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Shepherd Solar

Special Use by Review Permit Application

Elbert County, Colorado



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Acronyms and Abbreviations

APEN:	Air Pollution Emissions Notice
AQ:	Air Quality
BESS:	Battery Energy Storage System
BMPs:	Best Management Practices
BSFPD:	Big Sandy Fire Protection District
CDPHE:	Colorado Department of Public Health and Environment
CO:	Carbon Monoxide
COD:	Commercial Operation Date
CPW:	Colorado Parks and Wildlife
ECZR:	Elbert County Zoning Regulations
EG:	Economic Growth
EN:	General Environment
EPA:	Environmental Protection Agency
FEMA:	Federal Emergency Management Agency
FTE:	Full-time Equivalent
FW:	Forestry and Noxious Weed Management
GESC:	Grading, Erosion, and Sediment Control
GIS:	Geographic Information System
HM:	Hazard Mitigation
HPH:	High Priority Habitat
HR:	Historic Resources
KOPs:	Key Observations Points
MW:	Megawatt
NA:	Noise Abatement
NFPA:	National Fire Protection Association
NO_x:	Nitrogen Oxides
NRCS:	Natural Resources Conservation Service
O_3:	Ozone
OEM:	Office of Emergency Management
O&M:	Operations and Maintenance
PM:	Particulate Matter
PPA:	Power Purchase Agreements
PS:	Public Safety

PV:	Photovoltaic
SPCC:	Spill Prevention, Control, and Countermeasure
SO_2:	Sulfur Dioxide
SUR:	Special Use by Review
SWMP:	Stormwater Management Plan
SWPPP:	Stormwater Pollution Prevention Plan
USDA:	United States Department of Agriculture
USEPA:	United States Environmental Protection Agency
USFWS:	United States Fish and Wildlife Service
USGS:	United States Geological Survey
VOCs	Volatile Organic Compounds
WQ:	Water Quality
WL:	Wildlife

1. Overview of Required Special Use by Review Application Information

As of application submittal Elbert County Zoning Regulations (ECZR) Amendment 5 outlines the General Requirements for Special Use by Review (SUR) applications in Article II; Section B. Table 1 below provides an index directing the reader to the corresponding sections of the application.

Table 1. Elbert County Special Use by Review Application Requirements

Application Materials	Required or Additional Document[1]	Location in Application, if Applicable
Land Development Application Form	R	1041 and SUR Cover Letter - Attachment A
Cover Letter / Narrative	R	Cover Letter
Vicinity Map (separate from site plan)	R	SUR Appendix Appendix B - Sheet C-1
Proof of Ownership: Deed	R	SUR Appendix C
Proof of Ownership: Title Commitment	R	SUR Appendix C
List and map of property owners and addresses	R	List: SUR Narrative Section 2.4 Map: SUR Appendix B Sheet C-3 and SUR Appendix N Addresses: SUR Appendix N
Written Legal Description of Property Boundary	R	SUR Narrative – Section 2.4
Proof of Water	R	1041 and SUR Cover Letter – Attachment D SUR Narrative – Section 3.2(b)
Proof of Sewer	R	1041 and SUR Cover Letter – Attachment D SUR Narrative – 3.2(e)
Proof of Fire Protection	R	1041 and SUR Cover Letter – Attachment E
Proof / Explanation of Access	R	SUR Appendix E
Statement of Taxes Due	R	SUR Appendix C
Special Use by Review (SUR) Permit Site Plan Exhibit	R	SUR Appendix A
Special Use by Review (SUR) Development Guide / Written Restrictions	R	SUR Appendix A SUR Narrative - Section 2.3

Survey of the Property	A	SUR Appendix D
Final Drainage Report and Plan or Drainage Letter	A	SUR Appendix G
Floodplain Development Permit	A	Not applicable, no floodplain development is proposed
Geologic Report	A	SUR Appendix J
Grading and Erosion Control Plan	A	SUR Appendix B
Final Plans for Public Improvements	A	SUR Appendix B
Visual Analysis or Renderings	A	SUR Appendix H
Traffic Analysis or Renderings	A	SUR Appendix E
Landscape Plan	A	SUR Appendix B, Sheet C-48 and C-49
Building Elevations	A	SUR Appendix B, Sheet C-45
Development Agreement, Subdivision Improvement Agreement, etc.	A	Not applicable
Certification of notice from property owner to mineral estate owners of record pursuant to CRS 24-65.5-103	R	Once hearing dates are scheduled, this notice will be provided in accordance with state statute.
List and map of property owners and addresses at time of application process step that requires public noticing. List and map of property owners shall not be generated more than six (6) months prior to submittal	R	SUR Appendix N

[1] *ECZR Amendment 5, Article II, Section B states "a required document is a document that is required to be submitted for a specific application. An additional document is a document that can be required by CDS Director or Public Works Director based on the specific circumstances of the application."*

ECZR Amendment 5 Article III, Sections E.5 and E.8 also require that the Special Use Narrative include specific additional elements. Table 2 below directs the reader to these sections.

Table 2. Elbert County Special Use by Review Narrative Requirements

Required Narrative Components	Location
Explanation of the proposal	SUR Narrative Section 2.3
The use is in harmony with the character of the neighborhood and compatible with the surrounding area	SUR Narrative Section 3.2(a)
The use will not have an undue burden on available infrastructure	SUR Narrative Section 3.2(b)

The use will not unduly increase traffic congestion or burden the existing road system	SUR Narrative Section 3.2(c)
The use will not cause significant air, odor, water, noise, or light pollution	SUR Narrative Section 3.2(d)
All sanitation requirements will be met	SUR Narrative Section 3.2(e)
Parking is adequately provided, when appropriate	SUR Appendix B, Sheet C-29
The use is adequately buffered and screening is provided, when appropriate	SUR Narrative Section 3.2(f)
The use will not otherwise be detrimental to the health, safety, or welfare of the present or future inhabitants of Elbert County	SUR Narrative Section 3.2(g)
Additional activity activity-specific supplemental standards may be applied to specific uses. Refer to Article V of these regulations and provide a response to additional criteria if the proposed use is listed	SUR Narrative Section 3.2(f)

Further Elbert County Zoning Regulations Amendment 5 Article III, Section E.7 lists specific requirements for the Special Use Exhibit. An overview of these requirements is included in Table 2 below and the Special Use Exhibit is presented in Appendix A

Table 3. Elbert County Special Use by Review Exhibit Requirements

Required SUR Exhibit Components	Location
The name of the Special Use Exhibit, centered on the upper portion of each sheet	Included
The sheet number in the lower right hand corner of each sheet (Sheet 1 of _)	Included
Case# in the upper right corner of each sheet;	Included
Signature blocks and Certifications for CDS Director, Planning Commission, Board of County Commissioners, Clerk & Recorder, Fire Protection District, Owner, and Notary	Included
Notes and information shall be included on the first sheet of the Exhibit, with lettering being a minimum font size of twelve (12) point	Included
Legal Description - A legal description of the property designated as a lot, block, or tract on a recorded plat or a metes and bounds description if not platted	See SUR Narrative Section 2.4

Vicinity Map - A vicinity map shall be provided that locates the parcel in the County. The vicinity map shall clearly show the boundaries of the subject property, major roads within one (1) mile of the subject property and the proposed access to the property	Included and further detailed in SUR Appendix B
Names, addresses, and phone number of owner, representative, and individual/firm preparing the document	Included
Name of the proposed development and submittal phase centered at the top of the sheet	Included
North Arrow and Scale - North arrows shall be indicated on the Special Use Exhibit site plan and the location map. In addition, the scale shall be indicated and a bar scale provided for the site plan	Included
Existing zoning, land uses, and owner's name and addresses shall be indicated for adjacent properties	SUR Appendix B
Existing easements shall be shown on the site plan with reception number and/or book and page reference, their purpose, their benefiting party, and whether or not the easement will remain on the subject property	Included
All existing structures on the subject property shall be shown with setbacks from the property line with a note indicating as to whether or not the structures will remain on the subject property. Note total building coverage percent (%) and square footage	Included
Topography of the site shall be shown at two foot (2') contour intervals unless other intervals are approved by the CDS Director. Areas of twenty percent (20%) slope or greater shall be noted	SUR Appendix B
Access to the site from a dedicated County right-of-way shall be shown graphically. Internal vehicular and pedestrian circulation shall be shown with right-of-way and trail widths indicated	Included
All natural and man-made water courses, detention areas, streams/creeks, and	Included

lakes shall be shown. Any 100-year (1 %) flood plains affecting the property shall be indicated	
All adjacent land owned by the applicant or owned by an entity that the applicant is a party to, that is not a part of the application, shall be noted and a note indicating the current and intended use of the land shall be included	SUR Appendix B
No-build areas that restrict building in hazardous areas shall be indicated	Not applicable
Significant treed areas on the subject property shall be indicated	Not applicable
Location and dimension of required off-street parking and loading areas. Note the total number of parking spaces provided	Included
Delineate public and private roadways, right-of-way, street names and points of access on or adjacent to the proposed site. Dimension and note surface material	Included
Development Standards shall be provided on the cover of the Exhibit	Included

2. Applicant Information and Project Overview

Shepherd Solar LLC (Applicant), a wholly owned subsidiary of BayWa r.e. Development LLC respectfully requests review and approval of an SUR Permit to develop, construct, operate, and maintain a 199 megawatt (MW) solar photovoltaic electric generating facility and a 100 MW battery energy storage system (BESS) in Elbert County, Colorado.

2.1 Applicant Information, Name, Authorized Agent, and Contact Information

Table 4. Summary of Applicant Information

Name of Applicant	Shepherd Solar LLC
Name of Owner	BayWa r.e. Development LLC
Phone number	858-450-6800
Email	analies.ross-dyjak@baywa-re.com
Address	5901 Priestly Drive, Suite 300, Carlsbad, CA 92008

Project Description	Solar Energy Generation and Battery Energy Storage Facility

BayWa r.e. Development LLC is part of the BayWa r.e. global group of companies, an international renewable energy developer supported by established shareholders and long-term financing partners. BayWa r.e. AG, headquartered in Munich, Germany, is indirectly owned 51% by BayWa AG, a stock corporation founded in 1923 and active in global agriculture, energy, and building materials markets, and 49% by Energy Infrastructure Partners (EIP), a leading energy infrastructure investor managing more than EUR 7 billion on behalf of global institutional investors.

BayWa r.e. develops, realizes, operates, and maintains wind, solar, and battery energy storage projects across Europe and the United States. To date, BayWa r.e. AG and its affiliates have developed and realized more than 6,000 MW of renewable energy capacity, with projects typically financed and supported by institutional capital partners prior to construction and transferred to long-term investors including insurance companies, investment funds, and pension funds.

In addition, BayWa r.e. recently closed a refinancing package consisting of bank financing, shareholder loans, and operational guarantees totaling more than €3 billion, providing a strong capital foundation supporting the company's activities through mid-2029. Supported by this shareholder structure, secured financing, and global development experience, BayWa r.e. Development LLC has the financial capability to responsibly develop and deliver long-term energy infrastructure projects in the United States.

2.2 Project Team

The Project team, experience, and contact information is provided in **Table ##** below.

Table 5. Project Team Experience

Name	Title	Experience	Emails
Analies Ross-Dyjak	Development Manager	• 4 years in renewable energy development and 4 years in marketing • Previous roles at Hydroviv, League of Conservation Voters, and Community Energy Partners	Analies.Ross-Dyjak@baywa-re.com
Adam Williams	Vice President of Development	• 17 years in renewable energy development and 4 years in oil and gas industry • Previous roles at Savion, Shell, and Chevron	Adam.Williams@baywa-re.com

Gavin McPherson	Development Operations Manager	• 2 years in renewable energy development and 4 years in engineering	Gavin McPherson
Eli Johnson	Lead Civil Engineer	• 21 years in civil engineering design, including 7 years in renewable energy • Previous roles at Apex Clean Energy, Juwi, and Southern Company	Eli.Johnson@baywa-re.com
Natalie Aiello	Central Permitting Manager	• 9 years of experience in renewable energy, oil and gas, and mining industries • Previously held roles with NextEra Energy Resources and environmental consulting firms	Natalie.Aiello@baywa-re.com
Annaka Egan	Community Engagement Manager	• 3 years in renewable energy industry and 7 years' experience in small town growth, community planning, and economic development • Previously held community and urban planning roles with SE Group and GSBS Consulting	Annaka.Egan@baywa-re.com
Brian Risch	Senior Real Estate Manager	• 15 years of experience in renewable and oil and gas industries • Previously held roles with EDF Renewables and mineral title consulting firms	Brian.Risch@baywa-re.com
Rohini Gaikwad	Senior Interconnection Manager	• 13.5 years of experience working in renewable industry and with electric utility companies	Rohini.Gaikwad@baywa-re.com

		• Previously held roles with NextEra Transmission and electric utilities	

2.3 Project Description

The Shepherd Solar Project (Project) is a proposed utility-scale renewable energy development located in Elbert County, Colorado (CO). The Project consists of a 199-MW photovoltaic solar energy facility with an associated 100 MW battery energy storage system (BESS). The facility will be constructed on approximately 1,990 acres (Site) of privately-owned agricultural land.

The solar array will convert sunlight into electricity using ground-mounted photovoltaic panels. Power generated by the solar facility will be stored in a co-located BESS, enabling flexible dispatch to the electric grid. The Project will interconnect to the regional transmission network via a planned point of interconnection, details of which are being developed in coordination with the relevant utility.

In addition to the solar and battery systems, the Project will include associated infrastructure such as access roads, power inverters, transformers, fencing, underground electrical cabling, a substation, a switchyard, stormwater and erosion control features, a water storage tank, parking, and potentially an on-site operations and maintenance (O&M) facility. Temporary construction laydown areas will also be established during construction.

The Project's SUR Site Plan can be found in Appendix A. Further detailed preliminary construction drawings, including a Grading, Erosion, and Sediment Control plan, are included in Appendix B. The SUR Site Plan also includes the Project's written restrictions and development guide, which include a comprehensive list of all anticipated Project components as well as the intended uses for the Site, which include the development, construction, operation, maintenance, repair, replacement, and decommissioning of a utility-scale solar energy facility with an associated battery storage system. Additionally, the Site may be used for ongoing agricultural purposes, including grazing, herding, and crop farming, as well as emergency response training. The Project will also contain a 30,000-gallon water storage tank, which will be accessible to Big Sandy Fire Protection District (BSFPD) in the event of fire suppression needs in the area. Wind energy generation is not proposed or anticipated at this time.

2.4 Property Information and Legal Descriptions

An overview of the Project's proposed parcels and associated ownership information is provided below. Notarized copies of Property Owner Authorization Forms signed by all participating landowners is provided in the 1041 and SUR Cover Letter, Attachment F. Proof of Ownership documentation, including deeds and title commitments, as well as documentation of the Applicant's recorded lease agreements with the landowners is provided in Appendix C Statement of Taxes Due are also included in Appendix C and are dated 3/9/2026. Lastly, an ALTA / NSPS Land Title Survey of the proposed Project area is included in Appendix D.

Table 6. Parcel IDs, Property Owners, Mineral Owners, and Legal Descriptions for Project Parcels

Parcel ID	Property Owners	Mineral Owners	Parcel Legal Description	Leased Legal Description
1926300138	J and D Farm Properties, LLC c/o Donna Maranville	J and D Farm Properties, LLC CoBank, FCB Occidental Petroleum Corporation	The following real property in the County of Elbert and State of Colorado, to-wit: The South Half of Section 26, and all of Section 35, all in Township 11 South, Range 59 West of the 6th P.M.; all of Section 1, the North Half of the Northwest Quarter (Lots 3 and 4), of Section 2, all in Township 12 South, Range 59 West of the 6th P.M., County of Elbert, State of Colorado.	Township 11 South, Range 59 West of the 6th P.M Section 26: South Half Section 35: ALL Township 12 South, Range 59 West of the 6th P.M Section 1: ALL Section 2: North Half of the Northwest Quarter (Lots 3 and 4)
1936000044	Chad and Cindy Maranville	Occidental Petroleum Corporation State of Colorado	W1/2 OF Section 25, Township 11 South, Range 59 West of the 6th P.M., County of Elbert, State of Colorado; and all of Section 36, Township 11 South, Range 59 West of the 6th P.M., County Of Elbert, State of Colorado.	Township 11 South, Range 59 West of the 6th P.M Section 36: All land lying south of the centerline of the waterway of the Southeast Quarter (SE1/4) and The southwest 2 acres of the SW1/4 (for gen-tie and access use only).
1831000038	Jack and Linda Maranville	Occidental Petroleum Corporation	All of Section 31, Township 11 South, Range 58 West of the 6th P.M., County of Elbert, State of Colorado.	Township 11 South, Range 58 West of The 6th P.M Section 31: All land lying south of the centerline of the waterway of the South Half (S 1/2)

2.5 Request for Permit Timeline Validity

If approved by Elbert County, the Applicant respectfully requests that the SUR permit remain valid for a period of 10 years from the date of issuance to allow commencement of construction. Upon initiation of construction within that period, the permit shall remain in effect through

completion of the Project. After receiving all required permits and authorizations, every effort will be made to start construction as soon as practicable. However, Tri-State transmission network upgrades and equipment procurement that may be required for the Project have extremely long lead times outside of the Applicant's control. Out of consideration for the County's time and staff resources, the Applicant respectfully requires a longer permit validity period to avoid the need to return for renewed approvals, if the Project schedule extends beyond the currently anticipated schedule due to unforeseeable factors, including Tri-State transmission network upgrades.

3. General Considerations for Every Application and Special Use by Review Approval Criteria

3.1 General Considerations

ECZR Article II Section H outlines general requirements that should be considered for every application to determine its suitability and supportability where the application is proposed. Specifically, these considerations include whether the application is suitable for the community and surrounding area in which it is proposed, and whether the community has the available infrastructure, services, and resources to support it.

3.1.1 Suitability

Examples of factors evaluated in determining whether an application is suitable for the surrounding community include density, lot size, population, water use, water and sewer availability, open space, and agricultural lands.

The Project is suitable for the area in which it is proposed. Elbert County has historically encouraged energy development in eastern portions of the County, away from higher-density residential areas; the proposed Project is consistent with this approach. Additionally, during the February 9, 2026 Comprehensive Plan Steering Committee Meeting #7[1], Open House #2 feedback indicated "some openness to renewables along existing transmission corridors." The Project is located immediately adjacent to existing Tri-State transmission infrastructure, which would connect the Project to CO's energy grid (Appendix A).

Elbert County resident input collected during the County's 2025-2026 ongoing Comprehensive Plan update has consistently emphasized the importance of preserving the County's rural character. The Project represents a low-intensity, non-residential land use that maintains the open and rural nature of the surrounding area. The Project has been intentionally designed to concentrate development within a condensed lease area, allowing approximately 698 acres of the parcels to remain outside of the Project footprint. These remaining acres will continue to be available for active agricultural operations and preserving the rural character of the property. The Project design is also considering the incorporation of agrivoltaics practices, such as sheep

[1] Elbert County Comprehensive Plan. Steering Committee Meeting #7 – Joint Meeting with Planning Commission and BOCC. Available online at: https://www.elbertcountycomprehensiveplan.com/wp-content/uploads/2026/02/Elbert-Comp-Plan_Steering-Committee-Meeting_7.pdf

grazing, within portions of the leased area during the operations phase. This would further support the County's agricultural heritage.

The Project design incorporates areas of the site that will remain undeveloped to preserve existing viewsheds, maintain open space, and allow for continued wildlife movement across the Site. These undeveloped areas support local wildlife and, in addition to the low-profile nature of solar panels, help ensure the Project remains visually compatible with the surrounding agricultural and rural landscape. There are no designated open space areas within or in the vicinity of the Project, including regional parks, natural areas, special resource areas, or trails.

Following construction, the Project will employ a small number of onsite personnel and will not induce population growth or development pressures typically associated with residential or commercial projects. Unlike more permanent forms of development, the Project is essentially a reversible land use. At the end of its operational life, Project components will be removed and the Site will be restored to pre-construction conditions to the extent practicable, allowing for continued long-term flexibility in land use and responsible stewardship of agricultural land.

The Project is also a low-intensity use of water resources. Water will be trucked to the site as-needed for uses such as dust control, revegetation efforts, and to maintain the Project's approximately 30,000-gallon onsite cistern. No onsite wells are proposed and water demand during the operational phase will be negligible. The facility will feature an on-site septic system and leach field, engineered by a licensed professional in accordance with county sanitation standards.

The Project will not negatively impact adjacent agricultural lands. The Project maintains appropriate voluntary setbacks from adjacent properties and will carefully manage the property for noxious weeds, erosion, and pests during construction and operational periods.

Additionally, the proposed Project incorporates voluntary setbacks consistent with Agricultural (A) zoning standards, as identified in the ECZR, to maintain compatibility with the surrounding area. While these setbacks are not explicitly required for solar or BESS facilities under the ECZR, the Applicant has voluntarily chosen to apply them to further support land-use consistency. Depending on the adjacent road classification, these setbacks range from 50 to 150 feet. Please see Appendix B, Sheet C-4 for further details.

Overall, the Project represents a critical infrastructure investment that strengthens Elbert County's economy and enhances domestic energy reliability, while preserving open space, agricultural land, and the long-term interests of private landowners and the surrounding community.

3.1.2 Infrastructure

As part of the general considerations, it must also be determined whether the surrounding community has the resources and services necessary to support the project. The Project will not place an undue burden on Elbert County. These measures ensure that the Project does not

create long-term impacts to County infrastructure and that any temporary effects are appropriately mitigated.

Any local fire and emergency services needs associated with the Project are not expected to burden Elbert County, in that these services would only be utilized in rare circumstances. The Project's temporary construction demands will be managed through advance coordination with Elbert County Sheriff's Office, BSFPD, Elbert County Office of Emergency Management, and Elbert County Public Works, including a road use agreement and construction traffic plan. The Project's traffic plan, including preliminary haul routes and site distance analyses, is available in Appendix E

The Project will fund and maintain a 30,000-gallon water storage container for on-site and community emergency response use, reinforcing local firefighting capabilities. Over the long term, the stable, state-assessed property tax stream and modest operating employment will provide resources for public safety, schools, libraries that exceed any incremental service needs associated with the Project, thereby avoiding an undue burden on existing residents.

3.2 Special Use by Review Approval Criteria

ECZR Article III.E.5 lists criteria that should be considered by the Elbert County Planning Commission, Board of County Commissioners, and by the CDS Director when reviewing Special Use by Review applications. These criteria are detailed below and explained in relation to the Project.

a) The use is in harmony and compatible with the surrounding area and neighborhood

Under the current ECZR, solar facilities are an allowable land use on Agriculture (A) zoned land in Elbert County, if the use is permitted via a Special Use by Review. All parcels associated with the Site are zoned Agriculture (A). Additionally, the Project will connect into the existing Tri-State transmission line infrastructure, which minimizes installation of new above-ground transmission infrastructure.

Furthermore, the Project is a low-intensity land use that intentionally concentrates solar and BESS development within a consolidated lease area. This concentrated design allows for continuation of agricultural activities on remaining portions of the Project's parcels, if desired by the landowners. The Project is also considering incorporating agrivoltaics practices, such as sheep grazing, within portions of the Project area during operations, which would further reinforce the Project's consistency with Elbert County's agricultural heritage.

b) The use will not have an undue burden on available infrastructure

The Project will not cause an undue burden on Elbert County, its residents, and available infrastructure.

The Project has been intentionally designed to avoid increasing long-term demand on any County-provided utilities or public service systems. The Project is not anticipated to require County water, wastewater treatment, sewer connections, or municipal utilities at any stage. All

potable water will be obtained from an offsite bulk water provider and is planned to be transported to the site using water trucks. Existing wells onsite will not be utilized by the Project and installation of any new wells is not proposed.

Local fire and emergency services are not expected to experience any material burden from the Project, as such services would only be required under unforeseen emergency circumstances. The Project's temporary construction demands will be managed through advance coordination with the Elbert County Sheriff's Office, Elbert County Office of Emergency Management, the BSFPD, and Elbert County Public Works, including a Road Use Agreement and construction traffic plan.

The Project will fund a 30-000 gallon water storage container for onsite and community emergency response use, reinforcing local firefighting capabilities. Over the long-term, the stable, state-assessed property tax stream and modest operating employment will provide resources for public safety, schools, libraries that exceed the incremental service needs, thereby avoiding an undue burden on existing residents.

Additionally, the Project will not cause an undue financial burden to the County. A detailed economic impact analysis is presented in Appendix F. Elbert County's fiscal structure is primarily supported by property taxes, supplemented by sales and use taxes and state allocations such as the Highway Users Tax Fund, in which the county imposes a 1% countywide sales and use tax in unincorporated areas, and residents pay 2.9% state sales tax. The county's taxable property distribution is dominated by residential and agricultural classifications, with assessed valuations forming the basis for mill levies applied across County government, school districts, and special districts. In 2023, the county's assessed value totaled approximately $631 million, with total property tax revenue distributed primarily to Elbert County Government, Big Sandy Schools, and fire protection districts. Mill levies vary by district but generally fall within the range typical for rural Colorado counties.

The County does not operate centralized water or wastewater treatment systems for rural parcels; instead, services are provided through private wells and septic systems. Therefore, there are no countywide rates for water or wastewater treatment applicable to the Project. Water supply costs for the Project will be privately managed. Operational water use will be minimal and is anticipated for as needed use, including panel cleaning, onsite vegetation, and potable water for the O&M building, which will rely on a private septic system engineered to state standards.

The Project will not impose additional costs on County utilities or infrastructure. All project-related water, wastewater, and service needs will be privately financed, and the project will not require new public facilities. Instead, the project will generate significant fiscal benefits through property taxes, sales taxes on equipment, and other revenues, ensuring that the County's existing tax burden and fee structure for residents will not be impacted by Project activities, but rather supported by the additional revenue stream.

<u>c) The use will not unduly increase traffic congestion or burden the existing road system</u>

A traffic plan was developed for the Project and is included in Appendix E.

The Project team met with representatives from Elbert County Public Works Road and Bridge Department on January 27, 2026 to receive the Department's initial feedback on the Project's proposed haul route. Two routes, County Road 149 and County Road 169, are currently identified as the primary preferred main routes, with County Road 133 and County Road 46 as other potential options. Prior to construction, the Project will conduct further analysis of existing road conditions and will have a firmer understanding of delivery directions. Although not anticipated at this time, this analysis may identify other county roads that are suitable for the Project. The Project and Elbert County Road and Bridge Department will enter into a Road Use Agreement that will be carried out prior to the start of construction. This Road Use Agreement will document mutually acceptable road improvement efforts and the Project's use of county roads for construction and operations. The Road Use Agreement with the County includes requirements to post a financial security or bond to ensure that County roadways are maintained and repaired, if necessary.

d) The use will not cause significant air, odor, water, noise, or light pollution

Air

Solar and BESS facilities do not emit air emissions or odors during normal operations. To address construction-related air quality, the Project will apply for an Air Pollutant Emissions Notice (APEN) with Colorado Department of Public Health and Environment (CDPHE) prior to construction. The Project may qualify for a General Construction Permit (GP03) for Land Development Projects. Although the full leased area is 1,990 acres, the Project design may be optimized prior to construction, and disturbed areas may ultimately be less than the 1,850-acre threshold.

To comply with air quality regulations, methods for limiting dust and maintaining air quality during construction activities will be implemented. These measures include, but are not limited to, wetting dirt roads and earthen areas with limited vegetation, covering exposed piles of soil, abiding posted speed limits on public roads, and maintaining low vehicle speeds within the Project area. Water will be applied regularly to disturbed areas and stockpiles during construction to prevent the addition of particulate matter and fugitive dust to the local airshed.

The Project is anticipated to create temporary noise effects from equipment and activities during the construction phase. These effects will be short term and limited to the estimated construction period of approximately 18-24 months.

Odor

Solar and BESS facilities do not emit fumes or odors during normal operation. Any temporary odors or emissions would be limited to construction equipment and vehicles during the construction phase.

Water

The Project will protect and maintain surface water quality using avoidance measures, engineered controls, regulatory compliance, and BMPs. All field-verified wetlands and surface waters have been fully avoided in the Project layout. Grading has been designed to preserve natural hydrologic connectivity and maintain existing drainage patterns while allowing infiltration beneath and between solar panels. Please see the Project's drainage analysis in Appendix G.

Before construction, the Applicant will obtain a stormwater discharge permit from the CDPHE, supported by a Stormwater Pollution Prevention Plan. Engineered water-quality and detention basins designed in accordance with Mile High Flood District standards will treat and detain runoff from the substation and BESS facility to prevent increases in peak flows or pollutant loads to downstream surface waters.

The Project will not impact groundwater levels, flow direction, quality, artesian pressure, recharge rates, recharge sources, water storage, or seepage loss. No adverse effects to groundwater quantity or quality are anticipated under either average or worst-case conditions. This conclusion is based on an evaluation of existing hydrogeologic conditions, hydrologic modeling, the regional groundwater framework, and the Project's construction and operational water-supply approach.

Noise

The Project is anticipated to create temporary noise effects from equipment and activities during the construction phase. These effects will be short-term and limited to the estimated construction period of approximately 18-24 months.

Spatial distribution of construction noise will vary throughout the construction schedule and depend upon the type of activity, as well as background noise levels in the area. Some temporary disturbances that nearby communities may experience include the following:

- Increased vehicle traffic noise (e.g., passenger vehicles, semi-tractor/trailer trucks)
- Noise from construction equipment (e.g., graders, loaders, water trucks)
- Installation of posts (e.g., hydraulic hammers)
- Other construction-related activities (e.g., unloading and loading materials)

During the Project's operational period, noise will be minimal, infrequent, and primarily associated with occasional vehicle traffic from maintenance personnel and onsite inverters. Inverter and BESS noise is expected to blend with existing ambient sounds such as local traffic, unpaved road use, agricultural activities, and residential yard work, and is not anticipated to be perceptible beyond the Site Boundary. Furthermore, based on the proposed Project layout (Appendices A and B), the nearest residence would be at least 1,800 ft away from the BESS, which exceeds the nearby Lincoln[2] and Kiowa Counties[3] BESS ordinances that require BESS

[2] Lincoln County Ordinance. 2024. Available online at: BESS REGS.pdf

[3] Kiowa County BESS Ordinance. 2023. Available online at: https://kiowacounty-colorado.com/2023-3%20Resolution%20%20Setbacks%20for%20Solar%20Wind%20and%20Transmission.pdf

structures to be at least 1,000 ft away (at least 1,320 ft for Kiowa County) from nonparticipating landowner residences.

To further reduce potential impacts, inverters will be located towards the interior of the solar array, wherever feasible, to increase distance from property lines. As solar panels only generate electricity during daylight hours, inverter activity, and therefore operational noise, will cease after sunset.

Light Pollution

The Project is not expected to generate light pollution. Any necessary facility lighting will be limited to the minimum required for safety and security and will be fully down-shielded to prevent upward or off-site light pollution. With these measures in place, lighting impacts on neighboring properties and the surrounding rural landscape will be effectively negligible.

Glare

Although not explicitly required by the ECZR, the Applicant has included an explanation of the Project's glare-minimizing measures. Solar panels are designed to absorb rather than reflect light, using anti-reflective coating, and micro-textured surfaces to minimize reflections (Darwash and Mohammed 2025[4]). This design assists in reducing glare and makes solar panels far less reflective than common surfaces, such as windows, water, or grass, (Wu 2025[5]) and improves light absorption and durability of the solar cells (Darwash and Mohammed 2025). As such, glare impacts are expected to be minimal and will not pose a hazard to nearby properties or roadways.

e) All sanitation requirements will be met

During construction, onsite personnel will maintain the Site utilizing good housekeeping BMPs to ensure the Project is managed in a clean and safe condition. Any materials, tools, waste, and debris will be removed from the site on an as-needed basis. Dumpsters will be located onsite during construction, and all trash removal costs will be borne by the Project and its subcontractors. Portable toilets and handwashing stations will be provided during construction and will be routinely cleaned and serviced. These restroom facilities will be sited away from the drainages and wetlands onsite.

During operations, the onsite Operations and Maintenance (O&M) building will include restroom facilities that will feature an on-site septic system and leach field, engineered by a licensed professional in accordance with county sanitation standards.

f) The use will be adequately landscaped, buffered, and screened

[4] Darwash, Ruaa Ali, and Mohammed Fawzi Mohammed. 2025. "A Comprehensive Review of Antireflection Coating Materials for Solar Cell Efficiency. Available online at: 3-1-ICAIIT_2025_13(2).pdf

[5] Wu, Bob. 2025. Myth vs. Reality: Do Solar Panels Cause Glare or Dazzle. Available online at: Myth vs Reality: Do Solar Panels Cause Glare or Dazzle?

The Site spans approximately 1,990 acres and is situated within a predominantly agricultural setting characterized by open fields and rural land uses. Residential development in the vicinity is sparse, with limited roadside visibility due to the remote location of the Site. The low-profile nature of the proposed solar panel arrays, combined with existing topography, is expected to result in minimal visual contrast with the surrounding environment. The Project is designed to preserve the rural character of the area, with disturbed areas reseeded to maintain visual continuity and minimize soil erosion. Additionally, retention of agricultural operations on undisturbed portions of the leased parcels, where pursued by the landowners, would further reinforce the area's existing rural visual character. A visual simulation of the proposed Project is included in Appendix H.

Vegetative screening is proposed near the Project's O&M building and substation (Appendix B, Sheets C-48 and C-49). The Applicant evaluated the potential for additional screening; however, due to the Project's limited visual impact, the desire to reduce water use associated with the Project, and potential wildfire risks associated with tall vegetation, no further screening is included beyond what is shown in the current plans. This approach also aligns with the existing visual landscape in Elbert County, where large trees and shrubs are generally sparse across Colorado's eastern plains. Moreover, vegetative screening for solar and BESS facilities is not required under the ECZR.

The BESS will have a minimal effect on overall visual character because its design would align with the existing solar facility layout and would use containerized units placed within the fenced project area. These enclosures resemble standard shipping containers and would be arranged in a compact footprint adjacent to pre-existing electrical infrastructure (i.e., the switchyard and substation), which would reduce visual disturbance and avoid new vertical elements beyond those already associated with the solar array and substation. By co-locating the BESS with the solar facility, the Project design limits land disturbance and maintains consistency in shape and scale, which helps the installation blend with the agricultural setting and other existing energy infrastructure in the surrounding area. As a result, the net visual impact of the Project is negligible and would not introduce features that would significantly alter the surrounding landscape or viewshed.

The visual characteristics of the Project were assessed through a detailed simulation process to evaluate potential impacts on the surrounding landscape. This simulation was conducted using a combination of ArcGIS Pro, Google Earth Pro, Adobe Photoshop, and SketchUp, and involved selecting multiple vantage points around the perimeter of the Project Area, with particular emphasis on residential and roadside viewsheds. These Key Observation Points (KOPs) were chosen to illustrate how the Project may appear from nearby properties and public areas. All KOP images were taken from public roads. The simulation incorporated conceptual infrastructure designs and existing Site photography to generate realistic three-dimensional renderings of the proposed solar array.

It is important to note that the simulation assumed solar panels would be placed across the full Survey Boundary, without any setbacks or exclusions, representing the most conservative, full-coverage scenario. Please see Figure 1 below for a visual representative of the conservative

layout used for visual modeling purposes. In addition, BESS components were included in the visual analysis at select KOPs where the BESS could be reasonably visible and were modeled after the solar layout was established to ensure a conservative representative of cumulative visual conditions. Actual solar panel and BESS placement are expected to be significantly reduced from the visual modeling effort, meaning the visual impacts depicted are likely greater than what will realistically occur once the Project is constructed. Final layout and panel placement will be determined prior to construction.

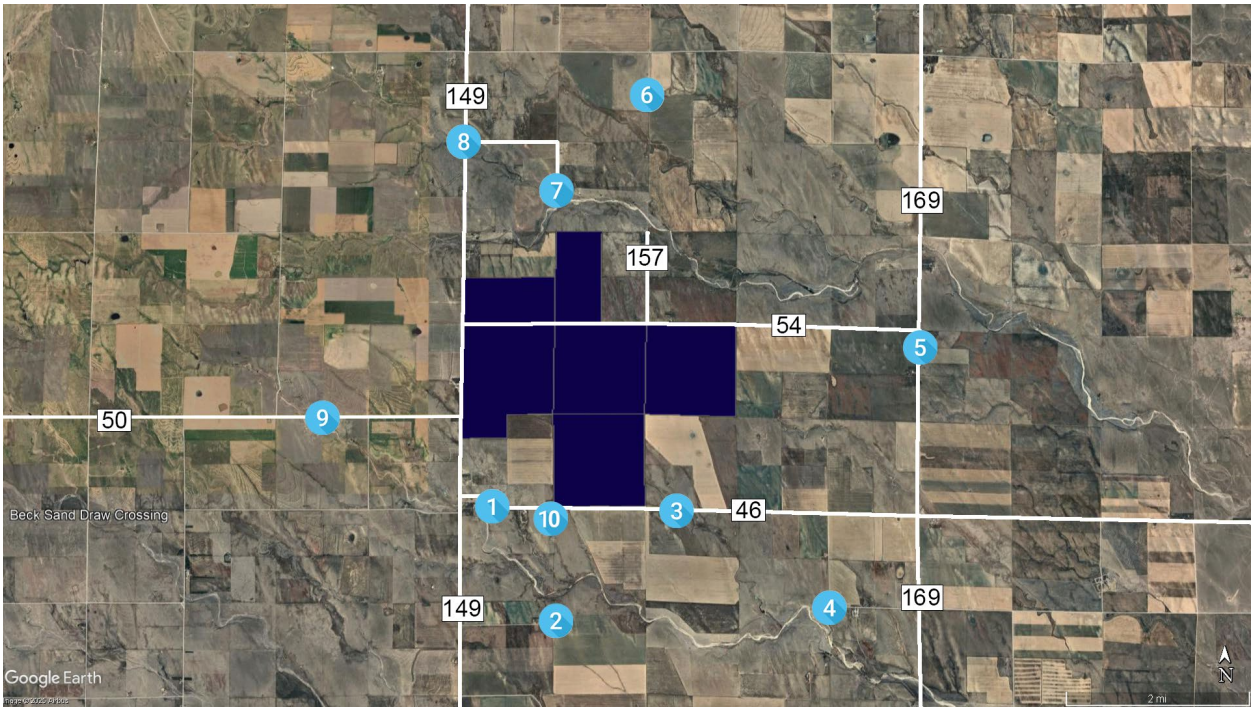


Figure 1. Locations utilized for the Project's visual simulation effort. The visual modeling effort utilized a conservative layout, as depicted in this figure.

g) The use will not otherwise be detrimental to the health, safety, or welfare of the present or future inhabitants of Elbert County

The Project is designed with multiple layers of safety to protect workers, the public, and surrounding properties. The Project will comply with applicable federal, state, and local regulations and will incorporate industry best practices to ensure safe construction, operation, and maintenance.

The BESS will utilize lithium-ion battery modules housed within purpose-built containerized units. These systems incorporate advanced safety features, including temperature management systems, fire detection and suppression equipment, and power conversion equipment that safely manages the transfer of electricity between direct current storage and alternating current grid service. Continuous monitoring systems and automated controls allow the system to detect irregular operating conditions and respond quickly to prevent potential hazards. The design,

installation, and operation of the BESS will comply with applicable national electrical and fire safety standards.

Lithium-ion battery technology is widely used in everyday consumer electronics such as cell phones, laptops, and other household devices. Utility-scale battery storage systems use similar underlying technology but are engineered with additional safety systems, monitoring, and controls appropriate for large-scale energy infrastructure.

Solar PV panels anticipated for use in the Project are primarily composed of silicon, glass, aluminum framing, and other non-toxic materials commonly found in consumer electronics and building materials. During operation, solar panels generate electricity without combustion, emissions, or hazardous byproducts. At the end of their useful life, solar panels are typically repaired, refurbished, or recycled where feasible. When panels cannot be reused or recycled, they will be disposed of in accordance with applicable state and federal regulations.

During construction and operation, the Applicant will minimize the use and storage of hazardous materials on-site to the extent practicable. Secondary containment will be required for fuels, lubricants, and other materials that could pose environmental risks if released. Contractors and subcontractors working on the Project will be required to comply with applicable environmental and safety regulations. Prior to beginning work, contractors and subcontractors will be required to:

1. Provide written disclosure of all substances and materials, including hazardous materials, proposed for use on the Project site.
2. Submit Safety Data Sheets for all hazardous materials intended for use, application, or storage on-site.
3. Ensure the safe handling, transport, and disposal of any hazardous waste in accordance with applicable regulations.

If the Project stores more than 1,320 gallons of oil or fuel aboveground, or a single aboveground oil storage tank exceeds 660 gallons, a Spill Prevention, Control, and Countermeasure (SPCC) Plan will be prepared in accordance with federal regulations. The Project is anticipated to include solar and BESS inverter transformers as shown in Appendix B. These transformers typically contain mineral oil used for cooling and electrical insulation. Although this oil is generally biodegradable, it will be conservatively managed as a potential environmental hazard in the unlikely event of a release. Appropriate containment measures will be installed to prevent oil from migrating off-site.

An operational SPCC Plan will be prepared prior to the completion of construction and will be maintained on-site along with other applicable operational plans. Safety Data Sheets will also be maintained on-site during both construction and operational phases of the Project.

Through the incorporation of established engineering standards, operational controls, and environmental protection measures, the Project is designed to operate safely and reliably while protecting the health, safety, and welfare of present and future inhabitants of Elbert County.

f) Supplemental Standards are met for specific uses, as applicable.

There are no Supplemental Standards in the ECZR specific to solar and BESS projects. The ECZR does include Supplemental Standards for substations, which state 1) substations may not be located within one-quarter mile of an existing subdivision, town, or agricultural development, 2) circumstances may exist when substations may be located within one-quarter mile limitation from an existing subdivision, town, or agricultural development when deemed appropriate by the Elbert County Planning Commission and the Board of County Commissioners, 3) locations on hilltops or ridgelines are discouraged, and 4) landscaping and berming will be considered on a case-by-base basis.

The Project includes a collector substation that must be located adjacent to the existing transmission grid to interconnect and deliver power to the grid. Accordingly, the proposed substation location is driven by the transmission Point of Interconnection (POI) and associated engineering requirements. The proposed substation is not located within one-quarter mile of an existing subdivision or town. The ECZR does not define the term “agricultural development.” There are no agricultural facilities (e.g., barns, feedlots, dairies, livestock confinement areas, commercial greenhouses or similar permanent agricultural infrastructure) within one-quarter mile that would reasonably constitute agricultural development.

4. Overview of Natural Resources

4.1 Air

Analysis of existing conditions indicates that the air quality in Elbert County remains mostly within CDPHE and U.S. Environmental Protection Agency (EPA) air quality standards, with minimal local sources impacting the proposed Site.

The Project will apply for an APEN from CDPHE prior to the start of construction. To comply with air quality regulations, methods for limiting dust and maintaining air quality during construction activities will be implemented. These measures include, but are not limited to, wetting dirt roads and earthen areas with limited vegetation, covering exposed piles of soil, abiding posted speed limits on public roads, and maintaining low vehicle speeds within the Project area. Water will be applied regularly to disturbed areas and stockpiles during construction to prevent the addition of particulate matter and fugitive dust to the local airshed.

4.2 Surface Waters, including Wetlands

The Project is designed to respond to site-specific topography, land cover, and runoff patterns to effectively manage drainage and minimize erosion. Hydrologic and hydraulic modeling indicates that most of the Site is suitable for solar and BESS development with targeted earthwork and erosion control measures. Overall site outflow rates are reduced under proposed conditions, with only minor, localized increases at a limited number of discharge points, thereby minimizing potential impacts to adjacent properties. The design incorporates applicable local and state

stormwater requirements, promotes infiltration of panel runoff through vegetated areas, and uses diffuse roadway layouts to limit changes in runoff. Conceptual stormwater basins are also included to manage water quality and runoff from larger impervious areas, with additional design refinement planned in later project phases. Analysis of the Project's immediate and long-term impacts are detailed in Appendix G.

The County requires an evaluation of how the Project would perform during the most intense and unlikely storm events because these conditions provide the best assessment of the Project's safety. These worst-case storm conditions do not reflect normal weather and instead consider rare but powerful storms that could produce unusually high winds or high rainfall. By examining these events in advance, the Applicant can show that the Site has been designed to handle extreme weather without creating erosion, flooding, or offsite impacts. Planning for the worst-case storm conditions gives the County confidence that the Project is resilient and will maintain the integrity of the land and water resources, as well as the surrounding properties and environment.

In 2025, the Applicant contracted scientists from Ramboll to conduct a wetland delineation of the Site. The Project will completely avoid direct impacts to all wetlands and other waters. The 2026 Stormwater Report modeled the Site and surrounding tributary areas (a total of 6,028 acres). The analysis represented the 100-year, 24-hr design storm with a precipitation depth inferred from the National Oceanic and Atmospheric Administration Atlas 14 and used the USACE Hydrologic Engineering Center-River Analysis System to compare existing and proposed conditions.

Under average storm conditions, modeled flows remain similar to or lower than existing conditions due to preserved drainage patterns, infiltration between panel rows, and widespread re-vegetation that stabilizes soils and reduces surface runoff. The net immediate effects during construction would be limited to temporary, localized increases in sediment mobility. These would be minimized through erosion and sediment controls, phased disturbance, and avoidance of drainage features.

The net long-term effects would be minimal. Solar array areas will be fully re-vegetated, maintaining infiltration capacity and reducing runoff generation. Runoff from the substation and BESS facility will be detained and treated to prevent degradation of surface-water quality.

Even under worst-case storm conditions, including the 100-year design storm, peak discharge from the Project area is predicted to decrease relative to existing conditions because of increased ground cover, stabilized soils, and engineered stormwater management features. Localized hotspots of depth, velocity, or scour identified in the analysis will be addressed through panel layout refinements, reinforcement of low-water crossings, and site-wide reductions in total peak outflow, as well as general stormwater and erosion control BMPs.

The Project will protect and maintain surface water quality using avoidance measures, engineered controls, regulatory compliance, and BMPs. All field-verified wetlands and surface waters have been fully avoided in the Project layout. Grading has been designed to preserve

natural hydrologic connectivity and maintain existing drainage patterns while allowing infiltration beneath and between solar panels.

Before construction, the Applicant will obtain a stormwater discharge permit from the Colorado Department of Public Health and Environment (CDPHE), supported by a Stormwater Pollution Prevention Plan. Engineered water-quality and detention basins designed in accordance with Mile High Flood District standards will treat and detain runoff from the substation and BESS facility to prevent increases in peak flows or pollutant loads to downstream surface waters.

4.3 Ground Water

No groundwater infrastructure exists within the Site. Groundwater infrastructure within and around the Survey Boundary includes one well located on the eastern portion of the Survey Boundary with a reported depth of 168 ft. Approximately 2,200 ft northeast of this well, just outside the Survey Boundary, are two additional groundwater wells spaced approximately 79 ft apart, each with a depth of 80 ft. Approximately 756 ft from the Survey Boundary, exists a groundwater well at depth of 80 ft, and approximately 275 ft from the Survey Boundary there is another groundwater well at depth of 375 ft. For well permit information, please see Table 7.

The Project will not impact groundwater levels, flow direction, quality, artesian pressure, recharge rates, recharge sources, water storage, or seepage loss. No adverse effects to groundwater quantity or quality are anticipated under either average or worst-case conditions. This conclusion is based on an evaluation of existing hydrogeologic conditions, the regional groundwater framework, and the Project's construction and operational water-supply approach.

Table 7. Well permits on or adjacent to the Shepherd Solar Project.

Well Owner	Permit #	Receipt #	Depth (ft)	Well Use	Well Status	Location
Cline, O R	5196	9077738	168	Residential	Constructed	Within the Survey Boundary, outside of Site
Barnes Alvin & Karen	97113-VE	0030502	180	Unknown	Constructed	Outside of the Survey Boundary and Site
Lieurance, Michael D	203767-A	0414759B	180	Residential	Constructed	Outside of the Survey Boundary and Site
Brown, Christopher S	38664	9078003	80	Residential	Constructed	Outside of the Survey

Well Owner	Permit #	Receipt #	Depth (ft)	Well Use	Well Status	Location
						Boundary and Site
Gordon Billy & Juanita	254294	0518104	375	Residential	Constructed	Outside of the Survey Boundary and Site

4.4 Floodplains

There are no proposed floodplain impacts from the Project (Appendix B, Sheet C-4)

4.5 Wildlife

There are no state or federally-listed species observed onsite. Field surveys were conducted to evaluate wildlife habitat at the Site in June 2025, which included reconnaissance throughout the Site and Survey Boundary in search of suitable habitat and federal and state-listed species. Based on the results of this field evaluation, the Project area does not support federal or state threatened or endangered species or their associated habitats. Additionally, the Project does not intersect with any mapped Colorado Parks and Wildlife (CPW) High-Priority Habitat or U.S. Fish and Wildlife Service (USFWS) Critical Habitat.

Common, non-listed wildlife species observed during the Site visit include: Red-winged Black Bird (*Agelaius phoeniceus*), Horned Lark (*Eremophila alpestris*), Lark Bunting (*Calamospiza melanocorys*), Western Meadowlark (*Sturnella neglecta*), Mourning Dove (*Zenaida macroura*), Red-tailed Hawk (*Buteo jamaicensis*), Western Earless Lizard (*Holbrookia maculata*), Coyotes (*Canis latrans*), Mule Deer (*Odocoileus hemionus*), Pronghorn (*Antilocapra americana*), and a potential Badger den (*Meles meles*).

The Applicant has proactively coordinated with CPW and incorporated the following recommendations in the Project design and schedule:

- Consolidate Project infrastructure and roads to minimize land disturbance and fragmentation
- Co-locate Project with existing transmission corridors and pre-disturbed areas, such as roads and agricultural lands
- Conduct early and ongoing Project consultation with CPW
- Avoid mapped HPH
- Consult with USFWS

• Depending upon construction schedule, conduct pre-construction surveys for nesting birds prior to commencement of groundbreaking

• Maintain buffer zones around drainages and wetlands

• Design fence layout to allow for continued wildlife movement throughout the Project area, including wildlife corridors along drainages. Approximately 265 unfenced areas will remain unfenced within the drainages onsite to support wildlife movement.

• Incorporate an 8-foot tall fence with a smooth top (e.g., no protrusions or wire) to discourage deer and other big game wildlife from jumping the fence and to prevent entanglement or impalement risks

Place a fence crossing in the southernmost drainage (Swale #6) to prevent predators from trapping pr

• Incorporate native species into re-vegetation efforts and prevent the spread of noxious weeds

Additionally, during the December 2025 meeting, CPW requested that the Applicant incorporate a fence crossing at the southernmost onsite drainage (Swale #6). As this drainage naturally terminates within the Project area, CPW expressed concern that fencing along the exterior extents of the drainage could inadvertently funnel wildlife into a confined area, rather than allowing natural movement across the landscape. This recommendation has been incorporated into the design and typical fence design for the Project is shown included in Appendix B Sheet C-47.

4.6 Noxious Weeds

To address noxious weeds, the Project and its contractors will implement control measures during both the construction and operations phases of the Project in accordance with the Colorado Noxious Weed Act.[6] Onsite personnel will be trained to identify noxious weeds listed by the Elbert County Noxious Weed Advisory Board[7] for eradication purposes.

The Applicant consulted with the United States Department of Agriculture (USDA) Natural Resources and Conservation Service (NRCS) field office in Simla to further understand noxious weeds known in eastern Elbert County. The NRCS Resource Conservationist indicated the most common listed noxious weeds expected in eastern Elbert County are Mullein (*Verbascum Thapsus*), Cheatgrass/Downy brome (*Bromus tectorum*), and Field bindweed (*Convolvulus arvensis*). Knapweed (*Centaurea* sp.) and redstem filaree (*Erodium cicutarium*) may be present in Eastern Elbert County as well.

[6] Colorado Noxious Weed Act, §§ 35-5.5-101 to 35-5.5-119. 1990. Available online at: https://ag.colorado.gov/conservation/noxious-weeds/noxious-weed-management-in-colorado.

[7] Approved Elbert County Noxious Weed List. 2023. Available online at: https://www.elbertcounty-co.gov/DocumentCenter/View/3363/Approved-Elbert-County-Noxious-Weed-List-2023-PDF.

During construction, soil disturbance will be minimized to the extent practicable to reduce the potential for the introduction or spread of noxious weeds. Disturbed areas will be stabilized in accordance with the Project's stormwater permit requirements and Elbert County Construction Standards and Specifications. Weed control may include targeted chemical or manual treatment. Herbicides will be applied in accordance with label instructions and all applicable environmental and regulatory requirements. A draft Vegetation Management Plan is included in Appendix I.

4.7. Geologic Conditions and Natural Hazards

A geotechnical survey and report was completed for the Project and is presented in Appendix J.

Desktop mapping from the Natural Resources Conservation Service identified Weld loam (1–3% slopes) as the dominant soil unit, along with the Bresser–Truckton–Blakeland complex, Platner–Ascalon sandy loams, and several Ascalon sandy loam units with slopes ranging from 1 to over 8 percent. Field verification in confirmed these soil types and their general distribution (Appendix J). All observed soils are non-hydric, well- to moderately well-drained, and consistent with mapped textures. Slopes across the site are generally low, with most areas under 5 percent and steeper gradients occurring only along localized swales and drainage features.

Drainage in the site is internal to the site, conveyed through six swales totaling approximately 39,500 linear feet, which direct stormwater eastward. These features are shallow, wide, and often modified by agricultural grading, promoting infiltration rather than rapid runoff. No perennial or intermittent streams occur on site, and there is no connection to mapped floodplains. FEMA mapping confirms that the site lies outside high-risk flood zones. Field verification supports a low risk of overbank flooding, with water primarily retained in depressions or shallow swales during storm events.

Seismic hazard mapping by the Colorado Geological Survey indicates that there are no mapped faults or seismic sources within the site.[8] Historical seismicity in the broader region is low, and there are no mapped landslide hazards within the area of interest (AOI). As such, the risk of earthquake or landslide impacts to the Project is considered minimal.

The Colorado State Forest Service Wildfire Risk Viewer classifies most of the site as low wildfire risk, with approximately 5 percent rated as moderate.[9] This classification is consistent with the field observation of predominantly agricultural land uses that provide limited fuel continuity (Ramboll 2025). While wildfire risk is not expected to significantly constrain construction or operation, standard fire safety practices will be implemented during activities with ignition potential.

[8] Colorado Geological Survey. (2024). *Debris-flow susceptibility of select Colorado counties (Map) - V20220215* [Interactive map]. Colorado Department of Natural Resources. https://cologeosurvey.maps.arcgis.com/apps/webappviewer/index.html?id=ade090db28134b56a2dd7824ad5820d

[9] Colorado Wildfire Risk Viewer, Colorado State Forest Service (CSFS). 2024. Retrieved from: https://co-pub.coloradoforestatlas.org/#/.

5. Zoning and Comprehensive Plan Consistency

5.1 2018 Comprehensive Plan

In 2018, Elbert County adopted a comprehensive land use plan, which is an official public document that is intended to guide development and land use planning efforts. The Project aligns with the 2018 Elbert County Comprehensive Plan by advancing the County's vision for responsible growth, economic diversification, and environmental stewardship. Table 8 below summarizes the Project's alignment and compliance with applicable goals and policies of the current effective Comprehensive Plan.

Table 8. Overview of applicable Elbert County 2018 Comprehensive Plan Goals and Policies and Project Compliance with Plan

Goals	Policies	Project Compliance
Land Use		
Hazard Mitigation (HM) Goal: Elbert County supports plans and policies to reduce the impacts of natural hazards to the people, property and environment of the County.	HM3 Policy: The County should incorporate hazard mitigation into future development plans and policies.	The Project will be designed and constructed in full compliance with applicable building, fire, and electrical codes, as well as National Fire Protection Association (NFPA) standards. Adherence to these standards enhances structural integrity and operational safety during natural hazard events and is consistent with the County's natural hazard mitigation objectives.
	HM4 Policy: The County should enhance local mitigation capabilities, including human, technical, financial and regulatory capabilities.	To enhance local fire response capabilities, the Project has voluntarily committed to siting a 30,000-gallon water storage tank onsite to support fire suppression efforts in the surrounding area. In addition, the Project will offer and conduct annual training refreshers with Big Sandy Fire District and Elbert County Office of Emergency Management personnel to support

Goals	Policies	Project Compliance
		emergency preparedness and response capacity.
	HM5 Policy: The County should improve communication and coordination of mitigation activities between federal, state and local governments and with private and non-profit organization.	The Project has been engaging with Big Sandy Fire District since the summer of 2023 to incorporate their feedback into our project planning and design. The Project is committed to maintaining an open line of communication and collaborative emergency response planning with Big Sandy Fire District throughout the entire Project lifecycle.
Public Safety		
Public Safety (PS) Goal: Elbert County strives to ensure that public safety services are sufficient to serve and protect the County	PS2 Policy: As development occurs, the County and developers should cooperate in providing funding to update existing facilities and construct additional fire protection facilities – especially in rural areas where fire equipment and protection may not be readily available.	Consistent with this policy, the Project will cooperate with the County and local emergency responders to support fire protection services in a remote, rural area of Elbert County. The Project has voluntarily committed to installing a 30,000-gallon onsite water storage tank to enhance water availability and support emergency response capabilities. Additionally, the Applicant has agreed to a gift agreement with Big Sandy Fire District, which will support the District's procurement and enhancement of equipment to improve wildlife fighting capabilities.
Natural Resources		

Goals	Policies	Project Compliance
General Environment (EN) Goal: Elbert County strives to safely foster a balance between the natural and developed environment while supporting private property rights.	EN1 Policy: All development, including residential, industrial, commercial and public utilities, should be designed and constructed in a manner that is respectful to the environment.	The Project is designed to safely construct essential utility infrastructure while minimizing impacts to natural resources and supporting private property rights. The Project represents a reasonable and appropriate use of privately owned land and will not place an undue burden on the Elbert County community.
	EN2: New developments should minimize negative impacts to adjacent agricultural lands and designated open space.	The Project will not negatively impact adjacent agricultural lands. The Project maintains appropriate setbacks from adjacent properties and will carefully manage the property for noxious weeds and erosion during construction and operational periods. There are no designated open space areas within or in the vicinity of the Project, including regional parks, natural areas, special resource areas, or trails.
Air Quality (AQ) Goal: Elbert County strives to protect air quality for the health and safety of the citizens.	AQ1 Policy: Colorado Department of Health air quality standards applicable to the County shall be considered minimum standards.	The Project will comply with Colorado Department of Health air quality standards. The Project will apply for an Air Pollutant Emissions Notice (APEN) prior to construction and will incorporate measures and BMPs throughout the construction period to maintain air quality.
Water Quality (WQ) Goal: Elbert County strives to protect water quality for the health and safety of the citizens.	WQ1 Policy: The County encourages erosion control plans for any new developments in the County	Prior to construction, the Project will develop an erosion control plan for implementation during construction activities.

Goals	Policies	Project Compliance
Noise Abatement (NA) Goal: Elbert County will follow the state of Colorado noise abatement standards.	NA2 Policy: New developments or permitted uses are responsible for mitigating noise to neighboring properties.	Construction of the Project will include a temporary increase in noise during the construction phase.
Forestry and Noxious Weed Management (FW): Elbert County will strive to protect and enhance native vegetation to conserve water resources, protect soils and preserve natural habitat.	FW1: The County should encourage the preservation of significant vegetation through weed control, reseeding and other re-vegetation practices.	The Project will implement a Vegetation Management Plan (Appendix I) for Project re-vegetation needs, including re-vegetation of disturbed areas and noxious weed management.
	FW2: Land disturbance and erosion should be minimized to help prevent air and water pollution and minimize noxious plant proliferation. The County should encourage stabilization and landscaping of final landforms and control of runoff at historic levels.	The Project site design (Appendices A and B) minimizes grading and land disturbance to the extent practicable. Stormwater and erosion control BMPs will be installed prior to earthwork and will be maintained as necessary.
	FW3 Policy: Significant stands of trees and shrubs identified during the land review process should be preserved and maintained in concert with good forest management practices. Improvements should be located to minimize the removal of vegetation. Special attention should be given to unique or significant forms of vegetation in areas adjacent to bodies of water and in locations where the tree line forms the horizon line on ridges.	The Site selected for the proposed Project does not impact significant stands of trees or shrubs. Therea re no unique or significant forms of vegetation onsite. Impacts to aquatic vegetation will be avoided by the Project.
	FW4: Offsite disturbance by development is discouraged. When disturbance is unavoidable,	Offsite disturbance is not anticipated.

Goals	Policies	Project Compliance
	stabilization and re-vegetation with native plants or landscaping should proceed immediately after construction.	
	FW5 Policy: Existing vegetation should remain undisturbed, except in cases where it is prudent for public improvements, surveying, wildlife protection, agricultural cultivation, forest management or noxious plant control.	Existing vegetation onsite will be disturbed only to the minimal extent practicable to accommodate project infrastructure and necessary construction activities. Areas not required for permanent improvements—such as access roads, equipment pads, or other long-term facilities—will be restored and re-vegetated following construction. The Project has been designed to avoid and minimize vegetation disturbance to the greatest extent feasible while allowing for prudent development.
	FW6 Policy: The County and property owners should work together to reduce the proliferation of noxious plants in an environmentally sound manner in compliance with State laws, County regulations and recognized agricultural priorities.	The Project will manage and treat noxious weeds, as needed, during construction and operations. Construction staff and operational personnel will be trained to identify noxious weeds.
Wildlife (WL) Goal: Elbert County values wildlife and the environments that support them and will strive to minimize disruption of their natural habitats and migratory corridors.	*WL1 Policy: The County should continue to include Colorado Parks & Wildlife as a referring agency in appropriate land use applications*	The Project has voluntarily and proactively engaged with Colorado Parks and Wildlife (CPW) in advance of permitting. Please see Appendix K for CPW correspondence.
	WL2 Policy: Stewardship of critical ecosystem components should be encouraged, including	No critical ecosystem components, including wetlands and significant wildlife habitats, will be impacted by the Project.

Goals	Policies	Project Compliance
	wetlands and other significant wildlife habitats	
	WL3 Policy: The County should evaluate the effect of proposed development upon wildlife, wildlife habitat and migration corridors.	The Project has been carefully sited outside of any mapped migration routes, calving areas, or concentration areas for wildlife species. Additionally, the Project layout is being designed to allow for continued wildlife movement throughout the area, including maintaining wildlife corridors in the existing drainages onsite.
Historic Resources (HR) Goal: Elbert County respects its rich history and encourages preservation of the resources that have contributed to the character of the County.	HR1 Policy: The County should encourage the preservation of historical sites and buildings as well as important archaeological and paleontological sites.	No archaeological or paleontological resources are known to occur within the areas onsite proposed for solar and BESS development. While there are two older structures within the larger Project area, they are in dilapidated condition and will be completely avoided by the Project.
Energy Conservation (EN) Goal: Elbert County strives to ensure permanent, renewable and reliable energy supplies.	EN1 Policy: The County should encourage energy conservation strategies, energy-efficient design and renewable energy resources to be incorporated at all levels of development.	The Project supports the Plan's goals for energy conservation and renewable energy development by introducing a clean, emission-free energy source that reduces reliance on foreign energy sources and mitigates air quality impacts.
Economic Growth (EG) Goal: Elbert County promotes strong, diverse economic development.	EG2 Policy: Elbert County should encourage economic development that provides a balance between commercial and residential tax assessments.	The Project supports this policy by contributing to non-residential tax base and diversifying County tax revenues, without increasing demand for services such as schools.

Goals	Policies	Project Compliance
		This improves the County's tax revenue balance while maintaining a low service burden.
	EG3 Policy: Elbert County should encourage the recruitment, expansion and diversification of the industrial economic base to achieve a well-balanced economy	The Project diversifies the County's economic base with new energy infrastructure. This introduces new private capital investment, supports regional grid reliability, and creates construction-phase employment without introducing a high-intensity land use.
	EG5 Policy: The County should encourage economic development that minimizes impacts on surrounding lands.	The Project is intentionally designed to minimize impacts to surrounding lands through voluntary setbacks, low-profile infrastructure, and BMPs for construction and operations, including dust mitigation, re-vegetation, erosion and sediment controls, and noxious weed management. A temporary increase in traffic will be largely minimized to the construction period.
	EG7 Policy: The County should encourage public-private collaboration that provides opportunities for the workforce.	The Project team has coordinated and involved a variety of external stakeholders, including members of the public, state agencies, Double El Conservation District, Big Sandy Fire Protection District, and Elbert County staff to incorporate feedback into Project planning.

5.2 2026 Comprehensive Plan Updates

The Applicant understands that Elbert County is in the process of revising its Comprehensive Plan. While the revised plan is still being drafted at the time of application submittal for the Project, the Applicant has carefully considered community feedback from the ongoing 2025 –

2026 Comprehensive Plan update process[10]. The Project has reviewed results and community feedback from the July – September 2025 online community survey, October 16, 2025 Open House, and January 26, 2026 Open House and identified several key themes. These themes are discussed below and evaluated in relation to the proposed Project.

Preservation of Rural Character:

Community feedback throughout the Comprehensive Plan update process has consistently emphasized the importance of preserving Elbert County's rural character. The Project location is sited within the Rural Preservation Land Use Category, as of the Draft Future Land Use Map shared at the Open House #2 on January 26, 2026. Rural Preservation land use areas are intended to "maintain the County's agricultural heritage, protect natural resources, and preserve open space while allowing very-low density residential development on parcels that are typically 35 acres or larger." The proposed Project is consistent with the intent of this designation.

The Project is a low-intensity, non-residential land use that maintains the open and rural nature of the surrounding area. Additionally, the Project has been intentionally designed to concentrate development within a condensed lease area, allowing approximately 698 acres of the parcels to remain outside of the Project footprint. These remaining acres will continue to be available for active agricultural operations and preserving the rural character of the property. The Project design is also considering the incorporation of agrivoltaics practices, such as sheep grazing, within portions of the leased area during the operations phase. This would further support the County's agricultural heritage.

Following construction, the Project will employ a small number of onsite personnel and as such, will not introduce growth patterns and pressures typically associated with residential development projects. Unlike other types of development projects, the proposed Project is essentially a reversible land use, in that at the end of its operational life, project components can be removed and the Site will be restored to pre-construction conditions to the extent practicable. This ensures continued long-term flexibility for future land use and responsible stewardship of agricultural land.

A recent state-wide analysis determined that ground-mounted solar projects occupy less than 0.022% of all land in CO and less than 1% of the state's agricultural land, making its footprint negligible compared to ongoing farmland loss associated with residential and exurban development (Appendix L). Additionally, more than 2,100 acres in CO are operating as agrivoltaics systems, demonstrating that solar and agriculture successfully co-exist.

Openness to Renewable Energy Projects along Existing Transmission Infrastructure

During the February 9, 2026 Comprehensive Plan Steering Committee meeting, general feedback from the Comprehensive Plan Open House #2, held in January 2026, expressed some openness to renewable energy projects along existing transmission corridors. The proposed Project is located directly adjacent to existing Tri-State transmission infrastructure and will connect into this existing system to deliver reliable, domestic energy to the Colorado grid. By

[10] Elbert County. 2026. Comprehensive Plan Update. Available online at: https://www.elbertcountycomprehensiveplan.com/

siting the Project close to existing transmission infrastructure, this significantly minimizes the need for new transmission infrastructure and maintains the Project's footprint entirely within the privately-owned parcels identified in Table 4.

Limited Residential Growth:

Results from both the community survey, as well as the October 2025 and January 2026 open houses, indicate that county residents support limited new residential growth in the County. The Project does not include any residential uses and does not generate demand for schools. By providing productive long-term land use that does not require new housing or associated services, the Project is consistent with community preferences to limit residential growth.

Compatible Economic Development:

The Comprehensive Plan Steering Committee has identified economic development opportunities within eastern Elbert County, focused around Simla and Matheson, as a key theme for the Comprehensive Land Use update. Additionally, community input has expressed support for economic activity that aligns with the County's rural character and does not introduce intensive industrial development.

The proposed Project provides local economic benefits, which are thoroughly discussed in Section 15, 16, and 23 of this application narrative, and include economic benefits ranging from short-term construction employment to additional tax revenue, all without urbanization. During the October 2025 Open House for the Comprehensive Plan update, seven participants indicated support for non-residential growth in the Simla and Matheson general area. The Project is consistent with this input, as it represents a non-residential use that provides economic benefits while maintaining rural land use patterns.

