



**MEMORANDUM**

**TO:** Cochise County Planning and Zoning Commission  
**FROM:** Christine McLachlan, AICP, Planning Division Manager  
**FOR:** Daniel Coxworth AICP, Development Services Director  
**SUBJECT:** SU 23-15 (Winchester Solar Mod), Application for a Special Use Authorization  
**DATE:** July 3, 2023, for the July 12, 2023, Meeting

**Docket SU 23-15 (Winchester Solar Mod)**

The applicant, Winchester Solar I and II, LLC, requests Special Use Authorization to construct, operate, and maintain a proposed phased 660 MW Solar Energy Power Plant and Battery Energy Storage System (BESS) Project on 4,078.24 acres of land. The property is in unincorporated Willcox, Arizona on a combination of undeveloped private land and public land owned by the Arizona State Lands Division, where noted in the table below.

This is a modification of SU 23-11 (Winchester Solar). SU 23-11 was approved by the Cochise County Planning and Zoning Commission on May 10, 2023. That application included 3,433 acres of land to be used to construct, operate, and maintain a proposed phased 500 MW Solar Energy Power Plant and BESS project. This modification encompasses an additional 645.23 acres of land to serve the project, where noted on the location map and on the table, below. The installation of a solar energy power plant and BESS is subject to site development standards contained in the Cochise County Zoning Regulations and requires Special Use Authorization from the Planning and Zoning Commission in a rural zoning district. Substantial alterations to special use requests must also be reviewed and approved by the Planning and Zoning Commission.

As stated in the application, "The additional land would host the Project Substation, battery energy storage system (BESS) yard, as well as rows of solar modules mounted on racking equipment that tracks the sun throughout the day. Inverters will be used to convert the power from direct current to alternating current and transformers will "step up" the power to transmission voltage. A battery energy storage system (BESS) is planned to be constructed as part of the Project which will require inverters, transformers, a cooling system and fire detection and prevention."

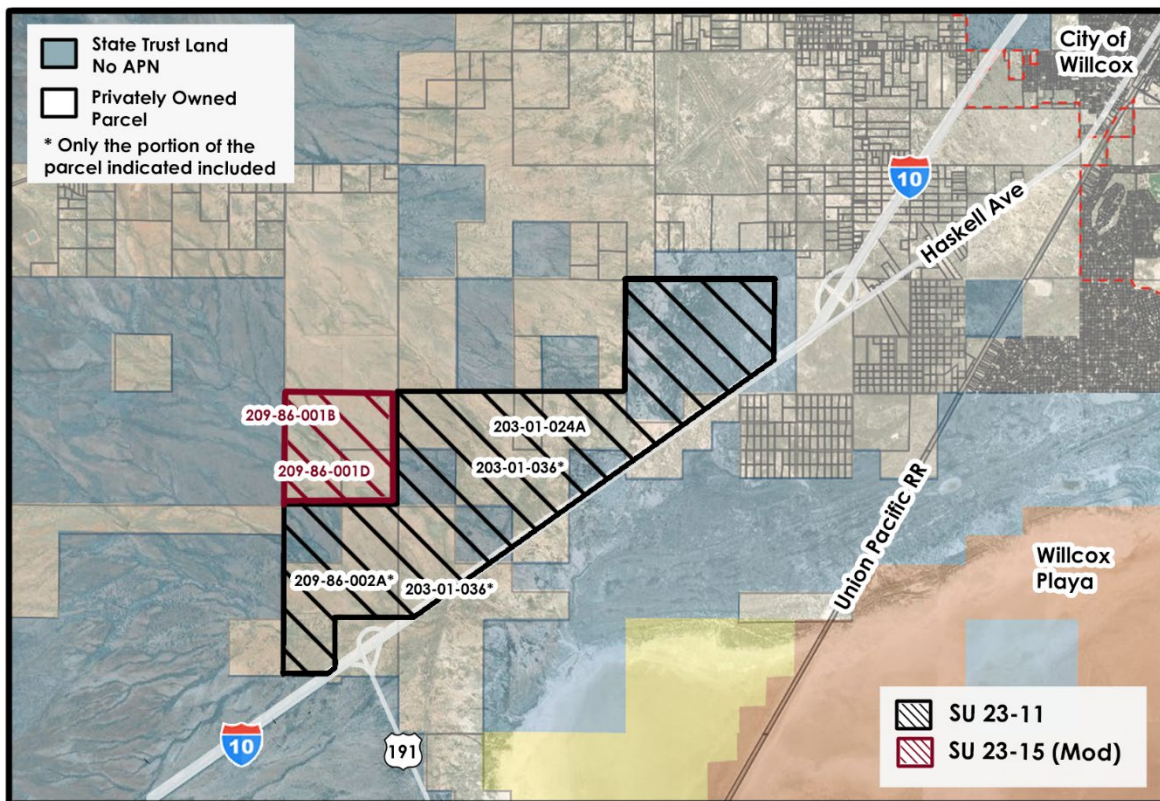
**I. DESCRIPTION OF SUBJECT PARCEL AND SURROUNDING USES**

**Site Size:** 3,435-Acres (SU 23-11), 645-acres (SU 23-15)  
**TOTAL 4,080-acres (approx.)**

**Zoning:** RU-4 (Rural, 4-acres minimum parcel)  
**Growth Area:** Category D  
**Plan Designation:** Rural  
**Area Plan:** None  
**Existing Uses:** Undeveloped/Vacant  
**Proposed Uses:** Phased Utility Scale Solar and Battery Energy Storage System to generate up to 660 MW on 4,078-acres of land

