

PLANNING & ZONING STAFF SUMMARY REPORT

MEETING DATE: DECEMBER 20, 2022

CASE # ETZ 2022-26

ACTING BOARD	ROSWELL-CHAVES COUNTY EXTRATERRITORIAL PLANNING AND ZONING COMMISSION
---------------------	--

ACTION REQUESTED:	Special Use Permit for a Community Solar Facility in the Rural Suburban District
------------------------------	---

LAND OWNER & AGENT:	Floyd D. Haake Trust Affordable Solar Group LLC
------------------------------------	--

LOCATION & LEGAL:	700-900 block of O'Connor Road. A portion of the NE4SW4 & E2SNW4SW4 of Section 29, T.11S, R. 24E.
----------------------------------	---

ITEM SUMMARY	Floyd D. Haake Trust and Affordable Solar Group LLC are proposing a 5 MW community solar facility on 28 acres of the 59-acre parcel of land located along the 900 block of O'Connor Rd. The Haake Trustees are not residents of Chaves County. The surrounding area is zoned R-S with the exception of the lots to the south and across Sunset Ave. zoned Industrial. There are other Industrial zoned properties along Sunset Ave. and Hobson Rd. to the south. The proposed site is not in the flight zone of the Roswell Air Center. The County Comp. Master Plan recommends that renewable energy facility be located in places that would have minimal impact on the adjacent residential neighborhood. Article 25 states reasons for granting a SUP shall; 1. not be a danger to public health and safety; 2. Not be detrimental to the economic welfare of the county; 3. Not be a nuisance; 4. meet the use standard for R-S district; 5. be compatible with the surrounding area; 6. conform with the 2016 Comp. Master Plan.
-------------------------	--

SUPPORTING DOCUMENTS	Staff Report, Application, Warranty Deed, Development Plan & Affordable Solar Group LLC information, Vicinity Map.
---------------------------------	---

SUMMARY BY: Louis Jaramillo –Planning & Zoning Director

STAFF'S REPORT

CASE # ETZ 2022-26

Affordable Solar Group LLC and Floyd D. Haake Trust are requesting a Special Use Permit for a community solar facility located along the 900 block of O'Connor Road on the south side. The proposed solar facility would be located on the western portion (28 acres) of a large 59 acres lot. The proposed facility is not in the F-1 Fight Zone Area of the Roswell Air Center. The lot is accessible from O'Connor Road, S. Washington Ave. and S. Sunset Ave. Affordable Solar Group LLC's site plan indicates the proposed community solar facility would be accessible from O'Connor Road only.

The proposed site and the properties to the west, north and east are zoned R-S Rural-Suburban District. The properties to the south and across S. Sunset Ave. are a mix of vacant R-S lots and I-1 Industrial-trucking business (ETZ 2007) lots. The properties to the west range in size from 0.75 to 4.5 acres and contain residential dwelling units. The properties to the north of the proposed site and across O'Connor Road range in size from 6 to 20 acres. One property is vacant, two of them contain two-single family residential dwelling units and the rest have one-single family residential dwelling unit. The properties to the east are RISD-Sunset Elementary School and a large vacant lot that is requesting a SUP for Community Solar Facility (ETZ 2022-28).

O'Connor Road is a twenty-four-foot-wide County maintained road that runs from the Roswell Relief Route to S. Main Street. South Washington Avenue is a twenty-one-foot-wide County maintained road that runs from O'Connor Road to Hobson Road. South Sunset Avenue is a four-lane street, maintained by the City of Roswell, and runs from 2nd Street to Hobson Road. It is classified as a minor collector, in the City of Roswell's Comprehensive Master Plan.

Staff has reviewed Mitchell A. Pavao-Zuckerman's (2016 assistant professor University of Maryland) report which states that the measured ambient air temperature over a solar facility was warmer than the surrounding area by 5-7-degrees F (3-4 C), at night and that the added heat was unmeasurable and dissipated within 100 feet of the facility. The report also states the heat effect may be caused by the natural ground's, underneath the solar panels, inability to cool off as quickly as the surrounding area. (See attachment).

The 2016 Comprehensive Master Plan encourages new commercial or industrial uses be located in areas that are not injurious to residential neighborhoods and, when possible, along major highways and arterial roads. (Land Use 4.3) It also notes that new solar energy facilities should be located and designed to mitigate negative impacts to surrounding residential neighborhoods (Physical Appearance 4.4). The Future Land Use Scenario map recommends this area as Mid-Density Residential (5-10 residential homes per acre) use which is really not possible in the ETZ area due to the 5-acre minimum lot size in the ETZ area.

If approved, Affordable Solar Group LLC proposes to construct a twenty-four (24') foot service road along the perimeter of the facility for fire prevention and emergency service access. Affordable Solar Group LLC has provided a development plan showing the solar panels will be ground based. The solar facility would be fenced in for security reasons. (See Project Description for details.) The facility will tie into the nearby

overhead electric line on O'Connor Road. Xcel Energy is unable to determine if they will be able to accept the 5-megawatt community solar facility on their distribution line.

Article 25 of the Roswell-Chaves County Extraterritorial Zoning Ordinance No. 80-1 states that a Special Use Permit shall not be transferable from one property owner or location to another. It lists four considerations the Commission must take into account when acting on a SUP. It also states six reasons for granting a Special Use Permit-1. not be a danger to public health and safety; 2. Not be detrimental to the economic welfare of the county; 3. Not be a nuisance; 4. meet the use standard for R-S district; 5. be compatible with the surrounding area; 6. conform with the 2016 Comp. Master Plan. The Article notes thirteen development restrictions or conditions the Commission may require as part of the approval such as screen fencing, additional setback requirements and size of the array farm, just to name a few. Finally, Article 25 gives reasons for revoking or terminating the Special Use Permit, such as but not limited to, failure to begin construction, the restrictions and conditions have not been met, or the use becomes detrimental to the public's health and safety. (See attachment)

Should the Special Use Permit receive favorable consideration, Staff recommends the following Conditions of Approval:

1. A twenty-four (24) feet wide hard pack, weather proof, service road shall be required along the perimeter the facility and within the fenced in area for fire and other emergency vehicles.
2. The location and development of the community solar facility shall conform to the presented and approved site plan, included in this report. Changes or modification by the Commission may be necessary for public health, safety and welfare or to compliance with other Conditions of Approval listed. Any modification to the location or an increase in size of the facility **made after** this public hearing shall require ETZ Commission's approval at a second public hearing.
3. Failure to complete the construction of the community solar facility within ten (10) years shall result in the Special Use Permit being terminated.
4. Affordable Solar Group LLC shall apply for any necessary building and electrical permits for construction of the community solar facility within one year of being award the solar project.
5. Affordable Solar Group LLC shall utilize the existing electric transmission lines in the area.
6. Affordable Solar Group LLC shall provide a de-commissioning and restoration plan for this property.
7. All lighting used on-site shall be shielded from traffic, surrounding properties and shall comply with the NM Night Sky Act.
8. All solar panels and their foundations shall be setback from all property lines a minimum of one hundred (100) feet to reduce the effects on the surrounding residential lots and public school.

9. A minimum six (6) foot security fence around the perimeter of the facility.

Findings of Fact:

1. The proposed solar facility **(is or is not)** be a low impact commercial use in a vacant area and would be an economic benefit to the community with rising utility costs, and to assist in the costly and limited space for personal solar facilities on one's private property.
2. The proposed solar facility **(may or may not)** conforms with the requirements for approval as stated in Article 25 of the Roswell-Chaves County ETZ Ordinance 80-1.
3. The proposed Special Use Permit **(may or may not)** correspond with the recommendation of the Chaves County 2016 Comprehensive Master Plan.
4. Owner's within one hundred (100) feet of the proposed Special Use Permit have been notified of this public hearing by certified and standard mail, per Section 2.5 of the Roswell-Chaves County Extraterritorial Zoning Ordinance No. 80-1. Staff has received a number of phone calls concerning this case but no protest letters have been received at the time of this writing.
5. Planning and Zoning Staff have advertised this meeting in the local Roswell Daily Record fifteen (15) days prior to today's public hearing per the Roswell-Chaves County Extraterritorial Zoning Ordinance No. 80-1.



