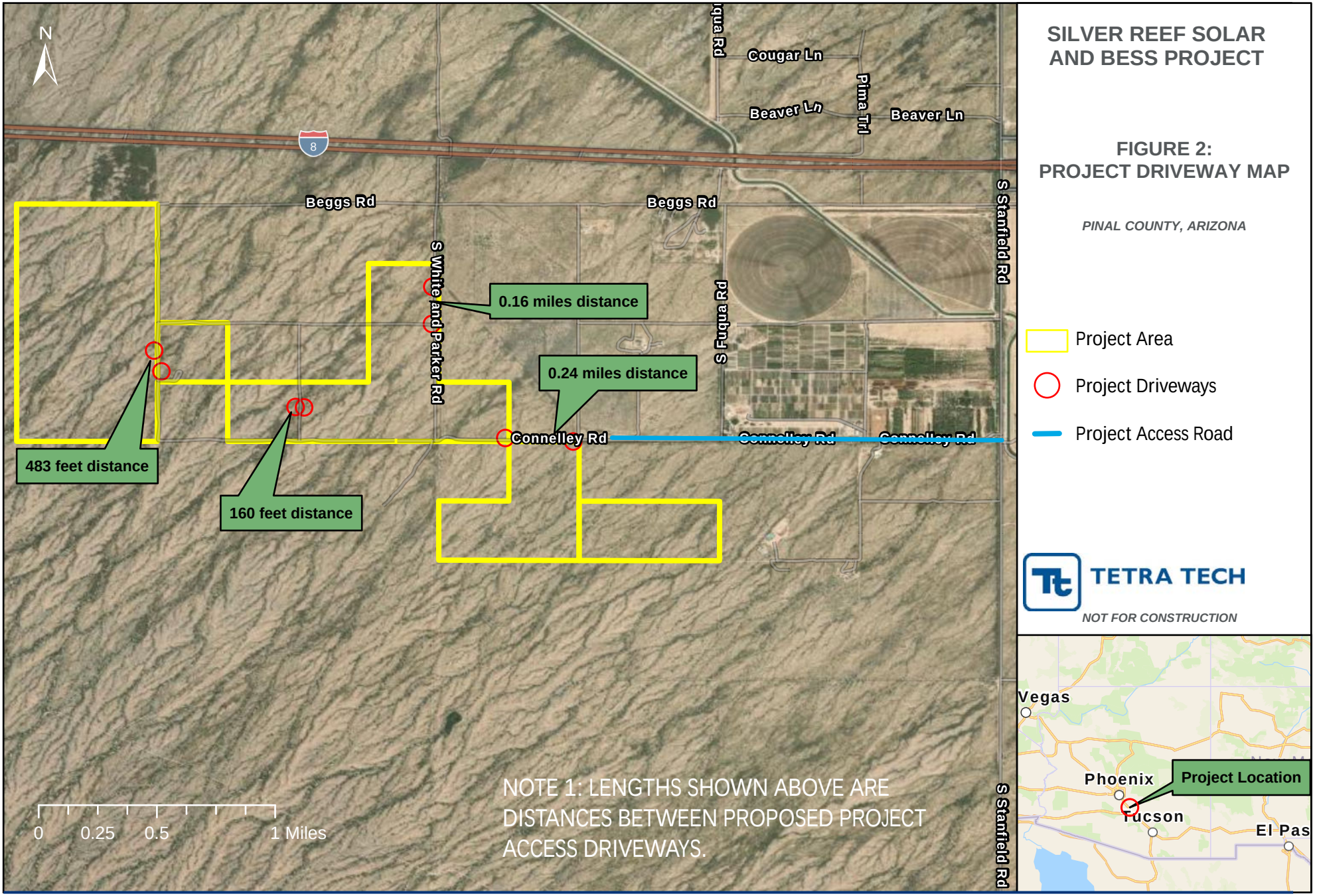
Project Area

TETRA TECH

NOT FOR CONSTRUCTION



FIGURE 2: PROJECT DRIVEWAY MAP



PATH: C:\USERS\EMMA.SLATER\ONEDRIVE - TETRA TECH, INC\DOCUMENTS\ARCGIS\PROJECTS\MYPROJECT\SILVERREEF.APRX - USER: EMMA.SLATER - DATE: 7/31/2025

Arizona Environmental Online Review Tool Report

Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department requests further coordination to provide project/species specific recommendations. Please use the Project Evaluation Form to submit your project to the Project Evaluation Program at PEP@azgfd.gov.

Project Name:
Novis Renewables Silver Reef

Project Type:
Energy Production/Storage/Transfer, Energy Production (generation), photovoltaic solar facility (new/expansion)

Project ID:
HGIS-23965

Project Description:
Proposed solar and storage project.

Contact Person:
Heatherlee Leary

Organization:
Tetra Tech, Inc.

On Behalf Of:
CONSULTING

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. Arizona Wildlife Conservation Strategy (AWCS), specifically Species of Greatest Conservation Need (SGCN), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

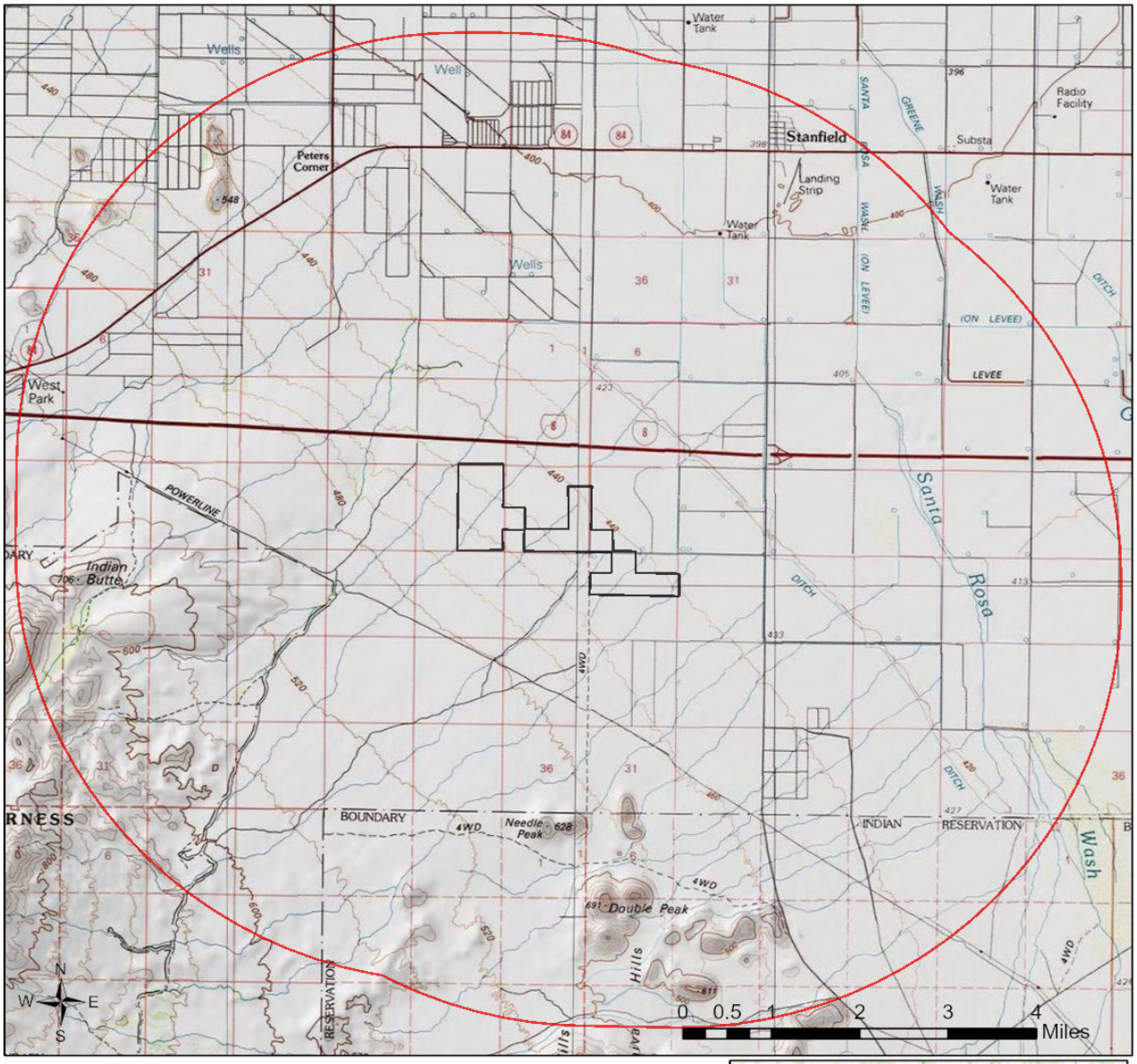
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies.

Novis Renewables Silver Reef

USA Topo Basemap With Locator Map



Buffered Project Boundary

Project Boundary



Project Size (acres): 830.62

Lat/Long (DD): 32.8144 / -112.0062

County(s): Pinal

AGFD Region(s): Yuma

Township/Range(s): T7S, R3E; T7S, R4E

USGS Quad(s): DOUBLE PEAK; INDIAN BUTTE

County of Yavapai, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Copyright:© 2013 National Geographic Society, i-cubed
Esri, USGS

Novis Renewables Silver Reef

Web Map As Submitted By User



Buffered Project Boundary

Project Boundary

Project Size (acres): 830.62

Lat/Long (DD): 32.8144 / -112.0062

County(s): Pinal

AGFD Region(s): Yuma

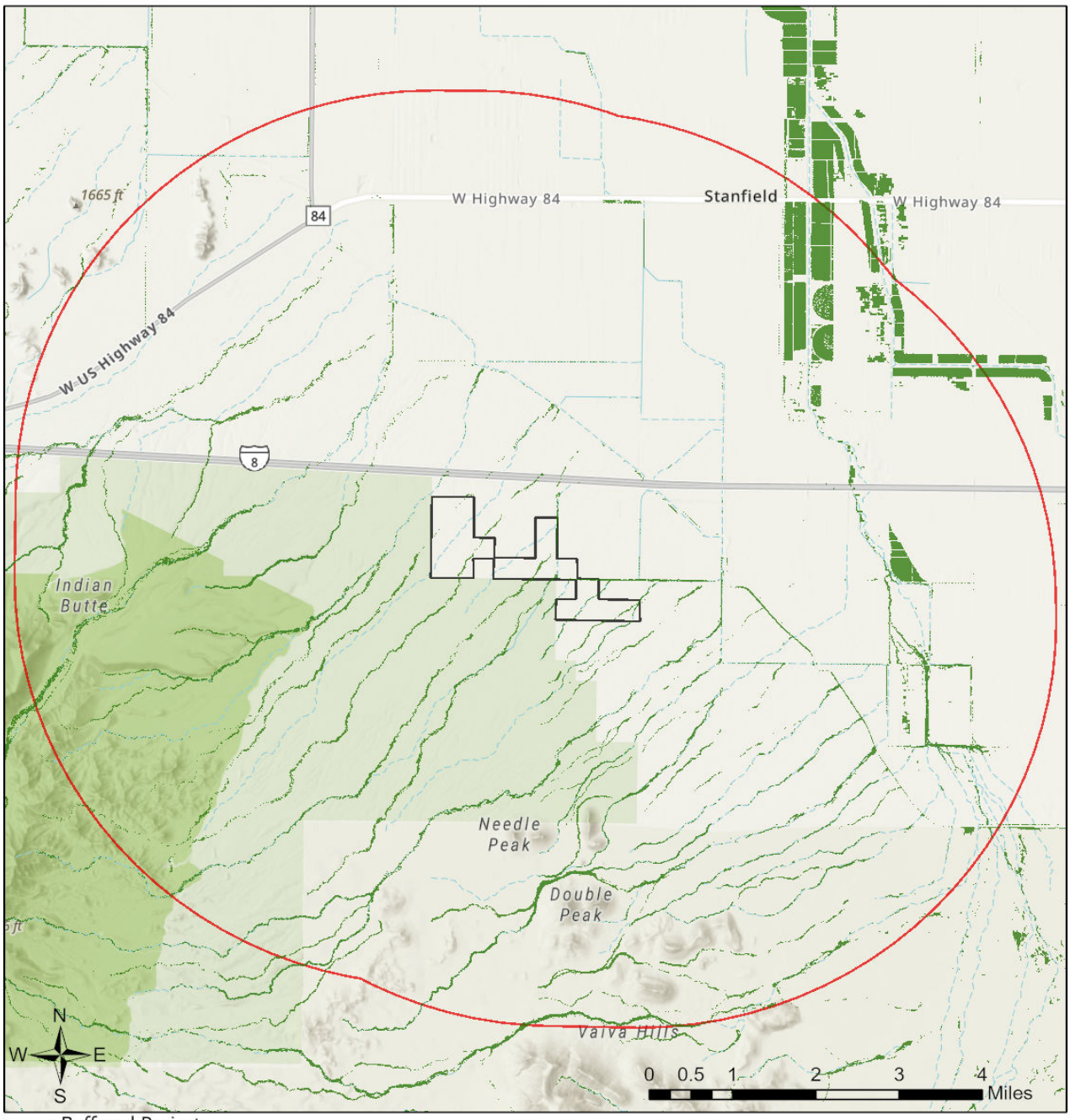
Township/Range(s): T7S, R3E; T7S, R4E

USGS Quad(s): DOUBLE PEAK; INDIAN BUTTE

Esri, NASA, NGA, USGS

Novis Renewables Silver Reef

Important Areas



- Buffered Project Boundary
- Project Boundary
- Important Bird Areas
- Critical Habitat
- Pinal County Riparian
- Wildlife Connectivity

Project Size (acres): 830.62

Lat/Long (DD): 32.8144 / -112.0062

County(s): Pinal

AGFD Region(s): Yuma

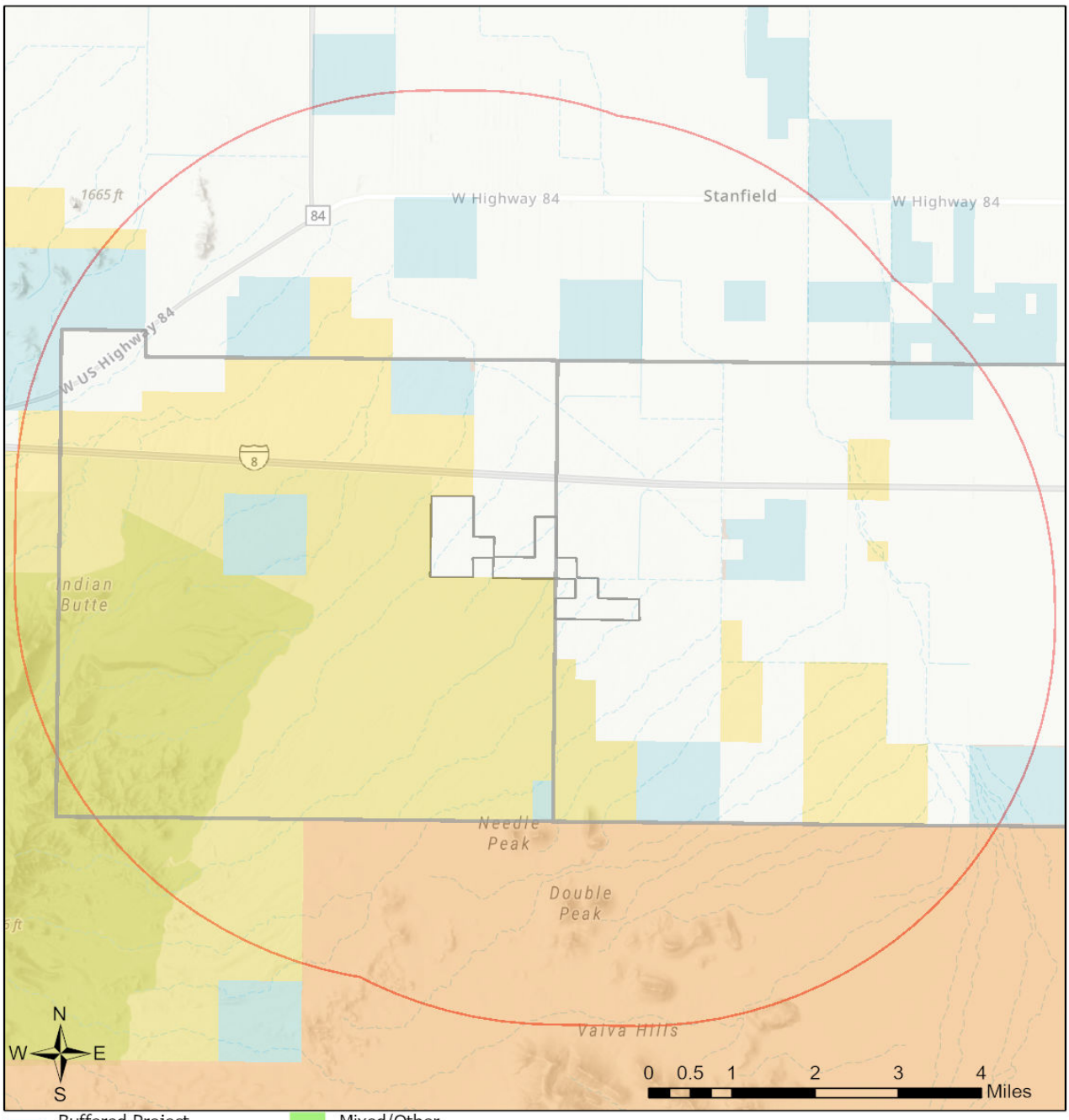
Township/Range(s): T7S, R3E; T7S, R4E

USGS Quad(s): DOUBLE PEAK; INDIAN BUTTE

Esri, NASA, NGA, USGS
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

Novis Renewables Silver Reef

Township/Ranges and Land Ownership



- Buffered Project Boundary
- Project Boundary
- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State & Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge
- Township/Ranges

Project Size (acres): 830.62

Lat/Long (DD): 32.8144 / -112.0062

County(s): Pinal

AGFD Region(s): Yuma

Township/Range(s): T7S, R3E; T7S, R4E

USGS Quad(s): DOUBLE PEAK; INDIAN BUTTE

Esri, NASA, NGA, USGS
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

Special Status Species Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Antilocapra americana sonoriensis	Sonoran Pronghorn	LE,XN		S		1
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		2
Chaetodipus baileyi	Bailey's Pocket Mouse					2
Chionactis annulata	Resplendent Shovel-nosed Snake					
Falco sparverius	American Kestrel					2
Incilius alvarius	Sonoran Desert Toad					2
Lepus alleni	Antelope Jackrabbit					2
Mammillaria thornberi	Thornber Fishhook Cactus				SR	

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Riparian Area	Riparian Area					

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Anaxyrus retiformis	Sonoran Green Toad			S		2
Artemisiospiza nevadensis	Sagebrush Sparrow					3
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		2
Auriparus flaviceps	Verdin					2
Buteo regalis	Ferruginous Hawk	SC		S		2
Buteo swainsoni	Swainson's Hawk					2
Calypte costae	Costa's Hummingbird					2
Campylorhynchus brunneicapillus	Cactus Wren					2
Charadrius montanus	Mountain Plover	SC				2
Chilomeniscus cinctus	Variable Sandsnake					2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1
Colaptes chrysoides	Gilded Flicker			S		2
Columbina inca	Inca Dove					2
Empidonax wrightii	Gray Flycatcher					2
Falco mexicanus	Prairie Falcon					2
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1
Falco sparverius	American Kestrel					2
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1
Incilius alvarius	Sonoran Desert Toad					2

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Lanius ludovicianus	Loggerhead Shrike	SC				2
Lasiurus xanthinus	Western Yellow Bat		S			2
Macrotus californicus	California Leaf-nosed Bat	SC		S		2
Megascops kennicottii	Western Screech-owl					2
Melanerpes uropygialis	Gila Woodpecker					2
Melospiza lincolnii	Lincoln's Sparrow					2
Micrathene whitneyi	Elf Owl					3
Myotis velifer	Cave Myotis	SC		S		2
Myotis yumanensis	Yuma Myotis	SC				2
Neotamias cinereicollis	Gray-collared Chipmunk					2
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					2
Passerculus sandwichensis	Savannah Sparrow					2
Phrynosoma solare	Regal Horned Lizard					2
Smilisca fodiens	Lowland Burrowing Treefrog			S		2
Spizella breweri	Brewer's Sparrow					2
Tadarida brasiliensis	Brazilian Free-tailed Bat					2
Toxostoma bendirei	Bendire's Thrasher					2
Toxostoma lecontei	LeConte's Thrasher			S		2

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Odocoileus hemionus	Mule Deer					
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Energy Production/Storage/Transfer, Energy Production (generation), photovoltaic solar facility (new/expansion)

Project Type Recommendations:
During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. Use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species affected by lighting. All lighting should be shielded, canted, or cut to ensure that light reaches only areas needing illumination.

Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at https://www.invasivespeciesinfo.gov/unitedstates/az.shtml and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at https://imap.natureserve.org/imap/services/page/map.html.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select “See What’s Here” for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

For any powerlines built, proper design and construction of the transmission line is necessary to prevent or minimize risk of electrocution of raptors, owls, vultures, and golden or bald eagles, which are protected under state and federal laws. Limit project activities during the breeding season for birds, generally March through late August, depending on species in the local area (raptors breed in early February through May). Conduct avian surveys to determine bird species that may be utilizing the area and develop a plan to avoid disturbance during the nesting season. For underground powerlines, trenches should be covered or back-filled as soon as possible. Incorporate escape ramps in ditches or fencing along the perimeter to deter small mammals and herpetofauna (snakes, lizards, tortoise) from entering ditches. In addition, indirect affects to wildlife due to construction (timing of activity, clearing of rights-of-way, associated bridges and culverts, affects to wetlands, fences) should also be considered and mitigated.

Based on the project type entered, coordination with U.S. Fish and Wildlife Service (Migratory Bird Treaty Act) may be required (https://www.fws.gov/office/arizona-ecological-services).

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.

Project Location and/or Species Recommendations:
HDMS records indicate that one or more native plants listed on the **Arizona Native Plant Law and Antiquities Act** have been documented within the vicinity of your project area. Please contact:
Arizona Department of Agriculture
1688 W Adams St.
Phoenix, AZ 85007
Phone: 602.542.4373
https://agriculture.az.gov/sites/default/files/Native%20Plant%20Rules%20-%20AZ%20Dept%20of%20Ag.pdf starts on page 44

This review has identified **riparian areas** within the vicinity of your project. During the planning stage of your project, avoid, minimize, or mitigate any potential impacts to riparian areas identified in this report. Riparian areas play an important role in maintaining the functional integrity of the landscape, primarily by acting as natural drainages that convey water through an area, thereby reducing flood events. In addition, riparian areas provide important movement corridors and habitat for fish and wildlife. Riparian areas are channels that contain water year-round or at least part of the year. Riparian areas also include those channels which are dry most of the year, but may contain or convey water following rain events. All types of riparian areas offer vital habitats, resources, and movement corridors for wildlife. The Pinal County Comprehensive Plan (i.e. policies *6.1.2.1* and *7.1.2.4*), Open Space and Trails Master Plan, Drainage Ordinance, and Drainage Design Manual all identify riparian area considerations, guidance, and policies. Guidelines to avoid, minimize, or mitigate impacts to riparian habitat can be found at https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/. Further consultation with the Arizona Game and Fish Department and Pinal County may be warranted.

HDMS records indicate that **Western Burrowing Owls** have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at https://www.azgfd.com/wildlife-conservation/conservation-and-endangered-species-programs/burrowing-owl-management/.

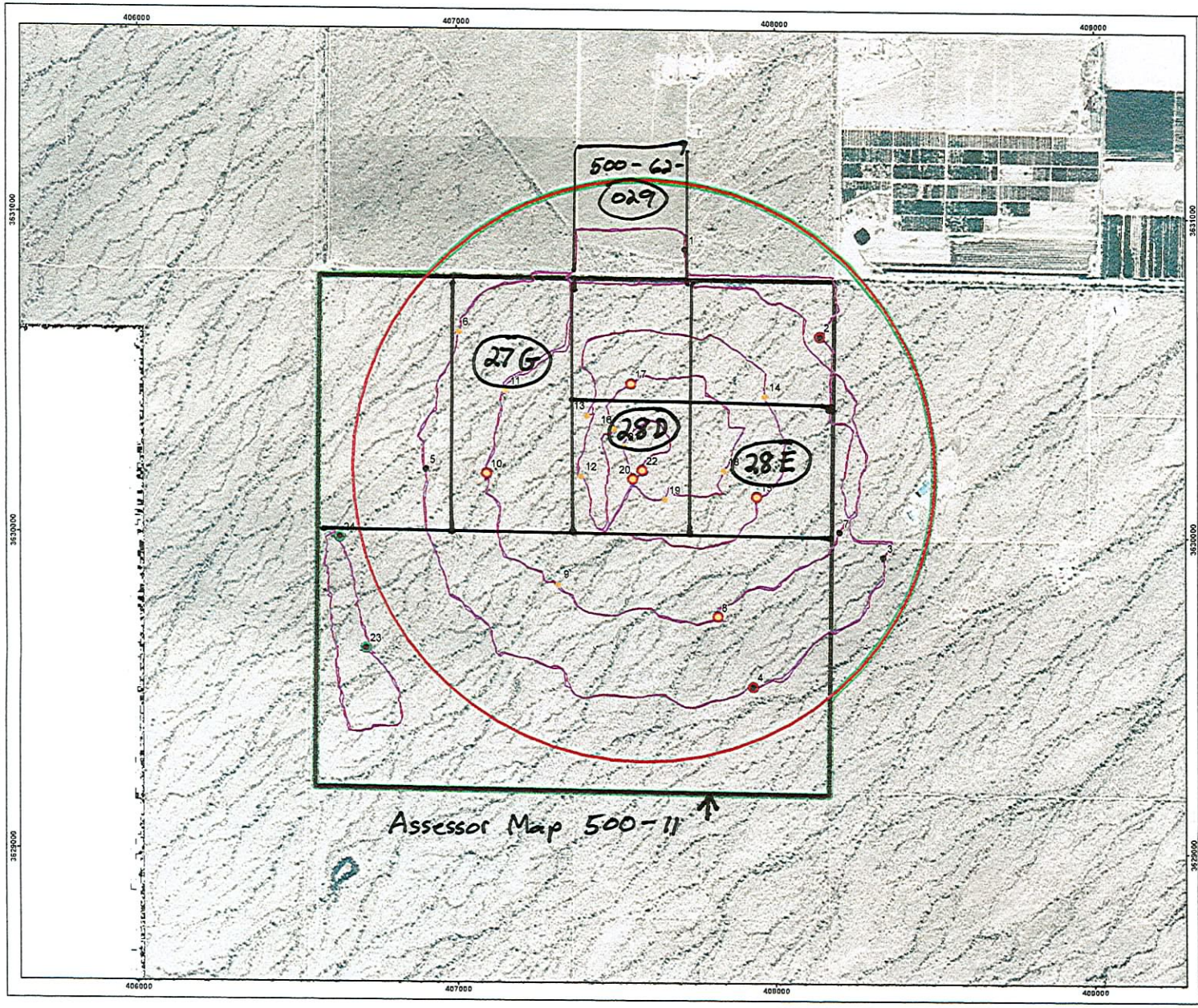


Figure ES.1

General Site Overview
Williams Field Bomb Target Range #12
FUDS Property # J09AZ071301

Pinal County, Arizona

Legend

- 8 Munitions Debris Field Observation Location
- 3 Field Observation Location
- Biased Soil Sample Location
- Ambient Soil Sample Location
- MRS 01 Williams Field Bomb Target # 12
- Site Boundary (Original DoD Target Property)
- FUDS Eligible Boundary
- Qualitative Reconnaissance Track

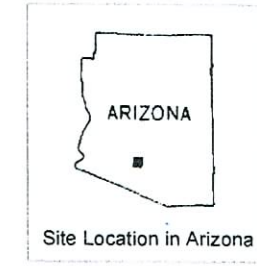


Image: 2006 Orthophotos
Projection: UTM Zone 12 NAD83, Map Units in Meters

300 150 0 300 Meters

N

PARSONS	U.S. ARMY SOUTH PACIFIC DIVISION RANGE SUPPORT CENTER
DESIGNED BY BT	General Site Overview
DRAWN BY BT	
CHECKED BY DS	SCALE As Shown — PROJECT NUMBER 744653.84104
SUBMITTED BY DS	DATE September 2008 — PAGE NUMBER ES-5

FINAL

Site Inspection Report
Williams Field
Bomb Target Range #12
Pinal County, Arizona

U.S. Army Corps of Engineers
Southwest IMA Region

FUDS Project No. J09AZ071301
Contract: W912DY-04-D-0005
Task Order: 0009



Prepared For:
U.S. Army Corps of Engineers, Los Angeles District
915 Wilshire Blvd., Suite 15018
Los Angeles, California 90017-3401
and
U.S. Army Corps of Engineers
South Pacific Division Range Support Center

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5390 Triangle Parkway, Suite 100
Norcross, Georgia 30092

January 2009

The views, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other documentation.

Janet Napolitano
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

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(602) 771-2300 • www.azdeq.gov

Stephen A. Owens
Director

January 12, 2009
FPU 09-123

U.S. Army Corps of Engineers, Los Angeles District
ATTN: CESPL-PM-M Mr. Matthew Shun
915 Wilshire Blvd., Suite 15018
Los Angeles, CA 90017-3401

RE: FUDS MMRP ADEQ Review of *Draft-Final Site Inspection Report for Williams Field Bomb Target Ranges #12, Pinal County, Arizona* dated September 2008

Dear Mr. Shun:

ADEQ has reviewed the above referenced MMRP Site Inspection report for the Williams Bomb Target Range #12 and offer the following comments.

General Comment:

1. ADEQ considers the detection of TNT in two (2) samples and a field duplicate to be a significant discovery, yet it appears to be given the same status as the non-essential nutrient metals, which (with the possible exception of mercury) are commonly found in the highly mineralized areas of this region. This is unprecedented for a practice bomb target site and as such ADEQ considers this site to have an actual HE release.

2. It should be noted in the report that while low annual rainfall defines the Sonoran Desert, and evaporation far exceeds precipitation throughout the region, precipitation does occur during the summer and winter rainy seasons. Rainfall, especially during the summer monsoons, can be extremely heavy, with localized flooding of normally dry washes and streams. Also, infiltration does occur along these washes and streams. If significant potential sources or concentrations of mobile contaminants are discovered at the site, groundwater (protected by law for drinking water use throughout Arizona) and surface water and sediment will likely become an issue at the site.

Specific Comments:

1. Page ES-2, **ES.7** – The depth to groundwater beneath Williams BTR #12 is given as "at least 430 feet bgs". Please state the source of this information.

2. Page 2-1, **2.2.3 Demographics** – In both subsections 2.2.3.1 and 2.2.3.2 demographic or population data sources for "Pinal County, California" are cited. Please revise "California" to "Arizona".

3. Pages 7-1 through 7-3, **Summary and Conclusions** – This section should include a table listing all samples taken at the site (including any duplicates) and all significant analytical results (i.e., any apparently anomalous results or results exceeding any standards, health based guidance levels, etc.), along with the appropriate action levels.

4. Page 7-1, **7.1 Summary**–The text should be expanded to show the significance of finding the high explosive TNT at two locations at the site and what this implies regarding historic practices at the site and future investigation of the site.

5. Page 8-1, **Recommendations**- ADEQ agrees with the recommendation to continue to a Remedial Investigation/ Feasibility Study (RI/FS) with further munitions constituent (MC) evaluation focusing on lead, but would also include a focus on explosives and mercury.

If you have any questions or wish to discuss this letter, please feel free to call me at (602) 771-4197 or send an e-***mail to Stonebrink.Brian@azdeq.gov***

Sincerely,

Brian Stonebrink

Brian Stonebrink,
FUDS Project Manager
Federal Projects Unit,
Waste Programs Division, ADEQ

cc: Don Atkinson, Federal Projects Unit, Technical Support/ Hydrologist
Project and Reading File

Thank you for your review.

General Comments:

1. ADEQ considers the detection of TNT in two (2) samples and a field duplicate to be a significant discovery, yet it appears to be given the same status as the non-essential nutrient metals, which (with the possible exception of mercury) are commonly found in the highly mineralized areas of this region. This is unprecedented for a practice bomb target site and as such ADEQ considers this site to have an actual HE release.

Agree – The recommendation for the MRS at Williams Field BTR #12 has been revised to include further sampling for explosives during the RI/FS.

2. It should be noted in the report that while low annual rainfall defines the Sonoran Desert, and evaporation far exceeds precipitation throughout the region, precipitation does occur during the summer and winter rainy seasons. Rainfall, especially during the summer monsoons, can be extremely heavy, with localized flooding of normally dry washes and streams. Also, infiltration does occur along these washes and streams. If significant potential sources or concentrations of mobile contaminants are discovered at the site, groundwater (protected by law for drinking water use throughout Arizona) and surface water and sediment will likely become an issue at the site.

Comment noted.

Specific Comments:

1. Page ES-2, **ES.7** – The depth to groundwater beneath Williams BTR #12 is given as "at least 430 feet bgs". Please state the source of this information.

Agree – Groundwater depth information was obtained from the "Arizona Wells Database" on the Center for Sustainability of Semi-Arid Hydrology and Riparian Areas (SAHRA) website. The source of this information has been cited in the referenced paragraph.

2. Page 2-1, **2.2.3 Demographics** – In both subsections 2.2.3.1 and 2.2.3.2 demographic or population data sources for "Pinal County, California" are cited. Please revise "California" to "Arizona".

Agree – Revised as suggested.

3. Pages 7-1 through 7-3, **Summary and Conclusions** – This section should include a table listing all samples taken at the site (including any duplicates) and all significant analytical results (i.e., any apparently anomalous results or results exceeding any standards, health based guidance levels, etc.), along with the appropriate action levels.

Comment noted. Table 5.5 of Chapter 5 lists all samples collected at the site. Detections of explosives and metals are shown in bold font. Human health and

ecological screening levels are provided in Tables 6.5 and 6.6 of Chapter 6 for analytes carried over into the risk assessment.

4. Page 7-1, **7.1 Summary**–The text should be expanded to show the significance of finding the high explosive TNT at two locations at the site and what this implies regarding historic practices at the site and future investigation of the site.

Agree – The presence of TNT in the surface soil could indicate either that demolition bombs were used at the MRS or that Williams Field BTR #12 was swept during the March 1947 clearance activities (i.e. TNT may have been used for disposal activities; see Subchapter 2.3 of the SI Report). Text has been added to Subchapter 7.2, Paragraph 7.2.2.

5. Page 8-1, **Recommendations**- ADEQ agrees with the recommendation to continue to a Remedial Investigation/ Feasibility Study (RI/FS) with further munitions constituent (MC) evaluation focusing on lead, but would also include a focus on explosives and mercury.

Agree – The recommendation for the MRS at Williams Field BTR #12 has been revised to include further sampling for explosives during the RI/FS. However, mercury was not detected above the human health or ecological screening values. There is no unacceptable risk due to exposure to mercury to human or ecological receptors in the surface soil. Therefore, additional sampling for mercury is not recommended during the RI/FS.

CONTRACTOR STATEMENT OF INDEPENDENT TECHNICAL REVIEW

Parsons has completed the Final Site Inspection Report for the Williams Field Bomb Target Range #12, Pinal County, Arizona. Notice is hereby given that an independent technical review has been conducted that is appropriate to the level of risk and complexity inherent in the project, as defined in the Quality Control Plan. During the independent technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions was verified. This included review of assumptions; methods, procedures, and material used in analyses; alternatives evaluated; the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing Corps policy.

Patti De La O Kam Burkwood

January 14, 2009

Study/Design Team Leader and Team Members

Debi Chapman

January 14, 2009

Independent Technical Review Team Leader

Significant concerns and the explanation of the resolution are as follows:

None

As noted above, all concerns resulting from independent technical review of the project have been considered.

Laura Kelly

January 14, 2009

Parsons Program Manager(s)

PARSONS
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January 14, 2009

U.S. Army Corps of Engineers, Los Angeles
District (CESPL)
ATTN: CESPL-PM-M (Mr. Matthew Shun)
915 Wilshire Blvd., Suite 15018
Los Angeles, CA 90017-3401
(213) 452-3976

Subject: Contract W912DY-04-D-0005, Delivery Order 0009
MMRP SI for SW Region –Final SI Report
Williams Field Bomb Target Range #12, Pinal County, AZ

Dear Mr. Shun:

Parsons has prepared this Final Site Inspection (SI) Report in accordance with the Performance Work Statement (PWS) to include the completed Munitions Response Site Prioritization Protocol (MRSPP). The MRSPP notification announcement was prepared in coordination with USACE, Los Angeles District (CESPL) Public Affairs Office (PAO) and the Project Manager (PM). It appeared in the agreed newspaper prior to the second (closeout) TPP Meeting held in the Arizona Department of Environmental Quality (ADEQ) office in Phoenix, Arizona on January 7, 2009. The comments received from the ADEQ during the second TPP Meeting have been incorporated into the Final SI Report as discussed at the meeting.

Two copies have been provided for your internal files. We have provided six additional copies for your distribution to the ADEQ and other key project stakeholders. We have simultaneously submitted single copies of this document to EM CX. Electronic copies have also been provided, including one to Lara Beasley and Rochelle Hance. Electronic copies have also been provided with the hard copies.

If you have any questions or comments, please contact me at (678) 969-2384 or (404) 606-0346 (cell) or the Project Manager (Ms. Laura Kelley) at (678) 969-2437.

Sincerely,

PARSONS



Don Silkebakken, P.E.
MMRP SI Program Manager

cc: Lara Beasley – 1 CD
R. Hance – 1 CD
Deborah Walker/ Brad McCowan (EM CX) – 1 copy/CD
Heidi Novotny (EM CX) – 1 CD
Patti De La O (Parsons Geographic Lead)
Laura Kelley (Parsons PM - Project File 744653.84104a)

U.S. Army Corps of Engineers
Southwest IMA Region

Final

Site Inspection Report
Williams Field Bomb Target Range #12
Pinal County, Arizona

FUDS Project No. J09AZ071301
January 2009

In Support of

FUDS MMRP Site Inspections Project

Prepared By:

PARSONS

5390 Triangle Parkway, Suite 100
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and

U.S. Army Corps of Engineers
South Pacific Division Range Support Center

Contract: W912DY-04-D-0005
Task Order: 0009

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ACRONYMS AND ABBREVIATIONS

AAF	Army Air Field
ADEQ	Arizona Department of Environmental Quality
AGFD	Arizona Game and Fish Department
AMA	Active Management Area
ASM	Arizona State Museum
ASR	Archive Search Report
AZ DWR	Arizona Department of Water Resources
AZ SHPO	Arizona State Historic Preservation Office
bgs	Below Ground Surface
BLM	Bureau of Land Management
BTR	Bomb Target Range
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESPL	USACE Los Angeles District
CFR	Code of Federal Regulations
CHE	Chemical Hazard Evaluation
CRREL	Cold Regions Research and Engineering Laboratory
CSEM	Conceptual Site Exposure Model
CSM	Conceptual Site Model
CWM	Chemical Warfare Materiel
CZMP	Coastal Zone Management Program
DERP	Defense Environmental Restoration Program
DMM	Discarded Military Munitions
DoD	Department of Defense
DQO	Data Quality Objective
EcoSSL	Ecological Soil Screening Level
EHE	Explosive Hazard Evaluation
ER	Engineer Regulation
ESV	Ecological Screening Values
°F	Degrees Fahrenheit
FTL	Field Team Leader
FUDS	Formerly Used Defense Site
GIS	Geographic Information System
GPS	Global Positioning System
HDMS	Heritage Data Management System
HE	High Explosive
HHE	Health Hazard Evaluation
HQ	Hazard Quotient
HRS	Hazard Ranking System
IGD	Interim Guidance Document
INPR	Inventory Project Report
MC	Munitions Constituent

ACRONYMS AND ABBREVIATIONS (CONTINUED)

MD	Munitions Debris
MEC	Munitions and Explosives of Concern
mg/kg	milligram per kilogram
mm	millimeter
MMRP	Military Munitions Response Program
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
NAD	North American Datum
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NDAI	No Department of Defense Action Indicated
NHA	National Heritage Area
NHL	National Historic Landmark
NHP	National Heritage Program
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRHP	National Register of Historic Places
NRIS	National Register Information System
NTCRA	Non Time-Critical Removal Action
NWI	National Wetlands Inventory
NWRS	National Wildlife Refuge System
Parsons	Parsons Corporation
PQL	Practical Quantitation Limit
PRG	Preliminary Remediation Goal
PSAP	Programmatic Sampling and Analysis Plan
PWP	Programmatic Work Plan
PWS	Performance Work Statement
QA	Quality Assurance
QC	Quality Control
QR	Qualitative Reconnaissance
RAC	Risk Assessment Code
RI/FS	Remedial Investigation/Feasibility Study
RSL	Regional Screening Level (prepared by USEPA)
ROE	Right of Entry
SAHRA	Semi-Arid Hydrology and Riparian Areas
SI	Site Inspection
SLRA	Screening Level Risk Assessment
SLERA	Screening Level Ecological Risk Assessment
SRL	Soil Remediation Levels
SS-WP	Site-Specific Work Plan
SVT	Site Visit Team
T&E	Threatened and Endangered

ACRONYMS AND ABBREVIATIONS (CONTINUED)

TCRA	Time-Critical Removal Action
TESS	Threatened and Endangered Species System
TNT	2,4,6-Trinitrotoluene
TPP	Technical Project Planning
U.S.	United States
USACE	U.S. Army Corps of Engineers
USAESCH	USACE Engineering and Support Center, Huntsville
USC	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UTM	Universal Transverse Mercator
UXO	Unexploded Ordnance

GLOSSARY OF TERMS

Anomaly	Any item that deviates from the expected subsurface ferrous and non-ferrous material at a site (pipes, power lines, etc.).
Discarded Military Munitions (DMM)	Military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. The term does not include UXO, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of consistent with applicable environmental laws and regulations.
Inhabited Structure	Permanent or temporary structures, other than military munitions-related structures, that are routinely occupied by one or more persons for any portion of a day.
Magnetometer	An instrument for measuring the strength of a magnetic field; used to detect buried iron and other metal objects.
Military Munitions	All ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of the Department of Defense, the Coast Guard, the Department of Energy, and the National Guard. The term includes confined gaseous, liquid, and solid propellants; explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives and chemical warfare agents; chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges; and devices and components thereof.
Munitions and Explosives of Concern (MEC)	Military munitions that may pose unique explosives safety risks, including UXO, DMM, or MC present in high enough concentrations to pose an explosive or other health hazard.

GLOSSARY OF TERMS (CONTINUED)

Munitions Constituents (MC)	Any materials originating from unexploded ordnance, DMM, or other military munitions, including explosive and nonexplosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.
Munitions Debris (MD)	Remnants of munitions (for example, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal.
Munitions Response	Response actions, including investigation, removal actions, and remedial actions, to address the explosive safety, human health, or environmental risks presented by unexploded ordnance, DMM, or MC, or to support a determination that no removal or remedial action is required.
Munitions Respouse Site (MRS)	A discrete location that is known to require a munitions response.
Projectile	Object projected by an applied force and continuing in motion by its own inertia. This includes bullets, bombs, shells, grenades, guided missiles, and rockets.
Unexploded Ordnanee (UXO)	Military munitions that have been primed, fused, armed, or otherwise prepared for action; that have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installation, personnel, or material; and that remain unexploded whether by malfunction, design, or any other cause.

EXECUTIVE SUMMARY

ES.1 The objective of the site inspection (SI) for the Williams Field Bomb Target Range (BTR) #12 was to determine whether any munitions response site (MRS) warrants further evaluation under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) beyond the SI stage. The recommendation for an MRS could include further evaluation as part of a Remedial Investigation/Feasibility Study (RI/FS), Removal Action (Time Critical Removal Action [TCRA] or Non Time Critical Removal Action [NTCRA]), or no Department of Defense (DoD) Action Indicated (NDAI). There is one MRS at the Williams Field BTR #12, defined as "MRS01 – Williams Field Bomb Target #12".

ES.2 The SI of the Williams Field BTR #12, which operated as a practice bombing target, was performed to evaluate the evidence for the presence of munitions and explosives of concern (MEC), munitions debris (MD), and munitions constituents (MC) at the site. To accomplish this objective, qualitative reconnaissance (QR) and MC sampling were performed on June 23 and 24, 2008.

ES.3 The Technical Project Planning (TPP) Team agreed to the SI Technical Approach at the November 28, 2007 TPP meeting. It was proposed during the TPP process and documented in the Final Site-Specific Work Plan (SS-WP) Addendum (Parsons, 2008b) that a QR and the collection of surface soil samples would be sufficient to meet the SI project objectives.

ES.4 The SI evaluation included performing approximately 10.06 miles of QR within the MRS. In addition, 10 surface soil samples and one associated field duplicate sample were collected. Locations of eight soil samples and the associated field duplicate were selected to represent areas with the highest likelihood of the presence of MEC or MC contamination (biased samples). Two of the surface soil sample locations were selected to represent ambient conditions at Williams Field BTR #12. Figure ES.1 shows the actual QR path and surface soil sample locations.

ES.5 All surface soil samples were analyzed by TestAmerica for explosives and selected metals. ***Explosives (2,4,6-Trinitrotoluene [TNT]) were detected in biased surface soil samples W12-MRS01-SS-06-05 and W12-MRS01-SS-06-08, and the biased field duplicate sample.*** Metals were detected in all 10 surface soil samples and the field duplicate soil sample.

ES.6 The analytical results of the samples were evaluated to determine if there is MC contamination in the surface soil at the MRS01 – Williams Field Bomb Target #12. The results of the MC evaluation show that ***there is potential MC contamination in the***

surface soil at the MRS01 – Williams Field Bomb Target #12, in particular TNT and the non-essential nutrient metals aluminum, antimony, barium, copper, lead, mercury, and zinc. Both a MC Screening Level Risk Assessment (SLRA) and a Screening Level Ecological Risk Assessment (SLERA) were conducted for these MC.

ES.7 The primary exposure pathway at MRS01 – Williams Field Bomb Target #12 is surface soil. This pathway is complete at the MRS01 – Williams Field Bomb Target #12 for human and ecological receptors. The air exposure pathway is complete for human receptors and potentially complete for ecological receptors. The site receives minimal rainfall. There are no perennial surface water bodies at the MRS01 – Williams Field Bomb Target #12. There are several dry washes (or intermittent streams) that traverse the site from southwest to the northeast (Google Earth, 2008). Natural drainage occurs through these washes. These washes are dry in times of no precipitation. Rainfall in the Williams Field BTR #12 area is limited. It is unlikely that MC in soil at the MRS01 - Williams Field Bomb Target #12 would migrate to the underlying groundwater, due the depth to groundwater (at least 430 feet bgs) and the arid conditions at the site. Therefore, the groundwater migration pathway at the Williams Field BTR #12 is incomplete.

ES.8 Based on the results of the SLRA, ***exposure to MC in the surface soil at the MRS01 – Williams Field Bomb Target #12 does not pose an unacceptable risk to human health.*** Based on the results of the SLERA, ***there is a potential for an unacceptable ecological risk due to exposure to MC (lead) in the surface soil at MRS01 – Williams Field Bomb Target #12.*** However, it should be noted that the maximum detected concentration of lead in the surface soil at the MRS01 – Williams Field Bomb Target #12 only slightly exceeds its respective ESV and its respective background concentrations.

ES.9 ***MD from M38A2 100-lb practice bombs and M1A1 spotting charges were found in the MRS. MD from several hundred M38A2 100-lb practice bombs were found at the target center. The SVT observed graded rings with wooden debris (possible target remnants) at the target center. There were no other visual indicators (earthen berms, distressed vegetation, stained soil, or ground scars) of suspect areas identified during the QR. There was no visual evidence of the use of demolition bombs. No MEC was observed during the SI field activities.*** The presence of MD has historically been reported at the Williams Field BTR #12.

ES.10 Based on the Archives Search Report (ASR) (USACE, 1998a) and ASR Supplement (USACE, 2004b), the munitions known to have been used at MRS01 – Williams Field Bomb Target #12 are M38A2 100-lb practice bombs and their associated spotting charges (M1A1, M3, and M5). The MkI 100-lb demolition bomb was not known to have been used at the MRS01 – Williams Field Bomb Target #12 but is included as a potential munition based on information provided in the ASR. The ASR (USACE, 1998a) states that in July 1942 a request was made for a storage bunker to store 250,000 lbs of black powder and 210 100-lb demolition bombs. The ASR does not indicate which range the bombs were to be used or which model was used. The MkI 100-

lb demolition bomb was selected as a potential munition because it was a popular bomb for the 1918 – 1944 era. TNT, an MC of the MkI 100-lb demolition bomb was detected in the surface soil samples collected during the SI. The presence of TNT in the surface soil may indicate that this munition was used at Williams Field BTR #12. The presence of TNT may also indicate that Williams Field BTR #12 was the sixth range that was swept during the clearance activities conducted in March 1947 (Subchapter 2.3).

ES.11 An MEC risk evaluation was conducted for MRS01 – Williams Field Bomb Target #12. Based on the qualitative MEC risk evaluation, there is the possibility that human receptors might come into contact with explosively hazardous MEC at MRS01 - Williams Field Bomb Target #12. Therefore, there is the potential for an explosive safety risk at this MRS. However, immediate removal action for MEC is not warranted at this time. Further investigation is needed to conclusively determine the nature of potential MEC hazards within the MRS.

ES.12 Based on analytical results and the MD identified within the MRS to date, an RI/FS with further MC evaluation for explosives and possibly lead in surface soil is recommended. Because lead only slightly exceeds its respective background concentration and ecological screening value (ESV), the RI/FS TPP Team should evaluate the need for further MC sampling for this MC metal. Table ES.1 summarizes the recommendation for the MRS.

Table ES.1
Recommendation Summary

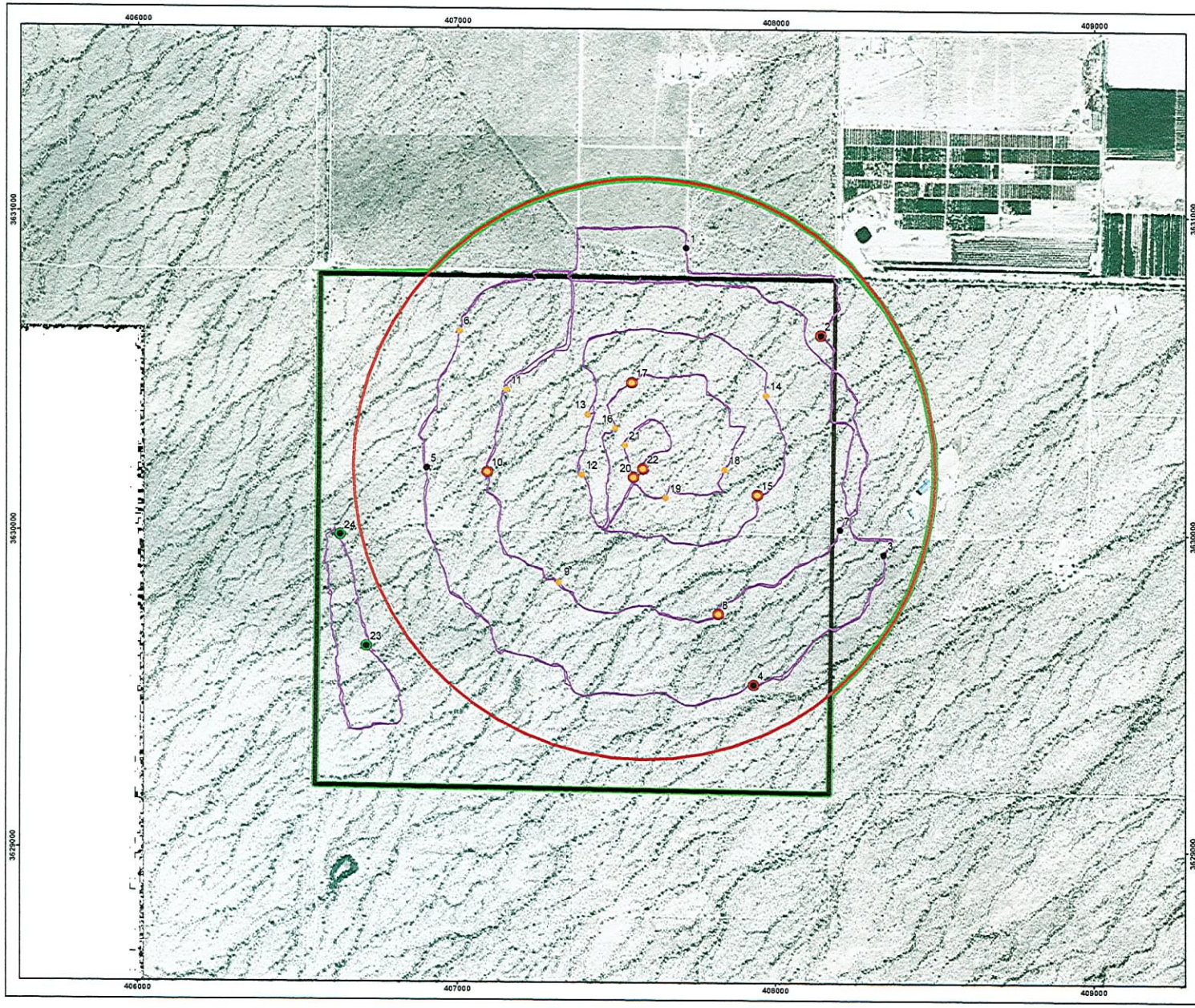
Munitions Response Site	Acreage	Munitions and Explosives of Concern and/or Munitions Debris Assessment (1)	Munitions Constituent Assessment (2)	Recommendation
MRS01 – Williams Field Bomb Target #12	649	Yes MD from M38A2 100-lb practice bombs and M1A1 spotting charges observed during the 2008 SI. MD found during previous site visits.	Yes Non-essential nutrient MC metals contamination exists in the surface soil at the MRS, in particular aluminum, antimony, barium, copper, lead, mercury, and zinc. Contamination from TNT, an MC of the MkI demolition bomb, also exists in the surface soil at the MRS. There is no unacceptable risk expected for human receptors from exposure to the MC metals or TNT. Lead may pose a risk to ecological receptors.	RI/FS with further MC evaluation, focusing on explosives and possibly lead. Immediate removal action for MEC is not warranted.

(1) "Yes" in this column indicates confirmed MEC or MD presence indicative of potential MEC presence, resulting in an RI/FS recommendation for the MRS.
(2) "Yes" in this column indicates confirmed MC presence at levels indicating a potential elevated risk to human health or ecological receptors, resulting in a recommendation for further MC sampling during an RI/FS.

Figure ES.1

General Site Overview
Williams Field Bomb Target Range #12
FUDS Property # J09AZ071301

Pinal County, Arizona



Legend

- Munitions Debris Field Observation Location
- Field Observation Location
- Biased Soil Sample Location
- Ambient Soil Sample Location
- MRS 01 Williams Field Bomb Target # 12
- Site Boundary (Original DoD Target Property)
- FUDS Eligible Boundary
- Qualitative Reconnaissance Track



Site Location in Arizona

N

Image: 2006 Orthophotos
Projection: UTM Zone 12 NAD83, Map Units in Meters

300 150 0 300 Meters

PARSONS	U.S. ARMY SOUTH PACIFIC DIVISION RANGE SUPPORT CENTER

DESIGNED BY: BT	General Site Overview		
DRAWN BY: BT			
CHECKED BY: DS	SCALE: As Shown	PROJECT NUMBER: 744653.84104	
SUBMITTED BY: DS	DATE: September 2008	PAGE NUMBER: ES-5	
	FILE: X:\GIS\Site_inspections_sw\Maps\williamsfield_az\ FigES_1_fr12.mxd		

CHAPTER 1
INTRODUCTION

1.1 BACKGROUND

1.1.1 Parsons Corporation (Parsons) received Contract No. W912DY-04-D-0005, Task Order No. 0009, from the United States Army Corps of Engineers (USACE), Engineering and Support Center, Huntsville (USAESCH) to perform a Site Inspection (SI) at the Williams Field Bomb Target Range (BTR) #12. The Williams Field BTR #12 is located approximately 14 miles southwest of Casa Grande, Arizona in Pinal County (Figure 1.1).

1.1.2 The Williams Field BTR #12 was used from 1942 to 1946 for practice bombing (USACE, 1998a). The actual date of disposal is unknown. Known improvements at Williams Field BTR #12 include construction of an aiming circle (USACE, 1998a). Historical documents and other evidence indicate that practice bombs, demolition bombs, and aircraft parachute flares (M8A1) may have been used at the site.

1.1.3 The Williams Field BTR #12 has been identified as being Formerly Used Defense Sites (FUDS) eligible and project number J09AZ071301 has been assigned. There is one munitions response site (MRS) within Williams Field BTR #12: the MRS01 – Williams Field Bomb Target #12. The coordinates for the MRS are listed in Table 1.1. The coordinates are in meters (Universal Transverse Mercator [UTM] North American Datum [NAD] 83). The MRS is designated as 649 acres.

Table 1.1
Williams Field Bomb Target Range #12 Coordinates

MRS	X-Coordinate (meters)	Y-Coordinate (meters)
MRS01 – Williams Field Bomb Target #12	407523.44	3630205.93

1.2 PROJECT OBJECTIVES

1.2.1 The Department of Defense (DoD) has established the Military Munitions Response Program (MMRP) to address DoD sites suspected of containing munitions and explosives of concern (MEC) or munitions constituents (MC). Under the MMRP, the USACE is conducting environmental response activities at FUDS for the Army, DoD's Executive Agent for the FUDS program.

1.2.2 Pursuant to USACE's Engineer Regulation (ER) 200-3-1 (USACE, 2004a) and the Management Guidance for the Defense Environmental Response Program (DERP) (Office of the Deputy Under Secretary of Defense (Installations and

Environment), September 2001), USACE is conducting FUDS response activities in accordance with the DERP statute (10 United States Code [USC] 2701 et seq.), the Comprchensive Environmental Responsc, Compensation, and Liability Act of 1980 (CERCLA) (42 USC §9620), Executive Orders 12580 and 13016, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 Code of Federal Regulations [CFR] Part 300). As such, USACE is conducting remedial SIs, as set forth in the NCP, to evaluate hazardous substance releases or threatened releases from eligible FUDS. This SI is intended to assess the potential for MEC/MC as related to munitions use at the identified FUDS. If during the course of performance of this SI other environmental concerns such as those relating to hazardous and toxic waste are encountered, the Regional USACE office will be informed immediately as to those findings.

1.2.3 While not all MEC/MC constitute CERCLA hazardous substances, pollutants, or contaminants, the DERP statute provides DoD the authority to respond to releases of MEC/MC, and DoD policy states that such responses shall be conducted in accordance with CERCLA and the NCP.

1.2.4 The primary objective of the MMRP SI is to determine whether an MRS warrants further response action under CERCLA or not. The SI collects the minimum amount of information necessary to make this determination. Additionally, it (i) determines the potential need for a removal action; (ii) collects or develops additional data, as appropriate, for Hazard Ranking System (HRS) scoring by the U.S. Environmental Protection Agency (USEPA); and (iii) collects data, as appropriate, to characterize the release for effective and rapid initiation of the Remedial Investigation and Feasibility Study (RI/FS), if warranted. An additional objective of the MMRP SI is to collect the additional data necessary to complete the Munitions Response Site Prioritization Protocol (MRSPP).

1.2.5 The SI was performed as a result of the Archives Search Report (ASR) (USACE, 1998a) and ASR Supplement completed by the USACE, St. Louis District (USACE, 2004b). Williams Field BTR #12 was determined as being used by the DoD and therefore eligible for the DERP–FUDS. All work adhered to the DERP for FUDS and relevant U.S. Army regulations and guidance for MEC programs. As specified in the task order, this report is prepared to summarize the SI sampling events and presents an accounting of the MEC/MC contamination identified on-site, if present.

1.3 PROJECT SCOPE

1.3.1 The SI for Williams Field BTR #12 evaluated potential MEC and MC presence. In general, the scope of work for Williams Field BTR #12 included Qualitative Reconnaissance (QR) and MC sampling. The QR and MC sampling was focused within the MRS. The Technical Project Planning (TPP) Team concurred that the SI data collection efforts would focus on screening for MC contamination in surface soil. If contamination was identified, then other environmental media could be evaluated as part of a subsequent RI/FS.

1.3.2 A total of 10 surface soil samples (and one associated field duplicate sample) werc collected and analyzed for explosives and selected metals. Eight of the surface soil

samples and the associated field duplicate sample were collected with maximum bias to coincide with locations most likely to display evidence of residual MC contamination (within the MRS and/or near munitions debris [MD]). The remaining two surface soil samples were collected from anticipated "non DoD impacted" areas to reflect ambient conditions at Williams Field BTR #12.

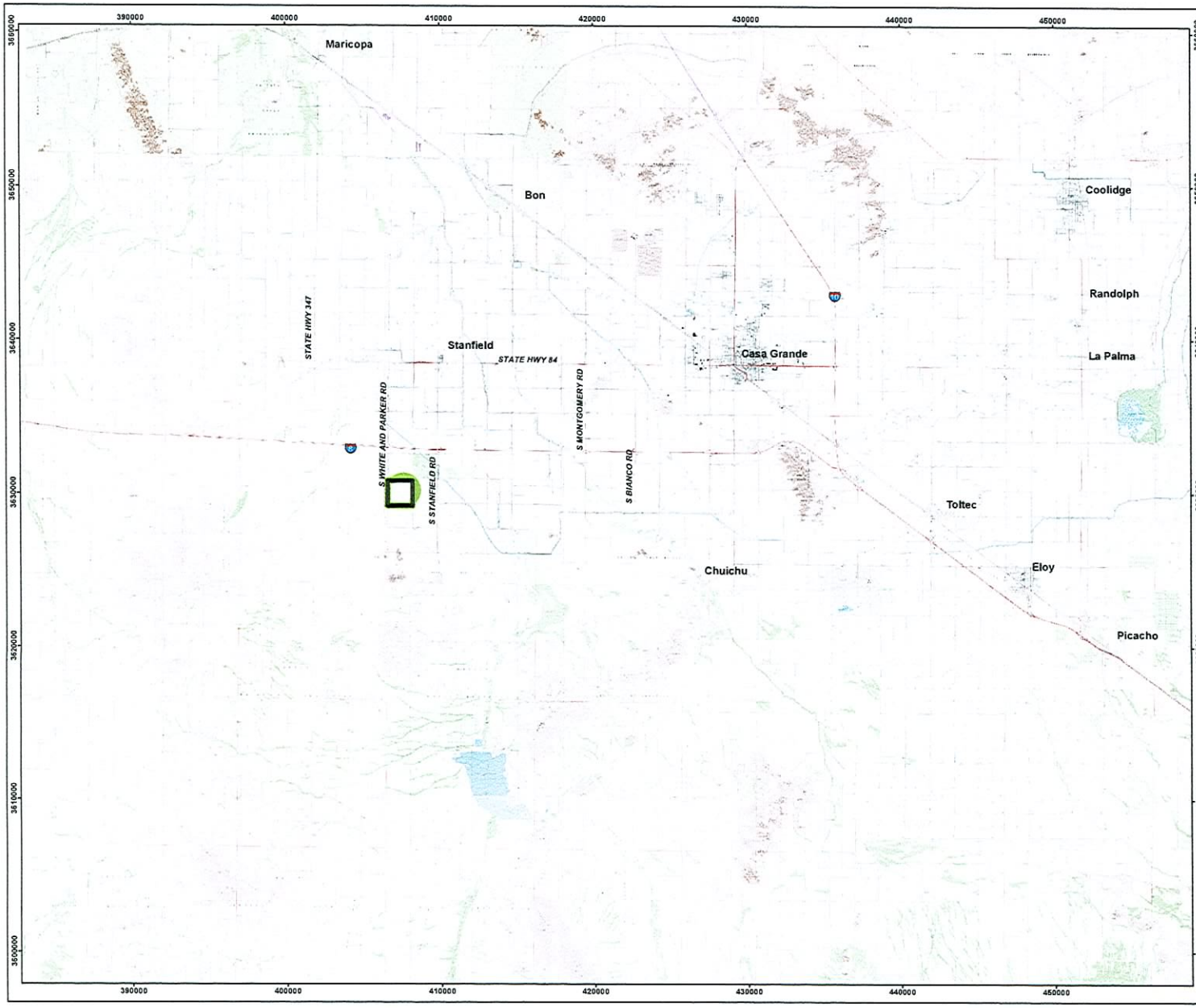


Figure 1.1

Site Location
Williams Field Bomb Target Range #12
FUDS Property # J09AZ071301

Pinal County, Arizona

Legend

- Site Boundary (Original DoD Target Property)
- FUDS Eligible Boundary



Site Location in Arizona

N

Image Source: USGS 7.5' Topo Quadrangles, 1981 - 1992
Projection: UTM Zone 12 NAD83, Map Units in Meters

6 3 0 6 Kilometers

PARSONS	U.S. ARMY SOUTH PACIFIC DIVISION RANGE SUPPORT CENTER
DESIGNED BY: BT	Site Location
DRAWN BY: BT	
CHECKED BY: DS	SCALE: As Shown — PROJECT NUMBER: 744653.84104
SUBMITTED BY: DS	DATE: September 2008 — PAGE NUMBER: 1-4
	FILE: X:\GIS\Site_inspections_swMaps\williamsfield_azt Fig1_1_tr12.mxd

CHAPTER 2
PROPERTY DESCRIPTION AND HISTORY

2.1 SITE DESCRIPTION

The Williams Field BTR #12 is located primarily in Section 19, Township 7 South, Range 4 East, approximately 14 miles southwest of Casa Grande, Arizona in Pinal County. Access is via West Connelly Road, southwest of the Interstate 8 and South Stanfield Road junction. The project boundaries are provided on Figure 2.1.

2.2 SITE LOCATION AND SETTING

2.2.1 Topography and Vegetation

2.2.1.1 The topography of the Williams Field BTR #12 slopes downward to the northeast with an elevation change of approximately 85 feet. The highest elevation at the site is 1,510 feet above mean sea level. Several unnamed washes, or wet weather creeks, run through the Williams Field BTR #12 and eventually drain into the Santa Rosa Canal to the northeast.

2.2.1.2 Vegetation in the area is sparse, consisting of low grasses and shrubs such as white or yellow brittlebush, foothill or blue paloverde, cane or snake cholla, creosotebush, white and triangle leaf bursage, and red brome grass (USACE, 1998a).

2.2.2 Significant Structures

An examination of satellite photography (Google Earth, 2008) indicates that there are currently between two to six inhabited structures within Williams Field BTR #12 and/or MRS01 – Williams Field Bomb Target #12. These structures appear to be residences and agricultural-related buildings. One house was observed within the MRS01 – Williams Field Bomb Target #12 during the 2008 SI field effort. There are more than 26 inhabited structures located within 2 miles of Williams Field BTR #12 and the MRS (Google Earth, 2008).

2.2.3 Demographics

2.2.3.1 The demographics information for Pinal County, Arizona was obtained from the U.S. Census Bureau website (http://quickfacts.census.gov/qfd/). The demographics information for Casa Grande, Arizona was obtained from the American Fact Finder Fast Access to Information link on the U.S. Census Bureau website (http://factfinder.census.gov/home/saff/main.html?_lang=en).

2.2.3.2 In 2000, the population of Casa Grande, Arizona (located about 14 miles northeast of Williams Field BTR #12), was 25,224. In 2000, Pinal County, Arizona had a population of 179,727, approximately 33.5 people per square mile. Figure 2.2 show the approximate population for Williams Field BTR #12, based on the 2000 U.S. Census.

2.2.4 Current and Future Land Use

2.2.4.1 Based on information obtained from the ASR (USACE, 1998a) and Parsons, the entire site is privately owned. Most of the FUDS-eligible property is undeveloped desert land. The land north and east of the site has been developed for agricultural purposes. There are scattered residences and agricultural buildings in a radius approximately one half to three quarters of a mile from the target center. Information obtained during the TPP meeting indicates that portions of the Williams Field BTR #12 are residentially developed. Additional residential development of the site is anticipated.

2.2.4.2 Cow patties were observed during the 2008 SI field effort, indicating that portions of the Williams Field BTR #12 may also be used seasonally for cattle grazing. Debris from human activity, including backpacks, clothing, water bottles, and more than 15 abandoned bicycles were scattered throughout the site during the SI field effort. Based on the type of debris, it is likely that the site is used by illegal immigrants traveling through the site.

2.3 SITE OWNERSHIP AND HISTORY

2.3.1 On June 22, 1942, Headquarters West Coast Air Force Training Center requested funds for the construction of 24 bomb targets for Williams Army Air Field (AAF). Headquarters Air Force Flying Training Command approved the request and forwarded it to the Army Air Forces. On August 8, 1942, the U.S. Engineer Office was awarded a contract for the construction of the Williams Field BTR #12, which was to be completed by August 31, 1942. The Williams Field BTR #12 was scheduled to have both a day and a night target, and a Roman numeral "XII" target marker. Other planned improvements at the Williams Field BTR #12 included 2.5 miles of graded roads, 26 acres of cleared areas, and 6,235 square yards of oiled stripes. Known improvements included construction of an aiming circle (USACE, 1998a).

2.3.2 Cadets in a Bombardier Training Program, based at Williams AAF, used these bombing ranges. On June 13, 1942, the first class of bombardier cadets arrived at Williams AAF. In February 1943, the Army Air Forces transferred the training program to New Mexico, and only combat pilots trained at Williams AAF until the end of the year. Headquarters Williams Field recommended the Williams Field BTR #12 be placed in excess status since the range had not been used since July 1943, but the date of disposal is unknown (USACE, 1998a).

2.3.3 A letter dated July 2, 1942 to the Commanding General, Army Air Forces requested a barricaded igloo at Williams AAF for the storage of approximately 250,000 pounds of black powder and 210 100-lb demolition bombs. It does not state at which range the bombs were to be used, or which model was used. No historical evidence was found suggesting that the Williams Field BTR #12 was used as a demolition target (USACE, 1998a).

2.3.4 A dedudding report, dated April 21, 1947, from the 9800 TSU Detachment describes clearances of six unspecified Williams Field Bombing Target Ranges located in Pinal County, Arizona. The dedudding operations began on March 10, 1947. The operations consisted of search crews carrying picks and shovels in order to check out

buried debris. Each of the six ranges was swept a minimum of two times. On some targets, piles of supposedly expended bombs were found to contain unexploded bombs. Bomb disposal personnel disposed of duds by using a sufficient charge of Composition C-3 or TNT. A total of 69 M38A2 practice bombs containing all or portions of their original spotting charge were found on the six ranges (USACE, 1998a). The ASR for another Williams Field Bombing Range (Williams Field BTR #2, USACE, 1998b) indicated that a Certificate of Clearance was issued in 1948 by USACE, Los Angeles District (CESPL). The Certificate of Clearance specified Ranges 2, 3, 4, 5, and 6 as part of the dedudding activities. The Certificate of Clearance indicated that all dangerous or explosive material was disposed (USACE, 1998a). It is unknown if the Williams Field BTR #12 was the sixth range that was swept during the clearance operations.

2.3.5 Based on information obtained from the ASR (USACE, 1998a) and Parsons, the entire site is privately owned.

2.4 SITE OPERATIONS AND WASTE CHARACTERISTICS

2.4.1 Munitions Response Site-Specific Descriptions/Operations

2.4.1.1 The description of the single MRS (MRS01 – Williams Field Bomb Target #12) is obtained from the 1998 ASR (USACE, 1998a) and the 2004 ASR Supplement (USACE, 2004b).

2.4.1.2 The MRS at the Williams Field BTR #12 consists of 649 acres and was used as a practice bombing target. Known improvements at the site include the construction of an aiming circle. A large amount of practice bomb debris was found at the target center as well as scattered throughout the area during a site visit conducted in support of the ASR in 1996. Historical documents and evidence on Williams Field BTR #12 indicate that the following munitions were used at this site: practice bombs (M38A2) and their associated signals (M1A1, M3, and M5).

2.4.1.3 The ASR (USACE, 1998a) states that in July 1942 a request was made for a storage bunker to store 250,000 lbs of black powder and 210 100-lb demolition bombs. The ASR does not indicate which range the bombs were to be used or which model was used, but there is a potential that the demolition bombs were used at the Williams Field BTR #12. The MkI 100-lb demolition bomb was selected as a potential munition for the Williams Field BTR #12 because it was a popular bomb for the 1918 – 1944 era. Additionally, the M8A1 aircraft parachute flare was not known to have been used at the Williams Field BTR #12 but is considered a potential munition based on discoveries at other Williams Field Bomb Target Ranges and their historical usage at many of the Williams Field Bomb Target Ranges.

2.4.2 Regulatory Compliance

The USACE conducted the SI at the Williams Field BTR #12 as part of FUDS response activities pursuant to and in accordance with the guidance, regulations, and legislation listed in Chapter 1.

2.5 PREVIOUS INVESTIGATIONS

2.5.1 1994 Inventory Project Report

The INPR (USACE, 1994) was completed in March of 1994 by CESPL. The Inventory Project Report (INPR) established the site as a FUDS, established the preliminary site boundary, assigned the FUDS Project Number J09AZ071301, and recommended an investigation to determine further appropriate action on the potential MEC. The INPR assigned the Williams Field BTR #12 a Risk Assessment Code (RAC) score of 4, indicating low risk based on a marginal hazard severity and occasional probability.

2.5.2 1998 Archives Search Report

2.5.2.1 The ASR (USACE, 1998a) was completed by USACE, St. Louis District and documents a site visit, community interviews, and confirmation of MD findings. The ASR site visit was conducted in December 1996 to verify the information found in the historical records. The primary focus of the site visit was to locate evidence of ordnance and explosive surface presence. During the site visit, a large amount of practice bomb debris was found at the target center as well as scattered throughout the area. No craters, high explosive (HE) fragments or unexploded ordnance (UXO) were observed. The ASR concluded that there is an MEC presence on the Williams Field BTR #12, based on extensive archive searches, interviews, and the ASR site visit.

2.5.2.2 The ASR reports conventional ordnance was used at the Williams Field BTR #12. Research conducted for the ASR discovered no historical records indicating ordnance disposal on site. The ASR did not uncover any evidence of chemical warfare materials storage, usage or disposal at the Williams Field BTR #12.

2.5.3 2004 Archives Search Report Supplement

The ASR Supplement (USACE, 2004b) for the Williams Field BTR #12 provides additional site information and presents structured data on the target area. The ASR Supplement identified one MRS, the MRS01 – Williams Field Bomb Target #12, at the site. The MRS01 – Williams Field Bomb Target #12 encompasses 649 acres. Because a range safety fan is included when determining the MRS boundary and acreage, the boundary of the MRS falls outside the original property boundary and the MRS acreage exceeds that of the original property acreage. A RAC score of 4 was reported for the MRS01 – Williams Field Bomb Target #12 in the ASR Supplement, indicating low risk based on a *negligible* hazard severity and a *remote* hazard probability.

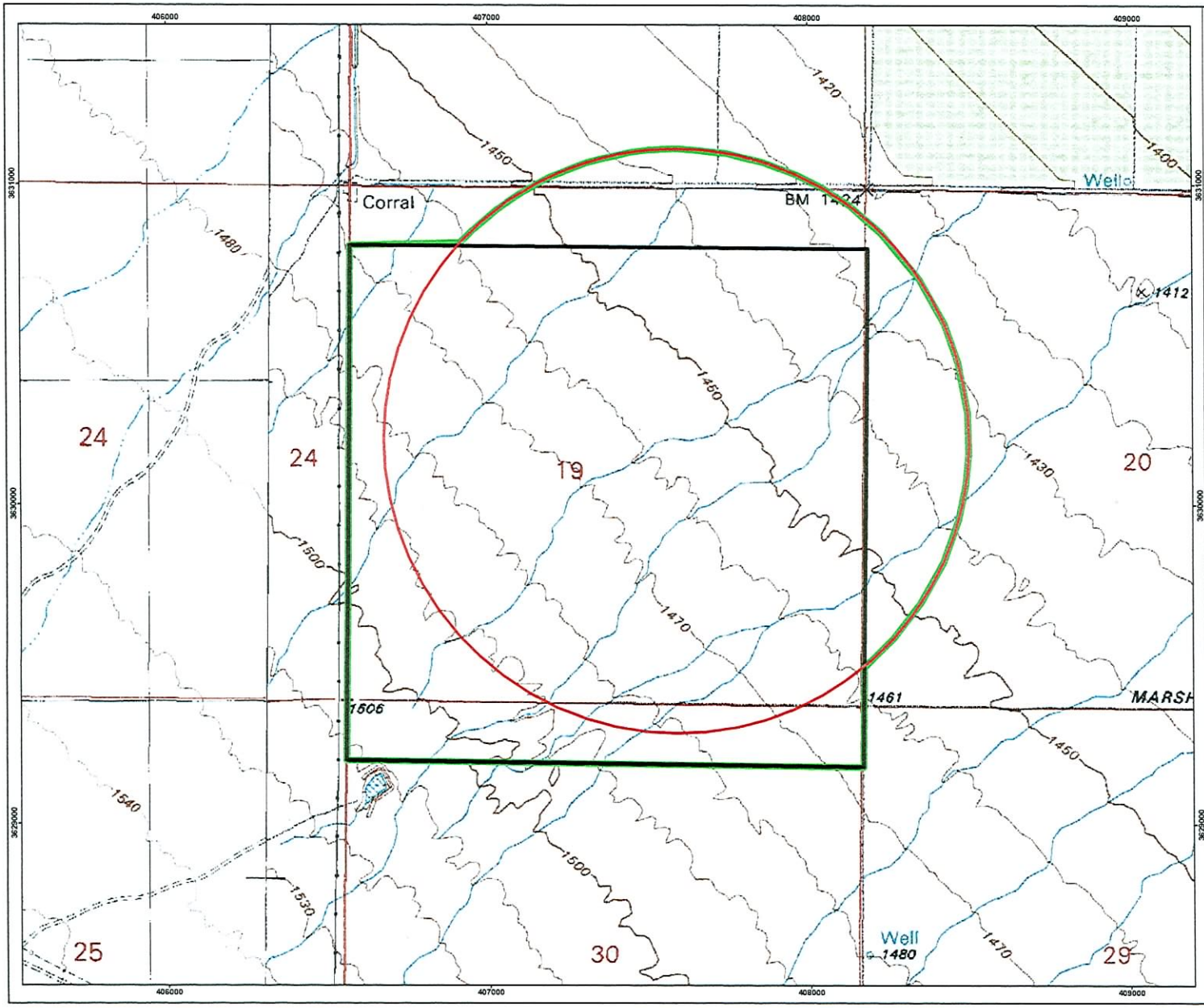


Figure 2.1

Site Setting
Williams Field Bomb Target Range #12
FUDS Property # J09AZ071301

Pinal County, Arizona

Legend

- MRS 01 Williams Field Bomb Target # 12
- Site Boundary (Original DoD Target Property)
- FUDS Eligible Boundary



Site Location in Arizona

Image Source: USGS 7.5' Topo Quadrangles, 1981 - 1992
Projection: UTM Zone 12 NAD83, Map Units in Meters

400 200 0 400 Meters

N

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DRAWN BY: BT	
CHECKED BY: DS	SCALE: As Shown — PROJECT NUMBER: 744653.84104
SUBMITTED BY: DS	DATE: September 2008 — PAGE NUMBER: 2 - 5
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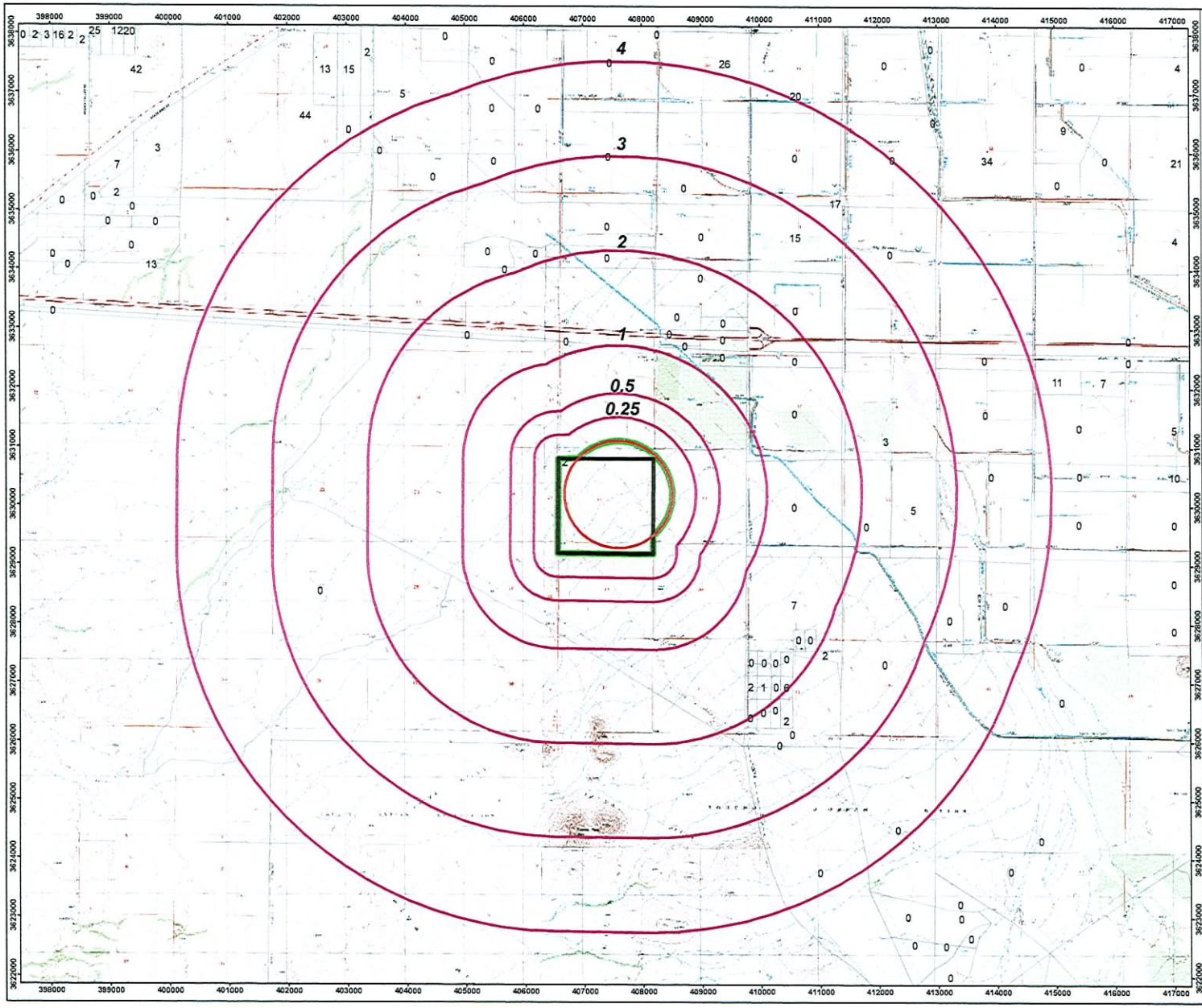

Figure 2.2

2000 Census Data
Williams Field Bomb Target Range #12
FUDS Property # J09AZ071301

Pinal County, Arizona

Legend

- 4 — 2000 Census Block Boundary with Total Population
- MRS 01 Williams Field Bomb Target # 12
- Site Boundary (Original DoD Target Property)
- FUDS Eligible Boundary
- Buffer (Mile)



Site Location in Arizona

N

Image Source: USGS 7.5' Topo Quadrangles, 1981 - 1992
Projection: UTM Zone 12 NAD83, Map Units in Meters

2 1 0 2 Kilometers

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SUBMITTED BY: DS	DATE: September 2008 — PAGE NUMBER: 2 - 6
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CHAPTER 3
SITE INSPECTION TASKS

3.1 HISTORICAL RECORD REVIEW

The existing body of information pertinent to Williams Field BTR #12 was thoroughly reviewed in advance of the TPP meeting conducted on November 28, 2007 and summarized to the TPP Team as part of the development and concurrence of the selected Technical Approach for the single MRS. Sampling locations and QR planning, as presented in the Site Specific Work Plan (SS-WP) Addendum, were the direct result of this review process. This information has been augmented with institutional knowledge and additional documentation provided by CESPL or obtained by Parsons during coordination of the field effort. As part of mobilization preparation for the SI, the Site Visit Team (SVT) reviewed all existing site information.

3.2 TECHNICAL PROJECT PLANNING SUMMARY

The Williams Field BTR #12 falls under the purview of the CESPL. A TPP meeting was held at the Arizona Department of Environmental Quality (ADEQ) in Phoenix, Arizona on November 28, 2007 and included representatives of CESPL, ADEQ, Pinal County, Bureau of Land Management (BLM), Arizona State Land Department, and Parsons. The TPP Meeting was held in accordance with Engineering Manual 200-1-2 (USACE, 1998c). Unanimous TPP Team concurrence with the Technical Approach presented in the Final TPP Memorandum issued on February 1, 2008 (Parsons, 2008a) was achieved (see Appendix B). Key TPP facts and decisions, as they appeared in the Final SS-WP Addendum (Parsons, 2008b), are summarized below in italics:

- *The TPP Team concurred with the Technical Approach (developed to support a RI/FS) as presented/revised at the TPP meeting on November 28, 2007 inclusive of number, type, and location of samples, as well as sampling methodology and laboratory analyses.*

- *Surface water samples and sediment samples will not be collected at the site based on the absence of a perennial water source.*

- *Groundwater samples will not be collected at the site based on the absence of groundwater wells at the Williams Field BTR #12. The closest groundwater well is located approximately 1.5 miles from the site.* **A review of the well data provided by Banks Information Solutions, Inc. indicates that one groundwater well is located within the MRS01 – Williams Field Bomb Target #12 boundary and one groundwater well is located within the FUDS property boundary (but outside of the MRS boundary). The well located within the**

MRS is used for irrigation, and has a depth to water greater than 640 feet. The groundwater well located within the FUDS property bonndary but outside of the MRS is unused. The last measured depth to water in this well was greater than 430 feet. Based on the depth to groundwater of the wells located at and near the Williams Field BTR #12, groundwater samples were not collected during the 2008 SI.

- *The TPP Team agreed to convert the two proposed surface water / groundwater samples to discretionary surface soil samples. The discretionary surface soil samples (SS-09 and SS-10) will be collected in biased locations as determined by the professional judgment of the Field Team Leader (FTL).*

- *The surface soil samples will be collected using Cold Regions Research and Engineering Laboratory (CRREL) "Seven-Point Wheel" composite sampling technique.*

- *The surface soil samples will be analyzed for selected metals and explosives. The TPP Team agreed to only analyze for metals that are found in the munitions known or suspected to have been used at the Williams Field BTR #12.*

- *The TPP Team agreed that the exact soil sampling locations will be left to the professional judgment of the FTL. The sampling locations identified in the Conceptual Site Model (CSM) will serve as a starting point to assist the FTL in finding conditions indicative of MEC and MC contamination and will represent the fallback sample location in the absence of field observations.*

- *The surface soil samples will be collected from 0 to 6 inches below ground surface (bgs), or until hard ground conditions prevent sample collection. This sampling depth is proposed because of the sandy nature of the soils at the Williams Field BTR #12. The Final TPP Memorandum issued on February 1, 2008, indicated that surface soil samples would be collected from 0 to 6 feet bgs. This information is an error. The TPP Team agreed to a sample depth of 0 to 6 inches bgs.*

- *Screening criteria will consist of the USEPA Region 9 Residential Soil Preliminary Remediation Goals (PRGs) and the Arizona Residential Soil Remediation Levels (SRLs). The maximum detected concentration of all explosive analytes will be compared in the Screening Level Risk Assessment (SLRA) to the most conservative of the Arizona Residential SRLs and the USEPA Region 9 Residential Soil PRGs, and in the Screening Level Ecological Risk Assessment (SLERA) to USEPA Ecological Soil Screening Levels (EcoSSLs), supplemented with appropriate values from the PSAP Addendum (Parsons, 2006). The maximum detected concentration of each metal analyte will be compared to a background concentration (in the absence of previously established site-specific background concentrations, a background concentration for each metal will be determined using the maximum concentration from the ambient samples collected in association with this SI). Each analyte will also be evaluated to verify that it is*

a potential MC for the site (i.e. the munitions known or suspected for the site). Only those analytes that are detected at the site above background/ambient concentrations and are potential MC will be retained for consideration in the SLRA and SLERA (i.e. compared in the SLRA to the most conservative of the Arizona Residential SRLs and the USEPA Region 9 Residential Soil PRGs, and in the SLERA to the USEPA EcoSSLs, supplemented with appropriate values from the PSAP addendum). Screening values will provide criteria for achieving the MC data quality objectives. If detected, those analytes that are not essential nutrients, and do not have a screening value available for comparison (for example, PETN) will be qualitatively evaluated in the SLRA and SLERA and noted as a source of uncertainty in the risk screening process. **In June 2008, the USEPA released new Regional Screening Levels (RSLs) for human health (USEPA, 2008). The new RSLs are recommended by USEPA for immediate use, in place of the earlier Region 3, 6, and 9 values. Parsons used the USEPA RSLs for residential soil for explosives and the Arizona Residential SRLs for metals in the SLRA. For the SLERA, when EcoSSLs are not available, the references cited by the PSAP (USACE 2005) and PSAP Addendnm (Parsons, 2006) were used to obtain the appropriate screening values.**

- *If MEC is found during the field work, the location will be noted on the Geographic Information System (GIS) map, the coordinates will be recorded, and the appropriate land owner notified, who will in turn notify the Pinal County Emergency Management Team. If the land owner does not contact the Emergency Management Team within one hour, the SVT will call the TPP Team directly in accordance with Interim Guidance Document (IGD) 06-05 (USACE, 2006a). To the extent practical, the SVT will remain with the MEC until the Emergency Management Team arrives.* **MEC was not observed during the 2008 SI field effort.**

- *Because of the dangers of heat exhaustion, the field work will not be scheduled to occur during the summer. The month of April is generally the beginning of the summer.*

- *The TPP Team did not identify any site-specific issues requiring an expedited project schedule or document reviews for the Williams Field BTR #12.*

3.3 NON-MEASUREMENT DATA COLLECTION

3.3.1 The following sources were consulted for identifying environmental and cultural resources at the Williams Field BTR #12:

- Topographic Map – U.S. Geological Survey (USGS)
- Threatened and Endangered Species System (TESS) – Endangered Species Program (USFWS, 2008a)
- National Wildlife Refuge System (NWRS) (USFWS, 2008b)

- Wetlands Online Mapper – National Wetlands Inventory (NWI), U.S. Fish and Wildlife Service (USFWS, 2008c)
- Arizona Game and Fish Department (AGFD) - Arizona Natural Heritage Program (NHP) - Heritage Data Management System (AGFD, 2008)
- National Register Information System (NRIS) – National Register of Historic Places (NRHP), National Park Service (NPS, 2008a)
- List of National Historic Landmarks (NHL) – National Historic Landmarks Program, National Park Service (NPS, 2008b)
- List of National Heritage Areas (NHA) – National Heritage Areas Program, National Park Service (NPS, 2008c)
- Arizona State Historic Preservation Office (AZ SHPO) – Arizona State Museum (ASM), University of Arizona (AZ SHPO, 2008)
- National Oceanic and Atmospheric Administration (NOAA) – Coastal Zone Management Program (CZMP) (NOAA, 2008)
- Archive Search Report (ASR) Findings Williams Field Bomb Target Range #12, Pinal County, Arizona, Project No. J09AZ071301, February 1998 (USACE, 1998a)

3.3.2 According to the NRIS, NRHP, NHL, and NHA federal databases, there are no archaeological or cultural resources within the boundary of the Williams Field BTR #12. According to the Final TPP Memorandum, there are no historically or culturally significant areas known to be within the site boundary. According to the ASM, no archaeological projects or inspection are recorded within the FUDS property boundary. Six archaeological inspections were completed within a 1-mile radius of the Williams Field BTR #12 site between 1979 and 1986.

3.4 SITE-SPECIFIC WORK PLAN

3.4.1 The Final SS-WP Addendum (Parsons, 2008b) serves to augment the Programmatic Work Plan (PWP) (Parsons, 2005), the Programmatic Sampling and Analysis Plan (PSAP) (USACE, 2005), and the PSAP Addendum (Parsons, 2006) and, as warranted, by presenting pertinent site-specific information and procedural adjustments that could not be readily captured in the programmatic documents. The SS-WP Addendum also reflects TPP Team agreements that required modification of the preliminary SI Technical Approach.

3.4.2 The PWP, PSAP, and PSAP Addendum are intended to be umbrella documents that set overall programmatic objectives and approaches, whereas the SS-WP Addendum provides site-specific details and action plans. The PWP, PSAP, PSAP Addendum and SS-WP Addendum accompanied the SVT during SI field activities.

3.4.3 The SS-WP Addendum includes a project description, the Field Investigation Plan, the Sampling and Analysis Plan, the Environmental Protection Plan, and the Health and Safety Plan specific to Williams Field BTR #12. The Field Investigation Plan developed a Technical Approach to guide sample collection and analysis for MEC and MC to ensure that the results were sufficient to determine whether additional investigations or implementation of a remedy are necessary for the single MRS located

within Williams Field BTR #12. Key elements of the Technical Approach include the CSM to help determine types of samples and their locations. In addition, Data Quality Objectives (DQOs) help ensure that the data acquired is sufficient to characterize MEC and MC at the MRS. QR confirms known target locations and evaluates the presence or absence of MEC/MC within the MRS. The sampling rationale, included in Table 3.1, has been updated to show actual conditions observed by the SVT.

3.4.4 The Sampling and Analysis Plan discusses procedures for sample acquisition from locations biased toward the highest potential for MEC contamination; quality assurance (QA) and quality control (QC) for the sampling process; sample shipment to an approved, independent laboratory; and analysis of the samples by the laboratory. The Environmental Protection Plan ensures compliance with Army Regulation 200-2 by presenting procedures for avoiding, minimizing, and mitigating potential impacts to environmental and cultural resources during SI field activities. The Health and Safety Plan supplements the Programmatic Accident Prevention Plan with site-specific emergency contact information and directions to the nearest hospital.

3.5 DEPARTURES FROM PLANNING DOCUMENTS

During the SI field investigation, several departures from the SS-WP Addendum occurred; none of which are believed to have any impact on the recommendations. These departures include the following:

- Right of entry (ROE) was not granted for the proposed location of ambient surface soil sample W12-MRS01-SS-06-01. Therefore, ambient surface soil W12-MRS01-SS-06-01 was relocated southwest of its original proposed location onto property with approved ROE. There were no MD observed in the sample location.
- Biased surface soil samples W12-MRS01-SS-06-03, W12-MRS01-SS-06-06, and W12-MRS01-SS-06-08 were moved from their original proposed locations. Sample W12-MRS01-SS-06-03 was moved to the target center, approximately 300 feet southwest of its original proposed location. Sample W12-MRS01-SS-06-06 was moved near MD from a M38A2 practice bomb, approximately 300 feet north of its original proposed location. ROE was not granted for the proposed location of sample W12-MRS01-SS-06-08. Therefore, it was moved approximately 1,000 feet southwest of its original proposed location.
- Surface soil samples collected on June 23, 2008 were held overnight on ice. Surface soil samples were shipped the following day (June 24, 2008) via FedEx to the laboratory.

Table 3.1
Sampling Rationale
Williams Field Bomb Target Range #12

Sample ID	Sample Coordinates Longitude	Latitude	Media	Analysis	Potential Munitions	Rationale
W12-RL-SS-06-01	-111.997277359	32.803928285	Soil	Selected Metals [1], Explosives	None	Outside MRS; to serve as ambient metals data; explosives analysis to verify that the sample is ambient
W12-RL-SS-06-02	-111.996361608	32.800796597	Soil	Selected Metals [1], Explosives	None	Outside MRS; to serve as ambient metals data; explosives analysis to verify that the sample is ambient
W12-MRS01-SS-06-03	-111.987149704	32.805909049	Soil	Selected Metals [1], Explosives	Bomb, 100-lb, Practice, M38A2; Signal, Spotting Charge, M1A1, M3, and M5; Flare, Aircraft Parachute, M8A1[2]; Bomb, 100-lb, Demolition, MkI[3]; Cartridge, 20mm, TP, M99	Within MRS at the target center, near MD from hundreds of M38A2 practice bombs. To determine if sample location has been impacted by past DOD activities.
W12-MRS01-SS-06-04	-111.987544529	32.808352941	Soil	Selected Metals [1], Explosives	Bomb, 100-lb, Practice, M38A2; Signal, Spotting Charge, M1A1, M3, and M5; Flare, Aircraft Parachute, M8A1[2]; Bomb, 100-lb, Demolition, MkI[3]; Cartridge, 20mm, TP, M99	Within MRS, near MD from an M38A2 practice bomb. To determine if sample location has been impacted by past DOD activities.
W12-MRS01-SS-06-05	-111.983299338	32.805207830	Soil	Selected Metals [1], Explosives	Bomb, 100-lb, Practice, M38A2; Signal, Spotting Charge, M1A1, M3, and M5; Flare, Aircraft Parachute, M8A1[2]; Bomb, 100-lb, Demolition, MkI[3]; Cartridge, 20mm, TP, M99	Within MRS, near MD from an M38A2 practice bomb. To determine if sample location has been impacted by past DOD activities.
W12-MRS01-SS-06-06	-111.992373262	32.805755982	Soil	Selected Metals [1], Explosives	Bomb, 100-lb, Practice, M38A2; Signal, Spotting Charge, M1A1, M3, and M5; Flare, Aircraft Parachute, M8A1[2]; Bomb, 100-lb, Demolition, MkI[3]; Cartridge, 20mm, TP, M99	Within MRS near MD from M38A2 practice bombs. To determine if sample location has been impacted by past DOD activities.
W12-MRS01-SS-06-07	-111.983361562	32.799820620	Soil	Selected Metals [1], Explosives	Bomb, 100-lb, Practice, M38A2; Signal, Spotting Charge, M1A1, M3, and M5; Flare, Aircraft Parachute, M8A1[2]; Bomb, 100-lb, Demolition, MkI[3]; Cartridge, 20mm, TP, M99	Within MRS to determine if sample location has been impacted by past DOD activities.
W12-MRS01-SS-06-08	-111.981231216	32.809766906	Soil	Selected Metals [1], Explosives	Bomb, 100-lb, Practice, M38A2; Signal, Spotting Charge, M1A1, M3, and M5; Flare, Aircraft Parachute, M8A1[2]; Bomb, 100-lb, Demolition, MkI[3]; Cartridge, 20mm, TP, M99	Within MRS and downhill of the target center. Looking for contamination that may have been moved by erosion or runoff.
W12-MRS01-SS-06-09	-111.984577420	32.801826495	Soil	Selected Metals [1], Explosives	Bomb, 100-lb, Practice, M38A2; Signal, Spotting Charge, M1A1, M3, and M5; Flare, Aircraft Parachute, M8A1[2]; Bomb, 100-lb, Demolition, MkI[3]; Cartridge, 20mm, TP, M99	Within MRS, near MD from an M38A2 practice bomb. To determine if sample location has been impacted by past DOD activities.
W12-MRS01-SS-06-10	-111.987461942	32.805663456	Soil	Selected Metals [1], Explosives	Bomb, 100-lb, Practice, M38A2; Signal, Spotting Charge, M1A1, M3, and M5; Flare, Aircraft Parachute, M8A1[2]; Bomb, 100-lb, Demolition, MkI[3]; Cartridge, 20mm, TP, M99	Within MRS near target center and MD from hundreds of M38A2 practice bombs. To determine if sample location has been impacted by past DOD activities.

1 - Selected metals include aluminum, antimony, barium, copper, iron, lead, magnesium, mercury, potassium, sodium, and zinc.
2 - Although flares are not listed in the Archives Search Report Supplement (USACE, 2004b) as a munition used at this site, flares have been added to the munitions list based on past discoveries at other Williams Field Bomb Target Ranges, and based on their historical usage at many of the Williams Field Bomb Target Ranges.
3 - The ASR (USACE, 1998a) states that in July 1942 a request was made for a storage bunker to store 250,000 lbs of black powder and 210 100-lb demolition bombs. It does not state at which range the bombs were to be used, or which model was used. Therefore, the demolition bomb has been added as a potential munitions at the Williams Field BTR #12. The MkI 100-lb Demolition Bomb was selected as a potential munition for the Williams Field BTR #12 because it was a popular bomb for the 1918 - 1944 era.

CHAPTER 4
MUNITIONS AND EXPLOSIVES OF CONCERN FINDINGS

4.1 GENERAL INFORMATION

Based on a review of historical records, previous studies, and current conditions at Williams Field BTR #12, it was determined by the TPP Team that there is a potential for MEC and/or MD to be present at the site. QR and soil sampling were conducted within the single MRS as well as within the overall FUDS property boundary (per TPP Team agreements). This chapter details the overall DQOs, MEC history, and inspection activities for the Williams Field BTR #12.

4.1.1 Qualitative Reconnaissance

4.1.1.1 The primary task of the SI was to assess the presence of MEC and MC. To assess the presence of MEC, the SVT conducted a QR in pre-determined areas throughout the MRS on June 23 and 24, 2008. The results of the QR are discussed in Subchapter 4.2.

4.1.1.2 The QR consisted of a visual reconnaissance of the ground surface to identify indicators of suspect areas, including earthen berms, distressed vegetation, stained soil, ground scars or craters, target remnants, and visible metallic debris.

4.1.1.3 The SVT initiated the QR by driving to the outline of the proposed QR path as identified in the Garmin Rhino™ database and establishing a "base" from which to conduct the QR on foot. The Garmin Rhino™ database includes a graphical display of the proposed QR line which the SVT used for navigation. A UXO Technician III used a Schonstedt GA-92XTi magnetometer for safety purposes (anomaly avoidance). Each day, prior to beginning the QR and throughout the QR, the Schonstedt magnetometer was checked against a known metal object to confirm that it was operating correctly. Battery checks were also performed. During the QR, the SVT collected samples, took photographs for documentation purposes, and recorded field observations. For example, if they observed MD, munitions-related features, or terrain changes; if they encountered roads or barriers; or if there were no variations since the last observation (approximately 15 minutes of walking with no change), then these field observations were noted. Figure 4.1 shows the actual QR route and observation locations. The observation location numbers correspond to the photo station numbers included in the Photo-documentation Log (Appendix E).

4.1.1.4 As discussed in the Final SS-WP Addendum, the QR route was not restricted to the proposed path, but was determined in the field by the FTL based on the baseline QC procedures described in Chapter 3 of the PWP (Parsons, 2005), visual observations, possession of signed ROE, and areas of pre-determined focus. Table 4.1

presents the potential MEC anticipated to be present at Williams Field BTR #12 as well as within the MRS. The potential constituents of the MEC are also listed in this table. The MEC CSM and conceptual site exposure model (CSEM) are included in Appendix J.

4.1.1.5 As shown in the Photo-documentation Log (Appendix E), the SVT recorded numerous field observations throughout the course of the SI, including detail on topography, soil color, vegetation, drainage, the presence of any barriers, changes in magnetic fields (based on audible signals) and MD. ***Although MD and possible target remnants were found during the QR, no MEC or MC indicators (stained soil or stressed vegetation) were observed.*** The SVT also observed debris related to the possible use of the site by illegal immigrants. Field observations are summarized in Table 4.2. Appendix D includes related field forms. A discussion of the results of the QR is included in Subchapter 4.2.2.

4.1.2 Data Quality Objectives

4.1.2.1 Introduction

4.1.2.1.1 DQOs are qualitative and quantitative statements that clarify study objectives and specify the type and quality of the data necessary to support decisions. The development of DQOs for a specific site or MRS takes into account factors that determine whether the quality and quantity of data are adequate for project needs, such as data collection, uses, types, and needs. While developing these DQOs in accordance with the process presented in Chapter 3, paragraph 3.1.2 of the PWP (Parsons, 2005), Parsons followed the *Guidance on Systematic Planning Using the Data Quality Objectives Process*, EPA QA/G-4, EPA/240/B-06/001 (USEPA, 2006).

4.1.2.1.2 The goal of the TPP process is to achieve stakeholder, USACE, and applicable state and federal regulatory concurrence with the DQOs for a given site. The TPP Team approved the Williams Field BTR #12 DQOs at the TPP meeting on November 28, 2007. Tables 4.3 through 4.6 present the DQO worksheets. *All the DQOs have been met.*

4.1.2.1.3 As stated in Chapter 1 of this SI Report, data must be sufficient to do the following: 1) determine the potential need for a removal action; 2) enable HRS scoring by USEPA, if they choose to do so; 3) characterize the release for effective and rapid initiation of RI/FS; and 4) complete the MRSPP.

4.1.2.1.4 DQOs cover four project objectives that SI data must satisfy: 1) evaluate potential presence of MEC; 2) evaluate potential presence of MC; 3) collect data needed to complete MRSPP scoring sheets; and 4) collect information for HRS scoring.

4.1.2.2 Munitions and Explosives of Concern Data Quality Objective

The MEC DQO *was achieved* by evaluating potential presence of MEC at Williams Field BTR #12 and within the MRS. During the QR, the SVT searched for visual evidence of MEC and MD (indicative of potential MEC presence) in areas with the highest likelihood of potential presence in accordance with the TPP Team agreements.

4.1.2.3 Munitions Constituents Data Quality Objective

The MC DQO *was achieved* by evaluating potential presence of MC at specific locations within the FUDS-eligible boundary to include the MRS. The TPP Team agreed on the list of compounds/analytes for sample analysis based on the munitions potentially used at Williams Field BTR #12. The complete list of munitions potentially used at Williams Field BTR #12 is provided in Table 4.1. Subchapter 5.3.4.5 presents the results of the MC sampling.