APN or S/T/R Acreage Status	Acreage	Status
209-86-001B	484.56	Requesting via modification
209-86-001D	160.67	Requesting via modification
All of APN 203-01-024A	80.01	Approved (SU 23-11)
A portion of APN 209-86-002A	626	Approved (SU 23-11)
A portion of APN 203-01-036	1368	Approved (SU 23-11)
Section 16, 14S, Range 24E (ASLD)	640	Approved (SU 23-11)
Portion of the W 1/2 Section 15, 14S, 24E (ASLD)	65	Approved (SU 23-11)
Portion of the NW 1/4, Section 21, 14S, 24E (ASLD)	81	Approved (SU 23-11)
Portion of SE 1/4, Section 20, 14S, 24E (ASLD)	105	Approved (SU 23-11)
SW 1/4 Section 19, 14S, 24E (ASLD)	160	Approved (SU 23-11)
Portion of the NE 1/4 Section 30, 14S, 24E	148	Approved (SU 23-11)
NW 1/4 Section 24, 14S, 23E (ASLD)	160	Approved (SU 23-11)

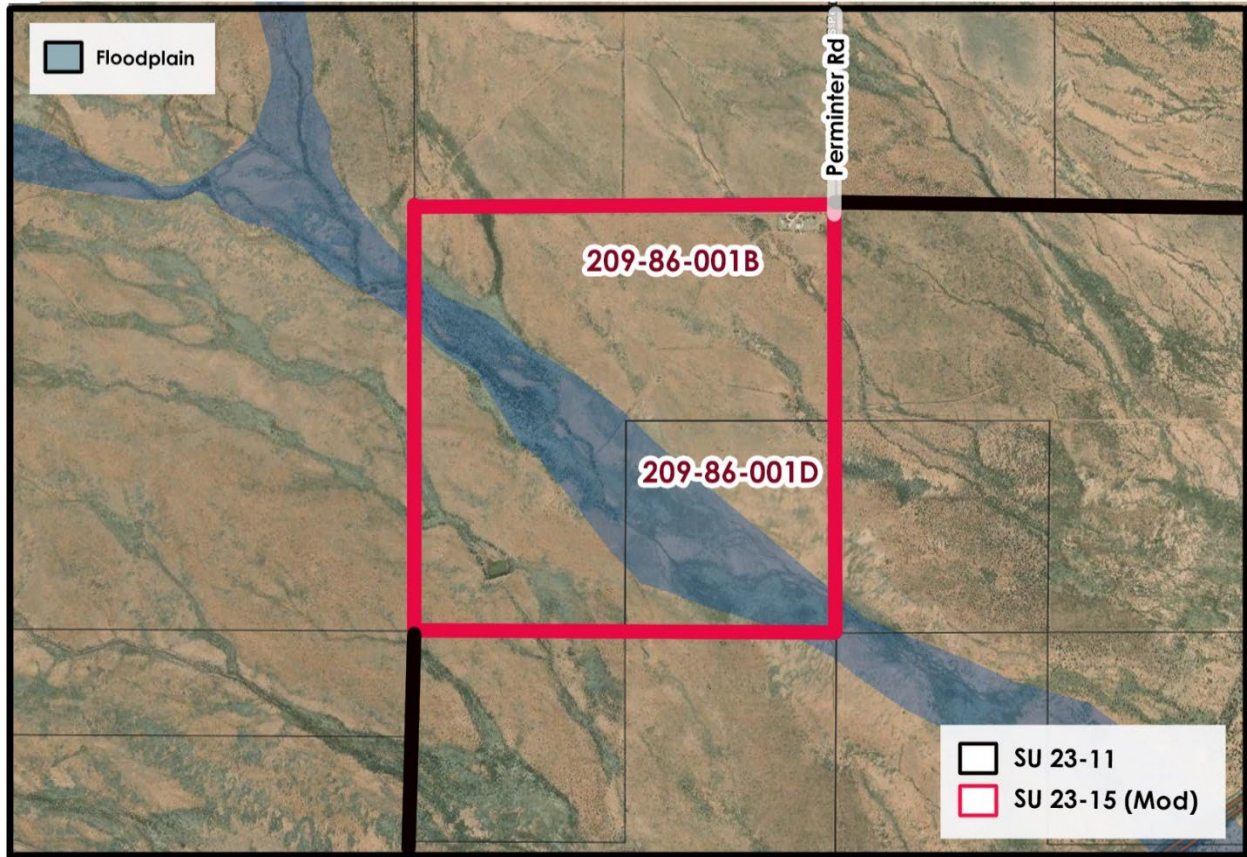
Figure 1: Request Location



Location  
 SU 23-15 Winchester Solar Mod



Figure 2: Expansion Area Enlarged



Location, Expansion Area Enlarged  
 SU 23-15 Winchester Solar Mod



**Surrounding Zoning and Uses (See Figure 4)**

Relation to Subject Parcel	Zoning District	Use of Property
North	RU-4	Undeveloped/vacant
South	RU-4	Undeveloped/vacant/I-10
East	RU-4	Undeveloped/vacant/I-10
West	RU-4	Undeveloped/vacant



**II. SITE HISTORY**

- Undeveloped except for APN 20986001B, which includes a single-family home constructed in 2007, a barn constructed in 1988 and associated agricultural improvements (stock corral, cattle squeeze)
- SU 23-11 approved on 5/10/23 by the Planning and Zoning Commission

