



**Planning
Commission**



Cochise County Planning Commission

Cochise County Complex
Board of Supervisors' Hearing Room
1415 W. Melody Lane, Building G
Bisbee, Arizona 85603

The Planning Commission meets the second Wednesday of the month at 4:00 p.m. in the Board of Supervisors' Hearing Room. All meetings are open to the public. Those who wish to speak are asked to complete a "Speaker Information" form (available at the meeting) and submit it to County staff before the Call to Order.

The order and/or deletion of any item on the agenda is subject to modification at the meeting. Actions of the Planning Commission may be appealed to the Board of Supervisors by any interested party by submitting an application for appeal within 15 days. An application for appeal is available this afternoon with the Clerk, at the Community Development Department's office Monday through Friday between 8 A.M. and 5 P.M., or anytime on our webpage in the "Permits and Packets" link

Packets and staff reports are available for review at the Community Development Department. Questions or concerns may be directed to Planning Manager, Michael Turisk at 520.432.9240. Agendas and minutes are posted on Cochise County's home page in the "Public Meeting Info" link.

Pursuant to the Americans with Disabilities Act (ADA), Cochise County does not, by reason of a disability, exclude from participation in or deny benefits or services, programs or activities or discriminate against any qualified person with a disability. Inquiries regarding compliance with ADA provisions, accessibility or accommodations can be directed to Chris Mullinax, Safety/Loss Control Analyst at (520) 432-9720, FAX (520) 432-9716, TDD (520) 432-8360, 1415 Melody Lane, Building F, Bisbee, Arizona 85603.

**COMMUNITY DEVELOPMENT DEPT.
HOURS OF OPERATION
Monday through Friday
7:30 a.m. to 5:00 p.m.
Phone: 520.432.9240
Fax: 520.432.9278**

**Regular Meeting
April 9, 2014
4:00 p.m.**

AGENDA

1. **4:00 P.M. - CALL TO ORDER**
2. **ROLL CALL** (Introduce Commission members and explain quorum and requirements for taking legal action).
3. **APPROVAL OF PREVIOUS MONTH'S MINUTES**
4. **CALL TO THE PUBLIC** - Pursuant to A.R.S. § 38-431.01 (H) this is an opportunity for the public to comment. Individuals are invited to address the Commission on any issue within the Commission's jurisdiction. Since Commissioners may not discuss items that are not specifically identified on the agenda, Commission action taken as a result of public comment will be limited to directing staff to study the matter, responding to any criticism or scheduling the matter for further consideration and decision at a later date.
5. **NEW BUSINESS**

Item 1- (Page 1) – PUBLIC HEARING - Docket SU-14-06 (Torch Renewable Energy, LLC): A Special Use authorization request for a Solar Energy Power Plant on one Section of land located approximately 14-miles west of Willcox. The proposed utility-scale solar array would be constructed on private land, and the accessory infrastructure would be constructed on adjacent state trust land. The Applicant is Torch Renewable Energy, LLC, Glenn

Holliday, Agent for Applicant.

Item 2 – (Page 117) – PUBLIC HEARING - Docket SU-14-05 (Sierra Vista Economic Development Foundation): A Special Use authorization request to establish and operate an Unmanned Aerial System (UAV) test facility. The project would reactivate existing runways and place new structures at the site to test small UAVs. The subject parcel is located at 2940 N. Four Pillars Road in Huachuca City. The Applicant is the Sierra Vista Economic Development Foundation.

Item 3 – (Page 168) – PUBLIC HEARING - Docket R-14-06 (Amendments to the Zoning Regulations): Consideration of proposed amendments to the current Zoning Regulations (adopted October 22, 2013; *Zoning Ordinance 13-05*). The intent of the proposed amendments is to provide for more simplification and clarification of the current regulations.

- 7. PLANNING DIRECTOR'S REPORT, INCLUDING PENDING, RECENT AND FUTURE AGENDA ITEMS AND BOARD OF SUPERVISORS' ACTIONS**
- 8. CALL TO COMMISSIONERS ON RECENT MATTERS**
- 9. ADJOURNMENT**

COCHISE COUNTY PLANNING & ZONING COMMISSION

DRAFT MINUTES

March 12, 2014

REGULAR MEETING at 4:00 p.m.

The regular meeting of the Cochise County Planning and Zoning Commission was called to order at 4:00 p.m. by Chair Weissler at the Cochise County Complex, 1415 Melody Lane, Building G, Bisbee, Arizona in the Board of Supervisors' Hearing Room.

Chair Weissler admonished the public to turn off cell phones, use the speaker request forms provided, and to address the Commission from the podium using the microphone. She explained the time allotted to speakers when at the podium. She then explained the composition of the Commission, and indicated there was one Special Use docket carried over from the previous meeting, two new Special Use dockets and a Subdivision Tentative Plat Extension. She explained the consequences of a potential tie vote and the process for approval and appeal.

ROLL CALL

Ms. Weissler noted the presence of a quorum and the roll, asking the Commissioners to introduce themselves and indicate the respective District they represent; eight Commissioners (Tim Cervantes, Jim Lynch, Gary Brauchla, Liza Weissler, Pat Edie, Jim Martzke, Nathan Watkins, and Joe Garcia) indicated their presence. Staff members present included Beverly Wilson, Planning Director; pretty sure it was the new young lady from the attorney's office Elda Orduno, Deputy County Attorney, Michael Turisk, Planning Manager, Keith Dennis, Planner II; and Peter Gardner, Planner I.

APPROVAL OF THE MINUTES

Motion: Approve the minutes of the February 12, 2014 meeting. **Action:** Approve. **Moved by:** Mr. Martzke **Seconded by:** Mr. Lynch

Vote: Motion passed (**Summary:** Yes = 7, No = 0, Abstain = 1)

Yes: Mr. Lynch, Mr. Cervantes, Mr. Brauchla, Mr. Martzke, Ms. Weissler, Ms. Edie, And Mr. Watkins **No:** 0 **Abstain:** Mr. Garcia

CALL TO THE PUBLIC:

Mr. Jack Cook of Bisbee spoke of various matters.

OLD BUSINESS

Item 1

PUBLIC HEARING

Docket SU-14-02 (Workman): A request for a Special Use authorization to establish and operate a special event venue in the Kings Ranch subdivision. The proposal is to use the 10,937-square foot existing home on the property for special events. This land use is deemed an indoor/outdoor recreation use, allowed by Special Use in the Rural Districts.

The subject parcel (104-24-415) is located at 6121 E. Oak Loop in Palominas. The Applicant is R.L. Workman of Workman Homes.

Chair Weissler called for the Planning Director's report. Planner II, Keith Dennis presented the Docket, explaining the background of the request utilizing photos, maps, and other visual aids. He explained access issues and solutions. He explained the Modifications requested by the Applicants, and explained Staff's assessment of the requests and the support and opposition from neighbors. Mr. Dennis also explained Staff's analysis of the Special Use factors. He explained offsite impacts and potential mitigation measures that may be applied. Mr. Dennis explained the Applicant's proposed mitigation plan and other changes designed to reduce impacts on neighboring properties. He also provided examples of screening walls. He closed by listing factors in favor of and against approval and invited questions from the Commission. Ms. Weissler asked for examples of what the described decibel levels would equate to. Mr. Dennis provided examples and Mr. Gardner clarified the decibel system.

Ms. Weissler invited the Applicant to make a statement. Michael Cerepanya of Hereford spoke on behalf of the Applicant, Bob Workman of Hereford. Mr. Cerepanya presented the proposed mitigation plan. He detailed the restrictions on music, citing timeframe, location, and decibel limits. He explained that they had performed sound testing on site to provide data for the mitigation plan. Mr. Cerepanya explained the basis for the other mitigation requests, citing speaker and wall location. He provided examples of existing homes in the subdivision, using them as justification for the Applicant's desired wall. Mr. Cerepanya closed by providing an alternate sample motion. Mr. Workman then spoke, stating that he would not do anything to harm the community, noting that he currently owned the surrounding properties. He acknowledged that noise was the primary concern and emphasized the proposed mitigation measures. Mr. Workman closed by stating that he felt the project would be an asset rather than a detriment to the neighborhood. Ms. Weissler asked Mr. Cerepanya for confirmation that he had drafted the alternate sample motion. Mr. Cerepanya confirmed that he did. Ms. Weissler asked for clarification of the motion, and it was noted that there was a typographical discrepancy in the alternate motion that was changed to meet the Applicant's intent. Mr. Garcia asked if the structure was built for a commercial use. Mr. Cerepanya stated that it was begun as a home and explained the background of the structure. Mr. Workman provided further detail regarding the building. Mr. Garcia asked about the capacity of the building. Mr. Cerepanya stated that there was parking for 200. Mr. Garcia asked how many bathrooms were available. Mr. Workman stated there were six. Mr. Garcia asked if there was a septic system. Mr. Cerepanya stated that there two systems. Mr. Workman provided additional technical details regarding the septic systems. Mr. Cervantes asked for clarification regarding the changes to the alternate motion and the limits to speakers and decibels. Mr. Cerepanya explained the intent and the goal to limit decibels. Mr. Workman detailed their sound tests and the proposed music system based on the results of the test.

Ms. Weissler opened the Public Hearing. She opened with calling for speakers in favor of the docket.

Ms. Tracie Jerman of Hereford identified herself as a resident of the subdivision and supported the project.

She stated that she lived near the project and did not hear any disturbance when the sound tests were conducted. She stated that the facility would be a popular location for parties and weddings. Ms. Jerman stated she felt that the facility could increase property values.

Ms. Sarah Neyhart of Sierra Vista, a photographer, spoke in favor of the venue. She stated that it would keep business in Cochise County as opposed to going to Tucson.

There being no further speakers in support, Ms. Weissler asked for speakers in opposition.

Ms. Kori Henderson of Hereford spoke, noting that she owned several properties adjacent to the subdivision. She emphasized that the area was residential and spoke in favor of the quiet, rural environment. She expressed gratitude that further mitigation was being considered, though she stated that she felt it may be insufficient due to the slope of the area. She expressed concern that the public notice from the Applicant was incomplete and claimed that it was difficult to contact Mr. Workman. She further claimed that the information she had received from the Applicant was unclear and dismissive. Ms. Henderson noted that last year the Commission had rebuked the Applicant for failing to adhere to correct procedures for a previous Special Use. She stated that there was a "nepotistic relationship" with the developer, and that there were no CC&Rs to protect the homeowners. She also claimed that the developer had three times the votes as the homeowners and could therefore ignore their concerns. She closed by expressing concern for the process and the Applicant's reticence to provide clear answers to her concerns. She also worried about recourse if the mitigation did not work.

Ms. Katherine Oakes of Sierra Vista explained that she owned property outside the subdivision. She expressed concern regarding the lighting and worried about losing her dark skies. She noted that while she did not live at the site, she was worried about the project decreasing the value of her property.

Ms. Connie Atkins of Hereford noted that she lived outside the subdivision. She expressed concern about the traffic and was concerned that patrons of the venue would get lost and would drive onto her property attempting to locate the venue. She explained her view of the subject property and expressed concern about the noise test, noting that she was not notified of the test and was not given the opportunity to participate and comment on the test. Ms. Atkins complained that she and other property owners were not given copies of the mitigation plan prior to the meeting. She again noted that the lights would be visible at her home. She expressed support for keeping the area free of commercial activity and preventing disruption to wildlife.

Mr. Robert Artuz of Hereford stated that he lived within the subdivision. He expressed concern that the project was very secretive. He expressed concern about lights from traffic entering and leaving the facility. He stated that he could hear other subdivision residents speaking in normal voices. Mr. Artuz claimed that he was never told that a commercial activity could occur on the property and further claimed that no one who supported the request "had to live there".

There being no one else wishing to speak, Ms. Weissler invited the Applicant to rebut the speakers in opposition.

Mr. Cerepanya stated that they had followed the County's regulations pertaining to the citizen notice, and that they would follow the County's lighting regulations. He noted that all parking lot lights would be low intensity, ground level lighting. Mr. Workman apologized for the appearance of secrecy and stated that the provision for commercial use of this property was in the CC&Rs and on the plat, as it was for his office. He stated that it was in the disclosures. Several audience members interjected that they were not in the subdivision and not party to any of that. Mr. Workman acknowledged that he knew that, and stated that he had not anticipated that there would be any objection to the proposal. He stated that the lighting would be present regardless of the use of the structure, and stated that there would eventually be intervening homes between this site and the objecting property owners. Mr. Workman stated again that he was not looking to harm the area and emphasized how many lots he owned in the area. He also noted that harming the area would not be in his best interest.

Ms. Weissler closed the Public Hearing and asked for discussion from the Commission.

Mr. Martzke commented that he felt the Applicant had made a good effort to mitigate the impacts, and stated that if the objectors wanted the area to remain undeveloped they could purchase the properties to prevent development. He stated he felt that other outside impacts would cause more disturbance to the objecting property owners and emphasized that he felt the Applicant was moving in the right direction. He stated that in the past realtors were unable to "sell views" unless they could guarantee that the views would remain forever. Mr. Cervantes stated that he had seen similar uses in subdivisions, most commonly as clubhouses for the subdivision, and felt that they worked well. Ms. Weissler stated that she agreed with Staff's recommendation regarding the block wall around the building envelope. She stated that she understood the Applicant's concerns, but felt Staff was correct in their recommendation.

Ms. Weissler then called for the Planning Director's summary and recommendation. Mr. Dennis recommended Conditional Approval and explained the Conditions and Modifications recommended by Staff. Ms. Weissler asked for clarification of the interaction of the Conditions and adoption of the Applicant's mitigation plan if adopted as a Condition. Mr. Dennis stated that the Commission would decide which one would take precedence. Mr. Lynch questioned the ability of the condition regarding speaker limitations as technically impossible. Mr. Cervantes provided clarification on options regarding speakers and decibel limits, suggesting a decibel limit at the property line. Mr. Brauchla stated that he felt he was not qualified to impose a technical limit. Mr. Watkins concurred that the technical condition was beyond the experience of the Commission, and asked if anything would prevent a homeowner from installing a large outdoor sound system on their residential property. Mr. Cervantes asked if the subdivision CC&Rs had any such provision. Mr. Workman explained that it would fall under the "noxious use" provision. Mr. Cervantes asked if they wanted to remove the sound limitation. Mr. Workman stated that the intent was to use ambient music outside, and would cover sound limits under the rental agreements. He stated the idea was a "piano bar", not "a rock band and a keg". A member of the public asked from the floor if there would be limits to the types of groups and parties permitted at the venue. Ms. Weissler asked the member to speak from the podium. Mr. Workman stated that "kids partying at spring break is not what we're looking for". Ms. Weissler stepped in to prevent a back and forth discussion between the Applicant and a member of the public.

Mr. Cervantes stated that he felt the location and facility would self-regulate and would prevent the sorts of events that the neighbors were concerned about. He discussed his background in sound, and noted that he has an outdoor sound system in the neighborhood that he cannot use without complaint, and expressed support for the project. Mr. Watkins compared the project to a similar facility in Tucson. Ms. Weissler asked for modification to the Condition. Mr. Cervantes suggested a time and decibel limit at the property line. Mr. Dennis explained that such a performance standard was possible. Ms. Edie asked if Staff was still recommending a six-foot block wall on all sides. Mr. Dennis confirmed that this was still Staff's recommendation. Mr. Cervantes asked for clarification of the sound mitigation on the east side, which Mr. Workman provided, explaining that the house itself blocked noise to the east. Mr. Lynch asked for clarification of the concept plan, which Mr. Workman provided. Mr. Martzke asked where the Applicant was proposing to construct a six-foot wall. Mr. Workman demonstrated his proposal. Mr. Martzke asked about the other fencing. Mr. Workman explained the wrought iron fence he planned. Mr. Dennis asked the Applicant for clarification of the fence types, which Mr. Workman provided. Ms. Weissler summed up the discussion and called for a motion. Mr. Martzke made a motion for Approval of the Special Use with Conditions and Modifications given by Staff, with the Condition that music be limited to 50 decibels at the property line, with no restriction on equipment (a change to the impact mitigation plan) and removed the Condition pertaining to sound from Staff's recommendation, and replaced the requirement for a six-foot wall around the building envelope with a requirement for a six-foot wall around the courtyard. Ms. Edie seconded the motion and Ms. Weissler asked for discussion.

Ms. Weissler called for a vote. The motion passed 5-2, with one abstention.

Motion: Motioned to grant the Special Use with the Conditions and Modifications as recommended by Staff as noted.

Action: Approve with Conditions and Modifications **Moved by:** Mr. Martzke **Seconded by:** Ms. Edie

Vote: Motion passed (**Summary:** Yes = 5, No = 2, Abstain = 1)

Yes: Mr. Cervantes, Mr. Martzke, Ms. Edie, Mr. Watkins, and Mr. Brauchla

No: Mr. Lynch and Mr. Garcia

Abstain: Ms. Weissler

NEW BUSINESS

Item 1

NOT A PUBLIC HEARING

Docket S-05-05 (La Marquesa) – A request for an additional one-year time extension for the La Marquesa Subdivision Tentative Plat. La Marquesa is a 103-lot Residential Conservation subdivision located on 317 acres, zoned RU-4 (Rural; one dwelling unit per 4 acres) and located at the north side of Three Canyons Road in Hereford, about one-mile east of Highway 92. The Tentative Plat was approved by the Board of Supervisors on February 5, 2007. The current Tentative Plat extension expired on February 5, 2014. The Developer is Mr. Patrick Kirk and the Project Engineer is Mr. Blaine Reely of Monsoon Consultants in Tucson.

Chair Weissler called for the Planning Director's report. Planner II, Keith Dennis presented the Docket, explaining the background of the request utilizing photos, maps, and other visual aids. He closed by recommending approval.

Ms. Weissler asked if the Applicant wished to make a statement. Mr. Patrick Kirk, of Tucson, spoke to explain the request, expounding on current market conditions. He also discussed cost issues pertaining to the water company. Mr. Kirk closed by requesting another one-year extension.

Ms. Weissler then called for the Planning Director's summary and recommendation. Mr. Dennis recommended Approval. Mr. Watkins asked Staff if one year was sufficient. Mr. Dennis explained that the regulations permitted extensions on a yearly basis only. Ms. Weissler called for a motion. Mr. Lynch made a motion to grant a one-year extension to the Tentative Plat. Mr. Cervantes seconded the motion and Ms. Weissler asked for discussion. Ms. Weissler called for a vote. The motion passed 8-0.

Motion: Motioned to extend the Tentative Plat for one year.

Action: Extend the Tentative Plat **Moved by:** Mr. Lynch **Seconded by:** Mr. Cervantes

Vote: Motion Passed (**Summary:** Yes = 8, No = 0, Abstain = 0)

Yes: Ms. Weissler, Mr. Lynch, Mr. Cervantes, Mr. Brauchla, Mr. Martzke, Ms. Edie, Mr. Garcia and Mr. Watkins

No: 0

Abstain: 0

Item 2

PUBLIC HEARING

Docket SU-14-03 (Marshall): - A request for Special Use authorization to establish and operate a small-scale animal husbandry operation on an undeveloped, one-acre site. The intention is to construct a small tack shed/horse shelter to accommodate up to two horses on a seasonal basis. As the proposal is to establish a principal land use on the site, it is considered Animal Husbandry and requires Special Use approval. The subject parcel is unaddressed, but is located at the southwest corner of S. Barnett Road and Copper Ridge Road in unincorporated Bisbee. The Applicant is Mr. Steve Marshall.

Chair Weissler called for the Planning Director's report. Planner II, Keith Dennis presented the Docket, explaining the background of the request utilizing photos, maps, and other visual aids. He explained the Modifications requested by the Applicants, and explained Staff's assessment of the requests and the support and opposition from neighbors. Mr. Dennis also explained Staff's analysis of the Special Use factors. He closed by listing factors in favor of and against approval and invited questions from the Commission.

Ms. Weissler invited the Applicant to make a statement.

Mr. Steve Marshall of Bisbee explained his request and plans for the property.

Ms. Weissler opened the Public Hearing. There being no one interested in speaking, Ms. Weissler closed the Public Hearing and asked for discussion from the Commission.

Ms. Weissler then called for the Planning Director's summary and recommendation. Mr. Dennis recommended Conditional Approval and explained the Conditions recommended by Staff, including a Condition that the site be treated as a Residential Site. Ms. Weissler called for a motion. Mr. Watkins made a motion for Approval of the Special Use with Conditions given by Staff. Mr. Martzke seconded the motion and Ms. Weissler asked for discussion. Ms. Weissler called for a vote. The motion passed 8-0.

Motion: Motioned to grant the Special Use with the Conditions as recommended by Staff.

Action: Approve with Conditions and Modifications **Moved by:** Mr. Watkins **Seconded by:** Mr. Martzke

Vote: Motion passed (**Summary:** Yes = 8, No = 0, Abstain = 0)

Yes: Ms. Weissler Mr. Lynch, Mr. Cervantes, Mr. Martzke, Ms. Edie, Mr. Watkins, Mr. Garcia, and Mr. Brauchla

No: 0

Abstain: 0

Item 3

PUBLIC HEARING

Docket SU-14-04 (Kitko): A request for Special Use authorization in order to offer a single-family home for short-term vacation rentals. The proposed use is considered Guest Lodging and requires Special Use approval. The subject parcel is located at 11943 S. Elk Horn Road in Pearce. The Applicant is Stephen Kitko.

Chair Weissler called for the Planning Director's report. Planner I, Peter Gardner presented the Docket, explaining the background of the request utilizing photos, maps, and other visual aids. He explained the Modifications requested by the Applicants, and explained Staff's assessment of the requests and the support from neighbors. Mr. Gardner also explained Staff's analysis of the Special Use factors. He closed by listing factors in favor of and against approval and invited questions from the Commission.

Ms. Weissler invited the Applicant to make a statement. As the Applicant was not present, Ms. Weissler opened the Public Hearing. There being no one wishing to speak, Ms. Weissler closed the Public Hearing and asked for discussion from the Commission.

Ms. Weissler then called for the Planning Director's summary and recommendation. Mr. Gardner recommended Conditional Approval and explained the Conditions and Modifications recommended by Staff. Ms. Weissler called for a motion. Mr. Lynch made a motion for Approval of the Special Use with Conditions and Modifications given by Staff. Mr. Martzke seconded the motion and Ms. Weissler asked for discussion. Ms. Weissler called for a vote. The motion passed 8-0.

Motion: Motioned to grant the Special Use with the Conditions and Modifications as recommended by Staff.

Action: Approve with Conditions and Modifications **Moved by:** Mr. Lynch **Seconded by:** Mr. Martzke

Vote: Motion passed (**Summary:** Yes = 8, No = 0, Abstain = 0)

Yes: Ms. Weessler Mr. Lynch, Mr. Cervantes, Mr. Martzke, Ms. Edie, Mr. Watkins, Mr. Garcia, and Mr. Brauchla

No: 0

Abstain: 0

Item 4

PLANNING DIRECTOR'S REPORT:

Planning Director, Beverly Wilson offered the Director's Report, informing the Commission that there would be two Special Use Dockets, one Rezoning, and one Regulation Docket for the April meeting. She also noted that there would be a joint Work Session regarding the Light Pollution Code, and another on the Comprehensive Plan update. She also updated the Commission on the adoption of the water conservation regulations.

CALL TO COMMISSIONERS ON RECENT MATTERS:

No Commissioners wished to comment.

ADJOURNMENT – Chair Weessler called for a motion to adjourn: Mr. Lynch moved, Mr. Martzke seconded and the meeting was adjourned at 5:59 p.m.



COCHISE COUNTY COMMUNITY DEVELOPMENT

"Public Programs...Personal Service"

MEMORANDUM

TO: Cochise County Planning and Zoning Commission

FROM: Michael Turisk, Planning Manager *MT*

FOR: Beverly Wilson, Planning Director *BW*

SUBJECT: Docket SU-14-06 (Torch Renewable Energy, LLC)

DATE: March 28, 2014, for the April 9, 2014 Meeting

APPLICATION FOR A SPECIAL USE

This is a Special Use authorization request for a Solar Energy Power Plant, per Section 607.50 of the Zoning Regulations. The proposed project would generate power via a photovoltaic (PV) array to be constructed on private land (Parcel 209-56-008D) owned by Sunny Mesa, LLC. The accessory infrastructure, including transmission line, substation and operation and maintenance facility, would be constructed on State Trust Land. The project site encompasses approximately one Section of land or one square-mile, is zoned RU-4 and is located approximately 14-miles west of incorporated Willcox. Access would be taken from West Airport Road to North Muleshoe Road. The Applicant is Torch Renewable Energy, LLC; Glenn Holliday, Agent for Applicant.

I. DESCRIPTION OF SUBJECT PARCELS AND SURROUNDING LAND USES

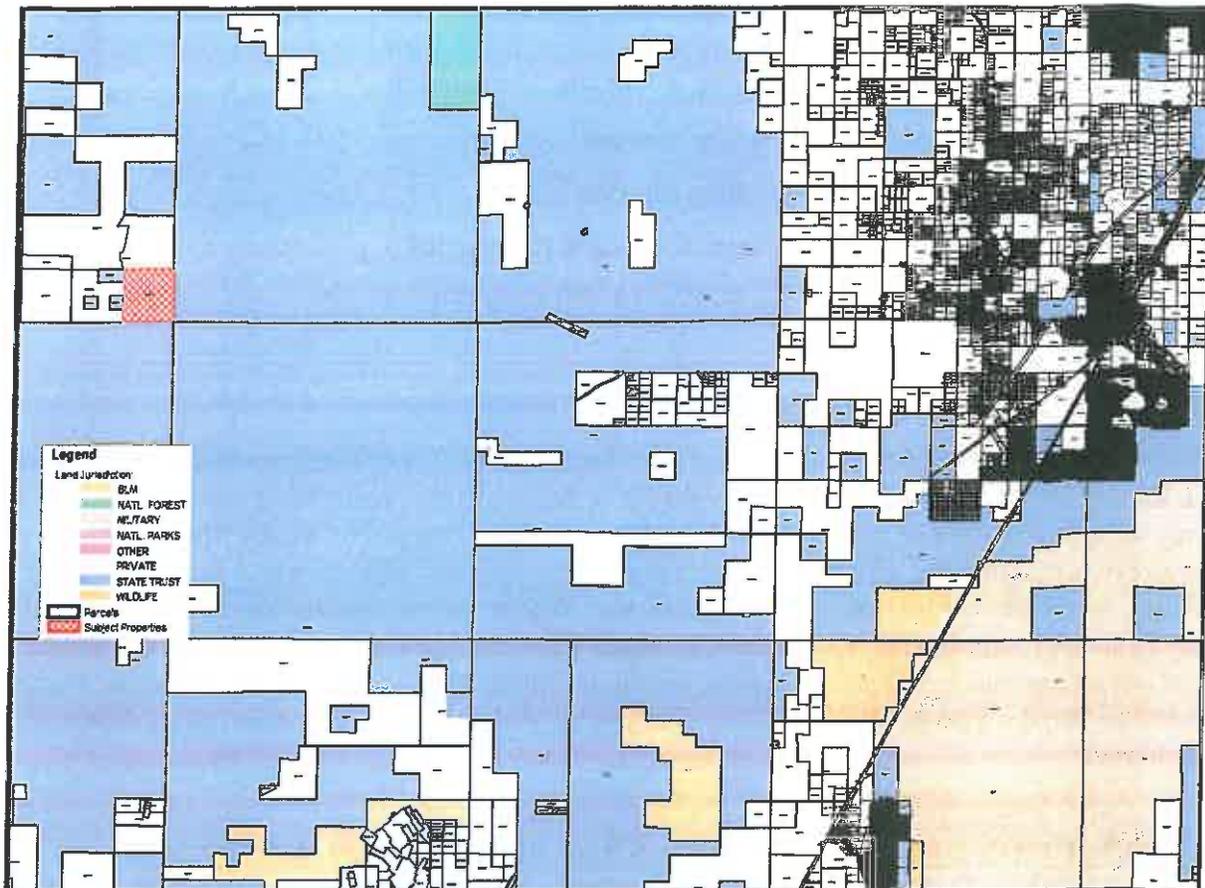
Size of Project Site: Approximately one square-mile
 Zoning: RU-4 (Rural; minimum lot size 4 acres)
 Growth Area: Category D (Rural)
 Area Plan: None
 Comprehensive Plan Designation: Rural
 Existing Uses: Grazing

Surrounding Zoning

| Relation to Subject Parcel | Zoning District | Use of Property |
|----------------------------|-----------------|---------------------|
| North | RU-4 | Grazing; open space |
| South | RU-4 | Grazing; open space |
| East | RU-4 | Grazing; open space |
| West | RU-4 | Grazing; open space |

II. PARCEL HISTORY

There are no permits or violations on record for the subject properties.



Subject properties shown in cross-hatched area at upper left. City of Willcox and I-10 at far right

III. BACKGROUND AND NATURE OF THE REQUEST

Due in part to recent and significant interest in jumpstarting renewable energy development in Arizona, Arizona’s *Climate Change Action Plan* (2006) was developed to outline specific recommendations for State regulators, including setting an aggressive goal of reducing greenhouse gas emissions in the state to year 2000 levels by year 2020, and to 50 per cent below year 2000 levels by year 2050. Furthermore, in late 2012, following a three-year environmental analysis, the Department of Interior designated 192,000 acres of public land in Arizona as potentially suitable for utility-scale renewable energy development. Lands were chosen due to their "low resource sensitivity and few environmental conflicts," as well as their proximities to power transmission capability, load centers and areas with high energy demand.

University of Arizona’s Solar Suitability Analysis of Cochise County

In 2013, the University of Arizona completed a site Suitability Analysis for small- and large-

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scale solar projects for Cochise County.

Fundamental site characteristics were analyzed in order to determine real-world potential for solar energy development in the County. Computer modeling helped eliminate lands considered inappropriate and to locate areas considered having the highest potential. A mapping tool allows for integration with the County's Geographic Information Systems (GIS) mapping layers, such as ownership, floodplains, washes, sensitive wildlife habitat and corridors, agricultural lands and residential developments. The results show good opportunities for solar development in the Willcox area and the proposed project site in particular (*see attached solar suitability maps*).

Red Horse Solar Project

Torch Renewable Energy, LLC, a Houston-based renewable energy developer, has submitted a request for Special Use authorization for a utility-scale solar energy project that would utilize photovoltaic (PV) collector arrays mounted on single-axis tracking systems. Utility-scale PV has grown into the fastest growing sector of the solar industry and feature large, centralized systems that feed power directly to the grid. PV systems are comprised of modules commonly known as PV panels, inverters for grid-connected systems and when alternating current rather than direct current is required, wiring and transmission, and mounting frameworks. The *Red Horse* solar array would be sited in proximity to its "sister" project, the *Red Horse II* utility-scale wind energy project approved by the Planning and Zoning Commission in April 2013.

The proposed project site is located approximately 14-miles west of Willcox and approximately 15-miles north of Interstate 10 in an area known as the *Allen Flat*.

Much of the land in this area is owned by the Arizona State Land Department (ASLD) and is characterized by sparse development, expansive, uninterrupted open space and grazing activity administered largely by the ASLD. The most conspicuous topographical feature most immediate to the project site is the Winchester Mountain range to the north and east. Development in the area of the project site is minimal.

The photovoltaic array would be constructed on private land owned by Sunny Mesa, LLC, with the associated infrastructure, including the transmission line, sited on State Trust Land. The project would use the same operations and maintenance facility as the *Red Horse II* wind project approved in 2013. Approximately 50 employees would be needed for the construction phase. Post-construction operation and maintenance would require about two employees (this would possibly vary seasonally depending on maintenance schedules). Completion of both Red Horse projects is expected within one year.

Single-axis tracking systems follow the sun from east to west as it moves throughout the day. Arrays are arranged in north-south rows that are moved by a drive system. This system is more effective than a fixed-tilt system over the course of a year.

The County zones land held in State Trust in the event said land transfers to private ownership. ASLD requires right-of-way for access to and the use of state lands for renewable energy development, but does not require a commercial lease of the land as it can be co-used for renewable energy and other purposes such as grazing.



Single-axis PV tracking system

ASLD has a legal and fiduciary obligation to maximize returns to beneficiaries of the trust, and thus has a critical interest in the development of renewable energy. The ASLD holds a competitive advantage over the federal government or private landowners because of the agency's ability to sell or lease multiple parcels at once; this is advantageous to energy developers who would otherwise need to negotiate individually with potentially numerous private landowners.

The ancillary infrastructure needed for interconnection and maintenance would be sited on State-administered lands. Approximately 2.8-miles of additional distribution lines would be installed from the southern boundary of the privately owned site to the existing transmission corridor that would be shared by both *Red Horse* projects. Power would be distributed to Tucson Electric Power in part by a nearby existing 34.5 (kV) Kilovolt overhead transmission line. The project's associated infrastructure would include a 34.5-kV substation, service roads, transmission (including underground transmission), as well as a 2,400-squarefoot operations and maintenance facility. Transmission lines would tie in to the regional grid via a new substation that would connect to the existing Winchester substation to the southwest, and would continue westward roughly paralleling the existing overhead transmission lines along the I-10 corridor.

The ASLD is in the process of permitting the right-of-way for the wind energy project to install transmission and construct the substation, and is currently considering the right-of-way application for alignment for the *Red Horse* solar project. Right-of-way approval authorizes the construction, operation, maintenance and possible decommissioning of that portion of the project sited on state-administered lands. Similar to the County's review process, ASLD requires project review by outside agencies to determine the nature and scope of mitigation, if necessary.

ASLD has indicated that the proposed right-of-way alignment is currently under review in order to determine the best possible route with the least constraints.



View to northeast towards existing 34.5 kV transmission line (in background).

IV. ANALYSIS OF IMPACTS – COMPLIANCE WITH SPECIAL USE FACTORS

Section 1716.02 of the Zoning Regulations provides a list of 10 factors with which to evaluate Special Use applications. Staff uses these factors to help determine whether to recommend approval for a Special Use authorization, as well as to determine what Conditions and/or Modifications and Waivers may be needed. Eight of the 10 criteria apply to this request. The project as submitted complies with five of the eight applicable Special Use factors. If the Conditions of Approval recommended by staff and the requested Modification are approved, the project would comply with all eight of the applicable factors.

A. Compliance with Duly Adopted Plans: Complies

Section F (*Intergovernmental Coordination*) of the Comprehensive Plan speaks to the potential impacts that other governmental agencies’ actions might have upon the people, land and resources of the County, and how those actions must be carried out in a manner consistent with the Goals and Policies of the Plan. However, the proposed project complies with the applicable County Comprehensive Plan policies relative to the appropriateness of the use in Category D (Rural) areas, as large-scale renewable energy projects are generally considered appropriate uses in these areas.

B. Compliance with the Zoning District Purpose Statement: Complies

Section 601.02 of the Zoning Regulations encourages “*those types of non-residential and non-agricultural activities which serve local needs or provide a service and are compatible with rural living.*” Furthermore, Section 601.07 offers the following:

“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”

As indicated in Section A (*Compliance with Duly Adopted Plans*), large-scale renewable energy projects are often appropriate uses in expansive rural areas. Being a Special Use, oversight exists to ensure that this non-residential (commercial) use is sensitive to the rural environment.

C. Development Along Major Streets: Not Applicable

The project site is not located along any roadway designated an arterial.

D. Traffic Circulation Factors: Complies with Condition 7

Compliance with this factor depends upon the ability of a proposed land use to utilize the existing transportation network in the manner in which it was designed. Access to the project site would be from the east via West Airport Road, a partly improved County-maintained roadway, then continuing northwestward via North Muleshoe Road to a private project access road. Although the equipment and infrastructure would not be as massive as that for the *Red Horse II* wind project, nevertheless, these roadways are inadequately designed to handle the various oversized construction-related vehicles needed to access the site for during the construction phase. Airport Rd., the improved segment in particular, may require major repair and improvements post-construction due to the number of trips and the sheer weight of the large transport vehicles expected (*see Condition 8, below*). The Applicant is advised that at the Commercial Permit phase a right-of-way and encroachment permit would be needed for the access apron onto any County-maintained roadways.

Per the County’s Transportation Planner, a formal Traffic Study would not be required.

E. Adequate Services and Infrastructure: Complies

This factor concerns the ability of the Applicant to provide for necessary street, water, sewer and utility services on the property, as applicable. Temporary provisions for potable water and waste services would be made available during construction, and an operation and maintenance facility would be constructed to serve employees. The Willcox Fire Department would provide emergency services if needed.

F. Significant Site Development Standards: Complies with Requested Modifications

Given the project site’s size, the Applicant would not have difficulty meeting most of the required site development standards for the RU-4 Zoning District, namely minimum setbacks and parking requirements. However, a Modification of the maximum permissible site coverage (impermeable surface) of 25 percent for sites zoned Rural would be needed to allow for the

expansive solar array. Furthermore, a Modification of the 20-ft. minimum driveway width is requested. Staff supports both request.

G. Public Input: Complies

The Applicant completed the requisite Citizen Review process by mailing notice to the two property owners within one-mile of the site, but did not receive any response.

H. Hazardous Materials: Not Applicable

Per the Applicant, no hazardous materials are to be stored or utilized on site.

I. Off-site Impacts: Complies with Conditions

Fort Huachuca's Electronic Proving Ground

The Electronic Proving Ground (EPG) encompasses nearly 2,500 square-miles in Cochise County and is an ideal environment for testing sensitive command, communications, control, computer, and intelligence equipment.

Since the EPG is located remotely and situated in a location with minimal radio-frequency interference, it is the primary Army Test Center for avionics systems and unmanned vehicles. The Department of the Army has indicated that electromagnetic interference from renewable energy projects within or near the EPG have the potential to compromise this important resource. The Department of the Army has suggested that the Applicant provide more details to ensure the project does not generate undue impacts, but supports the installation of transmission lines underground to minimize electromagnetic interference (*see attached comments dated 29 March 2014*). Staff recommends doing so be made a Condition of approval.

Biological/Natural and Cultural Resources

Construction and operational activities associated with renewable energy development can generate various biological or environmental impacts. It is expected that construction activities associated with the project would result in direct temporary and permanent vegetation loss. This loss would result from clearing, grading and other surface disturbances.

Federal and state agencies oversee the development of renewable energy projects on public land, and federal laws such as the Migratory Bird Treaty Act and the Endangered Species Act (ESA) are designed to ensure renewable energy projects are sited in areas that pose minimal threat to natural resources. Furthermore, guidelines have been developed by the Arizona Game and Fish Department (AZGF) to encourage early consideration of natural resources for renewable energy projects. These guidelines emphasize the need for proactive approaches in order to help identify and avoid sensitive areas up front and to reduce sometimes unnecessary and potentially costly project delays. Per an interagency Memorandum of Understanding (MOU), ASLD is required to consult with AZGF regarding the Applicant's environmental monitoring plans as part of the right-of-way acquisition and permitting process. A biological survey has been completed for the site to determine biodiversity and identify areas particularly sensitive areas, and to determine mitigation measures.



Per AZGF this area of the County is considered important to pronghorn (*Antilocapra americana*), a species that resembles deer or antelope that prefers open, expansive terrain at elevations varying from 3,000 to 5,900 feet. Today, approximately 10,000 pronghorn are found in Arizona, chiefly in the north-central portion of the state. However, small, scattered herds of the Chihuahuan subspecies occur in southeastern Arizona. AZGF identifies pronghorn as a species of Economic and Recreational Importance, and has communicated concern about the potential impacts the project would have on the specie's movement patterns and the high-quality grassland habitat found in the area. That agency's concerns extend to golden eagles (*Aquila chrysaetos*); specifically, regarding how the project could impact foraging and prey base. Furthermore, the proposed use of barbed wire for fencing has the potential to impact wildlife movement and corridors. AZGF has made recommendations detailed in the attached memorandum from that agency dated 27 March 2014.

In addition to the biological studies, a cultural resource inventory has been completed.

Outdoor Storage:

A temporary laydown yard would be required during construction in order to store and prepare components and equipment during construction. The future operation and maintenance facility would also serve as post-construction storage

Transient Dust

Project construction would generate temporary transient dust impacts from grading activities and travel on unimproved roads. Various dust mitigation measures would be employed, including watering trucks and soil stabilizers. The dust control protocol is described in greater detail in the *Red Horse Solar and Wind Facility Dust Mitigation Plan* (Exhibit C).

Drainage

A preliminary drainage and hydrology report was submitted as part of the Special Use application; the report has been deemed inadequate for the purposes of Commercial Permit issuance, however. A revegetation and reclamation plan is currently in development. A drainage and hydrology report that meets County standards would be required prior to Commercial Permit issuance.

Noise

The existing background noise in the project area is characteristically quiet of most rural environments. Temporary construction noise would be generated, but long-term operational noise impacts would be negligible. Potential impacts from maintenance activities on existing ambient noise levels would be detectable for short durations, but given the rural, isolated location, any potential noise generation would likely be undetectable or of little concern, especially given that the nearest residence is nearly four miles distant.

Decommissioning

The ASLD requires a surety bond to be posted per that agency's processing guidelines for renewable energy testing and production decommissioning on State lands. As a Condition of



Approval, the County would also require decommissioning for the solar arrays or other project-related structures on private land within one-year of going offline.

J. Water Conservation: Complies

Photovoltaic technology uses the least amount of water of all solar energy technologies. Water use for flat plate PV installations is minimal, as water is not necessary to the conversion of solar energy to electric energy in a PV plant. Water is used to wash PV panels at intervals dependent on specific environmental conditions. Water would be used during construction for dust mitigation and post-construction in order to periodically clean photovoltaic panels. As of this writing, a well would be drilled to serve the operation and maintenance facility, with 200-gallons per day estimated to be used. All water usage would be required to conform to the water conservation regulations provided in the Zoning Regulations, as well as the applicable Comprehensive Plan policies, per Section 102E.

V. PUBLIC COMMENT

Per the County's citizen review requirements, the Department mailed notice to two neighboring property owners within one-mile of the subject properties (ASLD and Sunny Mesa, LLC). Staff posted the property on March 24, 2014, and published a legal notice in the *Bisbee Observer* on March 13, 2014. To date, the Department has received one verbal response of support from the single private property owner within the one-mile notification radius.

As noted above, the following site development standard Modifications are requested:

1. *A Modification to the maximum 25 per cent allowance for site coverage; and*
2. *A Modification to the minimum 20-ft. wide road standard for commercial uses to allow for 16-ft. wide setup and maintenance access.*

VI. SUMMARY AND RECOMMENDATION

This is a Special Use authorization request for a utility-scale solar energy project proposed for a site located west of the City of Willcox. The project would meet the applicable policies of the County's *Comprehensive Plan*, the overall purpose of the Rural Zoning Districts, and would be developed in an area considered appropriate for utility-scale renewable energy development. Oversight exists at the State level to ensure that the project does not threaten sensitive biological and cultural resources, and Staff is recommending that Conditions speaking to this be attached to approval. In the event the project were to be rendered offline, the State and County would require decommissioning.

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 would not be materially detrimental to the health, safety and welfare of the public or to property in the vicinity;
3. The project would support Arizona's renewable energy standard of generating 15 percent of electricity from renewable sources by 2025 by serving as a source of clean energy, offsetting greenhouse gas emissions and reducing the need to generate electricity from fossil fuels;

4. The project would be sited in an area considered optimal from a solar resource perspective;
5. The project would provide increased revenue for the ASLD for the use of State-administered land;
6. Once completed the project would generate negligible levels of traffic;
7. At build-out the project would use minimal water;
8. The project would be sited close to existing power distribution infrastructure and the approved Red Horse II wind project; and
9. To date, the Department has received one verbal response of support.

Factors Against Approval

1. The project would have the potential to impact natural and cultural resources unless mitigated;
2. During construction, transport trucks would likely significantly deteriorate local roadways, particularly West Airport Road., unless mitigated; and
3. Construction activities would generate noise and transient dust unless mitigated.

