

## SU 23-27 (Herbie Solar)

Special Use Authorization to construct, operate,  
and maintain a proposed Solar Energy Power  
Plant and Battery Energy Storage System in a Rural  
Zoning District

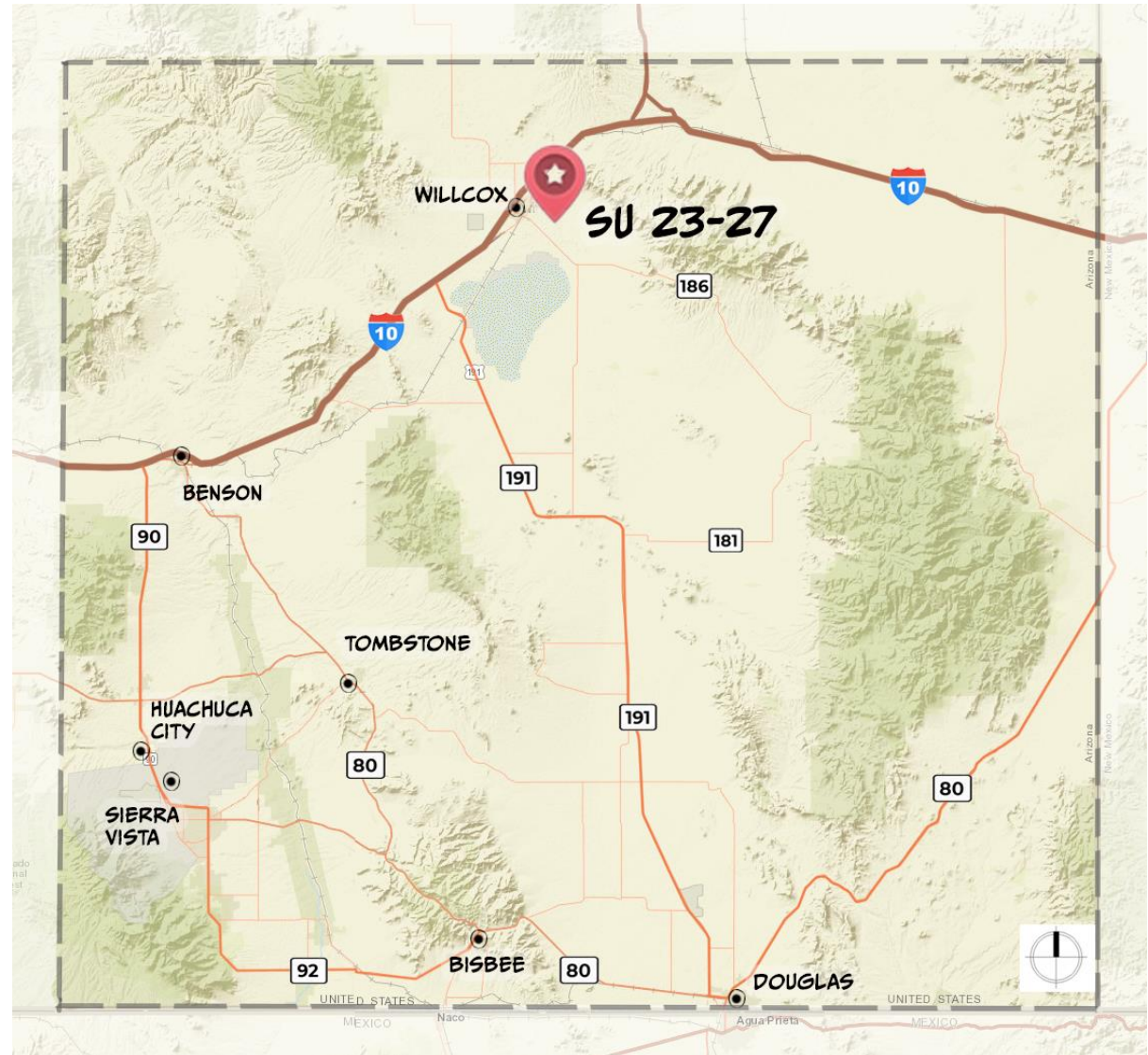
**Planning & Zoning Commission**

**December 13, 2023**

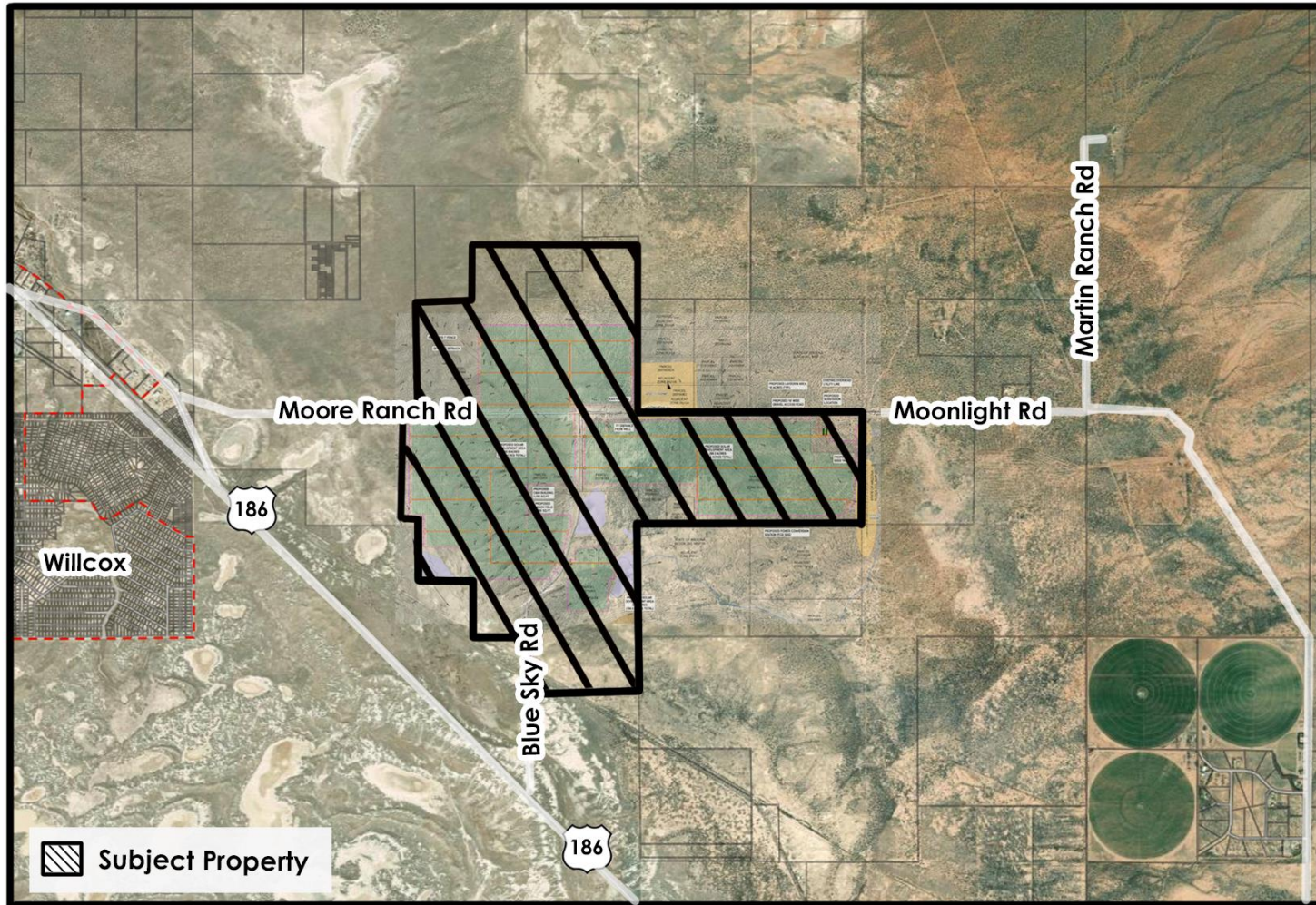


# DEVELOPMENT SERVICES

- This is a request to allow an 80-MW solar energy power plant with an 80-MW battery storage
- Multiple parcels (see report/application), 784.5 developed acres (approx.)
- Herbie Solar, LLC (applicant)
- Undeveloped land, rangeland