4.1.2.4 Munitions Response Site Prioritization Protocol Data Quality Objective

The MRSPP DQO *was achieved* by obtaining sufficient information to complete the MRSPP scoring sheets. Specific input data were collected, and the three modules for the MRSPP were populated as part of the SI. The scoring sheets for the MRSPP are included in Appendix K.

4.1.2.5 Hazard Ranking System Data Quality Objective

The HRS DQO *was achieved* by including information in the SI report necessary for the USEPA to populate the HRS score sheets, if they choose to do so. Source documents for the HRS information include the INPR, ASR, and ASR Supplement documents, as well as the MC sampling results reported in Chapter 5 and information from local and state agencies regarding population, groundwater well users, and drinking water well use.

4.2 MRS01 – WILLIAMS FIELD BOMB TARGET #12

4.2.1 Historical Munitions and Explosives of Concern Information

4.2.1.1 The MRS at the Williams Field BTR #12 consists of 649 acres and was used as a practice bombing target. Known improvements at the site include the construction of an aiming circle. A large amount of practice bomb debris was found at the target center as well as scattered throughout the area during a site visit conducted in support of the ASR in 1996. Historical documents and other evidence indicates that the following munitions were used at this site: 100-lb practice bombs (M38A2) and their associated spotting charges (M1A1, M3, and M5).

4.2.1.2 The ASR (USACE, 1998a) states that in July 1942 a request was made for a storage bunker to store 250,000 lbs of black powder and 210 100-lb demolition bombs. The ASR does not indicate which model was used or which range the bombs were to be used, but there is a potential that the demolition bombs were used at the Williams Field BTR #12. The MkI 100-lb demolition bomb was selected as a potential munition for Williams Field BTR #12 because it was a popular bomb for the 1918 – 1944 era. Additionally, the M8A1 aircraft parachute flare was not known to have been used at the Williams Field BTR #12 but is considered as a potential munition based on discoveries at other Williams Field Bomb Target Ranges and their historical usage at many of the Williams Field Bomb Target Ranges.

4.2.2 Inspection Activities

4.2.2.1 The SI field effort for Williams Field BTR #12 was conducted on June 23 and 24, 2008. To assess the presence of MEC, the combined three man SVT conducted

QR over an approximately 10.06 mile linear path within MRS01 – Williams Field Bomb Target #12, as well as outside the MRS boundary (Figure 4.1).

4.2.2.2 ***The SVT observed graded rings with wooden debris (possible target remnants) at the target center. There were no other visual indicators (earthen berms, distressed vegetation, stained soil, or ground scars) of suspect areas identified during the QR. There was no visual evidence of the use of demolition bombs. No MEC was observed during the SI field activities. However, MD from M38A2 100-lb practice bombs and M1A1 spotting charges were found in the MRS. MD from several hundred M38A2 100-lb practice bombs were found at the target center.*** The discovery of the MD is noted in the Daily Field Reports (Appendix D) and the Photo-documentation Log (Appendix E).

4.2.2.3 The SVT also observed debris from human activity, including backpacks, clothing, water bottles, and more than 15 bicycles scattered throughout the MRS01 – Williams Field Bomb Target #12. Based on the type of debris, it is likely that illegal immigrants travel through the site. The SVT also observed cow patties within the MRS, indicating that portions of the MRS and the Williams Field BTR #12 may be used seasonally for cattle grazing.

4.2.2.4 Along the QR track, the SVT found a water tank located on top of a plywood structure (Point ID #5). The SVT did not observe any pumps connected to the water tank, possibly indicating that water is transported to the site and stored in the tank. A shed, constructed of plywood, was also observed in the vicinity of the water tank.

Table 4.1
Chemical Composition of Known or Suspected Munitions and Explosives of Concern
Williams Field Bomb Target Range #12, Pinal County, Arizona

General Munitions Type	Type/Model	Case Composition	Filler	Potential Constituent
Bomb, 100-lb, Practice	M38A2	Steel	Sand	Iron
Charge, Spotting, Bomb	M1A1	Steel	Black Powder, Smokeless Powder, Primer Mix	Antimony Sulfide, Dinitrotoluene, Diphenylamine, Lead Styphnate, Nitrocellulose, Pentaerythritoltetranitrate, Potassium Nitrate, Tetracene
Charge, Spotting, Bomb	M3	Steel	Black Powder. Dark Smoke Composition, Primer Mix	Antimony Sulfide, Dinitrotoluene, Diphenylamine, Lead Styphnate, Magnesium, Nitrocellulose, Pentaerythritoltetranitrate, Potassium, Potassium Nitrate, Tetracene
Charge, Spotting, Bomb	M5	Glass	FM Smoke Mixture (Sulfur-trioxide chlorosulfonic acid solution)[1]	N/A
Flare, Aircraft, Parachute [2]	M8A1	Chip Board with Zinc Alloy Sheathing	Illumination composition, Black Powder	Potassium Nitrate, Magnesium, Barium Nitrate, Sodium Oxilate, Aluminum, Potassium Chlorate, Antimony Sulfide, Lead Azide, Copper, Zinc
Bomb, 100-lb, Demolition[3]	MkI	Steel	50/50% Amatol OR TNT	Iron, Trinitrotoluene (TNT), Ammonium Nitrate TNT
Fuze, Bomb, Nose	M105	Steel	Black Powder, Tetryl, Primer Mix	Iron, Lead Azide, Potassium Nitrate, Tetryl, TNT
Fuze, Bomb, Nose	MkVII	Steel	Black Powder, Primer Mixture	Antimony Sulfide, Iron, Lead Thiocyanate, Mercury Fulminate, Potassium Chlorate, TNT
Fuze, Bomb, Tail	AN-106	Steel	Primer Mix, Black Powder, Tetryl	Antimony Sulfide, Lead Azide, Lead Thiocyanate, Potassium Chlorate, Potassium Nitrate, Tetryl

Table 4.1 (continued)
Chemical Composition of Known or Suspected Munitions and Explosives of Concern
Williams Field Bomb Target Range #12, Pinal County, Arizona

General Munitions Type	Type/Model	Case Composition	Filler	Potential Constituent
Fuze, Bomb, Tail	MkIII	Steel	Primer Mix, TNT, Tetryl	Antimony Sulfide, Lead Thiocyanate, Mercury Fulminate, Potassium Chlorate, Tetryl, TNT

1 - Chlorosulfonic acid reacts violently with water evolving heat and large quantities of white fumes of hydrochloric acid and sulfuric acid. Sulfur-trioxide reacts with the moisture in the air to produce sulfuric acid mist. The mixture of these two compounds does not have an potential MC constituents.

2 - Although flares are not listed in the ASR Supplement (USACE, 2004b) as a munition used at this site, flares have added been to the potential munitions list based on past discoveries at other Williams Field Bomb Target Ranges during the SI field effort and based on their historical usage at many of the Williams Field Bomb Target Ranges. Potential munitions constituents associated with flares have been included in the target analyte list for this site.

3 - The ASR (USACE, 1998a) states that in July 1942 a request was made for a storage bunker to store 250,000 lbs of black powder and 210 100-lb demolition bombs. It does not state at which range the bombs were to be used, or which model was used. Therefore, the MkI 100-lb Demolition Bomb demolition bomb has been added as a potential munition at this site because it was a popular bomb for the 1918 - 1944 era.

Table 4.2
Summary of Qualitative Reconnaissance Observations, June 23 and 24, 2008
Williams Field Bomb Target Range #12, Pinal County, California

Mnnitions Response Site Name	Potential Munitions and Explosives of Concern	Munitions Debris	Munitions Related Features
MRS01 – Williams Field Bomb Target #12	None Observed	MD from M38A2 100-lb practice bombs and M1A1 spotting charges were found within the MRS	Graded rings with wooden debris at the center (possible target remnants)

Table 4.3
Munitions and Explosive of Concern
Data Quality Objective Worksheet

SITE: Williams Field Bomb Target Range #12, Pinal County, California
PROJECT: MMRP Site Inspection / FUDS Project No. J09AZ071301

DQO Element Number*	DQO Element Description*	Site-Specific DQO Statement	Objective Met? Yes (Y)/No (N)
Intended Data Use(s):			
1	Project Objective(s) Satisfied	Evaluate presence/lack thereof of MEC	Y
Intended Need Requirements:			
2	Data User Perspective(s)	Risk, Remedy	Y
3	Contaminant or Characteristic of Interest	MEC, MD	Y
4	Media of Interest	N/A	N/A
5	Required Locations or Areas	Focus on area within MRS	Y
6	Number of Samples Required	N/A	N/A
7	Reference Concentration of Interest or Other Performance Criteria	QR path (total length) = 7.88 miles (approximate) *10.06 miles of QR conducted*	Y
Appropriate Sampling and Analysis Methods:			
8	Sampling Method	QR with magnetometer (Schonstedt) for avoidance.	Y
9	Analytical Method	N/A	N/A

* Refer to EM 200-1-2, Paragraph 4.2.1

Table 4.4
Munitions Constituent
Data Quality Objective Worksheet

SITE: **Williams Field Bomb Target Range #12, Pinal County, California**
PROJECT: **MMRP Site Inspection / FUDS Project No. J09AZ071301**

DQO Element Number*	DQO Element Description*	Site-Specific DQO Statement	Objective Met? Yes (Y)/No (N)
Intended Data Use(s):			
1	Project Objective(s) Satisfied	Evaluate presence/lack thereof of MC	Y
Intended Need Requirements:			
2	Data User Perspective(s)	Risk, Remedy	Y
3	Contaminant or Characteristic of Interest	Explosives, select metals	Y
4	Media of Interest	Surface soil	Y
5	Required Sampling Locations or Areas and Depths	As determined by the TPP Team. Locations based on MRS configuration.	Y
6	Number of Samples Required	10 surface soil samples (to include 8 biased and 2 ambient) plus associated QC samples.	Y
7	Reference Concentration of Interest or Other Performance Criteria	Soil screening levels will include the USEPA Region 9 Residential Soil Preliminary Remediation Goals (PRGs), ADEQ Residential Soil Remediation Levels, and USEPA Ecological Soil Screening Levels (EcoSSLs). *In June 2008, USEPA released new RSLs for human health. The new RSLs are recommended by USEPA for immediate use, in place of the earlier Region 3, 6, and 9 values. For the SLRA, Parsons used the Arizona Residential SRLs for metals evaluation, and the USEPA RSLs for residential soil for evaluation of explosives. For the SLERA, when EcoSSLs are not available, the references cited by the PSAP (USACE 2005) and PSAP Addendum (Parsons, 2006) were used to obtain the appropriate screening values.*	Y
Appropriate Sampling and Analysis Methods:			
8	Sampling Method	Composite samples in accordance with the PSAP and PSAP Addendum	Y
9	Analytical Method	Explosives SW8321A; Select metals SW6010B and SW6020, Mercury – SW7471A	Y

Table 4.5
Munitions Response Site Prioritization Protocol Data Quality Objective Worksheet

Site:	Williams Field Bomb Target Range #12				
Project:	MMRP Site Inspection / FUDS No. J09AZ071301				
Module	**Table #**	**Table Description**	**Known Data**	**Current Data Gap**	**Data Source**
Explosive Hazard Evaluation (EHE)	1	Munitions Type	X		Historical Records/Findings
	2	Source of Hazard	X		Historical Maps
	3	Location of Munitions	X		Historical or Field Findings
	4	Ease of Access	X		Field Findings
	5	Status of Property	X		Historical Records
	6	Population Density	X		U.S. Census Bureau
	7	Population Near Hazard	X		Field Findings
	8	Types of Activities/Structures	X		Regional Zoning
	9	Ecological and/or Cultural Resources	X		SHPO/Field Findings
	10	Determining the EHE	X		Scores from Tables 1 through 9
Chemical Warfare Materiel (CWM) Hazard Evaluation (CHE)	11	CWM Configuration	X		Historical Records/Findings
	12	Sources of CWM	X		Historical Records/Findings
	13	Location of CWM	X		Historical or Field Findings
	14	Ease of Access	X		Field Findings
	15	Status of Property	X		Historical Records
	16	Population Density	X		U.S. Census Bureau
	17	Population Near Hazard	X		Field Findings
	18	Types of Activities/Structures	X		Regional Zoning
	19	Ecological and/or Cultural Resources	X		SHPO/Field Findings
	20	Determining the CHE	X		Scores from Tables 11 through 19
Health Hazard Evaluation (HHE)	21	Groundwater Data	X		N/A
	22	Surface Water - Human Endpoint	X		N/A
	23	Sediment - Human Endpoint	X		N/A
	24	Surface Water - Ecological Endpoint	X		N/A
	25	Sediment - Ecological Endpoint	X		N/A
	26	Surface Soil	X		Surface Soil Sampling Results
	27	Supplemental Contaminant Hazard Factor	X		All MC Sampling Results
	28	Determining the HHE	X		Scores from Tables 21 through 27
	29	MRS Priority	X		Scores from Tables 10, 20, and 28
	A	MRS Background Information	X		DoD Databases

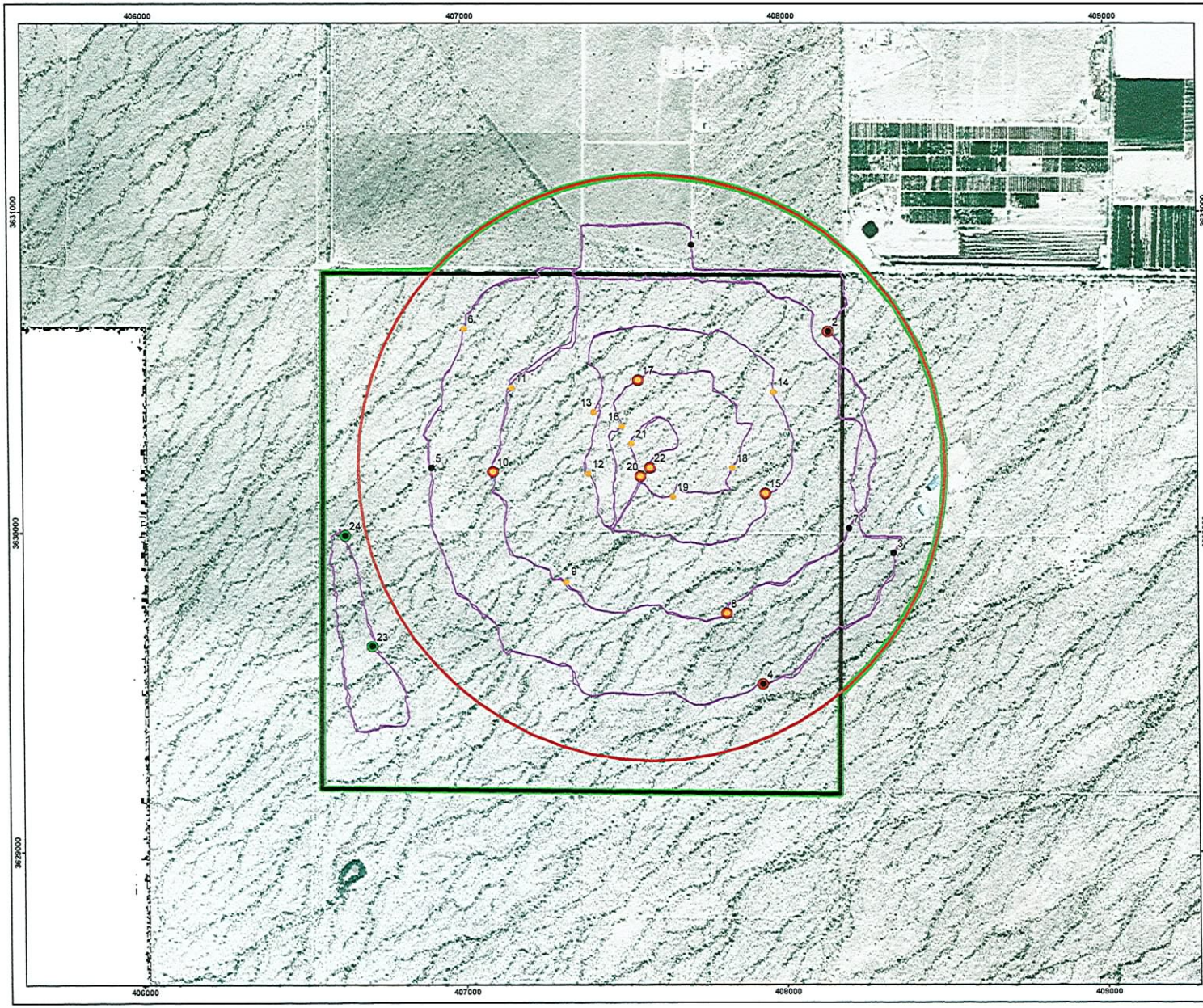
Table 4.6
Hazard Ranking System
Data Quality Objective Worksheet

Site: Williams Field Bomb Target Range #12			
Project: MMRP Site Inspection / FUDS No. J09AZ071301			
DQO Statement Number: 4 of 4			
Data Description	**Known Data**	**Current Data Gap**	**Data Source**
Source Type	X		Historical Records/Findings
Estimated Volume or Area	X		Field Findings
Hazardous Substance	X		Constituents of Suspected Munitions
Groundwater Sample Concentration	X		N/A
Groundwater Use	X		Well Records/Municipal Data
Surface Water Sample Concentration	X		N/A
Surface Water Pathways	X		N/A
Soil Sample Concentration	X		Sample Results
Soil Pathways	X		Municipal Data
Sensitive Environments	X		State Historic Preservation Office, US Fish and Wildlife Service, various government agencies
Attractiveness/Accessibility	X		Field Findings/Land Use Records

Figure 4.1

Qualitative Reconnaissance and Field Observation Locations Williams Field Bomb Target Range #12 FUDS Property # J09AZ071301

Pinal County, Arizona



Legend

- Munitions Debris Field Observation Location
- Field Observation Location
- Biased Soil Sample Location
- Ambient Soil Sample Location
- MRS 01 Williams Field Bomb Target # 12
- Site Boundary (Original DoD Target Property)
- FUDS Eligible Boundary
- Qualitative Reconnaissance Track



Site Location in Arizona

N

Image: 2006 Orthophotos
Projection: UTM Zone 12 NAD83, Map Units in Meters

300 150 0 300 Meters

PARSONS	U.S. ARMY SOUTH PACIFIC DIVISION RANGE SUPPORT CENTER
DESIGNED BY: BT	Qualitative Reconnaissance and Field Observation Locations
DRAWN BY: BT	
CHECKED BY: DS	SCALE: As Shown — PROJECT NUMBER: 744653.84104
SUBMITTED BY: DS	DATE: September 2008 — PAGE NUMBER: 4-12
	FILE: X:\GIS\Site_inspections_swMaps\williamsfield_ac\Fig4_1_3r12.mxd

CHAPTER 5
MIGRATION/EXPOSURE PATHWAYS AND RECEPTORS

5.1 INTRODUCTION

5.1.1 This chapter of the SI report evaluates the potential for release of MC to the environment based on site-specific conditions. It is necessary to evaluate site-specific conditions and land use to evaluate risks posed to potential receptors under current and future land use scenarios. This chapter of the SI report evaluates exposure pathways for groundwater, surface water, sediment, soil, and air. The CSEM for the Williams Field BTR #12, included in Appendix J, summarizes which potential receptor exposure pathways are (or may be) complete and which are (and are likely to remain) incomplete. An exposure pathway is not considered to be complete unless all four of the following elements are present (USEPA, 1989). An example of a hypothetical groundwater pathway is included:

- *A source and mechanism for contaminant release.* For example, a site has known MEC from which MC have leached and contaminated surface soil.
- *An environmental transport and/or exposure medium.* In the example, the MC in soil is mobile and can contaminate groundwater.
- *A point of exposure at which the contaminant can interact with a receptor.* A drinking water well drawing from the contaminated aquifer is located at the MRS.
- *A receptor and a likely route of exposure at the exposure point.* A resident lives onsite and drinks water from the well.

5.1.2 In the hypothetical resident example described above, all four factors are present. Therefore, the groundwater exposure pathway is complete. If any single factor was absent (for example, MC contamination was not present in soil, or the resident obtained drinking water from another source), then the pathway would be incomplete.

5.2 GENERAL INFORMATION

5.2.1 Regional Geologic Setting

5.2.1.1 The Williams Field BTR #12 is located in an area of the Sonoran Desert that lies within the Basin and Range physiographic province. This province is characterized by steep, rugged mountain ranges bounded by broad, gently sloping alluvium filled valleys, or basins. The mountain ranges have a generally northwest to southeast trend parallel to an extensive system of sub-parallel faults. The Williams Field BTR #12 appears to be located on a fan terrace consisting of Quaternary and upper Tertiary sedimentary alluvium underlain by basalt and pyroclastic rock. This fan is the

transition area between the hills to the southwest, which are Precambrian igneous rock, and a basin containing the Santa Rosa Wash to the east (USACE, 1998a).

5.2.1.2 The soils in the area of Williams Field BTR #12 are basic with a pH ranging from 7.9 to 8.4 (USDA, 1991). They are deep, well-drained to excessively-drained sandy, silty soils developed on alluvial and terrace deposits. The soils are moderately permeable and runoff is rapid. The hazard of soil erosion due to blowing is high (USACE, 1998a).

5.2.2 Regional Hydrogeologic Setting

The Williams Field BTR #12 is located within the Pinal Active Management Area (AMA), which covers 4,000 square miles in central Arizona. Water resources within the Pinal AMA include groundwater, surface water, reusable effluent, and precipitation. Naturally occurring surface waters entering the Pinal AMA include intermittent flow in the Gila and Santa Cruz Rivers and imported water from the Colorado River. The site itself is located within the Maricopa-Stanfield subbasin, one of the two principal hydrologic subbasins within the AMA. The Maricopa-Stanfield subbasin is stratified into three major aquifer systems: The Upper Alluvial Unit, the Middle Silt Unit, and the Lower Conglomerate Unit (AZ DWR, 1999). The majority of the groundwater available is from within the interstitial spaces of the alluvial deposits tbat fill the basin east of the Williams Field BTR #12 area. In general, these alluvial deposits are hydraulically connected and form a single unconfined aquifer. However, some isolated areas containing impermeable clay and silt layers may be under confined conditions, usually at depths greater than 1,000 feet. The greatest groundwater yields come from sand and gravel deposits which border the area's streams and rivers, with possible well yields of 3,000 gallons per minute (USACE, 1998a).

5.2.3 Regional Groundwater Use

5.2.3.1 According to the well report obtained from Banks Information Solutions, Inc., there are 47 water wells known to exist within a 4-mile radius of the Williams Field BTR #12 (Figure 5.2). Three of the wells are stock wells, 19 are irrigation wells, and the remaining 25 of the wells are unused. Table 2.1 lists active wells (by type) within a 4-mile radius of the Williams Field BTR #12. One well, used for irrigation, is located within the MRS boundary. The depth to water was measured at 644.3 feet bgs, last measured in 1974 (Sustainability of Semi-Arid Hydrology and Riparian Areas [SAHRA], 2008). Based on available water level data, the depth to water in this well is generally increasing. An unused well is located within the FUDS property boundary but outside of the MRS boundary, as shown in Figure 5.2. The depth to water in this well was measured at 437 feet bgs, last measured in 1958. Based on available water level data, the depth to water in this well is generally increasing (SAHRA, 2008). There are no public water supply wells located within a 4-mile radius of the FUDS-eligible property boundary. A copy of the well report is provided in Appendix L.

Table 5.1
Active Groundwater Wells within a 4-Mile Radius of Williams Field Bomb Target Range #12

Irrigation	Stock	Total
19	3	22

5.2.3.2 Using available population information based on U.S. census data for the year 2000 (Table 5.2), the SI assumes that people living within each square mile within a 0- to 4-mile buffer are using public supply or domestic water wells. Population information was estimated by including the total number of people indicated in the census data blocks for any blocks (partial or complete) intersected by the 0- to 4-mile buffer zone around the MRS01 – Williams Field Bomb Target #12.

Table 5.2
Approximate Population Information in the Vicinity of the MRS01 - Williams Field Bomb Target #12

MRS Name	On Site	0 to 0.25 mile	0.25 to 0.5 mile	0.5 to 1 mile	1 to 2 miles	2 to 3 miles	3 to 4 miles	Total
MRS01 – Williams Field Bomb Target #12	2	0	0	7	18	30	69	126

Source: U.S. Census 2000 data. The population within the FUDS-eligible property boundary is determined using a conservative approach to calculate the population of an area by including the total number of people for any census block that falls within or overlaps the FUDS-eligible property boundary.

5.2.4 Regional Hydrologic Setting

The Williams Field BTR #12 is located within the Sonoran Desert. Based on review of satellite imagery of the Williams Field BTR #12 site, there are several dry washes (or intermittent streams) that traverse the site from the southwest to the northeast (Google Earth, 2008). Surface water from the Williams Field BTR #12 flows into the Santa Rosa Canal (located to the east and northeast) via these dry washes.

5.2.5 Regional Sensitive Ecological Resources

5.2.5.1 The state of Arizona supports 54 federally listed threatened and endangered (T&E) species, 37 animals and 17 plants. Among this diverse group of fauna and flora, there are 13 species that are both federally and state-listed as T&E species known to exist within Pinal County. However, six fish species and one bird species (Yuma clapper rail) would not potentially be found at the Williams Field BTR #12 due to lack of proper aquatic habitat. The remaining six federally and state-listed T&E species that are potentially located within the Williams Field BTR #12 are presented in Table 5.3. According to the USFWS, of the six species potentially located on site, the Mexican

spotted owl and the southwestern willow flycatcher are declared as having critical habitat, and the cactus ferruginous pygmy-owl is proposed as having critical habitat within Pinal County. T&E species were not identified during the SI field effort.

5.2.5.2 Based on the potential presence of six federally and state-listed T&E species and a review of the Army Checklist for Important Ecological Places (USACE, 2006b), the Williams Field BTR #12 site is an important ecological place. Therefore, ecological receptors are considered to be receptors for migration pathways at this site.

Table 5.3
Federally and State-Listed Species Potentially Within the Williams Field Bomb Target Range #12

Common Name	Scientific Name	Federal Status	State Status	Preferred Habitat	Habitat Present at Site?
Arizona Hedgehog Cactus	*Echinocereus triglochidiatus var. arizonicus*	Endangered	Highly Sensitive	Oak woodlands and chaparral at 1050 to 1410 meters. Usually grows in clumps among granite boulders (NatureServe, 2008).	No
Southwestern Willow Flycatcher	*Empidonax traillii extimus*	Endangered	Species of Concern	Thickets, scrubby and brushy areas, open second growth, swamps, and open woodland. Restricted to riparian habitat. Nests primarily in swampy thickets, especially of willow, sometimes buttonbush, tamarisk, vines, or other plants, where vegetation is 4 to 7 meters or more in height (NatureServe, 2008).	No
Cactus Ferruginous Pygmy-Owl	*Glaucidium brasilianum cactorum*	Endangered	Species of Concern	Currently mainly associated with Sonoran desert scrub, especially along washes with dense xeroriparion mesquite, palo verde, desert ironwood, desert hackberry, and catclaw acacia (NatureServe, 2008).	Yes
Lesser Long-Nosed Bat	*Leptonycteris curasoae yerbabuenae*	Endangered	Species of Concern	Roosts in old mines and caves at the base of mountains near alluvial fans vegetated with agave, yucca, saguaro, and organ pipe cactus (NatureServe, 2008).	Yes

Table 5.3
Federally and State-Listed Species Potentially Within the Williams Field Bomb Target Range #12

Common Name	Scientific Name	Federal Status	State Status	Preferred Habitat	Habitat Present at Site?
Mexican Spotted Owl	*Strix occidentalis lucida*	Threatened	Species of Concern	Occurs primarily in mixed conifer, pine oak, and evergreen oak forests. Also occurs in ponderosa pine forests and rocky canyonlands (NatureServe, 2008).	No
Nichol's Turk's Head Cactus	*Echinocactus horizonthalonius var. nicholii*	Endangered	Highly Sensitive	Unshaded microsites in Sonoran desert scrub on dissected alluvial fans at the foot of limestone mountains and on inclined terraces and saddles on limestone mountain sides. North facing black limestone slopes where ocotillos, saguaros, and palo verdes occur in abundance (NatureServe, 2008).	Yes

5.2.6 Sample Locations and Methods

5.2.6.1 On June 23 and 24, 2008, QR was conducted and surface soil samples were collected from the Williams Field BTR #12 as shown in Figure 5.1. Eight of the soil sample locations were selected to represent areas with the highest likelihood for the presence of MEC or MC contamination (biased soil samples) per the SS-WP (Parsons, 2008b). One duplicate biased surface soil sample was also collected. Two ambient surface soil samples were collected outside of the MRS but within the FUDS property boundary, from anticipated "non DoD impacted" areas. Surface soil samples were collected from 0 to 6 inches bgs. The sampling locations were recorded with a Global Positioning System (GPS) unit for later reference.

5.2.6.2 A UXO Technician III screened and approved each potential location prior to final location selection and sample collection. In accordance with the PSAP Addendum (Parsons, 2006), the CRREL "seven-point wheel" composite sampling technique was employed for the soil samples. As discussed in the Final SS-WP Addendum (Parsons, 2008b) and Subchapter 5.3.4.4 (below), a 2-foot template was used during sample collection. The actual GPS coordinates for the sample locations were recorded and updated in the GIS database.

5.2.6.3 Surface soil samples were analyzed by TestAmerica in Arvada, Colorado for explosives (Method SW8321A) and select total metals (Methods SW6010B/6020/SW7471A).

5.2.7 Background/Ambient Metals Concentrations

5.2.7.1 No site-specific statistical evaluation of background metals concentrations is available. Due to the limited scope of the SI, conducting a site-specific statistical background evaluation of metals concentrations (which typically requires collection of at least 10 background samples) was not considered practical or warranted at this stage of investigation. Analytical results of two ambient samples collected during the 2008 SI field effort were used to estimate background metals concentrations at the Williams Field BTR #12.

5.2.7.2 To provide an indication of metals naturally occurring in soils at the Williams Field BTR #12, two ambient surface soil samples (W12-RL-SS-06-01 and -02) were collected during the 2008 SI field activities. These samples were collected outside of the MRS, but within the FUDS property boundary, in areas that are not expected to be affected by former DoD activities at the Williams Field BTR #12 (Figure 5.1). There were no MEC or MD observed in the vicinity of the ambient sample locations, suggesting that the locations are likely representative of the naturally occurring surface soil in the area.

5.2.7.3 The analytical results for the ambient surface soil samples are presented in Table 5.4. These values are used to estimate the background concentrations of metals at the Williams Field BTR #12, which is one of the criteria used to evaluate whether or not MC contamination is present (Subchapter 5.2.8). Explosives were not detected in the ambient samples, further indicating that the samples represent ambient surface soil conditions.

5.2.7.4 The analytical results for the surface soil samples are listed in Table 5.5. Groundwater, surface water, sediment, and air samples were not collected from the Williams Field BTR #12.

Table 5.4
Soil Background Concentrations of Metals
Williams Field Bomb Target Range #12

Analyte	Units	W12-RL-SS-06-01 Ambient Sample		W12-RL-SS-06-02 Ambient Sample		Background Concentration (1)	
Metals							
Aluminum	mg/kg	10,000		8,300		10,000	
Antimony	mg/kg	0.25	U	0.25	U	0.25	U
Barium	mg/kg	85		69		85	
Copper	mg/kg	16		11		16	
Iron	mg/kg	16,000		15,000		16,000	
Lead	mg/kg	9.9		6.3		9.9	
Magnesium	mg/kg	4,100		3,700		4,100	
Mercury	mg/kg	0.0091	J	0.033	U	0.0091	J
Potassium	mg/kg	2,200		2,100		2,200	
Sodium	mg/kg	92	J	88	J	92	J
Zinc	mg/kg	39		28		39	

1 - Background concentration is the maximum analyte concentration detected in the ambient surface soil samples (Table 5.5).

U – Analyte not detected, i.e., the concentration is less than the practical quantitation limit (PQL) in soil.

J – Analyte detected, estimated concentration.

Table 5.5
Summary Of Validated Analytical Results For Williams Field Bomb Target Range #12 MMRP Soil Samples Collected In June 2008

SAMPLE ID:		W12-RL-SS-06-01 Ambient Sample		W12-RL-SS-06-02 Ambient Sample		W12-MRS01-SS-06-03		W12-MRS01-SS-06-11 FD of W12-MRS01-SS-06-03		W12-MRS01-SS-06-04		W12-MRS01-SS-06-05		W12-MRS01-SS-06-06		W12-MRS01-SS-06-07		W12-MRS01-SS-06-08		W12-MRS01-SS-06-09		W12-MRS01-SS-06-10	
DATE SAMPLED:		06/24/08		06/24/08		06/24/08		06/24/08		06/24/08		06/24/08		06/23/08		06/23/08		06/23/08		06/23/08		06/24/08	
LAB SAMPLE ID:	Units	D8F250297011		D8F250297010		D8F250297008		D8F250297009		D8F250297006		D8F250297005		D8F250297004		D8F250297002		D8F250297001		D8F250297003		D8F250297007	
Explosives - SW8321A																							
1,3,5-Trinitrobenzene	mg/kg	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
1,3-Dinitrobenzene	mg/kg	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
2,4,6-Trinitrotoluene (TNT)	mg/kg	0.10	U	0.10	U	0.10	U	**0.0052**	J	0.10	U	**0.0093**	J	0.10	U	0.10	U	**0.0053**	J	0.10	U	0.10	U
2,4-Dinitrotoluene	mg/kg	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
2,6-Dinitrotoluene	mg/kg	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
2-Amino-4,6-dinitrotoluene	mg/kg	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
2-Nitrotoluene	mg/kg	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
3-Nitrotoluene	mg/kg	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
4-Amino-2,6-dinitrotoluene	mg/kg	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
4-Nitrotoluene	mg/kg	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	mg/kg	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Methyl-2,4,6-trinitrophenylnitramine (Tetryl)	mg/kg	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Nitrobenzene	mg/kg	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Nitroglycerin	mg/kg	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	mg/kg	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Pentaerythritol Tetranitrate (PETN)	mg/kg	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Metals - SW6010B/6020/7471A																							
Aluminum	mg/kg	**10000**		**8300**		**9200**	J	**9800**		**11000**		**8900**		**5900**		**9600**		**9500**		**11000**		**9200**	
Antimony	mg/kg	0.25	U	0.25	U	0.25	UJ	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	**0.014**	J
Barium	mg/kg	**85**		**69**		**79**		**82**		**88**		**87**		**56**		**78**		**82**		**77**		**87**	
Copper	mg/kg	**16**		**11**		**14**		**15**		**15**		**18**		**8.8**		**12**		**13**		**13**		**14**	
Iron	mg/kg	**16000**		**15000**		**15000**	J	**14000**		**15000**		**16000**		**10000**		**14000**		**17000**		**15000**		**14000**	
Lead	mg/kg	**9.9**		**6.3**		**12**		**12**		**8.4**		**12**		**6.0**		**7.4**		**8.9**		**7.8**		**9.0**	
Magnesium	mg/kg	**4100**		**3700**		**3900**		**4300**		**4500**		**3700**		**2400**		**3800**		**4000**		**4400**		**3900**	
Mercury	mg/kg	**0.0091**	J	0.033	U	0.033	U	**0.017**	J	**0.0068**	J	0.033	U	0.033	U	0.033	U	**0.012**	J	**0.014**	J	0.033	U
Potassium	mg/kg	**2200**		**2100**		**2400**		**2500**		**2200**		**2100**		**1400**		**2400**		**2300**		**2200**		**2500**	
Sodium	mg/kg	**92**	J	**88**	J	**110**	J	**100**	J	**88**	J	**83**	J	**67**	J	**93**	J	**93**	J	**98**	J	**93**	J
Zinc	mg/kg	**39**		**28**		**42**		**40**		**35**		**38**		**24**		**32**		**33**		**30**		**35**	

QA NOTES AND DATA QUALIFIERS:

(NO CODE) - Confirmed identification.
U - Analyte was analyzed for but not detected above the sample specific practical quantitation limit (PQL_sa).
UJ - Analyte not detected, reported PQL_sa may be inaccurate or imprecise.
J - Analyte detected, estimated concentration.
FD = Field Duplicate
Detections are bolded.

5.2.8 Munitions Constituent Source Evaluation

5.2.8.1 As explained in Subchapter 5.1, an exposure pathway is not considered to be complete unless MC contamination is present. To make this determination for metals, the concentration of each MC metal in the soil is compared to several criteria. Any detection of explosives is considered MC contamination. For an analyte to be considered contamination related to a release from munitions-related activities, it is necessary for the following conditions to be true:

- The analyte is detected in the sample medium, AND
- The analyte is present above the background concentration (Subchapter 5.2.7), AND
- The analyte is a potential constituent of the munitions formerly used at the site (Table 4.1).

5.2.8.2 The MC metals analyzed for in the samples collected within the MRS were evaluated against these criteria to determine whether or not potential MC contamination is present. Only detections (Subchapter 5.3.4.5) of analytes that meet the conditions above are evaluated further in the SLRA and SLERA in Chapter 6. Iron, magnesium, potassium, and sodium are essential nutrients that are not expected to pose a human or ecological risk, so they are not retained for consideration in Chapter 6. Any detection of explosives is considered to be MC contamination and is evaluated in the SLRA and SLERA in Chapter 6.

5.3 MRS01 – WILLIAMS FIELD BOMB TARGET #12

This subchapter of the SI Report describes the evaluation of exposure pathways for the single MRS located at the Williams Field BTR #12: the MRS01 – Williams Field Bomb Target #12. The analysis of each pathway is based on the analytical results for media of concern and the current and future land use information presented in Subchapter 2.2.4. As described in Subchapter 2.2.4, the entire site is privately owned (USACE, 1998a). Information obtained during the TPP meeting indicates that portions of the Williams Field BTR #12 are residentially developed, and additional residential development of the site is anticipated. Cow patties were observed during the SI field effort, indicating that parts of the Williams Field BTR #12 may also be used seasonally for cattle grazing. Additionally, based on the debris from human activity observed during the 2008 SI field effort, it is likely that the site is used by illegal immigrants. The land surrounding the site has been developed for agricultural purposes and there are scattered residences and agricultural buildings approximately three-quarters of a mile from the aiming circle. The CSEM for the MRS01 – Williams Field Bomb Target #12 is provided in Appendix J.

5.3.1 Historical Munitions Constituent Information

To date, no data exist to indicate that MC related to the use of munitions have affected the MRS.

5.3.2 Groundwater Migration Pathway

Groundwater can serve as a contaminant transport mechanism that may affect surface water bodies, sediment, drinking water supplies, vegetation, and sensitive environmental areas such as wetlands. The likelihood of exposure is influenced by such factors as the volume and concentration of contaminated soil at the ground surface that can be transported to the groundwater, site-specific geology, climate, and the expected future land use.

5.3.2.1 Geologic and Hydrogeologic Setting

As described in Subchapter 5.2.2, the MRS is located within the Maricopa-Stanfield subbasin of the Pinal AMA. The subbasin is stratified into three major aquifer systems: The Upper Alluvial Unit, the Middle Silt Unit, and the Lower Conglomerate Unit (AZ DWR, 1999). The majority of the groundwater available is from within the interstitial spaces of the alluvial deposits that fill the basin east of the Williams Field BTR #12 area. In general, these alluvial deposits are hydraulically connected and form a single unconfined aquifer. However, some isolated areas containing impermeable clay and silt layers may be under confined conditions, usually at depths greater than 1,000 feet. The greatest groundwater yields come from sand and gravel deposits which border the area's streams and rivers, with possible well yields of 3,000 gallons per minute (USACE, 1998a). There is one well, used for irrigation, located within the MRS. There is one unused groundwater well located within the FUDS property boundary but outside of the MRS. Based on available water level data, the depth to water in the irrigation well is 644.3 feet bgs, last measured in 1974. The depth to water in the unused well is 437 feet bgs, last measured in 1958. The depth to groundwater in both wells is generally increasing (SAHRA, 2008).

5.3.2.2 Releases and Potential Releases to Groundwater

There have been no known releases or potential releases of MC to groundwater within the MRS. Nineteen of the 22 active wells reported within a 4-mile radius of the site are used for irrigation, and the other three are stock wells. There are no public water supply or domestic use wells reported within 4 miles of the MRS. The available information (Subchapter 5.3.2.1) indicates that the depth to groundwater beneath the site is greater than 430 feet bgs (SAHRA, 2008). Given the apparent depth to groundwater and the arid conditions at the site, it is considered unlikely that releases of MC to soil as a result of the munitions-related activities would migrate to the underlying groundwater.

5.3.2.3 Groundwater Migration Pathway and Receptors

There is one groundwater well located within the MRS boundary (Figure 5.2). The purpose of this well is indicated as irrigation. Additionally, there is one unused well located within the FUDS property boundary, but outside of the MRS. Residences are located within 1 mile of the MRS, and additional residential development is expected in the future. However, no domestic-use wells are reported within 4 miles of the MRS, and the available information suggests that any such wells installed in the future will use deep groundwater (Subchapter 5.3.2.1). Site visitors may also be present at the MRS and the FUDS-eligible property. Therefore, based on the available groundwater information and the current and future land use, the potential receptors for a complete groundwater

migration pathway at the MRS would include current and future residents, commercial or industrial workers (e.g., ranch hands and other agricultural personnel), and site visitors. Exposures of those receptors to groundwater would occur via ingestion and dermal absorption.

5.3.2.4 Groundwater Sample Locations and Methods

Groundwater sampling for MC has not been performed in the past within the MRS and was not conducted as part of the SI. Based on available water level data, the depth to water in the well located within the MRS boundary is generally increasing. The depth to water in this well is 644.3 feet and was last measured in 1974 (SAHRA, 2008).

5.3.2.5 Groundwater Migration Pathway Analytical Results

Not applicable; groundwater sampling was not conducted during the SI.

5.3.2.6 Groundwater Migration Pathway Conclusions

Although groundwater at and near the site is accessible to receptors when it is used as irrigation and livestock water, the apparent depth to groundwater and the arid conditions at the site make it unlikely that MC contamination from surface soil would migrate to groundwater. Therefore, the groundwater migration pathway at the Williams Field BTR #12 is considered to be incomplete.

5.3.3 Snrface Water and Sediment Migration Pathways

Surface water can serve as a contaminant transport mechanism that may affect surface water bodies, sediment, drinking water supplies, vegetation, and sensitive environmental areas such as wetlands. The likelihood of exposure is influenced by such factors as the volume and concentration of contaminated soil at the ground surface that can be transported to the surface water and sediment through runoff and erosion. No surface water or sediment samples were collected because there are no perennial surface water bodies within the MRS.

5.3.3.1 Hydrologic Setting

5.3.3.1.1 The Williams Field BTR #12 is located within the Sonoran Desert. There are no perennial surface water sources within the MRS01 – Williams Field Bomb Target #12. Based on a review of satellite imagery of the Williams Field BTR #12 site, there are several dry washes (or intermittent streams) that traverse the site from the southwest to the northeast (Google Earth, 2008). Surface water from the Williams Field BTR #12 flows into the Santa Rosa Canal via these dry washes.

5.3.3.1.2 The USFWS Wetlands Online Mapper through the NWI was used to identify wetlands that may be located within the MRS and surrounding area. According to the NWI, there are no wetlands within the MRS or the Williams Field BTR #12. Wetlands were not observed during the 2008 SI field effort.

5.3.3.2 Releases and Potential Releases to Surface Water and Sediment

There are no known direct releases or potential direct releases of MC to surface water or sediment at the MRS01 – Williams Field Bomb Target #12. There are no perennial water bodies at the MRS01 – Williams Field Bomb Target #12.

5.3.3.3 Surface Water and Sediment Migration Pathway and Receptors

There are no perennial surface water sources within the MRS01 – Williams Field Bomb Target #12, and surface water was not observed during the SI field effort. Potential receptors for a complete surface water migration pathway at the MRS would include current and future residents, commercial or industrial workers (e.g., ranchers and other agricultural personnel), site visitors, and ecological receptors. Exposures to human and ecological receptors might occur by incidental ingestion and dermal contact. Ecological receptors might also be exposed via ingestion of surface water as drinking water. However, it is unlikely that these pathways would be present because there are no perennial water bodies at the MRS01 – Williams Field Bomb Target #12.

5.3.3.4 Surface Water and Sediment Sample Locations and Methods

Neither surface water nor sediment sampling has been performed in the past at the MRS, and surface water and sediment samples were not collected during the SI field effort, as agreed to by the TPP Team. There are no perennial surface water sources within the MRS.

5.3.3.5 Surface Water and Sediment Migration Pathway Analytical Results

Not applicable; surface water sampling was not conducted during the SI field effort.

5.3.3.6 Surface Water and Sediment Migration Pathway Conclusions

The lack of perennial surface water or sediment at or near the MRS makes it highly unlikely that human or ecological receptors would be exposed to MC contamination in those media. Therefore, based on currently available information, the surface water and sediment migration pathway is considered incomplete for all receptors at the MRS01 – Williams Field Bomb Target #12.

5.3.4 Soil Exposure Pathway

Potential soil exposure pathways include incidental ingestion, dermal contact, and inhalation of re-suspended particulates by both human and ecological receptors, as well as leaching to groundwater and runoff to surface water and sediment. The likelihood of exposure is influenced by such factors as the volume and concentration of contaminated soil exposed at the ground surface, site-specific geology, climate, and expected future land use. Ecological receptors may also come into contact with MC in the soil by ingestion of biota that have been exposed to MC in soil.

5.3.4.1 Physical Source Access Conditions

5.3.4.1.1 The Williams Field BTR #12 and its associated MRS are located approximately 14 miles southwest of Casa Grande, Arizona. Access to the site is provided via West Connelly Road, southwest of the Interstate 8 and South Stanfield Road junction.

5.3.4.1.2 Based on information obtained from the ASR (USACE, 1998a) and Parsons, the entire site is privately owned. Most of the FUDS-eligible property is undeveloped desert land. The land north and east of the site has been developed for agricultural purposes. There are scattered residences and agricultural buildings in a radius approximately one half to three quarters of a mile from the target center.

Information obtained during the TPP meeting indicates that portions of the Williams Field BTR #12 are residentially developed. Additional residential development of the site is anticipated.

5.3.4.2 Actual or Potential Contamination Areas

The MRS01 – Williams Field Bomb Target #12 was used as a target for practice bombing (USACE, 1998a). MD were discovered within the MRS during the ASR field visit conducted in 1996 and during the SI field effort conducted in 2008. As a result, the potential for munitions-related contamination exists within the MRS01 – Williams Field Bomb Target #12.

5.3.4.3 Soil Exposure Pathways and Receptors

The soil exposure pathway accounts for the potential risks to human and ecological receptors at or near the MRS that may come into contact with contaminated soil. Based on the known current and future land use at the site, the potential receptors for soil at the MRS01 – Williams Field Bomb Target #12 include current and future residents, commercial or industrial workers (e.g., ranchers and other agricultural personnel), site visitors, and ecological receptors. Exposure to contaminated soil could occur via incidental ingestion, inhalation of re-suspended particulate matter, and by dermal contact. Ecological receptors may also come into contact with MC in the soil by ingestion of biota that have been exposed to MC in soil.

5.3.4.4 Soil Sample Locations and Methods

5.3.4.4.1 Ten surface soil samples and one associated field duplicate sample were collected from the Williams Field BTR #12 as shown in Figure 5.1. Eight of the soil sample locations (W12-MRS01-SS-06-03 through W12-MRS01-SS-06-10) were selected to represent areas with the highest likelihood for the presence of MEC or MC contamination (biased soil samples) per the Final SS-WP Addendum (Parsons 2008b). One duplicate biased surface soil sample (W12-MRS01-SS-06-11) was also collected. Two ambient surface soil samples (W12-RL-SS-06-01 and W12-RL-SS-06-02) were collected outside of the MRS but within the FUDS property boundary, from anticipated "non DoD impacted" areas. Surface soil samples were collected from 0 to 6 inches bgs. The sampling locations were recorded with a GPS unit for later reference. Appendix D includes the field notes and field forms for this SI field effort.

5.3.4.4.2 A UXO Technician III screened and approved each potential location prior to final location selection and sample collection. Per the PWP, the UXO Technician checked the magnetometer against a known piece of metal and performed battery checks each day to confirm that it was working properly. In accordance with the PWP, the CRREL seven-point wheel composite sampling technique was employed with modifications. Instead of using a 4-foot diameter template, the locations of the six sample locations surrounding the center location were determined by using a 2-foot template, which was used to provide direction for measurement from the center location. This method resulted in equidistant spacing of the six locations in a circular pattern, with all six outer locations placed at a distance of 2 feet from the center location (for a total four-foot diameter of the sample "wheel"). Therefore, the configuration called for by the CRREL seven-point wheel composite sampling technique was met. The actual GPS

coordinates for the center point of each surface soil sample location were recorded and updated in the GIS database. The surface soil sample collection procedures presented in the Final PWP (Parsons, 2005), the Final PSAP (USACE, 2005), and the Final PSAP Addendum (Parsons, 2006) were followed.

5.3.4.4.3 Surface soil samples were packaged and shipped to TestAmerica in Arvada, Colorado for analysis. Samples were analyzed for explosives (Method SW8321A) and selected total metals (Methods SW6010B/6020/SW7471A).

5.3.4.5 Soil Exposure Analytical Results

The analytical results for the surface soil samples collected from the Williams Field BTR #12 are presented in Table 5.5. The results were used in the source evaluation (Table 5.6), using the criteria described in Subchapter 5.2.8. The explosive compound 2,4,6-trinitrotoluene (TNT) was detected in surface soil samples, and was retained for consideration in the SLRA in Chapter 6. Table 5.6 shows that aluminum, antimony, barium, copper, iron, lead, magnesium, mercury, potassium, sodium, and zinc were detected at maximum concentrations that exceed background concentrations.

Table 5.6
Soil Source Evaluation
MRS01 - Williams Field Bomb Target #12

Analyte	Units	Maximum Detected Site Concentration	Background Concentration (1)	Exceeds Background Concentration?	Potential Munitions Constituent? (2)	Screening Level Risk Assessment / Screening Level Ecological Risk Assessment Required?	Primary reason for exclusion from Screening Level Risk Assessment / Screening Level Ecological Risk Assessment
Metals							
Aluminum	mg/kg	11,000	10,000	**Yes**	**Yes**	**Yes**	--
Antimony	mg/kg	0.014 J	0.25 U	**Yes**	**Yes**	**Yes**	--
Barium	mg/kg	88	85	**Yes**	**Yes**	**Yes**	--
Copper	mg/kg	18	16	**Yes**	**Yes**	**Yes**	--
Iron (3)	mg/kg	17,000	16,000	**Yes**	**Yes**	No	Essential nutrient (Footnote 3)
Lead	mg/kg	12	9.9	**Yes**	**Yes**	**Yes**	--
Magnesium (3)	mg/kg	4,500	4,100	**Yes**	**Yes**	No	Essential nutrient (Footnote 3)
Mercury	mg/kg	0.017 J	0.0091 J	**Yes**	**Yes**	**Yes**	--
Potassium (3)	mg/kg	2,500	2,200	**Yes**	**Yes**	No	Essential nutrient (Footnote 3)
Sodium (3)	mg/kg	110 J	92 J	**Yes**	**Yes**	No	Essential nutrient (Footnote 3)
Zinc	mg/kg	42	39	**Yes**	**Yes**	**Yes**	--

1 - Background concentrations established in Table 5.4

2 - Potential munitions constituents listed in Table 4.1

3 - Iron, magnesium, potassium, and sodium are essential nutrients and are not expected to pose an unacceptable risk to human or ecological receptors.

U - Analyte was analyzed for but not detected above the sample specific practical quantitation limit (PQL_sa).

J - Analyte detected, estimated concentration.

5.3.4.6 Soil Exposure Conclusions

The explosive compound TNT was detected in surface soil samples collected from the MRS01 – Williams Field Bomb Target #12. In addition, the maximum detected concentrations of aluminum, antimony, barium, copper, iron, lead, magnesium, mercury, potassium, sodium, and zinc exceed their respective ambient concentrations. However, as noted in Subchapter 5.2.8, iron, magnesium, potassium, and sodium are essential nutrients that are not expected to pose a human or ecological risk. These essential nutrients were not retained for consideration in the SLRA and SLERA in Chapter 6. Based on the analytical data and the available current and future land use at the site, potential surface soil contamination by TNT and the non-essential nutrient MC metals aluminum, antimony, barium, copper, lead, mercury, and zinc is present at the MRS01 – Williams Field Bomb Target #12. Based on the available current and future land use at the site, the soil exposure pathway is complete for TNT and the MC metals. Consequently, they were retained for further evaluation in the SLRA and SLERA in Chapter 6.

5.3.5 Air Migration Pathway

The air migration pathway accounts for hazardous substance migration in gaseous or particulate form through the air. Inhalation of a contaminant can be a potential exposure pathway for human and ecological receptors. No air sampling was performed at the MRS01 – Williams Field Bomb Target #12, and the TPP Team agreed that air sampling would not be performed as part of this SI.

5.3.5.1 Climate

The climate in the Williams Field BTR #12 area is very arid with approximately 8.4 inches of rain per year. Humidity averages range from low to moderate, with an abrupt change from the dry month of June to the summer thunderstorm peak season during July and August. Temperatures are generally hot with normal high temperatures reaching above 90 degrees Fahrenheit (°F) from May through September, and over 100°F from early June through early September. The area is characterized by light winds; however, high winds are commonly associated with summer thunderstorms. These high winds can also cause dust storms, which move large distances across the deserts (USACE, 1998a).

5.3.5.2 Releases and Potential Releases to Air

There are no known direct releases of MC to air at the MRS. During dry and windy conditions, soil can become airborne. If there were releases of MC to soil as a result of DoD munitions activities, it is possible that the constituents would migrate to air via dust.

5.3.5.3 Air Migration Pathway and Receptors

Receptors potentially affected by the air pathway consist of people who reside, work, or go to school within a buffer zone of 4 miles around the MRS. From the U.S. census data, collected in 2000, there are 7 residents within a 0.5- to 1-mile radius of the MRS. Approximately 126 people live within the 4-mile buffer zone. Based on the known current and future land use at the site, the potential receptors for the air migration pathway at the MRS01 – Williams Field Bomb Target #12 include current and future

residents, commercial or industrial workers (e.g., ranchers and other agricultural personnel), site visitors, and ecological receptors. These receptors could be exposed to surface soil through inhalation of re-suspended particulate matter through the air migration pathway. The CSEM is presented in Appendix J.

5.3.5.4 Sample/Monitoring Locations/Methods

Air sampling was not conducted as part of this SI. Air sampling is not known to have been previously performed at the MRS or on any part of the Williams Field BTR #12.

5.3.5.5 Air Migration Pathway Analytical Results

Not applicable; air samples were not collected during the SI.

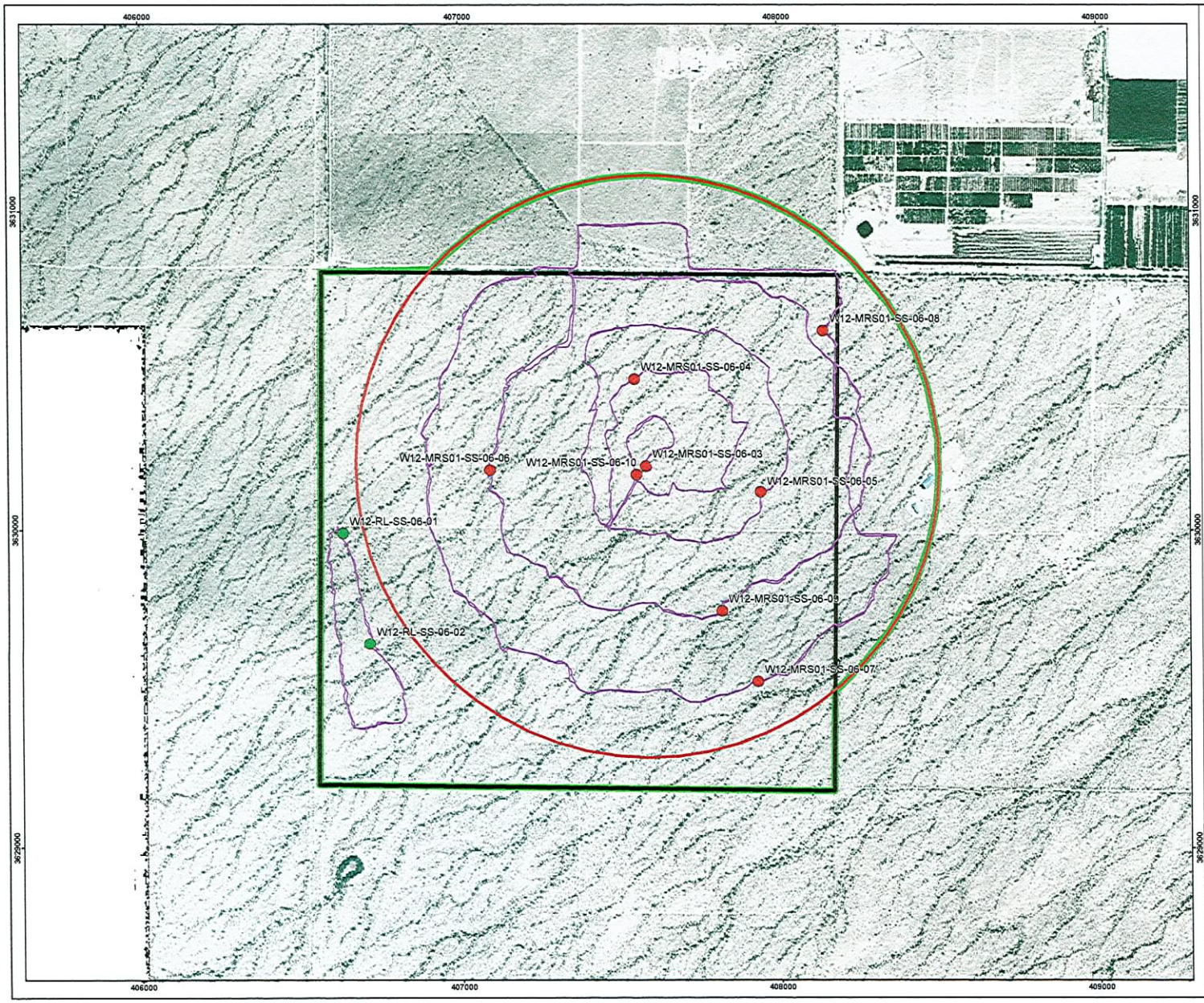
5.3.5.6 Air Migration Pathway Conclusions

As discussed in Subchapter 5.3.4.6, TNT and the non-essential nutrient MC metals aluminum, antimony, barium, copper, lead, mercury, and zinc satisfied the soil source evaluation criteria (Subchapter 5.2.8) for surface soil, and were retained for further consideration in the SLRA and SLERA in Chapter 6. Therefore, the air migration pathway for inhalation of airborne dust is complete for all receptors present at the site. Since the soil screening levels used to evaluate human risk include inhalation pathways, air migration will be addressed under the soil pathway in the SLRA in Chapter 6.

Figure 5.1

Sample Locations
Williams Field Bomb Target Range #12
FUDS Property # J09AZ071301

Pinal County, Arizona



Legend

- Biased Soil Sample Location
- Ambient Soil Sample Location
- MRS 01 Williams Field Bomb Target # 12
- Site Boundary (Original DoD Target Property)
- FUDS Eligible Boundary
- Qualitative Reconnaissance Track



Site Location in Arizona

N

Image: 2006 Orthophotos
Projection: UTM Zone 12 NAD83, Map Units in Meters

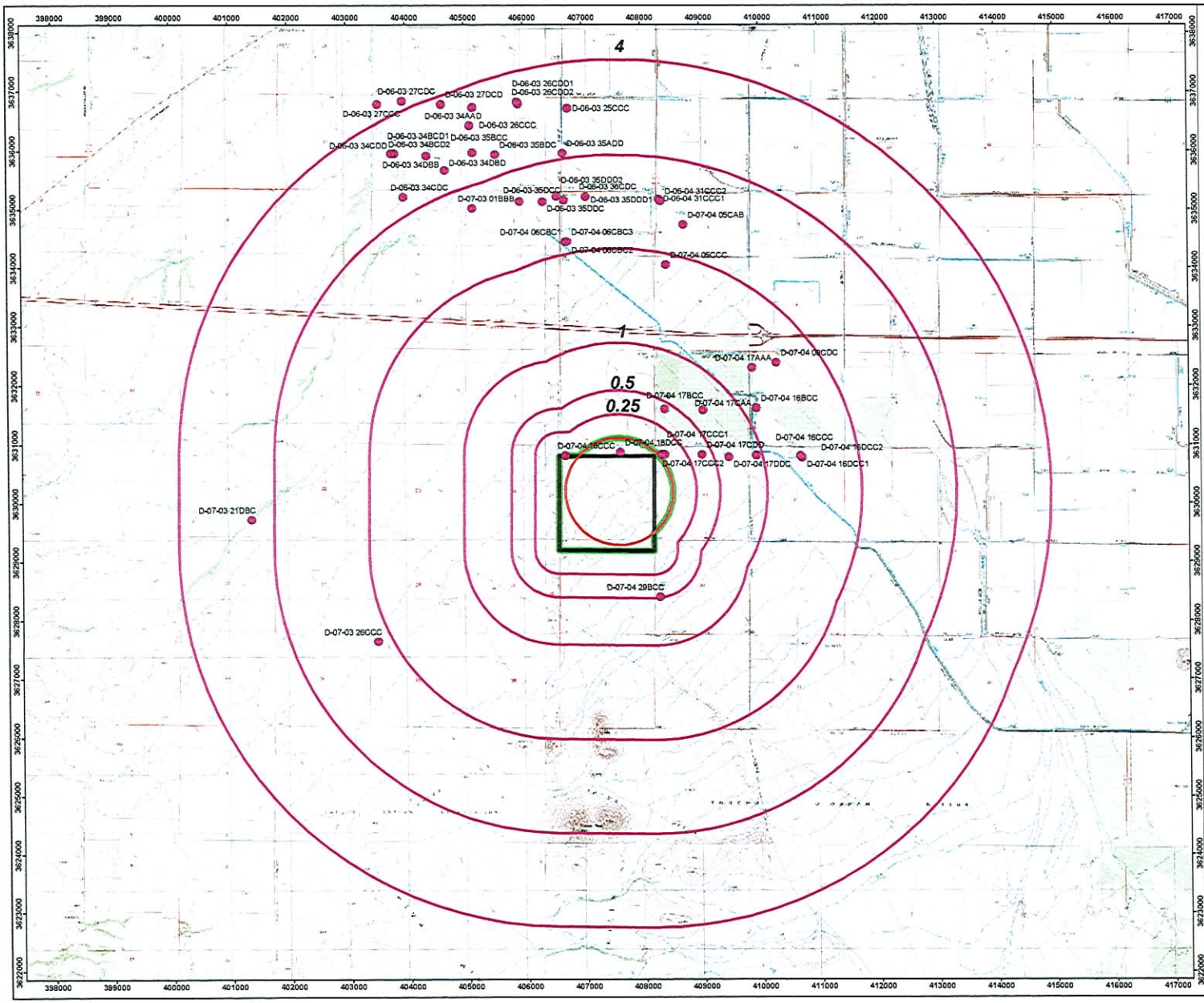
300 150 0 300 Meters

PARSONS	U.S. ARMY SOUTH PACIFIC DIVISION RANGE SUPPORT CENTER
DESIGNED BY: BT	Sample Locations
DRAWN BY: BT	
CHECKED BY: DS	SCALE: As Shown — PROJECT NUMBER: 744653.84104
SUBMITTED BY: DS	DATE: September 2008 — PAGE NUMBER: 5-19
	FILE: X:\GIS\Site_inspections_pw\Maps\williamsfield_ea\Fig5_1_tr12.mxd

Figure 5.2

Water Wells within 4-Mile Buffer
Williams Field Bomb Target Range #12
FUDS Property # J09AZ071301

Pinal County, Arizona



Legend

- Well with State ID #
- MRS 01 Williams Field Bomb Target # 12
- Site Boundary (Original DoD Target Property)
- FUDS Eligible Boundary
- Buffer (Mile)



Site Location in Arizona

N

Image Source: USGS 7.5' Topo Quadrangles, 1981 - 1992
Projection: UTM Zone 12 NAD83, Map Units in Meters

2 1 0 2 Kilometers

PARSONS	U.S. ARMY SOUTH PACIFIC DIVISION RANGE SUPPORT CENTER
DESIGNED BY: BT	Water Wells within 4-Mile Buffer
DRAWN BY: BT	
CHECKED BY: DS	SCALE: As Shown — PROJECT NUMBER: 744653.84104
SUBMITTED BY: DS	DATE: September 2008 — PAGE NUMBER: 5-20
	FILE: X:\GIS\Site_inspections_swi\Maps\williamsfield_sa1\Fig5_2_B12.mxd

CHAPTER 6

SCREENING LEVEL RISK ASSESSMENT

6.1 MUNITIONS AND EXPLOSIVES OF CONCERN SCREENING LEVEL RISK ASSESSMENT

6.1.1 Conceptual Site Model

The CSM for Williams Field BTR #12, included in Appendix J, summarizes conditions at the site that could result in human exposure to MEC. It describes the types of MEC potentially present in the MRS, past MEC and MD findings, and current and projected future land use and receptors.

6.1.2 Introduction

6.1.2.1 A qualitative risk evaluation was conducted to assess the potential explosive safety risk to the public at the Williams Field BTR #12. The purpose of this risk evaluation is to qualitatively evaluate whether a potential risk is present at the site and the primary causes of that potential risk. The risk evaluation presented here is based on historical information presented in prior studies (such as the INPR, ASR, and ASR Supplement) and observations made during the SI QR.

6.1.2.2 An explosive safety risk exists if a person can come near or into contact with a MEC item and interact with it in a manner that results in a detonation. The potential for an explosive safety risk depends upon the presence of three critical elements:

- a source (such as, presence of MEC), AND
- a human receptor (such as, a person), AND
- the potential for interaction between the source and receptor (such as, the possibility that the item might be picked up or disturbed by the receptor).

6.1.2.3 All three of these elements must be present for there to be an explosive safety risk. There is no risk if any one element is missing. Each of these three elements provides a basis for implementing effective risk-management response actions.

6.1.3 Qualitative Risk Evaluation

6.1.3.1 The potential risk posed by MEC was characterized qualitatively by evaluating three primary risk factors for each MRS at a site. These factors are related to the three critical elements listed above and are:

- MEC Presence: whether there is the potential for MEC to be present at the MRS;

- MEC Type: the type(s) of MEC that might be present at the MRS and the related potential explosive hazards; and
- Site Accessibility: the potential receptors at the MRS and how they might interact with the MEC.

6.1.3.2 The known or suspected presence of an explosive hazard and any potential human receptors at an MRS will typically be considered sufficient justification for RI/FS. The following paragraphs describe each of the primary risk factors.

6.1.3.3 **Munitions and Explosives of Concern Presence:** this factor describes whether MEC either has been confirmed or is suspected to be present at the MRS, either at the surface or in the subsurface, and is based on historical information presented in prior studies (such as the INPR, ASR, and ASR Supplement) and observations made during the SI QR. Note that if there is historical evidence of potential MEC presence at a site, lack of confirmation of MEC presence during the SI QR will not be considered as evidence of MEC absence for this qualitative risk evaluation. Table 6.1 lists the three possible categories used to describe MEC presence for this evaluation.

Table 6.1
Categories of Munitions and Explosives of Concern Presence

MEC Presence	Description
Confirmed or suspected	There is physical or confirmed historical evidence of MEC presence at the MRS, or there is physical or historical evidence indicating that MEC may be present at the MRS.
Small arms only(1)	The presence of small arms ammunition is confirmed or suspected, and there is evidence that no other types of munitions were used or are present at the MRS.
Evidence of no munitions	Following investigation of the MRS, there is physical or historical evidence that there are no UXO or discarded military munitions (DMM) present.

1 - Small arms ammunition is defined as "ammunition, without projectiles that contain explosives (other than tracers), that is .50 caliber or smaller or for shotguns" (Department of the Army, 2005).

6.1.3.4 **Munitions and Explosives of Concern Type:** this factor describes whether the MEC potentially present at the MRS might be detonated, resulting in injury to one or more human receptors. If multiple MEC items are potentially present at an MRS, the item which poses the greatest risk to public health is selected for purposes of this qualitative risk evaluation. This determination is based on historical information presented in prior studies (such as the INPR, ASR, and ASR Supplement) and observations made during the SI QR. Table 6.2 lists the three possible categories used to describe MEC type for this evaluation.

Table 6.2
Categories of Munitions and Explosives of Concern Type

MEC Type	Description
Potentially Hazardous	Fuzed or unfuzed MEC that may result in physical injury to an individual if detonated by an individual's activities.
Small arms only[1]	Small arms ammunition is confirmed or suspected, and there is evidence that no other types of munitions were used or are present at the MRS.
Inert	MD or other items that will cause no injury (such as, training ordnance containing no explosives, fuzes, spotting charges, etc.).

1 - Small arms ammunition is defined as "ammunition, without projectiles that contain explosives (other than tracers), that is .50 caliber or smaller or for shotguns" (Department of the Army, 2005).

6.1.3.5 **Site Accessibility:** this factor describes whether human receptors have any access to the MRS and, therefore, may interact with any MEC that is present at the surface or in the subsurface. For purposes of this qualitative risk evaluation, if MEC is confirmed or suspected to be present at the MRS, it is assumed that human receptors might come into contact with that MEC unless there is "Complete Restriction to Access." A description of the potential receptors will also be given with this assessment. Table 6.3 lists the two possible categories used to describe site accessibility for this evaluation.

Table 6.3
Categories of Site Accessibility

Site Accessibility	Description
Accessible	Access control is not complete: residents, site workers, visitors, or trespassers can gain access to all or part of the MRS.
Complete restriction to access	Human receptors are completely prevented from gaining access to the MRS.

6.1.3.6 With regard to this qualitative risk evaluation, further evaluation (such as, RI/FS) for the MRS will typically be justified if the following conditions are true:

- MEC is confirmed or suspected to be present, AND
- The MEC confirmed or suspected to be present is potentially hazardous, AND
- The MRS is accessible.

6.1.3.7 The primary risk factors identified above were evaluated for the MRS at Williams Field BTR #12 using the data collected during the SI field effort and the historical data available from other studies. The following sections discuss the qualitative risk evaluation by each primary risk factor to determine whether or not further evaluation is justified at the MRS.

6.1.4 Munitions and Explosives of Concern Risk Assessment: MRS01 – Williams Field Bomb Target #12

6.1.4.1 No MEC was observed at MRS01 – Williams Field Bomb Target #12 during the SI field activities conducted in June 2008. However, MD from M38A2 100-lb practice bombs and M1A1 spotting charges were found in the MRS during the 2008 SI field activities. MD have historically been reported at the MRS (USACE, 1998). Based on this information, the presence of MEC at MRS01 – Williams Field Bomb Target #12 is assessed to be "Confirmed or Suspected."

6.1.4.2 Based on the ASR (USACE, 1998a) and ASR Supplement (USACE, 2004b), the munitions known to have been used at MRS01 – Williams Field Bomb Target #12 are M38A2 100-lb practice bombs and their associated spotting charges (M1A1, M3, and M5). The MkI 100-lb demolition bomb was not known to have been used at the MRS01 – Williams Field Bomb Target #12 but is included as a potential munition based on information provided in the ASR. The ASR (USACE, 1998a) states that in July 1942 a request was made for a storage bunker to store 250,000 lbs of black powder and 210 100-lb demolition bombs. The ASR does not indicate which range the bombs were to be used or which model was used. The MkI 100-lb demolition bomb was selected as a potential munition because it was a popular bomb for the 1918 – 1944 era. TNT, an MC of the MkI 100-lb demolition bomb was detected in the surface soil samples collected during the SI. The presence of TNT in the surface soil may indicate that this munition was used at Williams Field BTR #12. The presence of TNT may also indicate that Williams Field BTR #12 was the sixth range that was swept during the clearance activities conducted in March 1947 (Subchapter 2.3). The M8A1 aircraft parachute flare was not known to have been used at the MRS01 – Williams Field Bomb Target #12, but was included as a potential munition based on discoveries at other Williams Field Bomb Target Ranges and their historical usage at many of the Williams Field Bomb Target Ranges. Any of these munitions might present a residual hazard if they remain at the site intact. Based on this information, the MEC Type at the MRS01 – Williams Field Bomb Target #12 is assessed to be "Potentially Hazardous."

6.1.4.3 The MRS01 – Williams Field Bomb Target #12 is situated primarily in Section 19, Township 7 South, Range 4 East, approximately 14 miles southwest of Casa Grande, Arizona. The Williams Field BTR #12 and the MRS is accessible via West Connelly Road, which traverses through the northern portion of the MRS along the northern FUDS property boundary. Based on information obtained from the ASR (USACE, 1998a) and Parsons, the entire site is privately owned. Most of the FUDS-eligible property is undeveloped desert land. The land north and east of the site has been developed for agricultural purposes. There are scattered residences and agricultural buildings in a radius approximately one half to three quarters of a mile from the target center. The SVT observed one house within the MRS01 – Williams Field Bomb Target #12 boundary. Additional residential development of the site is anticipated. Observations made during the SI field effort indicate that parts of the MRS may be used seasonally for cattle grazing and by illegal immigrants traveling through the site. Based on this information, the Site Accessibility at the MRS01 – Williams Field Bomb Target #12 is considered to be "Accessible."

6.1.5 Risk Summary

6.1.5.1 The qualitative MEC risk evaluation for MRS01 – Williams Field Bomb Target #12 is summarized in Table 6.4.

Table 6.4
Munitions and Explosives of Concern Risk Evaluation
MRS01 – Williams Field Bomb Target #12

MRS	MEC Presence	MEC Type [1]		Site Accessibility	Further Evaluation?
MRS01 – Williams Field Bomb Target #12	Confirmed or suspected	Bomb, 100-lb, Demolition, MkI	Potentially Hazardous	Accessible	Yes

1 - Where multiple MEC items were used at an MRS, the item which poses the greatest risk to public health is listed for purposes of this risk assessment.

6.1.5.2 Based on this qualitative MEC risk evaluation, there is the possibility that human receptors might come into contact with explosively hazardous MEC at MRS01 – Williams Field Bomb Target #12. Therefore, there is the potential for an explosive safety risk at this MRS.

6.2 MUNITIONS CONSTITUENT HUMAN HEALTH SCREENING LEVEL RISK ASSESSMENT

6.2.1 Conceptual Site Model

As described in Subchapter 6.1.4, the entire site is privately owned. Most of the FUDS-eligible property is undeveloped desert land. The land north and east of the site has been developed for agricultural purposes. There are scattered residences and agricultural buildings in a radius approximately one half to three quarters of a mile from the target center. The SVT observed one house within the MRS01 – Williams Field Bomb Target #12 boundary. Additional residential development of the site is anticipated. The MRS may be seasonally used for cattle grazing. It is also possible that illegal immigrants travel through the site. Potential human receptors for the MRS at the Williams Field BTR #12 include current and future residents, commercial or industrial workers (e.g., ranchers and other agricultural personnel), and site visitors. These receptors may be exposed to MC through direct contact with soil (incidental ingestion, dermal contact, and inhalation of fugitive dust). The CSEM in Appendix J identifies affected media, transport mechanisms, exposure routes, and potential receptors.

6.2.2 Affected Media

6.2.2.1 Direct release of MC from munitions activities within the MRS would be primarily to soil. If there were releases of MC to surface soil as a result of the munitions-related activities, MC could migrate to surface water and sediment, if present, through runoff and erosion. But migration to groundwater is unlikely at Williams Field BTR #12, given the depth to groundwater and the arid site conditions (Subchapters 5.2.3 and 5.3.2.6). MC in the surface soil can also become airborne in fugitive dust.

6.2.2.2 Based on decisions made at the TPP meeting, surface soil was the medium determined to be most likely affected by MC. Surface water, sediment and groundwater were not sampled during this SI.

6.2.3 Screening Levels

The risk-based soil screening values selected by the TPP Team for this SI were the USEPA Region 9 Residential Soil PRGs (USEPA, 2004) and the Arizona Residential SRLs. However, in June 2008, USEPA released the new RSLs for human health (USEPA, 2008). The new RSLs are recommended by USEPA for immediate use, in place of the earlier Region 3, 6, and 9 values. Therefore, Parsons used the USEPA RSLs for residential soil for explosives and the Arizona Residential SRLs for metals in the SLRA.

6.2.4 Risk Characterization for Soil

To complete the human health risk characterization for soil at this site, the maximum detected concentrations of TNT, aluminum, antimony, barium, copper, lead, mercury, and zinc were compared to the screening levels described in Subchapter 6.2.3. For those analytes to be considered as possible health concerns at the site, it is necessary for their soil concentrations to exceed their risk-based screening levels.

6.2.5 MRS01 – Williams Field Bomb Target #12

Groundwater, surface water, sediment, and air samples were not collected from the MRS01 – Williams Field Bomb Target #12; therefore, these pathways were not evaluated in the SLRA. Eight biased surface soil samples and one biased field duplicate soil sample were collected from the MRS01 – Williams Field Bomb Target #12. As shown in Table 5.5, the TNT was detected in surface soil, and non-essential nutrient MC metals aluminum, antimony, barium, copper, lead, mercury, and zinc were detected above their ambient concentrations (Table 5.6). These MC were retained for consideration in this SLRA. Table 6.5 shows that the maximum detected concentrations of the evaluated MC did not exceed their risk-based screening values for surface soil.

Table 6.5
Soil Human Health Screening Level Risk Assessment
MRS01 - Williams Field Bomb Target #12

Analyte	Units	Maximum Detected Site Concentration		Human Health Screening Level for Residential Soil	Exceeds Screening Level?
Metals					
Aluminum	mg/kg	11,000		76,000 (1)	No
Antimony	mg/kg	0.014		31 (1)	No
Barium	mg/kg	88		15000 (1)	No
Copper	mg/kg	18		3100 (1)	No
Lead	mg/kg	12		400 (1)	No
Mercury	mg/kg	0.017	J	23 (1)	No
Zinc	mg/kg	42		23,000 (1)	No
Explosives					
2,4,6-Trinitrotoluene (TNT)	mg/kg	0.0093	J	16 (2)	No

1 - Arizona Residential SRLs (http://azsos.gov/public_services/Title_18/18-07.htm)
2 - USEPA RSLs for Chemical Contaminants at Superfund Sites for Soil, updated July 7, 2008 (http://epa-prgs.ornl.gov/chemicals/download/master_sl_table_run_7JULY2008.pdf)

6.2.6 Discussion

The maximum detected concentrations of TNT, aluminum, antimony, barium, copper, lead, mercury, and zinc in surface soil did not exceed the risk-based human health screening values. Therefore, no unacceptable risks are expected for human receptors exposed to surface soil at the MRS01 – Williams Field Bomb Target #12.

6.3 MUNITIONS CONSTITUENT ECOLOGICAL SCREENING LEVEL RISK ASSESSMENT

6.3.1 As described in Subchapter 5.2.5, the MRS01 – Williams Field Bomb Target #12 is located in an area that potentially includes habitat for six federally and state-listed species. According to the USFWS of the six species potentially located on site, the Mexican spotted owl and the southwestern willow flycatcher are declared as having critical habitat and the cactus ferruginous pygmy-owl is proposed as having critical habitat within Pinal County. T&E species were not identified during the SI field effort.

6.3.2 Based on the potential presence of six federally and state-listed T&E species and a review of the Army Checklist for Important Ecological Places (USACE, 2006b), the Williams Field BTR #12 site is an important ecological place. Therefore, ecological receptors are considered to be receptors for migration pathways at this site.

6.3.1 Conceptual Site Model

Wildlife receptors within the MRS may be exposed to MC in surface soil by incidental ingestion and inhalation of fugitive dust and by consuming other MC-contaminated biota as part of their diet. Flora could be exposed via uptake from contaminated soil or from deposition of windblown particulates on exposed plant structures. Appendix J presents the CSEM developed for the MRS01 – Williams Field Bomb Target #12.

6.3.2 Affected Media

6.3.2.1 The direct release of MC from munitions activities at the site would likely be primarily to surface soil. If there were releases of MC to surface soil as a result of the munitions-related activities, it could migrate to surface water and sediment, if present, via runoff and erosion, or to groundwater through leaching. MC in the surface soil can also become airborne in fugitive dust.

6.3.2.2 Eight biased surface soil samples and one biased field duplicate soil sample were collected at the site. Surface soil is expected to act as an indicator of potential contamination; therefore, surface water and sediment were not sampled during this SI. Activities at the site would be expected to release MC directly to surface soil and result in the highest concentrations in the soil. Thus the absence of MC in surface soil would likely indicate an absence of contamination in other media. Groundwater is not directly accessible to most ecological receptors; therefore, this pathway is incomplete for ecological receptors.

6.3.3 Screening Values

6.3.3.1 The ecological screening values (ESVs) selected by the TPP Team for this SI are the USEPA EcoSSLs. The EcoSSLs are developed for four groups of organisms (plants, invertebrates, birds, and mammals), for a limited set of metals, and the most conservative value for each MC is used for screening purposes. When EcoSSLs are not available, the references cited by the PSAP (USACE, 2005) and PSAP Addendum (Parsons, 2006) are used to obtain the appropriate screening values.

6.3.3.2 The ESVs are based on a number of conservative assumptions, including assumptions about the types of receptors present (e.g., insectivores, terrestrial mammals, etc.) and assumptions about exposure parameters such as soil ingestion rate and receptor range. Site-specific information was not used to develop these screening values, because the use of site-specific information typically results in less conservative, higher screening values.

6.3.4 Ecological Risk Characterization for Soil

6.3.4.1 As discussed in Subchapter 5.2.8, the source evaluation is used to determine which analytes are retained for consideration in a SLERA. Only those analytes retained for consideration in the SLERA are evaluated in this chapter.

6.3.4.2 In order to complete the ecological risk characterization for this site, the maximum detected concentration of each selected analyte was evaluated against the relevant ESV (Subchapter 6.3.3). This comparison resulted in the calculation of a hazard

quotient (HQ) for each analyte. The HQ was calculated by determining the ratio of the maximum detected site concentration to the ESV. If the HQ is equal to or less than 1, the potential for ecological risk is considered to be negligible. If the HQ is greater than 1, there is the potential for unacceptable ecological risks.

6.3.5 MRS01 – Williams Field Bomb Target #12

6.3.5.1 Eight biased surface soil samples and one biased field duplicate soil sample were collected at the Williams Field Bomb Target #12. The explosive compound TNT and the non-essential nutrient MC metals aluminum, antimony, barium, copper, lead, mercury, and zinc were retained for consideration in this SLERA. Table 6.6 shows that the calculated HQs for TNT, antimony, barium, copper, mercury, and zinc are less than 1. The HQs for aluminum and lead are 220 and 1.1, respectively.

6.3.5.2 Based on current EcoSSL guidance (USEPA, 2003), aluminum must be present in a soluble form to be toxic to ecological receptors. Therefore, analytical results of aluminum in soil cannot be directly correlated with toxicity. Aluminum in soil is likely to only present a risk to ecological receptors in moist, acidic (pH 5 or less) soil. The soil at the Williams Field BTR #12 and the MRS is basic (pH ranges from 7.9 to 8.4) (Subchapter 5.2.1), and the climate is arid (Subchapter 5.3.5.1). Consequently, the conservative nature of the screening values (Subchapter 6.3.3) and the nature of aluminum toxicity, suggest that potential ecological risk due to exposure to aluminum in surface soil is not likely at this site.

Table 6.6
Soil Screening Level Ecological Risk Assessment
MRS01 - Williams Field Bomb Target #12

Analyte	Units	Maximum Detected Site Concentration	Ecological Receptors	
			Ecological Soil Screening Level (1)	HQ
Metals				
Aluminum	mg/kg	11,000	50 (2)	220
Antimony	mg/kg	0.014	0.27	≤1
Barium	mg/kg	88	330	≤1
Copper	mg/kg	18	28	≤1
Lead	mg/kg	12	11	1.1
Mercury	mg/kg	0.017	0.1 (2)	≤1
Zinc	mg/kg	42	46	≤1
Explosives				
2,4,6-Trinitrotoluene (TNT)	mg/kg	0.0093	6.4 (3)	≤1

1 - USEPA Ecological Soil Screening Levels, May 2008 (http://www.epa.gov/ecotox/ecossl/)
2 - USEPA Region 4, Ecological Screening Values
(http://www.epa.gov/region04/waste/ots/ecolbul.htm)
3 - Los Alamos National Laboratory, EcoRisk Database v. 2.2, 2005.

6.3.6 Discussion

Based on the results of this SLERA, there may be an unacceptable risk to ecological receptors from exposure to lead in surface soil at the MRS01 – Williams Field Bomb Target #12. However, it should be noted that the maximum detected concentration of lead in the surface soil at the MRS01 – Williams Field Bomb Target #12 only slightly exceeded its respective ESV and background concentration.

CHAPTER 7
SUMMARY AND CONCLUSIONS

7.1 SUMMARY

7.1.1 One MRS was identified and evaluated to determine its potential to cause significant contamination to the environment or to adversely affect human and ecological receptors. The evaluation included the collection of surface soil samples and the implementation of a QR within the MRS.

7.1.2 During the QR and sampling conducted on June 23 and 24, 2008, ***MD from practice bombs (M38A2) and spotting charges (M1A1) were found. Graded rings and possible target remnants were also observed. No MEC was observed during the SI field effort.*** Debris from human activity (i.e. backpacks, clothing, water bottles, and bicycles) were observed throughout the site, indicating the site may be used by illegal immigrants traveling through the site.

7.1.3 Ten surface soil samples and one associated field duplicate sample were collected and analyzed for explosives and selected metals. ***Explosives (TNT) were detected in biased surface soil samples W12-MRS01-SS-06-05 and W12-MRS01-SS-06-08, and the biased field duplicate sample.*** Additionally, metals were detected in all 10 surface soil samples and the associated field duplicate sample. The metals results were compared to the following criteria to determine the need to perform a SLRA/SLERA for each analyte. If all three criteria are met, MC metals contamination is present and a SLRA/SLERA is necessary for the analyte:

- The analyte is detected in the sample medium; and
- The analyte is present above the background/ambient concentration; and
- The analyte is a potential constituent of the munitions formerly used at the Williams Field BTR #12.

7.1.4 The results of the MC evaluation show that ***there is potential MC contamination in the surface soil at the MRS01 – Williams Field Bomb Target #12, in particular TNT and the non-essential nutrient metals aluminum, antimony, barium, copper, lead, mercury, and zinc.*** A SLRA and a SLERA were conducted for these MC.

7.2 CONCLUSIONS REGARDING POTENTIAL MUNITIONS AND EXPLOSIVES OF CONCERN

7.2.1 ***MD from M38A2 100-lb practice bombs and M1A1 spotting charges were found in the MRS. MD from several hundred M38A2 100-lb practice bombs were found at the target center. The SVT observed graded rings with wooden debris (possible target remnants) at the target center. There were no other visual indicators***

(earthen berms, distressed vegetation, stained soil, or ground scars) of suspect areas identified during the QR. There was no visual evidence of the use of demolition bombs. No MEC was observed during the SI field activities.

7.2.2 The MkI 100-lb demolition bomb was not known to have been used at the MRS01 – Williams Field Bomb Target #12 but is included as a potential munition based on information provided in the ASR. The ASR (USACE, 1998a) states that in July 1942 a request was made for a storage bunker to store 250,000 lbs of black powder and 210 100-lb demolition bombs. The ASR does not indicate which range the bombs were to be used or which model was used. The MkI 100-lb demolition bomb was selected as a potential munition because it was a popular bomb for the 1918 – 1944 era. TNT, an MC of the MkI 100-lb demolition bomb was detected in the surface soil samples collected during the SI. The presence of TNT in the surface soil may indicate that this munition was used at Williams Field BTR #12. The presence of TNT may also indicate that Williams Field BTR #12 was the sixth range that was swept during the clearance activities conducted in March 1947 (Subchapter 2.3).

7.2.3 MD has been found at the Williams Field BTR #12 in the past. Based on the qualitative MEC risk evaluation conducted for MRS01 – Williams Field Bomb Target #12, there is the possibility that human receptors might come into contact with explosively hazardous MEC. Therefore, there is the potential for an explosive safety risk at this MRS.

7.3 CONCLUSIONS REGARDING POTENTIAL MUNITIONS CONSTITUENT EXPOSURE PATHWAYS

7.3.1 An exposure pathway is not considered to be completed unless all four of the following elements are present (USEPA, 1989);

- A source and mechanism for contaminant release;
- An environmental transport/exposure medium;
- A point of exposure at which the contaminant can interact with a receptor; and
- A receptor and a likely route of exposure at the exposure point.

7.3.2 The primary exposure pathway at MRS01 – Williams Field Bomb Target #12 is surface soil. This pathway is complete at the MRS01 – Williams Field Bomb Target #12 for human and ecological receptors. The air exposure pathway is complete for human receptors and potentially complete for ecological receptors. The site receives minimal rainfall. There are no perennial surface water bodies at the MRS01 – Williams Field Bomb Target #12. There are several dry washes (or intermittent streams) that traverse the site from southwest to the northeast (Google Earth, 2008). Natural drainage occurs through these washes. These washes are dry in times of no precipitation. Rainfall in the Williams Field BTR #12 area is limited. It is unlikely that MC in soil at the MRS01 - Williams Field Bomb Target #12 would migrate to the underlying groundwater, due the depth to groundwater (at least 430 feet bgs) and the arid conditions at the site. Therefore, the groundwater migration pathway at the Williams Field BTR #12 is incomplete.

7.3.3 Based on the results of the SLRA, ***exposure to MC in the surface soil at the MRS01 – Williams Field Bomb Target #12 does not pose an unacceptable risk to human health.*** Based on the results of the SLERA, ***there is a potential for an unacceptable ecological risk due to exposure to MC (lead) in the surface soil at MRS01 – Williams Field Bomb Target #12.*** However, it should be noted that the maximum detected concentration of lead in the surface soil at the MRS01 – Williams Field Bomb Target #12 only slightly exceeds its respective ESV and its respective background concentrations.

CHAPTER 8
RECOMMENDATIONS

Parsons recommends that the FUDS-eligible portion of MRS01 – Williams Field Bomb Target #12 proceed to RI/FS with further MC evaluation for explosives and possibly lead in surface soil (Table 8.1). This recommendation is due to the presence of MD observed at the Williams Field BTR #12 during the SI field activities, and the historical MD findings. Because lead only slightly exceeds its respective background concentration and ESV, the RI/FS TPP Team should evaluate the need for further MC sampling for this MC metal. Table 8.1 lists the recommendation and rationale for MRS01 – Williams Field Bomb Target #12.

Table 8.1
Recommendation Summary

Munitions Response Site	Acreage	Munitions and Explosives of Concern and/or Munitions Debris Assessment (1)	Munitions Constituent Assessment (2)	Recommendation
MRS01 – Williams Field Bomb Target #12	649	Yes MD from M38A2 100-lb practice bombs and M1A1 spotting charges observed during the 2008 SI. MD found during previous site visits.	Yes Non-essential nutrient MC metals contamination exists in the surface soil at the MRS, in particular aluminum, antimony, barium, copper, lead, mercury, and zinc. Contamination from TNT, an MC of the MkI demolition bomb, also exists in the surface soil at the MRS. There is no unacceptable risk expected for human receptors from exposure to the MC metals or TNT. Lead may pose a risk to ecological receptors.	RI/FS with further MC evaluation, focusing on explosives and possibly lead. Immediate removal action for MEC is not warranted.

(1) "Yes" in this column indicates confirmed MEC or MD presence indicative of potential MEC presence, resulting in an RI/FS recommendation for the MRS.
(2) "Yes" in this column indicates confirmed MC presence at levels indicating a potential elevated risk to human health or ecological receptors, resulting in a recommendation for further MC sampling during an RI/FS.

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Preliminary Hydrology and Hydraulic Study

Silver Reef Project

Pinal County, Arizona

August 2025

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Acronyms and Abbreviations

DEM	Digital Elevation Model
H&H	hydrologic and hydraulic
HEC-HMS	Hydrologic Engineering Center – Hydrologic Modeling System
HEC-RAS 2D	Hydrologic Engineering Center – River Analysis System 2D
HSG	Hydrologic Soil Group
NRCS	Natural Resources Conservation Service
USACE	U.S. Army Corps of Engineers

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Preliminary Hydrology and Hydraulic Study is to provide a preliminary analysis of hydrologic and hydraulic (H&H) conditions for the development of the Silver Reef Project (Project).

The proposed Project is a 150 megawatt solar energy and battery energy storage system located in Pinal County, Arizona. The preliminary Project Area is approximately 800 acres in size as shown in a KMZ provided by Silver Reef Energy, LLC titled "Silver Reef Energy, LLC (1)." However, Project boundaries are anticipated to become more refined at the final design phase as the layout develops. The H&H modeling results described herein were used to evaluate the 25-, 50-, and 100-year storm inundation limits at the site in existing conditions and provide recommendations for site development restrictions, flow depth risk, and site measures.

The location of the site is shown in Appendix A. The Project Area is primarily bare earth and in an unincorporated area. Little or no change in the runoff potential for the existing area is anticipated upon implementation of a Post-Construction Stormwater Management Program at the site. Refer to Section 5.1 for additional discussion regarding the regulatory environment understood to be present in Arizona.

1.2 Project Overview

The Project will include the installation of ground-mounted racks that hold solar photovoltaic panels; the panels will be elevated off the ground with natural underlying cover. This is typical for solar energy facilities. These racks and panels allow rainfall to reach the ground close to where the rain naturally falls, thereby distributing the rainfall evenly across the Project Area. Consequently, the racks and panels are not considered impervious from a hydrologic standpoint. Other site improvements to the solar area include installing a battery energy storage system, concrete pads to support the inverters, interior gravel/aggregate maintenance roads, erosion control features, stormwater management features, public road entrances, and perimeter fencing.

2.0 EXISTING CONDITIONS

The preliminary Project Area is approximately 800 acres. This area is located in Pinal County, Arizona, off of Interstate 8, south of the city of Stanfield. Surveyed topography for the Project had not been made available at the time of study. National Agriculture Imagery Program imagery was used to analyze runoff direction. Runoff generally flows from the southwest to the northeast across the project area through various rills in the otherwise low sloped area. An ALTA survey was not provided at the time of study. In terms of drainage impact, no significant existing culverts were found in a search of available aerial imagery.

A computational area was refined for analysis to include only areas within or directly upstream of the Project. This computational area is approximately 37 square miles in total. The computational area was delineated based on site topography. Topography shows that some highland areas from the Table Top mountains drain towards the Project. Runoff drains to the northeast off the Project property. For a more detailed look at the computational area and direction of runoff, view the Topography Heat Map in Appendix B.

2.1 Landcover

The Project is located within Arizona, which is mostly characterized by high and low points over mainly arid landcover. In this area, trees and vegetation are scarce. The existing land uses across Pinal County are primarily bare outside of city areas. There are no large cities in the computational area. Within the Project area, land uses mainly consist of scrub/shrub cover. Existing land uses at the Project according to the National Land Cover Database are shown in Appendix C (USGS 2018).

2.2 Soils

To evaluate the runoff potential of soils throughout the United States, the Natural Resources Conservation Service (NRCS) classifies them into four Hydrologic Soil Groups (HSG). According to Urban Hydrology for Small Watersheds (USDA 1986), different soil types vary in infiltration rate. See Table 1.

Table 1. Hydrologic Soil Group Rate and Texture

Hydrologic Soil Group	Infiltration Rate (inches per hour)	Soil Texture
A	> 0.3	Sand, loamy sand, or sand loam
B	0.15 – 0.3	Silt loam or loam
C	0.05 – 0.15	Sandy clay loam
D	< 0.05	Clay loam, silty clay loam, sandy clay, silty clay, or clay

A geotechnical report of the Project Area was not available at the time of study. Soil data was obtained from NRCS web soil survey data (USDA 2020). Project Area soils are generally varied from HSG A to D. However, most of the computational area is covered by HSG A soils. See Appendix D for the NRCS Soil Survey Geographic Database soils map for the Project Area.

2.3 Federal Emergency Management Agency Study

The Project Area sits between two Federal Emergency Management Agency Flood Insurance Rate Map panels: 04021C1500E and 04021C1525E (FEMA 2016). 04021C1500E has not been printed, but 04021C1525E has and has an effective date of December 4, 2007. The Project property sits entirely within Zone X according to the Federal Emergency Management Agency panel that was printed. Zone X is categorized as areas determined to be outside the 0.2-percent annual chance of flood. The Santa Rosa Wash to the east lies within Zone A. Zone A is categorized as special flood hazard areas inundated by the 1-percent annual chance of flood with no base flood elevations determined. Flood Insurance Rate Map panels can be found in Appendix E.

3.0 PROPOSED CONDITIONS

A preliminary Project Area boundary was provided at the time of study. A detailed layout was not provided. Detailed engineering design of the facility is likely to result in changes to the exact Project location. This study analyzes existing conditions of the provided site location only and makes no estimates or assumptions about future Project boundaries. Tetra Tech recommends performing an H&H study of the final proposed conditions of the facility when final design details become available. Such a study, though not a regulatory requirement, would serve to confirm the assumption that the existing hydrologic and hydraulic conditions present on-site will not be materially altered after construction of the proposed facility.

3.1 Site Hydrology and Hydraulics

The Project will include the installation of ground-mounted racks that hold photovoltaic panels; the panels will be elevated off the ground with the underlying surface. The ground surface underneath the panels will be open, with surface runoff sheet-flowing underneath the solar arrays. Rainfall landing on the panels will flow off the bottom edge and travel overland as sheet flow and shallow concentrated flow to the site's natural depressions and proposed perimeter stormwater management facilities. Other site improvements to the solar area include installing a battery energy storage system, concrete pads to support the inverters, interior gravel/aggregate maintenance roads, erosion control features, stormwater management features, public road entrances, and perimeter fencing. These other installations will cause an increase of impervious surfaces and shall be mitigated by best management practices to meet existing condition runoff.

4.0 HYDROLOGIC AND HYDRAULIC MODEL DEVELOPMENT

4.1 Modeling Methodologies

H&H modeling of stormwater runoff generated by precipitation is a well-described engineering discipline governed by proven scientific methods and closed-form equations. Numerous H&H modeling techniques are considered acceptable to describe the movement of rainfall/runoff across the Project Area; however, each H&H modeling methodology is wholly dependent on its respective base data.

The envelope of industry-standard and acceptable hydrology modeling techniques is much broader than its hydraulic modeling counterpart. Numerous methods could be acceptable to describe the rainfall/runoff generated at the Project. To conservatively describe the range of potential flood hazards present at the Project, Tetra Tech developed two distinct H&H software models, described in the sections that follow.

4.1.1 Hydrologic Engineering Center – Hydrologic Modeling and River Analysis Systems

The study for this Project used the U.S. Army Corps of Engineer's (USACE) Hydrologic Engineering Center – Hydrologic Modeling System (HEC-HMS) and Hydrologic Engineering Center – River Analysis System (HEC-RAS 2D) for modeling.

The HEC-HMS modeling methodologies (described in Section 4.3) produced a wide variation of runoff depths, extents, and velocities. Because of this, Tetra Tech developed a HEC-HMS model using the NRCS (formerly Soil Conservation Service) Unit Hydrograph hydrology model to define an expected range of potential storm conditions present at the Project and determine the distribution of precipitation.

The HEC-RAS 2D model was used to model the distributed precipitation in a two-dimensional catchment for analysis of its associated hydraulic activity with respect to the Project Area. The remainder of discussion in this section details the base data employed in model development (Section 4.2), HEC-HMS model development (Section 4.3), and HEC-RAS 2D model development (Section 4.4). When summarizing results from these models, flow depth describes how deep runoff accumulates during a specified storm. Flow velocity describes the speed at which runoff travels. Inundation maps represent the boundaries of expected inundated areas during a specified storm.

4.2 Base Data

Input data for the hydrologic and hydraulic models were obtained from a variety of sources summarized in Table 2.

Table 2. Data Sources

Data	Purpose	Source	Format
Elevation	Development of Hydrologic Engineering Center – Hydrologic Modeling System and Hydrologic Engineering Center – River Analysis System models	National Agriculture Imagery Program	Raster
Land use	Estimating precipitation losses (infiltration)	National Land Cover Database	Raster
Soil Types	Estimating precipitation losses (infiltration)	Natural Resources Conservation Service Soil Survey Geographic Database	Raster
Precipitation	25-, 50-, and 100-year precipitation depth	National Oceanic and Atmospheric Administration Atlas 14	PDF
Project Boundary	Horizontal Limits of Hydrologic Engineering Center – Hydrologic Modeling System and Hydrologic Engineering Center – River Analysis System models	ArcGIS polygon exported to shapefile	shapefile

4.2.1 Digital Terrain Model

Elevation data (Light Detecting and Ranging) for the computational area was obtained from the National Agriculture Imagery Program through the University of Arizona, using Light Detecting and Ranging imagery data (UA 2017). Tetra Tech developed a Digital Elevation Model (DEM) for the computational area from this data. All geographic information system data are in the North American Datum 1983 Arizona Central U.S.-Foot projection. Using the USACE's River Analysis System Mapper software, the DEM was then imported into HEC-RAS 2D. Unless noted otherwise, all elevation data in this report is based on the North American Vertical Datum of 1988 (NAVD88) datum. A heat map of the modeled topography can be found in Appendix B.

4.3 Hydrologic Engineering Center – Hydrologic Modeling System Modeling

To estimate peak discharges and runoff volumes for the 25-, 50-, and 100-year rainfall events, the HEC-HMS Version 4.12 was used. Because the Project Area is located entirely within one watershed, one HEC-HMS model was created with one subbasin. Hydrologic characteristics including drainage area, storm type, and rainfall were then determined for the subbasin.

The HEC-HMS run includes one basin model with hydrologic characteristics of the subbasin, one meteorologic model with the rainfall hyetographs based on a 24-hour frequency storm, and one set of control specifications to specify the time window and computational time step. Table 3 summarizes the model runs and components used to simulate the rainfall-runoff process for each watershed for a 24-hour frequency.

Table 3. Hydrologic Engineering Center – Hydrologic Modeling System Modeling Description

Storm Size	Precipitation (inches)
25-year	2.92
50-year	3.32
100-year	3.75

4.3.1 Precipitation

For the HEC-HMS models, a 24-hour rainfall event with a 6-minute time interval was used to produce a synthetic storm from statistical data for the 25-, 50-, and 100-year events. For all simulations, the precipitation is assumed to fall uniformly throughout the watersheds at any given time step. The precipitation for the 25-, 50-, and 100-year, 24-hour storms can be found in Table 3, according to National Oceanic and Atmospheric Administration Rainfall Atlas 14 (NOAA 2017). Figure 1, Figure 2, and Figure 3 show precipitation graphs for all applicable rainfall events. Precipitation values were taken directly from HEC-HMS to be input as inflow into the HEC-RAS 2D model. Loss was calculated through the infiltration layer within HEC-RAS 2D directly. See Section 4.4.3 for more on infiltration. NOAA precipitation is shown in Appendix F.

4.3.2 Existing Hydraulic Structures

Based upon a thorough desktop review of available information, Tetra Tech determined there were no hydraulic structures within the computational area extents that would meaningfully impact the preparation and analyses contained herein for preliminary analysis.

4.4 Hydrologic Engineering Center – River Analysis System 2D Modeling

To estimate the 25-, 50-, and 100-year runoff depths at the site, the HEC-RAS 2D Version 6.5 was used. HEC-RAS is the successor to the HEC-2 program developed by the USACE in the 1960s to calculate water surface profiles. Originally developed in the 1990s and updated over the years, HEC-RAS can model steady or unsteady flow under subcritical, supercritical, or mixed-flow regimes. Until recently, HEC-RAS was limited to one-dimensional flow in rivers, ditches, canals, and other waterways, and required the use of cross-sections to create a model. Recent HEC-RAS 2D versions allow the creation of two-dimensional hydraulic models, applicable to this study. These models utilize a user-defined computational mesh superimposed on a DEM to calculate water surface elevations, flow velocities, and arrival times for the maximum values. The plan components used in the HEC-RAS 2D model inputs are summarized in Table 4.