VII. RECOMMENDATION

Based on the Factors in Favor of Approval, Staff recommends **conditional approval** of the Special Use authorization request for a utility-scale solar energy project west of Willcox, subject to the following Conditions:

1. The Applicant shall submit the Preliminary Screening and Pre-construction Study Plan to AZGF with a copy of said Plan provided to the Community Development Department;
2. The Applicant shall continue environmental monitoring program, and shall submit the findings to AZGF with a copy of said findings provided to the Community Development Department;
3. The Applicant shall use commercially reasonable efforts to minimize any potential impacts to flora and fauna, particularly pronghorn by adopting AZGF's *Wildlife Compatible Fencing Guidelines*, as well as bat species by restricting artificial lighting to narrow spectrum lighting and the minimum necessary for safety;
4. The Applicant shall develop an invasive weed control plan and submit said plan to AZGF;
5. If substantial construction progress has not occurred within three (3) years from the date of approval, the Special Use Authorization shall be revoked after 30-days notice to the Applicant;
6. If the solar project is rendered offline, the Applicant shall remove all above ground solar structures and appurtenant equipment and infrastructure within one year;
7. The Applicant shall install all transmission lines for the project underground to minimize electromagnetic interference with Fort Huachuca's Electronic Proving Ground;
8. *Condition #3* of SUA-13-04 for the *Red Horse II* wind project shall apply to this request and reads as follows:

The Applicant acknowledges that transporting equipment and materials to the property during construction is likely to damage Taylor or Airport Roads, and that the Applicant is responsible to pay the County the cost to repair such roads to their current condition by an

outside contractor:

- a. Prior to permit issuance and transporting equipment and materials to the subject property for construction, i) the County Engineer will prepare a written baseline assessment of the current condition of such roads, to be acknowledged and agreed upon by the Applicant; and ii) the Applicant and the County will enter into a written agreement pursuant to which the Applicant will provide the County funds in the amount of \$3,000,000 *in the form of cash or bond*, less the depreciation of such roads in the amount to be determined by the County Engineer, to be drawn upon by the County to pay for the cost of repair, with the balance after repair, if any, to be returned to the Applicant upon certification by the County Engineer that such roads have been repaired to their current condition.
No certificate of occupancy will be issued for use until such roads have been repaired or the County Engineer has determined that the Applicant has supplied sufficient funds to repair such roads to their current condition.
 - b. If, during the construction phase the County Engineer determines that such roads have become unsafe for travel, the County may draw down funds to pay for an interim repair as needed.
 - c. This Condition was based on the assumption that Taylor and Airport Roads will be the route taken for this Special Use Authorization.
 - d. If an alternate route over other County-maintained roads is used, a new estimate and final agreement will be executed between the parties. In the event this project is decommissioned in whole or in part, an additional agreement will be executed between the parties to provide for necessary repair of any County-maintained roads utilized and the cost to remove all decommissioned structures on all private lands;
9. Within 30-days of approval of the Special Use Authorization, the Applicant shall provide the County a signed Acceptance of Conditions form and a Waiver of Claims form arising from ARS Section 12-1134. Prior to operation of the Special Use Authorization, the Applicant shall apply for a Building/Use Permit for the project within 12-months of approval;
 10. The Building/Use Permit shall include a site plan in conformance with all applicable site development standards (except as Modified) and with Section 1705 of the Zoning Regulations, the completed Special Use permit questionnaire and application, and appropriate fees. A Building/Use Permit must be issued within 18-months of the Special Use Authorization approval, otherwise the Special Use Authorization may be deemed void upon 30-day notification to the Applicant;
 11. It is the Applicant's responsibility to obtain any additional permits, or meet any additional conditions, that may be applicable to the proposed use pursuant to other federal, state, or local laws or regulations; and
 12. Any changes to the approved Special Use shall be subject to review by the Planning Department and may require additional Modification and approval by the Planning and Zoning Commission.

VIII. ATTACHMENTS

A. Special Use Application and Exhibits

- B. Maps
- C. Biological Survey
- D. Dust Mitigation Plan
- E. Staff and Agencies' Comments
- F. State ROW Supplemental Information Request
- G. Preliminary Hydrology and Drainage Report
- H. SUA-13-04 "As you are aware letter" dated 11 June



February 27, 2014

Michael Turisk, Planning Manager
Cochise County Community Development
1415 Melody Lane, Building E
Bisbee, Arizona 85603

Mike Turisk,

Torch Renewable Energy, LLC (TRE) on behalf of Red Horse Wind 2, LLC and its wholly subsidiaries are submitting a Special Use Application (SUP) for the development of the Red Horse Wind Solar Facility. The attached materials include a completed SUP application form and Exhibits to elaborate on sections of the SUP application.

In conjunction with the development of the Red Horse 2 Wind Facility, Torch is planning to build a solar facility that will utilize some of the same infrastructure as the wind facility. The solar facility will be located on private land, while the transmission line, substation and project Operations & Maintenance Facility will be Arizona State Trust Land. The Solar Facility will share the Operations & Maintenance Facility with the Wind Facility.

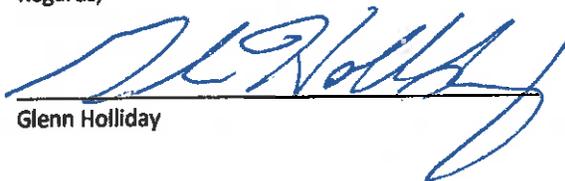
TRE has submitted a Right-of-Way application to the Arizona State Land Department to utilize the specified State Lands for purposes of developing building a transmission line and project substation. A copy of this application is attached in Exhibit C.

Two letters describing the project and the intent to proceed have been sent. The letters were sent to the Sunny Mesa, Inc. and the Arizona State Land Department. Copies of these letters are included in Exhibit E. There has been no response from the land owners yet but we will continue to seek comment and provide an updates as available.

Lastly, a contractor has not yet been selected. Once a contractor is selected proof of a commercial contractor licensed in the State of Arizona will be supplied.

As we have mentioned, we are on a tight development schedule and hope that the contents of this application are sufficient to be on the meeting agenda for April 9th, 2014. If there is any further information you need to assist with the processing of this application please let us know. A \$300.00 application fee is attached.

Regards,


Glenn Holliday

2/27/2014
Date

1331 LAMAR, SUITE 1450
HOUSTON, TX 77010-3039

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**COCHISE COUNTY
COMMUNITY DEVELOPMENT**

"Public Programs...Personal Service"

**COCHISE COUNTY PLANNING DEPARTMENT
COMMERCIAL USE/BUILDING PERMIT/SPECIAL USE PERMIT QUESTIONNAIRE
(TO BE PRINTED IN INK OR TYPED)**

TAX PARCEL NUMBER 20956008D

APPLICANT Red Horse Wind 2, LLC on behalf of Torch Renewable Energy, LLC

ADDRESS 1331 Lamar Ave. Suite 1075. Houston, TX 77010

CONTACT TELEPHONE NUMBER 713-753-1287

EMAIL ADDRESS: Glenn.Holliday@teai.com

PROPERTY OWNER (IF OTHER THAN APPLICANT) ASLD and Sunny Mesa, Inc.

ADDRESS Arizona State Land Department: 1616 West Adams; Pheonix, Az 85007

Sunny Mesa, Inc.: 4445 East Holmes Ave. Suite 102 Mesa, Arizona 85206

DATE SUBMITTED 2/26/14

| | |
|---|------------------|
| Special Use Permit Public Hearing Fee (if applicable) | \$ <u>300.00</u> |
| Building/Use Permit Fee | \$ _____ |
| Total paid | \$ <u>300.00</u> |

PART ONE - REQUIRED SUBMITTALS

1. Cochise County Joint Application (attached).
2. Questionnaire with all questions completely answered (attached).
3. A minimum of (6) copies of a site plan drawn to scale and completed with all the information requested on the attached Sample Site Plan and list of Non-residential Site Plan Requirements. (Please note that **nine (9) copies will be required for projects occurring inside the Uniform Building Code enforcement area. In addition, if the site plan is larger than 11 by 17 inches, please provide one reduced copy.**)
4. Proof of ownership/agent. If the applicant is not the property owner, provide a notarized letter from the property owner stating authorization of the Commercial Building/Use/Special Use Application.
5. Proof of Valid Commercial Contractor's License. (Note: any building used by the public and/or employees must be built by a Commercial Contractor licensed in the State of Arizona.)

6. Hazardous or Polluting Materials Questionnaire, if applicable.

OTHER ATTACHMENTS THAT MAY BE REQUIRED DEPENDING ON THE SCOPE OF THE PROJECT

1. Construction Plans (possibly stamped by a licensed Engineer or Architect)
2. Off-site Improvement Plans
3. Soils Engineering Report
4. Landscape Plan
5. Hydrology/Hydraulic Report
6. Traffic Impact Analysis (TIA): **Where existing demonstrable traffic problems have already been identified such as high number of accidents, substandard road design or surface, or the road is near or over capacity, the applicant may be required to submit additional information on a TIA.**
7. Material Safety Data Sheets
8. Extremely Hazardous Materials Tier Two Reports
9. Detailed Inventory of Hazardous or Polluting Materials along with a Contingency Plan for spills or releases

The Commercial Permit Coordinator/Planner will advise you as soon as possible if and when any of the above attachments are required.

PART TWO - QUESTIONNAIRE

In the following sections, thoroughly describe the proposed use that you are requesting. **Attach separate pages if the lines provided are not adequate for your response.** Answer each question as completely as possible to avoid confusion once the permit is issued.

SECTION A - General Description (Use separate sheets as needed)

1. What is the existing use of the property? Agriculture/Ranch Land

2. What is the proposed use or improvement? Exhibit A

3. Describe all activities that will occur as part of the proposed use. In your estimation, what impacts do you think these activities will have on neighboring properties? _____
Exhibit A

4. Describe all intermediate and final products/services that will be produced/offered/sold.
Photovoltaic Solar Panels will be mounted on a single axis tracker system
will generate electricity, which will be sold to Tucson Electric Power (TEP)

5. What materials will be used to construct the building(s)? (Note, if an existing building(s), please list the construction type(s), i.e., factory built building, wood, block, metal)

The solar facility will use the Wind facility O&M Building as approved under the SUP for Wind Facility (SUA-13-04)

6. Will the project be constructed/completed within one year or phased? One Year yes
Phased if phased, describe the phases and depict on the site plan.

7. Provide the following information (when applicable):

A. Days and hours of operation: Days: 365 Hours (from 12 AM to 12 PM)

B. Number of employees: Initially: 50 Future: 2
Number per shift Seasonal changes intermittent cleaning of Solar Panels and repairs

C. Total average daily traffic generated:

(1) How many vehicles will be entering and leaving the site.
During construction there will be the delivery of supplies, equipment and material. Post construction there will be up to 2 employees on site, and periodic maintenance of panels and associated equipment.

(2) Total trucks (e.g., by type, number of wheels, or weight)
the total number of trucks are unknown at this time. Most traffic will occur during construction

(3) Estimate which direction(s) and on which road(s) the traffic will travel from the site?
The site will be accessed from Muleshoe Road. See Conceptual Plan (Exhibit A)

(4) If more than one direction, estimate the percentage that travel in each direction
Travel is expected to be equal in direction since staff and delivery trucks will enter and exit the site via the same route.

(5) At what time of day, day of week and season (if applicable) is traffic the heavies
Traffic will be heaviest during construction. Most traffic will occur during daylight hrs.

Circle whether you will be on public water system or private well. If private well, show the location on the site plan. water will either be trucked in or a well drilled

D. Estimated total gallons of water used: per day _____ per year _____

Will you use a septic system? Yes No If yes, is the septic tank system existing?
Yes No Show the septic tank, leach field and 100% expansion area on the site plan.

The Solar Facility will utilize the same Operations and Maintenance Building as the Wind Facility

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G. Does your parcel have permanent legal access*? Yes ___ No if no, what steps are you taking to obtain such access?

TRE submitted a Right-of-Way (ROW) application to the State of Arizona for authorization to build a transmission line to the substation. A copy of this application is included as Exhibit B.

~~Project access will be through Section 36, via a private easement access off of Muleshoe Ranch Road.~~

*Section 1807.02A of the Cochise County Zoning Regulations stipulates that no building permit for a non-residential use shall be issued unless a site has permanent and direct access to a publicly maintained street or street where a private maintenance agreement is in place. Said access shall be not less than twenty (20) feet wide throughout its entire length and shall adjoin the site for a minimum distance of twenty (20) feet. If access is from a private road or easement provide documentation of your right to use this road or easement and a private maintenance agreement.

H. For Special Uses only - provide deed restrictions that apply to this parcel if any.

Attached _____ NA

8. Identify how the following services will be provided:

| Service | Utility Company/Service Provider | Provisions to be made |
|-----------------|----------------------------------|--|
| Water | Trucked In or well | Well to be drilled and/or water to be delivered |
| Sewer/Septic | no septic at Solar Facility | Temporary provisions during construction |
| Electricity | Tucson Electric Power (TEP) | TEP will be contacted to set up Electricity. |
| Natural Gas | N/A | N/A |
| Telephone | Qwest | Phone will be connected once project is on-line. |
| Fire Protection | TBD | Likely City of Wilcox |

SECTION B - Outdoors Activities/Off-site Impacts

1. Describe any activities that will occur outdoors.

Construction and maintenance of Solar Facility . See Exhibit A.

2. Will outdoor storage of equipment, materials or products be needed? Yes No ___ if yes, show the location on the site plan. Describe any measures to be taken to screen this storage from neighboring properties. There will be a laydown yard during construction. Any items that

need to be stored post construction will be stored at the Wind Facility O&M Building

3. Will any noise be produced that can be heard on neighboring properties? Yes ___ No if yes; describe the level and duration of this noise. What measures are you proposing to prevent this noise from being heard on neighboring properties? _____

There will be noise during construction, but the duration is expected to be

short and the nearest house is ~4 miles away.

4. Will any vibrations be produced that can be felt on neighboring properties? Yes ___ No If yes; describe the level and duration of vibrations. What measures will be taken to prevent vibrations from impacting neighboring properties? _____

5. Will odors be created? Yes ___ No If yes, what measures will be taken to prevent these odors from escaping onto neighboring properties? _____

6. Will any activities attract pests, such as flies? Yes ___ No If yes, what measures will be taken to prevent a nuisance on neighboring properties?

7. Will outdoor lighting be used? Yes No If yes, show the location(s) on the site plan. Indicate how neighboring properties and roadways will be shielded from light spillover. Please provide manufacturer's specifications. Lighting will be minimal and included on design plans.

8. Do signs presently exist on the property? Yes ___ No If yes, please indicate type (wall, freestanding, etc.) and square footage for each sign and show location on the site plan.

A. _____ B. _____ C. _____ D. _____

9. Will any new signs be erected on site? Yes No ___ If yes, show the location(s) on the site plan. Also, draw a sketch of the sign to scale, show the copy that will go on the sign and **FILL OUT A SIGN PERMIT APPLICATION** (attached). Signs will be minimal and determined on design plans.

10. Show on-site drainage flow on the site plan. Will drainage patterns on site be changed?
Yes No ___ A pre-construction hydrology report is included in Exhibit C.

If yes, will storm water be directed into the public right-of-way? Yes ___ No

Will washes be improved with culverts, bank protection, crossings or other means?

Yes ___ No ___ Possibly, an engineer has not yet evaluated the roads.

If yes to any of these questions, describe and/or show on the site plan.

11. What surface will be used for driveways, parking and loading areas? (i.e., none, crushed aggregate, chipseal, asphalt, other)

Locally sourced crushed aggregate will be used to reinforce the roads where needed.

12. Show dimensions of parking and loading areas, width of driveway and exact location of these areas on the site plan. (See site plan requirements checklist.)

This information will be included on design plans.

AB

13. Will you be performing any off-site construction (e.g., access aprons, driveways, and culverts)?
Yes No ___ If yes, show details on the site plan. **Note: The County may require off-site improvements reasonably related to the impacts of the use such as road or drainage improvements.** Off-site construction will be limited to road improvements for construction access, unloading and loading of equipment and supplies.

SECTION C - Water Conservation and Land Clearing

1. If the developed portion of the site is one acre or larger, specific measures to conserve water on-site must be addressed. Specifically, design features that will be incorporated into the development to reduce water use, provide for detention and conserve and enhance natural recharge areas must be described. The Planning Department has prepared a *Water Wise Development Guide* to assist applicants. This guide is available upon request. If the site one acre or larger, what specific water conservation measures are proposed? Describe here or show on the site plan submitted with this application.

Measures will be taken to minimize water waste during construction and operation.

Water will be needed during construction and for periodic washing of solar panels.

2. How many acres will be cleared? Up to 650 acres will be utilized, but not all will be cleared.
If more than one acre is to be cleared describe the proposed dust and erosion control measures to be used (Show on site plan if appropriate.) _____

A dust mitigation plan is included in Exhibit D.

Erosion control measures will be developed and implemented as part of the SWPPP.

A revegetation and reclamation plan is being developed.

SECTION D - Hazardous or Polluting Materials

Some businesses involve materials that can contaminate the soil, air, water, waste disposal system or environment in general. Precautions must be taken to protect the environment when such products are distributed to or from the site, stored, manufactured, processed, disposed of, or released as raw materials, products, wastes, emissions, or discharges (When sold or incorporated in a product these materials are required to have Material Safety Data Sheets (MSDS) supplied by the manufacturer.) Examples of such products include but are not limited to paint, solvents, chemicals and chemical wastes, oil, pesticides, herbicides, fertilizers, radioactive materials, biological wastes etc.

Does the proposed use have any activities involving such materials?

Yes ___ No If yes, complete the attached *Hazardous or Polluting Materials Use Questionnaire*.

Note: Depending on quantities, this question does not apply to ordinary household or office products or wastes such as cleansers, waxes or office supplies. Answer YES only if the materials are involved in the commercial or special use process or if landscaping or maintenance chemicals (pesticides, fertilizers, paints, etc.) will be present in quantities greater than 50 pounds (solids) or 25 gallons (liquids).

If you answer NO to this question but in the County's experience, the type of business proposed typically uses such materials, you will be asked to complete the *Hazardous or Polluting Materials Questionnaire* prior to processing this Commercial Use/ Building/ Special Use Permit.

Applications that involve hazardous or polluting materials may take a longer than normal processing time due to the need for additional research. The Arizona Department of Environmental Quality Compliance Assistance Program can address questions about Hazardous Materials (1-800-234-5677, ext. 4333).

SECTION E - Applicant's Statement

I hereby certify that I am the owner or duly authorized owner's agent and all information in this questionnaire, in the Joint Permit Application and on the site plan is accurate. I understand that if any information is false, it may be grounds for revocation of the Commercial Use/ Building/ Special Use Permit.

Applicant's Signature RED HORSE WIND 2, LLC
By: [Signature]

Print Applicant's Name NAME: GLENN HOLLIDAY
TITLE: LAND MANAGER

Date signed 2/27/2014

EXHIBIT A. PROJECT DESCRIPTION AND MAP



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Exhibit A

“PROJECT DESCRIPTION AND PROPOSED USE” Red Horse Solar Facility

Torch Renewable Energy (TRE) is proposing to construct and operate a Solar Facility to generate renewable energy under contract with Tucson Electric Power. The Solar Facility will utilize photovoltaic panels mounted on single axis tracker racking systems. The trackers are used to minimize the angle of incidence between the incoming sunlight and the photovoltaic panel. The manufacturer has not yet been selected. All solar equipment will be located on private land, with the exception of the transmission line that will carry the energy down to the new substation that will be located directly adjacent to the Winchester Substation. An access road will be built around the perimeter of the entire panel array and traversing the site. A fence will be built around the project to protect the equipment. Six copies of the Conceptual Site Plan are attached, and a typical installation of the single axis technology is shown below.



The Balance of System (BOS) design includes the following elements:

- **Mounting Structure:** The structure will be made of metal, aluminium, or hot-dip galvanized steel sufficient to prevent corrosion for the Red Horse solar facility design life. Torch proposes to use racks manufactured by NSM Flexrack or similar.
- **Inverters:** Specific Inverter has not yet been specified.
- **Transformers:** The transformers will be reduced-loss transformers properly sized for the selected inverter and manufactured for a low-failure rate and high-performance (yield) during their useful life.
- **Inverter/Transformer/Local Switchgear Cabins:** The inverters, transformers and local switchgears will be installed in prefabricated, monolithic, self-supporting structures.

The Balance of Plant “BOP” includes anything else which is not specifically included in BOS but is needed to build the solar PV facility. The different BOP elements are described below:

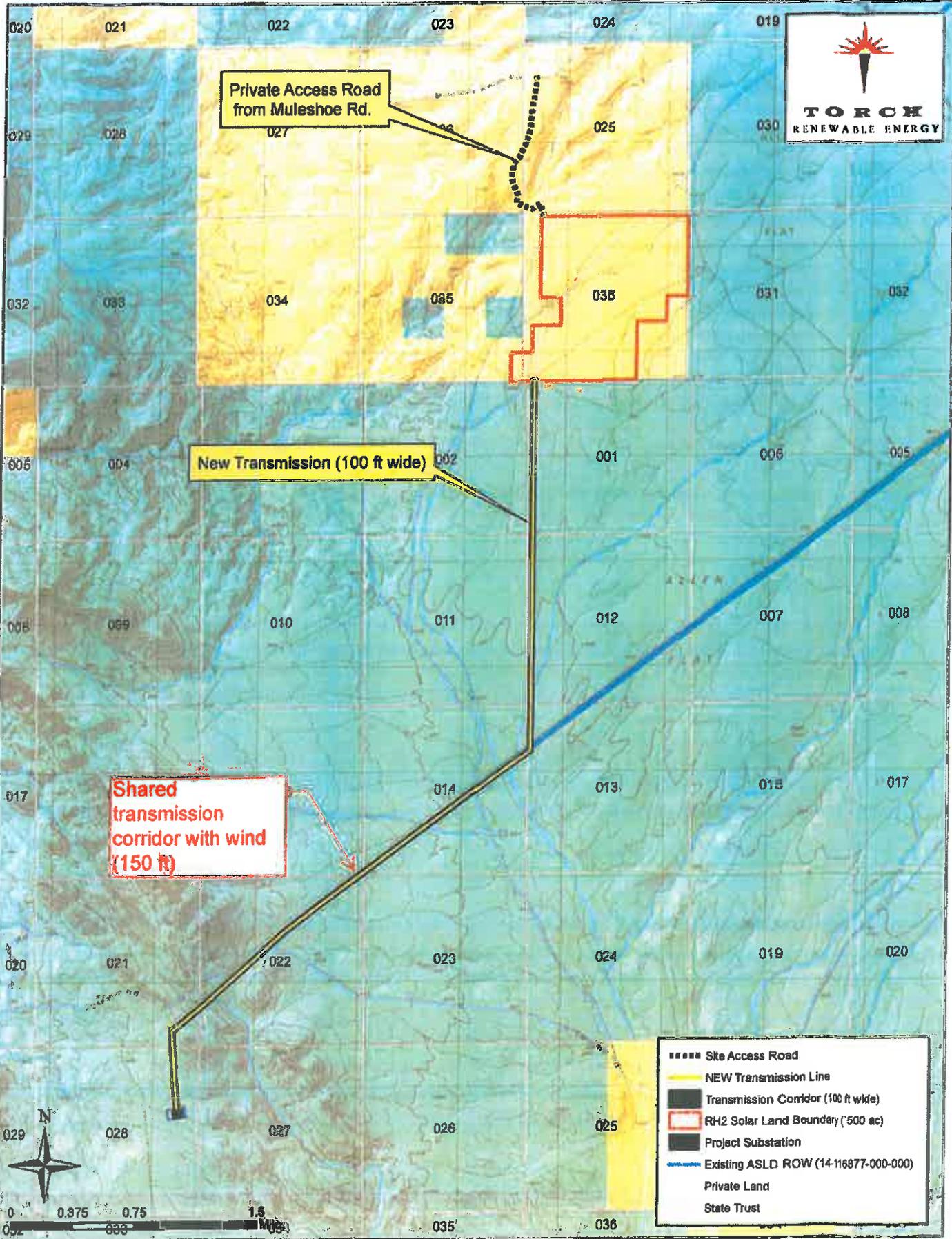
- **Main MV Switchgear:** The units will have all necessary grounding systems and interlocks to prevent erroneous switching that could compromise equipment reliability and efficiency or safety of personnel.
- **Auxiliary Service:** The Red Horse solar facility will provide all auxiliary services needed to run the project in case of failure.
- **Energy Metering Equipment:** The Red Horse solar facility will include necessary meters for measuring electric power produced and consumed.
- **Protection:** The Red Horse solar facility will incorporate all required protection systems to prevent damage to equipment and injury to personnel.
- **Civil Works:** The Red Horse solar facility civil works will include required drainage systems and trenches for buried electrical cable and cable ducts; perimeter road; fencing; site building; and inverter houses.
- **Meteorological Station:** Two meteorological stations will be installed to monitor incident radiation and meteorological conditions at the Red Horse solar facility.
- **Monitoring and Control System:** A Monitoring and Control (M&C) System will be installed to maximize PV plant efficiency and reliability. The Red Horse Hybrid Park solar facility M&C System will use networked IEDs (e.g., current and voltage sensors, irradiation sensors, energy counters, etc.) to perform distributed automation and protection functions, provide data sharing for monitoring, control and metering purposes and detect incipient failures or system malfunctions in order to prevent plant outages and maximize energy yield.

The Solar Facility will use the same substation and operations and maintenance facility as the Wind Farm.

The Solar Facility will create electricity with zero emissions and minimal water usage in an arid region. Wind and Photovoltaics (PV) have the lowest water consumption factors of any electricity generating technology. Water will be needed for occasional washing of panels. Water will either be trucked in or a well will be drilled. The identified location is remote and therefore has very limited view-shed consequences.

TRE has secured a long-term Power Purchase Agreement (PPA) with Tucson Electric Power Company (TEP). Construction is expected to begin in the 3rd Quarter of 2014 and commercial operations should commence by the middle of 2015.

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- Site Access Road
- NEW Transmission Line
- Transmission Corridor (100 ft wide)
- RH2 Solar Land Boundary (~500 ac)
- Project Substation
- Existing ASLD ROW (14-116877-000-000)
- Private Land
- State Trust



Red Horse Solar Facility - Conceptual Plan

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Existing Rd with limited improvements needed.

Overhead or underground (UG) transmission to the existing transmission corridor.

Overhead transmission to the substation.



- Site Access Road
- NEW Transmission Line
- Solar Facility Boundary (~650 ac)
- Winchester Substation
- Project Substation

Red Horse Solar Facility - Conceptual Plan

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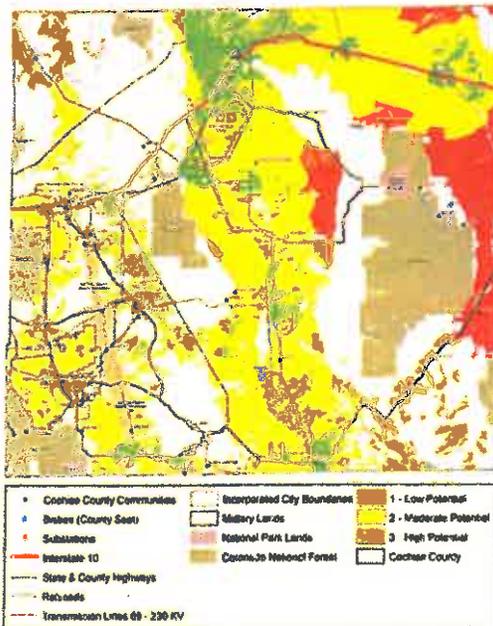
Renewable Energy Opportunity Analysis Executive Summary

Solar Facility Siting Analysis for Cochise County, Arizona April, 2012



Cochise County Cooperative Extension's Land Use Planning and Sustainable Development Program was requested by Cochise County (the County) to conduct an analysis for solar energy development potential on the 6200 square miles within their jurisdiction. Since surpassing 125,000 in population per the 2010 Census, the County is now required by state statute (ARS §11-804.B.4) to amend their comprehensive plan with an Energy Element. It is the hope that this analysis will aid the County in developing sound land use policies for siting renewable energy facilities. The analysis, using the Renewable Energy Opportunity Analysis (REOA) model, was conducted to identify areas of low, moderate and high potential for small and large solar projects throughout the county. While many factors go into siting solar facilities, REOA assesses fundamental physical and economic opportunities and constraints on any given piece of land, such as slope, aspect, proximity to transmission lines, sub-stations, roads, and others. The analysis was divided into two goals – the suitability for small solar utility-scale projects of 5 megawatts (MW) or less, and the suitability for large solar utility-scale projects greater than 5 MW. The results indicate a total of 53,461 acres as *high potential* (dark green areas) for large projects and 343,879 acres for smaller projects. Much greater acreages were found to have *moderate potential* (yellow areas) for both small and large scale projects. The resulting outputs should help renewable energy developers and the County begin the more complex task of focusing on specific regions of the County and conducting feasibility studies. This report explains the methodology behind the analysis, summarizes the results, and provides some direction for the use of the outputs.

**Small Scale Solar Facility Opportunity Maps
Less Than 5 Megawatts**



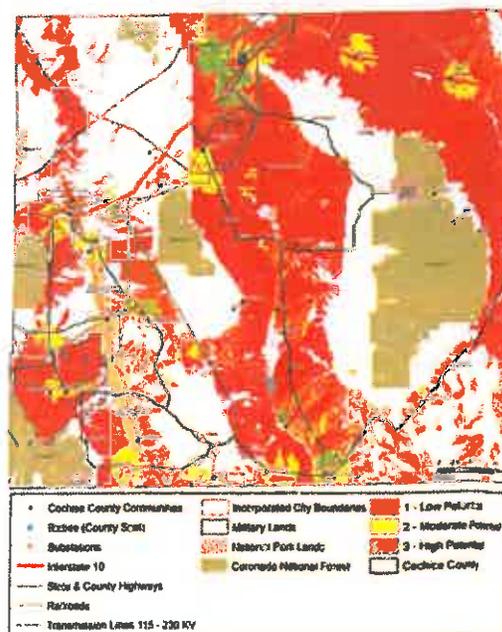
Small Scale Solar Potential Acreage
Low Potential - 251,281 acres
Moderate Potential - 1,166,982 acres
High Potential - 343,879 acres

This is not a survey project. The information is derived from various non-survey data and source. CEI emphasizes that the University does not assume any liability for damages resulting from errors, omissions, or use of the information. Users of this map are advised to be aware of the traditional disclaimer. Data sources: aerial, GIS, topographic, etc.

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Drexel Building, 2nd Floor
Cochise County Cooperative Extension
1100 N. 7th Street, Suite 200
Cochise County, AZ 85601



**Large Scale Solar Facility Opportunity Maps
Greater Than 5 Megawatts**



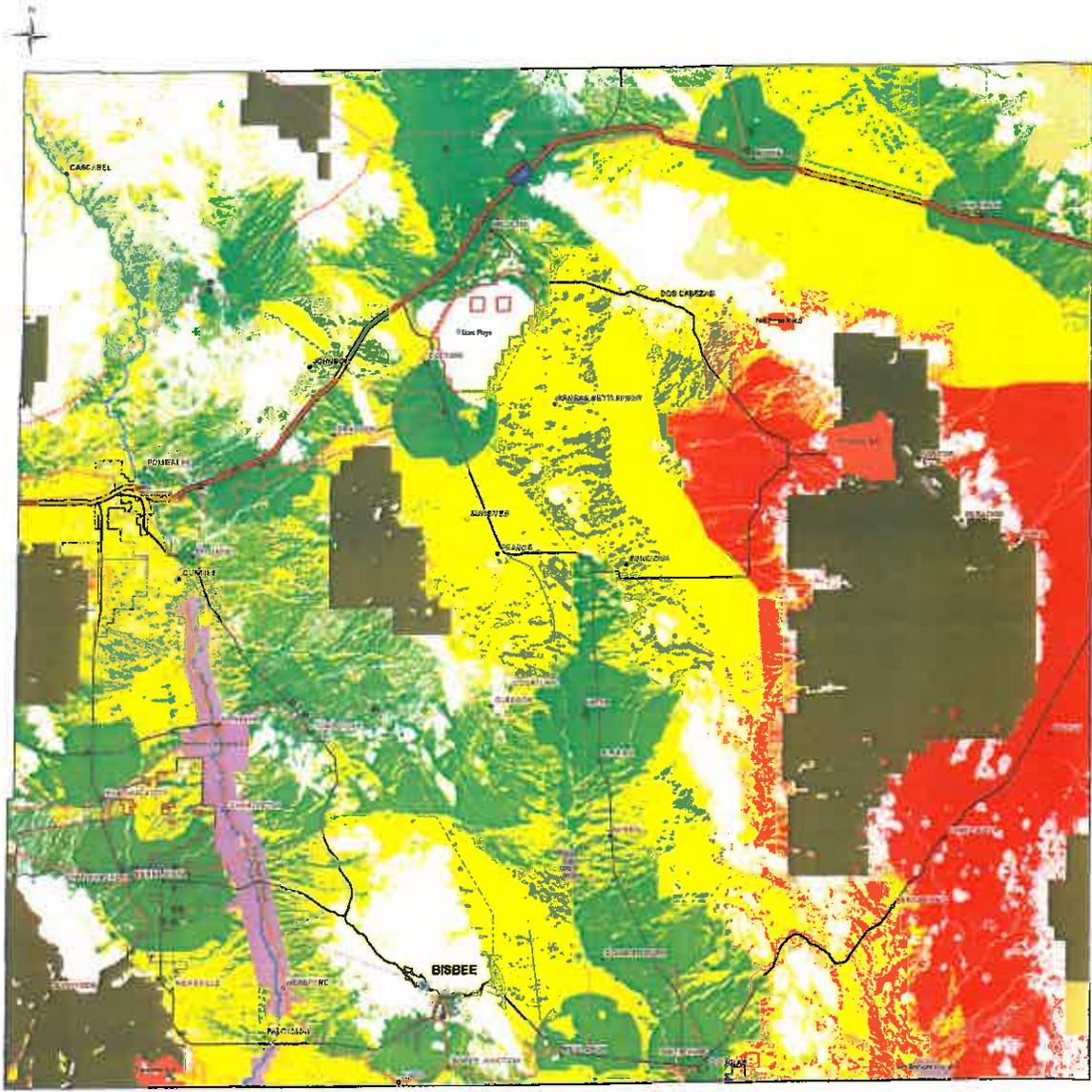
Large Scale Solar Potential Acreage
Low Potential - 3,335,454 acres
Moderate Potential - 492,900 acres
High Potential - 53,461 acres

This is not a survey project. The information is derived from various non-survey data and source. CEI emphasizes that the University does not assume any liability for damages resulting from errors, omissions, or use of the information. Users of this map are advised to be aware of the traditional disclaimer. Data sources: aerial, GIS, topographic, etc.

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Cochise County, Arizona: Opportunities for Small-Scale Solar Operations of 5 Megawatts or Less



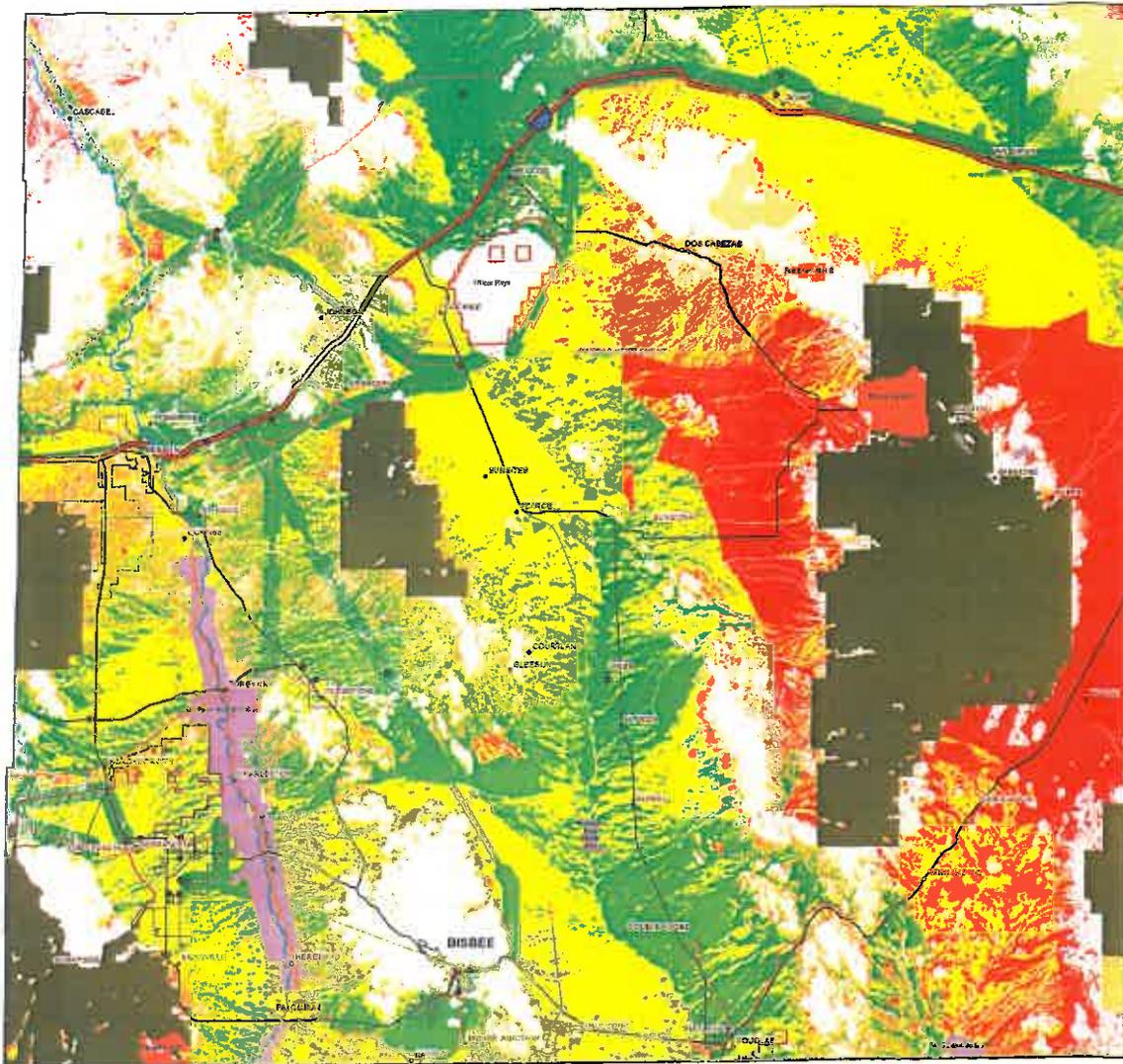
| | | |
|----------------------------------|----------------------|----------------------|
| ★ County Seat | □ Cochise County | ■ Low Potential |
| • Community | □ Urban | ■ Moderate Potential |
| • Substation | □ Military Land | ■ High Potential |
| == Interstate 10 | ■ Coronado N.F. | |
| — U.S., State or County Highway | ■ Conservation Area | |
| —+— Railroad | ■ National Park Land | |
| — River | ■ Wilderness | |
| — Transmission Line 10kV - 500kV | | |

Small-Scale Solar Potential:
 Low Potential - 335,339 acres
 Moderate Potential - 1,256,873 acres
 High Potential - 771,579 acres

This is not a survey product. The information is derived from various national, state and county GIS databases. The University does not assume any liability for damages arising from errors, omissions, or use of this information. Users of this map are advised to be aware of the locational accuracy, data collector rates, compilation methods, and cartographic format.

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Cochise County, Arizona: Opportunities for Large-Scale Solar Operations Greater Than 5 Megawatts



0 2.5 5 10 Miles

| | | |
|-----------------------------------|----------------------|----------------------|
| ★ County Seat | ▭ Cochise County | ▭ Low Potential |
| • Community | ▭ Urban | ▭ Moderate Potential |
| • Substation | ▭ Military Land | ▭ High Potential |
| ▬ Interstate 10 | ▭ Coronado N.F. | |
| ▬ U.S., State or County Highway | ▭ Conservation Area | |
| ▬ Railroad | ▭ National Park Land | |
| ▬ River | ▭ Wilderness | |
| ▬ Transmission Line 115kV - 500kV | | |

Large-Scale Solar Potential:

Low Potential - 382,486 acres
Moderate Potential - 1,340,067 acres
High Potential - 641,238 acres

This is not a survey product. The information is derived from various national, state and county GIS databases. The University does not assume any liability for damages arising from errors, omissions, or use of this information. Users of this map are advised to be aware of the locational accuracy, data collector dates, compilation methods, and cartographic format.

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Biological Evaluation of the Red Horse Solar Energy Facility, Cochise County, Arizona

Prepared for

Torch Renewable Energy, LLC

For submittal to

Cochise County

Prepared by

SWCA Environmental Consultants

March 2014

**BIOLOGICAL EVALUATION OF THE RED HORSE SOLAR ENERGY
FACILITY, COCHISE COUNTY, ARIZONA**

Prepared for

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For submittal to

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SWCA Project No. 25191

March 2014

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EXECUTIVE SUMMARY

This biological evaluation (BE) has been prepared as part of an effort to comply with the Endangered Species Act of 1973, as amended (ESA), for the Red Horse Solar Energy Facility in Sections 11, 12, 13, and 36, Township 14 South, Range 21 East, and Section 36, Township 13 South, Range 21 East, Gila and Salt River Baseline and Meridian. This project evaluation covers 76.0 acres of Arizona State Trust and 609.2 acres of private land, referred to as the Red Horse Solar Energy Facility, located in Cochise County, Arizona (the project area). The objectives of this BE are to 1) describe vegetation communities in the project area; and 2) evaluate habitat suitability for both federally listed and special-status species.

Eighteen federally listed species are addressed in this BE, 11 of which are listed by the U.S. Fish and Wildlife Service as threatened, endangered, or non-essential, experimental population species and are therefore protected under the authority of the ESA. The remaining seven species are listed by the U.S. Fish and Wildlife Service as candidate or proposed threatened and currently receive no statutory protection under the ESA.

At this time, of the 18 species listed for Cochise County by USFWS only one species, the federally endangered lesser long-nosed bat (*Leptonycteris curasoae yerbabuena*) listed under the ESA, could potentially occur in the project area. It is likely that the proposed project would not affect the lesser long-nosed bat and would have minimal impact on its habitat. For the remaining 17 species, the project area is clearly beyond the known geographic or elevational range of these species, or it does not contain vegetation or landscape features known to support these species, or both.

1.0 INTRODUCTION

SWCA Environmental Consultants (SWCA) was contracted by Torch Renewable Energy, LLC (TRE) to complete a biological evaluation (BE) for the Red Horse Solar Energy Facility near Willcox, Cochise County, Arizona (Figure 1). The project area is located in Sections 11, 12, 13, and 36, Township 14 South, Range 21 East, and Section 36, Township 13 South, Range 21 East, Gila and Salt River Baseline and Meridian. The BE for this project addresses habitat suitability for both federally listed and special-status species and the likelihood of occurrence within the proposed project area, which will include up to 609.2 acres for the solar panel facility (located on private land) and 76 acres for the generation tie-line (located on Arizona State Land Department-administered land). The timeline for this BE includes construction and operation of the project. Construction will commence in approximately August 2014, and will last for approximately 30 days. Operation is scheduled for at least 20 years, as TRE has a 20-year power purchase agreement with Tucson Electric Power. This BE describes both the direct and indirect effects on the federally listed and special-status species from the disturbance and operation conditions that will result from development of single-access tracker photovoltaic panels, access roads, operations and maintenance facilities, and all other associated infrastructure.

The purpose of this BE is to address compliance with the Endangered Species Act of 1973, as amended (ESA); this BE was prepared for Cochise County by a request from TRE.

The scope of work for this BE includes:

- review of the U.S. Fish and Wildlife Service (USFWS) species list for Cochise County;
- review of the Arizona Game and Fish Department (AGFD) online occurrence records for special-status species near the project area;
- field reconnaissance of the property; and,
- potential for occurrence for both federally listed and special-status species within the project area.

The ESA specifically prohibits the “take” of a listed species. Take is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to engage in any such conduct.” Most bird species also receive legal protection under the federal Migratory Bird Treaty Act (16 United States Code 703–712). Only threatened or endangered species listed by the USFWS are afforded protection under the ESA.

2.0 METHODS

An SWCA biologist conducted a field reconnaissance of the project area on March 19, 2014. A shape file of the project area, provided by TRE, and loaded onto a Trimble global positioning system (GPS) unit, along with a KMZ file loaded into Google Earth, were used for general orientation and to locate project boundaries. The field reconnaissance consisted of a pedestrian survey of the entire project area to evaluate vegetation and landscape features considered important to the potential occurrence of federally listed and special-status plant and animal species.

Species were identified using the USFWS IPaC (Information, Planning and Conservation System) website. A shape file of the project area was uploaded to the online mapping tool and a list of federally protected species was generated for the specified project location (see Figure 1). The special-status species evaluated in this BE were based on the list of endangered, threatened, candidate, proposed

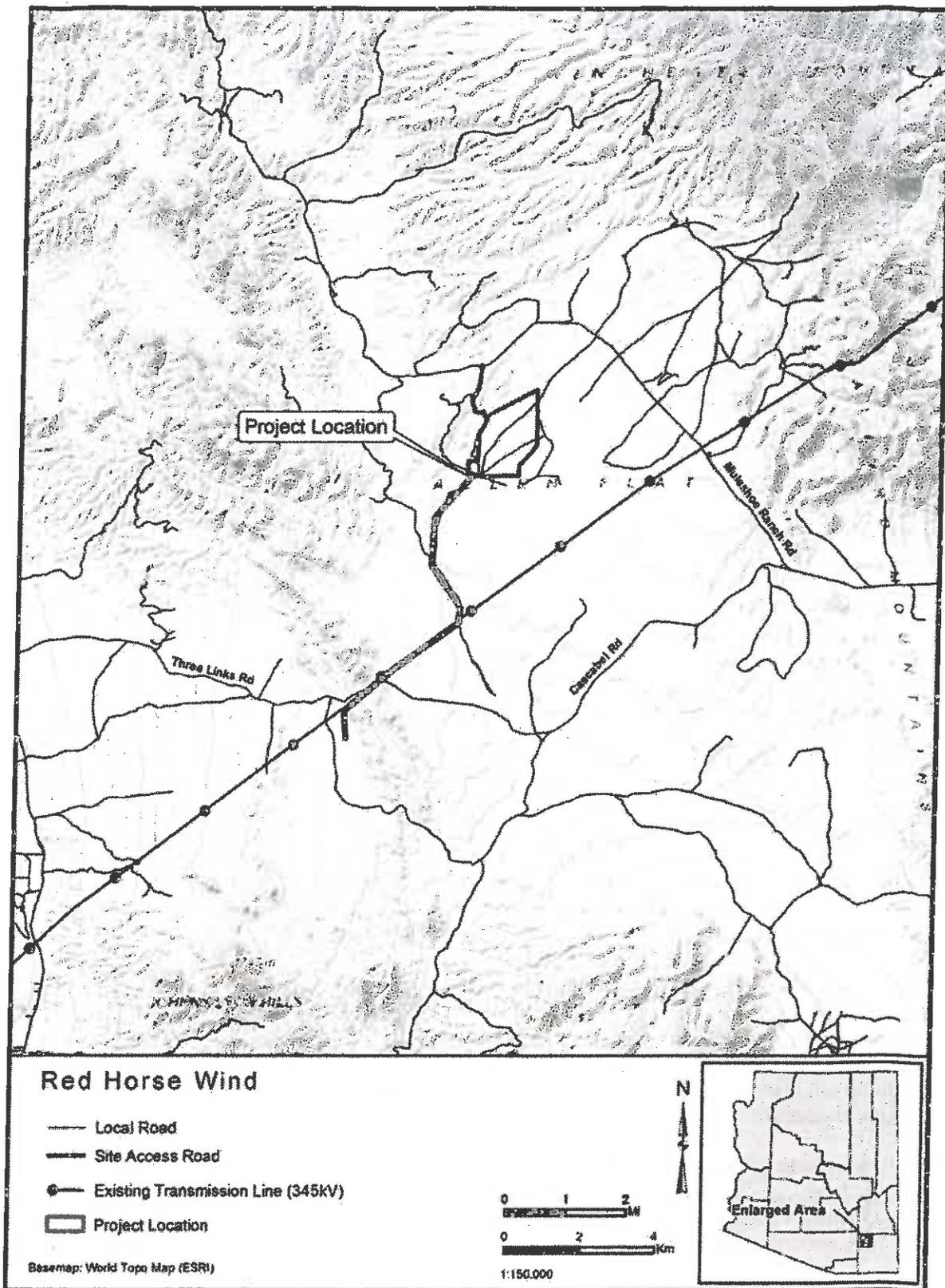


Figure 1. Project location.

threatened, and non-essential, experimental population species for Cochise County, Arizona, available at the USFWS website (USFWS 2014).