# DEVELOPMENT SERVICES

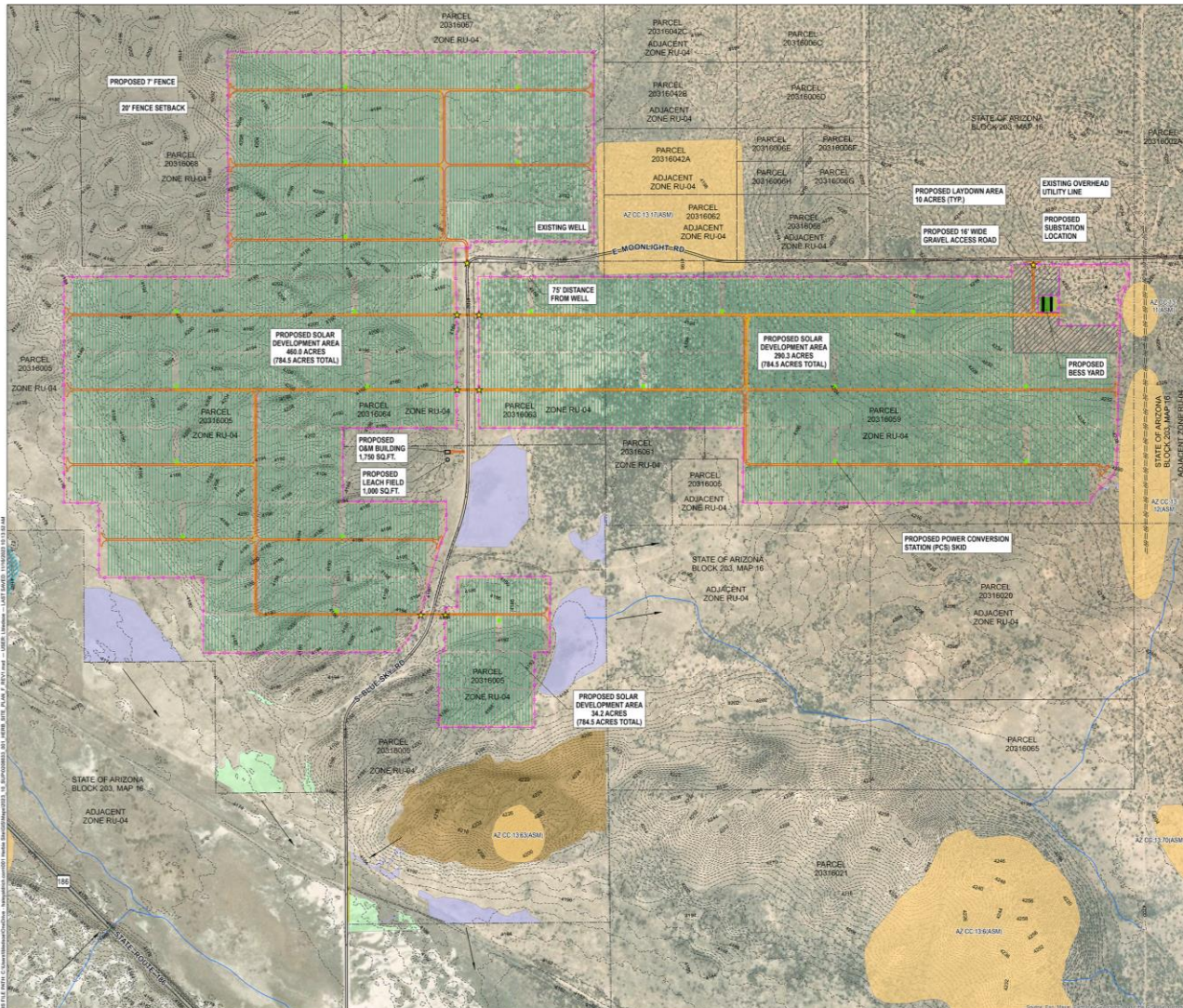


Location  
SU 23-27 (Herbie Solar)

N.T.S



# DEVELOPMENT SERVICES

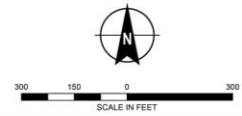


**LEGEND**

PROPOSED 7-FT HIGH FENCE	PROPOSED LAYDOWN AREA
20-FT FENCE SETBACK	FEMA FLOOD ZONE A
PROPOSED 16-FT WIDE ACCESS ROAD	NHD MAPPED STREAM
PROPOSED MV FEEDER CABLE	DRAINAGE FLOW ARROW
PROPOSED PV MODULES & RACKING	EPHEMERAL DRY WASHES
PROPOSED EQUIPMENT PCS SKID	DESERT PLAYA
EXISTING PUBLIC ROADWAY	CULTURAL RESOURCES
EXISTING OVERHEAD ELECTRIC	TOPOGRAPHIC RIDGE
EXISTING TWO-TRACK ROAD	
2-FT TOPOGRAPHIC CONTOURS	
PROPERTY LINE	
PROPOSED ACCESS GATE	

PARCELS: 203-16-005, 203-16-059, 203-16-061, 203-16-063, 203-16-064, 203-16-067, 203-16-068  
 OWNERS: J. KATHRYN KLUMP AND KARRY KEITH KLUMP, STEPHEN A. KLUMP AND SHAYE E. KLUMP, PHILIP A. KLUMP AND SHANNON KLUMP  
 SCALE: AS SHOWN

- NOTES:**
1. THERE ARE NO PROPOSED PAVED PARKING SPACES. THERE IS A PROPOSED GRAVEL PARKING AREA FOR 3 VEHICLES AT THE OPERATIONS AND MAINTENANCE (O&M) BUILDING.
  2. THERE IS NO PROPOSED GRADING ANTICIPATED FOR INSTALLATION OF THE SOLAR MODULES; MODULES WILL BE INSTALLED ON EXISTING GRADE. MINOR GRADING IS ANTICIPATED TO INSTALL THE PROPOSED SUBSTATION AND GRAVEL ACCESS ROADS.
  3. PROJECT WILL BE CONSTRUCTED ALL AT ONCE (NOT PHASED).
  4. GROUND BELOW THE SOLAR ARRAYS WILL BE PLANTED WITH A LOW-GROWING SEED MIX OF NATIVE GRASSES.
  5. THERE IS NO PROPOSED SCREENING.
  6. THERE ARE NO CULTURAL RESOURCES LOCATED WITHIN THE PROJECTS PROPOSED DEVELOPMENT AREA.
  7. STREAMS DATA SOURCE: USGS NATIONAL HYDROGRAPHY DATASET (NHD)
  8. FLOOD ZONE DATA SOURCE: FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) NATIONAL FLOOD HAZARD LAYER (NFHL)
  9. WASHES AND PLAYS DATA SOURCE: HALEY & ALDRICH, INC. FIELD INVESTIGATION AND WETLAND DELINEATION REPORT (OCTOBER 2023).
  10. BASE MAP SOURCE: ESRI (WORLD IMAGERY)

