WELCOME

Please Sign In Here

takanock
CRITICAL POWER. UNCOMPROMISED.

Who We Are

Takanock: ***We take an energy-first approach to siting and permitting data centers with a focus on positive community involvement***

Integrate with the power grid for efficiency and sustainability

Leverage cutting edge resource management and cleaner back-up power sources

Prioritize transparent community engagement

OUR FOOTPRINT

4 active sites
in three states

1,600+ acres
under contrcol

2.8GW+
IT capacity

5.3GW+
generation capacity

takanock
CRITICAL POWER. UNCOMPROMISED.

Project Baccara

- Modern and efficient data centers with on-site power generation
- Located in Maricopa County, approximately 1 mile north of Luke AFB
- ≈ 160 acres zoned heavy industrial, NW of intersection of W Olive Ave and Litchfield Road



takanock
CRITICAL POWER. UNCOMPROMISED.

Project Components

Data Center Buildings

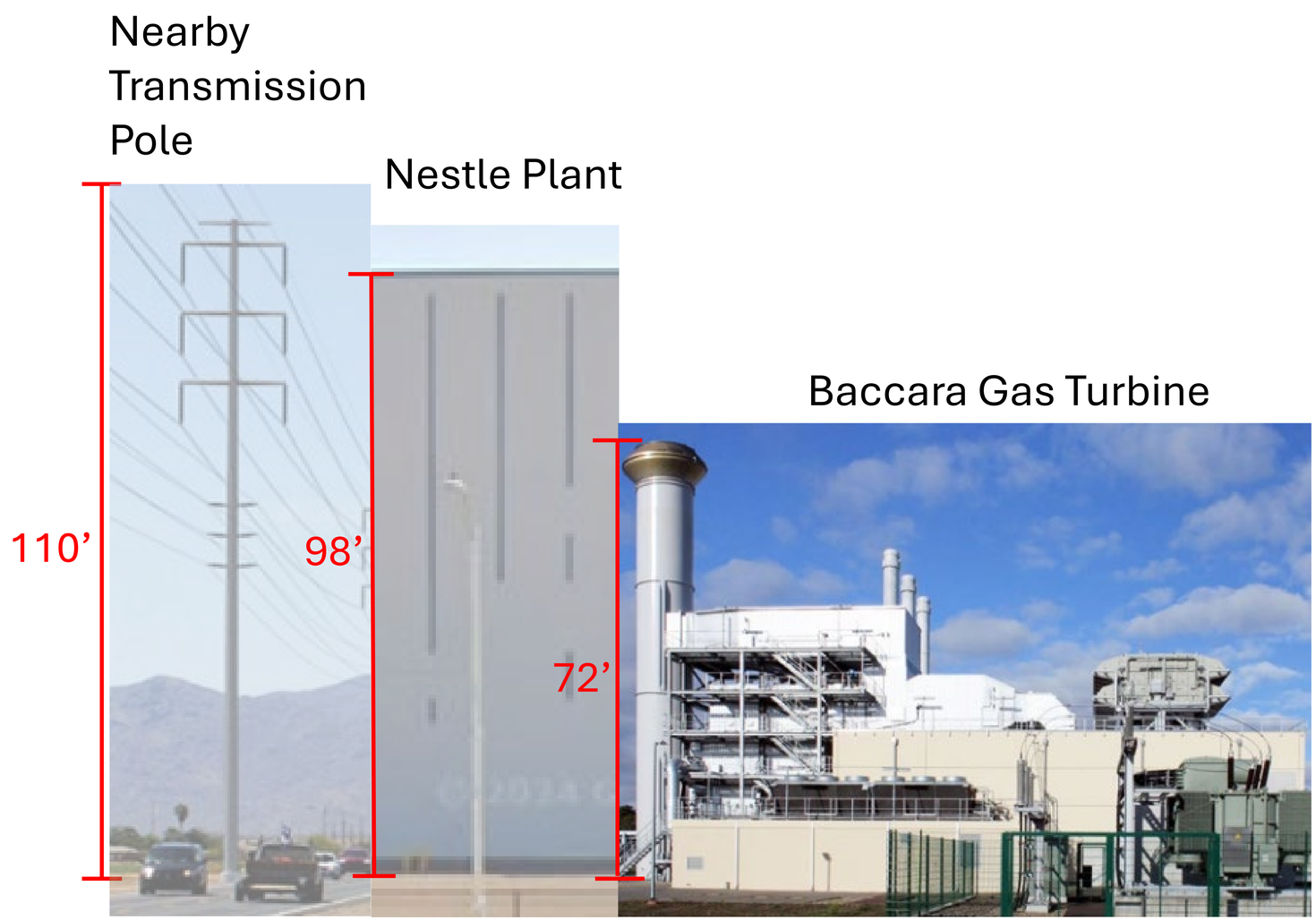
- Conceptual Design: Two buildings, each with two stories
- Total ≈ 2 Million Sq. Ft
- Design may adapt to future customer needs
- High security data centers help store and process critical information



Project Components

Power Generation

- Natural gas is a clean fuel source
- Up to 700 MW nameplate capacity
- Project will run only 30% of the year
- Providing power both to data centers and to support regional grid



takanock
CRITICAL POWER. UNCOMPROMISED.

Project Components

Substation

- Connects the data center and generation to the utility transmission system
- Power can flow in both directions, onto or out from the transmission grid
- Allows generators to provide support and power to region when needed



On-site substation to be owned by APS

Project Benefits



JOBS:

≈ 100 permanent well-paying jobs

≈ 1,400 induced jobs in surrounding community

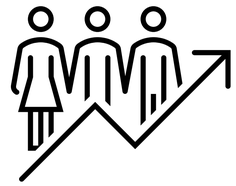


PROJECTED **ANNUAL** TAXES:

+$41 million to Maricopa County Schools

+$7 million to Maricopa County

$4 million for Special Tax Districts



INFRASTRUCTURE:

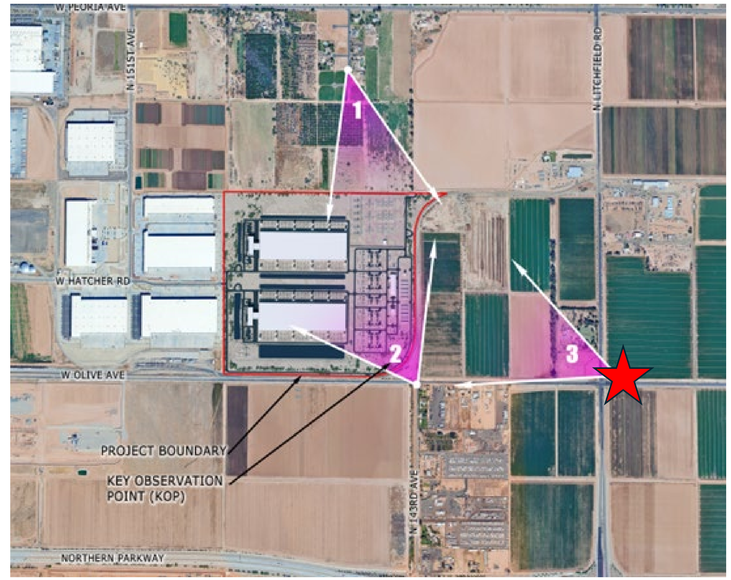
Energy resource to support regional transmission grid

High-tech growth to support regional economic development

takanock
CRITICAL POWER. UNCOMPROMISED.