Table 4. Summary of Hydrologic Engineering Center – River Analysis System 2D Input Titles

Description	Geometry	Unsteady Flow	Plan
25-Year	SR-GEO-EX-IT01	SR-UFLO-25YR	SR-EX-25YR-IT01
50-Year	SR-GEO-EX-IT01	SR-UFLO-50YR	SR-EX-50YR-IT01
100-Year	SR-GEO-EX-IT01	SR-UFLO-100YR	SR-EX-100YR-IT01

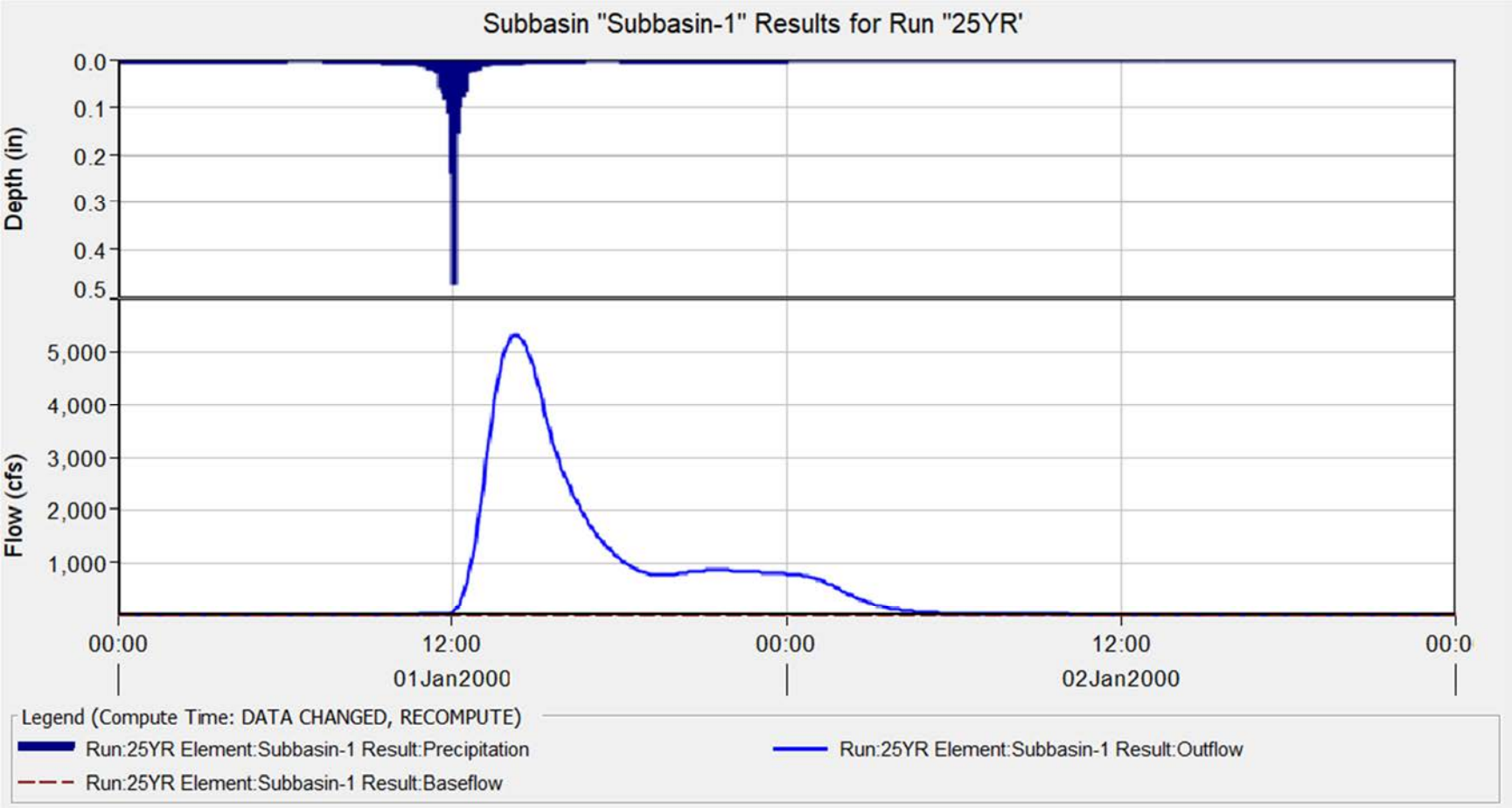

Figure 1. 25-Year Rainfall Hyetograph

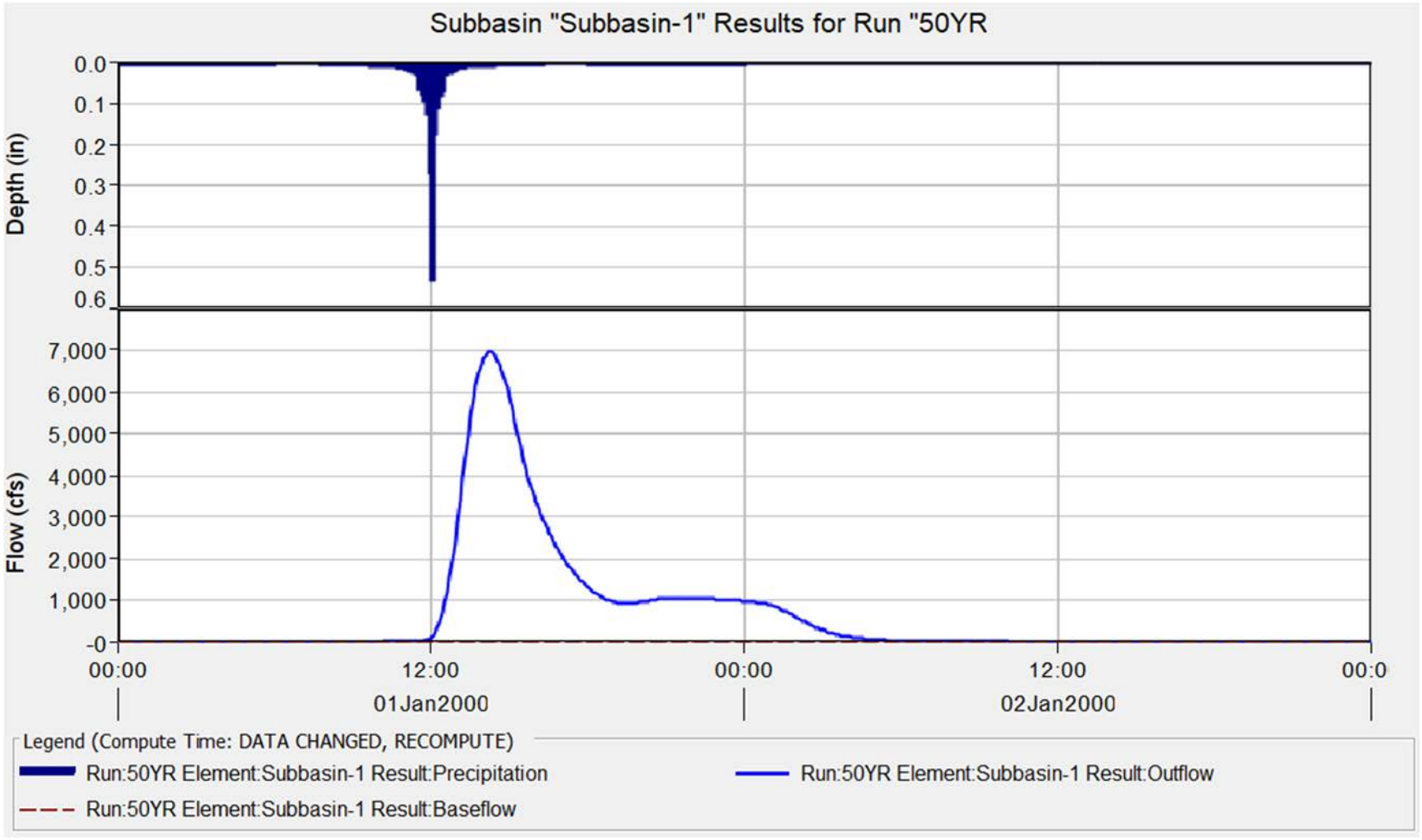

Figure 2. 50-Year Rainfall Hyetograph

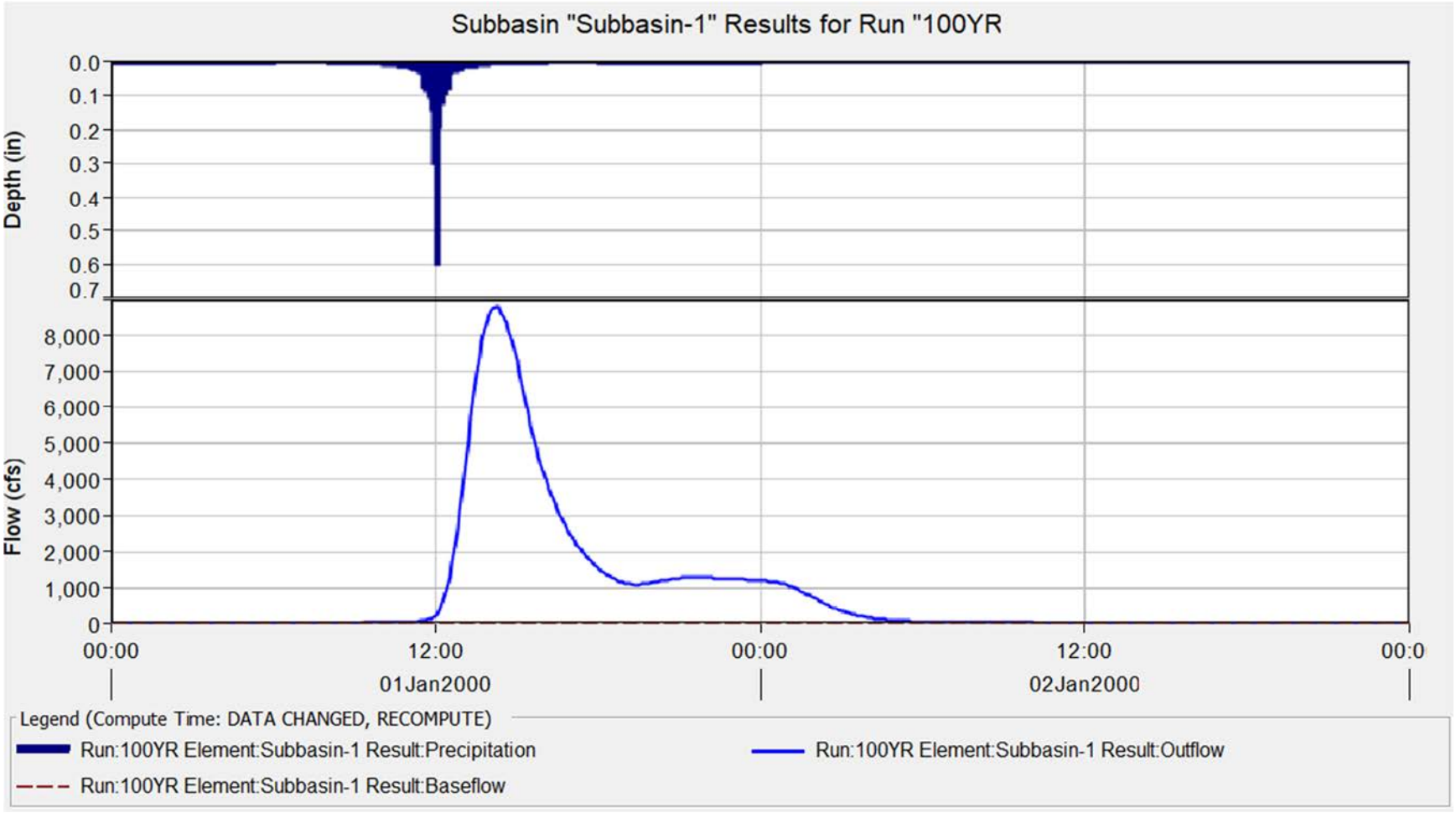

Figure 3. 100-Year Rainfall Hyetograph

4.4.1 Model Geometry

The HEC-RAS 2D model used for the Project Area incorporates one HEC-HMS basin model, one 2D flow area, and three downstream boundary conditions for the outflow. For the HEC-RAS 2D area, a 100- by 100-foot computational mesh was selected based on the resolution of the DEM, the land uses (primarily scrub/shrub), and the steepness of the terrain. To ensure consistency between the alignment of the individual cells comprising the mesh and the terrain being modeled, break lines were added at all major roads, all streams, and other locations as appropriate.

Using geographic information system data from the National Land Cover Database, and Manning's "n" values developed by the NRCS for various land uses, the HEC-RAS 2D "Manning's n by Land Cover" feature was used to define an "n" value for each land use. These values are summarized in Table 5.

Table 5. Summary of Land Use Variables

Description	Land Use Value	n
Open Water	11	0.038
Developed, Open Space	21	0.040
Developed, Low Intensity	22	0.090
Developed, Medium Intensity	23	0.120
Developed, High Intensity	24	0.160
Bare Earth	31	0.027
Deciduous Forest	41	0.150
Evergreen Forest	42	0.120
Mixed Forest	43	0.140
Shrub/ Scrub	52	0.115
Grassland/Herbaceous	71	0.038
Hay/ Pasture	81	0.038
Cultivated Crops	82	0.035
Woody Wetlands	90	0.098
Emergent Herbaceous Wetlands	95	0.068

4.4.2 Boundary Conditions

HEC-RAS 6.5 provides numerous options for the upstream boundary condition at a 2D flow area. Among these is the "Precipitation" option, which allows the user to input a precipitation depth that is then applied evenly over the 2D area. Accordingly, for the 24-hour, 25-, 50-, and 100-year rainfall events, the precipitation distribution in inches computed by HEC-HMS was input directly into the HEC-RAS 2D model. Infiltration is accounted for in the infiltration layer mentioned in Section 4.4.3. These infiltration values are based on national data for landcover and soils. To that end, field infiltration tests are highly recommended to determine more realistic inundation depths of the site's topographic depressions.

4.4.3 Infiltration Method

To estimate surface runoff at the site, an infiltration layer was added to HEC-RAS 2D 6.5 model based on existing landcover and soils data. This infiltration layer calculates loss over the computational grid based on equations developed by the NRCS (formerly Soil Conservation Service). The NRCS Curve Number

methodology estimates infiltration losses (abstractions) based on land use and soil characteristics. The NRCS runoff equation is shown as Equation 1:

$$Q = \frac{(P-I_a)^2}{(P-I_a)+S} \quad \text{(Equation 1)}$$

where:
Q = runoff (inches)
P = precipitation (inches)
Ia = initial abstraction (inches)
S = potential maximum retention after runoff begins (inches)

The initial abstraction (Ia) is defined as follows (USDA 2021): Initial abstraction (Ia) is all losses before runoff begins. It includes water retained in surface depressions, water intercepted by vegetation, evaporation, and infiltration. Ia is highly variable but generally is correlated with soil and cover parameters. Based on their studies of numerous small watersheds, the NRCS typically approximates the initial abstraction as 20 percent of the potential maximum retention, using Equation 2:

$$I_a = 0.2 \cdot S \quad \text{(Equation 2)}$$

Which in turn yields Equation 3:

$$Q = \frac{(P-0.2S)^2}{(P+0.8S)} \quad \text{(Equation 3)}$$

To correlate the potential maximum retention S to the land use and soil conditions at the site, Technical Release 55 (USDA 2021) uses a runoff curve number. The runoff curve number has a range of 0 to 50 and is related to the potential maximum retention S by Equation 4:

$$S = \frac{1{,}000}{CN} - 10 \quad \text{(Equation 4)}$$

A composite runoff curve number was input into the infiltration layer based on land use and HSG. HSG D was conservatively used for the whole of the computational area. Curve number data used to create the composite runoff numbers are summarized in Table 6.

Table 6. Summary Curve Numbers

Description	Curve Number for Hydrologic Soil Groups			
	A	B	C	D
Open Water	98	98	98	98
Developed, Open Space	49	69	79	84
Developed, Low Intensity	57	72	81	86
Developed, Medium Intensity	61	75	83	87
Developed, High Intensity	81	88	91	93
Bare Earth	78	86	91	93
Deciduous Forest	45	66	77	83
Evergreen Forest	25	55	70	77
Mixed Forest	36	60	73	79
Shrub/ Scrub	55	72	81	86
Grassland/Herbaceous	50	69	79	84
Hay/ Pasture	49	69	79	84
Cultivated Crops	67	78	85	89
Woody Wetlands	30	58	71	78
Emergent Herbaceous Wetlands	30	58	71	78

4.4.4 Scour

Local scour depths have been found via the calculated layer function in HEC-RAS 2D version 6.5. Inputs for the scour calculated layer include HEC-RAS 2D results of varying water depths and velocities across the site. These and other variables are inputs of the HEC-18 equation (equation 5) in finding scour depth, published by the Federal Highway Administration in the report "Evaluating Scour at Bridges, Fifth Edition" (FHWA 2012). The HEC-18 equation is shown as Equation 5:

$$y_s = 2.0 y_1 K_1 K_2 K_3 \left(\frac{a}{y^1}\right)^{0.65} Fr_1^{0.43} \quad (5)$$

y_s = scour depth (ft)

y_1 = flow depth directly upstream of pier (ft)

K_1 = (1.1) correction factor for pier nose shape

K_2 = (1.3) correction factor for angle of attack from flow

K_3 = (1.1) correction factor for bed condition

Fr_1 = Froude number directly upstream of the pier

a = pier width (0.5ft)

The Froude number is a function of runoff depth and velocity as shown in Equation 6 below:

$$Fr_1 = \frac{V_1}{\sqrt{g y_1}} \quad (6)$$

V_1 = velocity of flow directly upstream of the pier (ft/sec)

g = acceleration due to gravity (ft/sec^2)

It is important to note that the HEC-18 equation was intended for non-cohesive soils at bridge piers. There is currently no solar pile-specific equivalent. Analysis of local pier scour has been extensively studied in a laboratory; however, there is limited field data. When measured against field data, it has been observed that lab data is generally an overprediction of scour.

Scour was estimated for the velocity and depth results of each individual grid spacing in the HEC-RAS 2D model for the 25-, 50-, and 100-year, 24-hour storms.

5.0 SUMMARY OF FINDINGS

5.1 Stormwater Management

The Arizona Department of Environmental Quality determines stormwater management requirements related to construction sites and industrial facilities. During construction, coverage under the Arizona General Construction Permit (AZG2020-001) issued by the Arizona Department of Environmental Quality will be required to permit ground disturbance (ADEQ 2020). Basins should be designed to detain on-site flow and to account for volumetric differences between pre- and post-development calculations.

Tetra Tech recommends perpetuating any such sediment basins constructed for erosion control during construction as quantity attenuation measures when determined to be required during final design of the facility. Such quantity attenuation will contribute to a reduction of runoff rate and volume flowing towards any downstream property owners. The analysis and results contained in this report should be monitored and, if required, revised to reflect current regulatory requirements applicable during the facility's final design.

5.2 Hydrologic Engineering Center – Hydrologic Modeling System Analysis

For the 25-, 50-, and 100-year, 24-hour rainfall events, HEC-HMS indicates peak discharges and volumes as summarized in Table 7.

Table 7. Summary of Peak Discharges

Rainfall Event	Peak Discharge [cubic feet per second]	Volume [acre-feet]
25-Year, 24-Hour	5,332.4	1,962.0
50-Year, 24-Hour	6,954.9	2,502.3
100-Year, 24-Hour	8,802.0	3,115.1

These values represent the total runoff from the entirety of the computational area for each storm, not the peak flow through any outfall point at any particular time. Overall runoff was input into the HEC-RAS 2D model using time-series precipitation data.

5.3 Hydrologic Engineering Center – River Analysis System 2D Analysis

After numerous simulations, it was found that a time window of 48 hours was sufficient to ensure that the peak stage had occurred throughout the 2D modeling area. A 10-second time step with a 1-minute interval for the mapping and hydrograph output was found to yield satisfactory results for a 100- by 100-foot cell size.

Graphical results of runoff depth from the HEC-RAS 2D analysis for the 25-, 50-, and 100-year storm events at peak time are presented in Appendix G. Each event is graphically depicted for maximum estimated expected

inundation for that event at all locations within the model run. Runoff velocity results can be found in Appendix H. Scour Maps can be seen in Appendix I.

6.0 CONCLUSION

Stormwater discharging off-site onto adjacent property can be controlled by installing stormwater management basins in the post-developed condition. Stormwater that flows into these basins will not be discharged off-site but instead kept within the proposed basins to pool to a certain depth and infiltrate into the ground or evaporate. **While the storm modeling completed in this report estimates inundation depths within existing depressions, field infiltration tests and geotechnical review are highly recommended to determine more realistic inundation depths within the site's topographic depressions.** These infiltration tests should be incorporated into the model and re-run again to help determine tolerable depths within the array and its appurtenances.

Tolerable depths within the array are typically 1 foot or less for the 100-year storm, given the edge of panel clearance is typically held at 2 feet total, with 1 foot of freeboard from the 100-year water surface elevation. The areas within the Project Area with greater than a 1-foot runoff depth will inform the layout as no-build areas. Typically, depths greater than 1 foot are within existing rills of the terrain. The grading and flooding model will need to coincide in the General Arrangement of the solar plant to achieve a balance of megawatt production, civil earthwork, and construction feasibility. For stormwater depths of less than or greater than 1 foot, see Appendix G for all storms. Site grading may be necessary to mitigate depths in areas where array is desired within current non-buildable areas. With low runoff depth and high velocity, scour coverage is significant. Scour depths mostly remain lower than 2 feet within the Project Area. Scour depths can be seen in Appendix I. Potential site erosion problems and use of a drainage system are dependent on post-development conditions and site grading.

7.0 REFERENCES

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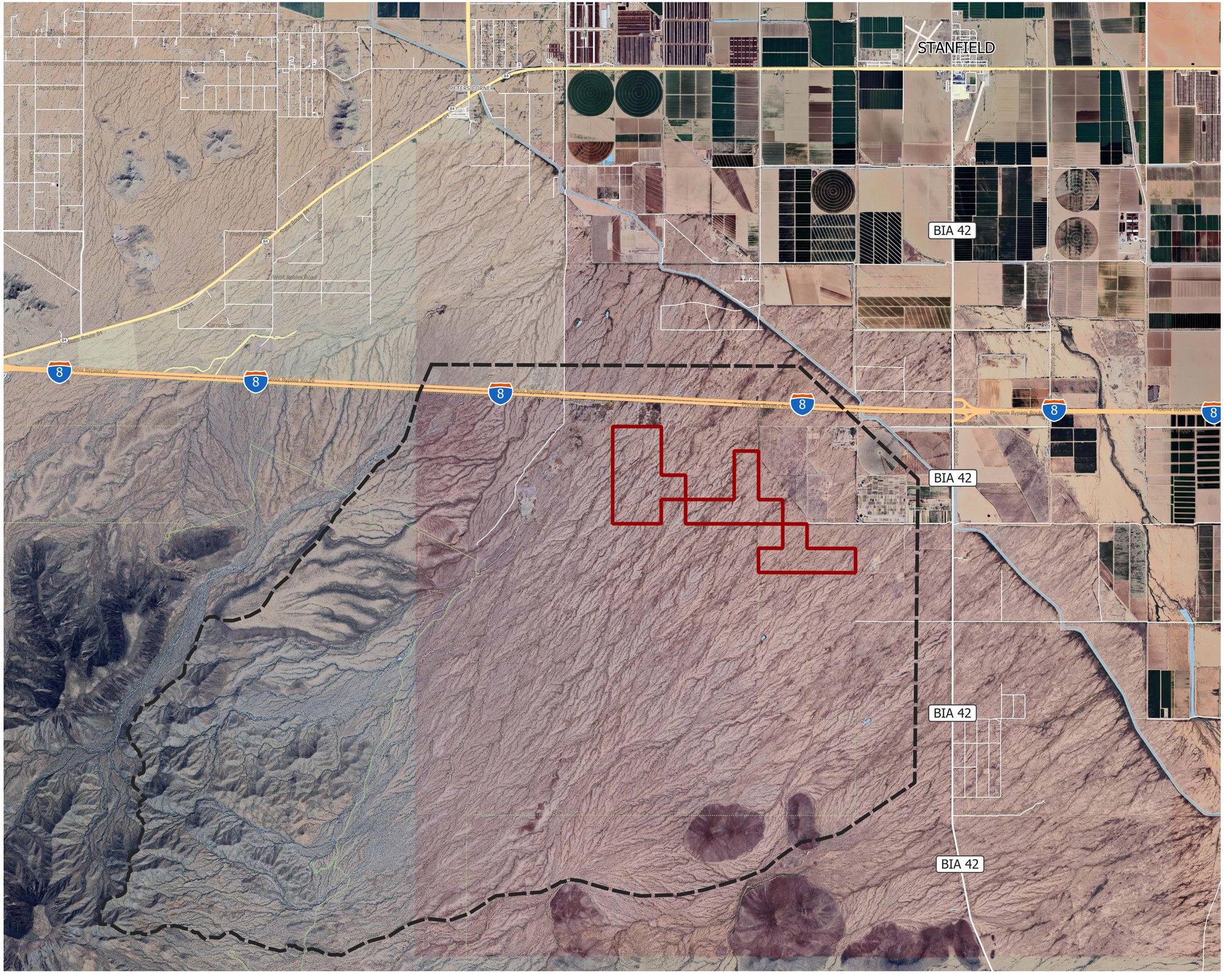
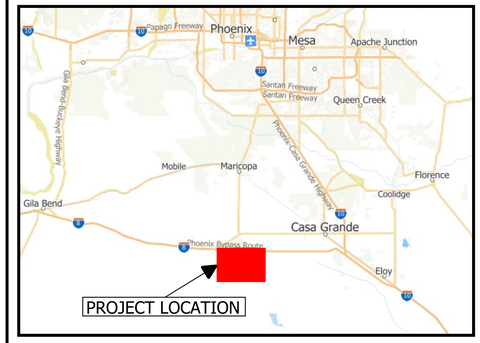
APPENDIX A: PROJECT LOCATION MAP



LEGEND

STUDY AREA
PROJECT AREA



N

0 0.5 1 1.5 mi

PROJECT LOCATION MAP

NOTES:
1. THIS PLAN IS FOR VISUAL INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION.

PREPARED FOR: SILVER REEF ENERGY, LLC

PREPARED BY: TETRA TECH

PROJ: SILVER REEF	DESN: ABB
DATE: AUG 2025	CHKD: JPP

APPENDIX B: TOPOGRAPHY HEAT MAP

LEGEND

STUDY AREA

PROJECT AREA

NAIP IMAGERY CONTOURS

5-FOOT

NAIP IMAGERY HEAT BANDING

1,000

400

DRAINAGE ARROW

N

0 0.5 1 mi

TOPOGRAPHY HEAT MAP

NOTES:

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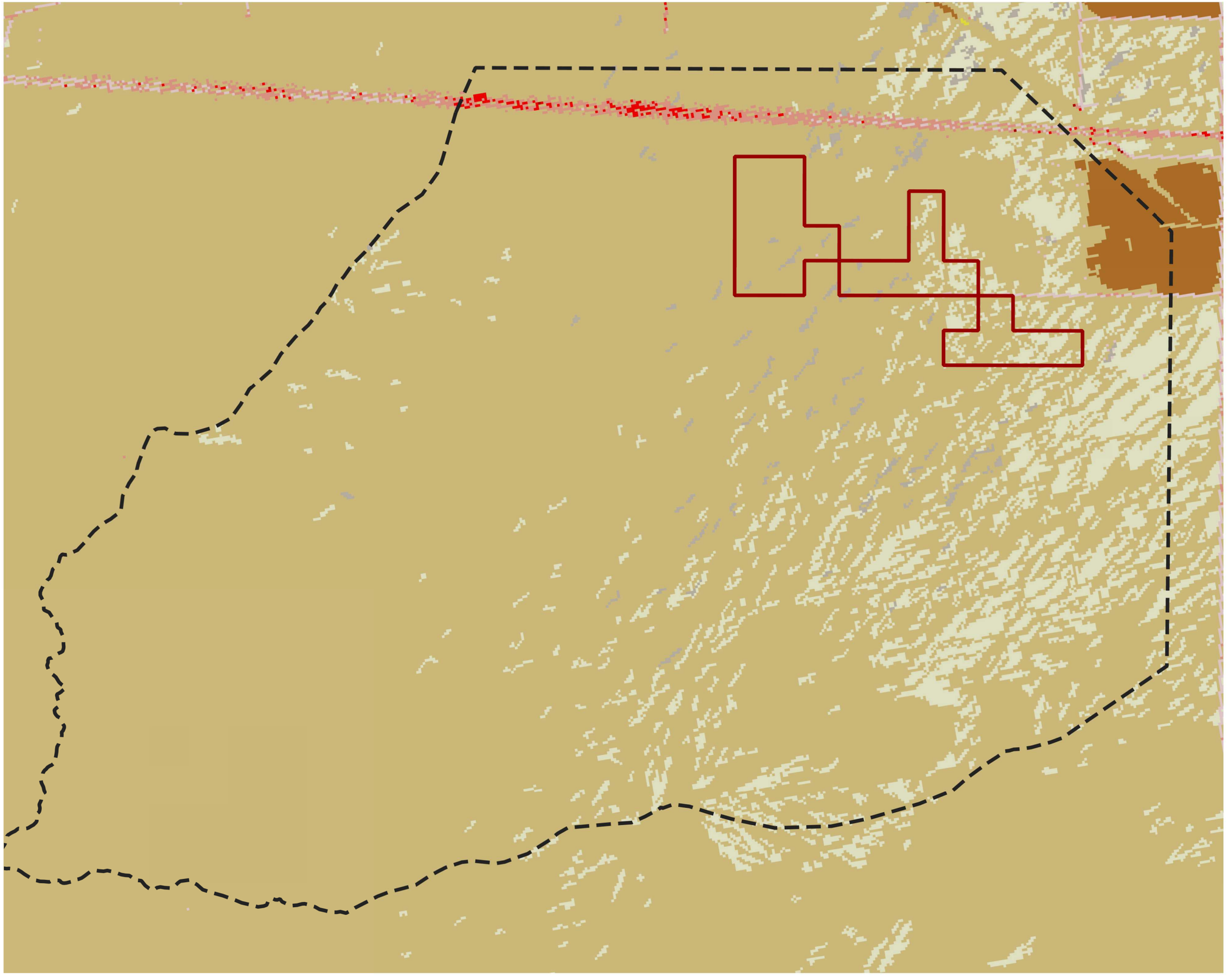
PREPARED FOR: SILVER REEF ENERGY, LLC

PREPARED BY: TETRA TECH

PROJ: SILVER REEF	DESN: ABB
DATE: AUG 2025	CHKD: JPP

APPENDIX C: LANDCOVER MAP



LEGEND

STUDY AREA
PROJECT AREA

NLCD LANDCOVER CLASSIFICATION

- 11 - OPEN WATER
- 21 - DEVELOPED, OPEN SPACE
- 22 - DEVELOPED, LOW INTENSITY
- 23 - DEVELOPED, MED INTENSITY
- 24 - DEVELOPED, HIGH INTENSITY
- 31 - BARE EARTH
- 41 - DECIDUOUS FOREST
- 42 - EVERGREEN FOREST
- 43 - MIXED FOREST
- 52 - SHRUB/SCRUB
- 71 - GRASSLAND/HERBACEOUS
- 81 - PASTURE/HAY
- 82 - CULTIVATED CROPS
- 90 - WOODY WETLANDS
- 95 - EMERGENT HERB. WETLANDS

N

0 0.5 1 mi

LANDCOVER MAP

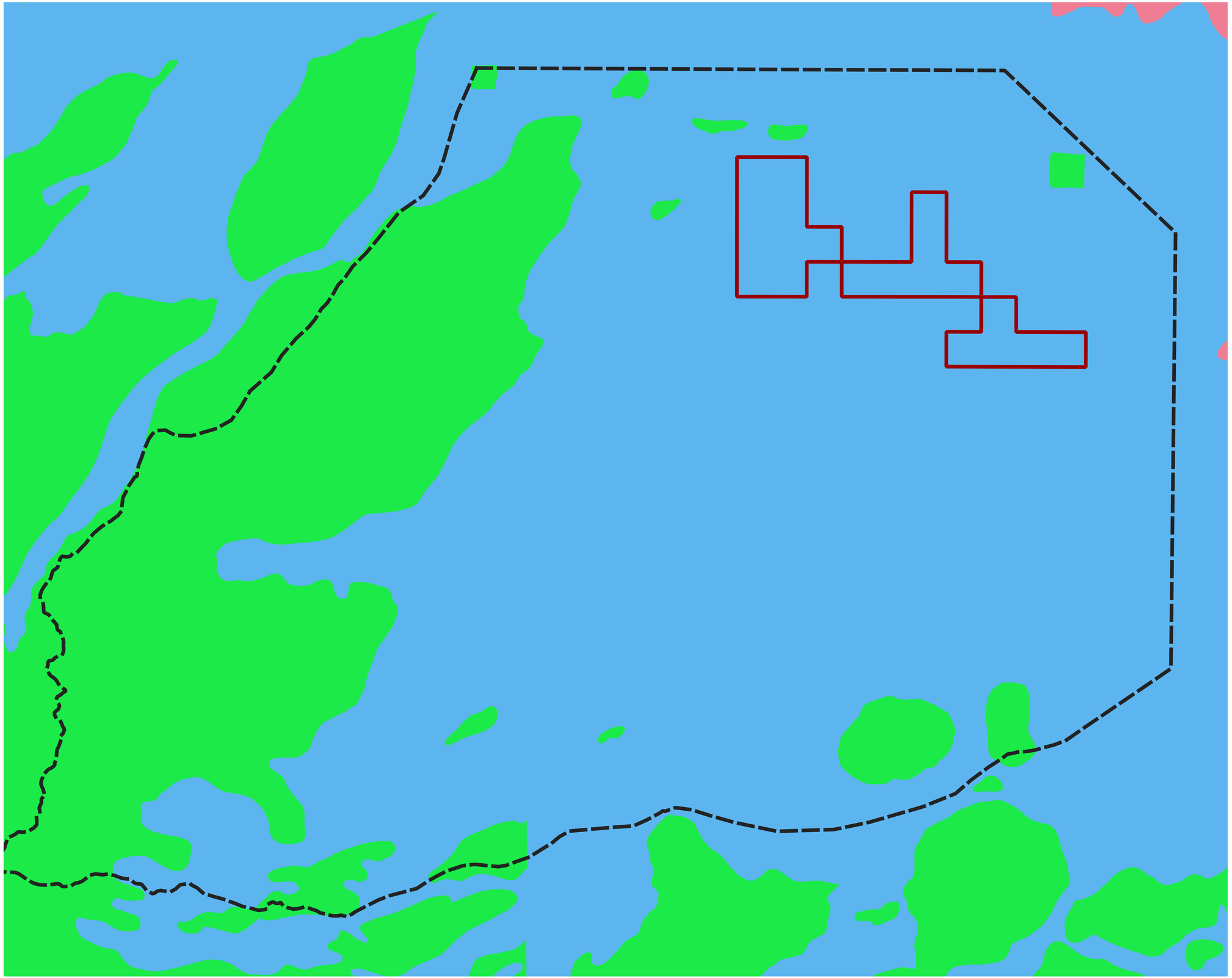
NOTES:
1. THIS PLAN IS FOR VISUAL INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION.

PREPARED FOR: SILVER REEF ENERGY, LLC

PREPARED BY: TETRA TECH

PROJ: SILVER REEF	DESN: ABB
DATE: JULY 2025	CHKD: JPP

APPENDIX D: SOILS MAP



LEGEND

STUDY AREA
PROJECT AREA

NRCS SOIL TYPE
A
B
C
D

N

0 0.5 1 mi

NRCS SOILS MAP

NOTES:
1. THIS PLAN IS FOR VISUAL INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION.

PREPARED FOR: SILVER REEF ENERGY, LLC

PREPARED BY: TETRA TECH

PROJ: SILVER REEF	DESN: ABB
DATE: AUG 2025	CHKD: JPP

APPENDIX E: NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION ATLAS 14 RAINFALL REPORT

NOAA Atlas 14, Volume 1, Version 5
Location name: Maricopa, Arizona, USA*
Latitude: 32.8213°, Longitude: -112.035°
Elevation: 1517 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.204 (0.171-0.245)	0.266 (0.225-0.321)	0.362 (0.305-0.434)	0.433 (0.363-0.517)	0.529 (0.437-0.629)	0.602 (0.491-0.712)	0.674 (0.540-0.798)	0.748 (0.590-0.884)	0.844 (0.650-1.00)	0.918 (0.692-1.10)
10-min	0.310 (0.261-0.373)	0.405 (0.343-0.488)	0.551 (0.464-0.661)	0.660 (0.552-0.787)	0.805 (0.665-0.957)	0.916 (0.747-1.08)	1.03 (0.822-1.21)	1.14 (0.898-1.35)	1.28 (0.989-1.52)	1.40 (1.05-1.67)
15-min	0.384 (0.323-0.462)	0.502 (0.425-0.605)	0.683 (0.575-0.819)	0.818 (0.684-0.975)	0.998 (0.824-1.19)	1.14 (0.926-1.34)	1.27 (1.02-1.50)	1.41 (1.11-1.67)	1.59 (1.23-1.89)	1.73 (1.31-2.06)
30-min	0.517 (0.436-0.622)	0.675 (0.573-0.814)	0.920 (0.774-1.10)	1.10 (0.921-1.31)	1.34 (1.11-1.60)	1.53 (1.25-1.81)	1.71 (1.37-2.03)	1.90 (1.50-2.25)	2.14 (1.65-2.54)	2.33 (1.76-2.78)
60-min	0.640 (0.539-0.770)	0.836 (0.709-1.01)	1.14 (0.958-1.36)	1.36 (1.14-1.63)	1.66 (1.37-1.98)	1.89 (1.54-2.24)	2.12 (1.70-2.51)	2.35 (1.86-2.78)	2.65 (2.04-3.15)	2.89 (2.18-3.44)
2-hr	0.725 (0.621-0.854)	0.940 (0.808-1.11)	1.26 (1.08-1.49)	1.50 (1.27-1.77)	1.83 (1.53-2.14)	2.08 (1.72-2.44)	2.35 (1.91-2.74)	2.61 (2.08-3.05)	2.96 (2.30-3.47)	3.24 (2.46-3.82)
3-hr	0.772 (0.663-0.916)	0.989 (0.855-1.18)	1.30 (1.12-1.55)	1.55 (1.33-1.84)	1.91 (1.60-2.24)	2.18 (1.80-2.56)	2.48 (2.01-2.90)	2.78 (2.21-3.26)	3.20 (2.46-3.77)	3.54 (2.66-4.19)
6-hr	0.911 (0.797-1.06)	1.16 (1.01-1.34)	1.49 (1.30-1.72)	1.75 (1.52-2.02)	2.12 (1.81-2.43)	2.41 (2.02-2.76)	2.70 (2.23-3.10)	3.01 (2.44-3.46)	3.44 (2.70-3.96)	3.77 (2.89-4.37)
12-hr	1.02 (0.906-1.17)	1.29 (1.15-1.48)	1.65 (1.46-1.88)	1.93 (1.70-2.19)	2.31 (2.01-2.61)	2.61 (2.24-2.94)	2.92 (2.46-3.30)	3.22 (2.68-3.66)	3.65 (2.95-4.17)	3.98 (3.15-4.58)
24-hr	1.23 (1.10-1.37)	1.56 (1.40-1.75)	2.03 (1.82-2.27)	2.40 (2.14-2.67)	2.92 (2.59-3.24)	3.32 (2.93-3.68)	3.75 (3.28-4.16)	4.19 (3.63-4.65)	4.80 (4.10-5.35)	5.28 (4.46-5.91)
2-day	1.28 (1.15-1.43)	1.65 (1.48-1.84)	2.16 (1.94-2.41)	2.58 (2.30-2.87)	3.16 (2.80-3.50)	3.62 (3.18-4.02)	4.10 (3.58-4.56)	4.60 (3.98-5.13)	5.31 (4.53-5.94)	5.87 (4.95-6.61)
3-day	1.35 (1.22-1.50)	1.73 (1.56-1.93)	2.28 (2.05-2.54)	2.72 (2.44-3.02)	3.35 (2.98-3.71)	3.84 (3.40-4.26)	4.37 (3.84-4.85)	4.93 (4.29-5.48)	5.71 (4.91-6.36)	6.35 (5.39-7.10)
4-day	1.42 (1.29-1.58)	1.82 (1.65-2.02)	2.40 (2.17-2.66)	2.87 (2.58-3.18)	3.54 (3.16-3.91)	4.07 (3.62-4.50)	4.65 (4.10-5.14)	5.26 (4.60-5.82)	6.12 (5.28-6.79)	6.82 (5.82-7.59)
7-day	1.57 (1.43-1.75)	2.01 (1.83-2.23)	2.66 (2.41-2.94)	3.18 (2.87-3.52)	3.92 (3.51-4.32)	4.52 (4.02-4.98)	5.15 (4.56-5.69)	5.82 (5.10-6.44)	6.78 (5.85-7.51)	7.54 (6.45-8.38)
10-day	1.71 (1.55-1.90)	2.19 (2.00-2.43)	2.90 (2.62-3.20)	3.46 (3.13-3.82)	4.25 (3.82-4.69)	4.88 (4.37-5.39)	5.55 (4.92-6.13)	6.26 (5.50-6.92)	7.26 (6.31-8.04)	8.06 (6.93-8.94)
20-day	2.07 (1.88-2.28)	2.67 (2.43-2.94)	3.52 (3.19-3.87)	4.16 (3.77-4.58)	5.03 (4.54-5.52)	5.70 (5.12-6.26)	6.38 (5.70-7.02)	7.07 (6.28-7.78)	8.00 (7.03-8.83)	8.71 (7.60-9.65)
30-day	2.42 (2.21-2.66)	3.12 (2.84-3.42)	4.11 (3.74-4.50)	4.86 (4.42-5.32)	5.87 (5.31-6.43)	6.65 (5.99-7.28)	7.44 (6.67-8.15)	8.25 (7.34-9.06)	9.33 (8.23-10.3)	10.2 (8.90-11.2)
45-day	2.81 (2.55-3.08)	3.62 (3.29-3.97)	4.77 (4.32-5.22)	5.62 (5.09-6.14)	6.74 (6.08-7.35)	7.58 (6.81-8.27)	8.43 (7.54-9.20)	9.28 (8.25-10.2)	10.4 (9.18-11.4)	11.2 (9.86-12.4)
60-day	3.11 (2.82-3.42)	4.02 (3.64-4.41)	5.29 (4.79-5.80)	6.21 (5.62-6.80)	7.41 (6.68-8.10)	8.30 (7.45-9.06)	9.18 (8.21-10.0)	10.0 (8.94-11.0)	11.2 (9.89-12.3)	12.0 (10.6-13.2)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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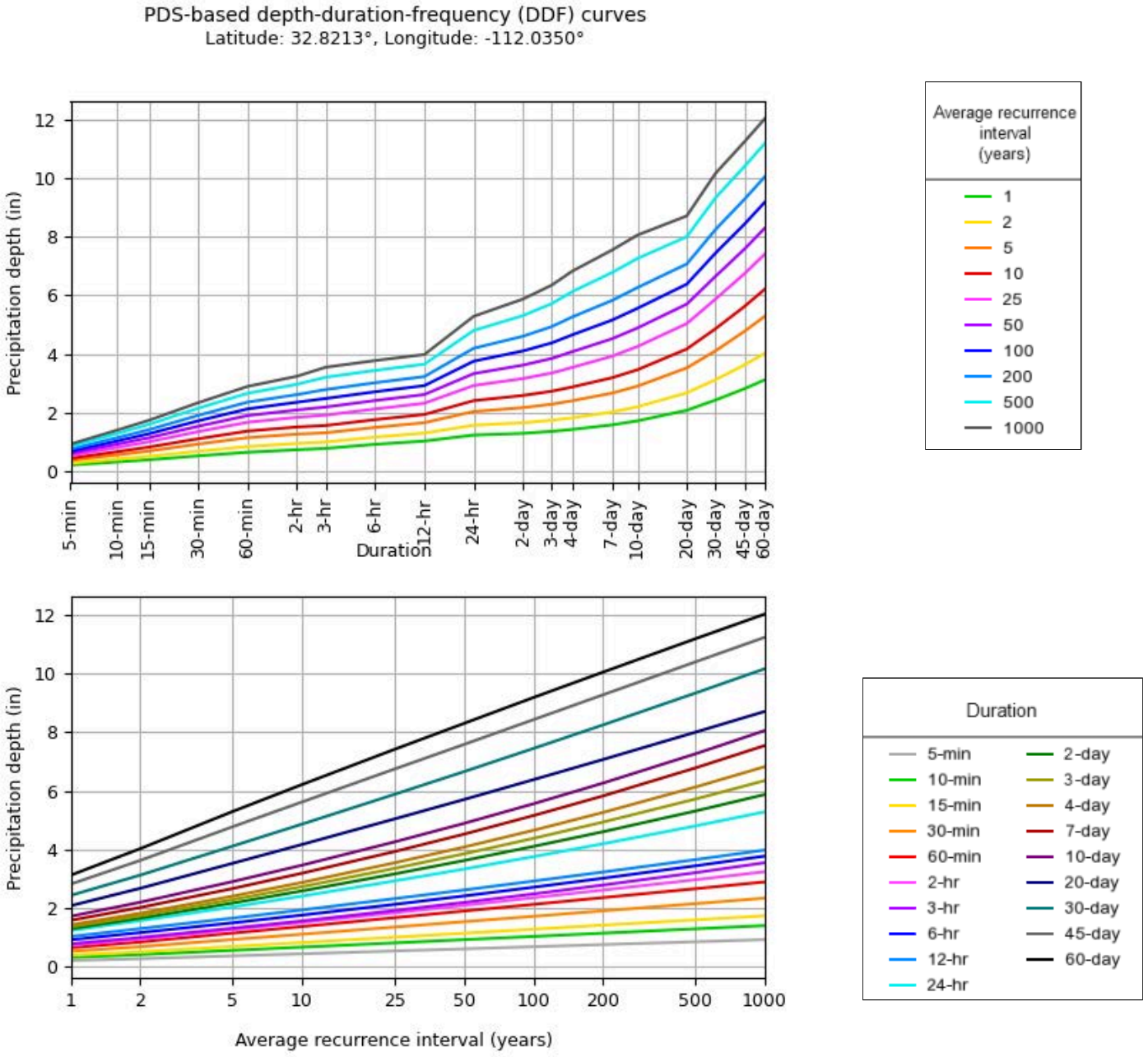
PF graphical



NOAA Atlas 14, Volume 1, Version 5

Created (GMT): Fri Jul 11 16:25:33 2025

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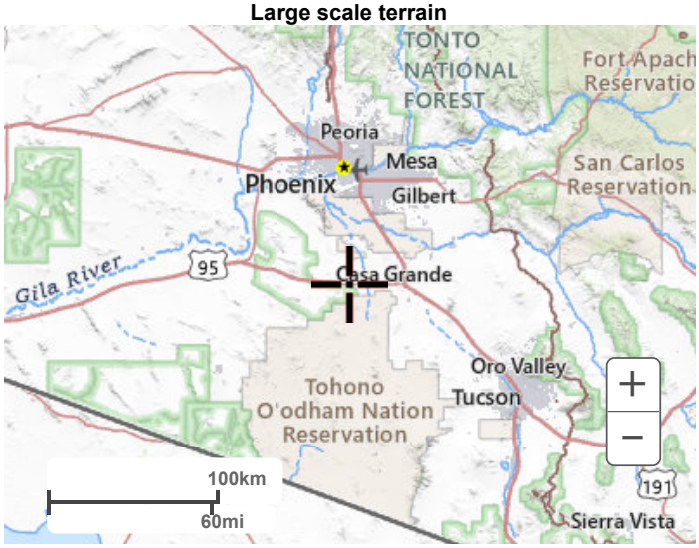
Maps & aerials

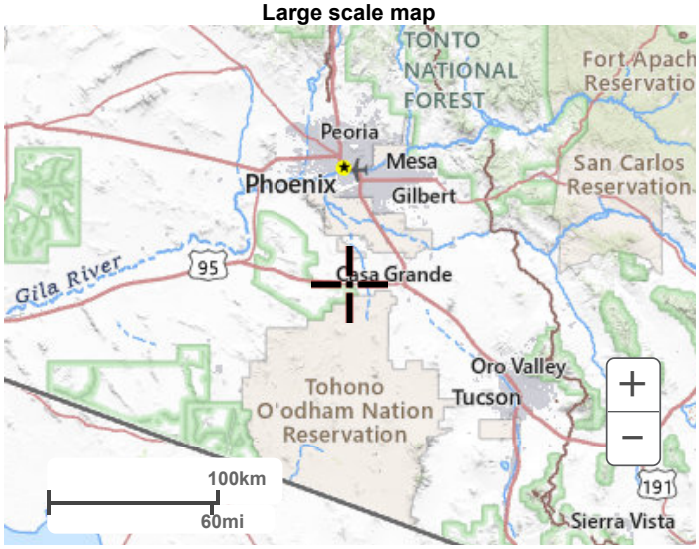
Small scale terrain



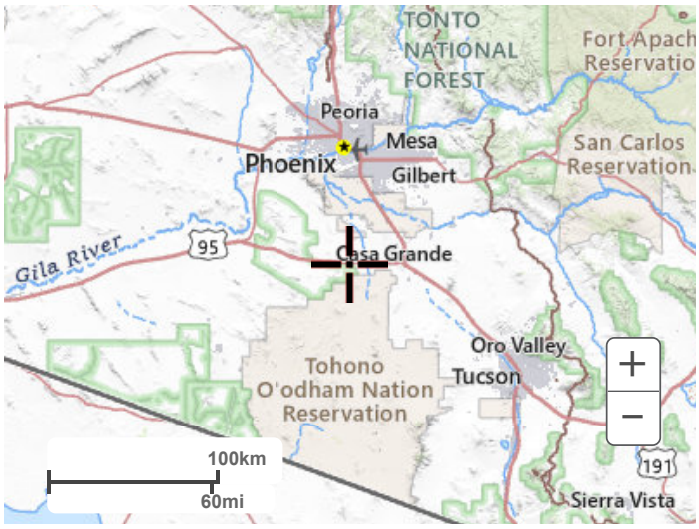
Large scale terrain



Large scale map



Large scale aerial



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US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

APPENDIX F: FEDERAL EMERGENCY MANAGEMENT AGENCY PANEL

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' NAVD 88. Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table shown in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 12. The **horizontal datum** was NAD 83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at http://www.ngs.noaa.gov/.

Base map information shown on this FIRM was derived from U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1992 or later.

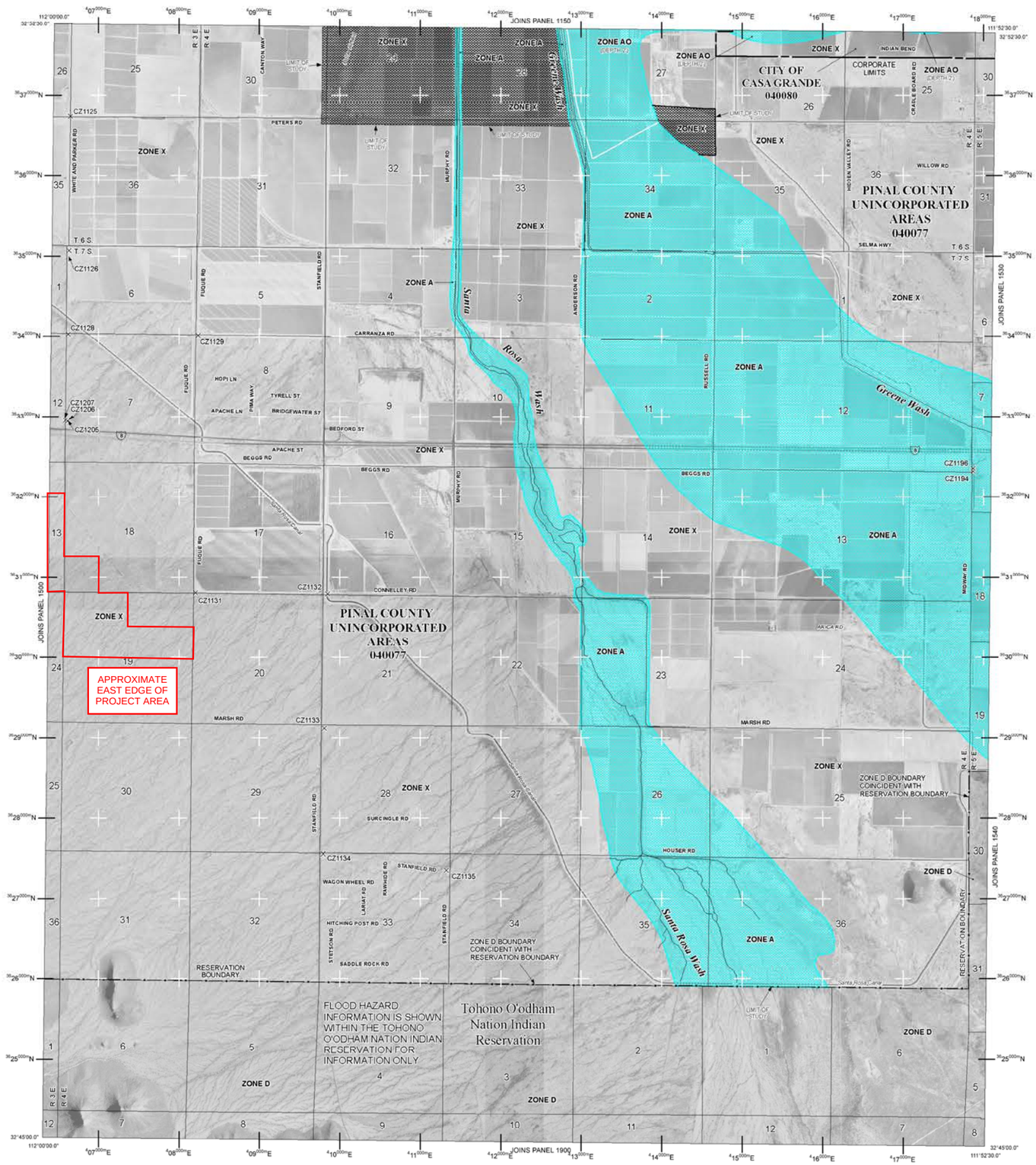
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, an accompanying Flood Insurance Study Report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://www.msc.fema.gov/.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- **ZONE A** No base flood elevations determined.
- **ZONE AE** Base flood elevations determined.
- **ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- **ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- **ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- **ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no base flood elevations determined.
- **ZONE V** Coastal flood zone with velocity hazard (wave action); no base flood elevations determined.
- **ZONE VE** Coastal flood zone with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

- **ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

- **ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
- **ZONE D** Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 Base Flood Elevation line and value; elevation in feet*
- (EL 987) Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- A — A Cross section line
- 23 — 23 Transect line
- 97° 07' 30", 32° 22' 30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4276000m 1000-meter Universal Transverse Mercator grid values, zone 12
- 600000 FT 5000-foot grid ticks: Arizona State Plane coordinate system, central zone (FIPSZONE 0202), Transverse Mercator
- DX5510 x Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 River Mile

MAP REPOSITORIES
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
December 4, 2007
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 2000'
1000 0 2000 4000 FEET
600 0 600 1200 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1525E

FIRM
FLOOD INSURANCE RATE MAP
PINAL COUNTY, ARIZONA AND INCORPORATED AREAS

PANEL 1525 OF 2575
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
PINAL COUNTY, UNINCORPORATED AREAS	040077	1525	E
CASA GRANDE, CITY OF	040080	1525	E

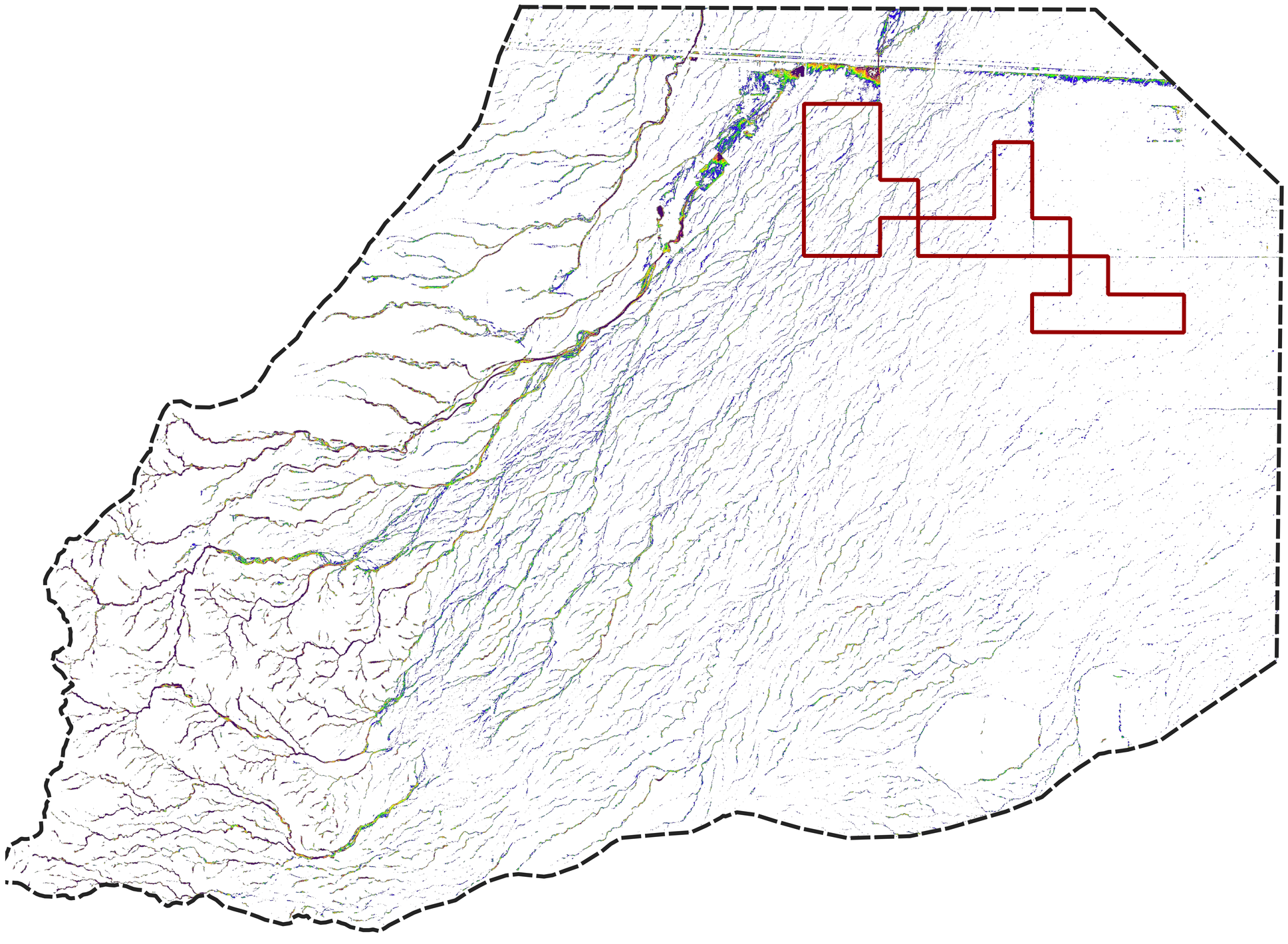
Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject.

MAP NUMBER
04021C1525E

EFFECTIVE DATE
DECEMBER 4, 2007

Federal Emergency Management Agency

APPENDIX G: RUNOFF DEPTH MAPS



LEGEND

STUDY AREA

PROJECT AREA

INNUNDATION DEPTH (FT)

- <0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- 2.0 - 2.5
- 2.5 - 3.0
- 3.0+

N

0 0.5 1 mi

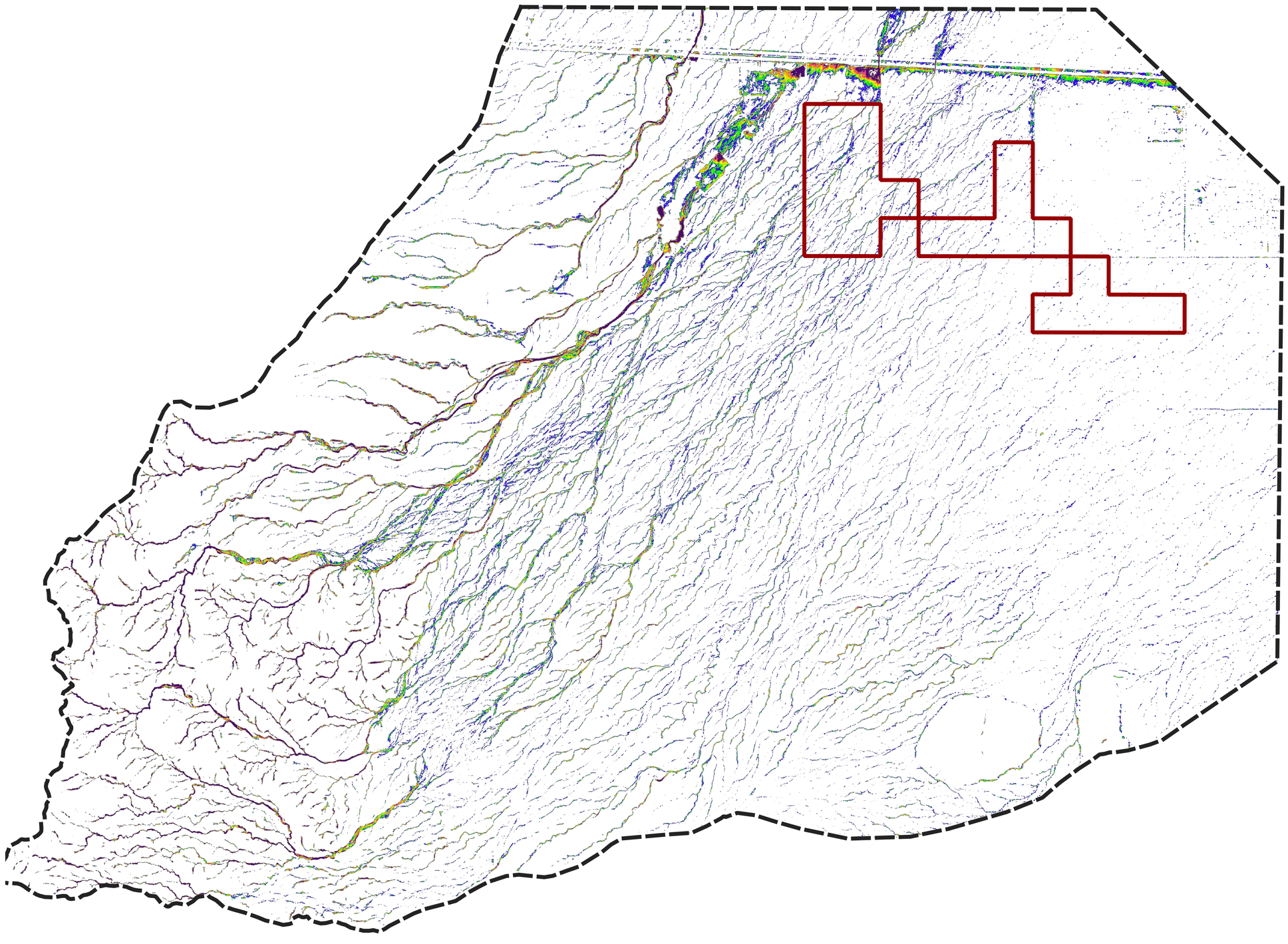
25-YEAR STORM INNUNDATION DEPTH MAP

NOTES:
1. THIS PLAN IS FOR VISUAL INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION.

PREPARED FOR: SILVER REEF ENERGY, LLC

PREPARED BY: TETRA TECH

PROJ: SILVER REEF	DESN: ABB
DATE: AUG 2025	CHKD: JPP



LEGEND

STUDY AREA

PROJECT AREA

INNUNDATION DEPTH (FT)

- <0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- 2.0 - 2.5
- 2.5 - 3.0
- 3.0+

N

0 0.5 1 mi

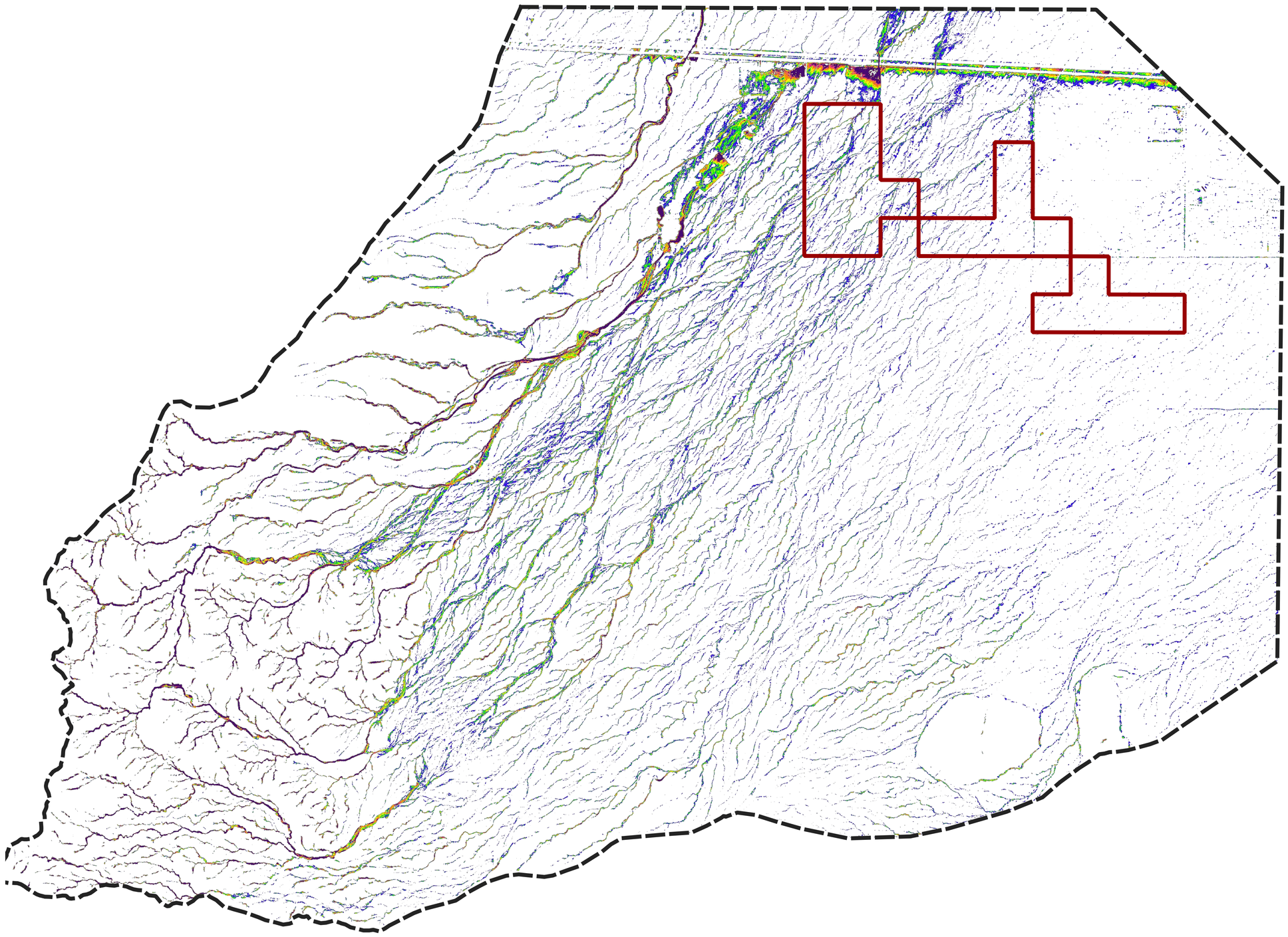
50-YEAR STORM INNUNDATION DEPTH MAP

NOTES:
1. THIS PLAN IS FOR VISUAL INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION.

PREPARED FOR: SILVER REEF ENERGY, LLC

PREPARED BY: TETRA TECH

PROJ: SILVER REEF	DESN: ABB
DATE: AUG 2025	CHKD: JPP



LEGEND

STUDY AREA

PROJECT AREA

INNUNDATION DEPTH (FT)

- <0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- 2.0 - 2.5
- 2.5 - 3.0
- 3.0+

N

0 0.5 1 mi

100-YEAR STORM INNUNDATION DEPTH MAP

NOTES:

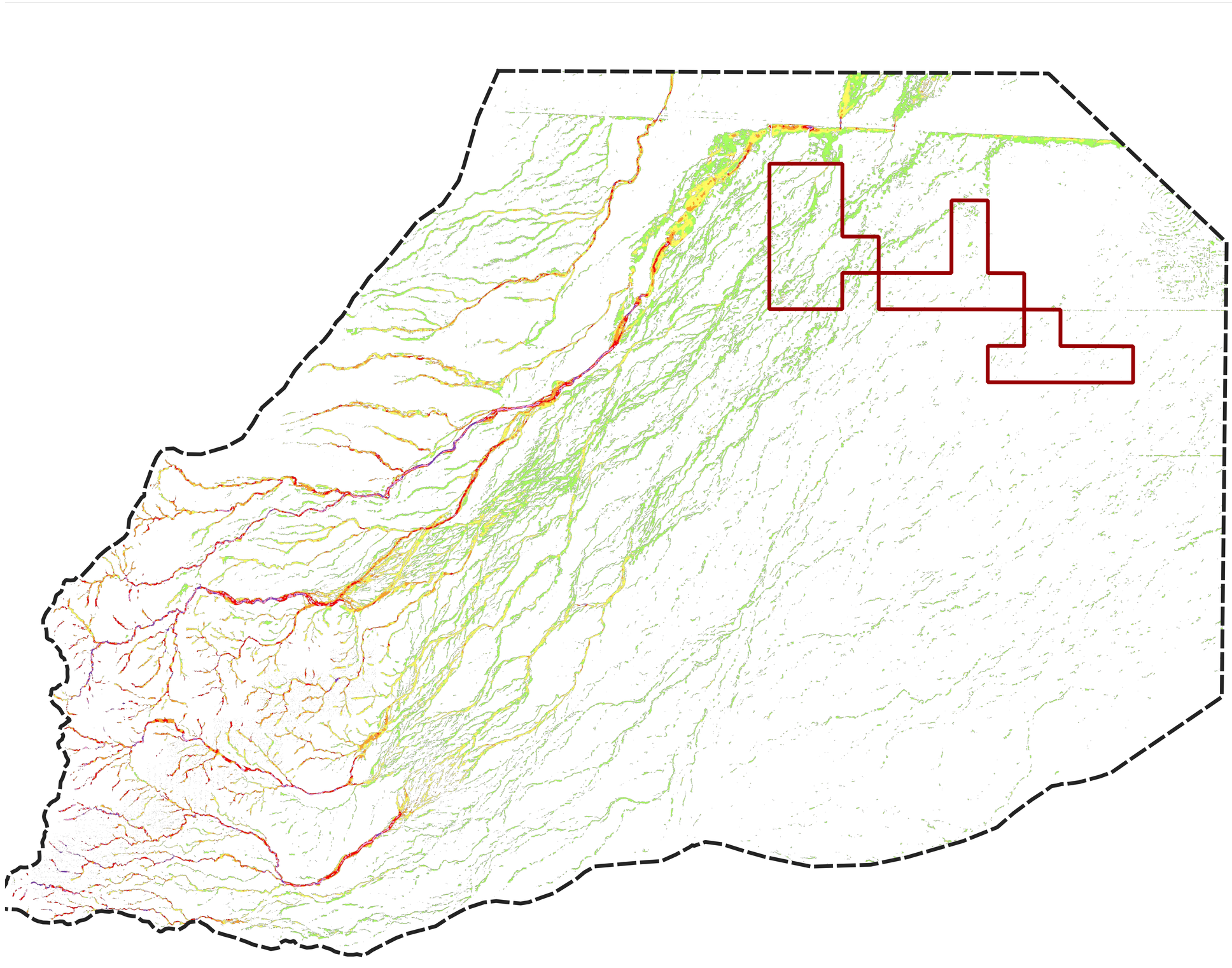
1. THIS PLAN IS FOR VISUAL INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION.

PREPARED FOR: SILVER REEF ENERGY, LLC

PREPARED BY: TETRA TECH

PROJ: SILVER REEF	DESN: ABB
DATE: AUG 2025	CHKD: JPP

APPENDIX H: RUNOFF VELOCITY MAPS



LEGEND

STUDY AREA

PROJECT AREA

VELOCITY (FT/SEC)

- <= 0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- 2.0 - 2.5
- 2.5 - 3.0
- 3.0+

N

0 0.5 1 mi

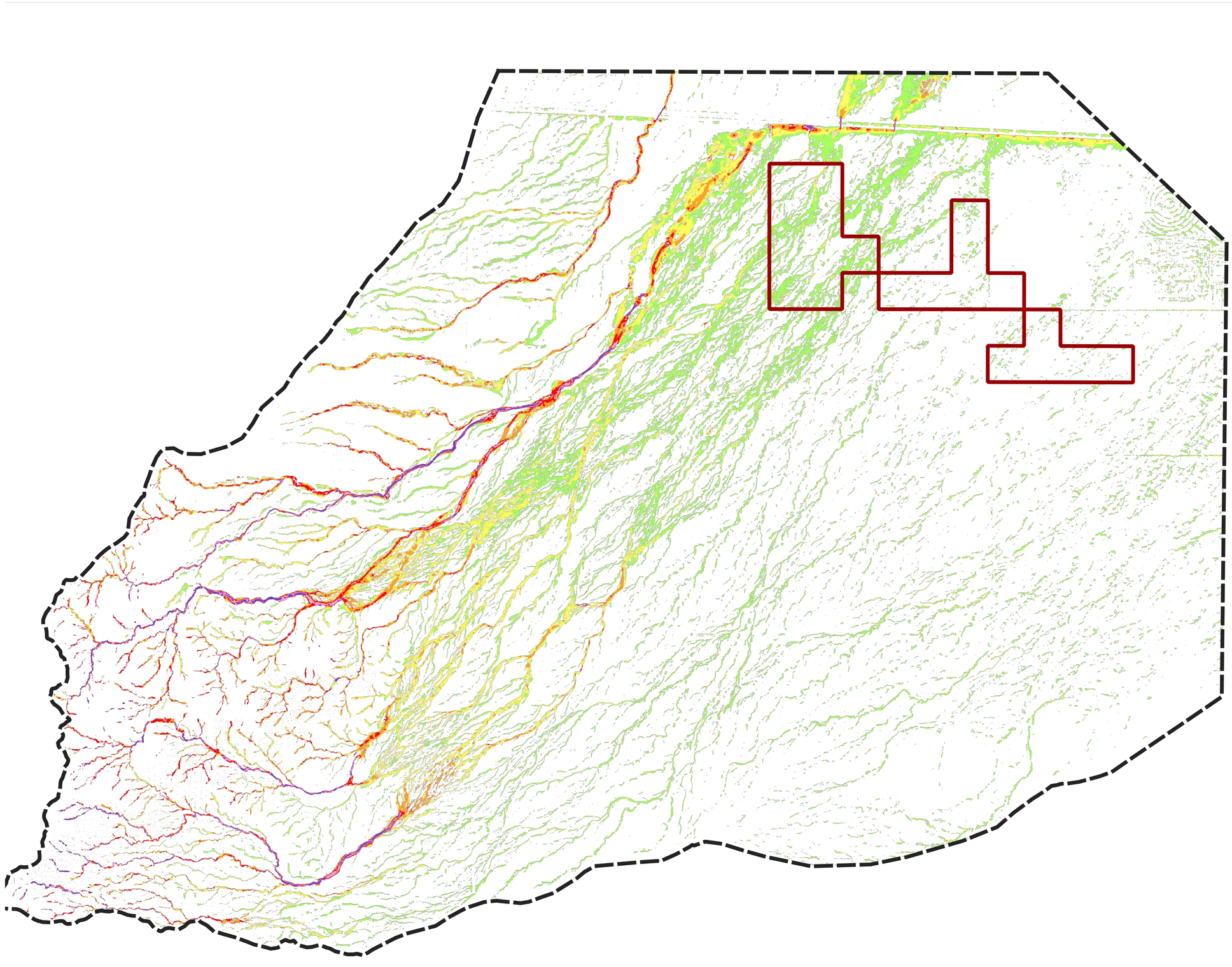
25-YEAR STORM VELOCITY MAP

NOTES:
1. THIS PLAN IS FOR VISUAL INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION.

PREPARED FOR: SILVER REEF ENERGY, LLC

PREPARED BY: TETRA TECH

PROJ: SILVER REEF	DESN: ABB
DATE: AUG 2025	CHKD: JPP



LEGEND

STUDY AREA

PROJECT AREA

VELOCITY (FT/SEC)

- <= 0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- 2.0 - 2.5
- 2.5 - 3.0
- 3.0+

N

0 0.5 1 mi

50-YEAR STORM VELOCITY MAP

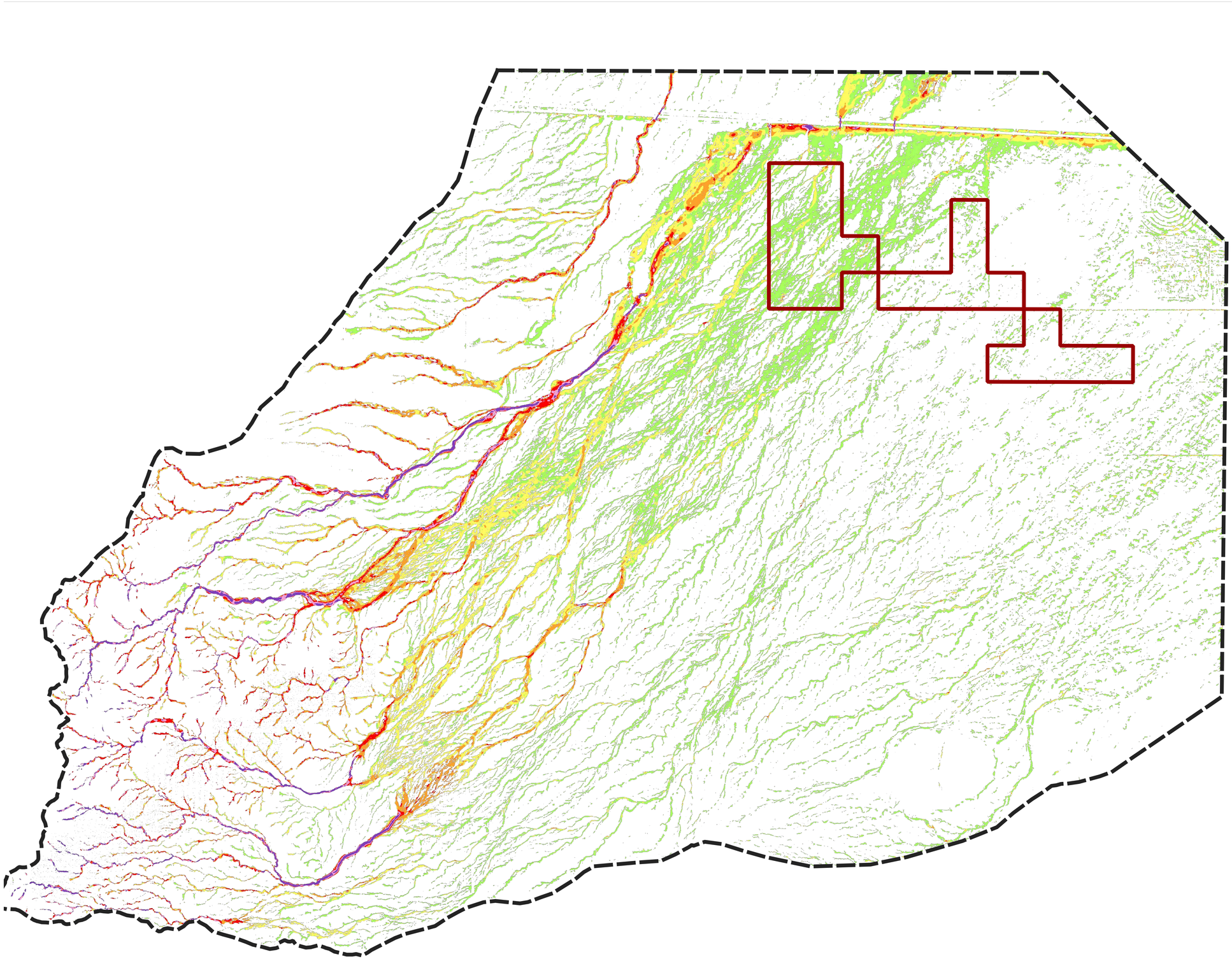
NOTES:

1. THIS PLAN IS FOR VISUAL INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION.

PREPARED FOR: SILVER REEF ENERGY, LLC

PREPARED BY: TETRA TECH

PROJ: SILVER REEF	DESN: ABB
DATE: AUG 2025	CHKD: JPP



LEGEND

STUDY AREA
PROJECT AREA

VELOCITY (FT/SEC)
- <= 0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- 2.0 - 2.5
- 2.5 - 3.0
- 3.0+

N

0 0.5 1 mi

100-YEAR STORM VELOCITY MAP

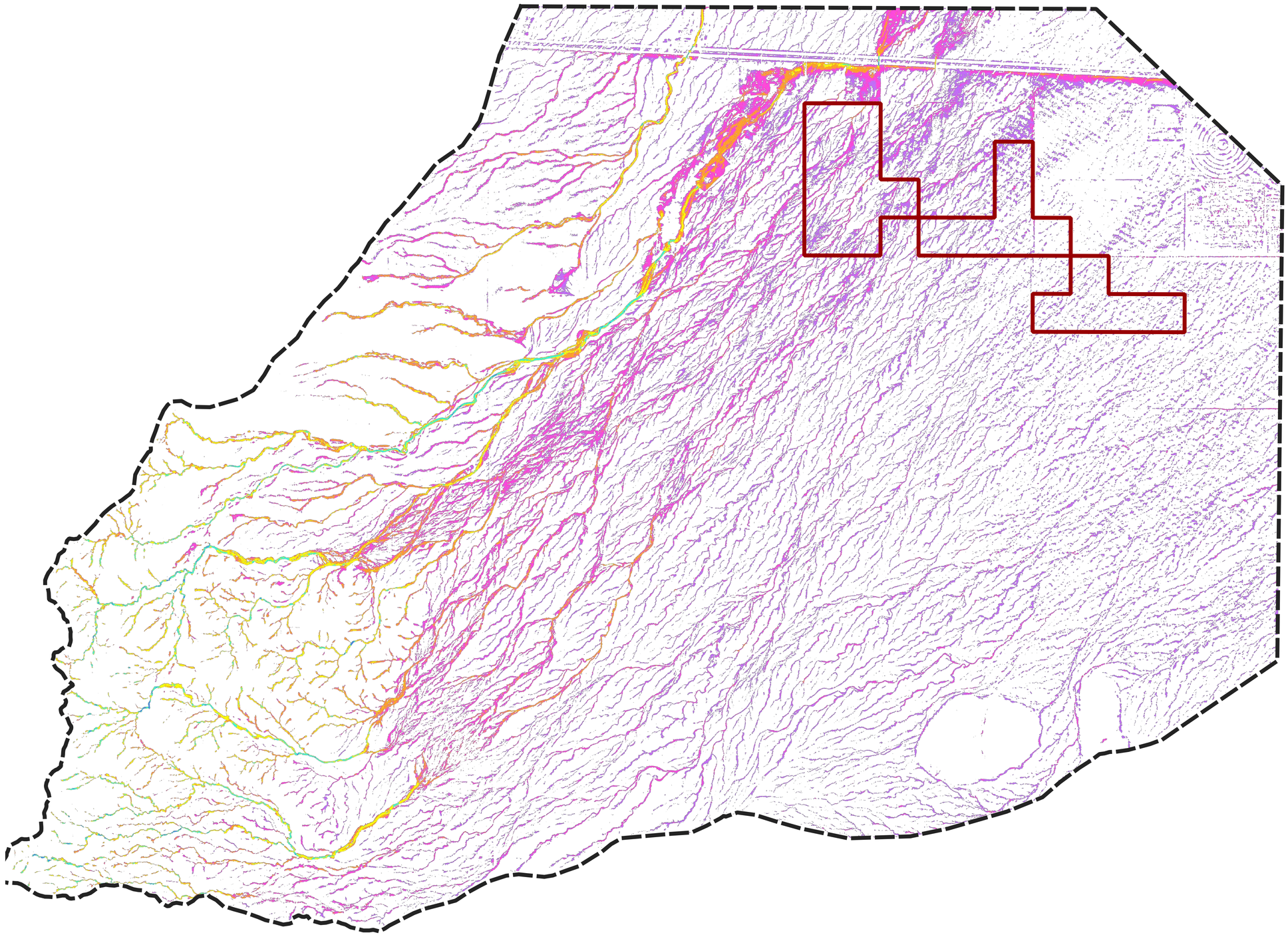
NOTES:
1. THIS PLAN IS FOR VISUAL INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION.

PREPARED FOR: SILVER REEF ENERGY, LLC

PREPARED BY: TETRA TECH

PROJ: SILVER REEF	DESN: ABB
DATE: AUG 2025	CHKD: JPP

APPENDIX I: RUNOFF SCOUR MAPS



LEGEND

STUDY AREA
PROJECT AREA

SCOUR DEPTH (FT)
- <0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- 2.0 - 2.5
- 2.5 - 3.0
- 3.0+

N

0 0.5 1 mi

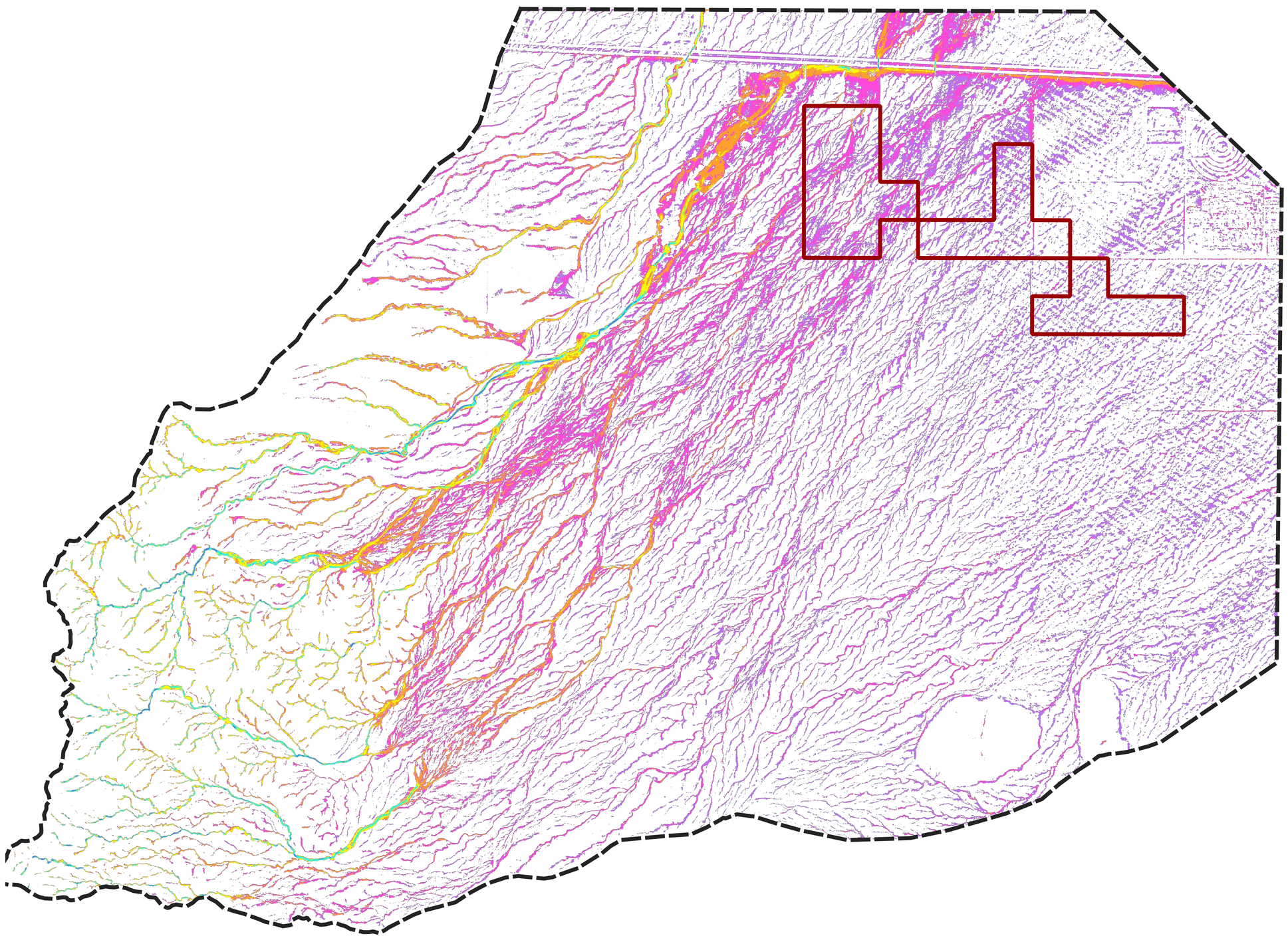
25-YEAR STORM SCOUR DEPTH MAP

NOTES:
1. THIS PLAN IS FOR VISUAL INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION.

PREPARED FOR: SILVER REEF ENERGY, LLC

PREPARED BY: TETRA TECH

PROJ: SILVER REEF	DESN: ABB
DATE: AUG 2025	CHKD: JPP



LEGEND

STUDY AREA

PROJECT AREA

SCOUR DEPTH (FT)

- <0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- 2.0 - 2.5
- 2.5 - 3.0
- 3.0+

N

0 0.5 1 mi

50-YEAR STORM SCOUR DEPTH MAP

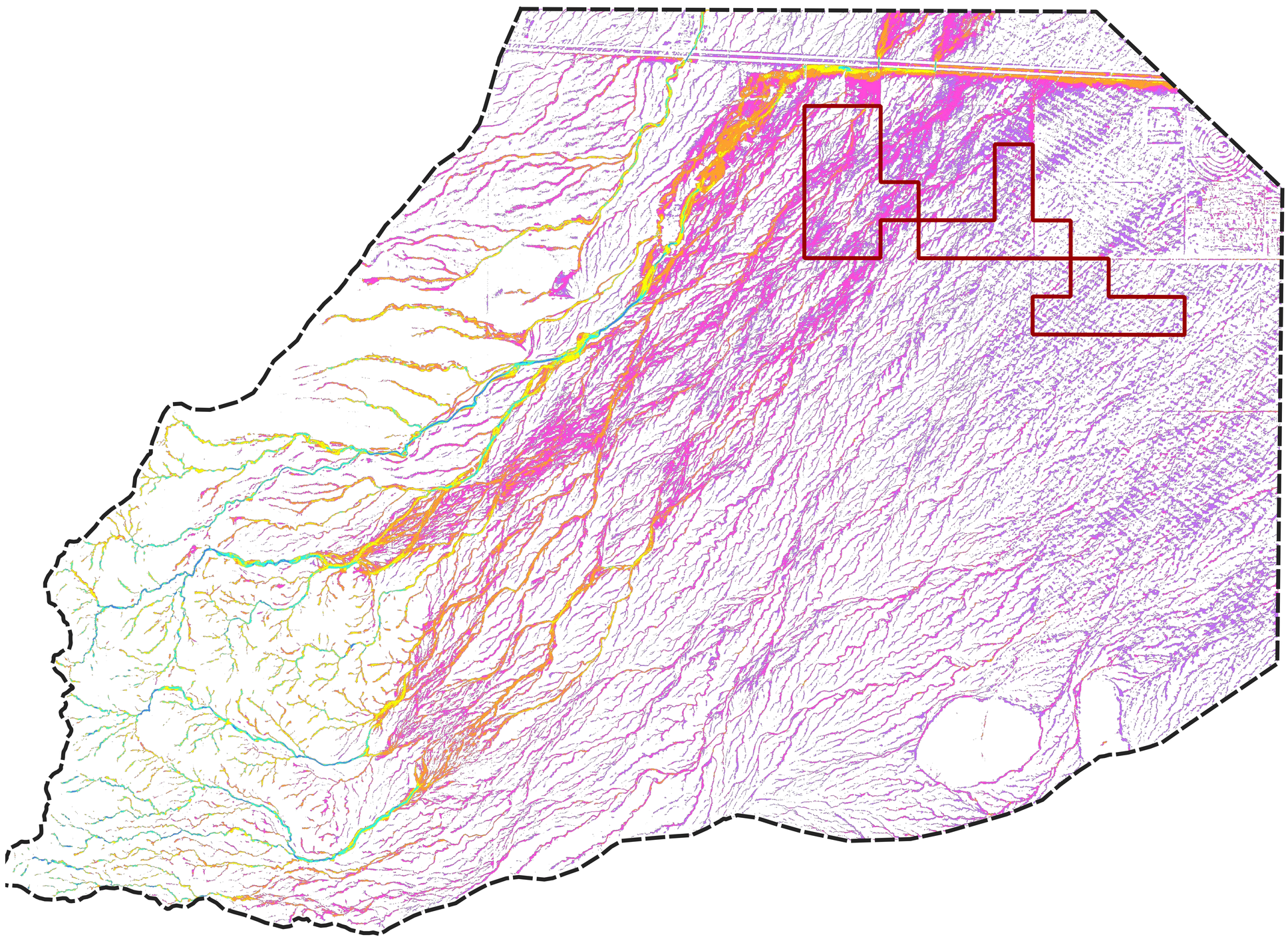
NOTES:

1. THIS PLAN IS FOR VISUAL INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION.

PREPARED FOR: SILVER REEF ENERGY, LLC

PREPARED BY: TETRA TECH

PROJ: SILVER REEF	DESN: ABB
DATE: AUG 2025	CHKD: JPP



LEGEND

STUDY AREA

PROJECT AREA

SCOUR DEPTH (FT)

- <0.5
- 0.5 - 1.0
- 1.0 - 1.5
- 1.5 - 2.0
- 2.0 - 2.5
- 2.5 - 3.0
- 3.0+

N

0 0.5 1 mi

100-YEAR STORM SCOUR DEPTH MAP

NOTES:

1. THIS PLAN IS FOR VISUAL INFORMATION PURPOSES ONLY. NOT FOR CONSTRUCTION.

PREPARED FOR: SILVER REEF ENERGY, LLC

PREPARED BY: TETRA TECH

PROJ: SILVER REEF	DESN: ABB
DATE: AUG 2025	CHKD: JPP

Casa Grande Dispatch

AFFIDAVIT OF PUBLICATION

State of Florida, County of Orange, ss:

Edmar Corachia, being first duly sworn, deposes and says: That (s)he is a duly authorized signatory of Column Software, PBC, duly authorized agent of Casa Grande Dispatch, a newspaper published at Casa Grande, Pinal County, Arizona, Tuesday, Thursday, and Saturday of each week; that a notice, a full, true and complete printed copy of which is hereunto attached, was printed in the regular edition of said newspaper, and not in a supplement thereto, for 1 issues. The publications thereof having been on the following dates:

PUBLICATION DATES:
Aug. 14, 2025

NOTICE ID: D0xPIxqyuUDATA1kwZoI
NOTICE NAME: PZ-PA-012-25

Edmar Corachia

(Signed)_____

VERIFICATION

State of Florida
County of Orange

PAMELA BAEZ
Notary Public - State of Florida
Commission # HH 186700
Expires on October 14, 2025

Subscribed in my presence and sworn to before me on this: 08/15/2025

_____
Notary Public
Notarized remotely online using communication technology via Proof.

NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT 6:00 P.M. ON THE 4TH DAY OF SEPTEMBER 2025, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 301 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR MAJOR COMPREHENSIVE PLAN AMENDMENT TO THE PINAL COUNTY COMPREHENSIVE PLAN.

PZ-PA-012-25 – PUBLIC HEARING/ACTION: Silver Reef Energy LLC, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 801± acres of land from Very Low Density Residential (VLDR, 0-1 du/ac) to Green Energy Production for a utility scale Solar Facility for a 150 megawatt photovoltaic solar and 200 megawatt Battery Energy Storage System, situated on a portions of section 14 T07S R03E, sections 12 & 13 T07S R03E, section 18 T07S R04E, and section 19 T07S R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-03-0040; 500-62-0160; -0200; -0230; -0310; -0320; -0330; -0340; 500-11-027G; -027H; -028D; and -028E; located 6.5 miles southwest of Casa Grande, south of Interstate 8 (I-8), in the unincorporated area of Pinal County.

ALL PERSONS INTERESTED IN THIS MATTER MAY APPEAR AND SPEAK AT THE PUBLIC HEARING AT THE DATE, TIME, AND PLACE DESIGNATED ABOVE.

DOCUMENTS PERTAINING TO THIS CASE CAN BE FOUND ON THE NOTICE OF HEARING PAGE FOR THE P&Z COMMISSION AT: https://www.pinal.gov/236/Notice-of-Hearings

DATED THIS 7th DAY OF AUGUST 2025, by Pinal County Development Services

TO QUALIFY FOR FURTHER NOTIFICATION IN THIS LAND USE MATTER YOU MUST FILE WITH THE PLANNING DEPARTMENT A WRITTEN STATEMENT OF SUPPORT OR OPPOSITION TO THE SUBJECT APPLICATION. YOUR STATEMENT MUST CONTAIN THE FOLLOWING INFORMATION:

1) Planning Case Number (see above)
2) Your name, address, telephone number and property tax parcel number (Print or type)
3) A brief statement of reasons for supporting or opposing the request
4) Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:
PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT
85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132
Contact for this matter: Patrick Zaia-Roberts, Senior Planner
E-mail address: Patrick.Roberts@

LocaliQ
Arizona
GANNETT

PO Box 632099, Cincinnati, OH 45263-2099

AFFIDAVIT OF PUBLICATION

Tetra Tech
18122 W Glenrosa Ave
Goodyear AZ 85395

STATE OF WISCONSIN, COUNTY OF BROWN

The Arizona Republic, a newspaper published in the city of Phoenix and general circulation in the counties of Maricopa, Coconino, Pima and Pinal, State of Arizona, and personal knowledge of the facts herein state and that the notice hereto annexed was Published in said newspapers in the issue:

08/14/2025

and that the fees charged are legal.
Sworn to and subscribed before on 08/14/2025

Legal Clerk

Notary, State of WI, County of Brown

8-21-26

My commission expires

Publication Cost:	$1832.00	
Tax Amount:	$0.00	
Payment Cost:	$1832.00	
Order No:	11572007	# of Copies:
Customer No:	1550219	0
PO #:	LAZS0350903	

THIS IS NOT AN INVOICE!

Please do not use this form for payment remittance.

NICOLE JACOBS
Notary Public
State of Wisconsin

NOTICE OF PUBLIC HEARING

NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT 6:00 P.M. ON THE **4TH** DAY OF **SEPTEMBER 2025**, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 301 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR **MAJOR COMPREHENSIVE PLAN AMENDMENT** TO THE PINAL COUNTY COMPREHENSIVE PLAN.

PZ-PA-012-25 – PUBLIC HEARING/ ACTION: Silver Reef Energy LLC, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 801± acres of land from Very Low Density Residential (VLDR, 0-1 du/ac) to Green Energy Production for a utility scale Solar Facility for a 150 megawatt photovoltaic solar and 200 megawatt Battery Energy Storage System, situated on a portions of section 14 T07S R03E, sections 12 & 13 T07S R03E, section 18 T07S R04E, and section 19 T07S R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-03-0040; 500-62-0160; -0200; -0230; -0310; -0320; -0330; -0340; 500-11-027G; -027H; -028D; and -028E; located 6.5 miles southwest of Casa Grande, south of Interstate 8 (I-8), in the unincorporated area of Pinal County.

ALL PERSONS INTERESTED IN THIS MATTER MAY APPEAR AND SPEAK AT THE PUBLIC HEARING AT THE DATE, TIME, AND PLACE DESIGNATED ABOVE.

DOCUMENTS PERTAINING TO THIS CASE CAN BE FOUND ON THE NOTICE OF HEARING PAGE FOR THE P&Z COMMISSION AT:
https://www.pinal.gov/236/Notice-of-Hearings

DATED THIS **7th** DAY OF **AUGUST 2025**, by Pinal County Development Services

TO QUALIFY FOR FURTHER NOTIFICATION IN THIS LAND USE MATTER YOU MUST FILE WITH THE PLANNING DEPARTMENT A WRITTEN STATEMENT OF SUPPORT OR OPPOSITION TO THE SUBJECT APPLICATION. YOUR STATEMENT **MUST** CONTAIN THE FOLLOWING INFORMATION:

1) Planning Case Number (see above)
2) Your name, address, telephone number and property tax parcel number **(Print or type)**
3) A brief statement of reasons for supporting or opposing the request
4) Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:
PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT
85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132

Contact for this matter: Patrick Zaia-Roberts, Senior Planner
E-mail address: Patrick.Roberts@pinal.gov
Phone # (520) 866-6409

August 14 2025
LAZS0350903

AFFIDAVIT OF POSTING OF BROADCAST SIGN

I, Jennifer Skulstad, Applicant for case PZ-PA-012-25 (Case number), personally caused 3 broadcast and 27 notice sign(s) to be posted in a visible place on or near the proposed project site on August 13th and 14th, 2025 (Date), at least 28 days before the Planning and Zoning Commission Public Hearing, regarding the proposed Major Comprehensive Plan Amendment (Type of application), in unincorporated Pinal County

The notice was posted as indicated on the attached map and photographs.

J Skulstad

Applicant

STATE OF ARIZONA)
) ss:
COUNTY OF MARICOPA)

Subscribed and sworn to me by Jennifer Lynn Skulstad this 18 day of August, 2025.

Irma A Nelson.

Notary Public

My Commission Expires: May 02, 2027.

IRMA A. NELSON
Notary Public - State of Arizona
MARICOPA COUNTY
Commission # 648868
Expires May 02, 2027

Silver Reef Energy, LLC

Silver Reef Energy Project Notification Sign Locations

Pinal County, AZ

Project Features
- Santa Rosa to Tat Momoli 230 kV Transmission Line
- Project Area

Transportation
- Interstate Highway
- Local Road

Boundaries
- PLSS Township
- PLSS Section

Land Manager
- Bureau of Land Management

Project Notification Sign Type and Photo Log
- Large Broadcast Sign
- Small Notice Sign
- Photo Point

TETRA TECH

NOT FOR CONSTRUCTION

Reference Map



1:12,500 NAD 1983 StatePlane Arizona Central FIPS 0202 Feet

0 1,500 3,000 Feet

Source: ESRI, USDA NAIP, US CENSUS, BTS, BLM, HIFLD

\\cess706gisfs1\CES\Projects\DEN\1688_0004_Silver_Reef_Solar_AZ\Projects\PinalCo_Permit\PinalCo_Permit.aprx

Sign Posting Photo Log

Sign No. 1 Date: 8/14/2025 Direction: N Lat/Long: -112.0151147, 32.82213889 Note: Inaccessible due to health, safety and access concerns.	
Sign No. 2 Date: 8/14/2025 Direction: NW Lat/Long: -112.0151142, 32.81896258	

Sign No. 3 Date: 8/14/2025 Direction: S Lat/Long: -112.0149249, 32.81868325	
Sign No. 4 Date: 8/14/2025 Direction: SW Lat/Long: -112.0151007, 32.81148069	

Sign No. 5 Date: 8/14/2025 Direction: NE Lat/Long: -112.0106753, 32.81144339	
Sign No. 6 Date: 8/14/2025 Direction: NE Lat/Long: -112.0062333, 32.81143848	

Sign No. 7 Date: 8/14/2025 Direction: NW Lat/Long: -112.0020512, 32.81142214	
Sign No. 8 Date: 8/14/2025 Direction: NW Lat/Long: -111.9982343, 32.81164015	

Sign No. 9 Date: 8/14/2025 Direction: S Lat/Long: -111.9975631, 32.81162933	
Sign No. 10 Date: 8/13/2025 Direction: N Lat/Long: -111.9937133, 32.81148771	

Sign No. 11 Date: 8/13/2025 Direction: S Lat/Long: -111.9935603, 32.81146429	
Sign No. 12 Date: 8/13/2025 Direction: S Lat/Long: -111.9893682, 32.81144083	

Sign No. 13 Date: 8/14/2025 Direction: NW Lat/Long: -111.9981679, 32.82209561	
Sign No. 14 Date: 8/14/2025 Direction: N Lat/Long: -111.9983538, 32.81864503	

Sign No. 15 Date: 8/14/2025 Direction: NW Lat/Long: -112.0013373, 32.81864185 Note: Could not access coordinates for this location. Sign installed 225 feet east of County-suggested location.	
Sign No. 16 Date: 8/14/2025 Direction: SE Lat/Long: -112.0013729, 32.81857167 Note: Could not access coordinates for this location. Sign installed 225 feet east of County-suggested location.	

Sign No. 17 Date: 8/14/2025 Direction: W Lat/Long: -111.998182, 32.81849057	
Sign No. 18 Date: 8/14/2025 Direction: SE Lat/Long: -111.9981171, 32.81512069	

Sign No. 19 Date: 8/13/2025 Direction: E Lat/Long: -111.9977288, 32.81490015	
Sign No. 20 Date: Direction: Lat/Long: Note: Inaccessible due to health, safety and access concerns.	No sign installed.

Sign No. 21 Date: 8/14/2025 Direction: NW Lat/Long: -111.9977936, 32.80765321	
Sign No. 22 Date: 8/14/2025 Direction: W Lat/Long: -111.9978588, 32.80417766	

Sign No. 23 Date: 8/14/2025 Direction: N Lat/Long: -111.9937739, 32.80411639	
Sign No. 24 Date: 8/14/2025 Direction: N Lat/Long: -111.9895838, 32.80410951	

Sign No. 25 Date: Direction: Lat/Long: - Note: Inaccessible due to health, safety and access concerns.	No sign installed.
Sign No. 26 Date: 8/14/2025 Direction: S Lat/Long: -111.9797412, 32.80404523	

Sign No. 27 Date: 8/14/2025 Direction: Lat/Long: Note: Inaccessible due to health, safety and access concerns.	No sign installed.