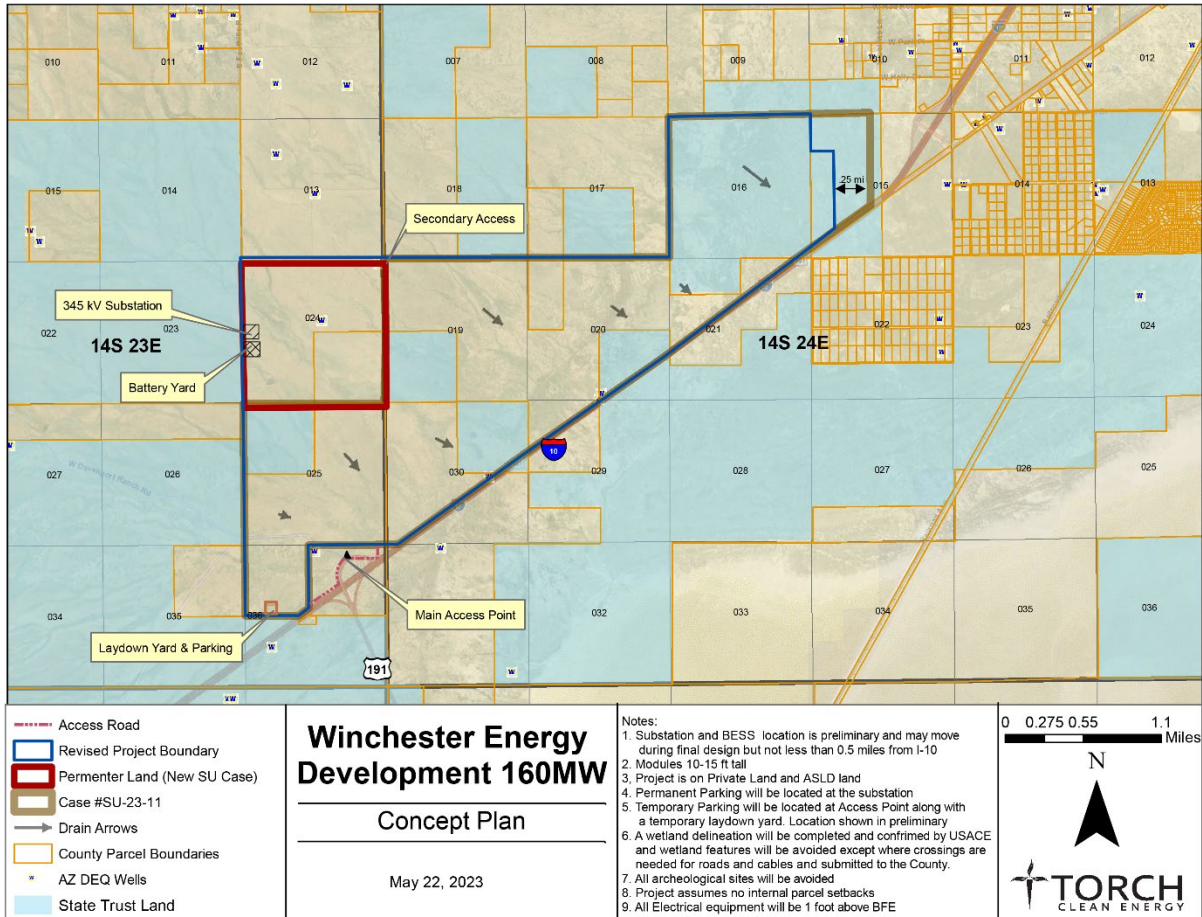
**III. REQUEST DESCRIPTION**

As stated in the application, the applicant is requesting Special Use Authorization “as an amendment to Cochise County SUP Docket SU-23-11 to include an additional two parcels (209-86-001B and 209-86-001D) to the Project area, increase the expansion potential of the Project to 660 MW of solar and battery storage, as well as permit a secondary access point. The 660 MW of power generation would provide the amount of power required for roughly 138,600 homes.”

The Project would be comprised of rows of solar modules mounted on racking equipment that tracks the sun throughout the day. Inverters will be used to convert the power from direct current to alternating current and transformers will "step up" the power to transmission voltage. A battery energy storage system (BESS) is planned to be constructed as part of the Project which will require inverters, transformers, a cooling system and fire detection and prevention. Ultimately, the project will generate electricity to be sold under long-term Power Purchase Agreements (PPAs) with an investor-owned utility and cooperative. As proposed, the Project would be

located on currently vacant, undeveloped land in unincorporated Willcox, AZ, except for APN 20986001B, which has a single-family home on it, where indicated on Figures 1 and 2. The applicant proposes potentially repurposing the home for a project small support office. All land subject to this request is zoned RU-4 (Rural, 1 dwelling per 4-acres).

Figure 2: Conceptual Site Layout



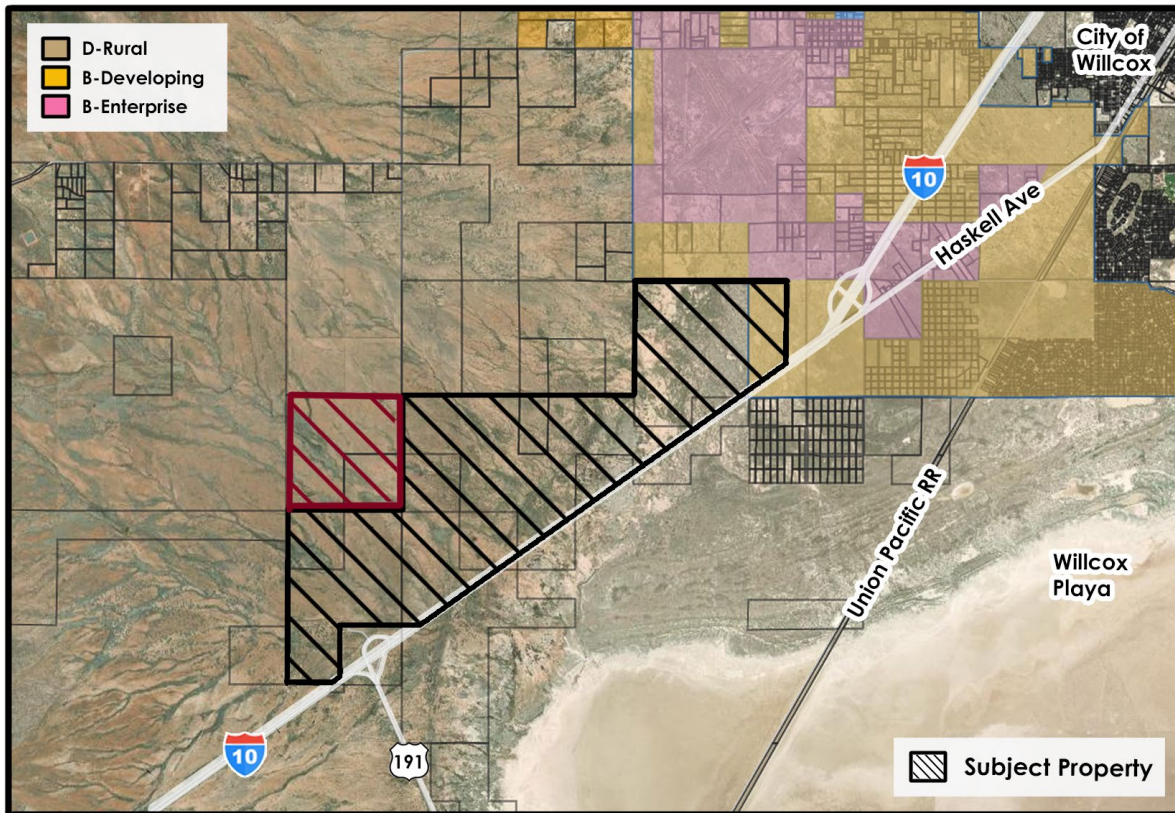
**IV. ANALYSIS OF IMPACTS – COMPLIANCE WITH SPECIAL USE FACTORS**