Vegetation was classified to the community level according to the map "Biotic Communities of the Southwest" by Brown (1994).

The AGFD maintains a statewide database, the Heritage Data Management System (HDMS), which tracks records for federally listed species and other State-listed species of special concern. SWCA accessed the HDMS through the Arizona Heritage Geographic Information System (AZHGIS) online environmental review tool to determine whether any federally proposed or designated critical habitat or State-listed special-status species have been documented in or near the project area (AZHGIS 2014).

The potential for occurrence on the property of the species addressed in this BE was based on 1) documented records; 2) existing information on distribution; and 3) qualitative comparisons of the habitat requirements of each species with vegetation communities or landscape features in the project area.¹ Possible impacts to these species were evaluated based on reasonably foreseeable project-related activities.

The potential for occurrence of each species was summarized according to the categories listed below. Because not all species are accommodated precisely by a given category (i.e., category definitions may be too restrictive), an expanded rationale for each category assignment is provided. Potential for occurrence categories are as follows:

- *Known to occur*—the species has been documented in the project area by a reliable observer.
- *May occur*—the project area is within the species' currently known range, and vegetation communities, soils, etc., resemble those known to be used by the species.
- *Unlikely to occur*—the project area is within the species' currently known range, but vegetation communities, soils, etc., do not resemble those known to be used by the species, or the project area is clearly outside the species' currently known range.

Those species listed by the USFWS were assigned to one of three categories of possible effect, following USFWS recommendations. The effects determinations recommended by USFWS are as follows:

- *May affect, is likely to adversely affect*—the proposed project is likely to adversely affect a species if 1) the species occurs or may occur in the project site; and 2) any adverse effect on listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not discountable, insignificant, or beneficial. In the event that the overall effect of the proposed action is beneficial to the listed species but also is likely to cause some adverse effects, the proposed action "is likely to adversely affect" the listed species.
- *May affect, is not likely to adversely affect*—the project is not likely to adversely affect a species if 1) the species may occur but its presence has not been documented and/or surveys following approved protocol have been conducted with negative results; and/or 2) project activity effects on a listed species are expected to be discountable, insignificant, or completely beneficial.

¹ We agree with Hall et al. (1997) that habitat is organism specific and thus not synonymous with vegetation community. However, we have refined their definition to read as follows: habitat is an area in which some members of a species regularly occur continuously or seasonally. In the field, habitat is operationally defined by the presence or absence of a species. Areas that appear suitable for a species but that have not been surveyed are considered possible habitat. We avoid using the term *potential* with respect to habitat because potential is defined as 'capable of becoming but not yet in existence'; *possible*, on the other hand, is defined as 'of uncertain likelihood'. We also avoid using the terms "unoccupied habitat" or "suitable, but unoccupied habitat," which represent a contradiction in terms.

Beneficial effects are contemporaneous positive effects without any adverse effects on the species. **Insignificant effects** relate to the size of the impact and should never reach the scale where take occurs. **Discountable effects** are those extremely unlikely to occur. Based on best judgment, a person would not 1) be able to meaningfully measure, detect, or evaluate insignificant effects; or 2) expect discountable effects to occur.

- *No effect*—the project will have no effect on a species if 1) it has no likelihood of effect on a listed species or its designated critical habitat (including effects that may be beneficial, insignificant, or discountable); or 2) the species' habitat does not occur in the project site.

3.0 RESULTS

3.1 Ecological Overview

The project area is approximately 15 miles (24 kilometers [km]) west of Willcox within the foothills of the Winchester Mountains' western side. The project area lies on a gently northeast-southwest-sloping grassland with relatively well-spaced narrow, shallow valleys that collect stormwater runoff. The project area's topography consists primarily of moderately undulating shoulders made of quaternary deposits. Elevations slope northeast to southwest between 4,560 and 4,795 feet above mean sea level (amsl). The project area is located in the upper reaches of the Hot Springs Canyon, Paige Creek, and Tres Alamos Wash subwatersheds (Hydrologic Unit Codes 1505020301, 1505020302, and 1505020208). Drainage in these watersheds is morphologically connected to the San Pedro River, which is located 10 miles (16 km) west of the project area. A stock tank (with an area of 3 acres) is located within the project area and is classified by the USFWS as a freshwater pond. However, there is little to no aquatic vegetation growth, and it does not support trees or fish and is not likely to support ecologically sensitive aquatic species.

3.2 Vegetation

The vegetation consists of Semidesert Grassland biotic community as defined by Brown (1994). The site reconnaissance showed that one dominant vegetation type occurs within the project area proper: moderately to heavily disturbed, human-disturbed grasslands. Common grass species include grama grass (*Bouteloua* spp.), muhly (*Muhlenbergia* spp.), and galleta grass (*Pleuraphis* spp.). Other common species include banana yucca (*Yucca baccata*), velvet mesquite (*Prosopis velutina*), rabbitbrush (*Chrysothamnus* spp.), and snakeweed (*Gutierrezia sarothrae*). Non-native vegetation within the project area includes prickly Russian thistle (*Salsola tragus*), walkingstick cactus (*Cylindropuntia spinosior*), sotol (*Dasyilirion wheeleri*), prickly pear (*Opuntia* sp.), and beargrass (*Nolina* sp.). Russian thistle occurs infrequently and only in disturbed areas, such as the stock tank and roads within the project area.

3.3 Wetlands and Riparian Areas

Using the digital USFWS National Wetlands Inventory online tool (USFWS 2013a), a human-made stock tank located within the project area was identified as a "freshwater pond." No wetlands or riparian areas were observed during the site reconnaissance or via the USFWS National Wetlands Inventory online tool (USFWS 2013a). The stock tank is subject to local precipitation, landowner manipulation, is ephemeral, and does not support aquatic vegetation/trees, or fish.

3.4 Species Evaluation

Of the 18 species listed for Cochise County by USFWS only one—the lesser long-nosed bat (*Leptonycteris curasoae yerbabuena*)—are likely to occur in the project area. For the remaining 17 species, the project area is clearly beyond the known geographic or elevational range of these species, or it does not contain vegetation or landscape features known to support these species, or both. Habitat requirements, potential for occurrence, and possible effects on these 16 species are summarized in Table 1, and the lesser long-nosed bat and Sprague’s pipit are discussed in further detail after the table. The project area does not occur in or near any federally proposed or designated critical habitat. The USFWS species list, generated using the IPaC mapping tool, is provided in Appendix A.

According to AZHGIS, there are three occurrence records for non-ESA protected species within 5 miles (8 km) of the project area (AZHGIS 2014). These records include the giant spotted whiptail (*Aspidoscelis stictogramma*), needle-spined pineapple cactus (*Echinomastus erectocentrus* var. *erectocentrus*), and lowland leopard frog (*Lithobates yavapaiensis*). Since these species are not afforded protection under the ESA, they are not addressed in this BE; none of the species are likely to occur in the project area. The AZHGIS search results are included in Appendix B.

AZHGIS results indicate the presence of a wildlife corridor within 5 miles (8 km) of the project area. The project area is located within Wildlife Linkage 88 (Galliuero-Winchester-Dragoons Linkage Area), which is also referred to as the Santa Catalina/Rincon – Galiuro Linkage Design. Wildlife species identified to use this linkage corridor include black bear (*Ursus americanus*), Chiricahua leopard frog (*Rana chiricahuensis*), grassland birds, javelina (*Tayassu tajacu*), Mexican long-tongued bat (*Choeronycteris mexicana*), mountain lion (*Felis concolor*), mule deer (*Odocoileus hemionus*), ornate box turtle (*Terrapene ornate*), Plains leopard frog (*Rana blairi*), and Texas horned lizard (*Phrynosoma cornutum*). However, development and operation of the proposed project would not likely affect the breeding or movements of any of these animals over the long term, or fragment any of these species’ habitats.

Table 1. Federally Listed Species Potentially Occurring in Cochise County, Arizona

| Common Name (Species Name) | Status* | Range or Habitat Requirements** | Potential for Occurrence in Project Area | Determination of Effect |
|--|------------|--|--|-------------------------|
| Arizona treefrog (<i>Hyla wrightorum</i> [Huachuca/Canelo distinct population segment]) | USFWS C | This treefrog mainly occurs within riparian communities in coniferous forests at elevations between 3,000 and 9,500 feet amsl (although it is typically reported above 6,000 feet amsl). In Arizona, this frog is known from fewer than 20 localities in the Huachuca Mountains and adjacent Canelo Hills, where it is found in Madrean oak woodland, savannah, pine-oak woodlands, and mixed-conifer forests. | Unlikely to occur. The project area is distant from known populations of this species. | No effect. |

Table 1. Federally Listed Species Potentially Occurring in Cochise County, Arizona (Continued)

| Common Name (Species Name) | Status* | Range or Habitat Requirements** | Potential for Occurrence in Project Area | Determination of Effect |
|--|------------|--|---|----------------------------|
| Chiricahua leopard frog (<i>Lithobates chiricahuensis</i>) | USFWS T | Restricted to springs, livestock tanks, and streams in the upper portions of watersheds at elevations between 3,281 and 8,890 feet amsl in central, east-central, and southeastern Arizona. Populations in central and east-central Arizona are disjunct from those in southeastern Arizona and may be distinct species. | Unlikely to occur. There are no permanent aquatic habitats or designated critical habitat for the species in the project area. Aquatic environment is not viable for supporting the species. Nearest current and past populations occur in the Galiuro and Dragoon Mountains, which are approximately 12 miles (19 km) north and 7 miles (11 km) south respectively, from the project area; thus, it is unlikely that the species would disperse from those populations through the project area. | No effect. |
| Desert pupfish (<i>Cyprinodon macularius</i>) | USFWS E | Found in shallow waters of desert springs, small streams, and marshes at elevations below 5,000 feet amsl. One natural population still occurs in Quitobaquito Spring and Quitobaquito Pond in Pima County, and reintroductions have been made in Pima, Pinal, Maricopa, Graham, Cochise, La Paz, and Yavapai Counties. | Unlikely to occur. Aquatic environment is not viable for supporting species. Project area is distant from known populations of species. | No effect. |
| Desert tortoise, Sonoran population (<i>Gopherus morafkai</i>) | USFWS C | Occurs on primarily rocky, and often steep, hillsides and bajadas of Mohave and Sonoran deserts scrub, typically at elevations below 7,800 feet amsl. May occur, but is less likely to occur, in desert grassland, juniper woodland, and interior chaparral habitats and even pine communities. | Unlikely to occur. Project area is at the eastern extreme of its range and contains grasslands, which are generally not suitable for the species; thus, unlikely to occur. | No effect. |
| Gila chub (<i>Gila intermedia</i>) | USFWS E | Normally found in smaller headwater streams, cienegas, and springs or marshes of the Gila River Basin at elevations between 2,720 and 5,420 feet amsl. | Unlikely to occur. There are no perennial aquatic habitats in the project area. | No effect. |
| Gila topminnow (<i>Poeciliopsis occidentalis</i>) | USFWS E | Occurs in small streams, springs, and cienegas at elevations below 4,500 feet amsl, primarily in shallow areas with aquatic vegetation and debris for cover. In Arizona, most of the remaining native populations are in the Santa Cruz River system. | Unlikely to occur. There are no perennial aquatic habitats in the project area. | No effect. |
| Huachuca springsnail (<i>Prygulopsis thompsoni</i>) | USFWS C | This species occurs in freshwater springs and cienegas, in marshy areas characterized by plains grassland, oak and pine-oak woodlands, and coniferous forests. | Unlikely to occur. There are no perennial aquatic habitats in the project area. | No effect. |

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Table 1. Federally Listed Species Potentially Occurring in Cochise County, Arizona (Continued)

| Common Name (Species Name) | Status* | Range or Habitat Requirements** | Potential for Occurrence in Project Area | Determination of Effect |
|--|----------------------|---|---|----------------------------|
| Jaguar (<i>Panthera onca</i>) | USFWS E | In Arizona, individuals have been found in Sonoran desertscrub through subalpine conifer forest. Photographs documented two jaguars, one in the Baboquivari Mountains (Pima County) and one in the Peloncillo Mountains (Cochise County) in 1996. Another individual was documented west of Nogales in 2001 and 2003, and southwest of Tucson in 2009. Jaguars were probably closely associated with rivers and cienegas (marshes), once prominent in southern Arizona. | Unlikely to occur. This species is extremely rare and there is no critical habitat within or adjacent to the project area. | No effect. |
| Lesser long-nosed bat (<i>Leptonycteris curasoae yerbabuena</i>) | USFWS E | See Section 3.4.1 below. | See Section 3.4.1 below. | See Section 3.4.1 below. |
| Loach minnow (<i>Tiaroga cobitis</i>) | USFWS E | Turbulent, rocky riffles of mainstream rivers and tributaries at or less than 7,220 feet in elevation. Habitat that is occupied is relatively shallow, has a moderate to swift current, with gravel to cobble-dominated substrates. | Unlikely to occur. There are no perennial aquatic habitats in the project area. | No effect. |
| Mexican spotted owl (<i>Strix occidentalis lucida</i>) | USFWS T | Found in mature montane forests and woodlands and steep, shady, wooded canyons. Can also be found in mixed-conifer and pine-oak vegetation types. Generally nests in older forests of mixed conifers or ponderosa pine (<i>Pinus ponderosa</i>)–Gambel oak (<i>Quercus gambelii</i>). Nests in live trees on natural platforms (e.g., dwarf mistletoe [<i>Arceuthobium</i> spp.] brooms), snags, and canyon walls at elevations between 4,100 and 9,000 feet amsl. | Unlikely to occur. There are no mature montane forests or steep, shady wooded canyons or appropriate vegetation types within the project area, and the project area is well below the elevation range of the species. | No effect. |
| Northern aplomado falcon (<i>Flaco femoralis septentrionalis</i>) | USFWS EEPN, XN | Habitat is variable throughout the species range and includes palm and oak savannahs, various desert grassland associations, and open pine woodlands. Within these variations, the essential habitat elements appear to be open terrain with scattered trees, relatively low ground cover, an abundance of insects and small to medium-sized birds, and a supply of nesting sites. | Unlikely to occur. Out of the range of experimental population. | No effect. |

Table 1. Federally Listed Species Potentially Occurring in Cochise County, Arizona (Continued)

| Common Name (Species Name) | Status* | Range or Habitat Requirements** | Potential for Occurrence in Project Area | Determination of Effect |
|--|-------------|--|--|----------------------------|
| Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>) | USFWS PT | This species is most abundant at elevations between 3,000 and 5,000 feet amsl in densely vegetated habitat surrounding cienegas, streams, and stock tanks, in or near water along streams in valley floors and generally open areas but not in steep mountain canyon stream habitat (Rosen and Schwalbe 1988). Considered extant in fragmented populations within the middle to upper Verde River drainage, middle to lower Tonto Creek, Cienega Creek, and a small number of isolated wetland habitats elsewhere in southeastern Arizona. | Unlikely to occur. There are no permanent aquatic or semi-aquatic habitats in the project area that support the habitat or food sources necessary for this species. Dispersal unlikely from nearest population in San Pedro River. | No effect. |
| Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>) | USFWS E | Found in dense riparian habitats along streams, rivers, and other wetlands where cottonwood (<i>Populus</i> spp.), willow (<i>Salix</i> spp.), boxelder (<i>Acer negundo</i>), saltcedar (<i>Tamarix</i> spp.), Russian olive (<i>Elaeagnus angustifolia</i>), buttonbush (<i>Cephalanthus</i> spp.), and arrowweed (<i>Pluchea sericea</i>) are present. Nests are found in thickets of trees and shrubs, primarily those that are 13 to 23 feet (4–7 meters) tall, among dense, homogeneous foliage. Habitat occurs at elevations below 8,500 feet amsl. | Unlikely to occur. There are no dense riparian habitats along streams, rivers, and other wetlands in the project area. The closest habitat is 10 miles (16 km) west along the San Pedro River. | No effect. |
| Spikedace (<i>Meda fulgida</i>) | USFWS E | Found in moving waters less than 3 feet (1 meter) in depth. Present range includes Aravaipa Creek, a tributary of the San Pedro River. | Unlikely to occur. There are no perennial aquatic habitats in the project area. | No effect. |
| Sprague's pipit (<i>Anthus spragueii</i>) | USFWS C | Winter range includes Arizona. Occurs in open grassland habitats | Unlikely to occur. Winter habitat not present in the project area. | No effect. |
| Wright's marsh thistle (<i>Cirsium wrightii</i>) | USFWS C | Wet, alkaline soils in spring seeps and marshy edges of streams and ponds between 3,450 and 8,500 feet amsl. Apparently extirpated from Arizona; however, some populations still exist in New Mexico. | Unlikely to occur. There are no springs/seeps, marshes, streams, or ponds in the project area. | No effect. |

Table 1. Federally Listed Species Potentially Occurring in Cochise County, Arizona (Continued)

| Common Name (Species Name) | Status* | Range or Habitat Requirements** | Potential for Occurrence in Project Area | Determination of Effect |
|--|-------------|---|---|----------------------------|
| Yellow-billed cuckoo (<i>Coccyzus americanus</i> [Western U.S. distinct population segment]) | USFWS PT | Typically found in riparian woodland vegetation (cottonwood, willow, or saltcedar) at elevations below 6,600 feet amsl. Dense understory foliage appears to be an important factor in nest site selection. | Unlikely to occur. There are no riparian woodland habitats in the project area. The closest habitat is 10 miles (16 km) west along the San Pedro River. | No effect. |

*** USFWS Status Definitions**

C = Candidate. Candidate species are those for which USFWS has sufficient information on biological vulnerability and threats to support proposals to list as endangered or threatened under the ESA. However, proposed rules have not yet been issued because such actions are precluded at present by other listing activity.

E = Endangered. Endangered species are those in imminent jeopardy of extinction. The ESA specifically prohibits the take of a species listed as endangered. Take is defined by the ESA as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to engage in any such conduct.

PT = Proposed Threatened. Proposed Threatened species are those that are not currently federally protected under the ESA but are eligible

to be listed as Threatened under the ESA.

T = Threatened. Threatened species are those in imminent jeopardy of becoming endangered. The ESA prohibits the take of a species listed as threatened under Section 4d of the ESA. Take is defined by the ESA as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to engage in any such conduct.

EXPN, XN = experimental non-essential population. A species listed as experimental and non-essential. Experimental, non-essential populations of endangered species (e.g., red wolf) are treated as threatened species on public land, for consultation purposes, and as species proposed for listing on private land.

** Range or habitat information is from HDMS (2014); USFWS Arizona Ecological Services Field Office (USFWS 2014); *Arizona Rare Plant Field Guide* (Arizona Rare Plant Committee n.d.); and Corman and Wise-Gervais (2005).

3.4.1 Lesser Long-Nosed Bat

BIOLOGY

Many features of lesser long-nosed bat population biology have been described by Fleming and Nassar (2002). The lesser long-nosed bat, a phyllostomid species, is one of two species of nectar-feeding bats that migrate from central or southern Mexico into northern Mexico and southern Arizona seasonally. Each spring, tens of thousands of lesser long-nosed bat adult and yearling females form maternity colonies in several caves and mines in western Sonora and southwestern Arizona. Females give birth to a single young beginning in mid-May, with young nursed for 4 to 5 weeks. Maternity roosts are occupied from late March–early April through late July–early August. At least three such colonies containing a total of 20,000 to 40,000 bats currently exist in southwestern Arizona (Fleming et al. 2003). Until it was commercially developed in the 1960s, the species also used Colossal Cave in the Rincon Mountains east of Tucson as a maternity roost (Cockrum and Petryszyn 1991). Each of these maternity colonies occurs in desertscrub habitat near large stands of columnar cacti, principally saguaro (*Carnegiea gigantea*) and organ pipe (*Stenocereus thurberi*), whose flowers and fruit provide the bulk of the bats' diet during the maternity period. No maternity roosts are currently known to occur in Arizona outside of saguaro/organ pipe-desertscrub habitat.

Beginning in July after pups are weaned and cactus resources are depleted, maternity roosts in Arizona disband and adults and juveniles move into a rather extensive series of “transitory” roosts (caves and abandoned mines) scattered throughout the uplands of south-central and southeastern Arizona. There they feed primarily at flowers of *Agave palmeri*. At this time of the year, at least 70,000 lesser long-nosed bats reside in Arizona (Fleming et al. 2003; see also subsequent annual surveys by AGFD). The species also feeds on sugar water from hummingbird feeders in urban areas throughout southern Arizona between mid-August and mid-October. This feeding behavior has become widespread in Tucson and surrounding towns, beginning in the mid-2000s (Fleming 2012). Bats continue to occupy “transitory” roosts until late September to mid-October, before migrating back to their winter roosts in central or southern Mexico.

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Several radiotelemetry studies have documented the foraging behavior of the species (e.g., Buecher and Sidener 2013; Horner et al. 1998; Ober et al. 2005). Results clearly indicate that 1) both adults and juveniles commute long distances (up to 25 miles [40 km] or more) from their day roosts to their feeding areas each night, 2) the species tends to return to the same feeding areas as long as they contain sufficient food resources, 3) the species sometimes forages in small groups (usually four to five bats in cactus country), 4) the feeding areas of groups or individuals overlap broadly (the species is not territorial), and 5) the species usually flies at speeds of 15 to 18 miles per hour—much faster than most insect-eating bats (reviewed in Ober et al. 2005). The height at which the species flies while commuting has not been carefully documented but it is likely that it exceeds 328 feet (100 meters) (personal observation, T. Fleming). While feeding at agaves, columnar cacti, and hummingbird feeders, these bats often fly a few meters above the ground. When feeding at agave flowers in southern Arizona, the species forages in large areas of up to 12,850 acres (20 square miles); the species also has similarly large feeding areas when visiting columnar cactus flowers in Sonora, Mexico (Horner et al. 1998; Ober et al. 2005). In southern Arizona, they apparently prefer to feed in grasslands rather than in oak/pinyon pine woodlands because of the higher agave densities there (Ober et al. 2005). Ober et al. (2005) also note that lesser long-nosed bat feeding areas contain higher densities of agaves than the general landscape. Finally, it is known that the density of flowering agaves varies substantially among years (Ober et al. 2005). The species responds to this variation not by changing the sizes of their feeding areas, which remain large regardless of agave flowering density, but by switching roosts to track changing resource densities.

In summary, tens of thousands of lesser long-nosed bats reside in southern Arizona between April and October. During the spring and early summer maternity period, the species is concentrated in southwestern Arizona where they feed on cactus flowers and fruit. They are more widely distributed in late summer and fall when they feed at agave flowers in upland habitats. These bats commute long distances from their day roosts to feed and forage over large areas once they arrive at their feeding areas. The foraging radius around roosts is thus likely to be 18 to 25 miles (30–40 km) or more; bats living in large roosts likely forage longer distances from their roosts than bats living in small roosts.

PALMER'S CENTURY PLANT SURVEYS—FORAGING RESOURCE SURVEYS

The majority of the project area has little to no *A. Palmeri* present, with some scattered individuals to the west and northwest of the project area and continuing beyond the project area to the west. Nectar and pollen from *A. palmeri* are one of the primary food resources for phyllostomid bat species, such as those in the genus *Leptonycteris* (USFWS 2013b). Although the degree to which phyllostomid bats use this particular area for foraging is unknown, suitable foraging habitat is present; however, it is primarily outside of the project area within the foothills and slopes of the Winchester Mountains.

POTENTIAL USE OF THE PROJECT AREA

Although it has not been determined whether lesser long-nosed bats use the project area, given the wide-ranging foraging behavior of the species and moderate density of agaves west of the proposed project area, it is possible that some individuals forage near the project area in late summer and early fall (August to mid-September).

DIRECT IMPACTS

Direct effects are caused by the action and occur at the same time and place as the action. Lesser long-nosed bats forage nocturnally in southern Arizona, on agave plants occurring in moderate densities, during the breeding season. Potential impact would be minimal since this species forages nocturnally when construction activity would not occur. Depending on the timing of construction, there could be no direct impact at all, due to the species' absence during the winter months.

INDIRECT EFFECTS

Indirect effects are caused by the action and occur later in time, but are reasonably certain to occur. Loss of some foraging habitat is likely, due to the development of the project area. However, the amount of *A. palmeri* lost in relation to the abundance of adjacent habitat would be minimal. As seen from both pedestrian surveys, as well as previous aerial surveys conducted in the vicinity of the project area, there is abundant habitat to support the foraging habits of the lesser long-nosed bat; however, as related to this project, the majority of habitat is west of the project area.

DETERMINATION OF EFFECT

SWCA's professional opinion is that the proposed Red Horse Solar Energy Facility project may impact individuals of lesser long-nosed bats through loss of some *A. palmeri* foraging habitat. However, the amount of loss, along with the proximity to alternative foraging habitat adjacent to the survey area, should not significantly impact lesser long-nosed bat populations. Project activity effects on lesser long-nosed bats are expected to be insignificant. Thus, this project may affect, but is not likely to adversely affect, the lesser long-nosed bat.

3.4.2 Pronghorn and Grassland

Although the pronghorn (*Antilocapra americana*) was not listed on any of the AGFD or USFWS special status species lists, AGFD identifies the species as a wildlife species of special concern and a Species of Economic and Recreational Importance due to the loss of habitat from agricultural and urban development, livestock fencing, shrub and tree encroachment, and highway construction. Development of the project would result in the permanent loss of potential pronghorn habitat, approximately 600 acres of moderately to heavily grazed grassland. However, this area is located on private land, which is bisected by numerous barbed wire fences which are known to impede movement of pronghorn; several out buildings and corrals are also located on the property. Therefore, habitat quality is relatively poor for pronghorn, and pronghorn use of this area is likely low.

4.0 LIMITATIONS AND WARRANTY

Within the limitations of schedule, budget, and scope of work, SWCA warrants that this study was conducted in accordance with accepted environmental science practices, including the technical guidelines, evaluation criteria, and species' listing status in effect at the time this evaluation was performed, as outlined in the species evaluation.

The results and conclusions of this report represent the best professional judgment of SWCA scientists and are based on information provided by the project proponent and on information obtained from agencies and other sources during the course of the study. No other warranty, expressed or implied, is made. This report should be reviewed by the appropriate regulatory agencies prior to any detailed site-planning or construction activities.

5.0 LITERATURE CITED

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APPENDIX A
USFWS Species List

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United States Department of the Interior



FISH AND WILDLIFE SERVICE
Arizona Ecological Services Field Office
2321 WEST ROYAL PALM ROAD, SUITE 103
PHOENIX, AZ 85021
PHONE: (602)242-0210 FAX: (602)242-2513
URL: www.fws.gov/southwest/es/arizona/
www.fws.gov/southwest/es/EndangeredSpecies/lists/

Consultation Tracking Number: 02EAAZ00-2014-SLI-0122

March 20, 2014

Project Name: red horse solar

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project.

To Whom It May Concern:

The Fish and Wildlife Service (Service) is providing this list under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). The list you have generated identifies threatened, endangered, proposed, and candidate species, and designated and proposed critical habitat, that *may* occur within one or more delineated United States Geological Survey 7.5 minute quadrangles with which your project polygon intersects. Each quadrangle covers, at minimum, 49 square miles. Please refer to the species information links found at http://www.fws.gov/southwest/es/arizona/Docs_Species.htm or <http://www.fws.gov/southwest/es/arizona/Documents/MiscDocs/AZSpeciesReference.pdf> for a quick reference, to determine if suitable habitat for the species on your list occurs in your project area.

The purpose of the Act is to provide a means whereby threatened and endangered species and the habitats upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of Federal trust resources and to determine whether projects may affect federally listed species and/or designated critical habitat. A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If the Federal action agency determines that listed species or critical habitat *may be affected* by

a federally funded, permitted or authorized activity, the agency must consult with us pursuant to 50 CFR 402. Note that a "may affect" determination includes effects that may not be adverse and that may be beneficial, insignificant, or discountable. An effect exists even if only one individual or habitat segment may be affected. The effects analysis should include the entire action area, which often extends well outside the project boundary or "footprint" (e.g., downstream). If the Federal action agency determines that the action may jeopardize a *proposed* species or adversely modify *proposed* critical habitat, the agency must enter into a section 7 conference. The agency may choose to confer with us on an action that may affect proposed species or critical habitat.

Candidate species are those for which there is sufficient information to support a proposal for listing. Although candidate species have no legal protection under the Act, we recommend that they be considered in the planning process in the event they become proposed or listed prior to project completion. More information on the regulations (50 CFR 402) and procedures for section 7 consultation, including the role of permit or license applicants, can be found in our Endangered Species Consultation Handbook at: <http://www.fws.gov/endangered/esg-library.pdf> TUC-GLOSS.PDF.

In addition to species listed under the Act, we advise you to consider species protected under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712) and the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668 *et seq.*). Both laws prohibit the take of covered species. The list of MBTA-protected birds is in 50 CFR 10.13 (for an alphabetical list see <http://www.fws.gov/migratorybirds/RegulationsPolicies/mbta/MBTANDX.HTML>). The Service's Division of Migratory Birds is the lead for consultations under these laws (Southwest Regional Office phone number, 505/248-7882). For more information regarding the MBTA, BGEPA, and permitting processes, please visit the following web site: <http://www.fws.gov/migratorybirds/mbpermits.html>. Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g. cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/southwest/es/arizona/CellTower.htm>

Although bald eagles (*Haliaeetus leucocephalus*) are no longer listed under the Act, they are protected under both the BGEPA and the MBTA. If a bald eagle nest occurs in or near the proposed project area, our office should be contacted. An evaluation must be performed to determine whether the project is likely to disturb nesting bald eagles (see <http://www.fws.gov/southeast/es/baldeagle/>) and the Division of Migratory Birds consulted if necessary. The National Bald Eagle Management Guidelines provide recommendations to minimize potential project impacts to bald eagles (see <http://www.fws.gov/midwest/eagle/pdf/NationalBaldEagleManagementGuidelines.pdf>).

Activities that involve streams and/or wetlands are regulated by the U.S. Army Corps of Engineers (Corps). We recommend that you contact the Corps to determine their interest in proposed projects in these areas. For activities within a National Wildlife Refuge, we recommend that you contact refuge staff for specific information about refuge resources.

If your action is on Indian land or has implications for off-reservation tribal interests, we encourage you to contact the tribe(s) and the Bureau of Indian Affairs (BIA) to discuss potential tribal concerns, and to invite any affected tribe and the BIA to participate in the section 7

consultation. In keeping with our tribal trust responsibility, we will notify tribes that may be affected by proposed actions when section 7 consultation is initiated. For more information, please contact our tribal coordinator, John Nystedt, at (928) 556-2160 or John_Nystedt@fws.gov.

The State of Arizona protects some species not protected by Federal law. We recommend you contact the Arizona Game and Fish Department (AGFD) for animals and Arizona Department of Agriculture for plants to determine if species protected by or of concern to the State may occur in your action area. The AGFD has an Environmental Review On-Line Tool that can be accessed at <http://www.azgfd.gov/hgis/>. We also recommend that you coordinate with the AGFD regarding your project.

For additional communications regarding this project, please refer to the consultation Tracking Number in the header of this letter. We appreciate your concern for threatened and endangered species. If we may be of further assistance, please contact Brenda Smith at 928/556-2157 for projects in Northern Arizona, our general Phoenix number (602/242-0210) for central Arizona, or Jean Calhoun at 520/670-6150 (x223) for projects in southern Arizona.

Sincerely,

/s/

Steven L. Spangle

Field Supervisor

Attachment

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United States Department of Interior
Fish and Wildlife Service

Project name: red horse solar

Official Species List

Provided by:

Arizona Ecological Services Field Office

2321 WEST ROYAL PALM ROAD, SUITE 103

PHOENIX, AZ 85021

(602) 242-0210

<http://www.fws.gov/southwest/es/arizona/>

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>

Consultation Tracking Number: 02BAAZ00-2014-SLI-0122

Project Type: Power Generation

Project Description: This is a proposed solar site of 600 acres with a geographic center of 32.24233 deg. North, 110.16486 deg. West. It is located in the Hooker Spring area, about 1.5 miles west of Willcox, AZ

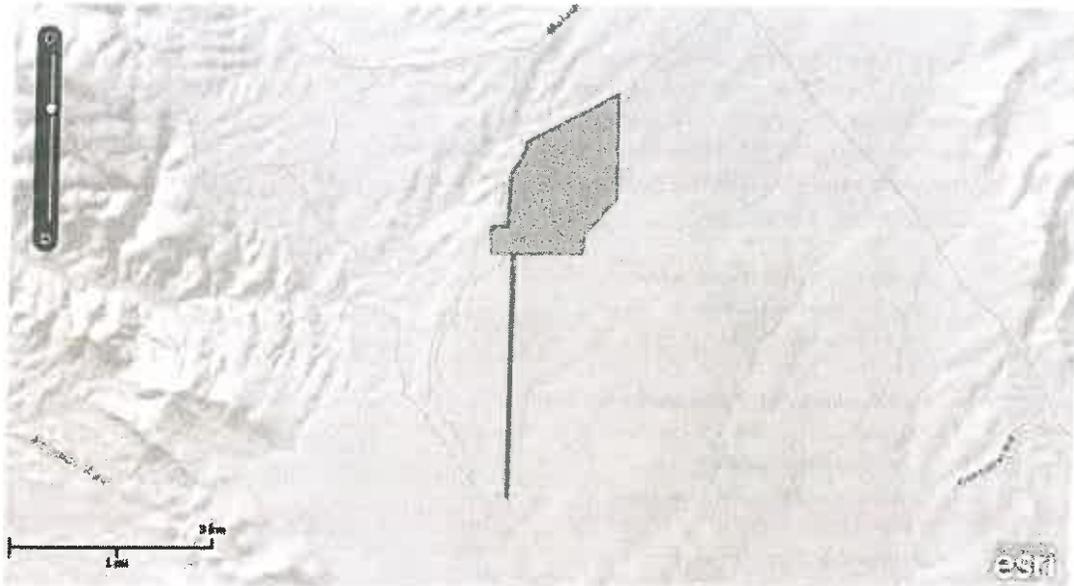
<http://ecos.fws.gov/ipac>, 03/20/2014 01:20 PM



United States Department of Interior
Fish and Wildlife Service

Project name: red horse solar

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-110.1487223 32.2727695, -110.1487199 32.2594869, -110.1538627 32.2546882, -110.1539268 32.2523256, -110.1644432 32.2522899, -110.1647298 32.2209754, -110.1650529 32.2209684, -110.1647668 32.2522888, -110.1681675 32.252277, -110.1682195 32.2558218, -110.1655225 32.2558756, -110.1652519 32.2624256, -110.1642292 32.2636719, -110.1630327 32.2654899, -110.1629389 32.2665276, -110.1487223 32.2727695)))

Project Counties: Cochise, AZ

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United States Department of Interior
Fish and Wildlife Service

Project name: red horse solar

Endangered Species Act Species List

There are a total of 18 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed on the Has Critical Habitat lines may or may not lie within your project area. See the Critical habitats within your project area section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Arizona Treefrog (*Hyla wrightorum*)

Population: Huachuca/Canelo Population

Listing Status: Candidate

Chiricahua leopard frog (*Lithobates chiricahuensis*)

Population: Entire

Listing Status: Threatened

Has Critical Habitat: Final designated

Desert pupfish (*Cyprinodon macularius*)

Population: Entire

Listing Status: Endangered

Has Critical Habitat: Final designated

Gila chub (*Gila intermedia*)

Population: Entire

Listing Status: Endangered

Has Critical Habitat: Final designated, Proposed

Gilatop minnow (*Poeciliopsis occidentalis*)

Population: U.S.A. only

Listing Status: Endangered

Huachuca springsnail (*Pyrgulopsis thompsoni*)

Listing Status: Candidate

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United States Department of Interior
Fish and Wildlife Service

Project name: red horse solar

Jaguar (*Panthera onca*)

Population: U.S.A. (AZ, CA, LA, NM, TX), Mexico, Central and South America

Listing Status: Endangered

Lesser Long-Nosed bat (*Leptonycteris curasoae yerbabuena*)

Population: Entire

Listing Status: Endangered

Loach minnow (*Tiaroga cobitis*)

Population: Entire

Listing Status: Endangered

Has Critical Habitat: Final designated

Mexican Spotted owl (*Strix occidentalis lucida*)

Population: Entire

Listing Status: Threatened

Has Critical Habitat: Final designated

northern aplomado falcon (*Falco femoralis septentrionalis*)

Population: U.S.A. (AZ, NM)

Listing Status: Experimental Population, Non-Essential

Northern Mexican gartersnake (*Thamnophis eques megalops*)

Listing Status: Proposed Threatened

Sonoran desert tortoise (*Gopherus morafkai*)

Listing Status: Candidate

Southwestern Willow flycatcher (*Empidonax traillii extimus*)

Population: Entire

Listing Status: Endangered

Has Critical Habitat: Final designated

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United States Department of Interior
Fish and Wildlife Service

Project name: red horse solar

spikedace (Meda fulgida)

Population: Entire

Listing Status: Endangered

Has Critical Habitat: Final designated

Sprague's Pipit (Anthus spragueii)

Listing Status: Candidate

Wright's Marsh thistle (Cirsium wrightii)

Listing Status: Candidate

Yellow-Billed Cuckoo (Coccyzus americanus)

Population: Western U.S. DPS

Listing Status: Proposed Threatened

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United States Department of Interior
Fish and Wildlife Service

Project name: red horse solar

Critical habitats that lie within your project area

There are no critical habitats within your project area.

<http://ecos.fws.gov/ipac>, 03/20/2014 01:20 PM

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APPENDIX B
AZHGIS Online Environmental Review Tool

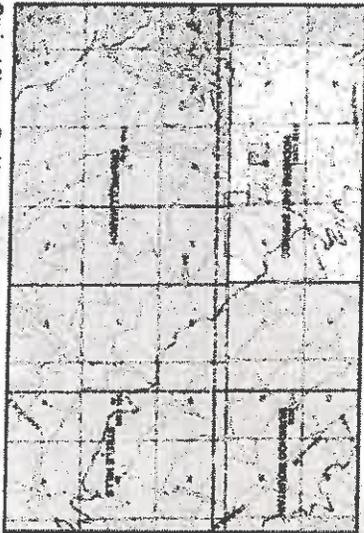
Arizona's On-line Environmental Review Tool

Search ID: 20140320022825

Project Name: Red Horse Solar2

Date: 3/20/2014 10:25:52 AM

Project Location



Project Name: Red Horse Solar2

Submitted By: Tim Hauck

On behalf of: PRIVATE

Project Search ID: 20140320022825

Date: 3/20/2014 10:25:47 AM

Project Category: Energy Storage/Production/Transfer Energy Production

(generation) solar power facility (new)

Project Coordinates (UTM Zone 12-NAD 83): 579289 496, 3669499.011

Project Area: 700.968 acres

Project Perimeter: 13707.847 meter

County: COCHISE

USGS 7.5 Minute Quadrangle ID: 1716

Quadrangle Name: HOOKE-RS HOT SPRINGS

Project locality is not anticipated to change

Location 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 Receipt is solely responsible for the project location and thus the correctness of the Project Review Receipt content.

The Department appreciates the opportunity to provide in-depth comments and project review when additional information or environmental documentation becomes available.

Special Status Species Occurrences/Critical Habitat/Tribal Lands within 5 miles of Project Vicinity:

| Name | Common Name | FWS | USFS | BLM | State |
|--|--------------------------------|-----|------|-----|-------|
| <i>Aspidochelone abroparvina</i> | Giant Spotted Vulpine | SC | S | | |
| <i>Echinomastix euacanthus</i> v. <i>epirocrotus</i> | Mayday-spined Pineapple Cactus | SC | | | SR |
| <i>Lithobates sylvaticus</i> | Lined Longtail Frog | SC | S | S | WGC |
| <i>Santa Catalina/Tribal - Galena</i> | Wildlife Corridor | | | | |
| Unmanned Aerial Vehicle | | | | | |

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Arizona's On-line Environmental Review Tool
Search ID: 20140330022925
Project Name: Red Horse Solar 2
Date: 3/29/2014 10:25:52 AM

Please review the entire receipt for project type recommendations and/or species or location information and retain a copy for future reference. If any of the information you provided did not accurately reflect this project, or if project plans change, another review should be conducted, as this determination may not be valid.

Arizona's On-line Environmental Review Tool:

1. This On-line Environmental Review Tool inquiry has generated recommendations regarding the potential impacts of your project on Special Status Species (SSS) and other wildlife of Arizona. SSS include all U.S. Fish and Wildlife Service federally listed, U.S. Bureau of Land Management sensitive, U.S. Forest Service sensitive, and Arizona Game and Fish Department (Department) recognized species of concern.
 2. These 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). These recommendations are preliminary in scope, designed to provide early considerations for all species of wildlife, pertinent to the project type you entered.
 3. The receipt, generated by the automated On-line Environmental Review Tool does not constitute an official project review by Department biologists and planners. Further coordination may be necessary as appropriate under the National Environmental Policy Act (NEPA) and/or the Endangered Species Act (ESA).
- The U.S. Fish and Wildlife Service (USFWS) has regulatory authority over all federally listed species under the ESA. Contact USFWS Ecological Services Office: <http://arizonaes.fws.gov/>
- Phoenix Main Office
2321 W. Royal Palm Road, Suite 103
Phoenix, AZ 85024
Phone 602-242-0210
Fax 602-242-2513

Tucson Sub-Office
201 North Bonita, Suite 141
Tucson, AZ 85745
Phone 520-670-6144
Fax 520-670-6154

Flagstaff Sub-Office
323 N. Larcoux Street, Suite 101
Flagstaff, AZ 86001
Phone 928-226-0674
Fax 928-226-1099

Disclaimer:

1. 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.
2. The Department's 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.
3. 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. HDMS data contains information about species occurrences that have actually been reported to the Department.

Arizona Game and Fish Department Mission

To conserve, enhance, and restore Arizona's diverse wildlife resources and habitats through aggressive protection and

Arizona's On-line Environmental Review Tool
Search ID: 20140320022825
Project Name: Red Horse Solar 2
Date: 3/29/2014 10:25:52 AM

management programs, and to provide wildlife resources and safe watercraft and off-highway vehicle recreation for the enjoyment, appreciation, and use by present and future generations.

Project Category: Energy Storage/Production/Transfer, Energy Production (generation), solar power facility (new)

Project Type Recommendations:

Based on the project type entered, coordination with State Historic Preservation Office may be required
<http://azshp.stateparks.com/SHPO/index.html>

During planning and construction, minimize potential introduction or spread of exotic invasive species. Invasive species can be plants, animals (exotic snails) and other organisms (e.g. microbes) which may cause alteration to ecological functions or compete with or prey upon native species and can cause social impacts (e.g. livestock forage reduction, increase wildlife risk). The terms noxious weed or invasive plants are often used interchangeably. Precautions should be taken to wash all equipment utilized in the project activities before and after project activities to reduce the spread of invasive species. Arizona has noxious weed regulations (Arizona Revised Statutes, Rules R3-4-244 and R3-4-245). See Arizona Department of Agriculture website for restricted plants.
<http://www.azda.gov/PS/Diquarantines.htm>. Additionally, the U.S. Department of Agriculture has information regarding pest and invasive plant control methods including pesticides, herbicides, biological control agents, and mechanical control.

<http://www.usda.gov/wps/portals/usda/home>. The Department regulates the importation, purchasing, and transportation of wildlife and fish (Restricted Live Wildlife), please refer to the hunting regulations for further information: http://www.azgfd.gov/hunting_rules.shtml.

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 maintained with 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.