Minimal Demand on Infrastructure and Public Services:

The 2025 community survey identified infrastructure capacity and roadway conditions as important considerations for future development. The Project has minimal long-term infrastructure demands and negligible need for public services. Traffic associated with the Project is primarily short-term during construction. Prior to construction, the Applicant will obtain approval from the Elbert County Department of Public Works for all access routes and construction-related traffic. The Applicant will also enter into a Road Use Agreement with the County, which includes requirements to post a financial security or bond to ensure that County roadways are maintained and repaired, if necessary. These measures ensure that the Project does not create long-term impacts to County infrastructure and that any temporary effects are appropriately mitigated. Additionally, the Project will introduce a stable, state-assessed property tax stream and modest operating employment will provide resources for public safety, schools, libraries that exceed the incremental service needs, thereby avoiding an undue burden on existing residents.

6. SUR Pre-application Procedures and Public Notice Requirements

6.1 Pre-application Meeting

A pre-application meeting for the Project was initially held on November 22, 2023. During the pre-application meeting, the Project, then known as Grey Wolf Solar, was confirmed to be subject to Ebert County's Special Use by Review (SUR) process. A second pre-application meeting was conducted on April 23, 2025, to provide an update on the project, confirm permitting processes, and solicit additional initial feedback from Elbert County staff.

6.2 Community Feedback about Project to Date

The Applicant hosted a community open house at the Hope Community Center on December 8th, 2025. The event was noticed per Elbert County standards that were effective as of the community meeting date. Elbert County community members shared questions about long-term land stewardship, end-of-life obligations, visual and environmental effects, fire safety, electricity distribution, and local economic benefits. The Applicant provided a project overview presentation explaining the project's size and configuration, use of existing grid infrastructure, preliminary timeline, and future project decommissioning. Discussion with Application representatives following the presentation covered the planned decommissioning bond, coordination with the local fire district on emergency response, erosion control, dust mitigation, prairie dog management, and the project's anticipated fiscal contributions through property tax and local spending.

The Applicant emphasized that the Project is operating as a long-term lease and thus the land will be restored to its prior condition after project completion. In the event of bankruptcy or project cancellation, there is a well-defined layered approach to long-term assurance to protect the community from financial burden. First, the project will be backed by a decommissioning bond sized in consultation with the County and adjusted for inflation over time, so sufficient funds are reserved to dismantle project equipment and restore the Site. Second, the Power Purchase Agreement (PPA) provides a contractual framework that helps maintain financial viability, and the parent company's support further reduces abandonment risk. Third, at the end of the Project's operation, in accordance with the Project's Decommissioning Plan (Appendix M), all equipment will be removed offsite. The Site will be reclaimed to its pre-existing condition and the decommissioning bond serving as a financial guarantee of that commitment. For more information about the Project's economic impact on Elbert County, see Appendix F.

The Applicant explained that the Project is located on open land rather than on rooftops or parking lots because utility-scale solar requires large, contiguous, relatively flat areas near existing transmission to be technically and economically viable. The selected Site leverages existing infrastructure by interconnecting directly into the Tri-State system onsite. The Project will minimize any new overhead electrical lines to the extent practicable. Electrical infrastructure

may be installed overhead or underground, as appropriate for site conditions, safety, and engineering requirements.

Furthermore, the Applicant clarified that the Project is not related to Xcel's Power Pathways project and reiterated that the Project will rely on existing infrastructure (Appendices A and B). Visual simulations presented at the meeting show limited visibility of the Project due to siting and topographic screening. For the full visual analysis report, please see Appendix H.

The Applicant provided clarity about facilities of fire safety and liability. The project insurance covers liability for any fires caused by project equipment and, in coordination with the Big Sandy Fire Protection District, the Project will include an onsite 30,000 gallon water tank and develop a comprehensive emergency response plan. Figure 2 below is an example of what the anticipated water storage tank may look like.



Figure 2. Image of anticipated 30,000 gallon water storage tank.

There were also questions about how the Project's land agreement is structured; the Project has secured land rights through confidential lease agreements in accordance with the landowner's private property rights. Community members asked whether electricity would

remain in Elbert County. The Applicant explained that power will flow into the Tri-State grid which feeds regional power co-ops including Mountain View Electric Association. While power cannot be reserved locally, the facility is expected to deliver approximately $29 million in property tax revenue, $7 million in operational tax revenue, and $49 million in local spending over its lifecycle. These economic contributions demonstrate alignment with Elbert County's approval criteria, Elbert County's Comprehensive Plan, and a commitment to long-term community value.

Meeting attendees also requested an overview of the projected Project timeline. The timeline consists of near-term permitting, with construction anticipated to begin as early as 2028 and may take up to two years. Commercial operation is anticipated as early as 2030 with an approximately 40-year operating life supported by onsite technicians and operational staff. Throughout the duration of the Project, the land would continue to be owned by the original landowners of the community and at the end of the lease term, the land would be restored to previous site conditions and could be reverted to its agricultural usage by the landowners.

At the conclusion of the meeting, two community members provided the Applicant with comment letters. One letter received from the Double El Conservation District highlighted the following concerns, which are addressed below. Since the December 2025 meeting, the Applicant has attempted to coordinate with the Double El Conservation District to get further agency feedback and ideas to address their concerns.

• Loss of prime farmland and agricultural productivity:

As of the most recent U.S. Department of Agriculture (USDA) Census of Agriculture conducted in 2022, the proposed Site comprises 0.2% of total farmland acreage in the County. Any short-term construction period activities are temporary and mitigated through standard best practices. Once the Project is fully decommissioned, the Site will be able to return to agricultural use, if desired by the landowners. Additionally, the Project lease boundaries were intentionally drawn to allow continuation of agricultural activities on remaining portions of the leased parcels. The Project team is also evaluating the possibility of incorporating agrivoltaics into the Project’s operational phase, which may include sheep grazing, honoring the agricultural heritage of the County and supplementing operational mowing efforts.

• Soil disturbance, compaction, and erosion risks:

Soil disturbance will be minimized wherever possible. All disturbed areas shall be watered until sufficiently wet. Wind erosion control techniques such as water, chemical dust suppressants, and/or vegetation will be used on all disturbed areas during construction. If needed, soil will be decompacted before planting to support re-vegetation efforts. To prevent erosion, a GESC plan (Appendix B, Sheets C-5 through C-31) and a SWPPP will be implemented to control construction stormwater drainage, reduce dust, and apply BMPs for earthwork

• Impacts to WQ and hydrology:

The Project has created a Stormwater and Drainage Report (Appendix G) that will, in addition to the SWPPP, protect and maintain WQ through the use of BMPs and avoidance measures. Before construction, the Applicant will obtain a stormwater discharge permit from the CDPHE, supported by a SWPPP. Engineered water-quality and detention basins designed in accordance with Mile High Flood District standards will treat and detain runoff from the substation and BESS facility to prevent increases in peak flows or pollutant loads to downstream surface waters

• Pest pressure and vegetation management challenges:

Based on onsite surveys, there are presently no known prairie dog colonies at the Site. Operational personnel will be trained to identify prairie dogs and their colonies. Should prairie dog colonies be identified onsite, onsite personnel will evaluate options to control the colony in accordance with state regulations and BMPs to prevent inadvertent impacts on other species that may utilize prairie dog burrows as habitat. Additionally, there are no known noxious weeds onsite based on onsite surveys to date. Onsite personnel will be trained to identify noxious weeds listed by the Elbert County Noxious Weed Advisory Board for eradication purposes. If identified, weed control may include targeted chemical or manual treatment. Herbicides will be applied in accordance with label instructions and all applicable environmental and regulatory requirements. Vegetative ground cover for disturbed areas will be placed using methods such as drill seeding, hydroseeding, or other effective methods as soon as practicable.

• Habitat fragmentation and wildlife impacts

The project has incorporated several measures to prevent habitat fragmentation and has incorporated CPW feedback into the Project's design and fencing design. The Project's fencing will be wildlife-friendly, including a smooth top wire in place of the traditional barbed wire to prevent entanglement, especially for large mammal species such as deer and antelope. Additionally, fencing will be designed to allow the maintenance of wildlife corridors throughout the site and around riparian corridors and wetlands.

• Availability of more suitable locations

Utility-scale solar needs to be located on large, contiguous tracts of land and cannot be sited on rooftops. The Project was intentionally sited near existing Tri-State transmission infrastructure to minimize construction of new transmission infrastructure.

One letter received from a community member, Ms. Juliet Pfost, identified pest pressure and pest management as a concern, which is addressed in the response to the Double El Conservation District letter above. Ms. Pfost's letter also included the following concerns, which are directly responded to below, as well as throughout the application.

• Fire Risk and Emergency Access

Due to industry safety standards and technology improvements, fire risk associated with the Project is expected to be minimal. As part of the Project's support for emergency response personnel, the Project will install and maintain a 30,000-gallon water tank onsite for fire suppression use throughout the community. Additionally, a thorough emergency response plan

will be developed in coordination with the BSGPD and Elbert County Office of Emergency Management. The Project also commits to reoccurring training and resources to prepare emergency response personnel on how to safely manage an onsite fire event, in the unlikely event that one should occur. Vegetation will also be strictly managed and maintained around the site, reducing fire propagation risk.

• Glare Impacts on my Home

Solar panels utilized for the Project will contain an anti-reflective coating to reduce glare and are intentionally designed to absorb sunlight, rather than reflect it.

• Traffic and Road Safety

A traffic plan is included in Appendix E, which provides further insight into traffic management and anticipated construction vehicle routes. Prior to construction, the Project will enter into a Road Use Agreement with Elbert County and will conduct any road improvements necessary to support construction of the project. Dust suppression via water trucks will be conducted on an as-needed basis. After completion of the Project's construction, per the Road Use Agreement, the Project will be required to improve any damage on county roads back to pre-construction conditions.

• Unclear Community Support or Benefits

The Project is expected to deliver long-term benefits to Elbert County and its residents. The Project is expected to generate approximately $49.1 million in total economic output and $949,000 in local tax revenues during the construction period. Increased property tax revenues throughout the operational period will support County services, schools, and infrastructure, including approximately $11.5 million to Big Sandy Schools. These significant economic benefits will assist the community while not placing any infrastructure burden on schools, housing, sewer, or other public infrastructure, aside from temporary road use during construction which is addressed above. Additionally, once the Project is operational, it will improve electrical grid stability to support the region's energy needs and contribute to economic diversification within the County. In addition to the economic benefits, the Applicant also intends to install and maintain a 30,000-gallon water tank onsite to support community fire response efforts and is also considering local road improvements, potentially including a five-mile stretch of County Road 54, between County Roads 149 and 169. This road improvement effort will allow for quicker response times from BSFPD and is estimated to reduce the school bus route by approximately 30 minutes.

In addition to the community open house hosted on December 8, 2025, the Applicant has closely involved local Emergency Medical Services (EMS), including both BSFPD and Elbert County Office of Emergency Management personnel in preliminary project planning efforts. Additional coordination to ensure that local services are appropriately supported through construction and project operations remains an ongoing priority for the Project.

6.3 Upcoming Community Meetings

The Applicant will voluntarily host an additional open house prior to the permitting hearing with the Board of County Commissioners to follow up with residents on questions asked during the initial open house and provide additional detail regarding project timeline and next steps.

As of the date of application submission, this open house is scheduled for April 1, 2026 at the Elbert County Agricultural Building in Kiowa, CO.

6.4 Public Notices

The December 8, 2025, open house was noticed in accordance with County noticing requirements, including posted signage and mailed notices to the required residents.

The April 1, 2026 open house will be noticed in accordance with County noticing requirements and guidance from Elbert County Community and Development Services (CDS). The Elbert County Assessor's Office has provided a radius report for all parcels within 2,640 ft of the Site for notification of the upcoming community open house (Appendix P).

Additionally, information about the Project and related community meetings has been made available to the public through the Development Projects Report and Map on the Elbert County website.

BayWa r.e.
r.e.think energy

Shepherd Solar

Appendices

Elbert County, Colorado



SUR Appendix B

Civil Construction Drawings of Grading, Erosion, and Sediment Control Plan

PRELIMINARY DESIGN SUBMITTAL

CIVIL CONSTRUCTION DRAWINGS

GRADING, EROSION, & SEDIMENT CONTROL PLAN

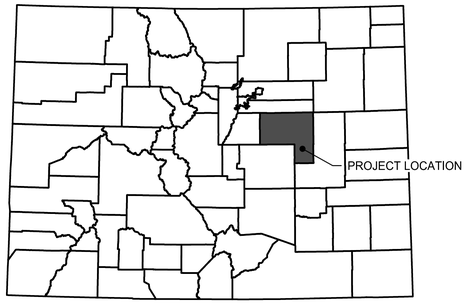
FOR

SHEPHERD SOLAR

LOCATED IN

ELBERT COUNTY, CO

PROJECT LOCATION MAP
(NOT TO SCALE)



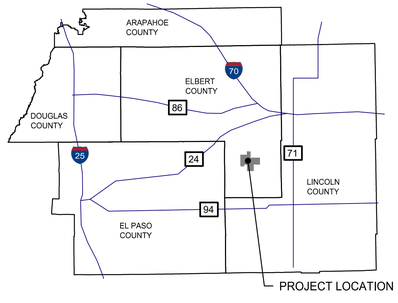
PROJECT DIRECTORY

APPLICANT/OWNER
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ELECTRICAL ENGINEER
ELECTRIC POWER ENGINEERS
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AUSTIN, TX 78735
CONTACT: RICARDO SOUSA
RSOUSA@EPECONSULTING.COM

VICINITY MAP
(NOT TO SCALE)



SITE INFORMATION

PARCEL ZONING
ZONE A (AGRICULTURE)

PROJECT DESCRIPTION
309 MWdc/231 MWac SINGLE AXIS TRACKER SOLAR ARRAY, 100MW BESS HYBRID PROJECT

COORDINATE SYSTEM
NAD83 COLORADO STATE PLANES, CENTRAL ZONE, US FOOT

BENCHMARK
TBD

FLOOD ZONE MAPPING
FEMA FLOOD INSURANCE RATE MAP (FIRM) PANEL 08039C0950C ELBERT COUNTY, COLORADO UNINCORPORATED AREAS (EFFECTIVE 03/17/2011) - FEMA ZONE A IS PRESENT WITHIN SITE LIMITS, THOUGH OUTSIDE OF THE LIMITS OF DISTURBANCE.

COLORADO 811
Know what's below. Contact 811 before you dig.

PLAN CONTENTS

SHEET NUMBER	SHEET TITLE	REV	REV DATE	EOR
C-1	COVER SHEET	C	3/5/2026	EAE
C-2	NOTES AND LEGEND	C	3/5/2026	EAE
C-3	EXISTING CONDITIONS	C	3/5/2026	EAE
C-4	SITE CONSTRAINTS	C	3/5/2026	EAE
C-5	PRELIMINARY GRADING AND SITE PLAN OVERVIEW	C	3/5/2026	EAE
C-6	PRELIMINARY REMOVAL PLAN	C	3/5/2026	EAE
C-7	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-8	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-9	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-10	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-11	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-12	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-13	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-14	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-15	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-16	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-17	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-18	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-19	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-20	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-21	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-22	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-23	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-24	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-25	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-26	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-27	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-28	PRELIMINARY GRADING AND SITE PLAN	C	3/5/2026	EAE
C-29	PRELIMINARY O&M GRADING AND SITE PLAN	C	3/5/2026	EAE
C-30	PRELIMINARY BESS GRADING & SITE PLAN	C	3/5/2026	EAE
C-31	PRELIMINARY UTILITY PADS GRADING & SITE PLAN	C	3/5/2026	EAE
C-32	CROSS SECTIONS - O&M AND BESS	C	3/5/2026	EAE
C-33	CROSS SECTIONS - SUBSTATION AND SWITCHYARD PADS	C	3/5/2026	EAE
C-34	CROSS SECTIONS - SWITCHYARD	C	3/5/2026	EAE
C-35	SIGHT DISTANCE INTERSECTION ANALYSIS	C	3/5/2026	EAE
C-36	SIGHT DISTANCE INTERSECTION ANALYSIS	C	3/5/2026	EAE
C-37	PRELIMINARY ESC PLAN	C	3/5/2026	EAE
C-38	PRELIMINARY ESC PLAN	C	3/5/2026	EAE
C-39	PRELIMINARY ESC PLAN	C	3/5/2026	EAE
C-40	PRELIMINARY ESC PLAN	C	3/5/2026	EAE
C-41	PRELIMINARY ESC PLAN	C	3/5/2026	EAE
C-42	PRELIMINARY ESC PLAN	C	3/5/2026	EAE
C-43	ESC DETAILS	C	3/5/2026	EAE
C-44	ESC DETAILS	C	3/5/2026	EAE
C-45	TYPICAL DETAILS	C	3/5/2026	EAE
C-46	STORM SEWER DETAILS	C	3/5/2026	EAE
C-47	FENCE AND GATE DETAILS	C	3/5/2026	EAE
C-48	LANDSCAPE SITE PLAN	C	3/5/2026	RS
C-49	LANDSCAPE DETAILS	C	3/5/2026	RS

PHASING NOTES

1. INITIAL AND INTERIM BMP'S AS NOTED ON PLANS SHALL BE INSTALLED PRIOR TO ANY GRADING OR LAND DISTURBING ACTIVITIES ON SITE. INITIAL AND INTERIM BMP'S SHALL BE LEFT IN PLACE UNTIL VEGETATION IS ESTABLISHED BY THE FINAL BMP'S AND THE PROJECTS NOTICE OF TERMINATION IS FILED.
2. FINAL BMP'S SHALL BE INSTALLED AFTER SITE IMPROVEMENTS ARE MADE AND SHALL BE ESTABLISHED PRIOR TO FINAL APPROVAL BY THE COUNTY.
3. ADDITIONAL GRADING, EROSION, AND SEDIMENT CONTROL MEASURE MAY BE REQUIRED OF THE OWNER OR HIS/HER AGENTS, DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT FUNCTION AS INTENDED.

THE GRADING, EROSION, AND SEDIMENT CONTROL (GESC) DOCUMENT FOR SHEPHERD SOLAR, LLC., HAS BEEN PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND TO THE BEST OF MY KNOWLEDGE AND ABILITY HAS BEEN PREPARED IN ACCORDANCE WITH THE CURRENT VERSION OF THE ELBERT COUNTY CONSTRUCTION STANDARDS & SPECIFICATIONS.

REGISTERED PROFESSIONAL ENGINEER:
EARTH A. EVANS
STATE OF COLORADO NO :0053515

WSB LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 555416
(763) 541-4800

THE SHEPHERD SOLAR PROJECT COMPRISES MULTIPLE LICENSED INDIVIDUALS FROM WSB AS LISTED BELOW AND CROSS REFERENCED ON SHE SHEET (SEE SHEET C-2) BY DEFINED LETTER DESIGNATORS.

EAE - EARTH A. EVANS, PE 0053515
RS - ROBERT SLIPKA, PLA 0001260

THESE GESC PLANS HAVE BEEN REVIEWED BY ELBERT COUNTY FOR GRADING, EROSION, AND SEDIMENT CONTROL IMPROVEMENTS ONLY

FOR AND ON BEHALF OF THE
ELBERT COUNTY
ROAD & BRIDGE DEPARTMENT

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

SCALE:	DESIGN BY:
AS SHOWN	CMM
PLAN BY:	CHECK BY:
CRN	EAE

REVISIONS

NO.	DATE	DESCRIPTION
A	01/26/2026	INITIAL PRELIMINARY DESIGN
B	02/25/2026	REVISED PRELIMINARY DESIGN
C	03/05/2026	REVISED PRELIMINARY DESIGN

THIS DOCUMENT IS RELEASED FOR COORDINATION PURPOSES ONLY UNDER THE AUTHORITY OF:

EARTH A. EVANS,
P.E. #0053515
ON 03/05/2026

AND IS NOT FOR CONSTRUCTION.

COVER SHEET

COLORADO LICENSED EARTH EVANS 53515 PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-1

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- SURVEYED SURFACE LIMITS
- PROJECT BOUNDARY/ LEASE LIMIT
- INTERNAL BOUNDARY / LEASE LINES
- SECTION LINES
- EXISTING OVERHEAD POWER
- EXISTING WATER LINE
- EXISTING BURIED FIBER LINE
- EXISTING GAS LINE
- EXISTING TELEPHONE (UNDERGROUND)
- EXISTING STORM SEWER
- EXISTING OIL LINE
- OVERHEAD POLES AND TOWERS
- EXISTING FENCE
- EXISTING RAILROAD
- EXISTING ROAD
- EXISTING TREE LINE
- EXISTING CULVERTS
- REMOVE TREE
- REMOVE FENCE
- REMOVE GRAVEL ROAD
- PROPOSED PERIMETER FENCING
- PROPOSED MEDIUM VOLTAGE FEEDER
- PROPOSED CULVERTS
- CORRECTIVE GRADING LIMITS
- SECTION LINES
- SILT FENCE PERIMETER
- FLOODPLAIN LIMITS
- FEMA FLOODPLAIN LIMITS
- WETLAND WATER BOUNDARY
- LIMITS OF DISTURBANCE
- JURISDICTIONAL STREAM CENTERLINE
- NON-JURISDICTIONAL STREAM CENTERLINE

- SOLAR PANEL POWER BLOCK
- EXISTING OBSCURE AREA
- FEMA 100-YEAR FLOODPLAIN
- EXISTING EASEMENT RESTRICTIONS PER BAYWA
- TREE CLEAR AND GRUB
- TEMPORARY & PERMANENT SEEDING AREA
- EROSION CONTROL BLANKET
- PROPOSED GRAVEL ROAD
- PROPOSED LWX - SEE SHEET C-5
- TEMPORARY CONSTRUCTION ENTRANCE
- EXISTING WETLANDS WITH SETBACK
- EXISTING NON-JURISDICTIONAL WETLANDS
- 100-YR INUNDATION LIMITS (1 FEET)
- 100-YR INUNDATION LIMITS (2 FEET)
- 100-YR INUNDATION LIMITS (3 FEET)
- EXISTING DRAINAGE DIRECTION
- PROPOSED DRAINAGE DIRECTION
- ACCESS A — PROPOSED ENTRANCE ID
- LWX-1L3 — PROPOSED LOW WATER CROSSING, SEE TABLE ON SHEET C-5
- PROPOSED GATE - SEE SHEET C-47
- R# OR RX — TYPICAL DETAIL - SEE SHEET C-45
- CTW — CONCRETE TRUCK WASHOUT AREA

TYPICAL SHORTHAND KEY

BEG	BEGIN
BFE	BASE FLOOD ELEVATION
BVC	BEGINNING OF VERTICAL CURVE
CL	CENTERLINE
CR	COUNTY ROAD
CSAH	COUNTY STATE AID HIGHWAY
E	EASTING
EG	EXISTING GRADE ELEVATION
END	END
EVC	END OF VERTICAL CURVE
FG	FINISH GRADE ELEVATION
HP	HIGH POINT
HWL	HIGH WATER LEVEL
HWY	HIGHWAY
INV	INVERTER
LP	LOW POINT
LWX	LOW WATER CROSSING
MAX	MAXIMUM
MIN	MINIMUM
N	NORTHING
PB	POWERBLOCK
PROF	PROFILE
PVI	POINT OF VERTICAL INTERSECTION
RG	ROUGH GRADE ELEVATION
RR	RAILROAD
RXX'	RADIUS XX FEET
SS	SUBSTATION
STA	STATION
UON	UNLESS OTHERWISE NOTED

ALIGNMENT DESIGNATION KEY

ALIGNMENT DESIGNATIONS FOR "LANES" AND "HAMMERHEADS" BASED ON THE FOLLOWING:

LANES	HAMMERHEADS
AL#	AHH#

A = AREA DESIGNATION
L = LANE (PV ROAD)
HH = HAMMERHEAD
# = NUMERICAL LANE

SOLAR PROJECT SPECIFIC NOTES

1. THE PROPOSED SOLAR ARRAY LAYOUT, INCLUDING SKID PADS, FOR THIS PROJECT WAS PREPARED AND PROVIDED BY THE ELECTRICAL ENGINEER NOTED ON TITLE SHEET.
2. ALTA SURVEY INFORMATION DISPLAYED HEREON WAS PROVIDED BY ULTEIG, PDF DATED AUGUST 15, 2025.
3. CONTRACTOR SHALL FIELD VERIFY SURVEY CONTROL AND DESIGN COORDINATES PRIOR TO START OF CONSTRUCTION.
4. SITE PREPARATION NOTES INCLUDED HEREON ARE PER GEOTECHNICAL ENGINEERING REPORT PREPARED BY TERRACON DATED OCTOBER 30, 2019.
5. NO WORK WITHIN ANY PIPELINE OR OVERHEAD EASEMENT SHALL COMMENCE UNTIL A FORMAL AGREEMENT BETWEEN BAYWA AND THE EASEMENT OWNER IS OBTAINED.
6. BIDDER TO ASSUME / ENSURE PROPER ACCESS BETWEEN FENCES AND DITCHES. 15' CLEARANCE REQUESTED BY BAYWA FOR VEHICULAR ACCESS.

GENERAL CONSTRUCTION NOTES

1. ALL CONSTRUCTION ACTIVITIES SHALL COMPLY TO THE DUST CONTROL REQUIREMENTS OF THE NPDES AND LOCAL JURISDICTION(S). NO SITE SPECIFIC DUST CONTROL PLAN HAS BEEN PREPARED.
2. ALL CONSTRUCTION ACTIVITIES SHALL COMPLY WITH A SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN (SPCC) TO BE PREPARED FOR THIS PROJECT.
3. ALL CONSTRUCTION ACTIVITIES SHALL COMPLY WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THIS PROJECT AND ARE HEREBY INCORPORATED BY REFERENCE TO THIS PROJECT PLAN.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR(S) TO BE FULLY INFORMED OF, AND TO COMPLY WITH, ALL LAWS, ORDINANCES, CODES, REQUIREMENTS AND STANDARDS WHICH IN ANY MANNER AFFECT THE COURSE OF CONSTRUCTION OF THIS PROJECT, THOSE ENGAGED OR EMPLOYED IN THE CONSTRUCTION, OR THE MATERIALS USED IN CONSTRUCTION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE PUBLIC AND PRIVATE PROPERTY ADJACENT TO THE WORK AREA AND SHALL EXERCISE DUE CAUTION TO AVOID DAMAGE TO SUCH PROPERTY. THE CONTRACTOR SHALL REPLACE OR REPAIR, TO THEIR ORIGINAL CONDITION, ALL EXISTING IMPROVEMENTS WITHIN OR ADJACENT TO THE WORK AREA, WHICH ARE NOT DESIGNATED FOR REMOVAL, AND ARE DAMAGED OR REMOVED AS A RESULT OF THEIR OPERATIONS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND PRESERVATION OF ALL EXISTING SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKERS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
7. CONSTRUCTION CONTRACTOR SHALL MAINTAIN A CURRENT, COMPLETE, AND ACCURATE RECORD OF ANY AND ALL CHANGES FROM THE CONSTRUCTION, AS PROPOSED IN THESE PLANS AND SPECIFICATIONS, FOR THE PURPOSES OF PROVIDING THE ENGINEER WITH A BASIS FOR AS-BUILT DRAWINGS. NO CHANGES SHALL BE MADE TO THESE PLANS WITHOUT PRIOR APPROVAL OF THE ENGINEER OF RECORD AND NOTIFICATION OF THE LOCAL AHJ HAVING AUTHORITY TO APPROVE THE PLANS.
8. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS AND ITEMS SHOWN TO BE REMOVED AS A PART OF THIS PROJECT AT A LICENSED FACILITY OPERATING UNDER LOCAL, STATE, AND/OR FEDERAL REGULATIONS.
9. A REGISTERED CIVIL ENGINEER MUST CERTIFY THAT THE IMPROVEMENTS, WHEN COMPLETED, ARE IN ACCORDANCE WITH THE PLANS, PRIOR TO THE REQUEST FOR FINAL INSPECTION. RECORD DRAWINGS ARE TO BE PREPARED AFTER CONSTRUCTION IS COMPLETED. THE CIVIL ENGINEER CERTIFYING THE IMPROVEMENTS AND PREPARING THE AS-BUILT PLANS SHALL BE PRESENT WHEN THE FINAL INSPECTION IS MADE.
10. IN ABSENCE OF THE PROJECT'S ENGINEER OF WORK, A THIRD-PARTY ENGINEER, IN GOOD STANDING AND LICENSED WITHIN THE JURISDICTION OF THIS PROJECT, MAY MAKE CHANGES TO THIS PLAN AS ALLOWED AND OUTLINED BY THE STATE'S PRACTICE ACTS AND RULES, OR SIMILAR GOVERNING DOCUMENT. THE THIRD-PARTY ENGINEER SHALL STAMP ALL CHANGES AND SHALL ASSUME FULL RESPONSIBILITY FOR THE ASSOCIATED CHANGES AS GOVERNED BY STATE LICENSING RULES. THE THIRD-PARTY ENGINEER SHALL PROVIDE NOTIFICATION TO THE ENGINEER OF WORK AND OBTAIN APPROVALS, AS REQUIRED, BY THE LOCAL AHJ FOR SAID CHANGES OR MODIFICATIONS.
11. NEITHER THE OWNER NOR THE ENGINEER OF WORK NOR THE ENGINEER OF RECORD WILL ENFORCE SAFETY MEASURES OR REGULATIONS, THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATES, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS. THIS DOES NOT ABSOLVE ANY LICENSED PROFESSIONAL FROM REPORTING SUSPECTED SAFETY VIOLATIONS TO THE OWNER, CONTRACTOR, AND/OR LOCAL AHJ.

GRADING NOTES

1. ALL GRADING AND RELATED CONSTRUCTION SHALL CONFORM TO THE STATE AND LOCAL REQUIREMENTS AND ADOPTED ORDINANCES, INCLUDING THE MOST CURRENT EDITION OF THE INTERNATIONAL BUILDING CODE AND THE PROJECT SPECIFIC GEOTECHNICAL REPORT.
2. STRAIGHT AND UNIFORM GRADES SHALL BE ESTABLISHED BETWEEN SPOT ELEVATIONS.
3. CONTOURS SHOWN HEREON ARE TO FINISHED SURFACE.
4. ALL PROJECTS INVOLVING SITE DISTURBANCE OF ONE ACRE OR GREATER SHALL COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (GEORGIA NPDES). THE CONTRACTOR SHALL BE RESPONSIBLE FOR FILING THE NOTICE OF INTENT TO THE STATE OR LOCAL AHJ.
5. REVEGETATION SHALL BE PLACED ON ALL DISTURBED SURFACES OTHER THAN PAVED OR GRAVEL SURFACES, IN ACCORDANCE WITH THE PROJECT'S REVEGETATION PLAN AS NOTED ON THE EROSION CONTROL PLANS.
6. SOIL TESTS SHALL BE COMPLETED IN ACCORDANCE WITH THE FINAL GEOTECHNICAL REPORT. ALL TESTS MUST BE MADE WITHIN FIFTEEN DAYS PRIOR TO PLACING MATERIAL. THE TEST RESULTS SHALL CLEARLY INDICATE THE LOCATION AND SOURCE OF THE MATERIAL.
7. COMPACTION TESTS SHALL BE MADE ON SUBGRADE MATERIAL AND MATERIAL AS SPECIFIED BY THE GEOTECHNICAL ENGINEER. SAID TESTS SHALL BE MADE PRIOR TO PLACING THE NEXT MATERIAL. COMPACTION TESTS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER.
8. ROAD SUBGRADE MATERIAL SHALL BE COMPACTED TO A RELATIVE COMPACTION OF 98% STANDARD PROCTOR AND TO A MINIMUM DEPTH OF TWELVE INCHES. WORK WITHIN LOCAL AHJ AREAS SHALL BE SUBJECT TO AHJ REQUIREMENTS IF MORE STRINGENT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCAL AHJ STANDARDS FOR ALL WORK WITHIN THE AHJ'S RIGHT-OF-WAY.
9. ALL UNSUITABLE MATERIALS SHALL BE REMOVED FROM THE PROJECT SITE AND TAKEN TO A SUITABLE DISPOSAL SITE, UNLESS OTHERWISE PERMITTED OR DIRECTED BY THE LOCAL AHJ.
10. DUST CONTROL IS TO BE MAINTAINED BY AN APPROPRIATE MOISTURE CONSISTENT AT ALL TIMES UPON COMMENCEMENT OF WORK, INCLUDING PERIODS OF SUSPENSION OF WORK, UNTIL FINAL ACCEPTANCE OF THE PROJECT. PROJECT SPECIFIC DUST CONTROL AND MITIGATION PLANS, IF PREPARED, SHALL GOVERN IF THERE IS A CONFLICT WITH THIS NOTE.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EARTHWORK QUANTITIES FOR BIDDING PURPOSES, AND SHALL MAKE THEIR OWN ALLOWANCES FOR BULKING, OVER EXCAVATION, COMPACTION LOSSES, LOSSES DUE TO CLEARING AND/OR SUBSIDENCE, AND GAINS FROM TRENCH SPOILS. EARTHWORK VOLUMES REPRESENTED HEREON ARE RAW QUANTITIES BASED ON EXISTING GROUND TO FINISHED GROUND SURFACES UNLESS OTHERWISE INDICATED.
12. TREE REMOVAL SHALL BE LIMITED TO THAT SHOWN ON FINAL GRADING PLANS.
13. A GEOTECHNICAL OR CIVIL ENGINEER SHALL ASSESS THAT GRADING IS PERFORMED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS AND IS SUITABLE TO SUPPORT THE INTENDED STRUCTURE(S).
14. THE CONTRACTOR IS RESPONSIBLE FOR SITE DRAINAGE DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES SHALL NOT MODIFY OR OTHERWISE ADJUST THE GRADING PLANS OF THIS PROJECT IN WAYS THAT WOULD CAUSE DAMAGE TO EXISTING FACILITIES OR NEIGHBORING PROPERTIES.
15. SITE PREPARATION – CONSTRUCTION AREAS FOR THE PROPOSED BUILDING AND SUBSTATION STRUCTURES SHOULD BE STRIPPED OF VEGETATION, TOPSOIL, TREES, EXISTING PAVEMENTS (INCLUDING CRUSHED STONE MATERIAL) AND OTHER DEBRIS/UNSUITABLE SURFACE MATERIAL. TOPSOIL MAY BE STOCKPILED. IF SO, IT SHALL BE IMMEDIATELY STABILIZED UNTIL RE-SPREAD FOR USE TO RE-VEGETATE DISTURBED AREAS AFTER GRADING OPERATIONS ARE COMPLETED. SUBGRADE SHALL BE PROOF ROLLED.
16. EARTHWORK BALANCE – THE INTENTION OF THE GRADING DESIGN IS TO BALANCE THE EARTHWORK ON SITE WITHOUT THE NEED FOR IMPORT OR EXPORT. THE CONTRACTOR SHALL FIELD ADJUST CUT AND FILL AS NECESSARY TO CREATE A BALANCED SITE WITHOUT NEGATIVELY IMPACTING DRAINAGE PATTERNS, INCLUDING WETLANDS, INCREASING MAXIMUM SLOPES, OR VIOLATING THE PILE REVEAL MAXIMUM AND MINIMUM HEIGHTS. PER PRELIMINARY GEOTECHNICAL REPORT, SHRINKAGE IS ESTIMATED AT 5 TO 10 PERCENT WHEN COMPACTING THE UPPER 2 FEET OF ON-SITE SOILS. SOILS USED FOR FILL SHOULD BE TESTED FOR ATTERBERG LIMITS AND PARTICLE SIZE DISTRIBUTION PRIOR TO PLACEMENT TO ENSURE SUITABILITY FOR STRUCTURAL FILL. EXPANSIVE CLAYS ARE NOT RECOMMENDED FOR ENGINEERED FILL BENEATH FOUNDATIONS OR SLABS.

UTILITY NOTES

1. LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES WHERE SHOWN ON THE PLANS ARE BASED ON AVAILABLE RECORDS AND ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL HAND EXPOSE UTILITIES AT LEAST 100 FEET AHEAD OF CONSTRUCTION IN ORDER TO VERIFY LOCATION AND DEPTH. A HYDROVAC MAY BE USED IN LIEU OF HAND EXPOSING UTILITIES, IF DEEMED ACCEPTABLE BY THE UTILITY OWNERS, TO VISUALLY VERIFY UTILITY LOCATIONS. CONTRACTOR AGREES THEY SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR LOCATING OR HAVING LOCATED ALL UNDERGROUND UTILITIES AND OTHER FACILITIES AND FOR PROTECTING THOSE IDENTIFIED BY LOCAL UNDERGROUND SERVICES ALERT DURING THE COURSE OF PROJECT CONSTRUCTION. ANY DEVIATIONS FROM THE PLAN LOCATION OF EXISTING FACILITIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF WORK, AND ENGINEER OF RECORD IF DIFFERENT, SO THE APPROPRIATE REVISIONS MAY BE MADE.
2. ALL UTILITY COMPANIES MUST BE NOTIFIED PRIOR TO THE START OF CONSTRUCTION BY PLACING A COLORADO 811 DIG ALERT.
3. CONSTRUCTION CONTRACTOR SHALL CONTACT LOCAL UNDERGROUND SERVICE ALERT AND MARKING AT LEAST 48 HOURS PRIOR TO START OF EXCAVATION AND SHALL VERIFY THE LOCATION OF ANY KNOWN UTILITIES, WHETHER OR NOT A REPRESENTATIVE OF EACH COMPANY WILL BE PRESENT DURING EXCAVATION.

MAINTENANCE NOTES

1. SITE ACCESS AND MAINTENANCE LANES HAVE BEEN DESIGNED TO MAINTAIN EXISTING DRAINAGE PATTERNS TO THE EXTENT FEASIBLE. ROADWAYS AND LANES ARE CONSTRUCTED AT OR NEAR EXISTING GROUND, WITH A CROSS SLOPE PROVIDED TO ALLOW CONTINUED SHEET FLOW OVER THE ROAD SURFACE. CONSTRUCTION OF ACCESS ROADS AND MAINTENANCE LANES WITH EXPOSED BASE MATERIALS WILL REQUIRE ROUTINE MAINTENANCE, PARTICULARLY IN AREAS OF REPEATED LOADING AND TURNING MOVEMENTS.
2. EROSION AND DETERIORATION OF THE DRIVING SURFACES WILL LIKELY OCCUR AFTER STORM EVENTS, REQUIRING ONGOING MAINTENANCE TO MAINTAIN THE ROAD SURFACE AND INTEGRITY OF THE STRUCTURAL SECTION. THIS WILL REQUIRE ADDING ROADWAY MATERIAL PER THE TYPICAL SECTIONS AND REGRADING/REPAIR OF THE ROAD SECTION AS NECESSARY BASED ON THE MAGNITUDE AND FREQUENCY OF THE STORM EVENT.

EROSION CONTROL NOTES

1. A NPDES/CDPS GENERAL PERMIT WILL BE ACQUIRED THROUGH THE COLORADO DEPARTMENT OF PUBLIC SAFETY FOR ANY CONSTRUCTION ACTIVITY THAT WILL DISTURB ONE ACRE OR MORE; OR CONSTRUCTION ACTIVITY THAT IS PART OF A COMMON PLAN OF DEVELOPMENT OR SALE.
2. THE PERMITTEE MUST IMPLEMENT CONTROL MEASURES TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM ALL POTENTIAL POLLUTANT SOURCES AT THE SITE WHICH, IF APPLICABLE, INCLUDES RUN-ON. CONTROL MEASURES USED TO MEET EFFLUENT LIMITATIONS MUST BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND PRIOR TO EACH PHASE OF CONSTRUCTION THAT INTRODUCES NEW POTENTIAL POLLUTANT SOURCES. CONTROL MEASURES MUST BE SELECTED, DESIGNED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH GOOD ENGINEERING, HYDROLOGIC AND POLLUTION CONTROL PRACTICES. CONTROL MEASURES IMPLEMENTED AT THE SITE MUST BE DESIGNED TO PREVENT POLLUTION OR DEGRADATION OF STATE WATERS.
3. CERTIFIED PERSONNEL SHALL CONDUCT AT LEAST ONE INSPECTION EVERY 7 CALENDAR DAYS; OR AT LEAST ONE INSPECTION EVERY 14 CALENDAR DAYS, IF POST-STORM EVENT INSPECTIONS ARE CONDUCTED WITHIN 24 HOURS AFTER THE END OF ANY PRECIPITATION OR SNOWMELT EVENT THAT CAUSES SURFACE EROSION. POST-STORM INSPECTIONS MAY BE USED TO FULFILL THE 14-DAY ROUTINE INSPECTION REQUIREMENT.
4. A STORMWATER MANAGEMENT PLAN SHALL BE DESIGNED, INSTALLED AND MAINTAINED FOR THE ENTIRE CONSTRUCTION ACTIVITY COVERED BY THE CDPS GENERAL PERMIT COR400000.
5. SPECIFIC CONTROL MEASURES MUST MEET THE REQUIREMENTS LISTED BELOW.
   (A) VEHICLE TRACKING CONTROLS MUST BE IMPLEMENTED TO MINIMIZE VEHICLE TRACKING OF SEDIMENT FROM DISTURBED AREAS. VEHICLE TRACKING CONTROLS MUST INCLUDE A STRUCTURAL CONTROL MEASURE (E.G. TRACKING PAD OR WASH RACK) AND MAY INCLUDE A NON-STRUCTURAL CONTROL MEASURE (E.G. SWEEPING OR RESTRICTING VEHICLE TRAFFIC TO PAVED AREAS).
   (B) STORMWATER RUNOFF FROM ALL DISTURBED AREAS AND SOIL STORAGE AREAS MUST UTILIZE OR FLOW TO ONE OR MORE CONTROL MEASURES TO MINIMIZE EROSION OR SEDIMENT IN THE DISCHARGE.
   (C) SELECTION OF CONTROL MEASURES SHOULD PRIORITIZE THE USE OF CONTROL MEASURES THAT MINIMIZE EROSION, AND PRIORITIZE PHASING
   (D) OUTLETS THAT WITHDRAW WATER FROM OR NEAR THE SURFACE MUST BE INSTALLED WHEN DISCHARGING FROM BASINS AND IMPOUNDMENTS, UNLESS INFEASIBLE.
   (E) MAINTAIN PRE-EXISTING VEGETATION FOR AREAS WITHIN 50 HORIZONTAL FEET OF RECEIVING WATERS. IN ADDITION INSTALL CONTROL MEASURES UPGRADIENT OF THE VEGETATIVE BUFFER THAT MEETS THE REQUIREMENTS OF THIS SECTION, PART I.B.1.A.I.
   (F) MINIMIZED SOIL COMPACTION FOR INFILTRATION AREAS. IF COMPACTION DOES OCCUR IN AREAS WHERE FINAL STABILIZATION WILL BE ACHIEVED THROUGH VEGETATIVE COVER, THEN DECOMPACTION OF THE SOIL MUST BE COMPLETED PRIOR TO PLANTING. TOPSOIL MUST BE PRESERVED FOR VEGETATIVE FINAL STABILIZATION.
   (H) MINIMIZE EXPOSED SOIL, INCLUDING STEEP SLOPES.
   (I) DIVERSION CONTROL MEASURES MUST MINIMIZE SOIL TRANSPORT AND EROSION WITHIN THE ENTIRE DIVERSION, MINIMIZE EROSION DURING DISCHARGE, AND MINIMIZE RUN-ON INTO THE DIVERSION
   (J) MINIMIZE DUST THROUGH THE APPROPRIATE APPLICATION OF WATER OR OTHER DUST SUPPRESSION TECHNIQUES.
   (K) CONTROL STORMWATER DISCHARGES TO MINIMIZE CHANNEL AND STREAMBANK EROSION AND SCOUR.
6. TEMPORARY STABILIZATION MUST BE IMPLEMENTED ON ANY PORTION OF THE SITE WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED, OR TEMPORARILY CEASED FOR MORE THAN 14 CALENDAR DAYS.
7. FINAL STABILIZATION MUST BE DESIGNED AND INSTALLED AS A PERMANENT FEATURE. ALL CONTROL MEASURES MUST BE REMOVED FROM THE CONSTRUCTION SITE, EXCEPT WHEN THE CONTROL MEASURE SPECIFICATIONS ALLOW THE CONTROL MEASURE TO BE LEFT IN PLACE.
8. THE PERMITTEE MUST COMPLY WITH THE LAWFUL REQUIREMENTS OF FEDERAL AGENCIES, MUNICIPALITIES, COUNTIES, DRAINAGE DISTRICTS AND OTHER LOCAL AGENCIES INCLUDING APPLICABLE REQUIREMENTS IN MUNICIPAL STORMWATER MANAGEMENT PROGRAMS DEVELOPED TO COMPLY WITH CDPS PERMITS. THE PERMITTEE MUST COMPLY WITH LOCAL STORMWATER MANAGEMENT REQUIREMENTS, POLICIES AND GUIDELINES INCLUDING THOSE FOR EROSION AND SEDIMENT CONTROL.

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

SCALE:	DESIGN BY:
AS SHOWN	CMM
PLAN BY:	CHECK BY:
CRN	EAE

REVISIONS

NO.	DATE	DESCRIPTION
A	01/26/2026	INITIAL PRELIMINARY DESIGN
B	02/25/2026	REVISED PRELIMINARY DESIGN
C	03/05/2026	REVISED PRELIMINARY DESIGN

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EARTH A. EVANS,
P.E. #0053515
ON 03/05/2026

AND IS NOT FOR CONSTRUCTION.

LEGEND AND NOTES

COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

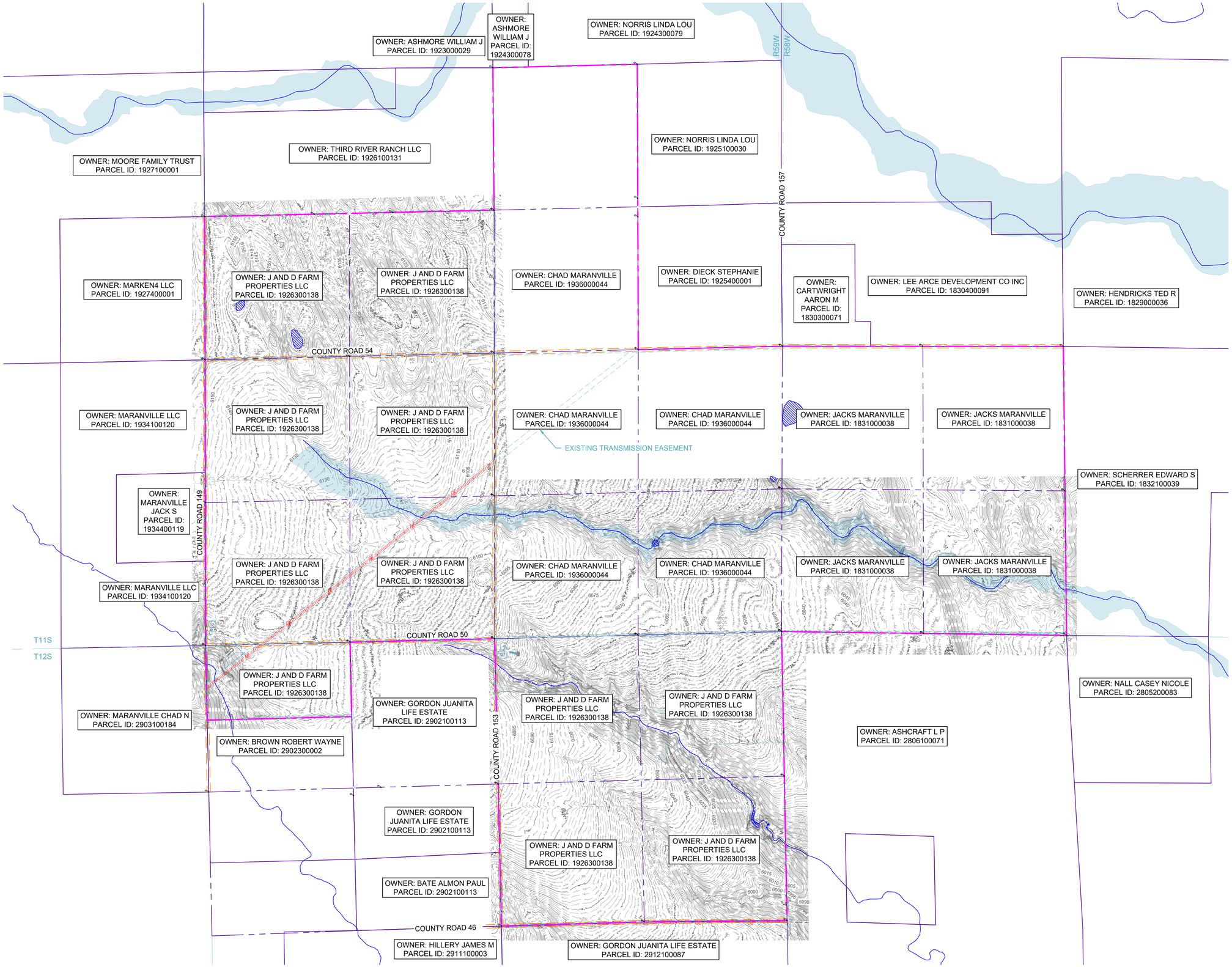
SHEPHERD SOLAR

SHEET NO.
C-2

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D



SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
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(763) 541-4800
FIRM #20171391667

SCALE:	DESIGN BY:
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P.E. #0053515
ON 03/05/2026

AND IS NOT FOR CONSTRUCTION.

EXISTING CONDITIONS

COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

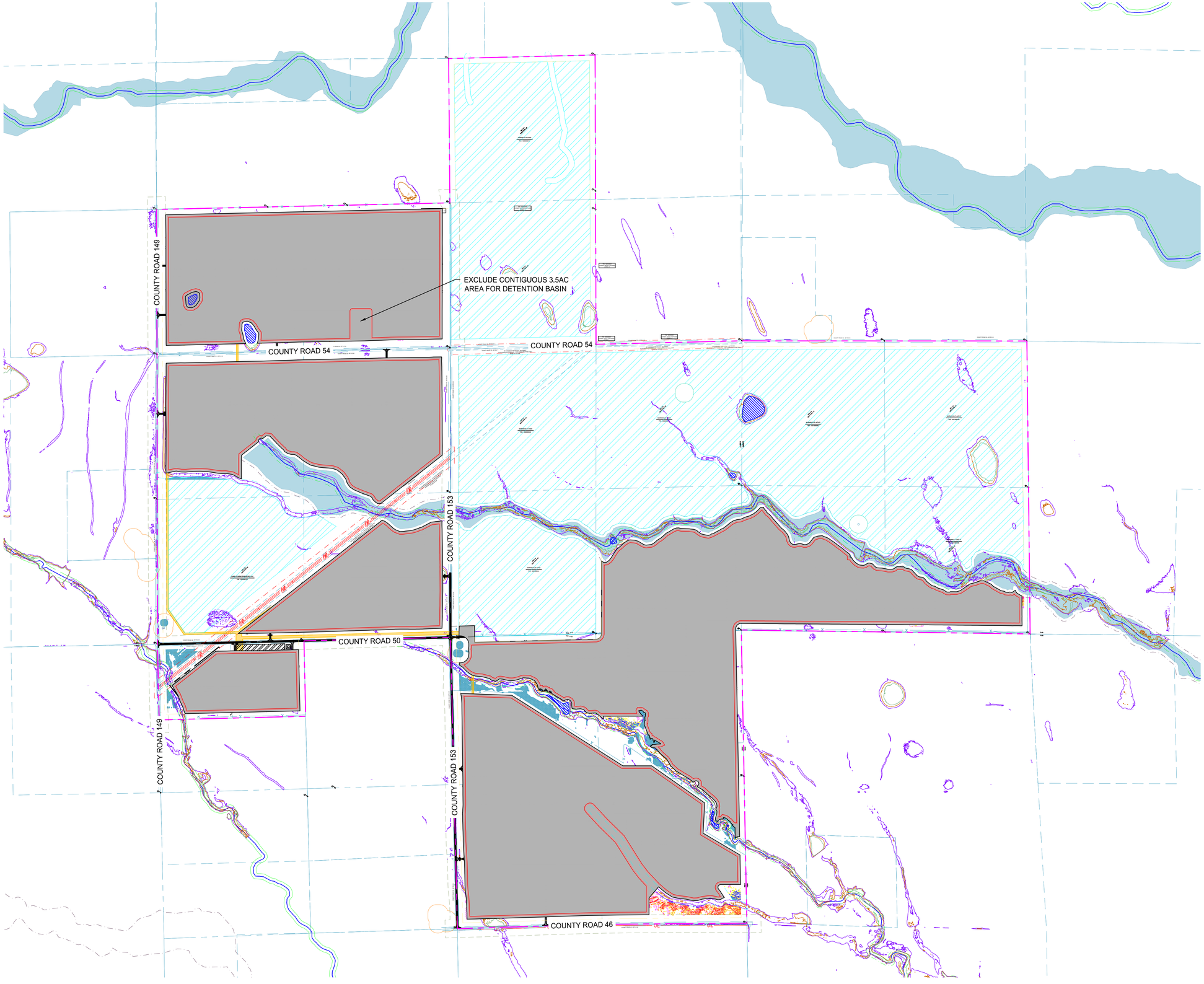
SHEPHERD SOLAR

SHEET NO.
C-3

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D



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SHEPHERD SOLAR

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FIRM #20171391667

SCALE:	DESIGN BY:
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MEK	EAE

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P.E. #0053515
ON 03/05/2026

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SITE CONSTRAINTS

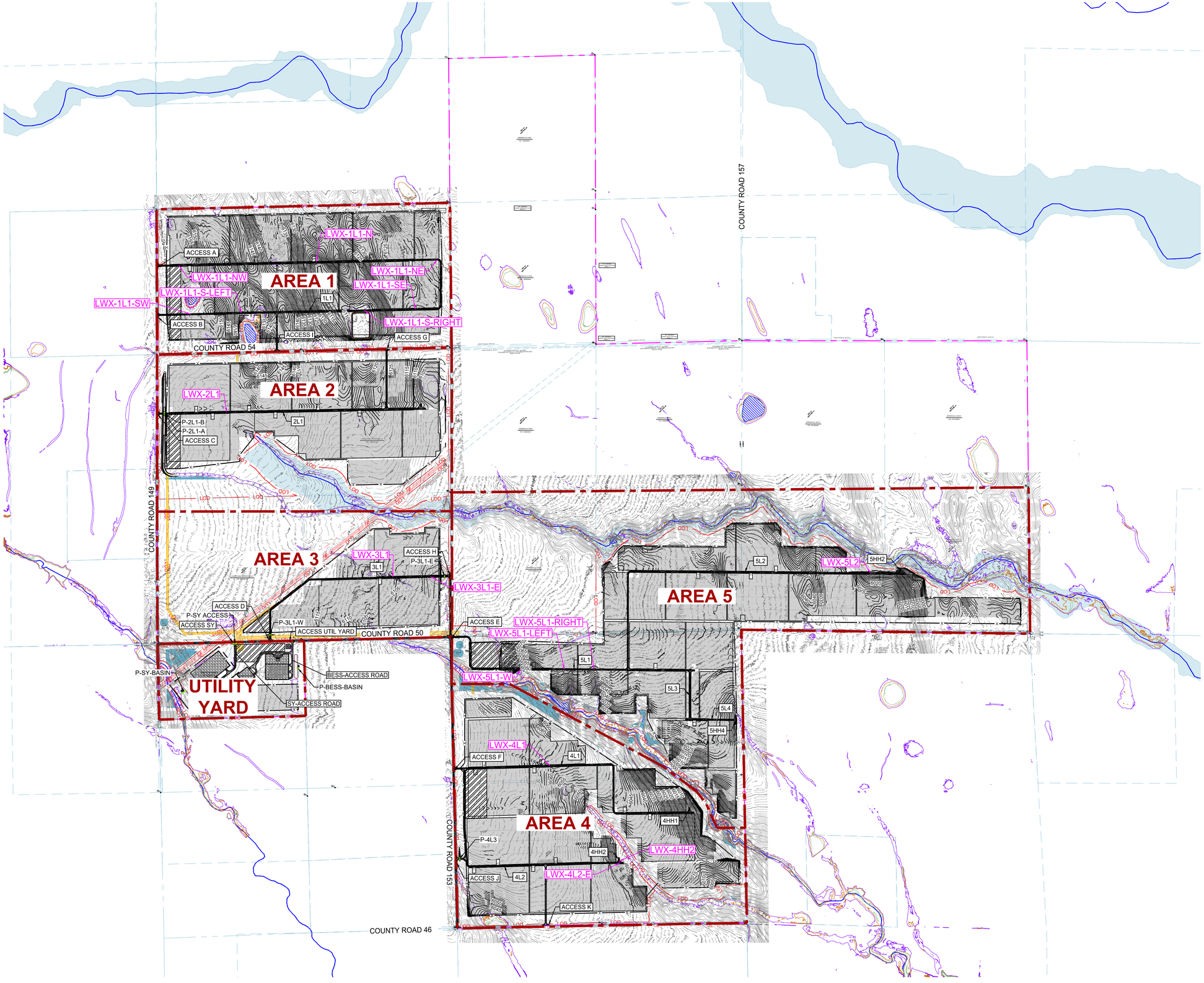
COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-4

WSB PROJECT NO.
032487

DATE	REV.
2026-03-11	D



LWX CROSSING SUMMARY		
ID	DETAIL	LENGTH
LWX-1L1-N	L1	150.0
LWX-1L1-NE	L1	96.0
LWX-1L1-NW	L1	80.0
LWX-1L1-S-LEFT	L1	80.0
LWX-1L1-S-RIGHT	L1	500.0
LWX-1L1-SE	L1	80.0
LWX-1L1-SW	L1	50.0
LWX-2L1	L1	1275.0
LWX-3L1	L1	240.0
LWX-3L1-E	L1	375.0
LWX-4HH2	L1	90.0
LWX-4L1	L1	350.0
LWX-4L2-E	L1	90.0
LWX-5L1-LEFT	L1	190.0
LWX-5L1-RIGHT	L1	120.0
LWX-5L1-W	L1	292.0
LWX-5L2	L1	190.0

ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- LIMITS OF DISTURBANCE
- CORRECTIVE GRADING LIMITS
- PROJECT BOUNDARY/ LEASE LIMIT
- INTERNAL PROPERTY LINES
- SECTION LINES
- NON-JURISDICTIONAL WATER COURSE
- JURISDICTIONAL WATER COURSE
- NON-JURISDICTIONAL WETLANDS
- EXISTING WETLANDS
- 1-FT INUNDATION
- 2-FT INUNDATION
- 3-FT INUNDATION
- PROPOSED PERIMETER FENCE
- PROPOSED CULVERTS
- FEMA SETBACK (30FT)
- PROPOSED GRAVEL ROAD
- PROPOSED LWX
- PROPOSED GATE - SEE SHEET C-3
- TYPICAL PV ROAD DETAIL SEE SHEET C-2
- RESTRICTED AREA PER BAYWA
- FEMA 100-YEAR FLOOD AREA
- SOLAR PANEL POWER BLOCK
- INVERTER SKID PAD
- STAGING AREA
- LWX-1L3 — PROPOSED LOW WATER CROSSING, SEE TABLE ABOVE

N

H: 0 800 1,600
SCALE IN FEET

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

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PLAN BY:	CHECK BY:
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EARTH A. EVANS,
P.E. #0053515
ON 03/05/2026

AND IS NOT FOR CONSTRUCTION.

PRELIMINARY GRADING AND SITE PLAN OVERVIEW

COLORADO LICENSED EARTH EVANS 53515 PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-5

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

COUNTY ROAD 157

COUNTY ROAD 54

COUNTY ROAD 149

COUNTY ROAD 50

COUNTY ROAD 153

COUNTY ROAD 46

LOD

DEMOLITION PLAN LEGEND

- PROJECT BOUNDARY/ LEASE LIMIT
- INTERNAL PROPERTY LINES
- SECTION LINES
- LOD — LIMITS OF DISTURBANCE
- NON-JURISDICTIONAL WATER COURSE
- JURISDICTIONAL WATER COURSE
- NON-JURISDICTIONAL WETLANDS
- EXISTING WETLANDS
- PROPOSED PERIMETER FENCE
- PROPOSED GRAVEL ROAD
- SOLAR PANELS (BY OTHERS)
- 1-FT INUNDATION
- 2-FT INUNDATION
- 3-FT INUNDATION
- 1 CLEAR & GRUB AREA
- 2 REMOVE FENCE
- 3 REMOVE TREE
- 4 REMOVE GRAVEL ROAD
- 5 REMOVE DEBRIS
- FEMA 100-YEAR FLOOD AREA

SEE SHEET C-2 FOR FULL LEGEND.

N

0 800 1,600

H: SCALE IN FEET

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
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PRELIMINARY REMOVAL PLAN

COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-6

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

OWNER: THIRD RIVER RANCH LLC
PARCEL ID: 1926100131

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: MARKEN4 LLC
PARCEL ID: 1927400001

COUNTY ROAD 149

21.2'

20'

60.6'

10'

ACCESS A

LWX-1L1-NW, SEE DETAIL
L1 ON SHEET C-45.
LWX LENGTH = 80.0'

BEG 1L1 CL
STA = 1100+00

1L1 RX

10' MIN.

10' MIN.

SEE SHEET C-10

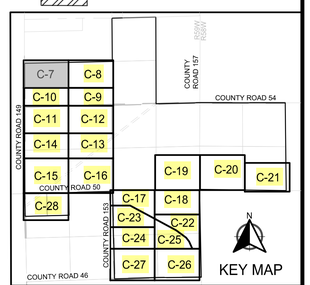
SEE SHEET C-8

ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- LIMITS OF DISTURBANCE
- CORRECTIVE GRADING LIMITS
- PROJECT BOUNDARY/ LEASE LIMIT
- INTERNAL PROPERTY LINES
- SECTION LINES
- NON-JURISDICTIONAL WATER COURSE
- JURISDICTIONAL WATER COURSE
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- 1-FT INUNDATION
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- 3-FT INUNDATION
- PROPOSED PERIMETER FENCE
- PROPOSED CULVERTS
- FEMA SETBACK (30FT)
- PROPOSED GRAVEL ROAD
- PROPOSED LWX
- PROPOSED GATE - SEE SHEET C-3
- TYPICAL PV ROAD DETAIL SEE SHEET C-2
- RESTRICTED AREA PER BAYWA
- FEMA 100-YEAR FLOOD AREA
- MV ROUTING CORRIDOR
- SOLAR PANEL POWER BLOCK
- INVERTER SKID PAD
- STAGING AREA



N

0 100 200
H: SCALE IN FEET

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SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

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MEK	EAE

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PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED
EARTH A. EVANS
53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-7

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

OWNER: THIRD RIVER RANCH LLC
PARCEL ID: 1926100131

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: CHAD MARANVILLE
PARCEL ID: 1936000044

LWX-1L1-N, SEE DETAIL L1 ON SHEET C-45.
LWX LENGTH = 150.0'

LWX-1L1-NE, SEE DETAIL L1 ON SHEET C-45.
LWX LENGTH = 95.9'

SEE SHEET C-7

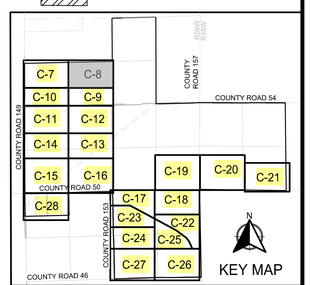
SEE SHEET C-9

ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- LIMITS OF DISTURBANCE
- CORRECTIVE GRADING LIMITS
- PROJECT BOUNDARY/ LEASE LIMIT
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- JURISDICTIONAL WATER COURSE
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- 2-FT INUNDATION
- 3-FT INUNDATION
- PROPOSED PERIMETER FENCE
- PROPOSED CULVERTS
- FEMA SETBACK (30FT)
- PROPOSED GRAVEL ROAD
- PROPOSED LWX
- PROPOSED GATE - SEE SHEET C-3
- TYPICAL PV ROAD DETAIL SEE SHEET C-2
- RESTRICTED AREA PER BAYWA
- FEMA 100-YEAR FLOOD AREA
- MV ROUTING CORRIDOR
- SOLAR PANEL POWER BLOCK
- INVERTER SKID PAD
- STAGING AREA



N

0 100 200
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SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

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PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED
EARTH A. EVANS
53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-8

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

SEE SHEET C-8

SEE SHEET C-10

SEE SHEET C-12

LWX-1L1-S-RIGHT, SEE DETAIL
L1 ON SHEET C-45
LWX LENGTH = 500.0'

LWX-1L1-SE, SEE DETAIL
L1 ON SHEET C-45
LWX LENGTH = 80.0'

OWNER: CHAD MARANVILLE
PARCEL ID: 1936000044

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

COUNTY ROAD 54

10' MIN.

47.8'

21.2'

20'

R60'

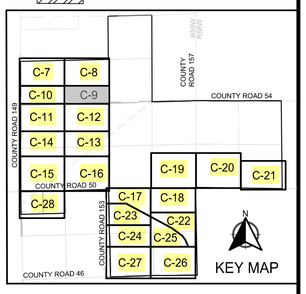
10'

ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- LIMITS OF DISTURBANCE
- CORRECTIVE GRADING LIMITS
- PROJECT BOUNDARY/ LEASE LIMIT
- INTERNAL PROPERTY LINES
- SECTION LINES
- NON-JURISDICTIONAL WATER COURSE
- JURISDICTIONAL WATER COURSE
- NON-JURISDICTIONAL WETLANDS
- EXISTING WETLANDS
- 1-FT INUNDATION
- 2-FT INUNDATION
- 3-FT INUNDATION
- PROPOSED PERIMETER FENCE
- PROPOSED CULVERTS
- FEMA SETBACK (30FT)
- PROPOSED GRAVEL ROAD
- PROPOSED LWX
- PROPOSED GATE - SEE SHEET C-3
- TYPICAL PV ROAD DETAIL SEE SHEET C-2
- RESTRICTED AREA PER BAYWA
- FEMA 100-YEAR FLOOD AREA
- MV ROUTING CORRIDOR
- SOLAR PANEL POWER BLOCK
- INVERTER SKID PAD
- STAGING AREA



N

0 100 200
H: SCALE IN FEET

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SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

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MEK	EAE

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P.E. #0053515
ON 03/05/2026

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PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED
EARTH A. EVANS
53515
PROFESSIONAL ENGINEER

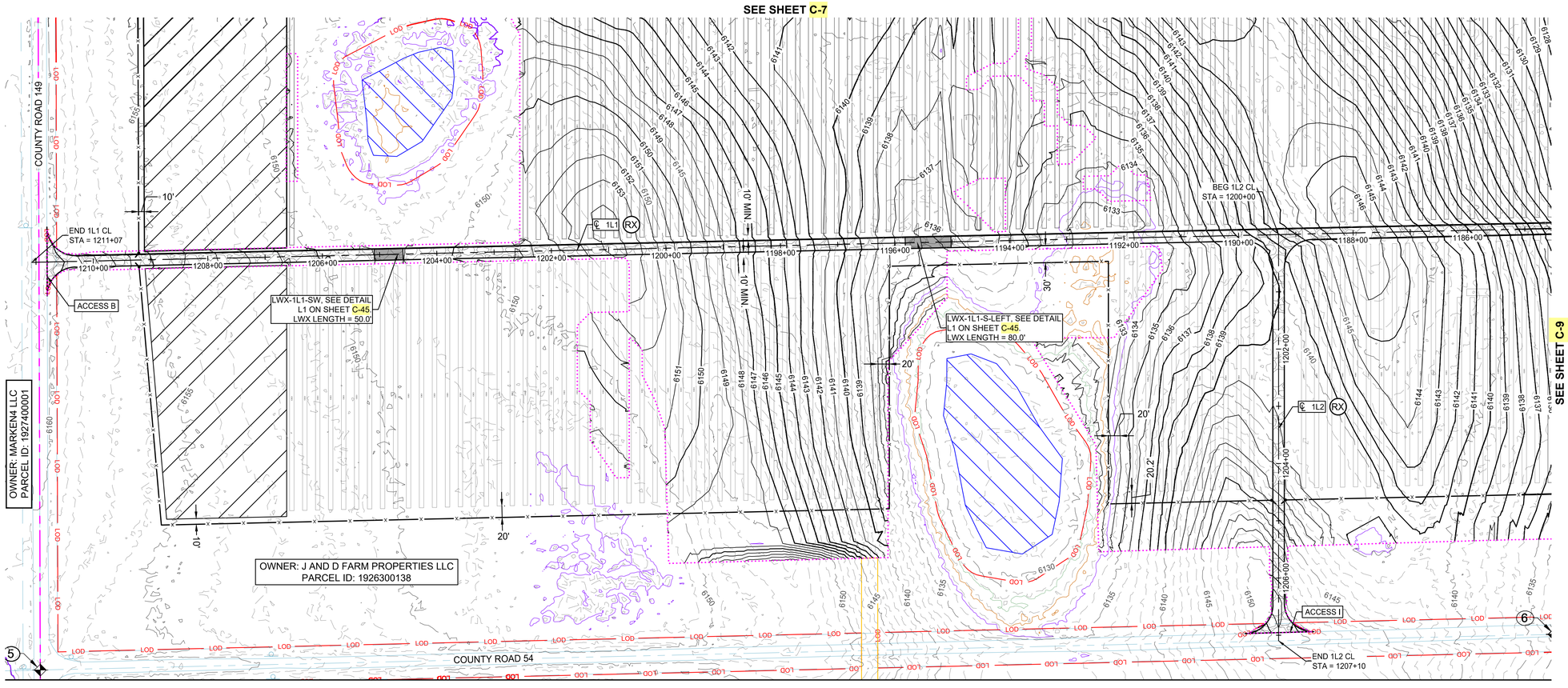
SHEPHERD SOLAR

SHEET NO.
C-9

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

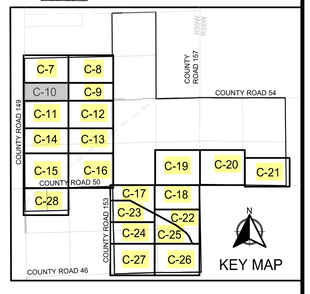


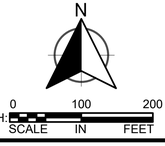
ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- LIMITS OF DISTURBANCE
- CORRECTIVE GRADING LIMITS
- PROJECT BOUNDARY/ LEASE LIMIT
- INTERNAL PROPERTY LINES
- SECTION LINES
- NON-JURISDICTIONAL WATER COURSE
- JURISDICTIONAL WATER COURSE
- NON-JURISDICTIONAL WETLANDS
- EXISTING WETLANDS
- 1-FT INUNDATION
- 2-FT INUNDATION
- 3-FT INUNDATION
- PROPOSED PERIMETER FENCE
- PROPOSED CULVERTS
- FEMA SETBACK (30FT)
- PROPOSED GRAVEL ROAD
- PROPOSED LWX
- PROPOSED GATE - SEE SHEET C-3
- TYPICAL PV ROAD DETAIL SEE SHEET C-2
- RESTRICTED AREA PER BAYWA
- FEMA 100-YEAR FLOOD AREA
- MV ROUTING CORRIDOR
- SOLAR PANEL POWER BLOCK
- INVERTER SKID PAD
- STAGING AREA





SHEPHERD SOLAR

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dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

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PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-10

WSB PROJECT NO.
032487

DATE	REV.
2026-03-11	D

SEE SHEET C-10

COUNTY ROAD 54

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

COUNTY ROAD 149

OWNER: MARANVILLE LLC
PARCEL ID: 1934100120

ACCESS C

P-2L1-A
P-2L1-B

BEG 2L1 CL
STA = 2100+00

LWX-2L1, SEE DETAIL
L1 ON SHEET C-45.
LWX LENGTH = 250.0'

℄ 2L1 RX

10' MIN.