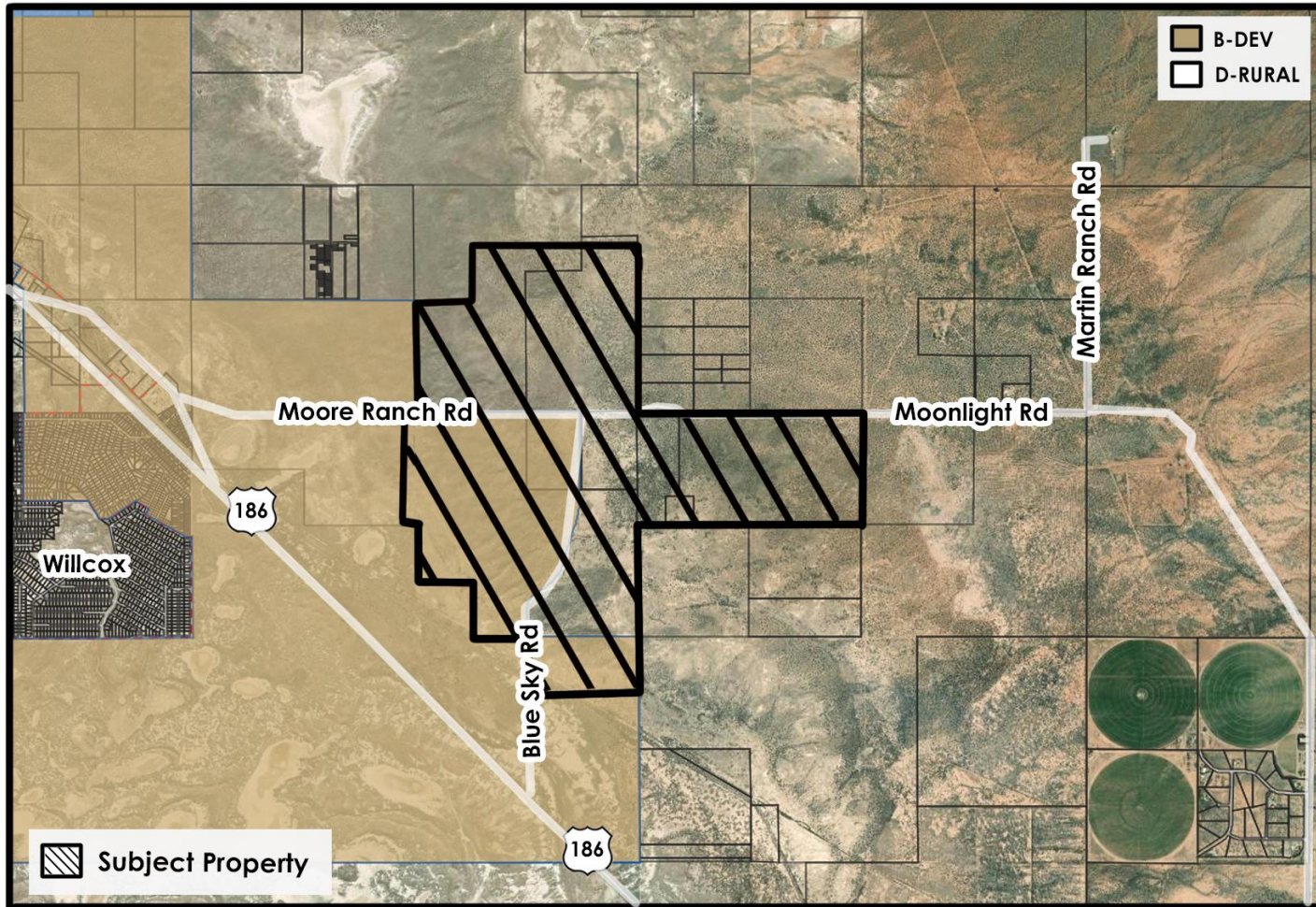


**HALEY ALDRICH** HERBIE SOLAR PROJECT  
COCHISE COUNTY, ARIZONA

**SITE PLAN**

NOVEMBER 2023