Section 1716.02 of the Zoning Regulations provides a list of ten factors with which to evaluate Special Use applications. Staff uses these factors to help determine the suitability of a given Special Use request, whether to recommend approval for a Special Use Authorization, as well as to determine what Conditions and/or Modifications may be needed.

With the information provided, ten (10) factors apply to this request. The project, as submitted, fully complies with seven (7) of the factors. The proposal can be brought into compliance with the remaining three factors with recommended conditions.

**1. Compliance with Duly Adopted Plans: Complies**

Figure 3: Land Use



Land Use  
SU 23-15 Winchester Solar Mod



Nearly the entire project area is within D-Rural land use, except for approximately 175 acres of the northeastern limits, which has the land use of B-Developing.

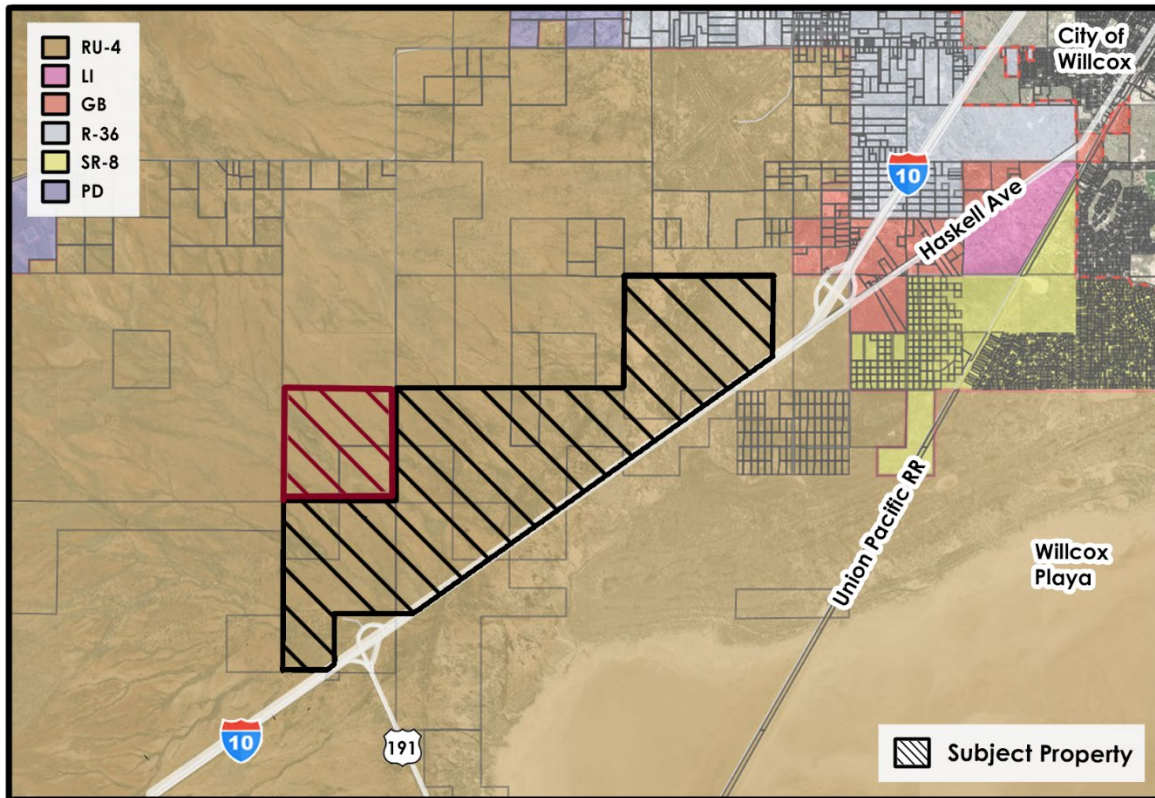
The Comprehensive Plan encourages the use of solar energy resources in Element E, Renewable Energy. Goal 1 states: *Support the development of local renewable energy projects and technologies.* This is implemented by several policies including:

- a. *Encourage utility-scale renewable energy projects, using the University of Arizona's Renewable Energy Opportunity Analysis and other resources as a guide for determining the suitability of proposals in any one location.*
- b. *Encourage renewable energy business development.*
- d. *Permit flexible site development standards.*

Approval of this project will, in part, implement the County's goals of encouraging renewable energy.

**2. Compliance with the Zoning District Purpose Statement: Complies**

Figure 4: Zoning



Zoning  
 SU 23-15 Winchester Solar Mod



The entire project area is zoned RU-4 (Rural, one dwelling per four acres). Section 601 of the Zoning regulations six purposes for this zoning designation.

Section 601.07 of the Zoning Regulations states: *RU (Rural) Zoning Districts are established to allow consideration of some more intense non-residential uses as Special Uses that are inappropriate in more densely populated urban/suburban areas that may under some circumstances be appropriate in rural areas if designed to be sensitive to the general character of rural districts and natural environment and harmonious and in scale with existing development near the proposed site and in conformance with Section 601.06.*

Solar energy power plants are considered special uses with the rural zoning. These are land intensive non-residential uses that are not appropriate, or even viable, in more densely population urban/suburban areas of the county.