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 (including spawning seasons), and to reduce spread of exotic invasive species. We recommend early direct 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

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Arizona's On-line Environmental Review Tool
Search ID: 20140320123825
Project Name: Red Horse Solar2
Date: 3/20/2014 10:25:52 AM

activities outside of breeding seasons

The Department requests further coordination to provide project/species specific recommendations, please contact Project Evaluation Program directly

Project Location and/or Species recommendations:

Heritage Data Management System 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 (refer to page 1 of the receipt). Please contact:
Arizona Department of Agriculture
1888 W Adams
Phoenix, AZ 85007
Phone: 602-542-4375

HDMS records indicate your project is in or near an identified wildlife habitat linkage corridor. Project planning and implementation efforts should focus on maintaining adequate opportunities for wildlife permeability. For information on the linkage assessment and wildlife species that may be affected refer to <http://www.corrldesign.org/arizona>. Contact your Arizona Game and Fish Department Regional Office for specific project recommendations: http://www.azgfd.gov/instate_azgfdagency_directory.shtml

Recommendations Disclaimer:

1. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project.
2. These recommendations are proposed actions or guidelines to be considered during preliminary project development.

3. Additional site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies.

4. Making this information already 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. The Department is interested in the conservation of all fish and wildlife resources, including those Special Status Species listed on this receipt, and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.

6. Further coordination requires the submittal of this Initiated and signed Environmental Review Receipt with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(ies) are to be accomplished, and project locality information (including site map).

7. Upon receiving information by AZGFD, please allow 30 days for completion of project reviews. Mail requests to:

Project Evaluation Program, Habitat Branch
Arizona Game and Fish Department
5000 West Carefree Highway
Phoenix, Arizona 85096-8000
Phone Number: (623) 236-7600
Fax Number: (623) 236-7666

Terms of Use

By using this site, you acknowledge that you have read and understand the terms of use. Department staff may revise these terms periodically. If you continue to use our website after we post changes to these terms, it will mean that you accept such changes. If at any time you do not wish to accept the Terms, you may choose not to use the website.

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Arizona's On-line Environmental Review Tool

Search ID: 20140320122825
Project Name: Red Horse Solar #2
Date: 3/26/2014 11:25:52 AM

1. The Environmental Review and project planning website was developed and intended for the purpose of screening projects for potential impacts on resources of special concern. By indicating your agreement to the terms of use for this website, you warrant that you will not use this website for any other purpose.
2. Unauthorized attempts to upload information or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.
3. The Department reserves the right at any time, without notice, to enhance, modify, alter, or suspend the website and to terminate or restrict your access to the website.
4. This Environmental Review is based on the project study area that was entered. The review must be redone if the project study area, location, or the type of project changes, if additional information becomes available, this review may need to be reconsidered.
5. A signed and initialed copy of the Environmental Review Receipt indicates that the entire receipt has been read by the signer of the Environmental Review Receipt.

Security:

The Environmental Review and project planning web application operates on a complex State computer system. This system is monitored to ensure proper operation, to verify the functioning of applicable security features, and for other like purposes. Anyone using this system expressly consents to such monitoring and is advised that if such monitoring reveals possible evidence of criminal activity, system personnel may provide the evidence of such monitoring to law enforcement officials. Unauthorized attempts to upload or change information, to delete or circumvent security measures, or to utilize this system for other than its intended purposes are prohibited.

This website maintains a record of each environmental review search result as well as all contact information. This information is maintained for internal tracking purposes. Information collected in this application

will not be shared outside of the purposes of the Department

If the Environmental Review Receipt and supporting material are not mailed to the Department or other appropriate agencies within six (6) months of the Project Review Receipt date, the receipt is considered to be null and void, and a new review must be initiated.

Print this Environmental Review Receipt using your Internet browser's print function and keep it for your records. Signature of this receipt indicates the signer has read and understands the information provided.

Signature: _____

Date: _____

Proposed Date of Implementation: _____

Please provide point of contact information regarding this Environmental Review.

Application or organization responsible for project implementation

Agency/organization: _____

Contact Name: _____

EXHIBIT D. DUST MITIGATION MANAGEMENT



**RED HORSE SOLAR AND WIND FACILITY
DUST MITIGATION PLAN**



December 17, 2013

Prepared by:
Torch Renewable Energy
1331 Lamar Ave. Ste 1450
Houston, Tx 77010

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OVERVIEW

Red Horse Wind 2, LLC (Red Horse), a wholly owned subsidiary of Torch Renewable Energy, LLC (TRE) is proposing to construct, operate, maintain and eventually decommission a wind-power electrical generation facility in Cochise County, Arizona. The project is located 14 miles west of Willcox in Cochise County, on land owned by the ASLD. The project includes the excavation and development of foundations for up to 29 wind turbines, installing an underground collection system, creating service and access roads, a temporary laydown yard, and building a collection substation and an operations and maintenance (O&M) facility. In addition, an overhead transmission line will run adjacent to an existing transmission line down to the Winchester substation. The first phase of the project will include the development of 26,261 feet of road that is 16 feet wide, and the excavation of 6 turbine foundations. The second phase of the project will involve constructing the project to completion.

It is the responsibility of Proponent's construction contractors (Contractor) working with third party Construction Inspectors contract for Agency(s) to ensure this Dust Control Plan is implemented.

INTRODUCTION

TRE is committed to working within the parameters of all federal, state, and local environmental protection policies and regulations. We also require any subcontractor, vendor and any other applicable or effected entity to conform to this same "commitment" of working within the parameters of all applicable environmental protection policies while they are associated with our operations.

Dust can affect the health of people, property or business and represent a risk to safety when conditions are allowed to inhibit visibility. Operators of a construction site must take reasonable precautions to prevent dust from becoming airborne and from being tracked onto paved public roads.

Construction sites generate dust from a variety of sources, such as: vehicle and equipment traffic on paved and unpaved roads; earthmoving vehicles and equipment during construction; wind erosion from disturbed and exposed soils, including stockpiles; material handling, conveyance, and transport within site boundaries.

RECOMMENDED BEST MANAGEMENT PRACTICES

A variety of abatement procedures will be used as conditions dictate. Abatement techniques include preventing the creation of fugitive dust, binding dust particles together, and reducing the wind speed at ground level. Trucks transporting mineral material for road construction will be covered with tarps.

WATER

Water trucks will be the primary method for dust suppression and control. One water truck will be employed on an as-needed basis. If additional water trucks are needed they will be employed.



Water for dust control will either be purchased from the Warbonnet Ranch or will be filled in Willcox.

STABILIZATION

Preventative measures will be taken to limit the possibility of dust from disturbed soils. Disturbed surface areas will be controlled via construction sequencing and clearing will be kept to a minimum width within the corridors. The SWPP identifies many BMPs for erosion and dust control. Below is a list of BMPs that have been identified in Section 4 of the SWPP that has been submitted to the Arizona Department of Environmental Quality (ADEQ). In addition, Section 3.6 of the SWPP also identifies erosions and sediment control measures which will be implemented throughout construction.

Erosion prevention and sediment control BMP's shall be installed to minimize erosion from disturbed surfaces and capture sediment on site. Site stabilization BMPs shall be installed within 14 calendar days of the most recent land disturbance, except under the following conditions:

1. Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions, apply stabilization measures as soon as practical;
2. When the site is using vegetative stabilization but is located in an arid area during dry or drought conditions, vegetative stabilization measures shall be initiated as soon as practicable.
3. Employ non-vegetative measures until vegetative stabilization measures can be applied
4. Within 50 feet of and impaired water or AOW, stabilization will be initiated within 7 days

Before construction

The following erosion prevention and sediment control measures are shown in the plans and shall be implemented prior to construction:

1. Sediment controls (such as silt fences) shall be installed immediately prior to disturbing upgradient soils. Install per plans and as field conditions dictate.
2. Rock exits shall be installed prior vehicles and equipment entering and exiting to paved surfaces.

During construction

The following erosion prevention, sediment control, and pollution prevention measures are shown in the plans and shall be implemented during construction:

1. Phase grading work to minimize the duration of exposed soil; to the extent practicable, only expose soils in areas that will be worked within a 14 day period.
2. Protect and/or avoid existing vegetated areas unless these areas are specifically staked for construction or within construction limits.
3. Strip, segregate, and stockpile topsoil for application during final grade to preserve existing organic and seed bed properties.
4. All disturbed areas shall have temporary protection or permanent cover over exposed soil areas if not being actively graded and/or if not at final grade within the time frames stated in Section 4.2.

A handwritten signature in blue ink, appearing to be the initials "GS", is located in the bottom right corner of the page.



5. Temporary protection shall be disc anchored straw or hay mulch, erosion control blanket, or an approved equal. If an approved equal is used, the BMP(s) used will be noted as a change to the SWPPP in Attachment D.
6. Install silt fence or logs around all temporary stockpile areas, within 200-feet of a surface water, prior to stockpiling material, if not already contained by perimeter controls.
7. When dewatering is needed, a temporary sump and rock base should be used at the pump location. Energy dissipation should be applied to the end of the pump hose. Discharge water to a large flat vegetated area for filtration/infiltration prior to flowing into receiving waters. If water is turbid, dewatering bags, temporary traps and rock weepers, or other adequate BMP is needed.
8. Construction of access roads with immediate application of rock base (if sequencing of activity is possible) could result in no rock pad access being needed if truck/vehicle access will not result in erosion/tracking of sediment onto adjacent paved roads.
9. Remove any sediment that has been tracked onto public streets at the end of each day.
10. Generation of dust shall be controlled by the application of water or approved dust palliatives.
11. Collect all construction debris in dumpsters or roll-off boxes that include a plug to control potential discharge of potential contaminated water. Empty dumpsters when debris reaches the top.
12. If concrete washing will occur at locations other than a batch plant, construct and clearly identify a concrete washout prior to the start of concrete work. Update SWPPP with washout location.
13. Store of hazardous materials (e.g. paints, solvents, petroleum, concrete) out of contact with stormwater in a secure, covered location; if the material is not covered, it should be stored in airtight and secure containers within secondary containment devices.

After Construction

The following BMPs shall be implemented upon completion of construction activities:

1. Remove accumulated sediment from sediment control BMPs before removing the BMPs.
2. Employ Permanent Vegetation Establishment measures in accordance with Section 3.7.
3. Remove perimeter sediment control BMPs after:
 - vegetation is 70% established (based on pre-construction vegetated percentages, See Attachment A for determining final stabilization), or
 - repair and stabilize areas disturbed during removal of BMPs.
3. Submit NOT when construction is complete and areas of disturbance have been permanently stabilized by:
 - construction of impervious or semi-pervious facilities (gravel roads, buildings, etc.), or
 - establishment of 70% density vegetative cover, or
4. The NOT shall be mailed to ADEQ within 30 days of achieving conditions in this section.

A handwritten signature in blue ink, appearing to be "G.G.", is located in the bottom right corner of the page.

Donovan, Dennis

From: Donovan, Dennis
Sent: Wednesday, March 19, 2014 12:39 PM
To: Turisk, Mike
Cc: Riggs, Karen; Lamberton, Karen; Wilson, Beverly
Subject: Preliminary Hydrology and Drainage Report for Solar Energy Power Plant - SU-14-06

Mike,

Pursuant to our conversation yesterday, I am writing this message to alert the applicant that the submitted EXHIBIT C. PRELIMINARY HYDROLOGY AND DRAINAGE REPORT in support of the Special Use Application referenced above is not adequate for our approval. The document is lacking in several areas, but the most striking issue has to do with the inaccurate results from use of the rational method to estimate storm discharges, or peak flow rates, for Nodes 1 & 2.

Some of the terminology in the report, as well as the discussion regarding and display of the methodology as presented is not in a standard drainage report format. But bottom line, the report indicates that for Basin A, at Node 1, the estimate for a 100 year peak flow is less than five (4.59) cubic feet per second (cfs) discharging from the 266 acre sized drainage sub-basin. It should be a few hundred cubic feet per second. Basin B, Node 2 is similarly understated. The rainfall intensities used are far too low as well.

Some of the other areas needing addressing are:

- The apparent mass grading required to construct the rows of solar panels.
- Compilations of existing and post development flows from the developed area in addition to the incoming flows from Basins A and B.
- Increases in runoff over historic due to significant impervious surfaces being added to the watershed by the solar panel.
- Historic and post development storm water flow patterns.
- Water harvesting considerations.

We are available to sit down with the applicant and go over the specific areas that prevent our approval at this time.

Respectfully,

Dennis

Dennis L. Donovan, P.E.
Civil Engineer II
Highway and Floodplain
520.432.9329

Cochise County
1415 Melody Lane, Bldg F
Bisbee, Arizona 85603
FAX 520.432.9338



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FT HUACHUCA
2837 BOYD AVENUE
FORT HUACHUCA, ARIZONA 85613-7001

March 26, 2014

Office of the Garrison Commander

Mr. Michael Turisk
Planning Manager
Cochise County Community Development
1415 Melody Lane, Building E
Bisbee, Arizona 85603

Dear Mr. Turisk

This letter is in response to your e-mail dated March 5, 2014, subject: Special Use Request for Solar Energy Project West of Willcox. Thank you for the opportunity to comment on the proposed project.

The application proposes to allow Torch Renewable Energy to operate and construct a Solar Facility in conjunction with the Red Horse II Wind Energy facility (approved as a Special Use in 2013) approximately 15 miles west of Willcox.

Based upon our assessment of the location of this proposal within the Buffalo Soldier Electronic Test Range (BSETR) (map enclosure) and our previous response memorandum, dated March 29, 2013, commenting on the proposed Torch Renewable Energy Red Horse 2 Wind Farm Special Use Permit (SUP) Application (enclosure) the potential areas of concern to our National Defense Missions remain the same. The following are specific to the Solar Facility project:

- a. Electromagnetic Interference (EMI) from the Collection Substation. As mentioned in our previous response to the Torch Renewable Energy Red Horse 2 Wind Farm SUP Application, there is insufficient information in the application on the design and components in the collection substation to make a definitive assessment of potential EMI impacts. We feel that with proper design considerations this can be minimized but request further information from Torch Renewable Energy on their plans before making any final determination.
- b. Potential EMI from the 34.5 KV Transmission Lines running from the Solar Array and feeding into the Winchester Substation. This includes the construction of an overhead or underground transmission line that will run due south from the solar facility to the transmission corridor being utilized for the Wind Facility. Upon intersecting with the existing corridor, the transmission line will utilize the same poles that are being installed for the Wind Facility that runs to the existing Winchester Substation. Of the two construction options cited, we recommend and support the underground version in order to minimize any potential EMI.

To minimize potential EMI impacts within the BSETR, we encourage limiting the development of additional energy projects within or surrounding the BSETR.

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Again, we appreciate the opportunity to work with your planning staff and Torch Renewable Energy on both the Wind and Solar projects. We await the receipt of the information requested before providing final comments on this project.

The point of contact for this action is Mr. Eric Gordon in the Plans, Analysis and Integration Office, e-mail eric.k.gordon.civ@mail.mil or telephone (520) 538-3135.

Sincerely,



THOMAS E. BORER
Deputy Garrison Commander

Enclosure

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DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FT HUACHUCA
2837 BOYD AVENUE
FORT HUACHUCA, ARIZONA 85613-7001

March 29, 2013

Office of the Garrison Commander

Mr. Michael Turisk
Planning Manager
Cochise County Community Development
1415 Melody Lane, Building E
Bisbee, Arizona 85603

Dear Mr. Turisk

This letter is in response to your e-mail dated February 27, 2013, subject: Proposed 28 Turbine Wind Energy Project in Northern Cochise Co. Thank you for the opportunity to comment on the proposed Torch Renewable Energy Red Horse 2 Wind Farm Special Use Permit (SUP) Application.

The application proposes to install 28 Wind Turbines with a total generating capacity of 51 MW on approximately 330 acres. The Wind Turbines will be up to 487 feet in total height with an additional blade diameter of 191.5 feet. Referencing the information and maps provided in the SUP Application, we have located the proposed site for this development within the Buffalo Soldier Electronic Test Range (see enclosure).

Based on the assessment of the location of this proposal within the Buffalo Soldier Electronic Test Range (BSETR), we have broken down potential areas of concern to our National Defense Missions as follows:

- a. Electromagnetic Interference (EMI) from the wind turbines themselves.
- b. EMI from the Collection Substation.
- c. EMI from the 2X34.5 KV Transmission Lines feeding into the Winchester Substation.
- d. Line-of-sight Signal Distortions from the Turbine Blades.

From review of the documentation provided in the SUP Application, we have assessed the potential impacts in each of these areas of concern. Our comments follow:

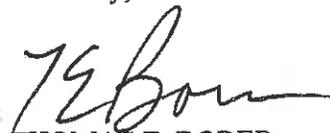
- a. EMI from the Wind Turbines – Based on studies and analysis performed by the Electronic Proving Ground of the current wind turbine on Ft. Huachuca and similar wind turbines as those proposed in this application observed at several locations in California, we do not believe there will be significant enough EMI generation from this proposal to significantly impact our testing missions in that area of the BSETR complex. As a follow on, we would like to have the opportunity to review and comment on the installation design for these turbines to ensure that proper grounding and other EMI minimizing considerations are incorporated.

- b. EMI from Collection Substation – There is not sufficient enough information in the SUP Application on the design and components in the collection substation to make a definitive assessment of potential EMI impacts. We feel that with proper design considerations this can be minimized but request further information from Torch Renewable Energy on their plans before making any final determination.
- c. EMI from the Transmission Lines – New 2x34.5 KV lines will be constructed from the proposed Wind Farm location down to the Tucson Electric Power (TEP) 345KV Transmission Line corridor and then into the Winchester Substation. Transmission lines can produce EMI as observed by a July 2012 study performed by the Electronic Proving Ground on 500KV lines like those being considered for the Sun Zia project. Based on that study, the only new impact from these lines will be the new corridor running from the Red Horse 2 Wind Farm down to the TEP corridor. There will be no additional EMI impacts in the BSETR once the two lines merge there. Based on the location along the eastern boundary of the BSETR, EPG does not anticipate significant impact to testing operations due to the addition of this new corridor.
- d. Line-of-Sight Signal Distortions – Signal distortions have been noted by EPG based on observations made and data collected on wind farms in California. Impacts are in narrow frequency bands and associated with the length of the blades on the turbines. On line-of-sight signals in that frequency range shot through the proposed Red Horse 2 Wind Farm, this could impact testing missions. However, based on the location of the proposed project along the eastern boundary of the BSETR, we feel that we can adjust testing missions in that part of the range complex to work around this potential impact. However, future expansions of wind farms in the BSETR may make this work around more difficult and could have impact on our ability to test in that part of the range.

Again, we appreciate the opportunity to work with your planning staff and Torch Renewable Energy on this project. We await the receipt of the information requested before providing final comments on this project.

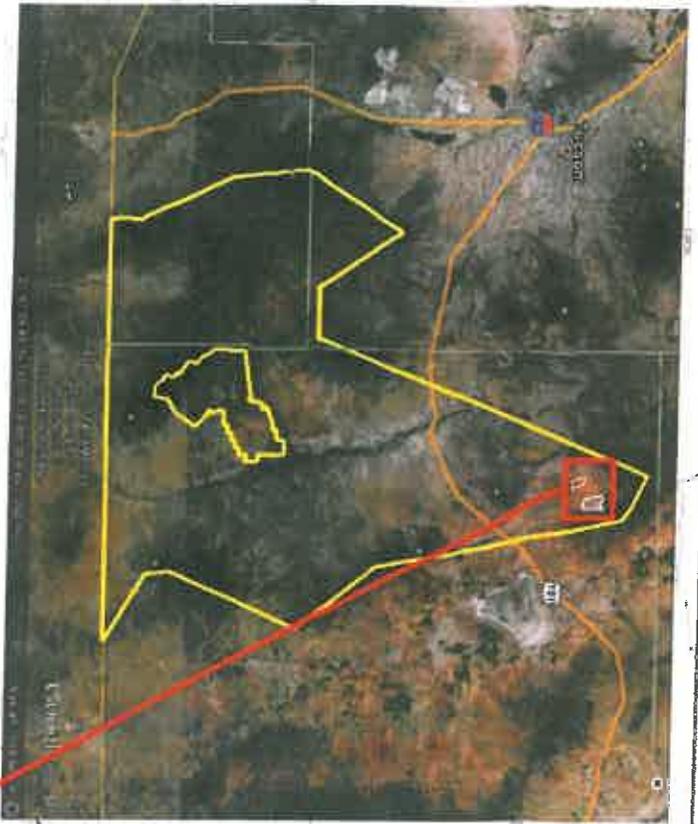
The point of contact for this action is Mr. Jim North in the Plans, Analysis and Integration Office, e-mail james.s.north.civ@mail.mil or telephone (520) 538-3135.

Sincerely,

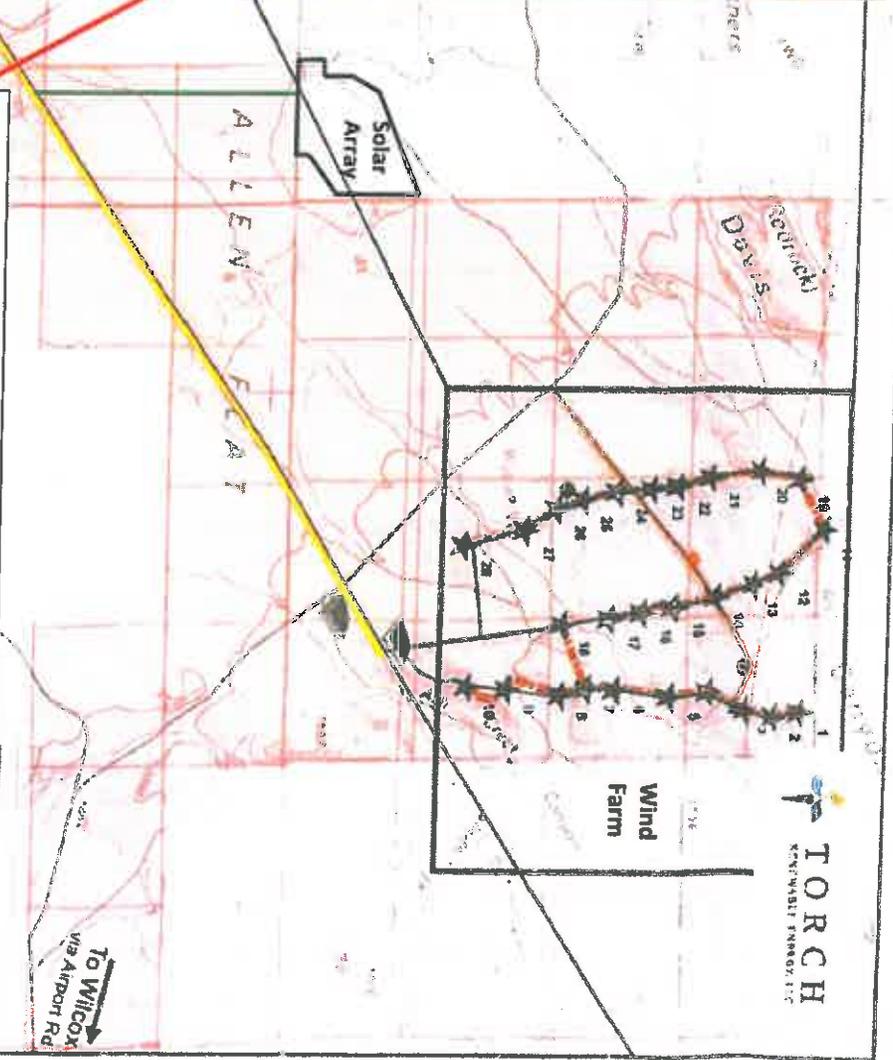


THOMAS E. BORER
Deputy Garrison Commander

Enclosure



- Installed MT 7 Towers
- Proposed Turbine Access Rd.
- Main Access Road (Existing)
- Turbine Access Road (New & Existing)
- Construction Fencing (1/4 MI.)
- Weather Station (345 kV)
- Proposed 34.5 kV Collection Substations
- Proposed Operation & Maintenance Facility
- Proposed Double Overhead 34.5 kV Transmission Lines
- Existing 345 kV Line
- Proposed Underground Transmission
- State Lands to include in ROW Application
- Turbine Array (Approved FAA Lighting Scheme)
- ☆ White Paint
- ★ White Paint - Red Lighting



Proposed Location of the Torch Renewable Energy - Red Horse 2 Wind Farm and Solar Array in the Buffalo Soldier Electronic Test Range

Areas of Potential Encroachment Concern:

- Electromagnetic Interference (EMI) from Wind Turbines
- Line-of-Sight Signal Distortions from Turbine Blades
- Collection Substation EMI
- EMI from 34.5KV Transmission Lines

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Turisk, Mike

From: Tim Bolton [tbolton@azland.gov]
Sent: Thursday, March 27, 2014 9:31 AM
To: Turisk, Mike
Subject: FW: Special Use request for solar energy project west of Willcox / Torch Renewable Energy / Cochise Cty / Request for Comments
Attachments: FW Special Use request for solar energy project west of Willcox Torch Renewable Energy Cochise Cty Request for Comments; Capture.PNG
Importance: High

Hi Mike – curious if you have looked over my request... Thank you

Good morning Mike – I left a VM yesterday regarding the above mentioned Special Use Request application. As mentioned in my VM, the Department is working with the applicant to site a proposed transmission/distribution line and access across State Land. This process may be lengthy and at this time I am recommending that the staff report not include the alignment that is shown on the attached application. Instead I am hoping that the staff report may include verbiage to the extent that the applicant has submitted a ROW application with the Department and we are processing and analyzing the request to ensure the best alignment with the least amount of constraints is implemented. Please let me know if this is possible, thank you

Tim Bolton
Principal Planner
Arizona State Land Department
Southern Arizona Office
177 N. Church Ave., Suite 1104
520-209-4263
520-209-4251 (fax)
tbolton@azland.gov



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

5000 W. CAREFREE HIGHWAY
 PHOENIX, AZ 85086-5000
 (602) 942-3000 • WWW.AZGFD.GOV

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March 27, 2014

COCHISE COUNTY

Mr. Michael Turisk
 Cochise County Community Development
 1415 Melody Lane, Building E
 Bisbee, AZ 85603

MAR 31 2014

PLANNING

**Re: Solar Energy Power Plant; Torch Renewable Energy Inc.
 Tax Parcel #209-56-008D**

Dear Mr. Turisk:

The Arizona Game and Fish Department (Department) has received the application dated March 5, 2014, requesting a review of a proposed solar array to be constructed on Allen Flat in Cochise County, Arizona. The solar array will be located on approximately 650 acres of Arizona State Trust Lands. The Department has the following comments for your consideration.

While the Department recognizes the purpose and supports the need for energy development, we also recognize that they may impact wildlife habitat. We believe project mitigations should focus on the following primary issues related to wildlife and their habitats:

- Wildlife habitat loss and fragmentation
- Maintaining public access and recreational opportunities
- Depletion of water resources and/or impacts to surface hydrology
- Direct impacts to wildlife resulting from site development, facilities, and transportation/access
- Project monitoring to evaluate project impacts and inform adaptive mitigation solutions

The Arizona State Land Department (ASLD) is in the process of permitting a wind facility and associated infrastructure on Allen Flat in the same general area as this 'sister' project that Torch Renewable Energy Inc. (Torch) proposed. Due to the location, size, and quality of habitat being evaluated for both the wind facility and the current proposed solar array, the Department has concerns about the impacts on pronghorn in Allen Flat. Currently and historically, this land is important grassland habitat occupied by pronghorn. The Department identifies pronghorn as a Species of Economic and Recreational Importance of particular concern in Arizona due to the loss of habitat from agricultural and urban development, livestock fencing, shrub and tree encroachment, and highway construction (Ockenfels et al. 1996).

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Solar Energy Power Plant; Torch Renewable Energy Inc.
Tax Parcel #209-56-008D
March 27, 2014

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Grasslands of central and southern Arizona have undergone dramatic vegetation changes over the last 130 years, including encroachment by shrubs, loss of perennial grass cover, and spread of non-native species. Native grasslands with low shrub cover now cover only 2 million acres or 15.4% of current and former grassland. Shrub cover has exceeded a threshold producing a type conversion from grassland to shrubland on over 4.1 million acres or 36% of the historic extent of grasslands in the ecoregion (Gori and Enquist 2003). These figures did not factor in former grasslands that have been developed due to urban growth.

As a result, high quality grassland habitats are becoming rare, as demonstrated by the limited distribution of pronghorn populations. Although shrub encroachment is occurring in portions of Allen Flat, it is still one of the few undeveloped grassland habitats within southeast Arizona that has an extant pronghorn population. We had discussed possible mitigation with Torch for their wind energy facility which involved mesquite clearing to benefit grassland habitat and wildlife in Allen Flat. This would have likely occurred on or adjacent to areas now being proposed for the solar array. The Department strongly recommends the project proponent consider alternate lands off of Allen Flat that pose significantly less risk of impacts to wildlife. The Department encourages the county to ask Torch to consider exploring less sensitive lands along the powerline and substation adjacent to Interstate 10 near the Sibyl Road exit.

The Department is also concerned about the installation of 'barbed wire fencing'. We encourage Torch to review the Department's *Wildlife Compatible Fencing Guidelines* at <http://www.azgfd.gov/hgis/guidelines.aspx>. The guidelines provide information on how fencing impacts wildlife and ways to design fencing to keep wildlife out without harming them.

The Department is also concerned about the possible effects of facility lighting on nocturnal wildlife. Artificial night lighting, which may be intensified by the collection mirrors, may attract insects and the species that prey on them (e.g. bats). It could also impair the ability of nocturnal animals to navigate and may negatively affect reptile populations. The Department recommends using 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, cantered, or cut to ensure that light reaches only areas needing illumination.

Lastly, if the solar array were constructed where it is currently proposed, the loss of foraging habitat for golden eagles may impact their movements and influence their use of the wind facility area. Also, with Wilcox Playa attracting thousands of water birds to the adjacent valley, these solar arrays may become an attractant to migrants that mistake them for bodies of water which would increase risk of avian collision at the wind facility.

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Solar Energy Power Plant; Torch Renewable Energy Inc.
Tax Parcel #209-56-008D
March 27, 2014
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Thank you for the opportunity to provide comments on this proposed project. We look forward to continued communications and further discussions on wildlife related issues and opportunities with the county and Torch regarding the project development and implementation. Please contact me at 623-236-7606 if you have any questions.

Sincerely,



Ginger Ritter

Project Evaluation Project Specialist, Habitat Branch

cc: Laura Canaca, Project Evaluation Program Supervisor, Habitat Branch
John Windes, Habitat Program Supervisor, Region V
Bill Werner, Renewable Energy Coordinator, USFWS

AGFD # M14-03274621

Attachment

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Solar Energy Power Plant; Torch Renewable Energy Inc.
Tax Parcel #209-56-008D
March 27, 2014
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Department Recommendations for the Torch Solar Project

To minimize the potential impacts to wildlife habitat and populations resulting from the development and operation of the Torch solar project, the Department recommends implementing the following:

1. We strongly encourage the developer review and implement the Department's *Guidelines for Solar Development in Arizona* which can be found at <http://www.azgfd.gov/hgis/guidelines.aspx>.
2. The Department recommends pre-construction studies be performed which provide sufficient detail to map the habitat for all special status species within the project vicinity (e.g. wetland/riparian habitat, contiguous tracts of undisturbed wildlife habitat, raptor nest sites) and to determine seasonal movement corridors for species (e.g. winter bird concentrations, raptor migration, nesting). These maps, as well as others, should be used to show the location of sensitive resources and to establish the layout of roads, fences, and other infrastructure in order to minimize habitat fragmentation and disturbance.
3. If wildlife is encountered during construction of the facility, it should be moved outside the project area within 1 mile of its original location. A scientific collecting permit is required for this activity. A permit can be obtained by emailing Scpermit@azgfd.gov for more information. If wildlife will need to be removed from the facility once it is operational, annual renewal of the permit will be required.
4. Project analysis should include evaluation of the direct, indirect and cumulative effects of project development on wildlife, wildlife habitat and wildlife habitat connectivity resulting from the conversion of 650 acres of grassland habitat to a solar generating plant. If negative impacts are anticipated, the Department recommends implementing activities that could mitigate these impacts. Such activities may include, but are not limited to, preserving land elsewhere, restoring degraded land, and/or relocating facility footprint.
5. Current hydrology of the project site should be maintained. Any change in sheet flow will have detrimental effects to down slope vegetation.
6. Coordinate plant salvage and revegetation efforts with the Arizona Department of Agriculture, in accordance with the Arizona Native Plant Law. A reclamation plan is recommended for disturbed sites, where appropriate, including planting native, weed-free seed and vegetation.
7. Limit project activities during the breeding season for birds, generally May 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.
8. 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.

**FORM (RW-1)
DOMINANT ESTATE
SUPPLEMENTAL INFORMATION REQUEST**

| | | |
|------------------------|-----------------------|----------------------------|
| APPLICANT NAME: | Red Horse Wind 2, LLC | APPLICATION NUMBER: |
|------------------------|-----------------------|----------------------------|

1. LOCATION OF DOMINANT ESTATE (i.e. the property to be served by the proposed right of way)

TOWNSHIP: 13S RANGE: 21E SECTION 35 and 36 ACREAGE 87.74

LEGAL DESCRIPTION forthcoming

2. OWNERSHIP & USE INFORMATION

(ALL QUESTIONS IN THIS SECTION REFER TO THE DOMINANT ESTATE - NOT STATE TRUST LAND!!)

| | | | |
|--|---------------------------|-------------------------|-----------------------------|
| TITLE IS HELD BY: <small>(name on deed)</small> | Sunny Mesa, Inc. | DATE ACQUIRED: | currently negotiation lease |
| CURRENT GENERAL PLAN DESIGNATION: | Agricultural | CURRENT ZONING: | RU-4 |
| EXISTING USE(S): | Ranching | | |
| PROPOSED GENERAL PLAN DESIGNATION: | | PROPOSED ZONING: | Zoning will stay the same |
| PROPOSED FUTURE USE(S): <small>(please attach copies of any proposed subdivision plats or zoning submittals)</small> | Zoning will stay the same | | |

**3. EXISTING INFRASTRUCTURE
(ROADS, POWER LINES, WATER & SEWERS LINES, ETC.)**

| | |
|--|---|
| AVAILABLE TO THE DOMINANT ESTATE: <small>(Please mark all that apply)</small> Water Line <u> </u> Size <u> </u> Sewer Line <u> </u> Size <u> </u> Electricity <u> x </u> Access <u> x </u> if legal access exists provide a map showing location and provide copies of easements Pending ALTA. | AVAILABLE TO STATE TRUST LAND: <small>(Please mark all that apply)</small> Water Line <u> </u> Size <u> </u> Sewer Line <u> </u> Size <u> </u> Electricity <u> </u> Access <u> x </u> if legal access exists provide a map showing location and provide copies of easements pending title review and ALTA survey |
|--|---|

4. ALTERNATIVE ROUTES/LOCATIONS

| | | | |
|--|-----------------------------------|---|---|
| Can this right of way be located at a different location that does not impact State Trust Land? | Yes <u> </u> No <u> x </u> | Have you contacted the owners of other possible locations? | Yes <u> </u> No <u> x </u> <small>there are no other realistic locations for the transmission</small> |
| If you answered yes to either of previous questions, why have you decided to acquire the right of way from the State Trust? | | | |

FB

**FORM (RW-2)
EASEMENT IN GROSS
SUPPLEMENTAL INFORMATION REQUEST**

| | | |
|------------------------|-----------------------|----------------------------|
| APPLICANT NAME: | Red Horse Wind 2, LLC | APPLICATION NUMBER: |
|------------------------|-----------------------|----------------------------|

1. INTENDED USERS (i.e. the general public, a specific organization, etc.)

Please list all intended users:

Red Horse Wind 2, LLC and potentially other entities engaged by Red Horse Wind 2, LLC to construct, operate, and maintain the solar facility.

**2. EXISTING INFRASTRUCTURE
(ROADS, ELECTRICAL LINES, WATER & SEWERS LINES, ETC.)**

AVAILABLE IN THE LOCAL AREA:
(Please mark all that apply)

Water Line Size _____ Provider Name _____
 Sewer Line Size _____ Provider Name _____
 Electricity _____
 Legal Access Provide a map showing location and provide copies of easements
To be provided upon completion of survey.

AVAILABLE IN THE LOCAL AREA:
(Please mark all that apply)

Water Line Size _____ Provider Name _____
 Sewer Line Size _____ Provider Name _____
 Electricity _____
 Legal Access Provide a map showing location and provide copies of easements

3. ALTERNATIVE ROUTES/LOCATIONS

Can this right of way be located at a different location that does not impact State Trust Land?

Yes _____ No

Have you contacted the owners of other possible locations?

Yes _____ No

If you answered yes to either of previous questions, why have you decided to acquire the right of way from the State Trust?

Project is potentially located on both private and ASLD lands. Torch is pursuing the option to lease lands from ASLD or from a private landowner. The ROW is for the transmission line.

**FORM (RW-CO)
CONDITIONAL RIGHT OF WAY
SUPPLEMENTAL INFORMATION REQUEST**

| | | |
|------------------------|-----------------------|----------------------------|
| APPLICANT NAME: | Red Horse Wind 2, LLC | APPLICATION NUMBER: |
|------------------------|-----------------------|----------------------------|

1. CONSTRUCTION DATES

| | | | |
|--|--------------|---|--------------|
| PROPOSED CONSTRUCTION START DATE ON STATE TRUST LAND: | June 1, 2014 | PLANNED CONSTRUCTION START DATE ON NON-STATE TRUST LAND: | June 1, 2014 |
|--|--------------|---|--------------|

| | | | |
|---|----------|--|----------|
| PROPOSED DURATION OF CONSTRUCTION ON STATE TRUST LAND: | 6 months | PLANNED DURATION OF CONSTRUCTION ON NON-STATE TRUST LAND: | 6 months |
|---|----------|--|----------|

| | |
|---|--|
| HAS CONTRACT FOR CONSTRUCTION BEEN ISSUED? | <input type="checkbox"/> Yes, to whom: _____ <input checked="" type="checkbox"/> No, is planned to be bid out on _____ (date) <small>Currently taking bids</small> |
|---|--|

| | |
|--|--|
| CAN THE CONSTRUCTION SCHEDULE ON STATE LAND BE DELAYED? | <input type="checkbox"/> Yes, until _____ (date) <input checked="" type="checkbox"/> No, please explain why not _____ <small>This will be required for for approved financing schedule to occur in June.</small> |
|--|--|

| | |
|--|--|
| IS IT POSSIBLE TO LIMIT THE INITIAL CONSTRUCTION AND SCOPE OF THE CONDITIONAL RIGHT OF WAY? | <input type="checkbox"/> Yes, initial construction required to meet safety or scheduled timeframes is: _____ _____ <input checked="" type="checkbox"/> No we can delay construction but not issuance of the ROW |
|--|--|

| | |
|---|----------------------------------|
| PLEASE STATE THE CONSEQUENCES OF NOT STARTING CONSTRUCTION AS PLANNED ON STATE LAND: | _____ _____ _____ _____ |
|---|----------------------------------|

2. PRIOR RIGHTS OF WAY

| | | | |
|---|--|---|--|
| HAVE YOU PREVIOUSLY APPLIED FOR RIGHTS OF WAY ON STATE TRUST LAND? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | HAVE YOU APPLIED FOR A RIGHT OF ENTRY OR CONDITIONAL RIGHT OF WAY WITHIN THE PAST 12 MONTHS? | <input checked="" type="checkbox"/> Yes, how many _____ <input type="checkbox"/> No 1 Right of Way 1 Right of Entry |
|---|--|---|--|

**FORM (RW-U)
 UTILITIES – PAGE 1 OF 3
 (except communication lines)
 SUPPLEMENTAL INFORMATION REQUEST**

APPLICANT NAME:

Red Horse Wind 2, LLC

APPLICATION NUMBER:

1. TYPE OF UTILITIES

What type of utilities are proposed within the easement area? (please mark appropriate items)

- Water Line Provider _____
- Water Reservoir Provider _____
- Water Treatment Plant Provider _____
- Water Lift Station Provider _____
- Sewer Line Provider _____
- Sewer Treatment Plant Provider _____
- Sewer Lift Station Provider _____
- Electrical Line Provider *Red Horse Wind 2, LLC*
- Electrical Substation Provider _____
- Petroleum Line Provider _____
- Natural Gas Line Provider _____
- Other Provider _____
- _____ Provider _____
- _____ Provider _____

2. WATER FACILITIES (Complete if Water Facilities are Proposed)

| | | | |
|--|---|--|---|
| Number of proposed water lines: | | Size of proposed lines: | <input type="checkbox"/> Inches <input type="checkbox"/> Inches <input type="checkbox"/> Inches |
| Are lines sized properly to accommodate adjacent State Trust Lands? | <input type="checkbox"/> Yes <input type="checkbox"/> No | If yes, please describe location of Trust Land to be served and approximately how many units can be accommodated: | Location _____ _____ _____ |
| Will the utility provider provide the State Trust with a "Will Serve Letter"? | <input type="checkbox"/> Yes <input type="checkbox"/> No | If no, why not? | # of Units |
| Type of water? | <input type="checkbox"/> Potable <input type="checkbox"/> Treated <input type="checkbox"/> Well <input type="checkbox"/> Other | If treated or other, please describe: | |

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**FORM (RW-U)
UTILITIES – PAGE 2 OF 3
SUPPLEMENTAL INFORMATION REQUEST**

3. SEWER FACILITIES (Complete if Sewer Facilities are Proposed)

| | | | |
|--|--------------------------------------|--|--|
| Number of proposed sewer lines: | | Size of proposed lines: | ___ Inches ___ Inches ___ Inches |
| Are lines sized properly to accommodate adjacent State Trust Lands? | ___ Yes ___ No | If yes, please describe location of Trust Land to be served and approximately how many units can be accommodated: | Location _____ _____ _____ # of Units _____ |
| Type of proposed sewer line? | ___ Gravity ___ Force ___ Main | What is the size of the existing line to which the proposed line will connect? | ___ Inches |

4. ELECTRICAL FACILITIES (Complete if Electrical Facilities are Proposed)

| | | | |
|---|---|--|--|
| Number of proposed electrical lines: | 1 | Size of proposed lines & number of circuits of each kV: | 34.5 kV 2 Circuits ___ kV ___ Circuits ___ kV ___ Circuits |
| Placement of lines and/or pole type: (please mark all that apply) | ___ Underground ___ Underhung on existing Poles ___ Metal Monopoles ___ Wood Monopoles ___ Lattice Towers ___ Other: | Substation description: <i>Substation under ROW #</i> <i>14-116877-000-000</i> | ___ kV to ___ kV ___ acres utilized for Substation ___ acres of Buffer Other Info: _____ _____ |
| Are lines/substation sized properly to accommodate adjacent State Trust Lands? | ___ Yes <input checked="" type="checkbox"/> No | If yes, please describe location of Trust Land to be served and approximately how many units can be accommodated: | Location _____ _____ _____ # of Units _____ |

5. NATURAL GAS FACILITIES (Complete if Natural Gas Facilities are Proposed)

| | | | |
|--|-------------------|--|--|
| Number of proposed gas lines: | | Size of proposed lines: | ___ Inches ___ Inches ___ Inches |
| Are lines sized properly to accommodate adjacent State Trust Lands? | ___ Yes ___ No | If yes, please describe location of Trust Land to be served and approximately how many units can be accommodated: | Location _____ _____ _____ # of Units _____ |

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**FORM (RW-U)
UTILITIES – PAGE 3 OF 3
SUPPLEMENTAL INFORMATION REQUEST**

6. FUNDING

| | | | |
|--|--|---|--|
| How will proposed acquisition & construction be funded? (please mark appropriate items) | <input checked="" type="checkbox"/> Private Developer <input type="checkbox"/> City Funds <input type="checkbox"/> County Funds <input type="checkbox"/> State Funds <input type="checkbox"/> Federal Funds <input type="checkbox"/> Other, describe <hr/> | Additional Funding Considerations (please mark appropriate items & provide copies) | <input type="checkbox"/> Impact Fee/Credit <input type="checkbox"/> Development Agr. <input type="checkbox"/> Payback Agr. <input type="checkbox"/> Grant/Bond <input type="checkbox"/> Other, describe <hr/> <hr/> |
|--|--|---|--|

7. MAINTENANCE & OPERATION

| | | | |
|--|----------------------|---------------------------------------|--|
| Who will maintain & operate the easement? | Red Horse Windz, LLC | Will the easement be assigned: | <input type="checkbox"/> Yes, to <hr/> <hr/> <input checked="" type="checkbox"/> No |
|--|----------------------|---------------------------------------|--|

8. PERMITS

| | |
|--|--|
| Have all of the required permits been obtained? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| List all permits that have been obtained: | |
| List all permits that still must be obtained: | Cochise County: Special Use Permit Building Permit |

ARIZONA STATE LAND DEPARTMENT
REAL ESTATE DIVISION

ADDENDUM TO APPLICATION
REQUIRED PRELIMINARY APPLICATION INFORMATION

This completed form, signed and dated by the Real Estate Division, must accompany every New Right of Way or Right of Entry Application. The Department will not accept an application for a right of way or a right of entry without this form being completed.

APPLICANT INFORMATION

Applicant Name: Red Horse Wind 2, LLC
Contact Name: Glenn Holliday
Mailing Address: 1331 Lamar St. Ste 1450
City: Houston
State & Zip Code: Texas; 77010
Phone: 713.753.1287 Fax: _____
E-Mail: Glenn.Holliday@teai.com

PARCEL INFORMATION

Section/Township/Range: T14S/R21E, Sections: 1, 12, 13, 14, 15, 21, 22, 28
Political Jurisdiction: Unincorporated Cochise County
Existing Zoning: RU-2, Category D
General Plan Designation: Agricultural
Existing Adjacent Land Uses: Ranch Land
North: Ranch Land
East: Ranch Land
South: Ranch Land
West: Ranch Land

Proposed Project Description, purpose and/or need for the requested right of way?
See Exhibit A and associated Conceptual Design Plan.