20'

20.8'

20.1'

SEE SHEET C-12

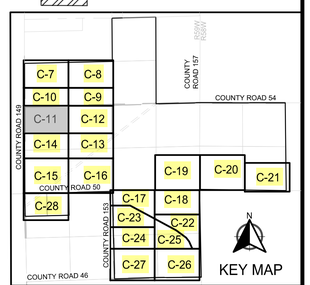
SEE SHEET C-14

ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
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- STAGING AREA



N

0 100 200
H: SCALE IN FEET

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dba: WSB Design and Consulting LLC
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MINNEAPOLIS, MN 55416
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PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED
EARTH A. EVANS
53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-11

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

SEE SHEET C-9

SEE SHEET C-11

SEE SHEET C-13

BEG 2L2 CL
STA = 2200+00

COUNTY ROAD 54

ACCESS G

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: CHAD MARANVILLE
PARCEL ID: 1936000044

10' MIN.

30.1'

20'

20.4'

END 2L2 CL
STA = 2210+97

BEG 2HH1 CL
STA = 210+00

END 2HH1 CL
STA = 210+90

END 2L1 CL
STA = 2148+58

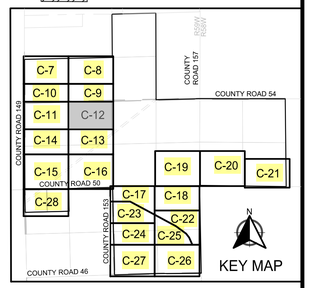
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ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
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- 2-FT INUNDATION
- 3-FT INUNDATION
- PROPOSED PERIMETER FENCE
- PROPOSED CULVERTS
- FEMA SETBACK (30FT)
- PROPOSED GRAVEL ROAD
- PROPOSED LWX
- PROPOSED GATE - SEE SHEET C-3
- TYPICAL PV ROAD DETAIL SEE SHEET C-2
- RESTRICTED AREA PER BAYWA
- FEMA 100-YEAR FLOOD AREA
- MV ROUTING CORRIDOR
- SOLAR PANEL POWER BLOCK
- INVERTER SKID PAD
- STAGING AREA



N

0 100 200
H: SCALE IN FEET

ACC- 032487 - SHEP-CP-GRAD-PLAN-ARA2.dwg 3/11/2026 3:21:14 PM

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

SCALE:	DESIGN BY:
AS SHOWN	CMM
PLAN BY:	CHECK BY:
MEK	EAE

REVISIONS

NO.	DATE	DESCRIPTION
A	01/26/2026	INITIAL PRELIMINARY DESIGN
B	02/25/2026	REVISED PRELIMINARY DESIGN
C	03/05/2026	REVISED PRELIMINARY DESIGN

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EARTH A. EVANS,
P.E. #0053515
ON 03/05/2026

AND IS NOT FOR CONSTRUCTION.

PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

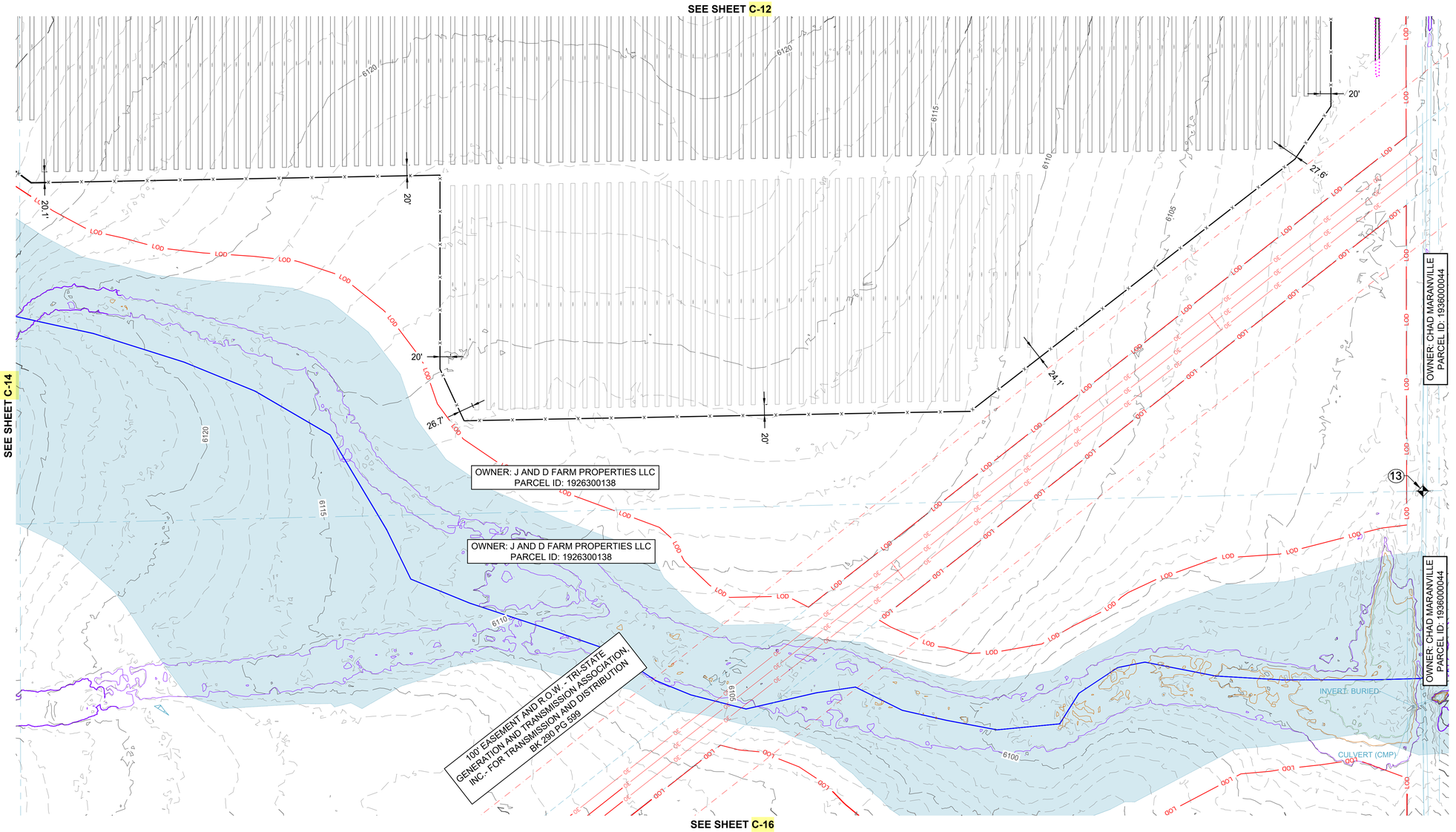
SHEPHERD SOLAR

SHEET NO.
C-12

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
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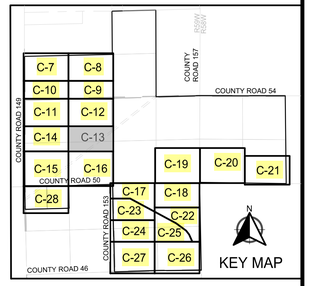


ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- LIMITS OF DISTURBANCE
- CORRECTIVE GRADING LIMITS
- PROJECT BOUNDARY/ LEASE LIMIT
- INTERNAL PROPERTY LINES
- SECTION LINES
- NON-JURISDICTIONAL WATER COURSE
- JURISDICTIONAL WATER COURSE
- NON-JURISDICTIONAL WETLANDS
- EXISTING WETLANDS
- 1-FT INUNDATION
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- 3-FT INUNDATION
- PROPOSED PERIMETER FENCE
- PROPOSED CULVERTS
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N

0 100 200
H: SCALE IN FEET

WSB LLC
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701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

SHEPHERD SOLAR

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PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED EARTH A. EVANS 53515 PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-13

WSB PROJECT NO.
032487

DATE	REV.
2026-03-11	D

SEE SHEET C-11

OWNER: MARANVILLE LLC
PARCEL ID: 1934100120

COUNTY ROAD 149

OWNER: MARANVILLE JACK S
PARCEL ID: 1934400119

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

10'

10'

20'

26.1'

25.5'

INVERT: BURIED

CULVERT (CMP)

6145

6140

6135

6130

6125

LOD

SEE SHEET C-13

SEE SHEET C-15

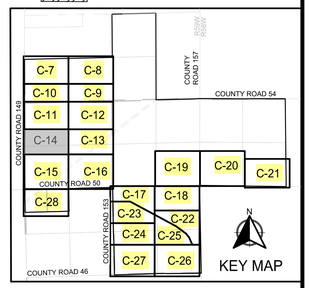
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ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

- EXISTING MAJOR CONTOUR
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N

0 100 200
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WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

SCALE: AS SHOWN
DESIGN BY: CMM
PLAN BY: MEK
CHECK BY: EAE

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SHEPHERD SOLAR

PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

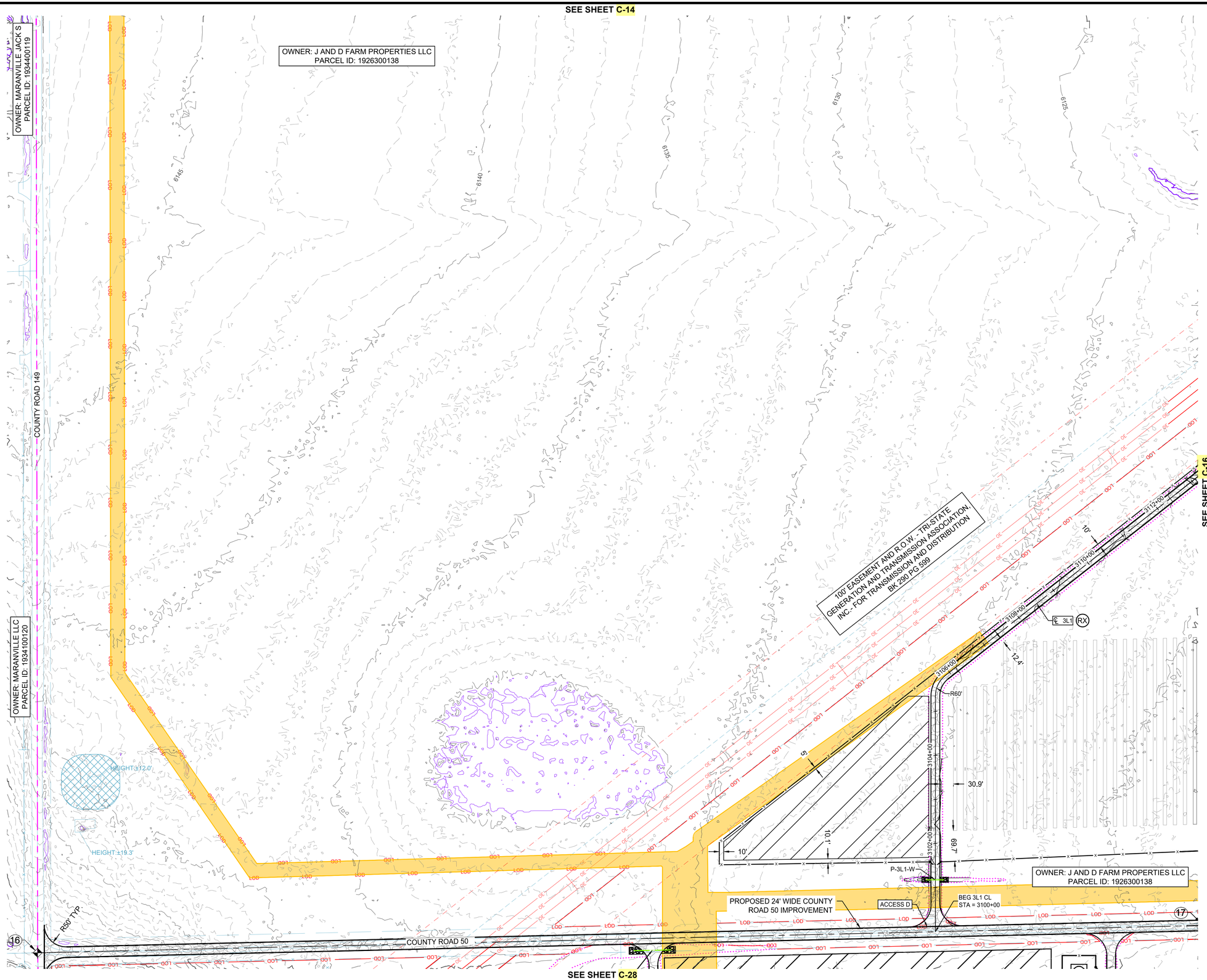
SHEPHERD SOLAR

SHEET NO.
C-14

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

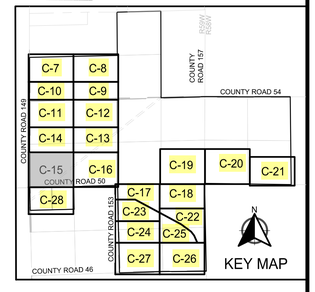


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5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

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N

0 100 200
H: SCALE IN FEET

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SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

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MEK	EAE

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PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-15

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

SEE SHEET C-13

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

100' EASEMENT AND R.O.W. - TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.- FOR TRANSMISSION AND DISTRIBUTION BK 290 PG 599

OWNER: CHAD IMARANVILLE
PARCEL ID: 1936000044

SEE SHEET C-15

SEE SHEET C-17

COUNTY ROAD 153

COUNTY ROAD 50

PROPOSED 24' WIDE COUNTY ROAD 153 IMPROVEMENT

PROPOSED 24' WIDE COUNTY ROAD 50 IMPROVEMENT

LWX-3L1, SEE DETAIL L1 ON SHEET C-45 LWX LENGTH = 130.0'

LWX-3L1-E, SEE DETAIL L1 ON SHEET C-45 LWX LENGTH = 300.0'

ACCESS H

END 3L1 CL STA = 3139+99

P-3L1-E

R60'

R50' TYP.

ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

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KEY MAP

N

0 100 200
H: SCALE IN FEET

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

SCALE:	DESIGN BY:
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PLAN BY:	CHECK BY:
MEK	EAE

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PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED EARTH EVANS 53515 PROFESSIONAL ENGINEER

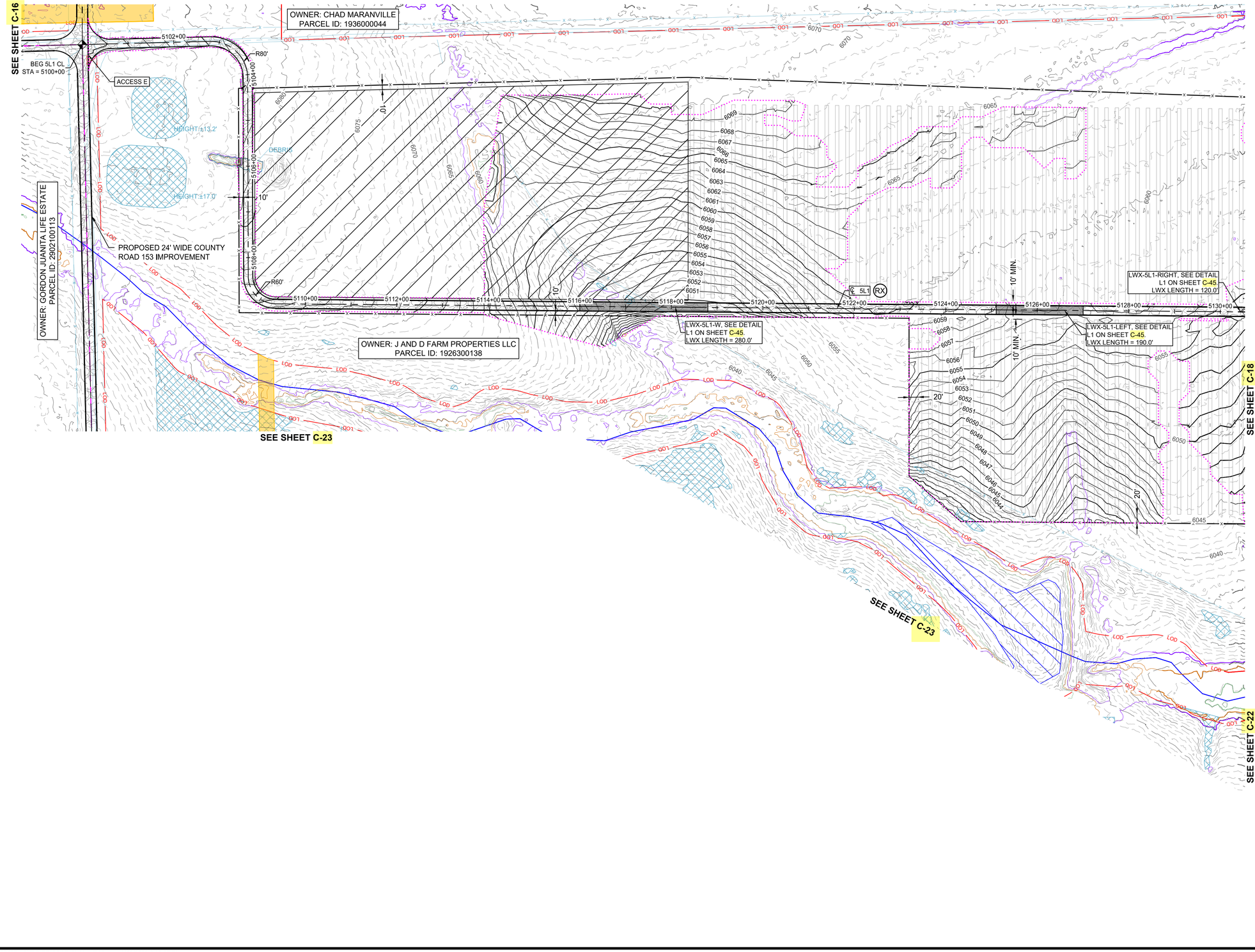
SHEPHERD SOLAR

SHEET NO.
C-16

WSB PROJECT NO.
032487

DATE
2026-03-11

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D

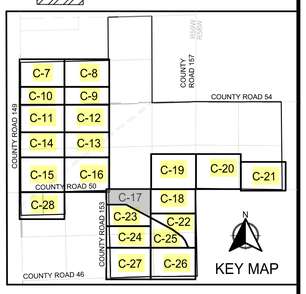


ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

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N

0 100 200
H: SCALE IN FEET

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SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
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MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

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COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

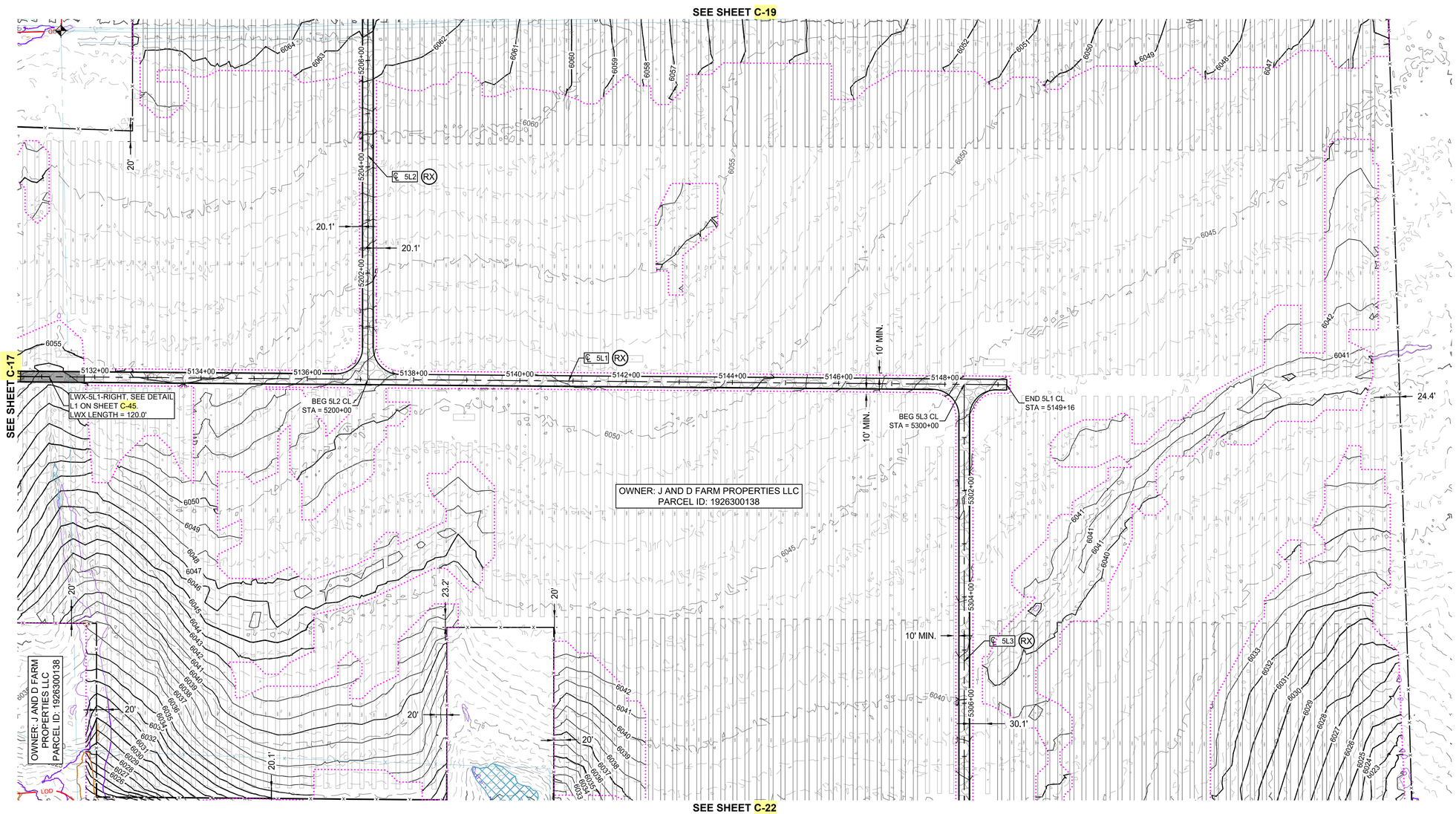
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SHEET NO.
C-17

WSB PROJECT NO.
032487

DATE
2026-03-11

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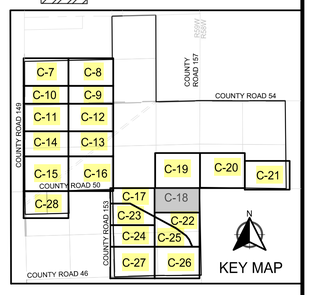


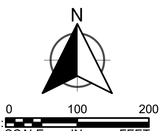
ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

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dba: WSB Design and Consulting LLC
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FIRM #20171391667

SHEPHERD SOLAR

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PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED EARTH EVANS 53515 PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-18

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

OWNER: CHAD MARANVILLE
PARCEL ID: 1936000044

OWNER: CHAD MARANVILLE
PARCEL ID: 1936000044

SEE SHEET C-20

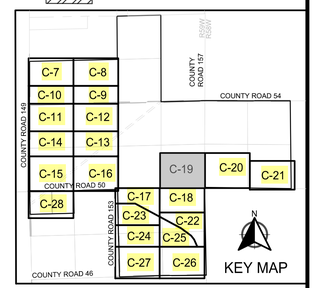
SEE SHEET C-18

ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- LIMITS OF DISTURBANCE
- CORRECTIVE GRADING LIMITS
- PROJECT BOUNDARY/ LEASE LIMIT
- INTERNAL PROPERTY LINES
- SECTION LINES
- NON-JURISDICTIONAL WATER COURSE
- JURISDICTIONAL WATER COURSE
- NON-JURISDICTIONAL WETLANDS
- EXISTING WETLANDS
- 1-FT INUNDATION
- 2-FT INUNDATION
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- PROPOSED PERIMETER FENCE
- PROPOSED CULVERTS
- FEMA SETBACK (30FT)
- PROPOSED GRAVEL ROAD
- PROPOSED LWX
- PROPOSED GATE - SEE SHEET C-3
- TYPICAL PV ROAD DETAIL SEE SHEET C-2
- RESTRICTED AREA PER BAYWA
- FEMA 100-YEAR FLOOD AREA
- MV ROUTING CORRIDOR
- SOLAR PANEL
- POWER BLOCK
- INVERTER SKID PAD
- STAGING AREA



0 100 200
H: SCALE IN FEET

ACC- 032487 - SHEP-CP-GRAD-PLAN-ARA5.dwg 3/11/2026 3:22:11 PM

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

SCALE:	DESIGN BY:
AS SHOWN	CMM
PLAN BY:	CHECK BY:
MEK	EAE

REVISIONS

NO.	DATE	DESCRIPTION
A.	01/26/2026	INITIAL PRELIMINARY DESIGN
B.	02/25/2026	REVISED PRELIMINARY DESIGN
C.	03/05/2026	REVISED PRELIMINARY DESIGN

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EARTH A. EVANS,
P.E. #0053515
ON 03/05/2026

AND IS NOT FOR CONSTRUCTION.

PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

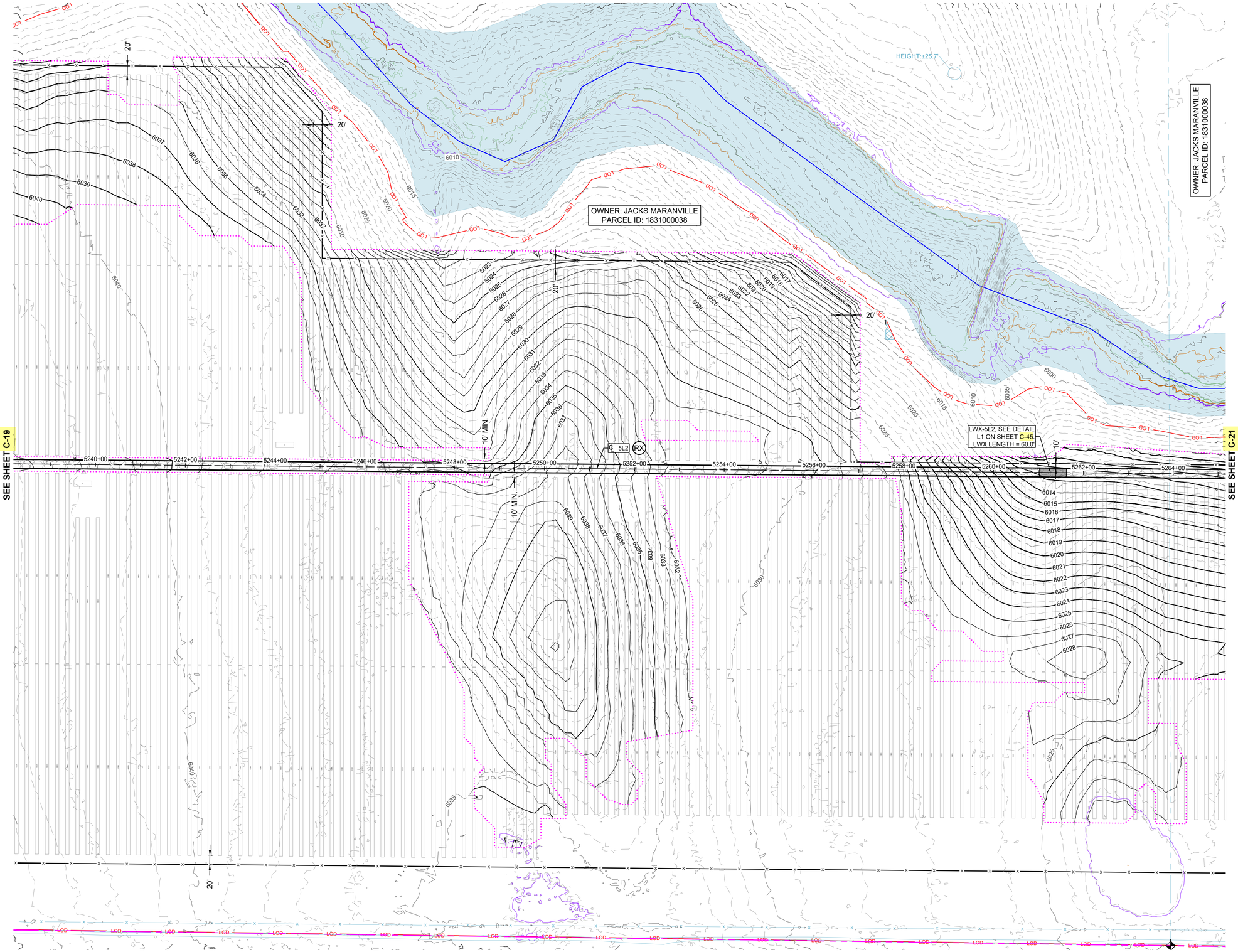
SHEPHERD SOLAR

SHEET NO.
C-19

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

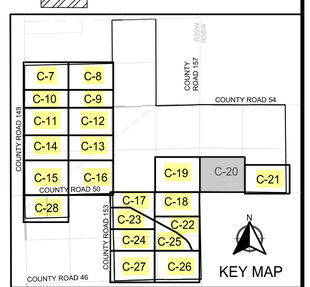


ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

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DESIGN BY: CMM
PLAN BY: MEK
CHECK BY: EAE

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SHEPHERD SOLAR

PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED
EARTH A. EVANS
53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-20

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

OWNER: JACKS MARANVILLE
PARCEL ID: 1831000038

SEE SHEET C-20

END 5HH2 CL
STA = 520+90

BEG 5HH2 CL
STA = 520+00

END 5L2 CL
STA = 5267+43

5266+00

℄ 5HH2 RX

℄ 5L2 RX

43.9'

10'

20'

23.9'

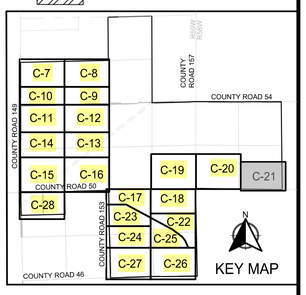
LOD

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COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-21

WSB PROJECT NO.
032487

DATE	REV.
2026-03-11	D

SEE SHEET C-18

SEE SHEET C-17

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

SEE SHEET C-25

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

SEE SHEET C-26

BEG 5L4 CL
STA = 5400+00

END 5L3 CL
STA = 5308+89

5308+00

5402+00

5404+00

5406+00

5408+00

END 5HH4 CL
STA = 541+60

END 5L4 CL
STA = 5409+02

BEG 5HH4 CL
STA = 540+00

10' MIN.

10'

20'

26.7'

28.1'

26.1'

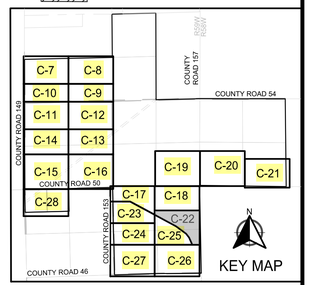
20.1'

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6	-2.0	-1.0	
7	-1.0	-0.17	
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N

0 100 200
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SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

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COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

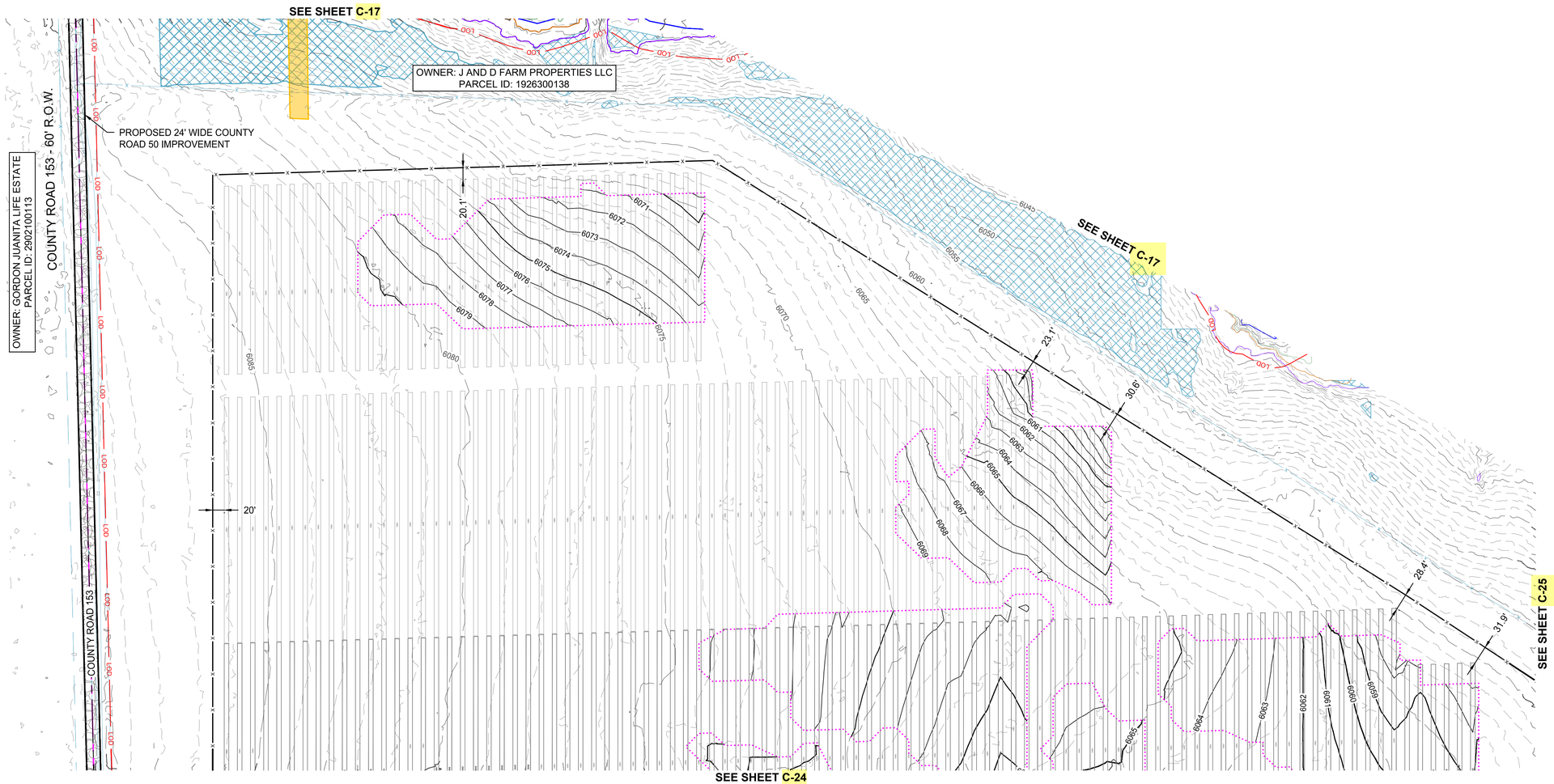
SHEPHERD SOLAR

SHEET NO.
C-22

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

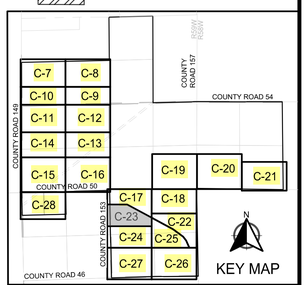


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EARTH EVANS
53515
PROFESSIONAL ENGINEER

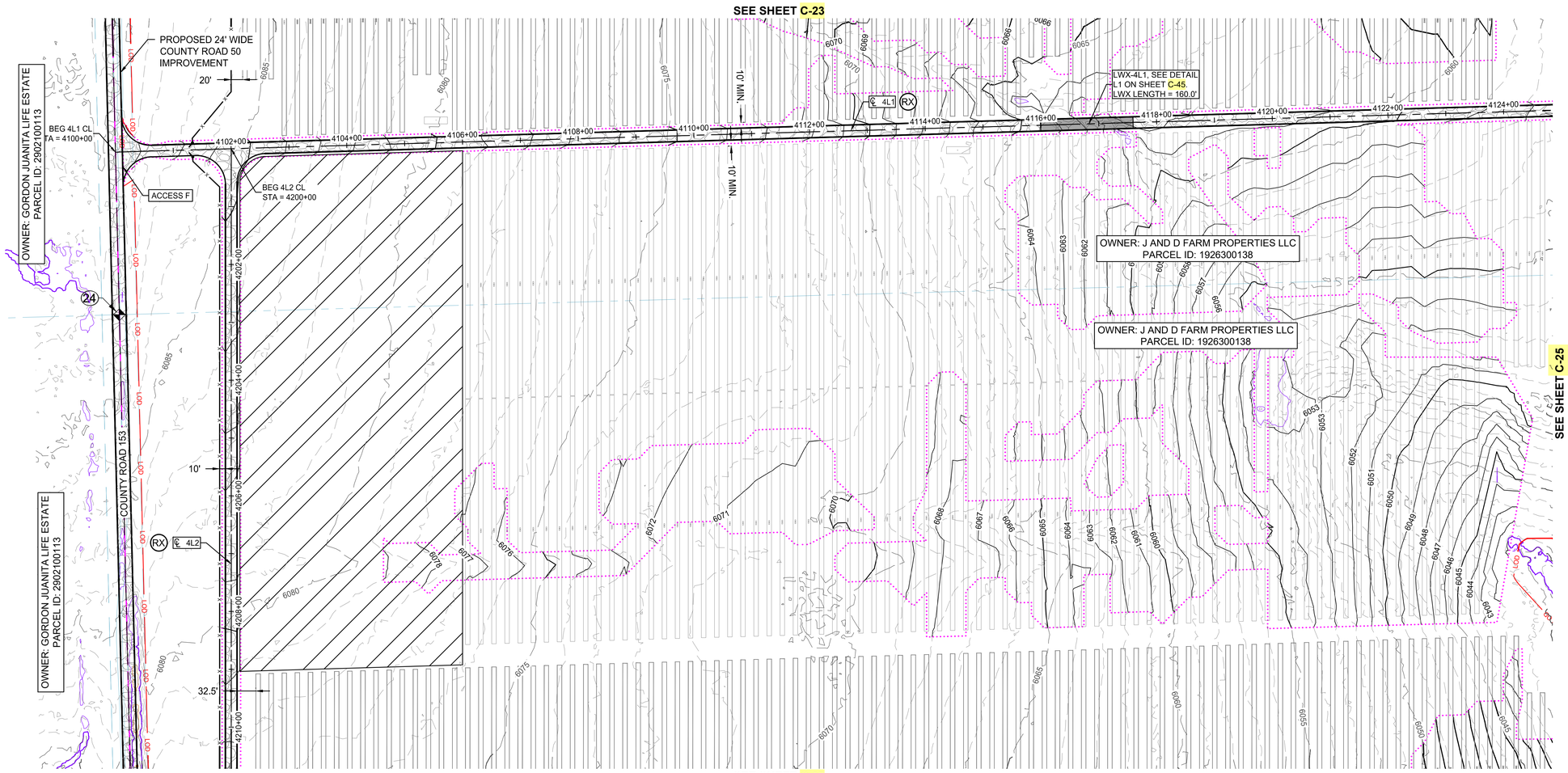
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C-23

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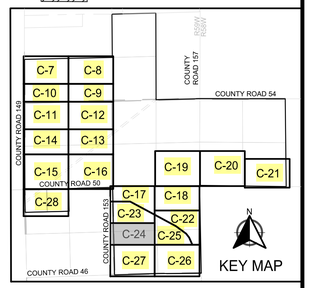


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7	-1.0	-0.17	
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9	1.0	2.0	
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SHEPHERD SOLAR

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COLORADO LICENSED EARTH EVANS 53515 PROFESSIONAL ENGINEER

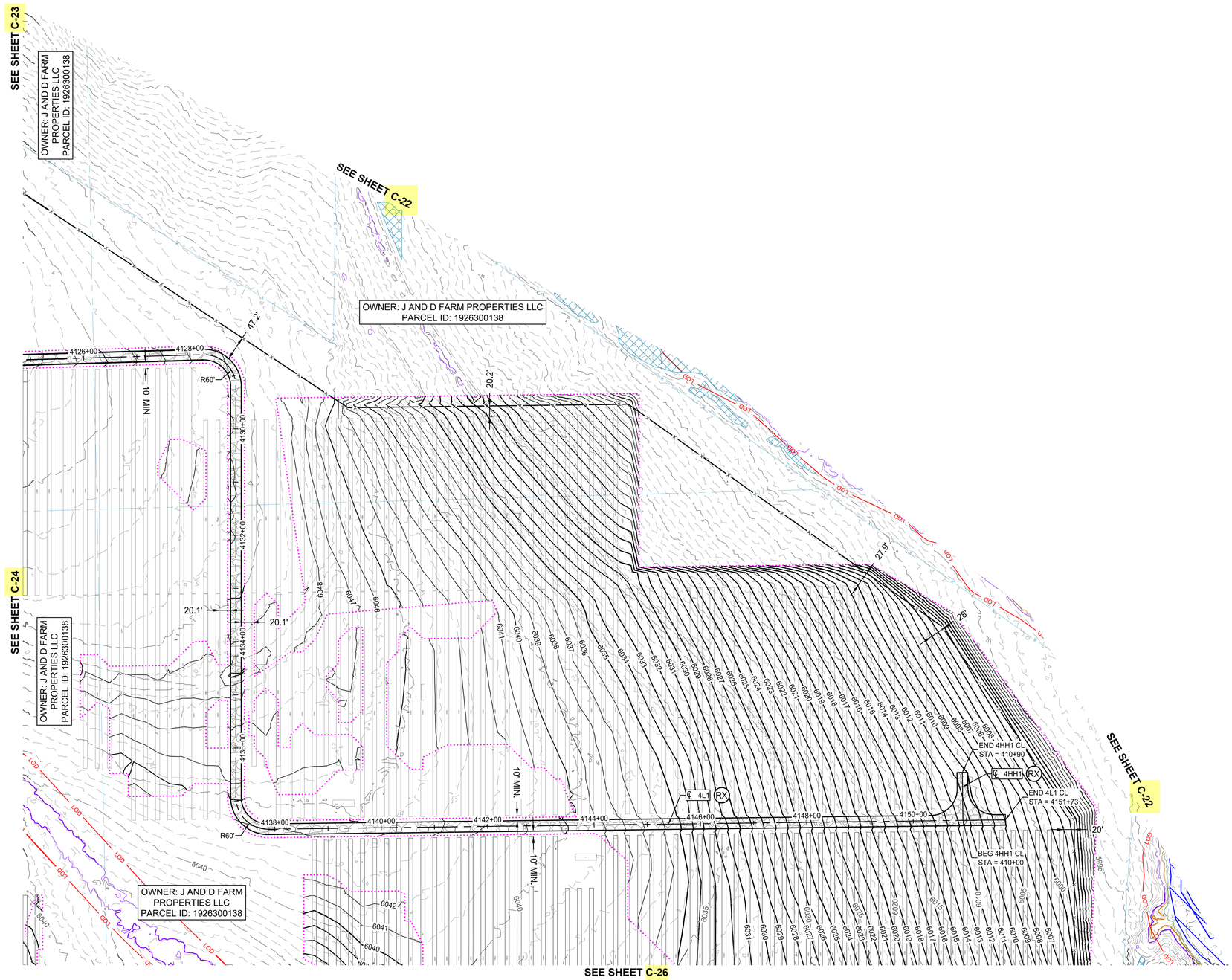
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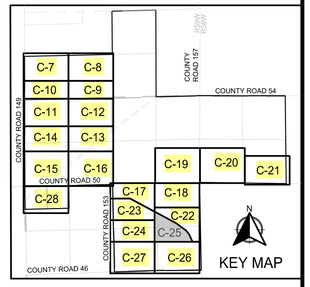


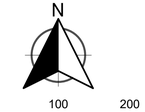
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53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-25

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

SEE SHEET C-25

SEE SHEET C-22

SEE SHEET C-27

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

LWX-4HH2, SEE DETAIL L1 ON SHEET C-45
LWX LENGTH = 90.0'

END 4HH2 CL
STA = 420+90

℄ 4HH2 RX

℄ 4L2 RX

10' MIN.

4242+00

4244+00

BEG 4HH2 CL
STA = 420+00

LWX-4L2-E, SEE DETAIL L1 ON SHEET C-45
LWX LENGTH = 90.0'

END 4L2 CL
STA = 4245+71

LOD

DE

20'

27.8'

20.1'

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: GORDON JUANITA LIFE ESTATE
PARCEL ID: 2912100087

28

COUNTY ROAD 46

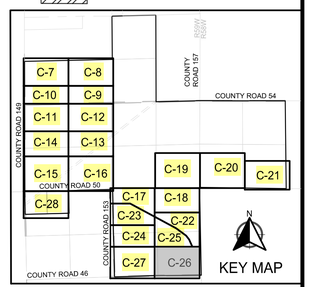
COUNTY ROAD 46 - 60' R.O.W.

ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- LIMITS OF DISTURBANCE
- CORRECTIVE GRADING LIMITS
- PROJECT BOUNDARY/ LEASE LIMIT
- INTERNAL PROPERTY LINES
- SECTION LINES
- NON-JURISDICTIONAL WATER COURSE
- JURISDICTIONAL WATER COURSE
- NON-JURISDICTIONAL WETLANDS
- EXISTING WETLANDS
- 1-FT INUNDATION
- 2-FT INUNDATION
- 3-FT INUNDATION
- PROPOSED PERIMETER FENCE
- PROPOSED CULVERTS
- FEMA SETBACK (30FT)
- PROPOSED GRAVEL ROAD
- PROPOSED LWX
- PROPOSED GATE - SEE SHEET C-3
- TYPICAL PV ROAD DETAIL SEE SHEET C-2
- RESTRICTED AREA PER BAYWA
- FEMA 100-YEAR FLOOD AREA
- MV ROUTING CORRIDOR
- SOLAR PANEL POWER BLOCK
- INVERTER SKID PAD
- STAGING AREA



N

0 100 200
H: SCALE IN FEET

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

SCALE:	DESIGN BY:
AS SHOWN	CMM
PLAN BY:	CHECK BY:
MEK	EAE

REVISIONS

NO.	DATE	DESCRIPTION
A.	01/26/2026	INITIAL PRELIMINARY DESIGN
B.	02/25/2026	REVISED PRELIMINARY DESIGN
C.	03/05/2026	REVISED PRELIMINARY DESIGN

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EARTH A. EVANS,
P.E. #0053515
ON 03/05/2026

AND IS NOT FOR CONSTRUCTION.

PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-26

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

SEE SHEET C-24

OWNER: GORDON JUANITA LIFE ESTATE
PARCEL ID: 2902100113

COUNTY ROAD 153 - 60' R.O.W.

OWNER: BATE ALMON PAUL
PARCEL ID: 2902100113

ACCESS J

BEG 4L3 CL
STA = 4300+00

P-4L3

END 4L3 CL
STA = 4301+98

10' MIN.

10'

℄ 4L2 RX

℄ 4L3 RX

R60'

R50'

32.8'

20.7'

21.3'

24.1'

PROPOSED 24' WIDE COUNTY ROAD 50 IMPROVEMENT

CULVERT BURIED

INVERT: 42"

INVERT: BURIED

CULVERT (CMP) INVERT: BURIED

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: GORDON JUANITA LIFE ESTATE
PARCEL ID: 2912100087

COUNTY ROAD 46

COUNTY ROAD 46 - 60' R.O.W.

BEG 4L4 CL
STA = 4400+00

20.1'

ACCESS K

END 4L4 CL
STA = 4411+05

27.8'

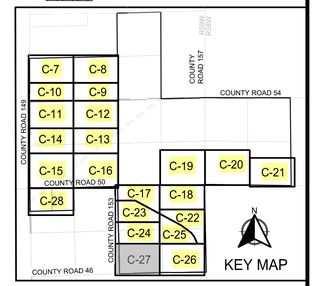
SEE SHEET C-26

ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- LIMITS OF DISTURBANCE
- CORRECTIVE GRADING LIMITS
- PROJECT BOUNDARY/ LEASE LIMIT
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- MV ROUTING CORRIDOR
- SOLAR PANEL POWER BLOCK
- INVERTER SKID PAD
- STAGING AREA



N

0 100 200
H: SCALE IN FEET

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

SCALE: AS SHOWN
DESIGN BY: CMM
PLAN BY: MEK
CHECK BY: EAE

REVISIONS

NO.	DATE	DESCRIPTION
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C.	03/05/2026	REVISED PRELIMINARY DESIGN

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EARTH A. EVANS,
P.E. #0053515
ON 03/05/2026

AND IS NOT FOR CONSTRUCTION.

SHEPHERD SOLAR

PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED EARTH EVANS 53515 PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-27

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

SEE SHEET C-15

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: BROWN ROBERT WAYNE
PARCEL ID: 2902300002

100' EASEMENT AND R.O.W.- TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.- FOR TRANSMISSION AND DISTRIBUTION BK 290 PG 599

ACCESS SY

P-SY ACCESS

ACCESS UTIL YARD

FIRE RESPONSE POINT
WATER TANK

O&M BUILDING
1.7 ACRES

SWITCHYARD
15 ACRES

SUBSTATION
1.3 ACRES

BESS
2.6 ACRES

LOT NO. 4

LOT NO. 3

CULVERT (CMP)

INVERT: 54"

16

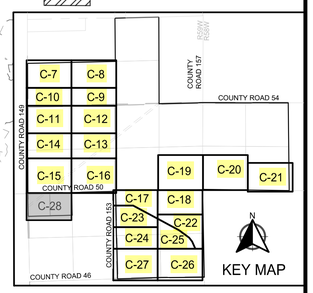
17

ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
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13	5.0	6.0	
14	6.0	10.5	

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- MV ROUTING CORRIDOR
- SOLAR PANEL POWER BLOCK
- INVERTER SKID PAD
- STAGING AREA



N

0 100 200
H: SCALE IN FEET

ACC- 032487 - SHEP-CP-GRAD-PLAN-UTIL.dwg 3/11/2026 3:23:03 PM

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

SCALE:	DESIGN BY:
AS SHOWN	CMM
PLAN BY:	CHECK BY:
MEK	EAE

REVISIONS

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ON 03/05/2026

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PRELIMINARY GRADING AND SITE PLAN

COLORADO LICENSED
EARTH A. EVANS
53515
PROFESSIONAL ENGINEER

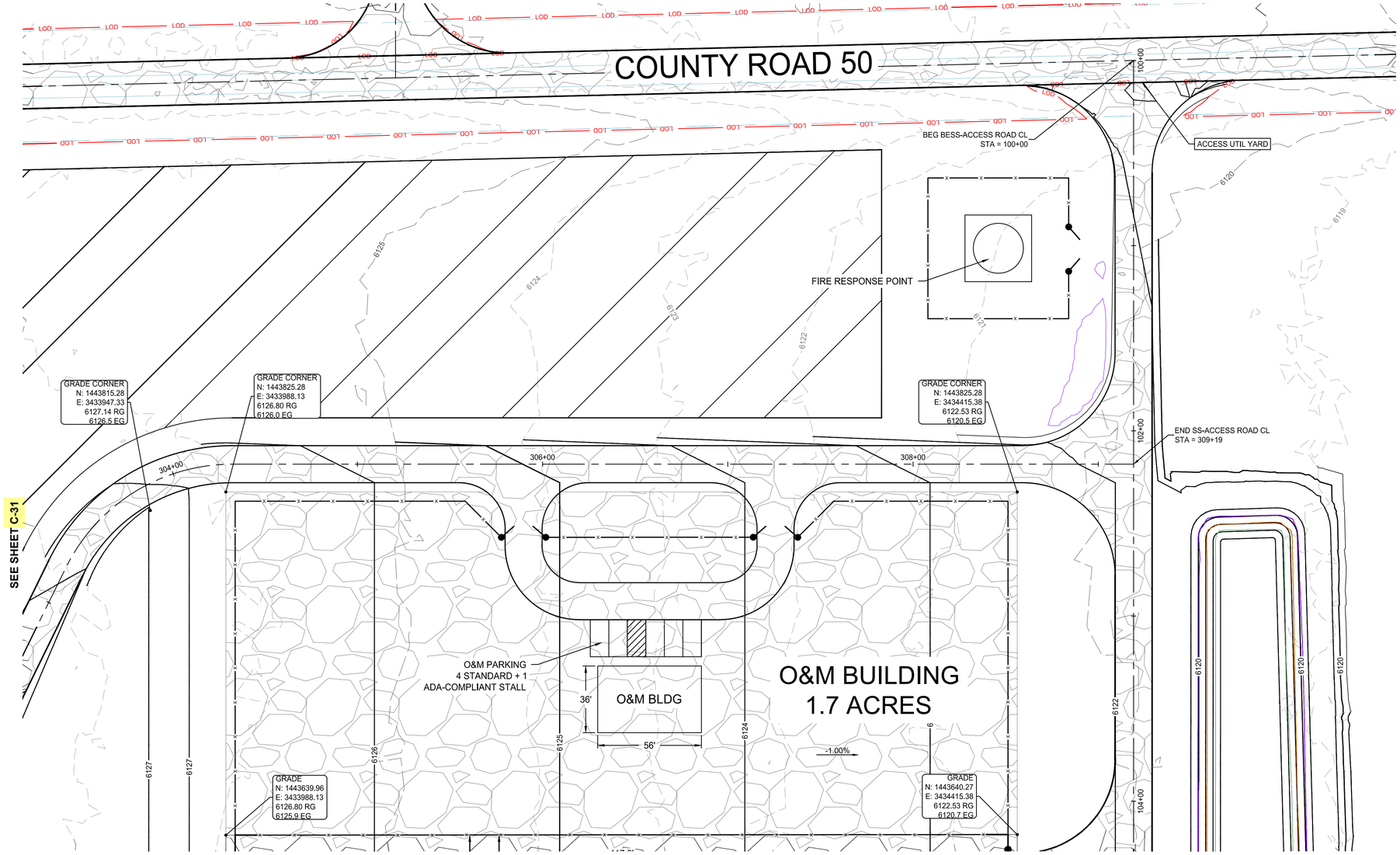
SHEPHERD SOLAR

SHEET NO.
C-28

WSB PROJECT NO.
032487

DATE
2026-03-11

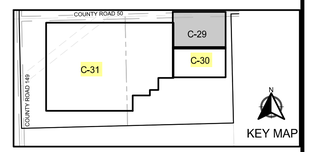
REV.
D



ELEVATION TABLE			
RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

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- SOLAR PANEL POWER BLOCK
- INVERTER SKID PAD
- STAGING AREA



N

H: 0 30 60
SCALE IN FEET

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

SCALE:	DESIGN BY:
AS SHOWN	CMM
PLAN BY:	CHECK BY:
MEK	EAE

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ON 03/05/2026

AND IS NOT FOR CONSTRUCTION.

PRELIMINARY O&M GRADING AND SITE PLAN

COLORADO LICENSED
EARTH A. EVANS
53515
PROFESSIONAL ENGINEER

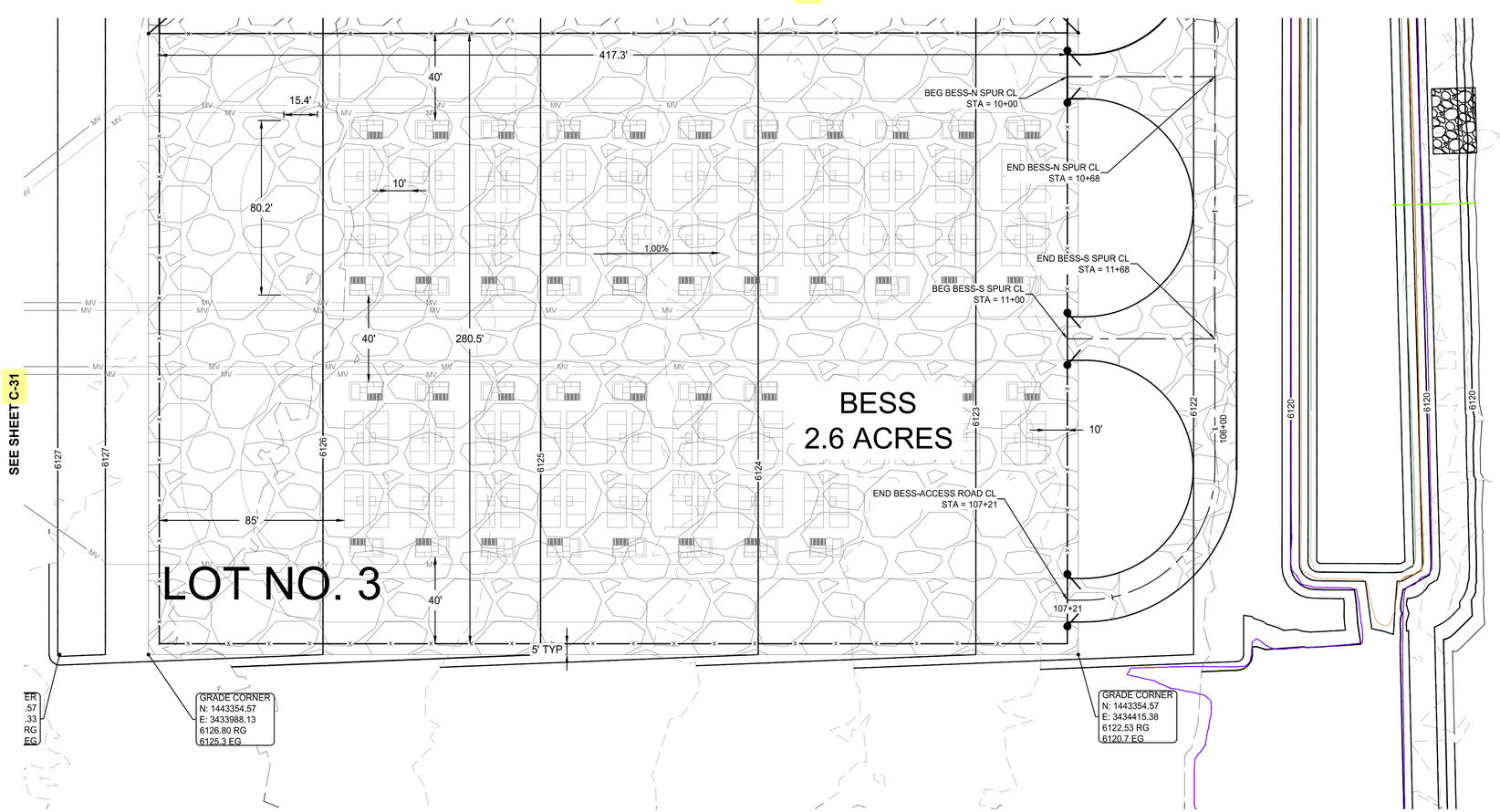
SHEPHERD SOLAR

SHEET NO.
C-29

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

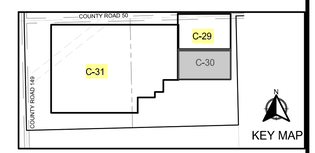


ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
5	-3.0	-2.0	
6	-2.0	-1.0	
7	-1.0	-0.17	
8	0.17	1.0	
9	1.0	2.0	
10	2.0	3.0	
11	3.0	4.0	
12	4.0	5.0	
13	5.0	6.0	
14	6.0	10.5	

GRADING PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- LOD — LIMITS OF DISTURBANCE
- CORRECTIVE GRADING LIMITS
- PROJECT BOUNDARY/ LEASE LIMIT
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- MV ROUTING CORRIDOR
- SOLAR PANEL
- POWER BLOCK
- INVERTER SKID PAD
- STAGING AREA



N

0 30 60
H: SCALE IN FEET

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

SCALE:	DESIGN BY:
AS SHOWN	CMM
PLAN BY:	CHECK BY:
MEK	EAE

REVISIONS

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P.E. #0053515
ON 03/05/2026

AND IS NOT FOR CONSTRUCTION.