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Mary Ellen Sheppard
Deputy County Manager

Himanshu Patel
Deputy County Manager

Open Space, Trails & Regional Parks Department
Development Review Comment Letter

Project Name: Silver Reef Solar
Case Number: PZ-PA-012-25
Reviewed By: Kelley Fox
Review Type: Major Comprehensive Plan Amendment
07/07/2025

Comment #	RESPOND TO ALL COMMENTS
1	There is substantial riparian habitat that transects the project area. The AZGFD ERT mapping tool can be used to view the recorded riparian habitat within the project area. Information and guidelines concerning riparian habitat within Pinal County can be found below: https://s3-us-west-2.amazonaws.com/azgfd-portal-wordpress-pantheon/wp-content/uploads/archive/PinalCounty_RiparianGuides_FINAL.pdf
2	Riparian habitat is considered to be of critical environmental importance, and is to be protected during development. Its protection is supported by Pinal County's Comprehensive Plan policies 3.1.4.1, 3.9.1.4, and 7.1.2.4, along with Development services code 2.176.100C, 2.176.100D, and 2.176.100E.
3	A buffer of 50 ft. around all documented riparian habitat within the development site should be incorporated into the site plan. Setbacks or buffers may be increased or decreased if not prohibited by another county ordinance or regulation, and if approved by the supervisors.
4	Noxious weeds have become increasingly problematic in areas of development and on large projects where vegetation management plans are not created or maintained. Due to the increasing threat noxious weeds have on the Sonoran desert and Pinal County landscape it is recommended that the applicant incorporate invasive species/noxious weed management plans for development. Information regarding noxious weeds can be found on the Arizona Department of Agriculture's website.
5	It is highly recommended that applicants limit the disturbance of soils and biological soil crusts in areas that are already level and suitable for array installation, thus limiting areas where noxious weeds can proliferate while simultaneously preserving important ecological aspects of the county's natural desert.

6	Guidelines for Solar development within Arizona provided by Arizona Game and Fish Department can be found at https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FinalSolarGuidelines03122010.pdf
10	Review AZGFD fencing guidelines which are in consonance with Pinal County expectations below: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/110125_AGFD_fencing_guidelines.pdf
11	Review and incorporate department guidelines regarding development within/around designated and proposed open space. https://www.pinal.gov/DocumentCenter/View/662/Open-Space-and-Recreation-Area-Design-Guidelines-Manual-PDF
12	Any clarifications regarding these comments or recommended guidelines can be directed towards Kelley Fox via email Kelley.fox@pinal.gov or via phone at 520-866-6661

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Mary Ellen Sheppard
Deputy County Manager

Himanshu Patel
Deputy County Manager

Open Space, Trails & Regional Parks Department
Development Review Comment Letter

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Case Number: PZ-PA-012-25
Reviewed By: Kelley Fox
Review Type: Major Comprehensive Plan Amendment
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12	Any clarifications regarding these comments or recommended guidelines can be directed towards Kelley Fox via email Kelley.fox@pinal.gov or via phone at 520-866-6661

July 30, 2025

Mr. Harvey Krauss
Planning Manager, Community Development
Pinal County
85 N Florence Street, PO Box 749
Florence, AZ 85132

Electronically submitted to: Harvey.Krauss@pinalcountyaz.gov & hayes@wmbattorneys.com

RE: PZ-PA-012-25 - Silver Reef Energy Solar & Storage Project

Dear Mr. Krauss:

The Arizona Game and Fish Department (Department) appreciates the opportunity to review Pinal County case number PZ-PA-012-25 - Silver Reef Energy Solar and Storage Project (Project). The Department understands that Silver Reef Energy, LLC (Silver Reef) has applied for a Major Comprehensive Plan Amendment (CPA) in Pinal County for the purpose of constructing, operating, maintaining, and decommissioning a 150 megawatt (MW) photovoltaic (PV) solar facility, a 200 MW battery energy storage system (BESS), and ancillary facilities. It is understood that the Project site includes approximately 801 acres of privately owned land located just south of I-8 and approximately 6.5 miles southwest of Casa Grande, Arizona in primarily undisturbed Sonoran desert scrub habitat.

Under Title 17 of the Arizona Revised Statutes, the Department, by and through the Arizona Game and Fish Commission, has jurisdictional authority and public trust responsibilities to conserve and protect the state fish and wildlife resources. In addition, the Department manages threatened and endangered species through authorities of Section 6 of the Endangered Species Act and the Department's Section 10(a)(1)(A) permit. It is the mission of the Department to conserve and protect Arizona's diverse fish and wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department recognizes the importance of planning efforts to develop renewable energy locations that contribute to regional and state economic growth needs and would like to work closely with Silver Reef, Tetra Tech, and Pinal County during the planning and development of this facility. The Department recognizes that appropriate coordination, proper planning, and voluntary implementation of best management practices allow projects to be developed that avoid, minimize, or offset potential impacts to wildlife and recreational access during development and operation of the facilities. For your consideration, the Department provides the

following comments based on the agency's statutory authorities, public trust responsibilities, and special expertise related to wildlife resources and recreation.

Arizona has recently seen an increase in the number of proposed and in-development renewable energy generation projects and associated infrastructure. A number of solar energy projects have been built or proposed within the vicinity of this Project, and although each of these projects individually may have a minimal impact on the broader landscape, these projects cumulatively could result in loss of habitat, impact wildlife movements, and affect wildlife-related recreation. Additionally, long-term effects to wildlife can extend several kilometers beyond the footprint of a solar project area (Sawyer et al. 2025[1]). It is important to consider all potential cumulative effects and to evaluate this Project in association with other projects in the area. Department staff are available to assist in identifying potential cumulative impacts to wildlife and associated voluntary conservation measures that can be implemented for the Project.

The Project narrative states that the surrounding area mainly includes private rural residential and agricultural crop lands, and there are no known recreational uses. However, the Project directly borders Bureau of Land Management (BLM) lands to the west and much of the southern boundary. BLM lands are available to the public for a variety of recreational uses such as hunting, hiking, and wildlife related recreation. Further, the Department's review identified that the lands in the immediate vicinity of the Project are designated as "Exisiting/Planned Open Space" in the Pinal County Comprehensive Plan. The Department recommends siting utility-scale solar facilities on previously disturbed or degraded areas near established development when possible.

The Department recommends conducting surveys in the Project area to determine wildlife species presence. These surveys should be of sufficient duration and intensity to adequately assess all habitat types and potential wildlife species occurrence in and adjacent to the Project area. Department staff are available to assist Silver Reef and Tetra Tech in determining appropriate surveys to conduct, as well as recommend design features and best management practices that can help minimize potential impacts. Based on the information provided, the Department offers the following recommendations to reduce potential impacts to wildlife and habitat; additional information can be found in *Guidelines for Solar Development in Arizona*[2]:

- The Project is located within the 10(j) designated, experimental nonessential population area of the endangered Sonoran pronghorn, and the species has been documented within 5 miles of the Project area and surrounding adjacent lands. Sonoran pronghorn have specific habitat requirements based on their life history and survival strategy. The Department would like to work with Silver Reef to minimize any potential impacts to this species. The Department recommends scheduling construction activities outside the fawning season for Sonoran pronghorn (February 1 to July 15) and requests coordination prior to construction activities in order to exchange information on current Sonoran pronghorn use in the Project area. If pronghorn are detected during Project activities,

[1] https://besjournals.onlinelibrary.wiley.com/doi/full/10.1002/2688-8319.70071
[2] https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FinalSolarGuidelines03122010.pdf

please notify the U.S. Fish and Wildlife Service[3] (USFWS) and the Department's Sonoran Pronghorn Program Lead (rgardner@azgfd.gov) as soon as possible.

- The western burrowing owl, a special status species that is regulated under the Migratory Bird Treaty Act (MBTA), has been documented within 5 miles of the Project area. The Department recommends conducting occupancy surveys for this species in advance of the design phase to understand distribution of burrowing owls in the Project site; avoidance of a large burrowing owl population may be advisable over removal or other conservation measures. Guidelines for conducting this survey are found in *Burrowing Owl Project Clearance Guidance for Landowners*[4]. Please note that the survey should be conducted by a surveyor who is certified by the Department or has similar training and qualifications. If an active burrowing owl burrow is detected, please contact the Department and the USFWS for direction, in accordance with the guidelines.
- The Bendire's and LeConte's Thrashers are special status species that are also regulated under the MBTA and have the potential to occur within the Project area. The Department recommends conducting surveys during the planning stage of development in order to better understand species presence and inform potential conservation measures. . Please reference the Desert Thrashers Working Group's Conservation of Bendire's and LeConte's Thrashers at Solar Development Sites[5] which outlines how to determine occupancy of thrashers and design considerations if present.
- The Sonoran desert tortoise, which is a federal and state species of special concern, could occur within the Project area as there is suitable habitat in the vicinity. The Department recommends conducting surveys for Sonoran desert tortoise within suitable habitat to determine the presence of this species. The *Sonoran Desert Tortoise Conservation Guidelines*[6] provide protocols for these surveys. If this species is detected, please refer to this document for guidelines on handling tortoises and recommended measures to avoid, minimize, or offset impacts to this species resulting from development activities.
- The Department also recommends conducting surveys for nesting birds prior to vegetation removal and/or construction activities that occur during the breeding season. The vegetation within the Project area may provide nesting opportunities for avian species that are regulated under the MBTA. If it is anticipated the Project will not be in compliance with MBTA, the Department recommends contacting the USFWS for technical assistance.
- Burrowing species could occur within the Project area and could be influenced by construction activities and by loss of habitat. Surveys for these species are recommended to determine their presence and to inform pre-construction activities. Department staff are available to assist in identifying suitable conservation measures, such as one-way exclosures on burrows that allow wildlife to exit the burrows and disperse to adjacent lands in advance of construction.

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[3] https://www.fws.gov/office/arizona-ecological-services/contact-us
[4] https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/nongame/eagles/BurrowingOwlClearanceProtocol_2009.pdf
[5] https://borderlandsbirds.org/wp-content/uploads/2024/09/Desert-Thrasher-Solar-Recommendations-1.0.pdf
[6] https://azgfd-portal-wordpress-pantheon.s3.us-west-2.amazonaws.com/wp-content/uploads/2025/01/16114611/Rubke-2024.-Sonoran-Desert-Tortoise-Conservation-Guidelines.pdf

Maintaining habitat connectivity is a priority for the Department, and wildlife movement corridors are important for wildlife to respond to changing environmental conditions. The landscape in which this Project is proposed provides important movement pathways for wildlife. The Department would like to meet with Silver Reef and Tetra Tech to discuss opportunities to incorporate wildlife connectivity into the Project design, including the following:

- The preliminary layout included in the Project narrative indicates the placement of panels will avoid a number of washes that flow through the site. The Department appreciates this design feature, in alignment with Pinal County Comprehensive Plan policies 3.1.4.6 and 3.1.4.1, and recommends leaving those washes unfenced and with an appropriate setback from any development to allow wildlife to utilize the washes as landscape-level movement corridors in the area. The Department recommends that there are no "dead ends" in security fencing. If a contiguous corridor cannot be achieved through the facility, the Department recommends that the entry be fenced off to prevent wildlife entrapment. The Department generally recommends a minimum corridor width of approximately 1,300 feet for large ungulates, however if this is not feasible, Department staff are available to assist in identifying other design features that would help facilitate wildlife movement through the site such as:
    - Splitting large panel arrays into multiple smaller arrays, with space between them, creating a pathway for wildlife movement. For this method, fencing would be erected around each array instead of the entire facility.
    - "Rounding" or "Cutting" corners off square-shaped plots, especially in known corridors and where project footprints are narrowest, to enhance wildlife permeability.
- The Department's *Wildlife Compatible Fencing Guidelines*[7] provide information on how fencing impacts wildlife, ways to design fencing to prevent wildlife entanglement and impalement, and to ensure wildlife movement is not restricted. Department personnel are available as resources to help determine appropriate fencing design and layout that will achieve its objective while reducing impact on wildlife, such as leaving a 6–8-inch gap between the ground surface and bottom of the fence to allow for smaller wildlife species to move freely through the area and make use of any habitat within the Project boundary.
- The Department recommends conducting minimal grading of the Project area and, to the extent possible, retaining habitat features underneath the panels, including vegetation and soils. The topography in the majority of the site is flat and would require minimal trimming of shrubs and existing vegetation to install the panels. Keeping the existing soil and root structures intact would serve to minimize erosional run-off and help reduce biodiversity loss within the site (Grodsky and Hernandez 2020[8]).

Finally, the Department offers the following general recommendations to reduce potential impacts to wildlife and habitat during construction and operation of the facility:

- A variety of other Arizona SGCN have the potential to occur within the Project area; please reference the attached HDMS report (HGIS-25326) for a complete list of species. If wildlife are encountered during Project activities, the Department recommends moving

[7] https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/110125_AGFD_fencing_guidelines.pdf
[8] https://www.nature.com/articles/s41893-020-0574-x

them out of harm's way, no more than 0.25 mile outside the Project boundary within similar habitat. Please note that the Arizona State Wildlife Action Plan was recently updated, and the Department has an interactive website, Arizona Wildlife Conservation Strategy[9], that includes the most recent list of SGCN to help navigate and identify conservation opportunities.

- If trenching or digging of large holes will occur, the Department recommends that trenching/digging and backfilling crews work together to minimize the number of open holes/trenches at any given time. Where trenches/holes cannot be backfilled immediately, the Department recommends escape ramps be constructed in each hole and at least every 300 feet in trenches. Escape ramps can be short lateral trenches or wooden planks sloping to the surface, and ramp slopes should be less than 45 degrees (1:1). Trenches or holes that have been left open should be inspected for animals and animals removed prior to backfilling.
- The Department recommends following the Avian Power Line Interaction Committee (APLIC) guidelines for new power lines, which can be found in the current version of *Suggested Practices for Avian Protection on Power Lines and Reducing Avian Collisions with Power Lines*. Large bodied birds, such as hawks, owls, vultures, and eagles, may be vulnerable to line strikes and electrocution during construction and operation of power lines and substations; power poles can also serve as perches for large-bodied birds. These potential impacts can be avoided or minimized by following the APLIC guidelines which include designing the power lines with enough space between energized components to reduce the likelihood of a bird electrocution or installing bird flight diverters in sections of line where elevated bird strikes are anticipated (e.g. lines over water bodies or in the path of colonial roosting locations). The Department's Raptor Coordinator, who can be contacted at raptors@azgfd.gov or 623-236-7575, can provide further information on specific design features and best management practices.
- Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations (Davies et. al. 2013[10]). The Department recommends using only the minimum amount of light needed for safety. If feasible, "warmer" narrow spectrum lighting (amber, orange, red) is wildlife-friendly and should be used as often as possible to minimize the number of species affected by lighting. It is also beneficial that all lighting is shielded, canted, or cut to minimize the amount of upward shining light.
- Please ensure the Project complies with Arizona Native Plant Law[11] regulations. A Native Plant Inventory may need to be conducted to identify, record, and coordinate plant salvage efforts for species that are Protected under the Arizona Native Plant Law.
- To minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects, and pathogens, the Department encourages taking precautions to wash and/or decontaminate equipment before entering and leaving the Project site. See the Arizona Department of Agriculture website[12] for a list of

[9] https://awcs.azgfd.com
[10] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3657119
[11] https://agriculture.az.gov/plantsproduce/native-plants
[12] https://agriculture.az.gov/pestspest-control/agriculture-pests/noxious-weeds

prohibited and restricted noxious weeds and the Arizona Native Plant Society[13] for recommendations on how to control them. To view a list of documented invasive species or to report invasive species in or near the Project area, visit iMapInvasives[14], which is a national cloud-based application for tracking and managing invasive species.

  - Stinknet is a highly invasive noxious winter weed native to South Africa, and is extremely flammable when dry. Stinknet (also known as globe chamomile) has heavily infested Maricopa, Pinal, and Pima counties and is expanding into Yuma, Yavapai, and Gila counties. Infestations spread rapidly along highways and open fields in residential areas. Emergence starts in late November and plants can continue to germinate and emerge through May in wet years. In order to minimize the spread of this plant it is critical that any new infestations are identified and quickly managed. Additional information is available through the Southwest Vegetation Management Association[15], the Sonoran Desert Cooperative Weed Management Area[16], or the Arizona Native Plant Society[17].

- The Department recommends revegetating disturbed areas with native drought-tolerant species that represent the natural surrounding landscape. Landscaping with native plants can help support wildlife and pollinator species in the area while reducing dust and erosion. In addition, the applicable land management agencies should be consulted regarding guidelines for revegetation efforts.

Thank you for the opportunity to review Pinal County case number PZ-PA-012-25 - Silver Reef Energy Solar and Storage Project. For further coordination, please contact Teigan Williams at tstruck@azgfd.gov or 928-341-4069.

Sincerely,

Danielle Klaas

Danielle Klaas
Regional Supervisor - Region IV

cc: Callie Cavalcant - Habitat, Evaluation, and Lands Branch Chief

AZGFD #M25-06123614

[13] https://aznps.com/invas
[14] https://imap.natureserve.org/imap/services/page/map.html
[15] https://www.swvma.org/
[16] https://www.sdcwma.org/species/stinknet.php
[17] http://aznps.com

Pinal County Planning and Zoning Commission
301 E. 11th St.
Florence, Arizona 85132

August 20, 2025

Re: 2025 Major Amendments to the Pinal County Comprehensive Plan

Dear Commissioners,

As president and CEO of the Arizona Technology Council, the state's premier trade association representing more than 750 science and technology companies, I am writing to express our strong support for projects that make up the proposed 2025 major amendments to the Pinal County Comprehensive Plan. Specifically, I'm referring to PZ-PA-010-25 (Silver King Solar and BESS), PZ-PA-011-25 (La Osa Energy Generating Facilities), PZ-PA-012-25 (Silver Reef Solar), PZ-PA-014-25 (Griffin Energy) and PZ-PA-015-25 (Energy Generation and Technology Campus).

Pinal County has experienced tremendous population growth in the past decade, reaching more than 522,000 residents—an estimated increase of 3.81% since 2024. The county has become an employment magnet for industries such as semiconductor manufacturing, electric vehicle battery plant construction, copper mining and health care, with advanced manufacturers such as LG Energy Solution, Lucid Motors and Procter & Gamble establishing operations throughout the county.

Each of the five proposed renewable energy projects named above present transformative economic development opportunities for Pinal County. They would create good-paying jobs and generate millions of dollars in tax revenues to fund schools, roads and emergency services. For instance, the Silver King Solar and BESS Project would create more than 300 construction jobs and generate more than $20 million in sales tax revenue during construction, with approximately $5.3 million going to the county.

Furthermore, the major amendments would ensure Pinal County remains a leader in renewable energy development and environmental stewardship. These projects collectively support the county's goal to meet current and future energy needs and decrease the county's dependence on non-renewable energy sources, improving air quality and residents' quality of life. They are also key to a broader energy transition initiated countywide, including increasing battery storage facilities, implementing critical grid upgrades and ensuring smarter energy use. Each project is also responsibly sited, minimizing impact on key visual resources.

On behalf of the Council and our members, I respectfully encourage you to support these critical projects.

Sincerely,

Steve

ARIZONA TECHNOLOGY COUNCIL & SCITECH INSTITUTE



Steven G. Zylstra
President & CEO

Casa Grande Dispatch

AFFIDAVIT OF PUBLICATION

State of Florida, County of Orange, ss:

Edmar Corachia, being first duly sworn, deposes and says: That (s)he is a duly authorized signatory of Column Software, PBC, duly authorized agent of Casa Grande Dispatch, a newspaper published at Casa Grande, Pinal County, Arizona, Tuesday, Thursday, and Saturday of each week; that a notice, a full, true and complete printed copy of which is hereunto attached, was printed in the regular edition of said newspaper, and not in a supplement thereto, for 1 issues. The publications thereof having been on the following dates:

PUBLICATION DATES:
Aug. 14, 2025

NOTICE ID: D0xPIxqyuUDATA1kwZoI
NOTICE NAME: PZ-PA-012-25

Edmar Corachia

(Signed)_____

VERIFICATION

State of Florida
County of Orange

PAMELA BAEZ
Notary Public - State of Florida
Commission # HH 186700
Expires on October 14, 2025

Subscribed in my presence and sworn to before me on this: 08/15/2025

_____
Notary Public
Notarized remotely online using communication technology via Proof.

NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT 6:00 P.M. ON THE 4TH DAY OF SEPTEMBER 2025, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 301 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR MAJOR COMPREHENSIVE PLAN AMENDMENT TO THE PINAL COUNTY COMPREHENSIVE PLAN.

PZ-PA-012-25 – PUBLIC HEARING/ACTION: Silver Reef Energy LLC, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 801± acres of land from Very Low Density Residential (VLDR, 0-1 du/ac) to Green Energy Production for a utility scale Solar Facility for a 150 megawatt photovoltaic solar and 200 megawatt Battery Energy Storage System, situated on a portions of section 14 T07S R03E, sections 12 & 13 T07S R03E, section 18 T07S R04E, and section 19 T07S R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-03-0040; 500-62-0160; -0200; -0230; -0310; -0320; -0330; -0340; 500-11-027G; -027H; -028D; and -028E; located 6.5 miles southwest of Casa Grande, south of Interstate 8 (I-8), in the unincorporated area of Pinal County.

ALL PERSONS INTERESTED IN THIS MATTER MAY APPEAR AND SPEAK AT THE PUBLIC HEARING AT THE DATE, TIME, AND PLACE DESIGNATED ABOVE.

DOCUMENTS PERTAINING TO THIS CASE CAN BE FOUND ON THE NOTICE OF HEARING PAGE FOR THE P&Z COMMISSION AT: https://www.pinal.gov/236/Notice-of-Hearings

DATED THIS 7th DAY OF AUGUST 2025, by Pinal County Development Services

TO QUALIFY FOR FURTHER NOTIFICATION IN THIS LAND USE MATTER YOU MUST FILE WITH THE PLANNING DEPARTMENT A WRITTEN STATEMENT OF SUPPORT OR OPPOSITION TO THE SUBJECT APPLICATION. YOUR STATEMENT MUST CONTAIN THE FOLLOWING INFORMATION:

1) Planning Case Number (see above)
2) Your name, address, telephone number and property tax parcel number (Print or type)
3) A brief statement of reasons for supporting or opposing the request
4) Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:
PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT
85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132
Contact for this matter: Patrick Zaia-Roberts, Senior Planner
E-mail address: Patrick.Roberts@

LocaliQ
Arizona
GANNETT

PO Box 632099, Cincinnati, OH 45263-2099

AFFIDAVIT OF PUBLICATION

Tetra Tech
18122 W Glenrosa Ave
Goodyear AZ 85395

STATE OF WISCONSIN, COUNTY OF BROWN

The Arizona Republic, a newspaper published in the city of Phoenix and general circulation in the counties of Maricopa, Coconino, Pima and Pinal, State of Arizona, and personal knowledge of the facts herein state and that the notice hereto annexed was Published in said newspapers in the issue:

08/14/2025

and that the fees charged are legal.
Sworn to and subscribed before on 08/14/2025

Legal Clerk

Notary, State of WI, County of Brown

8-21-26

My commission expires

Publication Cost:	$1832.00	
Tax Amount:	$0.00	
Payment Cost:	$1832.00	
Order No:	11572007	# of Copies:
Customer No:	1550219	0
PO #:	LAZS0350903	

THIS IS NOT AN INVOICE!

Please do not use this form for payment remittance.

NICOLE JACOBS
Notary Public
State of Wisconsin

NOTICE OF PUBLIC HEARING

NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT 6:00 P.M. ON THE **4TH** DAY OF **SEPTEMBER 2025**, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 301 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR **MAJOR COMPREHENSIVE PLAN AMENDMENT** TO THE PINAL COUNTY COMPREHENSIVE PLAN.

PZ-PA-012-25 – PUBLIC HEARING/ ACTION: Silver Reef Energy LLC, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 801± acres of land from Very Low Density Residential (VLDR, 0-1 du/ac) to Green Energy Production for a utility scale Solar Facility for a 150 megawatt photovoltaic solar and 200 megawatt Battery Energy Storage System, situated on a portions of section 14 T07S R03E, sections 12 & 13 T07S R03E, section 18 T07S R04E, and section 19 T07S R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-03-0040; 500-62-0160; -0200; -0230; -0310; -0320; -0330; -0340; 500-11-027G; -027H; -028D; and -028E; located 6.5 miles southwest of Casa Grande, south of Interstate 8 (I-8), in the unincorporated area of Pinal County.

ALL PERSONS INTERESTED IN THIS MATTER MAY APPEAR AND SPEAK AT THE PUBLIC HEARING AT THE DATE, TIME, AND PLACE DESIGNATED ABOVE.

DOCUMENTS PERTAINING TO THIS CASE CAN BE FOUND ON THE NOTICE OF HEARING PAGE FOR THE P&Z COMMISSION AT:
https://www.pinal.gov/236/Notice-of-Hearings

DATED THIS **7th** DAY OF **AUGUST 2025**, by Pinal County Development Services

TO QUALIFY FOR FURTHER NOTIFICATION IN THIS LAND USE MATTER YOU MUST FILE WITH THE PLANNING DEPARTMENT A WRITTEN STATEMENT OF SUPPORT OR OPPOSITION TO THE SUBJECT APPLICATION. YOUR STATEMENT **MUST** CONTAIN THE FOLLOWING INFORMATION:

1) Planning Case Number (see above)
2) Your name, address, telephone number and property tax parcel number **(Print or type)**
3) A brief statement of reasons for supporting or opposing the request
4) Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:
PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT
85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132

Contact for this matter: Patrick Zaia-Roberts, Senior Planner
E-mail address: Patrick.Roberts@pinal.gov
Phone # (520) 866-6409

August 14 2025
LAZS0350903

AFFIDAVIT OF POSTING OF BROADCAST SIGN

I, Jennifer Skulstad, Applicant for case PZ-PA-012-25 (Case number), personally caused 3 broadcast and 27 notice sign(s) to be posted in a visible place on or near the proposed project site on August 13th and 14th, 2025 (Date), at least 28 days before the Planning and Zoning Commission Public Hearing, regarding the proposed Major Comprehensive Plan Amendment (Type of application), in unincorporated Pinal County

The notice was posted as indicated on the attached map and photographs.

J Skulstad

Applicant

STATE OF ARIZONA)
) ss:
COUNTY OF MARICOPA)

Subscribed and sworn to me by Jennifer Lynn Skulstad this 18 day of August, 2025.

Irma A Nelson.

Notary Public

My Commission Expires: May 02, 2027.

IRMA A. NELSON
Notary Public - State of Arizona
MARICOPA COUNTY
Commission # 648868
Expires May 02, 2027

Silver Reef Energy, LLC

Silver Reef Energy Project Notification Sign Locations

Pinal County, AZ

Project Features
- Santa Rosa to Tat Momoli 230 kV Transmission Line
- Project Area

Transportation
- Interstate Highway
- Local Road

Boundaries
- PLSS Township
- PLSS Section

Land Manager
- Bureau of Land Management

Project Notification Sign Type and Photo Log
- Large Broadcast Sign
- Small Notice Sign
- Photo Point

TETRA TECH

NOT FOR CONSTRUCTION

Reference Map



1:12,500 NAD 1983 StatePlane Arizona Central FIPS 0202 Feet

0 1,500 3,000 Feet

Source: ESRI, USDA NAIP, US CENSUS, BTS, BLM, HIFLD

\\cess706gisfs1\CES\Projects\DEN\1688_0004_Silver_Reef_Solar_AZ\Projects\PinalCo_Permit\PinalCo_Permit.aprx

Sign Posting Photo Log

Sign No. 1 Date: 8/14/2025 Direction: N Lat/Long: -112.0151147, 32.82213889 Note: Inaccessible due to health, safety and access concerns.	
Sign No. 2 Date: 8/14/2025 Direction: NW Lat/Long: -112.0151142, 32.81896258	

Sign No. 3 Date: 8/14/2025 Direction: S Lat/Long: -112.0149249, 32.81868325	
Sign No. 4 Date: 8/14/2025 Direction: SW Lat/Long: -112.0151007, 32.81148069	

Sign No. 5 Date: 8/14/2025 Direction: NE Lat/Long: -112.0106753, 32.81144339	
Sign No. 6 Date: 8/14/2025 Direction: NE Lat/Long: -112.0062333, 32.81143848	

Sign No. 7 Date: 8/14/2025 Direction: NW Lat/Long: -112.0020512, 32.81142214	
Sign No. 8 Date: 8/14/2025 Direction: NW Lat/Long: -111.9982343, 32.81164015	

Sign No. 9 Date: 8/14/2025 Direction: S Lat/Long: -111.9975631, 32.81162933	
Sign No. 10 Date: 8/13/2025 Direction: N Lat/Long: -111.9937133, 32.81148771	

Sign No. 11 Date: 8/13/2025 Direction: S Lat/Long: -111.9935603, 32.81146429	
Sign No. 12 Date: 8/13/2025 Direction: S Lat/Long: -111.9893682, 32.81144083	

Sign No. 13 Date: 8/14/2025 Direction: NW Lat/Long: -111.9981679, 32.82209561	
Sign No. 14 Date: 8/14/2025 Direction: N Lat/Long: -111.9983538, 32.81864503	

Sign No. 15 Date: 8/14/2025 Direction: NW Lat/Long: -112.0013373, 32.81864185 Note: Could not access coordinates for this location. Sign installed 225 feet east of County-suggested location.	
Sign No. 16 Date: 8/14/2025 Direction: SE Lat/Long: -112.0013729, 32.81857167 Note: Could not access coordinates for this location. Sign installed 225 feet east of County-suggested location.	

Sign No. 17 Date: 8/14/2025 Direction: W Lat/Long: -111.998182, 32.81849057	
Sign No. 18 Date: 8/14/2025 Direction: SE Lat/Long: -111.9981171, 32.81512069	

Sign No. 19 Date: 8/13/2025 Direction: E Lat/Long: -111.9977288, 32.81490015	
Sign No. 20 Date: Direction: Lat/Long: Note: Inaccessible due to health, safety and access concerns.	No sign installed.

Sign No. 21 Date: 8/14/2025 Direction: NW Lat/Long: -111.9977936, 32.80765321	
Sign No. 22 Date: 8/14/2025 Direction: W Lat/Long: -111.9978588, 32.80417766	

Sign No. 23 Date: 8/14/2025 Direction: N Lat/Long: -111.9937739, 32.80411639	
Sign No. 24 Date: 8/14/2025 Direction: N Lat/Long: -111.9895838, 32.80410951	

Sign No. 25 Date: Direction: Lat/Long: - Note: Inaccessible due to health, safety and access concerns.	No sign installed.
Sign No. 26 Date: 8/14/2025 Direction: S Lat/Long: -111.9797412, 32.80404523	

Sign No. 27 Date: 8/14/2025 Direction: Lat/Long: Note: Inaccessible due to health, safety and access concerns.	No sign installed.

PINAL COUNTY
WIDE OPEN OPPORTUNITY

BOARDS AND COMMISSIONS
AGENDA ITEM

09/04/2025
Citizen Advisory Committee

Funds #:
Dept. #:
Dept. Name: Development Services
Requested By:

AGENDA ITEM AND REQUESTED BOARD ACTION:

PZ-PA-013-25 -- PUBLIC HEARING/ACTION: Withey Morris Baugh LLC, applicant/agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate **215± acres** of land **from Moderate Low Density Residential** to **Employment** for a data center campus, with a flexible industrial category that can support additional complementary industrial uses. Situated on a portion of section 1, T07S, R04E, of the Gila and Salt River Base and Meridian (legal on file) tax parcel: 500-12-001B.

MOTION:

PINAL COUNTY
WIDE OPEN OPPORTUNITY

BOARDS AND COMMISSIONS
AGENDA ITEM

09/04/2025
Citizen Advisory Committee

Funds #:
Dept. #:
Dept. Name: Development Services
Requested By:

AGENDA ITEM AND REQUESTED BOARD ACTION:

PZ-PA-014-25 -- PUBLIC HEARING/ACTION: Rose Law Group and Griffin Energy LLC, agent/applicant, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate **2,685.58± acres** of land from **Moderate Low Density Residential** (MLDR, 1-3.5 du/ac), **and Proposed Open Space to Green Energy Production, General Public Facilities/Services, and Proposed Open Space** for a utility scale solar facility with Battery Energy Storage System (BESS) and a gas fired power plant, situated on a portions of sections 10, 11, 12, 13, 14, 15, and 24, T07S, R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-16-001G; -001B; 500-11-0160; -017A; -017C; -0180; -019B; -020A; -0210; 500-18-001A; -001B; -001C; 500-19-002B; -002E; -0030; -004A; -004C; -0050; -006A, -006B; 500-23-003A; -003B; and -0120 located between the Santa Rosa Wash and Green Wash sited on both sides of Interstate 8, in the unincorporated area of Pinal County.

MOTION:

Attachments

Packet

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

MEETING DATE: SEPTEMBER 4, 2025

TO: CITIZENS ADVISORY COMMITTEE

CASE NO(S): **PZ-PA-014-25 Griffin Energy**

CASE COORDINATOR(s): PATRICK ZAIA-ROBERTS, SENIOR PLANNER

Executive Summary: *A Pinal County Comprehensive Plan Amendment request by Rose Law Group and Griffin Energy LLC, agent/applicants, requesting a Major Comprehensive Plan Amendment to the Pinal County Comprehensive Plan to re-designate 2685.58± acres of land from Moderate Low Density Residential (1-3.5 du/ac) to Green Energy Production on 2,285.58± acres, General Public Facilities/Services (GPF/S) on 240± acres, and Recreation/Conservation on 160± acres, to develop a Photovoltaic Solar Generation Facility, Natural Gas Power Plant and a Battery Energy Storage System (BESS), located between the Santa Rosa Wash and Green Wash, on both sides of Interstate 8, in the unincorporated area of Pinal County.*

If this request is approved:
If this major amendment to the Pinal County Comprehensive Plan is approved, the action will allow the applicant to pursue rezoning of the property to accommodate Green Energy Production and General Public Facilities/Services land-uses associated with the site.

LEGAL DESCRIPTION: 2685.58± acres, situated in sections 10, 11, 12, 13, 14, 15, and 24, T07S, R04E of the Gila and Salt River Base and Meridian (legal on file).

TAX PARCELS: 500-16-001G, 500-16-001B, 500-11-0160, 500-11-017A, 500-11-017C, 500-11-0180, 500-11-019B, 500-11-020A, 500-11-0210, 500-18-001A, 500-18-001B, 500-18-001C, 500-19-002B, 500-19-002E, 500-19-0030, 500-19-004A, 500-19-004C, 500-19-0050, 500-19-006A, 500-19-006B, 500-23-003A, 500-23-003B, and 500-23-0120.

APPLICANT/AGENT: Rose Law Group, Griffin Energy LLC

LANDOWNERS:
Stanfield 1295 LLC
Jorde Hacienda Inc.
Anderson Road 80 LLC
BDW Land Investments LLC

REQUESTED ACTION & PURPOSE: **PZ-PA-014-25:** A Major Comprehensive Plan Amendment request by Rose Law Group and Griffin Energy LLC, agent/applicant, requesting a Major Comprehensive Plan Amendment to the Pinal County Comprehensive Plan to re-designate 2685.58± acres of land from Moderate Low Density Residential (1-3.5 du/ac) to Green Energy Production, Recreation/Conservation and General Public Facilities/Services for a Photovoltaic Solar Generation Facility, a Gas Fired Power Plant and a Battery Energy Storage System (BESS), with associated Conservation Open Space areas, situated

in sections 10, 11, 12, 13, 14, 15, and 24, T07S, R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-16-001G; -001B; 500-11-0160; -017A; -017C; -0180; -019B; -020A; -0210; 500-18-001A; -001B; -001C; 500-19-002B; -002E; -0030; -004A; -004C; -0050; -006A, -006B; 500-23-003A; -003B; and -0120 located between the Santa Rosa Wash and Green Wash, on both sides of Interstate 8, in the unincorporated area of Pinal County.

SIZE: 2685.58± acres

STAFF FINDINGS

Public Comment:

To date, staff has received one letter of opposition from members of the public. This letter expresses concerns with the project failing to provide an AZ Game and Fish Environmental Review Tool (ERT) Report. The comments further describe concern from encroachment into a proposed regional trail site and potential water use and availability concerns.

PUBLIC PARTICIPATION:

60 Day Review Period:	6/9/2025 to 8/8/2025
Newspaper Publication:	8/19/2025
Site Posting:	8/14/2025
Property Mail-out:	8/20/2025
Web Posting:	8/15/2025

AGENCY REVIEW COMMENTS:

As of time of publication, comments have been received from Arizona Game and Fish Department and Pinal County Open Space and Trails Department. These comments have been included in the packet, and discussed within the case analysis. Staff has also received a letter of support from the Arizona Technology Council and SciTech Institute.

WORK SESSION SUMMARY:

Staff has received an application for a Major Comprehensive Plan Amendment of 2685.58± acres from Moderate Low Density Residential (1-3.5 du/ac) to Green Energy Production (2,285.58 ± acres), GPF/S (240 ± acres), and Recreation/Conservation (160 ± acres). Staff is in the process of gathering information from various agencies and County departments for further analysis of this site. Feedback from outside agencies, internal departments and public stakeholders shall be valuable in guiding staff and applicants to design and present policies for consideration to the Board of Supervisors

Two work sessions were held regarding this case with the Planning and Zoning Commission and Board of Supervisors, respectively. On July 17th, this case was presented to the Planning and Zoning Commission as a work-session item for the purpose of providing background information to the Commission and collecting comments and questions for later research and analysis as the case progresses. Staff discussed the physical conditions on the site as described in this report, and opened the case for discussion from the Commission members. The Commission identified multiple questions of staff for analysis and consideration which have been incorporated into the report. These questions addressed the following topics: Flood hazard and mitigation concerns specifically impacting neighboring residences; Proximity to neighboring residences; and, outreach beyond the 1,200 foot mailing requirements based on increased distance from residential neighbors and rural property configurations.

On August 13th, this item was proposed to the Board of Supervisors as a work session item soliciting comments and questions from the Board of Supervisors for their review and information. These questions and comments have been integrated into this report to contribute to the continued analysis of the project proposal. These questions discussed the following aspects: Inclusion and placement of regional trails within project areas; concerns of proximity to similar solar and gas power plants in the immediate proximity limiting land use potential of future development; interest in providing increased employment opportunities and advancing technology with consideration of the power demands of such advancements; consideration of this green energy production proposal as a barrier to future employment growth; consideration of fire mitigation and prevention services; consideration of water utilization and availability; and, consideration of aesthetic impacts to the proposal area.

PLAN AMENDMENT DISCUSSION:

Background

The Pinal County Comprehensive Plan serves as a guiding framework for the growth and evolution of our community. In response to shifting growth patterns, the applicant is pursuing a major amendment to this plan. This amendment centers on changes to the land use plan for an individual property, designating it for both employment and mixed-use purposes. The goal of this work-session is to provide the Board of Supervisors with valuable information and receive input on this plan to drive economic development, improve quality of life, and promote sustainable growth within Pinal County.

The proposed amendment focuses on optimizing land use to create a property that supports employment opportunities while integrating mixed-use components. The proposal seeks to blend residential, commercial, and recreational spaces, while offering improved regional infrastructure and introducing a local commerce center.

Project Proposal

This application is requesting a major amendment to the Pinal County Comprehensive Plan to amend 2685.58± acres of land from **Moderate Low Density Residential - MLDR (1-3.5 du/ac)** to **Green Energy Production**, **General Public Facilities/Services GPF/S**, and **Recreation/Conservation** to develop a Photovoltaic Solar Facility, Battery Energy Storage System (BESS), and a Gas Fired Power Plant.

Location and Accessibility

The property is located on the north and south sides of Interstate 8 (I-8) and is generally bound by the Santa Rosa Wash to the west and Indian Valley Road to the east. The northeast area of the site is also bound by the Greene Wash. Minor arterial roadways provide accessibility to the subject site through a number of potential means. The property is most directly accessed by I-8 and the Montgomery Road exit.

Site Data

This site is comprises of vacant land and agricultural farmland. One farmhouse lies central to the project area and the next nearest resident lies approximately one mile to the east of the subject site. The property is extensively bounded by GR – General Rural Zoned properties, the majority of which are utilized as farmland. Further east of the site lies parcels comprising of CR-2 Single Residence, MHP Mobile Home Park, RVP RV Park, SR Suburban Ranch and CB-1 Local business zonings. Further east of these properties lies the Attesa Racetrack Multi-Purpose Community Master Plan (MPCMP).

Flood Zone

The project is uniquely situated between the Santa Rosa Wash and Greene Wash. Consequently, the project area possesses a majority of land impacted by flood zone "A" designations. Flood plain "A" is described by the Federal Emergency Management Agency (FEMA) as possessing an annual 1% chance of flooding, and a 26% chance of flooding over the lifespan of a 30-year mortgage. Flood zone "A" designated areas are also referred to as the 100-year flood plain. Development of the proposed land uses in this location will require analysis of a grading and drainage plan, followed by a floodplain use permit downstream of the current development process.

Environmental Study

The comments from the Arizona Game and Fish Department (AZGFD) reflect comments regarding the potential ecological impacts of the proposed developments upon wildlife within Pinal County. The Department describes the potential presence of sensitive species, such as the Sonoran Desert Tortoise and the Western Burrowing Owl, within these areas, which require careful consideration and protection. Based on proximity to instances of these species habitats, AZGFD recommends five listed wildlife surveys to assess impacts of development upon protected species. AZGFD continues by describing wildlife movement corridors essential to wildlife connectivity between the Santa Rosa Wash and Greene Wash riparian areas. This comment is accompanied by recommendations for development of wildlife movement corridors as part of the development plan as the project progresses. These corridors are encouraged to utilize wildlife friendly fencing or open fencing in areas to mitigate environmental impacts. The report further describes concerns for noxious weeds and mitigation methods, and discussion of vegetation preservation and minimization of site grading areas. The report indicates appreciation of the intention of the Griffin Energy project to utilize an area for Recreation/Conservation dedication overlaying the open space corridors associated with the Santa Rosa and Greene Washes.

Infrastructure

The subject area lies both to the north and south of Interstate-8 (I-8). The property is crossed by S Russell Road and provides potential points of access utilizing Arica Road, or improvements to various other alignments. The site is accessible to the I-8 corridor by utilizing the I-8 Montgomery Road exit, and utilizing minor roadways to navigate to the subject properties. Traffic increase is proposed only during construction phases, with obligation from the applicant for a Traffic Impact Statement (TIS) at the time of zoning entitlement pursuit. A TIS has been requested for preliminary review for consideration of this Major Comprehensive Plan Amendment. Operational traffic is preliminarily anticipated to be minimal and inconsequential at project build-out, but may be anticipated depending if the proposed facilities are to be manned or remotely managed.

The site features ideal proximity to El Paso Natural Gas Pipeline, and immediately abuts the recently approved Project Bella Gas Fired Power Plant to the east. Electric Transmission Lines front the north boundary of the property and provide direct access to potential interconnections without requiring extensive electrical infrastructure improvements. The ED3 Caywood Substation also lies immediately south of the subject site on S Russell Road.

Land Suitability and Constraints

The subject property has remained farmland up until recently. This property is located amongst similar farmland, but is also a notable pocket of residential activity in a largely remote location. Utilization of

the Arizona Game and Fish Environmental Review Tool noted riparian areas in the southwest corner of the property. The applicant has agreed to revise the application to incorporate a Recreation/Conservation designation in this area, and has received additional comments from Arizona Game and Fish Department describing mitigation methods to reduce environmental impacts to the site. Pinal County Open Space, Trails and Regional Parks division (OSTRP) has further indicated that a proposed regional trail system intersects the property. OSTRP has proposed development criteria for consideration during the entitlement process to allow regional connectivity means aligned with goals outlined by the Comprehensive Plan.

Impacts to the area along with analysis of the project alignment with the comprehensive plan goals and objectives will be evaluated further in later sessions scheduled for the comprehensive plan process.

STAFF ANALYSIS:

The proposed amendment aligns with Pinal County's objectives of promoting economic development while ensuring land use compatibility with surrounding areas. This transition reflects a strategic shift towards accommodating modern infrastructure needs, by providing diverse options for power generation and Battery Energy Storage Systems (BESS), which are essential for supporting the county's growing energy demands. The proposed layout of this facility promotes utilization of existing infrastructure connections associated with similar parallel developments. The remote character of this development provides a benefit for minimizing impacts to project neighbors.

Environmental concerns have been raised by the Arizona Game and Fish Department (AZGFD), particularly regarding the potential impacts on local wildlife, including sensitive species like the desert tortoise and the western burrowing owl. The site has proposed mitigation strategies through utilization of a land-use category contributing to preservation of riparian areas. Additional mitigation means should be considered to minimize environmental impact through implementation of sufficient buffers to wildlife corridors. Due to the nature of the proposed development, construction of a large-scale BESS and gas power plant uses may still have indirect effects on nearby ecosystems. To address these concerns, it is recommended that detailed environmental impact assessments be conducted, alongside the implementation of mitigation strategies to minimize habitat disruption during both construction and operation phases.

Should the Citizen Advisory Committee find, after the presentation of the applicant and together with the testimony and evidence presented at the public hearing, that this Major Comprehensive Plan amendment is needed and necessary at this location and time, will not negatively impact adjacent properties, will promote orderly growth and development of the County and will be compatible and consistent with the applicable goals and policies of the Pinal County Comprehensive Plan, then staff will recommend that the Citizen Advisory Committee forward **PZ-PA-014-25**, to the Planning and Zoning Commission with a favorable recommendation. If the Citizen Advisory Committee cannot find all of the factors listed above grounds for approval, then staff recommends that the Citizen Advisory Committee forward this case to the Planning and Zoning Commission with recommendation of denial.

Date Prepared: 8/21/25 PZR

NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT 6:00 P.M. ON THE **4TH** DAY OF **SEPTEMBER 2025**, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 301 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR **MAJOR COMPREHENSIVE PLAN AMENDMENT** TO THE PINAL COUNTY COMPREHENSIVE PLAN.

PZ-PA-014-25 – PUBLIC HEARING/ACTION: Rose Law Group and Griffin Energy LLC, agent/applicant, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 2,685.58± acres of land from Moderate Low Density Residential (MLDR, 1-3.5 du/ac), and Proposed Open Space to Green Energy Production, General Public Facilities/Services, and Proposed Open Space for a utility scale solar facility with Battery Energy Storage System (BESS) and a gas fired power plant, situated on a portions of sections 10, 11, 12, 13, 14, 15, and 24, T07S, R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-16-001G; -001B; 500-11-0160; -017A; -017C; -0180; -019B; -020A; -0210; 500-18-001A; -001B; -001C; 500-19-002B; -002E; -0030; -004A; -004C; -0050; -006A, -006B; 500-23-003A; -003B; and -0120 located between the Santa Rosa Wash and Green Wash sited on both sides of Interstate 8, in the unincorporated area of Pinal County.

ALL PERSONS INTERESTED IN THIS MATTER MAY APPEAR AND SPEAK AT THE PUBLIC HEARING AT THE DATE, TIME, AND PLACE DESIGNATED ABOVE.

DOCUMENTS PERTAINING TO THIS CASE CAN BE FOUND ON THE NOTICE OF HEARING PAGE FOR THE P&Z COMMISSION AT:
https://www.pinal.gov/236/Notice-of-Hearings

DATED THIS **7TH** DAY OF **JULY 2025**, by Pinal County Development Services

TO QUALIFY FOR FURTHER NOTIFICATION IN THIS LAND USE MATTER YOU MUST FILE WITH THE PLANNING DEPARTMENT A WRITTEN STATEMENT OF SUPPORT OR OPPOSITION TO THE SUBJECT APPLICATION. YOUR STATEMENT **MUST** CONTAIN THE FOLLOWING INFORMATION:

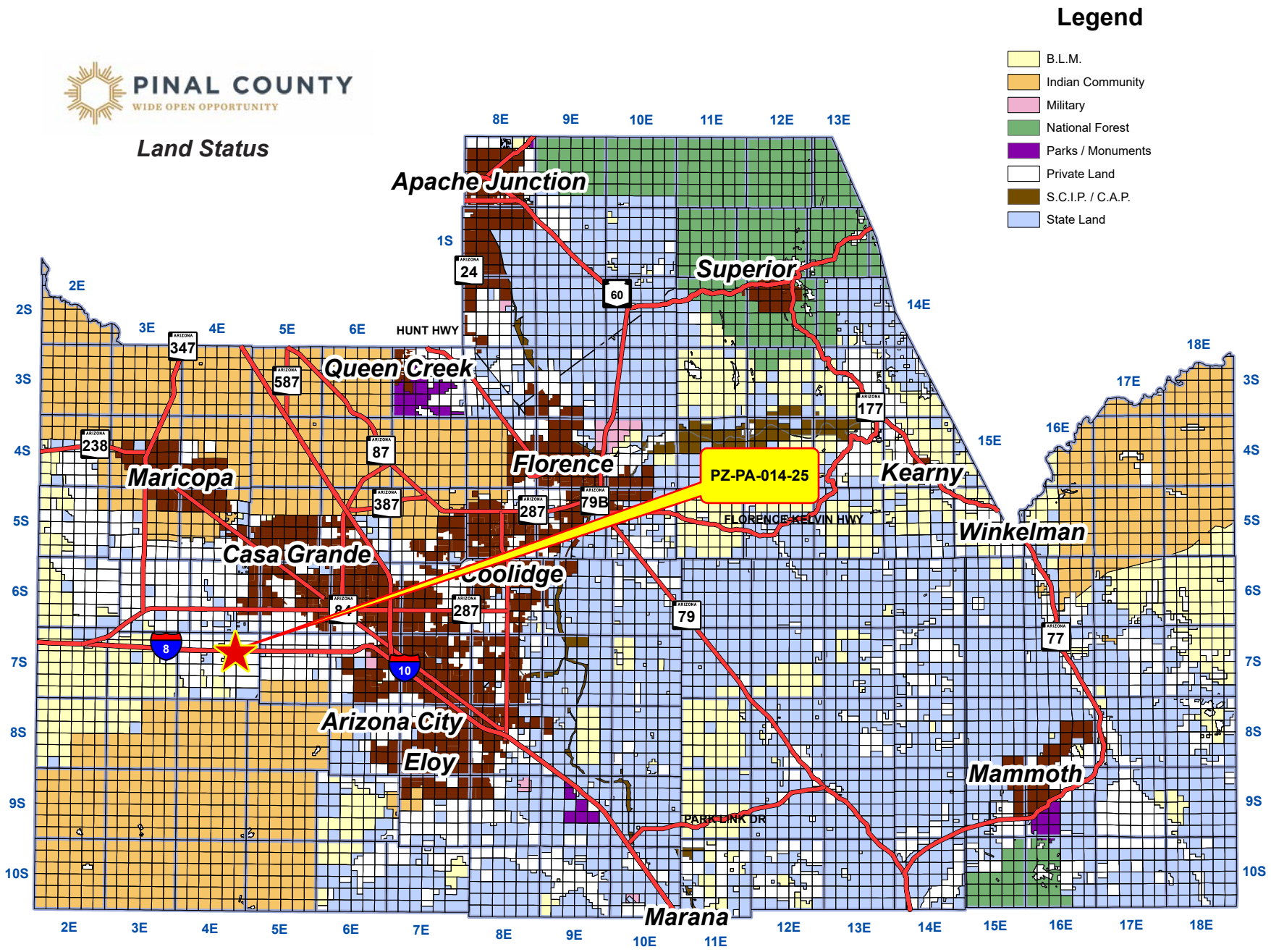
1) Planning Case Number (see above)
2) Your name, address, telephone number and property tax parcel number **(Print or type)**
3) A brief statement of reasons for supporting or opposing the request
4) Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:
PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT
85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132

Contact for this matter: Patrick Zaia-Roberts, Senior Planner
E-mail address: Patrick.Roberts@pinal.gov
Phone # (520) 866-6409

[*Anything below this line is not for publication*.]

TO BE PUBLISHED:
Pinal Central Dispatch
Arizona Republic


PINAL COUNTY
WIDE OPEN OPPORTUNITY
Land Status
Legend
B.L.M.
Indian Community
Military
National Forest
Parks / Monuments
Private Land
S.C.I.P. / C.A.P.
State Land
PZ-PA-014-25
Apache Junction
Superior
Queen Creek
Florence
Kearny
Maricopa
Casa Grande
Coolidge
Winkelman
Arizona City
Eloy
Mammoth
Marana
HUNT HWY
FLORENCE-KELVIN HWY
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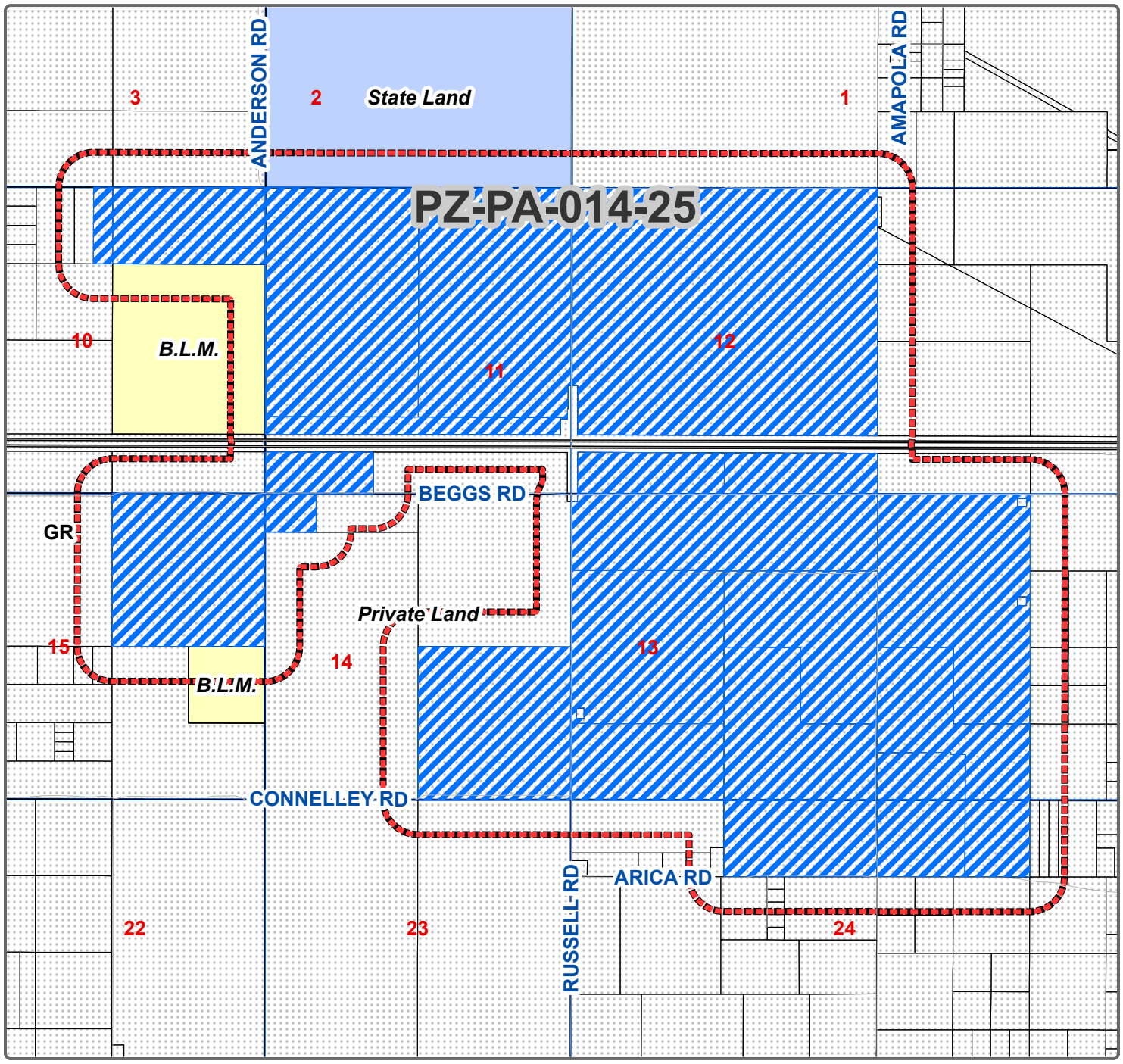


Community Development

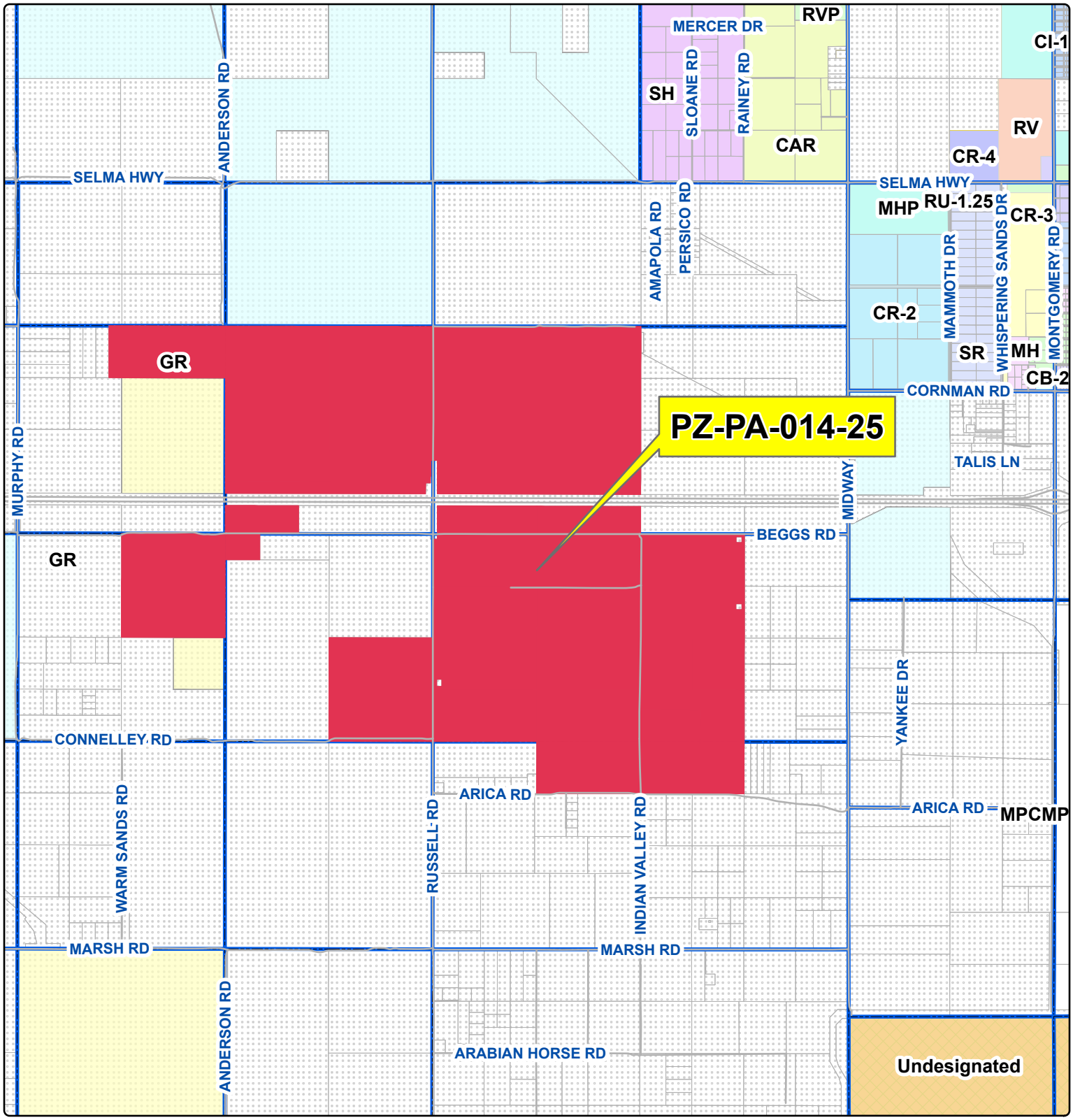
PZ-PA-014-25 – PUBLIC HEARING/ACTION: Rose Law Group and Griffin Energy LLC, agent/applicant, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 2,685.58± acres of land from Moderate Low Density Residential (MLDR, 1-3.5 du/ac), and Proposed Open Space to Green Energy Production, General Public Facilities/Services, and Proposed Open Space for a utility scale solar facility with Battery Energy Storage System (BESS) and a gas fired power plant, situated on a portions of sections 10, 11, 12, 13, 14, 15, and 24, T07S, R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-16-001G; -001B; 500-11-0160; -017A; -017C; -0180; -019B; -020A; -0210; 500-18-001A; -001B; -001C; 500-19-002B; -002E; -0030; -004A; -004C; -0050; -006A, -006B; 500-23-003A; -003B; and -0120 located between the Santa Rosa Wash and Green Wash sited on both sides of Interstate 8, in the unincorporated area of Pinal County.

Current Zoning: GR	Requested Zoning: Rezone	Current Land Use: MLDR

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Legal Description: Situated on a portions of sections 10, 11, 12, 13, 14, 15, and 24, T07S, R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-16-001G; -001B; 500-11-0160; -017A; -017C; -0180; -019B; -020A; -0210; 500-18-001A; -001B; -001C; 500-19-002B; -002E; -0030; -004A; -004C; -0050; -006A, -006B; 500-23-003A; -003B; and -0120 located between the Santa Rosa Wash and Green Wash sited on both sides of Interstate 8, in the unincorporated area of Pinal County.
SEC 10, 11, 12, 13, 14, 15, 24 TWN 07S, RNG 03E

Sheet No. 1 of 1	Owner/Applicant: ROSE LAW GROUP AND GRIFFIN ENERGY LLC		
	Drawn By: GIS / IT /RWH		Date: 07/09/2025
	Section 10, 11, 12, 13, 14, 15, 24	Township 07S	Range 04E
	Case Number: PZ-PA-014-25		

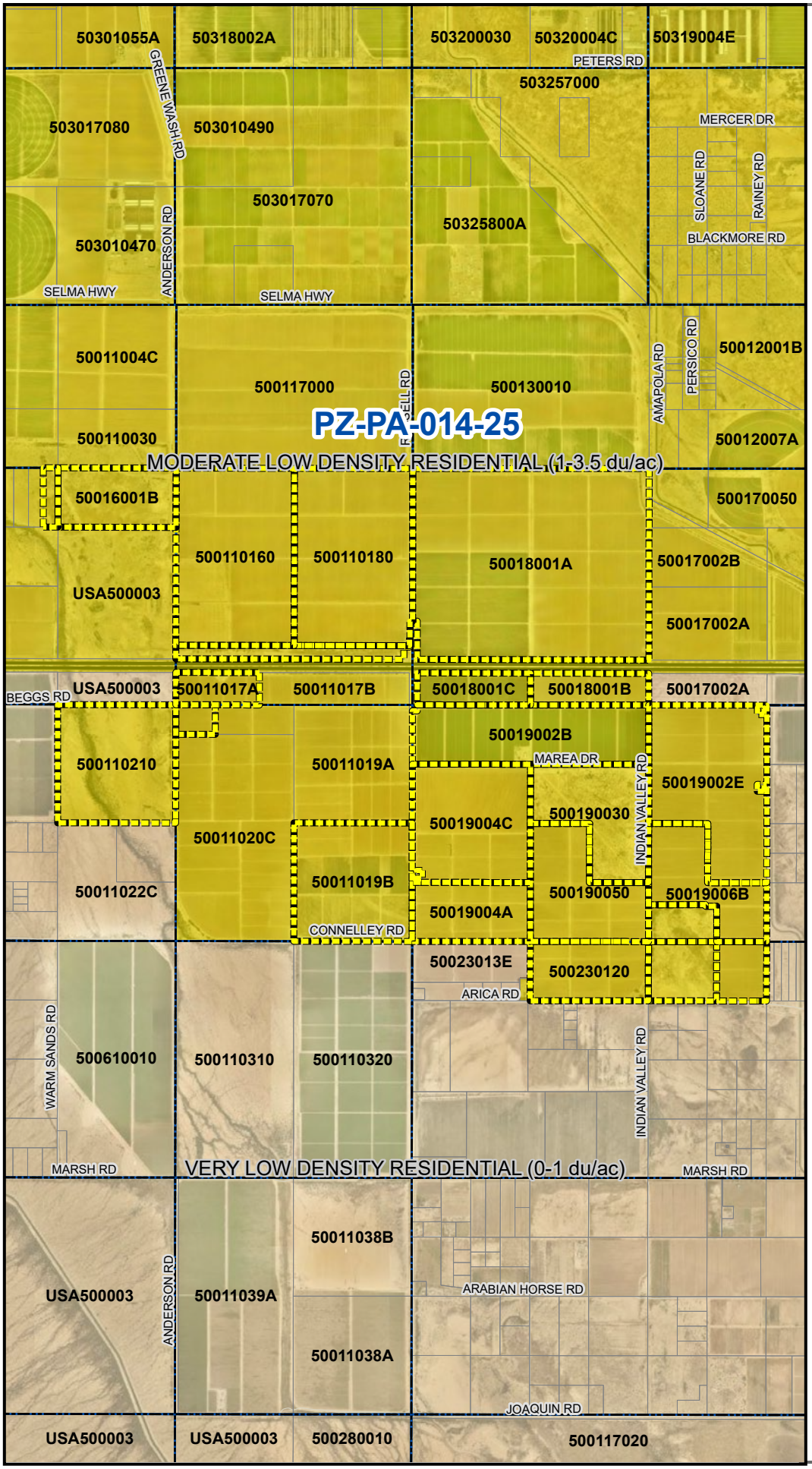


Community Development

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Legal Description: Situated on a portions of sections 10, 11, 12, 13, 14, 15, and 24, T07S, R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-16-001G; -001B; 500-11-0160; -017A; -017C; -0180; -019B; -020A; -0210; 500-18-001A; -001B; -001C; 500-19-002B; -002E; -0030; -004A; -004C; -0050; -006A, -006B; 500-23-003A; -003B; and -0120 located between the Santa Rosa Wash and Green Wash sited on both sides of Interstate 8, in the unincorporated area of Pinal County.
SEC 10, 11, 12, 13, 14, 15, 24 TWN 07S, RNG 03E

Owner/Applicant:	ROSE LAW GROUP AND GRIFFIN ENERGY LLC
Drawn By:	GIS / IT / RWH
Date:	07/07/2025
Sheet No.	1 of 1
Section	10, 11, 12, 13, 14, 15, 24
Township	08S
Range	04E
Case Number:	PZ-PA-014-25



PINAL COUNTY
WIDE OPEN OPPORTUNITY

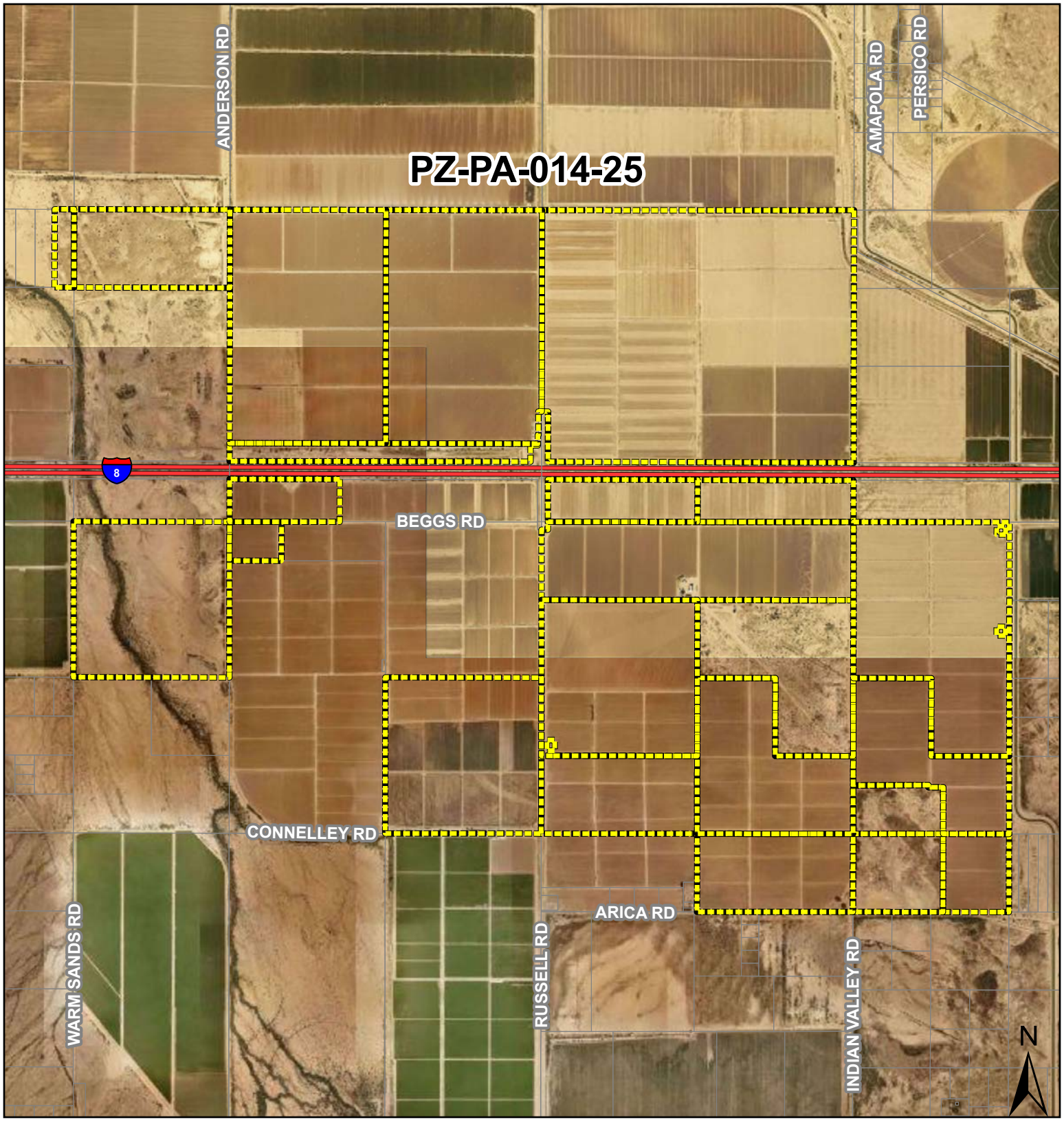
PZ-PA-014-25

FROM:

MODERATE LOW DENSITY RESIDENTIAL

TO:

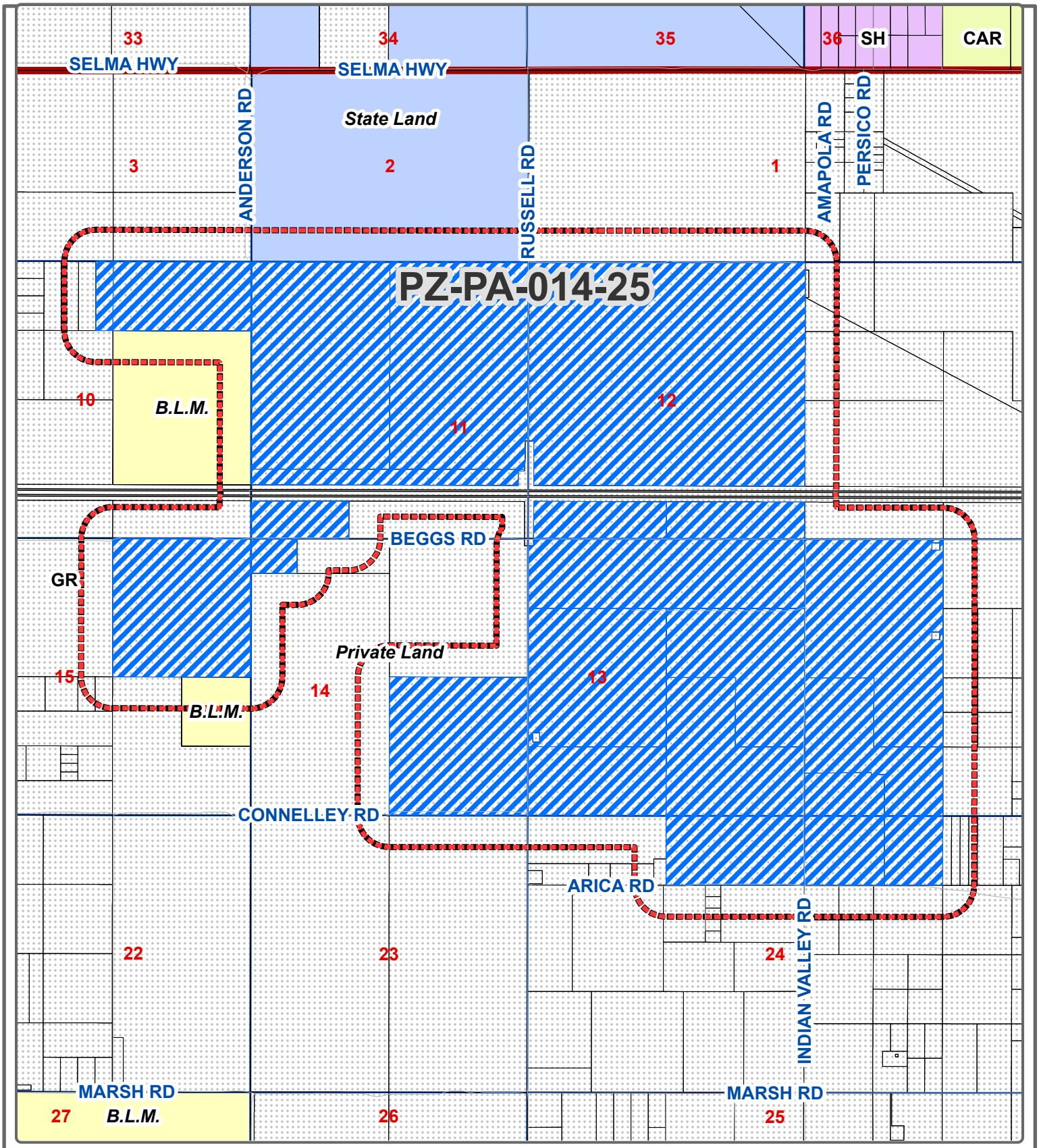
GREEN ENERGY PRODUCTION



Community Development

PINAL COUNTY
WIDE OPEN OPPORTUNITY

PZ-PA-014-25



Community Development

Owner/Applicant: Rose Law Group and Griffin Energy LLC			
Drawn By: GIS/IT - RWH	Date: 07/07/2025		
Section: 10, 11, 12, 13, 14, 15, 24	Township: 07S	Range: 04E	
Case Number: PZ-PA-014-25			

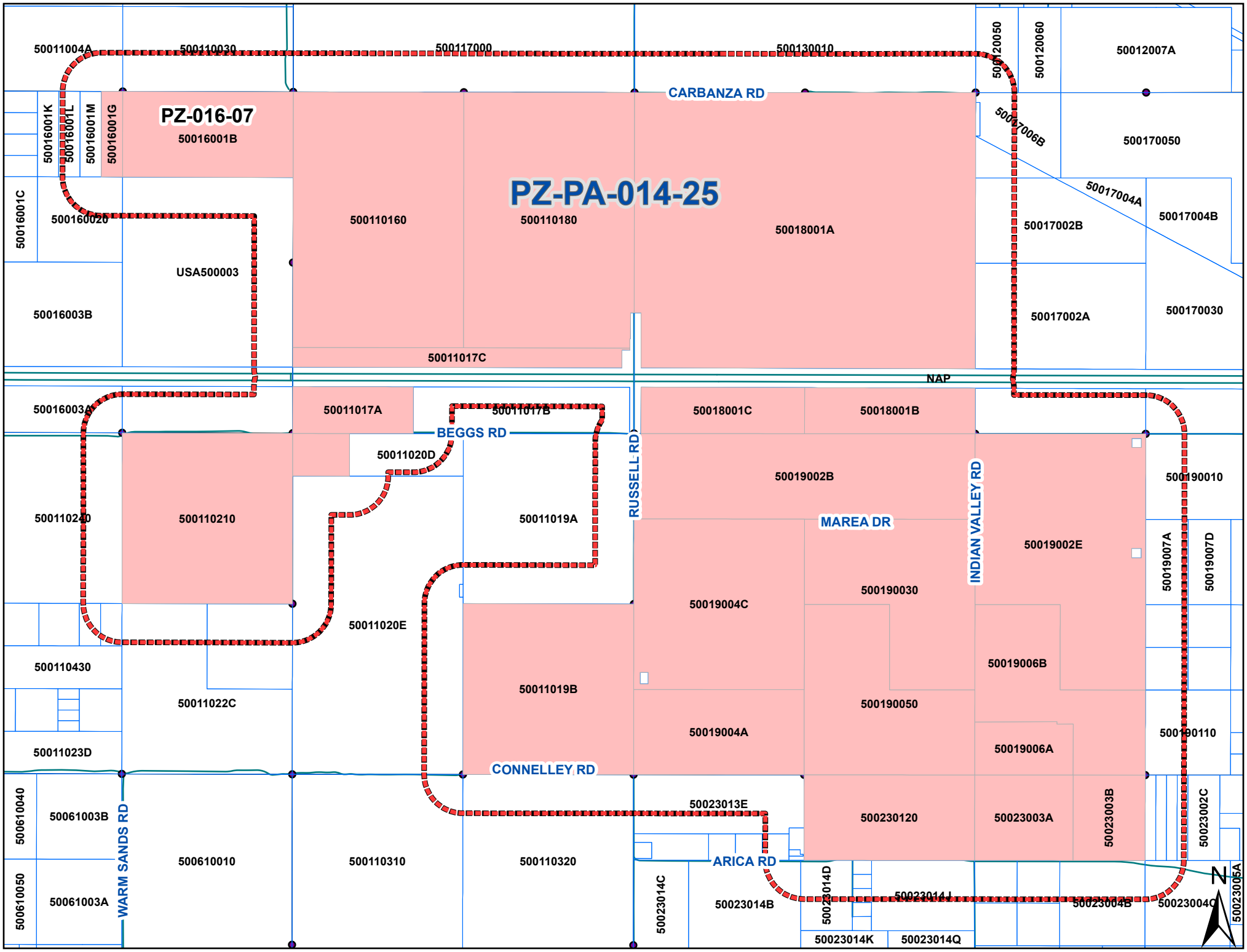
Legal Description: Situated on a portions of sections 10, 11, 12, 13, 14, 15, and 24, T07S, R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-16-001G; -001B; 500-11-0160; -017A; -017C; -0180; -019B; -020A; -0210; 500-18-001A; -001B; -001C; 500-19-002B; -002E; -0030; -004A; -004C; -0050; -006A, -006B; 500-23-003A; -003B; and -0120 located between the Santa Rosa Wash and Green Wash sited on both sides of Interstate 8, in the unincorporated area of Pinal County.

SEC 10, 11, 12, 13, 14, 15, 24 TWN 07S, RNG 03E

Sheet No. 1 of 1

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Current Zoning: GR
Request Zoning: Rezone
Current Land Use: MLDR


PZ-016-07
PZ-PA-014-25
CARBANZA RD
BEGGS RD
RUSSELL RD
MAREA DR
INDIAN VALLEY RD
CONNELLEY RD
ARICA RD
WARM SANDS RD
NAP
50011004A
500110030
500117000
500130010
50012006O
50012007A
50016001K
50016001L
50016001M
50016001G
50016001B
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500170050
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50023014C
50023014D
50023014J
50023004B
50023004C
50023005A
500610050
50061003A
50023014B
50023014K
50023014Q
N

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

PROCEDURE AND APPLICATION FOR A PROPOSED NON-MAJOR COMPREHENSIVE PLAN AMENDMENT

A. Attend a Concept Review (Zoning pre-application (Z-PA)) meeting with the Planning Department and affected County agencies.

B. File an application and all required supporting documentation for a Comprehensive Plan Amendment. Please use the attached application forms.

C. Public hearing before the Planning Commission with Commission recommendation to the Board of Supervisors. Time frame is approximately 10 to 15 weeks from application acceptance by the Planning Department.

D. Public hearing, (approximately 4 to 8 weeks after Planning Commission hearing), before the Board of Supervisors.

PROCEDURE FOR A PROPOSED MAJOR COMPREHENSIVE PLAN AMENDMENT

A. Attend a Concept Review (Zoning Pre-Application (Z-PA)) meeting with the Planning Department and affected County agencies.

B. File an application and all required supporting documentation for a Comprehensive Plan Amendment. Please use the attached application forms.

C. Public meeting with the Citizens Advisory Committee.

D. Public hearing before the Planning Commission with Commission recommendation to the Board of Supervisors.

E. Public hearing before the Board of Supervisors.

*Public hearing schedule will be made available in June.

FEE SCHEDULE FOR MAJOR AND NON-MAJOR AMENDMENTS

A. Major Comprehensive Plan Amendment: $5,091.00

B. Non-major Comprehensive Plan Amendment:

   a. 0-499 mailouts: $4,478.00
   b. 500 or more mailouts: $4,824.00
   c. With accompanying zone change: $3,354.00

COMMUNITY DEVELOPMENT
Planning Division

85 N. Florence St., PO Box 2973, Florence, AZ 85132 T 520-866-6442 FREE 888-431-1311 F 520-866-6530
www.pinalcountyaz.gov

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT IN AN UNINCORPORATED AREA OF PINAL COUNTY, ARIZONA
(All Applications Must Be Typed or Written in Ink)

Comprehensive Plan Amendment unincorporated & Property Information:
(Feel free to include answers and to these questions in a Supplementary Narrative, when doing so write see narrative on the space provided)

1. The legal description of the property: SEE ATTACHED

2. Parcel Number(s): SEE ATTACHED Total Acreage: 2,685.58 ACRES

3. Current Land Use Designation: MODERATE LOW DENSITY RESIDENTIAL (1-3.5 DU/AC)

4. Requested Land Use Designation: GREEN ENERGY PRODUCTION

5. Date of Concept Review: 05/27/2025 Concept Review Number: Z-PA-060-25

6. Why is this Comprehensive Plan Amendment being requested? (You must provide a summary of the anticipated development on this page, if not provided, the application cannot be processed.): THIS MAJOR COMPREHENSIVE PLAN AMENDMENT (CPA), OF THE PINAL COUNTY COMPREHENSIVE PLAN, IS BEING REQUESTED TO CHANGE THE LAND USE DESIGNATION OF THE SUBJECT PROPERTY FROM MODERATE LOW DENSITY RESIDENTIAL (MLDR 1-3.5 DU/AC) TO GREEN ENERGY PRODUCTION TO ALLOW FOR THE FUTURE DEVELOPMENT OF THE GRIFFIN ENERGY PROJECT, A LARGE SCALE POWER GENERATION FACILITY, SITUATED IN THE WESTERN PINAL COUNTY GROWTH AREA.

7. Discuss any recent changes in the area that would support your application. SEE ATTACHED PROJECT NARRATIVE.

8. Explain why the proposed amendment is needed and necessary at this time. SEE ATTACHED PROJECT NARRATIVE.

INV#: AMT: DATE: CASE: Xref:

COMMUNITY DEVELOPMENT
Planning Division

85 N. Florence, St, PO Box 2973, Florence, AZ 85132 T 520-866-6442 FREE 888-431-1311 F 520-866-6530
www.pinalcountyaz.gov

Docusign Envelope ID: CB79D1B0-5CAC-4D00-A4F2-48A8854B0CBB

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

- ☐ A. **Certified Boundary Survey**, including legal descriptions of the proposed designations
- ☐ B. Location map which identifies the property and its relationship to Pinal Countyenvirons.
- ☐ C. Map showing the topography of the property.
- ☐ D. Site map which specifically identifies the property including parcels under separate ownership.
- ☐ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ☐ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ☐ G. Non-refundable filing fee as shown on the cover page.
- ☐ H. Narrative in PDF format.
- ☐ I. Neighborhood meeting report

Your application must be submitted digitally via the online submittal portal site at https://citizenaccess.pinalcountyaz.gov/CitizenAccess/Default.aspx

Please call or email the Planning Division for more information.

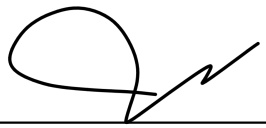
I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information, as requested. I understand if the information submitted is incomplete, this application cannot be processed.

Applicant: GRIFFIN ENERGY LLC Landowner: ANDERSON ROAD 80 LLC	24853 DEL PRADO, DANA POINT CA 92629 3369 E QUEEN CREEK RD SUITE 101 GILBERT AZ 85297	(971) 415-5339
Name of Landowner (Applicant)	Address	Phone Number

Signature of Applicant: Signed by: Ryan Galeria 3D542FAC41AD4AE...

SEE ATTACHED	Applicant/Rep.: RYAN.GALERIA@COPIAPOWER.COM
Signature of Landowner	E-Mail Address

JORDAN ROSE	7144 E STETSON DR SUITE 300, SCOTTSDALE, AZ 85251	(480) 505-3938
Name of Agent	Address	Phone Number

	JROSE@ROSELAWGROUP.COM JHALL@ROSELAWGROUP.COM
Signature of Agent	E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

Docusign Envelope ID: CB79D1B0-5CAC-4D00-A4F2-48A8854B0CBB

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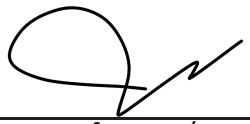
GRIFFIN ENERGY LLC	24853 DEL PRADO DANA POINT CA 92629	(971) 415-5339
Name of Applicant	Address	Phone Number
Signed by: Ryan Galeria 3D542FAC41AD4AE...		RYAN.GALERIA@COPIAPOWER.COM
Signature of Applicant		E-Mail Address
JORDAN ROSE	7144 E STETSON DR SUITE 300, SCOTTSDALE, AZ 85251	(480) 505-3938
Name of Agent/Representative	Address	Phone Number
		JROSE@ROSELAWGROUP.COM JHALL@ROSELAWGROUP.COM
Signature of Agent/Representative		E-Mail Address

The Agent/Representative has the authority to act on behalf of the landowner/applicant, which includes agreeing to stipulations. The agent will be the contact person for planning staff and must be present at all hearings. Please use attached Agency Authorization form, if applicable.

ANDERSON ROAD 80 LLC	3369 E QUEEN CREEK RD SUITE 101 GILBERT, AZ 85297	REP:(971) 415-5339
Name of Landowner	Address	Phone Number
		REP:RYAN.GALERIA@COPIAPOWER.COM
Signature of Landowner		E-Mail Address

If landowner is not the applicant, then applicant must submit a signed notarized consent form from the landowner with this application. Please use attached Consent to Permit form, if applicable.

Docusign Envelope ID: CB79D1B0-5CAC-4D00-A4F2-48A8854B0CBB

PINAL COUNTY
WIDE OPEN OPPORTUNITY

PROPERTY OWNER/AGENT AUTHORIZATION FORM

I (property owner) ANDERSON ROAD 80 LLC, hereby

authorize (owner's agent) AGENTS: GRIFFIN ENERGY LLC, ROSE LAW GROUP, KIMLEY-HORN

Acting as, ***(check one required for application processing)***

Contractor: ___ ROC#_____	Permitting Service: X	Registered Professional: X	Owner Builder: X	Relative: ___ Relation_____

To make application to Pinal County for the following (description of work) _____

PRE-APPLICATION, MAJOR COMPREHENSIVE PLAN AMENDMENT, PAD, ZONE CHANGE

Assessor Parcel Number: 500-16-001B

Name of RV/PM/MH Park (if applicable): N/A

Lot or Space # (if applicable): N/A

Physical Address: N//A, S/T/R: 10/07S/04E

City/Town: UNINCORPORATED PINAL COUNTY State: AZ Zip: 85222

By signing this Form, I acknowledge and agree that I am not released from responsibility for: (1) the payment of any and all fees associated with the issuance of any permits, orders, notices or other approvals ("Approvals") by Pinal County pursuant to my agent's application; (2) the satisfactory completion of all work authorized by such Approvals in compliance with all applicable county, state and federal laws, codes, rules, regulations and requirements; (3) correcting any violations of the terms and conditions of such Approvals issued by Pinal County pursuant to my agent's application. In the event this authorization is canceled, or the relationship between the owner and their agent or contractor is terminated, all rights to the permit, plans and fees will remain the property of the property owner.

Property Owner: ANDERSON ROAD 80 LLC

Owner Phone Number: 602.540.8151

By (signature): _____

Email: kevin@ppmland.com

Name: Kevin Petersen

Date: 5/16/25

Title: Manager

COMMUNITY DEVELOPMENT

85 N Florence Street, Building F. First Floor, PO Box 2973, Florence, AZ 85132 T 520-866-6442 FREE 888-431-1311 F 520-866-6530 www.pinalcountyaz.gov

Docusign Envelope ID: CB79D1B0-5CAC-4D00-A4F2-48A8854B0CBB

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

- ☐ A. **Certified Boundary Survey**, including legal descriptions of the proposed designations
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- ☐ D. Site map which specifically identifies the property including parcels under separate ownership.
- ☐ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ☐ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ☐ G. Non-refundable filing fee as shown on the cover page.
- ☐ H. Narrative in PDF format.
- ☐ I. Neighborhood meeting report

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Applicant: GRIFFIN ENERGY LLC Landowner: BDW LAND INVESTMENTS LLC	24853 DEL PRADO, DANA POINT CA 92629 10619 N HAYDEN RD SCOTTSDALE, AZ 85260	(971) 415-5339
Name of Landowner (Applicant)	Address	Phone Number

Signature of Applicant: Signed by: Ryan Galeria 3D542FAC41AD4AE...

SEE ATTACHED	Applicant/Rep.: RYAN.GALERIA@COPIAPOWER.COM
Signature of Landowner	E-Mail Address

JORDAN ROSE	7144 E STETSON DR SUITE 300, SCOTTSDALE, AZ 85251	(480) 505-3938
Name of Agent	Address	Phone Number

	JROSE@ROSELAWGROUP.COM JHALL@ROSELAWGROUP.COM
Signature of Agent	E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

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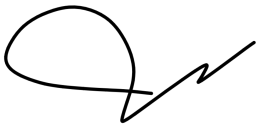
GRIFFIN ENERGY LLC	24853 DEL PRADO DANA POINT CA 92629	(971) 415-5339
Name of Applicant	Address	Phone Number
Signed by: Ryan Galeria 3D542EAC41AD4AE	RYAN.GALERIA@COPIAPOWER.COM	
Signature of Applicant	E-Mail Address	
JORDAN ROSE	7144 E STETSON DR SUITE 300, SCOTTSDALE, AZ 85251	(480) 505-3938
Name of Agent/Representative	Address	Phone Number
	JROSE@ROSELAWGROUP.COM JHALL@ROSELAWGROUP.COM	
Signature of Agent/Representative	E-Mail Address	

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BDW LAND INVESTMENTS LLC	10619 N HAYDEN RD SCOTTSDALE, AZ 85260	REP:(971) 415-5339
Name of Landowner	Address	Phone Number
	REP:RYAN.GALERIA@COPIAPOWER.COM	
Signature of Landowner	E-Mail Address	

If landowner is not the applicant, then applicant must submit a signed notarized consent form from the landowner with this application. Please use attached Consent to Permit form, if applicable.

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PINAL COUNTY
WIDE OPEN OPPORTUNITY

PROPERTY OWNER/AGENT AUTHORIZATION FORM

I (property owner) BDW LAND INVESTMENTS LLC, hereby

authorize (owner's agent) AGENTS: GRIFFIN ENERGY LLC, ROSE LAW GROUP, KIMLEY-HORN

Acting as, ***(check one required for application processing)***

Contractor: ___ ROC#_____	Permitting Service: X	Registered Professional: X	Owner Builder: X	Relative: ___ Relation_____

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Lot or Space # (if applicable): N/A

Physical Address: N//A, S/T/R: 10/07S/04E

City/Town: UNINCORPORATED PINAL COUNTY State: AZ Zip: 85222

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Property Owner: BDW LAND INVESTMENTS LLC Owner Phone Number: 602-509-8776

By (signature): _____ Email: dwerner@metrealtyadvisors.com

Name: Dan Werner Date: May 19, 2025

Title: Manager

Docusign Envelope ID: CB79D1B0-5CAC-4D00-A4F2-48A8854B0CBB

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

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Applicant: GRIFFIN ENERGY LLC Landowner: JORDE HACIENDA INC	24853 DEL PRADO, DANA POINT CA 92629 PO BOX 309 HIGLEY, AZ 85236	(971) 415-5339
Name of Landowner (Applicant)	Address	Phone Number

Signature of Applicant: Signed by: Ryan Galeria 3D542FAC41AD4AE...

SEE ATTACHED	Applicant/Rep.: RYAN.GALERIA@COPIAPOWER.COM
Signature of Landowner	E-Mail Address

JORDAN ROSE	7144 E STETSON DR SUITE 300, SCOTTSDALE, AZ 85251	(480) 505-3938
Name of Agent	Address	Phone Number

	JROSE@ROSELAWGROUP.COM JHALL@ROSELAWGROUP.COM
Signature of Agent	E-Mail Address

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Name of Applicant	Address	Phone Number
Signed by: Ryan Galeria 3D542EAC41AD4AE...	RYAN.GALERIA@COPIAPOWER.COM	
Signature of Applicant	E-Mail Address	
JORDAN ROSE	7144 E STETSON DR SUITE 300, SCOTTSDALE, AZ 85251	(480) 505-3938
Name of Agent/Representative	Address	Phone Number
	JROSE@ROSELAWGROUP.COM JHALL@ROSELAWGROUP.COM	
Signature of Agent/Representative	E-Mail Address	

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Paul Jorde	REP:RYAN.GALERIA@COPIAPOWER.COM	
Signature of Landowner	E-Mail Address	

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PINAL COUNTY
WIDE OPEN OPPORTUNITY

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authorize (owner's agent) AGENTS: GRIFFIN ENERGY LLC, ROSE LAW GROUP, KIMLEY-HORN

Acting as, ***(check one required for application processing)***

Contractor: ___ ROC#_____	Permitting Service: X	Registered Professional: X	Owner Builder: X	Relative: ___ Relation_____

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PRE-APPLICATION, MAJOR COMPREHENSIVE PLAN AMENDMENT, PAD, ZONE CHANGE

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Name of RV/PM/MH Park (if applicable): N/A

Lot or Space # (if applicable): N/A

Physical Address: N//A, S/T/R: 11, 12, 13, 14, 15, 24/07S/04E

City/Town: UNINCORPORATED PINAL COUNTY State: AZ Zip: 85222/85193/85272

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Property Owner: JORDE HACIENDA INC

Owner Phone Number: 602-999-5577

By (signature): Paul Jorde

Email: pauljorde@gmail.com

Name: Paul Jorde

Date: 5/17/2025

Title: President

COMMUNITY DEVELOPMENT

85 N Florence Street, Building F. First Floor, .PO Box 2973, Florence, AZ 85132 T 520-866-6442 FREE 888-431-1311 F 520-866-6530 www.pinalcountyaz.gov

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PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

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Applicant: GRIFFIN ENERGY LLC Landowner: STANFIELD 1295 LLC	24853 DEL PRADO, DANA POINT CA 92629 1121 W WARNER RD SUITE 109 TEMPE AZ 85284	(971) 415-5339
Name of Landowner (Applicant)	Address	Phone Number

Signature of Applicant: Signed by: Ryan Galeria 3D542FAC41AD4AE...

SEE ATTACHED — Applicant/Rep.: RYAN.GALERIA@COPIAPOWER.COM

Signature of Landowner — E-Mail Address

JORDAN ROSE	7144 E STETSON DR SUITE 300, SCOTTSDALE, AZ 85251	(480) 505-3938
Name of Agent	Address	Phone Number

JROSE@ROSELAWGROUP.COM
JHALL@ROSELAWGROUP.COM

Signature of Agent — E-Mail Address

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GRIFFIN ENERGY LLC	24853 DEL PRADO DANA POINT CA 92629	(971) 415-5339
Name of Applicant	Address	Phone Number
Signed by: Ryan Galeria 3D542FAC41AD4AE...	RYAN.GALERIA@COPIAPOWER.COM	
Signature of Applicant	E-Mail Address	
JORDAN ROSE	7144 E STETSON DR SUITE 300, SCOTTSDALE, AZ 85251	(480) 505-3938
Name of Agent/Representative	Address	Phone Number
	JROSE@ROSELAWGROUP.COM JHALL@ROSELAWGROUP.COM	
Signature of Agent/Representative	E-Mail Address	

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STANFIELD 1295 LLC	1121 W WARNER RD SUITE 109 TEMPE, AZ 85284	REP:(971) 415-5339
Name of Landowner	Address	Phone Number
SEE ATTACHED	REP:RYAN.GALERIA@COPIAPOWER.COM	
Signature of Landowner	E-Mail Address	

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PINAL COUNTY
WIDE OPEN OPPORTUNITY

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authorize (owner's agent) AGENTS: GRIFFIN ENERGY LLC, ROSE LAW GROUP, KIMLEY-HORN

Acting as, ***(check one required for application processing)***

Contractor: ___ ROC#_____	Permitting Service: X	Registered Professional: X	Owner Builder: X	Relative: ___ Relation_____

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Lot or Space # (if applicable): N/A

Physical Address: N//A, S/T/R: 12, 13, 14, 24/07S/04E

City/Town: UNINCORPORATED PINAL COUNTY State: AZ Zip: 85222/85193/85272

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Property Owner: STANFIELD 1295 LLC

Owner Phone Number: 480 831-2000

By (signature): C I B

Email: carson@wholdings.com

Name: Carson Brown

Date: 5/18/2025

Title: Authorized Agent

LEGAL DESCRIPTION

A PORTION OF SECTION 11, TOWNSHIP 7 SOUTH, RANGE 4 EAST OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID SECTION 11;

THENCE ALONG THE NORTH LINE OF SAID SECTION 11, SOUTH 89˚57’54” EAST, A DISTANCE OF 2642.26 FEET TO THE NORTH QUARTER CORNER OF SAID SECTION 11;

THENCE ALONG THE NORTH-SOUTH MID SECTION LINE OF SAID SECTION 11, SOUTH 00˚04’48” WEST, A DISTANCE OF 4258.45 FEET TO THE NORTH RIGHT OF WAY LINE OF INTERSTATE 8;

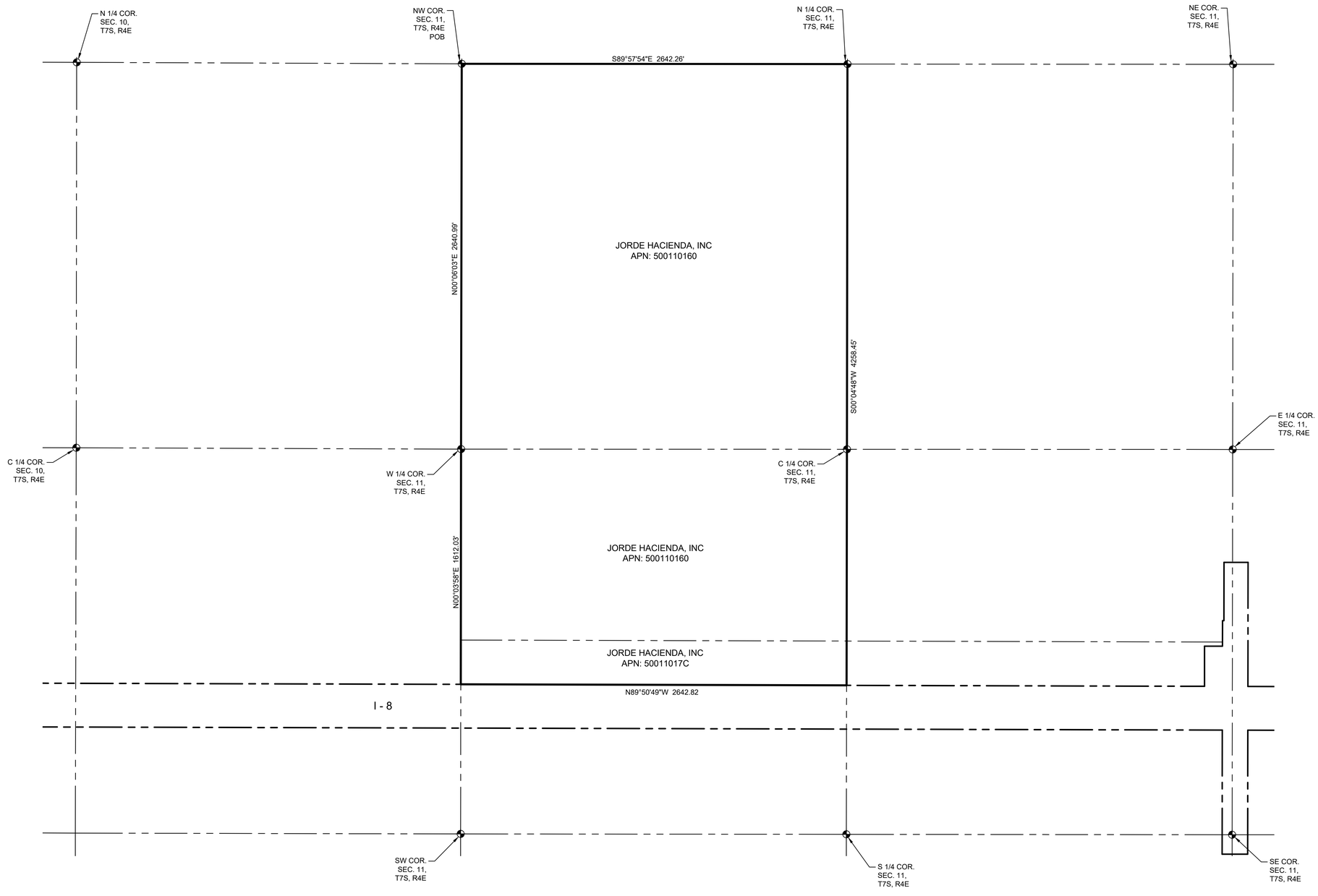
THENCE ALONG SAID RIGHT OF WAY LINE, NORTH 89˚50’49” WEST, A DISTANCE OF 2642.82 FEET TO THE WEST LINE OF SAID SECTION 11;

THENCE SAID WEST LINE, NORTH 00˚03’58” EAST, A DISTANCE OF 1612.03 FEET TO THE WEST QUARTER CORNER OF SAID SECTION 11;

THENCE CONTINUING ALONG SAID WEST LINE, NORTH 00˚06’03” EAST, A DISTANCE OF 2640.99 FEET TO THE POINT OF BEGINNING.

EXHIBIT B





Kimley»Horn
1661 E. Camelback Rd., Suite 400
Phoenix, Arizona 85016
Tel. No. (602) 837-5511

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
N/A	CWH	CWH	08/20/2025	291565066	1 OF 1

LEGAL DESCRIPTION

A PORTION OF SECTION 15, TOWNSHIP 7 SOUTH, RANGE 4 EAST OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTH QUARTER CORNER OF SAID SECTION 15;

THENCE ALONG THE NORTH LINE OF SAID SECTION 15, SOUTH 89˚52’28” EAST, A DISTANCE OF 2639.29 FEET TO THE NORTHEAST CORNER OF SAID SECTION 15;

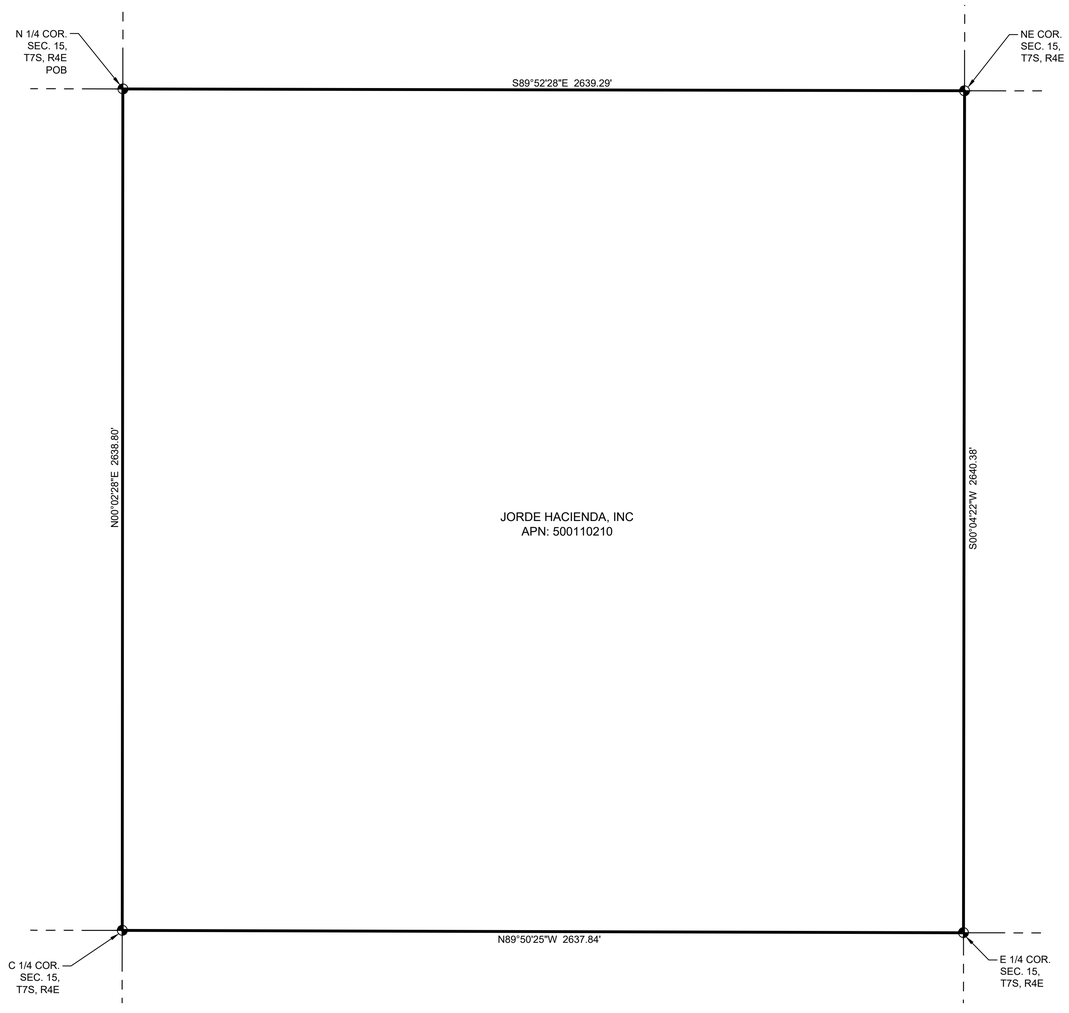
THENCE ALONG THE EAST LINE OF SAID SECTION 15, SOUTH 00˚04’22” WEST, A DISTANCE OF 2640.38 FEET TO THE EAST QUARTER CORNER OF SAID SECTION 15;

THENCE ALONG THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 15, NORTH 89˚50’25” WEST, A DISTANCE OF 2638.84 FEET TO THE CENTER QUARTER OF SAID SECTION 15;

THENCE ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 15, NORTH 00˚02’28” EAST, A DISTANCE OF 2638.80 FEET TO THE POINT OF BEGINNING.