# DEVELOPMENT SERVICES



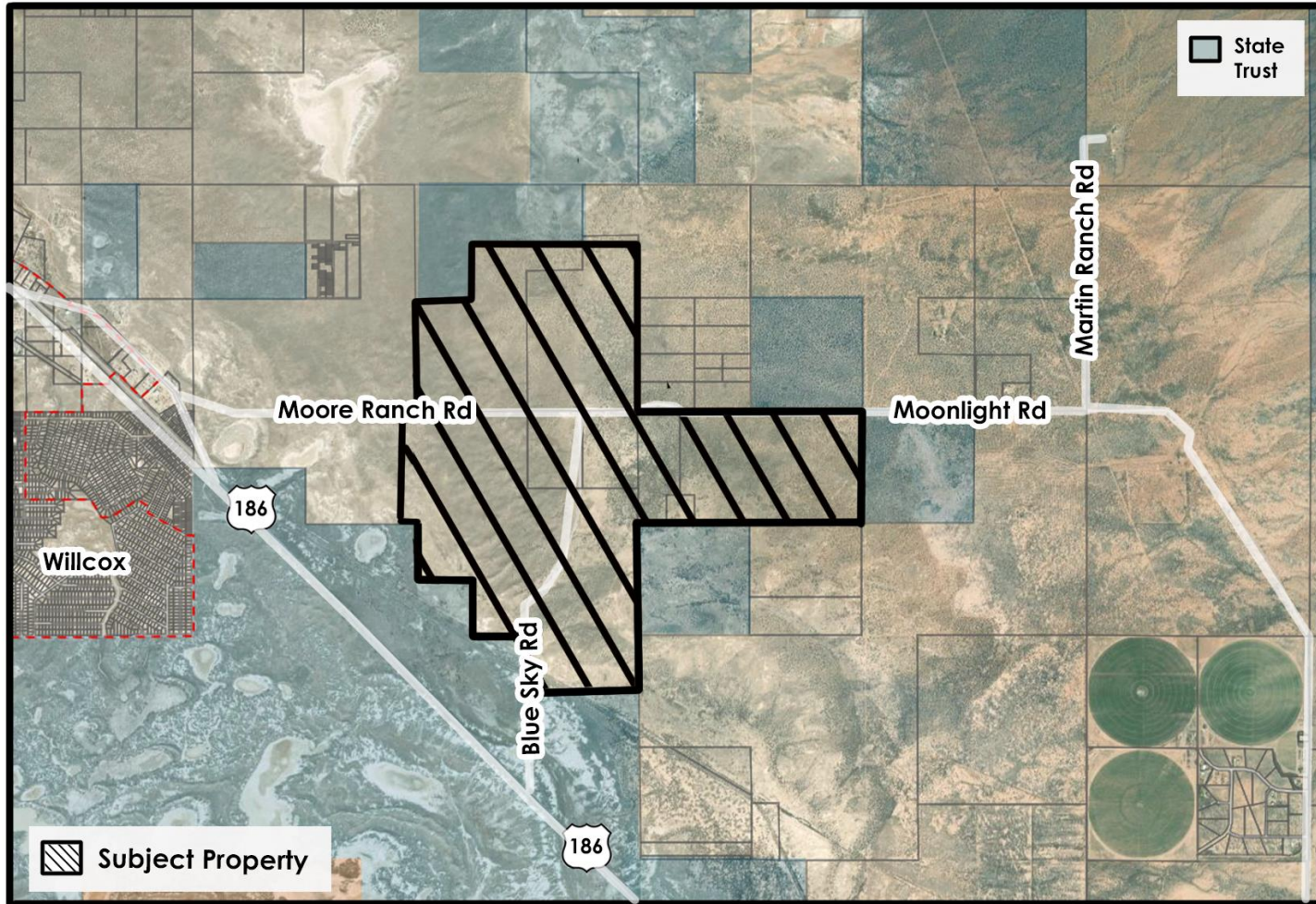
Land Use  
SU 23-27 (Herbie Solar)

N.T.S.