Site Plan Rendering





Rendering Location Point 3
Looking Northwest
Proposed Aerial View

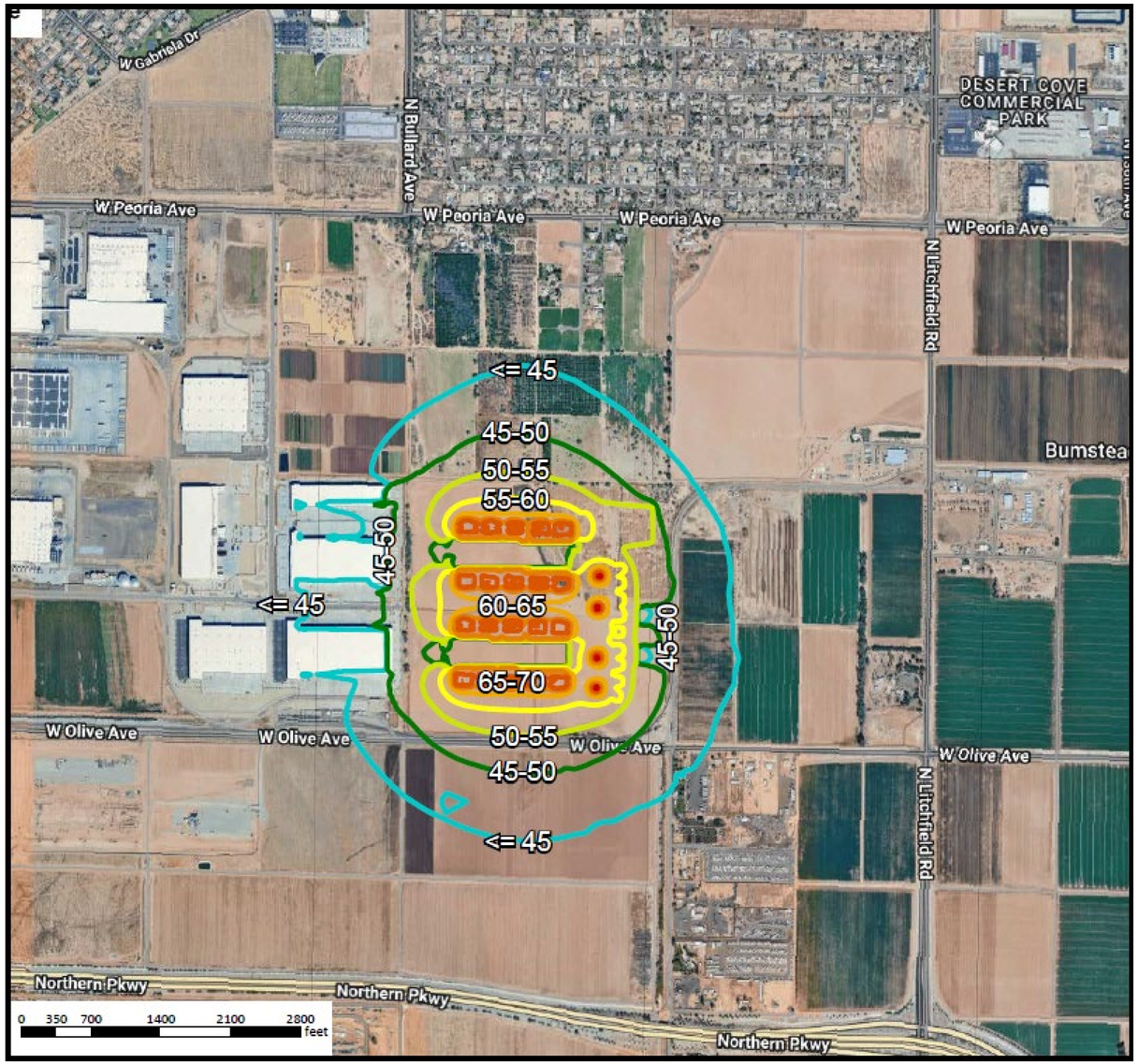
Site Plan Is Conceptual, Subject to Change; For Graphical Purposes Only

takanock
CRITICAL POWER. UNCOMPROMISED.

Environmental & Regulatory

takanock
CRITICAL POWER. UNCOMPROMISED.

Third Party Noise Studies



Noise level
Leq,d
in dB(A)

> 95	**Blender, power tools, lawnmower**
90 - 95	
85 - 90	**Police siren, hairdryer**
80 - 85	
75 - 80	**Traffic, noisy restaurant**
70 - 75	
65 - 70	**Dishwasher, vacuum cleaner**
60 - 65	
55 - 60	**Moderate rainfall, normal conversation**
50 - 55	
45 - 50	**Refrigerator, quiet office**
<= 45	

Within ½ mile noise is reduced to current typical background levels

takanock
CRITICAL POWER. UNCOMPROMISED.

Third Party Noise Studies

TABLE 2: MODELED EXTERIOR NOISE LEVELS FROM OPERATIONAL SOURCES

Monitoring Site	Time Period	Modeled Noise Levels (A)	Ambient Noise Levels[1] (B)	Modeled plus Ambient (C) (A+B)	Potential Noise Increase Above Ambient (C-B)	Exceeds Threshold?
		dBA				
Scattered residential south of the Project site along N. 143rd Avenue	Daytime	45.9	62.4	62.5	+0.1	**No**
	Evening	45.9	51.9	52.9	+1.0	**No**
	Nighttime	45.9	48.3	50.3	+2.0	**No**
Scattered residential north of the Project site along N. 144th Drive	Daytime	41.2	59.4	59.5	+0.1	**No**
	Evening	41.2	46.7	47.8	+1.1	**No**
	Nighttime	41.2	43.5	45.5	+2.0	**No**

Note: [1] Conservatively compared to the lowest measured hourly average ambient noise level.

Average listeners noticeably detect a difference of about **3 dB** in signal to noise ratio (SNR).