PRELIMINARY BESS GRADING & SITE PLAN

COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-30

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

SCALE:	DESIGN BY:
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PLAN BY:	CHECK BY:
MEK	EAE

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ON 03/05/2026

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PRELIMINARY UTILITY PADS GRADING & SITE PLAN

COLORADO LICENSED EARTH EVANS 53515 PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-31

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

SEE SHEET C-29
SEE SHEET C-30

GRADE CORNER
N: 1443883.95
E: 3433147.18
6134.32 RG
6133.9 EG

GRADE CORNER
N: 1443610.19
E: 3433362.03
6134.33 RG
6131.4 EG

GRADE CORNER
N: 1443815.28
E: 3433947.33
6127.14 RG
6126.5 EG

GRADE CORNER
N: 1443594.88
E: 3433662.89
6131.40 RG
6128.6 EG

GRADE CORNER
N: 1443444.51
E: 3433475.84
6131.40 RG
6129.6 EG

GRADE CORNER
N: 1443407.83
E: 3433813.27
6129.00 RG
6127.6 EG

GRADE CORNER
N: 1443354.57
E: 3433947.33
6127.21 RG
6125.6 EG

GRADE CORNER
N: 1443257.46
E: 3433626.22
6129.00 RG
6128.4 EG

GRADE CORNER
N: 1443205.80
E: 3432846.76
6124.44 RG
6115.3 EG

GRADE CORNER
N: 1443379.56
E: 3432631.92
6124.50 RG
6118.2 EG

SWITCHYARD
15 ACRES

SUBSTATION
1.3 ACRES

LOT NO. 4

BEG SY-N SPUR CL
STA = 20+00

END SY-N SPUR CL
STA = 20+90

BEG SY-C SPUR CL
STA = 21+00

END SY-C SPUR CL
STA = 21+90

BEG SY-S SPUR CL
STA = 22+00

END SY-S SPUR CL
STA = 22+90

BEG SY-ACCESS ROAD CL
STA = 200+00

BEG SS-SPUR CL
STA = 30+00

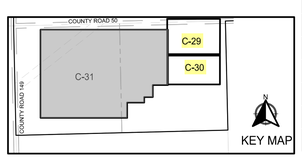
BEG SS-ACCESS ROAD CL
STA = 300+00

END SS-SPUR CL
STA = 31+99

645.0'
338.0'
80.0'
-1.5%

ELEVATION TABLE

RANGE	MIN	MAX	COLOR
1	-11.75	-6.0	
2	-6.0	-5.0	
3	-5.0	-4.0	
4	-4.0	-3.0	
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13	5.0	6.0	
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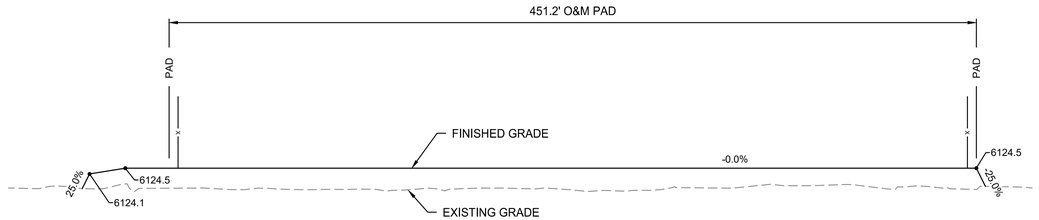


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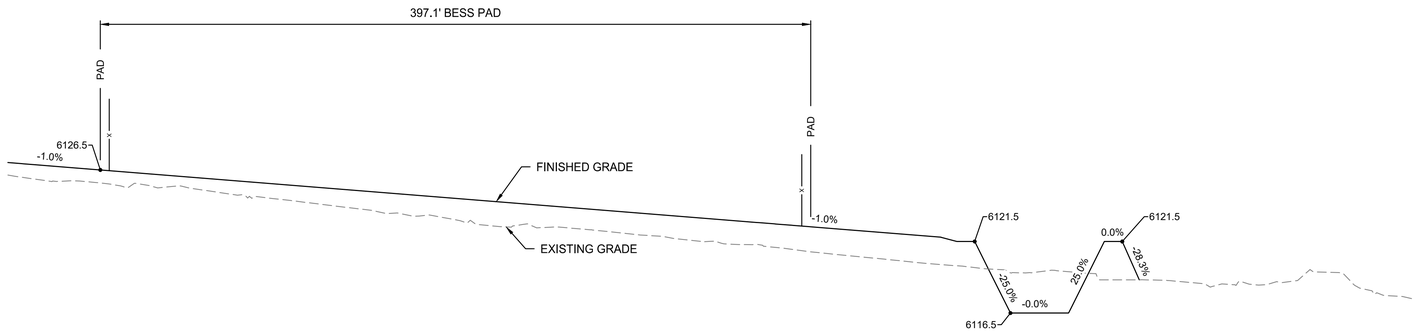
N

0 50 100
H: SCALE IN FEET



P1 O&M GRADING SECTION A-A

SEE SHEET C-28



P2 BESS GRADING SECTION B-B

SEE SHEET C-28

H: 0 40 80 SCALE IN FEET

V: 0 5 10 SCALE IN FEET

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
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(763) 541-4800
FIRM #20171391667

SCALE:	DESIGN BY:
AS SHOWN	CMM
PLAN BY:	CHECK BY:
MEK	EAE

REVISIONS

NO.	DATE	DESCRIPTION
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EARTH A. EVANS,
P.E. #0053515
ON 03/05/2026

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CROSS SECTIONS - O&M AND BESS

COLORADO LICENSED EARTH EVANS 53515 PROFESSIONAL ENGINEER

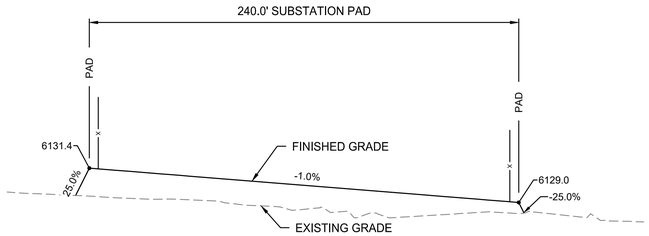
SHEPHERD SOLAR

SHEET NO.
C-32

WSB PROJECT NO.
032487

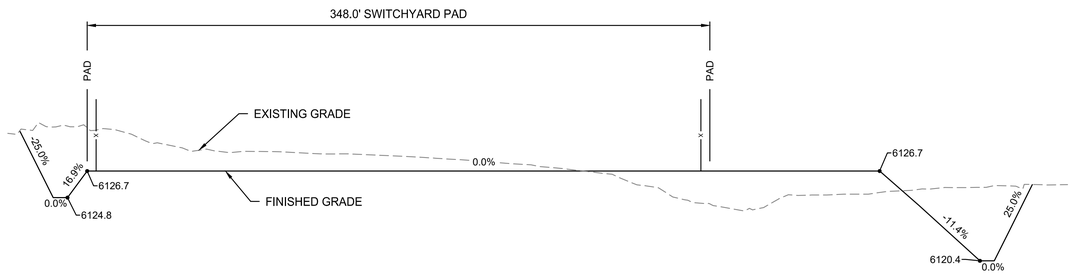
DATE
2026-03-11

REV.
D



P3 SUBSTATION GRADING SECTION C-C

SEE SHEET C-28



P4 SWITCHYARD GRADING SECTION D-D

SEE SHEET C-28

H: 0 40 80 SCALE IN FEET

V: 0 5 10 SCALE IN FEET

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

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MEK	EAE

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CROSS SECTIONS - SUBSTATION AND SWITCHYARD

COLORADO LICENSED EARTH EVANS 53515 PROFESSIONAL ENGINEER

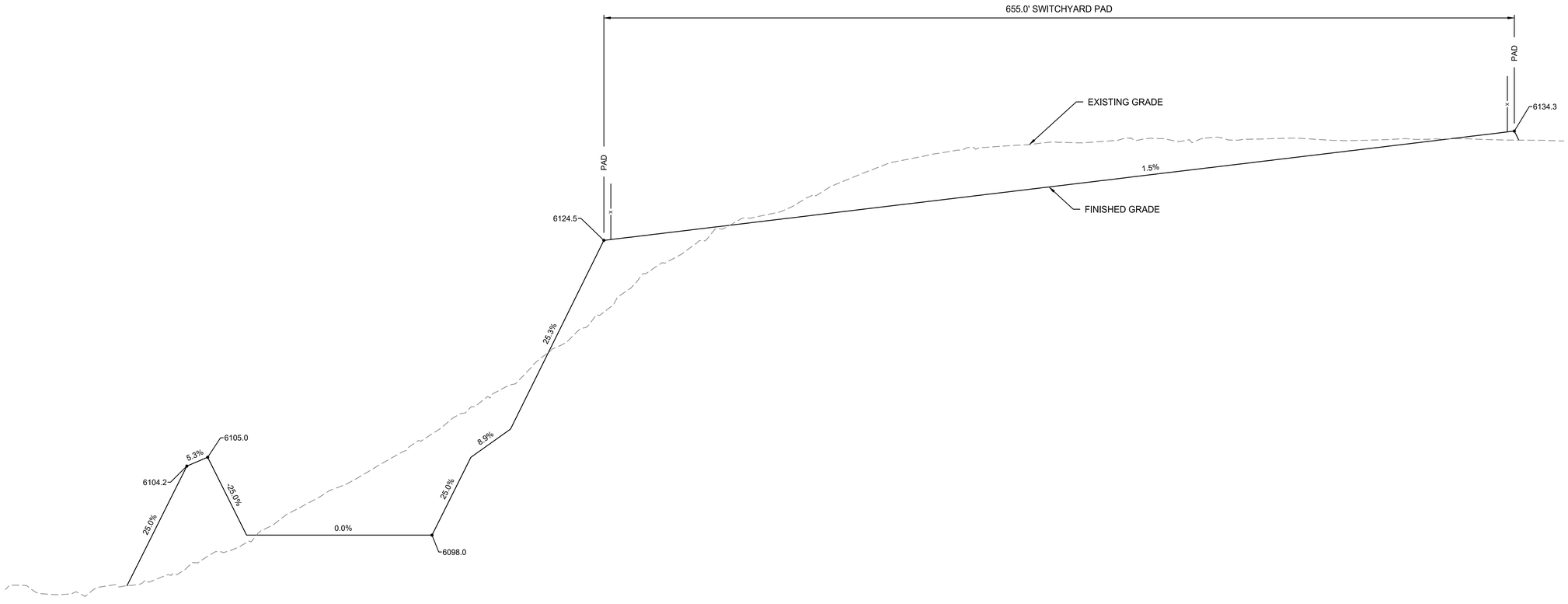
SHEPHERD SOLAR

SHEET NO.
C-33

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D



P-5 SWITCHYARD GRADING SECTION E-E

SEE SHEET C-28

H: 0 40 80 SCALE IN FEET

V: 0 5 10 SCALE IN FEET

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
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CROSS SECTIONS - SWITCHYARD

COLORADO LICENSED EARTH A. EVANS 53515 PROFESSIONAL ENGINEER

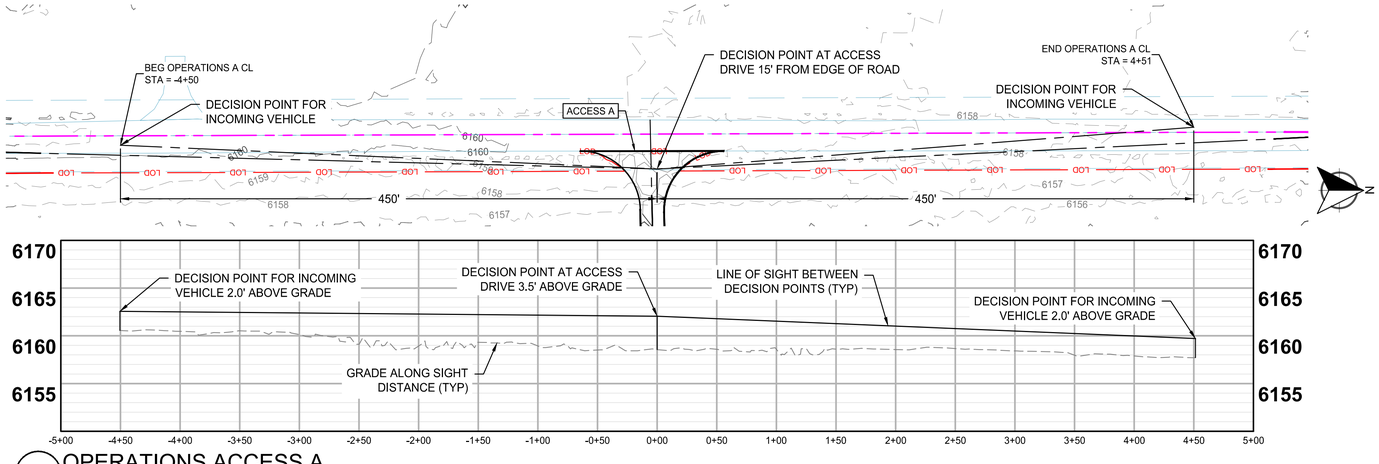
SHEPHERD SOLAR

SHEET NO.
C-34

WSB PROJECT NO.
032487

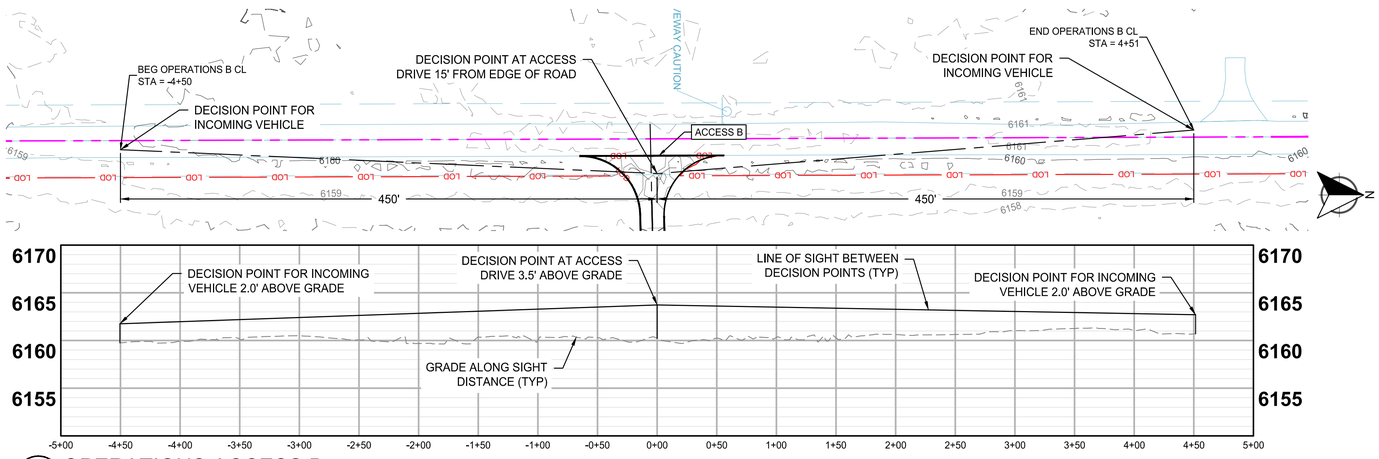
DATE
2026-03-11

REV.
D



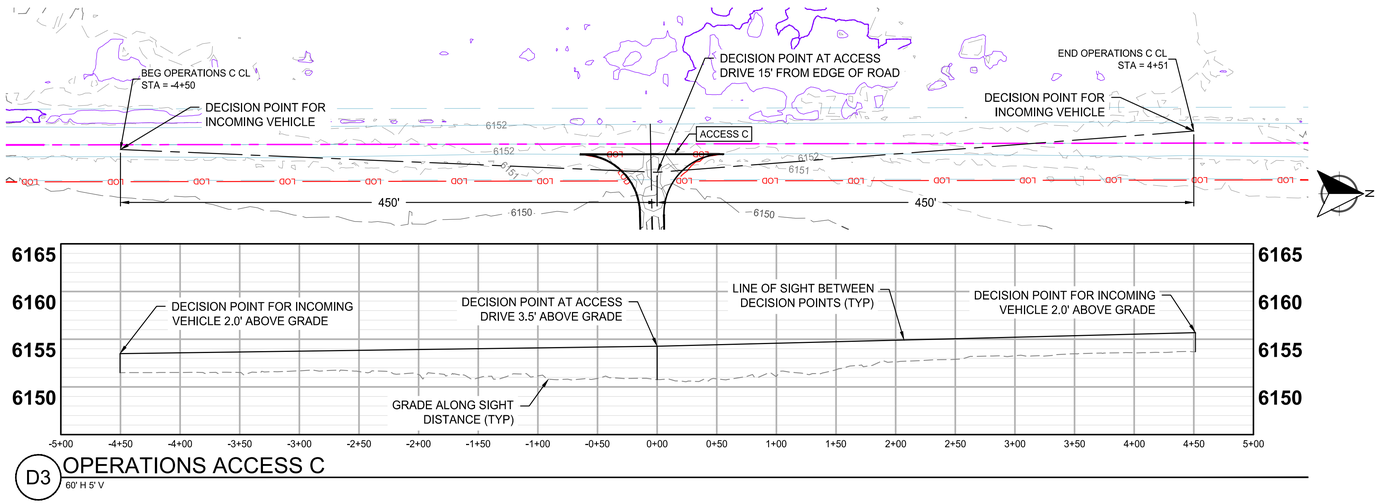
D1 OPERATIONS ACCESS A

60' H 5' V



D2 OPERATIONS ACCESS B

60' H 5' V



D3 OPERATIONS ACCESS C

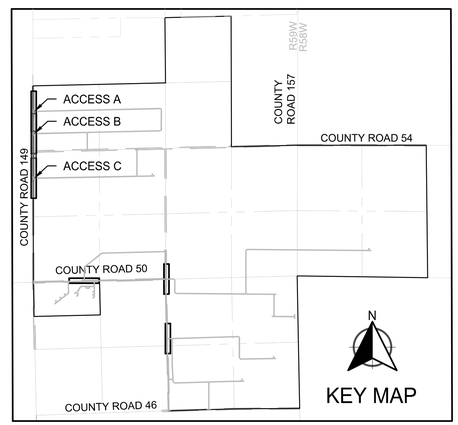
60' H 5' V

H: 0 60 120 SCALE IN FEET

V: 0 5 10 SCALE IN FEET

NOTES:

1. ALL EXISTING ROAD LOCATIONS SHOWN ARE APPROXIMATE.
2. EXACT PROPOSED INTERIOR ACCESS ROAD LOCATIONS ARE REPRESENTATIVE, AND TO BE FINALIZED PRIOR TO CONSTRUCTION.
3. SIGHT DISTANCES WERE CALCULATED ASSUMING A STOP CONTROLLED MOVEMENT AT THE ACCESS DRIVES.



SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

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MEK	EAE

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ON 03/05/2026

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SIGHT DISTANCE INTERSECTION ANALYSIS

COLORADO LICENSED EARTH EVANS 53515 PROFESSIONAL ENGINEER

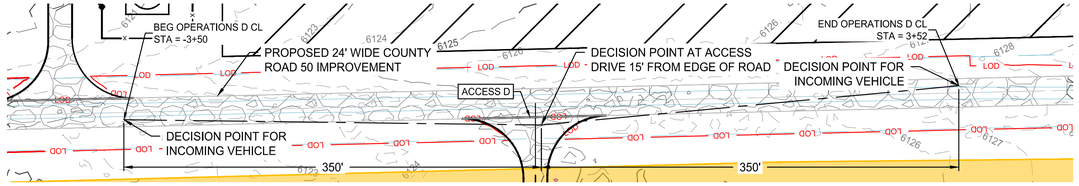
SHEPHERD SOLAR

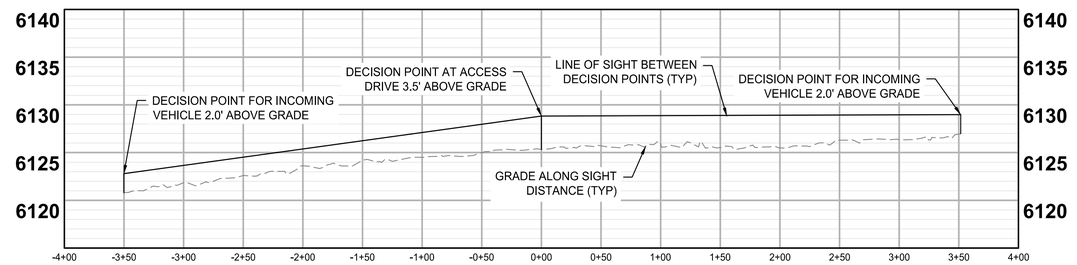
SHEET NO.
C-35

WSB PROJECT NO.
032487

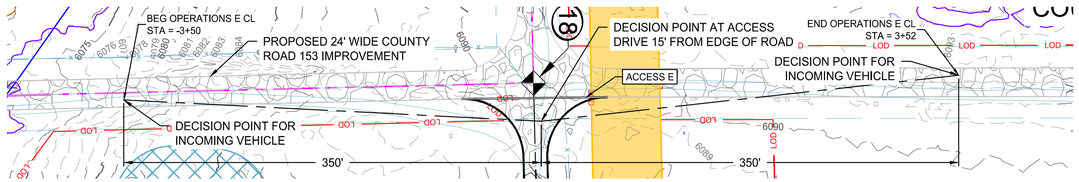
DATE
2026-03-11

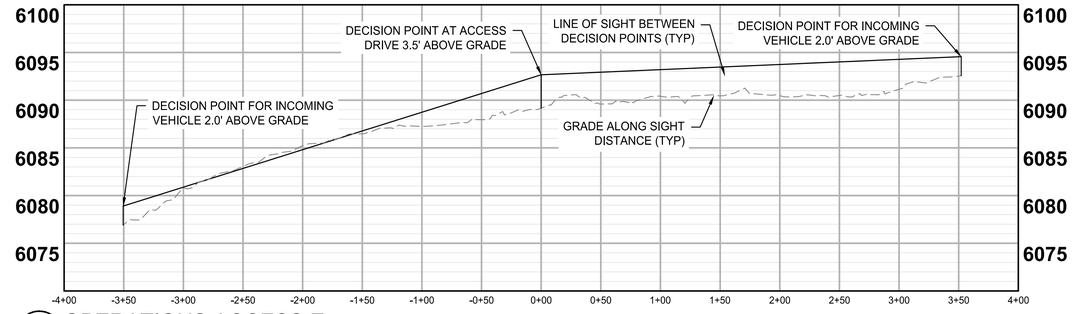
REV.
D



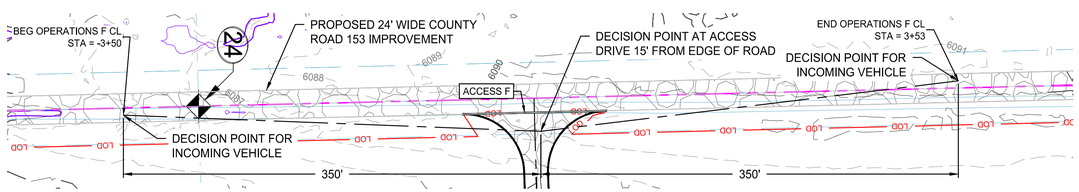


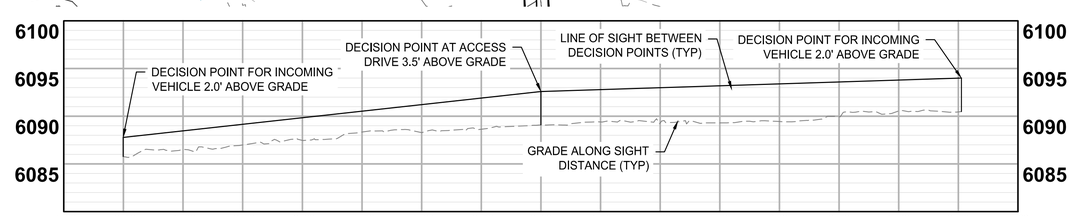
D4 OPERATIONS ACCESS D
60' H 5' V





D5 OPERATIONS ACCESS E
60' H 5' V

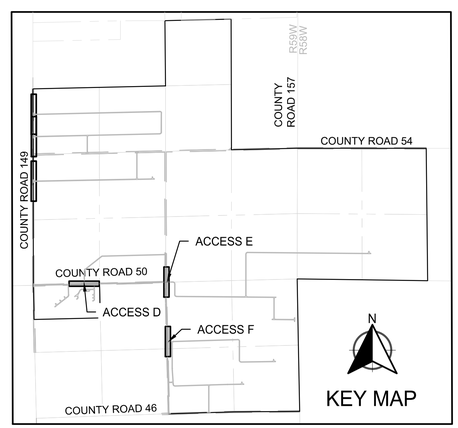




D6 OPERATIONS ACCESS F
60' H 5' V

0 60 120
H: SCALE IN FEET
0 5 10
V: SCALE IN FEET

NOTES:
1. ALL EXISTING ROAD LOCATIONS SHOWN ARE APPROXIMATE.
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3. SIGHT DISTANCES WERE CALCULATED ASSUMING A STOP CONTROLLED MOVEMENT AT THE ACCESS DRIVES.



SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

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AS SHOWN	CMM
PLAN BY:	CHECK BY:
MEK	EAE

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ON 03/05/2026

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SIGHT DISTANCE INTERSECTION ANALYSIS

COLORADO LICENSED EARTH EVANS 53515 PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-36

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: MARANVILLE LLC
PARCEL ID: 1934100120

COUNTY ROAD 54

COUNTY ROAD 149

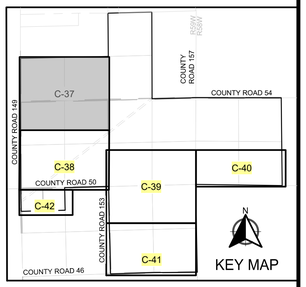
COUNTY ROAD 153

SEE SHEET C-38

ADDITIONAL EROSION CONTROL BMP MEASURES MAY BE REQUIRED. CONTRACTOR'S SWPPP SITE MANAGER SHALL CONTINUALLY MONITOR SITE AND ADD ADDITIONAL BMPs AS DEEMED NECESSARY AND MAINTAIN A RECORD. MODIFICATIONS TO EROSION CONTROL PLAN SHEETS DO NOT REQUIRE RE-ISSUANCE BY EOR FOR SUCH ADDITIONS TO THE PLAN.

ESC PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROJECT BOUNDARY/ LEASE LIMIT
- NON-JURISDICTIONAL WATER COURSE
- JURISDICTIONAL WATER COURSE
- NON-JURISDICTIONAL WETLANDS
- EXISTING WETLANDS
- 1-FT INUNDATION
- 2-FT INUNDATION
- 3-FT INUNDATION
- PROPOSED PERIMETER FENCE
- PROPOSED GRAVEL ROAD
- PROPOSED LWX
- PROPOSED GATE - SEE SHEET C-3
- RESTRICTED AREA PER BAYWA
- FEMA 100-YEAR FLOOD AREA
- SOLAR PANEL POWER BLOCK
- STAGING AREA
- EXISTING DRAINAGE DIRECTION
- PROPOSED DRAINAGE DIRECTION
- EROSION CONTROL BLANKET
- SEEDING HATCH
- CORRECTIVE GRADING LIMITS
- LIMITS OF DISTURBANCE
- CONSTRUCTION ENTRANCE
- TEMPORARY SEDIMENT POND
- SILT FENCE PERIMETER



N

0 200 400
H: SCALE IN FEET

ACC- 032487 - SHEP-C-EROS-PLAN.dwg 3/11/2026 3:24:21 PM

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

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MEK	EAE

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PRELIMINARY ESC PLAN

COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-37

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

SEE SHEET C-37

OWNER: MARANVILLE JACK S
PARCEL ID: 1934400119

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: MARANVILLE JACK S
PARCEL ID: 1934400119

COUNTY ROAD 149

OWNER: MARANVILLE LLC
PARCEL ID: 1934100120

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

100' EASEMENT AND R.O.W. - TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.- FOR TRANSMISSION AND DISTRIBUTION BK 290 PG 599

COUNTY ROAD 50

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: GORDON JUANITA LIFE ESTATE
PARCEL ID: 2902100113

COUNTY ROAD 153

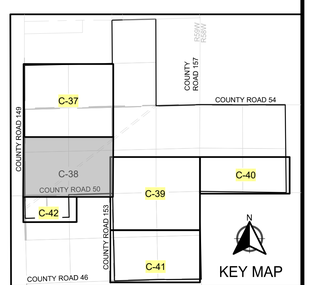
SEE SHEET C-39

SEE SHEET C-42

ADDITIONAL EROSION CONTROL BMP MEASURES MAY BE REQUIRED. CONTRACTOR'S SWPPP SITE MANAGER SHALL CONTINUALLY MONITOR SITE AND ADD ADDITIONAL BMPs AS DEEMED NECESSARY AND MAINTAIN A RECORD. MODIFICATIONS TO EROSION CONTROL PLAN SHEETS DO NOT REQUIRE RE-ISSUANCE BY EOR FOR SUCH ADDITIONS TO THE PLAN.

ESC PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROJECT BOUNDARY/ LEASE LIMIT
- NON-JURISDICTIONAL WATER COURSE
- JURISDICTIONAL WATER COURSE
- NON-JURISDICTIONAL WETLANDS
- EXISTING WETLANDS
- 1-FT INUNDATION
- 2-FT INUNDATION
- 3-FT INUNDATION
- PROPOSED PERIMETER FENCE
- PROPOSED GRAVEL ROAD
- PROPOSED LWX
- PROPOSED GATE - SEE SHEET C-3
- RESTRICTED AREA PER BAYWA
- FEMA 100-YEAR FLOOD AREA
- SOLAR PANEL POWER BLOCK
- STAGING AREA
- EXISTING DRAINAGE DIRECTION
- PROPOSED DRAINAGE DIRECTION
- EROSION CONTROL BLANKET
- SEEDING HATCH
- CORRECTIVE GRADING LIMITS
- LIMITS OF DISTURBANCE
- CONSTRUCTION ENTRANCE
- TEMPORARY SEDIMENT POND
- SILT FENCE PERIMETER



N

0 200 400
H: SCALE IN FEET

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
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COLORADO LICENSED EARTH EVANS 53515 PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-38

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

OWNER: CHAD MARANVILLE
PARCEL ID: 1936000044

OWNER: CHAD MARANVILLE
PARCEL ID: 1936000044

OWNER: GORDON JUANITA LIFE ESTATE
PARCEL ID: 2902100113

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

COUNTY ROAD 153

SEE SHEET C-38

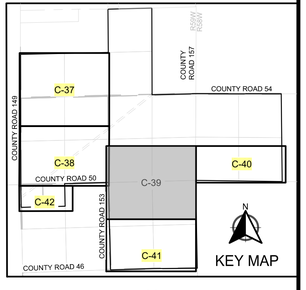
SEE SHEET C-40

SEE SHEET C-41

ADDITIONAL EROSION CONTROL BMP MEASURES MAY BE REQUIRED. CONTRACTOR'S SWPPP SITE MANAGER SHALL CONTINUALLY MONITOR SITE AND ADD ADDITIONAL BMPs AS DEEMED NECESSARY AND MAINTAIN A RECORD. MODIFICATIONS TO EROSION CONTROL PLAN SHEETS DO NOT REQUIRE RE-ISSUANCE BY EOR FOR SUCH ADDITIONS TO THE PLAN.

ESC PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROJECT BOUNDARY/ LEASE LIMIT
- NON-JURISDICTIONAL WATER COURSE
- JURISDICTIONAL WATER COURSE
- NON-JURISDICTIONAL WETLANDS
- EXISTING WETLANDS
- 1-FT INUNDATION
- 2-FT INUNDATION
- 3-FT INUNDATION
- PROPOSED PERIMETER FENCE
- PROPOSED GRAVEL ROAD
- PROPOSED LWX
- PROPOSED GATE - SEE SHEET C-3
- RESTRICTED AREA PER BAYWA
- FEMA 100-YEAR FLOOD AREA
- SOLAR PANEL POWER BLOCK
- STAGING AREA
- EXISTING DRAINAGE DIRECTION
- PROPOSED DRAINAGE DIRECTION
- EROSION CONTROL BLANKET
- SEEDING HATCH
- CORRECTIVE GRADING LIMITS
- LOD — LIMITS OF DISTURBANCE
- CONSTRUCTION ENTRANCE
- TSP — TEMPORARY SEDIMENT POND
- SF — SILT FENCE PERIMETER



N

0 200 400
H: SCALE IN FEET

SHEPHERD SOLAR

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dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
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FIRM #20171391667

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COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

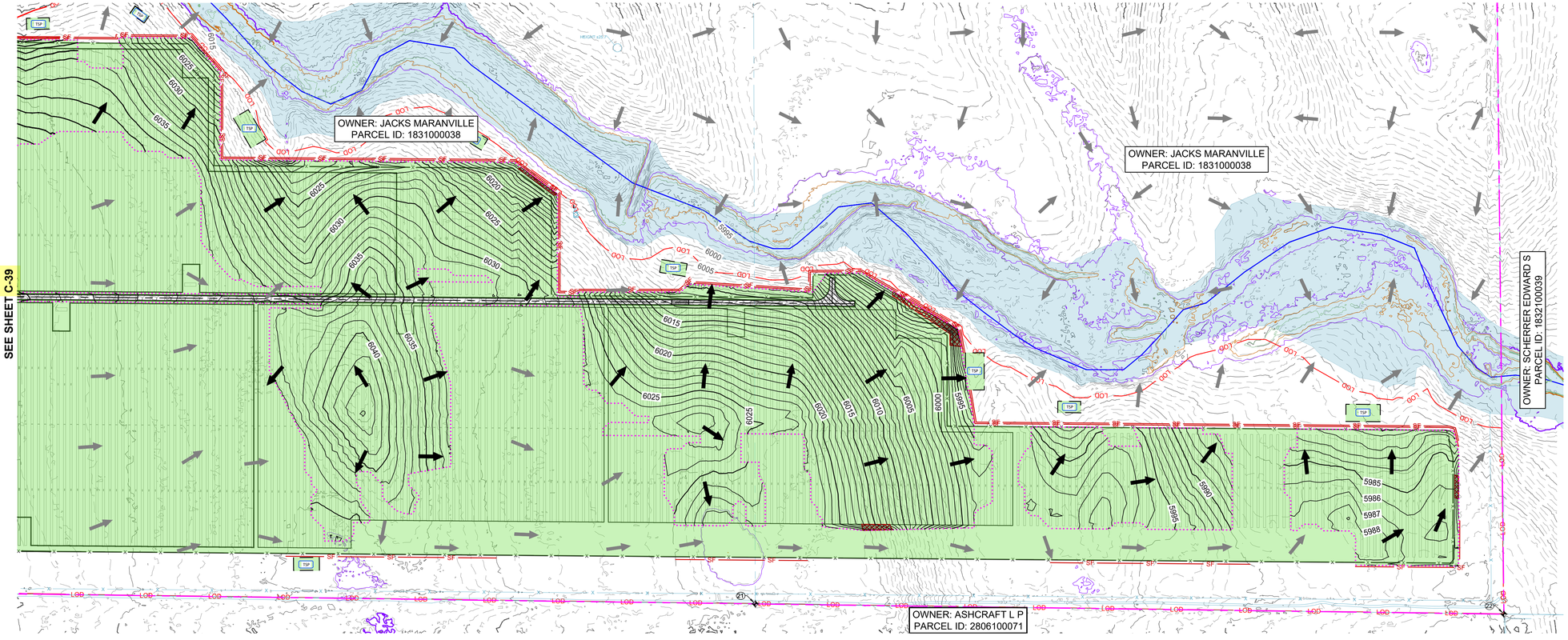
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SHEET NO.
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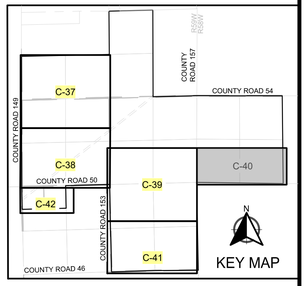
REV.
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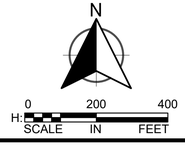


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- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
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- STAGING AREA
- EXISTING DRAINAGE DIRECTION
- PROPOSED DRAINAGE DIRECTION
- EROSION CONTROL BLANKET
- SEEDING HATCH
- CORRECTIVE GRADING LIMITS
- LIMITS OF DISTURBANCE
- CONSTRUCTION ENTRANCE
- TEMPORARY SEDIMENT POND
- SILT FENCE PERIMETER





SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

SCALE:	DESIGN BY:
AS SHOWN	GIR
PLAN BY:	CHECK BY:
MEK	EAE

REVISIONS

NO.	DATE	DESCRIPTION
A.	01/26/2026	INITIAL PRELIMINARY DESIGN
B.	02/25/2026	REVISED PRELIMINARY DESIGN
C.	03/05/2026	REVISED PRELIMINARY DESIGN

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EARTH A. EVANS,
P.E. #0053515
ON 03/05/2026

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PRELIMINARY ESC PLAN

COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

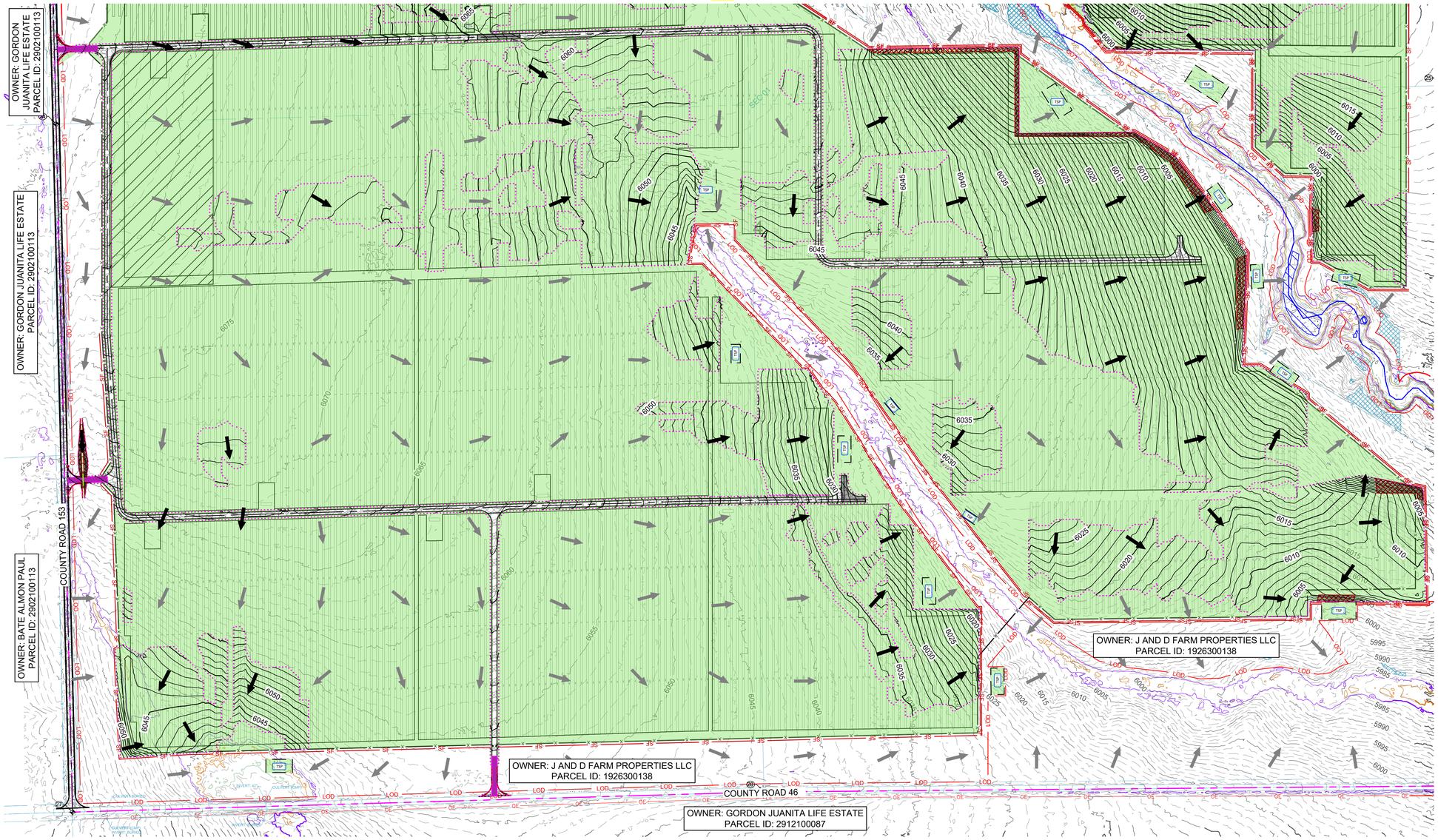
SHEET NO.
C-40

WSB PROJECT NO.
032487

DATE
2026-03-11

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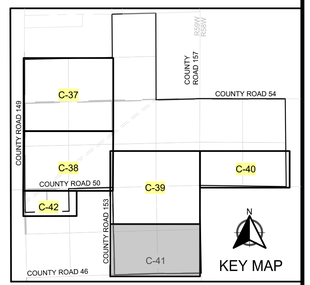
SEE SHEET C-39



ADDITIONAL EROSION CONTROL BMP MEASURES MAY BE REQUIRED. CONTRACTOR'S SWPPP SITE MANAGER SHALL CONTINUALLY MONITOR SITE AND ADD ADDITIONAL BMPs AS DEEMED NECESSARY AND MAINTAIN A RECORD. MODIFICATIONS TO EROSION CONTROL PLAN SHEETS DO NOT REQUIRE RE-ISSUANCE BY EOR FOR SUCH ADDITIONS TO THE PLAN.

ESC PLAN LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROJECT BOUNDARY/ LEASE LIMIT
- NON-JURISDICTIONAL WATER COURSE
- JURISDICTIONAL WATER COURSE
- NON-JURISDICTIONAL WETLANDS
- EXISTING WETLANDS
- 1-FT INUNDATION
- 2-FT INUNDATION
- 3-FT INUNDATION
- PROPOSED PERIMETER FENCE
- PROPOSED GRAVEL ROAD
- PROPOSED LWX
- PROPOSED GATE - SEE SHEET C-3
- RESTRICTED AREA PER BAYWA
- FEMA 100-YEAR FLOOD AREA
- SOLAR PANEL POWER BLOCK
- STAGING AREA
- EXISTING DRAINAGE DIRECTION
- PROPOSED DRAINAGE DIRECTION
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SHEPHERD SOLAR

SHEET NO.
C-41

WSB PROJECT NO.
032487

DATE
2026-03-11

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D

SEE SHEET C-38

COUNTY ROAD 50

100' EASEMENT AND R.O.W. - TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.- FOR TRANSMISSION AND DISTRIBUTION BK 290 PG 599

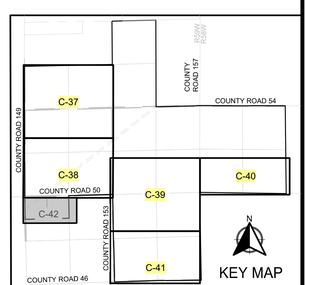
OWNER: J AND D FARM PROPERTIES LLC
PARCEL ID: 1926300138

OWNER: BROWN ROBERT WAYNE
PARCEL ID: 2902300002

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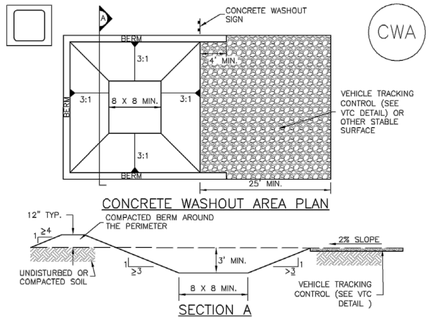
SHEET NO.
C-42

WSB PROJECT NO.
032487

DATE
2026-03-11

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Concrete Washout Area (CWA) MM-1



CONCRETE WASHOUT AREA PLAN

SECTION A

CWA–1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –CWA INSTALLATION LOCATION.

2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

MM-1 Concrete Washout Area (CWA)

CWA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.

5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER–TIGHT CONTAINER AND DISPOSED OF PROPERLY.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.

7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD).

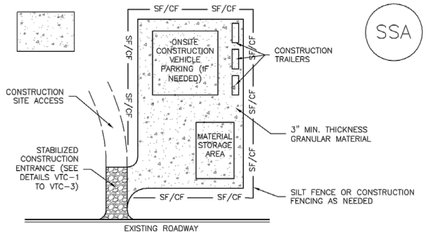
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SEEDING AND MULCHING INSTALLATION NOTES

1. All brands furnished shall be free from such noxious seeds as Russian or Canadian thistle, course fescue, European bindweed, Johnson grass, Knap weed, and leafy spurge.
2. The seeder shall furnish to the Contractor a signed statement certifying that the seed furnished is from a lot that has been tested by a recognized laboratory. Seed that has become wet, moldy, or otherwise damaged in transit or in storage, will not be acceptable. Seed tickets shall be provided to the Engineer upon request.
3. Drill seeding mix shall conform to the seed mix table.
4. If the seed available on the market does not meet the minimum purity and germination percentages specified, the subcontractor must compensate for a lesser percentage of purity or germination by furnishing sufficient additional seed to equal the specified product. The tags from the seed mixes must be supplied to contractor and forwarded to the Engineer.
5. The formula used for determining the quantity of pure live seed (PLS) shall be (pounds of seed) X (purity) X (germination) = pounds of pure live seed (PLS).
6. Perminate seed mix shall be used unless otherwise approved by the Engineer.
7. All areas to be seeded and mulched shall have native topsoil or approved soil amendments spread to a depth of at least 6 inches (loose depth). Haul roads and other compacted areas shall be loosened to a depth of 6 inches prior to spreading topsoil.
8. Soil is to be thoroughly loosened (tilled) to a depth of at least 6 inches prior to seeding. The top 6 inches of the seed bed shall be free of rocks greater than 4 inches and soil clods greater than 2 inches. Seeding over any compacted areas that haven't been thoroughly loosened shall be rejected.
9. Seed is to be applied using a mechanical drill to a depth of 1/4 inch. Row spacing shall be no more than 6 inches. Material used for mulch shall consist of long–stemmed straw. At least 50 percent of the mulch, by weight, shall be 10 inches or more in length. Mulch shall be applied and mechanically anchored to a depth of at least 2 inches. Mulch shall be applied at a rate of 4000 Lb. of straw per acre.
10. If the permittee demonstrates to the Engineer that it is not possible to drill seed, seed is to be uniformly broadcast at two times the drilled rate, then lightly harrowed to provide a deed depth of approximately 1/4 inch, then rolled to compact, then mulched as specified above.
11. Seeding and mulching shall be completed within 30 days of initial exposure or 7 days after grading is substantially complete in a given area (as defined by the Engineer). This may require multiple mobilizations for seeding and mulching.
12. Mulch shall be applied within 24–hours of seeding.
13. Tackifier should be utilized to help with straw displacement.

	STANDARDS & SPECIFICATIONS	REVISED:	EROSION AND SEDIMENT SEED AND MULCHING
DATE:		DRAWING NO. 600–10	

Stabilized Staging Area (SSA) SM-6



SSA–1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF STAGING AREA(S).
   –CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.

3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.

4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

SM-6 Stabilized Staging Area (SSA)

STABILIZED STAGING AREA MAINTENANCE NOTES

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.

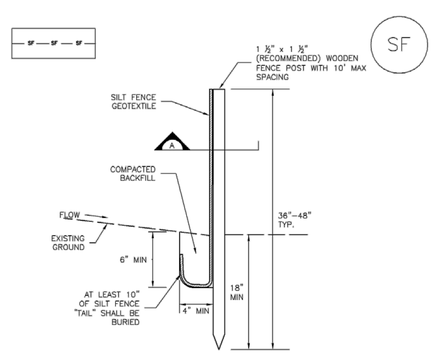
6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE–ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

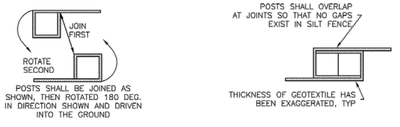
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

Silt Fence (SF) SC-1



SILT FENCE



SECTION A

SF–1. SILT FENCE

SC-1 Silt Fence (SF)

SILT FENCE INSTALLATION NOTES

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2–5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.

4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.

5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J–HOOK." THE "J–HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' – 20').

7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

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3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".

5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

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EROSION DETAILS

COLORADO LICENSED EARTH A. EVANS 53515 PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-43

WSB PROJECT NO.
032487

DATE 2026-03-11 | REV. D

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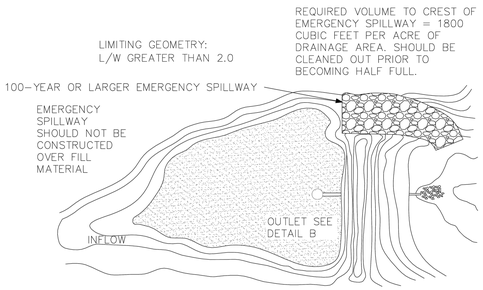
TEMPORARY SEDIMENT BASIN

DEFINITION

A TEMPORARY BASIN WITH A CONTROLLED STORM WATER RELEASE STRUCTURE, FORMED BY EXCAVATION OR CONSTRUCTION OF AN EMBANKMENT OF COMPACTED SOIL. REQUIRED FOR ALL DRAINAGE AREAS GREATER THAN 1 ACRE.

PURPOSE

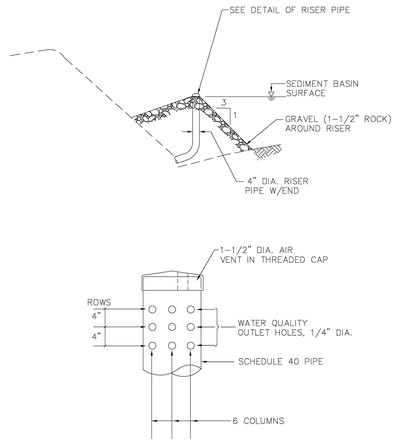
TO DETAIN SEDIMENT-LADEN RUNOFF FROM DISTRIBUTED AREAS TO ALLOW THE MAJORITY OF THE SEDIMENT TO SETTLE OUT.



STANDARDS & SPECIFICATIONS	REVISED:	TEMPORARY SEDIMENT BASIN
DATE:	DRAWING NO. 600-08	

SB

TEMPORARY SEDIMENT BASIN OUTLET DETAIL B



RISER PIPE DETAIL

STANDARDS & SPECIFICATIONS	REVISED:	TEMPORARY SEDIMENT BASIN OUTLET
DATE:	DRAWING NO. 600-09	

INLET PROTECTION

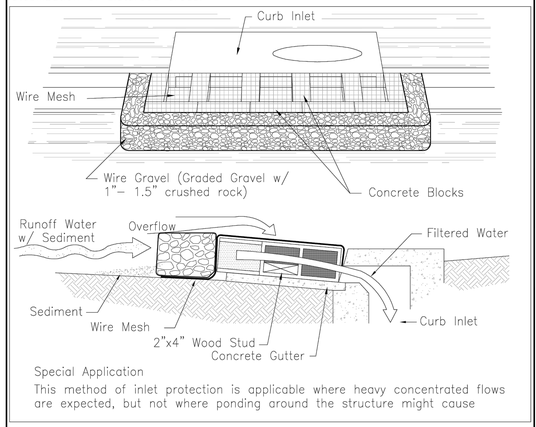
IP

Definition

A sediment filter or an excavated impounding area around a storm drain drop inlet or curb inlet.

Purposes

To reduce sediment from entering storm drainage systems prior to permanent stabilization of disturbed areas.



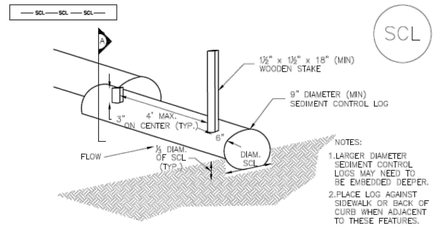
Special Application

This method of inlet protection is applicable where heavy concentrated flows are expected, but not where ponding around the structure might cause

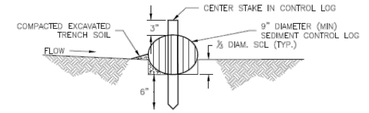
STANDARDS & SPECIFICATIONS	REVISED:	INLET PROTECTION DETAIL
DATE:	DRAWING NO. 600-05	

Sediment Control Log (SCL) SC-2

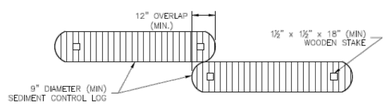
SCL



TRENCHED SEDIMENT CONTROL LOG

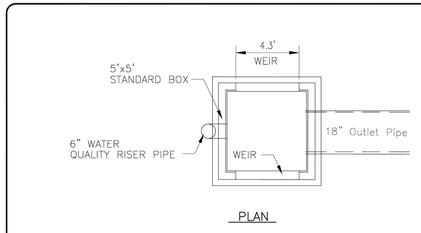


SECTION (A)
TRENCHED SEDIMENT CONTROL LOG

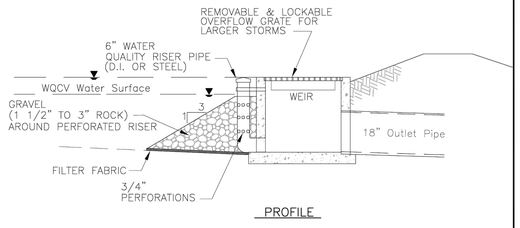


LOG JOINTS

SCL-1. TRENCHED SEDIMENT CONTROL LOG



PLAN



PROFILE

OUTLET STRUCTURE

STANDARDS & SPECIFICATIONS	REVISED:	OUTLET STRUCTURE
DATE:	DRAWING NO. 600-15	

INLET PROTECTION

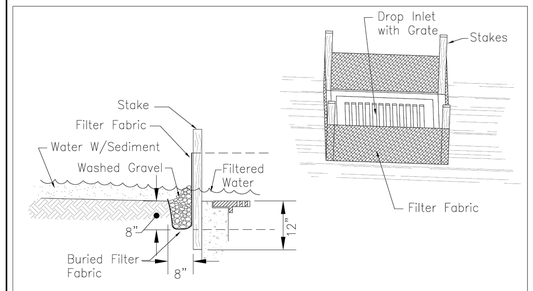
IP

Definition

A sediment filter or an excavated impounding area around a storm drain or curb inlet.

Purposes

To reduce sediment from entering storm drainage systems prior to permanent stabilization of disturbed area.

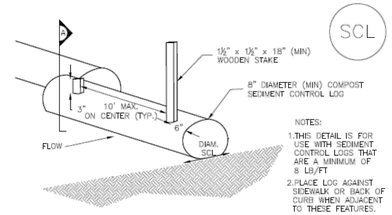


STORM DRAIN INLET PROTECTION

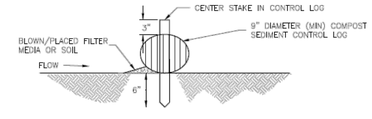
STANDARDS & SPECIFICATIONS	REVISED:	INLET PROTECTION DETAIL
DATE:	DRAWING NO. 600-06	

SC-2 Sediment Control Log (SCL)

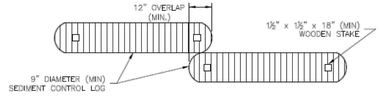
SCL



COMPOST SEDIMENT CONTROL LOG (WEIGHTED)



SECTION (A)
COMPOST SEDIMENT CONTROL LOG



LOG JOINTS

SCL-2. COMPOST SEDIMENT CONTROL LOG (WEIGHTED)

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FIRM #20171391667

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ON 03/05/2026

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EROSION DETAILS

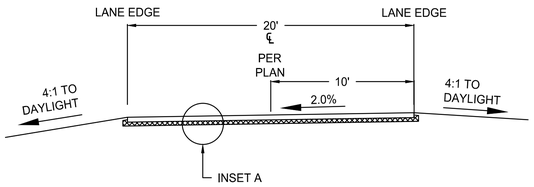
COLORADO LICENSED EARTH EVANS 53515 PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-44

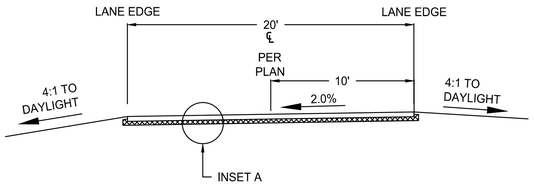
WSB PROJECT NO.
032487

DATE 2026-03-11 | REV. D



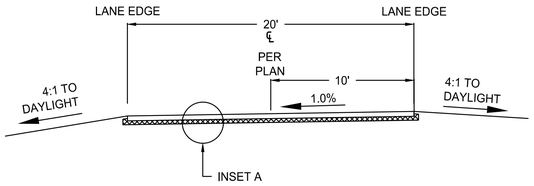
R1 SUBSTATION/SWITCHYARD ACCESS ROAD (SUPERELEVATED RIGHT)

NOT TO SCALE



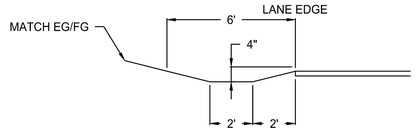
R2 PV ROAD/LANE (SUPERELEVATED RIGHT)

NOT TO SCALE



R3 BESS ACCESS ROAD (SUPERELEVATED RIGHT)

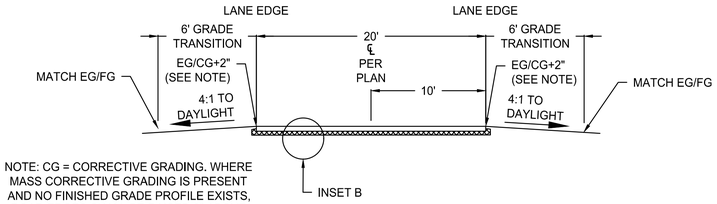
NOT TO SCALE



STRUCTURAL SECTION NOTES

BASE MATERIAL: BASE MATERIAL SHALL BE COMPOSED OF CDOT CLASS 6 AGGREGATE BASE COURSE (ABC), COMPACTED TO 98% STANDARD PROCTOR
SUBBASE: CDOT CLASS 6 ABC, TOPPED WITH CLASS 3 AASHTO M288 FABRIC
ROAD SECTIONS PROVIDED SHALL BE FINAL CONDITION THICKNESSES AFTER COMPACTION.
ROAD SECTIONS BASED ON PRELIM GEOTECH REPORT DATED NOVEMBER 21, 2025, KLEINFELDER PROJECT #: 26002369.001A

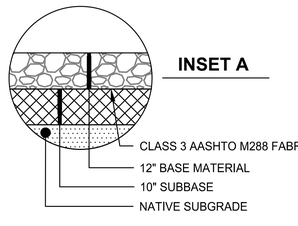
OPTIONAL TRANSITION DITCH
CONTRACTOR MAY INSTALL TRANSITION DITCH ON UPHILL SIDE OF PV ROADS BASED ON FIELD CONDITIONS AND CONTRACTOR'S PREFERENCE FOR DRAINAGE CONTROL DURING CONSTRUCTION.

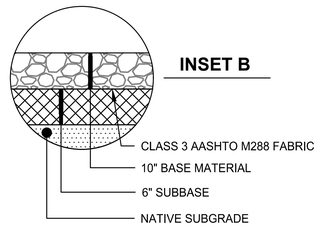


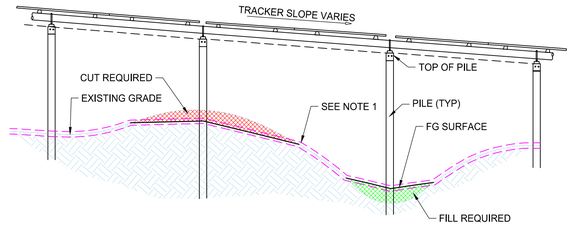
NOTE: CG = CORRECTIVE GRADING. WHERE MASS CORRECTIVE GRADING IS PRESENT AND NO FINISHED GRADE PROFILE EXISTS, ROAD EDGES SHALL BE RAISED 2" ABOVE PROPOSED CORRECTIVE GRADING ("CG").

RX EXISTING OR FINISH GRADE MATCH

NOT TO SCALE



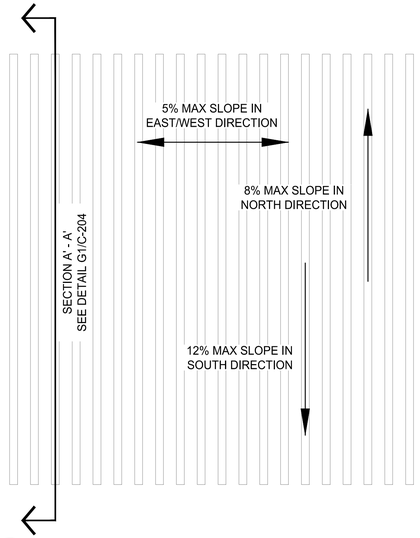




NOTES:
1. CONTRACTOR CONSTRUCTION GRADING TOLERANCE ± 0.2 FT.
2. REFER TO STRUCTURAL PLANS FOR DESIGN PILE REVEAL WINDOW, PILE DESIGN, AND ADDITIONAL CRITERIA AS APPLICABLE.
3. IF THE MINIMUM OR MAXIMUM PILE REVEAL HEIGHTS ARE EXCEEDED, ADDITIONAL EARTHWORK MAY BE REQUIRED FOR PILE REVEALS TO FALL WITHIN THE REQUIRED DESIGN PILE WINDOW.
4. DESIGN MAXIMUM TRACKER SLOPES
   4.1. SOUTH FACING - 12%
   4.2. NORTH FACING - 8%
   4.3. EAST/WEST - 5%
5. CONTRACTOR SHALL ENSURE THAT ADEQUATE TOPSOIL REMAINS AFTER ALL GRADING ACTIVITIES TO RE-VEGETATE THE SITE.
6. EARTHWORK BALANCING PLAN SHOULD AVOID IMPORT/EXPORT OVER PUBLIC ROADS.

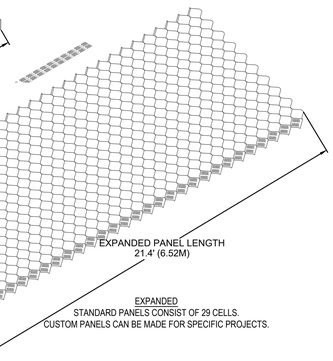
G1 TRACKER GRADING TOLERANCE (SECTION A'-A')

NOT TO SCALE



G2 SLOPE GRADING TOLERANCE

NOT TO SCALE



EXPANDED
STANDARD PANELS CONSIST OF 29 CELLS.
CUSTOM PANELS CAN BE MADE FOR SPECIFIC PROJECTS.

ISOMETRIC VIEW

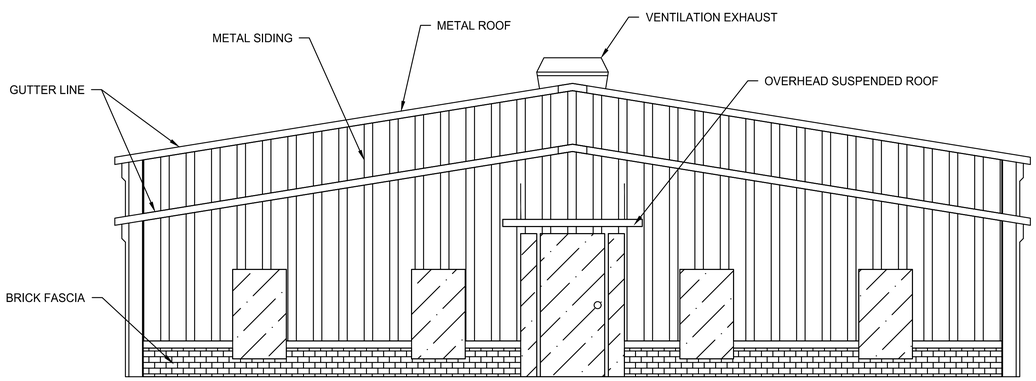
	CELL SIZE
EXPANDED CELL WIDTH	EXPANDED CELL LENGTH
10.2" (259 MM)	8.8" (224 MM)

MANUFACTURER NOTES:
1. PERFORATIONS RANGE FROM 11% TO 16%.
2. TYPICAL CELL HEIGHTS ARE 6".
3. CUSTOM CELL HEIGHTS CAN BE MADE FOR SPECIFIC PROJECTS.

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 4812-003.

L1 LOW WATER CROSSING - ENVIROGRID GEOCELL

NOT TO SCALE



NOTES:
1. O&M EXTERIOR IS TO BE CONSTRUCTED FROM BRICK FASCIA, METAL SIDING & METAL ROOF.
2. O&M BUILDING DIMENSIONS ARE TO BE 56' IN LENGTH, 36' IN WIDTH, 20' IN HEIGHT.

B1 O&M BUILDING (PRELIMINARY & SUBJECT TO CHANGE)

NOT TO SCALE

SHEPHERD SOLAR

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dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

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P.E. #0053515
ON 03/05/2026

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TYPICAL SECTIONS

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EARTH EVANS
53515
PROFESSIONAL ENGINEER

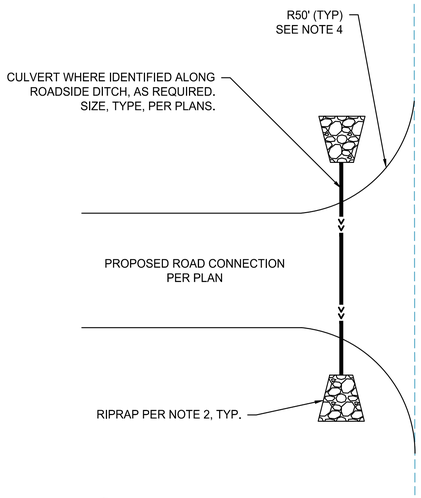
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SHEET NO.
C-45

WSB PROJECT NO.
032487

DATE
2026-03-11

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D

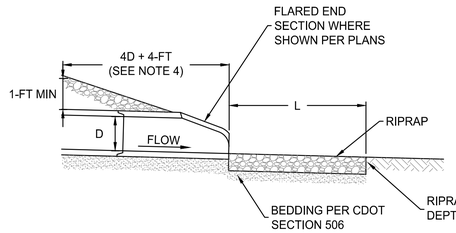


D1 PUBLIC ROADWAY CONNECTION

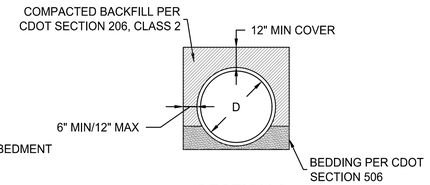
NOT TO SCALE

NOTES:

1. ALL COUNTY CONNECTION CULVERTS SHALL BE 16 GAGE POLYMER COATED CORRUGATED METAL ARCH PIPES UNLESS OTHERWISE APPROVED OR DIRECTED BY LOCAL AUTHORITY HAVING JURISDICTION.
2. SEE DETAIL D2, RIGHT, FOR RIPRAP INSTALLATION DETAIL. SEE ABOVE DRAINAGE CROSSING SCHEDULE FOR RIPRAP PROTECTION SIZING REQUIREMENTS.
3. ALL CULVERTS ARE DESIGNED FOR 25-YR STORM EVENT UNLESS OTHERWISE NOTED. SEE DRAINAGE REPORT FOR CALCULATIONS.
4. AT CONNECTIONS TO FARM-TO-MARKET ROAD, FINAL IMPROVED RADIUS SHALL BE 25-FT. A LARGER TEMPORARY RADIUS MAY BE USED FOR MATERIAL DELIVERIES BUT SHALL BE RESTORED TO NATIVE SOILS AT COMPLETION OF PROJECT AND RESEEDED TO FINAL IMPROVED RADIUS EDGE.



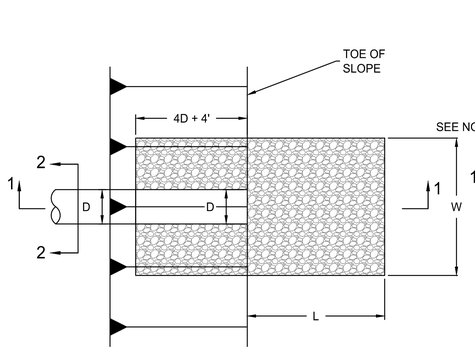
SECTION 1



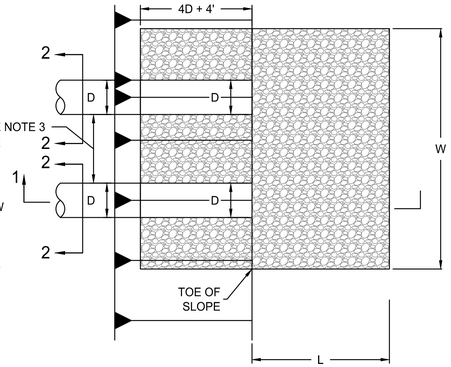
SECTION 2

NOTES:

1. RIPRAP SHALL CONFORM TO CDOT SECTION 506, TABLE 506-2. SIZE NOTED PER PLAN. INSTALL PER THIS DETAIL.
2. OUTER EDGE TO OUTER EDGE OF PIPES IS 12" FOR PIPES LESS THAN OR EQUAL TO 24". FOR PIPES GREATER THAN 24" PROVIDE HALF TIMES DIAMETER (0.5D).
3. IF NO FLARED END IS SPECIFIED, PIPES SHALL BE MITER CUT TO SLOPES AND ALL DIMENSIONS SHOWN HEREON SHALL BE MEASURED FROM END OF PIPE.
4. RIPRAP SHALL EXTEND UP SLOPE WHERE 1-FT MIN COVER IS PROVIDED ON CULVERTS. ANNOTATION HEREON ASSUMES 4:1 SLOPES.



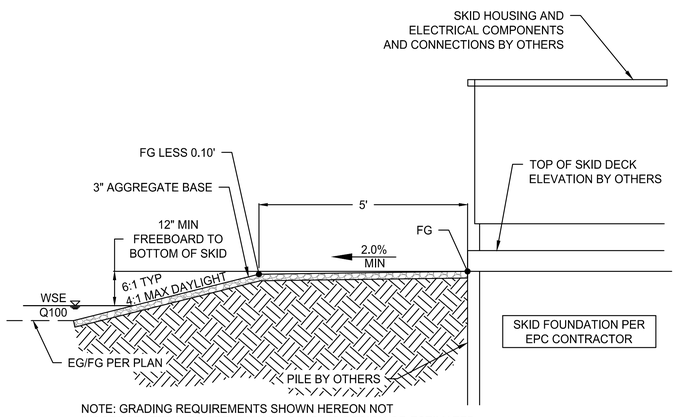
SINGLE PIPE OUTLET PLAN VIEW



MULTI PIPE OUTLET PLAN VIEW

D2 RIPRAP INSTALLATION

NOT TO SCALE



NOTE: GRADING REQUIREMENTS SHOWN HEREON NOT INCORPORATED INTO PRELIMINARY GRADING DESIGN OR ESTIMATED EARTHWORK QUANTITIES. CONTRACTOR SHALL MAKE ALLOWANCES.

D3 EQUIPMENT SKID GRADING CROSS SECTION

NOT TO SCALE

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(763) 541-4800
FIRM #20171391667

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P.E. #0053515
ON 03/05/2026

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STORM SEWER DETAILS

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EARTH EVANS
53515
PROFESSIONAL ENGINEER

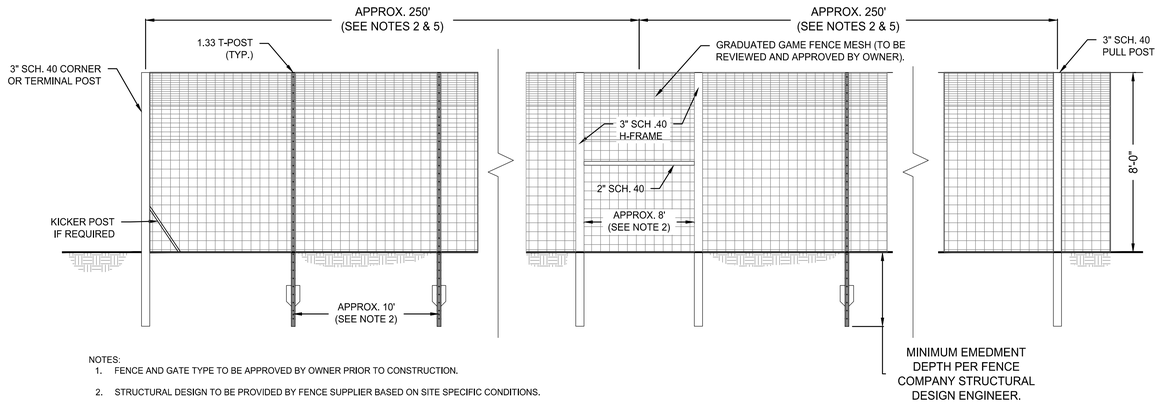
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SHEET NO.
C-46

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032487

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2026-03-11

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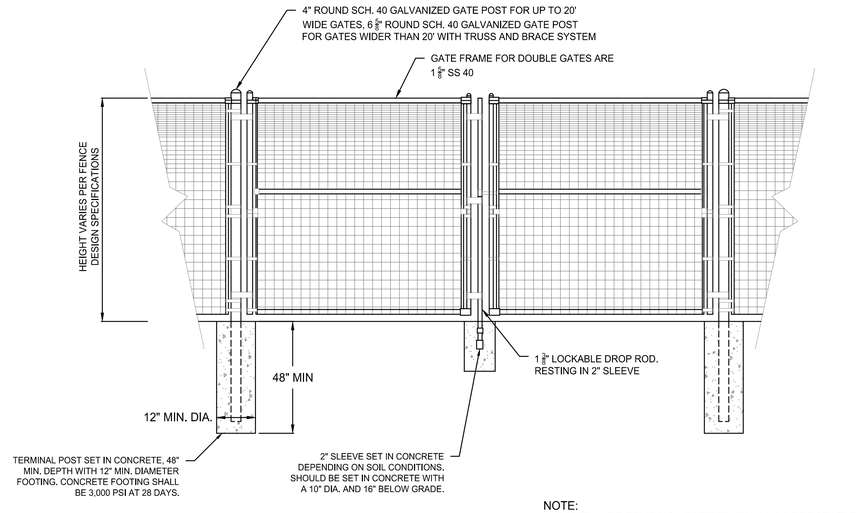


NOTES:

1. FENCE AND GATE TYPE TO BE APPROVED BY OWNER PRIOR TO CONSTRUCTION.
2. STRUCTURAL DESIGN TO BE PROVIDED BY FENCE SUPPLIER BASED ON SITE SPECIFIC CONDITIONS.
3. DIMENSIONS AND INFORMATION SHOWN ABOVE ARE FOR REFERENCE ONLY. ACTUAL DIMENSIONS AND INFORMATION TO BE PROVIDED BY MANUFACTURER / SUPPLIER.
4. INSTALL PULL POSTS APPROXIMATELY EVERY 500 FEET AND H-FRAME APPROXIMATELY EVERY 500 FEET, CENTERED BETWEEN PULL POSTS. FINAL SPACING DISTANCES TO BE ADJUSTED BY FENCE COMPANY STRUCTURAL DESIGN ENGINEER.
5. FOR BIDDING PURPOSES, ASSUME CUSTOM ORDER 12 FOOT LONG 1.33 T-POST, UNLESS OTHERWISE INDICATED BY FENCE COMPANY STRUCTURAL DESIGN ENGINEER BASED ON SITE SPECIFIC CONDITIONS.