**3. Development along Major Streets: Complies**

This criterion seeks to minimize road cuts that create unsafe traffic conflicts, hazardous traffic congestion and obstruct the functioning of arterials. There are no major throughfares or arterials that serve the project area. The Applicant proposes ingress/egress from an existing roads off the Highway 191 interchange with Interstate 10. The limited amount of access points and the low traffic demand of the use, once constructed, complies with the requirement to “minimize road cuts that are associated with unsafe traffic conflicts.”

**4. Traffic Circulation Factors: Complies**

The request is consistent with the use and preservation of surrounding roads as defined within the Comprehensive Plan. The only point of access is from the 191 interchange with Interstate 10. It will not result in the use of a residential street for residential traffic. Future circulation considerations do not warrant any right-of-way dedication or off-site improvements. This will be a phased project. As stated in the application, "Traffic to and from the Project will be heaviest during the construction phase of Winchester. During the height of construction, which is expected to last roughly 6 to 8 months, approximately 15 to 30 trucks and 160 passenger vehicles can be expected to travel to and from the site to deliver materials and perform construction and install tasks per day. Once operational, traffic to and from the Project will be very minimal and infrequent as the site will be monitored remotely using a supervisory communication and data acquisition (SCADA) system. An estimate of 3 to 5 vehicles will travel to and from the site per month after the completion of construction and testing."

#### **5. Adequate Services and Infrastructure: Complies**

As stated in the application, "The Winchester project area has been thoughtfully selected considering several factors, including the compatible adjacent land uses, existing transmission infrastructure, minimal topographic variability, proximity to transportation corridors, and various environmental factors." This site has met the applicant's criteria for determination of an appropriate site. The applicant additionally notes, "the Project was originally sited 14 miles to the west but has moved locations due to landowner and ASLD grazing lessee concerns about impacts to grazing operations." As this is an unmanned site that is intended to collect energy, the requirements for services and infrastructure, once constructed, are minimal. Regardless, solar installations will occupy vast tracts of land for decades, and consequently require serious consideration prior to approval. The land considered in this request is almost all vacant, undeveloped, and currently used for grazing.

#### **6. Significant Site Development Standards: Complies with condition**

##### **Site Plan:**

As stated in the application, "The Project would be comprised of rows of solar modules mounted on racking equipment that tracks the sun throughout the day. Inverters will be used to convert the power from direct current to alternating current and transformers will "step up" the power to transmission voltage. A battery energy storage system (BESS) is planned to be constructed as part of the Project which will require inverters, transformers, a cooling system and fire detection and prevention." In conjunction with the non-residential permit submittal the applicant shall provide a detailed and fully dimensioned site plan for the PV solar modules, BESS, and substation. These plans will show all setbacks, panel locations, travel ways, fencing, parking location, etc. Unmanned facilities require a minimum of a twelve-foot-wide unimproved driveway and one nine foot by nineteen-foot parking space. In addition, the following may also be required as part of permitting: a floodplain use permit, a stormwater pollution prevention plan, clearing permit, a notice to clear native plants. In addition, a drainage analysis will be required.

##### **Setbacks:**

Per the section 1824.02 of the zoning regulations, "Setbacks from all property boundaries or edge of road travel ways for Solar Energy Power Plants shall be, at minimum, twice the minimum setback requirement for the respective Zoning District or shall equal the height of the tallest structure, whichever is greater." As stated in the Key Observation Point (KOP) memo, "The Project would consist of photovoltaic (PV) panels approximately 55 feet setback from the Project Site boundary. Additionally, an 8-foot deer fence would be placed 40 feet from the Project Site boundary."

- ***Recommended COA: Per the conditions of approval for SU 23-11, "the project owner shall maintain an additional buffer from the northeastern project boundary limits, no less than ¼ mile for the life of the project."***

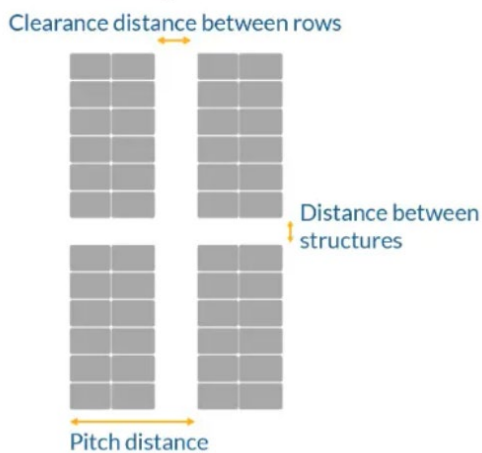
- **Recommended COA/waiver:** *The commission grants a waiver from setback required to internal parcel boundaries. Instead, minimum setbacks of 40’ shall only be applied to the exterior boundaries of the Project indicated by the concept plan.*

**Lot Coverage and Solar Panel Spacing:**

The Rural Land Use district restricts lot coverage to a maximum of 25%. However, section 1824.03.D, exempts Ground-mounted systems from lot coverage or impervious surface standards if the soil under the collector is maintained with perennial vegetated groundcover and not compacted.

From a project functionality standpoint, recent studies have shown that increased spacing of solar panels comes with benefits. Moving rows of solar panels farther apart can increase efficiency and improve economics in certain instances by allowing greater airflow to direct heat away. The increased spacing also allows greater wind flow, which can result in lower module temperatures and higher energy output. Greater spacing is also believed to reduce the “lake effect,” in which continuous closely spaced panel arrays create an optical illusion of water. For these reasons, staff recommends a condition, specifying clearance distance between array rows.

Figure 5: Array spacing Diagram



- **Recommended 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.*
- **Recommended COA:** *The project owner shall exclusively use PV panels with an anti-reflectivity coating that is integral to the panel.*

**Height:**

Per section 1824,03 of the Zoning Regulations, ground or pole-mounted solar energy systems shall not exceed twenty (20) feet in height when oriented at maximum tilt. The concept plan states that modules will be 10-15’ tall.