(According to a study published on PubMed)

At nearest residences there is no discernable difference in noise

takanock
CRITICAL POWER. UNCOMPROMISED.

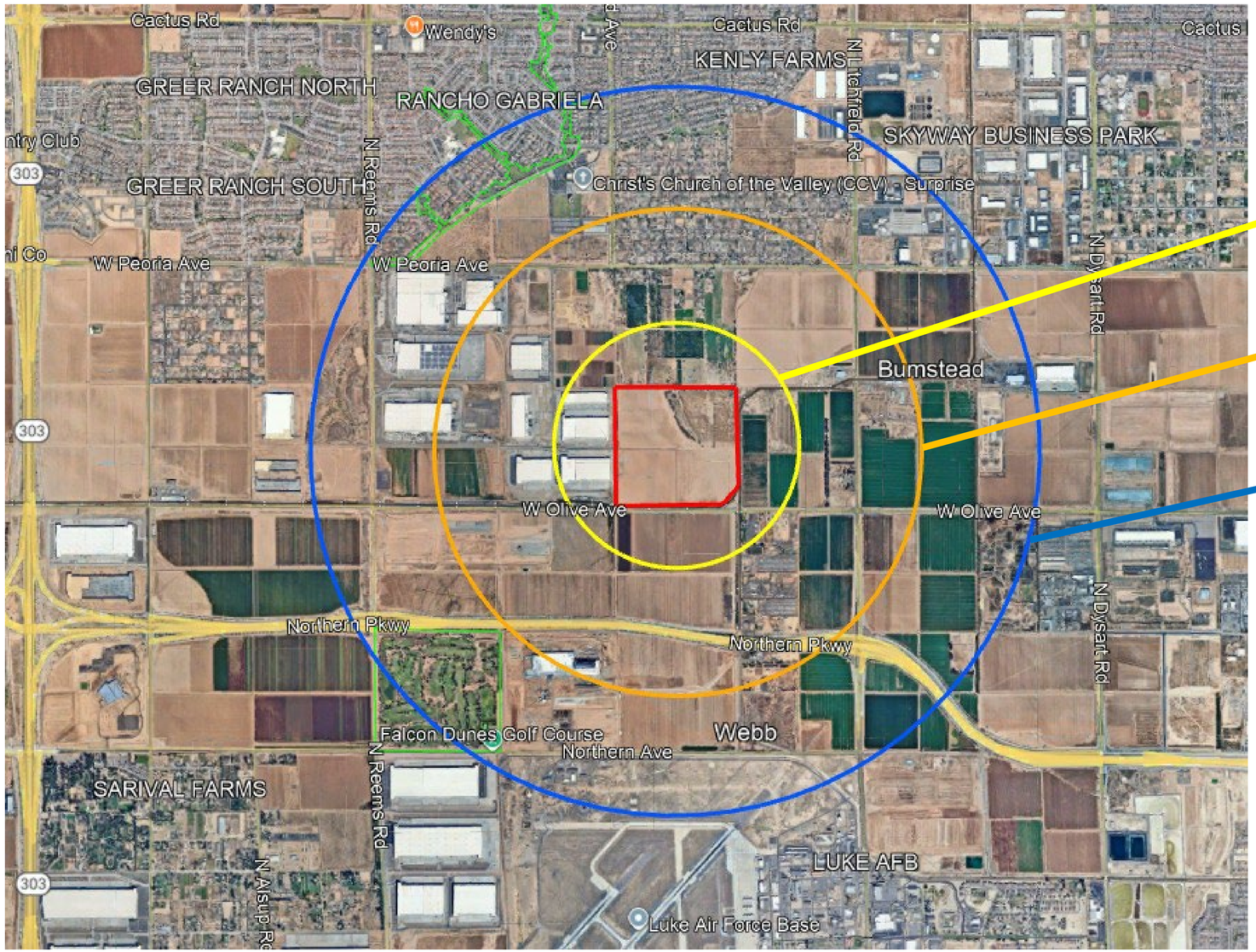
Air Emissions Controls

- Air emissions will remain well below major source thresholds
- Emissions modeling confirms no exceedances of safe air quality levels
- Turbine annual hours of operation are capped to ensure compliance with emissions limits
- Installed with Best Available Control Technology (BACT) – the most stringent emissions limits in the U.S.
- Advanced emissions reduction systems include Selective Catalytic Reduction (SCR) and Oxidation Catalyst (OxCat) to reduce NO_X, CO, and VOC
- The Maricopa Air Quality District is responsible for permitting the project and regulating emissions.
- Compliance with limits will be ensured with continuous emissions monitoring technology and reporting requirements

Type of Emissions	Baccara Emissions (Tons Per Year)	Major Source Emissions Limit (Tons per Year)
Nitrogen Oxides	89.9	100
Carbon Monoxide	79.8	100
Volatile Organic Compounds	37.5	100
Sulfur Oxides	12.4	100
Particulate Matter	61.3	70
Hazardous Air Pollutants	7.35	25

State of the art technology reduces emissions below acceptable thresholds

Distances from Project Site



0.5 mile radius ≈ 6 residences

1 mile radius ≈ 110 residences

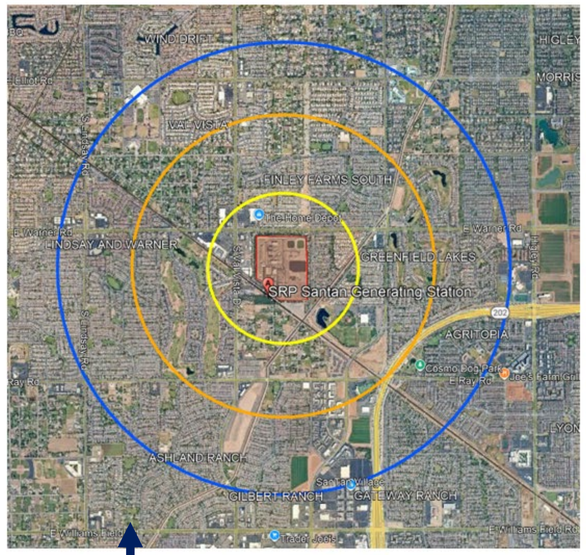
1.5 mile radius ≈ 630 residences

Counts based on aerial imagery interpretation

takanock
CRITICAL POWER. UNCOMPROMISED.