F1 FENCE/GATE ALTERNATIVE

NOT TO SCALE



NOTE:
1. GAME WIRE FENCING/ GATE SHOWN AS ACCEPTABLE ALTERNATIVE. EPC CONTRACTOR SHALL MAKE FINAL DETERMINATION ON TYPE OF FENCE TO BE INSTALLED.

F2 GAME WIRE FENCING TERMINATION AND GATE INSTALLATION DETAIL (DOUBLE GATE)

NOT TO SCALE

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WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

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MEK	CLB

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P.E. #0053515
ON 03/05/2026

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FENCE AND GATE DETAILS

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EARTH A. EVANS
53515
PROFESSIONAL ENGINEER

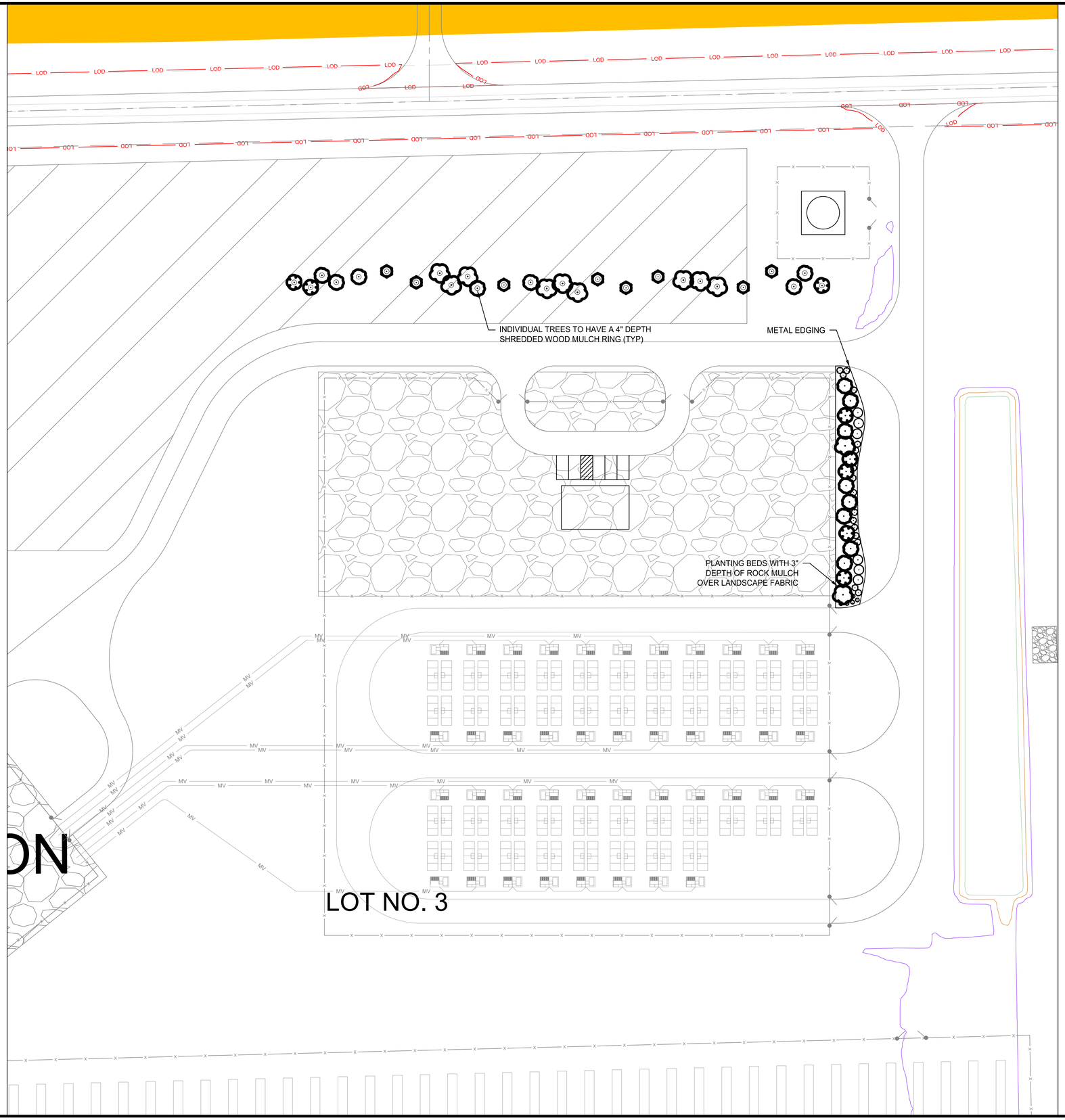
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C-47

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032487

DATE
2026-03-11

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PRELIMINARY PLANT SCHEDULE

SYMBOL	BOTANICAL / COMMON NAME	CONT	QTY
TREES			
	Acer glabrum / Rocky Mountain Maple	15 gal	8
	Crataegus spp. / Hawthorn	15 gal	15
	Prunus americana / American Plum	15 gal	11
	Prunus virginiana / Chokecherry	15 gal	8

SYMBOL	BOTANICAL / COMMON NAME	SIZE	QTY
SHRUBS			
	Amelanchier spp. / Serviceberry	5 gal	6
	Purshia tridentata / Antelope Bitterbrush	5 gal	7
	Symphoricarpos albus / Common Snowberry	5 gal	9
	Yucca spp. / Yucca	1 gal	5

N

H: 0 40 80
SCALE IN FEET

SHEPHERD SOLAR

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701 XENIA AVE S, #300
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LANDSCAPE SITE PLAN

COLORADO LICENSED
EARTH A EVANS
53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

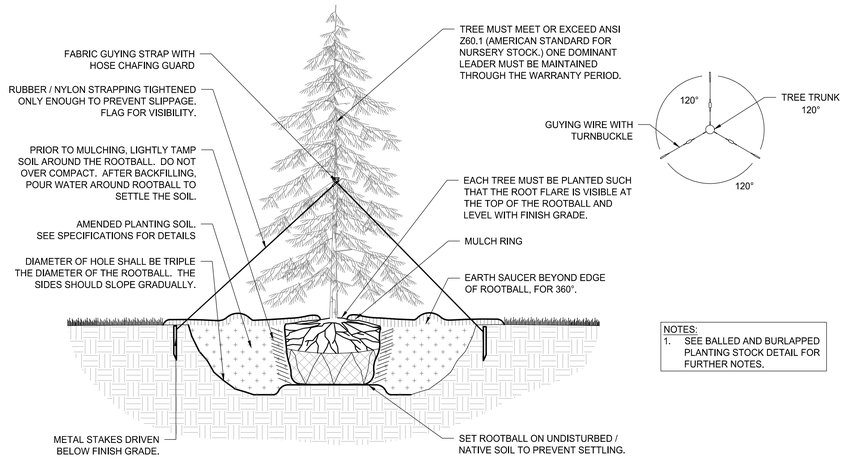
SHEET NO.
C-48

WSB PROJECT NO.
032487

DATE
2026-03-11

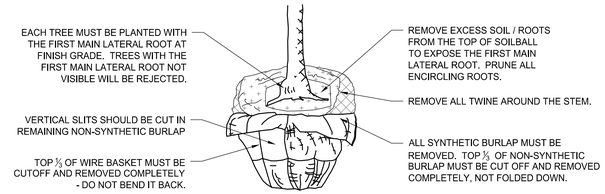
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D

C:\ACCACCDocs\WSB\032487-000\Project Files\05_Discipline\Landscape\03_Sheets\SHEP-LP-RSTR-PLAN.dwg 3/11/2026 3:25:14 PM



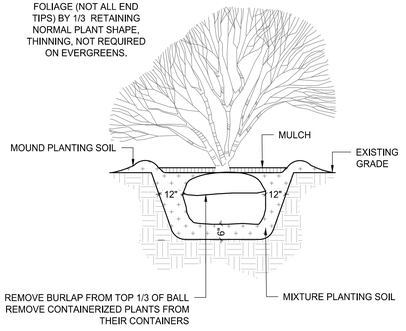
NOTES:
1. SEE BALLED AND BURLAPPED PLANTING STOCK DETAIL FOR FURTHER NOTES.

1 C-49 CONIFEROUS TREE PLANTING DETAIL



NOTES:
1. ROOTS OF ALL BALLED AND BURLAPPED STOCK SHALL FILL THE SOIL BALL, BE FREE OF KINKS, CIRCLING AND GIRDLING, AND THE UPPERMOST ROOTS SHALL NOT BE MORE THAN FOUR INCHES BELOW THE TOP OF THE SOIL BALL. TRANSPORT ROOTS SHALL BE SYMMETRICAL AROUND THE TRUNK / STEM OF THE PLANTS. SOIL BALLS MUST BE CENTERED OR NO MORE THAN 10% OFF CENTER.
2. WHEN MOVING PLANTS, LIFT FROM BENEATH THE ROOT BALL. DO NOT LIFT BY THE TRUNK AND DO NOT BREAK OR LOOSEN THE ROOT BALL.
3. BACKFILL PLANTING PIT WITH ORIGINAL SOIL HALFWAY TO THE TOP OF THE ROOT BALL, BREAK UP CLODS OF SOIL. DO NOT USE PEAT AS PART OF BACKFILL IN CLAY SOILS. REMOVE ALL ROCKS AND DEBRIS FROM BACKFILL AND THEN WATER PLANT AND BACKFILLED AREA TO SETTLE PLANTS AND FILL VOIDS.
4. REMOVE ALL WIRE BASKETS FROM THE TOP ⅓ OF THE ROOT BALL AND CONTINUE BACKFILLING REMAINING PLANTING PIT WITH ORIGINAL SOIL.
5. WATER THOROUGHLY A SECOND TIME TO SETTLE PLANTS AND FILL VOIDS WITHIN TWO HOURS OF PLANTING. PLACE SPECIFIED MULCH WITHIN 48 HOURS OF THE SECOND WATERING. PROVIDE SUPPORT IF NECESSARY.
6. STAKING OF TREES SHALL BE THE CONTRACTOR'S OPTION. THE CONTRACT IS RESPONSIBLE TO INSURING THAT ALL PLANTINGS ARE INSTALLED PLUMB AND REMAIN PLUMB THROUGHOUT THE WARRANTY PERIOD OF 1 YEAR AFTER SUBSTANTIAL COMPLETION, WHICHEVER IS GREATER.
7. IF STAKING IS INSTALLED, ALL COMPONENTS SHALL BE REMOVED BY THE CONTRACTOR AT THE END OF THE WARRANTY PERIOD.

2 C-49 BALL AND BURLAP DETAIL



NOTES:
1. PLANT SHRUBS IN LOCATIONS PER PLAN AND APPROVED BY LA/E.

3 C-49 SHRUB PLANTING DETAIL

SHEPHERD SOLAR

WSB LLC
dba: WSB Design and Consulting LLC
701 XENIA AVE S, #300
MINNEAPOLIS, MN 55416
(763) 541-4800
FIRM #20171391667

SCALE: AS SHOWN
DESIGN BY: LD
PLAN BY: LD
CHECK BY: RS

REVISIONS

NO.	DESCRIPTION	DATE

THIS DOCUMENT IS RELEASED FOR COORDINATION PURPOSES ONLY UNDER THE AUTHORITY OF:

EARTH A EVANS,
P.E. #0053515
ON 02/25/2026

AND IS NOT FOR CONSTRUCTION.

LANDSCAPE DETAILS

COLORADO LICENSED
EARTH EVANS
53515
PROFESSIONAL ENGINEER

SHEPHERD SOLAR

SHEET NO.
C-49

WSB PROJECT NO.
032487

DATE
2026-03-11

REV.
D

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SUR Appendix C

Property Owner and Land Information

SUR Appendix C

Proof of Ownership: Deeds

563999 B: 772 P: 816 QCD
11/21/2016 02:32:37 PM Page: 1 of 1 R 11.00 D 0.00
Dallas Schroeder Recorder, Elbert County, Co

QUIT CLAIM DEED

THIS DEED, made this 14th day of November, 2016 by and between JERRY W. MARANVILLE and DONNA L. MARANVILLE whose street address is 37345 Broadway, City of Matheson, County of Elbert and State of Colorado, Grantors, for the consideration of less than five hundred dollars, in hand paid, hereby sell(s) and convey(s) to J and D Farm Properties, LLC, a Colorado Limited Liability Company formed on October 18th, 2016 whose street address is 37345 Broadway, City of Matheson, County of Elbert and State of Colorado, Grantee, the following real property in the County of Elbert and State of Colorado, to wit:

The South half of Section 26, and all of Section 35, all in Township 11 South, Range 59 West of the 6th P.M.; all of Section 1, the North Half of the Northwest Quarter (Lots 3 and 4), of Section 2, all in Township 12 South, Range 59 West of the 6th P.M., except mineral reservations of record;

with all appurtenances and warrant(s) title to the same, subject to the general taxes for the current year and subsequent years, and subject to restrictions, reservations, covenants, easements, and rights of way of record, if any.

Signed this 14th day of November, 2016

Jerry W. Maranville
JERRY W. MARANVILLE

Donna L. Maranville
DONNA L. MARANVILLE

STATE OF COLORADO)
) ss.
COUNTY OF EL PASO)

The foregoing instrument was acknowledged before me this 14th day of November, 2016 by JERRY W. MARANVILLE and DONNA L. MARANVILLE, Grantors.

Witness my hand and official seal.

MEREDITH L. KENDZIORSKI
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID # 20074001063
MY COMMISSION EXPIRES JANUARY 10, 2019

Notary Public
My commission expires: 1/10/2019

***** Consideration less than $500; no documentary fee required *****

604248 B: 812 P: 827 WD
02/02/2021 02:07:22 PM Page 1 of 2 R: $18.00 D: $0.00
Dallas Schroeder Clerk/Recorder, Elbert County, CO

601715 B: 810 P: 315 WD
11/23/2020 01:04:22 PM Page 1 of 1 R: $13.00 D: $55.65
Dallas Schroeder Clerk/Recorder, Elbert County, CO

WARRANTY DEED

THIS DEED, Made this 20th day of November, 2020, between

VCM FARMS, LLC, A DELAWARE LIMITED LIABILITY COMPANY

of the County of ELBERT, in the State of COLORADO, grantor, and

CHAD MARANVILLE and CINDY MARANVILLE

whose legal address is 9880 COUNTY ROAD 149, MATHESON, CO 80830,
of the County of ELBERT in the State of COLORADO, grantee(s):

WITNESSETH, that the grantor, for and in consideration of the sum of exactly Five Hundred Fifty Six Thousand Five Hundred and 00/100 ($556,500.00) DOLLARS, the receipt and sufficiency of which is hereby acknowledged, has granted, bargained, sold and conveyed, and by these presents does grant, bargain, sell, convey and confirm unto the grantees, heirs and assigns forever, not in tenacy in common but in joint tenacy, all the real property, together with improvements, if any, situate, lying and being in the County of ELBERT, and State of COLORADO, described as follows:

DESCRIPTION NO. 1:

W1/2 OF SECTION 25,
TOWNSHIP 11 SOUTH,
RANGE 59 WEST OF TH 6TH P.M.,
COUNTY OF ELBERT,
STATE OF COLORADO

RE-RECORDED TO ADD NOTARY ACKNOWLEDGEMENT

DESCRIPTION NO. 2:

ALL OF SECTION 36,
TOWNSHIP 11 SOUTH,
RANGE 59 WEST OF THE 6TH P.M.,
COUNTY OF ELBERT,
STATE OF COLORADO

GRANTOR RESERVES 100% OF THE MINERAL RIGHTS OWNED

also known by street and number as VACANT LAND, MATHESON, COLORADO 80830

Assessor's Schedule or Parcel No.: R101362 AND R101384

TOGETHER with all and singular the hereditaments and appurtenances thereunto belonging, or in anywise appertaining and the reversion and reversions, remainder and remainders, rents, issues and profits thereof, and all of the estate, right, title, interest, claim and demand whatsoever of the grantor, either in law or equity, of, in and to the above bargained premises, with the hereditaments and appurtenances.

TO HAVE AND TO HOLD the said premises above bargained and described, with the appurtenances, unto the said grantee(s), heirs and assigns forever. And the grantor, for themselves, heirs and personal representatives, does covenant, grant, bargain and agree to and with the grantee(s), heirs and assigns, that at the time of the ensealing and delivery of these presents, he is well seized of the premises above conveyed, has good, sure, perfect, absolute and indefeasible estate of inheritance, in law, in fee simple, and has good right, full power and lawful authority to grant, bargain, sell and convey the same in manner and form aforesaid, and that the same are free and clear from all former and other grants, bargains, sales, liens, taxes, assessments, encumbrances and restrictions of whatever kind or nature soever. EXCEPT FOR TAXES FOR THE CURRENT YEAR AND SUBSEQUENT YEARS, EASEMENTS, RESTRICTIONS, RESERVATIONS, COVENANTS AND RIGHTS-OF-WAY OF RECORD, IF ANY.

The grantor shall and will WARRANT and FOREVER DEFEND the above-bargained premises in the quiet and peaceable possession of the grantee(s), heirs and assigns, against all and every person or persons lawfully claiming the whole or any part thereof. The singular number shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders.

IN WITNESS WHEREOF the grantor has executed this deed on the date set forth above.

BY: Sandra L. Shippey
SANDRA L SHIPPEY, MANAGER, VCM FARMS, LLC, A DELEWARE LIMITED LIABILITY COMPANY

(115095.PFD/115095/9)

STATE OF COLORADO }
} ss.
COUNTY OF ELBERT }

The foregoing instrument was acknowledged before me on this 20th day of November, 2020 by VCM FARMS, LLC, A DELAWARE LIMITED LIABILITY COMPANY., by Sandra L. Shippey, Manager.

My Commission Expires: 11/27/23

Witness my hand and Official seal.

Notary Public

VALERIE J PEARSON
Notary Public
State of Colorado
Notary ID # 20194044097
My Commission Expires 11-27-2023

601723 B: 810 P: 323 WD
11/23/2020 01:24:06 PM Page 1 of 2 R: $18.00 D: $37.10
Dallas Schroeder Clerk/Recorder, Elbert County, CO

WARRANTY DEED

THIS DEED, Made this 20th day of November, 2020, between

VCM FARMS, LLC, A DELAWARE LIMITED LIABILITY COMPANY

of the County of ELBERT, in the State of COLORADO, grantor, and

JACK S MARANVILLE and LINDA F MARANVILLE

whose legal address is 12301 COUNTY ROAD 149, MATHESON, CO 80830, of the County of ELBERT in the State of COLORADO, grantee(s):

WITNESSETH, that the grantor, for and in consideration of the sum of exactly Three Hundred Seventy One Thousand and 00/100 ($371,000.00) DOLLARS, the receipt and sufficiency of which is hereby acknowledged, has granted, bargained, sold and conveyed, and by these presents does grant, bargain, sell, convey and confirm unto the grantees, heirs and assigns forever, not in tenacy in common but in joint tenacy, all the real property, together with improvements, if any, situate, lying and being in the County of ELBERT, and State of COLORADO, described as follows:

DESCRIPTION NO. 1:

ALL OF SECTION 31,
TOWNSHIP 11 SOUTH,
RANGE 58 WEST OF THE 6TH P.M.,
COUNTY OF ELBERT,
STATE OF COLORADO

DESCRIIPTION NO. 2:

SW1/4 OF SECTION 23,
TOWNSHIP 13 SOUTH,
RANGE 58 WEST OF THE 6TH P.M.,
COUNTY OF ELBERT,
STATE OF COLORADO

GRANTOR RESERVES 100% OF MINERAL RIGHTS OWNED

also known by street and number as VACANT LAND, MATHESON, COLORADO 80830

Assessor's Schedule or Parcel No.: R101317 AND R101581

TOGETHER with all and singular the hereditaments and appurtenances thereunto belonging, or in anywise appertaining and the reversion and reversions, remainder and remainders, rents, issues and profits thereof, and all of the estate, right, title, interest, claim and demand whatsoever of the grantor, either in law or equity, of, in and to the above bargained premises, with the hereditaments and appurtenances.

TO HAVE AND TO HOLD the said premises above bargained and described, with the appurtenances, unto the said grantee(s), heirs and assigns forever. And the grantor, for themselves, heirs and personal representatives, does covenant, grant, bargain and agree to and with the grantee(s), heirs and assigns, that at the time of the ensealing and delivery of these presents, he is well seized of the premises above conveyed, has good, sure, perfect, absolute and indefeasible estate of inheritance, in law, in fee simple, and has good right, full power and lawful authority to grant, bargain, sell and convey the same in manner and form aforesaid, and that the same are free and clear from all former and other grants, bargains, sales, liens, taxes, assessments, encumbrances and restrictions of whatever kind or nature soever. EXCEPT FOR TAXES FOR THE CURRENT YEAR AND SUBSEQUENT YEARS, EASEMENTS, RESTRICTIONS, RESERVATIONS, COVENANTS AND RIGHTS-OF-WAY OF RECORD, IF ANY,

The grantor shall and will WARRANT and FOREVER DEFEND the above-bargained premises in the quiet and peaceable possession of the grantee(s), heirs and assigns, against all and every person or persons lawfully claiming the whole or any part thereof. The singular number shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders.

IN WITNESS WHEREOF the grantor has executed this deed on the date set forth above.

BY: Sandra L. Shippey
SANDRA L SHIPPEY, MANAGER, VCM FARMS, LLC, A DELEWARE LIMITED LIABILITY COMPANY

STATE OF COLORADO }
} ss.
COUNTY OF ELBERT }

The foregoing instrument was acknowledged before me on this 20th day of November, 2020 by VCM FARMS, LLC, A DELAWARE LIMITED LIABILITY COMPANY.

My Commission Expires: 11/27/23

Witness my hand and Official seal.

Notary Public

VALERIE J PEARSON
Notary Public
State of Colorado
Notary ID # 20194044697
My Commission Expires 11-27-2023

SUR Appendix C

Title Commitments

Stewart Title Energy Group
1360 Post Oak Blvd., 10th Floor
Houston, Texas 77056

Re: Title Commitment - Energy Group

Thank you for choosing the Stewart Title Guaranty Company - Commercial Services for your title work! We appreciate your business and look forward to working with you on this project.

Please see below for the relevant information related to this commitment:

County: Elbert
State: Colorado
Stewart Number: 25000372008

Contact Information:

Natalie Meismer
1360 Post Oak Blvd. MC10-1 10th Fl., Houston, TX 77056
Ph: (713) 625.8290 - Email: natalie.meismer@stewart.com

Alexis Crane
1360 Post Oak Blvd. MC10-1 10th Fl., Houston, TX 77056
Ph: (682) 220-1688 - Email: alexis.crane@stewart.com

If you have any comments/questions about the enclosed title commitment, please do not hesitate to reach out to the contact above.

Thank you,

Natalie Meismer

ALTA Commitment
SCHEDULE A

Issued By:
Stewart Title Guaranty Company
P.O. Box 2029, Houston, TX 77252

Commitment Number: 25000372008-02

Revision Number:

1. Commitment Date: October 28, 2025, at 8:00 a.m.

2. Policy to be issued:

   a. 2021 ALTA® Owner's Policy

      Proposed Insured: To Be Determined
      Proposed Amount of Insurance: $1,000.00
      The estate or interest to be insured: To Be Determined

3. The estate or interest in the Land at the Commitment Date is:

   Fee Simple

4. The Title is, at the Commitment Date, vested in:

   J and D Farm Properties, LLC, a Colorado Limited Liability Company

5. The Land is described as follows:

   SEE ATTACHED SCHEDULE A - EXHIBIT A

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SCHEDULE A - EXHIBIT A

Tax ID No.: R120882

The following real property in the County of Elbert and State of Colorado, to-wit:

The South Half of Section 26, and all of Section 35, all in Township 11 South, Range 59 West of the 6th P.M.; all of Section 1, the North Half of the Northwest Quarter (Lots 3 and 4), of Section 2, all in Township 12 South, Range 59 West of the 6th P.M., County of Elbert, State of Colorado.

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SCHEDULE B – I
Requirements

File No.: 25000372008-02

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.

2. Pay the agreed amount for the estate or interest to be insured.

3. Pay the premiums, fees, and charges for the Policy to the Company.

4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.

5. Pay all taxes, charges, assessments, levied and assessed against subject premises, which are due and payable.

6. Satisfactory evidence that improvements and/or repairs or alterations to the Land are completed, that contractor, sub-contractors, labor and materialmen are all paid, and have released of record all liens or notice of intent to perfect a lien.

7. If the fee owner is an entity, evidence of the good standing, incumbency and authority of that entity and of the Proposed Insured shown in Schedule A, Item 2(a) who will execute the instrument(s) required by the Company.

   With regard to J and D Farm Properties, LLC, a Colorado Limited Liability Company, The Company requires for its review a copy of the following:
   a. Articles of Organization, and any amendment thereto;
   b. Operating Agreement, and any amendment thereof;
   c. Certificate of good standing, if available, evidencing that the LLC is in good standing in the state of its registration and in the state where the Land is located (if different);
   d. Evidence of the authorization of the proposed transaction and the authority of the officers, managers, or members to execute the transaction documents; and
   e. Evidence of payment of franchise taxes due, where applicable.

   Note: At the time the Company is furnished these items, the Company may make additional requirements or exceptions.

8. The Policy(ies) to be issued together with endorsements and any coverage therein is conditioned upon the approval of the Company's Senior Underwriting Committee, which may include further requirements.

   Note: The above will be deleted upon receipt of the requisite approvals and not carried forward to the Policy.

NOTE: The Company reserves the right to make any additional requirements and/or exceptions to this commitment and any subsequent endorsements thereto upon review of all required documents or in otherwise ascertaining further details of the transaction.

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stewart TITLE

COMMITMENT FOR TITLE INSURANCE

SCHEDULE B – II
Exceptions

File No.: 25000372008-02

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This Commitment and the Policy treat any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document will be excepted from coverage.

The Policy will not insure against loss or damage resulting from the terms and conditions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company**:**

Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I - Requirements are met.

Standard Exceptions:

1. Encroachments, overlaps, boundary line disputes, or other matters which would be disclosed by a current, accurate and complete land title survey or inspection of the Land.

2. Rights or claims of parties in possession not recorded in the Public Records.

3. Rights of tenants in possession as tenants only under leases not recorded in the Public Records.

4. Easements or claims of easements not recorded in the Public Records.

5. Taxes or assessments which are not recorded as existing liens in the Public Records.

6. Any lien, or right to a lien, for services, labor, material or equipment, heretofore or hereafter furnished, imposed by law and not recorded in the Public Records

7. Minerals of whatsoever kind, subsurface and surface substances, including but not limited to coal, lignite, oil, gas, uranium, clay, rock, sand and gravel in, on, under and that may be produced from the Land, together with all rights, privileges, and immunities relating thereto, whether or not appearing in the Public Records or listed in Schedule B. The Company makes no representation as to the present ownership of any such interests. There may be leases, grants, exceptions or reservations of interests that are not listed.

8. Any inaccuracy in the area, square footage, or acreage of Land described in Schedule A. The Company does not insure the area, square footage, or acreage of the Land.

9. Unpatented mining claims, reservations or exceptions in patents or in acts authorizing the issuance thereof.

10. Water rights, claims or title to water.

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Special Exceptions:

11. Taxes for 2024 in the amount of $2,872.88 are paid.
    Tax ID No.: R120882

12. Reservation of (1) all oil, coal and other minerals within or underlying subject property; (2) the exclusive right to prospect for, mine and remove oil, coal and other minerals; (3) the right to ingress, egress and regress to prospect for, mine, and remove oil, coal and other minerals; and (4) the right to Union Pacific Railroad Company to maintain and operate its railroad in its present form of construction, and to make any change in the form of construction or method of operation of said railroad, as contained in Deed from Union Pacific Land Company recorded April 29, 1907 in Book 33, Page 162 in Public Records of Elbert County, Colorado.

    As affected by Surface Owner's Agreement by and between Harold Walraven, Trustee of the Walraven Family Trust, and Champlin Petroleum Company, dated January 15, 1985, and recorded February 11, 1985 in Book 377, Page 102 in Public Records of Elbert County, Colorado.

    Note: The Company makes no representation as to the present ownership of any such interests. There may be leases, assignments, amendments, exceptions or grants of interests that are not listed.

13. Reservations or exceptions contained in U.S. Patents, or in Acts authorizing the issuance thereof, recorded August 19, 1912 in Book 60, Page 458 in Public Records of Elbert County, Colorado, reserving 1) rights of the proprietor of a vein or lode to extract and remove his ore therefrom and 2) rights of way for ditches and canals constructed under the authority of the United States.

    Note: The Company makes no representation as to the present ownership of any such interests. There may be leases, assignments, amendments, exceptions or grants of interests that are not listed.

14. Reservations or exceptions contained in U.S. Patents, or in Acts authorizing the issuance thereof, recorded August 19, 1912 in Book 60, Page 459 in Public Records of Elbert County, Colorado, reserving 1) rights of the proprietor of a vein or lode to extract and remove his ore therefrom and 2) rights of way for ditches and canals constructed under the authority of the United States.

    Note: The Company makes no representation as to the present ownership of any such interests. There may be leases, assignments, amendments, exceptions or grants of interests that are not listed.

15. Reservations or exceptions contained in U.S. Patents, or in Acts authorizing the issuance thereof, recorded August 30, 1915 in Book 73, Page 585 in Public Records of Elbert County, Colorado, reserving 1) rights of the proprietor of a vein or lode to extract and remove his ore therefrom and 2) rights of way for ditches and canals constructed under the authority of the United States.

    Note: The Company makes no representation as to the present ownership of any such interests. There may be leases, assignments, amendments, exceptions or grants of interests that are not listed.

16. Reservation of mineral interest in favor of The Federal Land Bank of Wichita as contained in Corporation Special Warranty Deed dated November 19, 1942, and recorded January 2, 1943 in Book 189, Page 344 in Public Records of Elbert County, Colorado.

    Note: The Company makes no representation as to the present ownership of any such interests. There may be

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leases, assignments, amendments, exceptions or grants of interests that are not listed.

17. Order dated March 4, 1974, and recorded March 7, 1974 in Book 290, Page 599 in Public Records of Elbert County, Colorado.

18. Right-of-Way and Easement in favor of Mountain View Electric Association, Inc., a cooperative corporation dated January 15, 1951, and recorded November 8, 1982 in Book 351, Page 401 in Public Records of Elbert County, Colorado.

    Memorandum to all Interested Parties dated June 26, 2025, and recorded June 26, 2025 as Book 853, Page 93 in Public Records of Elbert County, Colorado.

19. Intentionally deleted.

20. Request for Notification of Surface Development dated April 24, 2002, and recorded May 16, 2002 in Book 629, Page 87 in Public Records of Elbert County, Colorado.

21. Request for Notification of Surface Development dated April 24, 2002, and recorded May 16, 2002 in Book 629, Page 163 in Public Records of Elbert County, Colorado.

22. Deed of Trust and Security Agreement executed by Jerry W. Maranville and Donna L. Maranville, Husband and Wife, to the Public Trustee of Elbert County, in favor of Farm Credit Bank of Wichita dated August 4, 1997, and recorded August 6, 1997 in Book 567, Page 783 in Public Records of Elbert County, Colorado.

23. Wind Lease and Easement Agreement by and between Jerry W. Maranville and Donna L. Maranville, and Invenergy Wind Development LLC, a Delaware limited liability company dated April 20, 2016, and recorded May 11, 2016 in Book 767, Page 864 in Public Records of Elbert County, Colorado.

24. Memorandum of Ground Lease Agreement by and between J and D Farm Properties, LLC, a Colorado limited liability company, and Grey Wolf Solar LLC, a Delaware limited liability company dated June 8, 2023, and recorded June 22, 2023 in Book 836, Page 728 in Public Records of Elbert County, Colorado.

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Stewart Title Energy Group
1360 Post Oak Blvd., 10th Floor
Houston, Texas 77056

Re: Title Commitment - Energy Group

Thank you for choosing the Stewart Title Guaranty Company - Commercial Services for your title work! We appreciate your business and look forward to working with you on this project.

Please see below for the relevant information related to this commitment:

County: Elbert
State: Colorado
Stewart Number: 25000372008

Contact Information:

Natalie Meismer
1360 Post Oak Blvd. MC10-1 10th Fl., Houston, TX 77056
Ph: (713) 625.8290 - Email: natalie.meismer@stewart.com

Alexis Crane
1360 Post Oak Blvd. MC10-1 10th Fl., Houston, TX 77056
Ph: (682) 220-1688 - Email: alexis.crane@stewart.com

If you have any comments/questions about the enclosed title commitment, please do not hesitate to reach out to the contact above.

Thank you,

Natalie Meismer

ALTA Commitment
SCHEDULE A

Issued By:
Stewart Title Guaranty Company
P.O. Box 2029, Houston, TX 77252

Commitment Number: 25000372008-03

Revision Number:

1. Commitment Date: October 28, 2025, at 8:00 a.m.

2. Policy to be issued:

   a. 2021 ALTA® Owner's Policy

      Proposed Insured: To Be Determined
      Proposed Amount of Insurance: $1,000.00
      The estate or interest to be insured: To Be Determined

3. The estate or interest in the Land at the Commitment Date is:

   Fee Simple

4. The Title is, at the Commitment Date, vested in:

   Chad Maranville and Cindy Maranville

5. The Land is described as follows:

   SEE ATTACHED SCHEDULE A - EXHIBIT A

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SCHEDULE A - EXHIBIT A

Tax ID No.: R122727

W1/2 OF SECTION 25, TOWNSHIP 11 SOUTH, RANGE 59 WEST OF THE 6TH P.M., COUNTY OF ELBERT, STATE OF COLORADO; AND

ALL OF SECTION 36, TOWNSHIP 11 SOUTH, RANGE 59 WEST OF THE 6TH P.M., COUNTY OF ELBERT, STATE OF COLORADO

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SCHEDULE B – I

Requirements

File No.: 25000372008-03

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.

2. Pay the agreed amount for the estate or interest to be insured.

3. Pay the premiums, fees, and charges for the Policy to the Company.

4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.

5. Pay all taxes, charges, assessments, levied and assessed against subject premises, which are due and payable.

6. Satisfactory evidence that improvements and/or repairs or alterations to the Land are completed, that contractor, sub-contractors, labor and materialmen are all paid, and have released of record all liens or notice of intent to perfect a lien.

7. If the fee owner is an entity, evidence of the good standing, incumbency and authority of that entity and of the Proposed Insured shown in Schedule A, Item 2(a) who will execute the instrument(s) required by the Company.

8. The Policy(ies) to be issued together with endorsements and any coverage therein is conditioned upon the approval of the Company's Senior Underwriting Committee, which may include further requirements.

   Note: The above will be deleted upon receipt of the requisite approvals and not carried forward to the Policy.

NOTE: The Company reserves the right to make any additional requirements and/or exceptions to this commitment and any subsequent endorsements thereto upon review of all required documents or in otherwise ascertaining further details of the transaction.

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COMMITMENT FOR TITLE INSURANCE

SCHEDULE B – II

Exceptions

File No.: 25000372008-03

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This Commitment and the Policy treat any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document will be excepted from coverage.

The Policy will not insure against loss or damage resulting from the terms and conditions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company**:**

Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I - Requirements are met.

Standard Exceptions:

1. Encroachments, overlaps, boundary line disputes, or other matters which would be disclosed by a current, accurate and complete land title survey or inspection of the Land.

2. Rights or claims of parties in possession not recorded in the Public Records.

3. Rights of tenants in possession as tenants only under leases not recorded in the Public Records.

4. Easements or claims of easements not recorded in the Public Records.

5. Taxes or assessments which are not recorded as existing liens in the Public Records.

6. Any lien, or right to a lien, for services, labor, material or equipment, heretofore or hereafter furnished, imposed by law and not recorded in the Public Records

7. Minerals of whatsoever kind, subsurface and surface substances, including but not limited to coal, lignite, oil, gas, uranium, clay, rock, sand and gravel in, on, under and that may be produced from the Land, together with all rights, privileges, and immunities relating thereto, whether or not appearing in the Public Records or listed in Schedule B. The Company makes no representation as to the present ownership of any such interests. There may be leases, grants, exceptions or reservations of interests that are not listed.

8. Any inaccuracy in the area, square footage, or acreage of Land described in Schedule A. The Company does not insure the area, square footage, or acreage of the Land.

9. Unpatented mining claims, reservations or exceptions in patents or in acts authorizing the issuance thereof.

10. Water rights, claims or title to water.

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Special Exceptions:

11. Taxes for 2024 in the amount of $2,242.20 are paid.
    Tax ID No.: R122727

12. Reservation of (1) all oil, coal and other minerals within or underlying subject property; (2) the exclusive right to prospect for, mine and remove oil, coal and other minerals; (3) the right to ingress, egress and regress to prospect for, mine, and remove oil, coal and other minerals; and (4) the right to Union Pacific Land Company] to maintain and operate its railroad in its present form of construction, and to make any change in the form of construction or method of operation of said railroad, as contained in Deed from Union Pacific Railroad Company recorded April 29, 1907 in Book 33, Page 162 in Public Records of Elbert County, Colorado.

    Note: The Company makes no representation as to the present ownership of any such interests. There may be leases, assignments, amendments, exceptions, or grants of interests that are not listed.

13. All rights to any and all minerals, ore and metals of any kind and character, and all coal, asphaltum, oil, gas and other like substances in or under said land, the rights of ingress and egress for the purposes of mining, together with enough of the surface of the same as may be necessary for the proper and convenient of such minerals and substances, as reserved in Patent from the State of Colorado, recorded March 30, 1921 in Book 113, Page 379 in Public Records of Elbert County, Colorado.

    Note: The Company makes no representation as to the present ownership of any such interests. There may be leases, assignments, amendments, exceptions, or grants of interests that are not listed.

14. All rights to any and all minerals, ore and metals of any kind and character, and all coal, asphaltum, oil, gas and other like substances in or under said land, the rights of ingress and egress for the purposes of mining, together with enough of the surface of the same as may be necessary for the proper and convenient of such minerals and substances, as reserved in Patent from the State of Colorado, recorded January 20, 1932 in Book 166, Page 67 in Public Records of Elbert County, Colorado.

    Note: The Company makes no representation as to the present ownership of any such interests. There may be leases, assignments, amendments, exceptions, or grants of interests that are not listed.

15. All rights to any and all minerals, ore and metals of any kind and character, and all coal, asphaltum, oil, gas and other like substances in or under said land, the rights of ingress and egress for the purposes of mining, together with enough of the surface of the same as may be necessary for the proper and convenient of such minerals and substances, as reserved in Patent from the State of Colorado, recorded April 16, 1941 in Book 186, Page 454 in Public Records of Elbert County, Colorado.

    Note: The Company makes no representation as to the present ownership of any such interests. There may be leases, assignments, amendments, exceptions, or grants of interests that are not listed.

16. Final Order in the Matter of the Designated Ground Water Basin of the Upper Big Sandy Creek of the State of Colorado dated December 8, 1972, and recorded January 8, 1973 in Book 284, Page 742 in Public Records of Elbert County, Colorado.

17. Right-of-Way Easement in favor of Tri-State Generation and Transmission Association, Inc., dated October 4, 1973, and recorded December 18, 1973 in Book 289, Page 447 in Public Records of Elbert County, Colorado.

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18. Right-of-Way Easement in favor of Tri-State Generation and Transmission Association, Inc., dated October 3, 1973, and recorded December 18, 1973 in Book 289, Page 448 in Public Records of Elbert County, Colorado.

19. Final Order and Decree in the Matter of the Big Sandy Ground Water Management District dated October 22, 1976, and recorded December 9, 1976 in Book 304, Page 155 in Public Records of Elbert County, Colorado.

20. Grant of Right of Way in favor of Big Sandy Communications, Inc., a corporation organized and existing under the laws of the State of Colorado dated February 11, 1981, and recorded March 18, 1981 in Book 337, Page 996 in Public Records of Elbert County, Colorado.

    Omnibus Deed of Easement and Right of Way dated June 3, 1996, and recorded June 26, 1996 in Book 547, Page 917 in Public Records of Elbert County, Colorado.

21. Intentionally deleted.

22. Division of Wind Lease and Easement Agreement (VCM Farms, LLC) by and between VCM Farms, LLC, a Delaware limited liability company, and Invenergy Wind Development LLC, a Delaware limited liability company, dated February 22, 2017, and recorded February 22, 2017 in Book 775, Page 416 in Public Records of Elbert County, Colorado.

    As affected by the terms, conditions, and stipulations of the Wind Lease Easement Agreement by and between VCM Farms, LLC, and Invenergy Wind Development LLC, a Delaware limited liability company, dated May 17, 2016, and recorded June 27, 2016 in Book 768, Page 956 in Public Records of Elbert County, Colorado, incorporated therein; as amended by the First Amendment to Wind Lease and Easement Agreement dated December 20, 2016, and recorded December 29, 2016 in Book 773, Page 884 in Public Records of Elbert County, Colorado.

23. Request for Notification of Surface Development dated April 24, 2002, and recorded May 16, 2002 in Book 629, Page 82 in Public Records of Elbert County, Colorado.

24. Deed of Trust executed by Chad Maranville and Cindy Maranville, to the Public Trustee of Elbert County, in favor of The First National Bank of Hugo dated November 20, 2020, and recorded November 23, 2020 in Book 810, Page 316 in Public Records of Elbert County, Colorado.

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Stewart Title Energy Group
1360 Post Oak Blvd., 10th Floor
Houston, Texas 77056

Re: Title Commitment - Energy Group

Thank you for choosing the Stewart Title Guaranty Company - Commercial Services for your title work! We appreciate your business and look forward to working with you on this project.

Please see below for the relevant information related to this commitment:

County: Elbert
State: Colorado
Stewart Number: 25000372008

Contact Information:

Natalie Meismer
1360 Post Oak Blvd. MC10-1 10th Fl., Houston, TX 77056
Ph: (713) 625.8290 - Email: natalie.meismer@stewart.com

Alexis Crane
1360 Post Oak Blvd. MC10-1 10th Fl., Houston, TX 77056
Ph: (682) 220-1688 - Email: alexis.crane@stewart.com

If you have any comments/questions about the enclosed title commitment, please do not hesitate to reach out to the contact above.

Thank you,

Natalie Meismer

ALTA Commitment
SCHEDULE A

Issued By:
Stewart Title Guaranty Company
P.O. Box 2029, Houston, TX 77252

Commitment Number: 25000372008-01

Revision Number:

1. Commitment Date: October 28, 2025, at 8:00 a.m.

2. Policy to be issued:

   a. 2021 ALTA® Owner's Policy

      Proposed Insured: To Be Determined
      Proposed Amount of Insurance: $1,000.00
      The estate or interest to be insured: To Be Determined

3. The estate or interest in the Land at the Commitment Date is:

   Fee Simple

4. The Title is, at the Commitment Date, vested in:

   Jack S. Maranville and Linda F. Maranville, not in tenancy in common but in joint tenancy

5. The Land is described as follows:

   SEE ATTACHED SCHEDULE A - EXHIBIT A

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SCHEDULE A - EXHIBIT A

Tax ID No.: R101317

ALL OF SECTION 31, TOWNSHIP 11 SOUTH, RANGE 58 WEST OF THE 6TH P.M., COUNTY OF ELBERT, STATE OF COLORADO.

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SCHEDULE B – I

Requirements

File No.: 25000372008-01

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.

2. Pay the agreed amount for the estate or interest to be insured.

3. Pay the premiums, fees, and charges for the Policy to the Company.

4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.

5. Pay all taxes, charges, assessments, levied and assessed against subject premises, which are due and payable.

6. Satisfactory evidence that improvements and/or repairs or alterations to the Land are completed, that contractor, sub-contractors, labor and materialmen are all paid, and have released of record all liens or notice of intent to perfect a lien.

7. If the fee owner is an entity, evidence of the good standing, incumbency and authority of that entity and of the Proposed Insured shown in Schedule A, Item 2(a) who will execute the instrument(s) required by the Company.

8. The Policy(ies) to be issued together with endorsements and any coverage therein is conditioned upon the approval of the Company's Senior Underwriting Committee, which may include further requirements.

   Note: The above will be deleted upon receipt of the requisite approvals and not carried forward to the Policy.

NOTE: The Company reserves the right to make any additional requirements and/or exceptions to this commitment and any subsequent endorsements thereto upon review of all required documents or in otherwise ascertaining further details of the transaction.

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COMMITMENT FOR TITLE INSURANCE

SCHEDULE B – II

Exceptions

File No.: 25000372008-01

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This Commitment and the Policy treat any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document will be excepted from coverage.

The Policy will not insure against loss or damage resulting from the terms and conditions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company**:**

Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I - Requirements are met.

Standard Exceptions:

1. Encroachments, overlaps, boundary line disputes, or other matters which would be disclosed by a current, accurate and complete land title survey or inspection of the Land.

2. Rights or claims of parties in possession not recorded in the Public Records.

3. Rights of tenants in possession as tenants only under leases not recorded in the Public Records.

4. Easements or claims of easements not recorded in the Public Records.

5. Taxes or assessments which are not recorded as existing liens in the Public Records.

6. Any lien, or right to a lien, for services, labor, material or equipment, heretofore or hereafter furnished, imposed by law and not recorded in the Public Records

7. Minerals of whatsoever kind, subsurface and surface substances, including but not limited to coal, lignite, oil, gas, uranium, clay, rock, sand and gravel in, on, under and that may be produced from the Land, together with all rights, privileges, and immunities relating thereto, whether or not appearing in the Public Records or listed in Schedule B. The Company makes no representation as to the present ownership of any such interests. There may be leases, grants, exceptions or reservations of interests that are not listed.

8. Any inaccuracy in the area, square footage, or acreage of Land described in Schedule A. The Company does not insure the area, square footage, or acreage of the Land.

9. Unpatented mining claims, reservations or exceptions in patents or in acts authorizing the issuance thereof.

10. Water rights, claims or title to water.

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Special Exceptions:

11. Taxes for 2024 in the amount of $1,461.24 are paid.
    Tax ID No.: R101317

12. Reservation of (1) all oil, coal and other minerals within or underlying subject property; (2) the exclusive right to prospect for, mine and remove oil, coal and other minerals; (3) the right to ingress, egress and regress to prospect for, mine, and remove oil, coal and other minerals; and (4) the right to Union Pacific Railroad Company to maintain and operate its railroad in its present form of construction, and to make any change in the form of construction or method of operation of said railroad, as contained in Deed from Union Pacific Land Company recorded March 25, 1907 in Book 33, Page 148 in Public Records of Elbert County, Colorado.

    Note: The Company makes no representation as to the present ownership of any such interests. There may be leases, assignments, amendments, exceptions or grants of interests that are not listed.

13. Right-of-Way Easement in favor of Mountain View Electric Association, Inc., a cooperative corporation, dated April 11, 1962, and recorded November 6, 1972 in Book 284, Page 17 in Public Records of Elbert County, Colorado.

14. Request for Notification of Surface Development dated April 24, 2002, and recorded May 16, 2002 in Book 629, Page 68 in Public Records of Elbert County, Colorado.

15. Right-of-Way Easement in favor of Mountain View Electric Association, Inc., a cooperative corporation, dated June 4, 1947, and recorded January 31, 2008 in Book 701, Page 576 in Public Records of Elbert County, Colorado.

16. Intentionally deleted.

17. Division of Wind Lease and Easement Agreement (VCM Farms, LLC) by and between VCM Farms, LLC, a Delaware limited liability company, and Invenergy Wind Development LLC, a Delaware limited liability company, dated February 22, 2017, and recorded February 22, 2017 in Book 775, Page 416 in Public Records of Elbert County, Colorado.

    As affected by the terms, conditions, and stipulations of the Wind Lease Easement Agreement by and between VCM Farms, LLC, and Invenergy Wind Development LLC, a Delaware limited liability company, dated May 17, 2016, and recorded June 27, 2016 in Book 768, Page 956 in Public Records of Elbert County, Colorado, incorporated therein; as amended by the First Amendment to Wind Lease and Easement Agreement dated December 20, 2016, and recorded December 29, 2016 in Book 773, Page 884 in Public Records of Elbert County, Colorado.

18. Reservation of mineral interest in favor of VCM Farms, LLC, a Delaware limited liability company, as contained in Warranty Deed dated November 20, 2020, and recorded November 23, 2020 in Book 810, Page 323 in Public Records of Elbert County, Colorado.

    Note: The Company makes no representation as to the present ownership of any such interests. There may be leases, assignments, amendments, exceptions or grants of interests that are not listed.

19. Deed of Trust executed by Jack S. Maranville and Linda F. Maranville, to the Public Trustee of Elbert County, in favor of Bank of Colorado, dated November 20, 2020, and recorded November 23, 2020 in Book 810, Page 324

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in Public Records of Elbert County, Colorado.

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SUR Appendix C

Proof of Project Lease: Recorded Lease Memos

627486 B: 836 P: 728 MEMLSE
06/22/2023 10:00:46 AM Page 1 of 8 R: $48.00 D:
Rhonda Braun, Elbert County, CO

Recording requested by and
when recorded mail to:

Grey Wolf Solar LLC
c/o BayWa r.e. Development, LLC
18575 Jamboree Road, Suite 850
Irvine, CA 92612
Attn: Legal Department

(Space Above for Recorder's Use Only)

MEMORANDUM OF GROUND LEASE AGREEMENT

This MEMORANDUM OF GROUND LEASE AGREEMENT (the "Memorandum") is dated June 8, 2023 by and between J and D Farm Properties, LLC, a Colorado limited liability company whose mailing address is 37345 Broadway, Matheson, CO 80830 ("Landlord"), and Grey Wolf Solar LLC, a Delaware limited liability company whose mailing address is 18575 Jamboree Road, Suite 850, Irvine, CA 92612 ("Tenant").

RECITALS

WHEREAS, Landlord and Tenant (as successor in interest pursuant to that unrecorded Assignment and Assumption Agreement dated January 30, 2023) are parties to that certain Ground Lease Agreement (the "Original Lease"), dated January 6, 2022, (the "Effective Date) whereby Landlord leased approximately 1,686.78 acres of real property in the County of Elbert, State of Colorado, as more specifically described on Exhibit A attached hereto and incorporated by reference (the "Land").

WHEREAS, Landlord and Tenant have amended the Lease by and through that certain First Amendment to Ground Lease Agreement dated January 20, 2023 (the "Amendment"); and

WHEREAS, Landlord and Tenant now intend to memorialize certain terms and conditions of the Lease and Amendment, (the Original Lease, as amended by the Amendment, is referred herein as the "Lease")

WHEREAS, The Parties now desire to provide recorded evidence of the Lease by executing and recording this Memorandum as required under and pursuant to the Lease.

Memorandum

In consideration of the foregoing Recitals, which are incorporated in this Memorandum by reference, and of the mutual promises and agreements set forth herein and in the Lease, the receipt and sufficiency of which are hereby acknowledged, the parties hereto state the following:

1. Grant. Subject to the terms and conditions of the Lease, Landlord hereby leases to Tenant, and Tenant hereby leases, hires and takes from Landlord, the Land for the purposes described herein,

together with the right to all rents, royalties, credits and profits derived from solar and other energy generation upon, over and across the Land, on the terms provided in the Lease.

2. Intended Use. The foregoing leasehold estate and grant of rents, royalties, credits and profits created by the Lease (collectively, the "Leasehold Estate") is for the construction and operation of a solar photovoltaic power array (the "System") for the generation and distribution of electric power including, without limitation:

    a. determining the feasibility of solar energy conversion and power generation on the Land, including studies of available sunlight and other data and extracting soil samples;

    b. constructing and operating the System on the Land; and

    c. undertaking any other activities, whether accomplished by Tenant or a third party authorized by Tenant, that Tenant reasonably determines are necessary, useful or appropriate to accomplish any of the foregoing purposes.

3. Term. The Lease shall commence on the Effective Date and shall continue for the Term (as defined herein), as follows:

    a. Diligence Period. The "Initial Diligence Period" shall commence on the Effective Date and continue until the date which is 365 days following the Effective Date.

        i. Extended Diligence Periods. Tenant will have the option to extend the Diligence Period, up to six (6) times, each for an additional 365 days.

    b. Initial Term. The "Initial Term" will begin on the Construction Commencement Date (as defined below) continuing 246 months from the anniversary of the Construction Commencement Date. As used herein, "Term" shall mean, collectively, the Diligence Period, the Initial Term and any Renewal Terms (as defined below).

    c. Construction Commencement Date. For purposes of the Lease, "Construction Commencement Date" shall mean the date that Tenant begins construction of the System on the Land, established by Tenant's receipt of an Elbert County grading permit, if applicable, for construction of any portion of the System

    d. Renewal Terms. Tenant shall have the option, in its sole discretion, to extend and renew the term of the Initial Term for up to four (4) periods of five (5) years each (each a "Renewal Term"). Tenant may exercise each such Renewal Term by written notice delivered to Landlord not later than sixty (60) days prior to the expiration of the Initial Term or the then-existing Renewal Term, as applicable.

4. Easements. Landlord hereby grants to Tenant during the Term of this Lease (a) an exclusive easement for light, solar energy resources; (b) a nonexclusive easement for vehicular and pedestrian access by means of roads and lanes if existing or later constructed by Landlord, or otherwise by such route or routes as Tenant may construct from time to time, and an exclusive easement for utility access over, under and across property owned by Landlord which is adjacent to or in the vicinity of the Land as reasonably necessary for Tenant's conduct of the Intended Use on the Premises and to access the Land; (c) an easement for any and all encroachments of Tenant's Property onto Landlord's adjacent property; and (d) an easement over, under and across the

Landlord's adjacent property for audio, visual, view, light, flicker, noise, vibration and any other effects attributable to the Intended Use of the Land.

5. Exclusivity. Landlord covenants that it will not (i) use or lease or permit any tenant to use or lease or (ii) permit any occupant or subtenant or assignee of a tenant or occupant to use any other property in which Landlord has an interest and which is located within a radius of one (1) mile of the Premises, for the purpose of conducting a business that is engaged in the solar power generation and/or a use similar to the Intended Use.

6. Notices. Notices shall be given to the Landlord and Tenant in accordance with the terms of the Lease.

7. Construction of Terms/Conflict. All defined terms used herein not otherwise defined shall have the meaning or definition set forth in the Lease. In the event that the terms, conditions and provisions of this Memorandum conflict with the terms, conditions and provisions of the Lease, the terms, conditions and provisions of the Lease shall control.

8. Successors and Assigns. This Memorandum and the rights granted herein shall run with the land, and shall be binding upon and inure to the benefit of the parties, their respective successors and assigns, but the provisions of this paragraph shall not be construed to allow any assignment or transfer of the rights and obligations otherwise prohibited or conditioned in the Lease.

9. Authority. Each party represents to the other that it has the necessary authority to enter into the Lease and this Memorandum.

10. Counterparts. This Memorandum may be executed in one or more counterparts, each of which, when taken together, shall constitute one and the same document.

[*Signature page follows immediately*]

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum as of the date first written above.

LANDLORD:

J and D Farm Properties, LLC,
a Colorado limited liability company

By Donna L. Maranville
Donna L. Maranville, Manager

TENANT:

Grey Wolf Solar LLC,
a Delaware limited liability company

By: _____
Name: _____
Title: _____

[*Notary pages follow immediately*]

627486 B: 836 P: 728 MEMLSE
06/22/2023 10:00:46 AM Page 5 of 8 R: $48.00 D:
Rhonda Braun, Elbert County, CO

19283489_v2

LANDLORD:

STATE OF COLORADO
COUNTY OF El Paso

This instrument was acknowledged before me on June 14th, 2023 by Donna L. Maranville, as Manager, of J and D Farm Properties, LLC, a Colorado limited liability company.

Courtney R. Greenwood
Notary Public

Printed Name: Courtney R Greenwood

(Seal)

My Commission Expires:
02-12-2026

COURTNEY R. GREENWOOD
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20184006887
My Commission Expires 02-12-2026

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum as of the date first written above.

LANDLORD:

J and D Farm Properties, LLC,
a Colorado limited liability company

By _____
Donna L. Maranville, Manager

TENANT:

Grey Wolf Solar LLC,
a Delaware limited liability company

By: _____
Name: Geoff Fallon
Title: Authorized Signatory

[*Notary pages follow immediately*]

627486 B: 836 P: 728 MEMLSE
06/22/2023 10:00:46 AM Page 7 of 8 R: $48.00 D:
Rhonda Braun, Elbert County, CO

CALIFORNIA ACKNOWLEDGMENT CIVIL CODE § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Orange }

On June 08, 2022 before me, T. Harlan, Notary Public,
Date *Here Insert Name and Title of the Officer*

personally appeared Geoff Fallon
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

T. HARLAN
Notary Public - California
Orange County
Commission # 2394855
My Comm. Expires Feb 24, 2026

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature T. Harlan
Signature of Notary Public

Place Notary Seal and/or Stamp Above

OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____	Signer's Name: _____
☐ Corporate Officer – Title(s): _____	☐ Corporate Officer – Title(s): _____
☐ Partner – ☐ Limited ☐ General	☐ Partner – ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact	☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator	☐ Trustee ☐ Guardian or Conservator
☐ Other: _____	☐ Other: _____
Signer is Representing: _____	Signer is Representing: _____

©2019 National Notary Association

EXHIBIT A

Description of the Land

The South Half of Section 26, and all of Section 35, all in Township 11 South, Range 59 West of the 6th P.M.; and all of Section 1, the North Half of the Northwest Quarter (Lots 3 and 4), of Section 2, all in Township 12 South, Range 59 West of the 6th P.M., County of Elbert, State of Colorado.

Parcel ID: 1926300138

Acres: 1,686.78

649375 B: 858 P: 310 MEMLSE
03/09/2026 08:45:01 AM Page 1 of 9 R: $43.00 D:
Rhonda Braun, Elbert County, CO

Recording requested by and
when recorded mail to:

Shepherd Solar LLC
c/o BayWa r.e. Americas
5901 Priestly Drive, Suite 300
Carlsbad, CA 92008
Attn: Legal Department

(Space Above for Recorder's Use Only)

MEMORANDUM OF GROUND LEASE AGREEMENT

This MEMORANDUM OF GROUND LEASE AGREEMENT (the "Memorandum") is dated March 6, 2026 by and between Chad Maranville and Cindy Maranville, whose mailing address is 9880 County Road 149 ("Landlord"), and Shepherd Solar LLC, a Delaware limited liability company (fka Grey Wolf Solar LLC) whose mailing address is 5901 Priestly Drive, Suite 300, Carlsbad, CA 92008 ("Tenant").

RECITALS

WHEREAS, Landlord and Tenant are parties to that certain Ground Lease Agreement (the "Lease"), dated March 24, 2025 (the "Effective Date), whereby Landlord leased approximately 118.00 acres of real property in the County of Elbert, State of Colorado, as more specifically described on Exhibit A attached hereto and incorporated by reference (the "Land").

WHEREAS, Landlord and Tenant now intend to memorialize certain terms and conditions of the Lease.

WHEREAS, the Parties now desire to provide record evidence of the Lease by executing and recording this Memorandum as required under and pursuant to the Lease.

Memorandum

In consideration of the foregoing Recitals, which are incorporated in this Memorandum by reference, and of the mutual promises and agreements set forth herein and in the Lease, the receipt and sufficiency of which are hereby acknowledged, the parties hereto state the following:

1. Grant. Subject to the terms and conditions of the Lease, Landlord hereby leases, demises, lets and warrants to Tenant, and Tenant hereby leases, hires and takes from Landlord, the Land for the purposes described herein, together with the right to all rents, royalties,

credits and profits derived from solar and other energy generation upon, over and across the Land, on the terms provided herein.

2. Intended Use. The foregoing leasehold estate and grant of rents, royalties, credits and profits created by the Lease (collectively, the "Leasehold Estate") is for the construction and operation of a solar photovoltaic power array (the "System") for the generation and distribution of electric power including, without limitation:

    a. determining the feasibility of solar energy conversion and power generation on the Land, including studies of available sunlight and other data and extracting soil samples;

    b. constructing and operating the System on the Land; and

    c. undertaking any other activities, whether accomplished by Tenant or a third party authorized by Tenant, that Tenant reasonably determines are necessary, useful or appropriate to accomplish any of the foregoing purposes.

3. Term. The Lease shall commence on the Effective Date and shall continue for the Term (as defined herein), as follows:

    a. Diligence Period. The "Initial Diligence Period" shall commence on the Effective Date and continue until the date which is 365 days following the Effective Date.

        i. Extended Diligence Periods. Tenant will have the option to extend the Diligence Period, up to four (4) times for an additional 365 days.

    b. Initial Term. The "Initial Term" will begin on the Construction Commencement Date (as defined below) continuing 246 months from the anniversary of the Construction Commencement Date. As used herein, "Term" shall mean, collectively, the Diligence Period, the Initial Term and any Renewal Terms (as defined below).

    c. Construction Commencement Date. For purposes of the Lease, "Construction Commencement Date" shall mean the date that Tenant begins construction of the System on the Land, established by Tenant's receipt of an Elbert County grading permit, if applicable, for construction of any portion of the System.

    d. Renewal Terms. Tenant shall have the option, in its sole discretion, to extend and renew the term of the Initial Term for up to four (4) periods of five (5) years each (each a "Renewal Term"). Tenant may exercise each such Renewal Term by written notice delivered to Landlord not later than sixty (60) days prior to the expiration of the Initial Term or the then-existing Renewal Term, as applicable.

4. Easements. Landlord hereby grants to Tenant during the Term of this Lease (a) an exclusive easement for light, solar energy resources; (b) a nonexclusive easement for vehicular and pedestrian access by means of roads and lanes if existing or later constructed by Landlord,

or otherwise by such route or routes as Tenant may construct from time to time, and an exclusive easement for utility access over, under and across property owned by Landlord which is adjacent to or in the vicinity of the Land as reasonably necessary for Tenant's conduct of the Intended Use on the Premises and to access the Land; and (c) an easement over, under and across the Landlord's adjacent property for audio, visual, view, light, flicker, noise, vibration and any other effects attributable to the Intended Use of the Land.

5. Notices. Notices shall be given to the Landlord and Tenant in accordance with the terms of the Lease.

6. Construction of Terms/Conflict. All defined terms used herein not otherwise defined shall have the meaning or definition set forth in the Lease. In the event that the terms, conditions and provisions of this Memorandum conflict with the terms, conditions and provisions of the Lease, the terms, conditions and provisions of the Lease shall control.

7. Successors and Assigns. This Memorandum and the rights granted herein shall run with the land, and shall be binding upon and inure to the benefit of the parties, their respective successors and assigns, but the provisions of this paragraph shall not be construed to allow any assignment or transfer of the rights and obligations otherwise prohibited or conditioned in the Lease.

8. Authority. Each party represents to the other that it has the necessary authority to enter into the Lease and this Memorandum.

9. Counterparts. This Memorandum may be executed in one or more counterparts, each of which, when taken together, shall constitute one and the same document.

[*Signature page follows immediately*]

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum as of the date first written above.

LANDLORD:

By:_____
Name: Chad Maranville

By:_____
Name: Cindy Maranville

[*Notary pages follow immediately*]

LANDLORD:

STATE OF COLORADO
COUNTY OF Lincoln

This instrument was acknowledged before me on March 5th, 2026 by Chad Maranville.

CHANSE MITCHELL
Notary Public
State of Colorado
Notary ID # 20224032302
My Commission Expires 08-17-2026

Notary Public

Printed Name: Chanse Mitchell

(Seal)

My Commission Expires:
8/17/2026

LANDLORD:

STATE OF COLORADO
COUNTY OF _____

This instrument was acknowledged before me on _____, 2026 by Cindy Maranville.

Notary Public

Printed Name: _____

(Seal)

My Commission Expires:
_____

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum as of the date first written above.

LANDLORD:

By: _____
Name: Chad Maranville

By: Cindy Maranville
Name: Cindy Maranville

[*Notary pages follow immediately*]

LANDLORD:

STATE OF COLORADO
COUNTY OF _____

This instrument was acknowledged before me on _____, 2026 by Chad Maranville.

_____
Notary Public

Printed Name: _____

(Seal)

My Commission Expires:
_____

LANDLORD:

STATE OF COLORADO
COUNTY OF Elbert

This instrument was acknowledged before me on March 6, 2026 by Cindy Maranville.

Cathy Sullivan
Notary Public

CATHY SULLIVAN
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20084021205
MY COMMISSION EXPIRES JULY 10, 2028

(Seal)

Printed Name: Cathy Sullivan

My Commission Expires:
July 10, 2028

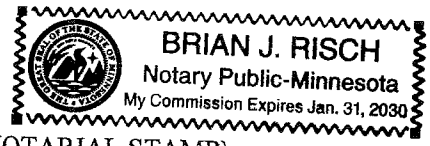
Tenant:

Shepherd Solar LLC

By: _____
Name: Nicole Nordquist
Title: Authorized Signatory

STATE OF MINNESOTA
COUNTY OF RAMSEY

This instrument was acknowledged before me on February 25th, 2026, by Nicole Nordquist, as Authorized Signatory of Shepherd Solar LLC.



(NOTARIAL STAMP)

_____
Signature
Title: Notary Public
My commission expires: 01/31/2030

649375 B: 858 P: 310 MEMLSE
03/09/2026 08:45:01 AM Page 9 of 9 R: $43.00 D:
Rhonda Braun, Elbert County, CO

EXHIBIT A

Description of the Land

Elbert County, Colorado

Parcel Number: 1936000044

All land lying south of the centerline of the waterway of the Southeast Quarter (SE1/4) of Section 36, 11S-R59W,

And

The Southwest 2 acres of the SW1/4 (for gen-tie and access use only).

649215 B: 858 P: 153 MEMLSE
03/02/2026 11:26:40 AM Page 1 of 7 R: $43.00 D:
Rhonda Braun, Elbert County, CO

Recording requested by and
when recorded mail to:

Shepherd Solar LLC
c/o BayWa r.e. Americas
5901 Priestly Drive, Suite 300
Carlsbad, CA 92008
Attn: Legal Department

(Space Above for Recorder's Use Only)

MEMORANDUM OF GROUND LEASE AGREEMENT

This MEMORANDUM OF GROUND LEASE AGREEMENT (the "Memorandum") is dated February 25, 2026 by and between Jack S. Maranville and Linda F. Maranville, whose mailing address is 12301 County Road 149 ("Landlord"), and Shepherd Solar LLC, a Delaware limited liability company (fka Grey Wolf Solar LLC) whose mailing address is 5901 Priestly Drive, Suite 300, Carlsbad, CA 92008 ("Tenant").

RECITALS

WHEREAS, Landlord and Tenant are parties to that certain Ground Lease Agreement (the "Lease"), dated March 24, 2025 (the "Effective Date), whereby Landlord leased approximately 185.00 acres of real property in the County of Elbert, State of Colorado, as more specifically described on Exhibit A attached hereto and incorporated by reference (the "Land").