**COCHISE COUNTY**  
Arizona

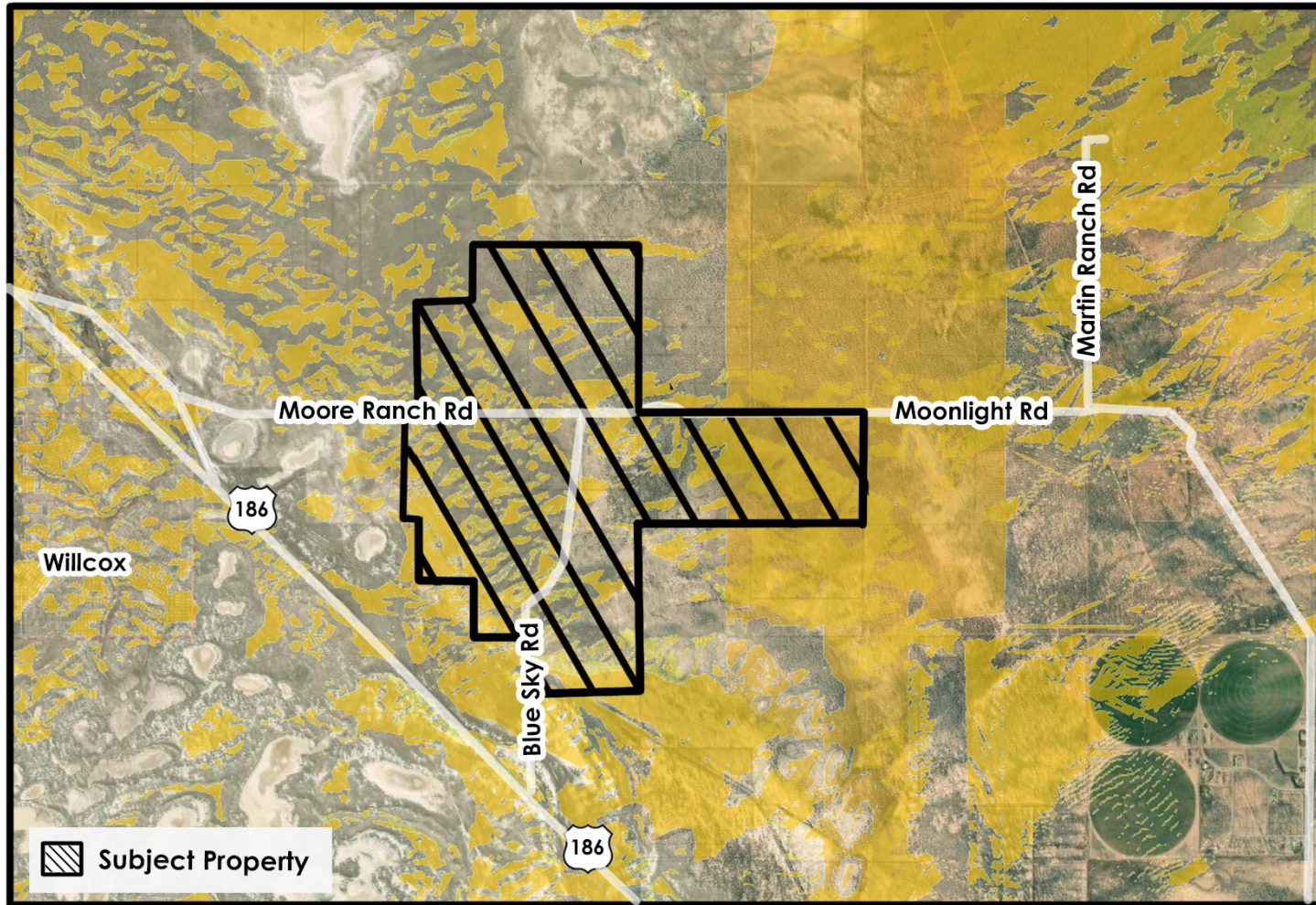
# DEVELOPMENT SERVICES



Public Land Ownership  
SU 23-27 (Herbie Solar)