Similar Power Plants in the Area

Santan Generating Station



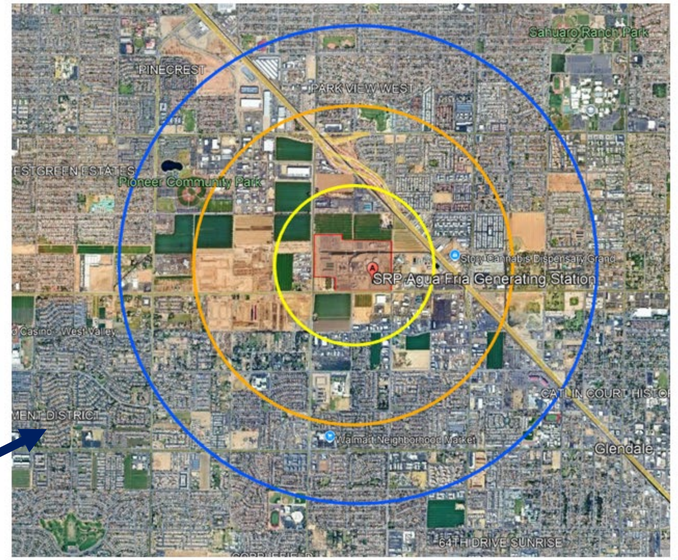
Gilbert, AZ

Latest Expansion: 2006
1,185 MW Natural Gas Plant

Single Family Homes within
½ mi ≈ 400
1 mi ≈ +1,400

Average value increase over last ten years (within ½ mile): 108%

Agua Fria Generating Station

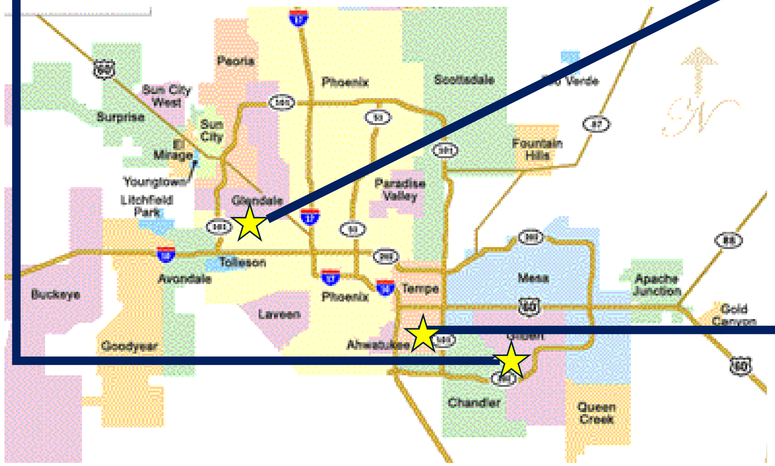


Glendale, AZ

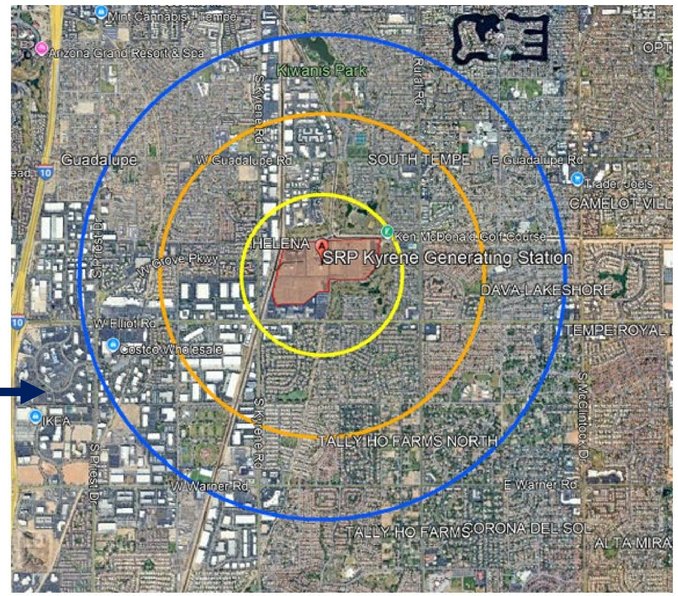
Latest Expansion: 2022
722 MW Natural Gas Plant

Single Family Homes within
½ mi ≈ 43
1 mi ≈ 750

Average value increase over last ten years (within ½ mile): 152%



Kyrene Generating Station



Tempe, AZ

Latest Expansion: 2007
573 MW Natural Gas Plant

Single Family Homes within
½ mi ≈ 260
1 mi ≈ +1,000

Average value increase over last ten years (within ½ mile): 92%

takanock
CRITICAL POWER. UNCOMPROMISED.

Water Use for Data Center

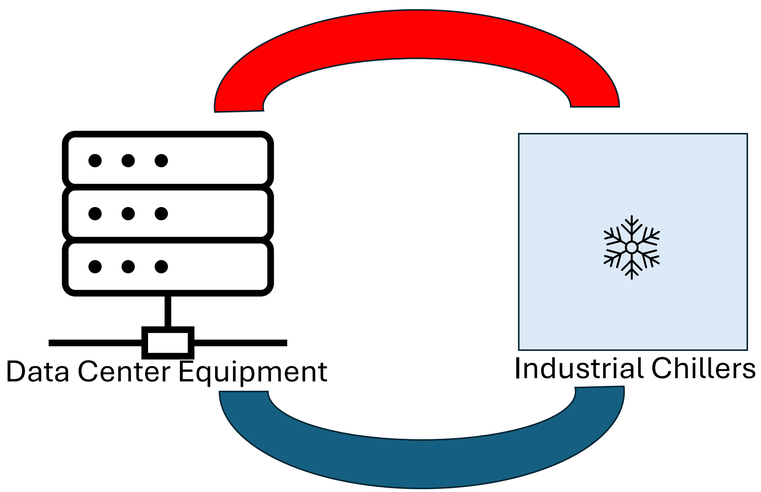
Takanock's system uses less than 1% of the water used by a traditional data center, or the equivalent of about 14 residential homes

Source:	EPCOR
System:	Closed Loop Chiller System
Use:	Filled once and continuously recirculated

takanock
CRITICAL POWER. UNCOMPROMISED.

Water Use

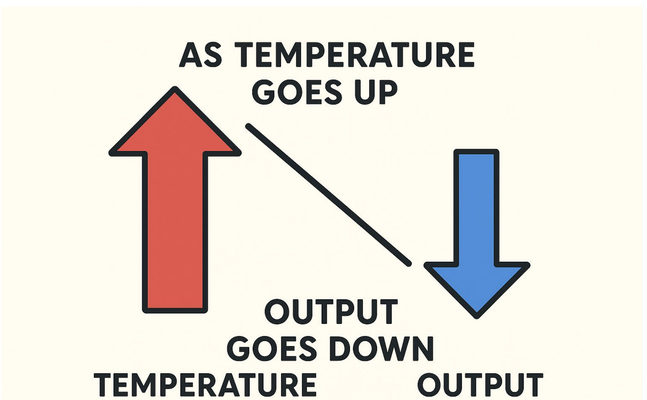
Data Center Use



Closed Loop Chilling System uses water circulating through a chiller to cool equipment. Water continually cycles with near zero evaporation

One-Time System Fill is Approximately 9 acre-feet per year for 3 years as phased into use.