WHEREAS, Landlord and Tenant now intend to memorialize certain terms and conditions of the Lease.

WHEREAS, the Parties now desire to provide record evidence of the Lease by executing and recording this Memorandum as required under and pursuant to the Lease.

Memorandum

In consideration of the foregoing Recitals, which are incorporated in this Memorandum by reference, and of the mutual promises and agreements set forth herein and in the Lease, the receipt and sufficiency of which are hereby acknowledged, the parties hereto state the following:

1. Grant. Subject to the terms and conditions of the Lease, Landlord hereby leases, demises, lets and warrants to Tenant, and Tenant hereby leases, hires and takes from Landlord, the Land for the purposes described herein, together with the right to all rents, royalties,

credits and profits derived from solar and other energy generation upon, over and across the Land, on the terms provided herein.

2. Intended Use. The foregoing leasehold estate and grant of rents, royalties, credits and profits created by the Lease (collectively, the "Leasehold Estate") is for the construction and operation of a solar photovoltaic power array (the "System") for the generation and distribution of electric power including, without limitation:

    a. determining the feasibility of solar energy conversion and power generation on the Land, including studies of available sunlight and other data and extracting soil samples;

    b. constructing and operating the System on the Land; and

    c. undertaking any other activities, whether accomplished by Tenant or a third party authorized by Tenant, that Tenant reasonably determines are necessary, useful or appropriate to accomplish any of the foregoing purposes.

3. Term. The Lease shall commence on the Effective Date and shall continue for the Term (as defined herein), as follows:

    a. Diligence Period. The "Initial Diligence Period" shall commence on the Effective Date and continue until the date which is 365 days following the Effective Date.

        i. Extended Diligence Periods. Tenant will have the option to extend the Diligence Period, up to four (4) times for an additional 365 days.

    b. Initial Term. The "Initial Term" will begin on the Construction Commencement Date (as defined below) continuing 246 months from the anniversary of the Construction Commencement Date. As used herein, "Term" shall mean, collectively, the Diligence Period, the Initial Term and any Renewal Terms (as defined below).

    c. Construction Commencement Date. For purposes of the Lease, "Construction Commencement Date" shall mean the date that Tenant begins construction of the System on the Land, established by Tenant's receipt of an Elbert County grading permit, if applicable, for construction of any portion of the System.

    d. Renewal Terms. Tenant shall have the option, in its sole discretion, to extend and renew the term of the Initial Term for up to four (4) periods of five (5) years each (each a "Renewal Term"). Tenant may exercise each such Renewal Term by written notice delivered to Landlord not later than sixty (60) days prior to the expiration of the Initial Term or the then-existing Renewal Term, as applicable.

4. Easements. Landlord hereby grants to Tenant during the Term of this Lease (a) an exclusive easement for light, solar energy resources; (b) a nonexclusive easement for vehicular and pedestrian access by means of roads and lanes if existing or later constructed by Landlord,

or otherwise by such route or routes as Tenant may construct from time to time, and an exclusive easement for utility access over, under and across property owned by Landlord which is adjacent to or in the vicinity of the Land as reasonably necessary for Tenant's conduct of the Intended Use on the Premises and to access the Land; and (c) an easement over, under and across the Landlord's adjacent property for audio, visual, view, light, flicker, noise, vibration and any other effects attributable to the Intended Use of the Land.

5. Notices. Notices shall be given to the Landlord and Tenant in accordance with the terms of the Lease.

6. Construction of Terms/Conflict. All defined terms used herein not otherwise defined shall have the meaning or definition set forth in the Lease. In the event that the terms, conditions and provisions of this Memorandum conflict with the terms, conditions and provisions of the Lease, the terms, conditions and provisions of the Lease shall control.

7. Successors and Assigns. This Memorandum and the rights granted herein shall run with the land, and shall be binding upon and inure to the benefit of the parties, their respective successors and assigns, but the provisions of this paragraph shall not be construed to allow any assignment or transfer of the rights and obligations otherwise prohibited or conditioned in the Lease.

8. Authority. Each party represents to the other that it has the necessary authority to enter into the Lease and this Memorandum.

9. Counterparts. This Memorandum may be executed in one or more counterparts, each of which, when taken together, shall constitute one and the same document.

[*Signature page follows immediately*]

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum as of the date first written above.

LANDLORD:

By: _____
Name: Jack S. Maranville

By: _____
Name: Linda F. Maranville

[*Notary pages follow immediately*]

LANDLORD:

STATE OF COLORADO
COUNTY OF El Paso

This instrument was acknowledged before me on February 19, 2026 by Jack S. Maranville.

Nancy A Helton
Notary Public

(Seal) NANCY ANN HELTON
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20154043412
My Commission Expires 11-05-2027

Printed Name: Nancy A Helton

My Commission Expires:
11-05-2027

LANDLORD:

STATE OF COLORADO
COUNTY OF El Paso

This instrument was acknowledged before me on February 19, 2026 by Linda F. Maranville.

Nancy A Helton
Notary Public

(Seal) NANCY ANN HELTON
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20154043412
My Commission Expires 11-05-2027

Printed Name: Nancy A Helton

My Commission Expires:
11-05-2027

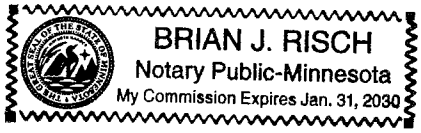
Tenant:

Shepherd Solar LLC

By: _____
Name: Nicole Nordquist
Title: Authorized Signatory

STATE OF MINNESOTA
COUNTY OF RAMSEY

This instrument was acknowledged before me on February 25th, 2026, by Nicole Nordquist, as Authorized Signatory of Shepherd Solar LLC.



(NOTARIAL STAMP)

_____
Signature
Title: Notary Public
My commission expires: 01/31/2030

649215 B: 858 P: 153 MEMLSE
03/02/2026 11:26:40 AM Page 7 of 7 R: $43.00 D:
Rhonda Braun, Elbert County, CO

EXHIBIT A

Description of the Land

Elbert County, Colorado

Parcel Number: 1831000038

All land lying south of the centerline of the waterway of the South Half (S 1/2) of Section 31, 11S-R58W.

SUR Appendix C

Statement of Taxes Due

STATEMENT OF TAXES DUE

Account Number R120882
Parcel 1926300138

Assessed To
J AND D FARM PROPERTIES LLC
37345 BROADWAY
MATHESON, CO 80830-9710

Legal Description

Section: 1 Township: 12 Range: 59 ALL Section: 2 Township: 12 Range: 59 N2NW4 Section: 26 Township: 11 Range: 59 S2 Section: 35 Township: 11 Range: 59 ALL

Situs Address

Year	Tax	Interest	Fees	Payments	Balance
Tax Charge					
2025	$3,080.64	$0.00	$0.00	($3,080.64)	$0.00
Total Tax Charge					$0.00
Grand Total Due as of 03/09/2026					**$0.00**

Tax Billed at 2025 Rates for Tax Area 0015 - BIG SANDY SCHL-FIRE-DOUBLE EL SOIL

Authority	Mill Levy	Amount
ELBERT COUNTY GENERAL	17.0200000	$746.50
ELBERT COUNTY ROAD AND BRID	9.5000000	$416.67
ELBERT COUNTY SOCIAL SERVIC	0.7940000	$34.82
ELBERT COUNTY RETIREMENT	0.9960000	$43.68
ELBERT COUNTY LIBRARY	2.5620000	$112.37
BIG SANDY FIRE PROTECTION D	8.0000000	$350.88
Taxes Billed 2025	38.8720000	$1,704.92

Values	Actual	Assessed
AG-DRY FARM LAND	$134,119	$36,210
AG-GRAZING LAND	$19,801	$5,350
OTHER BLDGS.-AGRICULTURAL	$8,500	$2,300
Total	$162,420	$43,860

Tax Billed at 2025 Rates for Tax Area 0015 - BIG SANDY SCHL-FIRE-DOUBLE EL SOIL

Authority	Mill Levy	Amount
BIG SANDY SCHOOL GENERAL	27.4310000	$1,203.13
BIG SANDY SCHOOL BOND	3.9350000	$172.59
Taxes Billed 2025	31.3660000	$1,375.72

Values	Actual	Assessed
AG-DRY FARM LAND	$134,119	$36,210
AG-GRAZING LAND	$19,801	$5,350
OTHER BLDGS.-AGRICULTURAL	$8,500	$2,300
Total	$162,420	$43,860

This is your Statement of Taxes Due for 2025 taxes due in 2026. Full payment is due on 4-30-26. First half payment is due 2-28-26 and second half is due 06-15-26. Prior year taxes need to be paid in Certified Funds. Current taxes can now be paid online at www.elbertcounty-co.gov. Please include the account number with your payment. Due dates that fall on Friday, weekend or holiday will be due the next regular business day. If you have questions, feel free to call 303-621-3120. Make payment to:
Elbert County Treasurer
PO Box 67
Kiowa CO 80117

STATEMENT OF TAXES DUE

Account Number R122727
Assessed To

Parcel 1936000044
MARANVILLE CHAD
9880 COUNTY RD 149
MATHESON, CO 80830

Legal Description **Situs Address**

Section: 25 Township: 11 Range: 59 W2 Section: 36 Township: 11 Range: 59

Year	Tax	Interest	Fees	Payments	Balance
Tax Charge					
2025	$2,435.12	$0.00	$0.00	($2,435.12)	$0.00
Total Tax Charge					$0.00
Grand Total Due as of 03/09/2026					**$0.00**

Tax Billed at 2025 Rates for Tax Area 0015 - BIG SANDY SCHL-FIRE-DOUBLE EL SOIL

Authority	Mill Levy	Amount
ELBERT COUNTY GENERAL	17.0200000	$590.08
ELBERT COUNTY ROAD AND BRID	9.5000000	$329.36
ELBERT COUNTY SOCIAL SERVIC	0.7940000	$27.53
ELBERT COUNTY RETIREMENT	0.9960000	$34.53
ELBERT COUNTY LIBRARY	2.5620000	$88.82
BIG SANDY FIRE PROTECTION D	8.0000000	$277.36
Taxes Billed 2025	38.8720000	$1,347.68

Values	Actual	Assessed
AG-DRY FARM LAND	$126,709	$34,210
OTHER BLDGS.-AGRICULTURAL	$1,700	$460
Total	$128,409	$34,670

Tax Billed at 2025 Rates for Tax Area 0015 - BIG SANDY SCHL-FIRE-DOUBLE EL SOIL

Authority	Mill Levy	Amount
BIG SANDY SCHOOL GENERAL	27.4310000	$951.02
BIG SANDY SCHOOL BOND	3.9350000	$136.42
Taxes Billed 2025	31.3660000	$1,087.44

Values	Actual	Assessed
AG-DRY FARM LAND	$126,709	$34,210
OTHER BLDGS.-AGRICULTURAL	$1,700	$460
Total	$128,409	$34,670

This is your Statement of Taxes Due for 2025 taxes due in 2026. Full payment is due on 4-30-26. First half payment is due 2-28-26 and second half is due 06-15-26. Prior year taxes need to be paid in Certified Funds. Current taxes can now be paid online at www.elbertcounty-co.gov. Please include the account number with your payment. Due dates that fall on Friday, weekend or holiday will be due the next regular business day. If you have questions, feel free to call 303-621-3120. Make payment to:
Elbert County Treasurer
PO Box 67
Kiowa CO 80117

STATEMENT OF TAXES DUE

Account Number R101317
Assessed To

Parcel 1831000038

MARANVILLE JACK S
12301 COUNTY RD 149
MATHESON, CO 80830

Legal Description

Section: 31 Township: 11 Range: 58

Situs Address

Year	Tax	Interest	Fees	Payments	Balance
Tax Charge					
2025	$1,588.08	$0.00	$0.00	($794.04)	$794.04
Total Tax Charge					$794.04

First Half Due as of 03/09/2026 **$0.00**

Second Half Due as of 03/09/2026 **$794.04**

Tax Billed at 2025 Rates for Tax Area 0015 - BIG SANDY SCHL-FIRE-DOUBLE EL SOIL

Authority	Mill Levy	Amount
ELBERT COUNTY GENERAL	17.0200000	$384.81
ELBERT COUNTY ROAD AND BRID	9.5000000	$214.79
ELBERT COUNTY SOCIAL SERVIC	0.7940000	$17.95
ELBERT COUNTY RETIREMENT	0.9960000	$22.52
ELBERT COUNTY LIBRARY	2.5620000	$57.93
BIG SANDY FIRE PROTECTION D	8.0000000	$180.88
Taxes Billed 2025	38.8720000	$878.88

Values	Actual	Assessed
AG-DRY FARM LAND	$83,750	$22,610
Total	$83,750	$22,610

Tax Billed at 2025 Rates for Tax Area 0015 - BIG SANDY SCHL-FIRE-DOUBLE EL SOIL

Authority	Mill Levy	Amount
BIG SANDY SCHOOL GENERAL	27.4310000	$620.23
BIG SANDY SCHOOL BOND	3.9350000	$88.97
Taxes Billed 2025	31.3660000	$709.20

Values	Actual	Assessed
AG-DRY FARM LAND	$83,750	$22,610
Total	$83,750	$22,610

This is your Statement of Taxes Due for 2025 taxes due in 2026. Full payment is due on 4-30-26. First half payment is due 2-28-26 and second half is due 06-15-26. Prior year taxes need to be paid in Certified Funds. Current taxes can now be paid online at www.elbertcounty-co.gov. Please include the account number with your payment. Due dates that fall on Friday, weekend or holiday will be due the next regular business day. If you have questions, feel free to call 303-621-3120. Make payment to:
Elbert County Treasurer
PO Box 67
Kiowa CO 80117

SUR Appendix D

ALTA / NSPS Survey

Monument Descriptions:

1. Northwest Corner Section 25 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"
2. North Quarter Corner Section 25 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"
3. West Quarter Corner Section 26 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"
4. West Quarter Corner Section 25 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"
5. Northwest Corner Section 35 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"
6. North Quarter Corner Section 35 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"
7. Northwest Corner Section 36 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"
8. North Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
9. Northeast Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
10. North Quarter Corner Section 31 Township 11 South Range 58 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"
11. Northeast Corner Section 31 Township 11 South Range 58 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"
12. West Quarter Corner Section 35 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
13. West Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
14. East Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
15. East Quarter Corner Section 31 Township 11 South Range 58 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
16. Southwest Corner Section 35 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
17. South Quarter Corner Section 35 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
18. Southwest Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
19. South Quarter Corner of Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
20. Southeast Corner of Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
21. South Quarter Corner of Section 31 Township 11 South Range 58 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
22. Southeast Corner of Section 31 Township 11 South Range 58 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
23. West Quarter Corner of Section 2 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
24. West Quarter Corner of Section 1 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
25. East Quarter Corner of Section 1 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
26. South Quarter Corner of Section 2 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
27. Southwest Corner of Section 1 Township 12 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"
28. South Quarter Corner of Section 1 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"
29. Southeast Corner of Section 1 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

Easements & Rights of Way

A. 100' RIGHT OF WAY - EASEMENT
TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.
TRANSMISSION AND DISTRIBUTION
BOOK 289, PAGE 447 (SEE NOTE 8)

B. 100' RIGHT OF WAY - EASEMENT
TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.
TRANSMISSION AND DISTRIBUTION
BOOK 289, PAGE 448 (SEE NOTE 8)

C. 100' RIGHT OF WAY - EASEMENT
TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.
TRANSMISSION AND DISTRIBUTION
BOOK 290, PAGE 599

D. 20' RIGHT OF WAY - EASEMENT
BIG SANDY TELECOMMUNICATIONS INC.
COMMUNICATION LINES
BOOK 337, PG 996

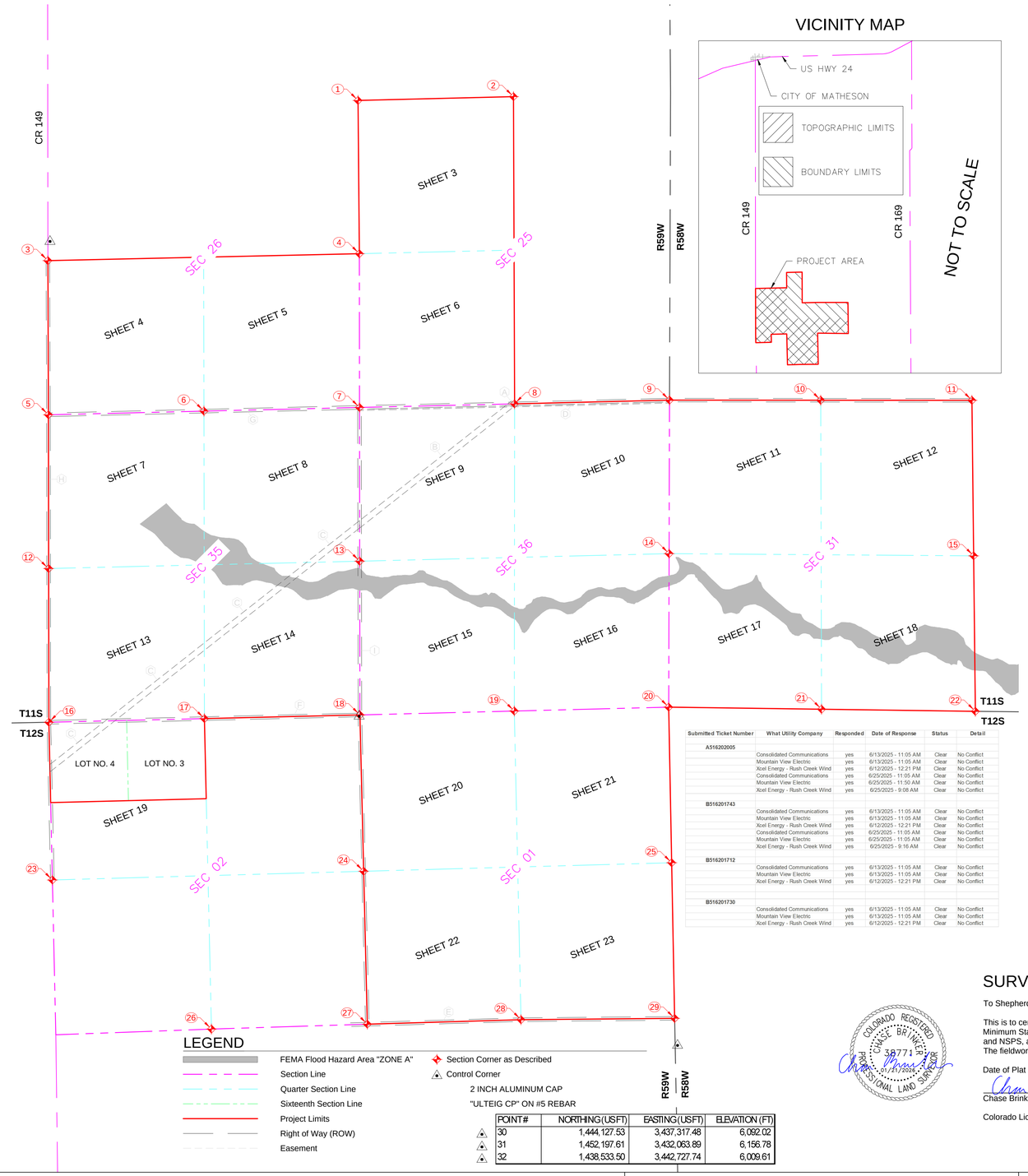
E. 60' RIGHT OF WAY
COUNTY ROAD 46 (SEE NOTE 2)

F. 60' RIGHT OF WAY
COUNTY ROAD 50 (SEE NOTE 2)

G. 60' RIGHT OF WAY
COUNTY ROAD 54 (SEE NOTE 2)

H. 60' RIGHT OF WAY
COUNTY ROAD 149 (SEE NOTE 2)

I. 60' RIGHT OF WAY
COUNTY ROAD 153 (SEE NOTE 2)



VICINITY MAP

Submitted Ticket Number	What Utility Company	Responded	Date of Response	Status	Detail
A516202005					
	Consolidated Communications	yes	6/13/2025 - 11:05 AM	Clear	No Conflict
	Mountain View Electric	yes	6/13/2025 - 11:05 AM	Clear	No Conflict
	Xcel Energy - Rush Creek Wind	yes	6/12/2025 - 12:21 PM	Clear	No Conflict
	Consolidated Communications	yes	6/25/2025 - 11:05 AM	Clear	No Conflict
	Mountain View Electric	yes	6/25/2025 - 11:50 AM	Clear	No Conflict
	Xcel Energy - Rush Creek Wind	yes	6/25/2025 - 9:08 AM	Clear	No Conflict
B516201743					
	Consolidated Communications	yes	6/13/2025 - 11:05 AM	Clear	No Conflict
	Mountain View Electric	yes	6/13/2025 - 11:05 AM	Clear	No Conflict
	Xcel Energy - Rush Creek Wind	yes	6/12/2025 - 12:21 PM	Clear	No Conflict
	Consolidated Communications	yes	6/25/2025 - 11:05 AM	Clear	No Conflict
	Mountain View Electric	yes	6/25/2025 - 11:05 AM	Clear	No Conflict
	Xcel Energy - Rush Creek Wind	yes	6/25/2025 - 9:16 AM	Clear	No Conflict
B516201712					
	Consolidated Communications	yes	6/13/2025 - 11:05 AM	Clear	No Conflict
	Mountain View Electric	yes	6/13/2025 - 11:05 AM	Clear	No Conflict
	Xcel Energy - Rush Creek Wind	yes	6/12/2025 - 12:21 PM	Clear	No Conflict
B516201730					
	Consolidated Communications	yes	6/13/2025 - 11:05 AM	Clear	No Conflict
	Mountain View Electric	yes	6/13/2025 - 11:05 AM	Clear	No Conflict
	Xcel Energy - Rush Creek Wind	yes	6/12/2025 - 12:21 PM	Clear	No Conflict

Client elected ALTA/NSPS Minimum Standards, Table A items:

1. Monuments placed at all major corners of the boundary of the surveyed property, except where already marked by existing monuments. Further described under the section "Monument Descriptions".

2. Addresses not disclosed in documents provided to surveyor, nor observed during field activities.

3. Flood zone classification for project area is Zone X, except where identified hereon. ref. FEMA FIRM MAP ID 08039C0950C eff. 3/17/2011

4. Gross land area of lands within the project limits is 3,236.85 acres (140,997,100 square feet), more or less.

5. Vertical relief obtained by LiDAR acquistion via a manned aerial platform and controlled by ground survey with 2' contour interval, on NAVD 88 derived from Geoid 18, with static GPS observations conducted by Ulteig field crews on 06/09/2025, processed through OPUS.

6.a. Zoning report not provided to surveyor.

6.b. Zoning report not provided to surveyor.

7.c. Measured height of buildings is plotted and shown hereon. Heights are measured from tallest structure point to foundation level, if any, derived from aerial acquisition.

8. Substantial features depicted hereon, where observed in the process of conducting the fieldwork.

11.a. Evidence of underground utilities existing on or serving the surveyed property (in addition to the observed evidence of utilities required pursuant to Section 5.E.iv.) as determined by: plans and/or reports provided by client and as responded to in submitted One-call ticket requests. Those tickets are shown hereon.

13. Names of adjoining owners according to current tax records included.

14. Surveyed property adjoins multiple intersections, including the intersection of County Road 149 and County Road 54 at its western limits.

15. Rectified orthophotography provided separately to client.

16. No evidence of recent earth moving work, building construction, or building additions observed in the process of conducting the fieldwork

17. Surveyor has not been informed of proposed changes in street right of way lines. No evidence of recent street or sidewalk construction or repairs were observed in the process of conducting the fieldwork.

18. Pursuant to Sections 5 and 6 (and applicable selected Table A items, excluding Table A item 1), no plottable offsite easements were disclosed in documents provided to or obtained by the surveyor. Any offsite easements included in the title policy were not plottable and blanket in nature.

19. Professional liability insurance policy obtained by the surveyor in the minimum amount of minimum $1,000,000 in effect throughout the contract term. Certificate of insurance to be furnished to client upon request.

NOTE: PROJECT LIMITS AND TOPOGRAPHIC LIMITS VARY. PER CLIENT REQUEST, TOPOGRAPHIC LIMITS EXCLUDE THE FOLLOWING LANDS, OTHERWISE CONTAINED WITHIN THE PROJECT LIMITS: WEST HALF OF SECTION 25, THE NORTH HALF OF SECTION 36, AND THE NORTH HALF OF SECTION 31. THUS, TABLE A ITEMS 5, 7.c., 8, and 15 ARE NOT ELECTED FOR SAID EXCLUDED LANDS.

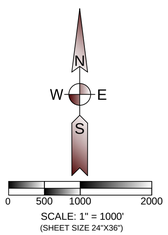
811 Ticket Response Pursuant to ALTA/NSPS Minimum Standards, Table A, Item 11a:

Visible above ground utilities have been field located as shown. Evidence of underground utilities shown hereon are represented based upon information provided by COLORADO ONE CALL ticket numbers A516202005, B516201743, B516201712, and B516201730, through field marking or mapping provided. However, some utility owners may not have responded. The underground utilities have not been physically located as a part of this survey. Prior to excavation or digging, contact COLORADO ONE CALL at 811 or 800-922-1987.

A516202005 Ticket subject Lands: N2NW4 Sec. 2 T11S R59W, ALL Sec. 35 T11S R59W, S2 Sec. 26 T11S R59W
B516201743 Ticket subject Lands: ALL Sec. 36 T11S R59W
B516201712 Ticket subject Lands: W2 Sec. 2 T12S R59W, ALL Sec. 1 T12S R59W
B516201730 Ticket subject Lands: ALL Sec. 31 T12S R58W

SURVEY NOTES:

1. THIS SURVEY HAS BEEN PREPARED BASED ON TITLE POLICIES AND ADDITIONAL EASEMENTS AND DOCUMENTATION HAVE NOT BEEN RESEARCHED.
2. LANDOWNER INFORMATION, PARCEL IDENTIFICATION NUMBERS, AND ROAD RIGHT-OF-WAY WIDTHS HAVE BEEN OBTAINED FROM A PUBLICLY AVAILABLE GEOGRAPHIC INFORMATION SYSTEM (GIS) DATABASE, AS PRESENTED AND MAINTAINED BY THE COUNTY OF ELBERT.
3. HORIZONTAL DATUM: COLORADO COORDINATE SYSTEM OF 1983, CENTRAL ZONE (NAD 83, COLORADO CENTRAL, US SURVEY FEET).
4. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
5. GEOID: GEOID 18
6. DISTANCES SHOWN HEREON ARE PRESENTED AT GRID VALUES. APPLY A COMBINED FACTOR OF 0.99964823 TO DERIVE GROUND DISTANCES.
7. PER C.R.S SECTION 13-80-105, IN NO CASE SHALL ACTION BE BROUGHT AGAINST A SURVEYOR MORE THAN 10 YEARS AFTER THE COMPLETION OF A SURVEY.
8. BY CLIENT REQUEST, THOSE EASEMENTS FILED WITH THE ELBERT COUNTY RECORDER IN BOOK 289, PAGES 447 & 448 HAVE BEEN INCLUDED HEREON AS VISUAL AIDS ONLY. IMPROVEMENTS HAVE NOT BEEN LOCATED IN THE FIELD AS THESE LANDS EXIST OUTSIDE THE PROJECTS TOPOGRAPHIC LIMITS. AN APPROXIMATE LOCATION HAS BEEN GENERATED FROM PUBLICLY AVAILABLE AERIAL IMAGERY AND AS PRESENTED, SHALL NOT BE RELIED UPON.



SCALE: 1" = 1000'
(SHEET SIZE 24"X36")

LEGEND

- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Section Line
- Project Limits
- Right of Way (ROW)
- Easement
- Section Corner as Described
- Control Corner
- 2 INCH ALUMINUM CAP
- "ULTEIG CP" ON #5 REBAR

POINT #	NORTHING (USFT)	EASTING (USFT)	ELEVATION (FT)
30	1,444,127.53	3,437,317.48	6,092.02
31	1,452,197.61	3,432,063.89	6,156.78
32	1,438,533.50	3,442,727.74	6,009.61

SURVEYOR'S CERTIFICATE

To Shepherd Solar, LLC and Stewart Title Guaranty Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 6(a), 6(b), 7(c), 8, 11(a), 13, 14, 15, 16, 17, 18, and 19 of Table A thereof. The fieldwork was completed on December 19th, 2025.

Date of Plat or Map: 01/21/2026

Chase Brinker, PLS

Colorado License Number 38771

COLORADO REGISTERED CHASE BRINKER 38771 01/21/2026 PROFESSIONAL LAND SURVEYOR

Ulteig

Austin - Billings - Bismarck - Boise - Cedar Rapids - Denver
Detroit Lakes - Fargo - Sacramento - Sioux Falls - St. Paul

12357-B Riata Trace Parkway, Suite 150
Austin, Texas 78727
Phone: 888.858.3441 Fax: 888.858.3440
Web: www.ulteig.com

ALTA/NSPS LAND TITLE SURVEY

In Parts of Township 11 South, Range 59 West,
Township 11 South, Range 58 West, & Township 12 South, Range 59 West
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 1 OF 23	REVISION X	--

ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

G:\2025\25.01064\Survey\CAD\25.01064_Grey Wolf_ALTA.dwg

PRO FORMA POLICY
ISSUING AGENT: STEWART TITLE GUARANTY COMPANY
ISSUING OFFICE: P.O. BOX 2029, HOUSTON, TX 77252
ISSUING OFFICE S ALTA REGISTRY ID:
ISSUING OFFICE FILE NUMBER: 25000372008
PROPERTY ADDRESS: ELBERT COUNTY, CO

OWNERSHIP: J AND D FARM PROPERTIES, LLC
PER QUIT CLAIM DEED RECORDED AT ELBERT COUNTY RECORDER
IN BOOK 772, PAGE 816 WITH REFERENCE NUMBER 563999
DATED 11/21/2016

SCHEDULE A (PROPERTY DESCRIPTION)

DATE OF POLICY:
[DATE AND TIME OF RECORDING]
EFFECTIVE DATE OF THE PUBLIC RECORDS SEARCH:
OCTOBER 28, 2025, AT 8:00 A.M.

1. THE INSURED IS:
TBD
2. THE ESTATE OR INTEREST IN THE LAND INSURED BY THIS POLICY IS:
SEE THE ATTACHED SCHEDULE A - EXHIBIT A.
3. THE TITLE IS VESTED IN:
PARCEL 1: JACK S. MARANVILLE AND LINDA F. MARANVILLE, NOT IN TENANCY IN COMMON BUT IN JOINT TENANCY
PARCEL 2: J AND D FARM PROPERTIES, LLC, A COLORADO LIMITED LIABILITY COMPANY
PARCEL 3: CHAD MARANVILLE AND CINDY MARANVILLE
4. THE LAND IS DESCRIBED AS FOLLOWS:
SEE ATTACHED SCHEDULE A - EXHIBIT A.

SCHEDULE A - EXHIBIT A

PARCEL 1:
FEE OWNER: JACK S. MARANVILLE AND LINDA F. MARANVILLE, NOT IN TENANCY IN COMMON BUT IN JOINT TENANCY
PER WARRANTY DEED RECORDED AT ELBERT COUNTY RECORDER IN BOOK 810, PAGE 323 WITH REFERENCE NUMBER 601723 DATED 11/23/2020
FILE NO.: 25000372008-01
PARCEL ID NO.: R101317
SURVEY SHEET NO.: 11, 12, 17, 18

INSURED ESTATE OR INTEREST: TBD

LEGAL DESCRIPTION:

ALL OF SECTION 31, TOWNSHIP 11 SOUTH, RANGE 58 WEST OF THE 6TH P.M., COUNTY OF ELBERT, STATE OF COLORADO.

PARCEL 2:
FEE OWNER: J AND D FARM PROPERTIES, LLC, A COLORADO LIMITED LIABILITY COMPANY
PER QUIT CLAIM DEED RECORDED AT ELBERT COUNTY RECORDER IN BOOK 772, PAGE 816 WITH REFERENCE NUMBER 563999 DATED 11/21/2016
FILE NO.: 25000372008-02
PARCEL ID NO.: R120882
SURVEY SHEET NO.: 4, 5, 7, 8, 13, 14, 19, 20, 21, 22, 23

INSURED ESTATE OR INTEREST: TBD

LEGAL DESCRIPTION:

THE FOLLOWING REAL PROPERTY IN THE COUNTY OF ELBERT AND STATE OF COLORADO, TO-WIT:

THE SOUTH HALF OF SECTION 26, AND ALL OF SECTION 35, ALL IN TOWNSHIP 11 SOUTH, RANGE 59 WEST OF THE 6TH P.M.; ALL OF SECTION 1, THE NORTH HALF OF THE NORTHWEST QUARTER (LOTS 3 AND 4), OF SECTION 2, ALL IN TOWNSHIP 12 SOUTH, RANGE 59 WEST OF THE 6TH P.M., COUNTY OF ELBERT, STATE OF COLORADO.

PARCEL 3:
FEE OWNER: CHAD MARANVILLE AND CINDY MARANVILLE
PER WARRANTY DEED RECORDED AT ELBERT COUNTY RECORDER IN BOOK 812, PAGE 827 WITH REFERENCE NUMBER 604248 DATED 02/02/2021
FILE NO.: 25000372008-02
PARCEL ID NO.: R122727
SURVEY SHEET NO.: 3, 6, 9, 10, 15, 16

INSURED ESTATE OR INTEREST: TBD

LEGAL DESCRIPTION:

W1/2 OF SECTION 25, TOWNSHIP 11 SOUTH, RANGE 59 WEST OF THE 6TH P.M., COUNTY OF ELBERT, STATE OF COLORADO; AND

ALL OF SECTION 36, TOWNSHIP 11 SOUTH, RANGE 59 WEST OF THE 6TH P.M., COUNTY OF ELBERT, STATE OF COLORADO.

SCHEDULE B

EXCEPTIONS AS TO ALL TRACTS:
1. RIGHTS OR CLAIMS OF PARTIES IN POSSESSION NOT SHOWN BY THE PUBLIC RECORDS.
2. EASEMENTS, OR CLAIMS OF EASEMENTS, NOT SHOWN BY THE PUBLIC RECORDS.
3. ENCROACHMENTS, OVERLAPS, BOUNDARY LINE DISPUTES, OR OTHER MATTERS WHICH WOULD BE DISCLOSED BY AN ACCURATE SURVEY AND INSPECTION OF THE LAND.
4. ANY LIEN, OR RIGHT TO A LIEN, FOR SERVICES, LABOR, OR MATERIAL HERETO OR HEREAFTER FURNISHED, IMPOSED BY LAW AND NOT SHOWN BY THE PUBLIC RECORDS.
5. TAXES OR SPECIAL ASSESSMENTS WHICH ARE NOT SHOWN AS EXISTING LIENS BY THE PUBLIC RECORDS.
6. UNPATENTED MINING CLAIMS, RESERVATIONS OR EXCEPTIONS IN PATENTS OR IN ACTS AUTHORIZING THE ISSUANCE THEREOF.
7. WATER RIGHTS, CLAIMS OR TITLE TO WATER.
8. RIGHTS OF TENANTS IN POSSESSION AS TENANTS ONLY UNDER LEASES NOT RECORDED IN THE PUBLIC RECORDS.
9. MINERALS OF WHATSOEVER KIND, SUBSURFACE AND SURFACE SUBSTANCES, INCLUDING BUT NOT LIMITED TO COAL, LIGNITE, OIL, GAS, URANIUM, CLAY, ROCK, SAND AND GRAVEL IN, ON, UNDER AND THAT MAY BE PRODUCED FROM THE LAND, TOGETHER WITH ALL RIGHTS, PRIVILEGES, AND IMMUNITIES RELATING THERETO, WHETHER OR NOT APPEARING IN THE PUBLIC RECORDS OR LISTED IN SCHEDULE B. THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF ANY SUCH INTERESTS. THERE MAY BE LEASES, GRANTS, EXCEPTIONS OR RESERVATIONS OF INTERESTS THAT ARE NOT LISTED.
10. ANY INACCURACY IN THE AREA, SQUARE FOOTAGE, OR ACREAGE OF LAND DESCRIBED IN SCHEDULE A. THE COMPANY DOES NOT INSURE THE AREA, SQUARE FOOTAGE, OR ACREAGE OF THE LAND.
11. THIS POLICY TOGETHER WITH ENDORSEMENTS AND ANY COVERAGE HEREIN IS CONDITIONED UPON THE APPROVAL OF THE COMPANY S SENIOR UNDERWRITING COMMITTEE, WHICH MAY INCLUDE FURTHER REQUIREMENTS.
(NON-SURVEY RELATED)

SPECIAL EXCEPTIONS AS TO EACH TRACT:
PARCEL 1:
1-1. TAXES FOR 2024 IN THE AMOUNT OF $1,461.24 ARE PAID.
TAX ID NO.: R101317

1-2. RESERVATION OF (1) ALL OIL, COAL AND OTHER MINERALS WITHIN OR UNDERLYING SUBJECT PROPERTY; (2) THE EXCLUSIVE RIGHT TO PROSPECT FOR, MINE AND REMOVE OIL, COAL AND OTHER MINERALS; (3) THE RIGHT TO INGRESS, EGRESS AND REGRESS TO PROSPECT FOR, MINE, AND REMOVE OIL, COAL AND OTHER MINERALS; AND (4) THE RIGHT TO UNION PACIFIC RAILROAD COMPANY TO MAINTAIN AND OPERATE ITS RAILROAD IN ITS PRESENT FORM OF CONSTRUCTION, AND TO MAKE ANY CHANGE IN THE FORM OF CONSTRUCTION OR METHOD OF OPERATION OF SAID RAILROAD, AS CONTAINED IN WARRANTY DEED FROM UNION PACIFIC LAND COMPANY TO C. M. GREGORY, RECORDED MARCH 25, 1907 IN BOOK 33, PAGE 148 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
NOTE: THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF ANY SUCH INTERESTS. THERE MAY BE LEASES, ASSIGNMENTS, AMENDMENTS, EXCEPTIONS OR GRANTS OF INTERESTS THAT ARE NOT LISTED.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

1-3. RIGHT-OF-WAY EASEMENT IN FAVOR OF MOUNTAIN VIEW ELECTRIC ASSOCIATION, INC., A COOPERATIVE CORPORATION, `DATED APRIL 11, 1962, AND RECORDED NOVEMBER 6, 1972 IN BOOK 284, PAGE 17 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

1-4. REQUEST FOR NOTIFICATION OF SURFACE DEVELOPMENT BY RME PETROLEUM COMPANY (FORMERLY KNOWN AS UNION PACIFIC RESOURCES COMPANY) AND/OR RME LAND CORP. (FORMERLY KNOWN AS UNION PACIFIC LAND RESOURCES CORPORATION), MINERAL ESTATE OWNERS, DATED APRIL 24, 2002, AND RECORDED MAY 16, 2002 IN BOOK 629, PAGE 68 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

1-5. RIGHT-OF-WAY EASEMENT IN FAVOR OF MOUNTAIN VIEW ELECTRIC ASSOCIATION, INC., A COOPERATIVE CORPORATION, DATED JUNE 4, 1947, AND RECORDED JANUARY 31, 2008 IN BOOK 701, PAGE 576 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

1-6. INTENTIONALLY DELETED. [PER NOTICE OF TERMINATION RECORDED OCTOBER 20, 2025 IN BOOK 855, PAGE 665, PUBLIC RECORDS OF ELBERT COUNTY, COLORADO]

1-7. RESERVATION OF MINERAL INTEREST AS CONTAINED IN WARRANTY DEED FROM VCM FARMS, LLC, A DELAWARE LIMITED LIABILITY COMPANY, TO JACK S. MARANVILLE AND LINDA F. MARANVILLE, DATED NOVEMBER 20, 2020, AND RECORDED NOVEMBER 23, 2020 IN BOOK 810, PAGE 323 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
NOTE: THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF ANY SUCH INTERESTS. THERE MAY BE LEASES, ASSIGNMENTS, AMENDMENTS, EXCEPTIONS OR GRANTS OF INTERESTS THAT ARE NOT LISTED.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

1-8. DEED OF TRUST EXECUTED BY JACK S. MARANVILLE AND LINDA F. MARANVILLE, TO THE PUBLIC TRUSTEE OF ELBERT COUNTY, IN FAVOR OF BANK OF COLORADO, DATED NOVEMBER 20, 2020, AND RECORDED NOVEMBER 23, 2020 IN BOOK 810, PAGE 324 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

PARCEL 2:
2-1. TAXES FOR 2024 IN THE AMOUNT OF $2,872.88 ARE PAID.
TAX ID NO.: R120882

2-2. RESERVATION OF (1) ALL OIL, COAL AND OTHER MINERALS WITHIN OR UNDERLYING SUBJECT PROPERTY; (2) THE EXCLUSIVE RIGHT TO PROSPECT FOR, MINE AND REMOVE OIL, COAL AND OTHER MINERALS; (3) THE RIGHT TO INGRESS, EGRESS AND REGRESS TO PROSPECT FOR, MINE, AND REMOVE OIL, COAL AND OTHER MINERALS; AND (4) THE RIGHT TO UNION PACIFIC RAILROAD COMPANY TO MAINTAIN AND OPERATE ITS RAILROAD IN ITS PRESENT FORM OF CONSTRUCTION, AND TO MAKE ANY CHANGE IN THE FORM OF CONSTRUCTION OR METHOD OF OPERATION OF SAID RAILROAD, AS CONTAINED IN WARRANTY DEED FROM UNION PACIFIC LAND COMPANY TO C. M. GREGORY, RECORDED APRIL 29, 1907 IN BOOK 33, PAGE 162 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
AS AFFECTED BY SURFACE OWNER'S AGREEMENT BY AND BETWEEN HAROLD WALRAVEN, TRUSTEE OF THE WALRAVEN FAMILY TRUST, AND CHAMPLIN PETROLEUM COMPANY, DATED JANUARY 15, 1985, AND RECORDED FEBRUARY 11, 1985 IN BOOK 377, PAGE 102 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
NOTE: THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF ANY SUCH INTERESTS. THERE MAY BE LEASES, ASSIGNMENTS, AMENDMENTS, EXCEPTIONS OR GRANTS OF INTERESTS THAT ARE NOT LISTED.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

2-3. RESERVATIONS OR EXCEPTIONS CONTAINED IN U.S. PATENTS, OR IN ACTS AUTHORIZING THE ISSUANCE THEREOF, RECORDED AUGUST 19, 1912 IN BOOK 60, PAGE 458 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO, RESERVING 1) RIGHTS OF THE PROPRIETOR OF A VEIN OR LODE TO EXTRACT AND REMOVE HIS ORE THEREFROM AND 2) RIGHTS OF WAY FOR DITCHES AND CANALS CONSTRUCTED UNDER THE AUTHORITY OF THE UNITED STATES.
NOTE: THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF ANY SUCH INTERESTS. THERE MAY BE LEASES, ASSIGNMENTS, AMENDMENTS, EXCEPTIONS OR GRANTS OF INTERESTS THAT ARE NOT LISTED.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

2-4. RESERVATIONS OR EXCEPTIONS CONTAINED IN U.S. PATENTS, OR IN ACTS AUTHORIZING THE ISSUANCE THEREOF, RECORDED AUGUST 19, 1912 IN BOOK 60, PAGE 459 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO, RESERVING 1) RIGHTS OF THE PROPRIETOR OF A VEIN OR LODE TO EXTRACT AND REMOVE HIS ORE THEREFROM AND 2) RIGHTS OF WAY FOR DITCHES AND CANALS CONSTRUCTED UNDER THE AUTHORITY OF THE UNITED STATES.
NOTE: THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF ANY SUCH INTERESTS. THERE MAY BE LEASES, ASSIGNMENTS, AMENDMENTS, EXCEPTIONS OR GRANTS OF INTERESTS THAT ARE NOT LISTED.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

2-5. RESERVATIONS OR EXCEPTIONS CONTAINED IN U.S. PATENTS, OR IN ACTS AUTHORIZING THE ISSUANCE THEREOF, RECORDED AUGUST 30, 1915 IN BOOK 73, PAGE 585 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO, RESERVING 1) RIGHTS OF THE PROPRIETOR OF A VEIN OR LODE TO EXTRACT AND REMOVE HIS ORE THEREFROM AND 2) RIGHTS OF WAY FOR DITCHES AND CANALS CONSTRUCTED UNDER THE AUTHORITY OF THE UNITED STATES.
NOTE: THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF ANY SUCH INTERESTS. THERE MAY BE LEASES, ASSIGNMENTS, AMENDMENTS, EXCEPTIONS OR GRANTS OF INTERESTS THAT ARE NOT LISTED.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

2-6. RESERVATION OF MINERAL INTEREST AS CONTAINED IN CORPORATION SPECIAL WARRANTY DEED FROM THE FEDERAL LAND BANK OF WICHITA TO NEWTON SCHAAL AND ETTA ESTHER SCHAAL, DATED NOVEMBER 19, 1942, AND RECORDED JANUARY 2, 1943 IN BOOK 189, PAGE 344 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
NOTE: THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF ANY SUCH INTERESTS. THERE MAY BE LEASES, ASSIGNMENTS, AMENDMENTS, EXCEPTIONS OR GRANTS OF INTERESTS THAT ARE NOT LISTED.
(PLOTTED AND SHOWN HEREON, AFFECTS SURVEYED PROPERTY)

2-7. EASEMENT, TERMS, CONDITIONS, AND STIPULATIONS CONTAINED IN ORDER UNDER CIVIL ACTION NO. 1973, DIV. 1 IN THE DISTRICT COURT IN AND FOR THE COUNTY OF ELBERT AND STATE OF COLORADO, STYLED TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC., A COLORADO CORPORATION, PETITIONER, VS. MIKE VERNIE, ET AL, RESPONDENTS, DATED MARCH 4, 1974, AND RECORDED MARCH 7, 1974 IN BOOK 290, PAGE 599 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

2-8. RIGHT-OF-WAY AND EASEMENT IN FAVOR OF MOUNTAIN VIEW ELECTRIC ASSOCIATION, INC., A COOPERATIVE CORPORATION, DATED JANUARY 15, 1951, AND RECORDED NOVEMBER 8, 1982 IN BOOK 351, PAGE 401 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
AS AFFECTED BY MEMORANDUM TO ALL INTERESTED PARTIES DATED JUNE 26, 2025, AND RECORDED JUNE 26, 2025 AS BOOK 853, PAGE 93 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

2-9. INTENTIONALLY DELETED. [COMBINED WITH EXCEPTION 2-2.]

2-10. REQUEST FOR NOTIFICATION OF SURFACE DEVELOPMENT BY RME PETROLEUM COMPANY (FORMERLY KNOWN AS UNION PACIFIC RESOURCES COMPANY) AND/OR RME LAND CORP. (FORMERLY KNOWN AS UNION PACIFIC LAND RESOURCES CORPORATION), MINERAL ESTATE OWNERS, DATED APRIL 24, 2002, AND RECORDED MAY 16, 2002 IN BOOK 629, PAGE 87 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

SPECIAL EXCEPTIONS AS TO EACH TRACT:
PARCEL 2 (CONTINUED):

2-11. REQUEST FOR NOTIFICATION OF SURFACE DEVELOPMENT BY RME PETROLEUM COMPANY (FORMERLY KNOWN AS UNION PACIFIC RESOURCES COMPANY) AND/OR RME LAND CORP. (FORMERLY KNOWN AS UNION PACIFIC LAND RESOURCES CORPORATION), MINERAL ESTATE OWNERS, DATED APRIL 24, 2002, AND RECORDED MAY 16, 2002 IN BOOK 629, PAGE 163 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

2-12. DEED OF TRUST AND SECURITY AGREEMENT EXECUTED BY JERRY W. MARANVILLE AND DONNA L. MARANVILLE, HUSBAND AND WIFE, TO THE PUBLIC TRUSTEE OF ELBERT COUNTY, IN FAVOR OF FARM CREDIT BANK OF WICHITA DATED AUGUST 4, 1997, AND RECORDED AUGUST 6, 1997 IN BOOK 567, PAGE 783 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

2-13. INTENTIONALLY DELETED. [PER NOTICE OF COMPLETE TERMINATION AND RELEASE RECORDED JUNE 20, 2023 IN BOOK 836, PAGE 581, PUBLIC RECORDS OF ELBERT COUNTY, COLORADO]

2-14. MEMORANDUM OF GROUND LEASE AGREEMENT BY AND BETWEEN J AND D FARM PROPERTIES, LLC, A COLORADO LIMITED LIABILITY COMPANY, LANDLORD, AND GREY WOLF SOLAR LLC, A DELAWARE LIMITED LIABILITY COMPANY,GRANTEE, DATED JUNE 8, 2023, AND RECORDED JUNE 22, 2023 IN BOOK 836, PAGE 728 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

PARCEL 3:
3-1. TAXES FOR 2024 IN THE AMOUNT OF $2,242.20 ARE PAID.
TAX ID NO.: R122727

3-2. RESERVATION OF (1) ALL OIL, COAL AND OTHER MINERALS WITHIN OR UNDERLYING SUBJECT PROPERTY; (2) THE EXCLUSIVE RIGHT TO PROSPECT FOR, MINE AND REMOVE OIL, COAL AND OTHER MINERALS; (3) THE RIGHT TO INGRESS, EGRESS AND REGRESS TO PROSPECT FOR, MINE, AND REMOVE OIL, COAL AND OTHER MINERALS; AND (4) THE RIGHT TO UNION PACIFIC LAND COMPANY] TO MAINTAIN AND OPERATE ITS RAILROAD IN ITS PRESENT FORM OF CONSTRUCTION, AND TO MAKE ANY CHANGE IN THE FORM OF CONSTRUCTION OR METHOD OF OPERATION OF SAID RAILROAD, AS CONTAINED IN DEED FROM UNION PACIFIC RAILROAD COMPANY TO C. M. GREGORY, RECORDED APRIL 29, 1907 IN BOOK 33, PAGE 162 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
NOTE: THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF ANY SUCH INTERESTS. THERE MAY BE LEASES, ASSIGNMENTS, AMENDMENTS, EXCEPTIONS, OR GRANTS OF INTERESTS THAT ARE NOT LISTED.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

3-3. ALL RIGHTS TO ANY AND ALL MINERALS, ORE AND METALS OF ANY KIND AND CHARACTER, AND ALL COAL, ASPHALTUM, OIL, GAS AND OTHER LIKE SUBSTANCES IN OR UNDER SAID LAND, THE RIGHTS OF INGRESS AND EGRESS FOR THE PURPOSES OF MINING, TOGETHER WITH ENOUGH OF THE SURFACE OF THE SAME AS MAY BE NECESSARY FOR THE PROPER AND CONVENIENT OF SUCH MINERALS AND SUBSTANCES, AS RESERVED IN PATENT FROM THE STATE OF COLORADO, RECORDED MARCH 30, 1921 IN BOOK 113, PAGE 379 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO. THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF THIS INTEREST.
NOTE: THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF ANY SUCH INTERESTS. THERE MAY BE LEASES, ASSIGNMENTS, AMENDMENTS, EXCEPTIONS, OR GRANTS OF INTERESTS THAT ARE NOT LISTED.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

3-4. ALL RIGHTS TO ANY AND ALL MINERALS, ORE AND METALS OF ANY KIND AND CHARACTER, AND ALL COAL, ASPHALTUM, OIL, GAS AND OTHER LIKE SUBSTANCES IN OR UNDER SAID LAND, THE RIGHTS OF INGRESS AND EGRESS FOR THE PURPOSES OF MINING, TOGETHER WITH ENOUGH OF THE SURFACE OF THE SAME AS MAY BE NECESSARY FOR THE PROPER AND CONVENIENT OF SUCH MINERALS AND SUBSTANCES, AS RESERVED IN PATENT FROM THE STATE OF COLORADO, RECORDED JANUARY 20, 1932 IN BOOK 166, PAGE 67 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO. THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF THIS INTEREST.
NOTE: THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF ANY SUCH INTERESTS. THERE MAY BE LEASES, ASSIGNMENTS, AMENDMENTS, EXCEPTIONS, OR GRANTS OF INTERESTS THAT ARE NOT LISTED.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

3-5. ALL RIGHTS TO ANY AND ALL MINERALS, ORE AND METALS OF ANY KIND AND CHARACTER, AND ALL COAL, ASPHALTUM, OIL, GAS AND OTHER LIKE SUBSTANCES IN OR UNDER SAID LAND, THE RIGHTS OF INGRESS AND EGRESS FOR THE PURPOSES OF MINING, TOGETHER WITH ENOUGH OF THE SURFACE OF THE SAME AS MAY BE NECESSARY FOR THE PROPER AND CONVENIENT OF SUCH MINERALS AND SUBSTANCES, AS RESERVED IN PATENT FROM THE STATE OF COLORADO, RECORDED APRIL 16, 1941 IN BOOK 186, PAGE 454 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO. THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF THIS INTEREST.
NOTE: THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF ANY SUCH INTERESTS. THERE MAY BE LEASES, ASSIGNMENTS, AMENDMENTS, EXCEPTIONS, OR GRANTS OF INTERESTS THAT ARE NOT LISTED.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

3-6. FINAL ORDER IN THE MATTER OF THE DESIGNATED GROUND WATER BASIN OF THE UPPER BIG SANDY CREEK OF THE STATE OF COLORADO DATED DECEMBER 8, 1972, AND RECORDED JANUARY 8, 1973 IN BOOK 284, PAGE 742 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(IS NOT LOCATED ON SURVEYED PROPERTY)

3-7. RIGHT-OF-WAY EASEMENT IN FAVOR OF TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC., DATED OCTOBER 4, 1973, AND RECORDED DECEMBER 18, 1973 IN BOOK 289, PAGE 447 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE, APPROXIMATE CURRENT LOCATION PLOTTED BY CLIENT REQUEST)

3-8. RIGHT-OF-WAY EASEMENT IN FAVOR OF TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC., DATED OCTOBER 3, 1973, AND RECORDED DECEMBER 18, 1973 IN BOOK 289, PAGE 448 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE, APPROXIMATE CURRENT LOCATION PLOTTED BY CLIENT REQUEST)

3-9. FINAL ORDER AND DECREE IN THE MATTER OF THE BIG SANDY GROUND WATER MANAGEMENT DISTRICT DATED OCTOBER 22, 1976, AND RECORDED DECEMBER 9, 1976 IN BOOK 304, PAGE 155 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(IS NOT LOCATED ON SURVEYED PROPERTY)

3-10. GRANT OF RIGHT OF WAY IN FAVOR OF BIG SANDY COMMUNICATIONS, INC., A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF COLORADO, DATED FEBRUARY 11, 1981, AND RECORDED MARCH 18, 1981 IN BOOK 337, PAGE 996 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
AS TRANSFERRED BY OMNIBUS DEED OF EASEMENT AND RIGHT OF WAY BY AND BETWEEN BIG SANDY TELECOMMUNICATIONS, INC., A COLORADO CORPORATION, GRANTOR, AND BIG SANDY TELECOM, INC., A NORTH CAROLINA CORPORATION, GRANTEE, DATED JUNE 3, 1996, AND RECORDED JUNE 26, 1996 IN BOOK 547, PAGE 917 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(PLOTTED AND SHOWN HEREON, AFFECTS SURVEYED PROPERTY)

3-11. INTENTIONALLY DELETED. [PER NOTICE OF TERMINATION RECORDED OCTOBER 20, 2025 IN BOOK 855, PAGE 665, PUBLIC RECORDS OF ELBERT COUNTY, COLORADO]

3-12. REQUEST FOR NOTIFICATION OF SURFACE DEVELOPMENT BY RME PETROLEUM COMPANY (FORMERLY KNOWN AS UNION PACIFIC RESOURCES COMPANY) AND/OR RME LAND CORP. (FORMERLY KNOWN AS UNION PACIFIC LAND RESOURCES CORPORATION), MINERAL ESTATE OWNERS, DATED APRIL 24, 2002, AND RECORDED MAY 16, 2002 IN BOOK 629, PAGE 82 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

3-13. DEED OF TRUST EXECUTED BY CHAD MARANVILLE AND CINDY MARANVILLE, TO THE PUBLIC TRUSTEE OF ELBERT COUNTY, IN FAVOR OF THE FIRST NATIONAL BANK OF HUGO DATED NOVEMBER 20, 2020, AND RECORDED NOVEMBER 23, 2020 IN BOOK 810, PAGE 316 IN PUBLIC RECORDS OF ELBERT COUNTY, COLORADO.
(AFFECTS SURVEYED PROPERTY, BLANKET IN NATURE)

G:\2025\25.01064\Survey\CAD\25.01064_Grey Wolf_ALTA.dwg

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Web: www.ulteig.com

ALTA/NSPS LAND TITLE SURVEY

In Parts of Township 11 South, Range 59 West,
Township 11 South, Range 58 West, & Township 12 South, Range 59 West
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 2 OF 23	REVISION X	--

ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

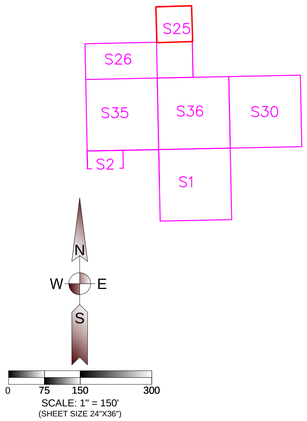
Monument Descriptions:

① Northwest Corner Section 25 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

② North Quarter Corner Section 25 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

④ West Quarter Corner Section 25 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

⑧ North Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

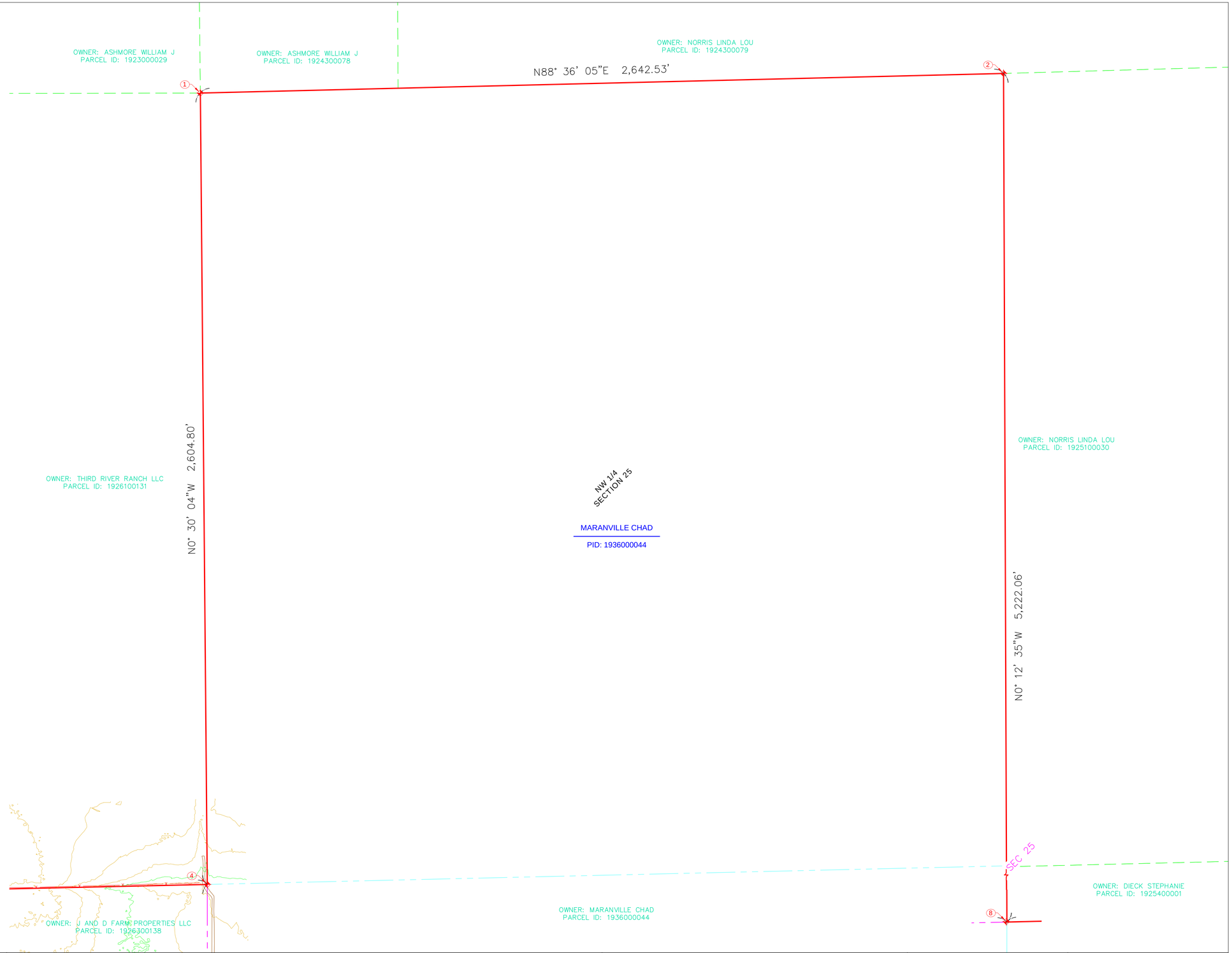


LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

1. THIS SURVEY HAS BEEN PREPARED BASED ON TITLE POLICIES AND ADDITIONAL EASEMENTS AND DOCUMENTATION HAVE NOT BEEN RESEARCHED.
2. LANDOWNER INFORMATION, PARCEL IDENTIFICATION NUMBERS, AND ROAD RIGHT-OF-WAY WIDTHS HAVE BEEN OBTAINED FROM A PUBLICLY AVAILABLE GEOGRAPHIC INFORMATION SYSTEM (GIS) DATABASE, AS PRESENTED AND MAINTAINED BY THE COUNTY OF ELBERT.
3. HORIZONTAL DATUM: COLORADO COORDINATE SYSTEM OF 1983, CENTRAL ZONE (NAD 83, COLORADO CENTRAL, US SURVEY FEET).
4. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
5. GEOID: GEOID 18
6. DISTANCES SHOWN HEREON ARE PRESENTED AT GRID VALUES. APPLY A COMBINED FACTOR OF 0.99964823 TO DERIVE GROUND DISTANCES.
7. PER C.R.S. SECTION 13-80-105, IN NO CASE SHALL ACTION BE BROUGHT AGAINST A SURVEYOR MORE THAN 10 YEARS AFTER THE COMPLETION OF A SURVEY.
8. BY CLIENT REQUEST, THOSE EASEMENTS FILED WITH THE ELBERT COUNTY RECORDER IN BOOK 289, PAGES 447 & 448 HAVE BEEN INCLUDED HEREON AS VISUAL AIDS ONLY. IMPROVEMENTS HAVE NOT BEEN LOCATED IN THE FIELD AS THESE LANDS EXIST OUTSIDE THE PROJECTS TOPOGRAPHIC LIMITS. AN APPROXIMATE LOCATION HAS BEEN GENERATED FROM PUBLICLY AVAILABLE AERIAL IMAGERY AND AS PRESENTED, SHALL NOT BE RELIED UPON.
9. WETLAND DELINEATION HAS BEEN PROVIDED BY CLIENT AND IS SHOWN HEREON.



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Web: www.ulteig.com

ALTA/NSPS LAND TITLE SURVEY

Northwest Quarter
Section 25, Township 11 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 3 OF 23	REVISION X	--

ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

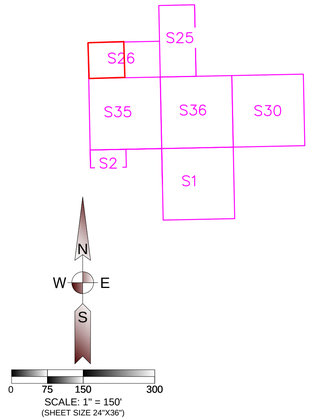
Monument Descriptions:

③ West Quarter Corner Section 26 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

④ West Quarter Corner Section 25 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

⑤ Northwest Corner Section 35 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

⑥ North Quarter Corner Section 35 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

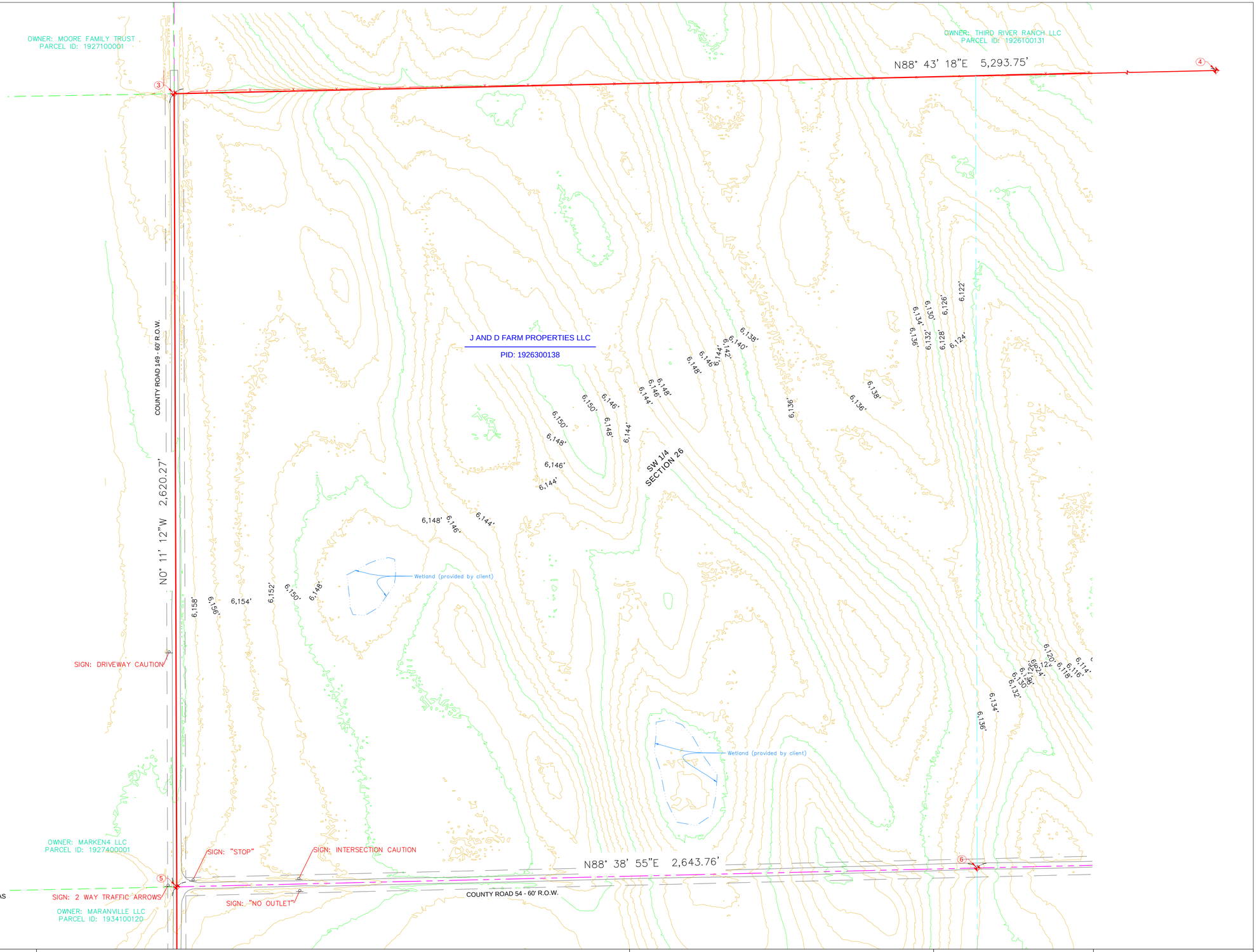


LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- 960' Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- x Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- OE Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

1. THIS SURVEY HAS BEEN PREPARED BASED ON TITLE POLICIES AND ADDITIONAL EASEMENTS AND DOCUMENTATION HAVE NOT BEEN RESEARCHED.
2. LANDOWNER INFORMATION, PARCEL IDENTIFICATION NUMBERS, AND ROAD RIGHT-OF-WAY WIDTHS HAVE BEEN OBTAINED FROM A PUBLICLY AVAILABLE GEOGRAPHIC INFORMATION SYSTEM (GIS) DATABASE, AS PRESENTED AND MAINTAINED BY THE COUNTY OF ELBERT.
3. HORIZONTAL DATUM: COLORADO COORDINATE SYSTEM OF 1983, CENTRAL ZONE (NAD 83, COLORADO CENTRAL, US SURVEY FEET).
4. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
5. GEOID: GEOID 18
6. DISTANCES SHOWN HEREON ARE PRESENTED AT GRID VALUES. APPLY A COMBINED FACTOR OF 0.99964823 TO DERIVE GROUND DISTANCES.
7. PER C.R.S. SECTION 13-80-105, IN NO CASE SHALL ACTION BE BROUGHT AGAINST A SURVEYOR MORE THAN 10 YEARS AFTER THE COMPLETION OF A SURVEY.
8. BY CLIENT REQUEST, THOSE EASEMENTS FILED WITH THE ELBERT COUNTY RECORDER IN BOOK 289, PAGES 447 & 448 HAVE BEEN INCLUDED HEREON AS VISUAL AIDS ONLY. IMPROVEMENTS HAVE NOT BEEN LOCATED IN THE FIELD AS THESE LANDS EXIST OUTSIDE THE PROJECTS TOPOGRAPHIC LIMITS. AN APPROXIMATE LOCATION HAS BEEN GENERATED FROM PUBLICLY AVAILABLE AERIAL IMAGERY AND AS PRESENTED, SHALL NOT BE RELIED UPON.
9. WETLAND DELINEATION HAS BEEN PROVIDED BY CLIENT AND IS SHOWN HEREON.