EXHIBIT B





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Phoenix, Arizona 85016
Tel. No. (602) 837-5511

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
N/A	CWH	CWH	08/20/2025	291565066	1 OF 1

LEGAL DESCRIPTION

A PORTION OF SECTIONS 10 THROUGH 14, AND A PORTION OF SECTION 24, TOWNSHIP 7 SOUTH, RANGE 4 EAST OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PART 1:

BEGINNING AT THE NORTH QUARTER CORNER OF SAID SECTION 11;

THENCE ALONG THE NORTH LINE OF SAID SECTION 11, SOUTH 89˚57’49” EAST, A DISTANCE OF 2642.29 FEET TO THE NORTHWEST CORNER OF SAID SECTION 12;

THENCE ALONG THE NORTH LINE OF SAID SECTION 12, NORTH 89˚59’29” EAST, A DISTANCE OF 5285.03 FEETTO THE NORTHEAST CORNER OF LOT 5 OF SAID SECTION 12;

THENCE ALONG THE EAST LINE OF LOTS 5, 8, 17 AND 20 OF SAID SECTION 12, SOUTH 00˚06’23” WEST, A DISTANCE OF 5284.31 FEET TO THE NORTHEAST CORNER OF LOT 5 OF SAID SECTION 13;

THENCE ALONG THE NORTH LINE OF SAID SECTION 13, SOUTH 89˚56’03” EAST, A DISTANCE OF 2641.92 FEET TO THE NORTHEAST CORNER OF LOT 3 OF SAID SECTION 13;

THENCE ALONG THE EAST LINE OF LOTS 3 AND 10 OF SAID SECTION 13, SOUTH 00˚06’16” WEST, A DISTANCE OF 2640.38 FEET TO THE NORTHEAST CORNER OF LOT 15 OF SAID SECTION 13;

THENCE ALONG THE EAST LINE OF LOTS 15 AND 22 OF SAID SECTION 13, SOUTH 00˚05’40” WEST, A DISTANCE OF 2638.53 FEET TO THE SOUTH LINE OF SAID SECTION 13 AND THE NORTHEAST CORNER OF LOT 3 OF SAID SECTION 24;

THENCE ALONG THE EAST LINE OF SAID LOT 3, SOUTH 00˚01’20” EAST, A DISTANCE OF 1318.40 FEET TO THE SOUTHEAST CORNER OF SAID LOT 3;

THENCE ALONG THE SOUTH LINE OF LOTS 3, 4, 5 AND 6 OF SAID SECTION 24, NORTH 89˚59’03” WEST, A DISTANCE OF 5282.72 FEET TO THE SOUTHWEST CORNER OF LOT 6 OF SAID SECTION 24;

THENCE ALONG THE WEST LINE OF SAID LOT 6, NORTH 00˚04’54” EAST, A DISTANCE OF 1320.06 FEET TO THE NORTH QUARTER CORNER OF SAID SECTION 24;

THENCE ALONG THE NORTH LINE OF SAID SECTION 24, NORTH 89˚58’09” WEST, A DISTANCE OF 2636.05 FEET TO THE NORTHWEST CORNER OF SAID SECTION 24;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 14, NORTH 89˚56’33” WEST, A DISTANCE OF 2647.21 FEET TO THE SOUTH QUARTER CORNER OF SAID SECTION 14;

THENCE ALONG THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 14, NORTH 00˚03’56” EAST, A DISTANCE OF 2640.42 FEET TO THE CENTER OF SAID SECTION 14;
THENCE ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 14, SOUTH 89˚56’37” EAST, A DISTANCE OF 2643.78 FEET TO THE EAST QUARTER CORNER OF SAID SECTION 14;

THENCE ALONG THE EAST LINE OF SAID SECTION 14, NORTH 00˚02’16” EAST, A DISTANCE OF 2639.94 FEET TO THE NORTHEAST CORNER OF SAID SECTION 14;

THENCE ALONG THE EAST LINE OF SAID SECTION 11, NORTH 00˚05’10” EAST, A DISTANCE OF 866.90 FEET TO THE MEDIAN CENTERLINE OF INTERSTATE 8;

THENCE LEAVING SAID EAST LINE, ALONG SAID MEDIAN CENTERLINE, NORTH 89˚50’49” WEST, A DISTANCE OF 2642.69 FEET TO THE NORTH-SOUTH MID SECTION LINE OF SAID SECTION 11;

THENCE ALONG SAID MID-SECTION LINE, NORTH 00˚04’48” EAST, A DISTANCE OF 4385.56 FEET TO THE POINT OF BEGINNING.

EXCEPT THEREFROM ANY PORTION OF THE ABOVE DESCRIBED PARCEL WITHIN THE ARIZONA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY FOR INTERSTATE 8 AS SHOWN ON THE RIGHT-OF-WAY PLAN FOR THE YUMA-CASA GRANDE STATE HIGHWAY PROJECT NO. I-8-2(33)162, MAP NO. D-11-T-399.

ALSO EXCEPTING ANY PORTION OF EMC-9 AND EMC-10 AS SHOWN ON THE RECORD OF SURVEY RECORDED IN FEE NUMBER 2023-065253, RECORDS OF PINAL COUNTY, ARIZONA.

TOGETHER WITH;

PART 2:

BEGINNING AT THE NORTHEAST CORNER OF SAID SECTION 10;

THENCE ALONG THE EAST LINE OF SAID SECTION 10, SOUTH 00˚06’03” WEST, A DISTANCE OF 1320.50 FEET;

THENCE LEAVING SAID EAST LINE, NORTH 89˚47’13” WEST, A DISTANCE OF 2637.31 FEET TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 10;

THENCE NORTH 89˚52’35” WEST, A DISTANCE OF 329.82 FEET;

THENCE NORTH 00˚04’12” EAST, A DISTANCE OF 1320.73 FEET TO THE NORTH LINE OF SAID SECTION 10;

THENCE ALONG SAID NORTH LINE, SOUTH 89˚53’32” EAST, A DISTANCE OF 329.73 FEET TO THE NORTH QUARTER CORNER OF SAID SECTION 10;

THENCE CONTINUING ALONG SAID NORTH LINE, SOUTH 89˚46’48” EAST, A DISTANCE OF 2638.11 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH;

PART 3:

BEGINNING AT THE SOUTHWEST CORNER OF SAID SECTION 11;

THENCE ALONG THE WEST LINE OF SAID SECTION 11, NORTH 00˚03’58” EAST, A DISTANCE OF 725.43 FEET TO THE SOUTH RIGHT OF WAY LINE OF INTERSTATE 8;

THENCE ALONG SAID RIGHT OF WAY LINE, SOUTH 89˚50’49” EAST, A DISTANCE OF 1866.63 FEET;

THENCE LEAVING SAID RIGHT OF WAY LINE, SOUTH 00˚04’22” WEST, A DISTANCE OF 722.83 FEET TO THE NORTH LINE OF SAID SECTION 14;

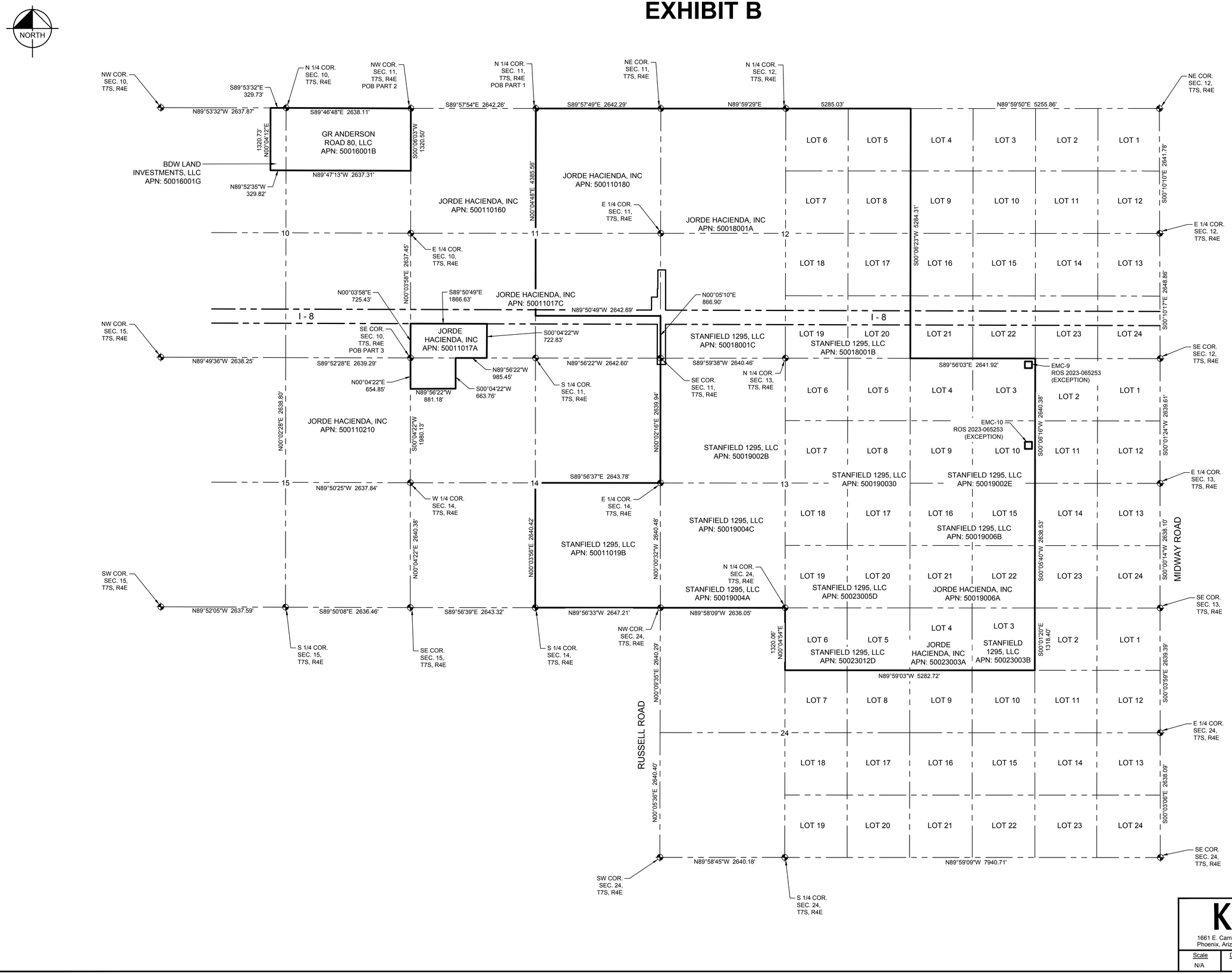
THENCE ALONG SAID NORTH LINE, NORTH 89˚56’22” WEST, A DISTANCE OF 985.45 FEET;

THENCE LEAVING SAID NORTH LINE, SOUTH 00˚04’22” WEST, A DISTANCE OF 663.76 FEET;

THENCE NORTH 89˚56’22” WEST, A DISTANCE OF 881.18 FEET TO THE WEST LINE OF SAID SECTION 14;

THENCE ALONG SAID WEST LINE, NORTH 00˚04’22” EAST, A DISTANCE OF 654.85 FEET TO THE POINT OF BEGINNING.

EXHIBIT B



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Tel. No. (602) 837-5511

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
N/A	CWH	CWH	08/20/2025	291565066	1 OF 1

GRIFFIN ENERGY PROJECT

PINAL COUNTY, ARIZONA

MAJOR COMPREHENSIVE PLAN AMENDMENT

PROJECT NARRATIVE

CASE #: PZ-PA-014-25

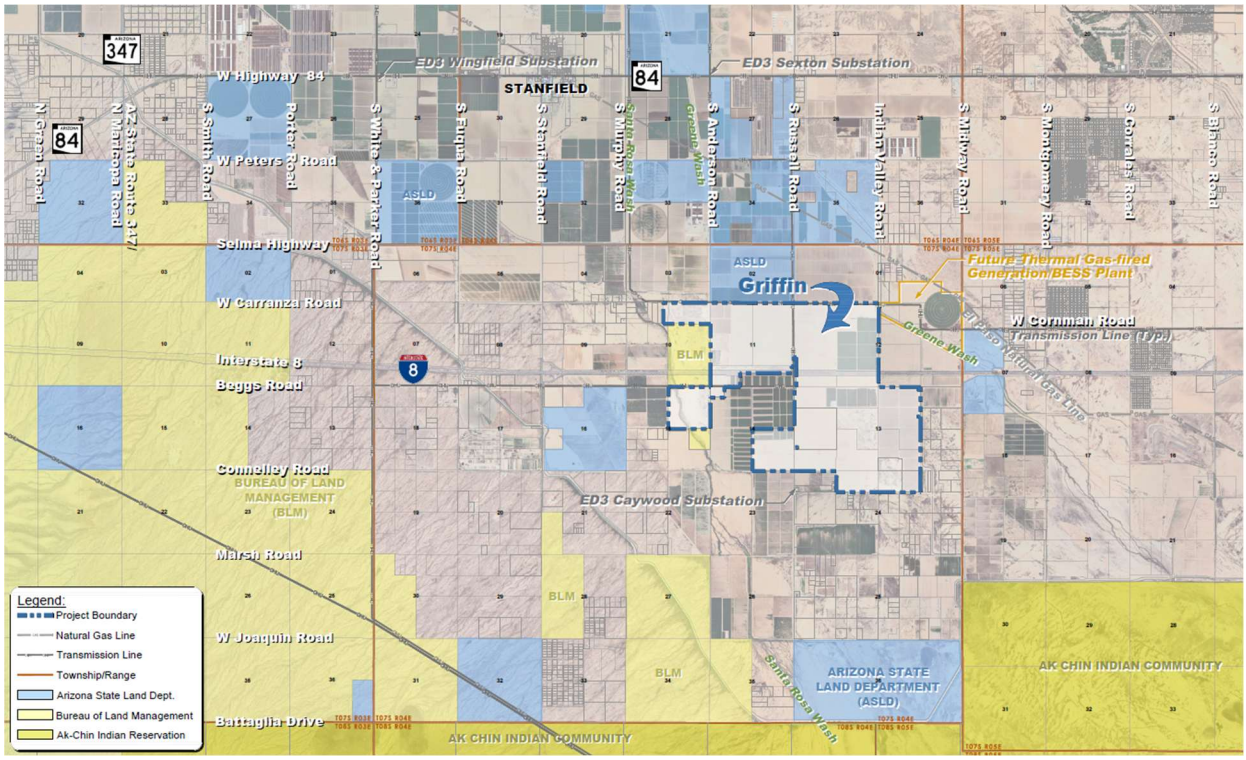

Exhibit A – Regional Context

1ST SUBMITTAL: MAY 29TH, 2025, REVISED: AUGUST 20TH, 2025

Project Team

Project Applicant / Developer	Agent / Representation	Planning & Entitlements / Engineering
Griffin Energy LLC	Rose Law Group	Kimley-Horn
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24853 Del Prado Ave.,	7144 E Stetson Dr. Ste 300,	1001 W. Southern Ave., Unit 131,
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A. PURPOSE OF THE REQUEST

Rose Law Group (the "Agent"), on behalf of Griffin Energy, LLC (the "Applicant") with permission of the subject property owners, is requesting a Major Comprehensive Plan Amendment (CPA) of the Pinal County Comprehensive Plan to change the land use designation of the overall ±2,685.58-acre Griffin Energy Project (the "Project"), from Moderate Low Density Residential (MLDR 1-3.5 du/ac) to Green Energy Production (±2,285.58 acres), General Public Facilities/Services (±240 acres) and Open Space (±160 acres), to allow for a large scale power generation facility situated in the western Pinal County growth area at the southwest corner of the W Carranza Road and Indian Valley Road alignments. The CPA request will be accompanied by a subsequent request for a Planned Area Development (PAD) Overlay with an accompanying zone change to rezone the underlying parcels from General Rural (GR) to PAD with Industrial Zoning District (I-3/PAD) to support the future land use and site plan approval.

B. DESCRIPTION OF THE PROPOSAL

As seen in ***Exhibit A - Regional Context***, the CPA area, made up of the following twenty-three (23) underlying parcels, is located approximately three (3) miles southeast of Stanfield, a small census-designated place (CDP) in Pinal County, within Sections 10, 11, 12, 13, 14, 15 and 24 of Township 7 South, Range 4 East.

Table 1 - Griffin Energy Project Parcel/Land Use List

#	Assessor Parcel #	Owner	Sect.	Town./ Range	Area/ Acres	Existing Comp. Plan L.U.	Proposed Comp. Plan L.U.
1	50016001G	BDW Land Investments LLC	10	7S 4E	9.99	MLDR 1-3.5 Du/Ac	Green Energy Production
2	50016001B	Anderson Road 80 LLC	10	7S 4E	80.00	MLDR 1-3.5 Du/Ac	Green Energy Production
3	500110160	Jorde Hacienda Inc	11	7S 4E	240.00	MLDR 1-3.5 Du/Ac	General Public Facilities/Services
4	500110180	Jorde Hacienda Inc	11	7S 4E	240.00	MLDR 1-3.5 Du/Ac	Green Energy Production
5	50018001A	Jorde Hacienda Inc	12	7S 4E	513.16	MLDR 1-3.5 Du/Ac	Green Energy Production
6	50011017C	Jorde Hacienda Inc	11	7S 4E	36.40	MLDR 1-3.5 Du/Ac	Green Energy Production
7	50011017A	Jorde Hacienda Inc	11	7S 4E	29.65	MLDR 1-3.5 Du/Ac	Green Energy Production
8	50011020A	Jorde Hacienda Inc	14	7S 4E	13.35	MLDR 1-3.5 Du/Ac	Green Energy Production
9	500110210	Jorde Hacienda Inc	15	7S 4E	160.00	MLDR 1-3.5 Du/Ac	Open Space
10	50023003A	Jorde Hacienda Inc	24	7S 4E	46.00	MLDR 1-3.5 Du/Ac	Green Energy Production
11	50019006A	Jorde Hacienda Inc	13	7S 4E	29.00	MLDR 1-3.5 Du/Ac	Green Energy Production
12	50023003B	Stanfield 1295 LLC	24	7S 4E	34.00	MLDR 1-3.5 Du/Ac	Green Energy Production
13	50019006B	Stanfield 1295 LLC	13	7S 4E	91.00	MLDR 1-3.5 Du/Ac	Green Energy Production
14	500190050	Stanfield 1295 LLC	13	7S 4E	120.00	MLDR 1-3.5 Du/Ac	Green Energy Production
15	500230120	Stanfield 1295 LLC	24	7S 4E	80.00	MLDR 1-3.5 Du/Ac	Green Energy Production
16	50019004A	Stanfield 1295 LLC	13	7S 4E	80.00	MLDR 1-3.5 Du/Ac	Green Energy Production
17	50011019B	Stanfield 1295 LLC	14	7S 4E	160.00	MLDR 1-3.5 Du/Ac	Green Energy Production
18	50019004C	Stanfield 1295 LLC	13	7S 4E	159.01	MLDR 1-3.5 Du/Ac	Green Energy Production
19	500190030	Stanfield 1295 LLC	13	7S 4E	120.00	MLDR 1-3.5 Du/Ac	Green Energy Production
20	50019002E	Stanfield 1295 LLC	13	7S 4E	199.18	MLDR 1-3.5 Du/Ac	Green Energy Production
21	50019002B	Stanfield 1295 LLC	13	7S 4E	159.60	MLDR 1-3.5 Du/Ac	Green Energy Production
22	50018001C	Stanfield 1295 LLC	12	7S 4E	41.75	MLDR 1-3.5 Du/Ac	Green Energy Production
23	50018001B	Stanfield 1295 LLC	12	7S 4E	43.49	MLDR 1-3.5 Du/Ac	Green Energy Production

The Developer proposes to construct, operate, and maintain a hybrid solar photovoltaic (PV) facility, battery energy storage system (BESS) and a natural gas-fired power generation facility along with associated infrastructure for the Griffin Energy Project.

The PV and BESS portion of the Project represents the majority of the ±2,285.58-acre site, which may be phased, including solar modules mounted on single axis trackers, inverters to convert direct current into grid-compatible alternating current, transformers to increase the voltage of the electricity generated, and battery energy storage system. This portion of the Project will also include necessary utility substation(s) and one or more small buildings to house telecommunication equipment.

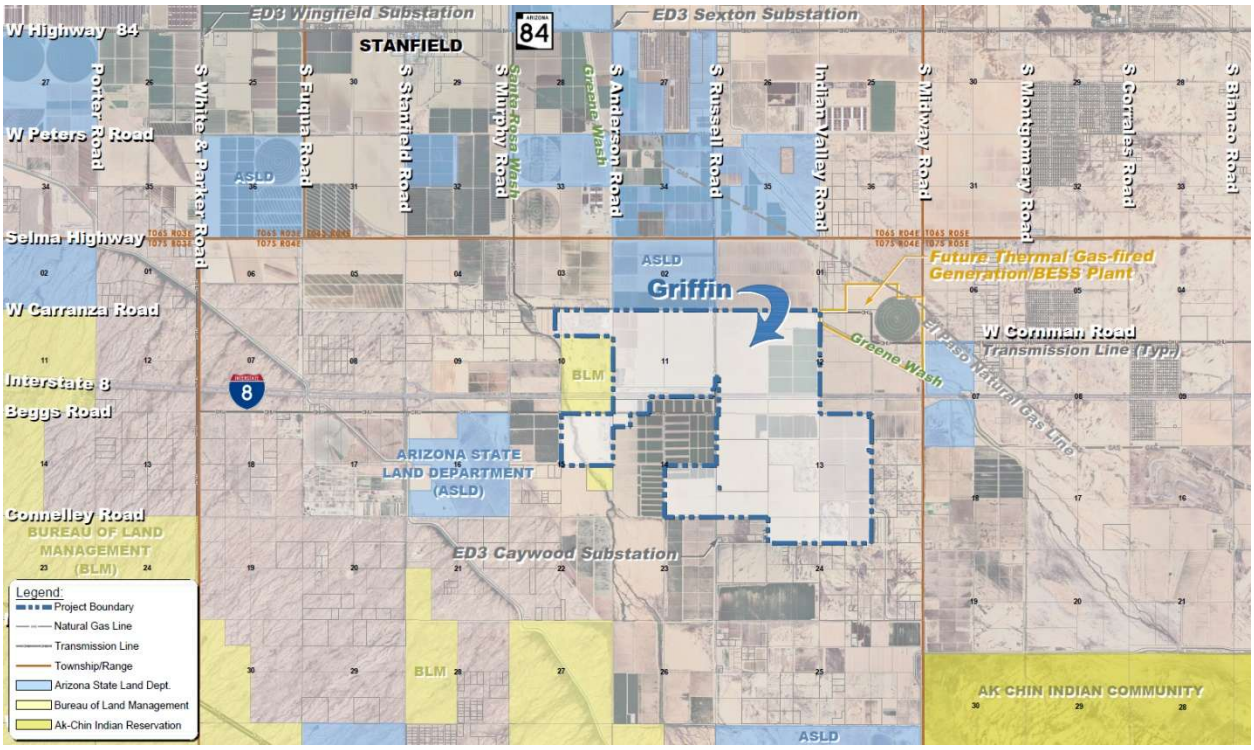
The gas plant portion of the site will utilize a maximum of ±240 acres, which will be strategically located within the overall Project boundary, and will include internal access roadways and employee parking, gas turbine power generation islands, battery energy storage systems, utility switchyards and operation, maintenance and process buildings.

Additionally, ±160 acres will be set aside as open space to preserve the Santa Rosa Wash corridor.

The Project is proposed in a relatively remote area of Pinal County that benefits from substantial existing infrastructure, including a host of transmission lines and nearby natural gas line that make the Property ideally suited for the proposed use. The Project is expected to utilize a shared transmission interconnection to the existing 500 kV Duke - Pinal Central transmission line, which runs along the Projects north edge. Off-site supporting improvements, infrastructure, and/or uses could include additional utility connections that extend, through private and/or Arizona State Land Department lands, to the necessary infrastructure.

At the time of the subsequent PAD and zone change, the project team will provide the County with additional detailed reports (TIA, Drainage, Water & Sewer) along with a de-commissioning document to provide details of the end-of-life process for the solar portions of the Project.

Exhibit B – Site Context



C. RELATIONSHIP TO SURROUNDING PROPERTIES

The ±2,685.58-acre Project is located a few miles south of Stanfield CDP between the Santa Rosa Wash to the west and the Greene Wash to the east and is sited on both sides of the Interstate 8 with roughly ±1,119.55 acres located to the north and ±1,566.03 acres to the south. This surrounding area, all within the General Rural (GR) zoning district, is characterized by native desert lands and agricultural properties. The Project site, due to its agricultural history, is relatively flat with only a 20-foot elevation change from north to south over the 2.25-mile stretch. Additionally, the Project is located west of the planned ±351.8-acre Project Bella (PZ-PA-008-24) development, which recently received Board of Supervisor approval of a Major CPA to General Public Facilities/Services for a 480 MW natural gas-fired power plant with a 440 MW battery storage facility. These planned facilities, in addition to the existing electrical and gas infrastructure in the surrounding area make this an ideal location for the proposed energy production land uses, limiting the need for extensive off-site infrastructure into the power grid. Other surrounding land uses include publicly owned and managed Local, State, and Federal Lands. These include lands controlled by the Arizona State Land Trust, Ak Chin Indian Reservation and Bureau of Land Management.

Throughout the processes, property owners and residents will be notified of the Project and efforts will be made to identify concerns over potential impacts and effective mitigation factors where possible. Site parcels will be enclosed by perimeter security fencing located along each phase Project boundaries and adjacent rights of way. No fencing will impede or otherwise enclose existing roads within the project boundaries. Screening and mitigation of visual impacts will be addressed in greater detail with the PAD/zone change and site plan submittals.

Table 2 – Surrounding Land Uses

Side	Ownership	Zoning	Land Use Designation	Land Use
Site	Private	GR	MLDR 1-3.5 du/ac	Agricultural/Vacant Desert
North	Private, ALSD	GR	MLDR 1-3.5 du/ac	Agricultural
East	Private	GR	VLDR 0-1 du/ac, MLDR 1-3.5 du/ac and General Public Facilities/Services	Agricultural/Vacant Desert
South	Private	GR	VLDR 0-1 du/ac & MLDR 1-3.5 du/ac	Agricultural/Vacant Desert
West	Private	GR	VLDR 0-1 du/ac & MLDR 1-3.5 du/ac	Agricultural/Vacant Desert

I. SITE ACCESS

The Project area is generally bound on the north side by the W. Carranza Road alignment, on the east side by the E. Arica Road and Indian Valley Road alignments, on the south side by W. Arica Road and Connelley Road alignments and on the west by the Santa Rosa Wash just east of the S. Murphy Road Alignment. The site can be accessed regionally from Interstate 8 from the westbound Stanfield Road exit to the west and the full S. Montgomery Rd. exit to the east.

There would be no significant increase in traffic during the operational life of the Project. There would be a relatively minor increase in the level of traffic during the limited timeframe required for each phase of the Project construction. A traffic impact study will be completed as part of the PAD/zone change process associated with the Project.

Internal circulation will be planned via a private driveway for the planned gas plant and a network of private maintenance and service drive aisles to provide vehicular access to the solar arrays, associated equipment, and BESS yard(s) and substation(s) facilities. All driveway aprons shall be paved with a minimum asphalt milling bound with a liquid binding emulsifier, or comparable, with the remainder of the typical 20' internal drives being compacted decomposed granite (DG), or similar road base material to minimize imperviousness and stormwater runoff, as proposed with an approved dust control permit.

Site access will be identified with the PAD/zone change and site plan applications. Final access locations and necessary right-of-way dedications/preservations will be determined in accordance with access management policies and permitting requirements of Pinal County.

D. COMPREHENSIVE PLAN AMENDMENT CRITERIA

This Comprehensive Plan Amendment is being requested in conjunction with the Arizona state statutes that define a "Major Amendment" as a "substantial alteration of the County's land use mixture or balance as established in the County's existing Comprehensive Plan Land Use element for that area of the County." However, it is left to each County to determine the criteria for determining if a proposed amendment meets this definition. Specifically related to the Griffin Energy Project, any change from a residential or non-residential land use to Green Energy Production of 640 acres or more contiguous acres represents a Major Comprehensive Plan Amendment. As seen in ***Exhibit C & D – Existing and Proposed Comprehensive Plan Land Use Map***, the change from Moderate Low Density Residential (MLDR 1-3.5 du/ac) to Green Energy Production (±2,285.58 acres), General Public Facilities/Services (±240 acres) and Open Space (±160 acres), for the overall ±2,685.58-acre Project area, meets these criteria.

Additionally, this area has experienced some changes over the years that support this application. There has been a focus on improving the surrounding electrical infrastructure within this area over time with the progressive improvements of the nearby ED3 Wingfield, Sexton, Caywood and Santa Rosa substations. Also, APS has announced the new 80-acre Bianco Substation nearby which will extend capacity and services to the Casa Grande West Industrial properties and surrounding area. This focus on electrical infrastructure, in addition to the recent Project Bella natural gas-fired power plant and battery storage facility, lends itself to future alternative energy solutions that will allow for opportunities to further bolster the surrounding infrastructure and power needs. Furthermore, the Comprehensive Plans addition of the Green Energy Production land use and the current focus on alternative energy looks at how Pinal County will provide a broad portfolio of energy resources to support future land use patterns and address energy conservation. The Plan now understands the importance to efficiently use and conserve energy sources and seek renewable sources so that future generations will not unnecessarily suffer from its shortage or absence.

The Griffin Energy Project team feels this proposed amendment is necessary at this time due to the unique opportunity for energy production in this area with the development of underutilized land that would provide jobs, sustainable energy, and further economic development in Pinal County.

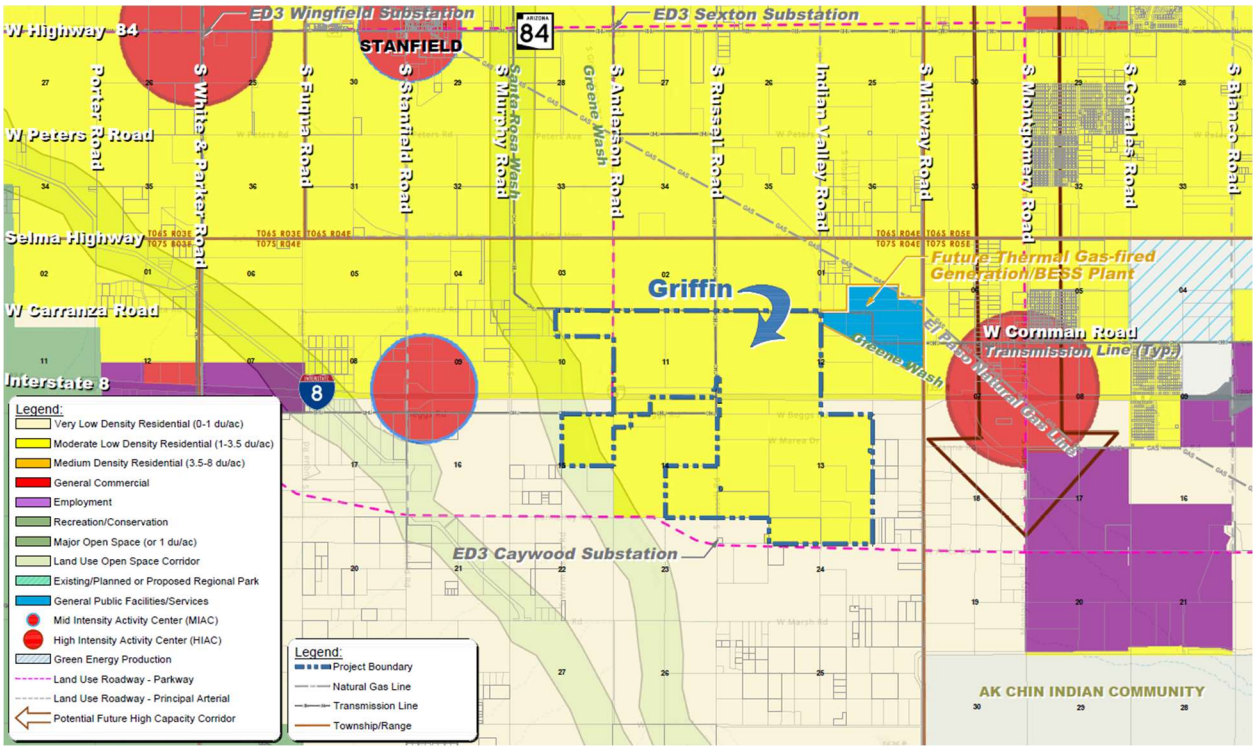


Exhibit C – Existing Comprehensive Plan Land Use Map

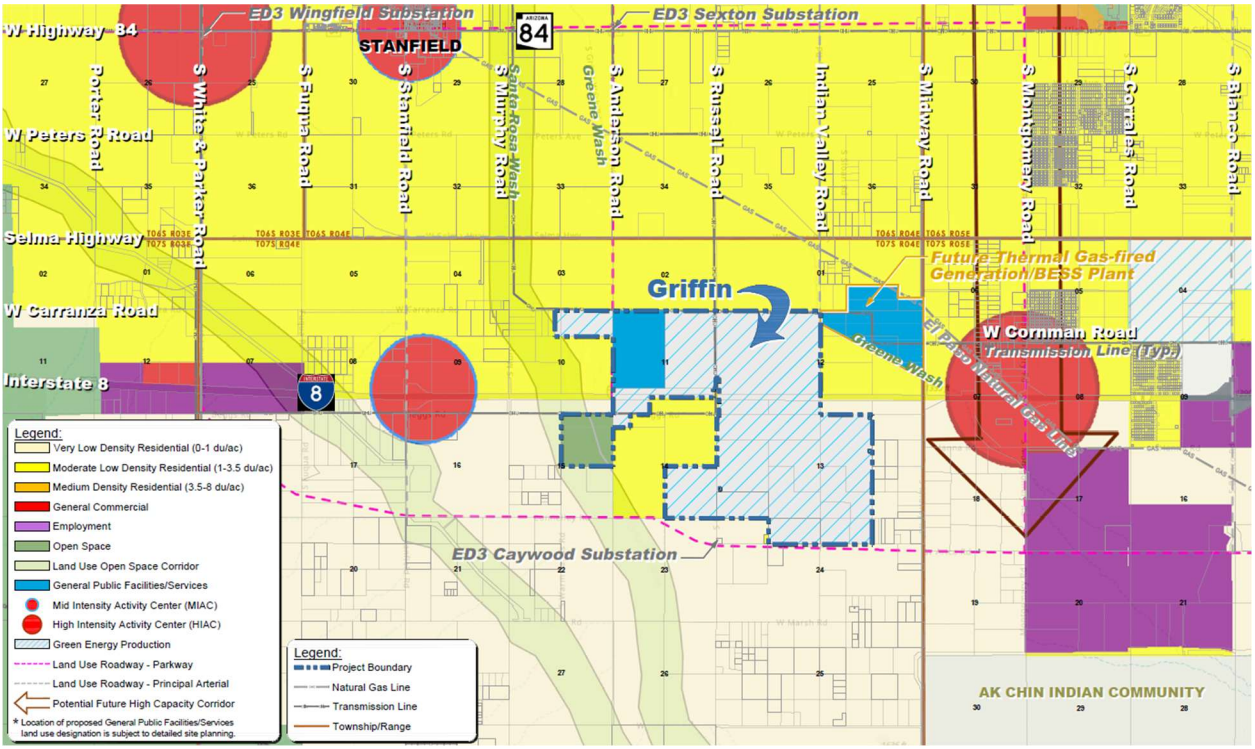


Exhibit D – Proposed Comprehensive Plan Land Use Map

E. COMPREHENSIVE PLAN COMPLIANCE

The Pinal County Comprehensive Plan is a vision-based plan that provides the framework that all decisions related to growth and development are measured against. This narrative, and more specifically the compliance analysis below, lays out the expectations for future growth and development of the Green Energy Production, General Public Facilities/Services and Open Space designations, which promote an efficient use of land, energy, and financial resources. Specifically, the renewable energy and solar uses discussed throughout the Plan respond to Pinal County's ability to be one of the most productive spots in the state for solar energy generation. These references provide measurable goals and strategies to further the vision components, as described below.

I. CONSISTENCY WITH PINAL COUNTYS VISION COMPONENTS.

The Project development area has a land use classification of Moderate Low Density Residential (MLDR 1-3.5 du/ac). The proposal will amend the Pinal County Comprehensive Plan Land Use of the site to Green Energy Production (±2,285.58 acres), General Public Facilities/Services (±240 acres) and Open Space (±160 acres). The proposed amendment request conforms to the goals, objectives, and policies of the current Comprehensive Plan by meeting the criteria outlined in the Plan's compliance checklist. The following analysis is in response to the Plan's compliance checklist:

1. Sense of Community

This Sense of Community vision component understands that the land use plan is more than just a map and that the goals of the Comprehensive Plan ultimately augment the visual aspects of the map. The Griffin Energy Project furthers these goals by focusing on the strategic areas within the Sense of Community component that provide the allowance for flexibility to respond to market changes and align with Pinal County's vision and policies to achieve a land use that is in line with the important goals and objectives, such as sustainable development, economic diversification, and energy efficiency. Additionally, given the surrounding land uses and the existing agriculture uses on and around the Project area, this proposal is consistent with the outlined Agriculture Planning Guidelines, which determine that solar and other renewable energy production are compatible with the farming heritage. In order to achieve these goals, the Pinal County Comprehensive Plan implemented the additional land use designation of Green Energy production, which is intended for areas that are strategically located for the development of large scale photovoltaic solar panel power generation facilities such as the Griffin Energy Project. The Property is ideally suited for the proposed use given its direct proximity to the existing on-site 500 kV transmission line and the existing El Paso natural gas line from which it will be served.

Further, relating to the West Pinal Growth Area, Pinal County states the need for carefully sited development in relation to existing and proposed infrastructure. Collaboration is encouraged with municipalities and private landowners within the West Pinal Growth Area plan to help knit together all of the public and private efforts and infrastructure development necessary for smart growth. The Griffin Energy Project will support the culmination of public, private and infrastructure development and seeks to include renewable energy into the community landscape, being mindful of residential land uses, with little impact on existing surrounding area.

2. Mobility and Connectivity

As required by the Mobility and Connectivity vision component, the Griffin Energy Project plans to work with the County to evaluate the transportation impacts of the proposed Comprehensive Plan amendment and rezoning based on Pinal County's regional transportation system. The minimal traffic impact associated with the Project fits the existing surrounding rural context. As seen on ***Exhibit C & D – Existing and Proposed Comprehensive Plan Land Use Map***, the Project has also contemplated the Land Use Roadways, which indicate the north/south Principal Arterial (Indian Valley Road) and Parkway (S. Anderson Road) designations north of the I-8 along the planned Parkway running east/west along the south W. Arica Road alignment. The Applicant will work with County staff to provide necessary right-of-way to preserve these designations. A High-Capacity Road (Under Study) designation has been identified within the surrounding area but does not appear to impact the Project area.

3. Economic Sustainability

This Project is intended to promote and incentivize the production and delivery of renewable energy resources that meet and otherwise support consumption needs of existing and emerging markets which benefit the regional and state economies and tax bases. The availability of sustainable, renewable, and economically efficient energy and the resulting cost savings, both immediate and over time, creates opportunity for reinvestment of public and private capital back into the local and regional economy.

The Project, which is located near identified Employment, Commercial and Activity Centers, is consistent with this vision component by implementing much needed energy generation and storage, adding resilience to the electrical grid and demonstrating the County's commitment to the use of renewable energy resources, which can help increase the number of businesses that expand in and locate to Pinal County. This renewable energy facility will be a catalyst for sustainable energy in the future. This Project provides the County and area a sustainable way of bringing economic development to the region while providing employment opportunities ranging from construction, operation, management, and maintenance. The Project was selected after completing site research on multiple sites to ensure selection of a land area well suited for energy development; including adjacent necessary electric transmission and gas infrastructure to provide a reliable and competitive energy development.

4. Open Spaces and Places

The Griffin Energy Project Major CPA amendment is consistent with the Open Spaces and Places vision component. The Pinal County Open Space and Trails Master Plan identifies the Santa Rosa wash along the Projects western boundary and the Green Wash along the east as Open Space corridors. Additionally, a proposed Multi-Use Trail Corridor is proposed south of Interstate 8. The Applicant will work with County staff and the Pinal County Parks/Rec team to ensure necessary preservations and further compatibility.

5. Environmental Stewardship

This request is consistent with the Environmental Stewardship vision component, which looks to expand renewable energy in Pinal County and have officials coordinate with energy providers to ensure energy infrastructure is adequate to support growth and infrastructure development. The Project will take advantage of the nearby gas and electrical infrastructure along with Arizona's year-round sunshine, collecting this energy and producing clean renewable electricity for Pinal County, its

residents, and surrounding communities. The Comprehensive Plan stresses the tremendous environmental, natural resource, and economic implications that energy conservation has and specifically discusses the need for gas power plants to help generate the County's additional electricity needs. The importance and demand for sustainable energy is an important part of the economy both locally and statewide. The Green Energy Production, General Public Facilities/Services and Open Space land uses will allow for the conservation of water resources currently available in Pinal County. The majority of the Project would use PV solar panels to generate electricity and as a renewable energy source, solar PV facilities generate no air emissions and use less water compared to traditional fossil fuel-based energy sources and the existing agricultural uses. Additionally, throughout the entitlement process, the project team will coordinate with the Arizona Game and Fish Department (AZGFD) to ensure the future development is sensitive to any potential wildlife in the area. As a step to ensure this sensitivity is realized, ±160 acres is being redesignated from Moderate Low Density Residential (MLDR 1-3.5 du/ac) to Open Space to protect the Santa Rosa Wash corridor through the Project.

6. Healthy, Happy Residents

This request is consistent with the Healthy, Happy Residents vision component by promoting a low impact use that contributes clean, safe, affordable, and efficient energy to the regional transmission grid while helping maintain long-term financial stability through the generation of revenues and tax base contributions for Pinal County. The Griffin Energy Project will provide fiscally responsible alternative energy services and effective and efficient infrastructure to implement delivery of services that help promote and contribute to a healthy community that residents can enjoy.

7. Quality Educational Opportunities

While this component may not apply to all projects, this request provides an opportunity for the community to have an opportunity to learn about, be aware of and take advantage of the benefits of alternative energy.

II. CONSISTENCY WITH THE PLAN'S KEY CONCEPTS ILLUSTRATED ON LAND USE, ECONOMIC, AND CIRCULATION GRAPHICS.

The Project Site Property has an existing land use designation of Moderate Low Density Residential (MLDR 1-3.5 du/ac). The proposal will amend the Pinal County Comprehensive Plan for the overall ±2,685.58-acre Project area to Green Energy Production, General Public Facilities/Services and Open Space. The proposed amendment request conforms to the goals, objectives, and policies of the current Comprehensive Plan by meeting the criteria outlined in the Plan's compliance checklist. The following is a response to the Plan's compliance checklist:

1. Consistency with the Land Use Designation shown on the graphics.

The General Public Facilities/Services land use designation includes large public and quasipublic facilities such as power plants. This proposed land use designation is consistent with the surrounding area which includes other gas generation plant approvals and necessary infrastructure. The Open Space land use is for lands intended to be preserved for recreational purposes or lands protected for cultural or ecological reasons. This proposed designation will ensure that the Santa Rosa Wash is preserved through the Project. Lastly, the Green Energy Production category is intended for areas that are designated specifically for large scale photovoltaic solar panel power generation facilities. All together, these land uses are consistent with the County's vision and policies to achieve land uses that

are in line with the important goals and objectives of the Comprehensive Plan, such as open space preservation, sustainable development, economic diversification, and energy efficiency. The Griffin Energy Project is in a remote area of Pinal County and is unlikely to conflict with other proposed developments or sensitive land uses. Additionally, given that the Project would be a passive, low-intensity use, the proposed amendment would be consistent with surrounding land uses, which include Very Low and Moderate Low Density Residential and General Public Facilities/Services.

2. Consistency with the Mixed-Use Activity Center Concept.

This proposal is not within a Mixed-Use Activity Center. Although, the supply of energy is essential to the region's transportation and manufacturing sectors. Energy resources significantly impact economic development by contributing to the region's overall attractivity on basic and corresponding non-basic employment, primary and secondary employment sectors and markets, and research and development within existing and emerging markets and industries. Additionally, energy availability and even surplus opportunities function as an incubator for innovations within all segments of the local, regional, and state economy.

3. Consistency with the Planning Guidelines described in the Land Use element.

Per the Comprehensive Plan, Major Plan Amendments should improve the County's overall condition and not undermine the Plan's core principles. The Plan recognizes the need to redesignate land uses in response to changing market conditions and to address the increasing demands of growth to the public infrastructure needs, specifically energy generation and consumption demands within the local economy.

4. Quality Employment Opportunities County-wide.

The Project is anticipated to generate new jobs in the construction, contracting, administrative, and project management fields during the construction and implementation of the Project over the proposed construction timeline. Additional jobs will be created for routine maintenance activities and equipment repair and replacement. In addition to providing in state construction jobs and long-term technical careers, local projects like Griffin Energy will help contribute to the regional economy by providing tax revenue and by using local engineering and development contractors.

The amendment would be compatible with the Economic Sustainability Vision outlined in Chapter 5 of the Comprehensive Plan. The adopted and revised 2021 Pinal County Comprehensive Plan's Economic Development Plan does not identify any areas for Green Energy Production, indicating that any land designated as such must be done so via a Comprehensive Plan amendment, major or minor.

5. Viable Agriculture, Equestrian and Rural Lifestyle.

As discussed above, the Griffin Energy Project will complement the existing rural character of the surrounding area by providing a low impact use, which will avoid adding traffic and noise to a quiet area. Additionally, the low-profile solar panels will preserve views and allow for continued drainage and wildlife movement. Given these surrounding land uses and the existing agriculture uses on and around the Project area, this proposal is consistent with the outlined Agriculture Planning Guidelines, which determine that Solar and other renewable energy production are compatible with the farming heritage. In order to achieve these goals, the Pinal County Comprehensive Plan implemented the additional land use designation of Green Energy production, which is intended for areas that are strategically located for the development of large scale photovoltaic solar panel power generation facilities such as Griffin Energy.

6. System of Connected Trails and Preservation of Open Space.

As discussed above, the amendment area is consistent with the Trails and Open Space Master Plan and Chapter 6: Open Spaces and Places of the Comprehensive Plan. The Pinal County Open Space and Trails Master Plan identifies the Santa Rosa wash along the Projects western boundary and the Green Wash along the east as Open Space corridors. Additionally, a proposed Multi-Use Trail Corridor is proposed south of Interstate 8. The Applicant will work with County staff and the Pinal County Parks/Rec team to ensure necessary preservations and further compatibility.

7. Natural and Cultural Resource Conservation.

Detailed environmental studies, including pedestrian biological and cultural/archaeological surveys will be completed and documented, as needed or as recommended by local, state, or federal agencies. Although, the majority of the Griffin Energy Project area has been previously disturbed with a history of agricultural usage.

8. Water Resources, Public Facilities/Services, and Infrastructure Support

Increasing the County's investment (in terms of land use planning) in local power generation facilities and infrastructure has a long-term tangible impact of lowering costs of energy production, delivery, and consumption. This goal is achieved in part by increasing local/regional energy production/generation. The increased supply has a proportionate impact on the accessibility of the resource and encourages integration of applied uses and transitions away from reliance on outdated and inefficient modes of energy generation and transmission creating efficiencies in these areas. Increased supply and efficiencies will promote increased integration into the market for various sectors of the economy (housing, manufacturing, transportation, etc.).

Compared to the existing agricultural uses on-site or the Comprehensive Plan allowance of +/-9,400 (3.5 du/ac) residential lots, Griffin Energy will require significantly less infrastructure and will have less overall impacts on the surrounding area. Utility service(s) to the site will be provided by the following providers. No wastewater service is planned to the site. The gas plant portion of the Project will provide adequate water resources and the necessary infrastructure to support the development. Based on recent surrounding analysis of projected water demands, by others, for this type of use it was found there would be a negligible impact on aquifer drawdown.

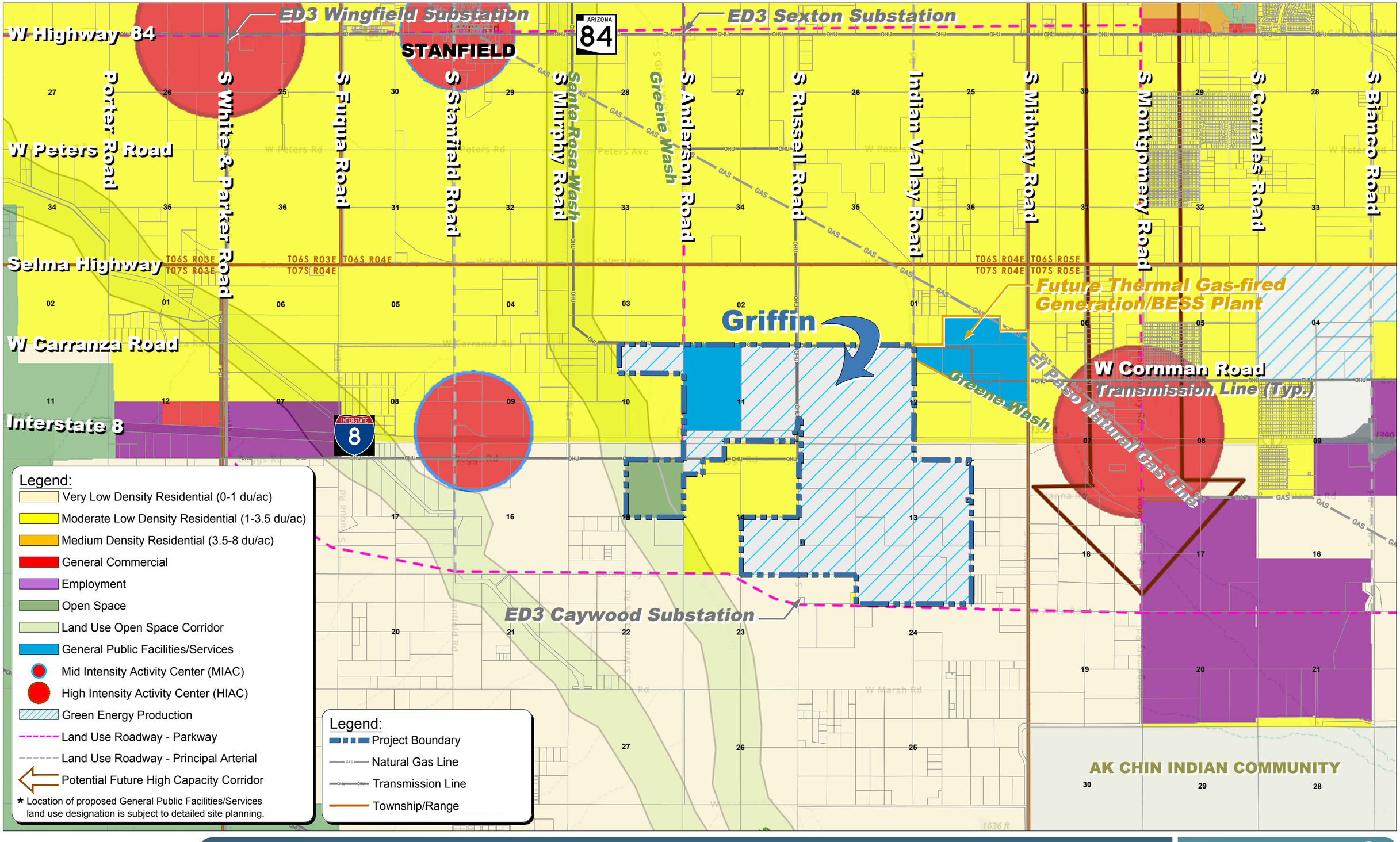
Utility/Service	Agency/Provider
Water	Arizona Water Company, Maricopa Stanfield Irrigation & Drainage District
Sewer	(N/A) Septic.
Electric Service	Electrical District-3, Salt River Project, Tuscon Electric Power
Fire Protection	TBD
Police Protection	Pinal County Sheriff Office
Refuse (Waste Management)	Republic Services

Development of the Project would not impact existing water quality. The site would be designed to pass off-site stormwater through or around the site and release it in a manner similar to the existing conditions. Based on a final hydrologic analysis of the Project Area, on-site drainage would be routed as necessary to retention basins in accordance with Pinal County Public Works regulations. This

drainage design concept would allow the site to be developed, while not increasing stormwater runoff or creating an adverse impact on adjacent properties. Careful Project siting and design, sensitive to existing topography and drainage patterns would also function to protect water quality.

F. CONCLUSION

The Griffin Energy Project Major Comprehensive Plan Amendment supports the Pinal County Comprehensive Plan goals by providing additional renewable energy resources and battery storage for local energy reliability and resiliency. The proposed Green Energy Production, General Public Facilities/Services and Open Space land uses minimize impacts to the surrounding neighbors and lessens the impact to the environment based on proximity to the existing infrastructure by minimizing very long interconnects. The electricity generated through these facilities would be distributed into to the electrical grid while directly benefiting Arizona corporations seeking competitively priced renewable energy and looking to add new clean energy resources to power the record number of people and companies moving to the state. The need for this Project is established by the growing demand for renewable energy and BESS facilities over the next decade, as evidenced by local providers policies designed to increase the use of renewable energy sources for electricity generation and storage to address its growing electrical demand load, particularly in the summer, and support integration of new renewable energy projects into a reliable and functioning grid. These policies require or encourage electricity suppliers to provide their customers with a stated minimum share of electricity from eligible renewable resources. Most states, including Arizona, have enacted their own programs to diversify their energy resources, promote domestic energy production and encourage economic development. Arizona has set their standards for investor-owned utilities at 45% by 2030 and 100% by 2050. Approval of the Project strengthens the overall energy production output and grid resiliency within Pinal County.



Kimley»Horn

Griffin Energy Project

PROPOSED COMPREHENSIVE PLAN LAND USE MAP - PINAL COUNTY, AZ

2025.08.20

0 2,000' 4,000' 6,000'

DRAWN BY: JK SCALE: APPROX.

NORTH

GRIFFIN ENERGY PROJECT

PINAL COUNTY, ARIZONA

MAJOR COMPREHENSIVE PLAN AMENDMENT

PROJECT NARRATIVE

CASE #: Z-PA-060-25

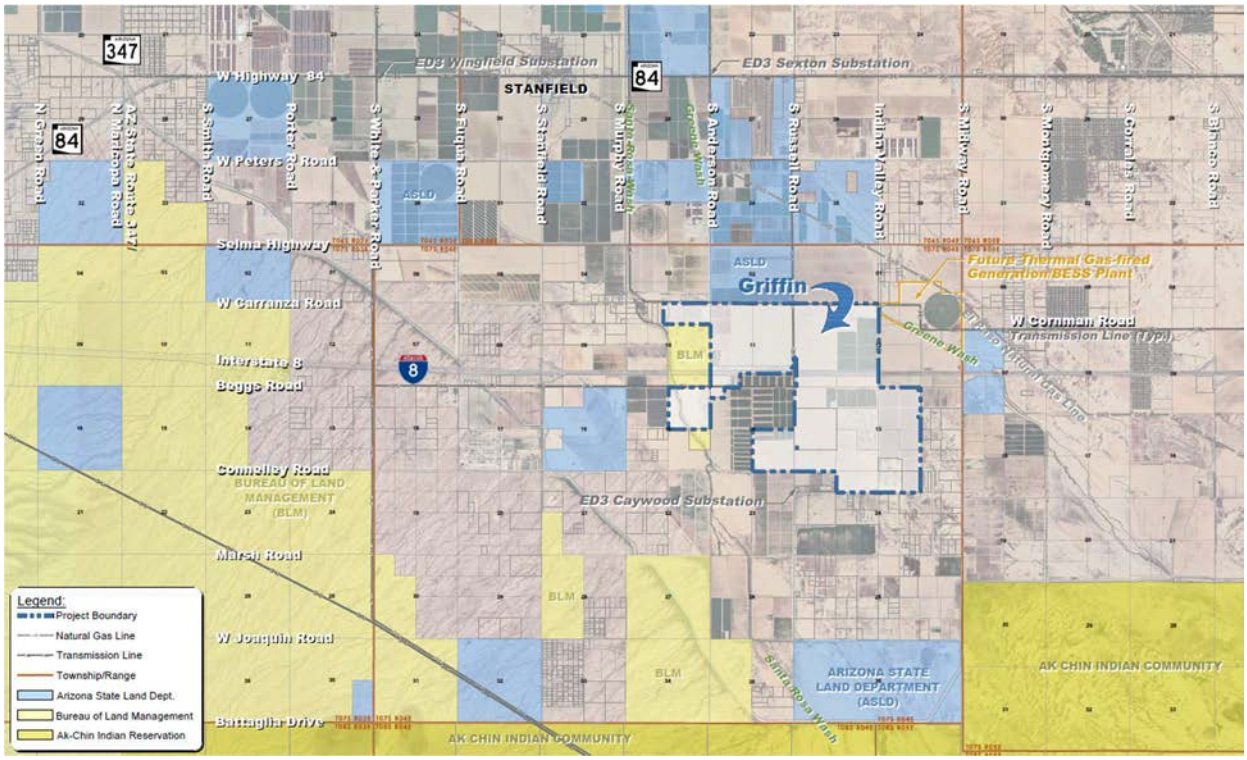


Exhibit A – Regional Context

1ST SUBMITTAL: MAY 29TH, 2025

Project Team

Project Applicant / Developer	Agent / Representation	Planning & Entitlements / Engineering
Griffin Energy LLC	Rose Law Group	Kimley-Horn
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A. PURPOSE OF THE REQUEST

Rose Law Group (the "Agent"), on behalf of Griffin Energy, LLC (the "Applicant") with permission of the subject property owners, is requesting a Major Comprehensive Plan Amendment (CPA) of the Pinal County Comprehensive Plan to change the land use designation of the overall ±2,685.58-acre Griffin Energy Project (the "Project") from Moderate Low Density Residential (MLDR 1-3.5 du/ac) to Green Energy Production to allow for a large scale power generation facility situated in the western Pinal County growth area at the southwest corner of the W Carranza Road and Indian Valley Road alignments. The CPA request will be accompanied by a subsequent request for a Planned Area Development (PAD) Overlay with an accompanying zone change to rezone the underlying parcels from General Rural (GR) to PAD with Industrial Zoning District (I-3/PAD) to support the future land use and site plan approval.

B. DESCRIPTION OF THE PROPOSAL

As seen in ***Exhibit A - Regional Context***, the CPA area, made up of the following twenty-three (23) underlying parcels, is located approximately three (3) miles southeast of Stanfield, a small census-designated place (CDP) in Pinal County, within Sections 10, 11, 12, 13, 14, 15 and 24 of Township 7 South, Range 4 East.

Table 1 - Griffin Energy Project Parcel/Land Use List

#	Assessor Parcel #	Owner	Sect.	Town./ Range	Area/Acres	Exist. Comp Plan LU
1	50016001G	BDW Land Investments LLC	10	7S 4E	9.99	MLDR 1-3.5 Du/Ac
2	50016001B	Anderson Road 80 LLC	10	7S 4E	80.00	MLDR 1-3.5 Du/Ac
3	500110160	Jorde Hacienda Inc	11	7S 4E	240.00	MLDR 1-3.5 Du/Ac
4	500110180	Jorde Hacienda Inc	11	7S 4E	240.00	MLDR 1-3.5 Du/Ac
5	50018001A	Jorde Hacienda Inc	12	7S 4E	513.16	MLDR 1-3.5 Du/Ac
6	50011017C	Jorde Hacienda Inc	11	7S 4E	36.40	MLDR 1-3.5 Du/Ac
7	50011017A	Jorde Hacienda Inc	11	7S 4E	29.65	MLDR 1-3.5 Du/Ac
8	50011020A	Jorde Hacienda Inc	14	7S 4E	13.35	MLDR 1-3.5 Du/Ac
9	500110210	Jorde Hacienda Inc	15	7S 4E	160.00	MLDR 1-3.5 Du/Ac
10	50023003A	Jorde Hacienda Inc	24	7S 4E	46.00	MLDR 1-3.5 Du/Ac
11	50019006A	Jorde Hacienda Inc	13	7S 4E	29.00	MLDR 1-3.5 Du/Ac
12	50023003B	Stanfield 1295 LLC	24	7S 4E	34.00	MLDR 1-3.5 Du/Ac
13	50019006B	Stanfield 1295 LLC	13	7S 4E	91.00	MLDR 1-3.5 Du/Ac
14	500190050	Stanfield 1295 LLC	13	7S 4E	120.00	MLDR 1-3.5 Du/Ac
15	500230120	Stanfield 1295 LLC	24	7S 4E	80.00	MLDR 1-3.5 Du/Ac
16	50019004A	Stanfield 1295 LLC	13	7S 4E	80.00	MLDR 1-3.5 Du/Ac
17	50011019B	Stanfield 1295 LLC	14	7S 4E	160.00	MLDR 1-3.5 Du/Ac
18	50019004C	Stanfield 1295 LLC	13	7S 4E	159.01	MLDR 1-3.5 Du/Ac
19	500190030	Stanfield 1295 LLC	13	7S 4E	120.00	MLDR 1-3.5 Du/Ac
20	50019002E	Stanfield 1295 LLC	13	7S 4E	199.18	MLDR 1-3.5 Du/Ac
21	50019002B	Stanfield 1295 LLC	13	7S 4E	159.60	MLDR 1-3.5 Du/Ac
22	50018001C	Stanfield 1295 LLC	12	7S 4E	41.75	MLDR 1-3.5 Du/Ac
23	50018001B	Stanfield 1295 LLC	12	7S 4E	43.49	MLDR 1-3.5 Du/Ac

The Developer proposes to construct, operate, and maintain a hybrid solar photovoltaic (PV) facility, battery energy storage system (BESS) and a natural gas-fired power generation facility along with associated infrastructure for the Griffin Energy Project.

The PV and BESS portion of the Project represents the majority of the ±2,685.58-acre site, which may be phased, including solar modules mounted on single axis trackers, inverters to convert direct current into grid-compatible alternating current, transformers to increase the voltage of the electricity generated, and battery energy storage system. This portion of the Project will also include necessary utility substation(s) and one or more small buildings to house telecommunication equipment.

The gas plant portion of the site will utilize a minimum of a ±50 acres, which will be strategically located within the overall Project boundary, and will include internal access roadways and employee parking, gas turbine power generation islands, battery energy storage systems, utility switchyards and operation, maintenance and process buildings.

The Project is proposed in a relatively remote area of Pinal County that benefits from substantial existing infrastructure, including a host of transmission lines and nearby natural gas line that make the Property ideally suited for the proposed use. The Project is expected to utilize a shared transmission interconnection to the existing 500 kV Duke - Pinal Central transmission line, which runs along the Projects north edge. Off-site supporting improvements, infrastructure, and/or uses could include additional utility connections that extend, through private and/or Arizona State Land Department lands, to the necessary infrastructure.

At the time of the subsequent PAD and zone change, the project team will provide the County with additional detailed reports (TIA, Drainage, Water & Sewer) along with a de-commissioning document to provide details of the end-of-life process for the solar portions of the Project.

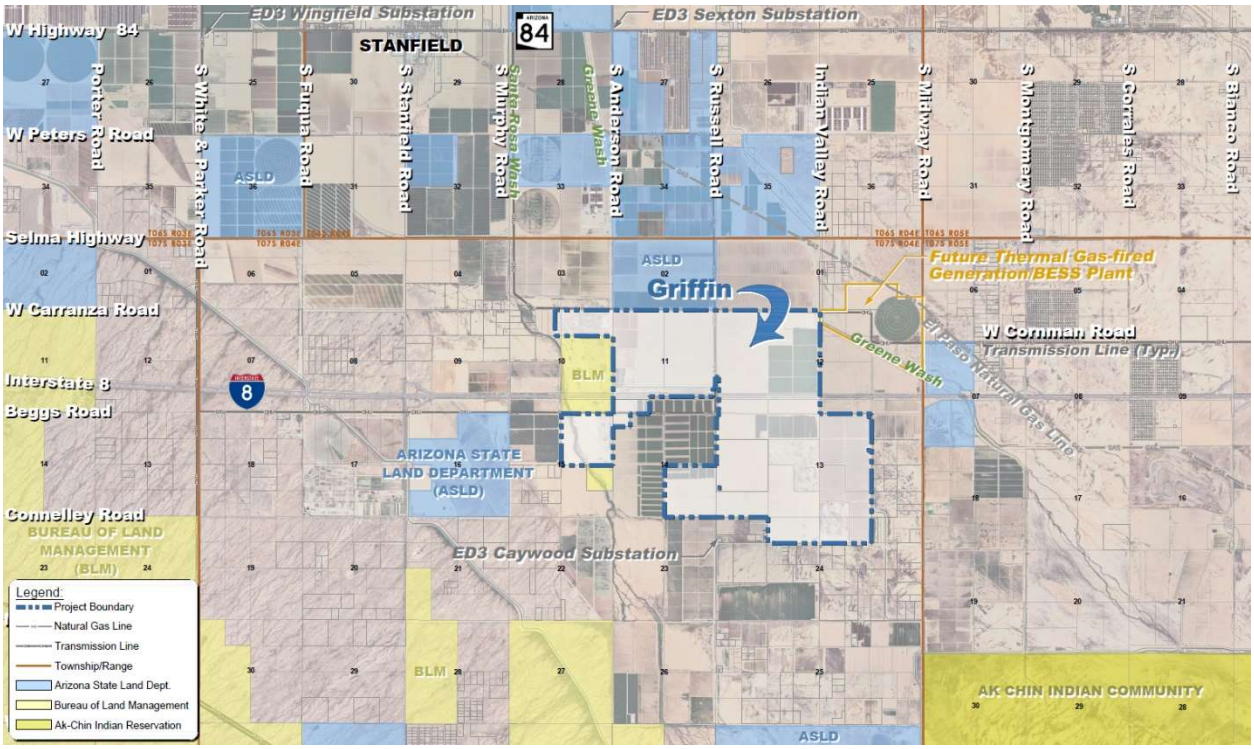


Exhibit B – Site Context

C. RELATIONSHIP TO SURROUNDING PROPERTIES

The ±2,685.58-acre Project is located a few miles south of Stanfield CDP between the Santa Rosa Wash to the west and the Greene Wash to the east and is sited on both sides of the Interstate 8 with roughly ±1,119.55 acres located to the north and ±1,566.03 acres to the south. This surrounding area, all within the General Rural (GR) zoning district, is characterized by native desert lands and agricultural properties. The Project site, due to its agricultural history, is relatively flat with only a 20-foot elevation change from north to south over the 2.25-mile stretch. Additionally, the Project is located west of the planned ±351.8-acre Project Bella (PZ-PA-008-24) development, which recently received Board of Supervisor approval of a Major CPA to General Public Facilities/Services for a 480 MW natural gas-fired power plant with a 440 MW battery storage facility. These planned facilities, in addition to the existing electrical and gas infrastructure in the surrounding area make this an ideal location for the proposed Green Energy Production land use, limiting the need for extensive off-site infrastructure into the power grid. Other surrounding land uses include publicly owned and managed Local, State, and Federal Lands. These include lands controlled by the Arizona State Land Trust, Ak Chin Indian Reservation and Bureau of Land Management.

Throughout the processes, property owners and residents will be notified of the Project and efforts will be made to identify concerns over potential impacts and effective mitigation factors where possible. Site parcels will be enclosed by perimeter security fencing located along each phase Project boundaries and adjacent rights of way. No fencing will impede or otherwise enclose existing roads within the project boundaries. Screening and mitigation of visual impacts will be addressed in greater detail with the PAD/zone change and site plan submittals.

Table 2 – Surrounding Land Uses

Side	Ownership	Zoning	Land Use Designation	Land Use
Site	Private	GR	MLDR 1-3.5 du/ac	Agricultural/Vacant Desert
North	Private, ALSD	GR	MLDR 1-3.5 du/ac	Agricultural
East	Private	GR	VLDR 0-1 du/ac, MLDR 1-3.5 du/ac and General Public Facilities/Services	Agricultural/Vacant Desert
South	Private	GR	VLDR 0-1 du/ac & MLDR 1-3.5 du/ac	Agricultural/Vacant Desert
West	Private	GR	VLDR 0-1 du/ac & MLDR 1-3.5 du/ac	Agricultural/Vacant Desert

I. SITE ACCESS

The Project area is generally bound on the north side by the W. Carranza Road alignment, on the east side by the E. Arica Road and Indian Valley Road alignments, on the south side by W. Arica Road and Connelley Road alignments and on the west by the Santa Rosa Wash just east of the S. Murphy Road Alignment. The site can be accessed regionally from Interstate 8 from the westbound Stanfield Road exit to the west and the full S. Montgomery Rd. exit to the east.

There would be no significant increase in traffic during the operational life of the Project. There would be a relatively minor increase in the level of traffic during the limited timeframe required for each phase of the Project construction. A traffic impact study will be completed as part of the PAD/zone change process associated with the Project.

Internal circulation will be planned via a private driveway for the planned gas plant and a network of private maintenance and service drive aisles to provide vehicular access to the solar arrays, associated equipment, and BESS yard(s) and substation(s) facilities. All driveway aprons shall be paved with a minimum asphalt milling bound with a liquid binding emulsifier, or comparable, with the remainder of the typical 20' internal drives being compacted decomposed granite (DG), or similar road base material to minimize imperviousness and stormwater runoff, as proposed with an approved dust control permit.

Site access will be identified with the PAD/zone change and site plan applications. Final access locations and necessary right-of-way dedications/preservations will be determined in accordance with access management policies and permitting requirements of Pinal County.

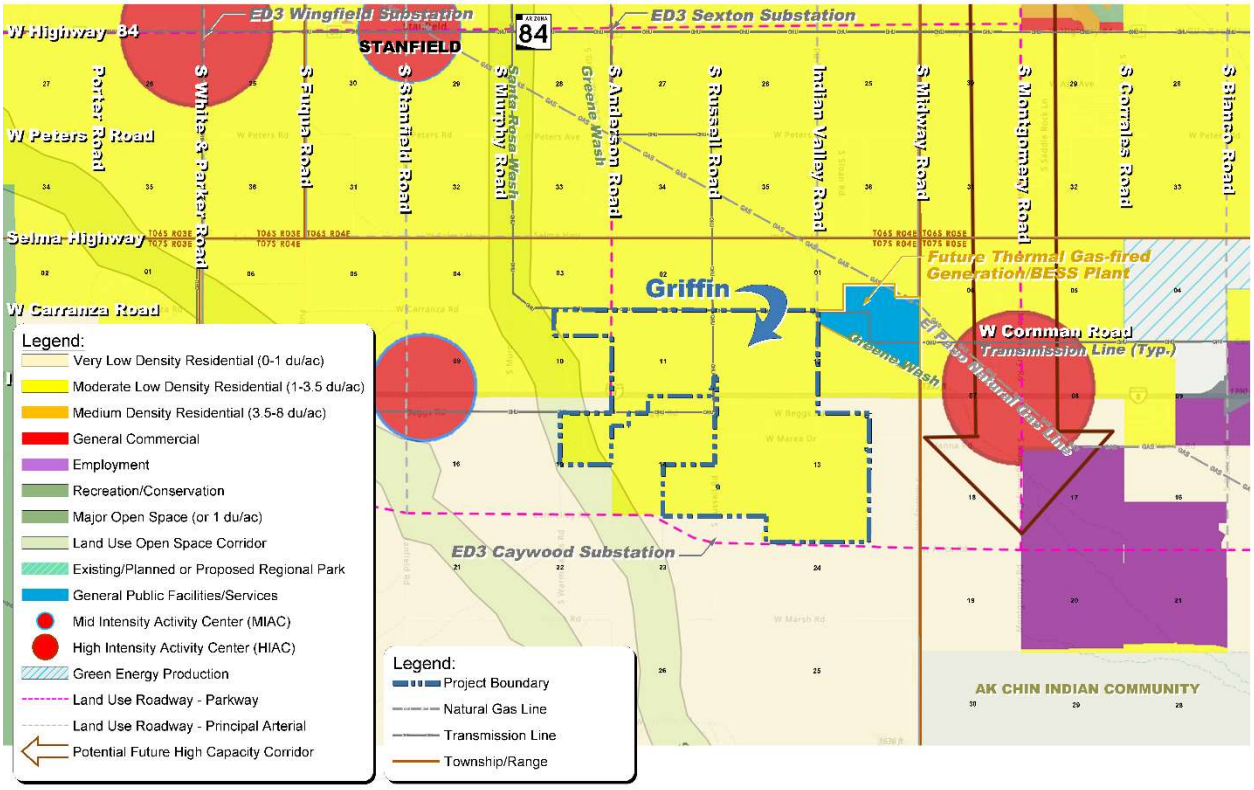
D. COMPREHENSIVE PLAN AMENDMENT CRITERIA

This Comprehensive Plan Amendment is being requested in conjunction with the Arizona state statutes that define a "Major Amendment" as a "substantial alteration of the County's land use mixture or balance as established in the County's existing Comprehensive Plan Land Use element for that area of the County." However, it is left to each County to determine the criteria for determining if a proposed amendment meets this definition. Specifically related to the Griffin Energy Project, any change from a residential or non-residential land use to Green Energy Production of 640 acres or more contiguous acres represents a Major Comprehensive Plan Amendment. As seen in ***Exhibit C & D – Existing and Proposed Comprehensive Plan Land Use Map***, the change from Moderate Low Density Residential (MLDR 1-3.5 du/ac) to Green Energy Production, for the overall ±2,685.58-acre Project area, meets these criteria.

Additionally, this area has experienced some changes over the years that support this application. There has been a focus on improving the surrounding electrical infrastructure within this area over time with the progressive improvements of the nearby ED3 Wingfield, Sexton, Caywood and Santa Rosa substations. Also, APS has announced the new 80-acre Bianco Substation nearby which will extend capacity and services to the Casa Grande West Industrial properties and surrounding area. This focus on electrical infrastructure, in addition to the recent Project Bella natural gas-fired power plant and battery storage facility, lends itself to future alternative energy solutions that will allow for opportunities to further bolster the surrounding infrastructure and power needs. Furthermore, the Comprehensive Plans addition of the Green Energy Production land use and the current focus on alternative energy looks at how Pinal County will provide a broad portfolio of energy resources to support future land use patterns and address energy conservation. The Plan now understands the importance to efficiently use and conserve energy sources and seek renewable sources so that future generations will not unnecessarily suffer from its shortage or absence.

The Griffin Energy Project team feels this proposed amendment is necessary at this time due to the unique opportunity for green energy production in this area with the development of underutilized land that would provide jobs, sustainable energy, and further economic development in Pinal County.

Exhibit C – Existing Comprehensive Plan Land Use Map



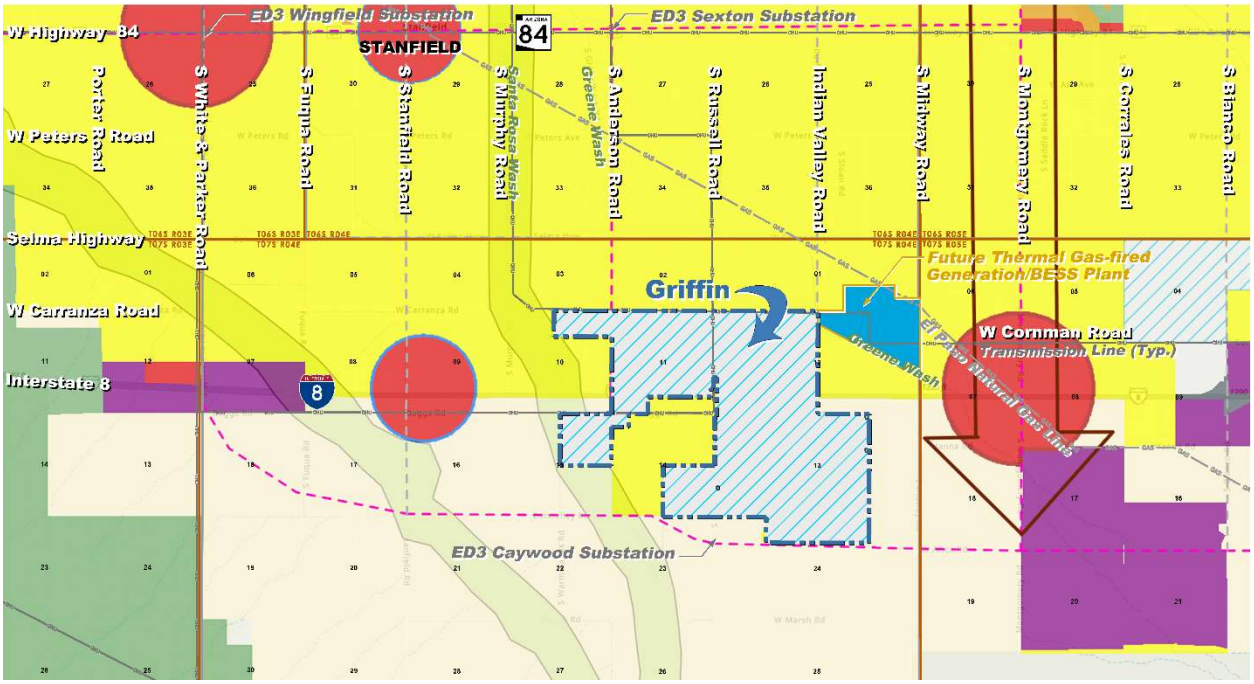


Exhibit D – Proposed Comprehensive Plan Land Use Map

E. COMPREHENSIVE PLAN COMPLIANCE

The Pinal County Comprehensive Plan is a vision-based plan that provides the framework that all decisions related to growth and development are measured against. This narrative, and more specifically the compliance analysis below, lays out the expectations for future growth and development of the Green Energy Production designation, which promotes an efficient use of land, energy, and financial resources. Specifically, the renewable energy and solar uses discussed throughout the Plan respond to Pinal County's ability to be one of the most productive spots in the state for solar energy generation. These references provide measurable goals and strategies to further the vision components, as described below.

I. CONSISTENCY WITH PINAL COUNTYS VISION COMPONENTS.

The Project development area has a land use classification of Moderate Low Density Residential (MLDR 1-3.5 du/ac). The proposal will amend the Pinal County Comprehensive Plan Land Use of the site to Green Energy Production. The proposed amendment request conforms to the goals, objectives, and policies of the current Comprehensive Plan by meeting the criteria outlined in the Plan's compliance checklist. The following analysis is in response to the Plan's compliance checklist:

1. Sense of Community

This Sense of Community vision component understands that the land use plan is more than just a map and that the goals of the Comprehensive Plan ultimately augment the visual aspects of the map. The Griffin Energy Project furthers these goals by focusing on the strategic areas within the Sense of Community component that provide the allowance for flexibility to respond to market changes and align with Pinal County's vision and policies to achieve a land use that is in line with the important goals and objectives, such as sustainable development, economic diversification, and energy efficiency. Additionally, given the surrounding land uses and the existing agriculture uses on and around the Project area, this proposal is consistent with the outlined Agriculture Planning Guidelines, which determine that solar and other renewable energy production are compatible with the farming heritage. In order to achieve these goals, the Pinal County Comprehensive Plan implemented the additional land use designation of Green Energy production, which is intended for areas that are strategically located for the development of large scale photovoltaic solar panel power generation facilities such as the Griffin Energy Project. The Property is ideally suited for the proposed use given its direct proximity to the existing on-site 500 kV transmission line and the existing El Paso natural gas line from which it will be served.

Further, relating to the West Pinal Growth Area, Pinal County states the need for carefully sited development in relation to existing and proposed infrastructure. Collaboration is encouraged with municipalities and private landowners within the West Pinal Growth Area plan to help knit together all of the public and private efforts and infrastructure development necessary for smart growth. The Griffin Energy Project will support the culmination of public, private and infrastructure development and seeks to include renewable energy into the community landscape, being mindful of residential land uses, with little impact on existing surrounding area.

2. Mobility and Connectivity

As required by the Mobility and Connectivity vision component, the Griffin Energy Project plans to work with the County to evaluate the transportation impacts of the proposed Comprehensive Plan amendment and rezoning based on Pinal County's regional transportation system. The minimal traffic

impact associated with the Project fits the existing surrounding rural context. As seen on ***Exhibit C & D – Existing and Proposed Comprehensive Plan Land Use Map***, the Project has also contemplated the Land Use Roadways, which indicate the north/south Principal Arterial (Indian Valley Road) and Parkway (S. Anderson Road) designations north of the I-8 along the planned Parkway running east/west along the south W. Arica Road alignment. The Applicant will work with County staff to provide necessary right-of-way to preserve these designations. A High-Capacity Road (Under Study) designation has been identified within the surrounding area but does not appear to impact the Project area.

3. Economic Sustainability

This Project is intended to promote and incentivize the production and delivery of renewable energy resources that meet and otherwise support consumption needs of existing and emerging markets which benefit the regional and state economies and tax bases. The availability of sustainable, renewable, and economically efficient energy and the resulting cost savings, both immediate and over time, creates opportunity for reinvestment of public and private capital back into the local and regional economy.

The Project, which is located near identified Employment, Commercial and Activity Centers, is consistent with this vision component by implementing much needed energy generation and storage, adding resilience to the electrical grid and demonstrating the County's commitment to the use of renewable energy resources, which can help increase the number of businesses that expand in and locate to Pinal County. This renewable energy facility will be a catalyst for sustainable energy in the future. This Project provides the County and area a sustainable way of bringing economic development to the region while providing employment opportunities ranging from construction, operation, management, and maintenance. The Project was selected after completing site research on multiple sites to ensure selection of a land area well suited for energy development; including adjacent necessary electric transmission and gas infrastructure to provide a reliable and competitive energy development.

4. Open Spaces and Places

The Griffin Energy Project Major CPA amendment is consistent with the Open Spaces and Places vision component. The Pinal County Open Space and Trails Master Plan identifies the Santa Rosa wash along the Projects western boundary and the Green Wash along the east as Open Space corridors. Additionally, a proposed Multi-Use Trail Corridor is proposed south of Interstate 8. The Applicant will work with County staff and the Pinal County Parks/Rec team to ensure necessary preservations and further compatibility.

5. Environmental Stewardship

This request is consistent with the Environmental Stewardship vision component, which looks to expand renewable energy in Pinal County and have officials coordinate with energy providers to ensure energy infrastructure is adequate to support growth and infrastructure development. The Project will take advantage of the nearby gas and electrical infrastructure along with Arizona's year-round sunshine, collecting this energy and producing clean renewable electricity for Pinal County, its residents, and surrounding communities. The Comprehensive Plan stresses the tremendous environmental, natural resource, and economic implications that energy conservation has and specifically discusses the need for gas power plants to help generate the County's additional electricity needs. The importance and demand for sustainable energy is an important part of the economy both

locally and statewide. The Green Energy Production land use will allow for the conservation of water resources currently available in Pinal County. The Project would use PV solar panels to generate electricity and as a renewable energy source, solar PV facilities generate no air emissions and use less water compared to traditional fossil fuel-based energy sources and the existing agricultural uses. Additionally, throughout the entitlement process, the project team will coordinate with the Arizona Game and Fish Department (AZGFD) to ensure the future development is sensitive to any potential wildlife in the area.

6. Healthy, Happy Residents

This request is consistent with the Healthy, Happy Residents vision component by promoting a low impact use that contributes clean, safe, affordable, and efficient energy to the regional transmission grid while helping maintain long-term financial stability through the generation of revenues and tax base contributions for Pinal County. The Griffin Energy Project will provide fiscally responsible alternative energy services and effective and efficient infrastructure to implement delivery of services that help promote and contribute to a healthy community that residents can enjoy.

7. Quality Educational Opportunities

While this component may not apply to all projects, this request provides an opportunity for the community to have an opportunity to learn about, be aware of and take advantage of the benefits of alternative energy.

II. CONSISTENCY WITH THE PLAN'S KEY CONCEPTS ILLUSTRATED ON LAND USE, ECONOMIC, AND CIRCULATION GRAPHICS.

The Project Site Property has an existing land use designation of Moderate Low Density Residential (MLDR 1-3.5 du/ac). The proposal will amend the Pinal County Comprehensive Plan for the overall ±2,685.58-acre Project area to Green Energy Production. The proposed amendment request conforms to the goals, objectives, and policies of the current Comprehensive Plan by meeting the criteria outlined in the Plan's compliance checklist. The following is a response to the Plan's compliance checklist:

1. Consistency with the Land Use Designation shown on the graphics.

While the Green Energy Production category is an additional land use alternative that does not have specific planning guidelines, it is consistent with the County's vision and policies to achieve a land use that is in line with the important goals and objectives of the Comprehensive Plan, such as sustainable development, economic diversification, and energy efficiency. The Griffin Energy Project is in a remote area of Pinal County and is unlikely to conflict with other proposed developments or sensitive land uses. Additionally, given that the Project would be a passive, low-intensity use, the proposed amendment would be consistent with surrounding land uses, which include Very Low and Moderate Low Density Residential and General Public Facilities/Services.

2. Consistency with the Mixed-Use Activity Center Concept.

This proposal is not within a Mixed-Use Activity Center. Although, the supply of energy is essential to the region's transportation and manufacturing sectors. Energy resources significantly impact economic development by contributing to the region's overall attractivity on basic and corresponding non-basic employment, primary and secondary employment sectors and markets, and research and development within existing and emerging markets and industries. Additionally, energy availability and even surplus

opportunities function as an incubator for innovations within all segments of the local, regional, and state economy.

3. Consistency with the Planning Guidelines described in the Land Use element.

Per the Comprehensive Plan, Major Plan Amendments should improve the County's overall condition and not undermine the Plan's core principles. The Plan recognizes the need to redesignate land uses in response to changing market conditions and to address the increasing demands of growth to the public infrastructure needs, specifically energy generation and consumption demands within the local economy.

4. Quality Employment Opportunities County-wide.

The Project is anticipated to generate new jobs in the construction, contracting, administrative, and project management fields during the construction and implementation of the Project over the proposed construction timeline. Additional jobs will be created for routine maintenance activities and equipment repair and replacement. In addition to providing in state construction jobs and long-term technical careers, local projects like Griffin Energy will help contribute to the regional economy by providing tax revenue and by using local engineering and development contractors.

The amendment would be compatible with the Economic Sustainability Vision outlined in Chapter 5 of the Comprehensive Plan. The adopted and revised 2021 Pinal County Comprehensive Plan's Economic Development Plan does not identify any areas for Green Energy Production, indicating that any land designated as such must be done so via a Comprehensive Plan amendment, major or minor.

5. Viable Agriculture, Equestrian and Rural Lifestyle.

As discussed above, the Griffin Energy Project will complement the existing rural character of the surrounding area by providing a low impact use, which will avoid adding traffic and noise to a quiet area. Additionally, the low-profile solar panels will preserve views and allow for continued drainage and wildlife movement. Given these surrounding land uses and the existing agriculture uses on and around the Project area, this proposal is consistent with the outlined Agriculture Planning Guidelines, which determine that Solar and other renewable energy production are compatible with the farming heritage. In order to achieve these goals, the Pinal County Comprehensive Plan implemented the additional land use designation of Green Energy production, which is intended for areas that are strategically located for the development of large scale photovoltaic solar panel power generation facilities such as Griffin Energy.

6. System of Connected Trails and Preservation of Open Space.

As discussed above, the amendment area is consistent with the Trails and Open Space Master Plan and Chapter 6: Open Spaces and Places of the Comprehensive Plan. The Pinal County Open Space and Trails Master Plan identifies the Santa Rosa wash along the Projects western boundary and the Green Wash along the east as Open Space corridors. Additionally, a proposed Multi-Use Trail Corridor is proposed south of Interstate 8. The Applicant will work with County staff and the Pinal County Parks/Rec team to ensure necessary preservations and further compatibility.

7. Natural and Cultural Resource Conservation.

Detailed environmental studies, including pedestrian biological and cultural/archaeological surveys will be completed and documented, as needed or as recommended by local, state, or federal agencies.

Although, the majority of the Griffin Energy Project area has been previously disturbed with a history of agricultural usage.

8. Water Resources, Public Facilities/Services, and Infrastructure Support

Increasing the County's investment (in terms of land use planning) in local power generation facilities and infrastructure has a long-term tangible impact of lowering costs of energy production, delivery, and consumption. This goal is achieved in part by increasing local/regional energy production/generation. The increased supply has a proportionate impact on the accessibility of the resource and encourages integration of applied uses and transitions away from reliance on outdated and inefficient modes of energy generation and transmission creating efficiencies in these areas. Increased supply and efficiencies will promote increased integration into the market for various sectors of the economy (housing, manufacturing, transportation, etc.).

Compared to the existing agricultural uses on-site or the Comprehensive Plan allowance of +/-9,400 (3.5 du/ac) residential lots, Griffin Energy will require significantly less infrastructure and will have less overall impacts on the surrounding area. Utility service(s) to the site will be provided by the following providers. No wastewater service is planned to the site. The gas plant portion of the Project will provide adequate water resources and the necessary infrastructure to support the development. Based on recent surrounding analysis of projected water demands, by others, for this type of use it was found there would be a negligible impact on aquifer drawdown.

Utility/Service	Agency/Provider
Water	Arizona Water Company, Maricopa Stanfield Irrigation & Drainage District
Sewer	(N/A) Septic.
Electric Service	Electrical District-3, Salt River Project, Tuscon Electric Power
Fire Protection	TBD
Police Protection	Pinal County Sheriff Office
Refuse (Waste Management)	Republic Services

Development of the Project would not impact existing water quality. The site would be designed to pass off-site stormwater through or around the site and release it in a manner similar to the existing conditions. Based on a final hydrologic analysis of the Project Area, on-site drainage would be routed as necessary to retention basins in accordance with Pinal County Public Works regulations. This drainage design concept would allow the site to be developed, while not increasing stormwater runoff or creating an adverse impact on adjacent properties. Careful Project siting and design, sensitive to existing topography and drainage patterns would also function to protect water quality.

F. CONCLUSION

The Griffin Energy Project Major Comprehensive Plan Amendment supports the Pinal County Comprehensive Plan goals by providing additional renewable energy resources and battery storage for local energy reliability and resiliency. The proposed Green Energy Production land use minimizes impacts to the surrounding neighbors and lessens the impact to the environment based on proximity to the existing infrastructure by minimizing very long interconnects. The electricity generated through these facilities would be distributed into to the electrical grid while directly benefiting Arizona corporations seeking competitively

priced renewable energy and looking to add new clean energy resources to power the record number of people and companies moving to the state. The need for this Project is established by the growing demand for renewable energy and BESS facilities over the next decade, as evidenced by local providers policies designed to increase the use of renewable energy sources for electricity generation and storage to address its growing electrical demand load, particularly in the summer, and support integration of new renewable energy projects into a reliable and functioning grid. These policies require or encourage electricity suppliers to provide their customers with a stated minimum share of electricity from eligible renewable resources. Most states, including Arizona, have enacted their own programs to diversify their energy resources, promote domestic energy production and encourage economic development. Arizona has set their standards for investor-owned utilities at 45% by 2030 and 100% by 2050. Approval of the Project strengthens the overall energy production output and grid resiliency within Pinal County.

PUBLIC PARTICIPATION PLAN

PINAL COUNTY, ARIZONA

GRIFFIN ENERGY PROJECT

MAJOR COMPREHENSIVE PLAN AMENDMENT

CASE #: Z-PA-060-25

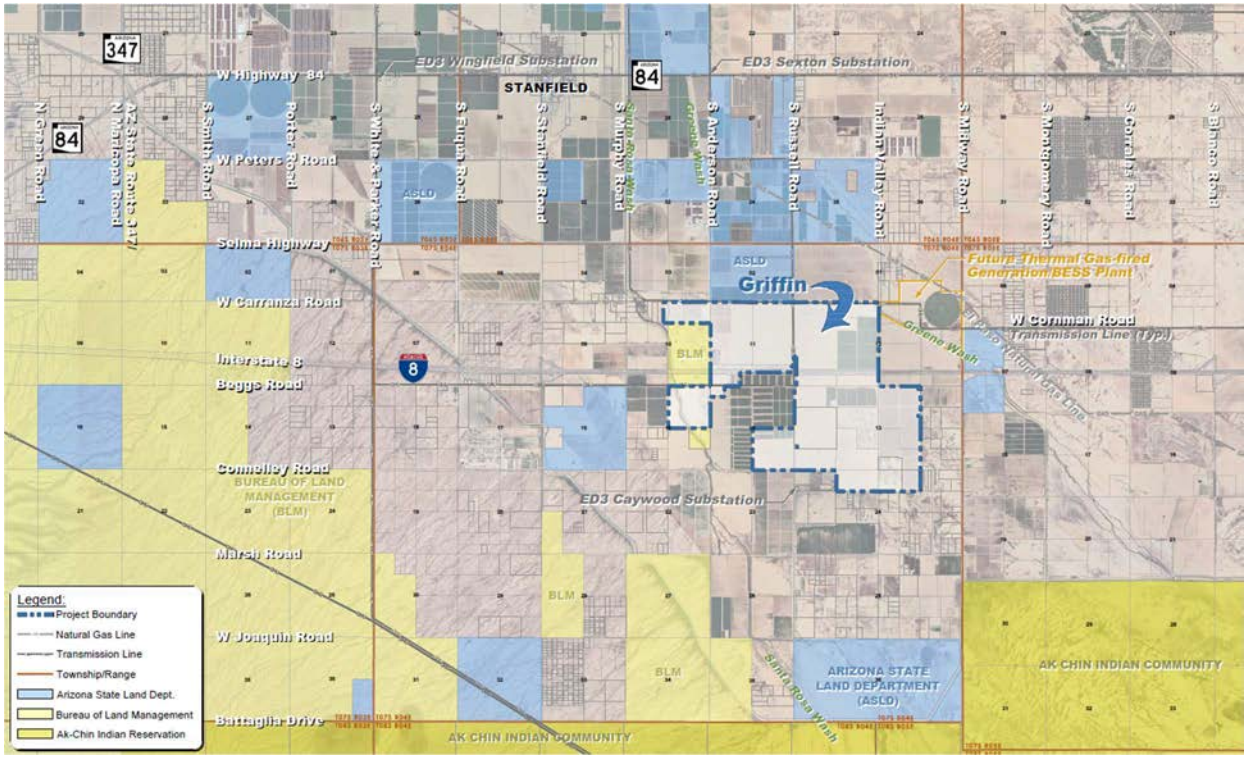


Exhibit A – Regional Context

1ST SUBMITTAL: MAY 29TH, 2025

A. INTRODUCTION

Rose Law Group (the "Agent"), on behalf of Griffin Energy, LLC (the "Applicant") with permission of the subject property owners, is requesting a Major Comprehensive Plan Amendment (CPA) of the Pinal County Comprehensive Plan to change the land use designation of the overall ±2,685.58-acre Griffin Energy Project (the "Project") from Moderate Low Density Residential (MLDR 1-3.5 du/ac) to Green Energy Production to allow for a large scale power generation facility situated in the western Pinal County growth area at the southwest corner of the W Carranza Road and Indian Valley Road alignments. The CPA request will be accompanied by a subsequent request for a Planned Area Development (PAD) Overlay with an accompanying zone change to rezone the underlying parcels from General Rural (GR) to PAD with Industrial Zoning District (I-3/PAD) to support the future land use and site plan approval.

As seen in ***Exhibit A - Regional Context***, the CPA area, made up of the following twenty-three (23) underlying parcels, is located approximately three (3) miles southeast of Stanfield, a small census-designated place (CDP) in Pinal County, within Sections 10, 11, 12, 13, 14, 15 and 24 of Township 7 South, Range 4 East.

Table 1 - Griffin Energy Project Parcel/Land Use List

#	Assessor Parcel #	Owner	Sect.	Town./ Range	Area/Acres	Exist. Comp Plan LU
1	50016001G	BDW Land Investments LLC	10	7S 4E	9.99	MLDR 1-3.5 Du/Ac
2	50016001B	Anderson Road 80 LLC	10	7S 4E	80.00	MLDR 1-3.5 Du/Ac
3	500110160	Jorde Hacienda Inc	11	7S 4E	240.00	MLDR 1-3.5 Du/Ac
4	500110180	Jorde Hacienda Inc	11	7S 4E	240.00	MLDR 1-3.5 Du/Ac
5	50018001A	Jorde Hacienda Inc	12	7S 4E	513.16	MLDR 1-3.5 Du/Ac
6	50011017C	Jorde Hacienda Inc	11	7S 4E	36.40	MLDR 1-3.5 Du/Ac
7	50011017A	Jorde Hacienda Inc	11	7S 4E	29.65	MLDR 1-3.5 Du/Ac
8	50011020A	Jorde Hacienda Inc	14	7S 4E	13.35	MLDR 1-3.5 Du/Ac
9	500110210	Jorde Hacienda Inc	15	7S 4E	160.00	MLDR 1-3.5 Du/Ac
10	50023003A	Jorde Hacienda Inc	24	7S 4E	46.00	MLDR 1-3.5 Du/Ac
11	50019006A	Jorde Hacienda Inc	13	7S 4E	29.00	MLDR 1-3.5 Du/Ac
12	50023003B	Stanfield 1295 LLC	24	7S 4E	34.00	MLDR 1-3.5 Du/Ac
13	50019006B	Stanfield 1295 LLC	13	7S 4E	91.00	MLDR 1-3.5 Du/Ac
14	500190050	Stanfield 1295 LLC	13	7S 4E	120.00	MLDR 1-3.5 Du/Ac
15	500230120	Stanfield 1295 LLC	24	7S 4E	80.00	MLDR 1-3.5 Du/Ac
16	50019004A	Stanfield 1295 LLC	13	7S 4E	80.00	MLDR 1-3.5 Du/Ac
17	50011019B	Stanfield 1295 LLC	14	7S 4E	160.00	MLDR 1-3.5 Du/Ac
18	50019004C	Stanfield 1295 LLC	13	7S 4E	159.01	MLDR 1-3.5 Du/Ac
19	500190030	Stanfield 1295 LLC	13	7S 4E	120.00	MLDR 1-3.5 Du/Ac
20	50019002E	Stanfield 1295 LLC	13	7S 4E	199.18	MLDR 1-3.5 Du/Ac
21	50019002B	Stanfield 1295 LLC	13	7S 4E	159.60	MLDR 1-3.5 Du/Ac
22	50018001C	Stanfield 1295 LLC	12	7S 4E	41.75	MLDR 1-3.5 Du/Ac
23	50018001B	Stanfield 1295 LLC	12	7S 4E	43.49	MLDR 1-3.5 Du/Ac

B. RELATIONSHIP TO SURROUNDING PROPERTIES

The Project team realizes the importance that public participation plays in the development process. We are committed to encouraging and allowing the public to express their thoughts, help them understand the matters and attempt to address them in a professional and appropriate way. Interested parties and stakeholders who could be engaged in the public participation process may include: Adjoining property owners within 1,200' of the Project boundaries, pertinent neighborhood groups, Pinal County Planning and Development Department, City of Maricopa, Maricopa County, Arizona Department of Transportation (ADOT), Ak-Chin Indian Reservation, Arizona Game and Fish Department (AZGFD), Bureau of Land Management (BLM), Arizona State Land Department (ASLD). Additional stakeholders identified throughout the review of the Major Comprehensive Plan Amendment application will be included in the public participation process and documented in the public participation report. It is not anticipated that any neighbors or stakeholders and/or their interests will be negatively affected by this proposed CPA.

C. NOTIFICATION AND INFORMATION PROCEDURES

The applicant will provide notification via first-class US mail to property owners within 1,200 feet of the project site. The Initial notice will include project information, as well as an opportunity to attend a neighborhood meeting/open house and learn about the proposal and/or contact or meet the applicant as needed to discuss the Project. The neighborhood meeting/open house will be scheduled for a convenient time and location near the Project site.

Future signs will also be posted so that the notices are visible from the nearest public right-of-way. All posting activities will conform to the applicable procedural requirements.

On both the notification and the sign postings the contact information of a Project team representative will be provided for use by the public to request information and provide comments, as follows.

Contact:
Kimley-Horn, Keith Nichter,
1001 W. Southern Ave., Suite 131,
Mesa, Arizona 85210
602.313.7206
Keith.Nichter@kimley-horn.com

This contact information provides the public with direct contact to the Project team members who will be able to respond directly for requests for information and to address comments or concerns identified by stakeholders and other interested parties. Public communication comments, and concerns will be forwarded to County Staff monthly/bi-monthly.

D. RESPONSE PROCEDURES

The applicant will be available to discuss the application with any interested party initiating a request or who participates in any public outreach program format (neighborhood open house). The applicant will remain open to all stakeholder and/or public feedback and discourse through the duration of the CPA process.

The applicant will provide the Planning and Zoning Division periodic written summaries of public/stakeholder correspondence to include: interested party/persons (including contact information), requests for information or actions, identified issues/comments, summaries of responses, and disposition of discussion and/or follow up actions/activities. Details of the correspondence will be documented for inclusion in the final Neighborhood Meeting Report.

E. SCHEDULE FOR COMPLETION

This Public Participation Plan will be submitted within thirty (30) days of the application submittal. A final Neighborhood Meeting Report will be provided prior to scheduling the CPA for any required public hearing.