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What is your opinion of the value of the right-of-way you wish to acquire the rights to, per acre, and if appropriate, per square foot?

To be determined. based on appraised value.

What are the funding mechanisms that will assist and or pay for this right of way? Are there constraints, stipulations or deadlines with the funding?

TRE will receive 100% of its funding for this right of way, and other early and mid stage development activities from TEAI. TEAI is well capitalized and has a successful 30 year track record, having acted as both a principal and investment manager for over US\$3.0 billion of energy transactions. Torch Renewable Energy (TRE) is a wholly owned subsidiary of a privately held energy project developer and manager, Torch Energy Advisors, Inc. (TEAI). This stage of funding will be free and clear of constraints, stipulations or deadlines.

Is access an improved dedicated public street? Yes No

Describe access and identify road names: Access will be off of Muleshoe Rd. on private land.
Torch is in the process of obtaining a private ROW with the land owner.

Are there any drainage and/or flood plain constraints or requirements for the use or proposed project? If yes, what are the proposed plans to address them and how or will they impact the proposed use?

There are no drainage or floodplain constraints. The road is existing and transmission poles will not be placed within a drainage. Any ephemeral wash crossings will be evaluated to determine the need for reinforcement.

Are there any waterways/washes in along or within the project area? If yes, what are the sizes and what constraints and/or issues may they generate?

The transmission line will cross 2 ephemeral washes. A preliminary jurisdictional determination will be completed and vetted through USACE. If any of these washes are identified as jurisdictional then the appropriate permits will be obtained through USACE.

Has the proposed use or proposed project been presented and/or vetted through the local, State or Federal jurisdiction? If yes, what was the jurisdiction's position? Please include any letter of support and/or stipulations imposed on the project.

The project is currently being discussed with Local, State, and Federal Entities.
Letters of compliance and permits will be submitted as they become available.



Are there any pending projects associated with this use or proposed project? If yes, do they require other rights of ways or acquisitions to complete the project? Please explain.

The Red Horse Wind farm will be built in conjunction with this project. The ROW application number is 14-116877-000-000.

Torch has also submitted an application for a commercial lease with the ASLD for Sections 1 and 2 in T14S/R21E.

Are there any extraordinary issues affecting the use or proposed project that you are aware of, such as the existence of endangered species, cultural resources, topographic constraints, etc.?

None identified in a desktop analysis. Torch is in the process of engaging consultants to complete a native plant survey, a cultural resource survey, and a waters of the U.S inventory.

What, local, State or Federal approvals, if any, are necessary for this use or proposed project? If a Certificate of Environmental Compatibility (CEC) by the Arizona Corporation Commission is required, when are you planning to file the application? If filed, please provide a copy of the application.

Cochise County Special Use Permit and Building permit; A CEC is not required because the project nameplate capacity is less than 100 MW. If any of the washes are classified as jurisdictional then the appropriate permit process will be followed per USACE.

Why are you requesting that this parcel be encumbered with a right of way at this time? Please provide supporting data.

See EXHIBIT A.

For Real Estate Division Use Only

Preliminary Application Conference Took Place with: Glenn Holiday

Real Estate Division Signature: Susan Russell 2/3/14
(Date)

ROW authorizes a KE 14

2/3/14 DR
JD
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EXHIBIT A

"REQUEST FOR RIGHT OF WAY"

APPLICANT: RED HORSE 2 WIND, LLC

3. REQUEST FOR RIGHT OF WAY: Applicant hereby makes Right of Way application under A.R.S § 37-461, for purpose of "Constructing a transmission line and improving an existing road to provide transmission and access for the construction and operation of a solar facility." Use of ASLD Lands includes the use of the corridor for the Construction and Operation Phases of the facility.

The Construction Phase will include: the construction of an overhead or underground transmission line that will run from the solar facility to the transmission corridor being utilized for the Wind Facility ROW (#14-116877-000-000). The transmission line from the Solar Facility will follow run due south from the facility and will be 100 feet wide. This width will accommodate transmission line and minimalist road for transmission maintenance. Upon teeing into the existing ROW, the transmission will utilize the same poles that are being installed for the wind facility that runs to the existing Winchester Substation. The transmission corridor to the Winchester Substation will be 150 feet wide and utilize the same corridor as that utilized for the wind farm transmission. The site will be accessed from Muleshoe Road where there is an existing road on private land. Torch is working with land owner to obtain access.

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Red Horse Wind 2, LLC

ARIZONA STATE LAND DEPARTMENT ENVIRONMENTAL DISCLOSURE QUESTIONNAIRE

These two pages are part of the application - DO NOT DETACH.

The purpose of this questionnaire is to give the Department an opportunity to detect proposed land uses that may have potential environmental impacts and risks, and to consider these impacts and risks in the processing of the application.

If you have questions regarding this questionnaire, please contact the State Land Department, Environmental Section at (602) 542-2119. Other Federal, State, County and local agencies may also need to be contacted regarding environmental regulations.

PLEASE INDICATE BELOW THE TYPE(S) OF POTENTIAL ENVIRONMENTAL IMPACTS FROM YOUR CURRENT OR PROPOSED USE:

| <u>YES</u> | <u>NO</u> | <u>WILL YOUR USE INVOLVE:</u> | <u>TYPE OF ENVIRONMENTAL IMPACT</u> |
|------------|-----------|--|-------------------------------------|
| | X | <u>WASTE TIRES</u> The collection of waste tires? If yes, explain: _____ | |
| | X | <u>LEAD ACID BATTERIES</u> The sale and disposal of lead acid batteries? If yes, explain: _____ | |
| | X | <u>DISCHARGE IMPACTING GROUNDWATER</u> Generating a discharge that may potentially impact groundwater? If yes, explain: _____ | |
| | X | <u>PESTICIDES?</u> If yes, explain use: _____ | |
| | X | <u>DRY WELLS?</u> If yes, ADEQ Registration #(s): _____ | |
| | X | <u>POTABLE WATER (DRINKING WATER) SYSTEMS?</u> If yes, explain: _____ | |
| | X | <u>WASTEWATER COLLECTION AND TREATMENT SYSTEMS</u> Wastewater collection and/or treatment? If yes, explain: _____ | |
| | X | <u>AIR CONTAMINANTS/AIR POLLUTION CONTROL</u> Air contaminant emissions? If yes, explain: _____ | |
| X | | <u>SOLID WASTE - GENERAL</u> Solid waste generation, transportation, treatment, recycling, storage or disposal? If yes, explain: _____ Solid Waste generated during construction will be disposed per Cochise County Regulations. | |
| | X | <u>SOLID WASTE - MEDICAL WASTE</u> Medical waste generation, transportation, treatment, recycling, storage or disposal? If yes, explain: _____ | |
| X | | <u>SOLID WASTE - SEWAGE SLUDGE/SEPTAGE</u> (Septic Tank Waste) Sewage sludge/septage generation, transportation, treatment, storage, use or disposal? If yes, explain: _____ Sewage Sludge generated during construction will be disposed per Cochise County Regulations. | |
| | X | <u>USED OIL</u> Used oil generation, transportation, storage, recycling, use, disposal, marketing or burning? If yes, explain: _____ | |
| | X | <u>RECYCLING ACTIVITIES?</u> If yes, explain: _____ | |
| | X | <u>SPECIAL WASTE</u> Special waste (asbestos, motor vehicle shredding waste) generation, transportation, treatment, recycling, storage or disposal? If yes, explain: _____ | |
| | X | <u>HAZARDOUS WASTE GENERATOR</u> Generating hazardous waste? If yes, explain: _____ | |
| | X | <u>HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL?</u> If yes, explain: _____ | |

(OVER)

| <u>YES</u> | <u>NO</u> | <u>WILL YOUR USE INVOLVE:</u> | <u>TYPE OF ENVIRONMENTAL IMPACT</u> |
|-------------------------------------|--------------------------|---|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>HAZARDOUS WASTE TRANSPORTATION?</u> If yes, explain: _____ | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>UNDERGROUND STORAGE TANK (UST)?</u> If yes, explain: _____ | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>ABOVEGROUND STORAGE TANK (AST)?</u> If yes, explain: _____ | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>HAZARDOUS SUBSTANCES?</u> If yes, explain: _____ | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>CURRENTLY UNCLASSIFIED WASTE</u> Will your use involve currently unclassified waste containing the following? (A.R.S. §49-854). If yes, check appropriate waste category: | |
| | | <input type="checkbox"/> Polychlorinated biphenyls (PCBs) | <input type="checkbox"/> Oil and gas exploration drilling muds |
| | | <input type="checkbox"/> Incinerator ash | <input type="checkbox"/> Categorical industrial pretreatment sludge |
| | | <input type="checkbox"/> Petroleum refining waste | <input type="checkbox"/> Radioactive waste |
| | | <input type="checkbox"/> Slag and refractory material | <input type="checkbox"/> Uranium ore tailings |
| | | <input type="checkbox"/> Precious metals recycling | <input type="checkbox"/> Industrial catalysts |
| | | <input type="checkbox"/> Aluminum dross | <input type="checkbox"/> Industrial sands (excluding mining or mineral processing operation) |
| | | <input type="checkbox"/> Petroleum contaminated soil | <input type="checkbox"/> Commercial/industrial septage |
| | | | <input type="checkbox"/> Used Antifreeze |
| | | | <input type="checkbox"/> Contaminated process equipment |
| | | | <input type="checkbox"/> Industrial Sludges |
| | | If checked, explain waste generation process: _____ | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>SUPERFUND SITES</u> Is the State Trust land located in a National Priority List (NPL, Federal Superfund) area or in a Water Quality Assurance Revolving Fund (WQARF, State Superfund) study area? If yes, NPor WQARF area name: _____ | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>LAND DISTURBANCE</u> If land disturbance will occur, will it be on previously undisturbed land? If yes, explain: _____ foundations for transmission poles. | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>WATER WELLS</u> Are there open and/or abandoned water wells on the property? If yes, submit a site diagram showing location(s) and use(s). | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>ADJACENT LAND USES</u> To the best of your knowledge, are adjacent lands subject to any of the above-referenced environmental impacts? If yes, explain: <u>No.</u> | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>ON-SITE INSPECTION/ENVIRONMENTAL ASSESSMENT</u> To the best of your knowledge, has an on-site inspection and/or an environmental site assessment been performed at this location? If yes, explain: _____ | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>PREVIOUS ENVIRONMENTAL IMPACT</u> To the best of your knowledge, has any environmental impact been reported previously to ADEQ? If yes, explain: _____ | |

ADDITIONAL COMMENTS:

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EXHIBIT A

“REQUEST FOR RIGHT OF WAY”

APPLICANT: RED HORSE 2 WIND, LLC

3. REQUEST FOR RIGHT OF WAY: Applicant hereby makes Right of Way application under A.R.S § 37-461, for purpose of “Constructing a transmission line and improving an existing road to provide transmission and access for the construction and operation of a solar facility.” Use of ASLD Lands includes the use of the corridor for the Construction and Operation Phases of the facility.

The Construction Phase will include: the construction of an overhead or underground transmission line that will run from the solar facility to the transmission corridor being utilized for the Wind Facility ROW (#14-116877-000-000). The transmission line from the Solar Facility will follow run due south from the facility and will be 100 feet wide. This width will accommodate transmission line and minimalist road for transmission maintenance. Upon teeing into the existing ROW, the transmission will utilize the same poles that are being installed for the wind facility that runs to the existing Winchester Substation. The transmission corridor to the Winchester Substation will be 150 feet wide and utilize the same corridor as that utilized for the wind farm transmission. The site will be accessed from Muleshoe Road where there is an existing road on private land. Torch is working with land owner to obtain access.

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RETURN TO:

ARIZONA STATE LAND DEPARTMENT
PUBLIC COUNTER
1616 WEST ADAMS
PHOENIX, ARIZONA 85007

SUBMIT NON-REFUNDABLE FILING FEE:

New/Renewal: \$500
Amend: \$100

| DEPARTMENTAL USE ONLY | | ROLODEX # _____ | |
|-----------------------|------------------|------------------------|-------|
| ACCOUNTING | T&C | RECOMMENDATION/INITIAL | DATE |
| Filing Fee: | Exam: _____ | Approve _____ | _____ |
| New/Renewal: \$500 | Exam #: _____ | Deny _____ | _____ |
| Amend: \$100 | Int Title: _____ | Reject _____ | _____ |
| N(34) R(35) A(23) | App Entry: _____ | Withdraw _____ | _____ |

APPLICATION FOR RIGHT OF WAY

Type or print in ink.

APPLICATION NO. _____

Complete ALL questions, SIGN and SUBMIT application with appropriate NON-REFUNDABLE FILING FEE.

1. APPLICANT:

Red Horse Wind 2, LLC

Name

1331 Lamar Ave. Suite 1450

Mailing Address

Houston TX 77010

City State Zip

Glenn Holliday 713.753.1287

Contact Person Phone No.

glenn.holliday@teai.com

Email Address for Contact Person

2. TYPE OF APPLICATION:

NEW

RENEW

AMEND

Reason for amendment:

3. REQUEST FOR RIGHT OF WAY: Applicant hereby makes Right of Way application under A.R.S. § 37-461, for the purpose of Construct and maintain a 34.5 kV transmission line over and across the lands hereinafter described for a term of 50

years, in accordance with the laws of the State of Arizona and the rules of the State Land Department.

(commercial lease #03-11-7442)

4. LEGAL DESCRIPTION: (Complete below and attach metes and bounds legal description, maps, surveys & plans)

| TWN. | RNG. | SEC. | LEGAL DESCRIPTION | ACRES | COUNTY | SLD USE ONLY | | |
|-------|-------|-------|--|-------|--------|--------------|-------|--------|
| | | | | | | CITY | GRT | PARCEL |
| _____ | _____ | _____ | See Exhibit B for preliminary legal descriptions | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

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5. CONSTRUCTION SCHEDULE:

- a. If construction is required, when is the proposed construction anticipated to begin? June 1, 2014
- b. Typical processing time for an application is 12-16 months. Does your construction schedule allow for this processing time? No Yes If no, please complete R/W Supplement "RW-CO" Conditional Right of Way Supplement.

6. TYPE OF RIGHT OF WAY – REQUIRED SUPPLEMENTS: (Complete supplement for each use marked) Required supplements are available at 1616 W. Adams or online at www.land.state.az.us

a. Municipal/Utility Rights of Way

- Public Roadway & Underground Utilities – (Complete supplement "RW-RU")
- Public Roadway – (Complete supplement "RW-R")
- Drainage Easement – (Complete supplement "RW-D")
- Service Road – (Complete supplement "RW-R")
- Underground Utility Easement – (Complete supplement "RW-U")
- Water Line, Reservoir or Lift Station – (Complete supplement "RW-U")
- Sewer Line or Lift Station – (Complete supplement "RW-U")
- Electrical Line or Substation – (Complete supplement "RW-U")
- Gas Line – (Complete supplement "RW-U")
- Temporary Construction Easement – (Complete supplement "RW-T")
- Other, Please specify _____

b. Telecommunications Rights of Way

- Communication Line – Distribution Line – (Complete supplement "RW-C")
- Communication Line – Single User – Transmission Corridor – (Complete supplement "RW-C")
- Communication Line – Multiple User – Transmission Corridor – (Complete supplement "RW-C")
- Service Road – (Complete supplement "RW-R")
- Temporary Construction Easement – (Complete supplement "RW-T")
- Other, Please specify _____

c. Private Individuals & Entities

- Non-Exclusive Access Road – (Complete supplement "RW-R")
- Haul Road – (Complete supplement "RW-R")
- Service Road – (Complete supplement "RW-R")
- Temporary Construction Easement – (Complete supplement "RW-T")
- Other, Please specify To construct an overhead or underground transmission line from a solar facility to the overhead transmission line being constructed for the wind facility.

7. BASIS FOR APPLICATION:

a. Why are you applying for this right of way? (Mark all that apply):

- | | |
|---|--|
| <input type="checkbox"/> Public Works Project | <input type="checkbox"/> Pending Sale |
| <input type="checkbox"/> Pending Private Development | <input type="checkbox"/> Loss of Alternative Access |
| <input type="checkbox"/> Required by City, County, etc. | <input checked="" type="checkbox"/> Other, Please specify: |
| <input checked="" type="checkbox"/> Necessary to provide infrastructure | <u>Construct a transmission line</u> |
| <input checked="" type="checkbox"/> Necessary to provide access | <u>(see 6.c. above)</u> |
| <input type="checkbox"/> Trespass/Encroachment | _____ |

b. Does this right of way serve a specific property?

- No If no, complete R/W Supplement "RW-2" (Easement in Gross Supplement)
- Yes If yes, complete R/W Supplement "RW-1" (Dominant Estate Supplement)

Both forms are being submitted since Torch is simultaneously pursuing a private lease and a commercial lease with the ASLD.

c. Is the proposed right of way to be used in conjunction with any application for a state lease, permit or sale (commercial, mineral, etc.)? No Yes If yes, provide the application number: _____

Commercial lease is being filed simultaneously

8. EXISTING LESSEE – IMPROVEMENTS:

a. Are there any improvements that would be disturbed if this application is approved (water tanks, wells, fences, building, etc.)? No Yes If yes, list below:

b. If approved, will the construction and the maintenance of the right of way interfere with or intrude upon the existing lessee's rights under any existing lease? No Yes If yes, describe in detail:

There are existing grazing leases (5-82580 and 5-194). The only disturbance will be during the construction of the transmission line.

c. Have you contacted the Lessee to discuss this application? No Yes N/A

9. JURISDICTIONAL WASHES:

a. Will the right of way cross any known washes, waterways, or other Waters of the U.S.? No Yes If yes, list the numbered washes or indicate "unnamed wash" below:

The transmission line will cross 2 minor ephemeral washes. Torch has a consultant preparing a Preliminary Jurisdictional Determination to determine if any of these washes are jurisdictional.

10. APPLICANT COMPLETE AND SIGN PAGE 4.

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CERTIFICATION: Pursuant to A.R.S. Title 37 and the Rules of the Arizona State Land Department, A.A.C. Title 12, Chapter 5, you must complete the following information pertinent to you and/or the organization you represent and sign the certification or your application will not be processed. NOTE: Applicant must complete item #1.

1. Is this application made in the name of: (Applicant must check one) _____ Individual(s) _____ Husband & Wife
 _____ Corporation _____ Partnership _____ Ltd. Partnership _____ Estate _____ Trust _____ Ltd. Liability Co.
 _____ Joint Venture _____ Municipality _____ Political Subdivision _____ Other (specify) _____

2. INDIVIDUAL(s) OR HUSBAND & WIFE: Complete the following for each applicant:
 NAME AGE MARITAL STATUS

3. CORPORATION: Complete the following:
 (A) Do you have authority from the Arizona Corporation Commission to do business in the State of Arizona? Yes ___ No ___
 (B) Is the corporation presently in good standing with the Arizona Corporation Commission? Yes ___ No ___
 (C) In what state are you incorporated? _____
 (D) Is the legal corporate name and Arizona business address the same as stated in this application? Yes ___ No ___
 If no, state the Legal Corporate Name: _____
 Address: _____
 (Street or Box Number) (City) (State) (Zip)

4. LIMITED LIABILITY COMPANY: Complete the following:
 (A) If an out-of-state limited liability company: Have you filed for a Certificate of Registration with the Arizona Corporation Commission?
 Yes ___ No ___
 (B) If an Arizona limited liability company: Have you filed Articles of Organization with the Arizona Corporation Commission?
 Yes ___ No ___
 (C) Are you authorized by the Arizona Corporation Commission to transact business in Arizona? Yes ___ No ___

5. PARTNERSHIP OR JOINT VENTURE: Complete the following for each authorized partner or principal in the partnership or joint venture:
 NAME BUSINESS ADDRESS AGE MARITAL STATUS

6. LIMITED PARTNERSHIP: Is this Limited Partnership on file with the Arizona Secretary of State? Yes No
 Complete the following for the authorized general partner(s) only:
 GENERAL PARTNER(S) NAME BUSINESS ADDRESS

7. ESTATE: Complete the following and attach a copy of the court or estate document(s):
 Name of the court-appointed administrator or personal representative: _____
 List the type and date of issuance of the court or Estate document: _____
 (Date Issued) (Type of Document)

8. TRUST: (A) Complete the following pursuant to A.R.S. § 33-404, for each beneficiary of the Trust:
 NAME ADDRESS AGE MARITAL STATUS

or (B) Identify the Trust document by title, document number, and county where document is recorded: _____

9. I HEREBY CERTIFY, UNDER PENALTY OF PERJURY, THAT THE INFORMATION AND STATEMENTS CONTAINED HEREIN, TOGETHER WITH ALL EXHIBITS AND ATTACHMENTS ARE TRUE, CORRECT AND COMPLETE AND THAT I/WE HAVE AUTHORITY TO SIGN THIS DOCUMENT.

By: Glenn Holliday 2/1/2014
 (Name of Corporation, Partnership, etc.) Date
 Signature of Applicant (Individual) Date
 Signature of Applicant (Individual) Date

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RED HORSE SOLAR

Pre-construction Hydrology Report



February 25, 2014

Prepared by:

Torch Renewable Energy
1331 Lamar Ave. Ste. 1450
Houston, Tx 77010



INTRODUCTION

Red Horse Solar (Red Horse Solar), a wholly owned subsidiary of Torch Renewable Energy, LLC (TRE) is proposing to construct, operate, and maintain a solar generation facility in Cochise County, Arizona. The project is located approximately 25 miles west of Willcox in Cochise County, on privately owned land. The project includes the excavation and development of foundations for each solar module. In addition, an overhead transmission line will run from the project site, adjacent to an existing transmission line down to the Winchester substation.

This hydrology and drainage report describes the existing environmental setting within the project area, and potential hydrologic/water quality impact associated with the implementation of the proposed project. This report has been prepared for the local Cochise County Planning Department.

PROJECT SUMMARY

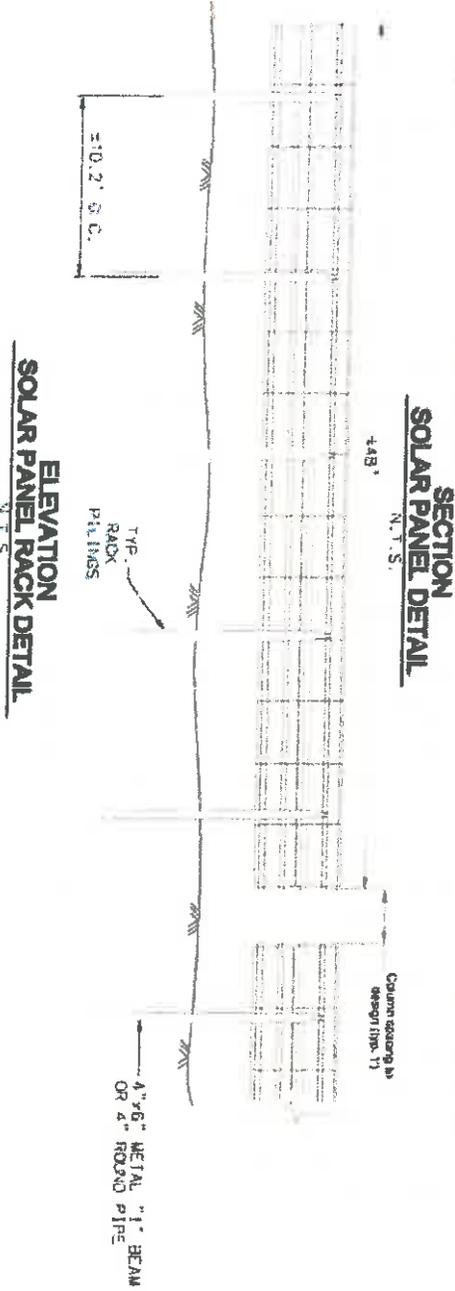
The proposed Red Horse Solar Facility is a solar photovoltaic (PV) power-generating facility within unincorporated Cochise County and is located on approximately 650 acres. The project will consist of the following components:

- The installation of photovoltaic (PV) modules, utilizing single axis tracker technology. An example of a typical solar module install is shown in Figure 1.
- 1 substation, located adjacent to the existing Winchester Substation.
- 5.6 miles of transmission lines and towers to the existing Winchester Substation
- Equipment pads for each single axis PV tracker.
- A main project access road that follows an existing road from Muleshoe Road. This main access road may require some reinforcement at wash crossings or where the road needs structural reinforcement. Aggregate will be used for reinforcement.
- Project access road around the perimeter and through the site will be built using aggregate and compaction.

METHODOLOGY

The description of the baseline hydrological conditions was done via a desktop analysis using information from existing sources and field data collected specifically for this project.

Typical Solar Panel Installation Detail



ARRANGEMENT/NUMBER OF PHOTOVOLTAIC PANELS, SPACING OF SUPPORTING RACKS AND RACK PILLINGS ARE SHOWN TO ILLUSTRATE THE GENERAL CONFIGURATION OF THE PROPOSE SOLAR COLLECTION SYSTEM AND ARE SUBJECT TO MODIFICATIONS AT FINAL ENGINEERING DESIGN.

Figure 1. Typical Sketch Showing Foundation Spacing





ENVIRONMENTAL SUMMARY

The sections below describe the existing environmental conditions at the project site and in the region for topography, geology, climate, and hydrology.

BASELINE STUDY OF THE HYDROLOGY

The Project Area is approximately 19 miles west of Willcox, Arizona, located in the plains to the west of the Winchester Mountains. The Project Area lies on Allan Flat, a gently northeast-southwest sloping grassland with relatively well spaced narrow, shallow valleys that collect storm runoff. The Project Area's topography consists primarily of moderately undulating shoulders made of quaternary deposits. Elevations slope northeast to southwest between 4,900 and 4,600 feet above mean sea level. The Project Area is located in the San Pedro-Willcox basin and within the Upper San Pedro Sub-basin (Hydrologic Unit Codes 1505020201), and within the upper Tres Alamos Wash watershed. Drainage is morphologically connected to the San Pedro River. There are no impaired (303d/TMDL) or Arizona Outstanding Waters (AOW) in or near the project area. Figure 2 shows the project location in the greater landscape and the sub-basins within the San Pedro-Wilcox basin.

The existing ephemeral washes were identified using a USGS quad map and field visits. These ephemeral washes are identified in Figure 3.

In general, drainage morphology in the Project Area can be described as having dispersed, low-velocity events. The runoff collection areas do not have consistent OHWM characteristics; there is minimal definition in the beds and banks, substrate is not significantly distinguishable from upland areas and there are almost no marked differences in vegetation.

Most drainage areas visible on aerial photographs are undefined floodplain features, which contain varied densities of shrub growth and variable channel bed elevations, indicating that storm flow events are dispersed more as localized sheetflow (see Figures 4-8). These areas appear morphologically connected, but there is limited evidence that flows have developed discrete, continuous conveyances maintaining an OHWM. This is true as drainage features travel off-site. Most channels have substrates that are very similar to upland deposits. It is highly unlikely that most flow events travel far beyond the Project Area. Topography undulates and slopes gently; this, coupled with soil types that are excessively well drained, creates unfavorable conditions for channel development. In general, localized sheetflow-like features dominate the landscape. Figures 4 through 8 show photos of the landscape and channels within the project area. Figure 9 shows the locations of these photos.

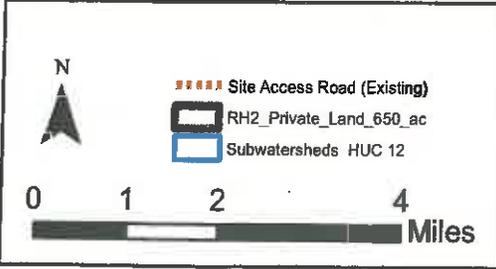
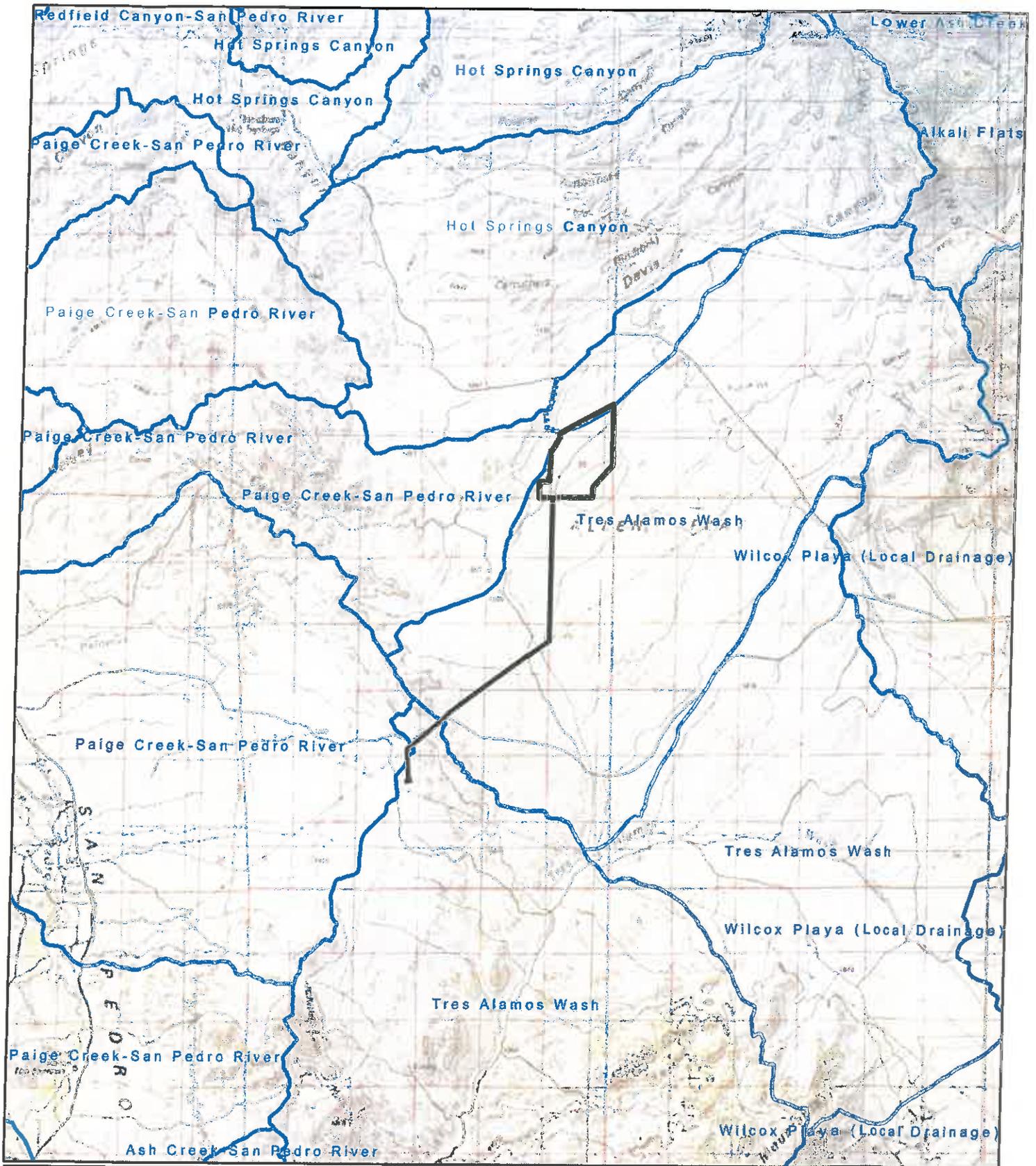
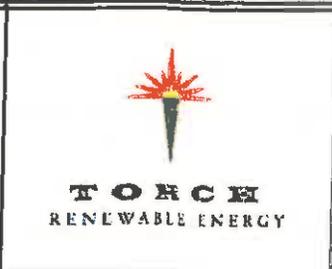


Figure 2.
RED HORSE SOLAR FACILITY
 Sub-basins within the Watershed



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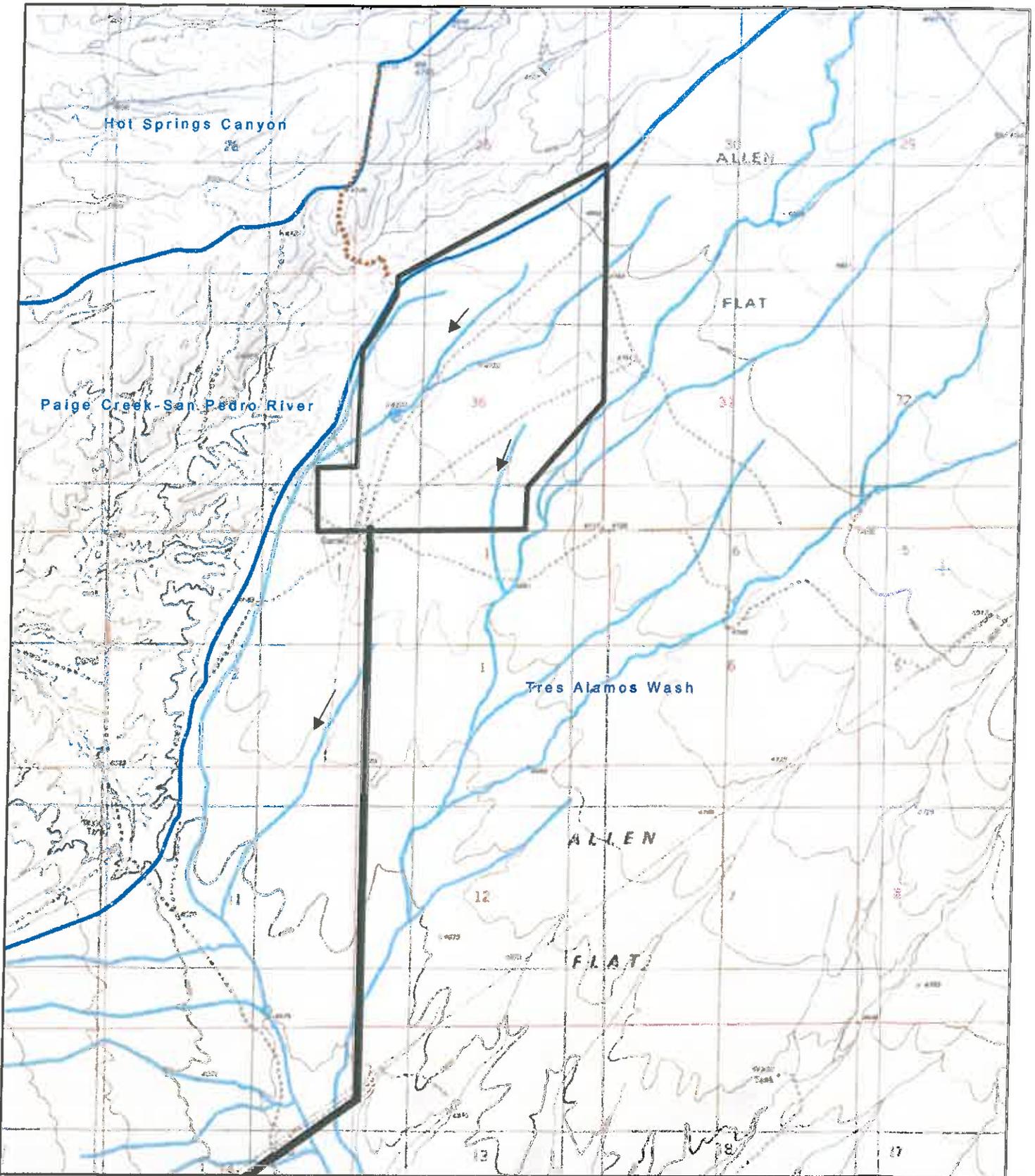


Figure 2.
RED HORSE SOLAR FACILITY
 Ephemeral Washes in Project Area





Figure 4. Photo ID 4108. Drainage channel on site is minimally defined. Photo location is shown in Figure 9.

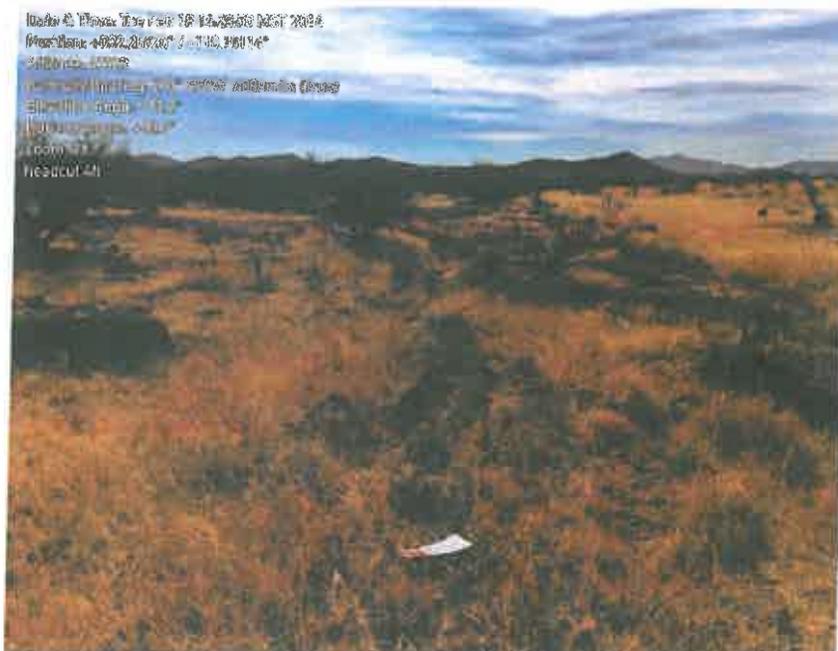


Figure 5. Photo ID 4111. Drainage channel on site is minimally defined. Photo location is shown in Figure 9.

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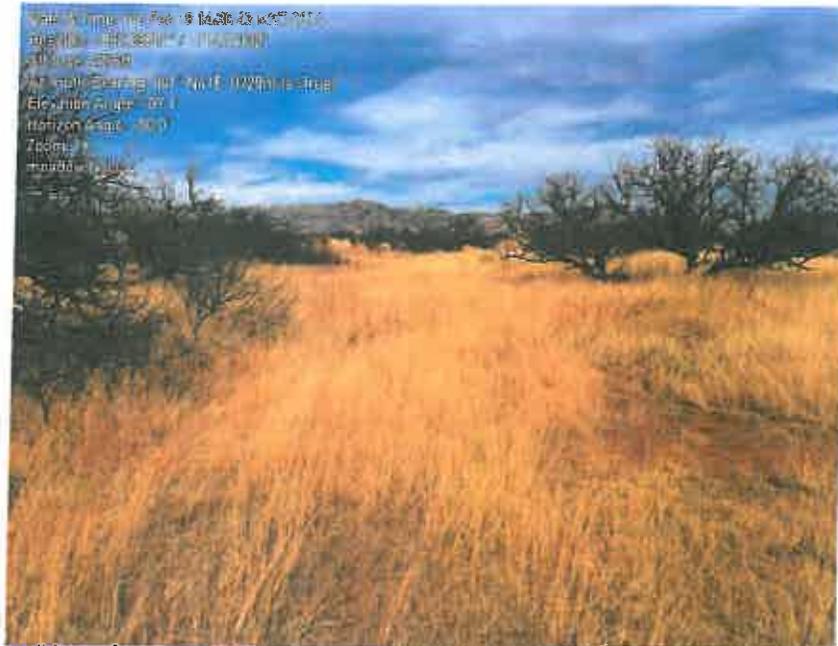


Figure 6. Photo ID 4112. Grasslands on site. Photo location is shown in Figure 9.



Figure 7. Photo ID 4115. Example of wash that is shown on USGS quadrangle that is undefinable on site.. Photo location is shown in Figure 9.

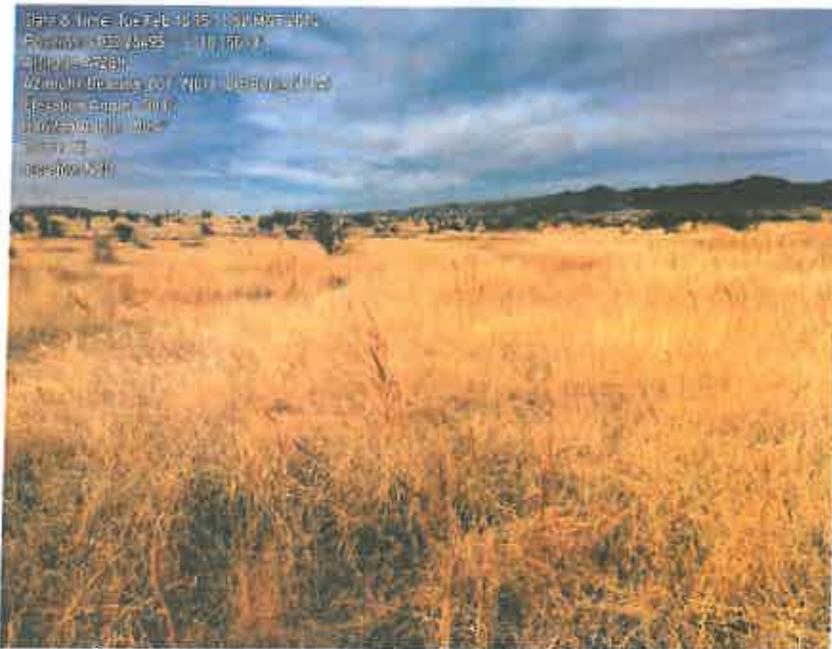


Figure 8. Photo ID 4116. Typical grasslands on site. Photo location is shown in Figure 9.

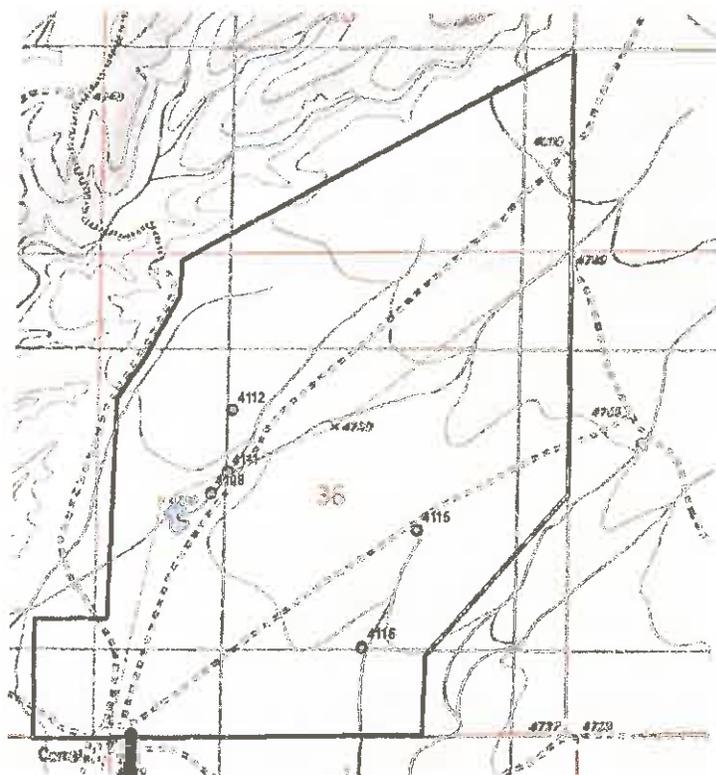


Figure 9. Photo locations.

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The vegetation consists of Semidesert Grassland as defined by Brown¹. The dominant vegetation includes blue grama (*Bouteloua gracilis*), galleta grass (*Pleuraphis* sp.), banana yucca (*Yucca baccata*), and velvet mesquite (*Prosopis velutina*).

The soil types mapped within the survey area are Terrarossa-Blacktail complex (fan terraces), Ashcreek silty clay loam (washes), and Carbine-Hathaway complex². The majority of the site is Terrarossa-Blacktail complex. The Ashcreek silty clay loam is primarily located within the washes, and the Carbine-Hathaway complex is located sporadically throughout the southern section of the site. The runoff designations are high to very high for soils in the project area².

Table 1. NRCS Soil Classifications at the Project Site.

| | Drainage classification | Hydrologic Soil Group | Runoff Potential |
|------------------------------|-------------------------|-----------------------|------------------|
| Terrarossa-Blacktail complex | well drained | C | high |
| Ashcreek silty clay loam | well drained | D | Very high |
| Carbine-Hathaway complex | well drained | D | Very high |

The project site is located in a dry-arid region that receives an average of 17.84 inches of rain a year³. The annual rainfall hydrograph is shown below in Figure 10. As can be seen in this diagram, the precipitation pattern is dominated by summer monsoons.

Water is provided to the project site by naturally occurring precipitation resulting in surface water runoff. The water table is far below the surface. The Arizona Department of Environmental Quality's well log shows a well located along the southern boundary of the project (ID 615953) with a depth of 620 feet (Figure 11). There are no perennial or intermittent streams within the project area. There are a couple ephemeral washes within the project area that appear to collect minimal surface water runoff. The project site has one anthropogenic hydrology feature, a stock watering pond. This pond will continue to operate and will not be impacted by the development. None of the washes within the project site have been identified as jurisdictional waters for the U.S. Army Corps of Engineers (USACE), as they lack connectivity to navigable waters and defined Ordinary High Water Marks (OHWM).

¹ Brown, D.E. (ed.). 1994. *Biotic Communities: Southwestern United States and Northwestern Mexico*. Salt Lake City: University of Utah Press.