Power Generation Use



In most scenarios, ambient air is cool enough to allow for needed amount of power generation.



Water cooling only used when demand exceeds available output at current temperatures.

Modeling of generation scenarios and air temperatures estimates that up to 100-acre feet of water will be needed per year.

takanock
CRITICAL POWER. UNCOMPROMISED.

Water Use for Generation

Compared to existing natural gas power plants in the area, Takanock's water use for power generation is approximately

85% lower

Compared to 2024 on-site water use, Takanock's projected use is

67% lower

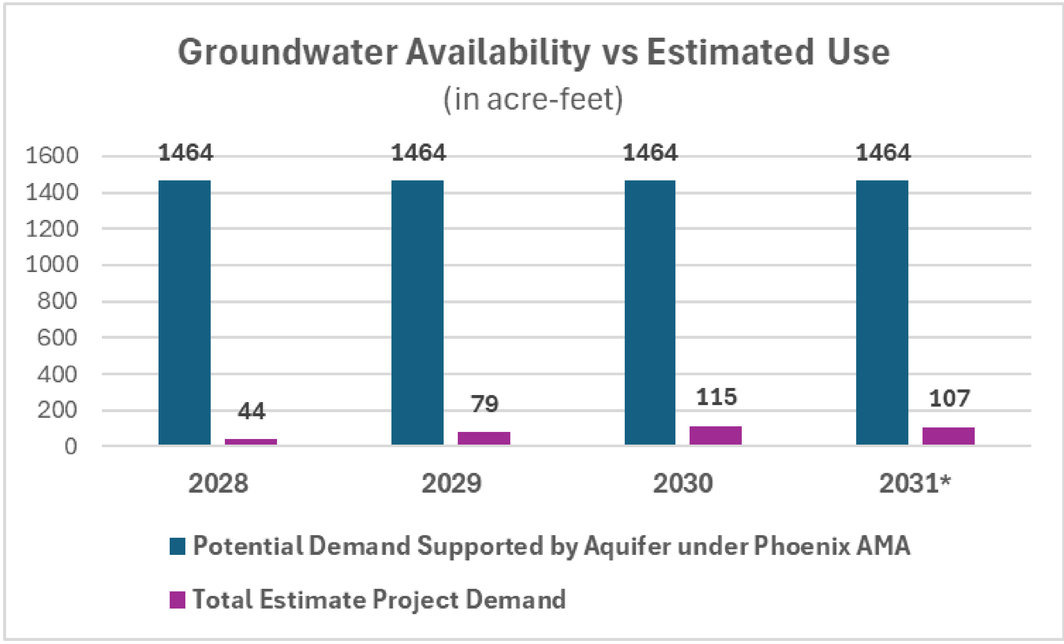
Source:	Recycled wastewater or on-site well
System:	Evaporative Intake Cooling
Projected Use:	Up to 180 acre feet per year
2024 Use:	Approximately 550 acre feet

takanock
CRITICAL POWER. UNCOMPROMISED.

Water Sources

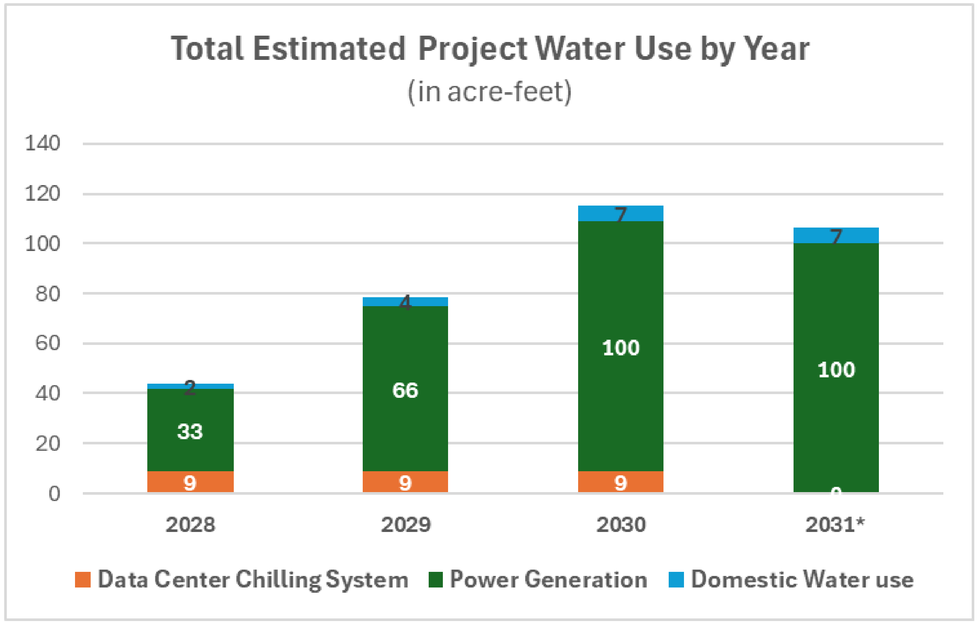
Potential Water Sources

1. Recycled Wastewater from nearby industrial user
2. Municipal water service
3. Groundwater from on-site wells



*Ongoing Operational levels

Study completed by Matrix New World Engineering



*Ongoing Operational levels

Even if 100% of water use came from groundwater wells, models show it is anticipated to have no impact on local wells or availability

takanock
CRITICAL POWER. UNCOMPROMISED.

Environmental Studies

Wetlands & Aquatic Resources

Recreation Resources

Threatened & Endangered Species Studies: Recon & Protocol Level Surveys

Cultural (Archeological) Resources Investigation

Land Use & Planned Developments

Visual & Viewshed Analysis

Numerous environmental impacts are considered by the ACC in its review

takanock
CRITICAL POWER. UNCOMPROMISED.