ROSWELL- CHAVES COUNTY ETZ/ CHAVES COUNTY ZONING APPLICATION

Case Number: ^{ETZ} 2022-20 ⁶ Date Received: 11-7-22 Fee: 300.00

Type of Request: [] Rezoning [x] Special Use [] Variance [] Change of Use
Owner's Name: Floyd D Haake Trust
Mailing Address: 2033 N Cheyenne Place Casa Grande, AZ 85122 Phone Number:
Agent's Name: Laurie Moxe
Mailing Address: 30610 S Osprey Dr. Oracle, AZ 85623 Phone Number 505-259-0724

[x] Roswell-Chaves County ETZ [] Chaves County
Case Address:
Legal Description: See Attached
Parcel Number: See Attached
Present Land Use: Vacant
Intended Land Use: Community solar generation facility
Present Zoning: Requested Zoning: Special Use
Reason for Requested: (Attach Letter if necessary) See attached
PLEASE INCLUDE ALL DEVELOPMENT PLANS, SITE PLANS, AND /OR BUSINESS PLANS

I ACKNOWLEDGE THAT I HAVE BEEN INFORMED OF THE DATES, TIMES, AND LOCATIONS OF THE PUBLIC HEARINGS FOR WHICH I OR MY AGENT SHALL ATTEND IN ORDER TO FULFILL THE REQUIREMENTS OF THIS APPLICATION.
Agent Laurie Moxe Date 11-4-22

WARRANTY DEED

FLOYD D. HAAKE, A MARRIED MAN, JOINED PRO FORMA BY HIS WIFE, MELBA W. HAAKE

_____, for consideration paid, grant to
FLOYD D. HAAKE, TRUSTEE UNDER TRUST AGREEMENT DATED FEBRUARY 1, 1977

whose address is **P.O. BOX 3474, HOLLYWOOD STATION, BHIIDOGO, NEW MEXICO 88345**

the following described real estate in **CHAVES** county, New Mexico:

NE/4SW/4, E/2NW/4SW/4, E/2SW/4SW/4, E/2SW/4NW/4 and E/2W/2SW/4SW/4, all in Section 29, Township 11 South, Range 24 East, N.M.P.M.;

SUBJECT TO a conveyance to Rosario Matamoros recorded in Deed Book 68 at page 215 in the office of the County Clerk of Chaves County, New Mexico, said conveyance covering two (2) acres, more or less;

AND LESS AND EXCEPTING four (4) acres, more or less, particularly described in that certain deed recorded in the office of the County Clerk of Chaves County, New Mexico, in Deed Book 197 at page 271;

AND LESS AND EXCEPTING such mineral rights as were heretofore reserved by predecessors in title;

It being the intention of Floyd D. Haake and Melba W. Haake to convey to Floyd D. Haake, Trustee under Trust Agreement dated February 1, 1977, all of their right title and interest in and to the property described in that certain Warranty Deed from Nora Etta Goodin, formerly Nora Etta Clow, a married woman dealing in her sole and separate estate, joined pro forma by her husband, Monte Goodin, to Floyd D. Haake dated March 4, 1960 and recorded in Book 227 of Deed Records of Chaves County, New Mexico at page 393;

AND FURTHER SUBJECT TO easements, restrictions, and all prior reservations of record;

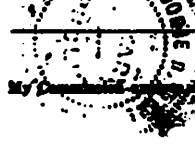
with warranty covenants.

WITNESS OUR hand 2 and seal 2 this 22nd day of October 19 79.
Floyd D. Haake (Seal)
Melba W. Haake (Seal)

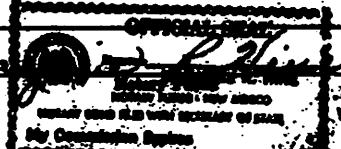
(Seal)

STATE OF NEW MEXICO, }
County of CHAVES } ss.

The foregoing instrument was acknowledged before me this 22nd day of October 19 79 by Floyd D. Haake, a married man, joined pro forma by his wife, Melba W. Haake.



My Commission expires January 26, 19 83



STATE OF NEW MEXICO, }
County of Chaves } ss.

I hereby certify that this instrument was filed for record on the 30th day of October, A. D. 19 79 at 2:35 P. M. and duly recorded in Book 289 Page 129

Records of Deeds of said County.
Katy Edlich

By Ramond J. Lora

Res. 35950 Feb. 5, 83

Return to Floyd D. Haake
Box 3474, HI, Bhiidogo, New Mexico 88345

WARRANTY DEED

FLOYD D. HAAKE, A MARRIED MAN, JOINED PRO FORMA BY HIS WIFE, HELGA W. HAAKE

_____, for consideration paid, grant _____ to
FLOYD D. HAAKE, TRUSTEE UNDER TRUST AGREEMENT DATED FEBRUARY 1, 1977

whose address is P.O. BOX 3474, HOLLYWOOD STATION, BUIDOSO, NEW MEXICO 88345

the following described real estate in CHAVES county, New Mexico:

NE/4SW/4, E/2NW/4SW/4, E/2SW/4SW/4, E/2SW/4SW/4 and E/2W/2SW/4SW/4, all in Section 29, Township 11 South, Range 24 East, N.M.P.M.;

SUBJECT TO a conveyance to Rosario Matamoras recorded in Deed Book 68 at page 215 in the office of the County Clerk of Chaves County, New Mexico, said conveyance covering two (2) acres, more or less;

AND LESS AND EXCEPTING four (4) acres, more or less, particularly described in that certain deed recorded in the office of the County Clerk of Chaves County, New Mexico, in Deed Book 197 at page 271;

AND LESS AND EXCEPTING such mineral rights as were heretofore reserved by predecessors in title;

It being the intention of Floyd D. Haake and Helga W. Haake to convey to Floyd D. Haake, Trustee under Trust Agreement dated February 1, 1977, all of their right title and interest in and to the property described in that certain Warranty Deed from Nora Etta Goodin, formerly Nora Etta Clow, a married woman dealing in her sole and separate estate, joined pro forma by her husband, Monte Goodin, to Floyd D. Haake dated March 4, 1960 and recorded in Book 227 of Deed Records of Chaves County, New Mexico at page 393;

AND FURTHER SUBJECT TO easements, restrictions, and all prior reservations of record;

with warranty covenants.

WITNESSES OUT hand 8 and seal 8 this 22nd day of October 19 79.
Floyd D. Haake (Seal)
Helga W. Haake (Seal)

_____ (Seal)

STATE OF NEW MEXICO, }
County of CHAVES } ss.

The foregoing instrument was acknowledged before me this 22nd day of October, 19 79, by Floyd D. Haake, a married man, joined pro forma by his wife, Helga W. Haake.

My Commission expires January 26, 19 83.
OFFICIAL SEAL
Ray Keith
COUNTY CLERK - CHAVES COUNTY, NEW MEXICO
My Commission Expires

STATE OF NEW MEXICO, }
County of Chaves } ss.

I hereby certify that this instrument was filed for record on the 30th day of October, A. D. 19 79 at 2:35 o'clock P. M., and duly recorded in Book 289 Page 129.

Records of Deeds of said County.
Ray Keith
County Clerk

By Ramona Flores
Ret. 55950 Fee, \$ 13

Return to Floyd D. Haake
Box 3474, RR, Buidoso, New Mexico 88345



November 4, 2022

Mr. Louis Jaramillo
Planning and Zoning Director
Chaves County
#1 St. Mary's Place
Suite #170
Roswell, NM 88203

Subject: ETZ Special Use Permit for the Proposed Sunset Community Solar Project

Dear Mr. Jaramillo:

Affordable Solar Group, LLC, a local New Mexico solar developer, is proposing to construct a Community Solar electric generating station which is approximately 5 megawatt (MW) in unincorporated Chavez County. The request is for a Special Use (SU) permit for the property for a proposed solar generation station called the Sunset Community Solar (Project). The Project is part of a New Mexico Legislature and New Mexico Public Regulation Commission (NMPRC) efforts to provide solar opportunities to those, for whatever reason, are unable to have solar on their own property. The Project will use the electric distribution grid in the local and regional area for the greater public good and for the health, safety and welfare of residents of Chaves County and will provide the community with a source of clean, renewable energy to support growth and economic development in the area. The Project is located on O Connor Road between Sunset Place and Washington Road.

The request for change in zoning designation is to a Special Use district (SU) to be developed for the proposed Project. The Project consists of approximately 59 acres of vacant land with a facility site of 28 acres in unincorporated Chaves County.