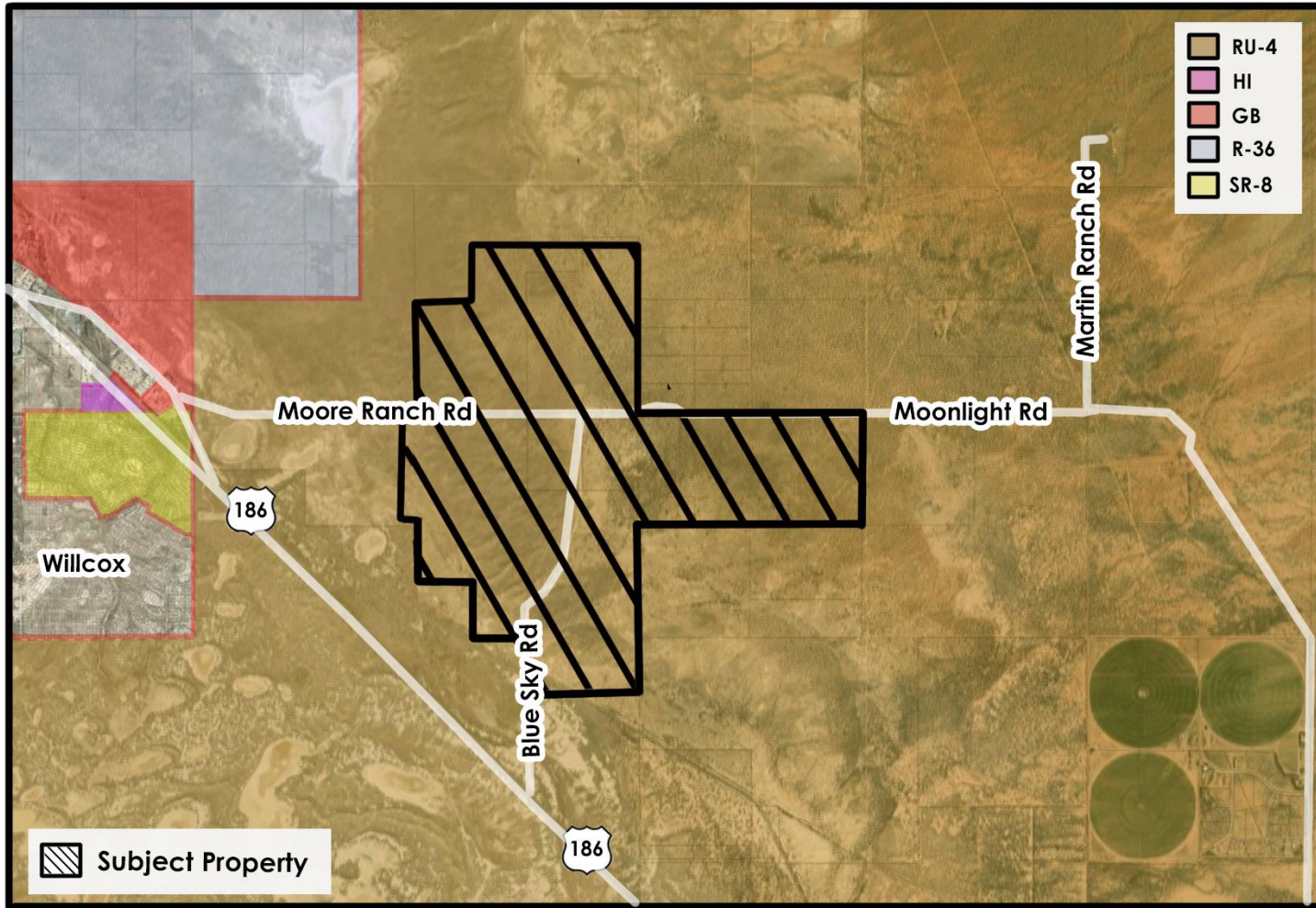
# DEVELOPMENT SERVICES



Renewable Energy Opportunity Analysis  
SU 23-27 (Herbie Solar)



# DEVELOPMENT SERVICES



Zoning  
SU 23-27 (Herbie Solar)

N.T.S



**COCHISE COUNTY**  
Arizona

## The Site



## The Site



# DEVELOPMENT SERVICES

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**There are 10 factors used to evaluate all special use proposals. As submitted, the application:**

Complies: 6 factors

- Compliance with duly Adopted Plans
- Compliance with the Zoning District Purpose
- Development along Major Streets
- Adequate Services and Infrastructure
- Significant Site Development Standards
- Public Input
- Water Conservation

Complies with Conditions: 4 factors

- Significant Site Development Standards
- Traffic Circulation
- Off site impacts
- Hazardous Materials



## Site Development Standards, Recommended Conditions

- Wildlife Impact COA: The project owner shall reserve a 6–8-inch gap between the ground surface and the bottom of all new project-related perimeter fencing.
- Lot Coverage COA: The project owner shall maintain the project site with perennial vegetated groundcover and noncompacted soil. Where grading is not required during project construction, any existing vegetation will be mowed rather than removed completely.
- Glare/Wildlife Impact COA: The project owner shall exclusively use PV panels with an anti-reflectivity coating that is integral to the panel.
- Wildlife Impact COA: All solar racks shall be installed to maintain no less than a twelve (12) foot minimum clear distance, measured from outer edge of panels, between all tracker rows (north-south). The applicant shall not exceed a 35% ground cover ratio, defined as panel area to total project area, for the project site.

## Traffic Circulation, Recommended Conditions

- Traffic COA/Dust Mitigation COA: The project owner shall submit, in advance or concurrent with their first Commercial Permit, a Traffic Improvement and Maintenance Plan, which successfully mitigates project impacts to Blue Sky Road (from Highway 186 to Moore Ranch Road) and Moore Ranch Road/Moonlight Road (from Blue Sky Road to the eastern project limits), to the satisfaction of the county. The plan shall include, but not be limited to, a traffic control plan, a dust control plan, a road stabilization plan, and a road maintenance plan.
- Traffic COA/Dust Mitigation COA: The project owner shall apply a chemical stabilizer, such as Magnesium Chloride, to Blue Sky Road (from Highway 186 to Moore Ranch Road) and Moore Ranch Road/Moonlight Road (from Blue Sky Road to the eastern project limits), as further specified in the Traffic Improvement and Maintenance Plan during the project construction phase. Road preparation and application shall follow best practices to improve product performance and shall be in accordance with manufacturer's specifications.