Project Permitting – County Level

Maricopa County

- Property currently zoned Heavy Industrial
  - Heavy Industrial uses by right include uses such as manufacturing, public utilities, wastewater treatment, trucking terminal

- Military Compatibility Permit (with POD) required due to proximity to Luke AFB
  - Filed July 11, 2025
  - Hearings will be held before Planning and Zoning and Board of Supervisors

- Air Permit under review by MCAQD, deemed complete

Planning & Zoning Hearing

October 2025

Board of Supervisors Hearing

November 2025

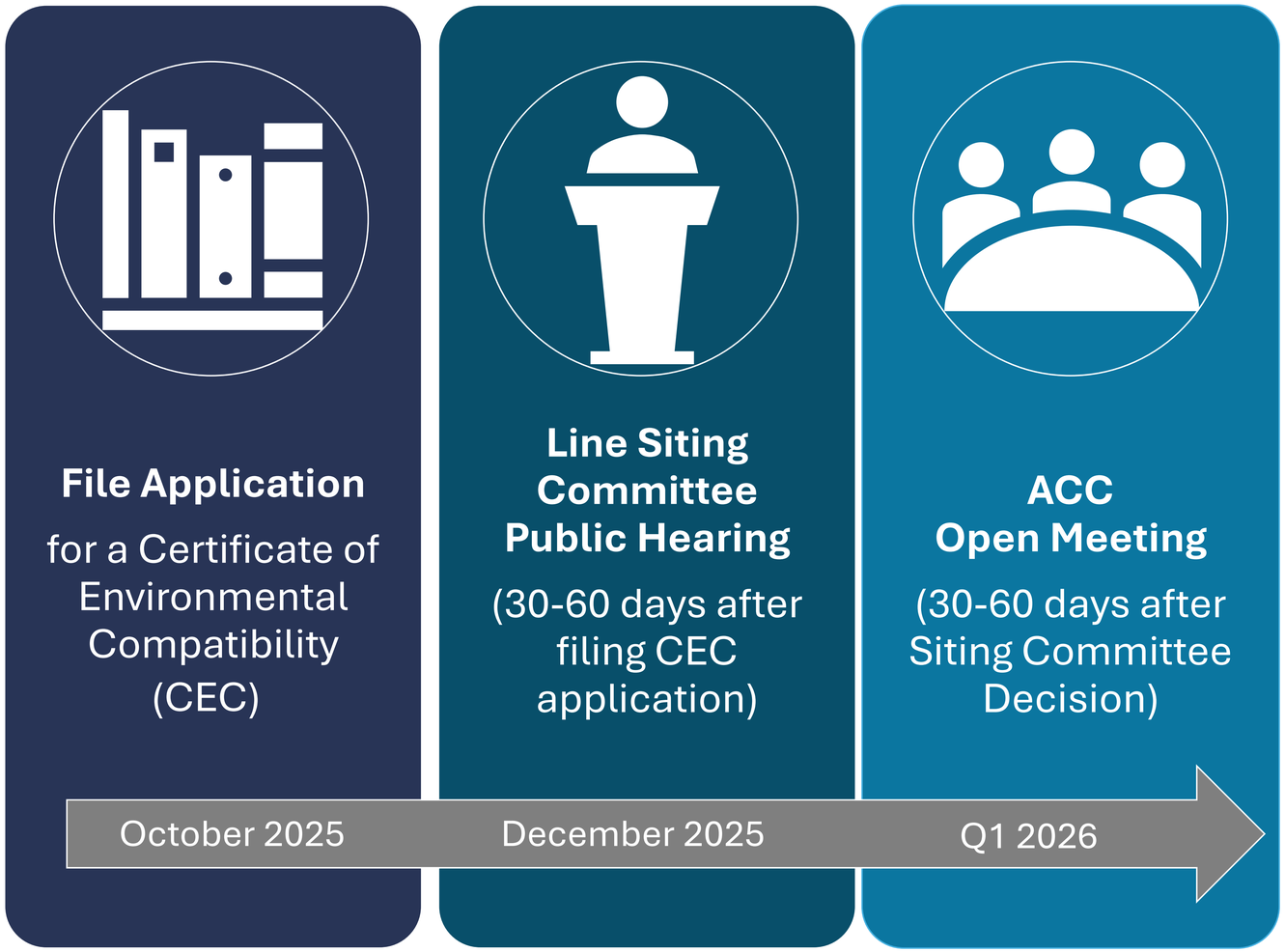
Air Permit Public Hearing

November 2025

All dates tentative, subject to change

takanock
CRITICAL POWER. UNCOMPROMISED.

Project Permitting – State Level



Arizona Corporation Commission

- Certificate of Environmental Compatibility (CEC) required for generation only
- Power Plant & Transmission Line Siting Committee Public hearing on December 1, 2025
- CEC review includes environmental, cultural, land use, recreation and other studies

All dates tentative, subject to change

Project Timeline

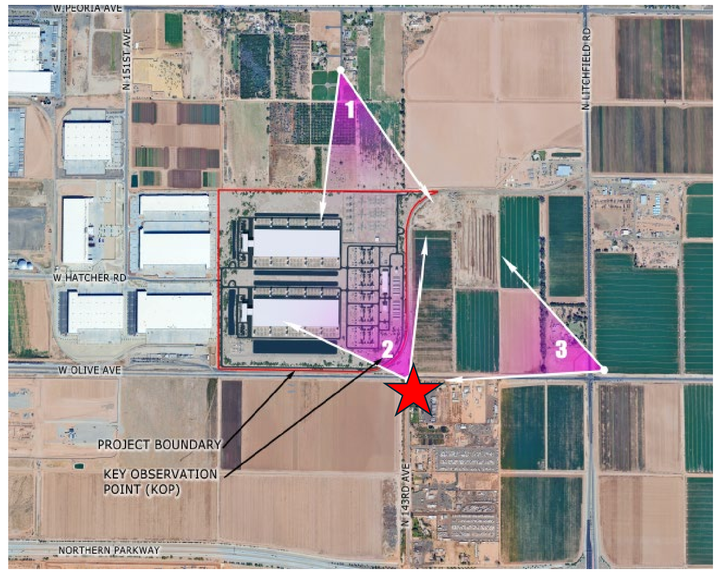
2025	2026	2027-2030
Community Engagement & Permitting	Site Preparation & Start of Construction	Construction of Data Centers and Turbines Completed in Phases

takanock
CRITICAL POWER. UNCOMPROMISED.

Project Photo Simulation – South

Existing View





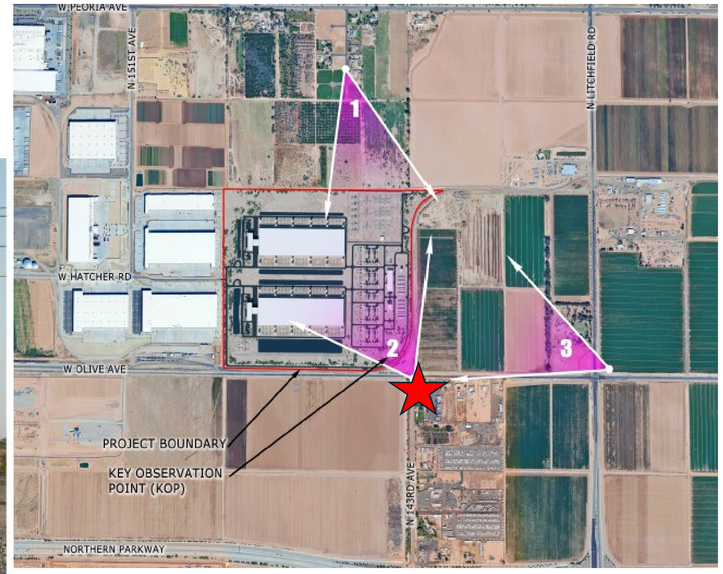
Key Observation Point (KOP) 2
Looking Northwest
W. Olive Ave & N 143 Ave

takanock
CRITICAL POWER. UNCOMPROMISED.