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Web: www.ulteig.com

ALTA/NSPS LAND TITLE SURVEY

Southwest Quarter
Section 26, Township 11 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 4 OF 23	REVISION X	--

ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

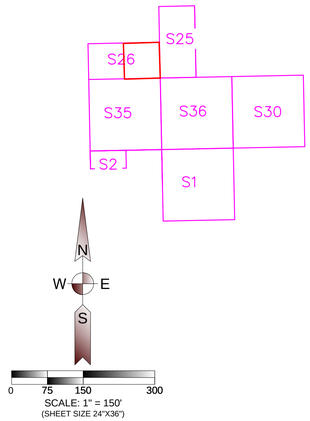
Monument Descriptions:

③ West Quarter Corner Section 26 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

④ West Quarter Corner Section 25 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

⑥ North Quarter Corner Section 35 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

⑦ Northwest Corner Section 36 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

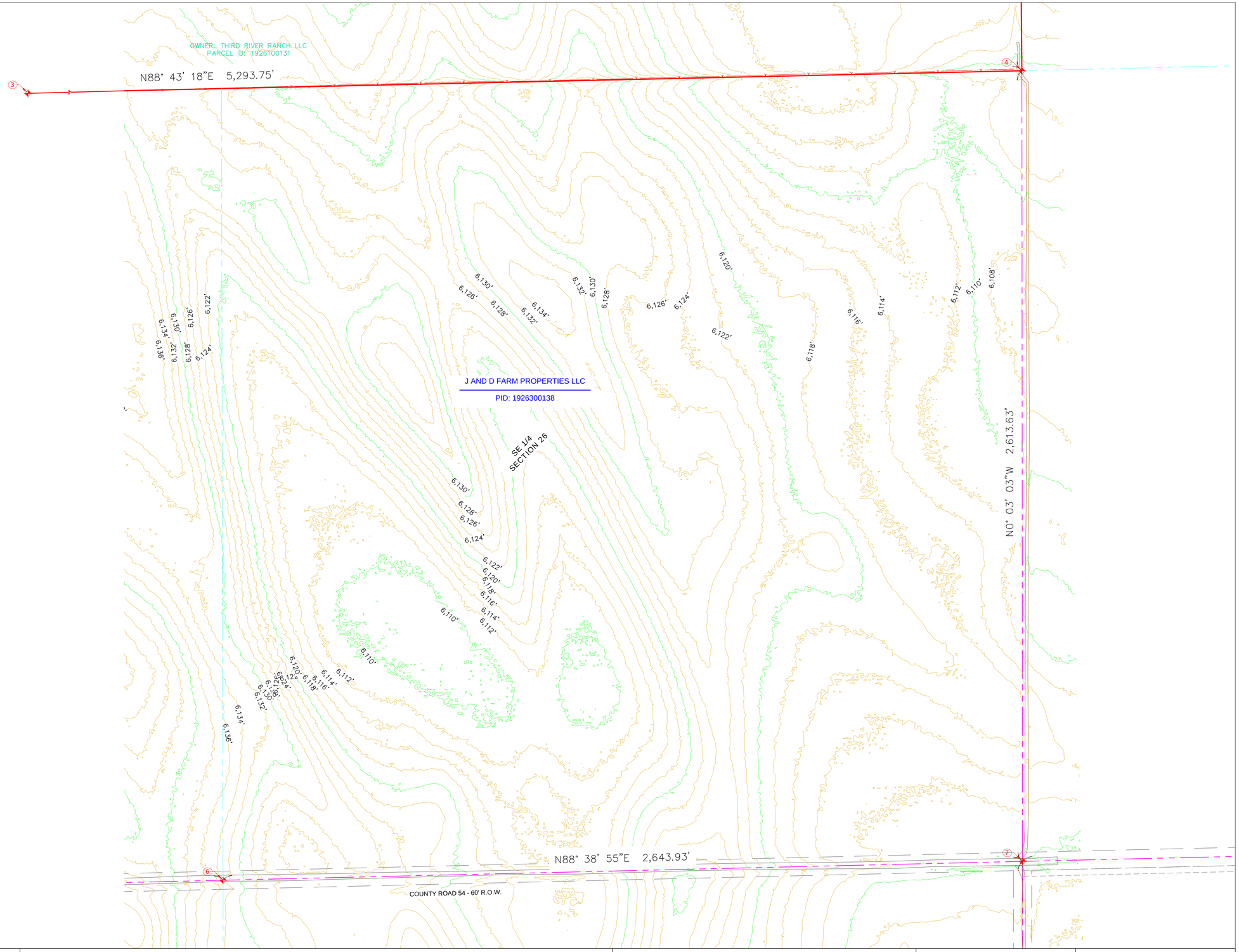


LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- 960' Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

1. THIS SURVEY HAS BEEN PREPARED BASED ON TITLE POLICIES AND ADDITIONAL EASEMENTS AND DOCUMENTATION HAVE NOT BEEN RESEARCHED.
2. LANDOWNER INFORMATION, PARCEL IDENTIFICATION NUMBERS, AND ROAD RIGHT-OF-WAY WIDTHS HAVE BEEN OBTAINED FROM A PUBLICLY AVAILABLE GEOGRAPHIC INFORMATION SYSTEM (GIS) DATABASE, AS PRESENTED AND MAINTAINED BY THE COUNTY OF ELBERT.
3. HORIZONTAL DATUM: COLORADO COORDINATE SYSTEM OF 1983, CENTRAL ZONE (NAD 83, COLORADO CENTRAL, US SURVEY FEET).
4. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
5. GEOID: GEOID 18
6. DISTANCES SHOWN HEREON ARE PRESENTED AT GRID VALUES. APPLY A COMBINED FACTOR OF 0.99964823 TO DERIVE GROUND DISTANCES.
7. PER C.R.S. SECTION 13-80-105, IN NO CASE SHALL ACTION BE BROUGHT AGAINST A SURVEYOR MORE THAN 10 YEARS AFTER THE COMPLETION OF A SURVEY.
8. BY CLIENT REQUEST, THOSE EASEMENTS FILED WITH THE ELBERT COUNTY RECORDER IN BOOK 289, PAGES 447 & 448 HAVE BEEN INCLUDED HEREON AS VISUAL AIDS ONLY. IMPROVEMENTS HAVE NOT BEEN LOCATED IN THE FIELD AS THESE LANDS EXIST OUTSIDE THE PROJECTS TOPOGRAPHIC LIMITS. AN APPROXIMATE LOCATION HAS BEEN GENERATED FROM PUBLICLY AVAILABLE AERIAL IMAGERY AND AS PRESENTED, SHALL NOT BE RELIED UPON.
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Web: www.ulteig.com

ALTA/NSPS LAND TITLE SURVEY

Southeast Quarter
Section 26, Township 11 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 5 OF 23	REVISION X	--

ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

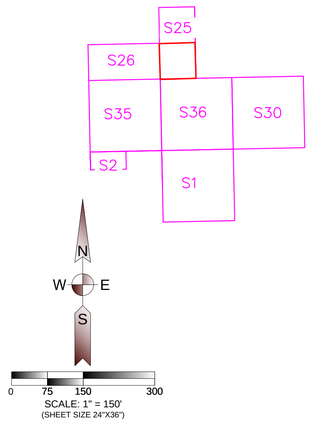
Monument Descriptions:

(2) North Quarter Corner Section 25 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

(4) West Quarter Corner Section 25 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

(7) Northwest Corner Section 36 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

(8) North Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

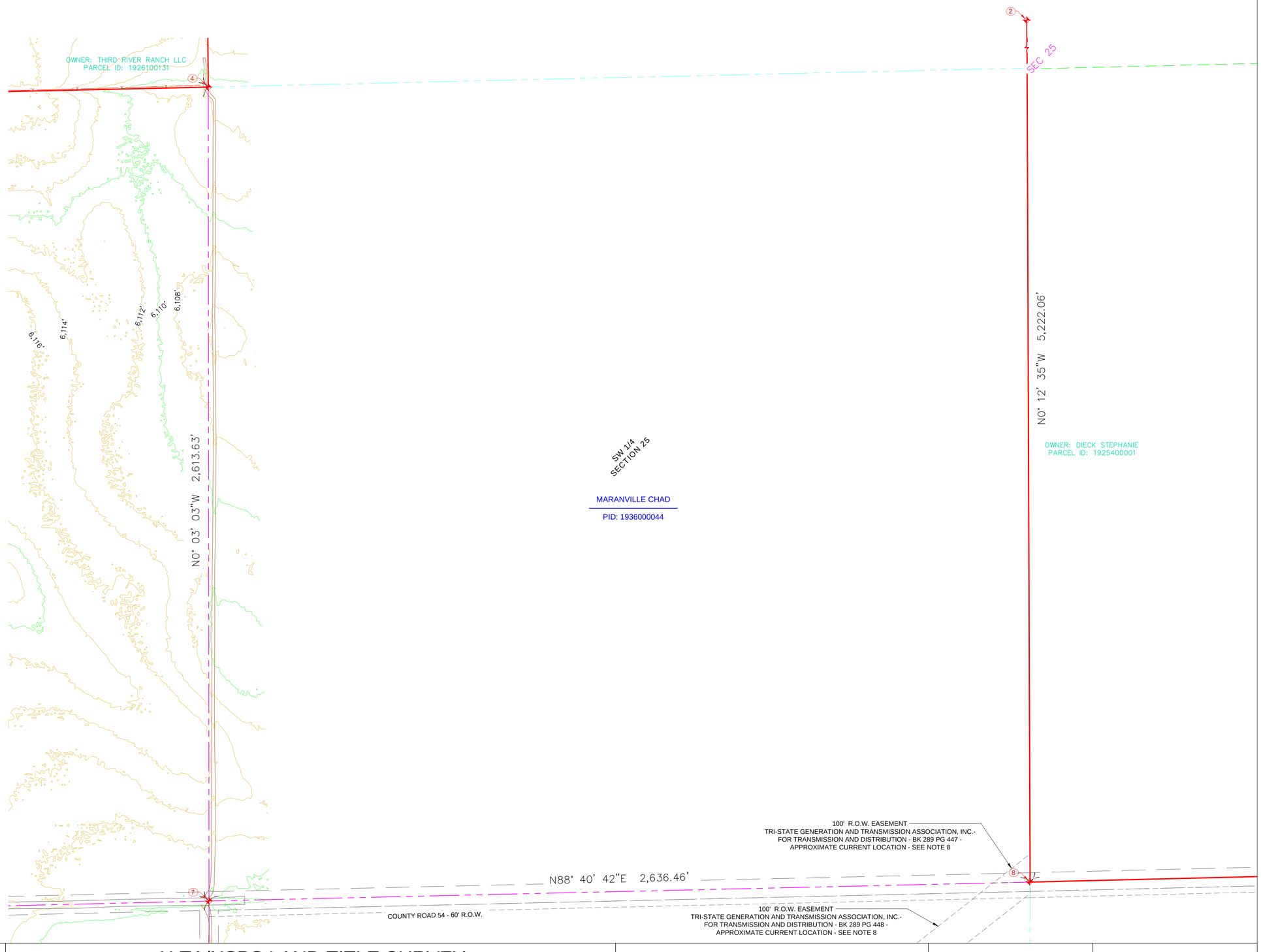


LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- 960 Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- x Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- OE Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

1. THIS SURVEY HAS BEEN PREPARED BASED ON TITLE POLICIES AND ADDITIONAL EASEMENTS AND DOCUMENTATION HAVE NOT BEEN RESEARCHED.
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3. HORIZONTAL DATUM: COLORADO COORDINATE SYSTEM OF 1983, CENTRAL ZONE (NAD 83, COLORADO CENTRAL, US SURVEY FEET).
4. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
5. GEOID: GEOID 18
6. DISTANCES SHOWN HEREON ARE PRESENTED AT GRID VALUES. APPLY A COMBINED FACTOR OF 0.99964823 TO DERIVE GROUND DISTANCES.
7. PER C.R.S. SECTION 13-80-105, IN NO CASE SHALL ACTION BE BROUGHT AGAINST A SURVEYOR MORE THAN 10 YEARS AFTER THE COMPLETION OF A SURVEY.
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9. WETLAND DELINEATION HAS BEEN PROVIDED BY CLIENT AND IS SHOWN HEREON.



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ALTA/NSPS LAND TITLE SURVEY

Southwest Quarter
Section 25, Township 11 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 6 OF 23	REVISION X	--

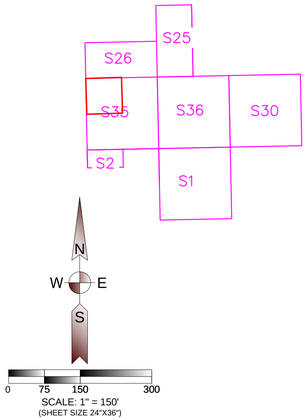
ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

Monument Descriptions:

⑤ Northwest Corner Section 35 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

⑥ North Quarter Corner Section 35 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

⑫ West Quarter Corner Section 35 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"



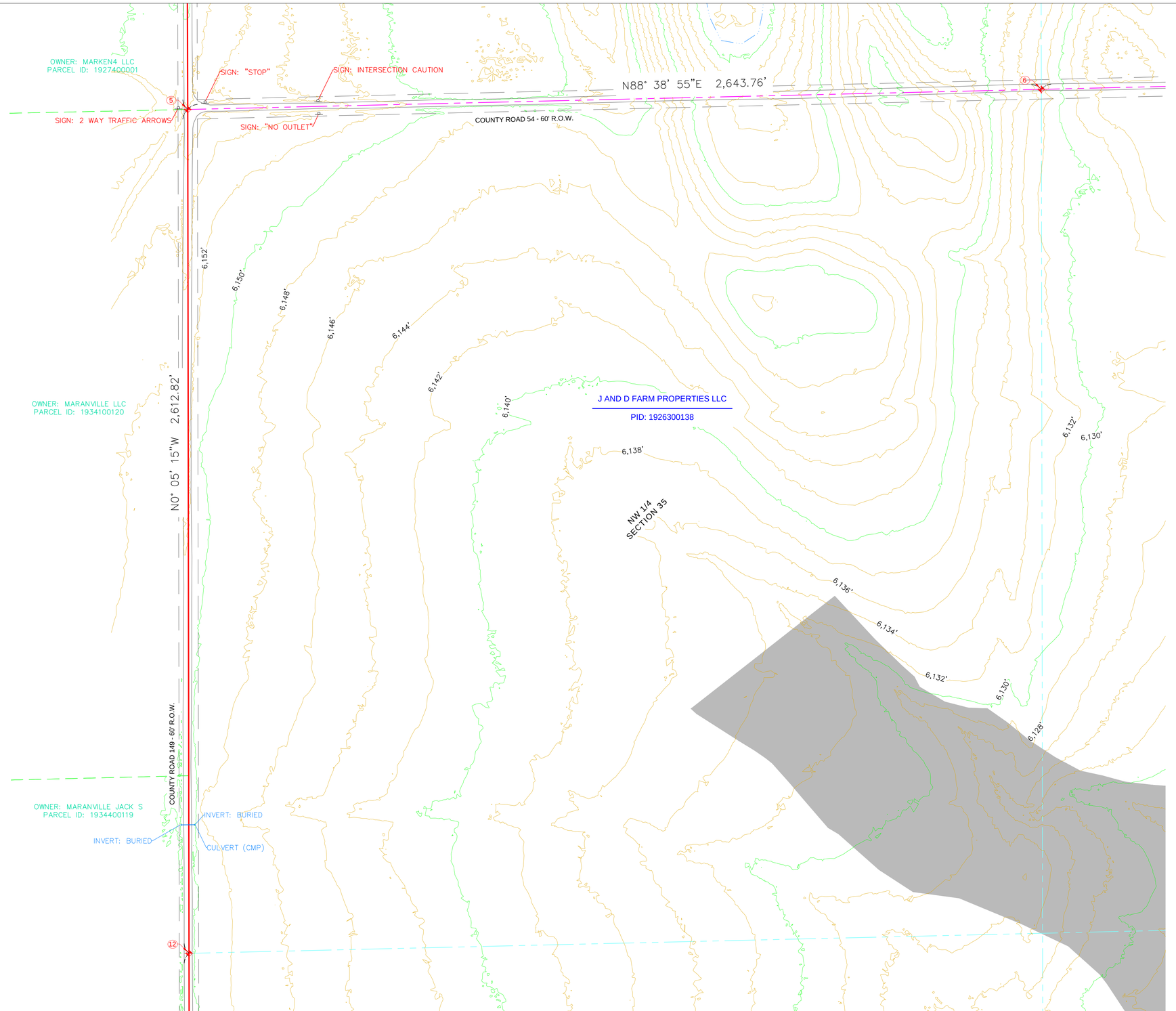
LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- 960' Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

1. THIS SURVEY HAS BEEN PREPARED BASED ON TITLE POLICIES AND ADDITIONAL EASEMENTS AND DOCUMENTATION HAVE NOT BEEN RESEARCHED.
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4. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
5. GEOID: GEOID 18
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ALTA/NSPS LAND TITLE SURVEY

Northwest Quarter
Section 35, Township 11 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 7 OF 23	REVISION X	--

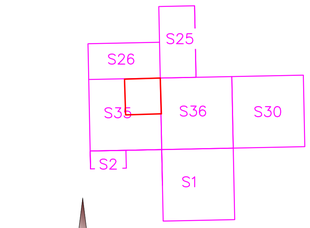
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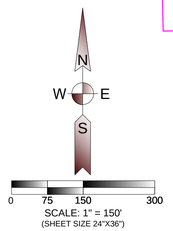
Monument Descriptions:

(6) North Quarter Corner Section 35 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

(7) Northwest Corner Section 36 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

(13) West Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"





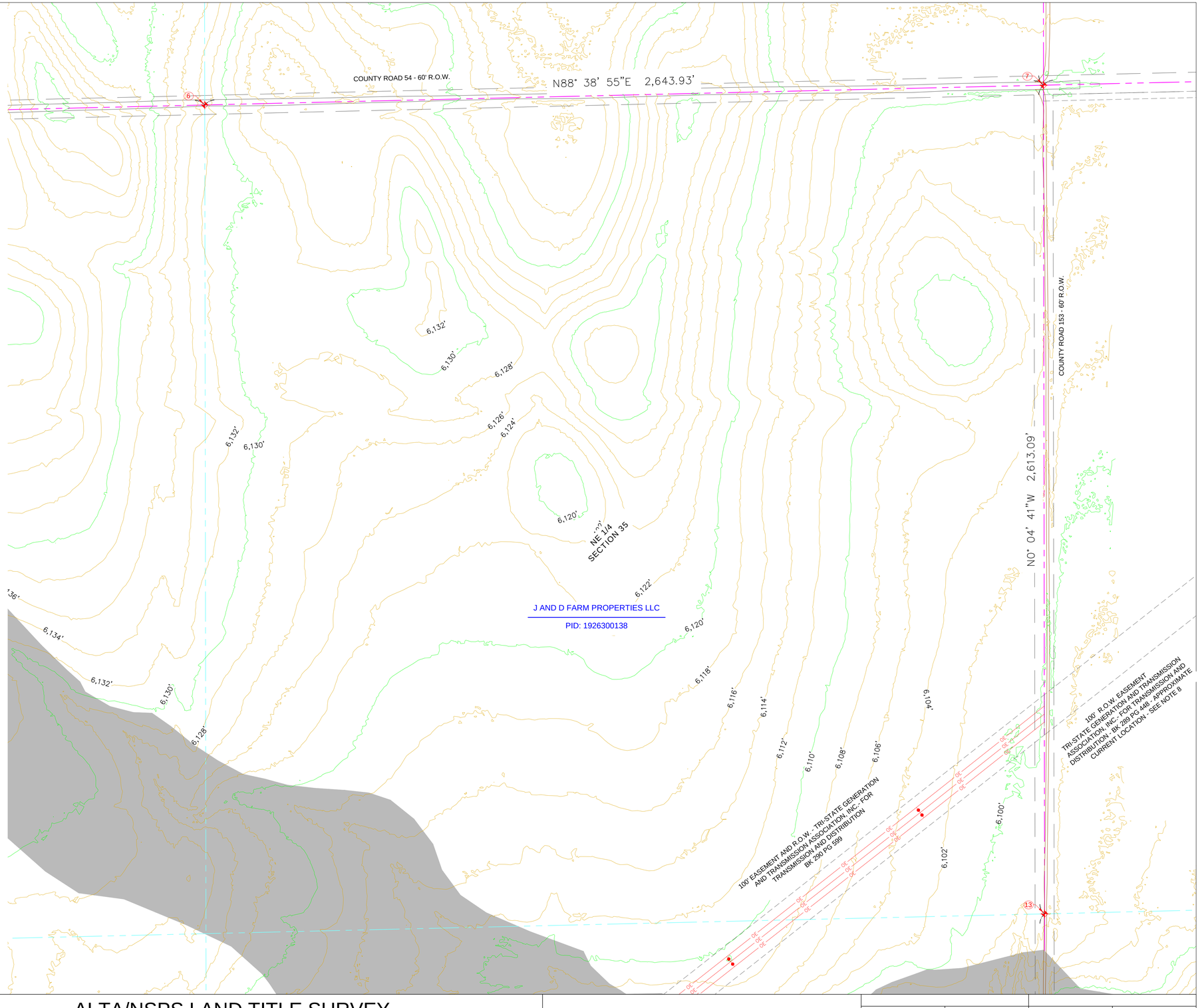
LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

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ALTA/NSPS LAND TITLE SURVEY

Northeast Quarter
Section 35, Township 11 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 8 OF 23	REVISION X	--

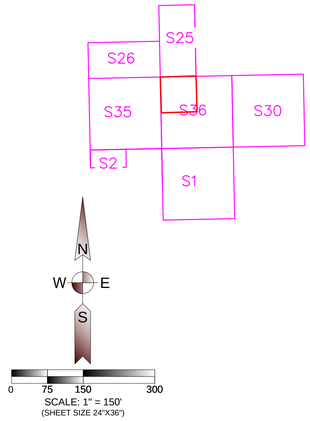
ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

Monument Descriptions:

⑦ Northwest Corner Section 36 Township 11 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

⑧ North Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

⑬ West Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

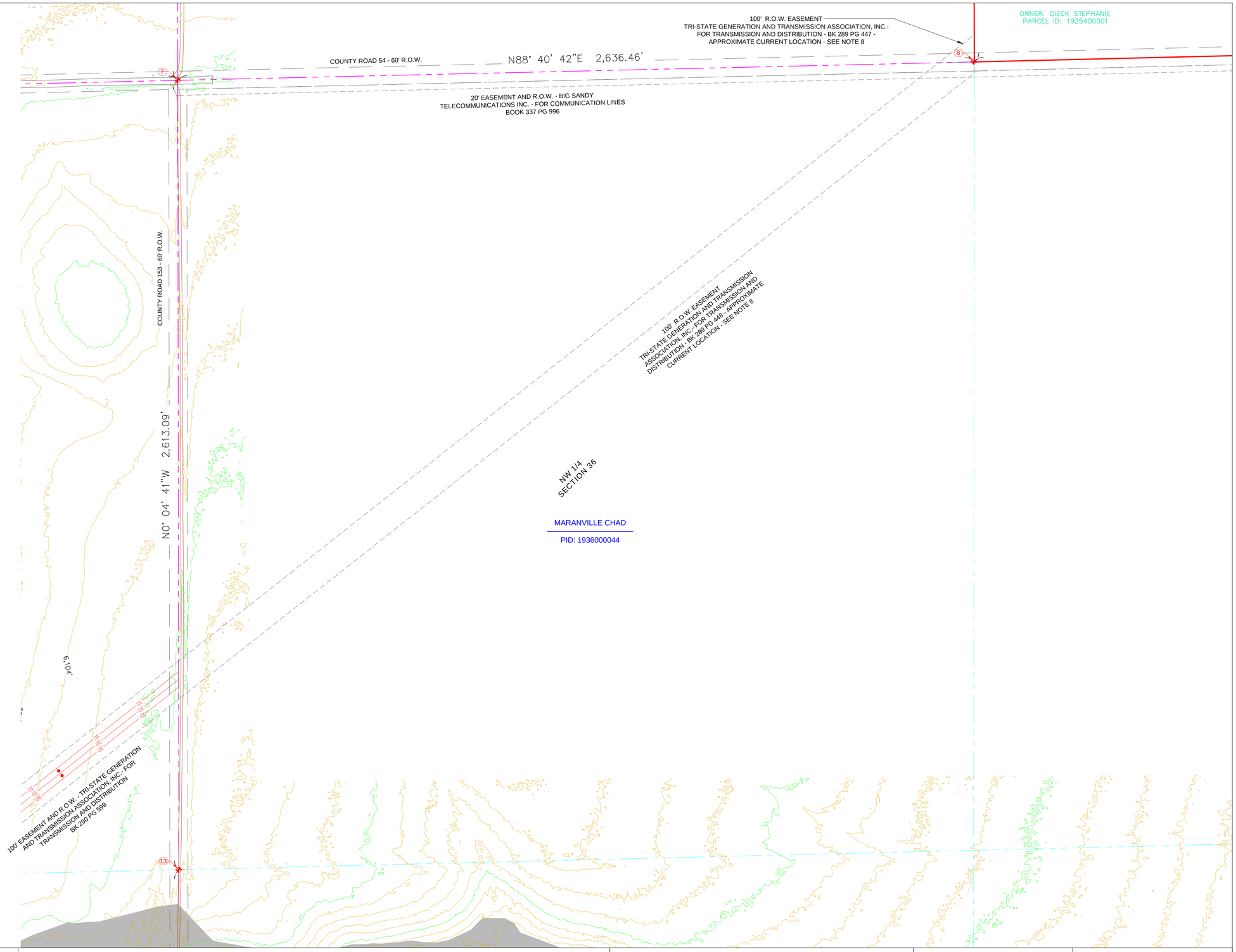


LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- 960 Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

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ALTA/NSPS LAND TITLE SURVEY

Northwest Quarter
Section 36, Township 11 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 9 OF 23	REVISION X	--

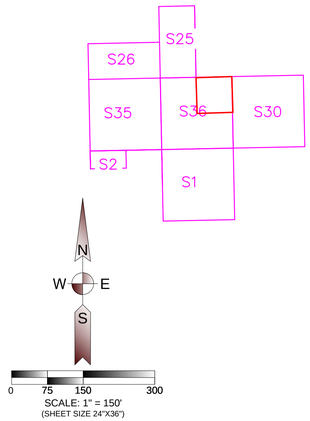
ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

Monument Descriptions:

⑧ North Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

⑨ Northeast Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

⑭ East Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

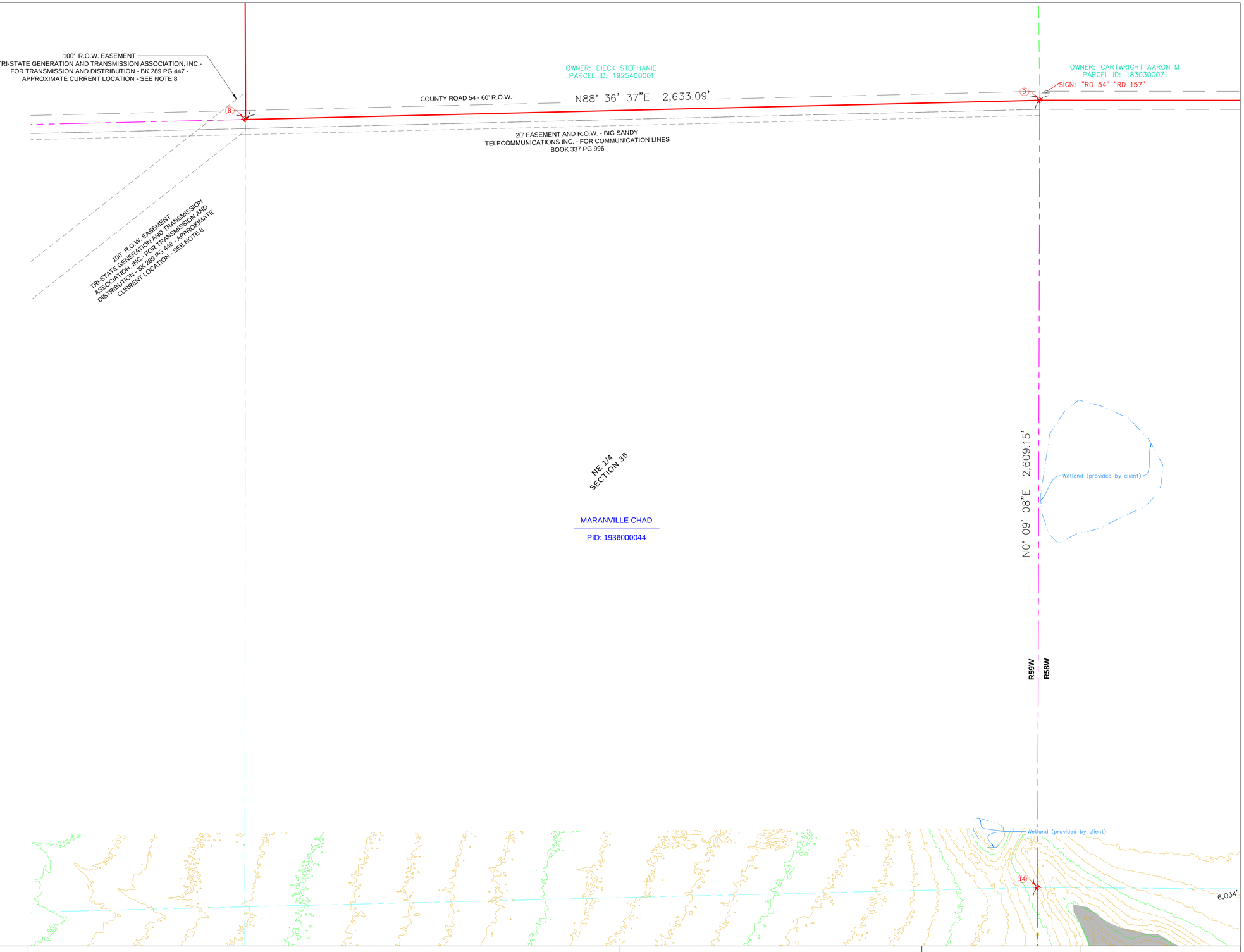


LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

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ALTA/NSPS LAND TITLE SURVEY

Northeast Quarter
Section 36, Township 11 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
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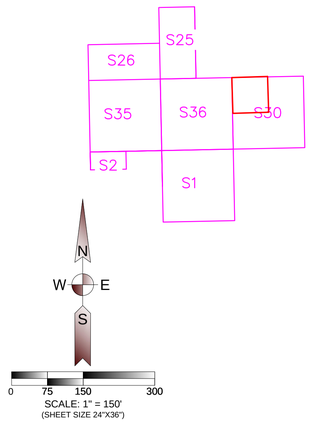
ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

Monument Descriptions:

(9) Northeast Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(10) North Quarter Corner Section 31 Township 11 South Range 58 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

(14) East Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

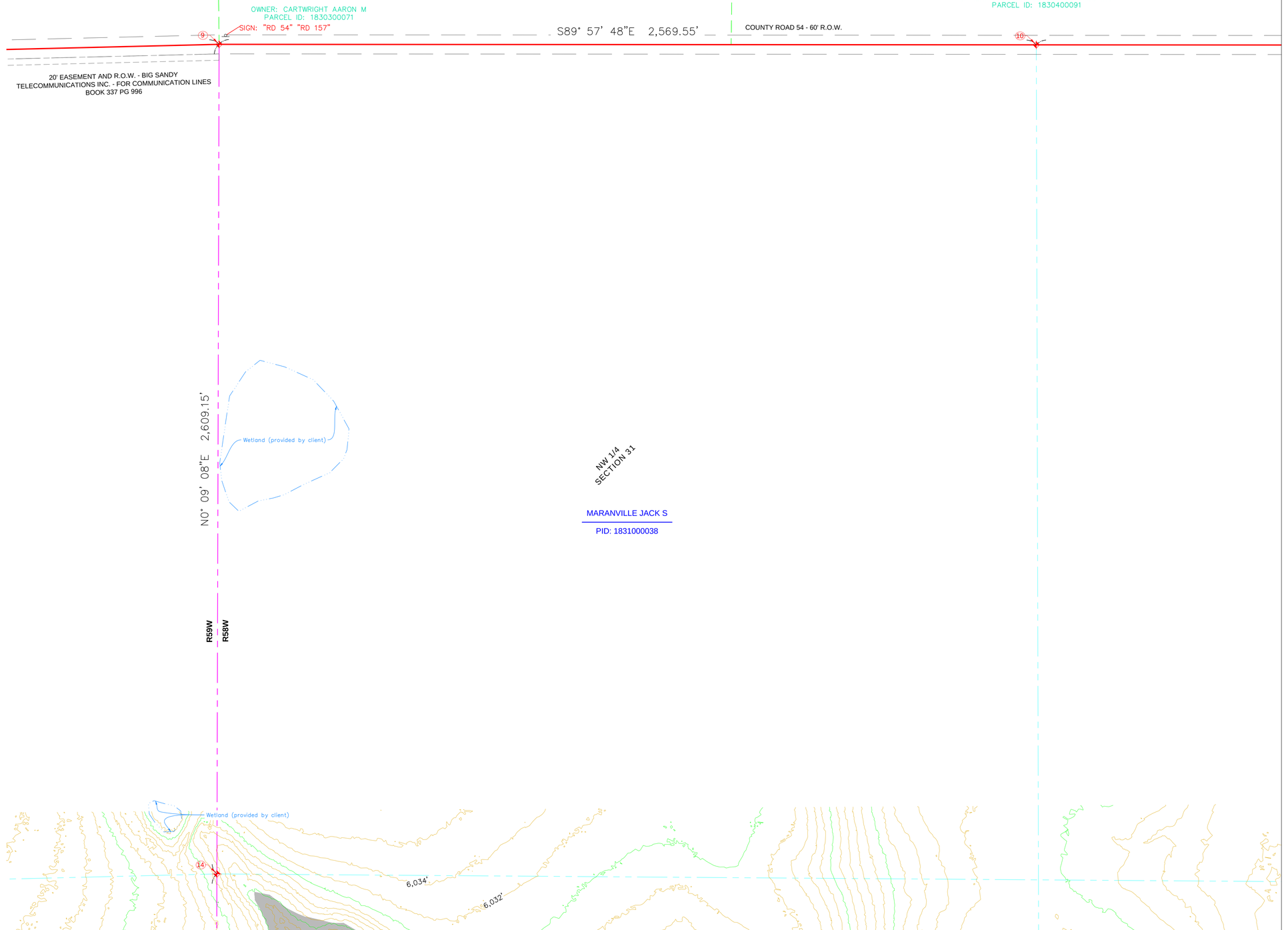


LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

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ALTA/NSPS LAND TITLE SURVEY

Northwest Quarter
Section 31, Township 11 South, Range 58 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
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Project Number:	25.01064	REVISION #	Date:
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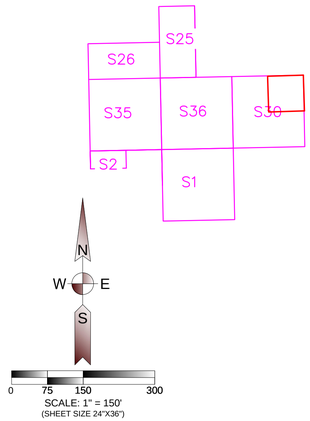
ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

Monument Descriptions:

⑩ North Quarter Corner Section 31 Township 11 South Range 58 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

⑪ Northeast Corner Section 31 Township 11 South Range 58 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

⑮ East Quarter Corner Section 31 Township 11 South Range 58 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

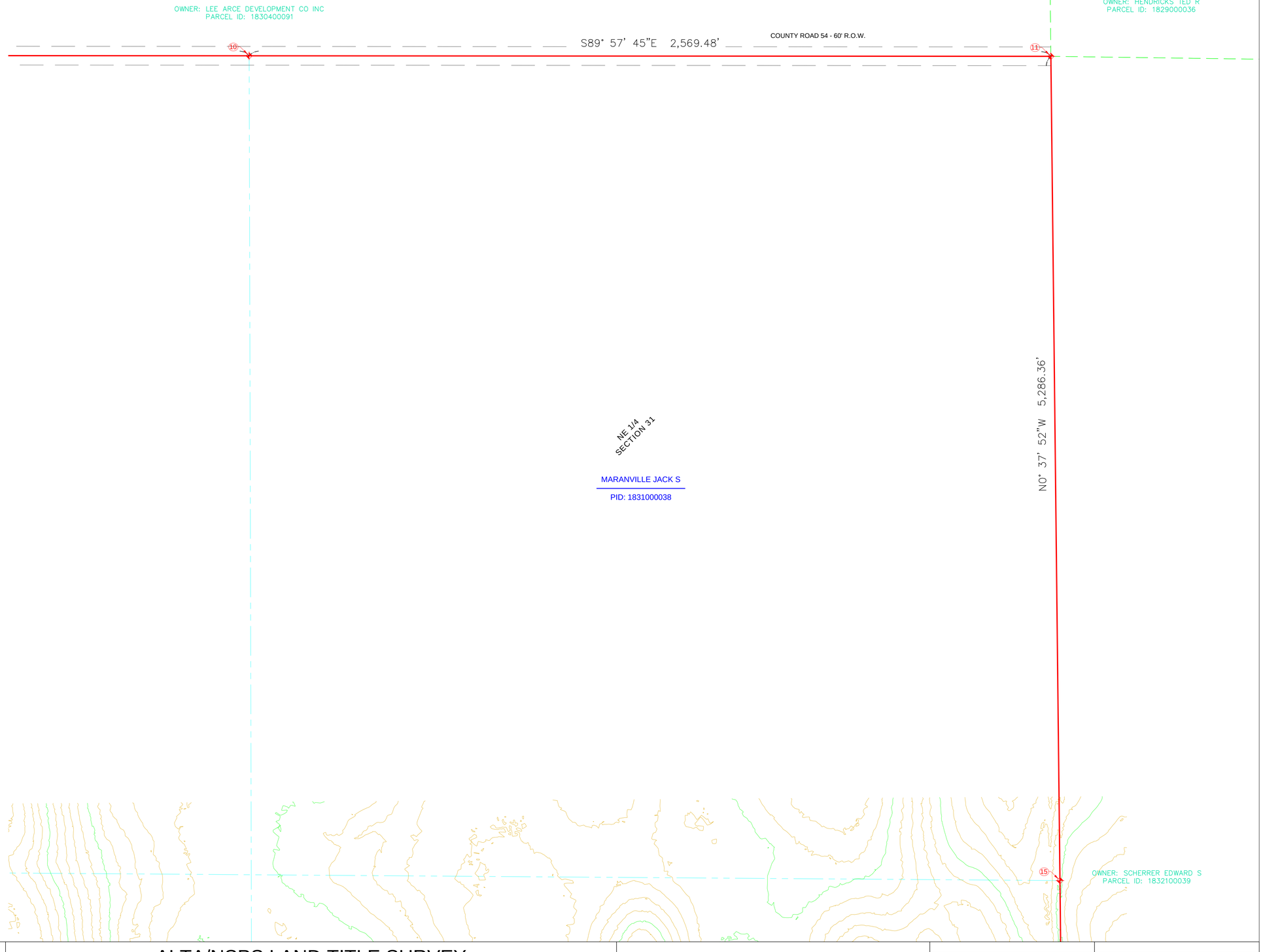


LEGEND:

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- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- Contour Line (960')
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- Overhead Power Line (OE)
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

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5. GEOID: GEOID 18
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ALTA/NSPS LAND TITLE SURVEY

Northeast Quarter
Section 31, Township 11 South, Range 58 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 12 OF 23	REVISION X	--

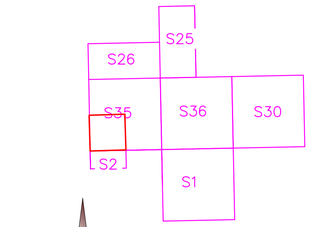
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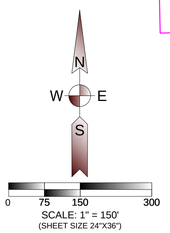
Monument Descriptions:

⑫ West Quarter Corner Section 35 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

⑯ Southwest Corner Section 35 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

⑰ South Quarter Corner Section 35 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"





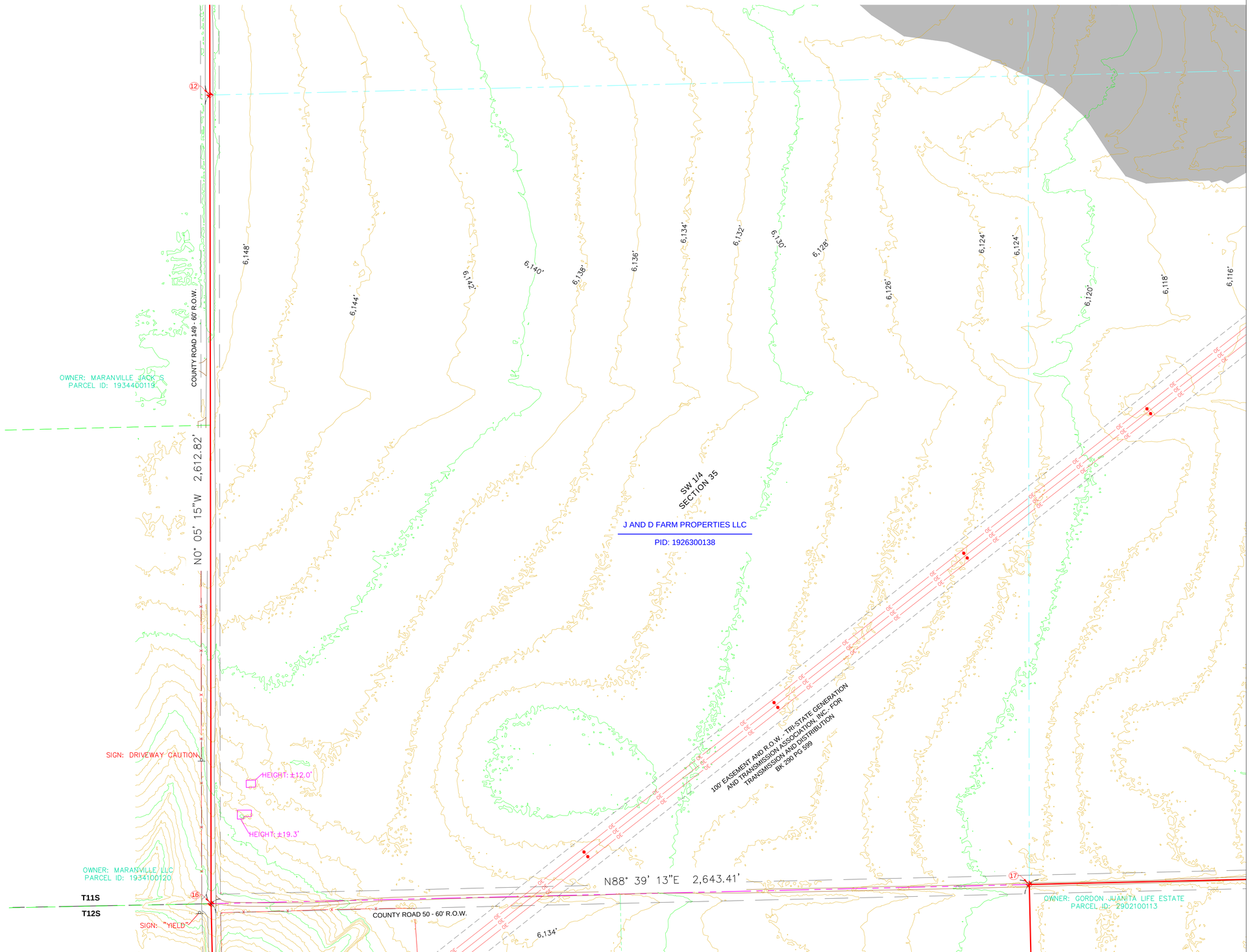
LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- 960' Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

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ALTA/NSPS LAND TITLE SURVEY

Southwest Quarter
Section 35, Township 11 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 13 OF 23	REVISION X	--

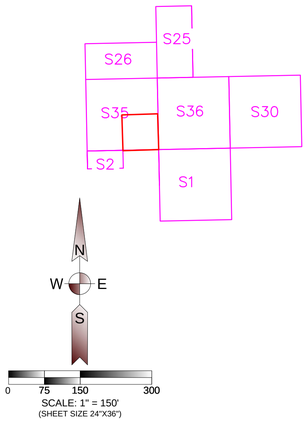
ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

Monument Descriptions:

⑬ West Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

⑰ South Quarter Corner Section 35 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

⑱ Southwest Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

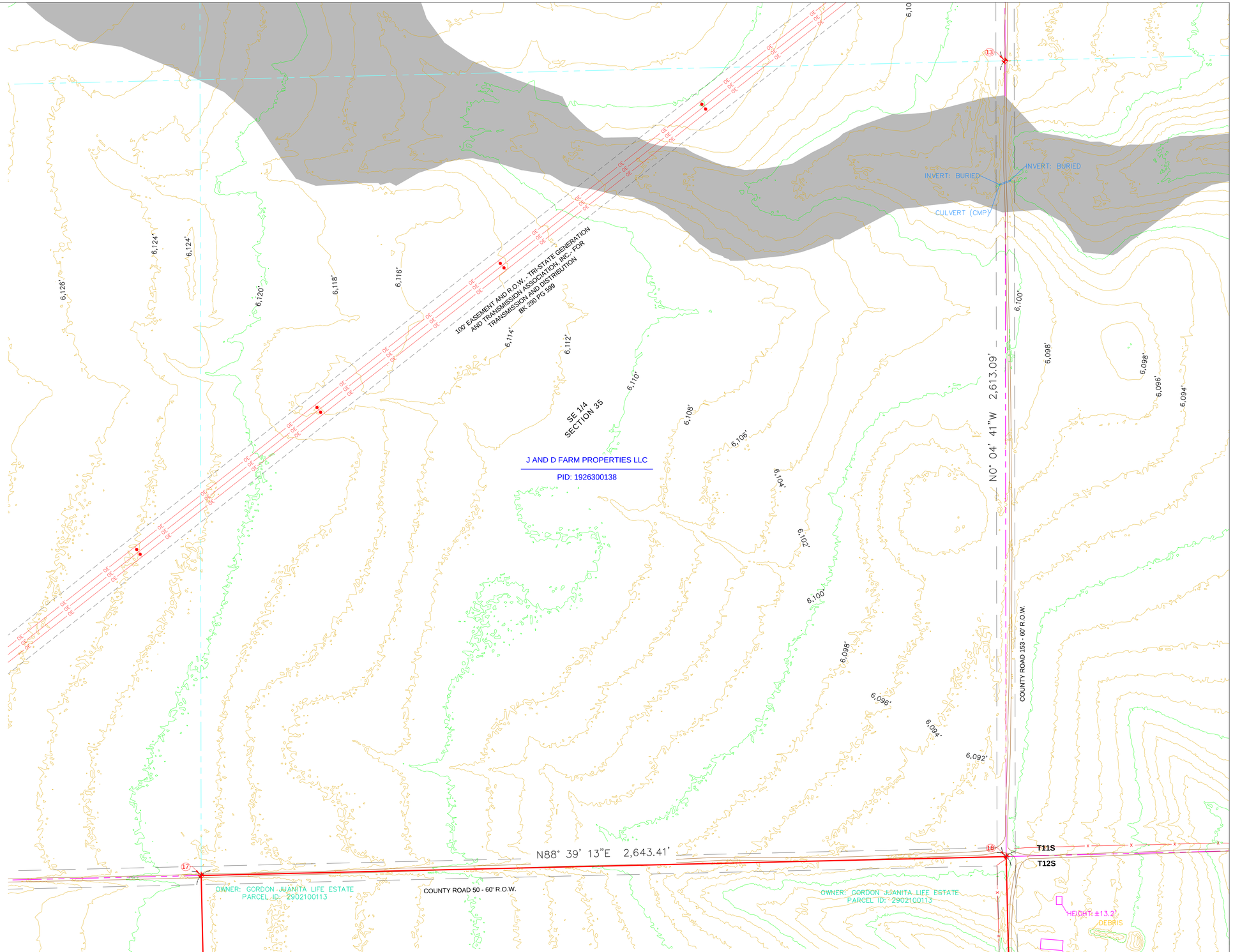


LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

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ALTA/NSPS LAND TITLE SURVEY

Southeast Quarter
Section 35, Township 11 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 14 OF 23	REVISION X	--

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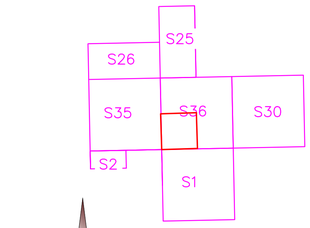
100' EASEMENT AND R.O.W. - TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.- FOR TRANSMISSION AND DISTRIBUTION BK 290 PG 599

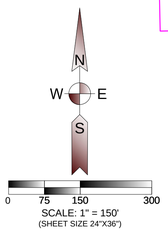
Monument Descriptions:

⑬ West Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

⑱ Southwest Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

⑲ South Quarter Corner of Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"





SCALE: 1" = 150'
(SHEET SIZE 24"X36")

LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- 960' Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

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9. WETLAND DELINEATION HAS BEEN PROVIDED BY CLIENT AND IS SHOWN HEREON.

INVERT: BURIED
INVERT: BURIED
CULVERT (CMP)
Wetland (provided by client)
COUNTY ROAD 153 - 60' R.O.W.
N 0° 04' 41" W 2,613.09'
SW 1/4 SECTION 36
MARANVILLE CHAD
PID: 1936000044
N88° 33' 10"E 2,624.38'
T11S
T12S
OWNER: GORDON JUANITA LIFE ESTATE
PARCEL ID: 2902100113
HEIGHT: ±13.2'

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ALTA/NSPS LAND TITLE SURVEY

Southwest Quarter
Section 36, Township 11 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 15 OF 23	REVISION X	--

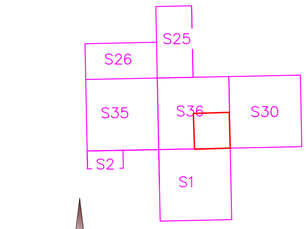
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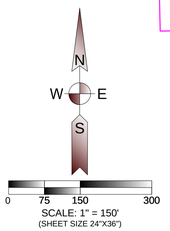
Monument Descriptions:

(14) East Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(19) South Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(20) Southeast Corner of Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"



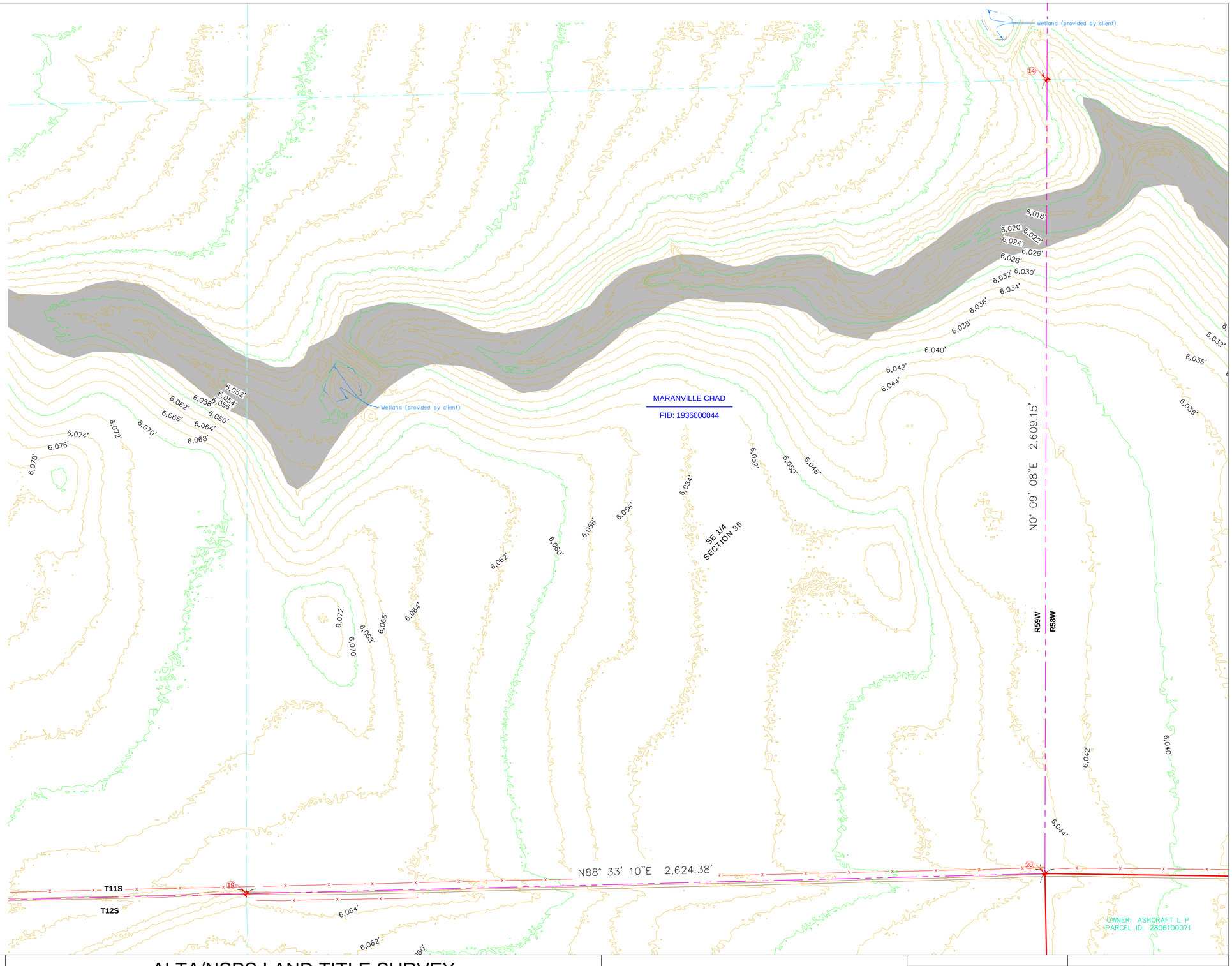


LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- 960' Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- OE Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

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ALTA/NSPS LAND TITLE SURVEY

Southeast Quarter
Section 36, Township 11 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
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Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 16 OF 23	REVISION X	--

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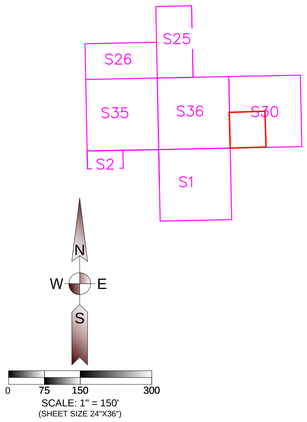
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Monument Descriptions:

(14) East Quarter Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(20) Southeast Corner of Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(21) South Quarter Corner of Section 31 Township 11 South Range 58 West
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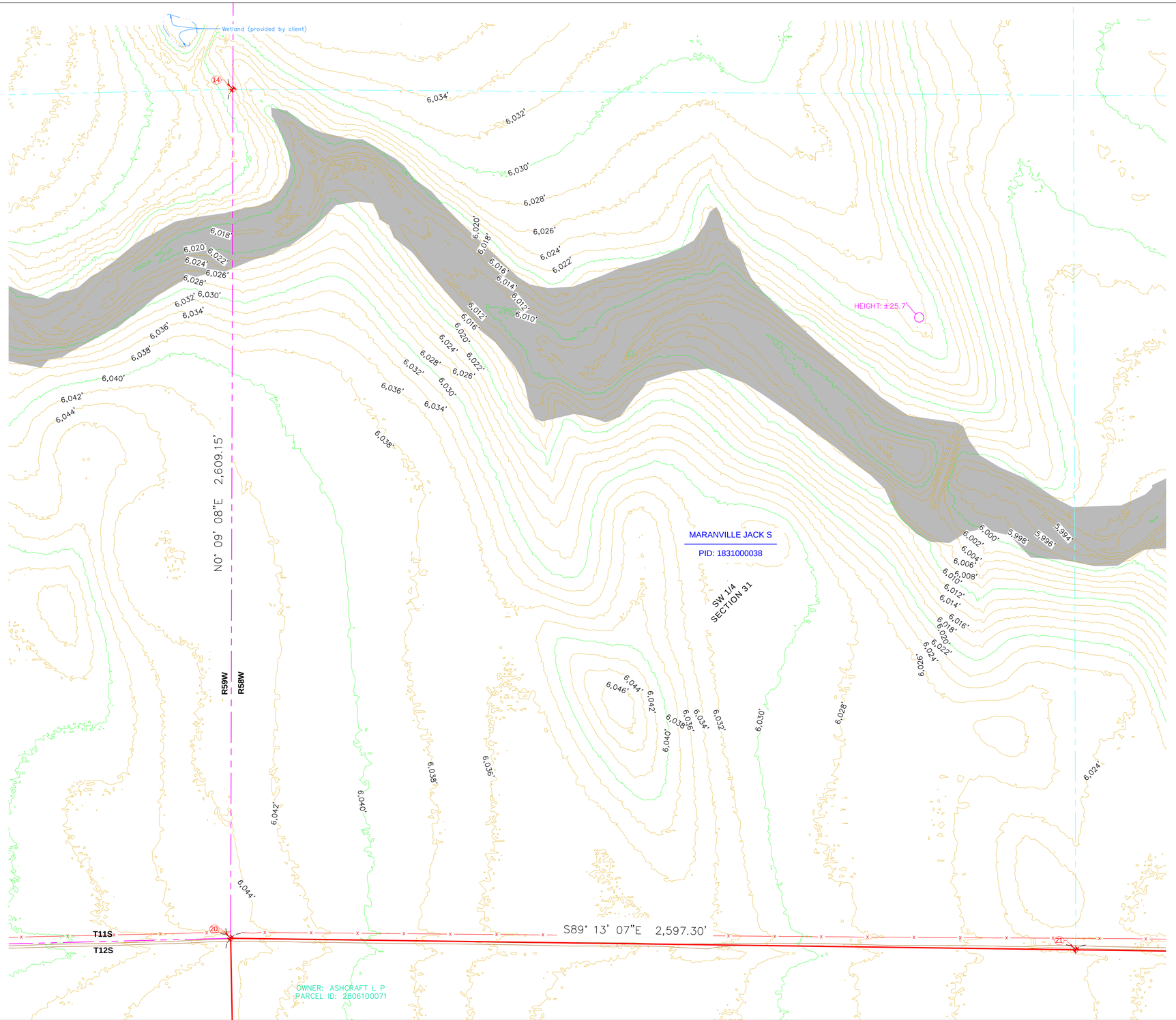


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- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
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Sheets:	PAGE 17 OF 23	REVISION X	--

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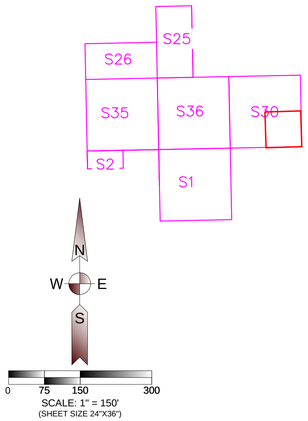
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Monument Descriptions:

(15) East Quarter Corner Section 31 Township 11 South Range 58 West
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(21) Southeast Corner of Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(22) South Quarter Corner of Section 31 Township 11 South Range 58 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

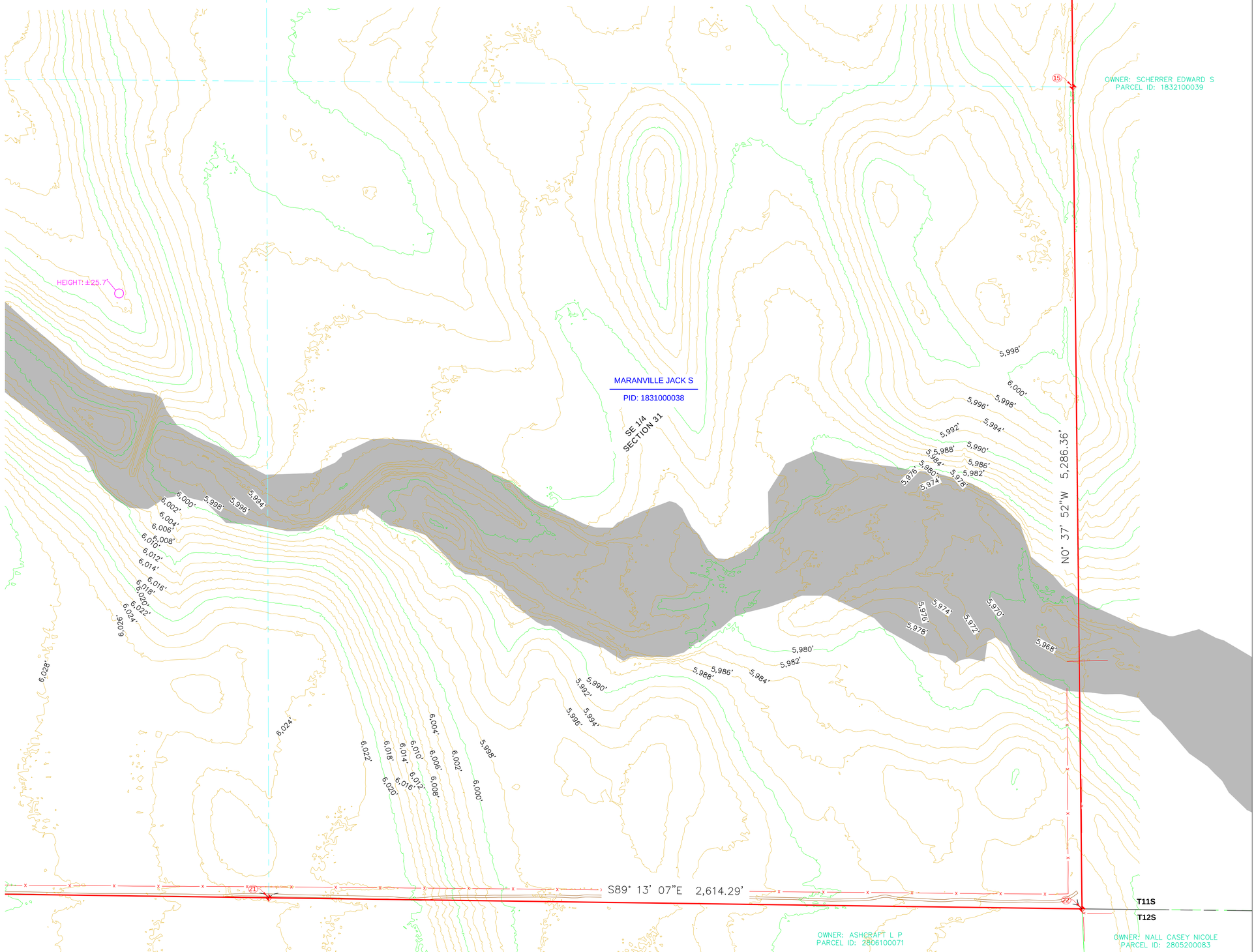


LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- Contour Line (960')
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

1. THIS SURVEY HAS BEEN PREPARED BASED ON TITLE POLICIES AND ADDITIONAL EASEMENTS AND DOCUMENTATION HAVE NOT BEEN RESEARCHED.
2. LANDOWNER INFORMATION, PARCEL IDENTIFICATION NUMBERS, AND ROAD RIGHT-OF-WAY WIDTHS HAVE BEEN OBTAINED FROM A PUBLICLY AVAILABLE GEOGRAPHIC INFORMATION SYSTEM (GIS) DATABASE, AS PRESENTED AND MAINTAINED BY THE COUNTY OF ELBERT.
3. HORIZONTAL DATUM: COLORADO COORDINATE SYSTEM OF 1983, CENTRAL ZONE (NAD 83, COLORADO CENTRAL, US SURVEY FEET).
4. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
5. GEOID: GEOID 18
6. DISTANCES SHOWN HEREON ARE PRESENTED AT GRID VALUES. APPLY A COMBINED FACTOR OF 0.99964823 TO DERIVE GROUND DISTANCES.
7. PER C.R.S. SECTION 13-80-105, IN NO CASE SHALL ACTION BE BROUGHT AGAINST A SURVEYOR MORE THAN 10 YEARS AFTER THE COMPLETION OF A SURVEY.
8. BY CLIENT REQUEST, THOSE EASEMENTS FILED WITH THE ELBERT COUNTY RECORDER IN BOOK 289, PAGES 447 & 448 HAVE BEEN INCLUDED HEREON AS VISUAL AIDS ONLY. IMPROVEMENTS HAVE NOT BEEN LOCATED IN THE FIELD AS THESE LANDS EXIST OUTSIDE THE PROJECTS TOPOGRAPHIC LIMITS. AN APPROXIMATE LOCATION HAS BEEN GENERATED FROM PUBLICLY AVAILABLE AERIAL IMAGERY AND AS PRESENTED, SHALL NOT BE RELIED UPON.
9. WETLAND DELINEATION HAS BEEN PROVIDED BY CLIENT AND IS SHOWN HEREON.