## Off Site Impacts, Recommended Conditions

- Glare/Wildlife Impact COA: The project owner shall exclusively use PV panels with an anti-reflectivity coating that is integral to the panel.
- Glare/Wildlife Impact COA: All solar racks shall be installed to maintain no less than a twelve (12) foot minimum clear distance, measured from outer edge of panels, between all tracker rows (north-south). The applicant shall not exceed a 35% ground cover ratio, defined as panel area to total project area, for the project site.
- Dust Mitigation COA: The project owner shall include all BMPs listed under factor 9 of the staff memo for dust mitigation on their Stormwater Pollution Prevention Plan.
- Wildlife Impact COA: The project owner shall conduct preconstruction surveys per the Migratory Bird Treaty Act (MBTA) prior to vegetation removal or ground disturbance associated with project construction.



## Hazardous Materials, Recommended Conditions

- Hazardous Material COA: The project owner shall submit an Emergency Response Plan in conjunction with building permit submittals for County and fire responder review and approval.
- Hazardous Material COA: The project owner shall submit a waste disposal plan to ensure proper waste disposal. Plan shall be submitted in conjunction with building permit submittals for County review and approval.



## Factors in Favor of Request

1. The project would serve as a source of clean energy, offsetting greenhouse gas emissions and reducing the need to generate electricity from fossil fuels;
2. The electricity generated by this project offers enhanced grid resiliency and support for future load growth needs;
3. The project is consistent with the applicable Policies of the Comprehensive Plan and the Purpose of the Rural Zoning Districts;
4. The project complies with most of the criteria used to evaluate special use requests;
5. The site plan submitted complies with most applicable site development standards and conditions; and
6. Once completed the project would generate negligible levels of traffic and would require minimal water, services and infrastructure.



## Factors Against Approving the Request

1. Cumulative area impacts in project vicinity;
2. Fugitive dust associated with construction;
3. General compatibility and aesthetics concerns – the surrounding terrain is flat, and the project has a large footprint;
4. Avian and wildlife concerns – the project is adjacent to the Willcox Playa/Cochise Lakes Important Bird Area. Also, AZGFD considers this general area to be an important wildlife connectivity zone. The project risks reducing habitat connectivity and wildlife movement/migration unless specific design features are incorporated to mitigate project impacts.



## Applicant Presentation/Discussion



## Staff Recommendation

Docket SU 23-27, Recommend Conditional Approval

If the Commission wishes to grant approval, staff recommends the following conditions:



## Recommended Conditions and Waivers\*

1. The project owner shall submit, in advance or concurrent with their first Commercial Permit, a Traffic Improvement and Maintenance Plan, which successfully mitigates project impacts to Blue Sky Road (from Highway 186 to Moore Ranch Road) and Moore Ranch Road/Moonlight Road (from Blue Sky Road to the eastern project limits), to the satisfaction of the county. The plan shall include, but not be limited to, a traffic control plan, a dust control plan, a road stabilization plan, and a road maintenance plan.
2. The project owner shall apply a chemical stabilizer, such as Magnesium Chloride, to Blue Sky Road (from Highway 186 to Moore Ranch Road) and Moore Ranch Road/Moonlight Road (from Blue Sky Road to the eastern project limits), as further specified in the Traffic Improvement and Maintenance Plan during the project construction phase. Road preparation and application shall follow best practices to improve product performance and shall be in accordance with manufacturer's specifications.

## Recommended Conditions and Waivers\* (continued)

3. The project owner shall reserve a 6 to 8-inch gap between the ground surface and the bottom of all new project-related perimeter fencing.
4. The project owner shall maintain the project site with perennial vegetated groundcover and noncompacted soil. Where grading is not required during project construction, any existing vegetation will be mowed rather than removed completely.
5. The project owner shall exclusively use PV panels with an anti-reflectivity coating that is integral to the panel.
6. All solar racks shall be installed to maintain no less than a twelve (12) foot minimum clear distance, measured from outer edge of panels, between all tracker rows (north-south). The applicant shall not exceed a 35% ground cover ratio, defined as panel area to total project area, for the project site.

## Recommended Conditions and Waivers\* (continued)

7. The project owner shall submit an Emergency Response Plan in conjunction with building permit submittals for County and fire responder review and approval.
8. The project owner shall submit a waste disposal plan to ensure proper waste disposal. Plan shall be submitted in conjunction with building permit submittals for County review and approval.
9. The project owner shall include all BMPs listed under factor 9 of the staff memo for dust mitigation on their Stormwater Pollution Prevention Plan.
10. The project owner shall conduct preconstruction surveys per the Migratory Bird Treaty Act (MBTA) prior to vegetation removal or ground disturbance associated with project construction.

## Recommended Conditions and Waivers\* (continued)

11. The commission grants a waiver from setback required to internal parcel boundaries. Instead, minimum setbacks of 40' shall only be applied to the exterior boundaries of the Project indicated by the concept plan.

\* Standard conditions related to acceptance of conditions, permitting timeframes, and modifications apply, and have not been modified by this request

## Sample Motion

*Madam Chair, I move to approve Docket SU-23-27 (Herbie Solar), with the Conditions of Approval recommended by staff and waiver requests requested by applicant; the Factors of Approval constituting Findings of Fact.*