**Lighting:**

As stated on the application, “there will be at least two foot-candles at the substation as recommended by NEC guidelines that will be switch operation.” Any lighting required within future submittals must be shown on the non-residential permit application and will be required to be fully shielded, use (wildlife-friendly) narrow spectrum bulbs, and comply with the Outdoor Lighting Regulations.

**7. Public Input: Complies**

See Section IV. Public Comment for additional discussion.

### 8. Hazardous Materials: Complies with condition

The applicant states that there are no proposed hazardous materials. However, solar panels often contain lead, cadmium, and other toxic chemicals. While these materials are sealed and cannot be removed without breaking apart the entire panel, leaching from broken panels damaged during natural events, like hail storms, and at decommissioning can be of concern. A condition of approval is recommended to address these concerns. Also, because a battery energy storage system is part of the application, the applicant will be required to comply with all standard fire safety precautions.

- ***Recommended COA: All panels shall be regularly inspected and continuously maintained by the project owner. Any broken or damaged panels shall be properly and safely removed in a timely manner from the site.***

### 9. Off-Site Impacts: Complies with conditions

Major off-site impacts could include temporary construction traffic, dust, noise, and long-term dust, noise and visual impacts/glare. Some impacts are mitigated by the proposed concept plan, while others can be mitigated by conditions. The following section considers all off site impacts and potential mitigation measures.

- Odor – proposed special use will not generate noticeable odors during construction or operation.
- Glare – the issue of potential glare is not addressed by the application. The project is generally located south of the Cochise County Airport, north of Interstate-10, and north of the Willcox Playa. Glare and reflectivity is a concern given the proximate uses. Fortunately, anti-reflective coatings (AR Coating) can be applied to solar panels. These coatings help retain maximum solar energy. At the same time, this can lessen potential visual distraction to drivers and lessen the appearance of the project as a body of water to birds, reducing bird attraction to the site.
  - ***Recommended COA: The project owner shall exclusively use PV panels with an anti-reflectivity coating that is integral to the panel.***
  - ***Recommended COA: To reduce the optical illusion of water that closely spaced panels can create, the project shall be designed with no less a twelve-foot distance between all tracker rows.***
- Noise – As stated in the application, “The majority of the noise associated with utility-scale solar and battery projects occurs during the temporary phase of construction. Equipment needed for site preparation and construction can include dozers, chippers, pile drivers, forklifts, and various trucks. According to the Federal Highway Administration Construction Handbook, the maximum noise from the above equipment does not exceed 72 decibels from 200 feet away, which is the equivalent to the noise of a busy office. Once operational, electrical discharge from transmission lines, operation of inverters, and the rotation of solar trackers can create humming or buzzing noises, though these noises will be minimal and would not affect any area outside the Project.”
- Traffic – Like other solar energy power plants in Cochise County, traffic to and from the Project will be heaviest during the construction phase. As stated in the project narrative, “during the height of construction, which is expected to last roughly 6 to 8 months, approximately 15 to 30 trucks and 160 passenger vehicles can be expected to travel to and from the site. Following the construction phase, traffic will substantially decline during the testing phase of the Project, which is anticipated to last between 2 to 4 months. Once operational, traffic to and from the Project will be very minimal and infrequent as the site will be monitored remotely using a supervisory communication and data acquisition (SCADA) system. An

estimate of 3 to 5 vehicles will travel to and from the site per month after the completion of construction and testing.” The project is proposed to have access from the Highway 191 interchange with I-10. Future coordination and permitting with ADOT will be necessary.

- Lighting: Solar energy power plants are not light intensive uses. The applicant states, “The Project’s only lighting will be two-foot candles at the substation, per the National Electric Safety Code Table 111-1. A foot candle is defined as enough light to saturate one square foot with one lumen of light. This lighting will only be used when necessary, during maintenance.”
- Dust - Project construction would likely generate fugitive dust. As stated in the application, “during the construction phases of the Project which are estimated to last between 10-12 months, water may be pumped from an on-site well to be used as a dust mitigation measure. After construction is completed, soil stabilization and re-seeding efforts will serve as natural erosion control as well as a dust mitigation measure.” While the placement of a solar energy power plant will not necessarily increase dust transmission in the long-term, without soils stabilization, dust transmission will also not improve. The applicant shall provide no less than a 40-foot-wide buffer along all perimeters of the site. Native vegetation, where present shall be preserved to the greatest extent possible, rather than grading the entire site. Keeping the existing soil and root structures intact would serve to minimize erosional run-off and maintain biotic diversity within the site.
- Stormwater and Floodplains: The applicant submitted a Limited Detail 2D Hydrology Study with their application. As stated in the report, “the subject tracts lie within Federal Emergency Management Agency (FEMA) Zone A, AE, AO, and X Special Flood Hazard Areas (SFHA) associated with Wilcox Playa and its tributaries. This study conducted a high-level analysis of runoff contribution from the Wilcox Playa watershed to evaluate backwater effects of ponding in Wilcox Playa on the subject tracts.” The concept plan states that a “wetland delineation will be completed and confirmed by USACE. Wetland features will be avoided except where crossings are needed for roads and cables.” It also states, “all electrical equipment will be one foot above BFE.” Staff recommends including these statements are conditions of approval.
  - **COA: The applicant shall submit a completed wetland delineation, confirmed by USACE prior to commercial permit issuance. Wetland features shall be avoided except where crossings are needed for roads and cables.**
  - **COA: To the extent feasible, non-fenced, wildlife corridors within project boundaries shall be reserved near washes or in areas determined by the AZGFD to be appropriate for a wildlife highway crossing.**