² Natural Resources Conservation Service (NRCS) web soil survey. <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

³ PRISM. NRCS in conjunction with PRISM. February 14, 2013. http://prismmap.nacse.org/nn/index.phtml?lon=-110.605&lat=32.163&vartype=ppt&month=14&year0=1981_2010&year1=1981_2010&units=English&layer_status%5B%5D=copright&layer_status%5B%5D=Graticule&layer_status%5B%5D=Cities&layer_status%5B%5D=Capitals&layer_status%5B%5D=Road&layer_status%5B%5D=States&layer_status%5B%5D=Counties&layer_status%5B%5D=Rivers&layer_status%5B%5D=Lakes&layer_status%5B%5D=World&layer_status%5B%5D=25m+Hillshade&layer_status%5B%5D=15s+Hillshade&layer_status%5B%5D=Hillshade&layer_status%5B%5D=DEM+%281+km%29&layer_status%5B%5D=DEM+%284+km%29&Pan_East.x=6&Pan_East.y=11&pr_month=01&pr_year=1997&ROSA_CMD=ZOOM_IN&size=small&PrevStateKey=1360867933-5622&NotFirstLoad=1&RosaMode=0&INPUT_TYPE=&INPUT_COORD=201%2C175&QueryString=&Prism=

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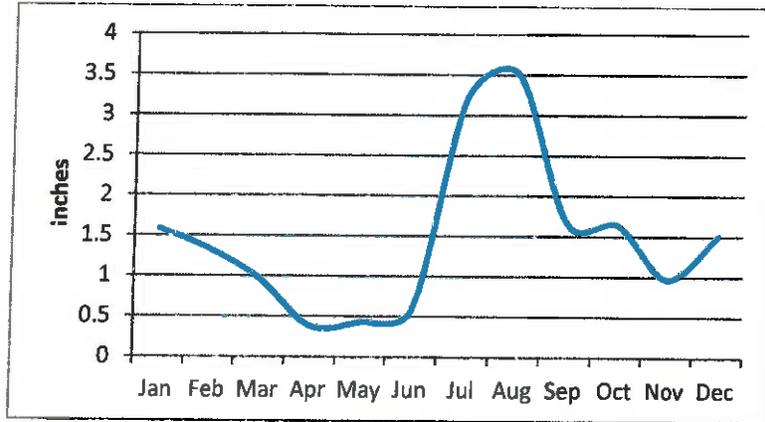


Figure 10. Annual rainfall hydrograph at lat/long: -110.101/32.293

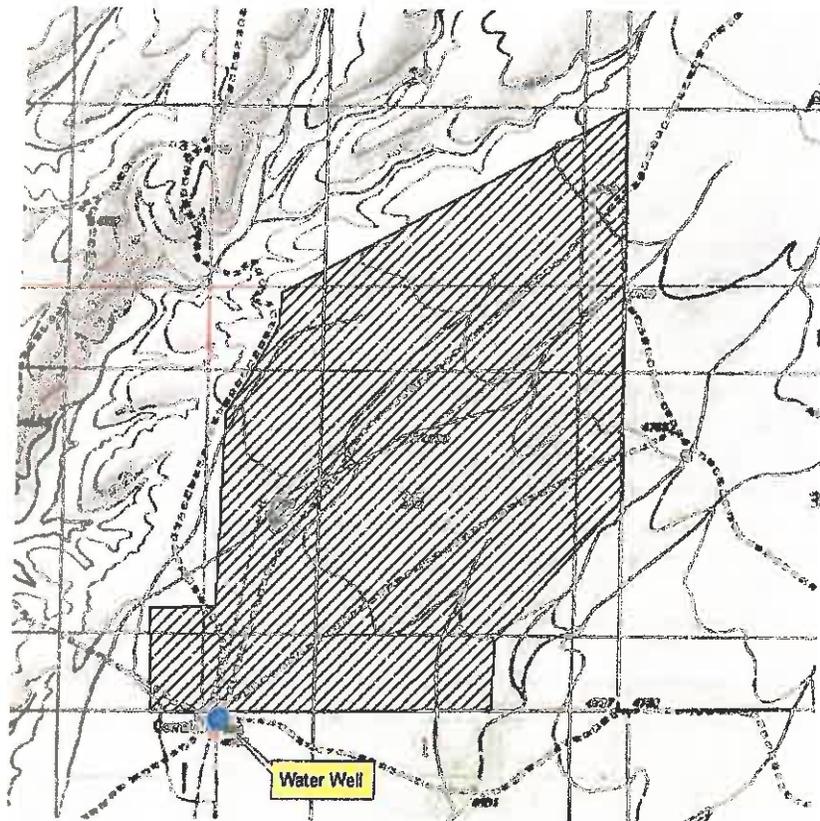


Figure 11. Water Well in Project Vicinity. Well is 620 feet deep.



Impact Analysis and Mitigation Measures

The proposed Project would result in the construction, operation, and maintenance of a photovoltaic (PV) solar facility within Cochise County. The Project would consist of installing solar panels on an estimated 650 acres of private land, the reinforcement and construction of new access roads, and the construction of a transmission line from the project site to the existing Winchester Substation (Figure 1).

The proposed Project would convert existing grazing land to a commercial/industrial land use. Based on available information cited herein, this land-use conversion would:

- Increase the site's impervious area by less than 1 percent.
- Impacts from where vegetation has been removed through the release of silt/dust laden surface water runoff into washes due to soil erosion and/or increased volumes of surface water runoff.
- A temporary increase in the time of concentration due to the increases 'roofing' caused by the solar panels. This temporary increase is not expected to impact the overall functioning of the watershed, or immediate neighbors.
- Maintain the groundwater recharge potential to the on-site groundwater basin.

A preliminary hydrologic analysis was run to determine peak flow rates during various storm events in the washes at the upstream end of the project site. The NRCS Lag equation was used to calculate the time of concentration and the rational method was used to calculate peak flow. The Steel formula was used to calculate rainfall intensity under various storm frequencies.

Tables 2 and 3 below present a hydrologic summary of existing conditions. Nodes 1 and 2 represent discharge locations associated with two identified sub drainages, A and B, respectively, which supply water to the project site. The drainages overlap slightly to accommodate for unknown topological constraints. Therefore the actual peak flow (Q) may be less due a smaller drainage area. Figure 12 shows the delineated drainages and node locations. Input parameters to determine the peak flow rate are summarized in Exhibit A.

Table 2. Predicted existing channel flow at Node 1 under various storm events..

| Storm Frequency (yr) | Intensity (in/hr) | Peak Flow (cfs) |
|----------------------|-------------------|-----------------|
| 2 | 0.11 | 1.51 |
| 4 | 0.13 | 1.68 |
| 10 | 0.20 | 2.68 |
| 25 | 0.25 | 3.39 |
| 50 | 0.27 | 3.52 |
| 100 | 0.35 | 4.59 |



Table 3. Predicted existing channel flow at Node 2 under various storm events.

| Storm Frequency (yr) | Intensity (in/hr) | Peak Flow (cfs) |
|----------------------|-------------------|-----------------|
| 2 | 0.12 | 0.90 |
| 4 | 0.13 | 1.00 |
| 10 | 0.21 | 1.60 |
| 25 | 0.26 | 2.03 |
| 50 | 0.27 | 2.11 |
| 100 | 0.35 | 2.74 |

During construction there is the potential for a minimal increase in surface water runoff due to the clearing of vegetation, the compaction of soils, and the introduction of aggregates to create access roads. This will reduce the overall infiltration capacity by a very small percentage on the project site, resulting in a very minimal increase in the rate and volume of direct surface runoff. This direct surface runoff will be managed through the implementation of Best Management Practices (BMPs) as defined in a Stormwater Pollution Prevention Plan (SWPPP).

The project will add permanent semi-pervious surfaces with the access roads and impervious area with the construction of the foundations for the solar modules. All roads will be constructed to allow unabated flow of the stormwater and minimize alternation to the existing drainage patterns; where possible the roads will be located in areas to minimize erosions and sedimentation risks. All permanent structures will be located in areas, and designed to minimize cut and fill of soils as well as minimized impacts to significant drainage ways and ditches.

To plan for minimal alteration of existing drainage patterns any location where a road must cross a swale, ditch, waterway, or other conveyance every attempt will be made to allow for overland flow without installation of culverts. For this project, we expect to utilize low water crossings, involving reinforcement of the channel to enable flow to continue along its existing path.

Permanent stormwater runoff treatment of the roads will be directed into the adjacent areas for infiltration by maintaining mostly sheet flow. However, in areas of 4% and greater slope there will be rock lined channels and rock checks installed as per plan and as deemed necessary in the field from the site inspector.

Land that has been cleared during construction will be re-vegetated per a Re-vegetation Plan that is being created by SWCA consultants. The revegetation of the landscape will maintain the run-off coefficient during post-construction conditions and ensure minimal soil erosion and impacts to downstream lands within the watershed.

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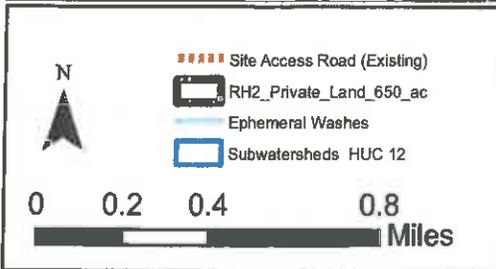
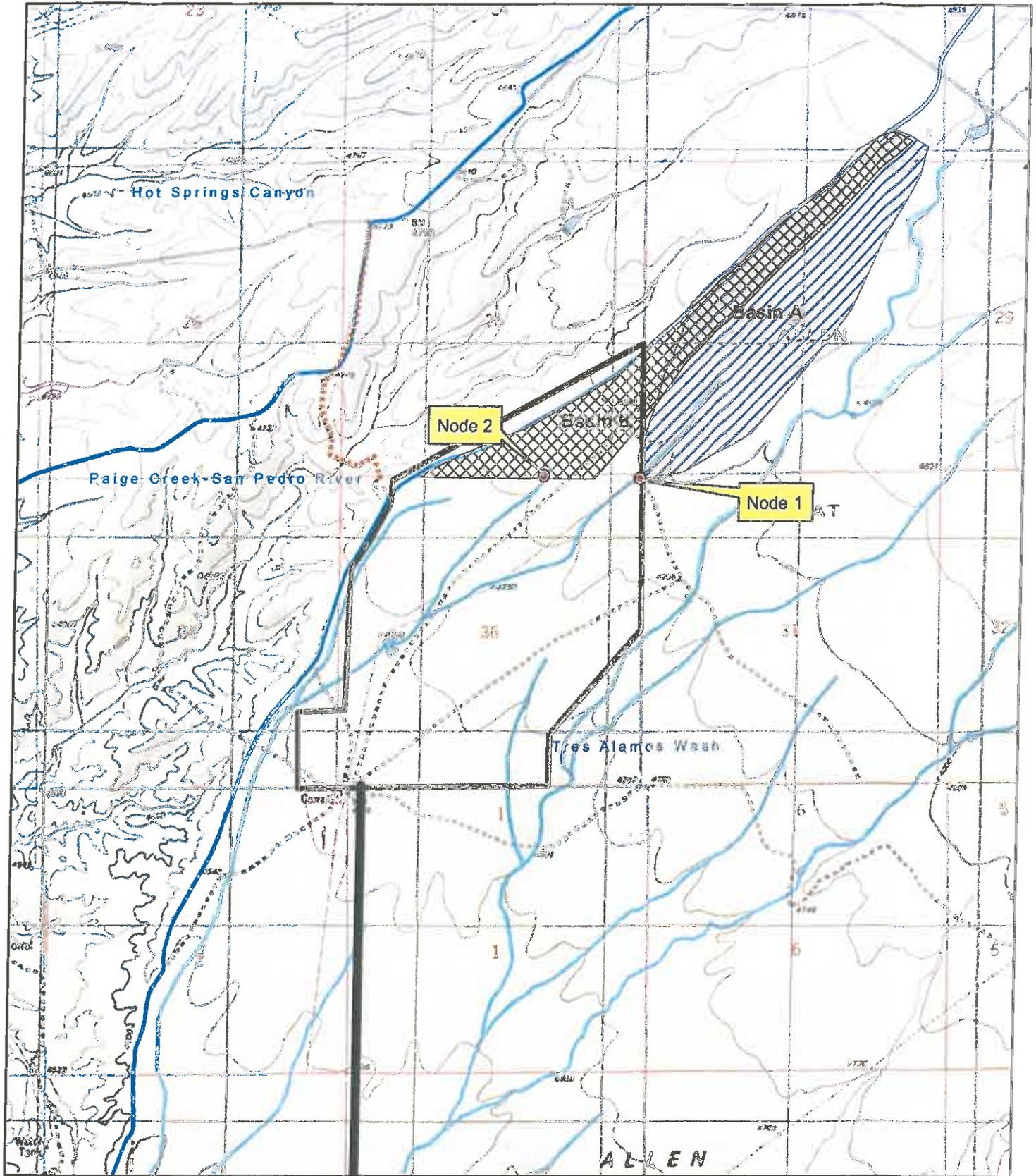
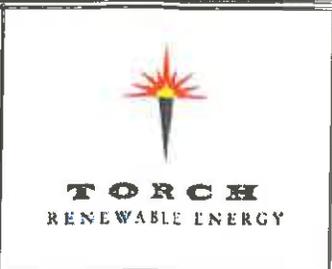


Figure 12.
RED HORSE SOLAR FACILITY
 Rational Method - Drainage Delimitation



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Lastly, once design is complete, permanent stormwater management measures will be implemented to ensure there is little to no impact to downstream lands. The main goal of the stormwater design will be to minimize erosion and sediment transport.

CONCLUSIONS

In conclusion, the construction, installation, and operation of the proposed Solar Facility is expected to have minimal to no noticeable impact of the natural hydrologic environment. The reasons for this are:

- there is a very minimal increase in impervious area;
- there is minimal increase in semi-impervious area;
- there are no impaired (303d/TMDL) or Arizona Outstanding Waters (AOW) within, or near, the project area that may be threatened during construction;
- the solar modules cause a temporary increase in the time of concentration but due to the lack of impermeable surface area, there is no expected increase in the rate or volume of run-off outside of the project area;
- the impact area is small compared with the greater watershed area and therefore the runoff coefficient is not expected to change.

In addition, a study published in the *Journal of Hydrologic Engineering* researched the hydrological impacts of utility scale solar facilities⁴. A model of a solar farm was used to simulate runoff for pre and post panel conditions. The model showed that the solar panels themselves did not have a significant effect on runoff volumes, peaks, or times to peak. However, the study did find that lack of maintenance of ground cover did increase the peak discharge in stormwater. In conclusion it was recommended that vegetation beneath the panels be maintained or that a buffer strip be placed after the most down gradient row of panels.

The final design drawings will include drainage design to prevent erosion and deterioration of the landscape. The SWPPP will include storm-water best management practices for the duration of construction.

⁴ Hydrologic Response of Solar Impacts. 2013. *Journal of Hydrologic Engineering*.
<http://ascelibrary.org/doi/abs/10.1061/%28ASCE%29HE.1943-5584.0000530?journalCode=jhyeff>



Exhibit A – Rational Method, Peak Flow Calculations

Node 1, Basin A

| | | | |
|---------------------------------|---------------------------------|-------|----------------------------|
| Soil Type | C | Notes | most of the site is type C |
| ARC type | II | | assumed average conditions |
| Cover Type | lightly grazed/plant cover >75% | | based on field visit |
| Curve Number (CN) | 74 | | good condition, open space |
| Average Slope | 0.11 | | Measured in GIS |
| elevation delta | 800 | | Measured in GIS |
| length (ft) | 7500 | | Measured in GIS |
| time of concentration (tc), mn* | 582.6951065 | | NRCS Lag Equation |
| Intensity | see below | | Steel Formual, Region 6 |
| Area (ac) | 266 | | Measured in GIS |
| Run-off Coefficient, C | 0.05 | | pasture in good condition |

Intensity and Peak Flow Calculations

| Frequency (yrs) | Steel Formula coefficient | Region 6 (AZ) | Intensity (I) In/hr | Q (Ft ³ /s) |
|-----------------|---------------------------|---------------|---------------------|------------------------|
| 2 | K | 68 | 0.1136 | 1.51 |
| | b | 16 | | |
| 4 | K | 75 | 0.1261 | 1.68 |
| | b | 12 | | |
| 10 | K | 122 | 0.2014 | 2.68 |
| | b | 23 | | |
| 25 | K | 155 | 0.2546 | 3.39 |
| | b | 26 | | |
| 50 | K | 160 | 0.2650 | 3.52 |
| | b | 21 | | |
| 100 | K | 210 | 0.3450 | 4.59 |
| | b | 26 | | |

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Node 2, Basin B

Notes

| | | |
|----------------------------------|---------------------------------|----------------------------|
| Soil Type | C | most of the site is type C |
| ARC type | II | assumed average conditions |
| Cover Type | lightly grazed/plant cover >75% | based on field visit |
| Curve Number (CN) | 74 | good condition, open space |
| Average Slope | 0.13 | Measured in GIS |
| elevation delta | 1100 | Measured in GIS |
| length (ft) | 8300 | Measured in GIS |
| time of concentration (tc), mn * | 566.9071044 | NRCS Lag Equation |
| Intensity | see below | Steel Formual, Region 6 |
| Area (ac) | 155 | Measured in GIS |
| Run-off Coefficient, C | 0.05 | pasture in good condition |

Intensity and Peak Flow Calculations

| Frequency (yrs) | coefficient | Region 6 | Intensity (I) ln/hr | Q (Ft ³ /s) |
|-----------------|-------------|----------|---------------------|------------------------|
| 2 | K | 68 | 0.1167 | 0.90 |
| | b | 16 | | |
| 4 | K | 75 | 0.1296 | 1.00 |
| | b | 12 | | |
| 10 | K | 122 | 0.2068 | 1.60 |
| | b | 23 | | |
| 25 | K | 155 | 0.2614 | 2.03 |
| | b | 26 | | |
| 50 | K | 160 | 0.2722 | 2.11 |
| | b | 21 | | |
| 100 | K | 210 | 0.3542 | 2.74 |
| | b | 26 | | |



COCHISE COUNTY COMMUNITY DEVELOPMENT

"Public Programs...Personal Service"

June 11, 2013

Torch Energy Advisors
C/o Mr. Glenn Holliday
1331 Lamar, Suite 1450
Houston, TX 77010-3039

RE: Docket SUA-13-04 (Red Horse Wind 2, LLC; Torch Energy Advisors, LLC)

Gentlemen,

As you are aware, at their regular meeting on June 11, 2013, the Cochise County Board of Supervisors voted (3 - 0) to uphold the Planning and Zoning Commission's decision to grant a special use permit for Docket SU-13-04 (Red Horse Wind 2) and deny Arizona Audubon's appeal from that decision. The Board also modified the conditions for approval to include the following as new conditions for the permit:

- Applicant shall submit the Preliminary Screening and Pre-Construction Study Plan to AZGFD with a copy sent to Cochise County.
- Applicant shall continue its environmental monitoring program and studies. Applicant will submit findings to AZGFD and provide a copy to Cochise County.
- Applicant shall use commercially reasonable efforts to reduce any potential negative impacts to avian species (specifically eagles) and bat species.
- Applicant shall develop an invasive weed control plan, which will be provided to AZGFD and Cochise County.
- Applicant shall install no more lighting than what is required by the Federal Aviation Administration (FAA).

In addition, Condition #3 from the original approval was modified to add the words "in the form of cash or a bond" as follows:

3. The Applicant acknowledges that transporting equipment and materials to the property during construction is likely to damage Taylor or Airport Roads, and that the Applicant is responsible to pay the County the cost to repair such roads to their current condition by an outside contractor. Prior to permit issuance and transporting equipment and materials to the subject property for construction, i) the County Engineer will prepare a written baseline assessment of the current condition of such roads, to be acknowledged and agreed upon by the Applicant; and ii) the Applicant and the County will enter into a written agreement pursuant to which the Applicant will provide the County funds in the amount of \$3,000,000, in the form of cash or a bond, less the depreciation of such roads

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in the amount to be determined by the County Engineer, to be drawn upon by the County to pay for the cost of repair, with the balance after repair, if any, to be returned to the Applicant upon certification by the County Engineer that such roads have been repaired to their current condition. No certificate of occupancy will be issued for use until such roads have been repaired or the County Engineer has determined that the Applicant has supplied sufficient funds to repair such roads to their current condition. If, during the construction phase the County Engineer determines that such roads have become unsafe for travel, the County may draw down funds to pay for an interim repair as needed. This condition was based on the assumption that Taylor and Airport Roads will be the route taken for this Special Use Authorization. If an alternate route over other County-maintained roads is used, a new estimate and final agreement will be executed between the parties. In the event this project is decommissioned in whole or in part, an additional agreement will be executed between the parties to provide for necessary repair of any County-maintained roads utilized and the cost to remove all decommissioned structures on all private lands.

This approval allows you to establish a Wind Energy Power Plant (Red Horse Wind 2), per Section 604.47 of the County's Zoning Regulations on the following properties: parcel No. 209-69-001 and on nine Sections of land described as being in T13S, Range 22E, Sec.15,16,17,20,21,22,27,28 and 29, per the G&SRB&M in Cochise County, Arizona.

Note: As a reminder, the Board's action was to authorize you to apply for the appropriate permits for your requested use; this permission does not relieve you of the obligation to apply for and obtain all required permits such as a County Planning and Zoning Department Use Permit and Building Permit, a Land Clearing Permit, and/or other permits as may be applicable. You should contact the Planning Department Permit Coordinator if you have any questions on what types of permits you need to obtain.

The Board reaffirmed the Commission's decision to enforce the following conditions of approval on those applicable permits:

1. Prior to permit issuance, the Applicant shall submit a plan for transient dust mitigation for all grading and construction phases for the project;
2. If substantial construction progress has not occurred within three (3) years from the date of approval, the Special Use Authorization shall be revoked after 30-days notice to the Applicant;
3. The Applicant acknowledges that transporting equipment and materials to the property during construction is likely to damage Taylor or Airport Roads, and that the Applicant is responsible to pay the County the cost to repair such roads to their current condition by an outside contractor. Prior to permit issuance and transporting equipment and materials to the subject property for construction, i) the County Engineer will prepare a written baseline assessment of the current condition of such roads, to be acknowledged and agreed upon by the Applicant; and ii) the Applicant and the County will enter into a written agreement pursuant to which the Applicant will provide the County funds in the amount of \$3,000,000, in the form of cash or a bond, less the depreciation of such roads

in the amount to be determined by the County Engineer, to be drawn upon by the County to pay for the cost of repair, with the balance after repair, if any, to be returned to the Applicant upon certification by the County Engineer that such roads have been repaired to their current condition. No certificate of occupancy will be issued for use until such roads have been repaired or the County Engineer has determined that the Applicant has supplied sufficient funds to repair such roads to their current condition. If, during the construction phase the County Engineer determines that such roads have become unsafe for travel, the County may draw down funds to pay for an interim repair as needed. This condition was based on the assumption that Taylor and Airport Roads will be the route taken for this Special Use Authorization. If an alternate route over other County-maintained roads is used, a new estimate and final agreement will be executed between the parties. In the event this project is decommissioned in whole or in part, an additional agreement will be executed between the parties to provide for necessary repair of any County-maintained roads utilized and the cost to remove all decommissioned structures on all private lands;

4. Within 30-days of approval of the Special Use Authorization, the Applicant shall provide the County a signed Acceptance of Conditions form and a Waiver of Claims form arising from ARS Section 12-1134. Prior to operation of the Special Use Authorization, the Applicant shall apply for a Building/Use Permit for the project within 12-months of approval;
5. The minimum setbacks from all parcel boundaries shall be 497-ft., which is at least equal to the horizontal distance from the turbines' base to the parcel boundaries equal to the proposed total height of the turbine structure as measured from its base to the tip of its highest blade, plus 10-ft.;
6. The Building/Use Permit shall include a site plan in conformance with all applicable site development standards (except as Modified) and with Section 1705 of the Zoning Regulations, the completed Special Use permit questionnaire and application, and appropriate fees. A Building/Use Permit must be issued within 18-months of the Special Use Authorization approval, otherwise the Special Use Authorization may be deemed void upon 30-day notification to the Applicant;
7. It is the Applicant's responsibility to obtain any additional permits, or meet any additional conditions, that may be applicable to the proposed use pursuant to other federal, state, or local laws or regulations; and
8. Any changes to the approved Special Use shall be subject to review by the Planning Department and may require additional Modification and approval by the Planning and Zoning Commission.

The Commission's approval of the following Modifications to site development standards for the project remain in place:

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1. A Modification of the maximum permitted height of 45-foot in the Rural Zoning Districts, per Section 604.02 to allow for the approximate 487-foot turbine heights; and
2. A Modification from the minimum 20-foot wide road standard for commercial uses to allow for 16-foot wide setup and maintenance access, per the submitted application.

We will need your signed Acceptance of Conditions Form and signed and notarized Waiver of Diminution of Value Form (enclosed) by **July 11, 2013**. As a condition of the approval, you must apply for a permit within 12-months and the applicable permits must be issued within 18 months or the Special Use approval may be deemed void upon 30-days notification to you (See Condition #4 and 6, above). Since the Permit Coordinator will issue the Building/Use Permit, you are encouraged to set up a meeting with Dora Flores for the submittal of permit applications and accompanying materials; she can be reached at (520) 432-9240. Prior to operation of the Special Use, the Permit Coordinator will ensure that all Special Use conditions and applicable Site Development Standards are met. After permit issuance, there must be substantial progress towards completion of the project within three (3) years from the date of approval (*June 11, 2013*), or the permit shall be revoked after 30-days notice, per Condition #2, above.

If you have any questions, please feel free to call me at 432-9240 or email me at bjwilson@cochise.az.gov.

Sincerely,

Beverly Wilson, Deputy Director Planning Division

cc: Karen Riggs, Interim Community Development Director
Michael Turisk, Planning Manager
Rick Corley, Zoning Administrator
Dora Flores, Permit and Customer Service Coordinator



COCHISE COUNTY COMMUNITY DEVELOPMENT

"Public Programs...Personal Service"

MEMORANDUM

TO: Cochise County Planning and Zoning Commission
FROM: Peter Gardner, Planner I *(PG)*
FOR: Beverly J. Wilson, Planning Director *(BW)*
SUBJECT: Docket SU-14-05 (Sierra Vista Economic Development Foundation)
DATE: March 27, 2014, for the April 9, 2014 Meeting

APPLICATION FOR A SPECIAL USE

Docket SU-14-05 (SVEDF): The Applicant is requesting a Special Use authorization to establish and operate an Unmanned Aerial System (UAS) test facility on the subject parcel. The proposal is to reactivate existing runways located on the parcel, and to place new structures as needed to test small UAS at the site. The land use is defined per Section 607.14 of the Zoning Regulations as *Airports, airstrips, helipads and or heliports*, and is allowed in the Rural Zoning Districts. The subject parcel (108-08-009) is located at 2940 N. 4 Pillars Road in Huachuca City, AZ. The Applicant is the Sierra Vista Economic Development Foundation.

I. DESCRIPTION OF SUBJECT PARCEL AND SURROUNDING LAND USES

Parcel Size: 160-Acres
 Zoning: Rural (RU-4)
 Growth Area: Category D (Rural)
 Plan Designation: Rural-Density Residential
 Area Plan: None
 Existing Uses: Single-Family Residence with runways

Zoning/Use of Surrounding Properties

| Relation to Subject Parcel | Zoning District | Use of Property |
|----------------------------|-----------------|---|
| North | RU-4 | State Land |
| South | RU-4 | Vacant Land/Two Single-Family Dwellings |
| East | RU-4 | Vacant Land |
| West | RU-4 | State Land |

II. PARCEL HISTORY

1991 – Permit issued for installation of a manufactured home and septic system. The manufactured home has never passed final inspection.

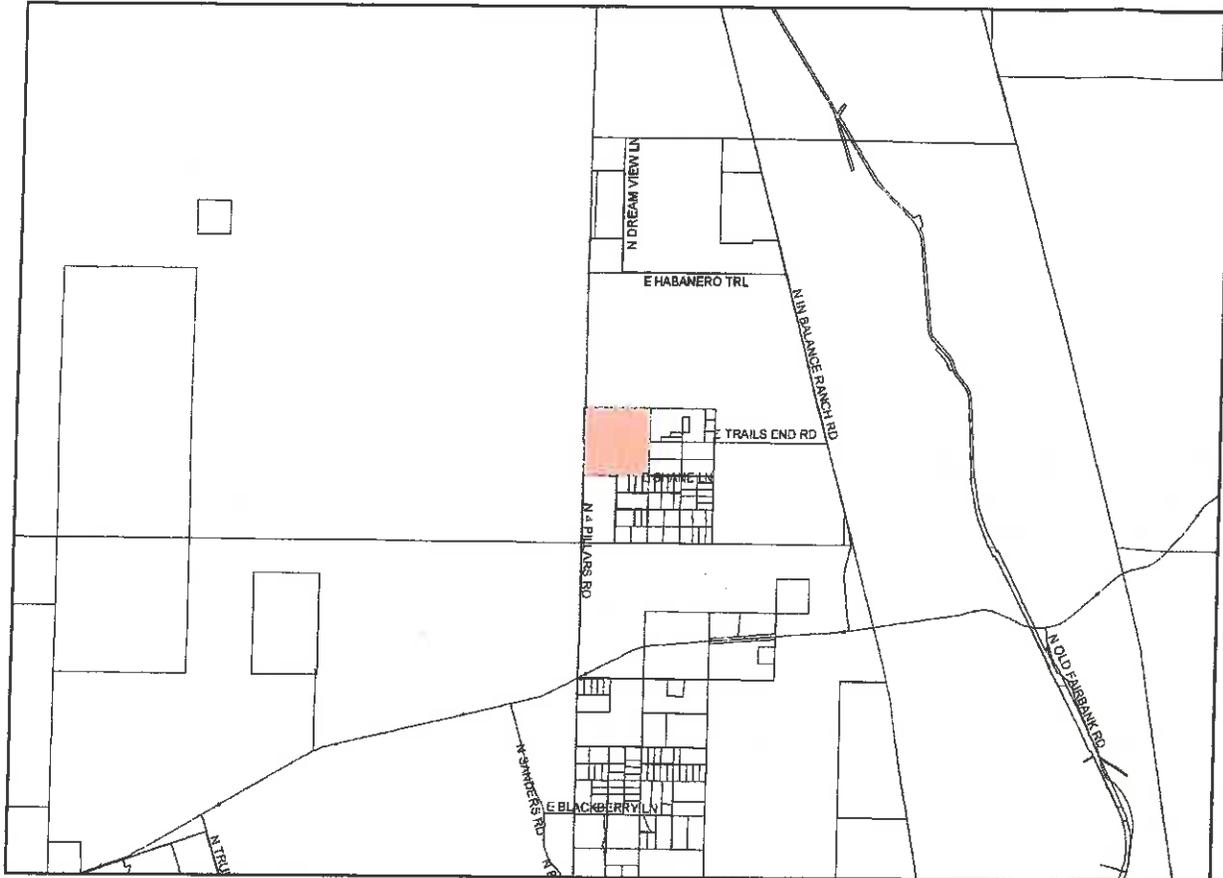
1991 – Special Use Authorization granted for the North/South Runway and one hanger.

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2001 – Special Use Authorization granted for the East/West Runway, 10 hangers, 40 space RV Park, and indoor and outdoor recreation facilities.

2001 – Non-residential permit issued for items granted Special Use Authorization.

2009 – Both Special Use Authorizations revoked due to non-compliance with Conditions.



The project site is north of Highway 82 between Highway 90 and the San Pedro River.

III. NATURE OF REQUEST

The Applicant, the Sierra Vista Economic Development Foundation (SVEDF), a private non-profit entity, intends to make the 160-acre site available as a testing location for Unmanned Aerial Systems. The SVEDF is proposing to lease the site from the current owner and will construct permanent facilities as needed, and will employ a third-party consulting firm to provide technical expertise and manage the operation of the site. The proposed use is limited to Class 1 and Class 2 UAS, which includes vehicles of no more than 55-pounds (See Exhibit G for explanation of UAS Classes). All unmanned vehicles will be flown within line-of-sight of the operator or a spotter, and would be held to a maximum ceiling of 400-feet.

The Applicant would like to reactivate the existing runways with three purposes in mind. The primary use is to provide cleared areas for the operation of the UAS. While traditional runways are generally not needed for vehicles of this size, the large cleared areas are convenient for their operation. The second purpose is to provide an alternative means of access for users of the site.

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Finally, the owner of the site would like to be able to utilize the runways for occasional visitors to the site.

IV. ANALYSIS OF IMPACTS – COMPLIANCE WITH SPECIAL USE FACTORS

Section 1716.02 of the Zoning Regulations provides a list of 10 factors with which to evaluate Special Use applications. Staff uses these factors to help determine whether to recommend approval for a Special Use Permit, as well as to determine what Conditions and/or Modifications may be needed. Eight of the 10 criteria apply to this request. The project as submitted complies with five of the eight applicable Special Use factors. If the Conditions of approval recommended by staff and the Modifications requested by the Applicant are applied, the project would comply with each of the eight applicable factors.



View looking north along the North/South runway south of the intersection with the East/West runway.

A. Compliance with Duly Adopted Plans: Complies (subject to Condition #4)

The site does not fall within any of the County’s adopted area plans. Subject to Condition 4, the project complies with the Comprehensive Plan by enhancing economic activity in the County while preserving sensitive biological areas from disturbance by maintaining the use over private property outside the SRPNCA.

B. Compliance with the Zoning District Purpose Statement: Complies

Section 601.07 of the Zoning Regulations establishes that the Rural Districts may include “*some more intense non-residential uses as Special Uses that are inappropriate in more densely populated urban/suburban areas.*” The proposed use does involve flight activities, but on a more limited scale than previous Special Use Authorizations on the property, and of lower intensity than surrounding aviation related facilities on State and Federal properties.

C. Development Along Major Streets: Not Applicable

The property takes access from N. 4 Pillars Road, a non-maintained road that takes access from E. Highway 82.



View of existing conditions, showing nearest structures to the southeast.

D. Traffic Circulation Factors: Complies

The project site takes access from State Highway 82 via a non-county maintained road. While N. 4 Pillars Road is unimproved and variable in width with several portions not being of sufficient width for two-way traffic, the road currently serves as primary access for approximately 10 homes, and the proposed use is not expected to generate a substantial increase in overall traffic. What traffic will be generated will be sporadic and clustered and therefore would generate negligible impact to traffic circulation.

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E. Adequate Services and Infrastructure: Complies

This factor concerns the ability of the Applicant to provide for necessary street, water, sewer and utility services on the property. The property is served by a private well and septic systems; SSVEC provides electric power, and the Whetstone Fire Department has provided a letter of authorization. As stated, internal surfaces are native and the property takes access from a native non-County maintained road, however both would safely support the expected load.

F. Significant Site Development Standards: Complies (See Requested Modifications)

It is important to note that most of the activities would take place outdoors, though in the future several support structures may be built. In addition, it is important to note that both airstrips are complete, and have been approved under previous Special Use requests prior to being revoked for failure to comply with Conditions separate from the airstrips themselves.

The Applicant has provided staff with a request for Modifications to several development standards, including driveway and parking surfacing requirements and width, as well as setbacks for the existing runway. A Waiver from the requirement for a private road maintenance agreement is also requested. These requests are further discussed in *Section VI* of this report, below.



View north along N. 4 Pillars Road.

G. Public Input: Complies

The Applicant completed the Citizen Review process and received one written and three verbal responses supporting the project. As of this writing, the subsequent County mailings have resulted in one letter of support and two responses expressing opposition (*See Section V of this memo, below*). The two objections raised concerns about privacy and property values.

H. Hazardous Materials: Not Applicable

Per the Applicant, no storage of hazardous materials would take place on the property. However, should any fuels or other flammable materials beyond typical household materials be stored on site, Condition 10 would require that such materials be stored in containers approved by the *National Fire Protection Association*.

I. Off-Site Impacts: Complies (Subject to Conditions #4, 5, 6, 8, & 9)

The action of taking off and landing an aircraft, manned or unmanned, may create visual and noise impacts to neighboring properties. Conditions 4, 5, 6, & 8 would limit the number and type of flights, as well as hours of operation, to minimize the potential impacts.

This land use also is not expected to have an impact on the Class C Fort Huachuca airspace, which lies to the south of the property. Potential conflict with the restricted airspace will be further minimized due to the proposed maximum altitude of 400-feet for the unmanned vehicles, which is well below the 15,000-foot floor of the restricted airspace located to the south. This floor also provides space for larger, manned aircraft to utilize the runways without infringing on the restricted airspace. However, the Garrison Commander at Fort Huachuca has requested that the Applicant establish communication and coordination protocols with Fort staff to ensure situational awareness of the testing and to prevent any unexpected conflicts. The Fort's staff has also determined that the frequencies used to control the aircraft lie outside the bands that may cause interference with the installations Electromagnetic Environment (EME), and therefore present no impact. The requested communication and coordination also applies to the control frequencies to ensure the facility does not negatively impact activities at the Fort. Under the operation protocols recommended by Staff as Condition 9, the Applicant would be required to contact personnel from Fort Huachuca to confer and come to an understanding regarding airspace and control frequency issues. The Applicant would be required to provide Staff with the results of such a meeting prior to issuance of a permit.

While the North/South runway is currently recognized and approved for private, civil aviation by the FAA, the East/West runway is not. Neither runway is recognized for unmanned flights by the FAA. While the proposed flight criteria fall within the exemption regarding private remote controlled aircraft, Unmanned Aerial Systems fall within a nebulous, rapidly changing area of the law. The Applicant shall be required to receive all necessary FAA clearances prior to operation as part of Condition 1.

The other issue with the North/South runway is the fact that the northern third of the runway extends onto State Trust Land without the knowledge of the State Land Agency or a lease for such a use. The FAA recognizes the entire length of this runway, but without permission from the State granted to the Applicant, we cannot legitimize this portion of the runway. Condition 11 acknowledges this requirement.

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Environmental groups, including the Friends of the San Pedro, have expressed concern regarding the proximity of the San Pedro Riparian National Conservation Area (SPRNCA) and the river in general and the impact of the use on birds and other wildlife in the area. Per Condition 4, all UAS activity would be confined entirely on and above the subject property unless the Applicant is granted express written permission by another landowner to conduct testing over other private or public property. This will also lessen the possibility of the vehicles intruding on the privacy of or causing a noise disturbance on neighboring parcels.

J. Water Conservation: Complies

The residence on the property is served by a well, and fixtures within the existing manufactured home are in place. Any new fixtures would be required to comply with the water conservation measures of the Zoning Regulations.

V. PUBLIC COMMENT

The Department mailed notices to neighboring property owners within one-mile of the subject property. Staff posted the property on March 20, 2014, and published a legal notice in the *Bisbee Observer* on the same date. To date, the Department has received two responses opposing the Special Use. These neighbors cite privacy and property values as reasons to oppose the use.

VI. REQUESTED MODIFICATIONS (See Condition #2)

The Applicant has requested the following site development standard Modifications as part of this Docket:

1. A Modification of the 24-foot two-way driveway standard for commercial uses; the Applicant requests to allow existing 12-foot wide internal driveways;
2. A Waiver of the requirement that all driveway and parking surfaces be improved with a two-inch gravel surface; the Applicant requests to all the existing native surfaces;
3. A Modification of the setback requirement of 40-feet for all structures to permit the existing runway that is situated along the west property line; and
4. A Waiver of the requirement that any commercial development that takes access from a non-county maintained road provide a Private Road Maintenance Agreement.

Staff supports the driveway and parking requests, as the low level of anticipated traffic may safely be accommodated by the existing transportation network leading to and on the parcel. In addition, the subject parcel is located at the terminus of 4 Pillars Road, and the Applicant therefore has a vested interest in maintaining the road in a safe, passable condition. Finally, Staff supports the setback request as the runway abuts State Trust Land that is not currently developed and is unlikely to be developed in the immediate future; therefore, the current location of the runway is the best location to minimize offsite impacts from larger civil aircraft.

VII. SUMMARY AND CONCLUSION

The site has been approved in the past as a private civil airstrip. This proposal would reactivate that use, and would grant authorization to conduct testing of small scale UAS under rules similar to those governing remote controlled hobby aircraft.

Neighboring property owners, governmental agencies, and other interested parties have raised several concerns regarding the project, including impact to activities at Fort Huachuca, the San Pedro Riparian National Conservation Area, and to the privacy of surrounding property owners. However, each of these may be successfully mitigated through Conditions of Approval as listed below.

Factors in Favor of Approving the Special Use

1. With the requested Modifications, the request complies with each of the eight applicable Special Use factors used by staff to analyze such requests;
2. Offsite impacts can be mitigated through existing regulations, approval Conditions, and permit requirements;
3. The Rural Zoning Districts are established for such land use activities, per Section 601.02 of the Zoning Regulations;
4. The site has been used previously for aircraft-related activities; and
5. Two neighboring property owners support the request.

Factors Against Allowing the Special Use

1. The nature of the business, and its location, suggest a potential for offsite impacts and changes in the character of a rural area unless mitigated; and
2. Two property owners have submitted written statements opposing the request, citing concerns regarding privacy and property values.

VIII. RECOMMENDATION

Based on the factors in favor of approval, Staff recommends **conditional approval** of the Special Use request, subject to the following Conditions:

1. Within 30-days of approval of the Special Use, the Applicant shall provide the County a signed Acceptance of Conditions form and a Waiver of Claims form arising from ARS Section 12-1134. Prior to operation of the Special Use, the Applicant shall apply for a building/use permit for the project within 12-months of approval. The building/use permit shall include a site plan in conformance with all applicable site development standards (except as modified) and with Section 1705 of the Zoning Regulations, the completed Special Use permit questionnaire and application, and appropriate fees. A permit must be issued within 18-months of the Special Use approval, otherwise the Special Use may be deemed void upon 30-day notification to the Applicant;
2. It is the Applicant's responsibility to obtain any additional permits, or meet any additional Conditions, that may be applicable to the proposed use pursuant to other federal, state, or local laws or regulations;

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3. Any changes to the approved Special Use shall be subject to review by the Planning Department and may require additional Modification and approval by the Planning and Zoning Commission;
4. All UAS testing shall be limited to Class I and Class II UAS;
5. All unmanned flights shall be maintained at an altitude of 400-feet or less, and shall occur under direct visual contact by the controller or designated spotter;
6. No munitions shall be carried or tested on site;
7. The use of the runways for manned aircraft shall be limited to daylight hours;
8. The use of the runways shall be limited to activities related to the testing of UAS and the private, personal, non-commercial use of the property owner. Touch and go flight training shall be prohibited;
9. A plan for communication and coordination with staff at Fort Huachuca to prevent intrusion into restricted airspace and interference with the Fort's Electromagnetic Environment shall be submitted;
10. Any aviation related fuels or other flammable materials on the property shall be stored in containers meeting National Fire Protection Association standards;
11. The portion of the North/South runway that extends onto State Trust Land shall be fenced and not used until such time as a State Land Lease agreement is secured and provided to Staff;
12. A Range Safety/Operations Officer shall be maintained by the Applicant who shall be present during all UAS testing activities; and
13. All testing and flight shall remain over the subject property unless granted express written permission from a property owner to overfly said owner's property.

Staff also recommends that the Modifications and Waivers described above be applied to the land use as part of such approval.

Sample Motion: Madame Chair, I move to approve Special Use Docket SU-14-05, with the Conditions and Modifications to development standards recommended by staff; the Factors in Favor of approval constituting the Findings of Fact.

IX. ATTACHMENTS

- A. Special Use Application
- B. Location Map
- C. Concept Plan
- D. Requested Modifications
- E. Agency Comments
- F. Citizen Review and Public Comment
- G. UAS Class Definitions



COCHISE COUNTY COMMUNITY DEVELOPMENT

"Public Programs...Personal Service"

COMMERCIAL USE/BUILDING PERMIT/SPECIAL USE PERMIT QUESTIONNAIRE

(TO BE PRINTED IN INK OR TYPED)

TAX PARCEL NUMBER: 108-08-009

ZONING DISTRICT RU-4

APPLICANT: Sierra Vista Economic Development Foundation

MAILING ADDRESS: 750 E. Bartow Drive

CONTACT TELEPHONE NUMBER: 520-458-6948

PROPERTY OWNER (IF OTHER THAN APPLICANT): Steve Vos

ADDRESS: 2940 N. Four Pillars Rd.
Huachuca City AZ 85616

DATE SUBMITTED: February 26, 2019

| | |
|---|-----------------------------|
| Special Use Permit Public Hearing Fee (if applicable) | \$ <u>300.⁰⁰</u> |
| Building/Use Permit Fee | \$ _____ |
| Total paid | \$ <u>300.⁰⁰</u> |

PART ONE - REQUIRED SUBMITTALS

1. Cochise County Joint Application (attached).
2. Questionnaire with all questions completely answered (attached).
3. A minimum of (9) copies of a site plan drawn to scale and completed with all the information requested on the attached Sample Site Plan and list of Non-residential Site Plan Requirements. (In addition, if the site plan is larger than 11 x 17 inches, please provide one reduced copy.)
4. Proof of ownership/agent. If the applicant is not the property owner, provide a notarized letter from the property owner stating authorization of the Commercial Building/Use/Special Use Application.

5. Citizen Review Report, if special use.
6. Proof of Valid Commercial Contractor's License. (Note: any building used by the public and/or employees must be built by a Commercial Contractor licensed in the State of Arizona.)
7. Hazardous or Polluting Materials Questionnaire, if applicable.