ATTACHMENTS

Attachment A – 1,200' Notification Map
Attachment B – 1,200' Notification List
Attachment C – Draft Notification Letter

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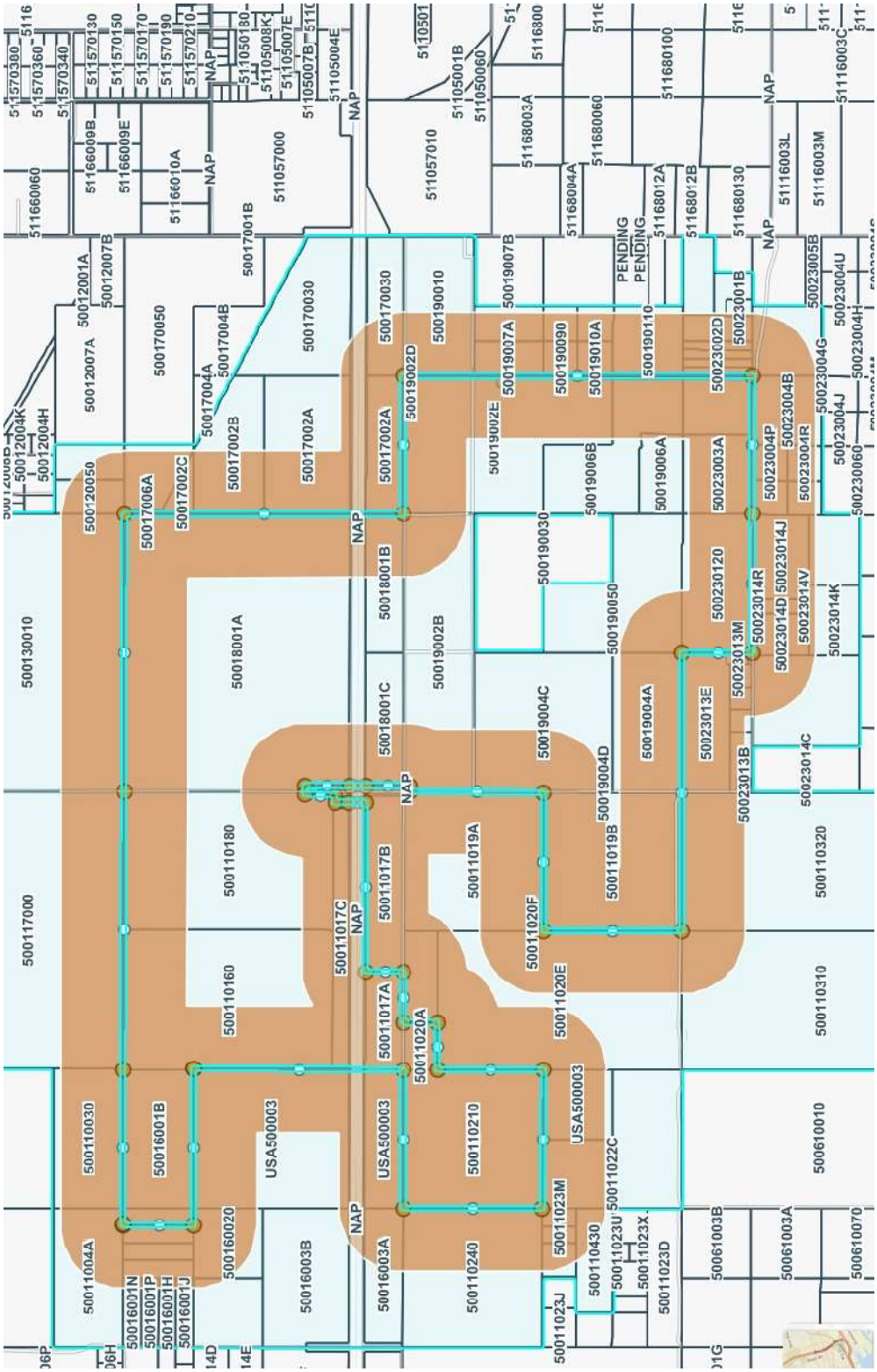
ATTACHMENT A – 1,200’ NOTIFICATION MAP



ATTACHMENT B – 1,200' NOTIFICATION LIST

APN	OWNER	ADDRESS	CITY/STATE/ZIP
50023013B	ELECTRICAL DISTRICT NO 1	41630 W LOUIS JOHNSON DR	MARICOPA , AZ 85138-8540
50023001B	LANGLEY TODD CAMERON & MARGARET EILEEN TRS	2051 E MELROSE ST	GILBERT , AZ 85297-7113
50023001G	LANGLEY FAMILY LIVING TRUST	2051 E MELROSE ST	GILBERT , AZ 85296-8529
50023001E	SCHNEIDER KENNETH E & JENNIFER JACKSON	7710 S MIDWAY RD	CASA GRANDE , AZ 85193-3764
50023002C	ELSAAD SALEH	700 MATTHEWS CT	ARLINGTON , TX 76012-2453
50023002A	UNSWORTH THOMAS E	9543 S MIDWAY RD	CASA GRANDE , AZ 85122-8512
50023002D	JEFFERSON MILAN	1239 W CASTLE DR	CASA GRANDE , AZ 85122-2665
500230150	BANCROFT THOMAS LEWIS JR & SHERI ANN	29580 W ARICA RD	CASA GRANDE , AZ 85193-8519
500230160	KALLA SUBHI M TRUST B	7820 N 47TH PL	PARADISE VALLEY , AZ 85253-3290
50023003B	STANFIELD 1295 LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
50023003A	JORDE HACIENDA INC	PO BOX 309	HIGLEY , AZ 85236-6030
500230120	STANFIELD 1295 LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
500110320	MOLHADO LLC	3030 E INDIGO ST	MESA , AZ 85213-3557
500110310	DWAIK FATHI Y	4301 ADRIEL LN	PLANO , TX 75074-4033
50019006A	JORDE HACIENDA INC	PO BOX 309	HIGLEY , AZ 85236-6030
500190110	JR INVESTMENTS 11 LLC	5112 W ARROWHEAD LAKES DR	GLENDALE , AZ 85308-8934
50019004A	STANFIELD 1295 LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
50019010B	KOLDOFF PATRICIA A & CASEY J	840 N 4TH AVE	PHOENIX , AZ 85003-3131
50019010A	VACANT LAND GUYS LLC	7720 NE HIGHWAY 99 D626	VANCOUVER , WA 98665-5885
500110430	MURPHY HOLDINGS LLC	22477 S 196TH CIR	QUEEN CREEK , AZ 85142-2765
500190080	STINSON GARY L & SHARON M	6111 N 2ND AVE	PHOENIX , AZ 85013-8501
500190090	RINK GLENN	801 W BIRCH AVE	FLAGSTAFF , AZ 86001-8600
50019006B	STANFIELD 1295 LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
500190050	STANFIELD 1295 LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
USA500003			, -
50011019B	STANFIELD 1295 LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
50011022C	AWESOME FLIPPERS LLC	19 MOUNT PLEASANT	WEST ORANGE , NJ 07052-0705
50011023M	MORROW BECKY A	PO BOX 2832	ARIZONA CITY , AZ 85123-3087
50011023K	MAYNARD MARK & CATHERINE	3845 E CRESCENT PL	CHANDLER , AZ 85249-9208
50011023L	MAKEY JAMES	PO BOX 2546	CHANDLER , AZ 85244-8524
50019007D	LARA DANIEL	17221 GLENBURN AVE	TORRANCE , CA 90504-4263

50019007A	HUSTEAD HOLDINGS LLC	179 S 1160 WEST CIR	SAINT GEORGE , UT 84770-0804
500190010	CHRISTY FAMILY TRUST	6991 W ASHBY DR	PEORIA , AZ 85383-3309
50011020D	HANSEN INVESTMENT TRUSTS	7320 N LA CHOLLA BLVD STE 154-413	TUCSON , AZ 85741-1230
50019002B	STANFIELD 1295 LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
50011020A	JORDE HACIENDA INC	PO BOX 309	HIGLEY , AZ 85236-6030
500110210	JORDE HACIENDA INC	PO BOX 309	HIGLEY , AZ 85236-6030
500110240	HUNJAN PROPERTIES LLC	3741 W MCDOWELL RD OFC 100	PHOENIX , AZ 85009-9221
500170030	CHRISTY FAMILY TRUST	6991 W ASHBY DR	PEORIA , AZ 85383-3309
50018001B	STANFIELD 1295 LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
50018001C	STANFIELD 1295 LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
50011017B	HANSEN INVESTMENT TRUSTS	7320 N LA CHOLLA BLVD STE 154-413	TUCSON , AZ 85741-1230
50011017A	JORDE HACIENDA INC	PO BOX 309	HIGLEY , AZ 85236-6030
USA500003			, -
50016003A	HUNJAN PROPERTIES LLC	3741 W MCDOWELL RD OFC 100	PHOENIX , AZ 85009-9221
50011017C	JORDE HACIENDA INC	PO BOX 309	HIGLEY , AZ 85236-6030
50011019A	HANSEN INVESTMENT TRUSTS	7320 N LA CHOLLA BLVD STE 154-413	TUCSON , AZ 85741-1230
50017002A	CHRISTY FAMILY TRUST	6991 W ASHBY DR	PEORIA , AZ 85383-3309
50016003B	FIRST PLACE HOLDINGS LLC	2065 E HAVEN CIR S	GILBERT , AZ 85298-8841
500170030	CHRISTY FAMILY TRUST	6991 W ASHBY DR	PEORIA , AZ 85383-3309
50017002B	CHRISTY FAMILY TRUST	6991 W ASHBY DR	PEORIA , AZ 85383-3309
USA500003			, -
500160020	LAKE CITY LLC	3943 E HASHKNIFE RD	PHOENIX , AZ 85050-0546
50016001C	SODHI PARAMJOT SINGH & KAUR GURSIMRAN	2502 N 55TH ST	PHOENIX , AZ 85008-8260
50016001J	AMERMAN DANIEL & CORINNE	4318 N WHITE RD	MARICOPA , AZ 85139-9482
50017002C	CHRISTY FAMILY TRUST	6991 W ASHBY DR	PEORIA , AZ 85383-3309
50016001H	COOK SHELDON R & KITTREAN TANNER CO-TRS	2975 E SIERRA MADRE AVE	GILBERT , AZ 85296-6945
50016001P	VIRON SHAI AVRAHAM	4541 S MURPHY RD	STANFIELD , AZ 85172-8517
50018001A	JORDE HACIENDA INC	PO BOX 309	HIGLEY , AZ 85236-6030
500110180	JORDE HACIENDA INC	PO BOX 309	HIGLEY , AZ 85236-6030
500110160	JORDE HACIENDA INC	PO BOX 309	HIGLEY , AZ 85236-6030
50016001B	ANDERSON ROAD 80 LLC	3369 E QUEEN CREEK RD STE 101	GILBERT , AZ 85297-7850
50016001G	BDW LAND INVESTMENTS LLC	10619 N HAYDEN RD	SCOTTSDALE , AZ 85260-0852
50016001M	AL-DALAL JENANE	6502 N 1ST PL	PHOENIX , AZ 85012-2113

50016001L	AL-DALAL JENANE	6502 N 1ST PL	PHOENIX , AZ 85012-2113
50016001K	AL-DALAL JENANE	6502 N 1ST PL	PHOENIX , AZ 85012-2113
50016001N	WAGGONER BRYAN K PC 401K PLAN	7400 E MCDONALD DR STE 121	SCOTTSDALE , AZ 85250-0609
500120050	PHAN LY T & VO NHI Y	6 HORTON PL	MILTON , MA 02186-6472
500120060	HICKS STANLEY J	4501 DUSTY TRAIL ST	NORTH LAS VEGAS , NV 89031-8903
500110030	KEELING DOUGLAS M TRUST	21733 W CLAYTON RD	CASA GRANDE , AZ 85193-3812
50011004A	LANGLEY STANFIELD ESTATES LLC	2738 E GUADALUPE RD	GILBERT , AZ 85234-8523
500117000			, -
500130010	KZAZ LLC	2172 M AVE	WILLIAMSBURG , IA 52361-1856
50117001F	PBS & SM MIDWAY IV LLC	2776 E VIRGINIA ST	GILBERT , AZ 85296-6899
501700200	KILLIAN C MAX TR	4445 E HOLMES AVE STE 102	MESA , AZ 85206-6339
50115002F	RED RIVER EL DORADO 6500 LLC	7600 E DOUBLETREE RANCH RD STE 300	SCOTTSDALE , AZ 85258-8219
50115002C	RED RIVER EL DORADO 6500 LLC	7600 E DOUBLETREE RANCH RD STE 300	SCOTTSDALE , AZ 85258-8219
50115001G	RED RIVER EL DORADO 6500 LLC	7600 E DOUBLETREE RANCH RD STE 300	SCOTTSDALE , AZ 85258-8219
510560020	JOHNSTON BILL JR	PO BOX 226	MARICOPA , AZ 85139-9013
510560040	PINAL COUNTY	PO BOX 827	FLORENCE , AZ 85132-2301
510560010	JOHNSTON BILL JR	PO BOX 226	MARICOPA , AZ 85139-9013
51048017B	ARIZONA RR RANCHES LLC	MAIL RETURN	, -
51057004A	JOHNSON-MCKINNEY ALICE L REV TRUST	PO BOX 566	STANFIELD , AZ 85172-2161
51057003A	CECIL BECKY JOHNSON FAMILY TRUST	PO BOX 566	STANFIELD , AZ 85172-2161
51057002D	ELECTRICAL DISTRICT NO 3	41630 W LOUIS JOHNSON DR	MARICOPA , AZ 85138-8540
510560030	PINAL COUNTY	PO BOX 827	FLORENCE , AZ 85132-2301
51057002F	ELECTRICAL DISTRICT NO 3	41630 W LOUIS JOHNSON DR	MARICOPA , AZ 85138-8540
51048029M	MARICOPA STANFIELD IRRIG & DRAINAGE	41630 W LOUIS JOHNSON DR	MARICOPA , AZ 85138-8540
51057002E	ARIZONA RR RANCHES LLC	MAIL RETURN	, -
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51048029N	ARIZONA RR RANCHES LLC	MAIL RETURN	, -
51057005A	RED RIVER/EL DORADO 6500 LLC	7600 E DOUBLETREE RANCH RD STE 300	SCOTTSDALE , AZ 85258-8219
51057006B	JOHNSON-MCKINNEY ALICE L REV TRUST	PO BOX 566	STANFIELD , AZ 85172-2161
51057003B	JOHNSON-MCKINNEY ALICE L REV TRUST	PO BOX 566	STANFIELD , AZ 85172-2161
51057006A	ARIZONA RR RANCHES LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
51057005B	ARIZONA RR RANCHES LLC	MAIL RETURN	, -
51048017F	ARIZONA RR RANCHES LLC	MAIL RETURN	, -

51057001F	RED RIVER EL DORADO 6500 LLC	7600 E DOUBLETREE RANCH RD STE 300	SCOTTSDALE , AZ 85258-8219
51048029L	ARIZONA RR RANCHES LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
51048017E	ARIZONA RR RANCHES LLC	MAIL RETURN	, -
51048017H	ARIZONA RR RANCHES LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
510480280	MERIDIAN 80 LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
51048029J	ARIZONA RR RANCHES LLC	MAIL RETURN	, -
51053003E	ARIZONA RR RANCHES LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
51048017K	ARIZONA RR RANCHES LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
51048017J	ARIZONA RR RANCHES LLC	MAIL RETURN	, -
510530020	RED RIVER EL DORADO 6500 LLC	7600 E DOUBLETREE RANCH RD STE 300	SCOTTSDALE , AZ 85258-8219
51053003A	ARIZONA RR RANCHES LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
51053003D	ARIZONA RR RANCHES LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
51048020E	TRES POINTS LLC	15420 E SILVER CREEK CT	GILBERT , AZ 85298-8943
51048016A	ARIZONA RR RANCHES LLC	MAIL RETURN	, -
510540030	ARIZONA RR RANCHES LLC	MAIL RETURN	, -
51054002A	ARIZONA RR RANCHES LLC	MAIL RETURN	, -
51048029L	ARIZONA RR RANCHES LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
51048029L	ARIZONA RR RANCHES LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
51048021D	HAM SUNSET LLC	PO BOX 15662	PHOENIX , AZ 85060-0566
50218006D	NISSAN NORTH AMERICA INC	7815 N WHITE AND PARKER RD	STANFIELD , AZ 85172-2964
51048018A	HAM SUNSET LLC	PO BOX 15662	PHOENIX , AZ 85060-0566
51057001M	DUGAN ANTHONY & JOY LYNN	PO BOX 189	STANFIELD , AZ 85172-2160
51057001L	KAT D LLC	PO BOX 189	STANFIELD , AZ 85172-2160
50023014D	LAKE POWELL INVESTMENT COMPANY	MAIL RETURN	, -
51057001Q	ARIZONA RR RANCHES LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
51048029L	ARIZONA RR RANCHES LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
50023014J	KHAIRUR RAZIQEEN LAND LLC	3314 S IVY WAY	CHANDLER , AZ 85248-8354
50023014K	KHAIRUR RAZIQEEN LAND LLC	3314 S IVY WAY	CHANDLER , AZ 85248-8354
50023014Q	EQUITY TRUST CO CUSTODIAN FBO MOHAMMAD BABAR KHAN IRA	3314 S IVY WAY	CHANDLER , AZ 85248-8354
50023014R	ADAMS ELIZABETH C	704 N BRIDLEGATE DR	GILBERT , AZ 85234-4325
50023014S	ADAMS ELIZABETH C	704 N BRIDLEGATE DR	GILBERT , AZ 85234-4325
50023014T	ADAMS ELIZABETH C	704 N BRIDLEGATE DR	GILBERT , AZ 85234-4325
50023014V	ADAMS ELIZABETH C	704 N BRIDLEGATE DR	GILBERT , AZ 85234-4325
50023014U	ADAMS ELIZABETH C	704 N BRIDLEGATE DR	GILBERT , AZ 85234-4325

51057001S	MARICOPA-STANFIELD IRRIGATION & DRAINAGE DIST	NO ADDRESS GIVEN	, -
51057001R	ELECTRICAL DISTRICT NO 3	41630 W LOUIS JOHNSON DR	MARICOPA , AZ 85138-8540
50023004B	OLDHAM BYRON S & MARCHELLE	1180 MOUNTAIN SPRINGS PKWY	SPRINGVILLE , UT 84663-3300
50023004C	OLDHAME MARK D & ANNA	875 S 400 W	OREM , UT 84058-8673
50023004N	E R PROPERTY VENTURES LLC	150 S ROAD 1 E	CHINO VALLEY , AZ 86323-3646
50023004R	AZ2 INVESTMENTS LLC	4111 E VALLEY AUTO DR STE 103	MESA , AZ 85206-6460
50023004P	GREENBERG YECHIEL	1172 52ND ST	BROOKLYN , NY 11219-9343
50023004Q	VALENZUELA CG LLC	MAIL RETURN	, -
50017006A	MARICOPA-STANFIELD IRRIGATION & DRAINAGE DISTRICT	41630 W LOUIS JOHNSON DR	MARICOPA , AZ 85138-8540
50017006B	RHODES BRIAN SCOTT	PO BOX 11090	CASA GRANDE , AZ 85130-0013
50023013E	GLOBAL STRATEGIC INVESTMENTS LLC	6660 N HIGH ST STE 1E	COLUMBUS , OH 43085-5253
50019004D	MARICOPA-STANFIELD IRRIGATION & DRAINAGE DISTRICT	41630 W LOUIS JOHNSON DR	MARICOPA , AZ 85138-8540
50019004C	STANFIELD 1295 LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
51053001A	SUN STATE TOWERS IV LLC	1426 N MARVIN ST	GILBERT , AZ 85233-3256
51053001B	GREWING LEONARD J	310 W CURRY ST	CHANDLER , AZ 85225-5712
50023013G	GRIMALDO ADRIANA & CHAVEZ JORGE	1236 S PORTLAND AVE	GILBERT , AZ 85296-6890
50023013J	PALLAMREDDY SURESH	3201 S DIAMOND DR	CHANDLER , AZ 85286-6610
50023013H	PALLAMREDDY SURESH	3201 S DIAMOND DR	CHANDLER , AZ 85286-6610
50023014B	SHELBRACK ANITA & TALLARICO ZACHARY	16803 W SENNA CT	SURPRISE , AZ 85387-7757
50023013K	BROOKS DILLON S & SHILO A	255 S KYRENE RD #102	CHANDLER , AZ 85226-6443
50017002A	CHRISTY FAMILY TRUST	6991 W ASHBY DR	PEORIA , AZ 85383-3309
50019002D	MARICOPA STANFIELD IRRIGATION & DRAINAGE DISTRICT	41630 W LOUIS JOHNSON DR	MARICOPA , AZ 85138-8540
50019002C	MARICOPA STANFIELD IRRIGATION & DRAINAGE DISTRICT	41630 W LOUIS JOHNSON DR	MARICOPA , AZ 85138-8540
50019002E	STANFIELD 1295 LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
50023013M	STANFIELD 1295 LLC	1121 W WARNER RD STE 109	TEMPE , AZ 85284-4281
50023013L	MARICOPA-STANFIELD IRRIGATION & DRAINAGE DISTRICT	41630 W LOUIS JOHNSON DR	MARICOPA , AZ 85138-8540
50011020E	THE ROBERT & MARIE HANSEN FOUNDATION	7320 N LA CHOLLA BLVD STE 154-413	TUCSON , AZ 85741-1230
50011020F	MARICOPA STANFIELD IRRIGATION AND DRAINAGE DISTRICT	41630 W LOUIS JOHNSON DR	MARICOPA , AZ 85138-8540

ATTACHMENT B – DRAFT NOTIFICATION LETTER

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LEGAL DESCRIPTION

A PORTION OF SECTIONS 10 THROUGH 15, AND A PORTION OF SECTION 24, TOWNSHIP 7 SOUTH, RANGE 4 EAST OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID SECTION 11;

THENCE ALONG THE NORTH LINE OF SAID SECTION 11, SOUTH 89˚57’54” EAST, A DISTANCE OF 2642.26 FEET TO THE NORTH QUARTER CORNER OF SAID SECTION 11;

THENCE CONTINUING ALONG SAID NORTH LINE, SOUTH 89˚57’49” EAST, A DISTANCE OF 2642.29 FEET TO THE NORTHWEST CORNER OF SAID SECTION 12;

THENCE ALONG THE NORTH LINE OF SAID SECTION 12, NORTH 89˚59’29” EAST, A DISTANCE OF 5285.03 FEETTO THE NORTHEAST CORNER OF LOT 5 OF SAID SECTION 12;

THENCE ALONG THE EAST LINE OF LOTS 5, 8, 17 AND 20 OF SAID SECTION 12, SOUTH 00˚06’23” WEST, A DISTANCE OF 5284.31 FEET TO THE NORTHEAST CORNER OF LOT 5 OF SAID SECTION 13;

THENCE ALONG THE NORTH LINE OF SAID SECTION 13, SOUTH 89˚56’03” EAST, A DISTANCE OF 2641.92 FEET TO THE NORTHEAST CORNER OF LOT 3 OF SAID SECTION 13;

THENCE ALONG THE EAST LINE OF LOTS 3 AND 10 OF SAID SECTION 13, SOUTH 00˚06’16” WEST, A DISTANCE OF 2640.38 FEET TO THE NORTHEAST CORNER OF LOT 15 OF SAID SECTION 13;

THENCE ALONG THE EAST LINE OF LOTS 15 AND 22 OF SAID SECTION 13, SOUTH 00˚05’40” WEST, A DISTANCE OF 2638.53 FEET TO THE SOUTH LINE OF SAID SECTION 13 AND THE NORTHEAST CORNER OF LOT 3 OF SAID SECTION 24;

THENCE ALONG THE EAST LINE OF SAID LOT 3, SOUTH 00˚01’20” EAST, A DISTANCE OF 1318.40 FEET TO THE SOUTHEAST CORNER OF SAID LOT 3;

THENCE ALONG THE SOUTH LINE OF LOTS 3, 4, 5 AND 6 OF SAID SECTION 24, NORTH 89˚59’03” WEST, A DISTANCE OF 5282.72 FEET TO THE SOUTHWEST CORNER OF LOT 6 OF SAID SECTION 24;

THENCE ALONG THE WEST LINE OF SAID LOT 6, NORTH 00˚04’54” EAST, A DISTANCE OF 1320.06 FEET TO THE NORTH QUARTER CORNER OF SAID SECTION 24;

THENCE ALONG THE NORTH LINE OF SAID SECTION 24, NORTH 89˚58’09” WEST, A DISTANCE OF 2636.05 FEET TO THE NORTHWEST CORNER OF SAID SECTION 24;

THENCE ALONG THE SOUTH LINE OF SAID SECTION 14, NORTH 89˚56’33” WEST, A DISTANCE OF 2647.21 FEET TO THE SOUTH QUARTER CORNER OF SAID SECTION 14;

THENCE ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 14, NORTH 00˚03’56” EAST, A DISTANCE OF 2640.42 FEET TO THE CENTER OF SAID SECTION 14;

THENCE ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 14, SOUTH 89˚56’37” EAST, A DISTANCE OF 2643.78 FEET TO THE EAST QUARTER CORNER OF SAID SECTION 14;

THENCE ALONG THE EAST LINE OF SAID SECTION 14, NORTH 00˚02’16” EAST, A DISTANCE OF 2639.94 FEET TO THE NORTHEAST CORNER OF SAID SECTION 14;

THENCE ALONG THE EAST LINE OF SAID SECTION 11, NORTH 00˚05’10” EAST, A DISTANCE OF 866.90 FEET TO THE MEDIAN CENTERLINE OF INTERSTATE 8;

THENCE LEAVING SAID WEST LINE, ALONG SAID MEDIAN CENTERLINE, NORTH 89˚50’49” WEST, A DISTANCE OF 3418.54 FEET;

THENCE SOUTH 00˚04’48” WEST, A DISTANCE OF 871.16 FEET TO THE NORTH LINE OF SAID SECTION 14;

THENCE ALONG SAID NORTH LINE, NORTH 89˚56’22” WEST, A DISTANCE OF 985.45 FEET;

THENCE LEAVING SAID NORTH LINE, SOUTH 00˚04’22” WEST, A DISTANCE OF 663.76 FEET;

THENCE NORTH 89˚56’22” WEST, A DISTANCE OF 881.18 FEET TO THE EAST LINE OF SAID SECTION 15;

THENCE ALONG SAID WEST LINE, SOUTH 00˚04’22” WEST, A DISTANCE OF 1980.13 FEET TO THE EAST QUARTER CORNER OF SAID SECTION 15;

THENCE ALONG THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 15, NORTH 89˚50’25” WEST, A DISTANCE OF 2637.84 FEET TO THE CENTER OF SAID SECTION 15;

THENCE ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 15, NORTH 00˚02’28” EAST, A DISTANCE OF 2638.80 FEET TO THE NORTH QUARTER CORNER OF SAID SECTION 15;

THENCE ALONG THE NORTH LINE OF SAID SECTION 15, SOUTH 89˚52’28” EAST, A DISTANCE OF 2639.29 FEET TO THE NORTHEAST CORNER OF SAID SECTION 15;

THENCE ALONG THE EAST LINE OF SAID SECTION 10, NORTH 00˚03’58” EAST, A DISTANCE OF 2637.45 FEET TO THE EAST QUARTER CORNER OF SAID SECTION 10;

THENCE CONTINUING ALONG SAID EAST LINE, NORTH 00˚06’03” EAST, A DISTANCE OF 1320.50 FEET;

THENCE LEAVING SAID EAST LINE, NORTH 89˚47’13” WEST, A DISTANCE OF 2637.31 FEET TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 10;

THENCE NORTH 89˚52’35” WEST, A DISTANCE OF 329.82 FEET;

THENCE NORTH 00˚04’12” EAST, A DISTANCE OF 1320.73 FEET TO THE NORTH LINE OF SAID SECTION 10;

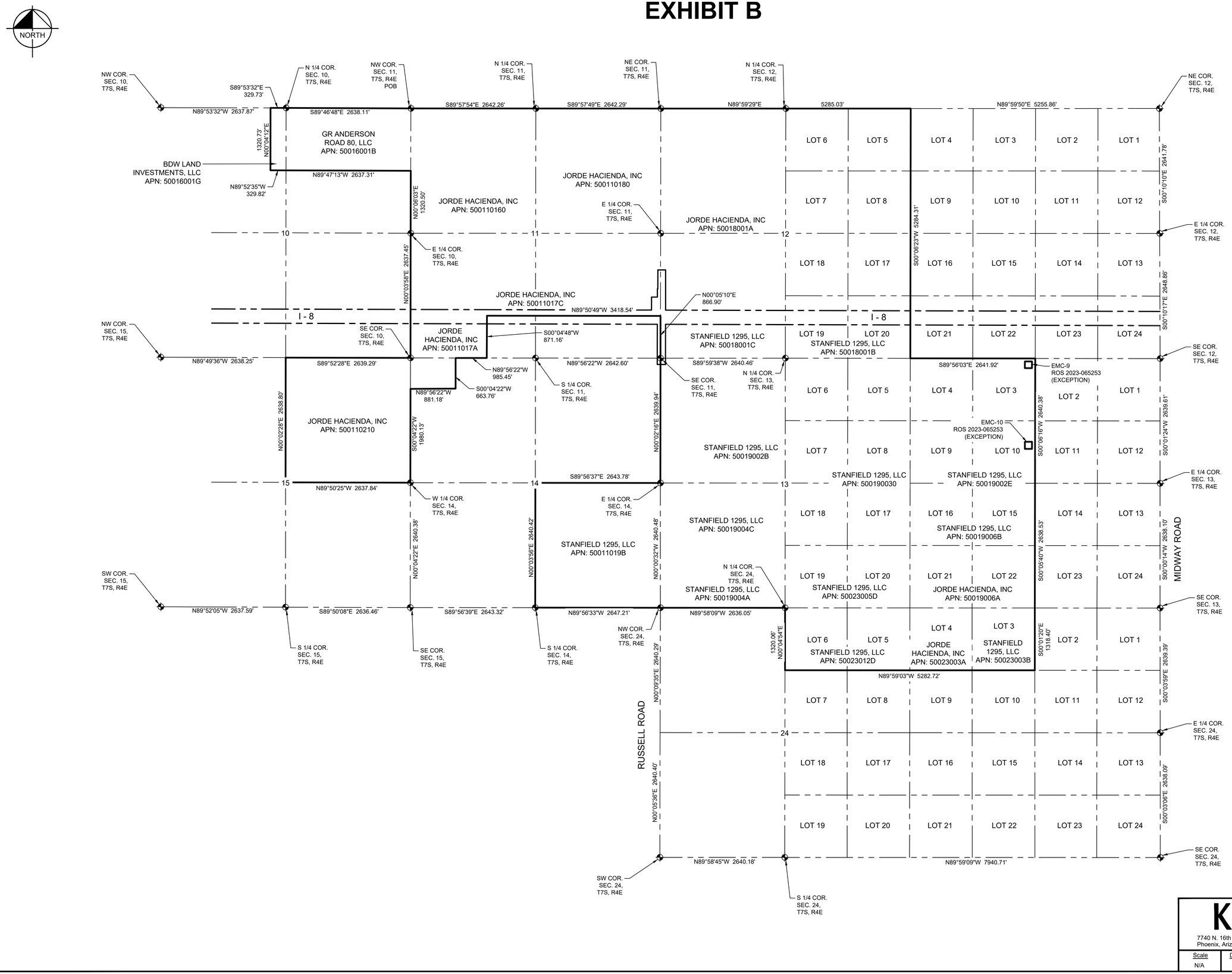
THENCE ALONG SAID NORTH LINE, SOUTH 89˚53’32” EAST, A DISTANCE OF 329.73 FEET TO THE NORTH QUARTER CORNER OF SAID SECTION 10;

THENCE CONTINUING ALONG SAID NORTH LINE, SOUTH 89˚46’48” EAST, A DISTANCE OF 2638.11 FEET TO THE POINT OF BEGINNING.

EXCEPT THEREFROM ANY PORTION OF THE ABOVE DESCRIBED PARCEL WITHIN THE ARIZONA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY FOR INTERSTATE 8 AS SHOWN ON THE RIGHT-OF-WAY PLAN FOR THE YUMA-CASA GRANDE STATE HIGHWAY PROJECT NO. I-8-2(33)162, MAP NO. D-11-T-399.

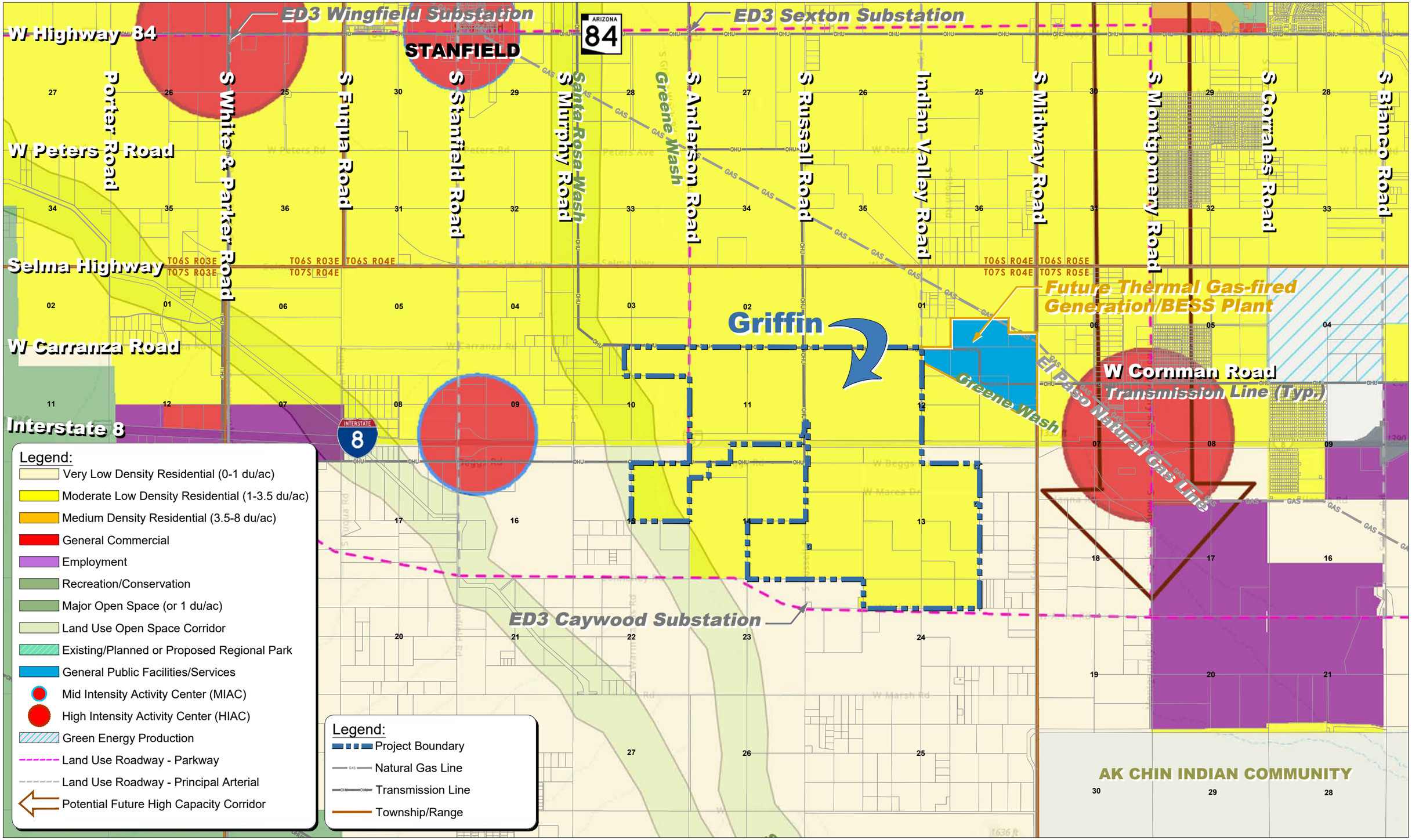
ALSO EXCEPTING ANY PORTION OF EMC-9 AND EMC-10 AS SHOWN ON THE RECORD OF SURVEY RECORDED IN FEE NUMBER 2023-065253, RECORDS OF PINAL COUNTY, ARIZONA.

EXHIBIT B



Kimley»Horn
7740 N. 16th Street, Suite 300
Phoenix, Arizona 85020
Tel. No. (602) 837-5511

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
N/A	CWH	CWH	05/29/2025	291565066	1 OF 1



Kimley»Horn

Griffin Energy Project

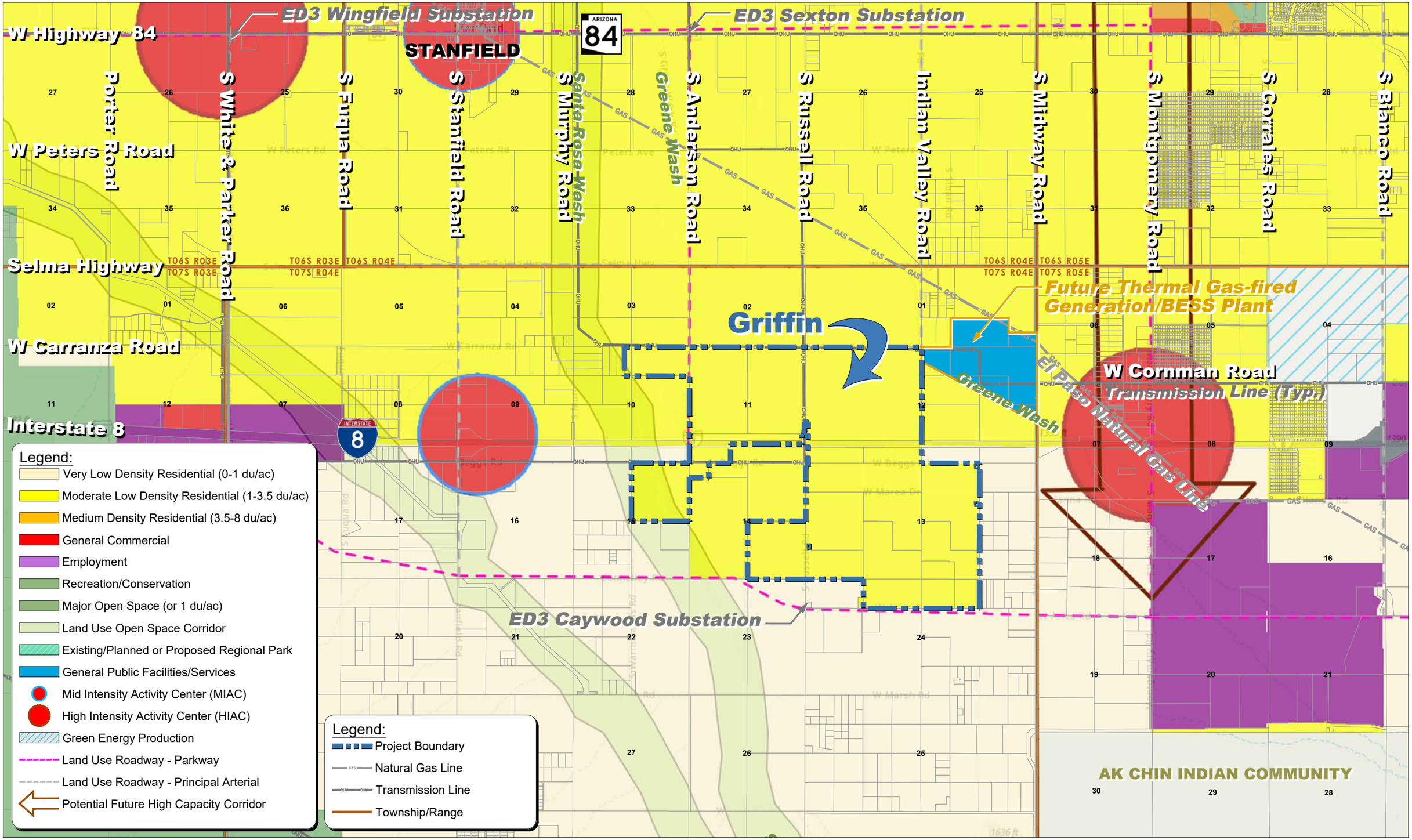
EXISTING COMPREHENSIVE PLAN LAND USE MAP - PINAL COUNTY, AZ

2025.05.19

0 2,000' 4,000' 6,000'

DRAWN BY: JK SCALE: APPROX.

NORTH



Kimley»Horn

Griffin Energy Project

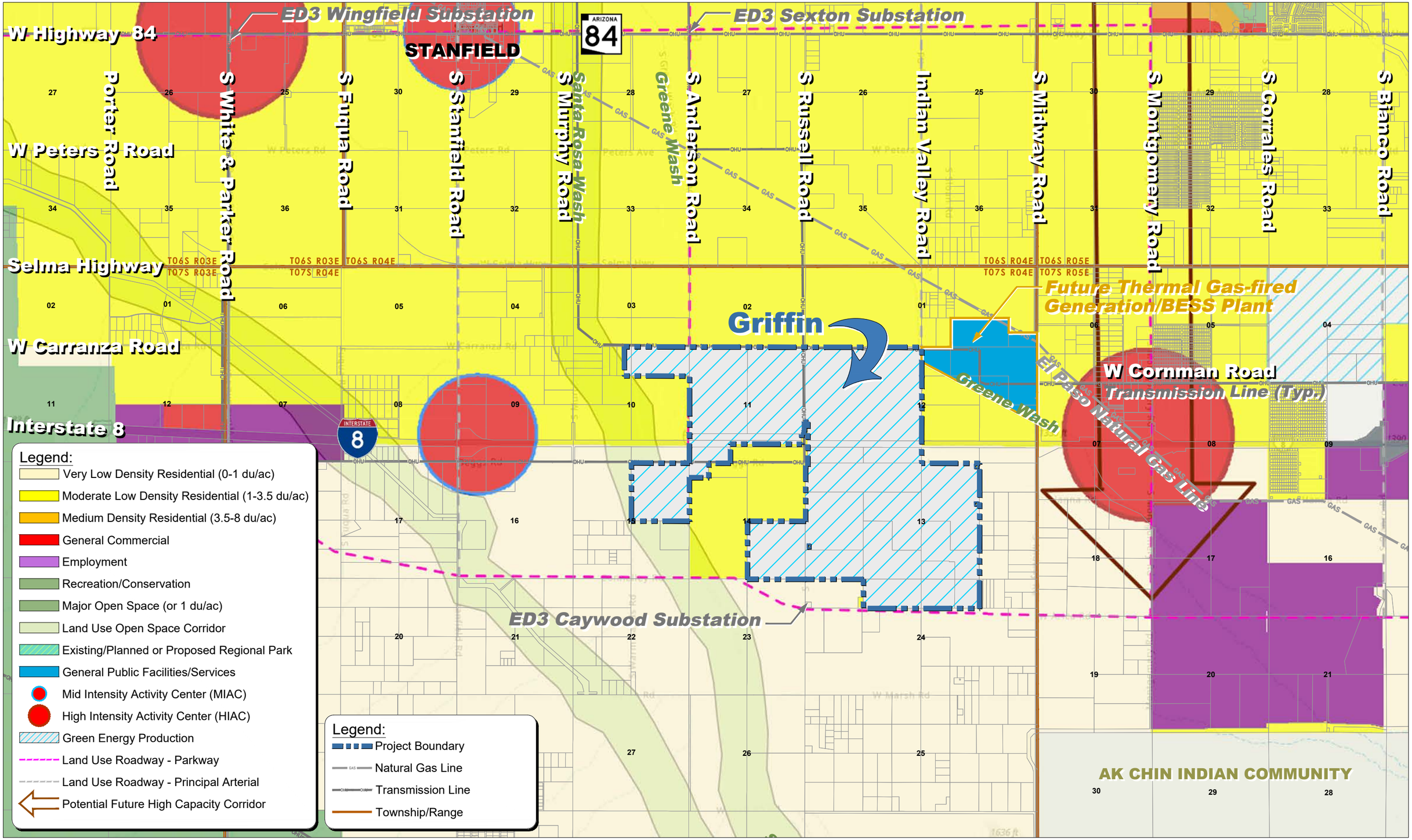
EXISTING COMPREHENSIVE PLAN LAND USE MAP - PINAL COUNTY, AZ

2025.05.19

0 2,000' 4,000' 6,000'

DRAWN BY: JK SCALE: APPROX.

NORTH



Kimley»Horn

Griffin Energy Project

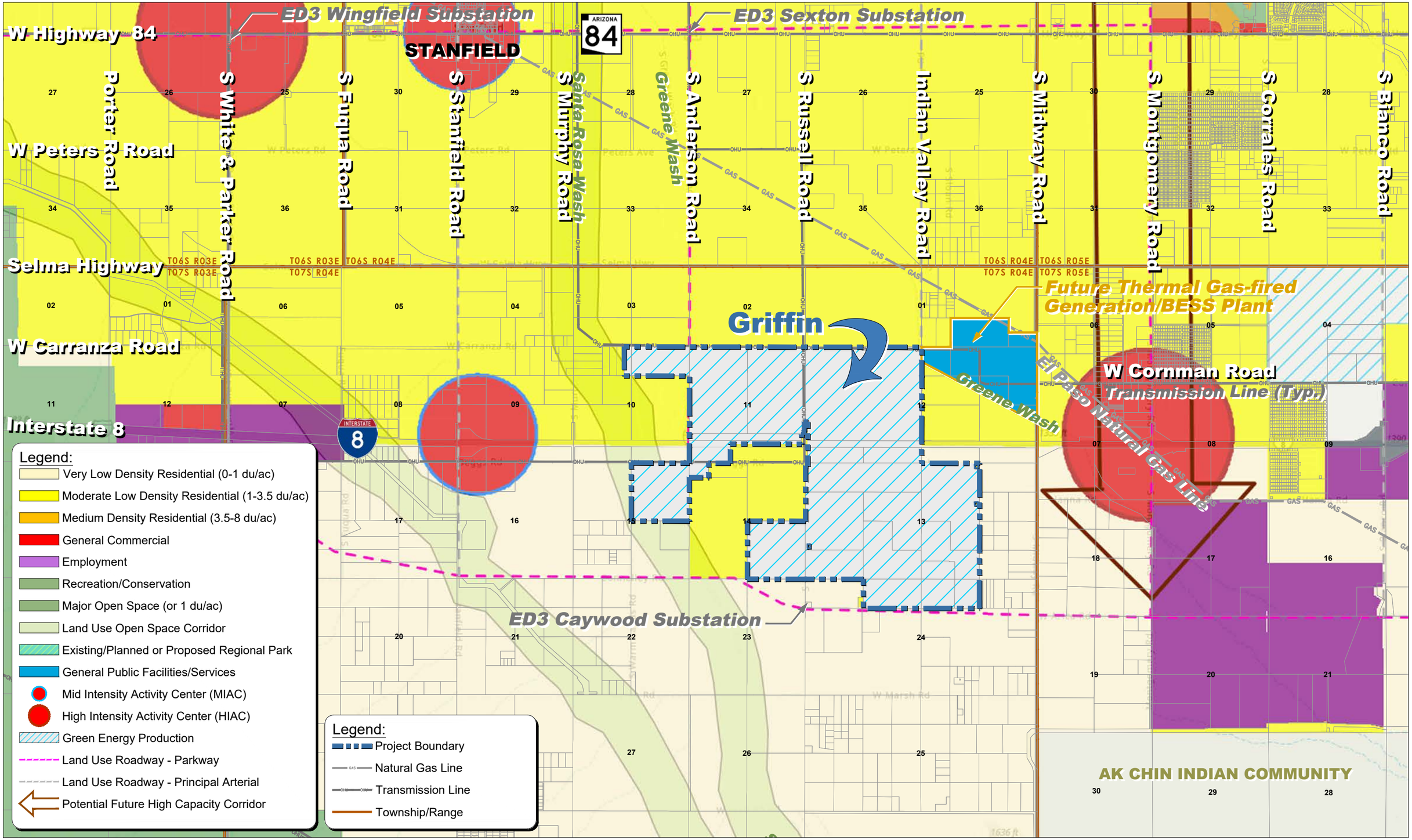
PROPOSED COMPREHENSIVE PLAN LAND USE MAP - PINAL COUNTY, AZ

2025.05.19

0 2,000' 4,000' 6,000'

DRAWN BY: JK SCALE: APPROX.

NORTH



Kimley»Horn

Griffin Energy Project

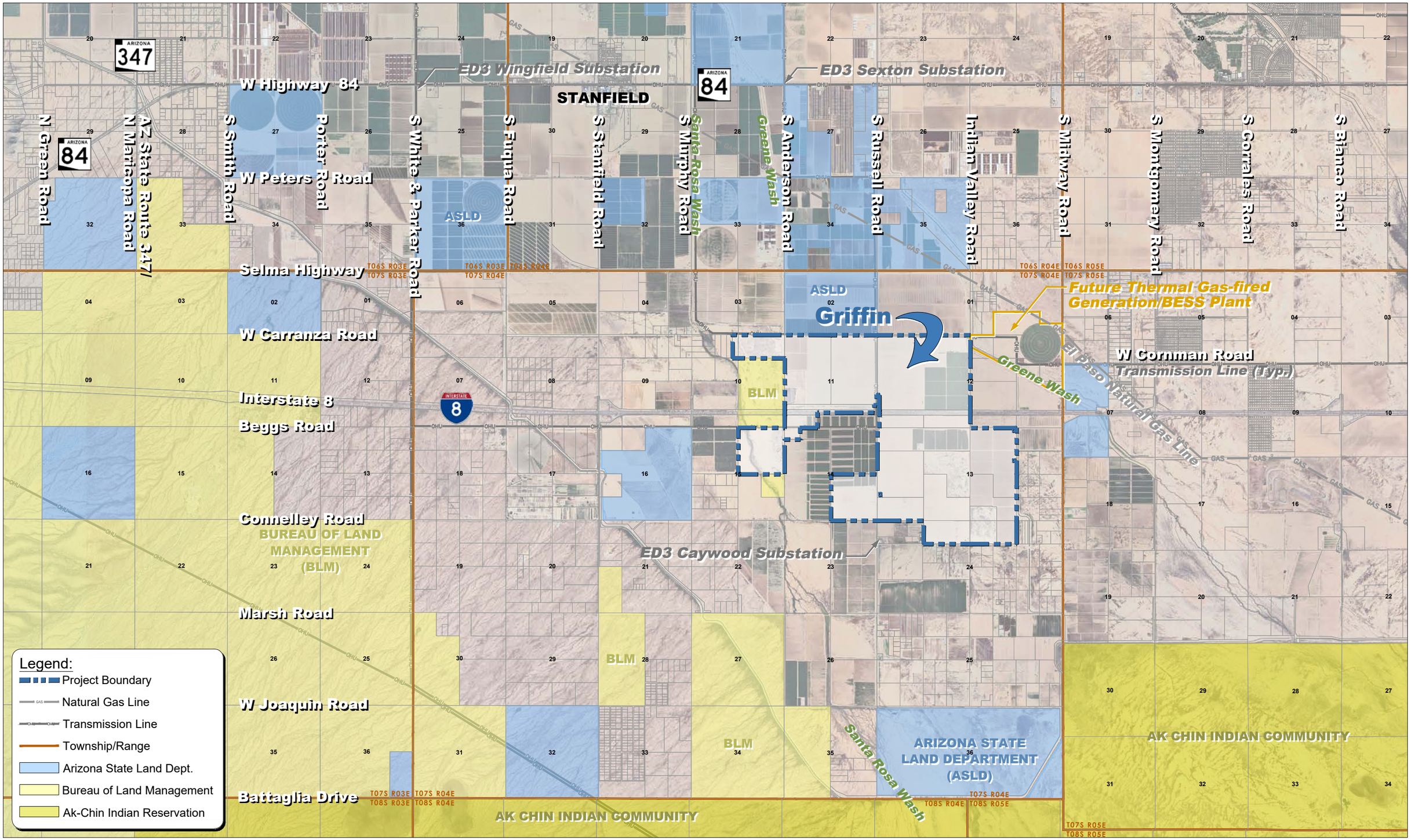
PROPOSED COMPREHENSIVE PLAN LAND USE MAP - PINAL COUNTY, AZ

2025.05.19

0 2,000' 4,000' 6,000'

DRAWN BY: JK SCALE: APPROX.

NORTH



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Griffin Energy Project

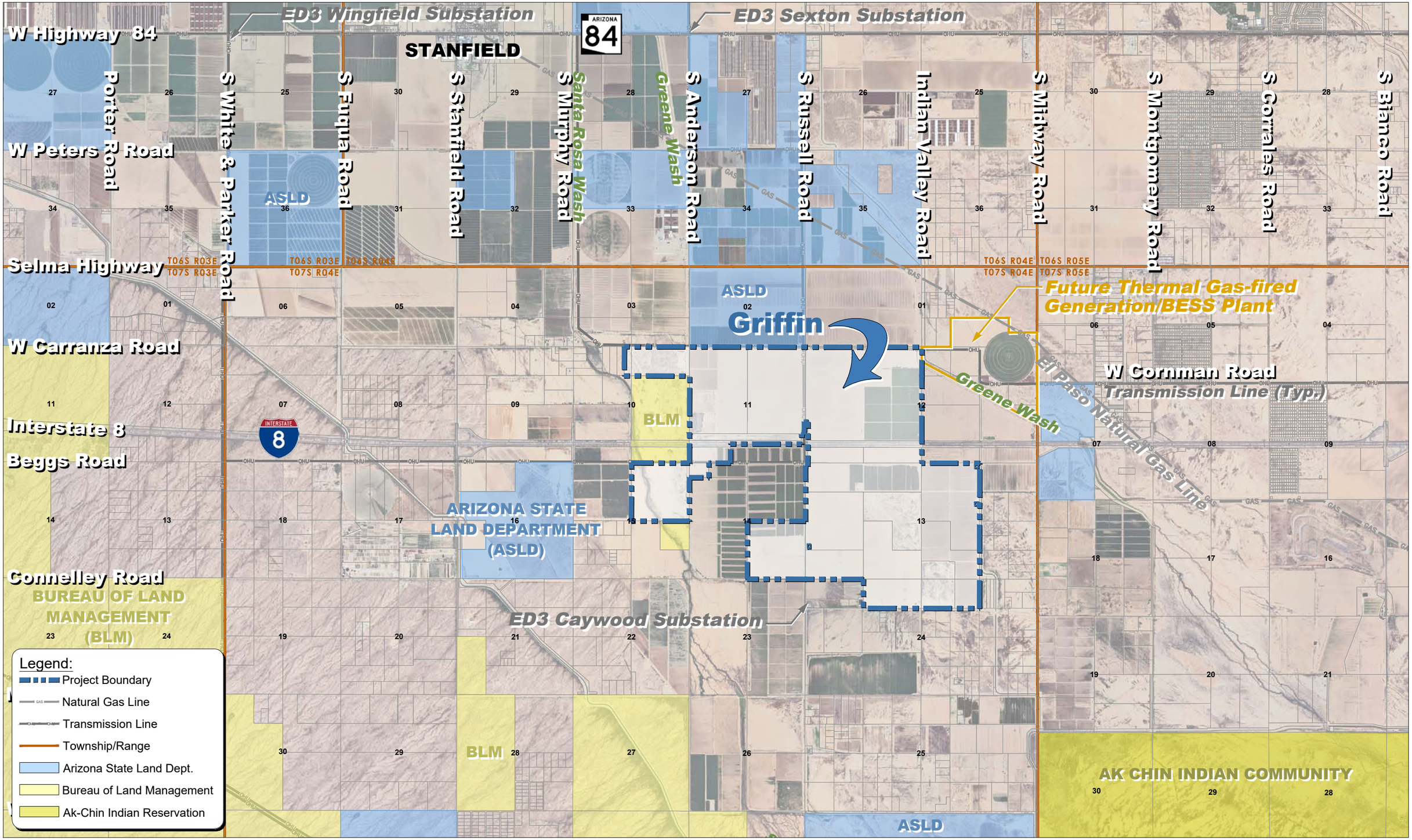
REGIONAL AERIAL PARCEL MAP - PINAL COUNTY, AZ

2025.04.18

0 2,500' 5,000' 7,500'

DRAWN BY: JK SCALE: APPROX.

NORTH



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CONTEXT AERIAL PARCEL MAP - PINAL COUNTY, AZ

2025.05.19

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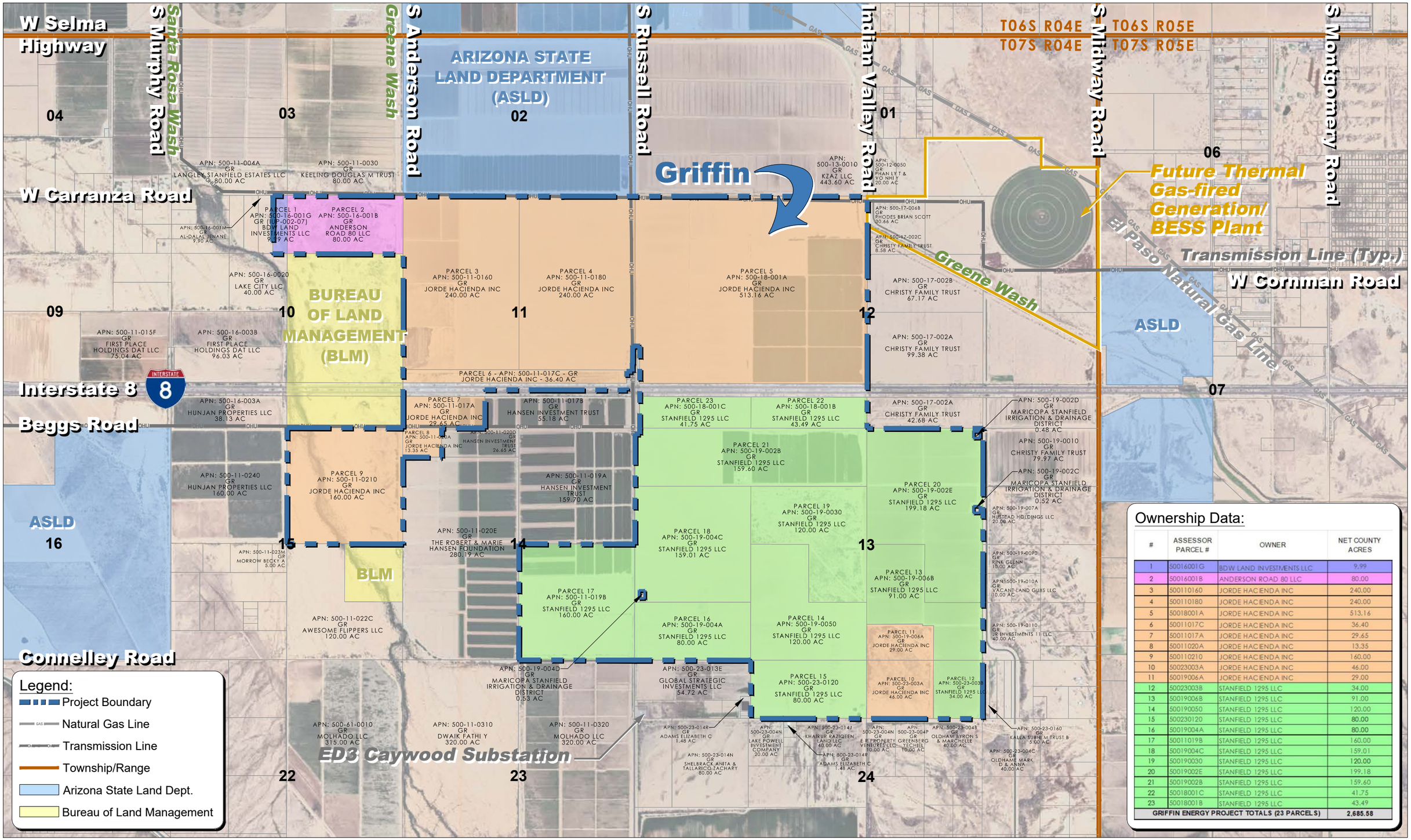
DRAWN BY: JK SCALE: APPROX.

NORTH



Ownership Data:

#	ASSESSOR PARCEL #	OWNER	NET COUNTY ACRES
1	50016001G	BDW LAND INVESTMENTS LLC	9.99
2	50016001B	ANDERSON ROAD 80 LLC	80.00
3	50011016O	JORDE HACIENDA INC	240.00
4	50011018O	JORDE HACIENDA INC	240.00
5	50018001A	JORDE HACIENDA INC	513.16
6	50011017C	JORDE HACIENDA INC	36.40
7	50011017A	JORDE HACIENDA INC	29.65
8	50011020A	JORDE HACIENDA INC	13.35
9	50011021O	JORDE HACIENDA INC	160.00
10	50023003A	JORDE HACIENDA INC	46.00
11	50019006A	JORDE HACIENDA INC	29.00
12	50023003B	STANFIELD 1295 LLC	34.00
13	50019006B	STANFIELD 1295 LLC	91.00
14	50019005O	STANFIELD 1295 LLC	120.00
15	50023012O	STANFIELD 1295 LLC	80.00
16	50019004A	STANFIELD 1295 LLC	80.00
17	50011019B	STANFIELD 1295 LLC	160.00
18	50019004C	STANFIELD 1295 LLC	159.01
19	50019003O	STANFIELD 1295 LLC	120.00
20	50019002E	STANFIELD 1295 LLC	199.18
21	50019002B	STANFIELD 1295 LLC	159.60
22	50018001C	STANFIELD 1295 LLC	41.75
23	50018001B	STANFIELD 1295 LLC	43.49
GRIFFIN ENERGY PROJECT TOTALS (23 PARCELS)			2,685.58

Legend:
- Project Boundary
- Natural Gas Line
- Transmission Line
- Township/Range
- Arizona State Land Dept.
- Bureau of Land Management

Kimley»Horn

Griffin Energy Project

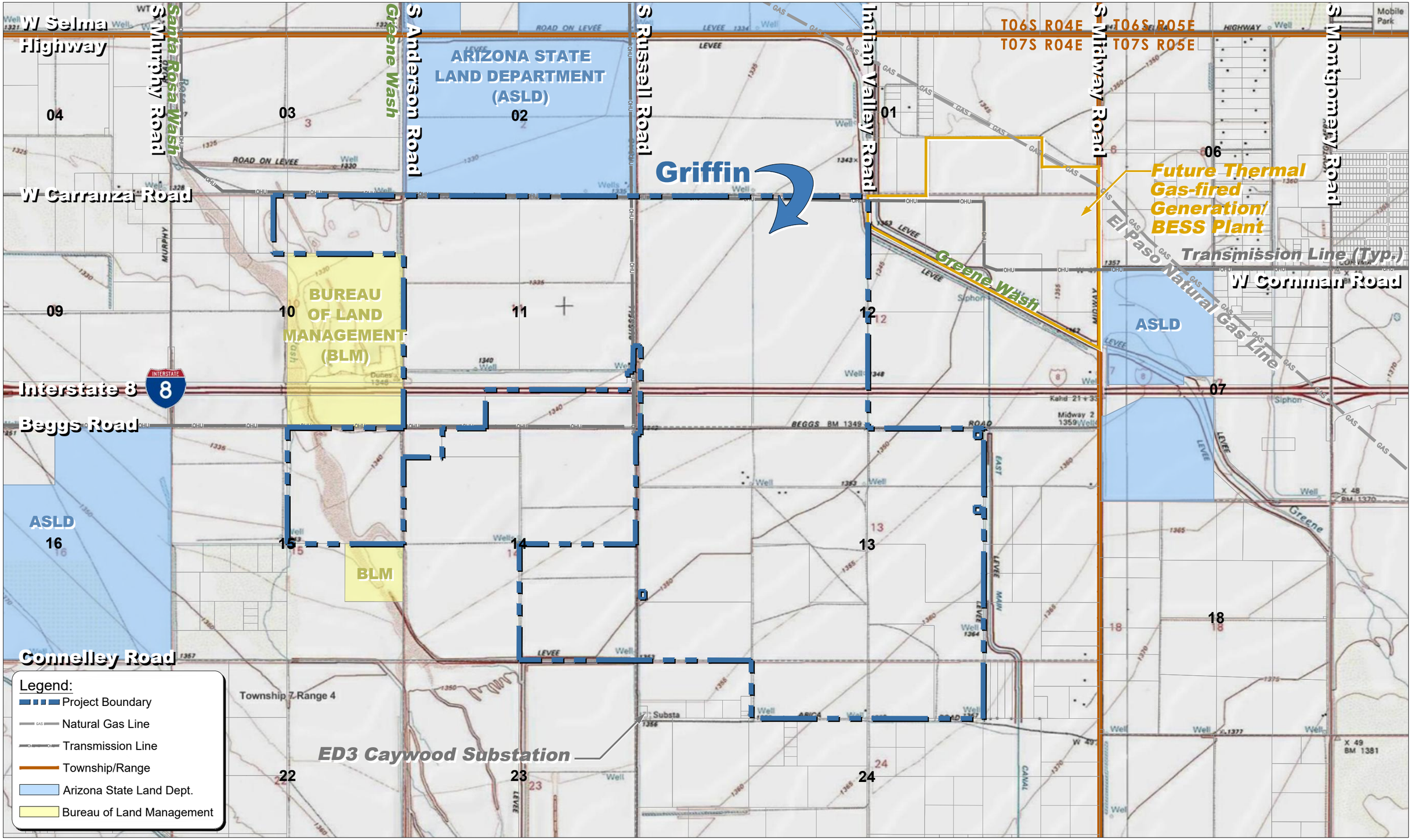
OWNERSHIP PARCEL MAP - PINAL COUNTY, AZ

2025.05.19

0 1,000' 2,000' 3,000'

DRAWN BY: JK SCALE: APPROX.

NORTH



Kimley»Horn

Griffin Energy Project

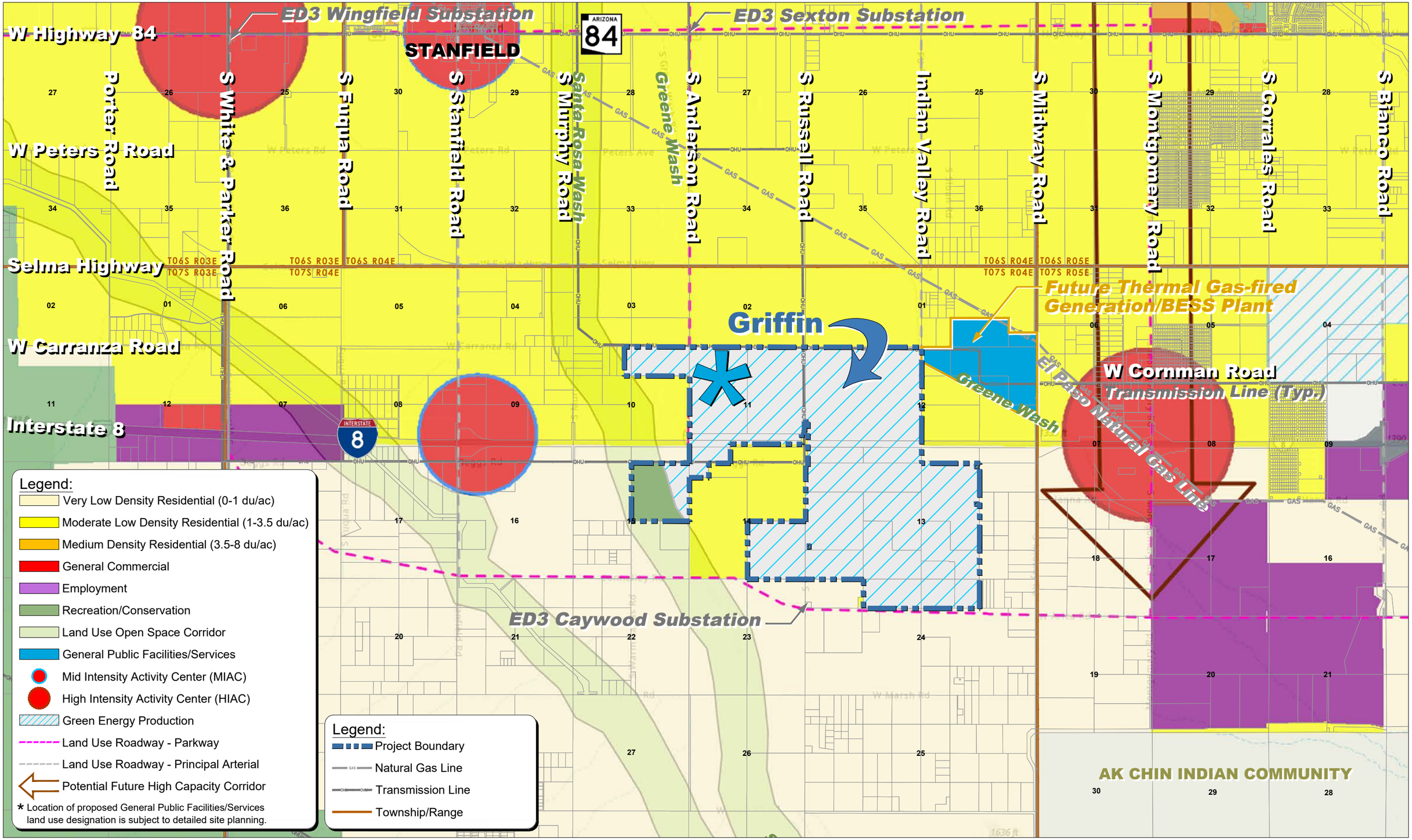
TOPOGRAPHY MAP - PINAL COUNTY, AZ

2025.05.19

0 1,000' 2,000' 3,000'

DRAWN BY: JK SCALE: APPROX.

NORTH



Kimley»Horn

Griffin Energy Project

PROPOSED COMPREHENSIVE PLAN LAND USE MAP - PINAL COUNTY, AZ

2025.07.22

0 2,000' 4,000' 6,000'

DRAWN BY: JK SCALE: APPROX.

NORTH

Arizona Environmental Online Review Tool Report

Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department requests further coordination to provide project/species specific recommendations. Please use the Project Evaluation Form to submit your project to the Project Evaluation Program at PEP@azgfd.gov.

Project Name:
Griffin Energy Project

Project Type:
Energy Production/Storage/Transfer, Energy Production (generation), photovoltaic solar facility (new/expansion)

Project ID:
HGIS-25263

Project Description:
Griffin Energy Project - Pinal County AZ

Contact Person:
Justin Kinkade

Organization:
Kimley-Horn

On Behalf Of:
PINAL

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. Arizona Wildlife Conservation Strategy (AWCS), specifically Species of Greatest Conservation Need (SGCN), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

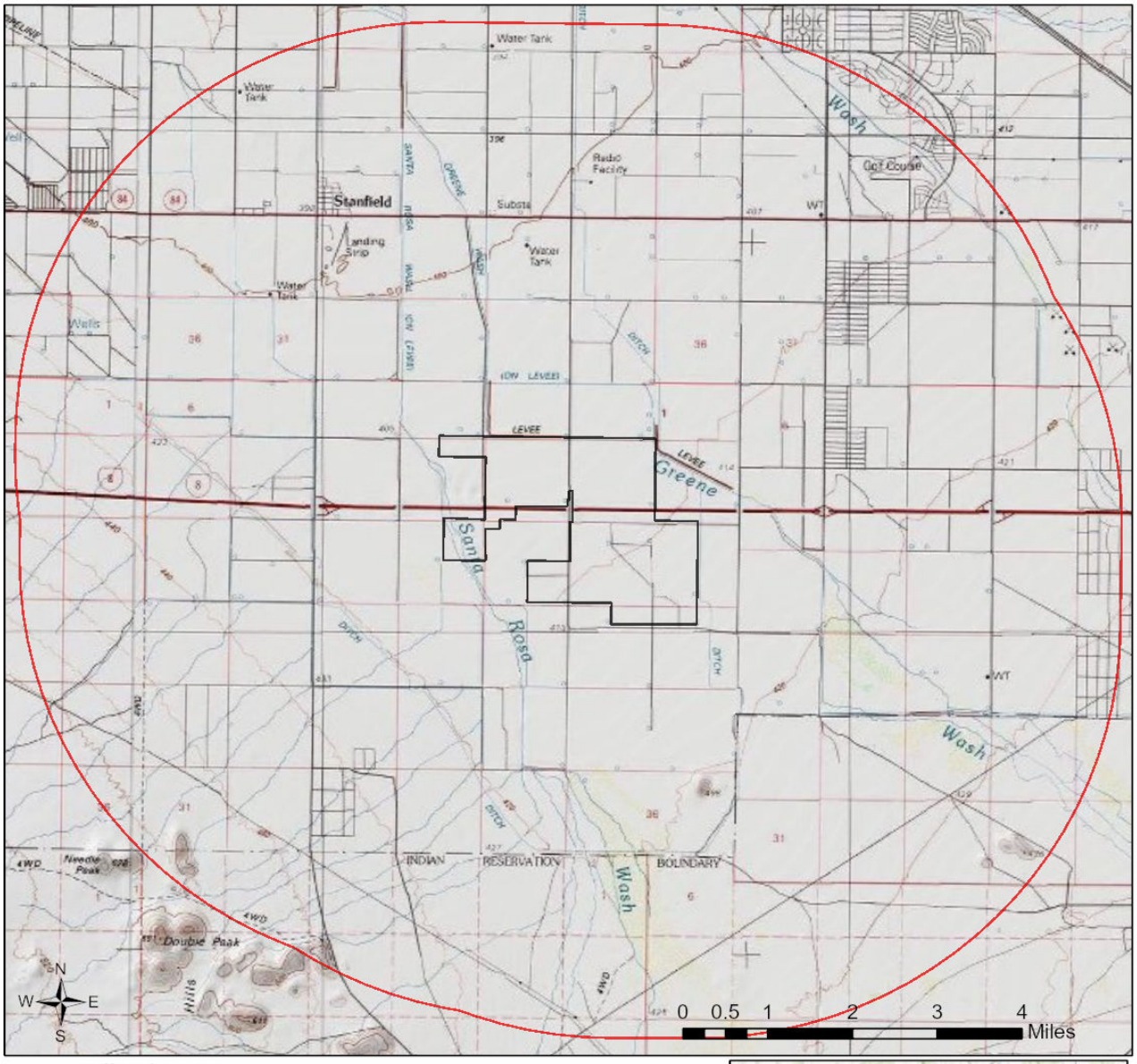
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies.

Griffin Energy Project

USA Topo Basemap With Locator Map



Buffered Project Boundary

Project Boundary

Project Size (acres): 2,752.35

Lat/Long (DD): 32.8252 / -111.9087

County(s): Pinal

AGFD Region(s): Mesa

Township/Range(s): T7S, R4E

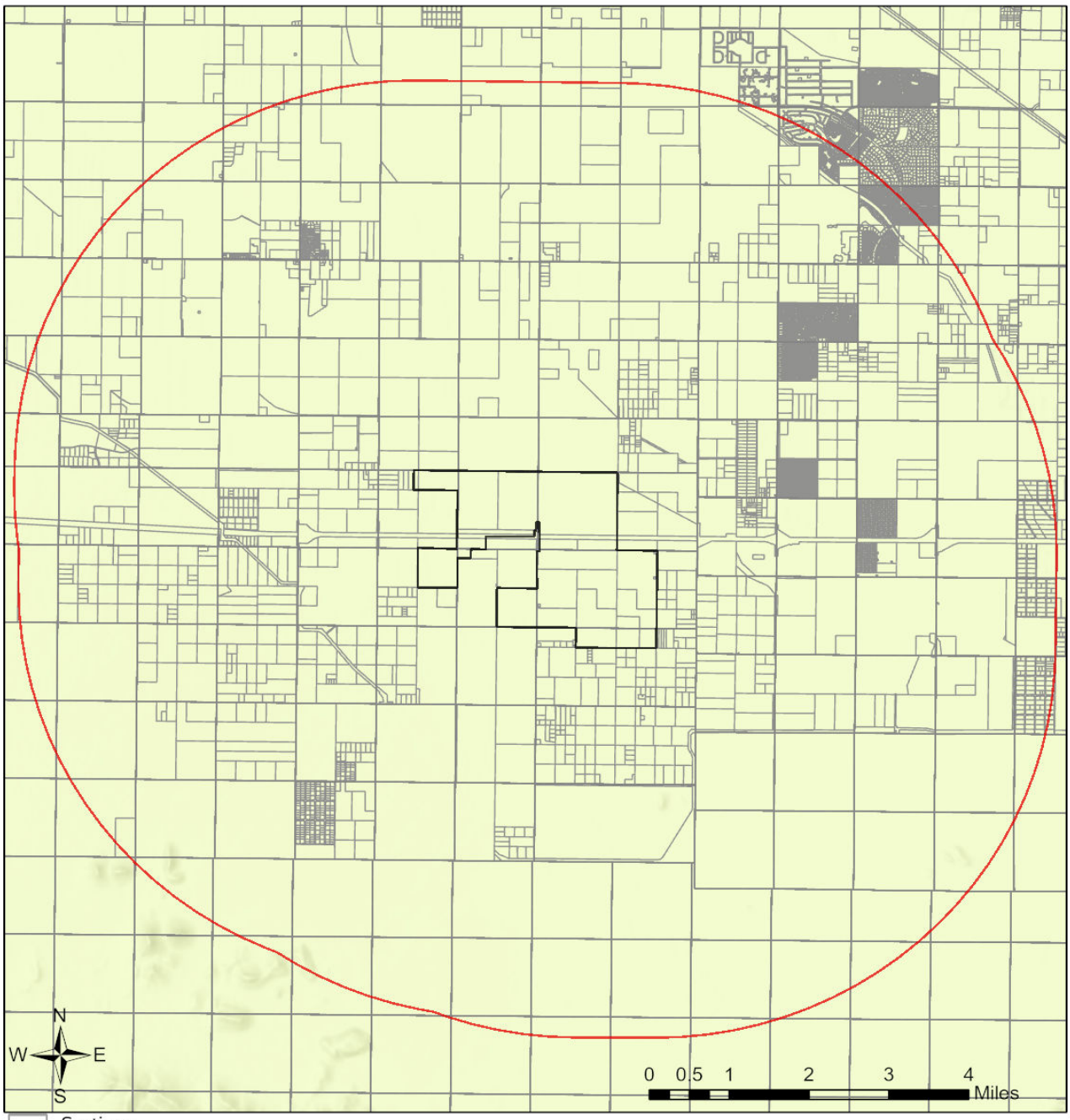
USGS Quad(s): DOUBLE PEAK



County of Yavapai, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Copyright:© 2013 National Geographic Society, i-cubed
Esri, USGS

Griffin Energy Project

Web Map As Submitted By User



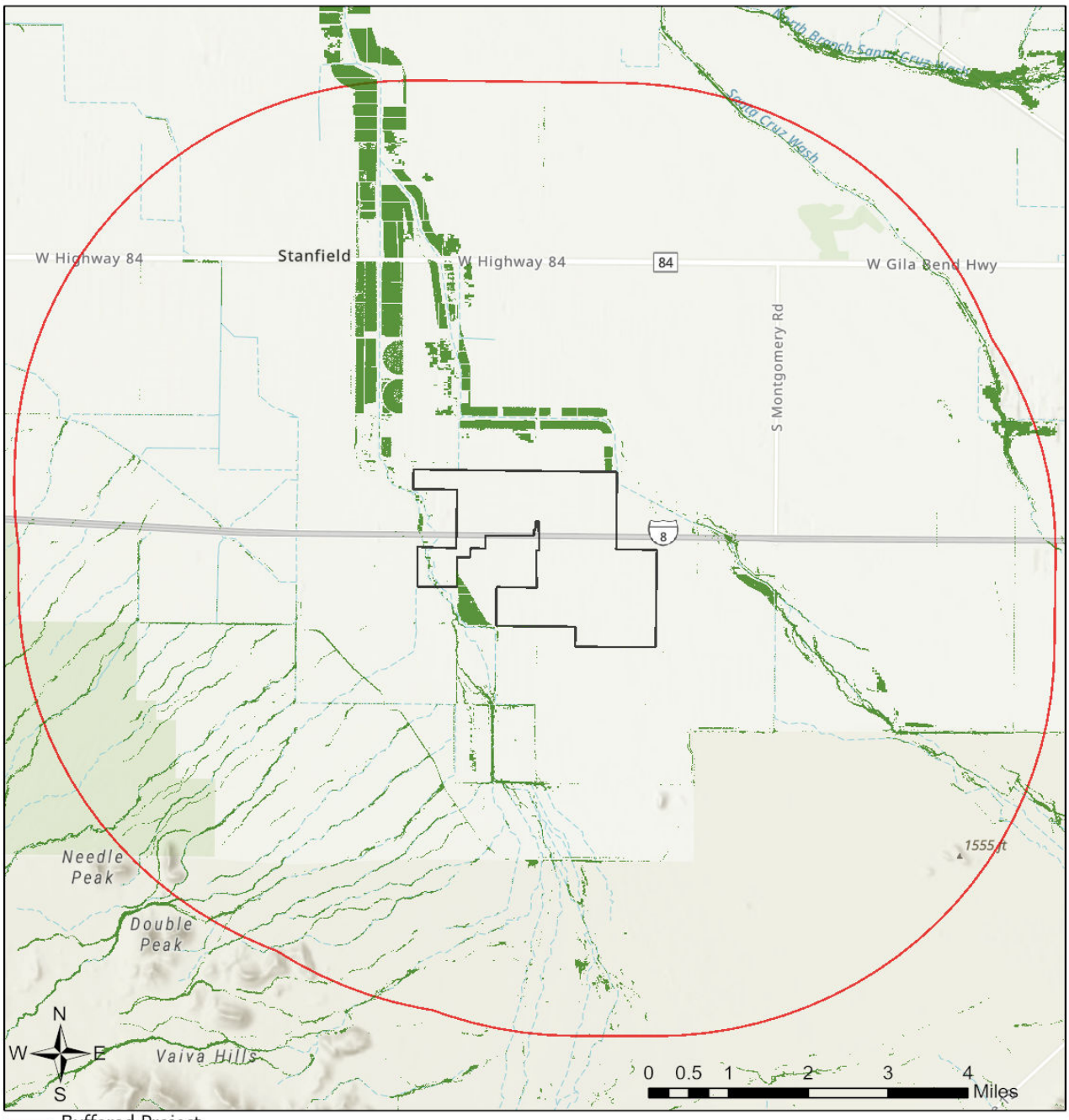
Sections
TaxParcel
Buffered Project Boundary
Project Boundary

Project Size (acres): 2,752.35
Lat/Long (DD): 32.8252 / -111.9087
County(s): Pinal
AGFD Region(s): Mesa
Township/Range(s): T7S, R4E
USGS Quad(s): DOUBLE PEAK

Esri, NASA, NGA, USGS

Griffin Energy Project

Important Areas



- Buffered Project Boundary
- Project Boundary
- Important Bird Areas
- Critical Habitat
- Pinal County Riparian
- Wildlife Connectivity

Project Size (acres): 2,752.35

Lat/Long (DD): 32.8252 / -111.9087

County(s): Pinal

AGFD Region(s): Mesa

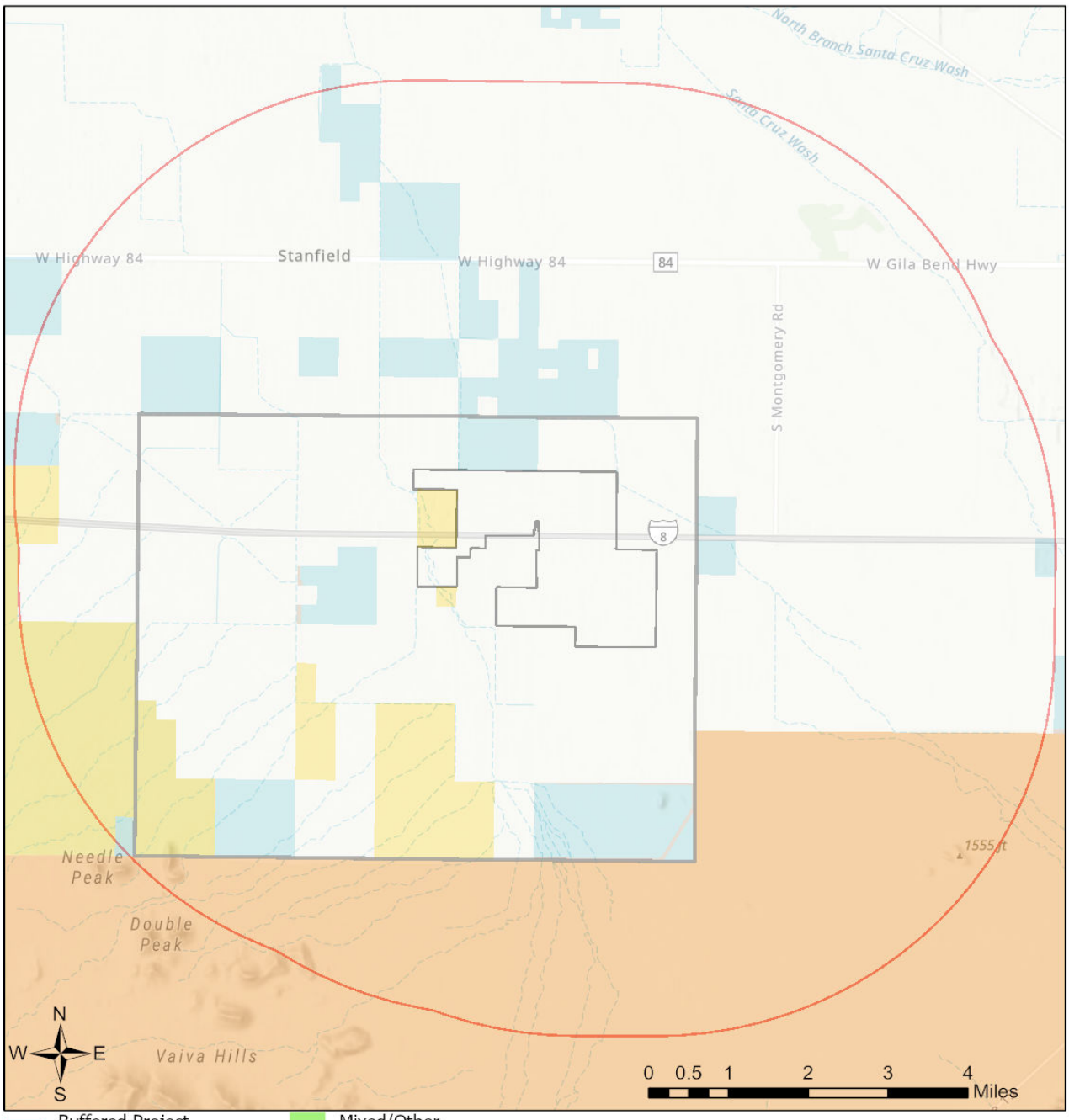
Township/Range(s): T7S, R4E

USGS Quad(s): DOUBLE PEAK

Esri, NASA, NGA, USGS
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

Griffin Energy Project

Township/Ranges and Land Ownership



- Buffered Project Boundary
- Project Boundary
- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State & Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge
- Township/Ranges

Project Size (acres): 2,752.35

Lat/Long (DD): 32.8252 / -111.9087

County(s): Pinal

AGFD Region(s): Mesa

Township/Range(s): T7S, R4E

USGS Quad(s): DOUBLE PEAK

Esri, NASA, NGA, USGS
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

Special Status Species Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Antilocapra americana sonoriensis	Sonoran Pronghorn	LE,XN		S		1
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		2
Falco sparverius	American Kestrel					2
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1
Incilius alvarius	Sonoran Desert Toad					2
Lepus alleni	Antelope Jackrabbit					2
Mammillaria thornberi	Thornber Fishhook Cactus				SR	
Toxostoma bendirei	Bendire's Thrasher					2

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Gila River to Lake St. Claire	Pinal County Wildlife Movement Area - Riparian/Wash					
Greene Wash and Reservoir	Pinal County Wildlife Movement Area - Riparian/Wash					
Riparian Area	Riparian Area					

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Anaxyrus retiformis	Sonoran Green Toad			S		2
Anthus spragueii	Sprague's Pipit					2
Aquila chrysaetos	Golden Eagle	BGA		S		2
Artemisiospiza nevadensis	Sagebrush Sparrow					3
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Auriparus flaviceps	Verdin					2
Buteo regalis	Ferruginous Hawk			S		2
Buteo swainsoni	Swainson's Hawk					2
Calcarius ornatus	Chestnut-collared Longspur					2
Calypte costae	Costa's Hummingbird					2
Campylorhynchus brunneicapillus	Cactus Wren					2
Catharus ustulatus	Swainson's Thrush					2
Charadrius montanus	Mountain Plover					2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Colaptes chrysoides	Gilded Flicker			S		2
Columbina inca	Inca Dove					2
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat		S	S		1
Cynanthus latirostris	Broad-billed Hummingbird		S			2
Empidonax wrightii	Gray Flycatcher					2
Eumops perotis californicus	Greater Western Bonneted Bat			S		2
Falco mexicanus	Prairie Falcon					2
Falco peregrinus anatum	American Peregrine Falcon		S	S		1
Falco sparverius	American Kestrel					2
Gastrophryne mazatlanensis	Sinoloan Narrow-mouthed Toad			S		2
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1
Icterus bullockii	Bullock's Oriole					2
Incilius alvarius	Sonoran Desert Toad					2
Lanius ludovicianus	Loggerhead Shrike					2
Lasiurus cinereus	Hoary Bat					2
Lasiurus frantzii	Desert Red Bat		S			2
Lasiurus xanthinus	Western Yellow Bat		S			2
Lepus alleni	Antelope Jackrabbit					2
Macrotus californicus	California Leaf-nosed Bat			S		2
Megascops kennicottii	Western Screech-owl					2
Melanerpes uropygialis	Gila Woodpecker					2
Melospiza lincolnii	Lincoln's Sparrow					2
Micrathene whitneyi	Elf Owl					3
Myotis velifer	Cave Myotis			S		2
Myotis yumanensis	Yuma Myotis					2
Neotamias cinereicollis	Gray-collared Chipmunk					2
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					2
Parabuteo unicinctus	Harris's Hawk					2
Passerculus sandwichensis	Savannah Sparrow					2
Perognathus amplus	Arizona Pocket Mouse					2
Peucaea carpalis	Rufous-winged Sparrow					2
Phrynosoma solare	Regal Horned Lizard					2
Pooecetes gramineus	Vesper Sparrow					2
Rana yavapaiensis	Lowland Leopard Frog		S	S		1
Smilisca fodiens	Lowland Burrowing Treefrog			S		2
Spizella breweri	Brewer's Sparrow					2
Tadarida brasiliensis	Brazilian Free-tailed Bat					2
Toxostoma bendirei	Bendire's Thrasher					2
Toxostoma lecontei	LeConte's Thrasher			S		2

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Energy Production/Storage/Transfer, Energy Production (generation), photovoltaic solar facility (new/expansion)

Project Type Recommendations:
During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and it is important to identify and conserve upland wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife species. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations. The AZGFD recommends using only the minimum amount of light needed for safety, especially in areas immediately adjacent to open space or undeveloped lands. The AZGFD encourages the use of motion sensing lighting and narrow spectrum lighting (amber or warm tones typically 2700 Kelvin or lower) wherever possible to lower the range of species affected by lighting. Also, please consider shielding, canting, or cutting all lighting, where possible, to ensure that light reaches only areas needing illumination and to minimize impacts to nocturnal wildlife.

Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at https://www.invasivespeciesinfo.gov/ and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control these species. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at https://imap.natureserve.org/imap/services/page/map.html.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select “See What’s Here” for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

Evaluate potential impacts to wildlife and fish species due to changes in access to water, water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods). Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing the project to minimize impacts to spawning fish and other aquatic species. Wash, drain, and dry equipment to reduce the spread of exotic invasive species. AZGFD recommends early coordination with the Project Evaluation Program (PEP@azgfd.gov) for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The AZGFD recommends that wildlife surveys are conducted to determine if noise-sensitive species, such as birds or mammals, occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

The AZGFD recommends following the Avian Power Line Interaction Committee (APLIC) guidelines for new power lines, which can be found in the current version of *Suggested Practices for Avian Protection on Power Lines and Reducing Avian Collisions with Power Lines*. Large bodied birds, such as hawks, owls, vultures, and eagles, may be vulnerable to line strikes and electrocution during construction and operation of power lines and substations; power poles can also serve as perches for large-bodied birds. These potential impacts can be avoided or minimized by following the APLIC guidelines which include designing the power lines with enough space between energized components to reduce the likelihood of a bird electrocution or installing bird flight diverters in sections of line where elevated bird strikes are anticipated (e.g. lines over water bodies or in the path of colonial roosting locations). The AZGFD's Raptor Coordinator, who can be contacted at raptors@azgfd.gov or 623-236-7575, can provide further information on specific design features and best management practices.

The AZGFD recommends that a qualified biologist conduct a survey for nesting birds within the project area prior to removal or trimming of trees/vegetation, if the removal or trimming occurs during the breeding season (the Project Evaluation Program can be contacted at PEP@azgfd.gov or 623-236-7600 to determine the appropriate breeding season within the project area). Trees and/or vegetation within the project area may provide nesting opportunities for avian species that are regulated under the Migratory Bird Treaty Act (MBTA) and protected under state law. If it is anticipated the project will not be in compliance with MBTA, the AZGFD recommends contacting the U.S. Fish and Wildlife Service (https://www.fws.gov/office/arizona-ecological-services) for technical assistance. The USFWS will provide options to comply with the MBTA.

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.

Project Location and/or Species Recommendations:
HDMS records indicate that one or more native plants listed on the **Arizona Native Plant Law and Antiquities Act** have been documented within the vicinity of your project area. Please contact:
Arizona Department of Agriculture
1688 W Adams St.
Phoenix, AZ 85007
Phone: 602.542.4373
https://agriculture.az.gov/sites/default/files/Native%20Plant%20Rules%20-%20AZ%20Dept%20of%20Ag.pdf starts on page 44

Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat connectivity feature***. The **County-level Stakeholder Assessments** contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-identifying-corridors/. Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

HDMS records indicate that one or more **Listed, Proposed, or Candidate** species or **Critical Habitat** (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at https://www.fws.gov/office/arizona-ecological-services or:

Phoenix Main Office
9828 North 31st Avenue #C3
Phoenix, AZ 85051-2517
Phone: 602-242-0210
Fax: 602-242-2513

Tucson Sub-Office
201 N. Bonita Suite 141
Tucson, AZ 85745
Phone: 520-670-6144
Fax: 520-670-6155

Flagstaff Sub-Office
SW Forest Science Complex
2500 S. Pine Knoll Dr.
Flagstaff, AZ 86001
Phone: 928-556-2157
Fax: 928-556-2121

This review has identified **riparian areas** within the vicinity of your project. During the planning stage of your project, avoid, minimize, or mitigate any potential impacts to riparian areas identified in this report. Riparian areas play an important role in maintaining the functional integrity of the landscape, primarily by acting as natural drainages that convey water through an area, thereby reducing flood events. In addition, riparian areas provide important movement corridors and habitat for fish and wildlife. Riparian areas are channels that contain water year-round or at least part of the year. Riparian areas also include those channels which are dry most of the year, but may contain or convey water following rain events. All types of riparian areas offer vital habitats, resources, and movement corridors for wildlife. The Pinal County Comprehensive Plan (i.e. policies *6.1.2.1* and *7.1.2.4*), Open Space and Trails Master Plan, Drainage Ordinance, and Drainage Design Manual all identify riparian area considerations, guidance, and policies. Guidelines to avoid, minimize, or mitigate impacts to riparian habitat can be found at https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/. Further consultation with the Arizona Game and Fish Department and Pinal County may be warranted.

HDMS records indicate that **Sonoran Desert Tortoise** have been documented within the vicinity of your project area. Please review the Tortoise Handling Guidelines found at https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/2014%20Tortoise%20handling%20guidelines.pdf.

HDMS records indicate that **Western Burrowing Owls** have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at https://www.azgfd.com/wildlife-conservation/conservation-and-endangered-species-programs/burrowing-owl-management/.

Pinal County

AFFIDAVIT OF POSTING BROADCAST SIGN

I, the applicant's representative for case # PZ-PA-014-25, personally caused at least one sign to be posted in a visible place on or near the proposed project site at NEC I8 & Russell Rd, at least 28 days before the Planning and Zoning Commission Public Hearing, in Pinal County.

See attached photo exhibit.

Dynamite Signs
Sign Company Name

Meghan Liggett
Sign Company Representative

Subscribed and sworn to be on 08/14/25 by Meghan Liggett.

IN WITNESS WHEREOF, I Hereto set my hand and official seal.

Marybeth Conrad
Notary Public

MARYBETH CONRAD
Notary Public - Arizona
Maricopa County
Commission # 673441
My Comm. Expires Oct 25, 2028

My Commission expires: 10-25-28


PINAL COUNTY
Public Hearings
Case Number: PZ-PA-014-25
Existing Comp Plan: ±2,685.58 acres from Moderate Low Density Residential (MLDR 1-3.5 du/ac) and Proposed Open Space
Proposed Comp Plan: +/-2685.58 acres Green Energy Production, General Public Facilities/Services, and Proposed Open Space for a utility scale solar facility with Battery Energy Storage System (BESS) and a gas fired power generation facility
Applicant Name: Rose Law Group pc
Applicant Phone Number: 480-505-3938 or jhall@roselawgroup.com
Case Information Available at Pinal County Planning and Development Services
(520) 866-6442 or www.pinalcountyaz.gov
Public Hearing Information
NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Date Posted: 08/14/25
August 14, 2025 at 10:16 AM
+32.811787, -111.912172
S Russell Rd
Casa Grande AZ 85193
United States
Maps


PINAL COUNTY
Public Hearings
Case Number: PZ-PA-014-25
Existing Comp Plan: ±2,685.58 acres from Moderate Low Density Residential (MLDR 1-3.5 du/ac) and Proposed Open Space
Proposed Comp Plan: +/-2685.58 acres Green Energy Production, General Public Facilities/Services, and Proposed Open Space for a utility scale solar facility with Battery Energy Storage System (BESS) and a gas fired power generation facility
Applicant Name: Rose Law Group pc
Applicant Phone Number: 480-505-3938 or jhall@roselawgroup.com
Case Information Available at Pinal County Planning and Development Services
(520) 866-6442 or www.pinalcountyaz.gov
Public Hearing Information
NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW
August 14, 2025 at 9:48 AM
+32.829003, -111.911645
S Russell Rd
Casa Grande AZ 85193
United States


PINAL COUNTY
Public Hearings
Case Number: PZ-PA-014-25
Existing Comp Plan: ±2,685.58 acres from Moderate Low Density Residential (MLDR 1-3.5 du/ac) and Proposed Open Space
Proposed Comp Plan: +/-2685.58 acres Green Energy Production, General Public Facilities/Services, and Proposed Open Space for a utility scale solar facility with Battery Energy Storage System (BESS) and a gas fired power generation facility
Applicant Name: Rose Law Group pc
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Case Information Available at Pinal County Planning and Development Services
(520) 866-6442 or www.pinalcountyaz.gov
Public Hearing Information
NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Date Posted: 08/14/25
Maps
August 14, 2025 at 10:45 AM
+32.807724, -111.895023
30358–31190 W Arica Rd
Casa Grande AZ 85193
United States


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
PINAL COUNTY
Maps
August 13, 2025 at 12:47 PM
+32.840177, -111.895677
Casa Grande AZ 85193
United States


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
August 13, 2025 at 12:44 PM
+32.840262,-111.903546
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
August 13, 2025 at 12:38 PM
+32.840055, -111.929065
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
August 13, 2025 at 12:34 PM
+32 840116 -111 912184
S Russell Rd
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
PINAL COUNTY
August 13, 2025 at 12:33 PM
+32.840258, -111.911825
S Russell Rd
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
August 13, 2025 at 12:30 PM
+32.833883, -111.912024
S Russell Rd
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
PINAL COUNTY
August 13, 2025 at 12:30 PM
+32.833866, -111.911954
S Russell Rd
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
Maps
August 13, 2025 at 12:25 PM
+32.825923,-111.911967
S Russell Rd
Casa Grande AZ 85193
United States


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
PINAL COUNTY
August 13, 2025 at 12:23 PM
+32.830785, -111.911761
S Russell Rd
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
PINAL COUNTY
Maps
August 13, 2025 at 12:17 PM
+32.823958, -111.911900
S Russell Rd
Casa Grande AZ 85193
United States


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
PINAL COUNTY
August 13, 2025 at 12:15 PM
+32 818767, -111.912198
S Russell Rd
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
August 13, 2025 at 12:14 PM
+32.818800,-111.911887
S Russell Rd
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
August 13, 2025 at 12:11 PM
+32.812078, -111.911959
S Russell Rd
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
PINAL COUNTY
August 13, 2025 at 12:00 PM
+32.811595,-111.920364
Connelly Rd
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
PINAL COUNTY
August 13, 2025 at 11:57 AM
+32.807803,-111.903215
31310 W Arica Rd
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
PINAL COUNTY
August 13, 2025 at 11:49 AM
+32.825570,-111.894741
W Beggs Rd
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
PINAL COUNTY
August 13, 2025 at 11:46 AM
+32.822262,-111.894896
31007–31199 W Marea Dr
Casa Grande AZ 85193
United States
W BEGGS RD
W MAREA DR
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
PINAL COUNTY
August 13, 2025 at 11:46 AM
+32.822247, -111.894899
31007–31199 W Marea Dr
Casa Grande AZ 85193
United States


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
August 13, 2025 at 11:42 AM
+32.815393,-111.894975
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
PINAL COUNTY
August 13, 2025 at 11:42 AM
+32.815367,-111.894832
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
PINAL COUNTY
August 13, 2025 at 11:37 AM
+32.807711, -111.895006
30358–31190 W Arica Rd
Casa Grande AZ 85193
United States
W ARICA RD
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
August 13, 2025 at 11:35 AM
+32.807662,-111.888199
29630–30356 W Arica Rd
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
August 18, 2025 at 11:20 AM
+32.827951, -111.895333
I-8/E
Casa Grande AZ 85193
United States
W BEGOS RD
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
August 13, 2025 at 11:17 AM
+32.827976, -111.903391
I-8 E
Casa Grande,AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
August 13, 2025 at 11:14 AM
+32 828006 -111 924097
I-8 E
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
August 13, 2025 at 11:13 AM
+32.828007, -111.929324
I-8 E
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
August 13, 2025 at 11:05 AM
+32 828455, -111 92995
I-8 W
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
August 13, 2025 at 11:03 AM
+32.828393, -111.918104
I-8 W
Casa Grande AZ 85193
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
Community Development
PINAL COUNTY
August 13, 2025 at 10:59 AM
+32.828370, -111.903486
I-8 W
Casa Grande AZ 85193
United States


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-014-25
August 13, 2025 at 10:54 AM
+32.828378, -111.895193
I-8 W
Casa Grande AZ 85193
United States
W REGGS RD
Maps

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Mary Ellen Sheppard
Deputy County Manager

Himanshu Patel
Deputy County Manager

Open Space, Trails & Regional Parks Department
Development Review Comment Letter

Project Name: Griffin Energy Project
Case Number: Z-PA-060-25
Reviewed By: Kelley Fox, Urban Wildlife Planner
Review Type: Major Comprehensive Plan Amendment
07/07/25

Comment #	RESPOND TO ALL COMMENTS
1	A planned regional multi-use trail, supported by Pinal County's Comprehensive Plan, is located transecting a portion of the project area. According to Development Services code **2.176.170 B** it is the applicant's responsibility to develop the trail according to Pinal County's standards.
2	Trail corridor requirements would include: • Signage would need to be approved by the Open Space and Trails Department. • Decomposed granite pedestrian paths would consist of natural subsoil compacted to 95%. • The corridor would need to be dedicated to the County in a form acceptable to the County.
3	Tread width and setbacks will be determined by the distance listed in our department-published Open Space and Recreation Area Design Guidelines Manual
4	Minimization of impacts to the multi-use trail corridor and surrounding habitat will be achieved through coordination between the Project and the Open Space and Trails department during trail development and the adherence to trail corridor requirements.
5	Parcels included in the project area are located within proposed open space. This land use designation is due to the high-value habitat and biologically sensitive criteria found within the area. It is highly recommended that proposed open space be minimized/removed from the project's footprint.
6	There is substantial riparian habitat that transects the project area. The AZGFD ERT mapping tool can be used to view the recorded riparian habitat within the

	project area. Information and guidelines concerning riparian habitat within Pinal County can be found below: https://s3-us-west-2.amazonaws.com/azgfd-portal-wordpress-pantheon/wp-content/uploads/archive/PinalCounty_RiparianGuides_FINAL.pdf
7	Riparian habitat is considered to be of critical environmental importance, and is to be protected during development. Its protection is supported by Pinal County's Comprehensive Plan policies **3.1.4.1, 3.9.1.4**, and **7.1.2.4**, along with Development services code **2.176.100 C, D, and E**.
8	A buffer of 50 ft. around all documented riparian habitat within the development site should be incorporated into the site plan. Setbacks or buffers may be increased or decreased if not prohibited by another county ordinance or regulation, and if approved by the supervisors.
9	Canals have shown to have high wildlife activity in Arizona due to their presence of water and usage as a wildlife movement corridor. Areas with these features are considered as environmentally sensitive, stated in the Pinal County Comprehensive Plan (pg. 254) A 50 ft. buffer around the canal and wildlife friendly development is strongly recommended. Acceptable wildlife friendly development can be found in the resource link below: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/WildlifeFriendlyDevelopment.pdf
10	It is highly recommended that applicants limit the disturbance of soils and biological soil crusts in previously undeveloped areas of the Sonoran Desert that are already level and suitable for array installation, thus limiting areas where noxious weeds can proliferate while simultaneously preserving important ecological aspects of the county's natural desert.
11	Noxious weeds have become increasingly problematic in areas of development and on large projects where vegetation management plans are not created or maintained. Due to the increasing threat noxious weeds have on the Sonoran desert and Pinal County landscape it is recommended that the applicant incorporate invasive species/noxious weed management plans for development. Information regarding noxious weeds can be found on the Arizona Department of Agriculture's website.
12	Guidelines for Solar development within Arizona provided by Arizona Game and Fish Department can be found at https://s3.amazonaws.com/azgfd-portal-

	wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FinalSolarGuidelines03122010.pdf
13	Review AZGFD fencing guidelines which are in consonance with Pinal County expectations below: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/110125_AGFD_fencing_guidelines.pdf
14	Review and incorporate department guidelines regarding development within/around designated and proposed open space. https://www.pinal.gov/DocumentCenter/View/662/Open-Space-and-Recreation-Area-Design-Guidelines-Manual-PDF
15	Any clarifications regarding these comments or recommended guidelines can be directed towards Kelley Fox via email Kelley.fox@pinal.gov or via phone at **520-866-6661**

July 28, 2025

Mr. Harvey Krauss
Pinal County
Planning Manager, Community Development
85 N Florence Street, PO Box 749
Florence, AZ 85132

Electronically submitted to: Harvey.Krauss@pinalcountyaz.gov;
Ryan.Galeria@Copiapower.com

RE: PZ-PA-014-25 Griffin Energy Major Comprehensive Plan Amendment

Dear Mr. Krauss:

The Arizona Game and Fish Department (Department) appreciates the opportunity to review the Major Comprehensive Plan Amendment for the proposed Griffin Energy Project (Project). The Department understands that Griffin Energy LLC is requesting a Major Comprehensive Plan Amendment (CPA) of the Pinal County Comprehensive Plan to change the land use designation of approximately 2,685-acres of private land from Moderate Low Density Residential to Green Energy Production, in order to construct a hybrid solar photovoltaic (PV) facility, battery energy storage system (BESS) and a natural gas-fired power generation facility with associated infrastructure on private land near Casa Grande in unincorporated Pinal County. The facility would be located on both sides of the I-8 and 8.5 miles south-east of Casa Grande, primarily within existing agricultural fields along with some undisturbed Sonoran Desert scrub habitat. The proposed project would utilize a shared transmission interconnection to the existing 500 kV Duke - Pinal transmission line.

Under Title 17 of the Arizona Revised Statutes, the Department, by and through the Arizona Game and Fish Commission (Commission), has jurisdictional authority and public trust responsibilities to conserve and protect the state fish and wildlife resources. In addition, the Department manages threatened and endangered species through authorities of Section 6 of the Endangered Species Act and the Department's Section 10(a)(1)(A) permit. It is the mission of the Department to conserve and protect Arizona's diverse fish and wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department recognizes the importance of planning efforts to develop renewable energy locations that contribute to regional and state economic growth needs and has appreciated the early involvement with Griffin Energy LLC during the planning and development of this facility. The Department recognizes that appropriate coordination, proper planning, and voluntary

implementation of best management practices allow projects to be developed that avoid, minimize, or offset potential impacts to wildlife and recreational access during development and operation of the facilities. For your consideration, the Department provides the following comments based on the agency's statutory authorities, public trust responsibilities, and special expertise related to wildlife resources and recreation.

Arizona has recently seen an increase in the number of proposed and in-development renewable energy generation projects and associated infrastructure. Multiple solar energy projects have been built or proposed within the vicinity of this Project. Although each of these projects individually may have a minimal impact on the broader landscape, these projects cumulatively could result in the loss of habitat, impact wildlife movements, and affect wildlife-related recreation. Additionally, long-term effects to wildlife can extend several kilometers beyond the footprint of a solar project area (Sawyer et al. 2022[1]). It is important to consider all potential cumulative effects and to evaluate the project in association with other projects in the area. Department staff are available to assist in identifying potential cumulative impacts to wildlife and associated voluntary conservation measures that can be implemented for the project.