#### **10. Water Conservation: Complies**

There will be no employees or customers coming to the site. The proposed Solar PV Energy system does not require on-site water in order to function on a day-to-day basis. There is one existing well within project boundaries, as indicated on the site plan, and several more slightly outside of project boundaries. As stated in the application, the project “will not require any water resources to generate or store electricity. However, during the construction phases of the Project which are estimated to last between 10-12 months, water may be pumped from an on-site well to be used as a dust mitigation measure. The quantity of water for dust mitigation during construction varies depending on the time of year and weather, but the Applicant will ensure county requirements are met for dust mitigation. Once operational, water may very occasionally be brought to site on an as-needed basis to wash panels to optimize module performance. *This water use would be minimal and has historically not been required.*”

#### **VI. ADDITIONAL STUDIES PROVIDED**

As stated in 1824.02 of the Zoning Regulations, “site-specific conditions and/or project scope may require that Applicants provide drainage and soil reports, water budgets and conservation measures, environmental assessments or environmental impact statements, visual impact analyses, FAA obstruction analysis, and/or cultural resources assessments with their application.” Due to the scale and location of this application, the following additional studies were provided at the time of the special use application:

- Biological Evaluation (Exhibit C)
- Potential Avian Impact Summary (Exhibit D)
- Hydrology and Hydraulic Study for planning purposes (Exhibit E)
- Visual Study from Key Observation Points (Exhibit F)

The following is a summation of those reports. The full reports are also a part of this docket, for the commission’s review.

- **Biological Evaluation** – The purpose of this biological evaluation (BE) is to address the Endangered Species Act of 1973. This BE is intended to identify and document special-status species and habitat that may be present within the survey area. The report concludes that, “The project would have no effect on any species listed under ESA. Five species of greatest conservation need (SGCN) have occurrence records within 5 miles of the project, and others have the potential to occur based on modeled habitat. Only one (monarch butterfly) of the 27 species listed by the USFWS as endangered; threatened; experimental population, nonessential or candidate species for Cochise County is likely to occur in the survey area. The project may impact individuals but is not likely to result in a trend toward federal listing or loss of viability.”
  - **COA: Pursuant to 1824.03 of the Zoning Regulations, which mandates wildlife-friendly fencing, the applicant shall reserve a 6–8-inch gap between the ground surface and the bottom of the perimeter fencing.**
- **Potential Avian Impacts Summary**- Winchester requested that SWCA Environmental Consultants (SWCA) summarize the potential impacts of the project to bird species that use the landscape near the proposed site, using the most recent and cited publicly available literature. To do this, SWCA reviewed literature that quantified PV solar facility-related bird mortality rates and identified potential mechanisms that could explain potential impacts to birds. The study concludes, “under reasonable worst-case assumptions, the project could result in minor potential impacts to birds, primarily passerines, doves, and pigeons near the facility. The project could also result in minor potential impacts to waterbirds due to the proximity of the Willcox Playa, which is located less than 2 miles to the southeast of the proposed project. Importantly, the resulting potential change in bird abundance near the project, if any, would not result in any species-specific population-level effects and would not persist past the operational life of the project.”
  - **COA: The project owner shall conduct preconstruction surveys per the Migratory Bird Treaty Act (MBTA) and state-listed sensitive species guidelines ahead of any ground disturbance. The Operations and Management (O&M) team selected for the Project will perform quarterly inspections of the site, and, during this process they will also identify and report (with photo, lat/long, date, and time of sighting) any injured or dead species to Arizona Game and Fish.**
- **Hydrology and Hydraulic Study (for planning purposes)** - The intent of this study is to evaluate the approximate 100-year and 500-year ponding depths within the subject tracts. The subject tracts encompassed a much greater area of 7,609 acres. The applicant is aware, prior to project acceptance and approval, the county will require a Floodplain use permit and a FEMA elevation certificate. In addition, the project will have to show no adverse impact, which is classified as not increasing the water surface elevation of the base flood more than one tenth of a foot along adjacent boundaries and will not

increase the flow velocity by more than 10%.

- Visual Study from Key Observation Points** - The purpose of this memorandum is to depict the visual features (e.g., landforms, vegetation, and existing built features) surrounding the proposed Winchester Energy Development Project (Project), located in Cochise County, Arizona, and how the Project would be perceived by observers from each key observation point (KOP). The report states that the visual impact of the project, in certain locations, may not register as perceivably altered “due to the presence of existing dense vegetation and the prominence of the Winchester Mountains in the background, which becomes the focus of viewer attention.”

Figure 5: Visual Simulation (from KOP)



**VII. OTHER CONSIDERATIONS,**

**REAL ESTATE VALUE IMPACTS**

Within the project narrative, which was submitted as part of the application, the applicant addressed the issue of impacts to real estate value. While this is a typical zoning consideration, it can be a common concern of nearby residents. As stated in the project narrative, “number of studies indicate that utility-scale solar facilities do not have a measurable impact on the value of adjacent properties. In some situations, they have even been shown to have a positive effect. One study in Illinois found that the value of properties within a one-mile radius from a solar facility increased by an average of 2% post-solar installation. The same study cited the same upward trend for property values within two miles of a solar facility in Indiana. Another study performed by CohnReznick Valuation Advisory Services analyzed the property value trends of both agricultural and residential properties which were adjacent to 11 existing solar facilities. The results showed no adverse effects on property values in the short or long-term.”