OTHER ATTACHMENTS THAT MAY BE REQUIRED DEPENDING ON THE SCOPE OF THE PROJECT

1. Construction Plans (possibly stamped by a licensed Engineer or Architect)
2. Off-site Improvement Plans
3. Soils Engineering Report
4. Landscape Plan
5. Hydrology/Hydraulic Report
6. Traffic Impact Analysis (TIA): **Where existing demonstrable traffic problems have already been identified such as high number of accidents, substandard road design or surface, or the road is near or over capacity, the applicant may be required to submit additional information on a TIA.**
7. Material Safety Data Sheets
8. Extremely Hazardous Materials Tier Two Reports
9. Detailed Inventory of Hazardous or Polluting Materials along with a Contingency Plan for spills or releases

The Commercial Permit Coordinator/Planner will advise you as soon as possible if and when any of the above attachments are required.

PART TWO - QUESTIONNAIRE

In the following sections, thoroughly describe the proposed use that you are requesting. **Attach separate pages if the lines provided are not adequate for your response.** Answer each question as completely as possible to avoid confusion once the permit is issued.

SECTION A - General Description (Use separate sheets as needed)

1. What is the existing use of the property? Private Airstrip

2. What is the improvement? 2nd Runway 08-26 in use as well as 17/35. Additional Buildings added (Temporary Structures) 1 Hangar and a portal Office Structure

3. Describe all activities that will occur as part of the proposed use. In your estimation, what impacts do you think these activities will have on neighboring properties?
Group 1 and Group 2 UAS (Unmanned Aircraft Systems) Flight operations below 400'. Traffic patterns line of sight flights only. minimal impact to neighboring properties.

4. Describe all intermediate and final products/services that will be produced/offered/sold.

N/A

5. What materials will be used to construct the building(s)? (Note, if an existing building(s), please list the construction type(s), i.e., factory built building, wood, block, metal)

Temporary office trailer (wood & metal) Fabric & aluminum frame hangar

6. Will the project be constructed/completed within one year or phased? One Year
Phased ___ if phased, describe the phases and depict on the site plan.

7. Provide the following information (when applicable):

A. Days and hours of operation: Days: 5 Hours (from 7 AM to 6 PM) occasional weekend operation

B. Number of employees: Initially: 3 Future: 7
Number per shift Seasonal changes

C. Total average daily traffic generated:

(1) How many vehicles will be entering and leaving the site?

2-4

(2) Total trucks (e.g., by type, number of wheels, or weight)?

SUV or light trucks

(3) Estimate which direction(s) and on which road(s) the traffic will travel from the site?

four Villars to Hwy 82 to Hwy 90 and reverse

(4) If more than one direction, estimate the percentage that travel in each direction?

Daily

(5) At what time of day, day of week and season (if applicable) is traffic the heaviest?

N/A

D. Circle whether you will be on public water system or private well. If private well, show the location on the site plan.

Estimated total gallons of water used: per day 10 per year _____

E. Will you use a septic system? Yes No If yes, is the septic tank system existing? Yes ___ No ___
Show the septic tank, leach field and 100% expansion area on the site plan.

F. Does your parcel have permanent legal access* Yes No ___

If no, what steps are you taking to obtain such access?

*Section 1807.02A of the Cochise County Zoning Regulations stipulates that no building permit for a non-residential use shall be issued unless a site has permanent and direct access to a publicly maintained street or street where a private maintenance agreement is in place. Said access shall be not less than twenty (20) feet wide throughout its entire length and shall adjoin the site for a minimum distance of twenty (20) feet.

Does your parcel have access from a (check one): private road or easement**

County-maintained road

State Highway

**If access is from a private road or easement provide documentation of your right to use this road or easement and a private maintenance agreement.

G. For Special Uses only - provide deed restrictions that apply to this parcel if any.

Attached _____ NA _____

H. Identify how the following services will be provided:

| Service | Utility Company/Service Provider | Provisions to be made |
|-----------------|----------------------------------|-------------------------|
| Water | Service Provider | well water |
| Sewer/Septic | Service Provider | porta pots |
| Electricity | SSVEC | |
| Natural Gas | — | |
| Telephone | Idaho Service Provider | Cell Phones |
| Fire Protection | White Stone Fire Dept. | Letter of Authorization |

SECTION B - Outdoors Activities/Off-site Impacts

1. Describe any activities that will occur outdoors.

Flight activities

2. Will outdoor storage of equipment, materials or products be needed? Yes ___ No if yes, show the location on the site plan. Describe any measures to be taken to screen this storage from neighboring properties

3. Will any noise be produced that can be heard on neighboring properties? Yes ___ No ___ if yes; describe the level and duration of this noise. What measures are you proposing to prevent this noise from being heard on neighboring properties?

Below 60 DB

4. Will any vibrations be produced that can be felt on neighboring properties? Yes ___ No if yes; describe the level and duration of vibrations. What measures will be taken to prevent vibrations from impacting neighboring properties?

5. Will odors be created? Yes ___ No If yes, what measures will be taken to prevent these odors from escaping onto neighboring properties?

6. Will any activities attract pests, such as flies? Yes ___ No If yes, what measures will be taken to prevent a nuisance on neighboring properties?

7. Will outdoor lighting be used? Yes ___ No If yes, show the location(s) on the site plan. Indicate how neighboring properties and roadways will be shielded from light spillover. Please provide manufacturer's specifications.

8. Do signs presently exist on the property? Yes ___ No If yes, please indicate type (wall, freestanding, etc.) and square footage for each sign and show location on the site plan.

A. _____ B. _____ C. _____ D. _____

9. Will any new signs be erected on site? Yes ___ No If yes, show the location(s) on the site plan. Also, draw a sketch of the sign to scale, show the copy that will go on the sign and **FILL OUT A SIGN PERMIT APPLICATION** (attached).

10. Show on-site drainage flow on the site plan. Will drainage patterns on site be changed?
Yes ___ No

If yes, will storm water be directed into the public right-of-way? Yes ___ No ___

Will washes be improved with culverts, bank protection, crossings or other means?
Yes ___ No

If yes to any of these questions, describe and/or show on the site plan.

11. What surface will be used for driveways, parking and loading areas? (i.e., none, crushed aggregate, chipseal, asphalt, other)
_____ crushed aggregate _____

12. Show dimensions of parking and loading areas, width of driveway and exact location of these areas on the site plan. (See site plan requirements checklist.)

13. Will you be performing any off-site construction (e.g., access aprons, driveways, and culverts)?
Yes ___ No If yes, show details on the site plan. **Note: The County may require off-site improvements reasonably related to the impacts of the use such as road or drainage improvements.**

SECTION C - Water Conservation and Land Clearing

1. If the developed portion of the site is one acre or larger, specific measures to conserve water on-site must be addressed. Specifically, design features that will be incorporated into the development to reduce water use, provide for detention and conserve and enhance natural recharge areas must be described. The Community Development Department, Planning, Zoning and Building Safety has prepared a *Water Wise Development Guide* to assist applicants. This guide is available upon request. If the site is one acre or larger, what specific water conservation measures are proposed? Describe here or show on the site plan submitted with this application.

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2. How many acres will be cleared? 1/4 acre

If more than one acre is to be cleared describe the proposed dust and erosion control measures to be used (Show on site plan if appropriate.)

SECTION D - Hazardous or Polluting Materials

Does the proposed use involve hazardous materials? These can include paint, solvents, chemicals and chemicals wastes, oil, pesticides, herbicides, fertilizers, radioactive materials, or biological agents. Engine repair, dry cleaning, manufacturing and all uses that commonly use such substances in the County's experience require completion of the attachment.

No Yes _____ If yes, complete the attached Hazardous Materials Attachment. Engine repair, manufacturing and all uses that commonly use such substances in the County's experience also require completion of the attachment.

Applications that involve hazardous or polluting materials may take a longer than normal processing time due to the need for additional research concerning the materials' impacts.

The Arizona Department of Environmental Quality (ADEQ) Compliance Assistance Program can address questions about Hazardous Materials (1-800-234-5677, ext. 4333.)

SECTION E - Applicant's Statement

I hereby certify that I am the owner or duly authorized owner's agent and all information in this questionnaire, in the Joint Permit Application and on the site plan is accurate. I understand that if any information is false, it may be grounds for revocation of the Commercial Use/ Building/ Special Use Permit.

Applicant's Signature Magnume D. Hall's

Date signed 3/26/2014

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A

Gardner, Peter

From: Mignonne Hollis [hollism@svedf.org]
Sent: Tuesday, March 04, 2014 4:04 PM
To: Gardner, Peter
Subject: RE: Question on the UAS project

Hi Peter,

Yes to a combination of all three. Primarily for UAS testing. We may have the occasional client using the airstrip for aerial access to the site and we imagine Mr. Vos would use the airstrip as well. We do have it written in our contact with him, should he use the airstrip he must notify the test site manager 48 hours prior to usage.

Thanks.

Mignonne

Mignonne D. Hollis
Executive Director
Sierra Vista Economic Development Foundation
750 E Bartow Suite 16
Sierra Vista AZ 85635

TEL: (520) 458-6948

FAX: (520) 458-7453

CELL: (520)226-6019

hollism@svedf.org

www.svedf.org



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From: Gardner, Peter [<mailto:PGardner@cochise.az.gov>]

Sent: Tuesday, March 04, 2014 11:50 AM

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A

To: Mignonne Hollis

Subject: Question on the UAS project

Mignonne,

As I'm working on the transmittal for this docket I had a thought. You have listed the existing use as a private airstrip, but the Planning Commission revoked the authorization to use the airstrips in 2009. Do you intend the reactivation of the airstrips to be part of this application? If so, in what capacity? Would they be for the UAS testing, for aerial access to the site, as private use for Mr. Vos, or some combination of these? Please let me know as soon as possible so that I can give as much time as possible for agency responses. Thanks,

Peter Gardner, Planner I

Cochise County Community Development Department

Planning, Zoning, and Building Safety Division

1415 Melody Lane, Building E

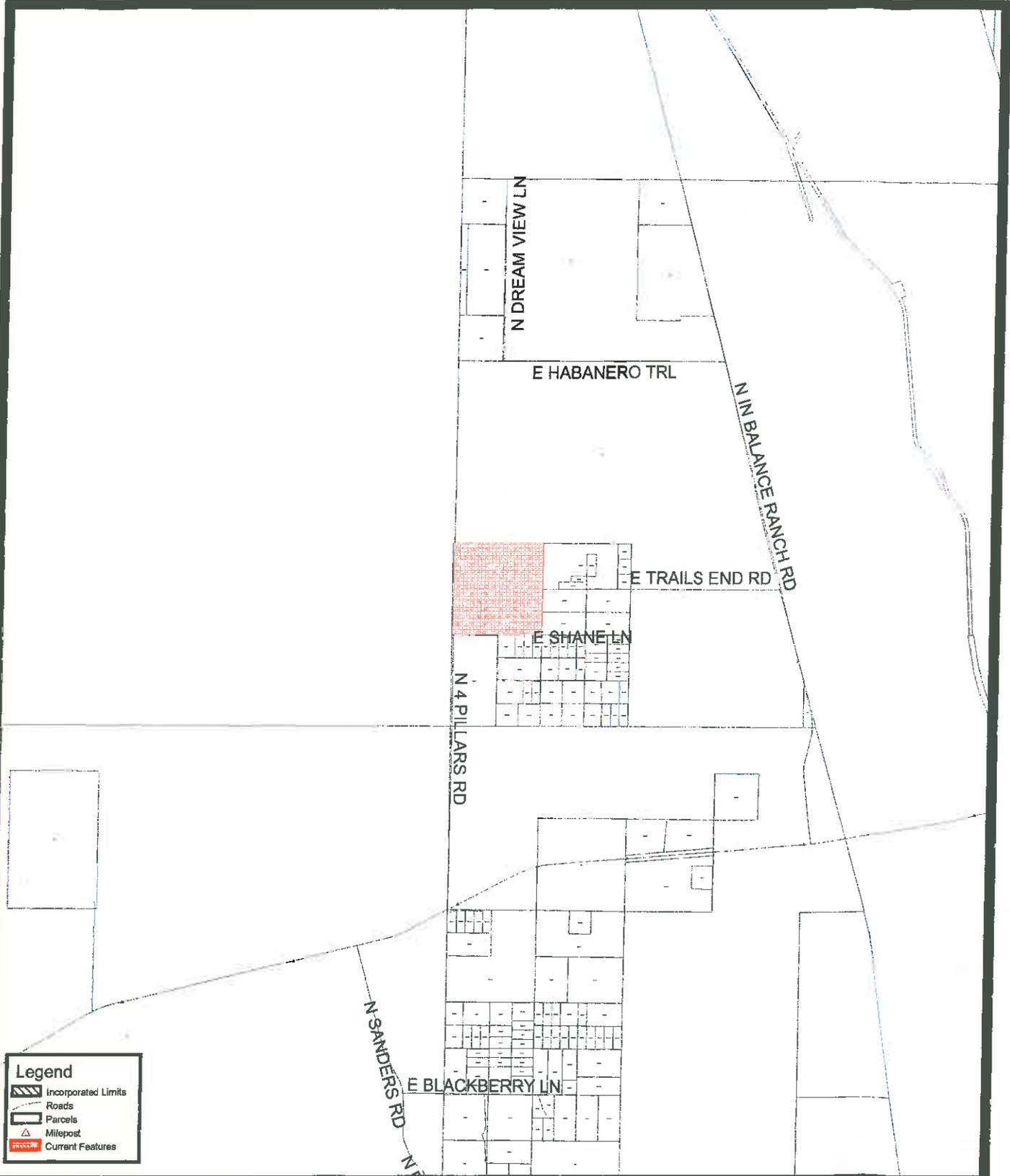
Bisbee, AZ 85603

Phone: 520-432-9240

Fax: 520-432-9278

"Public Programs, Personal Service"

www.cochise.az.gov



Legend

- Incorporated Limits
- Roads
- Parcels
- Milepost
- Current Features

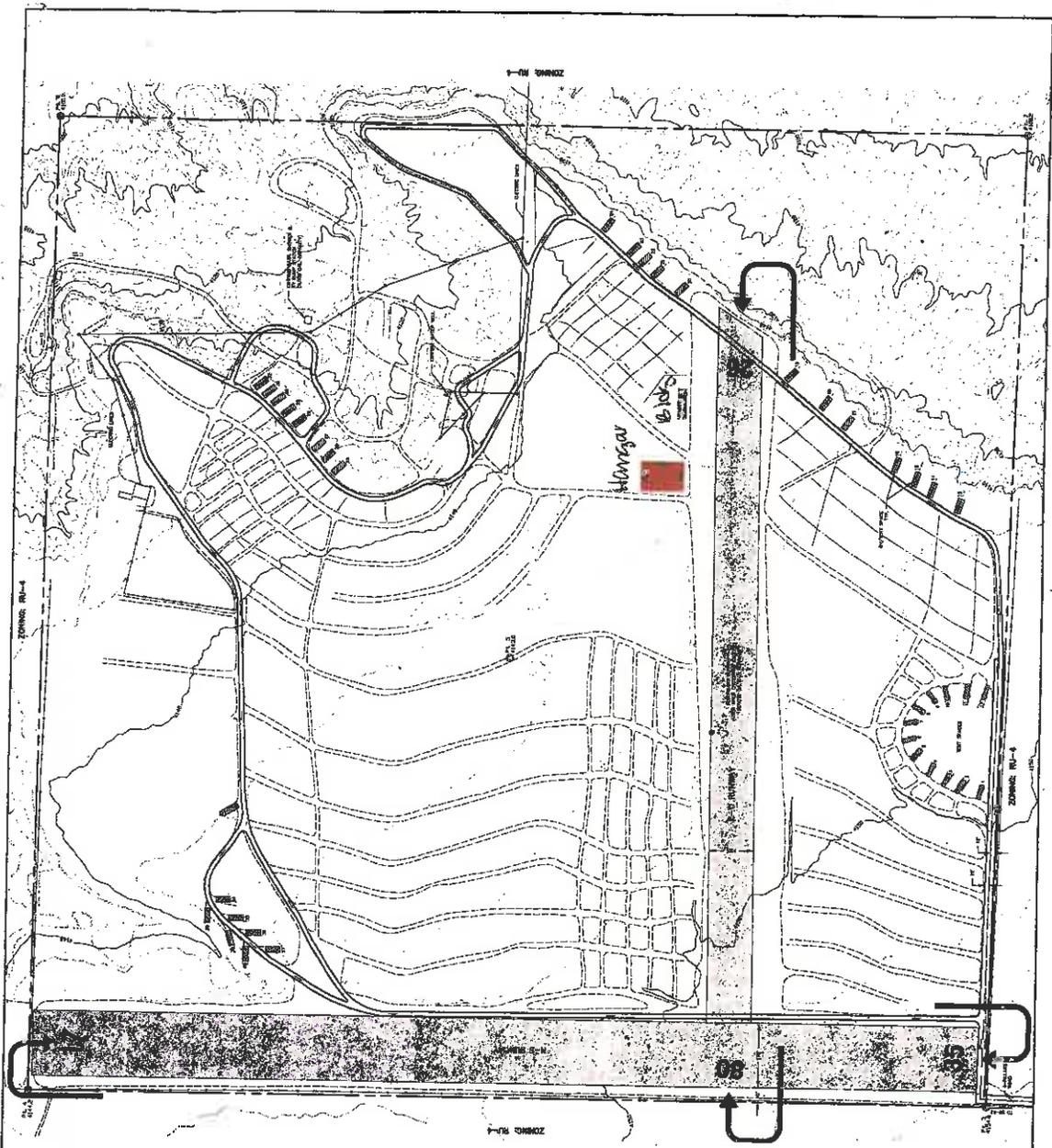


Location Map SU-14-05 (SVEDF)

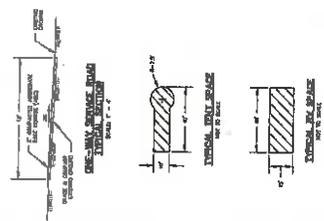
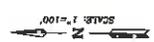
This map is a product of the Cochise County GIS



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BLACK LEWIS ENGINEERING, INC.
 PLANNERS • ENGINEERS • SURVEYORS
 1000 W. 10th Street, Suite 100
 Oklahoma City, Oklahoma 73106
 (405) 521-1111

DEVELOPMENT PLAN
 SITE VOS
 4-PILLARS CAMPGROUND

SHEET 1 OF 1

01-012

Gardner, Peter

From: Mignonne Hollis [hollism@svedf.org]
Sent: Wednesday, March 26, 2014 10:24 AM
To: Gardner, Peter
Cc: Lynn Mattingly
Subject: Site Modifications

Good Morning Peter,

I would like to request the following modifications from the site development standard:

1. We would like to use the existing driveways and parking areas as is without widening or laying two inches of gravel.
2. We would like to waive the requirement for a Private Road Maintenance Agreement for N 4 Pillars Road.
3. We would like permission to waive the required 40-foot setback on the north/south runway as it is.

Thank you so much for your consideration.

Mignonne

Mignonne D. Hollis
Executive Director
Sierra Vista Economic Development Foundation
750 E Bartow Suite 16
Sierra Vista AZ 85635

TEL: (520) 458-6948
FAX: (520) 458-7453
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DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FT HUACHUCA
2837 BOYD AVENUE
FORT HUACHUCA, ARIZONA 85613-7001

March 18, 2014

Office of the Garrison Commander

Mr. Peter Gardner
Planner I
Cochise County Community Development
1415 Melody Lane, Building E
Bisbee, Arizona 85603

Dear Mr. Gardner

This letter is in response to your Development Review Team Transmittal Letter, dated March 4, 2014; **APPLICANT: Sierra Vista Economic Development Foundation; PROJECT: SU-14-05 (SVDEF); SITE LOCATION: 9240 N. Four Pillars Road, Huachuca City, Arizona.** Pursuant to SB 1387, Real Estate Disclosure: Training Ranges, Section 9-500.28A, we accept this Transmittal Letter as notice that the applicant is requesting a Special Use authorization to establish and operate a testing facility for Unmanned Aerial Systems (UAS) and to legitimize use of two existing airstrips on the subject parcel.

After a review of the SU-14-05 project documents by our tenant agencies, Fort Huachuca submits the following issues, discussion, and recommendations for your consideration.

ISSUE: The coordination and de-confliction of frequencies used for devices and operations at the proposed UAS testing facility with Fort Huachuca.

DISCUSSION: Mr. Jim Ortega, the Fort Huachuca Installation Spectrum Manager, spoke with Ms. Mignonne Hollis, Executive Director SVDEF, regarding the frequencies being used. It was ascertained that the devices will all be operating on traditional radio-controlled (RC) bands and therefore should pose no threat to the installation's electromagnetic environment (EME).

RECOMMENDATION: SVDEF identify a point of contact to establish communication and coordination protocols with Mr. Jim Ortega, (520) 538-6030, and the Regional Frequency Manager, Mr. Mark Rossow, (520) 538-6423, to facilitate frequency use notification, de-confliction, and to maintain situational awareness of testing facility operations.

ISSUE: Proximity of proposed flight operations of UAS at the proposed testing facility to the installation's R-2303 regulated airspace (refer to map enclosure).

DISCUSSION: According to the proposal, all flying at the proposed testing facility will be performed over the subject property and the FAA approved runway, not to exceed 400 feet above ground. All UAS Class 1 and 2 systems are less than 55 lbs in weight and will only fly line-of-sight. Based on this information, the proposed testing facility should pose no risk to military or general aviation operations or to the Electronic Proving Ground's (EPG) mission.

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RECOMMENDATION: The flight operations at the proposed testing facility are outside the R-2303 restricted airspace, yet within Fort Huachuca's delegated airspace. As such, Fort Huachuca recommends that protocols be established by the proposed test facility to ensure that commercial operations do not enter the R-2303 restricted airspace. Additionally, recommend that the identified point of contact for the proposed testing facility include the Fort Huachuca Airspace Officer, Ms. Carol Thompson, (520) 538-2861, in all communications with Fort Huachuca and of any changes to the flight altitude, airspace or operations that differ from the proposal.

If during continued development there are changes to the project as it pertains to power outputs and frequencies, we request that the Cochise County Community Development Office contact Fort Huachuca to characterize the effects of project changes and to ensure risk mitigation.

Thank you for the opportunity to comment on proposed project SU-14-05: Special Use authorization to establish and operate a testing facility for Unmanned Aerial Systems (UAS) and to legitimize use of two existing airstrips on the subject parcel.

The point of contact for this action is Mr. Jim North in the Plans, Analysis and Integration Office, e-mail james.s.north.civ@mail.mil or telephone (520) 538-3135.

Sincerely,



THOMAS E. BORER
Deputy Garrison Commander

Enclosure

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U.S. Department
of Transportation

Federal Aviation
Administration

Western-Pacific Region
Airports Division
Phoenix -AFO

Airports Field Office
2800 N. 44th St. Ste. 510
Phoenix, AZ 85008

March 10, 2014

Cochise County, Arizona
Peter Gardner
Community Development Department
1415 Melody Lane
Bisbee, Arizona 85603

COCHISE COUNTY

MAR 13 2014

RE: SVEDE Drone Testing

Dear Mr. Gardner:

I am in receipt of the Special Use permit for the proposed drone testing facility located in Cochise County at 9240 N. Four Pillars Road, Huachuca City, Arizona. The airports division is not a granting authority for this use. The proper protocol is to have the applicant submit to the Federal Aviation Administration (FAA) Form 7480-1: NOTICE OF LAND AREA PROPOSAL. While this form has been previously submitted by the property owner and reviewed for the establishment of a airport, the use of the airport is changing from fixed wing aircraft to unmanned aircraft systems and therefore a new form must be submitted. Once the new FAA Form 7480-1 is submitted, it will take anywhere from 3 to 6 months for FAA approval.

I am enclosing a fact sheet that was prepared by the FAA with additional steps that are needed for the operation of a drone testing/research facility. Please feel free to contact me if you have any further questions or need more information.

Sincerely,

Jared M. Raymond
Community Planner
Federal Aviation Administration
Western-Pacific Region, Airports Division
Phoenix Field Office

Enclosure

MAR 13 2014

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PHOENIX

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**Federal Aviation
Administration**

Fact Sheet – Unmanned Aircraft Systems (UAS)

For Immediate Release

January 6, 2014

Contact: Les Dorr or Alison Duquette

Phone: (202) 267-3883

Unmanned Aircraft Systems (UAS) come in a variety of shapes and sizes and serve diverse purposes. They may have a wingspan as large as a Boeing 737 or smaller than a radio-controlled model airplane. Regardless of size, the responsibility to fly safely applies equally to manned and unmanned aircraft operations.

Because they are inherently different from manned aircraft, introducing UAS into the nation's airspace is challenging for both the FAA and aviation community. UAS must be integrated into a National Airspace System (NAS) that is evolving from ground-based navigation aids to a GPS-based system in NextGen. Safe integration of UAS involves gaining a better understanding of operational issues, such as training requirements, operational specifications and technology considerations.

The FAA's Role: Safety

Safety is the FAA's top mission, and the agency maintains the world's safest aviation system. As a provider of air traffic control services, the FAA also must ensure the safety and efficiency of the nation's entire airspace.

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The FAA first authorized use of unmanned aircraft in the NAS in 1990. Since then, the agency has authorized limited use of UAS for important missions in the public interest, such as firefighting, disaster relief, search and rescue, law enforcement, border patrol, military training and testing and evaluation. Today, UAS perform border and port surveillance by the Department of Homeland Security, help with scientific research and environmental monitoring by NASA and NOAA, support public safety by law enforcement agencies, help state universities conduct research, and support various other missions for public (government) entities.

Unmanned aircraft are flying now in the national airspace system under very controlled conditions. Operations potentially range from ground level to above 50,000 feet, depending on the specific type of aircraft. However, UAS operations are currently not authorized in Class B airspace, which exists over major urban areas and contains the highest density of manned aircraft in the National Airspace System.

There are currently two ways to get FAA approval to operate a UAS. The first is to obtain an experimental airworthiness certificate for private sector (civil) aircraft to do research and development, training and flight demonstrations. The second is to obtain a Certificate of Waiver or Authorization (COA) for public aircraft. Routine operation of UAS over densely-populated areas is prohibited.

Civil UAS

Obtaining an experimental airworthiness certificate for a particular UAS is currently the only way civil operators of unmanned aircraft are accessing the NAS. Experimental certificate regulations preclude carrying people or property for compensation or hire, but do allow operations for research and development, flight and sales demonstrations and crew training. The FAA is working with civilian operators to collect technical and operational data that will help refine the UAS airworthiness certification process. The agency is currently developing a future path for safe integration of civil UAS into the NAS as part of NextGen implementation.

Public UAS

COAs are available to public entities that want to fly a UAS in civil airspace. Common uses today include law enforcement, firefighting, border patrol, disaster relief, search and rescue, military training, and other government operational missions.

Applicants make their request through an online process and the FAA evaluates the proposed operation to see if it can be conducted safely.

The COA allows an operator to use a defined block of airspace and includes special provisions unique to the proposed operation. For instance, a COA may require flying only under Visual Flight Rules (VFR) and/or only during daylight hours. COAs usually are issued for a specific period—up to two years in many cases.

Most COAs require coordination with an appropriate air traffic control facility and may require a transponder on the UAS to operate in certain types of airspace.

Because UAS technology cannot currently comply with “see and avoid” rules that apply to all aircraft, a visual observer or an accompanying “chase plane” must maintain visual contact with the UAS and serve as its “eyes” when operating outside airspace restricted from other users.

COAs Issued:

| | |
|------|------------------------|
| 2009 | 146 |
| 2010 | 298 |
| 2011 | 313 |
| 2012 | 257 |
| 2013 | 373 (as of October 31) |

There were 545 COAs active as of December 4, 2013.

Streamlining the Process

The FAA has been working with its government partners to streamline COA procedures. In 2009, the FAA, NASA and the Departments of Defense and Homeland Security formed a

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UAS Executive Committee, or “ExCom” to address UAS integration issues. The ExCom established a working group that developed suggestions to expedite the COA process and increase transparency.

For new applications from public users, the FAA has an on-line process that ensures paperwork is complete and ready to be assessed. Today, the average time to issue an authorization for non-emergency operations is less than 60 days, and the renewal period is two years. The agency has expedited procedures in place to grant one-time COAs for time-sensitive emergency missions, such as disaster relief and humanitarian efforts.

Model Aircraft

Recreational use of airspace by model aircraft is covered by FAA Advisory Circular 91-57, which generally limits operations to below 400 feet above ground level and away from airports and air traffic. In 2007, the FAA clarified that AC 91-57 only applies to modelers, and specifically excludes individuals or companies flying model aircraft for business purposes.

The FAA guidance is available at:

http://www.faa.gov/documentLibrary/media/Advisory_Circular/91-57.pdf

Operation and Certification Standards

Integrating UAS into the nation’s airspace presents both opportunities and challenges. However, everything the FAA does is focused on ensuring the safety of the nation’s aviation system. New policies, procedures and approval processes will address the increasing desire by civilian operators to fly UAS in the NAS. Developing and implementing new UAS standards and guidance is a long-term effort.

The FAA chartered a UAS Aviation Rulemaking Committee in 2011 to develop inputs and recommendations on appropriate operational procedures, regulatory standards and policies before allowing routine UAS access to the nation’s airspace.

The FAA has asked RTCA – organized in 1935 as the Radio Technical Commission for Aeronautics, a group that facilitates expert advice to the agency on technical issues – to work with industry to assist in the development of UAS standards. RTCA’s technical

1011 E

group will address how UAS will handle communication, command and control and how they will “sense and avoid” other aircraft.

The FAA continues to work closely with its international aviation counterparts to harmonize standards, policies, procedures and regulatory requirements.

UAS Test Sites

After a rigorous 10-month selection process involving 25 proposals from 24 states, on December 30, 2013, the Federal Aviation Administration chose six UAS research and test site operators across the country.

In selecting the six test site operators, the FAA considered geography, climate, location of ground infrastructure, research needs, airspace use, safety, aviation experience and risk. In totality, these six test applications achieve cross-country geographic and climatic diversity and help the FAA meet its UAS research needs.

A brief description of the six test site operators and the research they will conduct into future UAS use are below:

- **University of Alaska.** The University of Alaska proposal contained a diverse set of test site range locations in seven climatic zones as well as geographic diversity with test site range locations in Hawaii and Oregon. The research plan includes the development of a set of standards for unmanned aircraft categories, state monitoring and navigation. Alaska also plans to work on safety standards for UAS operations.
- **State of Nevada.** Nevada’s project objectives concentrate on UAS standards and operations as well as operator standards and certification requirements. The applicant’s research will also include a concentrated look at how air traffic control procedures will evolve with the introduction of UAS into the civil environment and how these aircraft will be integrated with NextGen. Nevada’s selection contributes to geographic and climatic diversity.
- **New York’s Griffiss International Airport.** Griffiss International plans to work on developing test and evaluation as well as verification and validation processes under FAA safety oversight. The applicant also plans to focus its research on sense and avoid capabilities for UAS and its sites will aid in researching the complexities of integrating UAS into the congested, northeast airspace.

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- North Dakota Department of Commerce. North Dakota plans to develop UAS airworthiness essential data and validate high reliability link technology. This applicant will also conduct human factors research. North Dakota's application was the only one to offer a test range in the Temperate (continental) climate zone and included a variety of different airspace which will benefit multiple users.
- Texas A&M University – Corpus Christi. Texas A&M plans to develop system safety requirements for UAS vehicles and operations with a goal of protocols and procedures for airworthiness testing. The selection of Texas A&M contributes to geographic and climatic diversity.
- Virginia Polytechnic Institute and State University (Virginia Tech). Virginia Tech plans to conduct UAS failure mode testing and identify and evaluate operational and technical risks areas. This proposal includes test site range locations in both Virginia and New Jersey.

Across the six applicants, the FAA is confident that the agency's research goals of System Safety & Data Gathering, Aircraft Certification, Command & Control Link Issues, Control Station Layout & Certification, Ground & Airborne Sense & Avoid, and Environmental Impacts will be met.

Each test site operator will manage the test site in a way that will give access to parties interested in using the site. The FAA's role is to ensure each operator sets up a safe testing environment and to provide oversight that guarantees each site operates under strict safety standards.

Small Unmanned Aircraft

Small unmanned aircraft (sUAS) are likely to grow most quickly in civil and commercial operations because of their versatility and relatively low initial cost and operating expenses. The FAA is working on a proposed rule governing the use of a wide range of small civil unmanned aircraft systems.

The 2012 reauthorization bill also directed the FAA to "allow a government public safety agency to operate unmanned aircraft weighing 4.4 pounds or less" under certain restrictions. The bill specified these UAS must be flown within the line of sight of the

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operator, less than 400 feet above the ground, during daylight conditions, inside Class G (uncontrolled) airspace and more than five miles from any airport or other location with aviation activities.

Prior to the congressional action, the FAA and the Justice Department had been working on an agreement to streamline the COA process for law enforcement – an agreement that also meets the mandate. Initially, law enforcement organizations will receive a COA for training and performance evaluation. When the organization has shown proficiency in flying its UAS, it will receive an operational COA. The agreement expands the allowable UAS weight up to 25 pounds.

A New Office for New Technology

In 2012, the FAA established the Unmanned Aircraft Systems Integration Office to provide a one-stop portal for civil and public use UAS in U.S. airspace. This office is developing a comprehensive plan to integrate and establish operational and certification requirements for UAS. It will also oversee and coordinate UAS research and development.

Over more than 50 years, the FAA has a proven track record of introducing new technology and aircraft safely into the NAS. The agency will successfully meet the challenges posed by UAS technology in a thoughtful, careful manner that ensures safety and addresses privacy issues while promoting economic growth.

States, Cities and UAS

A number of states and municipalities have passed or are considering limitations on unmanned aircraft. The effect of such restrictions depends on the precise nature of the limitation.

By law, the FAA is charged with ensuring the safe and efficient use of U.S. airspace. This authority generally preempts any state or local government from enacting a statute or regulation concerning matters – such as airspace regulation—that are reserved exclusively to the U.S. Government.

For example, a state law or regulation that prohibits or limits the operation of an aircraft, sets standards for airworthiness, or establishes pilot requirements generally would be preempted. But state and local governments do retain authority to limit the aeronautical

activities of their own departments and institutions. Under most circumstances, it would be within state or local government power to restrict the use of certain aircraft, including a UAS, by the state or local police or by a state department or university.

For more information: <http://www.faa.gov/about/initiatives/uas/>
(<http://www.faa.gov/about/initiatives/uas/>)

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This page was published at: http://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=14153

E
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Gardner, Peter

From: fspremail@gmail.com on behalf of Friends of the San Pedro River [fspr@sanpedroriver.org]
Sent: Thursday, March 20, 2014 10:43 AM
To: Gardner, Peter
Cc: Friends of the San Pedro River
Subject: Fwd: Friends of the San Pedro River comments to County Planning Commission regarding Special Use Permit application

Friends of the San Pedro River

To Cochise County Planning and Zoning Commission,

The Friends of the San Pedro River submit the following comments regarding the application for a Special Use Permit by Mignonne Hollis of the Sierra Vista Economic Development Foundation (SVEDF). The project SU-14-05 (SVEDF) is to be located at Four Pillars Airport, 2940 N Four Pillars Road, Huachuca City, Arizona 85616, several miles west of Fairbank and the river.

The Friends of the San Pedro River believe that since flights of small drones (< 55 lbs) within line-of-sight and below 400 ft on the property are planned, it would not place an unreasonable nor onerous burden on the permittee for the county to include a condition on the Special Use Permit that it restrict operations so that no overflight of the San Pedro River nor the San Pedro Riparian National Conservation Area (SPRNCA) by such drones be allowed. Such a conditional use restriction would avoid any potential disturbance to sensitive wildlife along the river.

The Friends of the San Pedro River is a volunteer, non-profit conservation organization in southeastern Arizona. The Friends aim to conserve, protect, and enhance the natural and cultural resources of the San Pedro River. We are the only organization whose sole mission is protection of this special desert river through advocacy, education, and interpretation. Most of our 280 members are residents of the Upper San Pedro River Valley. Our 86 volunteers staff two visitor contact stations and lead over 200 walks, tours, school visits, and special events each year. They are the face of the river for over 30,000 visitors to San Pedro House and Fairbank Schoolhouse each year.

Thank you for your consideration.

Friends of the San Pedro River
4070 E Avenida Saracino
Hereford, AZ 85615

Phone: 520-459-2555
Email: fspr@sanpedroriver.org

Friends of the San Pedro River

4070 E Avenida Saracino, Hereford, AZ 85615

Dedicated to the conservation and restoration of the river through advocacy, education, and interpretation

fspr@sanpedroriver.org facebook.com/fspraz www.sanpedroriver.org



February 7, 2014

Subject: Parcel number 108-08-009
Four Pillars

Dear Property Owner or Resident:

The Sierra Vista Economic Development Foundation's (SVEDF) mission and purpose is to increase our region's economic strength and diversity through actions focused on business retention, recruitment, expansion, and business alliance development. In other words, we're committed to creating an economically healthy region! For more information about our foundation, the community leaders that volunteer on the Board of Directors, and what the foundation is accomplishing in Cochise County, please visit our website at www.svedf.org.

Most recently, we have been working on creating a place for the unmanned aircraft systems (UAS) industry within our region. SVEDF has been pursuing UAS industry opportunities for nearly three years and after a great deal of unwavering effort, we are pleased to announce its presence here in Cochise County! We welcome you to read the enclosed informational sheet to review a small portion of the many positive applications for the UAS industry.

We would like to inform you that SVEDF has entered into a lease agreement with the property owner of the aforementioned property (please see the enclosed map) for the purpose of testing small Class 1 & 2 unmanned systems. We are in the process of applying for a special use permit through Cochise County. Part of the process is to inform all of the property owners/residences in the immediate area of our plans.

As the unmanned industry grows, we want to be able to provide an economic opportunity for Cochise County, its residents, and people that may otherwise relocate in pursuit of a job elsewhere. By being on the forefront of the industry and specifically working in the agriculture field, we feel we have the opportunity to provide jobs and revenue to our tax base.

We have hired the local firm Thompson-Wimmer, Inc., one of the nation's leading technical services providers in assisting unmanned aircraft systems, as our test site manager. A test site managing representative will be present anytime a client is onsite to guarantee seamless safety and compliance monitoring. Four Pillars currently has an existing runway and is an FAA approved airport. We anticipate using the airport primarily during the week with the occasional weekend client.

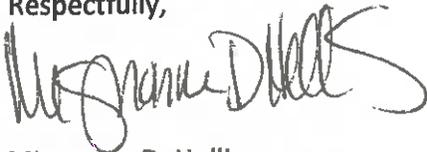
150 F

All aircraft will adhere to producing no more than 85 decibels @ 25 feet. All flying will be performed over the subject property and the FAA approved runway, not to exceed 400 feet above ground. All takeoff and landing patterns will maintain maximum clearance from residents and buildings. All issues with residents will be addressed promptly with full consideration to reasonable privacy and enjoyment of their properties.

All Class 1 and 2 systems are less than 55 lbs in weight and will only fly 'line of sight'. Systems may vary in power usage from battery operated to electrical power.

As we move forward, we stand by ready to address your questions and concerns. We encourage you to contact us directly by send an email to hollism@svedf.org, calling our office at (520) 458-6948, or sending correspondence to SVEDF, 750 E. Bartow, Sute 16, Sierra Vista, AZ. 85635.

Respectfully,



Mignonne D. Hollis
Executive Director

Unmanned Systems & Our Four Pillars Mission



Cyclone ADG, LLC

Cyclone ADG, LLC owners John Waszczak and Scott Rollefstad were recently named recipients of the Arizona Commerce Authority's AZFAST Grant for their innovation of Cyclone-6: an unmanned aerial support and sensor surveillance system. In December of 2010, Border Patrol Agent Brian Terry was shot and killed near Rio Rico, Arizona, while attempting to apprehend a group of armed subjects. It was then Rollefstad was moved to do more to protect the agents within our country. With the mission of saving lives, Rollefstad and Waszczak partnered in developing an unmanned system that would give agents an advantage in potentially dangerous situations by providing the location of threats. Cyclone-6 is a mile marker in doing more to protect the agents within our country.

CYCLONE ADG, LLC OWNERS SCOTT ROLLEFSTAD (LEFT) AND JOHN WASZCZAK (RIGHT). THE UNMANNED SYSTEM YOU SEE ON THE TABLE IS AN EXAMPLE OF THE TYPE & GENERAL SIZE OF SYSTEMS TO BE TESTED AT THE FOUR PILLARS FACILITY.

FOUR PILLARS WILL FEATURE SMALL TECHNOLOGY, NOT LARGE AIRCRAFT.

The Positive Applications of Unmanned Technology are Astounding!

Do you know that drones, also called unmanned aircraft systems (UAS), have practical applications that have nothing to do with weapons or espionage? No? Here are a few to consider:

1. They can save lives. In natural and manmade disasters, UAS can be positioned to survey damage, locate stranded and injured victims, and assess ongoing threats without risking the safety of rescue teams and first-responders.
2. They can support law enforcement. UAS can be used to search for lost children, provide tactical surveillance and suspect tracking, assist in accident investigations, and monitor large crowds.
3. They can contribute to safe infrastructure maintenance and management. Consider the difficulty of inspecting the underside of a bridge or the top of a skyscraper, not to mention the costs and risks. With UAS, scaffolding, cranes, or harnesses are not required. Just deploy the system to assess the structure's condition remotely.
4. They can streamline agriculture management. Using a crop management system to observe, measure, and respond to variability in individual plants, farmers can target areas requiring attention. By pinpointing these areas, farmers can provide care only where needed—improving

yield, conserving resources, and avoiding waste.

Recent Legislation Has Opened Up Growth Opportunities

When Congress passed the FAA Modernization and Reform Act of 2012, it directed the FAA to integrate commercial UAS into the National Airspace System by September 2015. As a result, the UAS industry is investing in new technologies to address emerging opportunities.

Integrating UAS into the National Airspace System has created economic opportunity, too. Between 2015 and 2018, the industry is projected to generate \$13.6 billion, and will grow organically and sustainably—culminating in more than \$82.1 billion in annual revenue by 2025 (source: AUVSI's 2013 economic impact report).

Although UAS are mostly known for military applications, that perception is likely to change as they are adopted into the commercial market. The technology's accessibility, cost, and safety provide a unique capability that has not been attainable for many companies. Benefits of this technology grow everyday.

Source: Michael Melle's article, 5 Benefits of Drones (UAS) That Might Surprise You



Our Focus

The Four Pillars facility is located on 160 acres & will feature smaller companies who are in the experimental stages of their product. The facility will never serve as a place to test large unmanned aircraft.

SVEDF envisions the test site as a place where UAS companies can go to test, train, and learn.

The purpose of the facility is to allow companies developing UAS products for the commercial market to test their product for effectiveness, train recipients of their technology, and learn the important aspects of integrating the technology.

The Unmanned Systems industry is gaining speed quickly & it is an economic jewel for Cochise County & the State of Arizona, promising to create jobs and revenue for years to come.

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Gardner, Peter

From: Mignonne Hollis [hollism@svedf.org]
Sent: Monday, March 10, 2014 9:14 AM
To: Gardner, Peter
Cc: Lynn Mattingly
Subject: RE: Transmittal SU-14-05 (SVEDF) - Unmanned Aerial System Test Facility & Airport

Good Morning Peter,

We will mostly test the software at Four Pillars and not so much flying around. The platforms are 60 DS – battery operated which means you can only hear them if you are within 5 ft of the operation. Normal testing will be anywhere from 15 - 20 minutes. They will not be flown continuously.

Please let me know if you need more information.

Thanks!
Mignonne

Mignonne D. Hollis
Executive Director
Sierra Vista Economic Development Foundation
750 E Bartow Suite 16
Sierra Vista AZ 85635

TEL: (520) 458-6948
FAX: (520) 458-7453
CELL: (520)226-6019
hollism@svedf.org
www.svedf.org



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From: Gardner, Peter [mailto:PGardner@cochise.az.gov]
Sent: Monday, March 10, 2014 8:30 AM

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To: Mignonne Hollis
Cc: Lynn Mattingly
Subject: FW: Transmittal SU-14-05 (SVEDF) - Unmanned Aerial System Test Facility & Airport

Mignonne,

We received the question below in response to our transmittal of your application. Can you please provide clarification regarding the level and duration of noise that may be generated? Thank you and regards,

Peter Gardner, Planner I
Cochise County Community Development Department
Planning, Zoning, and Building Safety Division
1415 Melody Lane, Building E
Bisbee, AZ 85603
Phone: 520-432-9240
Fax: 520-432-9278
"Public Programs, Personal Service"
www.cochise.az.gov

From: Wilson, Beverly
Sent: Monday, March 10, 2014 8:23 AM
To: Gardner, Peter
Subject: FW: Transmittal SU-14-05 (SVEDF) - Unmanned Aerial System Test Facility & Airport

Send me an answer!