The Project will provide Xcel customers in Chaves County with clean, renewable energy through the local electric distribution grid.

As you suggested, the applicant reached out to both the FAA and the Roswell Independent School District. The results are that the FAA provided a determination of "no impact" regarding the airfield impact and the Roswell Independent School District was supportive. Their responses are attached. The applicant will continue to stay in contact with the School District regarding the requests they made.

The attached materials, including the project description, justification and related information, and Exhibits are provided for your review of the Special Use permit request. This action will provide clean, renewable solar energy to Chaves County and its citizens.

If you have any questions on this submittal or need further information, please contact me at 505-681-6483 or Laurie Moyer at 505-259-0724.

Sincerely,



John Tekin, Select ROW



Laurie Moyer, Agent

Attachments:

PROJECT DESCRIPTION AND RELATED INFORMATION
Exhibit 1 – Site Location and Vicinity Map
Exhibit 2 – Surrounding Land Use
Exhibit 3 – Property Owners 100 Feet of the Project Boundary
Exhibit 4 – Project Site Plan
Exhibit 5 – Tracking Solar Array Elevations
Exhibit 6 – FAA Letter
Exhibit 7 – Roswell Independent School District Email
Agent Authorization Letter

**Sunset Community Solar Project
November 4, 2022**

PROJECT DESCRIPTION AND RELATED INFORMATION

Project Description

The applicant is proposing to build a tracking solar photovoltaic power generation array which will be approximately 5 megawatt (MW) including associated utility equipment. The proposed generating station is part of the Community Solar Act SB 84 that was approved by the New Mexico State Legislature and signed by the Governor in 2021. The project allows for Chaves County to have small scale community solar projects for its citizens. The Community Solar Act allows for solar developers to build small, local solar facilities for the community. This program allows all communities, households, businesses that don't have access to solar for a variety of reasons, to have access to solar. The SB 84 Community Solar Act expresses the desire to provide solar generation opportunities and additionally states that 30% of the electricity must be reserved for low-income customers and low-income service organizations. Public Regulation Commission (PRC) has drafted rules for the solar program which includes a cap on how large the program can be within each utility and other requirements for utilities, developers, and subscribers. More regulations and process are continue to be developed. By subscribing to this program, the subscriber receives a credit on their electric utility bill for the electric power produced from their portion of the solar site/center and therefore reduces their electric bill.

Site Location and Vicinity Map

The Applicant is requesting a change in zoning designation to a Special Use permit (SU) zoning for approximately 59 acres, with a facility area size approximately 28 acres, in unincorporated Chaves County. Boundaries of the property are O Connor Rd (Chaves County Road 200) to the north and Washington Road to the east and Sunset Place to the south. The property is currently vacant land. The request is for the installation of an approximately 5 megawatt (MW) tracking solar photovoltaic power generation array and associated utility equipment, called the Sunset Community Solar Project (Project).

(Exhibit 1)

Land Use

The request is for a Special Use permit (SU) zoning for the proposed Sunset Community Solar Project in the Roswell-Chaves County Extraterritorial Zone. The Special Use zone district is described in *Extraterritorial Zone for Roswell-Chavez County Ordinance Article 25 Section 25.1 Special Use Permits* allows for the ETZ Commission to determine the appropriateness of the SU application and determine the suitability of the use of the site.

Lands surrounding the project site are mostly vacant and undeveloped (**Exhibit 2**). Ownership property lines and building locations within 100 feet of Project (**Exhibit 3**). There are no structures located to the north, south, west and east within 100 feet of the site boundary. The Project, consisting of low profile tracking solar panels, will be compatible with the surrounding land (**Exhibit 5**). The Project will access the existing Excel owned electric distribution line on the south side of O Connor Road. An Xcel electric distribution line crosses O Connor Road at the site and continues through the site. An electric distribution line is the electric voltage that provides electric power to homes and businesses and are ubiquitous throughout the area.

Economic and Overall Health and Safety of the Community

The Project will provide Xcel customers in Chaves County with clean, renewable energy. The Community Solar Act allows for all communities, households, businesses that don't have access to solar for a variety of reasons, to have access to solar. The solar electric power generation industry is a major contributor to our quality of life in the United States. Reliable electric service is essential to modern living and improves everyone's quality of life. In addition, safe, reliable electric power is a cornerstone of community growth and economic development and is vital for the health, welfare, and safety of its citizens.

Health or Public Safety effects

There are no health effects from the Project site and no economic effects on adjoining properties would occur.

Odor, Glare and Noise

No odor will be generated by the Project.

The tracking solar panels will have a non-reflective coating on the surface to minimize any effects from glare. The permanent Project facility will generate undetectable minimal noise.

Traffic

It is anticipated that construction activities consisting of trucks entering, exiting and moving around the site may generate noise of a temporary duration during daytime hours. The generating station is designed to be operated remotely; therefore, approximately one vehicle per week will access the generating station after construction is complete and the generating station becomes operational. Any other traffic would be for any emergencies at the site.

Existing Facilities

The site is currently adjacent to the Xcel electric system and there are no other requirements for other services from the County such as sewer, water, gas roads, irrigation and drainages structures, refuse disposal, etc.

Access

Access to the site will be taken from Sunset Place in the southeast corner of the facility site. An access driveway 25 feet in width is proposed into the site with a locked entrance swing-gate approximately 25 feet in width. The surface of the access drive will be base course.

Site Plan and Grading & Drainage Plan

The Project Site Plan is presented in (Exhibit 4) and indicates the size, location and layout of the facility. A Grading & Drainage Plan is available for review. Detailed information for the Project is as follows:

- The proposed solar panels are tracking panels that will be configured together in long rows oriented north-south. Each row of panels will rotate together, making adjustments to the position as the panels move to track the sun east to west. Rows of tracking solar modules will be affixed to a direct buried, ground-mounted rack. The total height of the tracking panels will be approximately 6'8" above ground (Exhibit 5) Solar Trackers Elevation. Each row is a minimum of 60' long and rows are connected in the 60' sections. The row length varies depending on the amount of developable area.
- Rack piers will be pile driven to various depths at a minimum depth of 6-8 feet. The ground under the tracking solar facility panels will be treated for dust suppression, soil

stabilization and weed control.

- The Project site will be safely accessed directly from Sunset Place by a permanent compacted in-situ soil private access drives approximately 25 feet in width, which will be installed with locked entrance security gate. The Project will not generate traffic once it is built.
- For public safety and security purposes, the tracking solar generating station will be enclosed by a chain link security fence 8 feet in height, topped with an additional 1 foot of 3 strands of barbed wire on top and may include concertina wire rolled at the foot.
- A temporary staging area to accommodate movement of equipment, construction parking and the temporary construction trailers will be located on site or on adjacent owned property to the east of the facility site. No construction will occur during nighttime hours; however, a security guard may be on site at all times during the construction 24/7. Once construction is complete, utility personnel using pickup trucks would periodically visit the facility. Visits will be intermittent for maintenance or repair.
- On-site lighting and water and sewer facilities are not required for the Project and are not provided. Applicant will take advantage of natural moisture to clean the tracking solar panels.
- The proposed Sunset Community Solar Project will not be open to the public and will not be manned by personnel. The tracking solar generating station will be operated remotely and visited regularly by applicant or authorized contract personnel. Any parking within the fenced site will be for maintenance vehicles, as needed. These vehicles will be parked adjacent to the equipment where authorized personnel will be working. There is no paving allowed within the project site. During construction of the facility, construction workers and applicant crews will be parking on site or on adjacent owned property to the east. The permanent solar facility is unique to the electric utility industry and will not require permanent allocation of parking spaces.
- No parking spaces are required for the project and no parking spaces are identified or provided.
- Signage at the tracking solar generating station will include a standard sign 4 feet x 4 feet in size permanently attached at the entry to the station, and standard applicant warning signs for safety will be attached and spaced at intervals along the property fence.
- Landscaping is not required; the property edges will be reseeded with native vegetation, if necessary, after construction is complete.
- Dust suppression at the site will include active suppression via the use of water trucks during construction, soil compaction during construction and treatment with an appropriate mix of soil stabilizers during solar facility operation.