**OTHER PERMITS REQUIRED**

Permit/Compliance	Authorizing Authority	Action Item
<b>Federal Permits</b>		
Bald and Golden Eagle Protection Act (BGEPA) Compliance	USFWS and AZGFD	Biological Evaluation
Endangered Species Act (ESA) Compliance	USFWS and AZGFD	Biological Evaluation
Migratory Bird Treaty Act (MBTA) Compliance	USFWS and AZGFD	Biological Evaluation
National Historic Preservation Act (NHPA) Section 106 Compliance	Arizona SHPO	Class III Survey
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)	American Society for Testing and Materials (ASTM) Standard E 1527-13	Phase 1 ESA
Clean Water Act (CWA), Section 401 and Section 402- Water Quality Certification	U.S Army Corps of Engineers	Obtain Permit
Determination of No Hazard	Federal Aviation Administration	File 7460-1 Obstruction Evaluation
<b>State of Arizona Permits</b>		
Arizona Certificate of Environmental Compatibility (CEC)	Arizona Corporation Commission	Line Siting Committee Hearing
Clean Water Act, Section 402 - NPDES Permit (General Construction Permit)	Arizona Department of Environmental Quality (ADEQ)	SWPPP and GCP
Groundwater/Surface Management Permit	Arizona Department Water Resources - Well	Obtain Permit, if applicable
Notice of Intent to Clear Land	Arizona Department of Agriculture (ADA)	Send notice to ADA
Air Quality Permit(s)	Arizona Department of Environmental Quality - Air Quality	Obtain Permit, if applicable
Aquifer Protection Permit	Arizona Department of Environmental Quality - Aquifer Protection	Usually not needed for Solar Projects in Az.
<b>Cochise County Permits</b>		
Special Use Permit	Cochise County	Submit for permit
Clearing Permit	Cochise County	Submit for permit
Building Permit	Cochise County	Submit for permit
Driveway/ROW Permit	Cochise County	Submit for permit
Floodplain Use Permit	Cochise County	Submit for permit

**VIII. PUBLIC COMMENT**

The applicant mailed letters to property owners within ¼ mile of the property prior to their application submittal on May 26, 2023. The case planner mailed letters to the same property owners within ¼ mile (1,320 ft) of the subject property (June 1, 2023), published a legal ad in the *Sierra Vista Herald* (June 16, 2023), and posted legal notices on the property (June 28, 2023). To date, staff has received no written responses.

**IX. WAIVERS**

(Zoning Reg 1824.02 Setbacks) Applicant requests a waiver from setback required to internal parcel boundaries. Instead, the applicant requests that setbacks are only applied to the exterior of the Project. The case planner supports this request due to the mix of public and private parcel ownership, which would make combining the lots infeasible.

**X. SUMMARY AND CONCLUSION**

Authorization to approve the construction of a solar power generation facility and Battery Energy Storage System (BESS), with the potential for future expansion of up to 660 MW Solar Energy Power Plant and Battery Energy Storage System (BESS) Project on 4,080 acres of land.

**Factors in Favor of Approval**

1. The project is consistent with the applicable Policies of the Comprehensive Plan and the Purpose of the Rural Zoning Districts;
2. The project complies with most of the criteria used to evaluate special use requests;
3. The site plan submitted complies with most applicable site development standards and conditions;
4. Once completed the project would generate negligible levels of traffic and would use minimal water, services and infrastructure; and
5. The project would serve as a source of clean energy, offsetting greenhouse gas emissions and reducing the need to generate electricity from fossil fuels.
6. More specifically, this project replaces energy produced from the retired San Juan and the Four Corners Power Plants – both were coal powered
7. SU 23-11 was approved by the Commission on 5/10/23 (vote 6-1)

**Factors Against Approval**

1. Project construction will likely generate fugitive dust. While the placement of a solar facility will not necessarily increase dust transmission in the long-term, without long term soil stabilization, dust transmission will also not improve;
2. General compatibility and aesthetics concerns – the surrounding terrain is flat, and the area is undeveloped. The visibility and massing of the project is of concern;
3. Avian and wildlife concerns – there is potential for bird fatalities or injuries to occur if avian species mistake the solar panels for open water. The AZGFD stated in their review of the proposal that “the landscape in which this project is proposed provides important movement pathways for wildlife.” The project risks reducing habitat connectivity and wildlife movement/migration unless specific design features are incorporated to provide a pathway for the wildlife. The Connectivity Department within AZGFD is currently evaluating if a wildlife highway crossing is proposed along the southern edge of the project site. If a wildlife crossing is proposed, the applicant has committed to working with the Department on locating a corridor that allows for connectivity.

**XI. RECOMMENDATION**

Based on the factors in favor of approval, staff recommends **Conditional Approval** of the Special Use request, subject to the following conditions\*:

1. 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.

2. The project owner shall exclusively use PV panels with an anti-reflectivity coating that is integral to the panel.
3. All panels shall be regularly inspected and continuously maintained by the project owner. Any broken or damaged panels shall be properly and safely removed in a timely manner from the site.
4. To reduce the optical illusion of water that closely spaced panels can create, the project shall be designed with no less a twelve-foot distance between all tracker rows.
5. The applicant shall submit a completed wetland delineation, confirmed by USACE prior to commercial permit issuance. Wetland features shall be avoided except where crossings are needed for roads and cables.
6. To the extent feasible, non-fenced, wildlife corridors within project boundaries shall be reserved near washes or in areas determined by the AZGFD to be appropriate for a wildlife highway crossing.
7. The final locations of the proposed substation and battery energy storage system may deviate from what is indicated on the concept plan, provided each are located within project boundaries a minimum of 0.5 miles from I-10.
8. Pursuant to 1824.03 of the Zoning Regulations, which mandates wildlife-friendly fencing, the applicant shall reserve a 6–8-inch gap between the ground surface and the bottom of the perimeter fencing.
9. 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.
10. The project owner shall maintain an additional buffer from the northeastern project boundary limits, no less than ¼ mile for the life of the project.
11. The project owner shall conduct preconstruction surveys per the Migratory Bird Treaty Act (MBTA) and state-listed sensitive species guidelines ahead of any ground disturbance. The Operations and Management (O&M) team selected for the Project will perform quarterly inspections of the site, and, during this process they will also identify and report (with photo, lat/long, date, and time of sighting) any injured or dead species to Arizona Game and Fish.
12. The project owner shall submit, in advance or concurrent with their first Commercial Permit, a Traffic Improvement and Maintenance Plan, which successfully mitigates project construction impacts to Permenter Road, to the satisfaction of the county. The plan shall include, but not be limited to, traffic control, new access permit(s), as well as all necessary improvements and maintenance to Permenter Road.

\* 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-23-15 (Winchester Solar Mod), with the Conditions of Approval and waiver requests recommended by staff; the Factors of Approval constituting Findings of Fact.*