Project Photo Simulation – South

Simulated View





Key Observation Point (KOP) 2
Looking Northwest
W. Olive Ave & N 143 Ave

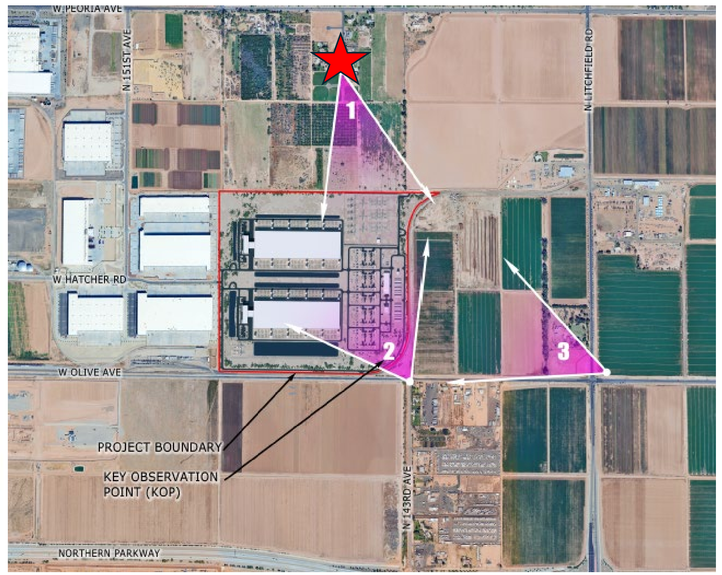
Photo Simulation Is Conceptual, Subject to Change; For Graphical Purposes Only

takanock
CRITICAL POWER. UNCOMPROMISED.

Project Photo Simulation – North

Existing View





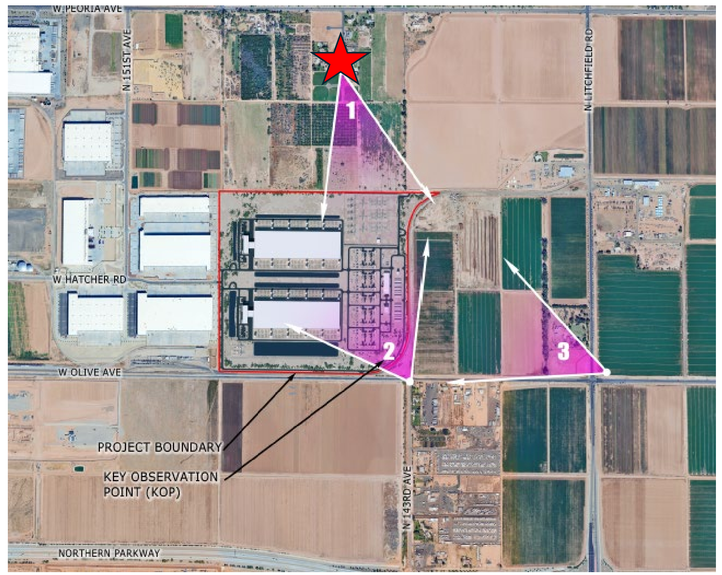
Key Observation Point (KOP) 1
Looking Southeast
10315 N 144th Dr.

takanock
CRITICAL POWER. UNCOMPROMISED.