Related Information

- Applicant will coordinate with the County Fire Chief regarding fire department/emergency response team ability to respond to an emergency at the site.
- An FAA review letter DETERMINATION OF NO HAZARD TO AIR NAVIGATION (Exhibit 6)
- An email for the Roswell Independent School District (Exhibit 7)

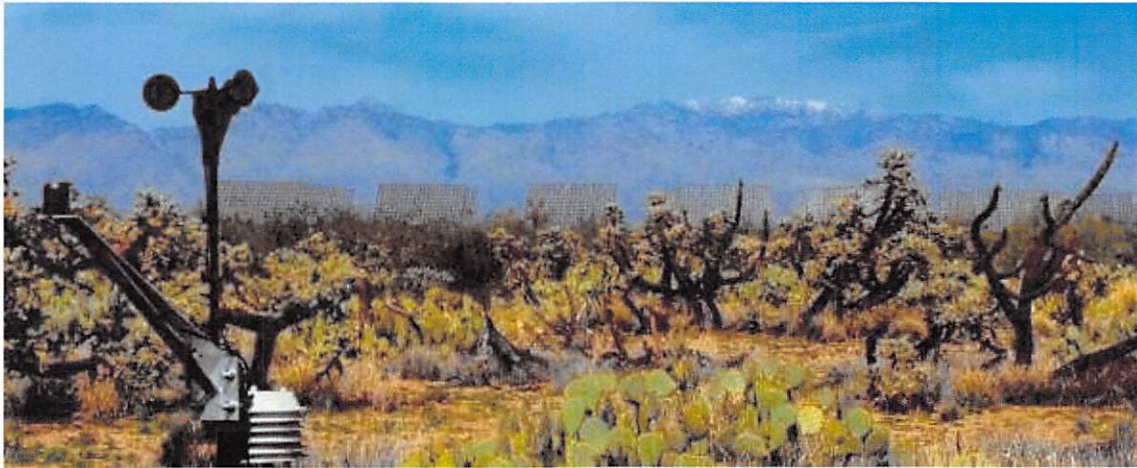
Justification

This zone change to Special Use permit is appropriate for this property meeting the intent of the SU permit zone category which accommodates development that requires special consideration because of the magnitude and unique nature of the Project. The SU permit for these lands:

1. Assures that the compatibility of property uses shall be maintained in the general area. The change of zone to SU will neither change the land use nor affect its present compatibility with the use of surrounding properties. This land use as a solar facility will consist of low profile tracking solar panels and related equipment generating renewable energy. The SU is appropriate because of the size and essential nature of the service it will provide. The Project is located nearby an existing large-scale regional utility corridor.
2. Preserves the integrity and character of the area of the SU permit, and the utility and value of property in it and in adjacent zones. The Project assures a reasonable physical separation between the solar facility and existing and eventual development. The SU zoning of the subject property ensures that the character of the area and its integrity will not be adversely affected. The SU zoning will not inhibit any land uses already possible on adjacent properties.
3. Assures that the SU permit will not become detrimental to the public health, safety, or general welfare of the County. The Project is an appropriate use in a Special Use permit. The Project is for the greater good and will enable applicant to supply clean, renewable energy to its customers in the area.
4. The SU permit zoning requested by applicant for the lands at the proposed Chaves County Solar Energy Center is consistent with the Comprehensive Plan by providing safe, reliable electric service to Xcel customers in Chaves County.

Researchers discover solar heat island effect caused by large-scale solar power plants

by Graham Binder, [University of Maryland](#)



Credit: University of Maryland

Large-scale solar power plants raise local temperatures, creating a solar heat island effect that, though much smaller, is similar to that created by urban or industrial areas, according to a new study.

The finding by Mitchell A. Pavao-Zuckerman, an assistant professor from the University of Maryland's College of Agriculture and Natural Resources, and colleagues from the University of Arizona, University of Madison-Wisconsin, and the Nevada Center of Excellence appears to contradict previous theoretical work and modeling studies predicting solar power installations would decrease temperatures around them by intercepting some of the sun's potentially warming energy and converting it into electricity.

"The understanding of energy balance - how heat moves in and out of ecosystems that change from natural to built settings is a big game changer for the future. Consider how PV [solar] panels absorb and reflect certain types of radiation which prevents the soil beneath from cooling like it would under a regular night sky," said Pavao-Zuckerman. "With this knowledge at our fingertips, we can mitigate environmental impacts by creating novel systems to make PV power plants work more efficiently and produce other co-benefits."

The multidisciplinary team examined the "heat island" effect of solar energy installations using experiments that spanned three different desert ecosystems in Arizona:

1. a natural desert ecosystem,
2. the traditional built environment of a parking lot surrounded by buildings and
3. a photovoltaic (PV) power plant. Prior studies on the "heat island" effect of solar power installations have been confined to just one biome or ecosystem.

For this study, the team defined the heat island effect as the difference in ambient air temperature around the solar power plant compared to that of the surrounding wild desert landscape. Findings demonstrated that temperatures around a solar power plant were 5.4-7.2 °F (3-4 °C) warmer than nearby wildlands.

The result demonstrates that there are potential heat costs to generating green power although the added heat dissipates quickly and can't be measured 100 feet away from the power plants. Considering the external costs of solar power, the discovery of this heat island effect may affect future decisions on when and where to convert natural ecosystems into large-scale solar facilities.

Pavao-Zuckerman, lead author Greg Barron-Gafford of the University of Arizona School of Geography and Development, and their research colleagues recently published their findings in the journal *Nature Scientific Reports* in a paper titled "The Photovoltaic Heat Island Effect: Larger solar power plants increase local temperatures."

Continuing studies by the group will focus on determining how far away from solar power plants the temperature increases reach, and on mitigating impact through such strategies as growing plants next to and under solar panels.

Journal information: [Scientific Reports](#)

Provided by [University of Maryland](#)

ARTICLE 25
SPECIAL USE PERMITS

Section 25.1 Granting Special Use Permits

A Special Use Permit shall be bound and limited to the parcel(s) of land described in the application and to the land owner/petitioner of the property stated in the application and as stated in the Certificate of Zoning. A Special Use Permit is nontransferable in location or ownership including the name change of a company, LLC, corporation, trust, and/or partnership. So as not to misperceive, confuse and misapprehend prospective owners, a real estate contract shall be construed as a change in ownership and as such shall require a new Special Use Permit application and process.

1. It is the purpose of this article to establish criteria for those uses listed as special uses in Section 25.2 of this Ordinance, and similar uses, as determined by the Planning Director, and to specify the expiration date as appropriate for approval of such uses. It is recognized that these uses which, because of their unique characteristics, cannot be properly addressed without consideration in each case of the impact of those uses upon neighboring land and of the public need for the particular use at the particular location. Special uses shall require issuance of a Zoning Certificate by the ETZ Commission.

Each zoning district lists special uses that, because of their special impact or unique characteristics, can have a substantial adverse impact upon or be incompatible with other uses of land. This impact often cannot be determined in advance of the use being proposed for a particular location. Such uses may be allowed to locate within given districts only through the review process of the special use permit and under the controls, limitations and regulations of such permits. This article establishes general and specific development standards for special uses and provides for a review process which will evaluate the location, scale, compatibility with rural character and development characteristics of such uses and their impact on adjacent properties and the county as a whole, to the end that such uses may be approved, modified, or disapproved fairly and objectively.

Upon the filing of a complete application for a Special Use Permit per the requirements contained in Article 2, Section 2.5 of this Ordinance, the application shall be scheduled for a public hearing before the ETZ Commission. Public notice of the hearing shall be issued as provided for in Article 2, Section 2.5 of this Ordinance. The ETZ Commission may grant approval of special use permits, grant approval with conditions of approval, or deny an application if the characteristics of the intended use would create an incompatible or hazardous condition. The ETZ Commission shall not use a Special Use Permit to alter or reduce the zoning requirements of the zone in which the proposed land use is to locate.

2. Prior to granting any Special Use Permit, the Commission shall hold a public hearing and shall determine that:
 - a. The granting of the Special Use Permit will not be injurious to the public health, safety, morals, and general welfare of the community.
 - b. The use or value of the area adjacent to the property included in the Special Use Permit will not be affected in a substantially adverse manner.
 - c. The site for the proposed Special Use Permit is suitable for that use, and the surrounding properties are compatible with that use.