The Department recommends conducting surveys in the project area to determine species presence. These surveys should be of sufficient duration and intensity to adequately assess all habitat types and potential wildlife species occurrence in and adjacent to the project area. Department staff are available to assist Griffin Energy LLC in determining appropriate surveys to conduct and design features and best management practices that can help minimize potential impacts. The attached Arizona Online Environmental Review Tool (ERT) report[2] (HGIS-25328), run by the Department, identifies Species of Greatest Conservation Need (SGCN), as identified in Arizona's State Wildlife Action Plan (SWAP), and Species of Economic and Recreational Importance that have been documented and predicted within the buffered project footprint. Please note that the SWAP was recently updated, and the Department has an interactive website, Arizona Wildlife Conservation Strategy[3], that includes the most recent list of SGCN species statewide to help navigate and identify conservation opportunities. Based on the information provided, the Department offers the following recommendations to reduce potential impacts to wildlife and habitat; additional information can be found in *Guidelines for Solar Development in Arizona*[4].

- The western burrowing owl, a special status species that is also regulated under the Migratory Bird Treaty Act (MBTA), has been recorded within 1 mile of the proposed project. The Department recommends conducting an occupancy survey for western burrowing owls to determine if this species occurs within the project footprint. Guidelines for conducting this survey are found in *Burrowing Owl Project Clearance Guidance for Landowners*[5]. Please note that the survey should be conducted by a

[1] https://esajournals.onlinelibrary.wiley.com/doi/10.1002/fee.2498
[2] https://ert.azgfd.gov/system/files/project_report_pz_ps_014_25_griffin_energy_89015_91678.pdf
[3] https://awcs.azgfd.com/
[4] https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FinalSolarGuidelines03122010.pdf
[5] https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/nongame/eagles/BurrowingOwlClearanceProtocol_2009.pdf

surveyor who is certified by the Department or has similar training and qualifications. If an active burrowing owl burrow is detected please contact the Department and the USFWS for direction, in accordance with the Guidelines.

- The Sonoran desert tortoise, which is a federal and state species of special concern, has been recorded within 2.5 miles of the project area. The Department recommends conducting surveys within suitable habitat in the undisturbed portions of the Project area, to determine the presence of this species. The *Sonoran Desert Tortoise Conservation Guidelines*[6] provide protocols for these surveys. If this species is detected, please refer to this document for guidelines on handling tortoises and recommended measures to avoid, minimize, or offset impacts to this species resulting from development activities.
- The Department recommends conducting avian surveys during the planning stage in order to better understand species presence and to inform potential conservation measures. Point counts are the preferred method for breeding bird surveys. These surveys are conducted twice a year during the peak breeding season, which is mid-January through June in this area. In addition, the project area may contain suitable habitat for Bendire's and LeConte's Thrashers. Additional surveys for these thrashers, two bird species of conservation concern, are recommended per the Desert Thrasher Working Group (DTWG). Please reference the DTWG's Conservation of Bendire's and LeConte's Thrashers at Solar Development Sites[7] which outlines how to determine occupancy of thrashers and design considerations if present.
- The Department also recommends conducting surveys for nesting birds prior to vegetation removal and/or construction activities that occur during the breeding season. The vegetation within the project area may provide nesting opportunities for avian species that are regulated under the Migratory Bird Treaty Act (MBTA). If it is anticipated the project will not be in compliance with MBTA, the Department recommends contacting the USFWS for technical assistance.
- Burrowing species are likely to occur within the project area and could be influenced by construction activities and by loss of habitat. Surveys for these species are recommended to determine their presence and to inform pre-construction activities. Department staff are available to assist in identifying suitable conservation measures, such as one-way exclosures on burrows that allow wildlife to exit the burrows and disperse to adjacent lands in advance of construction.

Maintaining habitat connectivity is a priority for the Department, and wildlife movement corridors are important for wildlife to respond to changing environmental conditions. This project falls within two xero-riparian riparian areas which include Santa Rosa Wash and Greene Wash. These Open Space corridors provide important movement pathways for wildlife between Sonoran Desert scrub habitat and agricultural fields. The Department would like to meet with Griffin Energy LLC to discuss opportunities to incorporate wildlife connectivity into the project design, including the following:

- The Department acknowledges and appreciates that Griffin Energy LLC will work with the County to preserve riparian open space corridors such as the Santa Rosa Wash and

[6] https://azgfd-portal-wordpress-pantheon.s3.us-west-2.amazonaws.com/wp-content/uploads/2025/01/16114611/Rubke-2024.-Sonoran-Desert-Tortoise-Conservation-Guidelines.pdf
[7] https://borderlandsbirds.org/wp-content/uploads/2024/09/Desert-Thrasher-Solar-Recommendations-1.0.pdf

Greene Wash. The Department recognizes riparian habitat as areas of environmental importance to wildlife and encourages management practices that maintain current riparian areas to the extent possible. The Department also recommends maintaining smaller ephemeral washes that occur in the project area in their natural state without fencing or other barriers to wildlife movement. Where possible, the Department recommends a buffer of 150 feet be maintained around the ephemeral riparian areas to maintain wildlife access and connectivity. Department staff are available to assist in determining appropriate setbacks and other measures to protect these areas.

- The Department recommends incorporating open unfenced corridors across the project area into the project design to facilitate wildlife movement. The Department recommends a minimum corridor width of approximately 1,300 feet and would like to discuss the following potential design features in further detail:
    - Splitting large panel arrays into multiple smaller arrays, with space between them, creates a pathway for wildlife movement. For this method, fencing would be erected around each array instead of the entire facility.
    - "Rounding" or "Cutting" corners off square-shaped plots, especially in known corridors and where project footprints are narrowest.
- The Department encourages Griffin Energy LLC to maintain vegetation along the site perimeter, and recommends that grading only be done when necessary (e.g. for retention basins). Additionally, the Department suggests, to the extent possible, retaining habitat features underneath the panels within undisturbed portions of the Project area, including vegetation and soils. The topography in the majority of the site is flat and would require minimal trimming of shrubs and existing vegetation to install the panels. Keeping the existing soil and root structures intact would serve to minimize erosional run-off and help reduce biodiversity loss within the site (Grodsky and Hernandez 2020[8]).

Finally, the Department offers the following general recommendations to reduce the potential for impacts to wildlife and habitat during construction and operation of the facility:

- In addition, a variety of other Arizona SGCN have the potential to occur within the project area. If wildlife are encountered during project activities, the Department recommends moving them out of harm's way, no more than 0.25 miles outside the project boundary with similar habitat.
- If trenching or digging of large holes will occur, the Department recommends that trenching/digging and backfilling crews work together to minimize the number of open holes/trenches at any given time. Where trenches/holes cannot be backfilled immediately, the Department recommends escape ramps be constructed in each hole and at least every 295 feet in trenches. Escape ramps can be short lateral trenches or wooden planks sloping to the surface, ramp slopes should be less than 45 degrees (1:1). Trenches or holes that have been left open should be inspected for animals and animals removed prior to backfilling.
- Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations (Davies et. al. 2013[9]). The Department recommends using only the

[8] https://www.nature.com/articles/s41893-020-0574-x
[9] https://pmc.ncbi.nlm.nih.gov/articles/PMC3657119/

minimum amount of light needed for safety. If feasible, "warmer" narrow spectrum lighting (amber, orange, red) is wildlife-friendly and should be used as often as possible to minimize the number of species affected by lighting. It is also beneficial that all lighting is shielded, canted, or cut to minimize the amount of upwards shining light.

- The information provided indicates that the project may include drainage improvements. Department staff remain available to assist in identifying potential impacts to wildlife and conservation measures to minimize potential impacts in development or construction of erosion structures. As an example, rip-rap is difficult for many species to traverse. If rip-rap is required for the construction of on-site retention basins or large-scale drainage needs, burying and back-filling with topsoil or other substrate would allow wildlife to move through the basins.
- The Department's *Wildlife Compatible Fencing Guidelines*[10] provide information on how fencing impacts wildlife, ways to design fencing to prevent wildlife entanglement and impalement, and to ensure wildlife movement is not restricted. The Department developed these guidelines to assist landowners, project managers, and others in designing wildlife compatible fences. The focus is on fence design rather than detailed fence construction specifications. The goal is to provide guidance in designing a fence that will achieve its objective within minimum impact to wildlife.
- Please ensure the project complies with Arizona Native Plant Law[11] regulations. A Native Plant Inventory may need to be conducted to identify, record, and coordinate plant salvage efforts for species that are Protected under the Arizona Native Plant Law.
- To minimize the potential introduction or spread of exotic invasive species including aquatic and terrestrial plants, animals, insects, and pathogens, the Department encourages taking precautions to wash and/or decontaminate equipment before entering and leaving the site. See the Arizona Department of Agriculture website[12] for a list of prohibited and restricted noxious weeds and the Arizona Native Plant Society[13] for recommendations on how to control them. To view a list of documented invasive species or to report invasive species in or near the project area, visit iMapInvasives[14], which is a national cloud-based application for tracking and managing invasive species.
- The Department recommends revegetating disturbed areas with native drought-tolerant species that represent the natural surrounding landscape. Landscaping with native plants can help support wildlife and pollinator species in the area while reducing dust and erosion. In addition, the applicable land management agencies should be consulted regarding guidelines for revegetation efforts, and areas where vegetation will be allowed to reestablish, it should be ensured that invasive populations are removed quickly.

Thank you for the opportunity to provide input on the Griffin Energy CPA. The Department appreciates the early and continued engagement in the Project. For further coordination, please contact Hunter Watson at hwatson@azgfd.gov or 602-791-8017.

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[10] https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/110125_AGFD_fencing_guidelines.pdf
[11] https://agriculture.az.gov/plantsproduce/native-plants
[12] https://agriculture.az.gov/pestspest-control/agriculture-pests/noxious-weeds
[13] https://aznps.com/conservation-original/invasive-plants/
[14] https://imap.natureserve.org/imap/services/page/map.html

Sincerely,



Kriselle Colvin
Regional Supervisor, Region VI

cc: Callie Cavalcant – Habitat, Evaluation and Lands Branch Chief

Attachment: ERT Species Report HGIS- 25328

AZGFD #M25-06124017

Arizona Environmental Online Review Tool Report

Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department requests further coordination to provide project/species specific recommendations. Please use the Project Evaluation Form to submit your project to the Project Evaluation Program at PEP@azgfd.gov.

Project Name:

PZ-PS-014-25 Griffin Energy Project

Project Type:

Energy Production/Storage/Transfer, Energy Production (generation), photovoltaic solar facility (new/expansion)

Project ID:

HGIS-25328

Project Description:

A proposed new solar project sited on the north and south side of the I-8, approximately 8.5 miles southwest of Casa Grande in Pinal County. This project would occur on approximately 2,685-acres of private land surrounded by agricultural fields, undisturbed Sonoran desert habitat, and Ak-Chin Indian Reservation

Contact Person:

Hunter Watson

Organization:

Arizona Game and Fish Departmenrt

On Behalf Of:

PINAL

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. Arizona Wildlife Conservation Strategy (AWCS), specifically Species of Greatest Conservation Need (SGCN), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

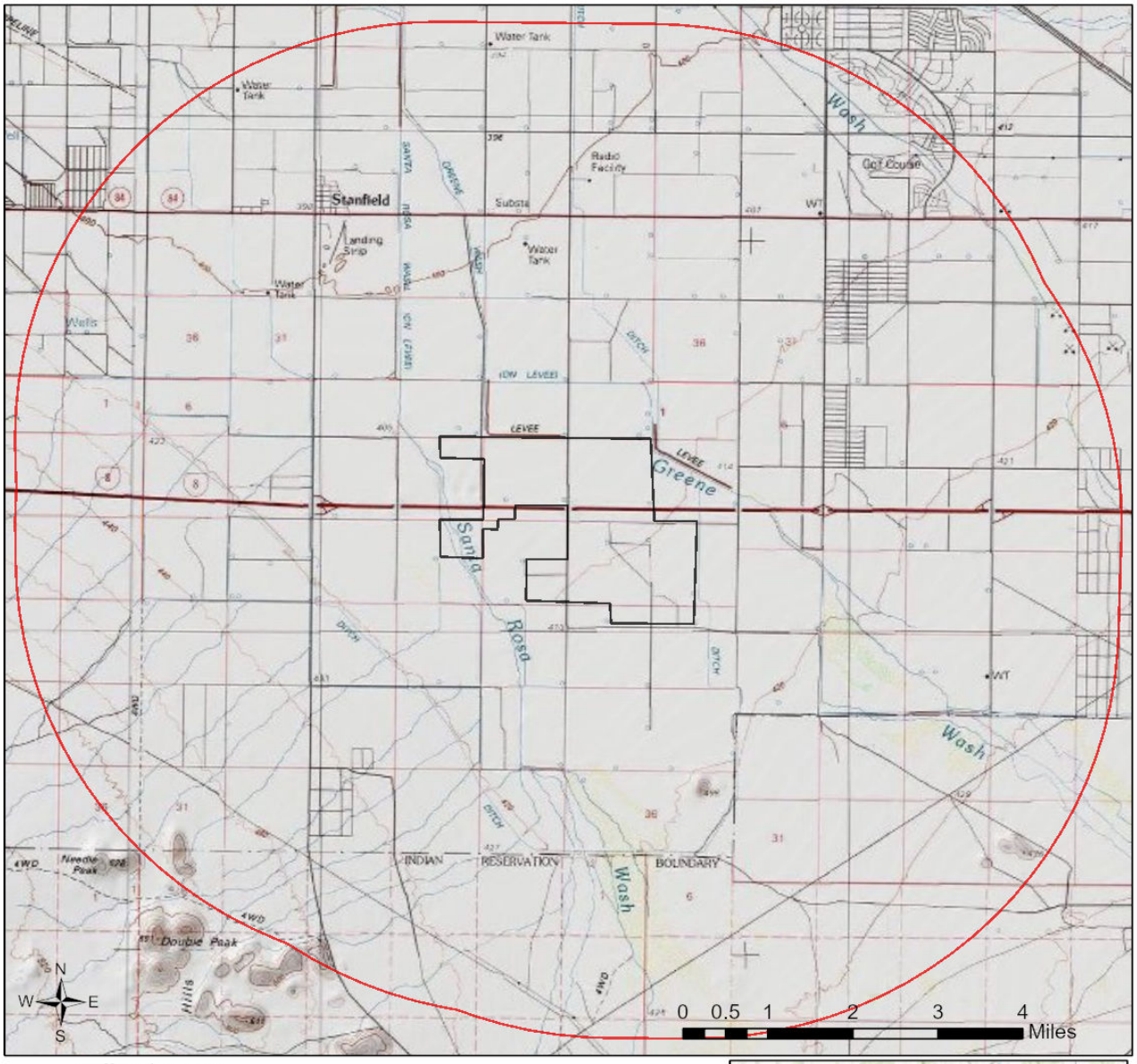
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies.

PZ-PS-014-25 Griffin Energy Project

USA Topo Basemap With Locator Map



Buffered Project Boundary

Project Boundary

Project Size (acres): 2,710.98

Lat/Long (DD): 32.8251 / -111.9087

County(s): Pinal

AGFD Region(s): Mesa

Township/Range(s): T7S, R4E

USGS Quad(s): DOUBLE PEAK



County of Yavapai, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
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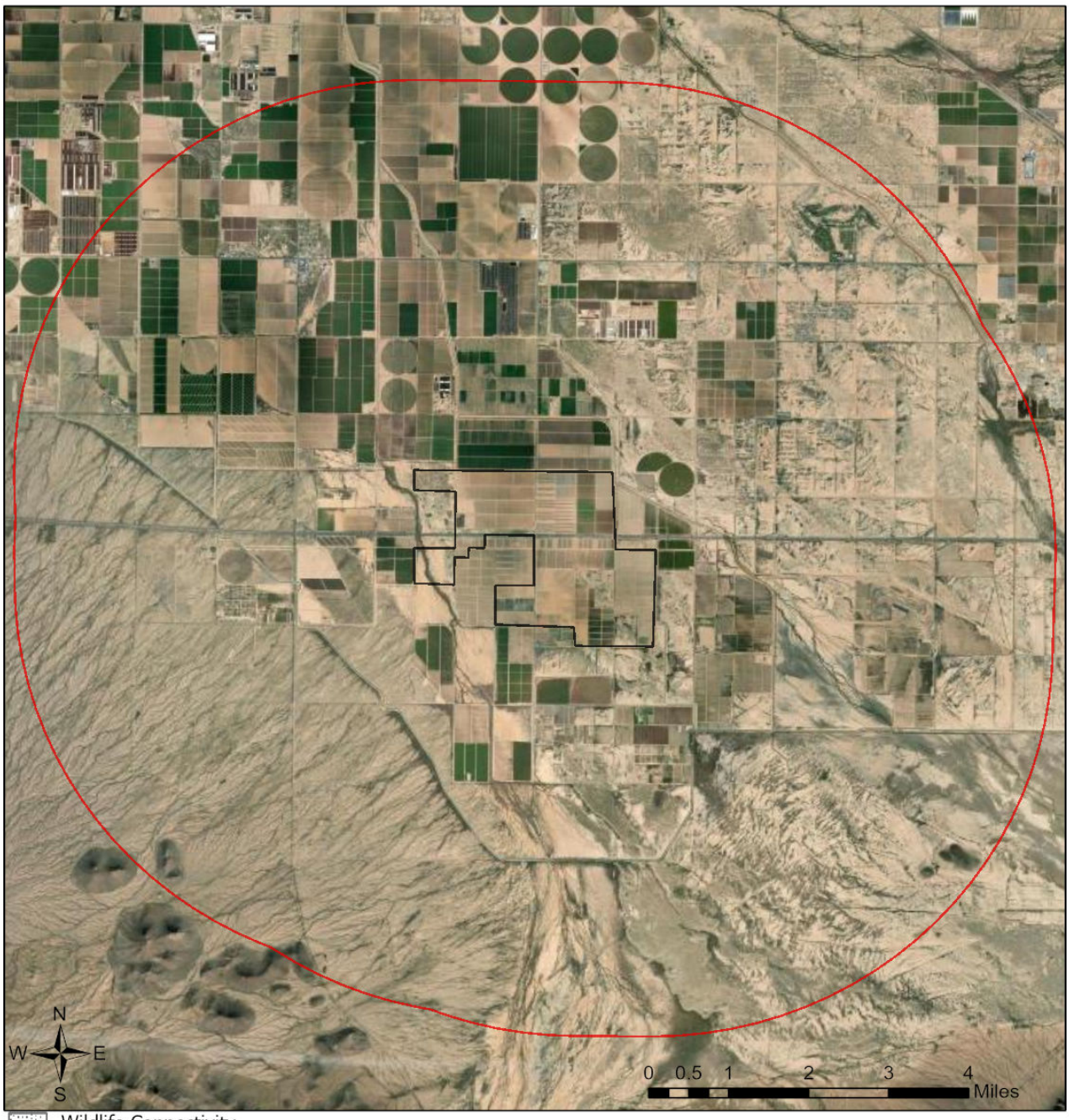
Esri, USGS

PZ-PS-014-25 Griffin Energy Project

Web Map As Submitted By User



Wildlife Connectivity

Buffered Project Boundary

Project Boundary

Project Size (acres): 2,710.98

Lat/Long (DD): 32.8251 / -111.9087

County(s): Pinal

AGFD Region(s): Mesa

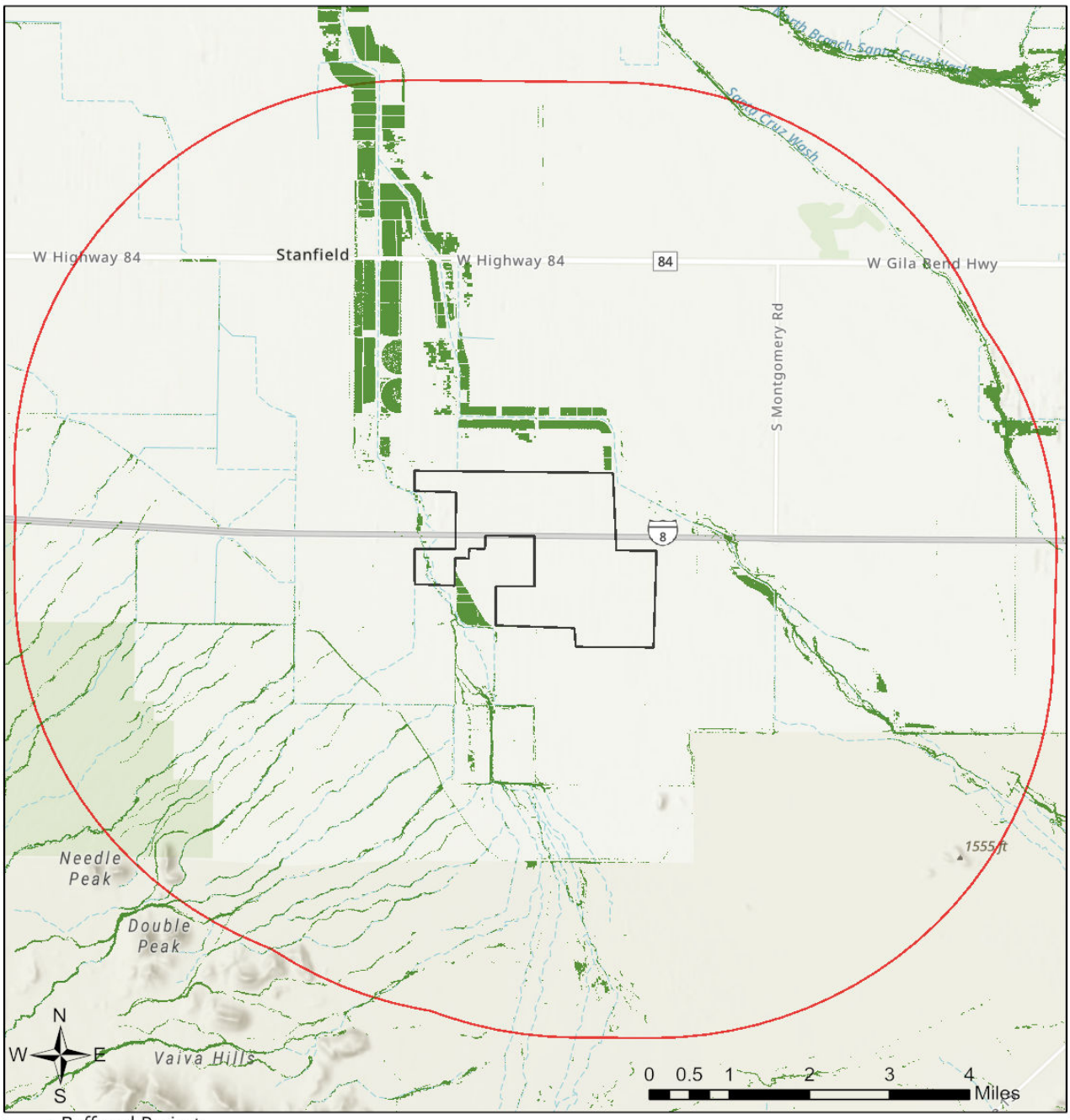
Township/Range(s): T7S, R4E

USGS Quad(s): DOUBLE PEAK

Earthstar Geographics

PZ-PS-014-25 Griffin Energy Project

Important Areas



- Buffered Project Boundary
- Project Boundary
- Important Bird Areas
- Critical Habitat
- Pinal County Riparian
- Wildlife Connectivity

Project Size (acres): 2,710.98

Lat/Long (DD): 32.8251 / -111.9087

County(s): Pinal

AGFD Region(s): Mesa

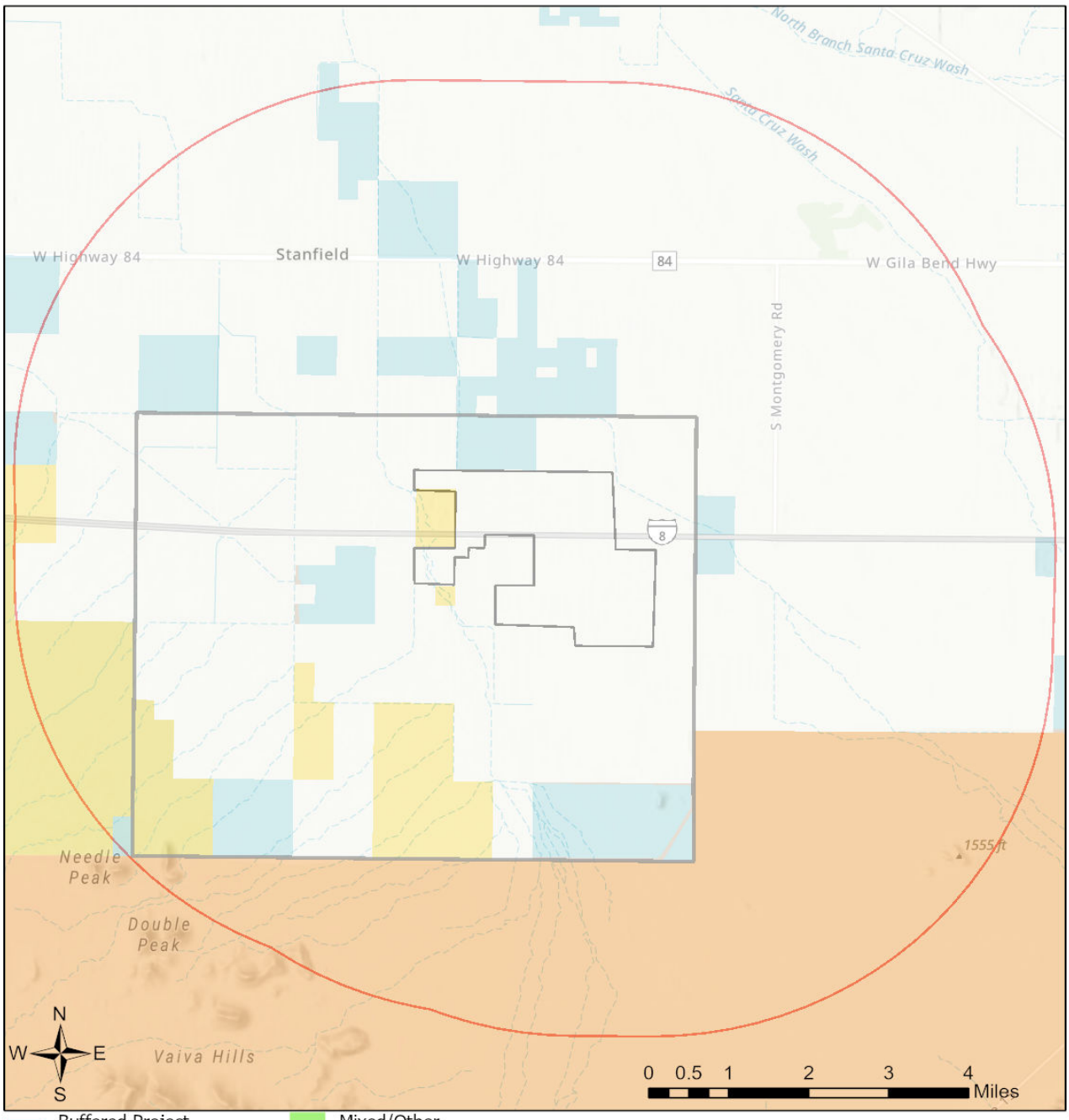
Township/Range(s): T7S, R4E

USGS Quad(s): DOUBLE PEAK

Esri, NASA, NGA, USGS
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

PZ-PS-014-25 Griffin Energy Project

Township/Ranges and Land Ownership



- Buffered Project Boundary
- Project Boundary
- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State & Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge
- Township/Ranges

Project Size (acres): 2,710.98

Lat/Long (DD): 32.8251 / -111.9087

County(s): Pinal

AGFD Region(s): Mesa

Township/Range(s): T7S, R4E

USGS Quad(s): DOUBLE PEAK

Esri, NASA, NGA, USGS
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

Special Status Species Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Antilocapra americana sonoriensis	Sonoran Pronghorn	LE,XN		S		1
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		2
Falco sparverius	American Kestrel					2
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1
Incilius alvarius	Sonoran Desert Toad					2
Lepus alleni	Antelope Jackrabbit					2
Mammillaria thornberi	Thornber Fishhook Cactus				SR	
Toxostoma bendirei	Bendire's Thrasher					2

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Gila River to Lake St. Claire	Pinal County Wildlife Movement Area - Riparian/Wash					
Greene Wash and Reservoir	Pinal County Wildlife Movement Area - Riparian/Wash					
Riparian Area	Riparian Area					

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Anaxyrus retiformis	Sonoran Green Toad			S		2
Anthus spragueii	Sprague's Pipit					2
Aquila chrysaetos	Golden Eagle	BGA		S		2
Artemisiospiza nevadensis	Sagebrush Sparrow					3
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Auriparus flaviceps	Verdin					2
Buteo regalis	Ferruginous Hawk			S		2
Buteo swainsoni	Swainson's Hawk					2
Calcarius ornatus	Chestnut-collared Longspur					2
Calypte costae	Costa's Hummingbird					2
Campylorhynchus brunneicapillus	Cactus Wren					2
Catharus ustulatus	Swainson's Thrush					2
Charadrius montanus	Mountain Plover					2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Colaptes chrysoides	Gilded Flicker			S		2
Columbina inca	Inca Dove					2
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat		S	S		1
Cynanthus latirostris	Broad-billed Hummingbird		S			2
Empidonax wrightii	Gray Flycatcher					2
Eumops perotis californicus	Greater Western Bonneted Bat			S		2
Falco mexicanus	Prairie Falcon					2
Falco peregrinus anatum	American Peregrine Falcon		S	S		1
Falco sparverius	American Kestrel					2
Gastrophryne mazatlanensis	Sinoloan Narrow-mouthed Toad			S		2
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1
Icterus bullockii	Bullock's Oriole					2
Incilius alvarius	Sonoran Desert Toad					2
Lanius ludovicianus	Loggerhead Shrike					2
Lasiurus cinereus	Hoary Bat					2
Lasiurus frantzii	Desert Red Bat		S			2
Lasiurus xanthinus	Western Yellow Bat		S			2
Lepus alleni	Antelope Jackrabbit					2
Macrotus californicus	California Leaf-nosed Bat			S		2
Megascops kennicottii	Western Screech-owl					2
Melanerpes uropygialis	Gila Woodpecker					2
Melospiza lincolnii	Lincoln's Sparrow					2
Micrathene whitneyi	Elf Owl					3
Myotis velifer	Cave Myotis			S		2
Myotis yumanensis	Yuma Myotis					2
Neotamias cinereicollis	Gray-collared Chipmunk					2
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					2
Parabuteo unicinctus	Harris's Hawk					2
Passerculus sandwichensis	Savannah Sparrow					2
Perognathus amplus	Arizona Pocket Mouse					2
Peucaea carpalis	Rufous-winged Sparrow					2
Phrynosoma solare	Regal Horned Lizard					2
Pooecetes gramineus	Vesper Sparrow					2
Rana yavapaiensis	Lowland Leopard Frog		S	S		1
Smilisca fodiens	Lowland Burrowing Treefrog			S		2
Spizella breweri	Brewer's Sparrow					2
Tadarida brasiliensis	Brazilian Free-tailed Bat					2
Toxostoma bendirei	Bendire's Thrasher					2
Toxostoma lecontei	LeConte's Thrasher			S		2

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Energy Production/Storage/Transfer, Energy Production (generation), photovoltaic solar facility (new/expansion)

Project Type Recommendations:
During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and it is important to identify and conserve upland wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife species. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations. The AZGFD recommends using only the minimum amount of light needed for safety, especially in areas immediately adjacent to open space or undeveloped lands. The AZGFD encourages the use of motion sensing lighting and narrow spectrum lighting (amber or warm tones typically 2700 Kelvin or lower) wherever possible to lower the range of species affected by lighting. Also, please consider shielding, canting, or cutting all lighting, where possible, to ensure that light reaches only areas needing illumination and to minimize impacts to nocturnal wildlife.

Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at https://www.invasivespeciesinfo.gov/ and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control these species. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at https://imap.natureserve.org/imap/services/page/map.html.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select “See What’s Here” for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

Evaluate potential impacts to wildlife and fish species due to changes in access to water, water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods). Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing the project to minimize impacts to spawning fish and other aquatic species. Wash, drain, and dry equipment to reduce the spread of exotic invasive species. AZGFD recommends early coordination with the Project Evaluation Program (PEP@azgfd.gov) for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The AZGFD recommends that wildlife surveys are conducted to determine if noise-sensitive species, such as birds or mammals, occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

The AZGFD recommends following the Avian Power Line Interaction Committee (APLIC) guidelines for new power lines, which can be found in the current version of *Suggested Practices for Avian Protection on Power Lines and Reducing Avian Collisions with Power Lines*. Large bodied birds, such as hawks, owls, vultures, and eagles, may be vulnerable to line strikes and electrocution during construction and operation of power lines and substations; power poles can also serve as perches for large-bodied birds. These potential impacts can be avoided or minimized by following the APLIC guidelines which include designing the power lines with enough space between energized components to reduce the likelihood of a bird electrocution or installing bird flight diverters in sections of line where elevated bird strikes are anticipated (e.g. lines over water bodies or in the path of colonial roosting locations). The AZGFD's Raptor Coordinator, who can be contacted at raptors@azgfd.gov or 623-236-7575, can provide further information on specific design features and best management practices.

The AZGFD recommends that a qualified biologist conduct a survey for nesting birds within the project area prior to removal or trimming of trees/vegetation, if the removal or trimming occurs during the breeding season (the Project Evaluation Program can be contacted at PEP@azgfd.gov or 623-236-7600 to determine the appropriate breeding season within the project area). Trees and/or vegetation within the project area may provide nesting opportunities for avian species that are regulated under the Migratory Bird Treaty Act (MBTA) and protected under state law. If it is anticipated the project will not be in compliance with MBTA, the AZGFD recommends contacting the U.S. Fish and Wildlife Service (https://www.fws.gov/office/arizona-ecological-services) for technical assistance. The USFWS will provide options to comply with the MBTA.

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.

Project Location and/or Species Recommendations:
HDMS records indicate that one or more native plants listed on the **Arizona Native Plant Law and Antiquities Act** have been documented within the vicinity of your project area. Please contact:
Arizona Department of Agriculture
1688 W Adams St.
Phoenix, AZ 85007
Phone: 602.542.4373
https://agriculture.az.gov/sites/default/files/Native%20Plant%20Rules%20-%20AZ%20Dept%20of%20Ag.pdf starts on page 44

Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat connectivity feature***. The **County-level Stakeholder Assessments** contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-identifying-corridors/. Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

HDMS records indicate that one or more **Listed, Proposed, or Candidate** species or **Critical Habitat** (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at https://www.fws.gov/office/arizona-ecological-services or:

Phoenix Main Office
9828 North 31st Avenue #C3
Phoenix, AZ 85051-2517
Phone: 602-242-0210
Fax: 602-242-2513

Tucson Sub-Office
201 N. Bonita Suite 141
Tucson, AZ 85745
Phone: 520-670-6144
Fax: 520-670-6155

Flagstaff Sub-Office
SW Forest Science Complex
2500 S. Pine Knoll Dr.
Flagstaff, AZ 86001
Phone: 928-556-2157
Fax: 928-556-2121

This review has identified **riparian areas** within the vicinity of your project. During the planning stage of your project, avoid, minimize, or mitigate any potential impacts to riparian areas identified in this report. Riparian areas play an important role in maintaining the functional integrity of the landscape, primarily by acting as natural drainages that convey water through an area, thereby reducing flood events. In addition, riparian areas provide important movement corridors and habitat for fish and wildlife. Riparian areas are channels that contain water year-round or at least part of the year. Riparian areas also include those channels which are dry most of the year, but may contain or convey water following rain events. All types of riparian areas offer vital habitats, resources, and movement corridors for wildlife. The Pinal County Comprehensive Plan (i.e. policies *6.1.2.1* and *7.1.2.4*), Open Space and Trails Master Plan, Drainage Ordinance, and Drainage Design Manual all identify riparian area considerations, guidance, and policies. Guidelines to avoid, minimize, or mitigate impacts to riparian habitat can be found at https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/. Further consultation with the Arizona Game and Fish Department and Pinal County may be warranted.

HDMS records indicate that **Sonoran Desert Tortoise** have been documented within the vicinity of your project area. Please review the Tortoise Handling Guidelines found at https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/2014%20Tortoise%20handling%20guidelines.pdf.

HDMS records indicate that **Western Burrowing Owls** have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at https://www.azgfd.com/wildlife-conservation/conservation-and-endangered-species-programs/burrowing-owl-management/.

azcentral.

Public Notices

Originally published at azcentral.com on 08/19/2025

NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT 6:00 P.M. ON THE 4TH DAY OF SEPTEMBER 2025, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 301 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR MAJOR COMPREHENSIVE PLAN AMENDMENT TO THE PINAL COUNTY COMPREHENSIVE PLAN.

PZ-PA-014-25 - PUBLIC HEARING/ACTION: Rose Law Group and Griffin Energy LLC, agent/applicant, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 2,685.58± acres of land from Moderate Low Density Residential (MLDR, 1-3.5 du/ac), and Proposed Open Space to Green Energy Production, General Public Facilities/Services, and Proposed Open Space for a utility scale solar facility with Battery Energy Storage System (BESS) and a gas fired power plant, situated on a portions of sections 10, 11, 12, 13, 14, 15, and 24, T07S, R04E of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 500-16-001G; -001B; 500-11-0160; -017A; -017C; -0180; -019B; -020A; -0210; 500- 18-001A; -001B; -001C; 500-19-002B; -002E; -0030; -004A; -004C; -0050; -006A, -006B; 500-23- 003A; -003B; and -0120 located between the Santa Rosa Wash and Green Wash sited on both sides of Interstate 8, in the unincorporated area of Pinal County.

ALL PERSONS INTERESTED IN THIS MATTER MAY APPEAR AND SPEAK AT THE PUBLIC HEARING AT THE DATE, TIME, AND PLACE DESIGNATED ABOVE.

DOCUMENTS PERTAINING TO THIS CASE CAN BE FOUND ON THE NOTICE OF HEARING PAGE FOR THE P&Z COMMISSION AT:

https://www.pinal.gov/236/Notice-of-Hearings

DATED THIS 7TH DAY OF JULY 2025, by Pinal County Development Services

TO QUALIFY FOR FURTHER NOTIFICATION IN THIS LAND USE MATTER YOU MUST FILE WITH THE PLANNING DEPARTMENT A WRITTEN STATEMENT OF SUPPORT OR OPPOSITION TO THE SUBJECT APPLICATION. YOUR STATEMENT MUST CONTAIN THE FOLLOWING INFORMATION:

1) Planning Case Number (see above)
2) Your name, address, telephone number and property tax parcel number (Print or type)
3) A brief statement of reasons for supporting or opposing the request
4) Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:

PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT
85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132

Contact for this matter: Patrick Zaia-Roberts, Senior Planner E-mail address: Patrick.Roberts@pinal.gov
Phone # (520) 866-6409

[Anything below this line is not for publication.]

TO BE PUBLISHED:
Pinal Central Dispatch
Arizona Republic
August 19 2025
LAZS0351937

Pinal County Planning and Zoning Commission
301 E. 11th St.
Florence, Arizona 85132

August 20, 2025

Re: 2025 Major Amendments to the Pinal County Comprehensive Plan

Dear Commissioners,

As president and CEO of the Arizona Technology Council, the state's premier trade association representing more than 750 science and technology companies, I am writing to express our strong support for projects that make up the proposed 2025 major amendments to the Pinal County Comprehensive Plan. Specifically, I'm referring to PZ-PA-010-25 (Silver King Solar and BESS), PZ-PA-011-25 (La Osa Energy Generating Facilities), PZ-PA-012-25 (Silver Reef Solar), PZ-PA-014-25 (Griffin Energy) and PZ-PA-015-25 (Energy Generation and Technology Campus).

Pinal County has experienced tremendous population growth in the past decade, reaching more than 522,000 residents—an estimated increase of 3.81% since 2024. The county has become an employment magnet for industries such as semiconductor manufacturing, electric vehicle battery plant construction, copper mining and health care, with advanced manufacturers such as LG Energy Solution, Lucid Motors and Procter & Gamble establishing operations throughout the county.

Each of the five proposed renewable energy projects named above present transformative economic development opportunities for Pinal County. They would create good-paying jobs and generate millions of dollars in tax revenues to fund schools, roads and emergency services. For instance, the Silver King Solar and BESS Project would create more than 300 construction jobs and generate more than $20 million in sales tax revenue during construction, with approximately $5.3 million going to the county.

Furthermore, the major amendments would ensure Pinal County remains a leader in renewable energy development and environmental stewardship. These projects collectively support the county's goal to meet current and future energy needs and decrease the county's dependence on non-renewable energy sources, improving air quality and residents' quality of life. They are also key to a broader energy transition initiated countywide, including increasing battery storage facilities, implementing critical grid upgrades and ensuring smarter energy use. Each project is also responsibly sited, minimizing impact on key visual resources.

On behalf of the Council and our members, I respectfully encourage you to support these critical projects.

Sincerely,

Steve

ARIZONA TECHNOLOGY COUNCIL & SCITECH INSTITUTE



Steven G. Zylstra
President & CEO

To: Pinal County staff; Citizen's Advisory Committee; Planning and Zoning Commission; Board of Supervisors

From: Cyndi Ruehl, Pinal County resident
Date: July 29, 2025
Re: Comment on the 2025 Major Amendments to the Pinal County Comprehensive Plan

La Osa Project (PZ-PA-011) and Griffin Energy Project (PZ-PA-014-25)
These two proposed Comprehensive Plan Major Amendments projects, propose to take, rezone and encompass designated open space. This is particularly concerning and needs very serious analysis and thoughtful, comprehensive consideration.

Pinal County Comprehensive Plan
Approved by the Board of Supervisors in 2007, the Pinal County Open Space and Trails Master Plan is based on county values, vision, goals as well as a careful countywide analysis and inventory of biological, abiotic and cultural resources, and natural systems. In other words, open space areas on the map were not just randomly plopped down where someone thought it might be nice to have a trail. These areas were thoughtfully analyzed and publicly vetted to be important areas. The taking of them and destroying, or at best altering, their natural systems should not be taken lightly and without careful debate (read Chapter 6 of the Pinal County Comprehensive Plan: Open Spaces and Places and Chapter 7: Environmental Stewardship).

The taking or altering of designated open space in these project areas would impact:

1) Important wildlife connectivity and habitat areas,
2) Critical riparian areas, and
3) Proposed regional trials.

Specifically:

<u>PZ-PA-011-25 the Osa Employment Center</u>
In the case of PZ-PA-011-25, the Osa Project, it may seem like an insignificant sliver of green transecting the project area, but rather its significance as a wildlife habitat and connectivity corridor, and critical riparian corridor is extremely important and impactful to all surrounding areas of the ecosystem. To pinch off a corridor can greatly diminish the health of the surrounding desert, wildlife populations, and movement of natural systems. Analysis from the AZ Environmental Review Tool indicates the project is in a Wildlife Habitat Linkage Corridor, impacting both Pima and Pinal Counties' wildlife. The Analysis identified the project would impact: 1) wildlife movement and connectivity, 2) CAP wildlife crossing and riparian washes important for wildlife movement, as well as 3)

all the other tremendous ecological services that natural ephemeral washes provide to the health of our ecosystem, water and air.

The project lies along the Green Canal and Santa Cruz wash, making some of the project in a Zone A floodplain and transects important wildlife connectivity and habitat. For these reasons that area is designated as “Major Open Space” in the Pinal County Open Space & Trails Master Plan.

The AZ Environmental Review Tool also states, “*Analysis indicates that the project is located in the vicinity of an identified Conservation Opportunity Area (COA). While there are many areas in Arizona that present abundant conservation opportunities, COAs are specific areas on the landscape that the Department identified as having the greatest potential for conservation efforts. COAs were identified using species and habitat data, the presence of unique landscape features, and Departmental expertise*.”

This project is also situated in habitat for endangered species, species of concern and endangered species candidates. These include: the lesser long-nose bat, burrowing owls and desert tortoise, as well as identified critical habitats.

The applicant suggests they will work with the open space, but as stated above, blocking corridors and connectivities cannot be corrected or mitigated by throwing in an equal acreage of land elsewhere on the property and calling it the same. **Wildlife do not travel through industrial zones.**

Impacts to water use, availability and projected demand are not discussed in this proposal.

PZ-PA-014-25 Griffin Power Project

The Pinal County Open Space and Trails Master Plan identifies the Santa Rosa Wash along the project’s western boundary and the Green Wash along the east as Open Space Corridors. The importance of wildlife connectivity and corridors, and their harmful impacts if pinched off, were discussed in the Osa Project earlier. Additionally, a proposed Multi-Use Trail Corridor cuts through this project property. Cutting off a trail corridor proposed to link into an entire trail system has the same effect as pinching off a piece - making the remainder wildlife corridor or trail corridor useless. **No hiker, equestrian or wildlife will walk through a solar field.**

Impacts to water use, availability and projected demand are not discussed in this proposal.

What is particularly disturbing about this proposal is the absence of the AZ Environmental Review Tool (ERT) analysis. The ERT is a valuable tool that analyzes environmental impacts and provides information on special status species and

Conservation Opportunity Areas (COAs), as described above in the Osa Project. The tool aids in assessment of land development impacts. This analysis is provided in the other 6 applications for major amendments, but this project is not transparent.

In Conclusion

I strongly believe in the advancement of sustainable, renewal energy. And what better place than Pinal County with its wide open, flat expanses of land and limitless sunshine. But there are some true values we must be committed to and not destroy or degrade in the name of industry: a few last pieces of some of the most biodiverse and unique pieces of the Sonoran Desert in the world, which we hold stewardship to in this county.

When it's gone….it's gone.

PINAL COUNTY
WIDE OPEN OPPORTUNITY

BOARDS AND COMMISSIONS
AGENDA ITEM

09/04/2025
Citizen Advisory Committee

Funds #:
Dept. #:
Dept. Name: Development Services
Requested By:

AGENDA ITEM AND REQUESTED BOARD ACTION:

PZ-PA-015-25 -- PUBLIC HEARING/ACTION: Arizona RR Ranches LLC, owner, W Holdings, applicant, Jordan Rose, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate **±495 acres** of land from **Moderate Low Density Residential (MLDR, 1-3.5 du/ac)** to ±414 acres **Employment** and ±81 acres **General Public Facilities/Services**, for the location of an energy generation and technology campus, situated on portion of sections 25, 26, T05S, R03E, of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 510-53-003D, 510-53-003E, 510-53-003A and portion of parcels, 510-54-002A, 510-48-029L, generally located northeast of Maricopa Road and Teel Road, in unincorporated area of Pinal County.

MOTION:

Attachments

Packet

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

MEETING DATE: SEPTEMBER 4, 2025

TO: PINAL COUNTY CITIZEN ADVISORY COMMITTEE

CASE NO: **PZ-PA-015-25- ENERGY GENERATION AND TECHNOLOGY CAMPUS**

CASE COORDINATOR: Glenn Bak, Senior Planner

Executive Summary: *2019 Pinal County Comprehensive Plan Major Amendment request by Arizona RR Ranches LLC, and Jordan Rose, applicant/agent to re-designate* ± 495 acres of land from Moderate Low Density Residential (MLDR, 1-3.5 du/ac) to ±414 acres of Employment and ±81 acres of General Public Facilities/Services, for the location of an energy generation and technology campus.

If this request is approved by the Board:
If this major amendment to the Pinal County Comprehensive Plan is approved, the action will allow the applicant to begin the process of rezoning the property to develop uses allowed within the Employment and General Public Facilities land use designations.

LEGAL DESCRIPTION: Situated on a portions of sections 25, 26, T05S, R03E, of the Gila and Salt River Base and Meridian (legal on file).

TAX PARCELS: 510-53-003D, 510-53-003E, 510-53-003A and portion of parcels, 510-54-002A, 510-48-029L

APPLICANT/AGENT: Rose Law Group, Jordan Rose

REQUESTED ACTION & PURPOSE: **PZ-PA-015-25 – PUBLIC HEARING/ACTION:** Arizona RR Ranches LLC, owner, W Holdings, applicant, Jordan Rose, agent, is requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate ±495 acres of land from Moderate Low Density Residential (MLDR, 1-3.5 du/ac) to ±414 acres of Employment and ±81 acres of General Public Facilities/Services , for the location of an energy generation and technology campus, situated on a portion of sections 25, 26, T05S, R03E, of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 510-53-003D, 510-53-003E, 510-53-003A and portion of parcels, 510-54-002A, 510-48-029L, and generally located northeast of Maricopa Road and Teel Road, in unincorporated area of Pinal County.

LOCATION: Northeast of Maricopa Road and Teel Road, within an unincorporated area of Pinal County.

SIZE: ±495 acres

STAFF FINDINGS:

PUBLIC COMMENT:
To date no comments in writing have been received from surrounding property owners.

PUBLIC PARTICIPATION:

60 day review period:	6/6/2025 to 8/8/2025
Newspaper Publication:	8/20/2025
Site Posting:	8/13/2025
Property mail outs:	8/19/2025
Web posting:	8/20/2025
Citizen Advisory Committee:	9/4/2025

OTHER REVIEW AGENCY COMMENTS:
The City of Maricopa submitted comments expressing opposition to the amendment. Comments from Open Space and Trails and Arizona Technology Council and SciTech Institute are included in the packet.

PLAN AMENDMENT DISCUSSION:

Request to Change Land-use:
This proposal is to change the land designation of parcels classified from Plan Amendment to amend the Land Use Plan and re-designate 495± acres of land from Moderate Low Density Residential (MLDR, 1-3.5 du/ac) to 414± acres Employment and 81± acres to General Public Facilities/Services, for the location of an energy generation and technology campus.

SURROUNDING ZONING AND LAND USE:
North: Ak Chin Reservation - Agricultural
South: General Rural (GR) - Agricultural
East: CI-1 – Nissan Test Facility
West: MD, C-1, R-7, CB-2 - Agricultural

Project Proposal:
W Holdings, applicant, Jordan Rose, agent, is proposing an amendment to Employment, General Public Facilities/Services for datacenters, battery energy storage system (BESS), and Natural Gas Power Plant.

Data Center and Technology campus would include buildings containing computing and networking hardware, along with power and cooling infrastructure. Centers such as these are required to store, process, manage, and distribute massive quantities of data, for modern communication, telehealth, remote work, media streaming, energy, healthcare, retail, aviation, automotive, entertainment, and government operations. These data centers will be supported by additional infrastructure such as power generation, energy distribution, and storage systems.

Gas fired power plants generate electricity by burning natural gas as its fuel. Natural gas is one of the cleaner option for burning compared to coal. These utilize lesser footprint compared to the Utility scale power plants.

Location and Accessibility
The proposed project is situated approximately three miles south of Maricopa with Ak Chin Reservation to its north. This falls in the extended planning areas for the City of Maricopa. Access to the site is from the west will be from Maricopa Road/Louis Johnson Road to Val Vista which is a Principal arterial bisecting the project area in half.

Site Data:
Currently the site is currently vacant, and is zoned CR-3 (Single residence zone) with a PAD overlay. It was zoned in the year 2000 under the case PZ-PD-060-00, and was never developed. The Nissan Technical Center lies to the east of the property and has Employment land-use and Light Industrial and Warehouse zoning (CI-1). Surrounding uses are agricultural and the site is located in flood zone X.

Flood Zone
The project site is situated within Flood Zone X, indicating a 0.2% annual chance of flood hazard.

Environmental Study:
The comments from the Arizona Game and Fish Department (AZGFD) reflect concerns regarding the potential impacts on local wildlife. While the site itself does not lie within any critical habitats or riparian areas, the development of a Data Center Campus along with the Gas fired power plant and other industrial uses may still have indirect effects on nearby ecosystems.

Pinal County Open Space and Trails recommends that applicant incorporate vegetation management plan to manage invasive noxious weeds dominating the Sonoran desert in large projects.

Additionally, a Class 1 cultural resource inventory search is recommended to locate if any recorded archaeological sites are identified within the project area. Mitigation measures aimed at minimizing impacts to cultural resources will be identified and implemented during the project's progression.

Staff Analysis and findings:
Energy Generation and Technology Campus proposal for amending the Land-use and re-designate 414± acres of land from Moderate Low Density Residential to Employment is being proposed for a data center campus and 81± acres for General Public Facilities/Services.

The growing population in Pinal County has led to a significant rise in energy demand. Modern lifestyles increasingly depend on high-speed data systems to support businesses, residential needs, and hybrid work-from-home schedules—all of which require reliable access to information and uninterrupted power. As a result, data centers have emerged throughout the region to meet these evolving demands. Adapting to this shift will require land-use amendments to support the infrastructure needs of this new digital era.

After a detailed review of the request, Pinal County Comprehensive Plan and Pinal County Development Services Code, staff shares the following findings for the proposed project:

1. Proposal is in the extended planning area of the City of Maricopa and it has objections for the following reasons:
    a. Non- conforming to the city's current land-use plan for residential, employment and commercial uses
    b. Potential decrease in housing stock area
    c. Proposed land-use will not generate jobs
    d. Proposal will further reduce the commercial potential

2. Proposal for a Data Center paired with a Gas-Fired Power Plant will help meet the rising energy demands of Pinal County's growing population by providing power in a sustainable, low-carbon way.
3. Access to the site will be via Val Vista road (Principal Arterial)
4. Existing Employment land use to the east of the project area is the Nissan Technical Center.
5. Site is currently undeveloped with no residential development surrounding.

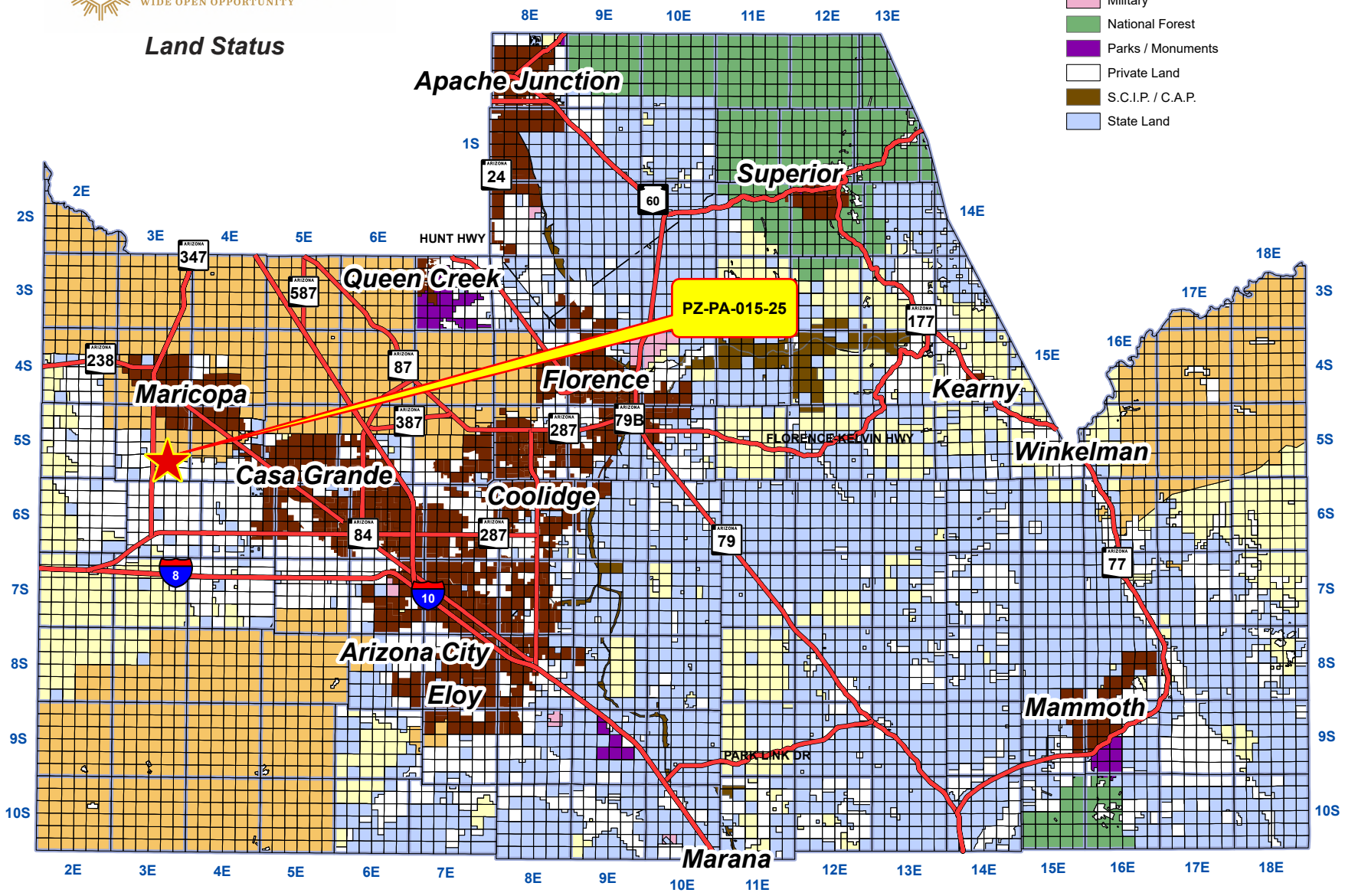
However, should the Citizen Advisory Committee find, after the presentation by the applicant and together with the testimony and evidence presented at the public hearing, that this Major Comprehensive Plan amendment is needed and necessary at this location and time, will not negatively

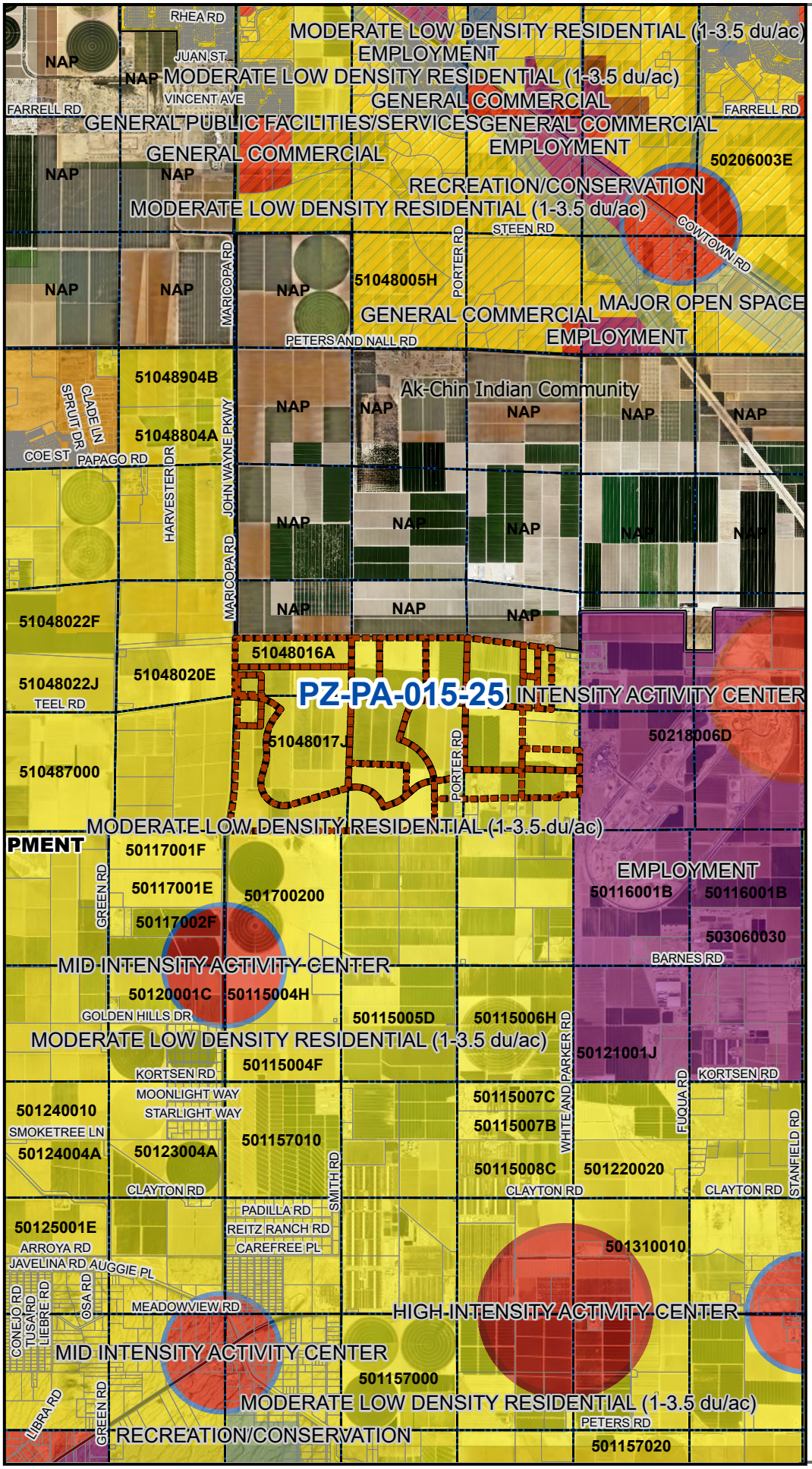
impact adjacent properties, will promote orderly growth and development of the County and will be compatible and consistent with the applicable goals and policies of the Pinal County Comprehensive Plan, then staff will recommend that the Citizen Advisory Committee forward **PZ-PA-015-25**, to the Planning and Zoning Commission with a favorable recommendation. If the Citizen Advisory Committee cannot find all of the factors listed above grounds for approval, then staff recommends that the Citizen Advisory Committee forward this case to the Planning and Zoning Commission with recommendation of denial.

Date Prepared: 08/21/25 SD

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Land Status





PINAL COUNTY
WIDE OPEN OPPORTUNITY

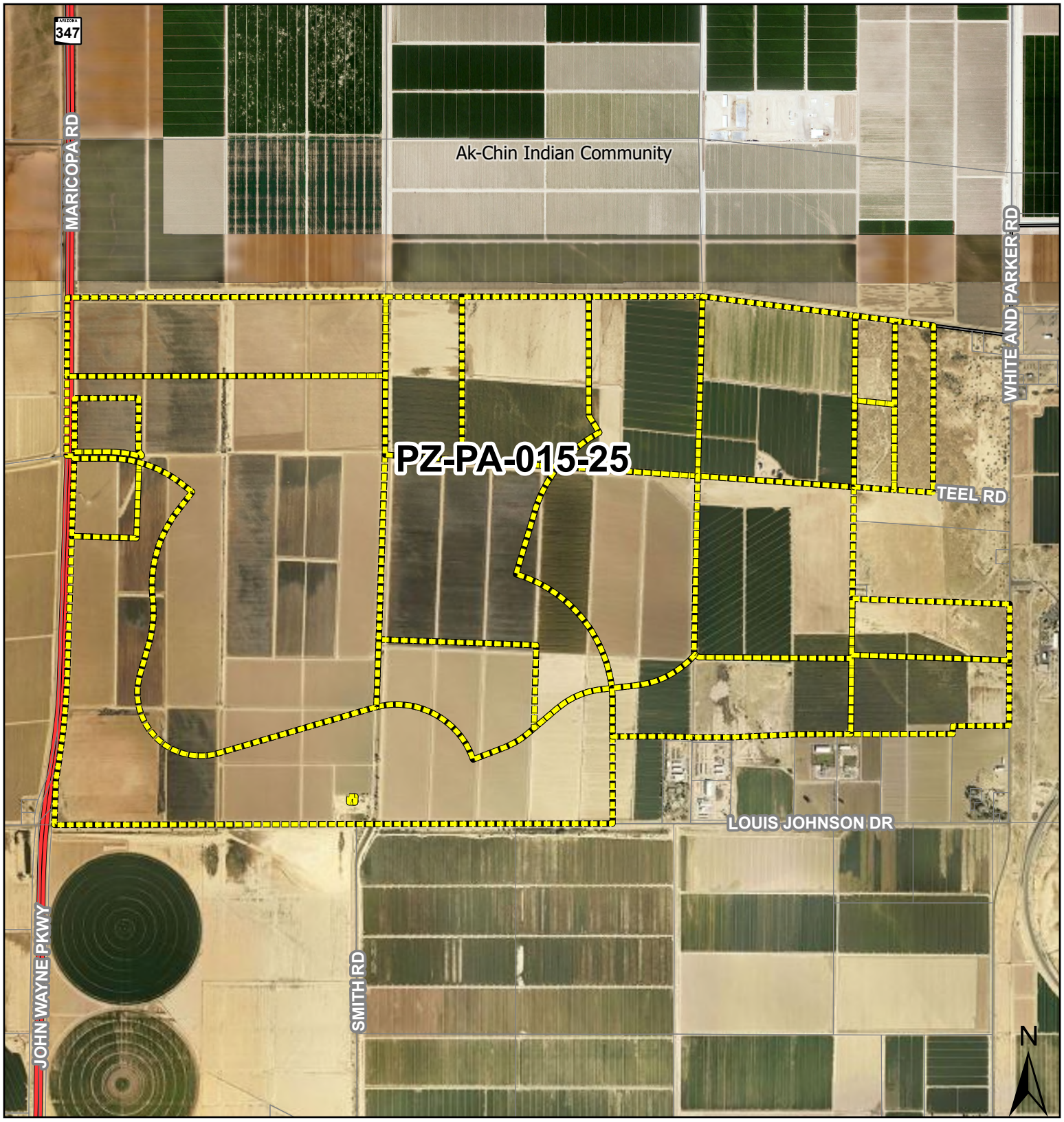
PZ-PA-015-25

FROM:

MODERATE
LOW DENSITY
RESIDENTIAL

TO:

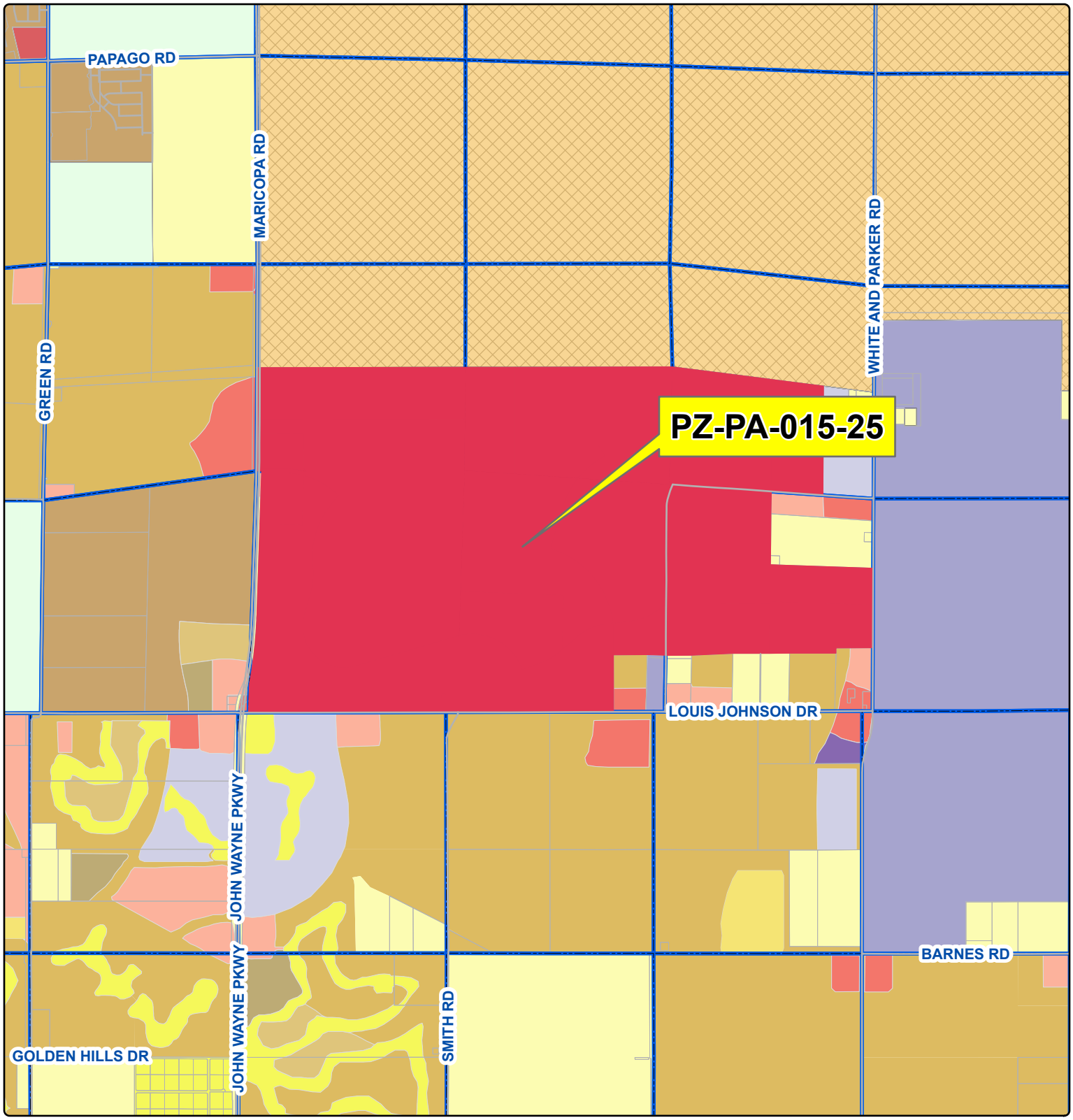
EMPLOYMENT
AND
GENERAL PUBLIC
FACILITIES/SERVICES



Community Development

PINAL COUNTY
WIDE OPEN OPPORTUNITY

PZ-PA-015-25



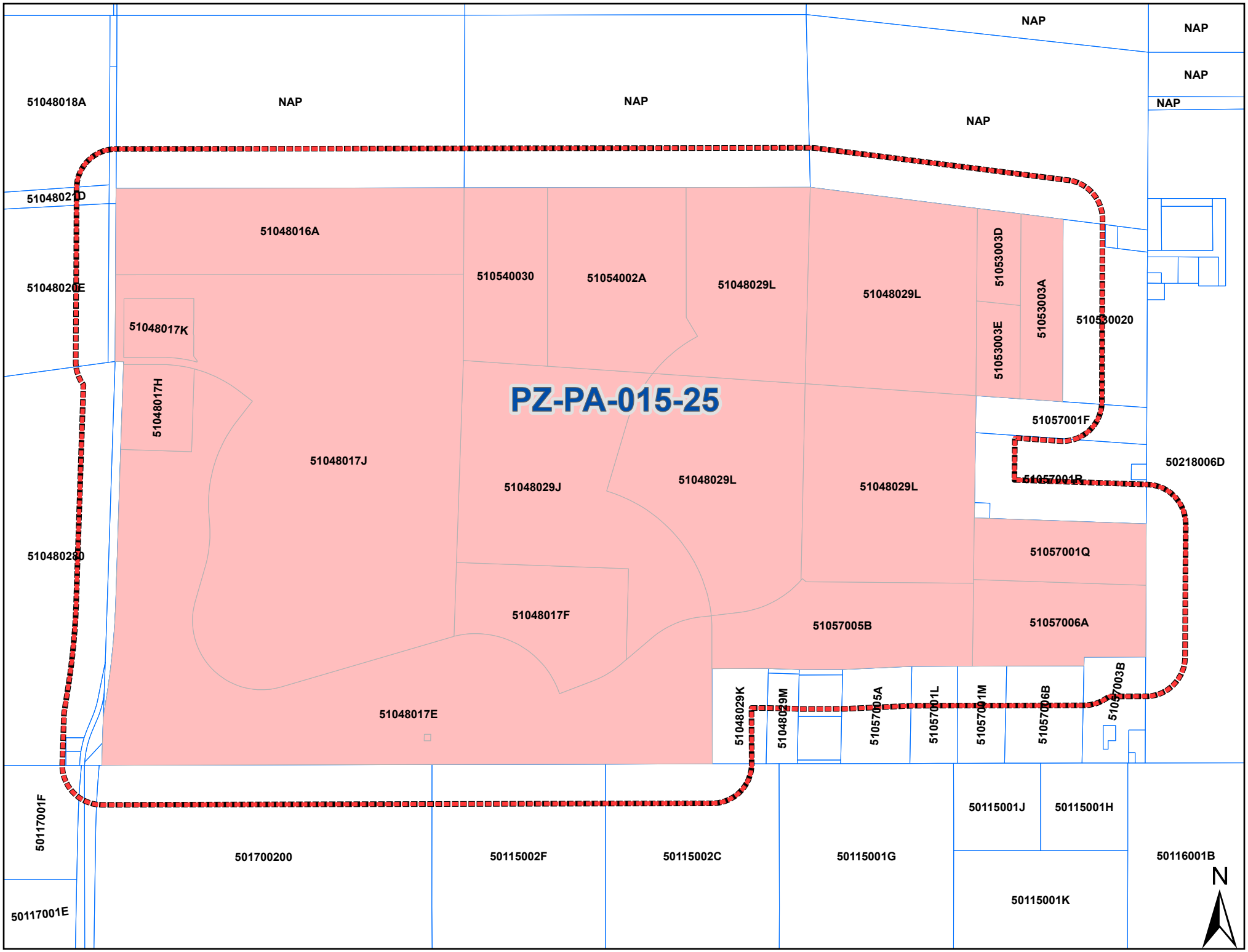
Community Development

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Legal Description: Situated on a portion of sections 25, 26, 27, 34, 35, & 36, T05S, R03E, of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 510-48-016A, -017B, -017E, -017F, -017H, -017J, -017K, -029J, -029L Portion of, 510-53-003A, -003D, -003E, 510-54-0030, -002A, 510-57-001Q Portion of, -005B, -006, generally located northeast of Maricopa Road and Teel Road, in unincorporated area of Pinal County.

SEC 25, 26, 27, 34, 35, & 36, TWN 05S, RNG 03E

Sheet No. 1 of 1	Owner/Applicant: ARIZONA RR RANCHES LLC		
	Drawn By: GIS / IT / RWH		Date: 08/18/2025
	Section 25, 26, 27, 34, 35, & 36	Township 05S	Range 03E
	Case Number: PZ-PA-015-25		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Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

PROCEDURE AND APPLICATION FOR A PROPOSED NON-MAJOR COMPREHENSIVE PLAN AMENDMENT

A. Attend a Concept Review (Zoning pre-application (Z-PA)) meeting with the Planning Department and affected County agencies.

B. File an application and all required supporting documentation for a Comprehensive Plan Amendment. Please use the attached application forms.

C. Public hearing before the Planning Commission with Commission recommendation to the Board of Supervisors. Time frame is approximately 10 to 15 weeks from application acceptance by the Planning Department.

D. Public hearing, (approximately 4 to 8 weeks after Planning Commission hearing), before the Board of Supervisors.

PROCEDURE FOR A PROPOSED MAJOR COMPREHENSIVE PLAN AMENDMENT

A. Attend a Concept Review (Zoning Pre-Application (Z-PA)) meeting with the Planning Department and affected County agencies.

B. File an application and all required supporting documentation for a Comprehensive Plan Amendment. Please use the attached application forms.

C. Public meeting with the Citizens Advisory Committee.

D. Public hearing before the Planning Commission with Commission recommendation to the Board of Supervisors.

E. Public hearing before the Board of Supervisors.

*Public hearing schedule will be made available in June.

FEE SCHEDULE FOR MAJOR AND NON-MAJOR AMENDMENTS

A. Major Comprehensive Plan Amendment: $5,091.00

B. Non-major Comprehensive Plan Amendment:

   a. 0-499 mailouts: $4,478.00
   b. 500 or more mailouts: $4,824.00
   c. With accompanying zone change: $3,354.00

COMMUNITY DEVELOPMENT
Planning Division

85 N. Florence St., PO Box 2973, Florence, AZ 85132 T 520-866-6442 FREE 888-431-1311 F 520-866-6530
www.pinalcountyaz.gov

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT IN AN UNINCORPORATED AREA OF PINAL COUNTY, ARIZONA
(All Applications Must Be Typed or Written in Ink)

Comprehensive Plan Amendment unincorporated & Property Information:
(Feel free to include answers and to these questions in a Supplementary Narrative, when doing so write see narrative on the space provided)

1. The legal description of the property: SEE ATTACHED

2. Parcel Number(s): 51053003A, D, E AND PORTIONS OF 51054002A AND 51048029L Total Acreage: +/- 495 ACRES

3. Current Land Use Designation: MODERATE LOW DENSITY RESIDENTIAL (1-3.5 DU/AC)

4. Requested Land Use Designation: EMPLOYMENT (+/-414 ACRES) & GENERAL PUBLIC FACILITIES/SERVICES (+/-81 ACRES)

5. Date of Concept Review: 05/27/2025 Concept Review Number: Z-PA-061-25

6. Why is this Comprehensive Plan Amendment being requested? (You must provide a summary of the anticipated development on this page, if not provided, the application cannot be processed.): THIS MAJOR COMPREHENSIVE PLAN AMENDMENT (CPA), OF THE PINAL COUNTY COMPREHENSIVE PLAN, IS BEING REQUESTED TO CHANGE THE LAND USE DESIGNATION OF THE SUBJECT PROPERTY FROM MODERATE LOW DENSITY RESIDENTIAL (MLDR 1-3.5 DU/AC) TO EMPLOYMENT & GENERAL PUBLIC FACILITIES/SERVICES TO ALLOW FOR THE FUTURE DEVELOPMENT OF THE ENERGY GENERATION & TECHNOLOGY CAMPUS SITUATED EAST OF ARIZONA STATE ROUTE 347, WEST OF S. WHITE AND PARKER ROAD AND IMMEDIATELY SOUTH OF THE AK-CHIN INDIAN COMMUNITY IN THE WESTERN PINAL COUNTY GROWTH AREA.

7. Discuss any recent changes in the area that would support yourapplication. SEE ATTACHED PROJECT NARRATIVE.

8. Explain why the proposed amendment is needed and necessary at thistime. SEE ATTACHED PROJECT NARRATIVE.

INV#: AMT: DATE: CASE: Xref:

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

- ☐ A. **Certified Boundary Survey**, including legal descriptions of the proposed designations
- ☐ B. Location map which identifies the property and its relationship to Pinal Countyenvirons.
- ☐ C. Map showing the topography of the property.
- ☐ D. Site map which specifically identifies the property including parcels under separate ownership.
- ☐ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ☐ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ☐ G. Non-refundable filing fee as shown on the cover page.
- ☐ H. Narrative in PDF format.
- ☐ I. Neighborhood meeting report

Your application must be submitted digitally via the online submittal portal site at https://citizenaccess.pinalcountyaz.gov/CitizenAccess/Default.aspx

Please call or email the Planning Division for more information.

I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information, as requested. I understand if the information submitted is incomplete, this application cannot be processed.

Applicant: W HOLDINGS Landowner: ARIZONA RR RANCHES LLC	1121 W WARNER RD. SUITE 109 TEMPE AZ 85284	(480) 831-2000
Name of Landowner (Applicant)	Address	Phone Number

Signature of Landowner (Applicant)	Applicant/Rep.: SETHK@WHOLDINGS.COM E-Mail Address

JORDAN ROSE	7144 E STETSON DR SUITE 300, SCOTTSDALE, AZ 85251	(480) 505-3938
Name of Agent	Address	Phone Number

Signature of Agent	JROSE@ROSELAWGROUP.COM JHALL@ROSELAWGROUP.COM E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information, as requested. I understand if the information submitted is incomplete, this application cannot beprocessed.

W HOLDINGS	1121 W WARNER RD SUITE 109 TEMPE, AZ 85284	(480) 831-2000
Name of Applicant	Address	Phone Number
SEE ATTACHED		SETHK@WHOLDINGS.COM
Signature of Applicant		E-Mail Address
JORDAN ROSE	7144 E STETSON DR SUITE 300, SCOTTSDALE, AZ 85251	(480) 505-3938
Name of Agent/Representative	Address	Phone Number
		JROSE@ROSELAWGROUP.COM JHALL@ROSELAWGROUP.COM
Signature of Agent/Representative		E-Mail Address

The Agent/Representative has the authority to act on behalf of the landowner/applicant, which includes agreeing to stipulations. The agent will be the contact person for planning staff and must be present at all hearings. Please use attached Agency Authorization form, if applicable.

ARIZONA RR RANCHES LLC	1121 W WARNER RD SUITE 109 TEMPE, AZ 85284	(480) 831-2000
Name of Landowner	Address	Phone Number
		SETHK@WHOLDINGS.COM
Signature of Landowner		E-Mail Address

If landowner is not the applicant, then applicant must submit a signed notarized consent form from the landowner with this application. Please use attached Consent to Permit form, if applicable.

PINAL COUNTY, ARIZONA

ENERGY GENERATION & TECHNOLOGY CAMPUS

MAJOR COMPREHENSIVE PLAN AMENDMENT

PROJECT APPLICATION NARRATIVE

CASE# PZ-PA-015-25:

May 29th, 2025, Revised August 12th, 2025

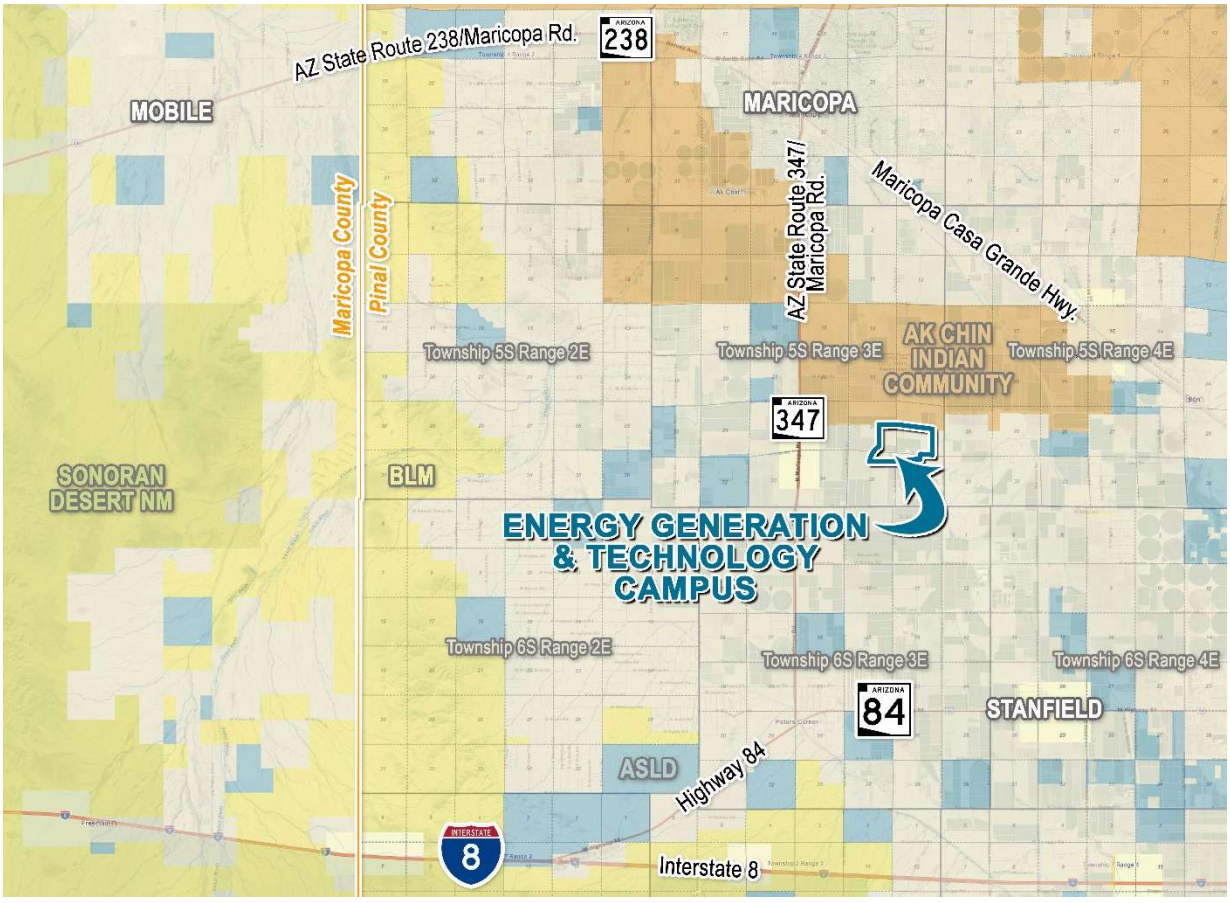

Exhibit A – Regional Context

Project Team

Project Applicant	Agent / Representation	Planning & Entitlements / Engineering
W Holdings	Rose Law Group	Kimley-Horn
Contact: Seth Keeler	Jordan Rose	Keith Nichter / Brett Stroup
1124 W Warner Rd.,	7144 E Stetson Dr.	1001 W. Southern Ave.,
Ste 109,	Ste 300,	Unit 131,
Tempe, AZ 85284	Scottsdale, AZ 85251	Mesa, AZ 85210
Sethk@Wholdings.com	JRose@Roselawgroup.com	Keith.Nichter@Kimley-Horn.com
	JHall@Roselawgroup.com	Brett.Stroup@Kimley-Horn.com

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A. PURPOSE OF THE REQUEST

Rose Law Group (the "Agent"), on behalf of W Holdings (the "Applicant") with permission of the subject property owner (Arizona RR Ranches LLC), is requesting a Major Comprehensive Plan Amendment (CPA) of the Pinal County Comprehensive Plan to change the land use designation of the ±495-acre Energy Generation and Technology Campus (the "Project") from Moderate Low Density Residential (MLDR 1-3.5 du/ac) to Employment (±414 acres) and General Public Facilities/Services (±81 acres) to allow for a large scale technology campus, with power generation facilities, situated in the western Pinal County growth area at the northeast corner of Arizona State Route 347 and W. Louis Johnson Drive. The CPA request will be accompanied by a subsequent request for a Planned Area Development (PAD) Overlay with an accompanying zone change to rezone the underlying parcels from the PAD with the Single Residence (CR-3/PAD) Zoning District to PAD with Industrial Zoning District (I-3 PAD) to support the future land use and site plan approval.

B. DESCRIPTION OF THE PROPOSAL

As seen in ***Exhibit A - Regional Context***, the Project is made up of five (5) parcels located, within Sections 25 and 26 in Township 5 South, Range 3 East, approximately eight (8) miles south and east of the City of Maricopa and just south of the Ak Chin Indian Community.

Table 1 - Energy Generation and Technology Campus Parcel/Land Use List

#	Assessor APN	Owner	Sect.	Town./ Range	Area/Acres	Exist. Comp Plan LU
1	Portion of 51054002a	Arizona RR Ranches LLC	26	5S 3E	0.82	MLDR 1-3.5 Du/Ac
2	Portion of 51048029I	Arizona RR Ranches LLC	26	5S 3E	413.25	MLDR 1-3.5 Du/Ac
3	51053003D	Arizona RR Ranches LLC	25	5S 3E	21.02	MLDR 1-3.5 Du/Ac
4	51053003E	Arizona RR Ranches LLC	25	5S 3E	20.18	MLDR 1-3.5 Du/Ac
5	51053003A	Arizona RR Ranches LLC	25	5S 3E	40.00	MLDR 1-3.5 Du/Ac

The Project represents an opportunity to redevelopment the approved +/-82-acre Teel Ranch PAD (PZ-PD-008-06), a 289-lot residential community, and a portion of the approved +/-4,141-acre Red River Master Planned Community, a 17,143-unit mixed-use community, which was an amendment of the Rancho Sierra (PZ-PD-041-00) and Rancho Sierra Vista (PZ-PD-060-00) Planned Area Developments. This approval will allow the replacement of planned single-family and multi-family units, significantly reducing the anticipated impact on local infrastructure, traffic, public facilities and services. In its place, the proposed Energy Generation & Technology Campus provides a less impactful use that will generate new jobs, tax revenues, renewable energy resources and battery

storage for local energy reliability and resiliency that will all significantly contribute to the economic growth and vitality of the County. The Project signifies an important investment within Pinal County, providing residents with crucial power and digital services, with the allowance of data centers and energy generation/storage uses such as gas generating facilities, battery energy storage systems (BESS) and other ancillary uses.

The proposed data centers are specialized facilities designed for the centralized management of electronic data, which has become critical infrastructure in today's digital world. The Project looks to address this growing need by allowing for the storage, processing, and transmission of the massive volumes of data that are generated every second. As individuals, businesses, and governments increasingly rely on cloud computing, streaming services, e-commerce, remote work, and connected devices, the need for secure, reliable, and high-performance computing environments has never been greater. This allowance for data centers will support everything from financial transactions and healthcare systems to emergency services and communications, acting as the backbone of the global digital economy. Without addressing the need for these uses, modern digital services and technologies simply could not function.

These campuses consist of buildings equipped with computing and networking hardware, as well as power and cooling infrastructure. Their primary function is to store, process, manage, and distribute vast quantities of data while ensuring secure and reliable access. These facilities play a vital role in modern life, enabling communication, telehealth, remote work, and media streaming. They're also essential to sectors like energy, healthcare, retail, aviation, automotive, entertainment, and government operations. Operating 24/7, these data centers will be supported by additional infrastructure such as power generation, energy distribution, and storage systems. Inside, they can house servers, switches, and telecommunications gear. To maintain optimal conditions, systems such as generators, batteries, electrical distribution, and cooling systems are used to regulate heat and airflow.

Technicians with specialized expertise monitor and manage these systems in accordance with best practices and manufacturer guidelines. Many modern centers can have automated systems to oversee real-time performance and ensure consistent uptime, excluding planned downtime for maintenance or upgrades. Given the high investment in both infrastructure and technology, these facilities maintain strict physical security measures in the form of perimeter fencing, controlled access, and on-site personnel.

In addition to permanent campus employment, the Project will generate substantial economic activity during its development, including hundreds of construction, utility, and support service jobs. Once operational, the site will contribute significantly to the local economy through both real and property taxes, helping to fund public services and infrastructure within Pinal County.

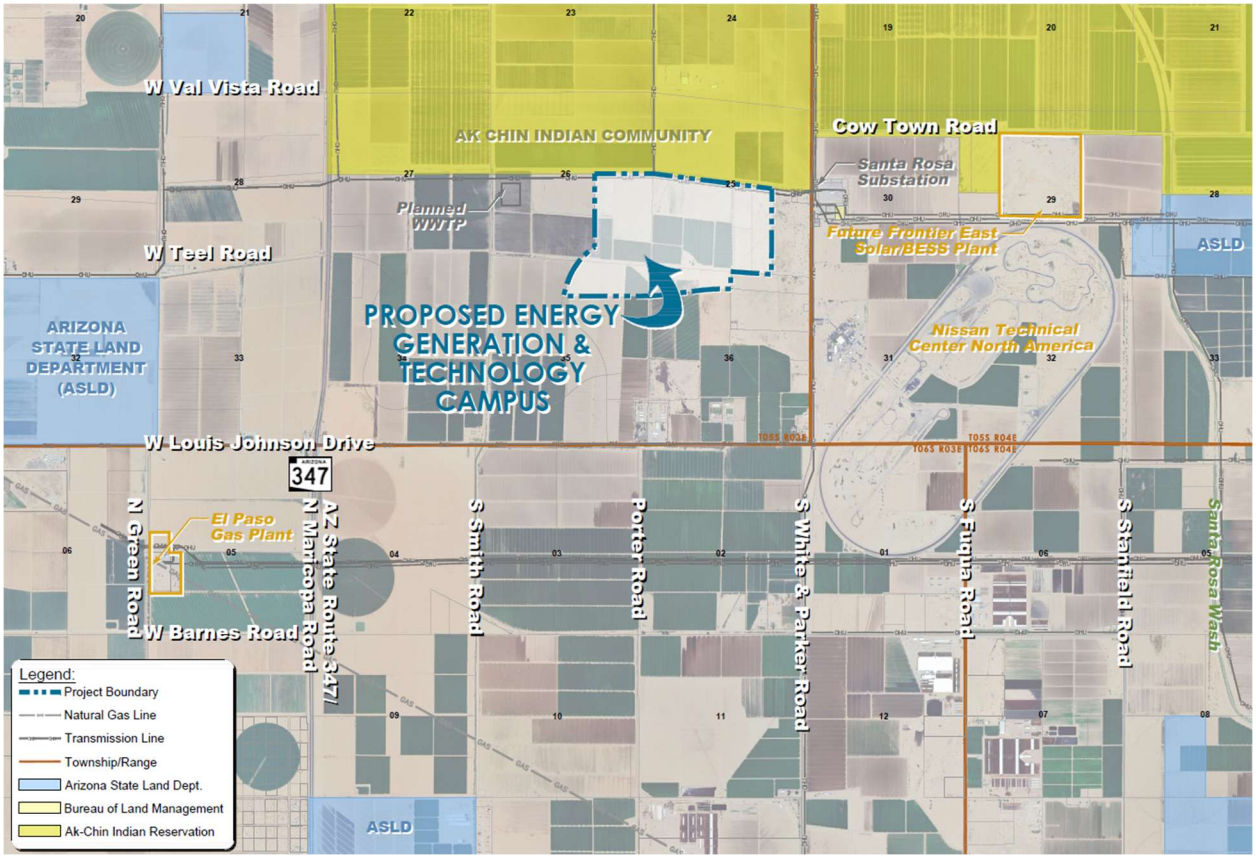


Exhibit B – Site Context

C. RELATIONSHIP TO SURROUNDING PROPERTIES

The Project site is located just west of Nissan's Arizona Testing Center in an area generally located south of the Ak Chin Indian Community, west of N. White & Parker Road, ±1-mile north of W. Louis Johnson Road and the ±1.5-mile east of the Arizona State Route 347. This surrounding area, mostly within the PAD with Single Residence (CR-3/PAD) and Light Industry and Warehouse Zoning District (CI-1) Zoning Districts, is characterized by active and passive agricultural uses with a few scattered residences and native desert lands. The Project site, due to its agricultural history, is relatively flat with only a +/-10-foot elevation change from west to east. The surrounding area is host to significant electrical infrastructure including 69Kv, 115Kv, 230kV, and 500kV transmission lines, which run along the Project boundaries, with the existing Santa Rosa electrical substation located less than a quarter mile to the east. Additionally, further east is the approved Frontier East Solar/BESS plant along with the existing El Paso Gas Plant and natural gas line located to the west and south. This existing infrastructure and the Employment Comprehensive Plan land use designations in the surrounding area make this an ideal location for the proposed land uses, limiting surrounding impacts and the need for extensive off-site infrastructure into the power grid.

With this proper planning and strategic site selection, the Energy Generation & Technology Campus will develop a master-planned campus that offers a cohesive framework for future data

center construction and energy generation—strategically located to minimize community impact and maximize access to critical infrastructure.

Throughout the processes, property owners and residents will be notified of the Project and efforts will be made to identify concerns over visual impacts and incorporate effective mitigation and/or screening of the Site where possible. Site parcels will be enclosed by perimeter security fencing located along each phase project boundaries and adjacent rights of way. No fencing will impede or otherwise enclose existing roads within the Project boundaries. Screening and mitigation of visual impacts will be addressed in greater detail with the PAD/zone change and site plan submittals.

Table 2 – Surrounding Land Uses

Side	Ownership	Existing Zoning	Existing Land Use Designation	Existing Land Use
Site	Private	CR-3 PAD	MLDR 1-3.5 du/ac	Agricultural/Vacant
North	Private/ Ak-Chin	Ak-Chin	N/A	Agricultural
East	Private	CR-3, CB-1, CB-2 & CI-B PAD & GR	MLDR 1-3.5 du/ac & Employment	Agricultural/Vacant/ Nissan Test Track
South	Private	CR-3, CB-1, CB-2, CI-1 & CI-B PAD & GR	MLDR 1-3.5 du/ac & Mid Intensity Activity Center	Agricultural/Vacant
West	Private	R-7, MD, MR, C-1, CB-1 PAD & CR-3, CB-2 PAD	MLDR 1-3.5 du/ac	Agricultural

I. SITE ACCESS

The Project area is generally bound on the north side by the Emerald Road alignment, on the east side by N. White & Parker Road. The site can be accessed regionally from Arizona State Route 347 via W. Louis Johnson and N. White & Parker Roads.

Compared to residential, commercial, or office developments, data centers produce significantly lower traffic volumes. A traffic impact analysis will be completed as part of the PAD/zone change process associated with the Project.

Internal circulation will be planned via a network of private maintenance and service drive aisles to provide vehicular access to the planned facilities and parking. Site access will be identified with the PAD/zone change and site plan applications. Final access locations and necessary right-of-way dedications/preservations will be determined in accordance with access management policies and permitting requirements of Pinal County.

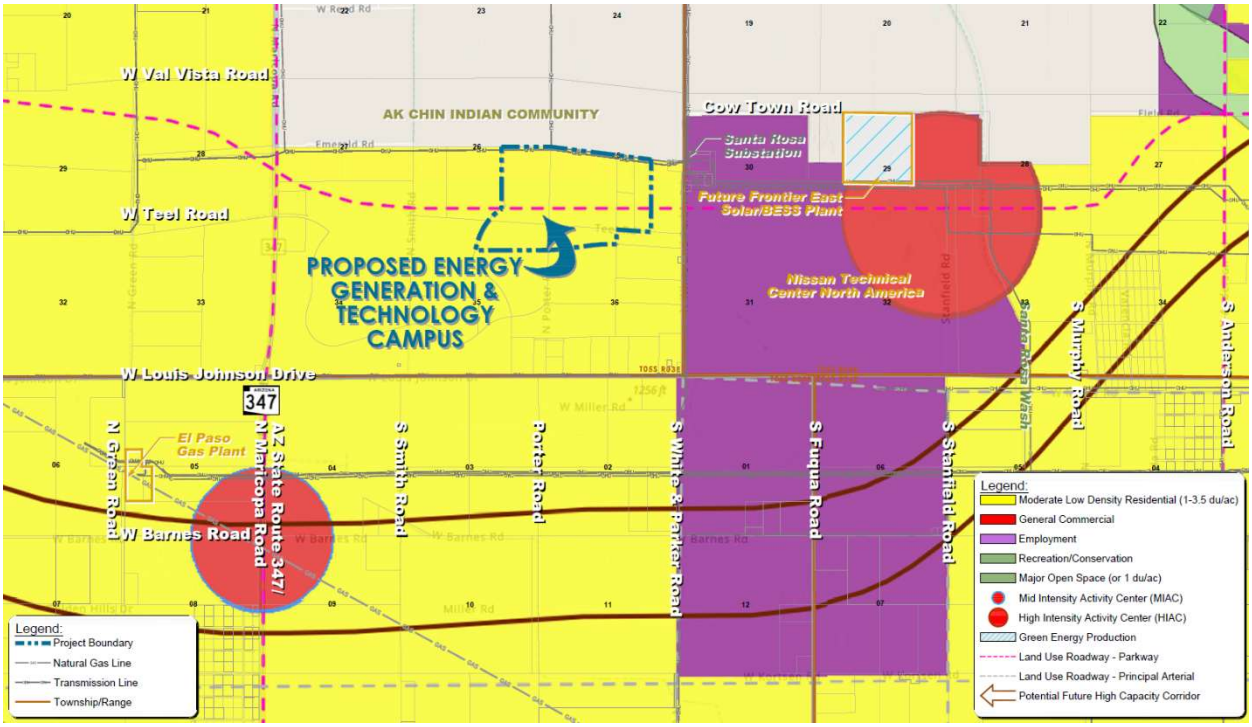
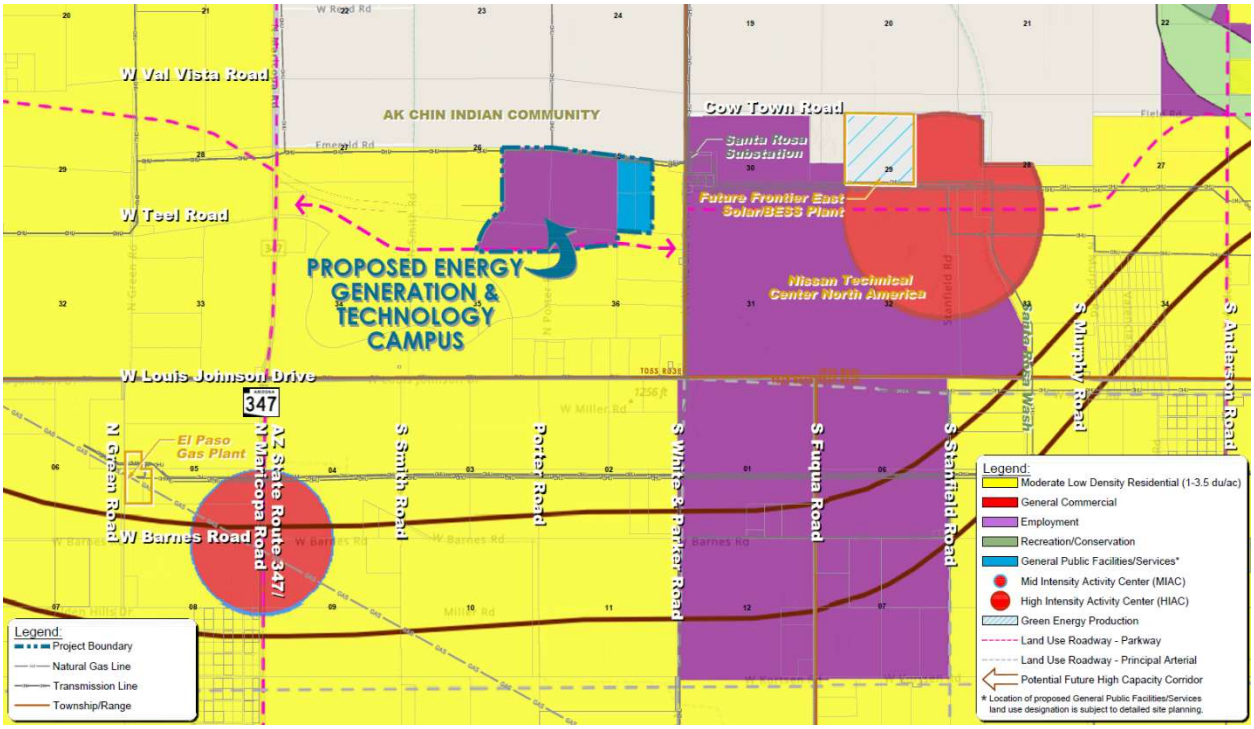


Exhibit C – Existing Comprehensive Plan Land Use Map

Exhibit D – Proposed Comprehensive Plan Land Use Map



D. COMPREHENSIVE PLAN AMENDMENT CRITERIA

This Comprehensive Plan Amendment is being requested in conjunction with the Arizona state statutes that define a "Major Amendment" as a "substantial alteration of the County's land use mixture or balance as established in the County's existing Comprehensive Plan Land Use element for that area of the County." However, it is left to each County to determine the criteria for determining if a proposed amendment meets this definition.

According to the Pinal County Comprehensive Plan amendment criteria, any change from a residential classification to a nonresidential land use classification of 160 or more contiguous acres represents a Major Comprehensive Plan Amendment. As seen in ***Exhibit C & D – Existing and Proposed Comprehensive Plan Land Use Map,*** the change from Moderate Low Density Residential (MLDR 1-3.5 du/ac) to Employment (±414 acres) and General Public Facilities/Services (±81 acres), meets this criterion.

Additionally, this area has experienced some recent changes that support this application. Since the previously approved Planned Area Developments, the nearby Santa Rosa Substation has experienced a significant expansion along with the addition of the Pinal West Substation located further to the west and large-scale transmission lines, within the area and along the Project boundaries. This focus on improving the surrounding electrical infrastructure in this area lends itself to future alternative energy solutions that will allow for opportunities to further bolster the surrounding infrastructure and power needs. Furthermore, the Comprehensive Plan at the time of these approvals did not have the current focus on alternative energy. The current Plan focuses on how Pinal County will provide a broad portfolio of energy resources to support future land use patterns and address energy conservation. The Plan now understands the importance to efficiently use and conserve energy sources and seek renewable sources so that future generations will not unnecessarily suffer from its shortage or absence.

Lastly, since these previous approvals, data centers are now considered critical infrastructure in our current economy. Being able to couple these necessary land uses, within an appropriate area, into an integrated campus can reduce reliance on traditional grid infrastructure and provide greater control over power supply while providing a more reliable, efficient, scalable, and secure environment compared to individual, sporadic data center sites, offering significant advantages in terms of operational resilience, cost savings, and environmental responsibility. The Project team feels this proposed amendment is necessary at this time due to the unique opportunity to develop underutilized land in a fashion that would provide jobs, sustainable energy, and further economic development within Pinal County.

E. COMPREHENSIVE PLAN COMPLIANCE

The Pinal County Comprehensive Plan is a vision-based plan that provides the framework that all decisions related to growth and development are measured against. This narrative, and more specifically the compliance analysis below, lays out the expectations for future growth and development of both employment and energy production land uses, which promote an efficient

use of land, energy, and financial resources. The Project recognizes the Comprehensive Plans focus on the need for employment opportunities and how the development of additional renewable energy uses, discussed throughout the Plan, respond to Pinal County's ability to be one of the most productive spots in the state for energy generation. These references provide measurable goals and strategies to further the vision components, as described below.

I. CONSISTENCY WITH PINAL COUNTYS VISION COMPONENTS.

The Project development area has a land use classification of Moderate Low Density Residential (MLDR 1-3.5 du/ac) and the approved zoning allowance for single-family and multi-family units. The proposal will amend the Pinal County Comprehensive Plan for the entire ±495-acre Project area to Employment (±414 acres) and General Public Facilities/Services (±81 acres) to allow for a subsequent request for a Planned Area Development (PAD) Overlay with an accompanying zone change to I-3 PAD to support the future large scale technology campus, with power generation and storage facilities. The proposed amendment request conforms to the goals, objectives, and policies of the current Comprehensive Plan by meeting the criteria outlined in the Plan's compliance checklist. The following analysis is in response to the Plan's compliance checklist:

1. Sense of Community

This Sense of Community vision component understands that the land use plan is more than just a map and that the goals of the Comprehensive Plan ultimately augment the visual aspects of the map. The Project furthers these goals by focusing on the strategic areas within the Sense of Community component that provide the allowance for flexibility to respond to market changes and align with Pinal County's vision and policies to achieve a land use that is in line with the important goals and objectives, such as sustainable development, economic diversification, and energy efficiency. Given the surrounding land uses and the existing agriculture uses on and around the Project area, this proposal is consistent with the outlined Agriculture Planning Guidelines, which determine that renewable energy production is compatible with the farming heritage coupled with appropriate buffers for other uses as planned within the Project. Additionally, the expansion of the surrounding employment land use designations, setup to allow Pinal County to take advantage of emerging economic development trends, will allow for growth in an area anticipated for employment and job centers so they are sustainable, viable components with resources and transportation management that are consistent with the surrounding areas.