Project Photo Simulation – North

Simulated View

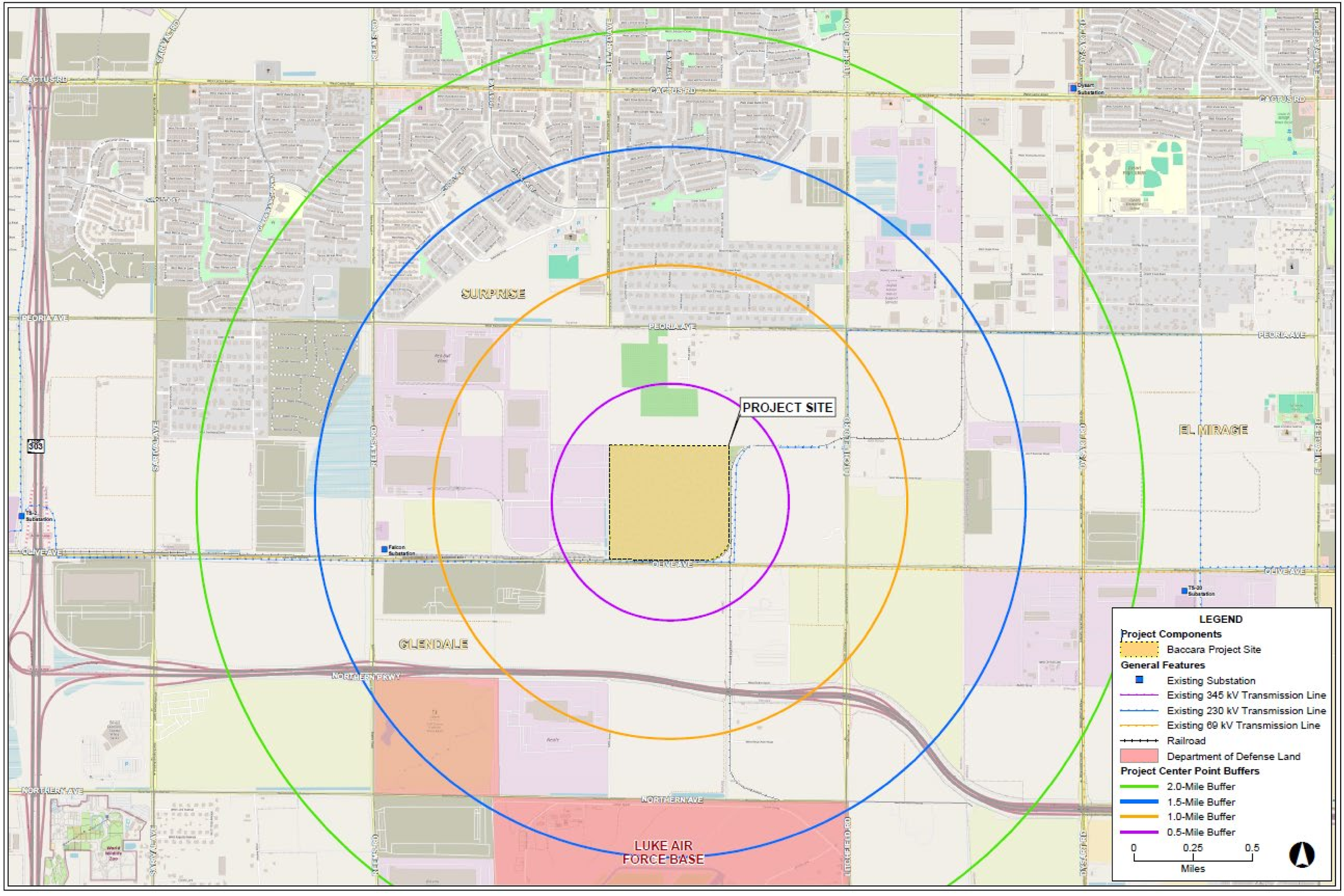




Key Observation Point (KOP) 1
Looking Southeast
10315 N 144th Dr.

Photo Simulation Is Conceptual, Subject to Change; For Graphical Purposes Only

takanock
CRITICAL POWER. UNCOMPROMISED.


CACTUS RD
PEORIA AVE
OLIVE AVE
NORTHERN AVE
NORTHERN PKWY
SURPRISE
GLENDALE
EL MIRAGE
LUKE AIR FORCE BASE
PROJECT SITE
303
LEGEND
Project Components
Baccara Project Site
General Features
Existing Substation
Existing 345 kV Transmission Line
Existing 230 kV Transmission Line
Existing 69 kV Transmission Line
Railroad
Department of Defense Land
Project Center Point Buffers
2.0-Mile Buffer
1.5-Mile Buffer
1.0-Mile Buffer
0.5-Mile Buffer
0
0.25
0.5
Miles

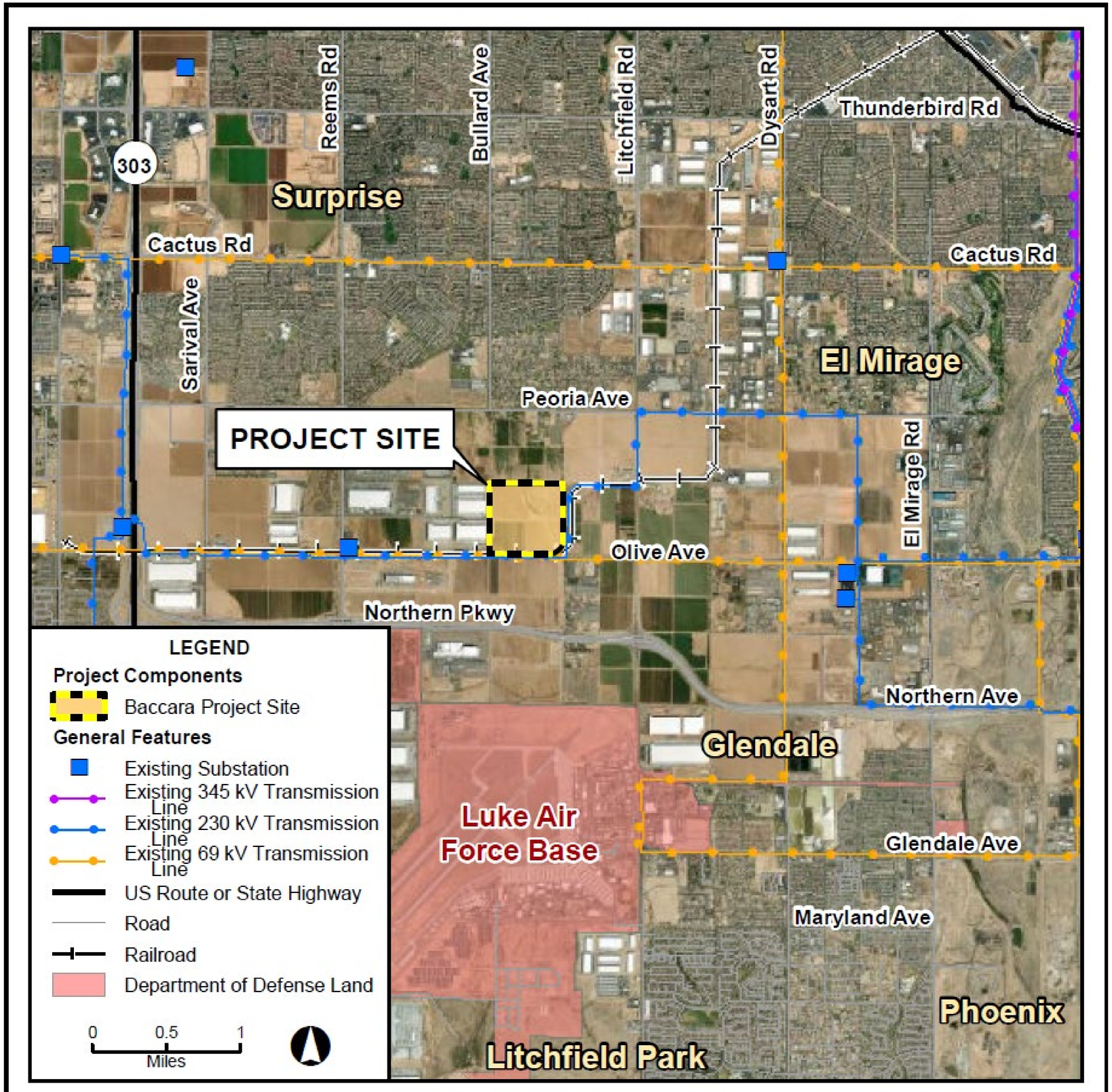
Comments

WE WANT TO HEAR FROM YOU!

Please Fill Out A Comment Form

Or Comment on the Project website at:
www.projectbaccara.com

takanock
CRITICAL POWER. UNCOMPROMISED.


303
Reems Rd
Bullard Ave
Litchfield Rd
Dysart Rd
Thunderbird Rd
Surprise
Cactus Rd
Cactus Rd
Sarival Ave
El Mirage
Peoria Ave
PROJECT SITE
El Mirage Rd
Olive Ave
Northern Pkwy
Northern Ave
Glendale
Luke Air Force Base
Glendale Ave
Maryland Ave
Phoenix
Litchfield Park
LEGEND
Project Components
Baccara Project Site
General Features
Existing Substation
Existing 345 kV Transmission Line
Existing 230 kV Transmission Line
Existing 69 kV Transmission Line
US Route or State Highway
Road
Railroad
Department of Defense Land
0
0.5
1
Miles