- d. That the grant of the Special Use Permit would be within the spirit, intent, purpose, and general plan of this Ordinance.
3. The ETZ Commission, upon receiving a properly filed application or petition, may permit and authorize a Special Use Permit when the following requirements have been met:
 - a. The proposed use will not endanger the public health or safety;
 - b. The proposed use at the proposed location will not be unreasonably detrimental to the economic welfare of the county, and that it will not create excessive public cost for facilities and services by finding that:
 1. The proposed use will be adequately serviced by adequate existing facilities such as highways, roads, police and fire protection, irrigation and drainage structures, refuse disposal, water and sewers/septic systems, and schools; or
 2. The applicant shall provide such facilities; or
 3. The proposed use will be of sufficient economic benefit to offset additional public costs or economic detriment;
 - c. The proposed use will not generate significant nuisance conditions such as noise, dust, glare, vibration;
 - d. The proposed use meets all required conditions and standards set forth in the zoning district where it proposes to locate;
 - e. The location and character of the proposed use is compatible and consistent with the character of the area in which it is to be located, and will ensure compatibility with existing neighboring land uses; and
 - f. The proposed use is in conformance with the Chaves County Comprehensive Plan.
 4. In permitting such uses the ETZ Commission may impose, in addition to the regulations specified herein, such conditions as it deems necessary to protect the best interests of the surrounding property or neighborhood or the county as a whole. These conditions may include, but are not limited to, the following:
 - a. Increasing the required lot size, setback or yard dimensions;
 - b. Limiting the height of buildings or structures;
 - c. Controlling the number and location of vehicular access points;
 - d. Requiring the dedication of additional rights-of-way for future public roadway improvements;
 - e. Requiring the designation of public use easements;
 - f. Increasing or decreasing the number of required off-street parking and/or loading spaces as well as designating the location, screening, drainage, surfacing or other improvement of a parking area;
 - g. Limiting the number, size, height, shape, location and lighting of signs;

- h. Requiring or limiting view-obscuring fencing, landscaping or other facilities to protect adjacent or nearby properties;
- i. Designating sites for and/or the size of open space or recreational areas;
- j. Requiring site reclamation upon discontinuance of the use and/or expiration or revocation of the Special Use Permit;
- k. Limiting hours and size of operation;
- l. Controlling the siting of the use and/or structures on the property;
- m. Requiring mitigation measures to effectively reduce the potential for land use conflicts with agricultural lands and adjacent residential lands, such as: landscape buffers, special setbacks, screening, and/or site design criteria using physical features, such as rock outcrops, ravines, and roads.

A Special Use Permit shall become void one (1) years after approval or such other time period as established by the ETZ Commission if the use is not completely developed. Failure to begin such action within the time limit specified shall void approval of the Zoning Certificate for the special use.

- 5. A Special Use Permit may be revoked or limited by the ETZ Commission if any one (1) of the following findings can be made:
 - a. That one or more of the conditions of approval of the Special Use Permit have not been met;
 - b. That the Special Use Permit was obtained by misrepresentation or fraud;
 - c. That the use for which the Special Use Permit was granted has ceased or was suspended for twelve (12) or more consecutive calendar months;
 - d. That the actual or permitted use is in violation of any statute, ordinance, law, or regulation; or
 - e. That the use permitted by the Special Use Permit is detrimental to the public health, safety or welfare, or constitutes a nuisance.
 - f. Change in property ownership or site location.

The ETZ Commission's decision is subject to appeal in accordance with the provisions of Article 2 of this Ordinance.

Section 25.2 Use Regulations A special use permit **shall be required** for the following uses:

- 1. Airports* or landing fields.
- 2. Cemeteries and mausoleums
- 3. Commercial communications transmitter antennas or towers provided they are at least 100 feet from any public way.
- 4. Community buildings or recreation fields.
- 5. Electric substations, gas regulator or pump/booster stations, and well and water pumping stations in any district, provided that in any residential district or commercial district, the site shall be developed and maintained in conformance with the general character and

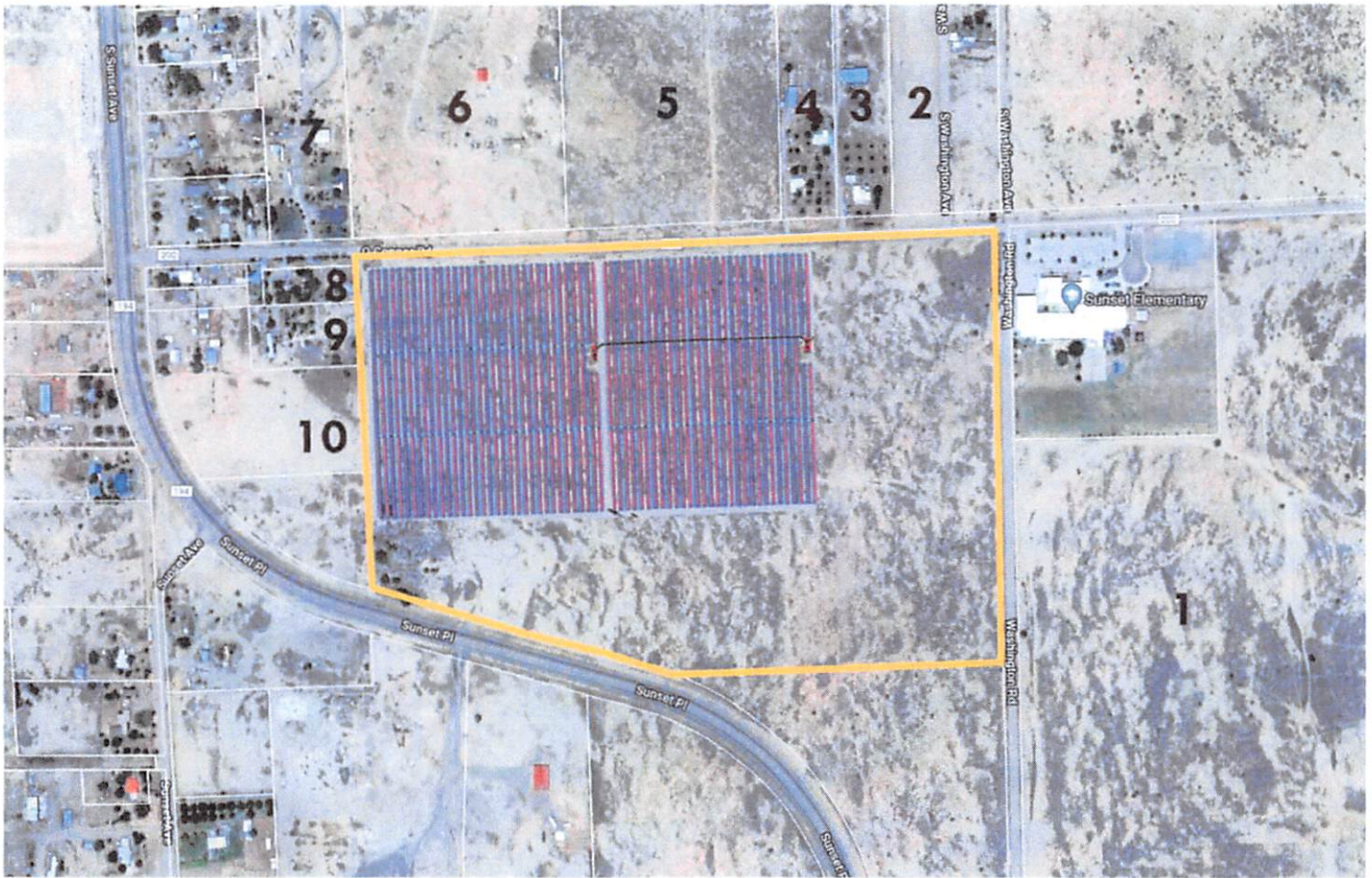
appearance of the district. Such development shall include landscaping and suitable screening in the form of a wall, or solid fence and compact evergreen shrub.