Further, relating to the West Pinal Growth Area, Pinal County states the need for carefully sited development in relation to existing and proposed infrastructure. Collaboration is encouraged with municipalities and private landowners within the West Pinal Growth Area plan to help knit together all of the public and private efforts and infrastructure development. Necessary for smart growth. The Project will support the culmination of public, private and infrastructure development and seeks to include employment and renewable energy into the community landscape with little impact on existing surrounding area.

2. Mobility and Connectivity

As required by the Mobility and Connectivity vision component, the Project plans to work with the County to evaluate the transportation impacts of the proposed Comprehensive Plan amendment and rezoning based on Pinal County's regional transportation system. The minimal traffic impact associated with the Project fits with the existing surrounding rural context. Additionally, no future trail alignments have been identified on or around the Project area and the proposed future land use will not require a need for pedestrian connectivity. As seen on ***Exhibit C & D – Existing and Proposed Comprehensive Plan Land Use Map***, the Project has also contemplated the Land Use Roadways, which indicate the Principal Arterial designation of White and Parker Road east of the Project's eastern frontage and the Val Vista Road Parkway designation to be aligned on the southern perimeter of the Project. The applicant will work with County staff to provide necessary right-of-way to preserve these designations. Additional High-Capacity Road (Under Study) designations have been identified within the surrounding area but do not appear to impact the Project area.

3. Economic Sustainability

The economic benefit to this region of Pinal County that would be realized from Energy Generation & Technology Campus would be substantial. The tax revenue generated by this Project would provide significant benefits to the County, helping to fund critical public services and expenditures within the surrounding communities. Beyond its direct fiscal and employment contributions, the Project is expected to stimulate broader economic development while also contributing to job market expansion, higher wages, and initiatives aimed at enhancing the overall quality of life for County residents. Additionally, in addition to storing, processing, and distributing data and applications for businesses, this Project is intended to promote the production and delivery of alternative energy resources that meet and otherwise support consumption needs which will benefit the regional and state economies and tax bases. The availability of sustainable, renewable, and economically efficient energy and the resulting cost savings, both immediate and over time, creates opportunity for reinvestment of public and private capital back into the local and regional economy.

The Project, which is located near identified Employment, Commercial and Activity Centers, is consistent with this vision component by implementing the development of employment and renewable energy, adding resilience to the electrical grid and demonstrating the County's commitment to the use of renewable energy resources, which can help increase the number of businesses that expand in and locate to Pinal County. This Project provides the County and area a sustainable way of bringing economic development to the region while providing employment opportunities ranging from construction, operation, management, and maintenance. The Project was selected after completing site research on multiple sites to ensure selection of a land area well suited for this type of campus, including adjacency to necessary electric transmission infrastructure to provide a reliable and competitive development.

4. Open Spaces and Places

The Project CPA amendment is consistent with the Open Spaces and Places vision component. The Pinal County Open Space and Trails Master Plan does not identify the Project area as having to dedicate any open space or trails (existing, proposed, or planned). The project team will coordinate with the Pinal County Parks/Rec team to ensure further compatibility.

5. Environmental Stewardship

This request is consistent with the Environmental Stewardship vision component, which looks to expand alternative energy in Pinal County. The Comprehensive Plan stresses the tremendous environmental, natural resource, and economic implications that energy conservation has and specifically discusses the need for gas power generation to help produce the County's additional electricity needs. The Projects data centers will utilize this alternative energy and battery storage, for local energy reliability and resiliency, to promote environmental stewardship.

While the majority of the Project area has been previously disturbed with a history of agricultural usage, detailed environmental studies, including pedestrian biological and cultural/archaeological surveys will be completed and documented, as needed or as recommended by local, state, or federal agencies. Additionally, throughout the entitlement process, the project team with coordinate with the Arizona Game and Fish Department (AZGFD) to ensure the future development is sensitive to any potential wildlife in the area.

6. Healthy, Happy Residents

This request is consistent with the Healthy, Happy Residents vision component by promoting a lower impact use, than currently allowed, that contributes much needed employment opportunities and efficient energy while helping maintain long-term financial stability through the generation of revenues and tax base contributions for Pinal County. The Project will provide fiscally responsible employment and alternative energy services and effective and efficient infrastructure to implement delivery of necessary data services that help promote and contribute to a healthy community that residents can enjoy.

7. Quality Educational Opportunities

While this component may not apply to all projects, this request provides an opportunity for the community to have an opportunity to learn about, be aware of and take advantage of the benefits of alternative energy.

II. CONSISTENCY WITH THE PLAN'S KEY CONCEPTS ILLUSTRATED ON LAND USE, ECONOMIC, AND CIRCULATION GRAPHICS.

The Project has an existing land use designation of Moderate Low Density Residential (MLDR 1-3.5 du/ac) and the approved zoning allowance for planned single-family and multi-family units. The proposal will amend the Pinal County Comprehensive Plan for the entire ±495-acre Project area to Employment (±414 acres) and General Public Facilities/Services (±81 acres) to

allow for a subsequent request for a Planned Area Development (PAD) Overlay with an accompanying zone change to I-3 PAD to support the future large scale technology campus, with power generation and storage facilities. The proposed amendment request conforms to the goals, objectives, and policies of the current Comprehensive Plan by meeting the criteria outlined in the Plan's compliance checklist. The following is a response to the Plan's compliance checklist:

1. **Consistency with the Land Use Designation shown on the graphics.**

The Project is consistent with the proposed Employment and General Public Facilities/Services land use designation defined as areas that can support a variety of employment-generating business activities such as industrial, office, business park, and warehousing and distribution. Power plants are also included in this category. The Project, which is in a remote area of Pinal County, is surrounded by existing infrastructure and the Nissan test track to the east along with existing Employment land use designations to the east and is unlikely to conflict with other proposed developments or sensitive land uses. Additionally, given that the Project would be a low-impact use, the proposed amendment would be consistent with surrounding Moderate Low Density Residential uses and would also provide opportunities to spur growth within the surrounding Employment and Activity Centers.

2. **Consistency with the Mixed-Use Activity Center Concept.**

This proposal is not within a Mixed-Use Activity Center. Although, data centers and the production of energy is essential to the region's business sectors. Data and energy resources significantly impact economic development by contributing to the region's overall attractivity on basic and corresponding non-basic employment, primary and secondary employment sectors and markets, and research and development within existing and emerging markets and industries. Additionally, energy availability and even surplus opportunities function as an incubator for innovations within all segments of the local, regional, and state economy.

3. **Consistency with the Planning Guidelines described in the Land Use element.**

Per the Comprehensive Plan, Major Plan Amendments should improve the County's overall condition and not undermine the Plan's core principles. The Plan recognizes the need to redesignate land uses in response to changing market conditions and to address the increasing demands of growth to the public infrastructure needs, specifically energy generation and consumption demands within the local economy.

4. **Quality Employment Opportunities County-wide.**

The Project is anticipated to generate new jobs during its operation and in the construction, contracting, administrative, and project management fields during the construction and implementation of the Project over the proposed construction timeline. Data centers have a wide range of jobs that contribute to the facility's operation, security, and maintenance. In addition to providing in-state construction jobs and long-term technical careers, local projects like the Energy Generation & Technology Campus will also help contribute to the regional

economy by providing tax revenue and by using local engineering and development contractors.

5. Viable Agriculture, Equestrian and Rural Lifestyle.

As discussed above, the project will complement the existing rural character of the surrounding area by providing a low impact use, which will avoid adding more traffic and noise to a quiet area than already planned and approved. Given the surrounding land uses and the existing agriculture uses on and around the Project area, this proposal is consistent with the outlined Agriculture Planning Guidelines, which determine that alternative energy production and uses with appropriate buffering are compatible with the farming heritage.

6. System of Connected Trails and Preservation of Open Space.

As discussed above, the amendment area is consistent with the Trails and Open Space Master Plan and Chapter 6: Open Spaces and Places of the Comprehensive Plan. There are no existing or otherwise dedicated Open Space areas or Trails within or around the Project area.

7. Natural and Cultural Resource Conservation.

While the majority of the Project area has been previously disturbed with a history of agricultural usage, detailed environmental studies, including pedestrian biological and cultural/archaeological surveys will be completed and documented, as needed or as recommended by local, state, or federal agencies.

8. Water Resources, Public Facilities/Services, and Infrastructure Support

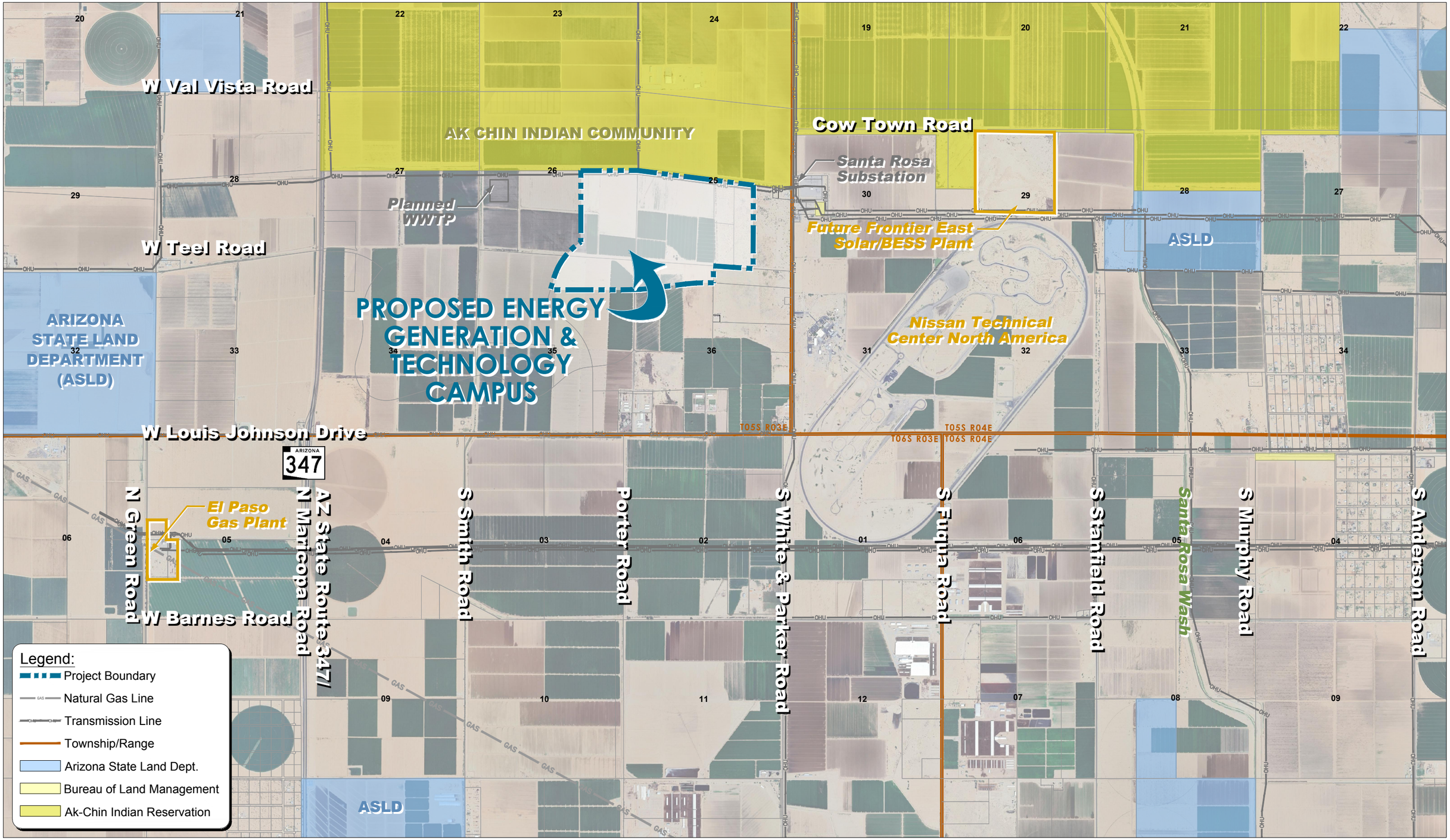
The existing agricultural uses on-site along with the allowed mixed-use master planned community, with planned single-family and multi-family units, are both heavy water users. The proposed data centers and energy generation uses are generally low staffed resulting in minimal potable water needs. Additionally, they will encourage innovative cooling technologies for operational purposes. The Project will require significantly less infrastructure than the planned community and will have less overall impacts on the surrounding area. Utility service(s) to the site, as listed below, will be coordinated with the following providers. Water for construction purposes will be transported to the site.

Utility/Service	Agency/Provider
Water	Hauled/well, Global Water's Santa Cruz district, Santa Rosa Water Company
Sewer	(TBD) Septic
Electric Service	Electrical District 3
Fire Protection	Pinal County Fire and Medical Authority (PCFMA)
Police Protection	Pinal County Sheriff Office
Refuse (Waste Management)	Republic Services
Telephone	Cox Communications
Cable	Cox Communications

Development of the Project would not impact existing water quality. The site would be designed to pass off-site stormwater through or around the site and release it in a manner similar to the existing conditions. Based on a final hydrologic analysis of the Project Area, on-site drainage would be routed as necessary to retention basins in accordance with Pinal County Public Works regulations. This drainage design concept would allow the site to be developed, while not increasing stormwater runoff or creating an adverse impact on adjacent properties. Careful Project siting and design, sensitive to existing topography and drainage patterns would also function to protect water quality.

F. CONCLUSION

The Major Comprehensive Plan Amendment supports the Pinal County Comprehensive Plan goals by providing much needed employment opportunities, additional renewable energy resources and battery storage for local energy reliability and resiliency. Moreover, the Project aligns with the Comprehensive Plan by providing necessary power generation and a high-tech economic environment offering quality employment opportunities available to residents in the County's western growth. Jobs within the data center sector typically offer strong wages, with many roles accessible to local residents who possess relevant technical skills. Overall, job opportunities in computer and information technology-related fields are projected to grow at a rate well above the national average. The need for this Project is established by growing demand for renewable energy and the management of electronic data. The Energy Generation & Technology Campus offers the opportunity for a strong economic driver that delivers significant fiscal benefits while placing minimal demand on infrastructure.



ENERGY GENERATION & TECHNOLGY CAMPUS

PINAL COUNTY, AZ

CONTEXT AERIAL MAP

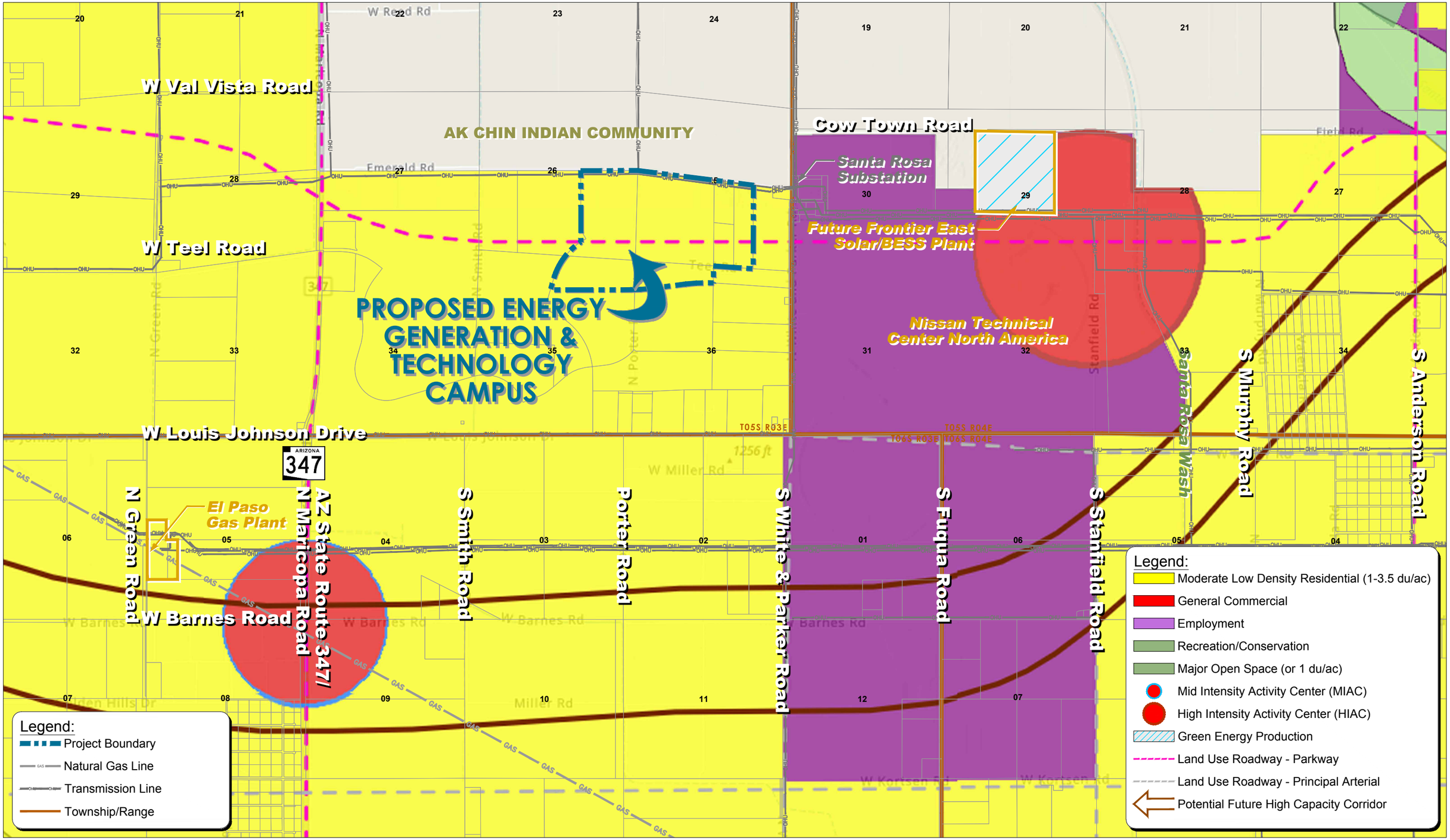
MAJOR CPA APPLICATION

08/12/2025

NORTH 0' 1,500' 3,000'

DRAWN BY: JK SCALE: APPROX.

Kimley»Horn



ENERGY GENERATION & TECHNOLGY CAMPUS

PINAL COUNTY, AZ

EXISTING COMP. PLAN LAND USE MAP

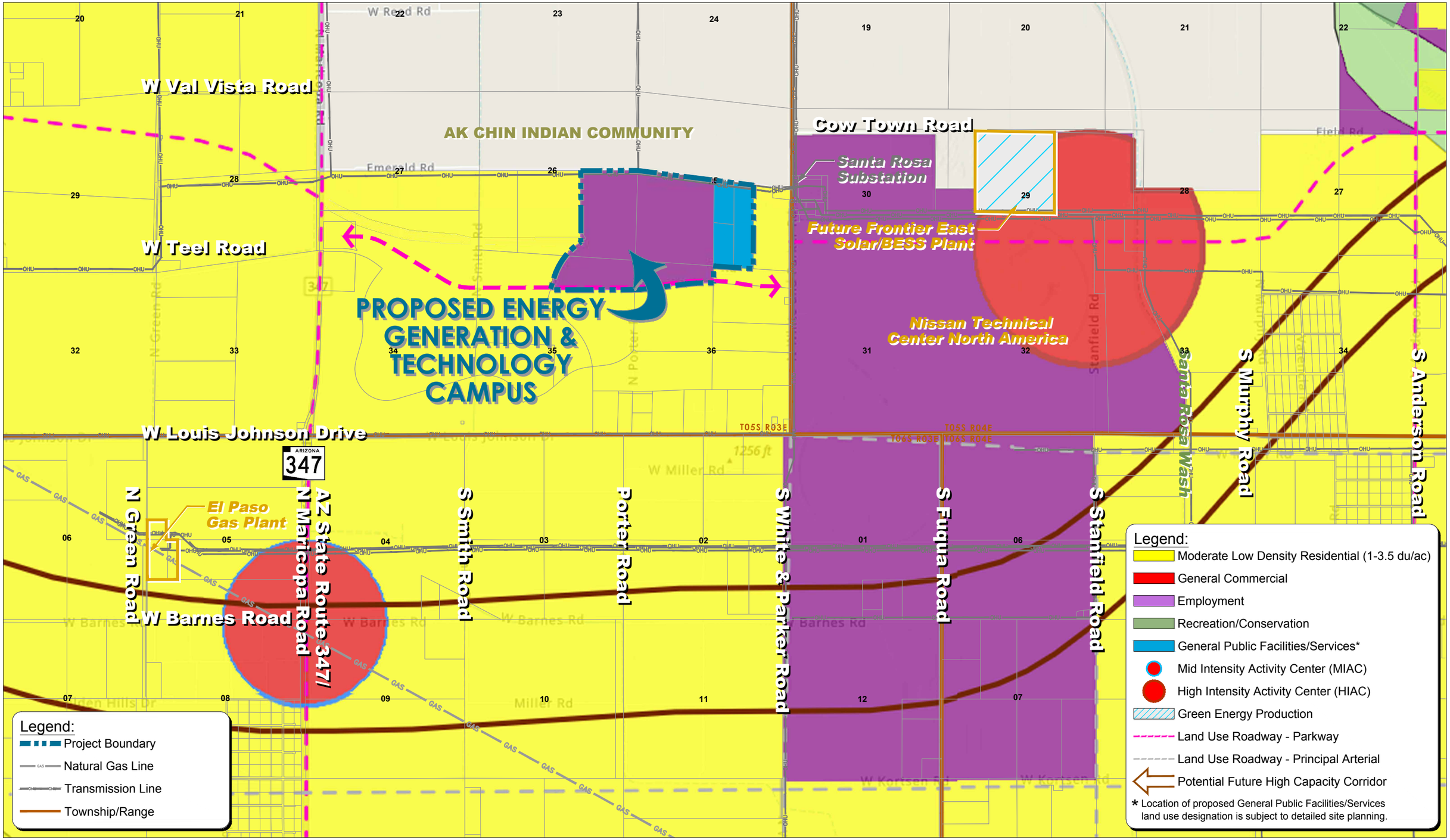
MAJOR CPA APPLICATION

08/12/2025

NORTH 0' 1,500' 3,000'

DRAWN BY: JK SCALE: APPROX.

Kimley»Horn



ENERGY GENERATION & TECHNOLGY CAMPUS

PINAL COUNTY, AZ

PROPOSED COMP. PLAN LAND USE MAP

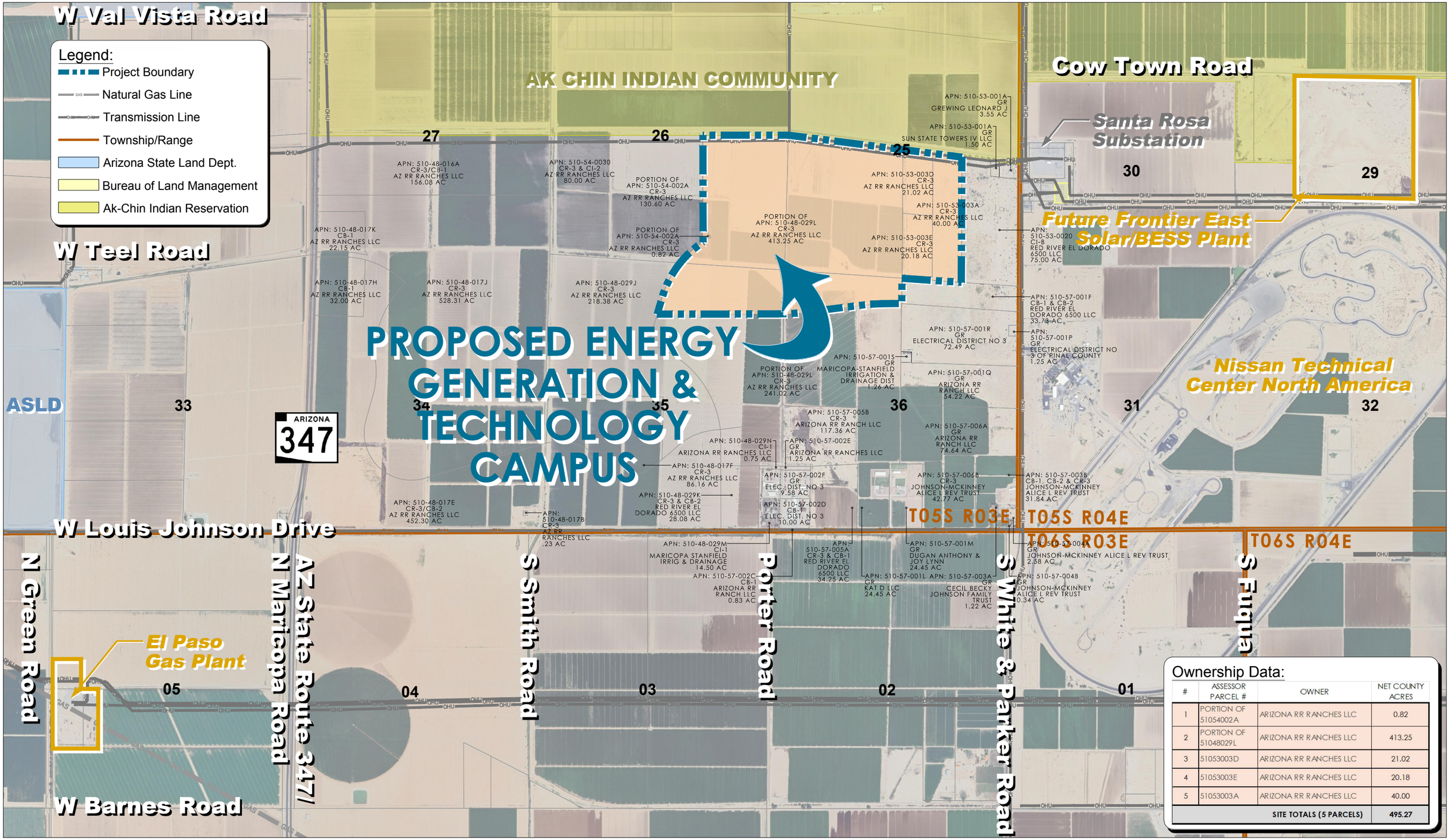
MAJOR CPA APPLICATION

08/12/2025

NORTH 0' 1,500' 3,000'

DRAWN BY: JK SCALE: APPROX.

Kimley»Horn



Ownership Data:

#	ASSESSOR PARCEL #	OWNER	NET COUNTY ACRES
1	PORTION OF 51054002A	ARIZONA RR RANCHES LLC	0.82
2	PORTION OF 51048029L	ARIZONA RR RANCHES LLC	413.25
3	51053003D	ARIZONA RR RANCHES LLC	21.02
4	51053003E	ARIZONA RR RANCHES LLC	20.18
5	51053003A	ARIZONA RR RANCHES LLC	40.00
		SITE TOTALS (5 PARCELS)	495.27

ENERGY GENERATION & TECHNOLGY CAMPUS
PINAL COUNTY, AZ

OWNERSHIP MAP
MAJOR CPA APPLICATION 08/12/2025

NORTH 0' 1,500' 3,000'
DRAWN BY: JK SCALE: APPROX.
Kimley»Horn

Arizona Environmental Online Review Tool Report

Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department requests further coordination to provide project/species specific recommendations. Please use the Project Evaluation Form to submit your project to the Project Evaluation Program at PEP@azgfd.gov.

Project Name:
Frontier West

Project Type:
Energy Production/Storage/Transfer, Energy Storage, Battery Energy Storage System (BESS) - (new)

Project ID:
HGIS-25952

User Project Number:
Kimley-Horn

Project Description:
Frontier West / Copia - Proposed Energy Generation & Technology Campus

Contact Person:
Justin Kinkade

Organization:
Kimley-Horn

On Behalf Of:
PINAL

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. Arizona Wildlife Conservation Strategy (AWCS), specifically Species of Greatest Conservation Need (SGCN), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

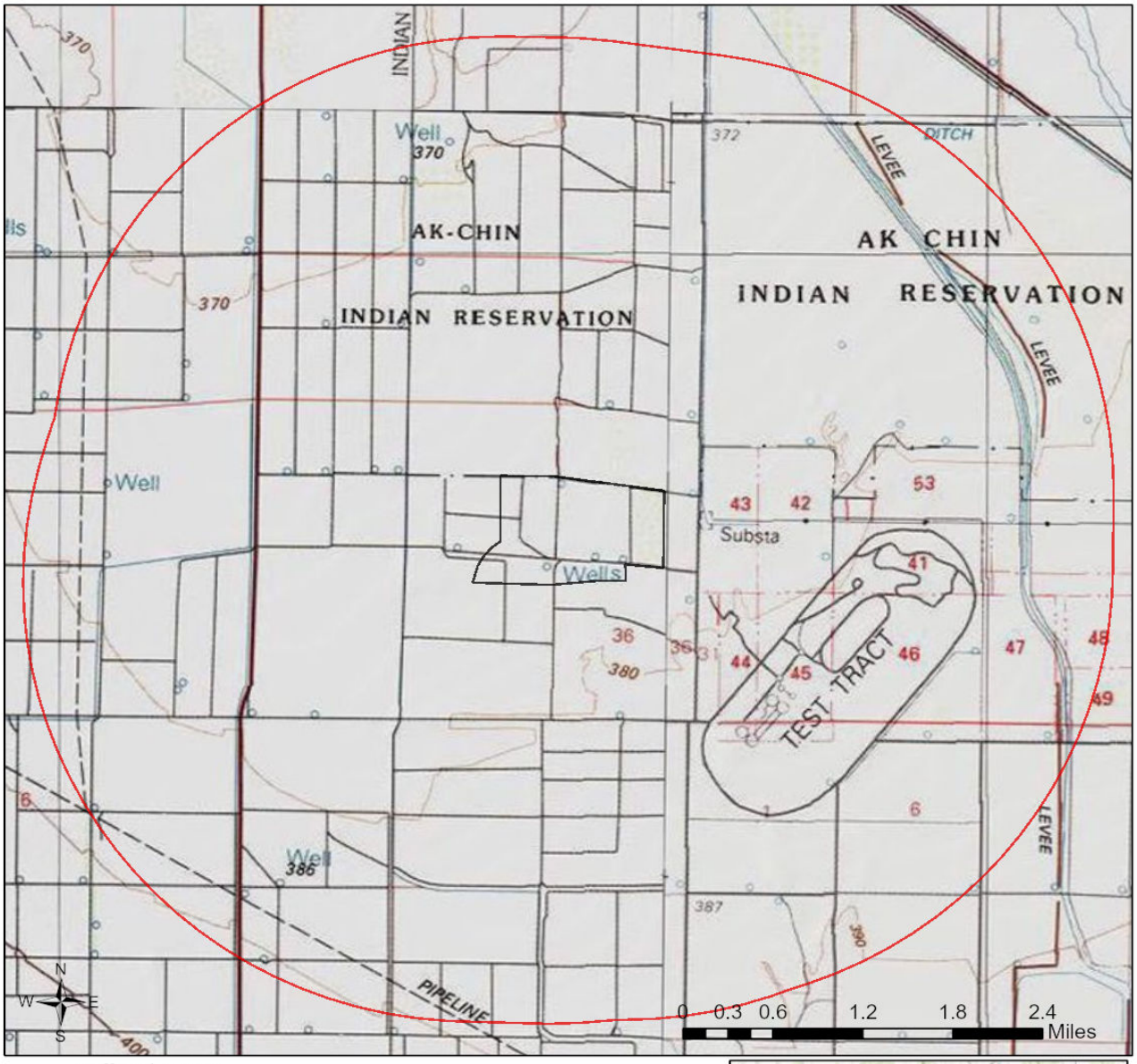
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies.

Frontier West

USA Topo Basemap With Locator Map



Buffered Project Boundary

Project Boundary

Project Size (acres): 489.56

Lat/Long (DD): 32.9584 / -112.0113

County(s): Pinal

AGFD Region(s): Mesa

Township/Range(s): T5S, R3E

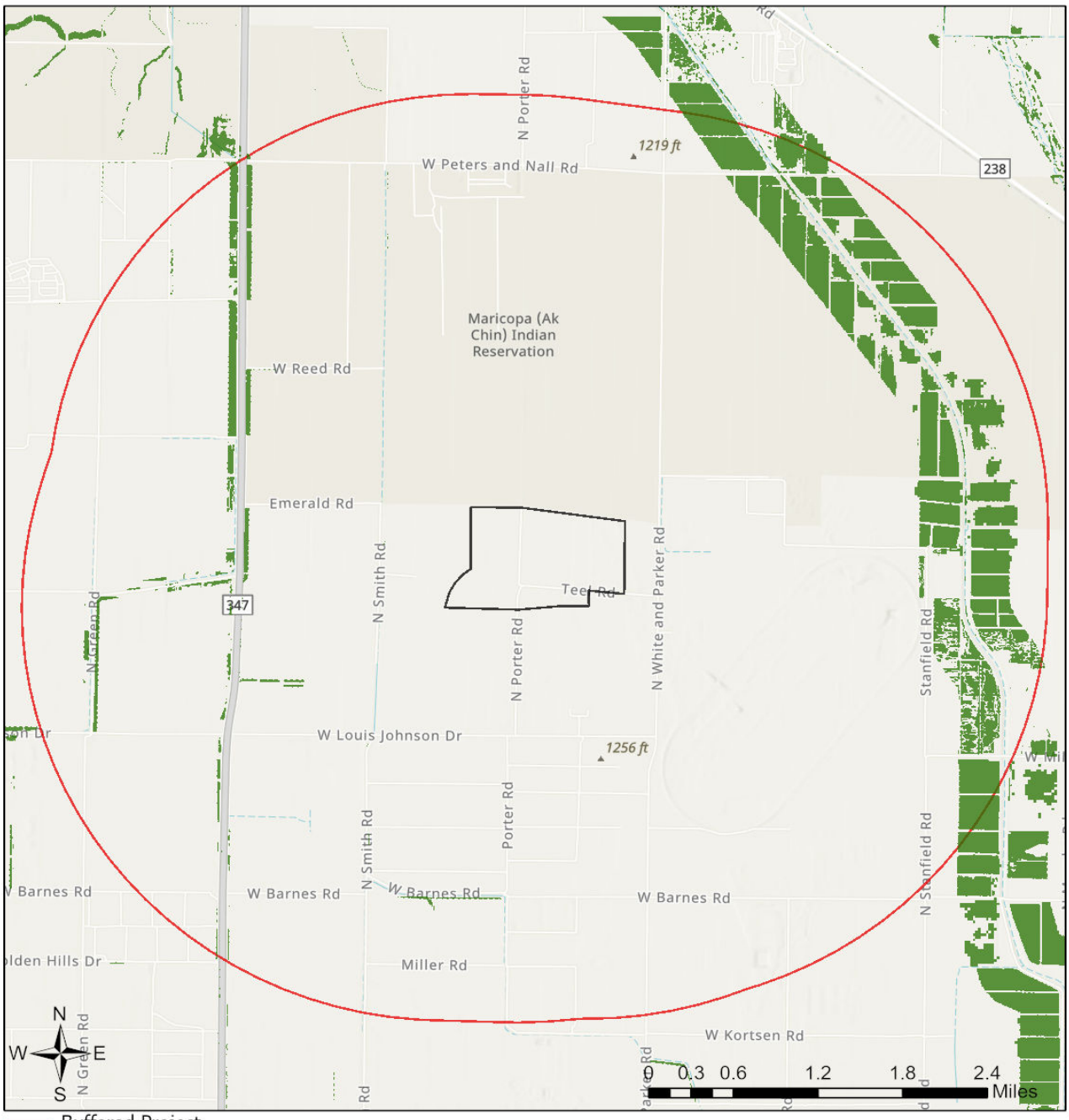
USGS Quad(s): ANTELOPE PEAK NE



County of Yavapai, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Copyright:© 2013 National Geographic Society, i-cubed
Esri, USGS

Frontier West

Important Areas



- Buffered Project Boundary
- Project Boundary
- Important Bird Areas
- Critical Habitat
- Pinal County Riparian
- Wildlife Connectivity

Project Size (acres): 489.56

Lat/Long (DD): 32.9584 / -112.0113

County(s): Pinal

AGFD Region(s): Mesa

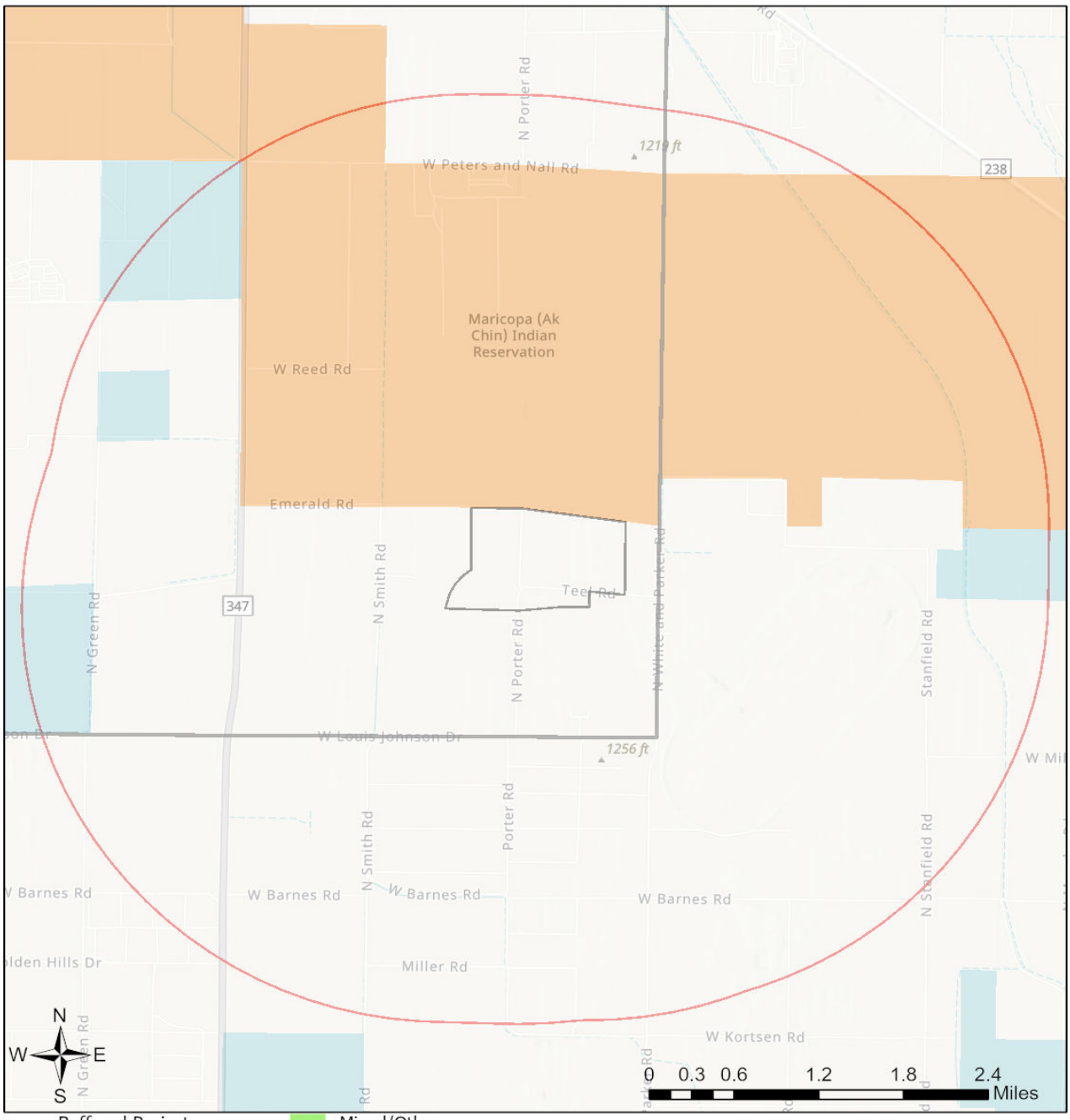
Township/Range(s): T5S, R3E

USGS Quad(s): ANTELOPE PEAK NE

Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS
Esri, NASA, NGA, USGS, FEMA

Frontier West

Township/Ranges and Land Ownership



- Buffered Project Boundary
- Project Boundary
- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State & Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge
- Township/Ranges

Project Size (acres): 489.56

Lat/Long (DD): 32.9584 / -112.0113

County(s): Pinal

AGFD Region(s): Mesa

Township/Range(s): T5S, R3E

USGS Quad(s): ANTELOPE PEAK NE

Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS
Esri, NASA, NGA, USGS, FEMA

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Falco sparverius	American Kestrel					2
Incilius alvarius	Sonoran Desert Toad					2

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Ak-Chin Indian Reservation	Ak-Chin Indian Reservation					

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Anaxyrus retiformis	Sonoran Green Toad			S		2
Anthus spragueii	Sprague's Pipit					2
Aquila chrysaetos	Golden Eagle	BGA		S		2
Artemisiospiza nevadensis	Sagebrush Sparrow					3
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Auriparus flaviceps	Verdin					2
Buteo regalis	Ferruginous Hawk			S		2
Buteo swainsoni	Swainson's Hawk					2
Calcarius ornatus	Chestnut-collared Longspur					2
Calypte costae	Costa's Hummingbird					2
Campylorhynchus brunneicapillus	Cactus Wren					2
Catharus ustulatus	Swainson's Thrush					2
Charadrius montanus	Mountain Plover					2
Chilomeniscus cinctus	Variable Sandsnake					2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1
Colaptes chrysoides	Gilded Flicker			S		2
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat		S	S		1
Empidonax wrightii	Gray Flycatcher					2
Eumops perotis californicus	Greater Western Bonneted Bat			S		2
Falco mexicanus	Prairie Falcon					2
Falco peregrinus anatum	American Peregrine Falcon		S	S		1
Falco sparverius	American Kestrel					2
Gastrophryne mazatlanensis	Sinoloan Narrow-mouthed Toad			S		2
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Icterus bullockii	Bullock's Oriole					2
Incilius alvarius	Sonoran Desert Toad					2
Lanius ludovicianus	Loggerhead Shrike					2
Lasiurus cinereus	Hoary Bat					2
Lasiurus xanthinus	Western Yellow Bat		S			2
Lepus alleni	Antelope Jackrabbit					2
Macrotus californicus	California Leaf-nosed Bat			S		2
Megascops kennicottii	Western Screech-owl					2
Melanerpes uropygialis	Gila Woodpecker					2
Melospiza lincolnii	Lincoln's Sparrow					2
Micrathene whitneyi	Elf Owl					3
Myotis velifer	Cave Myotis			S		2
Myotis yumanensis	Yuma Myotis					2
Neotamias cinereicollis	Gray-collared Chipmunk					2
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					2
Passerculus sandwichensis	Savannah Sparrow					2
Phrynosoma solare	Regal Horned Lizard					2
Pooecetes gramineus	Vesper Sparrow					2
Rana yavapaiensis	Lowland Leopard Frog		S	S		1
Spizella breweri	Brewer's Sparrow					2
Tadarida brasiliensis	Brazilian Free-tailed Bat					2
Toxostoma bendirei	Bendire's Thrasher					2
Toxostoma lecontei	LeConte's Thrasher			S		2

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Puma concolor	Mountain Lion					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Energy Production/Storage/Transfer, Energy Storage, Battery Energy Storage System (BESS) - (new)

Project Type Recommendations:
Fence recommendations will be dependent upon the goals of the fence project and the wildlife species expected to be impacted by the project. The AZGFD's Wildlife Compatible Fencing Guidelines provide information on how fencing impacts wildlife, ways to design fencing to prevent wildlife entanglement and impalement, and to ensure wildlife movement is not restricted. Please refer to the AZGFD's Fencing Guidelines located on Wildlife Friendly Guidelines page, which is part of the Wildlife Planning page at https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/.
For wildlife friendly fencing, general guidelines for ensuring wildlife-friendly barbed-wire fences along roadways and other property/allotment boundaries include: barbless wire on the top and bottom with the maximum fence height 42", minimum height for bottom 16". Modifications to this design may be considered for fencing anticipated to be routinely encountered by elk, bighorn sheep, or pronghorn (e.g., Pronghorn fencing would require 18" minimum height on the bottom). For projects that require chain link or other security/perimeter fence, leaving a 6–8-inch gap between the ground surface and bottom of the fence to allow for smaller wildlife species to move freely through the area and make use of any habitat within the project boundary.

During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and it is important to identify and conserve upland wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife species. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations. The AZGFD recommends using only the minimum amount of light needed for safety, especially in areas immediately adjacent to open space or undeveloped lands. The AZGFD encourages the use of motion sensing lighting and narrow spectrum lighting (amber or warm tones typically 2700 Kelvin or lower) wherever possible to lower the range of species affected by lighting. Also, please consider shielding, canting, or cutting all lighting, where possible, to ensure that light reaches only areas needing illumination and to minimize impacts to nocturnal wildlife.

Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at https://www.invasivespeciesinfo.gov/ and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control these species. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at https://imap.natureserve.org/imap/services/page/map.html.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select “See What’s Here” for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

Habitat restoration recommendations are dependent on habitat communities, target species, and other species located within the project area, site history, restoration goals, and treatment types. General project scoping should include defined project goals with measurable success criteria, a habitat restoration plan with adaptive management measures, post-project monitoring plans, and funding commitments. Prior to developing the habitat restoration plan, a site evaluation (e.g., soil conditions, local and watershed hydrological conditions and regimes) should be conducted along with pre-project fish and wildlife surveys to obtain baseline data for post-project evaluation and assessment of project impacts. The restoration plan should consider effects to habitat and wildlife at landscape scales and develop methods for site preparation and revegetation (plant species should be native to the area and based on current or expected site environmental conditions) that incorporate wildlife habitat features (e.g., retaining snags for roost sites). AZGFD recommends early coordination with AZGFD personnel on project designs. Contact information can be found at https://www.azgfd.com/Agency/Offices or email our Project Evaluation Program at PEP@azgfd.gov.

The AZGFD recommends that wildlife surveys are conducted to determine if noise-sensitive species, such as birds or mammals, occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

The AZGFD recommends following the Avian Power Line Interaction Committee (APLIC) guidelines for new power lines, which can be found in the current version of *Suggested Practices for Avian Protection on Power Lines and Reducing Avian Collisions with Power Lines*. Large bodied birds, such as hawks, owls, vultures, and eagles, may be vulnerable to line strikes and electrocution during construction and operation of power lines and substations; power poles can also serve as perches for large-bodied birds. These potential impacts can be avoided or minimized by following the APLIC guidelines which include designing the power lines with enough space between energized components to reduce the likelihood of a bird electrocution or installing bird flight diverters in sections of line where elevated bird strikes are anticipated (e.g. lines over water bodies or in the path of colonial roosting locations). The AZGFD's Raptor Coordinator, who can be contacted at raptors@azgfd.gov or 623-236-7575, can provide further information on specific design features and best management practices.

If trenching or digging of large holes is necessary, the AZGFD recommends trenching/digging and backfilling crews be close together to minimize the amount of open holes at any given time. Where trenches or holes cannot be back-filled immediately, the AZGFD recommends escape ramps be constructed in each hole and at least every 90 meters in trenches. Escape ramps can be short lateral trenches or wooden planks sloping to the surface. The AZGFD recommends that slopes be less than 45 degrees (1:1) and trenches and holes that have been left open be inspected to remove animals prior to backfilling.

Project Location and/or Species Recommendations:
Tribal Lands are within the vicinity of your project area and may require further coordination. Please contact:
Ak-Chin Indian Community Council
42507 W Peters & Nail Rd
Maricopa, AZ 85239
(520) 568-2618
(520) 568-4566 (fax)

HDMS records indicate that **Western Burrowing Owls** have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at https://www.azgfd.com/wildlife-conservation/conservation-and-endangered-species-programs/burrowing-owl-management/.

NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT **6:00 P.M**. ON THE **4TH** DAY OF **SEPTEMBER 2025**, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 301 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR **MAJOR COMPREHENSIVE PLAN AMENDMENT** TO THE PINAL COUNTY COMPREHENSIVE PLAN.

PZ-PA-015-25 – PUBLIC HEARING/ACTION: Arizona RR Ranches LLC, owner, W Holdings, applicant, Jordan Rose, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 2,495.42± acres of land from Moderate Low Density Residential (MLDR, 1-3.5 du/ac) to Employment and General Public Facilities/Services (Max 200± acres), for the location of a energy generation and technology campus, situated on a portion of sections 25, 26, 27, 34, 35, & 36, T05S, R03E, of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 510-48-016A, -017B, -017E, -017F, -017H, -017J, -017K, -029J, -029L Portion of, 510-53-003A, -003D, -003E, 510-54-0030, -002A, 510-57-001Q Portion of, -005B, -006, generally located northeast of Maricopa Road and Teel Road, in unincorporated area of Pinal County.

ALL PERSONS INTERESTED IN THIS MATTER MAY APPEAR AND SPEAK AT THE PUBLIC HEARING AT THE DATE, TIME, AND PLACE DESIGNATED ABOVE.

DOCUMENTS PERTAINING TO THIS CASE CAN BE FOUND ON THE NOTICE OF HEARING PAGE FOR THE P&Z COMMISSION AT:
https://www.pinal.gov/236/Notice-of-Hearings

DATED THIS **8th** DAY OF **JULY 2025**, by Pinal County Development Services

TO QUALIFY FOR FURTHER NOTIFICATION IN THIS LAND USE MATTER YOU MUST FILE WITH THE PLANNING DEPARTMENT A WRITTEN STATEMENT OF SUPPORT OR OPPOSITION TO THE SUBJECT APPLICATION. YOUR STATEMENT **MUST** CONTAIN THE FOLLOWING INFORMATION:

1) Planning Case Number (see above)
2) Your name, address, telephone number and property tax parcel number **(Print or type)**
3) A brief statement of reasons for supporting or opposing the request
4) Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:
PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT
85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132

Contact for this matter: Glenn Bak, Senior Planner
E-mail address: Glenn Bak@pinal.gov
Phone # (520) 866-6444

[*Anything below this line is not for publication.*]

TO BE PUBLISHED:
Pinal Central Dispatch
Arizona Republic

Pinal County
AFFIDAVIT OF POSTING BROADCAST SIGN

I, the applicant's representative for case # PZ-PA-015-25, personally caused at least one sign to be posted in a visible place on or near the proposed project site at NEC John Wayne Pkwy & Louis Johnson Dr, at least 28 days before the Planning and Zoning Commission Public Hearing, in Pinal County.

See attached photo exhibit.

Dynamite Signs
Sign Company Name

Meghan Liggett
Sign Company Representative

Subscribed and sworn to be on 08/14/25 by Meghan Liggett.

IN WITNESS WHEREOF, I Hereto set my hand and official seal.

Marybeth Conrad
Notary Public

MARYBETH CONRAD
Notary Public - Arizona
Maricopa County
Commission # 673441
My Comm. Expires Oct 25, 2028

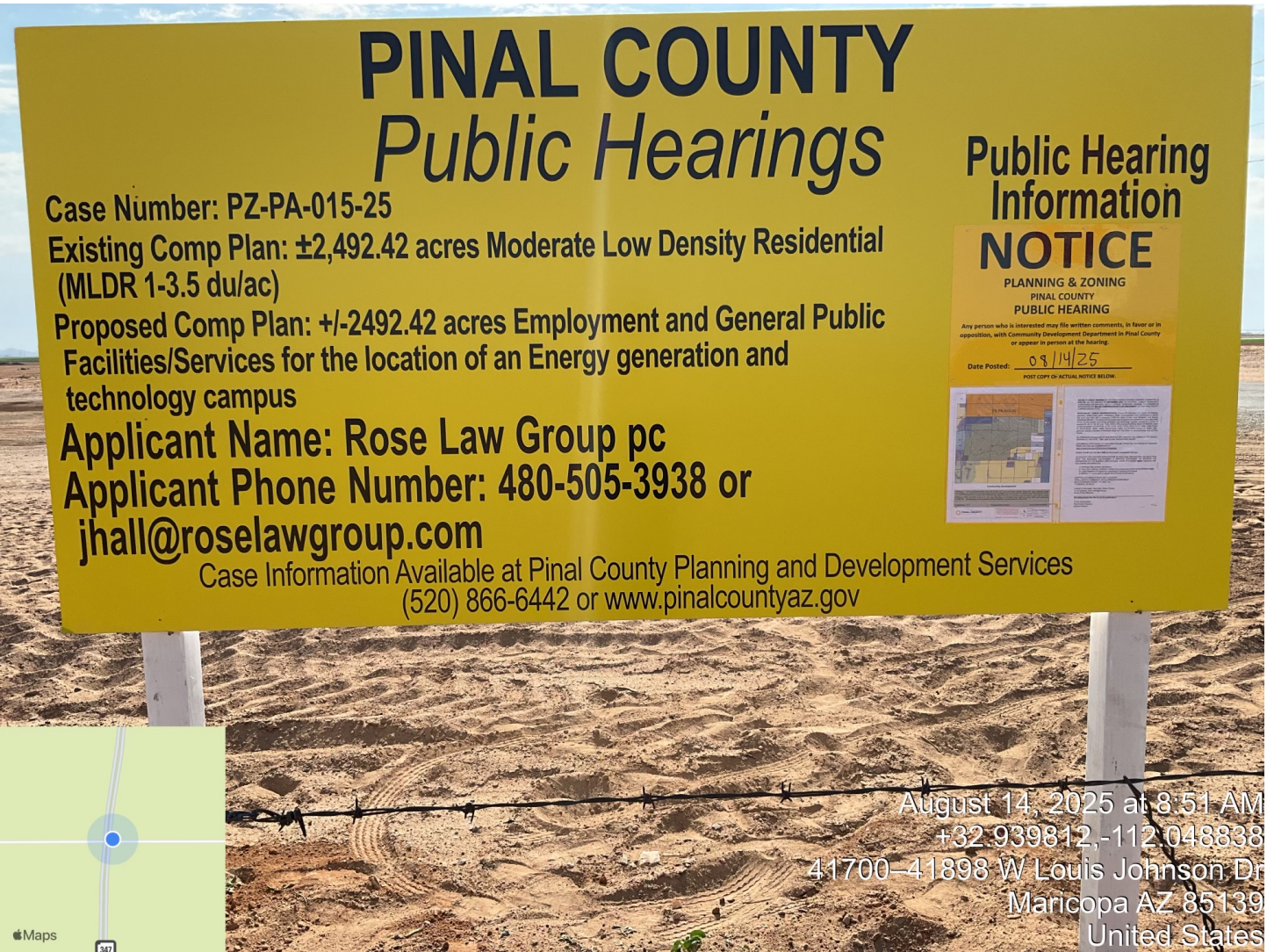
My Commission expires: 10-25-28


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-015-25
Private Land
Community Development
PINAL COUNTY
August 14, 2025 at 8:59 AM
+32 939798, -112 022890
41520–41698 W Louis Johnson Dr
Maricopa AZ 85139
United States
W LOUIS JOHNSON DR
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-015-25
Community Development
PINAL COUNTY
August 14, 2025 at 8:57 AM
+32.939753,-112.031518
44401–44499 W Louis Johnson Dr
Maricopa AZ 85139
United States
Maps



August 14, 2025 at 8:54 AM
+32.939921, -112.039855
41700–41898 W Louis Johnson Dr
Maricopa AZ 85139
United States


PINAL COUNTY
Public Hearings
Case Number: PZ-PA-015-25
Existing Comp Plan: ±2,492.42 acres Moderate Low Density Residential (MLDR 1-3.5 du/ac)
Proposed Comp Plan: +/-2492.42 acres Employment and General Public Facilities/Services for the location of an Energy generation and technology campus
Applicant Name: Rose Law Group pc
Applicant Phone Number: 480-505-3938 or jhall@roselawgroup.com
Case Information Available at Pinal County Planning and Development Services
(520) 866-6442 or www.pinalcountyaz.gov
Public Hearing Information
NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
Maps
347
August 14, 2025 at 8:51 AM
+32.939812,-112.048838
41700–41898 W Louis Johnson Dr
Maricopa AZ 85139
United States


PINAL COUNTY
Public Hearings
Case Number: PZ-PA-015-25
Existing Comp Plan: ±2,492.42 acres Moderate Low Density Residential (MLDR 1-3.5 du/ac)
Proposed Comp Plan: +/-2492.42 acres Employment and General Public Facilities/Services for the location of an Energy generation and technology campus
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(520) 866-6442 or www.pinalcountyaz.gov
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NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
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Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
August 14, 2025 at 8:47 AM
+32.956565,-112.047583
7081–8409 N John Wayne Pkwy
Maricopa AZ 85139
United States
347
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-015-25
Community Development
PINAL COUNTY
August 14, 2025 at 8:24 AM
+32.953311,-112.047820
7081–8409 N John Wayne Pkwy
Maricopa AZ 85139
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-015-25
Community Development
PINAL COUNTY
JOHN WAYNE PKWY
Maps
August 14, 2025 at 8:22 AM
+32.947145,-112.047963
7081–8409 N John Wayne Pkwy
Maricopa AZ 85139
United States


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-015-25
Community Development
PINAL COUNTY
NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT 6:00 P.M. ON THE 4TH DAY OF SEPTEMBER 2025 AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 301 E 11TH STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR MAJOR COMPREHENSIVE PLAN AMENDMENT TO THE PINAL COUNTY COMPREHENSIVE PLAN.
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https://www.pinal.gov/236/Notice-of-Hearings
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PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT
85 N. FLORENCE STREET, PO BOX 749
FLORENCE, AZ 85132
Contact for this matter: Glenn Barr, Senior Planner
E-mail address: Glenn.Barr@pinal.gov
Phone # (520) 866-6444
[Anything below this line is not for publication.]
TO BE PUBLISHED
Pinal Central Dispatch
Arizona Republic
August 14, 2025 at 7:53 AM
+32.956760,-112.039313
Maricopa AZ 85139
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-015-25
Community Development
PINAL COUNTY
August 14, 2025 at 7:49 AM
+32.956710,-112.030533
Maricopa AZ 85139
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
Any person who is interested may file written comments, in favor or in opposition, with Community Development Department in Pinal County or appear in person at the hearing.
Date Posted: 08/14/25
POST COPY OF ACTUAL NOTICE BELOW.
PZ-PA-015-25
Community Development
PINAL COUNTY
August 14, 2025 at 7:45 AM
+32.956326,-112.021971
Maricopa AZ 85139
United States
Maps


NOTICE
PLANNING & ZONING
PINAL COUNTY
PUBLIC HEARING
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Date Posted: 08/14/25
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PZ-PA-015-25
Community Development
PINAL COUNTY
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PZ-PA-015-25 – PUBLIC HEARING/ACTION: Arizona RR Ranches LLC, owner; W Holdings, applicant; Jordan Rose, agent, request a Major Comprehensive Plan Amendment to general
Maps
August 14, 2025 at 7:42 AM
+32.955705,-112.013695
8336–13004 N Porter Rd
Maricopa AZ 85172
United States

Affidavit of Mailing Notice

Case Number: PZ-PA-015-25.

Project Name: Copia Frontier Datacenters

Applicant Name: Rose Law Group

Location: NEC Miller Road and Highway 347

In order to assist in providing adequate notice to interested parties, the applicant shall secure the names and addresses of all property owners within 1200 feet of the subject property either through a title company or the Pinal County Assessor's website and shall send the ~~neighborhood meeting~~ notice to each said owner. Yellow NOH

I confirm that I secured the names and addresses of all property owners within 1200 feet of the subject property and have sent the ~~neighborhood~~ meeting notice to each said owner prior to the ~~neighborhood~~ meeting on Monday, August 18, 2025.

Applicant's / Representative's signature: Brittney Bemis

SUBSCRIBED AND SWORN before me this 19 day of August, 2025, by:

Laury A Henderson
Notary Public

LAURY A HENDERSON
Notary Public - Arizona
Maricopa County
Commission # 679868
My Comm. Expires Feb 26, 2029

My Commission Expires:
02/26/2029



CPU PEBBLESTONE MARKET
3399 N SCOTTSDALE RD
SCOTTSDALE, AZ 85251-6427
www.usps.com

08/18/2025 11:39 AM

Product	Qty	Unit Price	Price
PurpleHeartMedal	18	$0.78	$14.04
Grand Total:			$14.04

TO REPORT AN ISSUE
Visit https://emailus.usps.com

PREVIEW YOUR MAIL AND PACKAGES
Sign up for FREE at
https://informeddelivery.usps.com

All sales final on stamps and postage.
Thank you for your business.

Customer Service
1-800-ASK-USPS
(1-800-275-8777)
Agents do not have any additional information other than what is provided on USPS.com.

UFN: 037659-5559
Receipt #: 840-28520431-1-7051594-1
Clerk: 00

NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT 6:00 P.M. ON THE 4TH DAY OF SEPTEMBER 2025, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 301 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR MAJOR COMPREHENSIVE PLAN AMENDMENT TO THE PINAL COUNTY COMPREHENSIVE PLAN.

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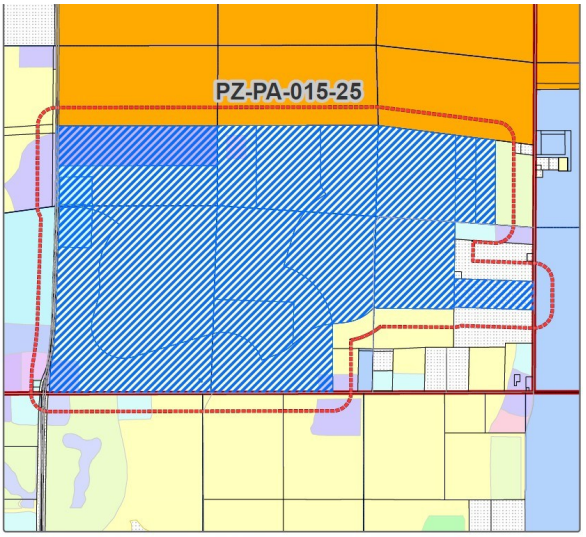

Community Development

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A brief statement of reasons for supporting or opposing the request
Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:
PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT 85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132

Contact for this matter: Glenn Bak, Senior Planner E-mail address: Glenn Bak@pinal.gov
Phone # (520) 866-6444

PINAL COUNTY
WIDE OPEN OPPORTUNITY

NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT 6:00 P.M. ON THE 4TH DAY OF SEPTEMBER 2025, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 301 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR MAJOR COMPREHENSIVE PLAN AMENDMENT TO THE PINAL COUNTY COMPREHENSIVE PLAN.

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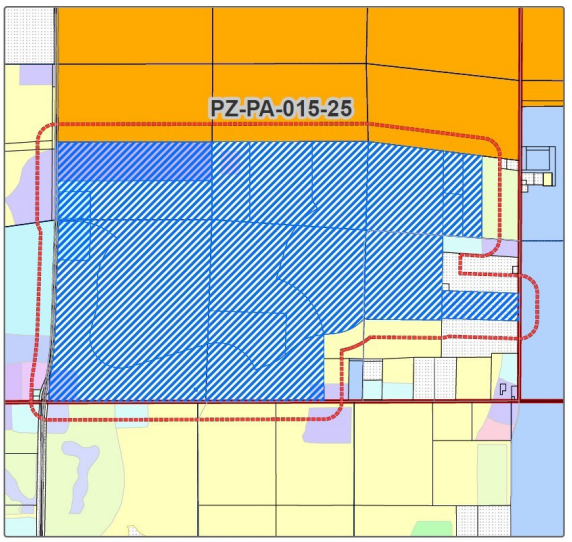


Community Development

PZ-PA-015-25 – PUBLIC HEARING/ACTION: Arizona RR Ranches LLC, owner, W Holdings, applicant, Jordan Rose, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 2,495.42± acres of land from Moderate Low Density Residential (MLDR, 1-3.5 du/ac) to Employment and General Public Facilities/Services (Max 200± acres), for the location of a energy generation and technology campus, situated on a portion of sections 25, 26, 27, 34, 35, & 36, T05S, R03E, of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 510-48-016A, -017B, -017E, -017F, -017H, -017J, -017K, -029J, -029L Portion of, 510-53-003A, -003D, -003E, 510-54-0030, -002A, 510-57-001Q Portion of, -005B, -006, generally located northeast of Maricopa Road and Teel Road, in unincorporated area of Pinal County.

Current Zoning: CR-3 | Requested Zoning: Rezone | Current Land Use: MLDR

ALL PERSONS INTERESTED IN THIS MATTER MAY APPEAR AND SPEAK AT THE PUBLIC HEARING AT THE DATE, TIME, AND PLACE DESIGNATED ABOVE.

DOCUMENTS PERTAINING TO THIS CASE CAN BE FOUND ON THE NOTICE OF HEARING PAGE FOR THE P&Z COMMISSION AT:

https://www.pinal.gov/236/Notice-of-Hearings
DATED THIS 8th DAY OF JULY 2025, by Pinal County Development Services

TO QUALIFY FOR FURTHER NOTIFICATION IN THIS LAND USE MATTER YOU MUST FILE WITH THE PLANNING DEPARTMENT A WRITTEN STATEMENT OF SUPPORT OR OPPOSITION TO THE SUBJECT APPLICATION. YOUR STATEMENT MUST CONTAIN THE FOLLOWING INFORMATION:
Planning Case Number (see above)
Your name, address, telephone number and property tax parcel number (Print or type)
A brief statement of reasons for supporting or opposing the request
Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:
PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT 85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132

Contact for this matter: Glenn Bak, Senior Planner E-mail address: Glenn Bak@pinal.gov
Phone # (520) 866-6444

PINAL COUNTY
WIDE OPEN OPPORTUNITY

PINAL COUNTY
COMMUNITY DEVELOPMENT DEPARTMENT
P O BOX 749 ((85 N FLORENCE ST, FIRST FLOOR)
FLORENCE, AZ 85132

NOTICE OF PUBLIC HEARING

PINAL COUNTY
COMMUNITY DEVELOPMENT DEPARTMENT
P O BOX 749 (85 N FLORENCE ST, FIRST FLOOR)
FLORENCE, AZ 85132

NOTICE OF PUBLIC HEARING

NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT 6:00 P.M. ON THE 4TH DAY OF SEPTEMBER 2025, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 301 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR MAJOR COMPREHENSIVE PLAN AMENDMENT TO THE PINAL COUNTY COMPREHENSIVE PLAN.

PZ-PA-015-25 – PUBLIC HEARING/ACTION: Arizona RR Ranches LLC, owner, W Holdings, applicant, Jordan Rose, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 2,495.42± acres of land from Moderate Low Density Residential (MLDR, 1 -3.5 du/ac) to Employment and General Public Facilities/Services (Max 200± acres), for the location of a energy generation and technology campus, situated on a portion of sections 25, 26, 27, 34, 35, & 36, T05S, R03E, of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 510-48-016A, -017B, -017E, -017F, -017H, -017J, -017K, -029J, -029L Portion of, 510-53-003A, -003D, -003E, 510-54-0030, -002A, 510-57-001Q Portion of, -005B, -006, generally located northeast of Maricopa Road and Teel Road, in unincorporated area of Pinal County.

ALL PERSONS INTERESTED IN THIS MATTER MAY APPEAR AND SPEAK AT THE PUBLIC HEARING AT THE DATE, TIME, AND PLACE DESIGNATED ABOVE.

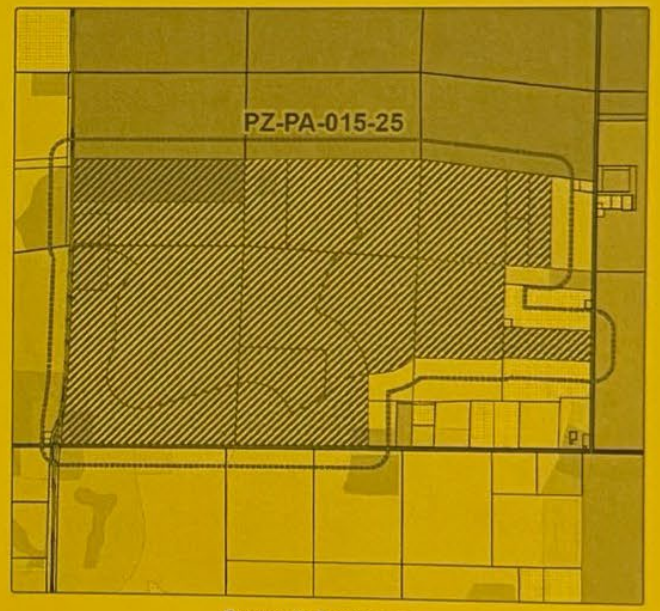
DOCUMENTS PERTAINING TO THIS CASE CAN BE FOUND ON THE NOTICE OF HEARING PAGE FOR THE P&Z COMMISSION AT:

https://www.pinal.gov/236/Notice-of-Hearings
DATED THIS 8th DAY OF JULY 2025, by Pinal County Development Services

TO QUALIFY FOR FURTHER NOTIFICATION IN THIS LAND USE MATTER YOU MUST FILE WITH THE PLANNING DEPARTMENT A WRITTEN STATEMENT OF SUPPORT OR OPPOSITION TO THE SUBJECT APPLICATION. YOUR STATEMENT MUST CONTAIN THE FOLLOWING INFORMATION:
Planning Case Number (see above)
Your name, address, telephone number and property tax parcel number (Print or type)
A brief statement of reasons for supporting or opposing the request
Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:
PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT 85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132

Contact for this matter: Glenn Bak, Senior Planner E-mail address: Glenn Bak@pinal.gov
Phone # (520) 866-6444



Community Development

PZ-PA-015-25 – PUBLIC HEARING/ACTION: Arizona RR Ranches LLC, owner, W Holdings, applicant, Jordan Rose, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 2,495.42± acres of land from Moderate Low Density Residential (MLDR, 1-3.5 du/ac) to Employment and General Public Facilities/Services (Max 200± acres), for the location of a energy generation and technology campus, situated on a portion of sections 25, 26, 27, 34, 35, & 36, T05S, R03E, of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 510-48-016A, -017B, -017E, -017F, -017H, -017J, -017K, -029J, -029L Portion of, 510-53-003A, -003D, -003E, 510-54-0030, -002A, 510-57-001Q Portion of, -005B, -006, generally located northeast of Maricopa Road and Teel Road, in unincorporated area of Pinal County.

Current Zoning: CR-3 | Requested Zoning: Rezone | Current Land Use: MLDR

PINAL COUNTY
WIDE OPEN OPPORTUNITY

51057006A
ARIZONA RR RANCHES LLC
1121 W WARNER RD STE 109
TEMPE, AZ 85284-4281

51048029L
ARIZONA RR RANCHES LLC
1121 W WARNER RD STE 109
TEMPE, AZ 85284-4281

51048017H
ARIZONA RR RANCHES LLC
1121 W WARNER RD STE 109
TEMPE, AZ 85284-4281

51053003E
ARIZONA RR RANCHES LLC
1121 W WARNER RD STE 109
TEMPE, AZ 85284-4281

51048017K
ARIZONA RR RANCHES LLC
1121 W WARNER RD STE 109
TEMPE, AZ 85284-4281

51053003A
ARIZONA RR RANCHES LLC
1121 W WARNER RD STE 109
TEMPE, AZ 85284-4281

51057003A
CECIL BECKY JOHNSON FAMILY TRUST
PO BOX 566
STANFIELD, AZ 85172-2161

51053003D
ARIZONA RR RANCHES LLC
1121 W WARNER RD STE 109
TEMPE, AZ 85284-4281

51057002D
ELECTRICAL DISTRICT NO 3
41630 W LOUIS JOHNSON DR
MARICOPA, AZ 85138-8540

51057002F
ELECTRICAL DISTRICT NO 3
41630 W LOUIS JOHNSON DR
MARICOPA, AZ 85138-8540

51057001M
DUGAN ANTHONY & JOY LYNN
PO BOX 189
STANFIELD, AZ 85172-2160

51053001B
GREWING LEONARD J
310 W CURRY ST
CHANDLER, AZ 85225-5712

51048021D
HAM SUNSET LLC
PO BOX 15662
PHOENIX, AZ 85060-0566

51057001R
ELECTRICAL DISTRICT NO 3
41630 W LOUIS JOHNSON DR
MARICOPA, AZ 85138-8540

51057004A
JOHNSON-MCKINNEY ALICE L REV TRUST
PO BOX 566
STANFIELD, AZ 85172-2161

51057006B
JOHNSON-MCKINNEY ALICE L REV TRUST
PO BOX 566
STANFIELD, AZ 85172-2161

51048018A
HAM SUNSET LLC
PO BOX 15662
PHOENIX, AZ 85060-0566

510560020
JOHNSTON BILL JR
PO BOX 226
MARICOPA, AZ 85139-9013

510560010
JOHNSTON BILL JR
PO BOX 226
MARICOPA, AZ 85139-9013

51057001Q
ARIZONA RR RANCHES LLC
1121 W WARNER RD STE 109
TEMPE, AZ 85284-4281

501700200
KILLIAN C MAX TR
4445 E HOLMES AVE STE 102
MESA, AZ 85206-6339

51048029M
MARICOPA STANFIELD IRRIG & DRAINAGE
41630 W LOUIS JOHNSON DR
MARICOPA, AZ 85138-8540

51057003B
JOHNSON-MCKINNEY ALICE L REV TRUST
PO BOX 566
STANFIELD, AZ 85172-2161

50117001F
PBS & SM MIDWAY IV LLC
2776 E VIRGINIA ST
GILBERT, AZ 85296-6899

51057001S
MARICOPA-STANFIELD IRRIGATION & DRAINAGE DIST
NO ADDRESS GIVEN

51057001L
KAT D LLC
PO BOX 189
STANFIELD, AZ 85172-2160

510480280
MERIDIAN 80 LLC
1121 W WARNER RD STE 109
TEMPE, AZ 85284-4281

50218006D
NISSAN NORTH AMERICA INC
7815 N WHITE AND PARKER RD
STANFIELD, AZ 85172-2964

510560030
PINAL COUNTY
PO BOX 827
FLORENCE, AZ 85132-2301

50115002F
RED RIVER EL DORADO 6500 LLC
7600 E DOUBLETREE RANCH RD STE 300
SCOTTSDALE, AZ 85258-8219

510560040
PINAL COUNTY
PO BOX 827
FLORENCE, AZ 85132-2301

50115001G
RED RIVER EL DORADO 6500 LLC
7600 E DOUBLETREE RANCH RD
STE 300
SCOTTSDALE, AZ 85258-8219

51048029K
RED RIVER EL DORADO 6500 LLC
7600 E DOUBLETREE RANCH RD
STE 300
SCOTTSDALE, AZ 85258-8219

50115002C
RED RIVER EL DORADO 6500 LLC
7600 E DOUBLETREE RANCH RD
STE 300
SCOTTSDALE, AZ 85258-8219

510530020
RED RIVER EL DORADO 6500 LLC
7600 E DOUBLETREE RANCH RD
STE 300
SCOTTSDALE, AZ 85258-8219

51057005A
RED RIVER/EL DORADO 6500 LLC
7600 E DOUBLETREE RANCH RD
STE 300
SCOTTSDALE, AZ 85258-8219

51057001F
RED RIVER EL DORADO 6500 LLC
7600 E DOUBLETREE RANCH RD
STE 300
SCOTTSDALE, AZ 85258-8219

51048020E
TRES POINTS LLC
15420 E SILVER CREEK CT
GILBERT, AZ 85298-8943

51053001A
SUN STATE TOWERS IV LLC
1426 N MARVIN ST
GILBERT, AZ 85233-3256

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Mary Ellen Sheppard
Deputy County Manager

Himanshu Patel
Deputy County Manager

Open Space, Trails & Regional Parks Department
Development Review Comment Letter

Project Name: I-8 & Stanfield
Case Number: PZ-PA-009-25
Reviewed By: Kelley Fox, Urban Wildlife Planner
Review Type: Major Comprehensive Plan Amendment
07/07/25

Comment #	RESPOND TO ALL COMMENTS
1	There is substantial riparian habitat that transects the project area. The AZGFD ERT mapping tool can be used to view the recorded riparian habitat within the project area. Information and guidelines concerning riparian habitat within Pinal County can be found below: https://s3-us-west-2.amazonaws.com/azgfd-portal-wordpress-pantheon/wp-content/uploads/archive/PinalCounty_RiparianGuides_FINAL.pdf
2	Riparian habitat is considered to be of critical environmental importance, and is to be protected during development. Its protection is supported by Pinal County's Comprehensive Plan policies 3.1.4.1, 3.9.1.4, and 7.1.2.4, along with Development services code 2.176.100C, 2.176.100D, and 2.176.100E.
3	A buffer of 50 ft. around all documented riparian habitat within the development site should be incorporated into the site plan. Setbacks or buffers may be increased or decreased if not prohibited by another county ordinance or regulation, and if approved by the supervisors.
4	A planned regional multi-use trail, supported by Pinal County's Comprehensive Plan, is located adjacent to/transecting the project area. According to Development Services code 2.176.170 B it is the applicant's responsibility to develop the trail according to Pinal County's standards.
5	Trail corridor requirements would include: • Signage would need to be approved by the Open Space and Trails Department. • Decomposed granite pedestrian paths would consist of natural subsoil compacted to 95%. • The corridor would need to be dedicated to the County in a form acceptable to the County.

6	Tread width and setbacks will be determined by the distance listed in our department-published Open Space and Recreation Area Design Guidelines Manual
7	Minimization of impacts to the multi-use trail corridor will be achieved through coordination between the Project and the Open Space and Trails department during trail development and the adherence to trail corridor requirements.
8	Canal systems and irrigation systems have been shown to provide movement corridors and habitat for wildlife. A 50ft buffer and wildlife friendly fencing is recommended to be incorporated into the project development plan.
9	Noxious weeds have become increasingly problematic in areas of development and on large projects where vegetation management plans are not created or maintained. Due to the increasing threat noxious weeds have on the Sonoran desert and Pinal County landscape it is recommended that the applicant incorporate invasive species/noxious weed management plans for development. Information regarding noxious weeds can be found on the Arizona Department of Agriculture's website.
10	Review and incorporate department guidelines regarding development within/around designated and proposed open space. https://www.pinal.gov/DocumentCenter/View/662/Open-Space-and-Recreation-Area-Design-Guidelines-Manual-PDF
11	Any clarifications regarding these comments or recommended guidelines can be directed towards Kelley Fox via email Kelley.fox@pinal.gov or via phone at 520-866-6661

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Mary Ellen Sheppard
Deputy County Manager

Himanshu Patel
Deputy County Manager

Open Space, Trails & Regional Parks Department
Development Review Comment Letter

Project Name: Silver King Solar
Case Number: PZ-PA-010-25
Reviewed By: Kelley Fox
Review Type: Major Comprehensive Plan Amendment
07/07/2025

Comment #	RESPOND TO ALL COMMENTS
1	There is substantial riparian habitat that transects the project area. The AZGFD ERT mapping tool can be used to view the recorded riparian habitat within the project area. Information and guidelines concerning riparian habitat within Pinal County can be found below: https://s3-us-west-2.amazonaws.com/azgfd-portal-wordpress-pantheon/wp-content/uploads/archive/PinalCounty_RiparianGuides_FINAL.pdf
2	Riparian habitat is considered to be of critical environmental importance, and is to be protected during development. Its protection is supported by Pinal County's Comprehensive Plan policies 3.1.4.1, 3.9.1.4, and 7.1.2.4, along with Development services code 2.176.100C, 2.176.100D, and 2.176.100E.
3	A buffer of 50 ft. around all documented riparian habitat within the development site should be incorporated into the site plan. Setbacks or buffers may be increased or decreased if not prohibited by another county ordinance or regulation, and if approved by the supervisors.
4	Two planned regional multi-use trails, supported by Pinal County's Comprehensive Plan, are located adjacent to/transecting the project area. According to Development Services code 2.176.170 B it is the applicant's responsibility to develop the trail according to Pinal County's standards.
5	Trail corridor requirements would include: • Signage would need to be approved by the Open Space and Trails Department. • Decomposed granite pedestrian paths would consist of natural subsoil compacted to 95%. • The corridor would need to be dedicated to the County in a form acceptable to the County. ○ If the project is in a lease agreement with a land manager that is not the applicant, a trail agreement tied to the length of the

	project's use between the applicant and the County could be acceptable pending legal review
6	Tread width and setbacks will be determined by the distance listed in our department-published Open Space and Recreation Area Design Guidelines Manual
7	Minimization of impacts to the multi-use trail corridors will be achieved through coordination between the Project and the Open Space and Trails department during trail development and the adherence to trail corridor requirements.
8	Due to the location of the proposed trail along the Magma Railway and the housing developments southwest of the project are, it is requested that the applicant develop trail on both sides of the railway to ensure user safety and connectivity
9	Noxious weeds have become increasingly problematic in areas of development and on large projects where vegetation management plans are not created or maintained. Due to the increasing threat noxious weeds have on the Sonoran desert and Pinal County landscape it is recommended that the applicant incorporate invasive species/noxious weed management plans for development. Information regarding noxious weeds can be found on the Arizona Department of Agriculture's website.
10	It is highly recommended that applicants limit the disturbance of soils and biological soil crusts in areas that are already level and suitable for array installation, thus limiting areas where noxious weeds can proliferate while simultaneously preserving important ecological aspects of the county's natural desert.
11	Guidelines for Solar development within Arizona provided by Arizona Game and Fish Department can be found at https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FinalSolarGuidelines03122010.pdf
12	Review AZGFD fencing guidelines which are in consonance with Pinal County expectations below: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/110125_AGFD_fencing_guidelines.pdf
13	Review and incorporate department guidelines regarding development within/around designated and proposed open space. https://www.pinal.gov/DocumentCenter/View/662/Open-Space-and-Recreation-Area-Design-Guidelines-Manual-PDF

14	Any clarifications regarding these comments or recommended guidelines can be directed towards Kelley Fox via email Kelley.fox@pinal.gov or via phone at 520-866-6661

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Mary Ellen Sheppard
Deputy County Manager

Himanshu Patel
Deputy County Manager

Open Space, Trails & Regional Parks Department
Development Review Comment Letter

Project Name: La Osa
Case Number: PZ-PZ-011-25
Reviewed By: Kelley Fox, Urban Wildlife Planner
Review Type: Major Comprehensive Plan Amendment
07/07/2025

Comment #	RESPOND TO ALL COMMENTS
1	Planned regional multi-use trails (Greene Wash and Sasco Rd), supported by Pinal County's Comprehensive Plan, is located transecting a portion of the project area. According to Development Services code 2.176.170 B it is the applicant's responsibility to develop the trail according to Pinal County's standards.
2	Trail corridor requirements would include: • Signage would need to be approved by the Open Space and Trails Department. • Decomposed granite pedestrian paths would consist of natural subsoil compacted to 95%. • The corridor would need to be dedicated to the County in a form acceptable to the County.
3	Tread width and setbacks will be determined by the distance listed in our department-published Open Space and Recreation Area Design Guidelines Manual
4	Minimization of impacts to the multi-use trail corridor and surrounding habitat will be achieved through coordination between the Project and the Open Space and Trails department during trail development and the adherence to trail corridor requirements.
5	Parcels included in the project area are located within proposed open space. This land use designation is due to the high-value habitat and biologically sensitive criteria found within the area. It is highly recommended that proposed open space be minimized/removed from the project's site plan. Please review and implement our guidelines regarding development within/around designated and proposed open space. https://www.pinal.gov/DocumentCenter/View/662/Open-Space-and-Recreation-Area-Design-Guidelines-Manual-PDF

6	There is substantial riparian habitat that transects the project area. The AZGFD ERT mapping tool can be used to view the recorded riparian habitat within the project area. Information and guidelines concerning riparian habitat within Pinal County can be found below: https://s3-us-west-2.amazonaws.com/azgfd-portal-wordpress-pantheon/wp-content/uploads/archive/PinalCounty_RiparianGuides_FINAL.pdf
7	Riparian habitat is considered to be of critical environmental importance, and is to be protected during development. Its protection is supported by Pinal County's Comprehensive Plan policies 3.1.4.1, 3.9.1.4, and 7.1.2.4, along with Development services code 2.176.100C, D, and E.
	A buffer of 50 ft. around all documented riparian habitat within the development site should be incorporated into the site plan. Setbacks or buffers may be increased or decreased if not prohibited by another county ordinance or regulation, and if approved by the supervisors.
8	Increased buffers (to 150 ft. minimum via Pinal County Riparian Guide)for the Santa Cruz River and Greene Wash were recommended by US Fish and Wildlife upon reviewing the Pinal County Open Space and Trails Masterplan to not only protect the main river reach but also the tributaries to protect the integrity of the watershed. Pg 125-126 https://www.pinal.gov/DocumentCenter/View/7115/Open-Space-and-Trails-Master-Plan-2007-PDF
9	Noxious weeds have become increasingly problematic in areas of development and on large projects where vegetation management plans are not created or maintained. Due to the increasing threat noxious weeds have on the Sonoran desert and Pinal County landscape it is recommended that the applicant incorporate invasive species/noxious weed management plans for development. Information regarding noxious weeds can be found on the Arizona Department of Agriculture's website.
10	Guidelines for Solar development within Arizona provided by Arizona Game and Fish Department can be found at https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FinalSolarGuidelines03122010.pdf
11	Review AZGFD fencing guidelines which are in consonance with Pinal County expectations below: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/110125_AGFD_fencing_guidelines.pdf
12	Review and incorporate department guidelines regarding development within/around designated and proposed open space.

	https://www.pinal.gov/DocumentCenter/View/662/Open-Space-and-Recreation-Area-Design-Guidelines-Manual-PDF
13	Any clarifications regarding these comments or recommended guidelines can be directed towards Kelley Fox via email Kelley.fox@pinal.gov or via phone at 520-866-6661

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Mary Ellen Sheppard
Deputy County Manager

Himanshu Patel
Deputy County Manager

Open Space, Trails & Regional Parks Department
Development Review Comment Letter

Project Name: Silver Reef Solar
Case Number: PZ-PA-012-25
Reviewed By: Kelley Fox
Review Type: Major Comprehensive Plan Amendment
07/07/2025

Comment #	RESPOND TO ALL COMMENTS
1	There is substantial riparian habitat that transects the project area. The AZGFD ERT mapping tool can be used to view the recorded riparian habitat within the project area. Information and guidelines concerning riparian habitat within Pinal County can be found below: https://s3-us-west-2.amazonaws.com/azgfd-portal-wordpress-pantheon/wp-content/uploads/archive/PinalCounty_RiparianGuides_FINAL.pdf
2	Riparian habitat is considered to be of critical environmental importance, and is to be protected during development. Its protection is supported by Pinal County's Comprehensive Plan policies 3.1.4.1, 3.9.1.4, and 7.1.2.4, along with Development services code 2.176.100C, 2.176.100D, and 2.176.100E.
3	A buffer of 50 ft. around all documented riparian habitat within the development site should be incorporated into the site plan. Setbacks or buffers may be increased or decreased if not prohibited by another county ordinance or regulation, and if approved by the supervisors.
4	Noxious weeds have become increasingly problematic in areas of development and on large projects where vegetation management plans are not created or maintained. Due to the increasing threat noxious weeds have on the Sonoran desert and Pinal County landscape it is recommended that the applicant incorporate invasive species/noxious weed management plans for development. Information regarding noxious weeds can be found on the Arizona Department of Agriculture's website.
5	It is highly recommended that applicants limit the disturbance of soils and biological soil crusts in areas that are already level and suitable for array installation, thus limiting areas where noxious weeds can proliferate while simultaneously preserving important ecological aspects of the county's natural desert.

6	Guidelines for Solar development within Arizona provided by Arizona Game and Fish Department can be found at https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FinalSolarGuidelines03122010.pdf
10	Review AZGFD fencing guidelines which are in consonance with Pinal County expectations below: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/110125_AGFD_fencing_guidelines.pdf
11	Review and incorporate department guidelines regarding development within/around designated and proposed open space. https://www.pinal.gov/DocumentCenter/View/662/Open-Space-and-Recreation-Area-Design-Guidelines-Manual-PDF
12	Any clarifications regarding these comments or recommended guidelines can be directed towards Kelley Fox via email Kelley.fox@pinal.gov or via phone at 520-866-6661

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Mary Ellen Sheppard
Deputy County Manager

Himanshu Patel
Deputy County Manager

Open Space, Trails & Regional Parks Department
Development Review Comment Letter

Project Name: Project Midway
Case Number: PZ-PA-013-25
Reviewed By: Kelley Fox, Urban Wildlife Planner
Review Type: Major Comprehensive Plan Amendment
07/07/25

Comment #	RESPOND TO ALL COMMENTS
1	Noxious weeds have become increasingly problematic in areas of development and on large projects where vegetation management plans are not created or maintained. Due to the increasing threat noxious weeds have on the Sonoran desert and Pinal County landscape it is recommended that the applicant incorporate invasive species/noxious weed management plans for development. Information regarding noxious weeds can be found on the Arizona Department of Agriculture's website.
2	Review and incorporate department guidelines regarding development within/around designated and proposed open space. https://www.pinal.gov/DocumentCenter/View/662/Open-Space-and-Recreation-Area-Design-Guidelines-Manual-PDF
3	Any clarifications regarding these comments or recommended guidelines can be directed towards Kelley Fox via email Kelley.fox@pinal.gov or via phone at 520-866-6661

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Mary Ellen Sheppard
Deputy County Manager

Himanshu Patel
Deputy County Manager

Open Space, Trails & Regional Parks Department
Development Review Comment Letter

Project Name: Griffin Energy Project
Case Number: Z-PA-060-25
Reviewed By: Kelley Fox, Urban Wildlife Planner
Review Type: Major Comprehensive Plan Amendment
07/07/25

Comment #	RESPOND TO ALL COMMENTS
1	A planned regional multi-use trail, supported by Pinal County's Comprehensive Plan, is located transecting a portion of the project area. According to Development Services code **2.176.170 B** it is the applicant's responsibility to develop the trail according to Pinal County's standards.
2	Trail corridor requirements would include: • Signage would need to be approved by the Open Space and Trails Department. • Decomposed granite pedestrian paths would consist of natural subsoil compacted to 95%. • The corridor would need to be dedicated to the County in a form acceptable to the County.
3	Tread width and setbacks will be determined by the distance listed in our department-published Open Space and Recreation Area Design Guidelines Manual
4	Minimization of impacts to the multi-use trail corridor and surrounding habitat will be achieved through coordination between the Project and the Open Space and Trails department during trail development and the adherence to trail corridor requirements.
5	Parcels included in the project area are located within proposed open space. This land use designation is due to the high-value habitat and biologically sensitive criteria found within the area. It is highly recommended that proposed open space be minimized/removed from the project's footprint.
6	There is substantial riparian habitat that transects the project area. The AZGFD ERT mapping tool can be used to view the recorded riparian habitat within the

	project area. Information and guidelines concerning riparian habitat within Pinal County can be found below: https://s3-us-west-2.amazonaws.com/azgfd-portal-wordpress-pantheon/wp-content/uploads/archive/PinalCounty_RiparianGuides_FINAL.pdf
7	Riparian habitat is considered to be of critical environmental importance, and is to be protected during development. Its protection is supported by Pinal County's Comprehensive Plan policies **3.1.4.1, 3.9.1.4**, and **7.1.2.4**, along with Development services code **2.176.100 C, D, and E**.
8	A buffer of 50 ft. around all documented riparian habitat within the development site should be incorporated into the site plan. Setbacks or buffers may be increased or decreased if not prohibited by another county ordinance or regulation, and if approved by the supervisors.
9	Canals have shown to have high wildlife activity in Arizona due to their presence of water and usage as a wildlife movement corridor. Areas with these features are considered as environmentally sensitive, stated in the Pinal County Comprehensive Plan (pg. 254) A 50 ft. buffer around the canal and wildlife friendly development is strongly recommended. Acceptable wildlife friendly development can be found in the resource link below: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/WildlifeFriendlyDevelopment.pdf
10	It is highly recommended that applicants limit the disturbance of soils and biological soil crusts in previously undeveloped areas of the Sonoran Desert that are already level and suitable for array installation, thus limiting areas where noxious weeds can proliferate while simultaneously preserving important ecological aspects of the county's natural desert.
11	Noxious weeds have become increasingly problematic in areas of development and on large projects where vegetation management plans are not created or maintained. Due to the increasing threat noxious weeds have on the Sonoran desert and Pinal County landscape it is recommended that the applicant incorporate invasive species/noxious weed management plans for development. Information regarding noxious weeds can be found on the Arizona Department of Agriculture's website.
12	Guidelines for Solar development within Arizona provided by Arizona Game and Fish Department can be found at https://s3.amazonaws.com/azgfd-portal-

	wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FinalSolarGuidelines03122010.pdf
13	Review AZGFD fencing guidelines which are in consonance with Pinal County expectations below: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/110125_AGFD_fencing_guidelines.pdf
14	Review and incorporate department guidelines regarding development within/around designated and proposed open space. https://www.pinal.gov/DocumentCenter/View/662/Open-Space-and-Recreation-Area-Design-Guidelines-Manual-PDF
15	Any clarifications regarding these comments or recommended guidelines can be directed towards Kelley Fox via email Kelley.fox@pinal.gov or via phone at **520-866-6661**

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

Mary Ellen Sheppard
Deputy County Manager

Himanshu Patel
Deputy County Manager

Open Space, Trails & Regional Parks Department
Development Review Comment Letter

Project Name: Energy Generation and Technology Campus
Case Number: PZ-PA-015-25
Reviewed By: Kelley Fox, Urban Wildlife Planner
Review Type: Major Comprehensive Plan Amendment
07/07/25

Comment #	RESPOND TO ALL COMMENTS
1	Noxious weeds have become increasingly problematic in areas of development and on large projects where vegetation management plans are not created or maintained. Due to the increasing threat noxious weeds have on the Sonoran desert and Pinal County landscape it is recommended that the applicant incorporate invasive species/noxious weed management plans for development. Information regarding noxious weeds can be found on the Arizona Department of Agriculture's website.
2	Review and incorporate department guidelines regarding development within/around designated and proposed open space. https://www.pinal.gov/DocumentCenter/View/662/Open-Space-and-Recreation-Area-Design-Guidelines-Manual-PDF
3	Any clarifications regarding these comments or recommended guidelines can be directed towards Kelley Fox via email Kelley.fox@pinal.gov or via phone at 520-866-6661

Pinal County Planning and Zoning Commission
301 E. 11th St.
Florence, Arizona 85132

August 20, 2025

Re: 2025 Major Amendments to the Pinal County Comprehensive Plan

Dear Commissioners,

As president and CEO of the Arizona Technology Council, the state's premier trade association representing more than 750 science and technology companies, I am writing to express our strong support for projects that make up the proposed 2025 major amendments to the Pinal County Comprehensive Plan. Specifically, I'm referring to PZ-PA-010-25 (Silver King Solar and BESS), PZ-PA-011-25 (La Osa Energy Generating Facilities), PZ-PA-012-25 (Silver Reef Solar), PZ-PA-014-25 (Griffin Energy) and PZ-PA-015-25 (Energy Generation and Technology Campus).

Pinal County has experienced tremendous population growth in the past decade, reaching more than 522,000 residents—an estimated increase of 3.81% since 2024. The county has become an employment magnet for industries such as semiconductor manufacturing, electric vehicle battery plant construction, copper mining and health care, with advanced manufacturers such as LG Energy Solution, Lucid Motors and Procter & Gamble establishing operations throughout the county.

Each of the five proposed renewable energy projects named above present transformative economic development opportunities for Pinal County. They would create good-paying jobs and generate millions of dollars in tax revenues to fund schools, roads and emergency services. For instance, the Silver King Solar and BESS Project would create more than 300 construction jobs and generate more than $20 million in sales tax revenue during construction, with approximately $5.3 million going to the county.

Furthermore, the major amendments would ensure Pinal County remains a leader in renewable energy development and environmental stewardship. These projects collectively support the county's goal to meet current and future energy needs and decrease the county's dependence on non-renewable energy sources, improving air quality and residents' quality of life. They are also key to a broader energy transition initiated countywide, including increasing battery storage facilities, implementing critical grid upgrades and ensuring smarter energy use. Each project is also responsibly sited, minimizing impact on key visual resources.

On behalf of the Council and our members, I respectfully encourage you to support these critical projects.

Sincerely,

Steve

ARIZONA TECHNOLOGY COUNCIL & SCITECH INSTITUTE



Steven G. Zylstra
President & CEO

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August 7, 2025

Mr. Harvey Krauss
Planning Manager, Community Development
Pinal County Development Services
85 North Florence Street, PO Box 749
Florence, AZ 85132
Harvey.krauss@pinal.gov

Re: **2025 Pinal County Major General Plan Amendments PZ-PA-015-25 and PZ-PA 009-25**

Mr. Krauss,

This letter shall serve as the City's response to the requested review of the proposed 2025 Major Amendments to the Pinal County Comprehensive Plan. Our comments are as follows:

Technology Campus Project – PZ-PA-015-25
The applicant is proposing to amend the comprehensive plan by changing approximately 2,495.2 acres of land from Moderate Low Density Residential (1-3.5 du/ac) to Employment to allow for the future development of a large-scale Energy Generation and Technology Campus, located 8 miles south and east of the City of Maricopa, south of the Ak Chin Indian Community.

The City of Maricopa **OBJECTS** to the proposed Comprehensive Plan Amendment based on the following:

The Maricopa General Plan identifies the majority of the subject site as Master Planned Community (MPC), Low Density Residential (LDR) a small portion as Employment (E), and a small portion as Commercial (C). The MPC land use designation provides for large-scale master planned developments that include a true variety of residential products, including larger and smaller lots, attached and detached housing, along with supporting commercial and employment land uses to meet the daily needs of the residents. The LDR land use designation provides for semi-rural large lot development with generous distances to street and between homes. The Employment (E) land use designation is intended to accommodate different types of development including office, industrial, and commercial, allowing for a varying scale and intensity of land uses. Preferred uses include lighter industrial uses such as light manufacturing, business park, and professional offices. The Commercial (C) land use designation provides for commercial nodes on individual parcels and is intended to provide neighborhood and community scale shopping, offices, medical facilities, which incorporate pedestrian and neighborhood needs through site planning.

The Red River Master Planned Community (MPC) was approved by the Pinal County Supervisors in late 2000. Although amended multiple times (Teel Ranch, Rancho Sierra, and Rancho Sierra Vista), the approved MPC proposed a total of 17,143 units on 4,100 acres. Land uses within the MPC were primarily single-family residential, 150 acres of community parks, 65 acres of commercial land, 73 acres of office space, and about 80 acres of business park. It should be noted, subsequent amendments to the Red River MPC reconfigured land uses within the approved MPC removed or revised portions of the MPC but the overall counts and land uses stayed the same. When approved in 2000, and the subsequent amendments, the subject site was in conformance with the Pinal County's Comprehensive Plan. Although the overall land use plan was not in

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conformance with the City of Maricopa's General Plan, the City supported the project due to consistency with other approved projects in the surrounding area.

As submitted, the proposed Comprehensive Plan change from Moderate Low Density Residential to Employment, for the construction and operation of a large-scale energy generation and technological facility is not supported by the City of Maricopa for the following reasons:

1. The proposal is not in conformance with the City of Maricopa's current land use plan. As noted above, the Maricopa plan designates the majority of this site as Master Plan Community (MPC) and Low Density Residential (LDR). Although there are small portions of Employment (E) and Commercial (C), those uses were subsidiary to the single-family residential which comprise the majority of the site.

2. As submitted, the proposed land use change would result in a significant decrease in the future housing stock in the Maricopa planning area.

3. Additionally, the proposed development would not advance any significant infrastructure needs in the immediate or surrounding area

4. The proposed land use change will not bring an abundance of jobs to the area and will not offer any community amenities or active open space/trails improvements.

5. the proposed development would effectively cannibalize what minimal commercial opportunities are proposed in the area.

Project Evergreen Investment Company, I-8 & Stanfield Road – PZ-PA-009-25

The applicant is proposing to amend the comprehensive plan by changing approximately 536 acres of land from Moderate Low Density Residential (1-3.5 du/ac) to Employment. The project area is currently zoned CR-2 and CR-3. In addition, there is a small piece of CB-1 zoned land along Stanfield Road. The west half of the site is located within the City of Maricopa planning boundary and the east half of the site is located within the Casa Grande planning boundary. Currently, the subject site is undeveloped and located at the southwest corner of N. Stanfield Rd. and W. Arranza Rd.

The City of Maricopa **OBJECTS** to the proposed Comprehensive Plan Amendment based on the following:

The Maricopa General Plan identifies those portions of land within the Maricopa planning boundary as Low Density Residential (LDR), Employment (E), and Commercial (C). The LDR land use designation provides for semi-rural large lot development. The Employment (E) land use designation is intended to accommodate different types of development including office, industrial, and commercial, allowing for a varying scale and intensity of land uses. Preferred uses include lighter industrial uses such as light manufacturing, business park, and professional offices. The Commercial (C) land use designation provides commercial nodes on individual parcels and is intended to provide neighborhood and community scale shopping, offices, and medical facilities, which incorporate pedestrian and neighborhood needs through site planning.

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The proposed Comprehensive Plan change from Moderate Low Density Residential to Employment is not supported by the City of Maricopa for the following reasons:

1. The proposal is not in conformance with the City of Maricopa's LDR and Commercial land use designations. The narrative for the project states the goal of the request is to bring the site into conformity with the adjacent properties. It should be noted that counties comprehensive plan designates the surrounding properties as Moderate Low Density Residential with a 30+residential subdivision to the immediate east.

2. Additionally, the change in land use would eliminate approximately 60 acres of land designated as commercial in the Maricopa Planning boundary. Although the city is not necessarily opposed to additional Employment designated land in this area, we would request that the land designated for future commercial uses be left in their current land use designation. In addition to the current applications with the county, the City of Maricopa would respectfully request that the applicant process a General Plan Amendment application with the City of Maricopa as well.

With respect to both applications within the City's voter approved General Plan Planning area, the City of Maricopa would respectfully request that the applicant process a General Plan Amendment application with the city in accordance to the County Comprehensive Plan as noted in p. 23 Relationship to Municipal and Native American Communities and p. 53 Land Use Plan, note # 4. prior to review by the County Board of Supervisors.

Please feel free to reach out to me if you have any questions or concerns. I've included my contact information below.

Sincerely,



Rick Williams, Planning Manager
City of Maricopa
39700 W. Civic Center Plaza
Maricopa, AZ 85138
520-316-6921
Richard.williams@maricopa-az.gov

CC: Hon. Mayor Nancy Smith
Hon. Chairman Stephen Q. Miller
Hon. Supervisor Rich Vitiello

NOTICE OF PUBLIC HEARING BY THE PINAL COUNTY CITIZENS ADVISORY COMMITTEE AT **6:00 P.M**. ON THE **4TH** DAY OF **SEPTEMBER 2025**, AT THE PINAL COUNTY EMERGENCY OPERATIONS CENTER (EOC), 301 E 11th STREET, FLORENCE, ARIZONA, TO CONSIDER AN APPLICATION FOR **MAJOR COMPREHENSIVE PLAN AMENDMENT** TO THE PINAL COUNTY COMPREHENSIVE PLAN.

PZ-PA-015-25 – PUBLIC HEARING/ACTION: Arizona RR Ranches LLC, owner, W Holdings, applicant, Jordan Rose, agent, requesting a Major Comprehensive Plan Amendment to amend the Land Use Plan and re-designate 2,495.42± acres of land from Moderate Low Density Residential (MLDR, 1-3.5 du/ac) to Employment and General Public Facilities/Services (Max 200± acres), for the location of a energy generation and technology campus, situated on a portion of sections 25, 26, 27, 34, 35, & 36, T05S, R03E, of the Gila and Salt River Base and Meridian (legal on file) tax parcels: 510-48-016A, -017B, -017E, -017F, -017H, -017J, -017K, -029J, -029L Portion of, 510-53-003A, -003D, -003E, 510-54-0030, -002A, 510-57-001Q Portion of, -005B, -006, generally located northeast of Maricopa Road and Teel Road, in unincorporated area of Pinal County.

ALL PERSONS INTERESTED IN THIS MATTER MAY APPEAR AND SPEAK AT THE PUBLIC HEARING AT THE DATE, TIME, AND PLACE DESIGNATED ABOVE.

DOCUMENTS PERTAINING TO THIS CASE CAN BE FOUND ON THE NOTICE OF HEARING PAGE FOR THE P&Z COMMISSION AT:
https://www.pinal.gov/236/Notice-of-Hearings

DATED THIS **8th** DAY OF **JULY 2025**, by Pinal County Development Services

TO QUALIFY FOR FURTHER NOTIFICATION IN THIS LAND USE MATTER YOU MUST FILE WITH THE PLANNING DEPARTMENT A WRITTEN STATEMENT OF SUPPORT OR OPPOSITION TO THE SUBJECT APPLICATION. YOUR STATEMENT **MUST** CONTAIN THE FOLLOWING INFORMATION:

1) Planning Case Number (see above)
2) Your name, address, telephone number and property tax parcel number **(Print or type)**
3) A brief statement of reasons for supporting or opposing the request
4) Whether or not you wish to appear and be heard at the hearing

WRITTEN STATEMENTS MUST BE FILED WITH:
PINAL COUNTY COMMUNITY DEVELOPMENT DEPARTMENT
85 N. FLORENCE STREET, PO BOX 749.
FLORENCE, AZ 85132

Contact for this matter: Glenn Bak, Senior Planner
E-mail address: Glenn Bak@pinal.gov
Phone # (520) 866-6444

[*Anything below this line is not for publication.*]

TO BE PUBLISHED:
Pinal Central Dispatch
Arizona Republic