Beverly Wilson, Planning Director
Cochise County Community Development Department
Planning, Zoning and Building Safety Division
1415 Melody Lane, Building E, Bisbee, AZ 85603
520.432.9240 Fax 520.432.9278
bjwilson@cochise.az.gov

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www.cochise.az.gov

From: DIANA BARTON [<mailto:dlbsunset50@msn.com>]
Sent: Saturday, March 08, 2014 10:55 PM
To: Lucinda Earven; Barb Buntin; Bob Cook; bon_cook; buggyladydriver; caffelatte1999@yahoo.com; Dana Cole; EILEEN SWIERS; Helene Jackson; James and Ginny Dargitz; joshua_brace@yahoo.com; joybanks.az@gmail.com; Julia Robinson; ken wendt; Kenneth Ellis; kiabrice@yahoo.com; letha.simmons; Linda Guinter; lynnetuttle; Mary Alinen; Mike Jackson; randy bulfer; Ray Mead; Rickstractor; s thomas; Searle, Richard; Sheepdog4759@yahoo.com; Susan Richards; Tonya Freeman; Tricia Gerrodette; william.buppert; Ann Aust; cricks1; debby.derosa; Jerry Kirby; Peter; Robert Dorr; torreys6; Wilson, Beverly
Subject: RE: Transmittal SU-14-05 (SVEDF) - Unmanned Aerial System Test Facility & Airport

Beverly,

Question 3 on the application does not match notice to the public, it is also not completely filled out the question is

#3

Will any noise be produced that can be heard on neighboring properties? yes or no **This is not answered and if the answer is yes then they need to answer the next questions on duration.** The comment is below 60 DS, but in the letter to the public it is stated. No more than 85 DS at 25 ft. and not duration is listed. So what it is 60 or

85 DS and what is the duration of this noise.

Thanks

Diana Barton

Date: Fri, 7 Mar 2014 08:19:01 -0800

From: hossdvm@yahoo.com

Subject: Fw: Fwd: Transmittal SU-14-05 (SVEDF) - Unmanned Aerial System Test Facility & Airport

To: dlbsunset50@msn.com; d.cole@msn.com; cricks1@me.com

Diana brought this to my attention in an email and then I get these details from our clerk...how fortuitous?! Thought you all might be interested in details. Another case of dumping annoying "stuff" in Whetstone?

On Friday, March 7, 2014 7:03 AM, "hereford_nrcd@juno.com" <hereford_nrcd@juno.com> wrote:
F Y I Cochise County P & Z

Kathy Morris

Board Clerk

Hereford NRCD

P.O. Box 3361

Sierra Vista, AZ 85635

520-220-2028

hereford_nrcd@juno.com

www.herefordnrcd.com

Please note: forwarded message attached

Cc: "Wilson, Beverly" <BJWilson@cochise.az.gov>, "Searle, Richard" <RSearle@cochise.az.gov>

Date: March 5, 2014 at 10:38 AM

Subject: Transmittal SU-14-05 (SVEDF) - Unmanned Aerial System Test Facility & Airport

Please see the attached transmittal regarding the Sierra Vista Economic Development Foundation's proposal for an Unmanned Aerial Systems test facility northeast of Huachuca City, adjacent to State Land. The Applicants also propose to reactivate the runways listed on the parcel as part of the test facility. Please return any comments no later than Friday, March 21. Please feel free to contact me with any questions. Thank you and regards,

Peter Gardner, Planner I

Cochise County Community Development Department
Planning, Zoning, and Building Safety Division
1415 Melody Lane, Building E

Bisbee, AZ 85603
Phone: 520-432-9240
Fax: 520-432-9278
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Gardner, Peter

From: Wilson, Beverly
Sent: Friday, January 24, 2014 11:59 AM
To: Gardner, Peter
Cc: Dennis, Keith
Subject: FW: Fwd: New unmanned aerial testing, training facility proposed | The Sierra Vista Herald

Please print out the info below for the EDF/drone docket...thank you - b

Beverly Wilson, RLA

Director, Planning, Zoning and Building Safety Division
Cochise County Community Development Department
1415 Melody Lane, Building E, Bisbee, AZ 85603
520.432.9240 Fax 520.432.9278
bjwilson@cochise.az.gov

"Public Programs, Personal Service"

www.cochise.az.gov

From: Anna Lands [<mailto:healing@rmsmte.com>]
Sent: Thursday, January 23, 2014 5:57 PM
To: Wilson, Beverly
Subject: Re: Fwd: New unmanned aerial testing, training facility proposed | The Sierra Vista Herald

Thanks, Beverly.. As you can surmise, my primary interest is in the safety and ease of the public. It is very scary stuff to many if not most people and the proponents will do well to be aware and responsive to that. The drones are here, are a reality, and "we" must adapt. I've asked the 'drone range' group to think about what is important to them and to distill that into a succinct statement, one which the County P&Z Commission and Dept. can utilize. If you think of anything along these lines, please let me know. Thanks.

And thanks for letting me know about Mike.. we have enjoyed a comfortable and trusting relationship for years..even through my panic attack over the Red Horse Wind Farm - If you do speak with him, please give him my warm greetings.

Best ~ Anna

On 1/23/2014 4:21 PM, Wilson, Beverly wrote:

Yes, me too! I first started following them when a girlfriend became involved and started to tell me the 'civil' uses possible. It will be interesting – and we are meeting with the EDF soon. They will be bringing in their request probably by April or May.

Thanks for keeping in touch with me. I know that you are friends with Mike Turisk – we have not seen Mike, and hear that his health is not good. He is missed.

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Take care – v/r-

Beverly Wilson, RLA

Director, Planning, Zoning and Building Safety Division
Cochise County Community Development Department
1415 Melody Lane, Building E, Bisbee, AZ 85603
520.432.9240 Fax 520.432.9278
bjwilson@cochise.az.gov

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From: Anna Lands [<mailto:healing@rnsmtc.com>]

Sent: Thursday, January 23, 2014 2:37 PM

To: Wilson, Beverly

Subject: Re: Fwd: New unmanned aerial testing, training facility proposed | The Sierra Vista Herald

Thank you for this, Beverly. The advent of drones in civil use is, to me, as meaningful as the advent of electricity. I've been watching the developments since early 2012 and the scope is absolutely amazing! As far as I know, this would be the first Special Use Permit for civil use in Arizona, perhaps anywhere. It has the potential to be a really good model for others. Thanks for keeping me up to date!!

Best ~ Anna

On 1/21/2014 5:14 PM, Wilson, Beverly wrote:

Hello Anna – you are correct. They have been notified that a Special Use will be required!

I do not have any information other than the newspaper, you, and KJAZZ – the NPR station in Phoenix yesterday when I flew back from the snow!!!

I'll keep you in the loop☺ and thank you for your patience.

Beverly Wilson, RLA

Director, Planning, Zoning and Building Safety Division
Cochise County Community Development Department
1415 Melody Lane, Building E, Bisbee, AZ 85603
520.432.9240 Fax 520.432.9278
bjwilson@cochise.az.gov

"Public Programs, Personal Service"

www.cochise.az.gov

From: Anna Lands [<mailto:healing@rnsmtc.com>]

Sent: Thursday, January 16, 2014 11:44 AM

To: Wilson, Beverly

Subject: Fwd: Fwd: New unmanned aerial testing, training facility proposed | The Sierra Vista Herald

Hi Beverly.. Am I correct in thinking that this project has to have a special use permit? Will the drones' flight be limited to the 160 acre boundary? What about noise and traffic impacts? Etc. Etc. Thanks for your thoughts and any information..

Anna

<http://www.svherald.com/content/eric-petermann/2014/01/14/365878>

--

Special Use: Docket SU-14-05 (SVEDF)



YES, I SUPPORT THIS REQUEST

Please state your reasons:

I Have no reason to object to this.

~~PS.~~

PS. Tell them to pave 4 pillars down to the airport gate



NO, I DO NOT SUPPORT THIS REQUEST:

Please state your reasons:

(Attach additional sheets, if necessary)

PRINT NAME(S):

Dave Moore

SIGNATURE(S):

A handwritten signature in cursive script, appearing to read "Dave Moore", written over a horizontal line.

YOUR TAX PARCEL NUMBER:

10808011A

(the eight-digit identification number found on the tax statement from the Assessor's Office)

Your comments will be made available to the Planning Commission. Upon submission this form or any other correspondence becomes part of the public record and is available for review by the applicant or other members of the public. **Written comments must be received by our Department no later than 4 PM on Friday, March 21, 2014 if you wish the Commission to consider them before the meeting. We cannot make exceptions to this deadline, however, if you miss the written comment deadline you may still make a statement at the public hearing listed above. NOTE: Please do not ask the Commissioners to accept written comments or petitions at the meeting, as they do not have sufficient time to read materials at that time. Your cooperation is greatly appreciated.**

RETURN TO: Peter Gardner, Planner I
Cochise County Planning Department
1415 Melody Lane, Building E

F

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February 19, 2014

Charles Spegal
691 East Highway 82
Huachuca City, Az. 85616
520 227 6011

Mignonne D. Hollis, Executive Director
Sierra Vista Economic Development Foundation
750 E. Bartow; Suite 16
Sierra Vista, AZ 85635

Subject: Four Pillars Drone Testing

Dear Ms. Hollis:

Thank you for your letter dated February 13, 2014. I have been following recent articles in the Harold pertaining to the unmanned systems to be tested in the Whetstone area, and have spoken to recently by phone. This letter is a follow-up to give you more specific information on the properties I have available in Whetstone.

I have storage properties either for rent, long term lease, or sale. One is located on highway 82, approximately 4 miles east of the Four Pillars area, Parcel No. 106 25 047 A. It is approximately 2 acres in size, surrounded by an 8 ft. blocked wall with reinforced concrete and razor wire. The ground is an all-weather covering that can handle large trucks. There are no utilities on this property, but they are available.

The second property, which contains three lots (Parcel Nos. 106 21 013; 014; 015) is located on the southeast corner of highway 90 and Camino De Tundra, which is about 1 mile north of the intersection of highways 90 and 82. This property has highway visibility. It is approximately $\frac{3}{4}$ acre in size with a building that is approximately 30' X 60' containing an office and a work area. All utilities are on the property and meet all county handicap requirements. The lot has a chain link fence with privacy staves.

When we spoke, you mentioned that you wanted to come out to see these properties. I am available most any time, and can be contacted at the phone number above. My email address is charlesspegal@q.com I look forward to hearing from you in the near future.

Sincerely,



Charles Spegal

cc: Thompson-Wimmer

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Special Use: Docket SU-14-05 (SVEDE)

COCHISE COUNTY

MAR 24 2014

PLANNING

YES, I SUPPORT THIS REQUEST

Please state your reasons:

Blank lines for providing reasons for supporting the request.

NO, I DO NOT SUPPORT THIS REQUEST:

Please state your reasons:

We need more information! What type of drones? What will they be doing? How can we decide? Will they taking photos of our yard? What is the real reason for the drones? Will we be compensated?

(Attach additional sheets, if necessary)

PRINT NAME(S):

Darlene McGinley

SIGNATURE(S):

DM

YOUR TAX PARCEL NUMBER: 10808012B (the eight-digit identification number found on the tax statement from the Assessor's Office)

Your comments will be made available to the Planning Commission. Upon submission this form or any other correspondence becomes part of the public record and is available for review by the applicant or other members of the public. Written comments must be received by our Department no later than 4 PM on Friday, March 21, 2014 if you wish the Commission to consider them before the meeting. We cannot make exceptions to this deadline, however, if you miss the written comment deadline you may still make a statement at the public hearing listed above. NOTE: Please do not ask the Commissioners to accept written comments or petitions at the meeting, as they do not have sufficient time to read materials at that time. Your cooperation is greatly appreciated.

RETURN TO: Peter Gardner, Planner I
Cochise County Planning Department
1415 Melody Lane, Building E
Bisbee, AZ 85603

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Special Use: Docket SU-14-05 (SVEDF)

YES, I SUPPORT THIS REQUEST

Please state your reasons:

NO, I DO NOT SUPPORT THIS REQUEST:

Please state your reasons:

Please see Attachment

(Attach additional sheets, if necessary)

PRINT NAME(S):

RIM Real Estate, LLP

SIGNATURE(S):

R. M. P. General Partner

YOUR TAX PARCEL NUMBER:

108-08-003

(the eight-digit identification number found on the tax statement

from the Assessor's Office)

Your comments will be made available to the Planning Commission. Upon submission this form or any other correspondence becomes part of the public record and is available for review by the applicant or other members of the public. **Written comments must be received by our Department no later than 4 PM on Friday, March 21, 2014 if you wish the Commission to consider them before the meeting. We cannot make exceptions to this deadline, however, if you miss the written comment deadline you may still make a statement at the public hearing listed above. NOTE: Please do not ask the Commissioners to accept written comments or petitions at the meeting, as they do not have sufficient time to read materials at that time. Your cooperation is greatly appreciated.**

RETURN TO: Peter Gardner, Planner I
Cochise County Planning Department
1415 Melody Lane, Building E
Bisbee, AZ 85603

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Attachment to Special Use Permit Docket #SU-14-05 (SVEDF)

To: Cochise County Planning Department

From: R & M Real Estate, LLP - TIN #108-08-003

We do not support the above-referenced request for a Special Use Permit. An unmanned aerial system facility contiguous to our 80 acre parcel will significantly decrease the value of our land. It will be difficult to find a developer or homeowner who will want to build homes or businesses under the possible surveillance and/or interference with the beautiful views our property currently has.

If the planning commission approves the application request, we will probably have to ask a judge to make a determination that our land is not saleable at current assessed value.

Please do not approve this special use permit.

Thank you for your consideration,

Rhonda Mallis Rosenbaum
General Partner
R & M Real Estate, LLP

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UAS Groups

UAS capabilities vary widely depending on the size, performance, and function of the UA. UAs range in size and speed from a wingspan less than one foot hovering at treetop level, to a wingspan of over 130 feet operating above 60,000 feet. These unofficial classification categories vary widely depending on which perspective is used - tactical use, performance, size, airworthiness, levels of autonomy, etc. The individual groups of UAS are identified by attributes of airspeed, weight, and operating altitude and briefly described below.

- **Group 1:** Typically hand-launched, self contained, portable systems employed for a small unit or base security. They are capable of providing “over the hill” or “around the corner” reconnaissance and surveillance. They operate within visual range and are analogous to radio-controlled model airplanes as covered in AC 91-57.30
- **Group 2:** Small to medium in size and usually support brigade and intelligence, surveillance, reconnaissance, and target acquisition requirements. They usually operate from unimproved areas and launched via catapult. Payloads may include a sensor ball with electro-optic / infrared (EO/IR) and laser range finder/designator (LRF/D) capability. They typically perform special purpose operations or routine operations within a specific set of restrictions.
- **Group 3:** Operate at medium altitudes with medium to long range and endurance. Their payloads may include a sensor ball with EO/IR, LRF/D, signal intelligence (SIGINT), communications relay, and chemical biological radiological nuclear explosive (CBRNE) detection. They usually operate from unimproved areas and may not require an improved runway.
- **Group 4:** Relatively large UAS that operate at medium to high altitudes and have extended range and endurance. They normally require improved areas for launch and recovery, beyond line-of-sight (BLOS) communications, and have stringent airspace operations requirements. Payloads may include EO/IR sensors, radars, lasers, communications relay, SIGINT, Automatic Identification System (AIS), and weapons.
- **Group 5:** Include the largest systems, operate at medium to high altitudes, and have the greatest range, endurance, and airspeed capabilities. They require improved areas for launch and recovery, BLOS communications, and the most stringent airspace operations requirements. Group 5 UAS perform specialized missions such as broad area surveillance and penetrating attacks.

Table 3: DoD UAS Group Descriptions³¹

| UAS Groups | Maximum Weight (lbs) (MGTOW) | Normal Operating Altitude (ft) | Speed (kts) | Representative UAS |
|------------|------------------------------|--------------------------------|-----------------|--|
| Group 1 | 0 – 20 | <1200 AGL | 100 |  Raven (RQ-11), WASP |
| Group 2 | 21 – 55 | <3500 AGL | < 250 |  ScanEagle |
| Group 3 | < 1320 | < FL 180 | |  Shadow (RQ-7B), Tier II / STUAS |
| Group 4 | >1320 | < FL 180 | Any Airspeed |  Fire Scout (MQ-8B, RQ-8B), Predator (MQ-1A/B), Sky Warrior ERMP (MQ-1C) |
| Group 5 | | > FL 180 | |  Reaper (MQ-9A), Global Hawk (RQ-4), BAMS (RQ-4N) |

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COCHISE COUNTY COMMUNITY DEVELOPMENT

"Public Programs...Personal Service"

MEMORANDUM

TO: Cochise County Planning and Zoning Commission
FROM: Dora V. Flores, Permit and Customer Service Coordinator
FOR: Beverly Wilson, Planning Director
SUBJECT: Docket R-14-06 (Zoning Regulations Updates)
DATE: March 31, 2014

I. BACKGROUND AND PROPOSED CHANGES

Docket R-14-06 is a resolution that proposes several revisions to the Cochise County Zoning Regulations, last revised and adopted on January 7th of 2014 (Resolution 14-01). Section 102.A.8 of the Cochise County Comprehensive Plan requires periodic review and updates to the Zoning Regulations to "reduce complexity, contradictions, and unnecessary regulations." The current set of proposed amendments to the Zoning Regulations incorporates recent changes to Arizona Revised Statutes, as well as clerical edits and amendments stemming from suggestions and comments received by Staff. Several of the revisions are included to bring the Zoning Regulations into conformance with procedures and amendments recently made to the building code. A summary listing of the changes as well as the complete draft document (with additions and deletions shown) is included for consideration. Following is a brief review of each Article and the changes Staff is proposing:

Article 2 (Definitions):

Modified Definitions:

Agriculture, General: Corrected the misspelling of "statute" and added the term "or the growing of medical marijuana" to be in compliance with Arizona Revised Statutes.

Community Garden: Change the word "shall" to "may".

Repair Services, Small Engines: Move down a position as it was out of sequence of alphabetization.

Article 5 (Zoning Districts, Maps, and Boundaries): Changes to this Article are to clarify that the Zoning Maps are now in a digital format and paper copies of maps are no longer kept.

Article 6 (RU, Rural Zoning Districts): Changes include the following:

- Well houses will be required to have a setback in compliance with AZ Dept of Water Resources (wells must maintain a 50' setback to all property lines) and also are exempt from permitting requirements if under 200-square feet and not located in a floodplain per an amendment made to the building code and the Flood Regulations.
- "Repair Services" was delineated into three different uses to correspond with the definitions in Article 2.

Article 7 (Residential Zoning Districts): Changes include the following:

- Well houses now will be required to have a setback in compliance with AZ Dept of Water Resources (wells must maintain a 50' setback to all property lines) and also are exempt from permitting requirements if under 200-square feet and not located in a floodplain per an amendment made to the building code and the Flood Regulations.

Article 11 (NB, Neighborhood Business Zoning District):

- "Repair Services" was delineated into two different uses to correspond with the definitions in Article 2.

Article 12 (GB-General Business): Changes include the following:

- "Repair Services" was delineated into two different uses to correspond with the definitions in Article 2.

Article 13 (LI-Light Industry Zoning District): Changes include the following:

- "Repair Services" was delineated into three different uses to correspond with the definitions in Article 2.
- Deleted "Dwelling or RV shall not be rented to the public" as it was a duplicate, see 1304.02.D

Article 14 (HI-Heavy Industrial Zoning District): Changes include the following:

- "Repair Services" was delineated into three different uses to correspond with the definitions in Article 2.
- Deleted "Dwelling or RV shall not be rented to the public" as it was a duplicate, see 1404.02.D

Article 15 (PD-Planned Development Districts): Changes include the following:

- "Hospitals" deleted from current location and added as a separate use, see 1502.58
- "Repair Services" was delineated into three different uses to correspond with the definitions in Article 2.

Article 17 (Administration): Changes include the following:

- Two sections were modified in 1704.01 (H and U) to comply with amendments to the building code as follow:
 - H. Added "like for like".
 - U. Added accessory structures under 200-square feet.
- Section 1720.01 modified to allow sufficient time to process temporary use permits.

- Section 1720.03 modified to clarify those temporary dwellings such as a manufactured home will be allowed during construction of a site built home.

Article 18 (Site Development Standards): Changes include the following:

- Added “Stockyard/Auction Sales” as a use to calculate required parking spaces.
- Section 1806.02, added the section number “1807.06” as a reference to complete the sentence.

Article 19 (Sign Code): Changes include the following:

- Added “No Trespassing” signs to list of signs not requiring permits.

Article 23 (Amendments): Changes include the following:

- Added verbiage to authorize the Zoning Inspector to shorten the length of a permit if in violation.

II. SUMMARY AND RECOMMENDATION

Staff previously indicated that minor edits and corrections would be addressed in a timely manner. The updates and edits included in these proposed changes reflect the spirit of addressing issues in a timely manner. Staff is requesting the Commission forward these proposed changes to the Board (meeting of May 6) with a recommendation for approval.

Sample Motion: *Madame Chair, I move to forward a recommendation of approval as proposed of Docket 14-06 to the Board of Supervisors.*

III. ATTACHMENTS

- A. Exhibit A (proposed revisions to the Zoning Regulations)

EXHIBIT "A" R-14-06 Zoning Regulations Update

Draft Zoning Regulations R-14-06

Definitions

Agriculture, General - A tract containing a minimum of 5 contiguous commercial acres which is being used for the production of farm, garden, or orchard crops, or the grazing or raising of farm animals, including feeding pens that are incidental and subordinate to a grazing operation. Examples of commodities produced include vegetables, fruit trees, grapes, cotton, grain, poultry, horses, cattle, sheep and swine. The term "general agriculture" includes such uses as the necessary treatment, packing or storage of farm products produced on premises, the sale of any farm crops or livestock raised on premises, and any signs, structures, or fences utilized for agricultural functions. By statute "general agriculture" includes dairy operations, including areas designated for raising heifers and bulls owned by the same dairy operation that is on property contiguous to the dairy operation or within one-quarter of a mile. It does not include signs advertising off-premise facilities, junkyards, other retail sales, manufacturing, any non-agricultural services, stockyards, slaughterhouses/meat packing plants, commercial pen feeding, production wineries, bone yards, plants for the reduction of animal matter, poultry feeding operations, ~~or agricultural processing plants~~, ~~or the growing of medical marijuana~~.

Comment [d1]: Corrected the misspelling of "Statute"

Comment [d2]: Added to clarify per Arizona Revised Statutes

Community Garden - An area used to grow food and/or fiber products for use, consumption, or sale by the garden participants. Accessory uses ~~shall~~ ~~may~~ include greenhouses, sheds, and outdoor storage of farm equipment. Community gardens are considered residential uses for the purposes of site development standards.

Comment [d3]: Changed to "may" instead of shall

Repair Services, Large Engines - Services designed to repair large vehicles such as trucks with more than two axles, recreational vehicles, tractors, combines, and/or other large engines and may include incidental retail sales of parts.

~~Repair Services, Small Engines - Services designed to repair vehicles with no more than two axles, recreational vehicles and/or other small engines and may include incidental retail sales.~~

Comment [d4]: Deleted, out of sequence of alphabetization, see below

Repair Services, Light - Services designed to repair items, such as watches, jewelry, furniture, electrical equipment, appliances, and clocks and may include incidental retail sales.

~~Repair Services, Small Engines - Services designed to repair vehicles with no more than two axles, recreational vehicles and/or other small engines and may include incidental retail sales.~~

Comment [d5]: Added, to put in correct order of alphabetization, see above

504 Official Zoning District Map

504.01 The Official Cochise County Zoning District Map, together with all ~~digital~~ explanatory matter hereon, is hereby adopted by reference and declared to be an official record and a part of these Zoning Regulations.

Comment [d6]: Added to clarify new format of maps

~~504.02 - Said map shall be identified as such by the signature of the Chairman of the Board of Supervisors and attested by the Clerk of the Board of Supervisors.~~

Comment [d7]: Deleted as paper copies of maps are no longer used

~~504.03~~ Whenever amendments or changes are made in Zoning District boundaries, such amendments or changes shall be made promptly on the Official Zoning District Map.

Comment [d8]: Renumbered

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EXHIBIT "A" R-14-06 Zoning Regulations Update

504.043 No changes of any kind shall be made in the Official Zoning District Map except in conformance with the procedures set forth in these Zoning Regulations. Any unauthorized change of whatever kind by any person or persons shall be considered a violation of these Zoning Regulations and punishable as provided in Article 23.

Comment [d9]: Renumbered

504.054 Regardless of the existence of purported copies of the Official Zoning District Map which may from time to time be made or published, the Official Zoning District Maps shall be that an digital map set in the custody of the Clerk of the Board of Supervisors and physically kept by the Clerk in the office of the Cochise County Community Development Department, which is hereby designated to be a part of the office of the Clerk of the Board of Supervisors for this purpose only. Said digital maps shall be the final authority as to the current Zoning status of all lands and buildings in the area of jurisdiction.

Comment [d10]: Renumbered

Comment [d11]: Verbiage added and deleted to reflect paper copies of maps are no longer kept, maps are now digital

504.06 In the event that the Official Zoning District Map becomes damaged, destroyed, lost or difficult to interpret because of the nature or number of changes and amendments thereto, the Board of Supervisors may, by resolution, adopt a new Official Zoning District Map which shall supersede the prior Official Zoning District Map. The new Official Zoning District Map may correct drafting or other errors or omissions in the prior Official Zoning District Map, but no such correction shall have the effect of amending the original Zoning Regulations or any subsequent amendments thereto.

Comment [d12]: Deleted as all digital maps are securely backed-up

603.10 Bed and breakfast inn, subject to procedures in Article 17.

Comment [d13]: Comma moved to proper location

606 Other Permitted Uses

The following rural uses will be allowed without the establishment of a permitted principal use:

606.01 Solid fences or walls six-feet in height or less. Setbacks do not apply; no permit required unless greater than three feet in height on a corner lot (informational permit required).

606.02 Well houses, in a fixed location. Setbacks do not apply. Required minimum setbacks shall be 50 feet from the property lines, no permit required if 200 square feet or less. Permit is required for electrical and/or if located in a floodplain.

Comment [d14]: Verbiage added and deleted to be in compliance with the Dept. of Water Resources, Flood Regulations and amendment made to the Building Code

606.03 In Category A and B only, one out-building, in a fixed location, corrals, and pens. Multiple structures allowed in Category C and D.

607.29 Repair services, large engines

607.30 Repair services, light

607.31 Repair services, small engines

607.320 Recycling centers.

Comment [d15]: Deleted to correspond with definitions and renumbered

Comment [d16]: Re-numbered 607.32 through 607.56

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EXHIBIT "A" R-14-06 Zoning Regulations Update

- 607.334** Cultural, historic and/or nature exhibits.
- 607.342** Residential care institutions.
- 607.353** Offender rehabilitation facilities.
- 607.364** Group quarters.
- 607.367** Funeral and/or crematory services.
- 607.386** Golf courses.
- 607.397** Agricultural processing services with less than 300-foot minimum setback.
- 607.3840** Communications towers exceeding 30-feet in height, subject to site development standards in Article 18.
- 607.3941** Cemeteries.
- 607.420** Slaughterhouses/meat packing plants.
- 607.434** Day care establishments.
- 607.442** Commercial plant nurseries.
- 607.453** Bed and breakfast establishment.
- 607.464** Grocery Stores.
- 607.475** Research and/or Testing Laboratories.
- 607.486** Impound Storage Yards.
- 607.497** Wind Energy Power Plants (in Category D Areas only).
- 607.4850** Mini-warehouses.
- 607.4951** Riding stables, commercial, on a site less than 10-acres.
- 607.529** Solar Energy Power Plants-in Category D areas only.
- 607.534** Medical Marijuana Cultivation Facility in RU-4 and greater only, subject to site development standards in Article 18.
- 607.542** Medical Marijuana Dispensary in RU-4 and greater only, subject to site development standards in Article 18.
- 607.553** Medical Marijuana Dispensary Cultivation Facility in RU-4 and greater only, subject to site development standards in Article 18.
- 607.564** Medical Marijuana Infusion Facility in RU-4 and greater only, subject to site development standards in Article 18.

EXHIBIT "A" R-14-06 Zoning Regulations Update

706 Other Permitted Uses

The following uses will be allowed without the establishment of a permitted principal use on parcels four-acres or larger:

- 706.01** Well houses, in a fixed location. ~~Setbacks do not apply. Required minimum setbacks shall be 50-feet from the property lines;~~ no permit required ~~if 200 square feet or less. Permit is required for electrical and/or if located in a floodplain.~~
- 706.02** One out-building, in a fixed location, ~~and corrals/ and pens.~~
- 706.03** Solid fences or walls six- feet in height or less. Setbacks do not apply; no permit required, except if greater than three feet in height on a corner lot (informational permit required).

Comment [d17]: Verbiage added and deleted to be in compliance with the Dept. of Water Resources, Flood Regulations and amendment made to the Building Code

Comment [d18]: Clarified

1106.13 Repair services (enclosed), ~~large engines~~

~~1106.14~~ Repair services (enclosed), ~~small engines.~~

1106.154 Communication towers, ~~see subject to~~ site development standards in Article 18.

~~1105.165~~ Bed and breakfast establishment.

1106.176 Lighted Outdoor Recreation Facilities.

1106.187 Animal Husbandry Services.

1106.198 Mini-warehouses.

~~1106.1926~~ Commercial Plant Nurseries.

Comment [d19]: Delineated to correspond with definitions and renumbered

Comment [d20]: Clarified to be the same as other sections

Comment [d21]: Renumbered 1105.06 through 1105.20

1205.10 Repair services (unenclosed), ~~and/or~~ large engines.

~~1205.11~~ Repair services (unenclosed), ~~small engines.~~

1205.121 Communications towers exceeding 40-feet in height, subject to site development standards in Article 18.

1205.132 Regional sewage treatment plants.

1205.143 Truck stops.

1205.154 Lighted Outdoor Recreation Facilities.

Comment [d22]: Delineated to correspond with definitions and renumbered

Comment [d23]: Renumbered 1205.12 through 1205.22

EXHIBIT "A" R-14-06 Zoning Regulations Update

- ~~1205.165~~ Golf courses.
- ~~1205.176~~ Solar Energy Power Plants, subject to site development standards in Article 18.
- ~~1205.187~~ Wind Energy Power Plants, subject to site development standards in Article 18.
- ~~1205.198~~ Medical Marijuana Cultivation Facility, subject to site development standards in Article 18.
- ~~1205.2049~~ Medical Marijuana Dispensary, subject to site development standards in Article 18.
- ~~1205.210~~ Medical Marijuana Dispensary Cultivation Facility, subject to site development standards in Article 18.
- ~~1205.224~~ Medical Marijuana Infusion Facility, subject to site development standards in Article 18.

~~1302.16~~ Repair services, ~~large engines~~

~~1302.17~~ ~~Repair services, light~~

~~1302.18~~ ~~Repair services, small engines~~

~~1302.19~~ Contract construction services.

~~1302.1820~~ Communications towers at a maximum height of 199-feet, subject to site development standards in Article 18.

~~1302.1921~~ Parking lots, commercial.

~~1302.22~~ ~~0~~ Bus, rail, and/or truck terminals, and accessory maintenance yards and garages.

~~1302.234~~ Manufacturing, wholesaling, warehousing, distribution, and/or storage of goods.

~~1302.24~~ ~~2~~ Motion picture production sites/studios.

~~1302.25~~ ~~3~~ Printing and/or publishing businesses.

~~1302.26~~ ~~4~~ Custom butchering/meat curing/processing.

~~1302.27~~ ~~6~~ Mini-warehouses.

~~1302.28~~ ~~7~~ Hospitals, including ambulatory services.

~~1302.29~~ ~~8~~ Funeral and/or crematory services.

~~1302.2930~~ Recycling centers.

~~1302.31~~ ~~6~~ Cultural, historic and/or nature exhibits.

~~1302.32~~ ~~4~~ Welfare and/or charitable services.

~~1302.33~~ ~~2~~ Impoundment storage yards.

Comment [d24]: Delineated to correspond with definitions and renumbered

Comment [d25]: Renumbered 1302.19 through 1302.45

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~~1302.34~~ ~~3~~Zoos and/or other animal exhibits.

~~1302.35~~ ~~4~~Fairgrounds and/or amusement parks.

~~1302.36~~ ~~5~~Truck stops.

~~1302.37~~ ~~6~~Emergency vehicle stations not otherwise exempted by Article 20.

~~1302.38~~ ~~7~~Recycling/Solid waste transfer facilities.

~~1302.39~~ ~~8~~Commercial plant nurseries.

~~1302.3940~~ Car Wash.

~~1302.41~~ ~~0~~Anemometers, with temporary use permit not to exceed 3-years.

~~1302.42~~ ~~1~~Ag-processing with a 300-foot minimum setback.

~~1302.43~~ ~~2~~Slaughterhouse/meat packing plants with a 300-foot minimum setback.

~~1302.443~~ Farmers markets.

~~1302.454~~ Community gardens.

~~1304.01~~ One dwelling or recreational vehicle for the family or employees of the owner/operator or caretaker of the site of a principal use. ~~(Dwelling or RV shall not be rented to the public)~~

Comment [d26]: Deleted, as it was a duplicate, see 1304.02.D below

~~1304.02~~ Recreational Vehicles (RV's) are allowed as follows:

- A. No permit is required for storage of no more than two RV's on a parcel.
- B. Temporary occupancy of one RV in conjunction with a permitted principal use up to six months in a calendar year with a required Temporary Use Permit; stays of 15-consecutive days or less do not require a permit.
- C. Temporary occupancy of RV's in conjunction with the construction of a residential or non-residential permitted principal use. Such occupancy shall be limited to the length of the permit with a required Temporary Use Permit, subject to Article 17.
- D. Recreational vehicles accessory to a principal permitted use may not be rented out.

~~1402.045~~ Repair services, ~~large engines~~

~~1402.06~~ Repair services, ~~light~~

~~1402.07~~ Repair services, ~~small engines~~

~~1402.085~~ Contract construction services.

Comment [d27]: Deleted to correspond with definitions and renumbered

Comment [d28]: Renumbered 1402.08 through 1402.35

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- 1402.096** Communications towers, subject to site development standards in Article 18.
- 1402.107** Bus, rail, and/or truck terminals, and accessory maintenance yards and garages.
- 1402.1198** Commercial feedlots, stockyards, and/or auction barns.
- 1402.129** Manufacturing, wholesaling, warehousing, distribution, and/or storage of goods.
- 1402.130** Ag-processing with a 300-foot minimum setback.
- 1402.141** Custom butchering/meat curing/processing.
- 1402.152** Jails, prisons and/or detention centers.
- 1402.162** Offender rehabilitation facilities.
- 1402.174** Recycling centers.
- 1402.185** Impoundment storage yards.
- 1402.196** Motion picture production sites/studios.
- 1402.2017** Parking lots, commercial.
- 1402.2118** Printing and/or publishing businesses.
- 1402.2249** Gasoline/service stations.
- 1402.239** Banks and/or banking services.
- 1402.241** Personal and professional services.
- 1402.252** Truck stops.
- 1402.263** Emergency vehicle stations not otherwise exempted by Article 20.
- 1402.274** Funeral and/or crematory services.
- 1402.285** Restaurants, bars, taverns, nightclubs and/or off-site winery tasting rooms
- 1402.29** Recycling/Solid waste transfer facilities.
- 1402.30** Carwash.
- 1402.31** Anemometers, with temporary use permit not to exceed 3-years.
- 1402.32** Commercial feedlots with 300-foot minimum setback.
- 1402.33** Slaughterhouses/meat packing plants with a 300-foot minimum setback.
- 1402.34** Commercial plant nurseries.
- 1402.35** Cemeteries.

EXHIBIT "A" R-14-06 Zoning Regulations Update

1404.01 One dwelling or recreational vehicle for the family or employees of the owner/operator or caretaker of the site of a principal use. ~~Dwelling or RV shall not be rented to the public.~~

Comment [d29]: Deleted, as it was a duplicate, see 1404.02.D below

1404.02 Recreational Vehicles (RV's) are allowed as follows:

- A. No permit is required for storage of no more than two RV's on a parcel.
- B. Temporary occupancy of one RV in conjunction with a permitted principal use up to six months in a calendar year with a required Temporary Use Permit; stays of 15-consecutive days or less do not require a permit.
- C. Temporary occupancy of RV's in conjunction with the construction of a residential or non-residential permitted principal use. Such occupancy shall be limited to the length of the building permit with a required Temporary Use Permit, subject to Article 17.
- D. Recreational vehicles accessory to a principal permitted use may not be rented out.

1502.13 Personal and professional services ~~and/or hospitals.~~

Comment [d30]: Deleted, added as a separate use at the end, see 1502.58

1502.33 Repair services. ~~large engines.~~

~~1502.34~~ Repair services, light.

~~1502.35~~ Repair service, small engines.

Comment [d31]: Delineated to correspond with definitions and renumbered

1502.364 Manufacturing, wholesaling, warehousing, distribution, or storage of goods.

Comment [d32]: Renumbered 1502.36 through 1502.58

1502.375 Jails, prisons, and/or detention centers.

1502.386 Motion picture production sites/studios.

1502.397 Restaurants, bars, taverns, nightclubs and/or off-site winery tasting rooms.

1502.4038 Fairgrounds and/or amusement parks.

1502.341.8 Residential care homes.

1502.420 Residential care institutions.

1502.434 Offender rehabilitation facilities.

1502.442 Agricultural processing services.

1502.453 Zoos and/or other animal exhibits.

1502.464 Recycling centers.

1502.475 Communications towers.

1502.486 Truck stops.

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~~1502.497~~ Commercial plant nurseries.

~~1502.5048~~ Heliports, helipads, airports, and/or airstrips designed to serve the development.

~~1502.5149~~ Lighted Outdoor Recreation Facilities.

~~1502.529~~ Anemometers, with temporary use permit not to exceed 3-years.

~~1502.531~~ Wind Energy Systems, subject to the site development standards in Article 18.

~~1502.542~~ Animal Husbandry Services.

~~1502.553~~ Solar energy systems, subject to the site development standards in Article 18.

~~1502.564~~ Solar Energy Power Plants, subject to the site development standards in Article 18.

~~1502.578~~ Community Gardens.

~~1502.58~~ –Hospitals

1704 Building/Use Permit Required

1704.01 It shall be unlawful to erect, construct, reconstruct, alter or use any structure or building without first obtaining a building/use permit from the County Zoning Inspector; except that no building/use permit shall be required for any repairs or improvements of a value not exceeding \$1,000 dollars (market value labor and materials or actual receipts for cost of materials can be provided) except that those items listed* in this section below are completely exempted from permit requirements for single family residential dwellings only.

For non-residential uses a permit is required regardless of the dollar value of the improvement when there are applicable building code requirements.

For the purpose of determining the value of any such repair, alterations, or improvements, the normal retail value of materials and labor performed shall be used. Even though no permit is required for repairs or improvements having a certain value or listed below, such repairs, improvements, or alterations shall comply with all other provisions of these Zoning Regulations.

Re-establishment of a discontinued non-residential use shall not require a permit for the same use, provided that the discontinued use was established through the permitting process in place at the time of establishment, and that no new construction is proposed.

***List Of Exemptions From Permit Requirements For Single Family Residential Dwellings Only**

- A. Re-roofing (when no structural changes are proposed or any reinforcement is required to add heavier roofing materials), re-siding or replacement of exterior trim.
- B. Replacing or adding gutters or downspouts.
- C. Replacing or adding soffit, gable, or roof ventilation.
- D. Replacing existing windows or doors with no structural changes.

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- E. Decks less than 30-inches in height above the lowest grade within 5-feet of deck edge.
- F. Replacing existing plumbing fixtures such as toilet, tub, sink, garbage disposal, water heater, or faucets.
- G. Replacing existing appliances or internal light fixtures.
- H. Replacing ~~like for like~~ or repairing existing furnace, air-conditioner, cooler, heat pump, or heater.
- I. General landscaping including lawn sprinkler systems, subject to water conservation requirements, and retaining walls up to 4-feet in height.
- J. Installation of low-voltage wiring for security alarm systems.
- K. Flooring of wood, vinyl, ceramic, stone, masonry or carpeting.
- L. Installation or removal of non-structural interior wall partitions, if no utilities are involved.
- M. Adding or replacing insulation in walls, floors, or ceilings.
- N. Wood, concrete block or wire fences up to six-feet high unless on a corner lot. Solid fences or walls greater than three-feet in height on corner lots require an informational permit.
- O. Painting, interior or exterior, and wallpapering.
- P. Concrete walkways, not in County right-of-way, and patio slabs.
- Q. Replacing cabinets or countertops.
- R. Window awnings supported by an exterior wall which do not project more than 54-inches.
- S. Swings and other playground equipment accessory to a single family dwelling.
- T. Water Tanks supported directly on grade if the capacity does not exceed 5000-gallons and the ratio of height to diameter or width does not exceed 2:1.
- U. ~~One-story detached accessory structures provided the floor area does not exceed 200 square feet and has no utilities. Floodplain regulations may apply.~~

Comment [d33]: Clarified as noted in building code exemptions

Comment [d34]: Added to comply with amendments to the building code

1720 Temporary Uses

The following regulations shall govern the operation of certain transitory or seasonal uses:

1720.01 Permits

Application for a temporary use permit shall be made to the County Zoning Inspector ~~at a minimum of 10-working days prior to the event.~~ applications shall include the following:

Comment [d35]: Added to ensure timely manner to process temp permits

- A. A description of the property to be used, rented or leased for the temporary use, including all information necessary to accurately portray the property;
- B. A site plan and description of the proposed use;
- C. Sufficient information to determine setback requirements, sanitary facilities, and availability of parking space to service the proposed use; and
- D. The applicable fee as specified in the fee schedule as adopted by the Board of Supervisors.

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1720.03 Particular Temporary Uses Permitted

Upon obtaining a temporary use permit, the following temporary uses shall be permitted, subject to the following standards and/or other standards imposed by the County Zoning Inspector to mitigate off-site impacts:

E. Contractor's Office, ~~or Security Dwelling,~~ ~~or Other Temporary Dwelling During~~ ~~Construction of a Building.~~

Temporary buildings, manufactured homes, and recreational vehicles used in conjunction with construction work only during the period of such construction, subject to the following:

1. Permitted in all Zoning Districts.
2. Any use permit approved for such temporary building, manufactured home or recreational vehicle shall be limited to a period of time not to exceed 1-year from the date of such approval; said permit may be renewed for like periods thereafter as approved by the County Zoning Inspector upon receipt of satisfactory evidence indicating that the need for such temporary use continues to exist.
3. Unless the use permit is renewed, such temporary building, manufactured home, or recreational vehicle shall be removed from the property upon the expiration of the previously approved use permit or within 10-days after completion of the construction work, whichever occurs first.

Comment [d36]: Added to clarify that temp dwellings such as a manufactured home may be used during construction of a site built home

1804.05 Schedule of Required Off-Street Parking

Cultural, Historic, ~~and Nature~~
Exhibits, ~~and Stockyard/Auction~~
~~Sales~~

1-per 500-square feet of gross floor area and exterior exhibit area

Comment [d37]: Added, needed parking requirements for the use

1806.02 Placement of Landscaping

A. Exemptions:

The following shall be exempt from the installation and maintenance of landscaping:

1. Single-household dwelling sites in all Growth Category Areas
2. Uses within the Category C and D Areas

B. Category A and B Growth Areas

All uses in Category A (Urban Growth) and Category B (Community Growth) Areas shall have landscaped a minimum of five-percent of the total developed area of a site. The landscaping shall be integrated into the developed area and shall include a minimum five-foot wide strip along the abutting street(s). Landscaping shall be approved as part of building permit approval.

C. Sight Distance at Intersections

No landscaping shall present traffic visibility hazards within the sight triangle as described in Section ~~1807.03~~

Comment [d38]: Added, section number as a reference to complete the sentence. It was left out of previous revisions to the Zoning Regulations by mistake

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EXHIBIT "A" R-14-06 Zoning Regulations Update

1902 Administrative Procedures and Requirements

1902.01 Sign Permit Required

It shall be unlawful for any person, firm or corporation to erect, alter, or relocate within the unincorporated area of Cochise County any sign as defined herein without first obtaining a sign permit in compliance with Article 17 from the County Zoning Inspector, except that:

- A. Minor repairs, maintenance, or painting of signs, or changes in copy which alter neither the structural characteristics nor the sign classification shall not require a permit.
- B. Provided all other provisions of these Zoning Regulations are met, sign permits shall not be required for the following signs:
 - 1. Name Plate Signs.
 - 2. Home Occupation Signs.
 - 3. Traffic Control Signs (Private).
 - 4. Real Estate Signs.
 - 5. Political Signs.
 - 6. Window Graphics (Temporary).
 - 7. Contractor's Signs.
 - 8. Developer's Signs.
 - 9. Subdivision Development Signs.
 - 10. On-Site and Off-Site Special Event Signs (Temporary).
 - 11. Non-illuminated wall signs to a maximum of 50-square feet.
 - 11.12. ~~No Trespassing Signs~~

Comment [d39]: Added this type of sign that does not require a permit

2303 Remedies

All remedies concerning these Zoning Regulations shall be cumulative and not exclusive. Conviction and punishment of any person hereunder shall not relieve such persons from the responsibility of correcting prohibited conditions or removing prohibited buildings, structures, or improvements and shall not prevent the enforced correction or removal thereof. In addition to the other remedies provided herein, any adjacent or neighboring property owner specially damaged by the violation of any provision of these Zoning Regulations may institute, in addition to any other appropriate remedy or proceeding an action for injunction, mandamus, or proceeding to prevent, abate or remove such unlawful erection, construction, reconstruction, alteration, maintenance or use.

~~If a property is in violation for building without a permit the County Zoning Inspector may shorten the length of the permit to complete the project.~~

Comment [d40]: Added to allow the Zoning Inspector to shorten the length of a permit if in violation such as operating a business without a permit