6. Extraction of gravel, sand or other raw materials, provided that a satisfactory guarantee be posted with the Commission assuring that the land be left in such a condition that all faces, slopes, edges, or spoil piles have a maximum slope 2½ feet horizontal to one (1) foot vertical.
7. Hospitals, clinics*, and institutions
8. Night clubs*
9. Nursery schools, day nurseries, child care centers, pre-kindergartens, and other special and similar private schools in an Industrial District as an accessory or function for employees, provided that adequate safety from loud noises and other industrial dangers are supplied and there is at least 100 square feet of open play for each child enrolled. Each play area shall be screened with a suitable wall, fence, or evergreen shrub.
10. Parking lots adjacent to, across the street from, or across the alley from the Commercial District, or a Business District.
11. Penal institutions
12. Poultry hatcheries, poultry production, dairying and any similar activities.
13. Private clubs or lodges
14. Railroad tracks, yards, and similar railroad facilities
15. State licensed or state operated family or group care residences for homeless, the criminal offender, or alcohol or drug abusers that function as a transition from institution to community.
16. Substance abuse treatment facilities.
17. Temporary commercial amusements or recreational developments
18. Multigenerational housing as a second dwelling unit in a residential district, with a yearly review by Staff.
19. Day Care Home-Group in a residential district.
20. Workforce Camps



OWNERSHIP PROPERTY LINES AND BUILDING LOCATIONS WITHIN 100 FEET OF PARCEL

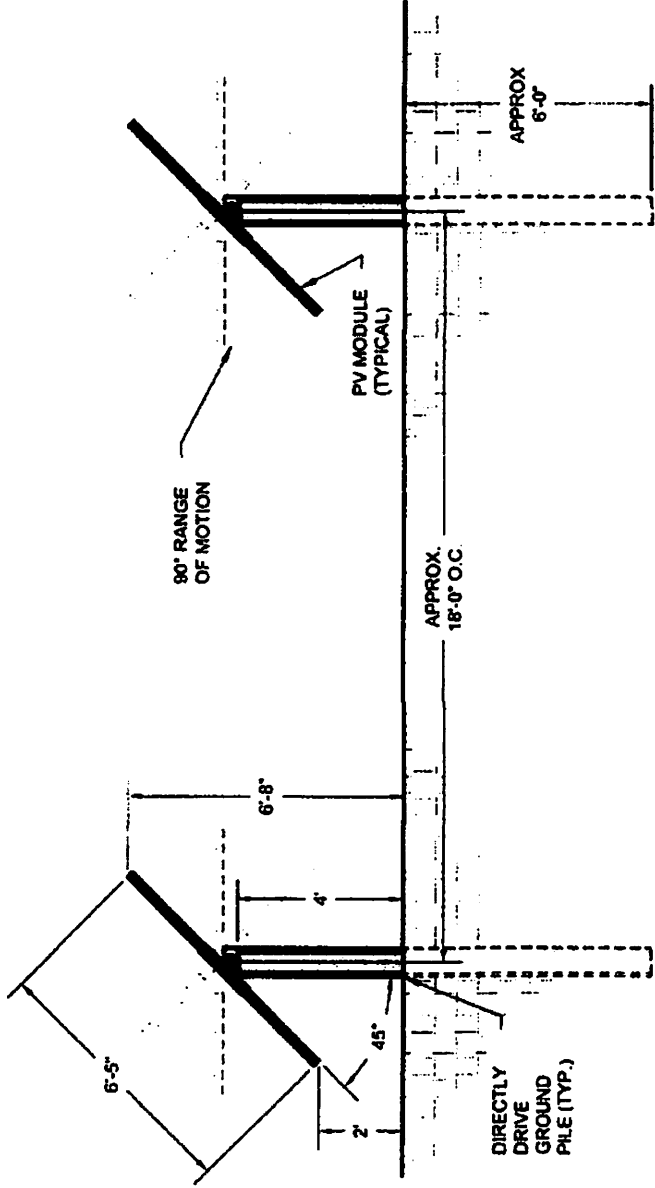
EXHIBIT 3



NAME	UPC	ACCOUNT #
1. Morales, Guadalupe; Morales, Guadalupe Jr.	413506636342800000	R008066
2. Akin, Crystal	413506626821400000	R008963
3. Lewis, James H.	4135066242215000000	R011285
4. Lewis, Nathan B.	4135066224216000000	R042602
5. Taylor Trust, Joan & Lawrence	4135066181218000000	R008010
6. Sefura, Ricky R.	4135066113220000000	R011533
7. Montoya, Juan	4135066065237000000	R009189
8. Ortega, Connie	4135066068301000000	R009102
9. Gutierrez, Connie	4135066066316000000	R007595
10. Lucero, Maria	4135066049337000000	R013050

NOT OFFICIAL

Solar Trackers



SINGLE-AXIS TRACKER - SECTION DETAIL

SCALE NOTE



Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2022-ASW-13337-OE

Issued Date: 09/26/2022

Dylan Connelly
 Affordable Solar
 4840 Pan American East Fwy NE
 Albuquerque, NM 87109-2220

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel NE CORNER
Location:	ROSWELL, NM
Latitude:	33-19-41.27N NAD 83
Longitude:	104-32-02.75W
Heights:	3655 feet site elevation (SE)
	7 feet above ground level (AGL)
	3662 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 03/26/2024 unless:

- the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- extended, revised, or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

RE: Sunset Elementary - Community Solar Site to the West

From: [Jeremy Sanchez](#)

Sent: Wednesday, September 28, 2022 7:36 AM

To: [John Tekin](#); [Sean Benedict](#)

Cc: [Brian Luck](#); [Chad Cole](#); [Dylan Connelly](#); [Jennifer Thompson](#); [Moye, Laurie](#); [Jeremy Sanchez](#)

Subject: RE: Sunset Elementary - Community Solar Site to the West

Greetings John,

The district is not opposed to the solar facility if the items below are addressed prior to, during, and after the installation process.

1. During construction, ASI should be cognizant of school pick-up and drop-off times, so as to not impede the flow of traffic during these critical timeframes.
2. ASI should take reasonable measures to prevent dust migration that would impact the school.
3. ASI should not use Washington Road as a truck route during construction.
4. The District would like ASI to provide regular construction progress updates, for both operational and educational purposes for the District.
5. The District would like to further discuss educational dashboards that could be utilized, in addition to ongoing educational partnerships between ASI and the District. ASI is equally interested and willing.

Thank You,

Jeremy Sánchez, CCCA
Construction Coordinator
Roswell Independent School District
300 N. Kentucky, Room 200
Roswell, NM 88201
575.637.3319 Office
575.416.4261 Cell

Form of Letter of Agency

Chaves County
Attn: Planning & Zoning Department
#1 St. Mary's Place
Suite #170
Roswell, NM 88203

RE: Letter of Agency

To Whom It May Concern:

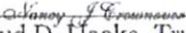
I am the Trustee Under Trust Agreement Dated February 1, 1977 (the "Trust"), the owner of the real property shown and described on the attached Exhibit A and Exhibit B ("Property"), which is currently under an option of contract for sale to Affordable Solar Installation, Inc. ("ASI").

On behalf of the Trust, I hereby authorize ASI, Select Properties, Inc., d/b/a Select ROW, and its agents to make such filings and submittals to Chaves County, and such other governmental departments and agencies as necessary to obtain the approvals for the intended use of the Property, including any re-zoning, vacations, or replat of the Property.

If you have any questions or concerns, please contact me at (405) 880-1691

Sincerely,

Floyd D. Haake, Trustee Under Trust Agreement Dated February 1, 1977

Authentisign

Floyd D. Haake, Trustee

September 28, 2022

Chaves County
Planning and Zoning
P.O. Box 1817
Roswell, NM 88202

RE: Sunset ES Xcel Community Solar Site, 1000 O Connor Road, Roswell, NM – Decommissioning

Dear Members of the Planning and Zoning Department:

The purpose of this letter is to provide a brief summary of Affordable Solar's experience with solar energy facilities, the preparation of decommissioning associated with these facilities, and an overview of our estimating methodology.

Established in 1998, Affordable Solar is a prominent solar developer and contractor in New Mexico. Affordable Solar has been trusted to deploy solar by thousands of homeowners, local businesses, some of the largest corporate enterprises in the Southwest, rural electric cooperatives, government agencies, and investor-owned utilities. Notably, we provide O&M services for PNM's entire solar fleet. According to Solar Power World's 2020 Top Solar Contractors, Affordable Solar is the 26th largest private Solar Contractor in the United States. Our services span residential PV installations to large utility-scale asset development and EPC services.

There is little current data available regarding the actual costs to decommission a solar facility because there have been few (if any) decommissioned since the average expected life span of a solar facility is approximately 35 years. However, we have combined our extensive experience in estimating sitework construction costs with the experience of our solar energy clients in the construction of all aspects of these facilities to develop quantifiable and defensible unit costs.

Quantities for the racking system, solar modules, inverters, and transformers have been provided for this decommissioning cost estimate. Quantities for site-related items listed were estimated using the preliminary site plan. Salvage values of the various metal components were estimated using current scrap metal prices for steel, copper, and aluminum obtained from the US salvage exchange rates.



Since County code requires the decommissioning estimate to be updated every five years, this estimate was performed assuming decommissioning in Year 5. As you will see, the attached decommissioning cost estimate for Year 5 results in a positive net surplus. The benefit of the salvage value resulting in a positive net surplus is the decommissioning of this solar farm will likely result in a “buy job.” The owner of the solar farm will issue RFP’s (Request for Proposals) to Recycling/Restoration companies to provide their bid to restore the site to its original conditions and sell the items of value to recyclers and dispose of items with no value in a landfill. The cost estimate shows that the net surplus is a positive value.

Additionally, with assumed inflation of 1.5% per year over an estimated 35-year life of the project, the net surplus would increase. This means the companies will be “buying” the right to perform the work and will be able to make a profit based off the salvage value of the recyclable items from the site. Please see the attached Decommissioning Cost and Salvage Value estimates.

Please contact me at 505.926.1764 should you have any questions or concerns.

Sincerely,

Dylan Connelly, PE
Director of Commercial Solar Development

September 28, 2022

Chaves County
Planning and Zoning
P.O. Box 1817
Roswell, NM 88202

RE: Sunset ES Xcel Community Solar Site, 1000 O Connor Road, Roswell, NM – Decommissioning Plan

Dear Members of the Planning and Zoning Department:

Pursuant to your request for a Decommissioning Narrative associated with the above solar project in Chaves County, NM, attached are the following documents:

- Project Description
- Site Plan
- Site Location (two broad and one closer)
- Landowner Purchase Option Cover Sheet
- Warranty Deed
- Landowner Property Tax filing Status County Treasurer
- Map Showing Abutting Property Owners within 100 Feet
- List of Property Owner Contact List Sourced from Chaves County GIS

Forthcoming in this Decommissioning Plan Document are the following sections:

- Introduction
- Facility Description
- Decommissioning Plan (Dismantlement, Demo and Disposal or Recycle)
- Site Stabilization After
- Permitting Requirements for Decommissioning Activity
- Schedule and Cost
- Surety Proposal/Decommissioning Cost Estimate

SUNSET ES SOLAR PROJECT

DECOMMISSIONING PLAN

Introduction

This decommissioning plan is provided by Affordable Solar Group, LLC (the “Project Company”) and will detail the projected decommissioning demands associated with the proposed project.

The purpose of this decommissioning plan is to provide procedures and an opinion of probable construction cost for partial or full closure of the solar facility. Chaves County Code requires a decommissioning plan to supplement plans submitted as part of a Site Stabilization. This decommissioning plan details provisions for facility deconstruction and site stabilization, to satisfy the specific guidelines set forth in Chaves County’s conditional use permit application requirements. This decommissioning plan shall take effect upon facility abandonment, discontinuation of operation, or expiration of the use permit as defined by Chaves County Code.

Facility Description

Affordable Solar proposes to build a photovoltaic (PV) solar facility (“Solar Facility”) with a nameplate capacity of approximately 5 MWAC (“Project”), in Chaves County, NM. The Facility is located at (33.32687, -104.53647) 1000 O Connor Road, Roswell, NM and within tax parcel identification number 413506618935100000000000 (59 acres) with the proposed project area being a total of 27.87 acres (“Property”).

Decommissioning Plan (Dismantlement, Demo and Disposal or Recycle)

The Project Company is responsible for this decommissioning, however the Project Company may contract with a third-party to perform the decommissioning on its behalf.

The Project Company will have twelve (12) months from the date decommissioning commences to complete decommissioning. Provided, however, the Project Company shall be able to request an extension of an additional six (6) months if it is in good faith diligently decommissioning and is delayed due to weather conditions or other items outside its control.

This Plan assumes that the Facility will be decommissioned under any of the following conditions:

1. The land lease (including the exercise of any extension options) ends and will either not be renewed or a new lease will not be entered into for the Project.

2. The system does not produce power for sale for a consecutive 12-month period, except in the instance of a force majeure event in which the Project is being repaired and/or restored.
3. The system is damaged and will not be repaired or replaced.

- **Dismantlement/Demo**

To decommission the Solar Facility, the Project will include at a minimum:

- Disconnection from the utility power grid.
- Removal of all Facility components: panels, inverters, wire, cable, combiner boxes, transformers, racks, trackers, tracker motors, weather monitoring, control system apparatus, etc.
- Removal of all non-utility owned equipment (at point of interconnection), conduits, structures, fencing, and foundations to a depth of at least three feet below grade.
- Restoration of property to a condition reasonably similar to its condition prior to Facility installation, or as initially agreed upon.
- Plant vegetation suitable for the location, native to the region, and which matches surrounding vegetation.

The owner of the leased property may request, in writing, for certain items to remain, e.g. access roads.

This decommissioning plan is based on current best management practices and procedures. This Plan may be subject to revision based on new standards and emergent best management practices at the time of decommissioning. Permits will be obtained as required and notification will be given to necessary stakeholders prior to decommissioning.

The decommissioning process will maximize the recycling, reuse and salvage of applicable facility components. Based on the extent of decommissioning, prior to beginning construction activities, the developer will submit applicable demolition and construction plans and permit applications which will outline the schedule and extents of demolition. Decommissioning activities will not begin prior to issuance of approved permits by local regulatory agencies with appropriate jurisdiction.

- **Disposal/Recycle**

- There is a robust secondary market for resale of solar PV panels worldwide and a network of facilities available for recycling panels. Solar PV panels are estimated to degrade less than 0.5% per year, meaning they're expected to operate at 90% of capacity after 20 years. Panel manufacturers will guarantee the performance for

- each individual module and replace defective modules per the terms of warranty. Panels can therefore be sold for a price higher than their scrap value.
- In general, the highest component value would be expected at the time of construction with declining value over the life of the Project. Over most of the Project's life, components such as the solar panels could be sold in the wholesale market for reuse or refurbishment. As panel efficiency and power production decrease due to aging and/or weathering, the resale value will decline accordingly. Secondary markets for used solar components include other utility scale solar facilities with similar designs that may require replacement equipment due to damage or normal wear over time; other buyers (e.g., developers, consumers) that are willing to accept a slightly lower power output in return for a significantly lower price point when compared to new equipment. The solar facility's additional supporting components, such as inverters, transformers, racking and piles, can be dismantled and resold for scrap value. Inverters and transformers are comprised of salvageable materials such as copper, aluminum, and silver. Piles and other steel components can likewise be recovered and salvaged. Resale values at the end of Year 5 for equipment of significant value were calculated with straight-line depreciation after an instant depreciation of the original material cost.

Site Stabilization – After

In order to adequately stabilization and restore the site to its previous condition, documentation using pre-construction video and/or digital photography will be performed prior to construction activities. This information will be reviewed prior to preparation of decommissioning demolition documents and included in the submittal to the County. Pre-construction documentation will also consist of detailed descriptions of existing vegetative and soil conditions as well as existing topography and drainage patterns.

At the time of decommissioning, the Project Company will restore the Solar Facility to a meadow-like condition. All waste and excess materials will be disposed of in accordance with municipal, provincial and federal regulations. Waste which can be recycled under municipal programs will be recycled accordingly. Provided, however, the Project Company shall not be required to replace any structures that were removed to build the Solar Facility.

Mass grading is not anticipated since the initial project will not alter topography significantly. The Project Company will provide dust control during site restoration. At the end of the project the area will be seeded and fertilized with native vegetation as needed to return the site to as close as practicable to original or initially agreed-upon condition. The future use of the land will be determined at the time of decommissioning. Deciding factors will be influenced by County land use and comprehensive plans and regulations at such time in the future.

The developer will coordinate with the County to monitor vegetation and drainage following restoration until permanent vegetation is established. Erosion and sediment control, re-seeding, soil stabilization, weed control and fertilization will be provided by the developer as needed until the site is stabilized and approved to be completed by the County.

Upon completion of the site stabilization and restoration, a final report of activities will be submitted to the County documenting the process and results.

Permitting Requirements for Decommissioning Activity

Schedule and Cost

Outlined below is the schedule for the project and the expected cost.

Surety Proposal/Decommissioning Cost Estimate

The Project Company will have twelve (12) months from the date decommissioning commences to complete decommissioning. Provided, however, the Project Company shall be able to request an extension of an additional six (6) months if it is in good faith diligently decommissioning and is delayed due to weather conditions or other items outside its control.

Industry standard prices in 2022 for removal costs (labor, material, and equipment) were determined using RSMeans cost data. Removal cost includes materials, contractor installation/demolition, mobilization, demobilization, overhead and profit, performance bonding, contingency, and engineering plans and permitting. Expenses associated with decommissioning the Project will be dependent on labor costs at the time of decommissioning.

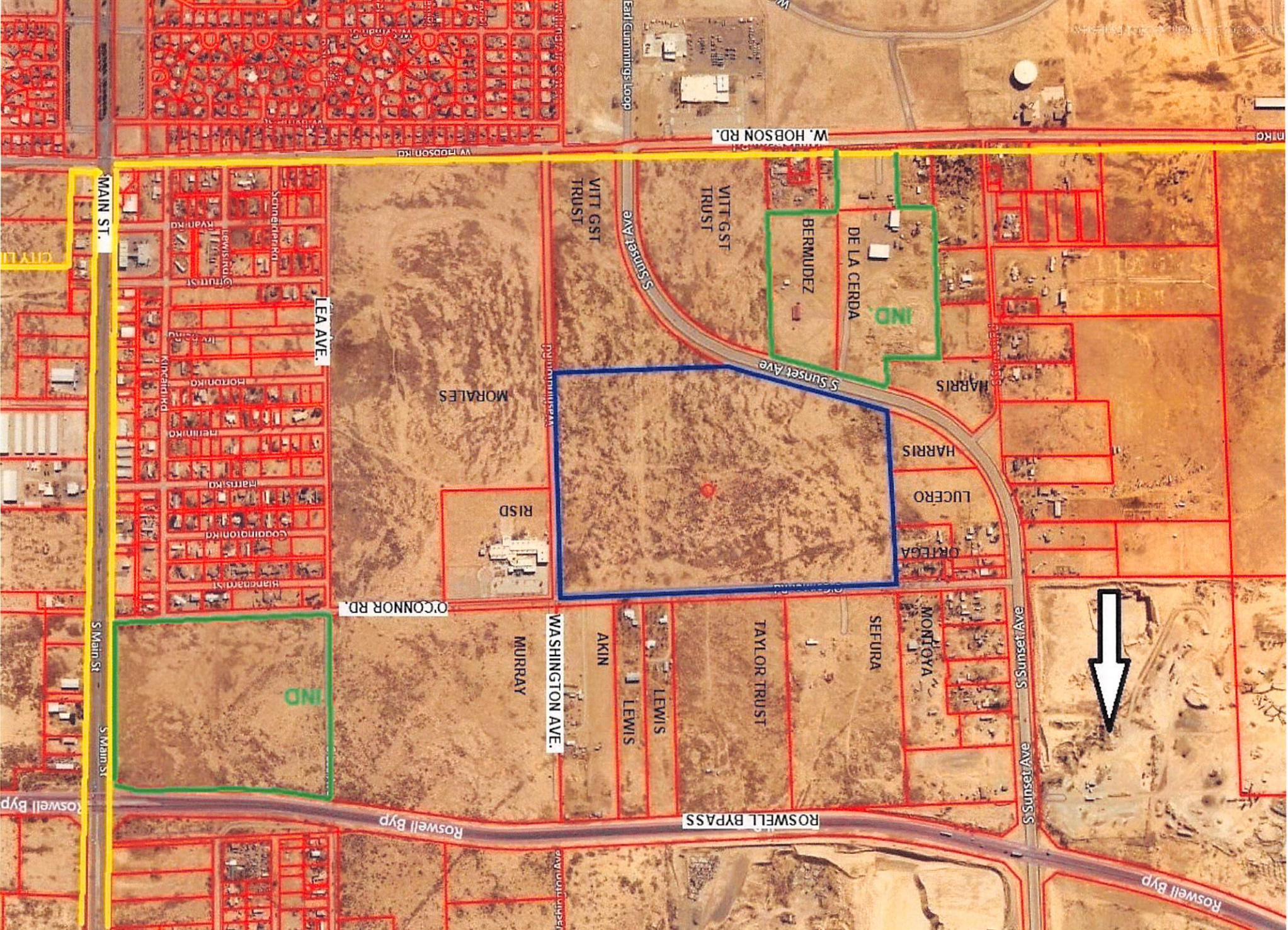
Total probable cost of decommissioning in Year 5 is estimated to be **(\$181,856)**.

The Engineer has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Engineer at this time and represent only the Engineer's judgment as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs. LS = Lump Sum, HR = Hours, EA = Each, LF = Linear Feet.

Item	Quantity	Unit	Unit Price	Total Price
Mobilization	1	LS		\$39,670
Supervision	210	HR	\$94	\$19,740
Temporary Facilities	1	LS		\$4,920
Safety	1	LS		\$3,340
Legal Expenses	1	LS		\$880
General Liability Insurance	1	LS		\$3,570
Contractor's G&A	1	LS		\$6,750
SWPPP, Erosion Control Measures	1	LS	\$38,000	\$38,000
Seeding	3	Ac	\$4,453.66	\$13,361
Tilling 6" topsoil/scarifying access road and rough grading existing soil	1	Ac	\$37,852.19	\$39,366
Remove and Recycle Chainlink Fence, 6' High	9,569	LF	\$5.31	\$46,497
Remove Power Pole		EA	\$262.44	\$0
Remove and Recycle AC Cables	3,900	LF	\$7.44	\$28,362
Remove and Recycle DC Cables	239,426	LF	\$0.23	\$17,285
Backfill AC and DC trenches	30,225	LF	\$1.39	\$41,898
Remove and Recycle Inverters	2	EA	(\$2,607.25)	(\$5,586)
Remove and Recycle Photovoltaic Modules	15,201	EA	(\$47.95)	(\$728,888)
Remove and Recycle Piles (10' W6x7 piles @ 25' OC assumed)	2,254	EA	\$106.63	\$220,148
Remove and Recycle Support Assemblies	385,809	LB	\$0.14	\$21,831
Contaminated Soils Testing	1	LS		\$2,000
Reclamation Monitoring and Maintenance	1	LS		\$5,000
				Total
				(\$181,856)

NOTES:

1. A site of similar size was used to derive potential quantities for erosion and sediment control(scaling 36MW to 5MW). Quantities were determined by comparing "unit/MW" quantities directly.
2. Labor productivity and unit rates were derived from RSMeans Online (Heavy Construction, 2022 data).
3. Material salvage values were based off of current US salvage exchange rates.
4. Equipment rental rates were determined from local rental facilities.
5. Photovoltaic Module material salvage rate is based on straight-line depreciation of modules (-0.5%/year): See Figure 1 in Appendix A of the Decom. Narrative
6. For PV Module Removal/Recycle labor and equipment costs are computed at present values, while salvage value is computed at 5 year depreciated values.
7. Material salvage values were determined using the most prevalent salvageable metal in each component: Copper Wire @\$0.16/LF (AC and DC Cables) and Steel @\$0.45/LF of fence, @\$0.56/pile, and @\$0.08/LB.
8. Inverter resale value is dependent on the assumption that all inverters will be decommissioned and resold half way through their useful life (every 5 years).
9. Labor, material, and equipment rates are based on the RSMeans City Cost Index (CCI) for Las Vegas, NM.



W. HOBSON RD.

MAIN ST.

LEA AVE.

VITT GST TRUST

VITT GST TRUST

BERMUDEZ

DE LA CERDA

MORALES

HARRIS

HARRIS

LUCERO

ORTEGA

O'CONNOR RD.

RISD

WASHINGTON AVE.

MURRAY

AKIN

LEWIS

LEWIS

TAYLOR TRUST

SEJURA

MONTOYA

S Sunset Ave

ROSWELL BYPASS

Roswell Byp

S Main St

S Main St



Roswell Byp