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ALTA/NSPS LAND TITLE SURVEY

Southeast Quarter
Section 31, Township 11 South, Range 58 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 18 OF 23	REVISION X	--

ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

Monument Descriptions:

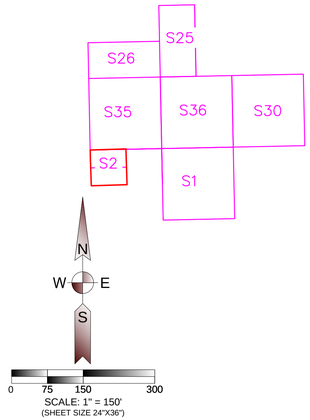
(16) Southwest Corner Section 35 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(17) South Quarter Corner Section 35 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(23) West Quarter Corner of Section 2 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(24) West Quarter Corner of Section 1 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(26) South Quarter Corner of Section 2 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

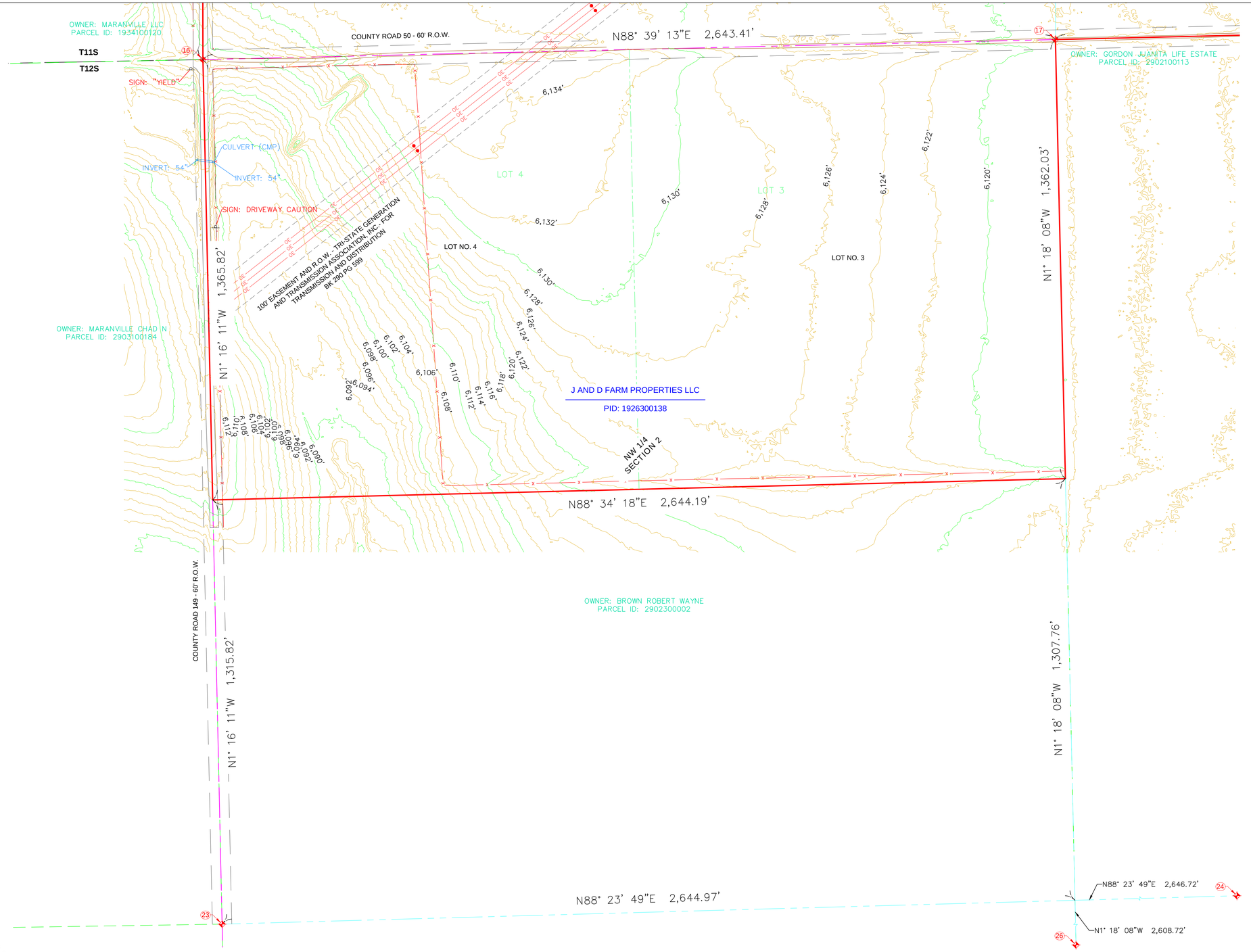


LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

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ALTA/NSPS LAND TITLE SURVEY

Northwest Quarter
Section 2, Township 12 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 19 OF 23	REVISION X	--

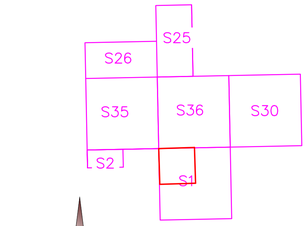
ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

Monument Descriptions:

(18) Southwest Corner Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(19) South Quarter Corner of Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(24) West Quarter Corner of Section 1 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"



LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

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9. WETLAND DELINEATION HAS BEEN PROVIDED BY CLIENT AND IS SHOWN HEREON.

N88° 33' 10"E 2,624.38'

T11S
T12S

OWNER: GORDON JUANITA LIFE ESTATE
PARCEL ID: 2902100113

HEIGHT: ±13.2'
DEBRIS

HEIGHT: ±17.0'

COUNTY ROAD 153 - 60' R.O.W.

N1° 22' 22"W 2,657.94'

NW 1/4 SECTION 1

Wetland (provided by client)

J AND D FARM PROPERTIES LLC

PID: 1926300138

OWNER: GORDON JUANITA LIFE ESTATE
PARCEL ID: 2902100113

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ALTA/NSPS LAND TITLE SURVEY

Northwest Quarter
Section 1, Township 12 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 20 OF 23	REVISION X	--

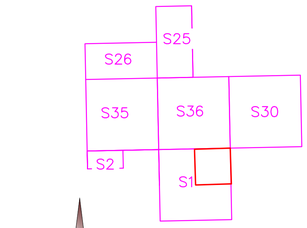
ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

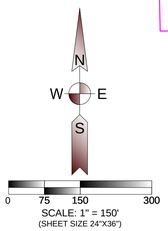
Monument Descriptions:

(19) South Quarter Corner of Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(20) Southeast Corner of Section 36 Township 11 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(25) East Quarter Corner of Section 1 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"





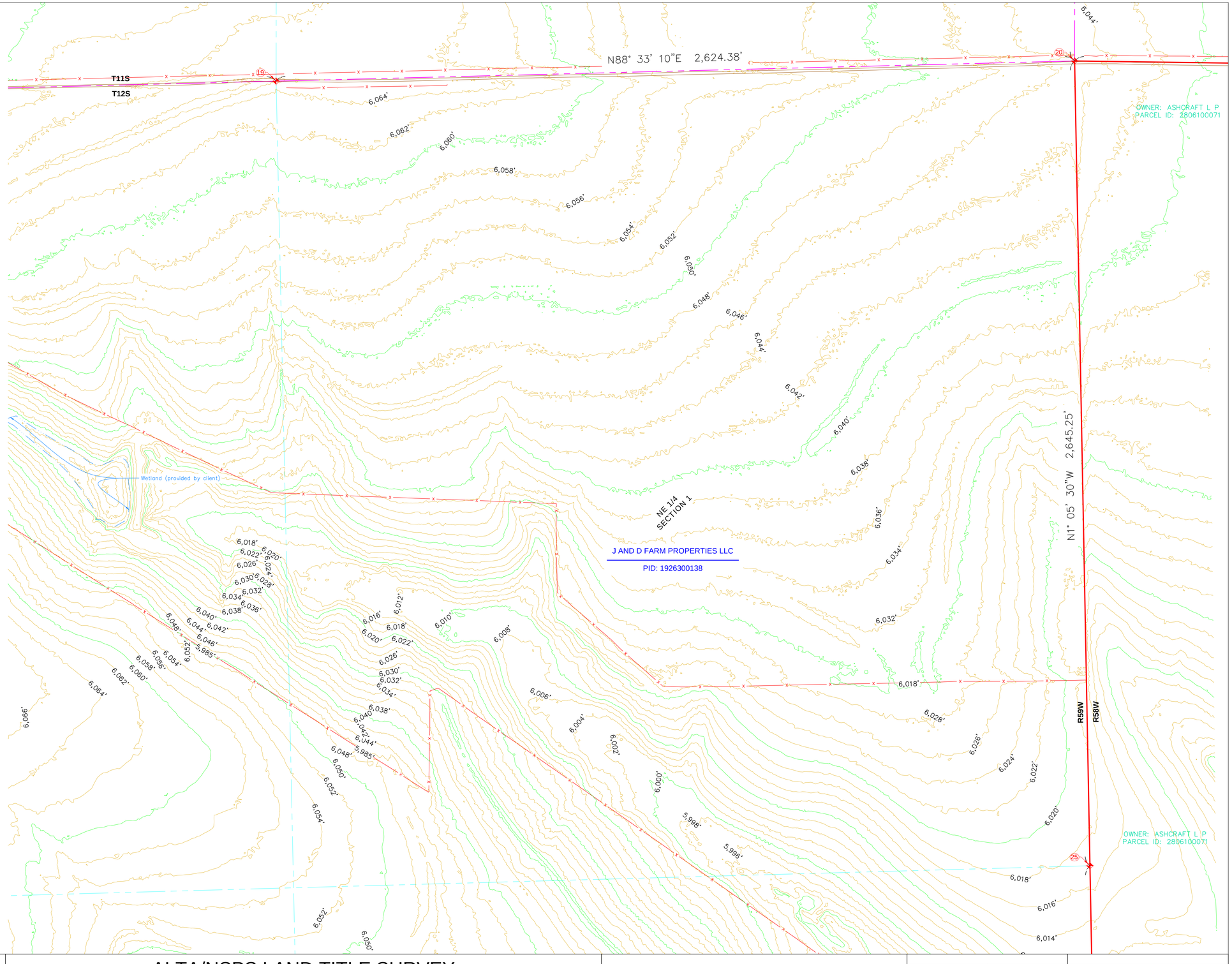
SCALE: 1" = 150'
(SHEET SIZE 24"X36")

LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

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9. WETLAND DELINEATION HAS BEEN PROVIDED BY CLIENT AND IS SHOWN HEREON.



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ALTA/NSPS LAND TITLE SURVEY

Northeast Quarter
Section 1, Township 12 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 21 OF 23	REVISION X	--

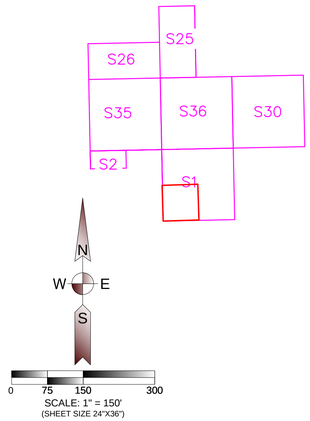
ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

Monument Descriptions:

(24) West Quarter Corner of Section 1 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(27) Southwest Corner of Section 1 Township 12 South Range 59 West
Found #6 Rebar with 2-1/2" Aluminum Cap "PLS 30127"

(28) South Quarter Corner of Section 1 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

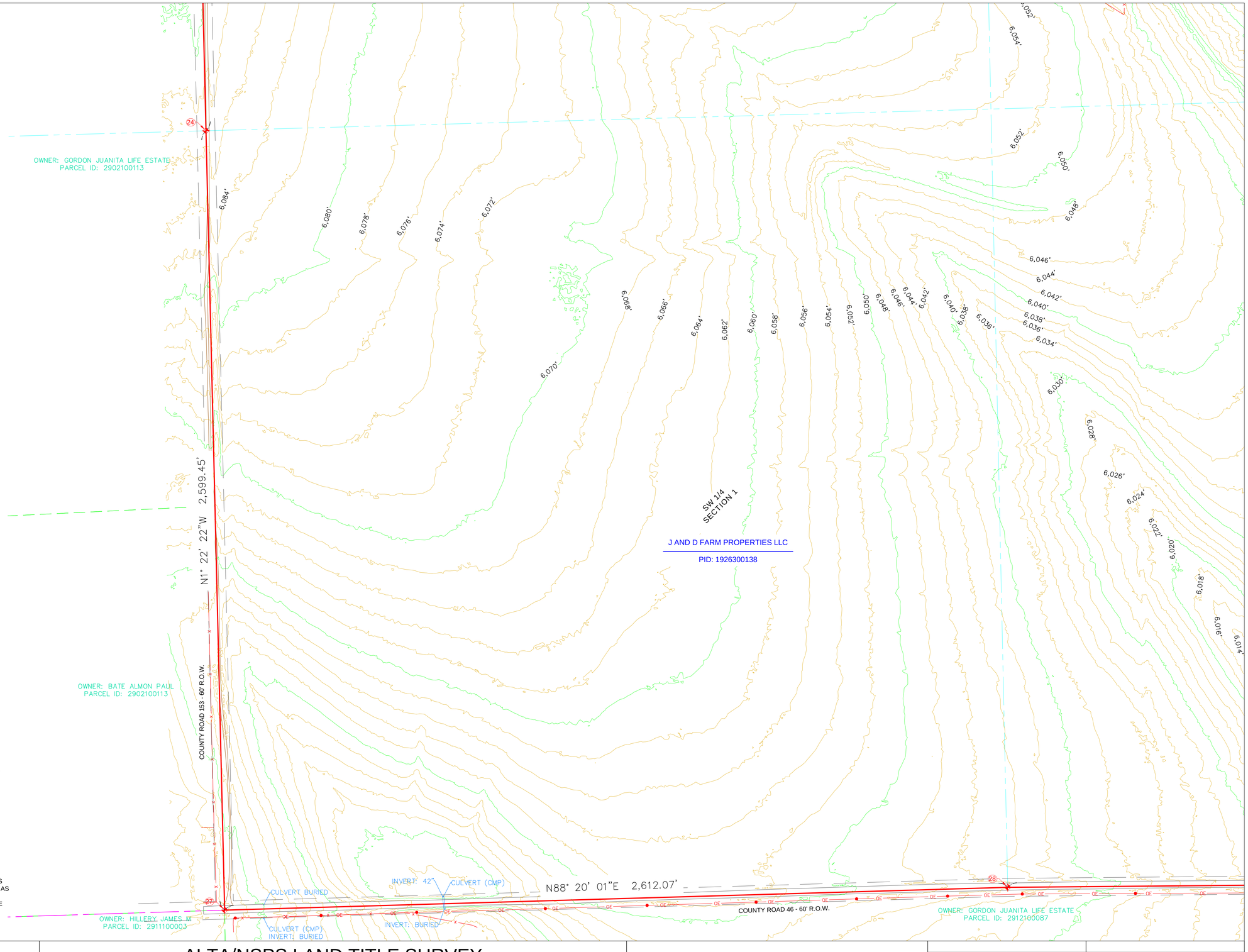


LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- 960' Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
- Fence
- "H" Pole (Power Support Structure)
- Single Wood Power Pole
- OE Overhead Power Line
- Unpaved Road Edge
- Easement as Described
- Right of Way as Described (ROW)

SURVEY NOTES:

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ALTA/NSPS LAND TITLE SURVEY

Southwest Quarter
Section 1, Township 12 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
Date:	01/21/2026	REVISION 0	01/14/2026
Drawn By:	BMW	REVISION 1	01/21/2026
Reviewed By:	CHTB	REVISION X	--
Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 22 OF 23	REVISION X	--

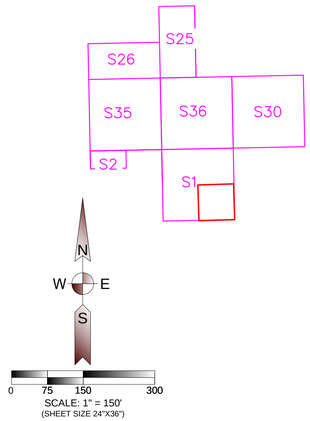
ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

Monument Descriptions:

(25) East Quarter Corner of Section 1 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(28) South Quarter Corner of Section 1 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

(29) Southeast Corner of Section 1 Township 12 South Range 59 West
Set #6 Rebar with 2-1/2" Aluminum Cap "PLS 38771"

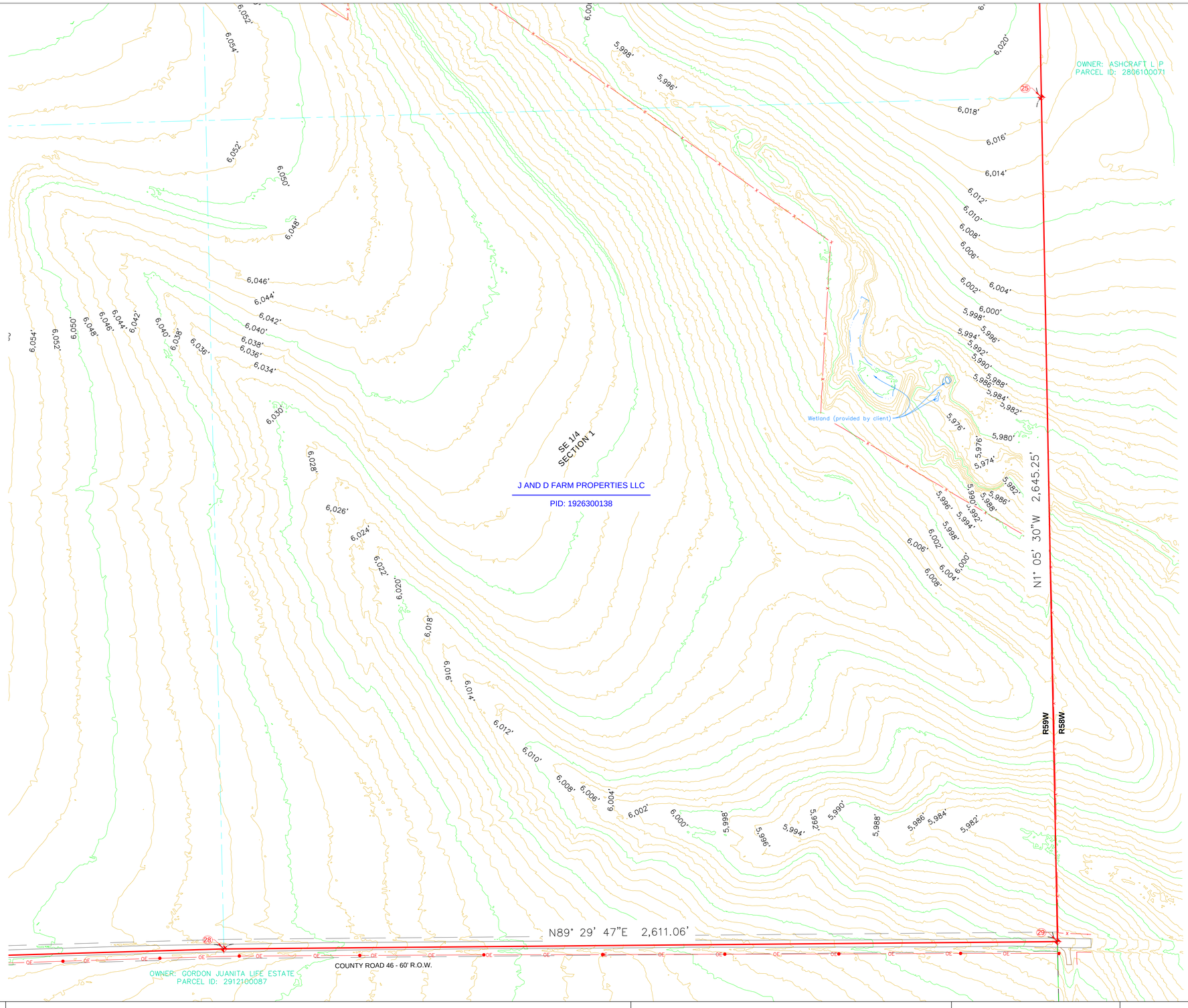


LEGEND:

- Section Corner as Described
- Street Sign as Described
- FEMA Flood Hazard Area "ZONE A"
- Section Line
- Quarter Section Line
- Sixteenth Quarter Line
- Contour Line
- Adjacent Property Line
- Project Limits
- Building
- Culvert
- Trail
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ALTA/NSPS LAND TITLE SURVEY

Southeast Quarter
Section 1, Township 12 South, Range 59 West, 6th P.M.
County of Elbert, State of Colorado

Shepherd Solar, LLC
5901 Priestly Drive, Suite 300,
Carlsbad, California 92008

Project Number:	25.01064	REVISION #	Date:
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Approved By:	CHTB	REVISION X	--
Sheets:	PAGE 23 OF 23	REVISION X	--

ALL PROFESSIONAL SEALS ARE APPLIED TO THE COVER PAGE

SUR Appendix E

Traffic Control Plan

3/5/2026

Mr. Eli Johnson
Lead Civil Engineer
BayWa
18575 Jamboree Road Suite 850
Irvine, CA 92612

Re: Shepherd Solar Traffic Control Plan
Task Order # TO-U0415-8064
WSB Project # 32487

Dear Eli,

Pursuant to our Task Order and Scope of Work, WSB has prepared a traffic control plan to present relevant traffic information and assess the potential impact of the Shepherd Solar project on local roadways within Elbert County. This report includes

1. Project location, key components, and construction schedule
2. Designated preliminary travel routes
3. Estimated daily vehicle trip generation
4. Potential haul route maps
5. Sight distance analysis and profiles at proposed access locations
6. Conclusions

Please review and let us know if you have any questions or comments.

Sincerely,
WSB



Ameer Kian
Sr. Project Manager

Attachments:
1. Exhibit A: Location Map
2. Exhibit B: Access Drives Sight Distance Exhibit

CC: Behnaz Beladi

701 XENIA AVENUE S | SUITE 300 | MINNEAPOLIS, MN | 55416 | 763.541.4800 | WSBENG.COM

1. Project location, key components, and construction schedule

Location
The Project is located in Elbert County, south of US HWY 24 and between County Roads 149 and 169. The project limits include parts of Township 11 South, Range 59 West (Section 25, 26, 35, and 36), Township 11 South, Range 58 West (Section 31), and Township 12 South, Range 59 West (Section 01, and 02). Exhibit A provides the project location and proposed haul route options.

Key Components
The Project is a 199 MW Solar Farm and 100 MW Battery Energy Storage System (BESS) occupying 1,990 acres. The key components for the Solar portion include Photovoltaic Solar Panels installed on single access trackers and driven piles, concrete equipment pads for inverters and transformers, access roads, security fencing with gates, and buried/overhead electrical collection and transmission lines from the PV areas to the substation. The BESS portion includes Battery equipment installed on Concrete Pads with medium voltage electrical lines from the BESS Yard to the Substation.

Construction Schedule
The project has an anticipated Commercial Operation Date (COD) of October 2030. It is anticipated that construction will take up to 24 months which corresponds to a mobilization of construction crews and equipment in October 2028. Construction will commence with civil works which will include delivery of civil machinery and raw materials such as engineered fill or gravel. Mechanical installation, which includes installation of the tracker piles, trackers, modules, and inverters will follow civil completion and will occur through Q2 2030. It is expected that there will be a consistent delivery of equipment during this time period. Deliveries will primarily take place Monday through Friday during normal working hours.

2. Designated travel routes

Potential travel routes have been proposed and identified with a summary of each option and the color of the route from Exhibit A below. BayWa's preferred routes, in order of priority, for heavy construction and material delivery vehicles are as follows. These designated travel routes are preliminary options available to access the project site during construction. The primary routes are from CR 169 (blue) and CR 146 (red). All other routes shown are secondary options. The viability of utilizing each of these access routes will be determined closer to construction upon a survey of the routes and an agreed upon road use agreement (RUA) with the County.

Primary Access Road Options:

County Road 169 (blue)

This route exits US Highway 24 in a rural area, heading south on County Road 169, west on County Road 46 to the project site. This route will also require access along CR 50 and CR 153. This route is approximately 16.2 miles long in total and includes the following sections and conditions-

- The County Road 169 section heading south is a 26' wide gravel/dirt road and is approximately 10.4 miles long. This road supports access to 14 Wind Turbine Generators (WTGs) and appears to have been improved as part of this Wind Project.
- The County Road 46 section heading west is a 26' wide gravel/dirt road, is approximately 4 miles long, and appears to be in good condition
- The County Road 153 section is an 18' wide two-track dirt road and is approximately 1 mile long. This road will likely need improvements to support this project.
- The County Road 50 section heading west to the project substation is an 18' wide two-track dirt road and is approximately 1 mile long. This road will likely need improvements to support this project.

County Road 149 North (red)

This route exits US Highway 24 in an urban area, heading south on County Road 149 to the project site. This route will also require access along CR 50 and CR 153. This route is approximately 9 miles and the County Road 149 section is a 32' wide gravel/dirt road.

Secondary Access Road Options:

County Road 149 South (purple)

This route exits State Road 94 in a rural area, heading north on County Road 149 to the project site. This route will also require access along CR 50 and CR 153. This route is approximately 16 miles and the County Road 149 section is generally a 58' wide gravel/dirt road with a 110 degree turn between CR 14 and CR 26 which may need improvements to make it usable. A small portion of this route (from County Road 2B south towards State Road 94) passes through Lincoln County.

County Road 46 (green)

This route exits State Road 71 in a rural area, heading west on County Road 46 to the project site. This route will also require access along CR 50 and CR 153. This route is approximately 15.6 miles and the County Road 46 section is a 26' wide gravel/dirt road. A small portion of this route (from State Road 71 to County Road 19) passes through Lincoln County.

County Road 133 (yellow)

This route exits US Highway 24 in a rural area, heading south on County Road 133 along Elbert County and El Paso County's joint boundary and east on County Road 50 to the project site. This route will also require access along CR 153. This route is approximately 10.9 miles and the County Road 133 section varies between a 24-28' wide gravel/dirt road.

BayWa will work with the County to establish designated travel routes with access to/from the site as appropriate. Construction vehicles and material delivery will be confined to agreed upon haul routes with the county to minimize impact and traffic to the county roads and residents.

3. Estimated daily vehicle trip generation

The project will have two distinct phases for the purposes of Traffic Management and Control: construction and ongoing operations and maintenance which will commence following completion of construction. For each phase, average daily trip generation can be estimated as follows-

Phase: Construction
Anticipated Dates: October 2028 – June 2030
Duration: 21 months

Vehicle Type	Estimated GVWR (lbs)	Vehicles per Day*	Average Vehicles Trips per Day
Material Delivery Trucks*	30,000-50,000	8-15	16-30
Equipment Hauling Trucks	20,000-40,000	0-5	0-10
BESS Container Trucks	30,000-50,000	0-4	0-2
Passenger Vehicles	2,000-10,000	20-300**	40-600
Fuel Trucks	20,000-30,000	1	2

* On the front end of construction, the material delivery trucks will primarily be hauling materials such as engineered fill or gravel. Once civil works are completed this will transition to delivery of mechanical equipment including the piles, trackers, and modules.

** This number will vary greatly depending on the phase of construction. Typically, the civil work is performed by a smaller crew of equipment operators whereas hundreds of workers will be required to install the solar modules. Peak workforce is estimated to be around 300 workers onsite.

Phase: Operations and Maintenance
Anticipated to begin October 2030
Duration: Ongoing

Vehicle Type	Estimated GVWR (lbs)	Vehicles per Day*	Average Vehicles Trips per Day
Utility Vehicle	2,000-10,000	1-2	2-4

*Number of Vehicles per Day have been provided by BayWa based on construction staging schedule and prior project experience.

Total Average Vehicle Trips per Day is estimated to be between 50 and 350 and will depend on what stage of construction the Project will be in. The bulk of the construction traffic (50-300 average vehicles per day) will be site construction passenger vehicles.

4. Potential haul route maps

Potential haul route maps are shown in Exhibit A and have been detailed in Section 2. Designated travel routes. BayWa's intention is to work with the county to designate a haul route for construction vehicles and material delivery. At this time, four options for access to the site have been proposed which are detailed in Exhibit A.

5. Sight distance analysis and profiles at proposed access locations

Sight distance analysis and profiles for proposed access locations have been drafted and are included in Exhibit B: Access Drives Sight Distance Exhibit. These include Construction Access locations A through C along County Road 149 and Construction Access locations D through F along County Road 50 and the North/South County Road between County Road 46 and County Road 50.

6. Conclusions

The project is anticipated to start in October 2028 with an estimated construction duration of 24 months.

During this period, traffic impact for the project will be at a maximum but is not expected to exceed 350 vehicle trips per day, even when material delivery and installation are happening concurrently. The bulk of the traffic (50-300 average vehicles per day) will be site construction passenger vehicles.

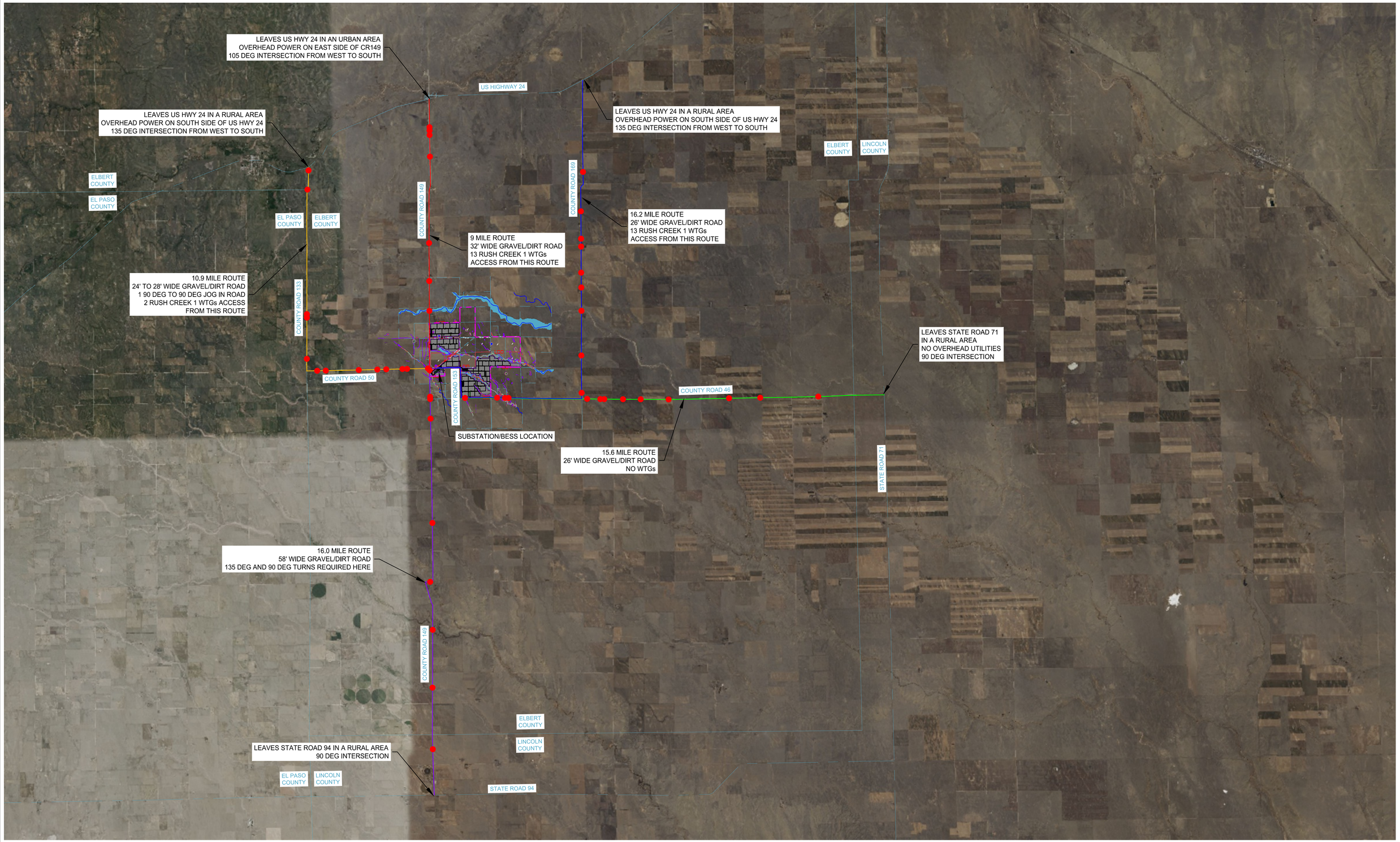
Designated travel and haul routes for access to/from the site have been proposed in Exhibit A and efforts have been made to minimize impact and traffic to the county roads and residents. Depending on the final Haul Route, improvements along some County Roads may be necessary to support the delivery of material and equipment to the site.

Sight distance exhibits for the proposed access locations have been provided in Exhibit B and show compliance with Elbert County Sight Distance Requirements.

If you have any questions on the Traffic Control Plan, please feel free to contact me at akian@wsbeng.com or (763) 388-3493.

Sincerely,

Ameer Kian,
Sr. Project Manager



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B	12/29/2025	HAUL ROUTE EXHIBIT
C	02/24/2026	HAUL ROUTE EXHIBIT
D	03/06/2026	HAUL ROUTE EXHIBIT

DESIGN BY: GIR
PLAN BY: GIR
CHECK BY: AK
SCALE: AS SHOWN

PRELIMINARY SHEPHERD SOLAR HAUL ROUTE EXHIBIT

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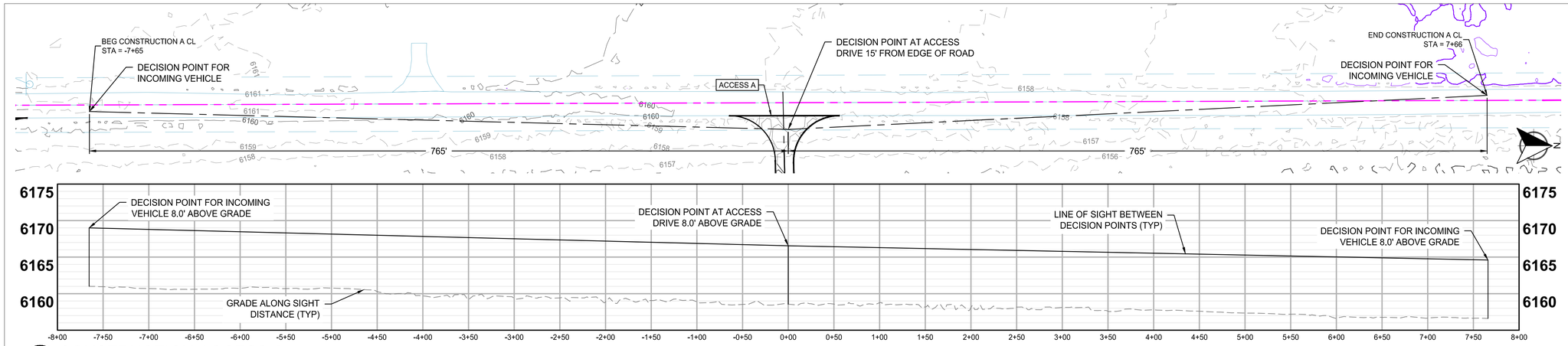
LEGEND

PRIMARY
- COUNTY ROAD 149 NORTH DELIVERY AND PRIMARY HAUL ROUTE
- COUNTY ROAD 169 DELIVERY AND PRIMARY HAUL ROUTE

SECONDARY
- COUNTY ROAD 46 DELIVERY AND HAUL ROUTE
- COUNTY ROAD 133 DELIVERY AND HAUL ROUTE
- COUNTY ROAD 149 SOUTH DELIVERY AND HAUL ROUTE

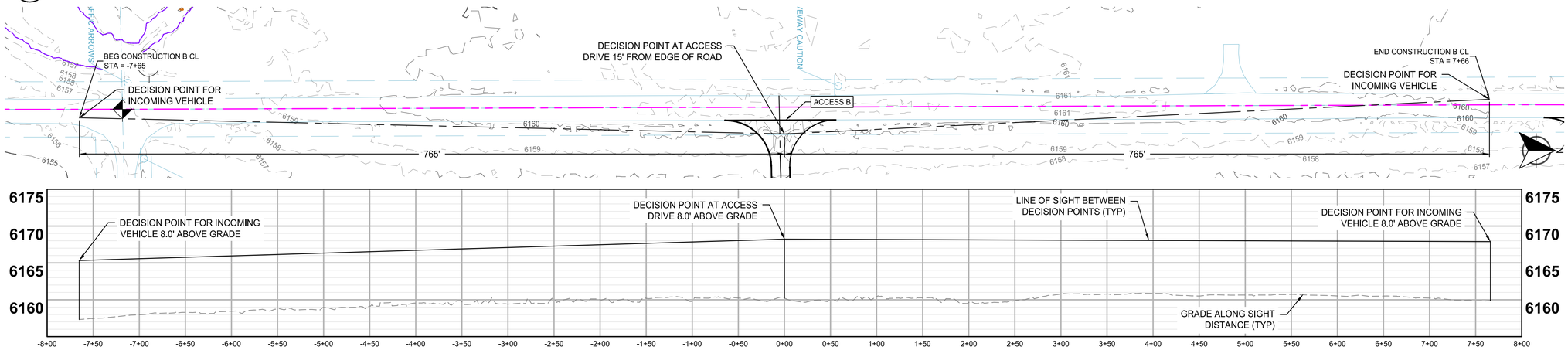
- CULVERT CROSSING

EXHIBIT A



D1 CONSTRUCTION ACCESS A

60' H 5' V



D2 CONSTRUCTION ACCESS B

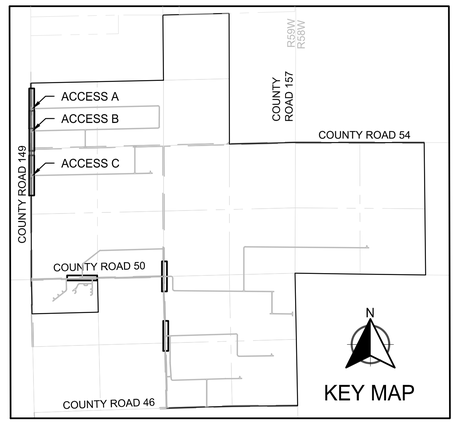
60' H 5' V

D3 CONSTRUCTION ACCESS C

60' H 5' V

NOTES:

1. ALL EXISTING ROAD LOCATIONS SHOWN ARE APPROXIMATE.
2. EXACT PROPOSED INTERIOR ACCESS ROAD LOCATIONS ARE REPRESENTATIVE, AND TO BE FINALIZED PRIOR TO CONSTRUCTION.
3. SIGHT DISTANCES WERE CALCULATED ASSUMING A STOP CONTROLLED MOVEMENT AT THE ACCESS DRIVES.



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DESIGN BY: CMM
PLAN BY: GIR
CHECK BY: EAE
SCALE: AS SHOWN

SHEPHERD SOLAR TRAFFIC CONTROL EXHIBIT

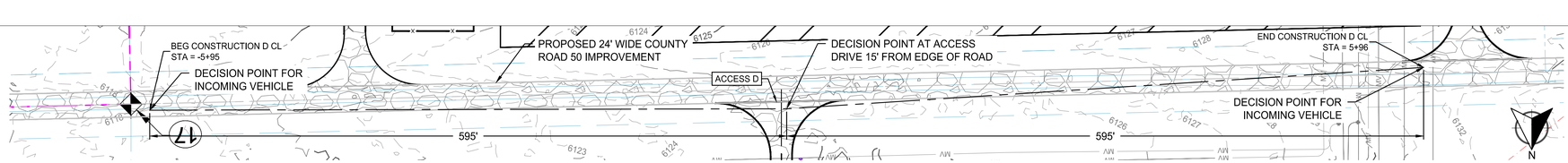
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V: 0 5 10 SCALE IN FEET

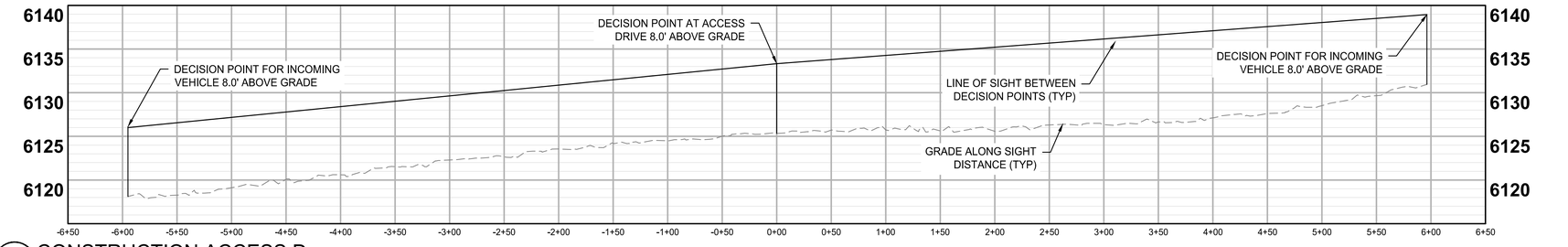
SITE CONSTRAINTS LEGEND

- PROJECT BOUNDARY/ LEASE LIMIT
- EXISTING OVERHEAD POWER
- PROPOSED PERIMETER FENCING
- PROPOSED GRAVEL ROAD CENTERLINE
- PROPOSED MEDIUM VOLTAGE FEEDER
- HIGH SLOPE BOUNDARY
- PANEL EXCLUSION ZONE
- PROJECT BOUNDARY SETBACK 100 FT
- OH UTILITY SETBACK 75 FT
- BUILDING SETBACK 150 FT
- FEMA SETBACK 50 FT
- WETLAND SETBACK 50 FT
- SWALE SETBACK 50 FT
- PUBLIC ROAD EDGE SETBACK 150 FT
- PV SETBACK ROAD AND BOUNDARY 50 FT
- PV SETBACK NO ROAD AND BOUNDARY 35 FT
- 100-YEAR FEMA ZONE A FLOODPLAIN LIMITS
- RESTRICTED AREA
- EXISTING WETLANDS
- SOUTH SLOPE > 12%
- NORTH SLOPE > 8%
- EAST-WEST SLOPE > 5%

EXHIBIT B

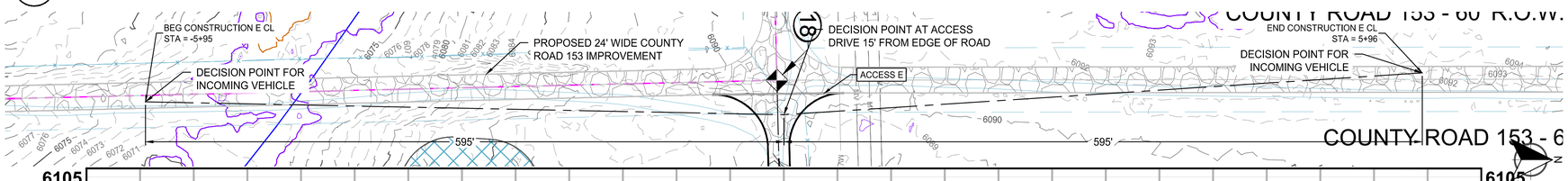
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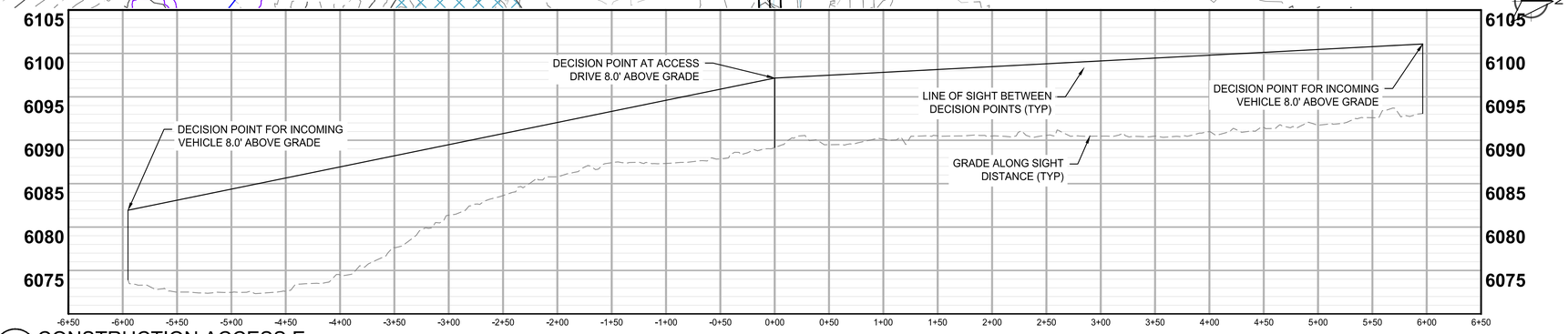




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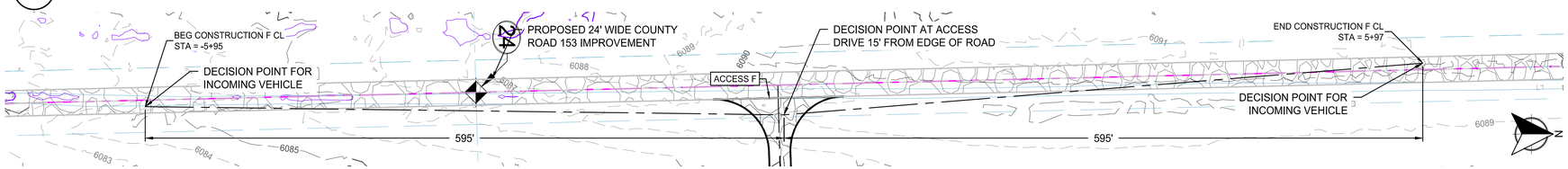
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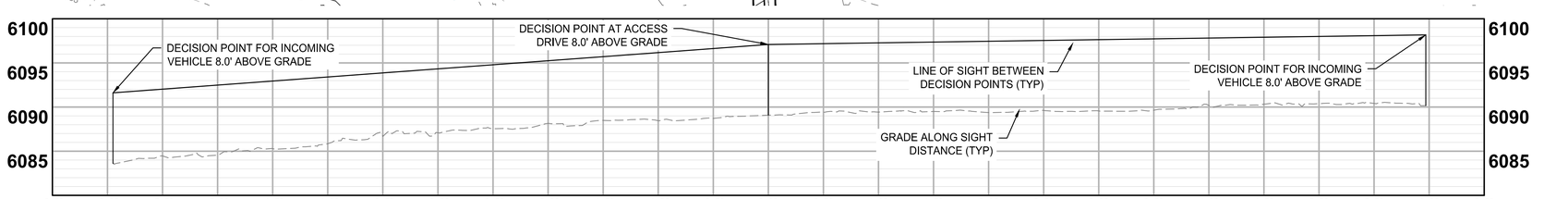




D5 CONSTRUCTION ACCESS E

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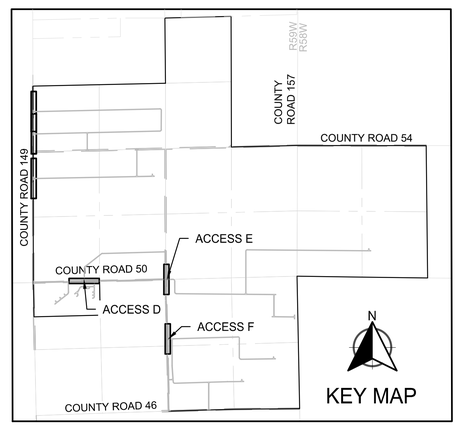


D6 CONSTRUCTION ACCESS F

60' H 5' V

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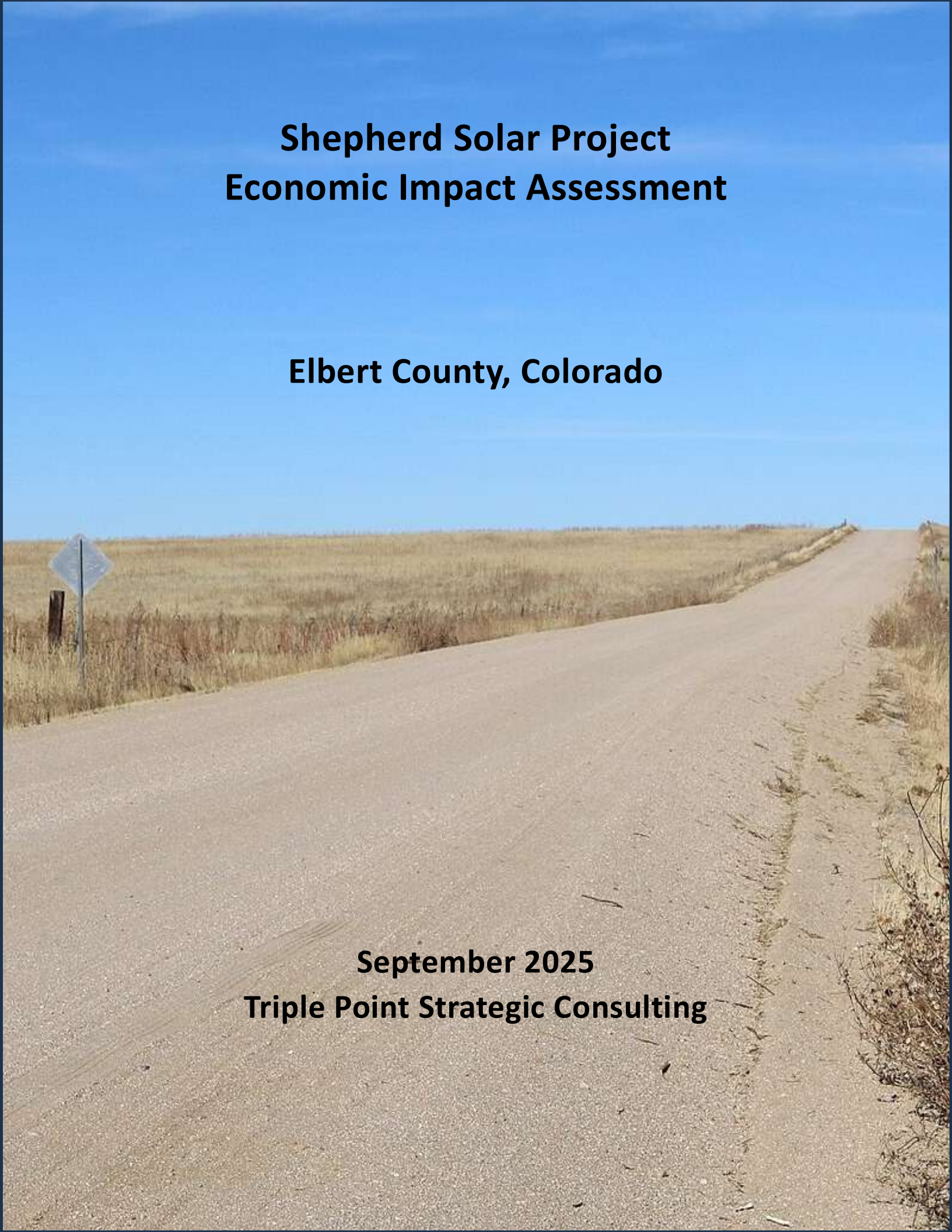
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SUR Appendix F

Economic Impact Analysis

Shepherd Solar Project
Economic Impact Assessment

Elbert County, Colorado



September 2025

Triple Point Strategic Consulting

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Shepherd Solar Project
Economic Impact Assessment

Elbert County, Colorado

Prepared for:

Shepherd Solar LLC
5901 Priestly Drive, Suite 300
Carlsbad, California 92008

Prepared by:

Triple Point Strategic Consulting
PO Box 985
Crested Butte, Colorado 81224

September 2025

Cover photo credit: Jeffrey Beall

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Acronyms and Abbreviations

AAGR	average annual growth rate
AC	alternating current
AFY	acre-feet per year
BEA	Bureau of Economic Analysis
BESS	battery energy storage system
BLS	Bureau of Labor Statistics
CRS	Colorado Revised Statutes
DC	direct current
DOLA	Department of Local Affairs
EIA	U.S. Energy Information Administration
EMS	emergency medical services
EPC	engineering, procurement, and construction
EZ	Enterprise Zone
FTE	full-time equivalent
FY	fiscal year
gen-tie	generation tie
GDP	gross domestic product
HUTF	Highway Users Tax Fund
IIA	Industry Impact Analysis
IMPLAN	impact analysis for planning
I-O	Input-Output
IRC	Internal Revenue Code
kV	kilovolt
LPF	Leontief Production Function
LQ	location quotient
Mgal	million gallons
MRIO	multi-region input-output
MW	megawatt
MWac	megawatts of alternating current
MWh	megawatt hour
OPI	Other Property Income
Project	Shepherd Solar Project
PV	photovoltaic
RV	recreational vehicle
SAIPE	Small Area Income and Poverty Estimates
SDO	State Demography Office
SOC	Standard Occupational Classification
TOPI	Taxes on Production and Imports, Net of Subsidies
Wac	watt alternating current
Wdc	watt direct current

Executive Summary

The Shepherd Solar Project (Project) is a proposed 199-megawatt alternating current (MWac) solar Project with an adjoining 100 MWac battery energy storage system (BESS) located in Elbert County, Colorado. The Project would be developed on approximately 1,990 acres of private land. Shepherd Solar LLC contracted Triple Point Strategic Consulting LLC to prepare this economic impact assessment for the Project. We assume the Project would be constructed over 12 to 18 months in 2028, followed by 40 years of operations. The first full year of operations is projected to be in 2029.

The economy of Elbert County is driven by agriculture and residential construction, operations, and home ownership. From 2020, the county's population has grown faster than Colorado's, averaging 2.9 percent annually. Real median household income is roughly a third greater than the state level. The total number of housing units has grown at a 2.4 percent average annual growth rate from 2016. Rental housing is in short supply. Unemployment is relatively low but has increased modestly over the past 2 years.

The outlook for utility-scale solar electricity generation in Colorado is very positive. The state currently ranks 14th in utility-scale generation. Production costs have declined significantly, supporting further growth with many new projects in the planning stages throughout the state. On the demand side, new technology, such as artificial intelligence, is rapidly increasing demand. The Project would have a positive impact on the county economy during construction and would continue to generate economic activity over its planned lifetime.

Capital Construction Budget

The total projected capital budget for construction is $479 million, of which $278 million would be used to purchase and import specialized equipment and $127 million would be injected into the Colorado economy in the form of construction spending (direct investment).

Economic Benefits of Construction to Elbert County

Elbert County's portion of direct investment is estimated to be $40.8 million. The economic impacts to Elbert County during the Project's 12 to 18 months of construction include the following:

- A total economic beneficial impact of $49.1 million through direct spending and multiplier impacts
- A total of $949,000 in municipal, special district, and Elbert County tax revenues from construction activities received within Elbert County

Table ES-1. Construction Employment Impacts to Elbert County

Employment Impact During Construction	Average Annual Employment	Total Annual Labor Income
Direct employment	180.0	$19,033,812
Supply chain and induced employment	39.1	$1,810,778

Note: The average annual job estimates are approximately full-time equivalent (FTE).

Economic Benefits of Construction to Colorado, Including Elbert County

The entire amount of direct investment projected to be spent in Colorado is $127 million, including the portion spent in Elbert County. The total economic beneficial impacts to Colorado, including Elbert County, during the 18 months of construction include the following:

- A total beneficial economic impact of $210.3 million through direct spending and multiplier impacts
- A total of $5.6 million in municipal, special district, and county-level tax revenues from construction activities received within Colorado

Table ES-2. Construction Employment Impacts to Colorado, Including Elbert County

Employment Benefits During Construction	Average Annual Employment	Total Annual Labor Income
Direct employment	360.0	$38,067,624
Supply chain and induced employment	349.7	$27,031,772

Note: The average annual job estimates are approximately full-time equivalent (FTE).

Operations Budget

The total annual amount of spending in Colorado for operations is projected to be $3.9 million, excluding off-site, capital, and property tax expenses. The planned operating lifetime is up to 40 years. The first full year of operations would be 2029.

Economic Benefits of Operations to Elbert County

The portion of the annual budget spent directly within Elbert County is projected to be $1.6 million. The annual economic impacts to Elbert County during operations include the following:

- A total annual economic impact of $1.9 million through direct spending and multiplier impacts
- A total of $34,000 annually in municipal, special district, and Elbert County tax revenues from operations activities received within Elbert County

Table ES-3. Operations Employment Impacts to Elbert County

Employment Benefits During Operations	Average Annual Employment	Total Annual Labor Income
Direct employment	8.0	$810,948
Supply chain and induced employment	1.2	$56,101

Note: The average annual job estimates are approximately full-time equivalent (FTE).

Economic Benefits of Operations to Colorado, Including Elbert County

The portion of the annual budget spent directly within Colorado is projected to be $3.9 million. The annual economic impacts to Colorado, including Elbert County, from operations include the following:

- Annual economic impact of $6.7 million through direct spending and multiplier impacts

- A total of $189,000 annually in local and county tax revenues from operations activities received within Colorado

Table ES-4. Operations Employment Impacts to Colorado, including Elbert County

Employment Benefits During Operations	Average Annual Jobs	Annual Labor Income
Direct jobs	8.0	$810,948
Supply chain and induced jobs	8.0	$766,555

Note: At statewide effective average, local tax rates are higher than within Elbert County.

Note: The average annual job estimates are approximately full-time equivalent (FTE).

Special equipment would be imported into Elbert County and subject to taxation having fiscal benefits. Sales tax on imported equipment is estimated to generate $3.3 million for the state and $1.1 million for Elbert County. Over the Project's lifetime, sales tax on replacement equipment is estimated to be $1.9 million in state revenue and $653,079 in county revenue. State-assessed property tax payments are estimated to total $25.0 million over the Project's lifetime, including $11.5 million payable to the Big Sandy Schools District and $9.7 million to Elbert County. All of the property tax jurisdictions receiving tax revenue are listed in Table 9-2.

Population and housing growth in Elbert County and across Colorado, combined with new electricity-driven technology, will increase demand for electricity going forward. Elbert County is in a strong position to further grow a skilled solar energy workforce and means for exporting locally produced energy.

This report directly addresses multiple socioeconomic issues as required in the Elbert County 1041 regulations, as shown in the following table.

Table ES-5. List of 1041 Regulations and Socioeconomic Report Sections

1041 Permit Requirement	Description	Section(s)
13	**Technical and Financial Capability of the Project**	
13 (a)	The estimated construction costs and period of construction for each development component.	7
13 (b)	Revenues and operating expenses for the Project.	7
15	**Local Government Services**	
15 (a)	Description of existing capacity and demand for local government services and services necessary to accommodate development.	11
15 (b)	Description of the impacts and net effects of the Project on the demand for local government services and the capability of local governments to provide those services.	7, 8, 11
15 (c)	Detailed explanation of how potential impacts or burdens will be overcome.	9

1041 Permit Requirement	Description	Section(s)
16	**Financial Burden on County Residents**	
16 (a)	Description of existing tax burden and fee structure for government services, including but not limited to assessed valuation.	9, 10
16 (b)	Description of the impacts and net effects of the Project on existing tax burden and fee structure for government services applicable to County residents and property owners.	7, 8, 11
16 (c)	Detailed explanation of how potential impacts or burdens will be overcome.	9
17	**Local Economy**	
17 (a)	Description of local economy including revenues generated by the different sectors, and the value or productivity of different lands.	4, 5, 6
17 (b)	Description of negative and positive fiscal impacts to the County and net effect of the Project on the local economy and opportunities for economic diversification, including the number and types of jobs created.	8, 9, 11
23	**Balance Between Benefits and Losses**	
23 (a)	Description of foreseeable benefits to the County, landowners, local economy, etc. created by the Project.	12, 13
23 (b)	Description of foreseeable losses of natural, agricultural, recreational, range, or industrial resources within the County and loss of opportunities to develop those resources in the future.	12, 13

About Triple Point Strategic Consulting LLC (Project Lead) and Consulting Team

Triple Point specializes in developing custom economic and financial models. We deliver results for our clients with high-value and accurate information, as demonstrated by our many repeat clients. Triple Point is active across the western United States and Canada, modeling for scenario planning, financial forecasting, permitting and approvals, optimal resource allocation, and improved decision-making. Economic impact studies are conducted using the IMPLAN model.

Jeff Moffett, Ph.D. founded Triple Point Strategic Consulting in 2013 to provide marketing, strategic planning, and economic analysis services. Focus areas are renewable energy, affordable housing, health assessments, resource management, and economic development. Jeff has served as an expert witness before the Idaho Department of Water Resources Court and was recently appointed to the nonpartisan Committee for a Responsible Federal Budget's Advisory Board. Jeff earned his master's degree in Econometrics and a doctorate in Applied Statistics at the University of Washington, Seattle. For more information visit www.tpsconsulting.net.

Nathan Perry, Ph.D. is a Professor of Economics at Colorado Mesa University and principal of Alvarium Economics. He has conducted many regional economic studies in Colorado, including economic impact studies, public land studies, and energy studies, and has published academic work on deficits and debt, inflation, and the Great Depression. Dr. Perry regularly presents on the economic conditions in western Colorado and the national economy, and serves on the Governor's Revenue Estimating Advisory Committee (GREAC).

Cirrus is a trusted business advisor providing state and local consulting services to renewable energy developers and owner-operators. The Cirrus team helps companies manage state and local tax liabilities, maximize public funding opportunities for investments, and enhance public-private partnerships in local communities. Cirrus leadership has worked together for over two decades and has extensive experience in the renewable energy industry, having rendered advisory services for over 900 development- and operational-stage projects totaling more than 115 gigawatts. They have negotiated incentives for renewables projects in more than 30 states.

Key Terminology

Direct Effects: The initial economic activity that occurs as a result of the project. This would include labor and materials spending in Elbert County and Colorado.

Direct Investment: The initial expenditure or funding allocated to undertake a project within a defined region, such as a county or state. Direct investment, also referred to as total direct impact, includes labor, materials, taxes, and other business costs for the construction phase and the operations and maintenance phases that are spent locally.

Dollar Year: The year represented by the values in an impact event being modeled. This is usually (but not always) the same as the year in which the event occurred or is expected to occur.

Economic Benefit: The benefits that accrue to the defined region resulting from this project including direct, indirect, and induced economic impacts. These benefits are broken down by economic output, employment, labor income, industry growth, and tax revenues in this report.

Indirect Effects: The economic activity generated in the supply chain resulting from the direct effects. This can include construction supplies (concrete, steel, wiring); equipment rental; future landscaping services for the site; legal, environmental, or safety services; and other goods and services that result from the direct spending.

Induced Effects: The economic activity created when workers from both the direct and indirect effects spend their wages on goods and services.

Intermediate Inputs: Repeating everyday materials required to make a final product. Intermediate inputs are purchases of nondurable goods and services such as energy, materials, and purchased services that are used for the production of other goods and services, rather than for final consumption. They do not include any capital-account purchases or labor.

Jobs: Construction jobs are considered "supported" since the building of a facility requires or supports a region's workforce. In the case of this Project, the operations and maintenance jobs are considered "created" since they would not exist prior to construction of the Project. Direct jobs are a model input. IMPLAN calculates indirect and induced job impact estimates resulting from the Project. See Appendix A for an explanation of direct, indirect, and induced impacts.

Note that IMPLAN jobs are not equivalent to full-time employment. In IMPLAN, one job lasting 12 months = two jobs lasting 6 months each = three jobs lasting 4 months each. A job can be either full time or part time. Although IMPLAN jobs are not technically equivalent to full-time employment, they are effectively full-time equivalent for the industries modeled in this report.

Labor Income: The total value of all forms of employment income paid throughout a defined economy during a specified period of time. It reflects the combined cost of total payroll paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners (e.g., capital consumption allowance) across the defined economy. Note that IMPLAN's estimated Employee Compensation and Proprietor Income fields represent the average payroll values for all employees that work in a firm, across all industries that report in the Project area's region.

Other Property Income (OPI): All money collected by an industry that is not paid into the operations of the company. This would include profits, capital consumption allowance, payments for rent, royalties, and interest income. This is also known as Gross Operational Surplus.

Output: The value of production by industry in a calendar year. Total output is the sum of labor income, OPI, TOPI, and intermediate inputs.

Taxes on Production and Imports, Net of Subsidies (TOPI): This impact category includes sales tax, property tax, motor vehicle taxes, severance, excise, assessments, custom duties, and other taxes and fees, less government subsidies. Because TOPI is net of subsidies, it can be negative for a given industry in a given year if that industry received more subsidies from the government than it paid out in these specific taxes in that year. *TOPI does not include all taxes paid by an industry.* For example, social insurance taxes are a part of employee compensation, and profits taxes are part of OPI.

Total Output: The gross total value of all sales and production. Total output is a broader measure than gross domestic product (GDP). Output is the value of an industry's production, and includes GDP and intermediate inputs that are associated with it.

1 Introduction

1.1 Purpose

Shepherd Solar LLC (Applicant) is proposing to construct and operate a 199 megawatt (MW) solar photovoltaic and 100 MW, 4-hour, battery energy storage system (BESS) and substation known as the Shepherd Solar Project (Project). This solar energy facility would be installed on approximately 1,990 acres of private land in Elbert County, Colorado. The County requires a 1041 permit for site selection and construction of major facilities of a public utility.

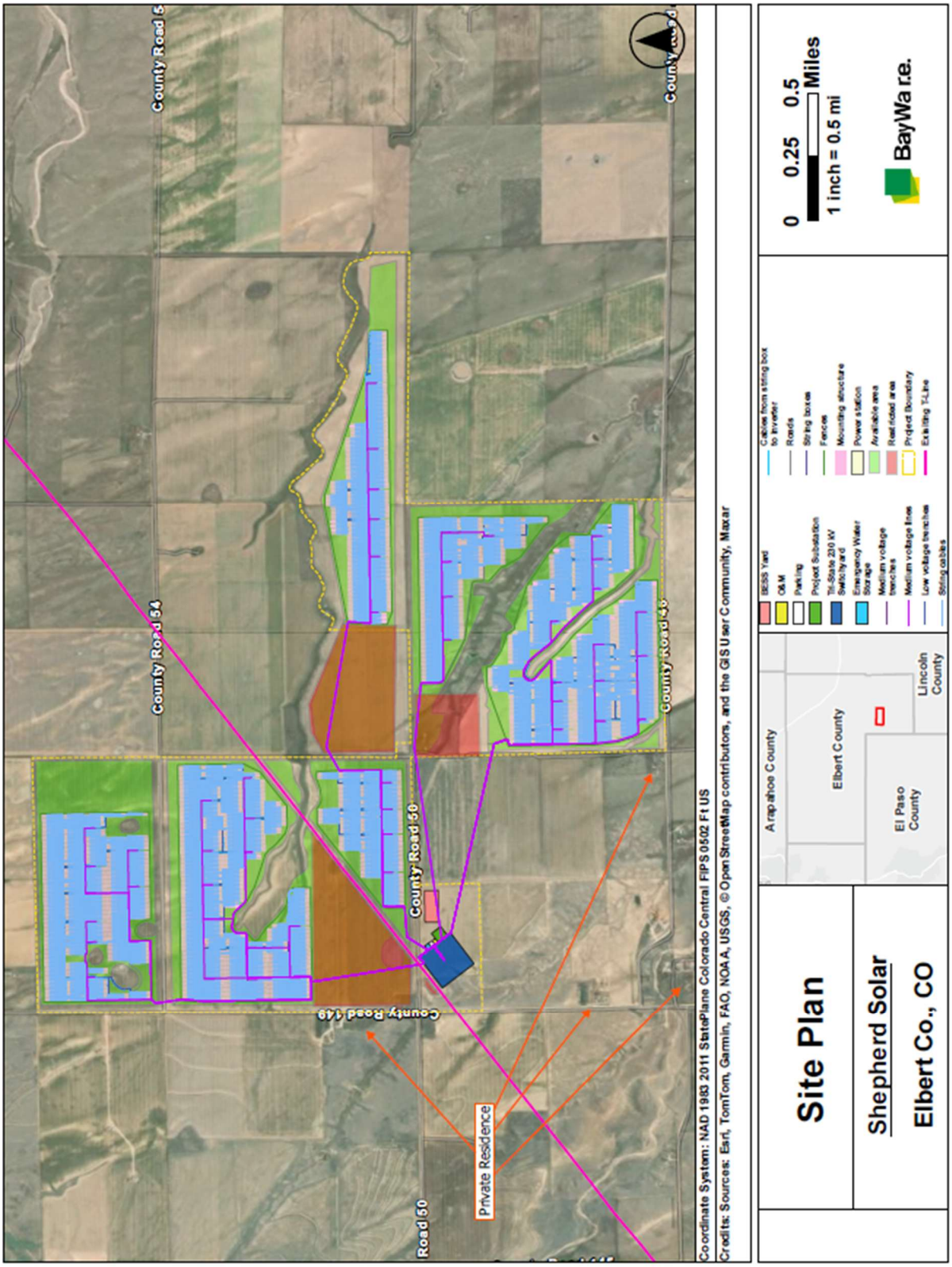
The purpose of this report is to show how the economy of the county and region would be impacted by constructing and operating the Project. This report characterizes the demographic and socioeconomic conditions of Elbert County and estimates the economic impacts of construction and operations activities. Developing the facility would produce new sources of revenue and fiscal benefits for Elbert County and applicable special districts. Estimates of the revenue-generating capacity are provided for each district. Assessments are provided for public services including fire and emergency response, law enforcement, medical facilities, and the school district. Shepherd Solar, LLC contracted Triple Point Strategic Consulting LLC to prepare this economic impact assessment for the Project.

1.2 Project Overview

We assume the Project would be constructed over a 12- to 18-month period in 2028, followed by 40 years of operations. The first full year of operations is projected to be 2029.

The proposed Project would consist of a network of solar arrays, including a system of maintenance roads designed to access each phase of the Project, an associated high-voltage substation for interconnection, a direct current (DC) to alternating current (AC) inverter and transformer pads, a BESS, an operations and maintenance building, and a water storage container to be used by both the Project and the local fire department in case of emergencies to reduce fire response time in the community.

The Project will produce enough energy to power between 38,000 and 60,000 average-sized homes and help increase the stability and reliability of power for Colorado energy customers. The Project would provide approximately 400 megawatt hours (MWh) of energy storage capabilities to the grid. The proposed Project intends to interconnect along the existing Tri-State Generation and Transmission Association's 230-kilovolt (kV) Lincoln – Midway transmission line that runs southwest to northeast through the Project's footprint (Figure 1-1). Further, Elbert County is home to the majority of turbines in the Rush Creek Wind Farm.

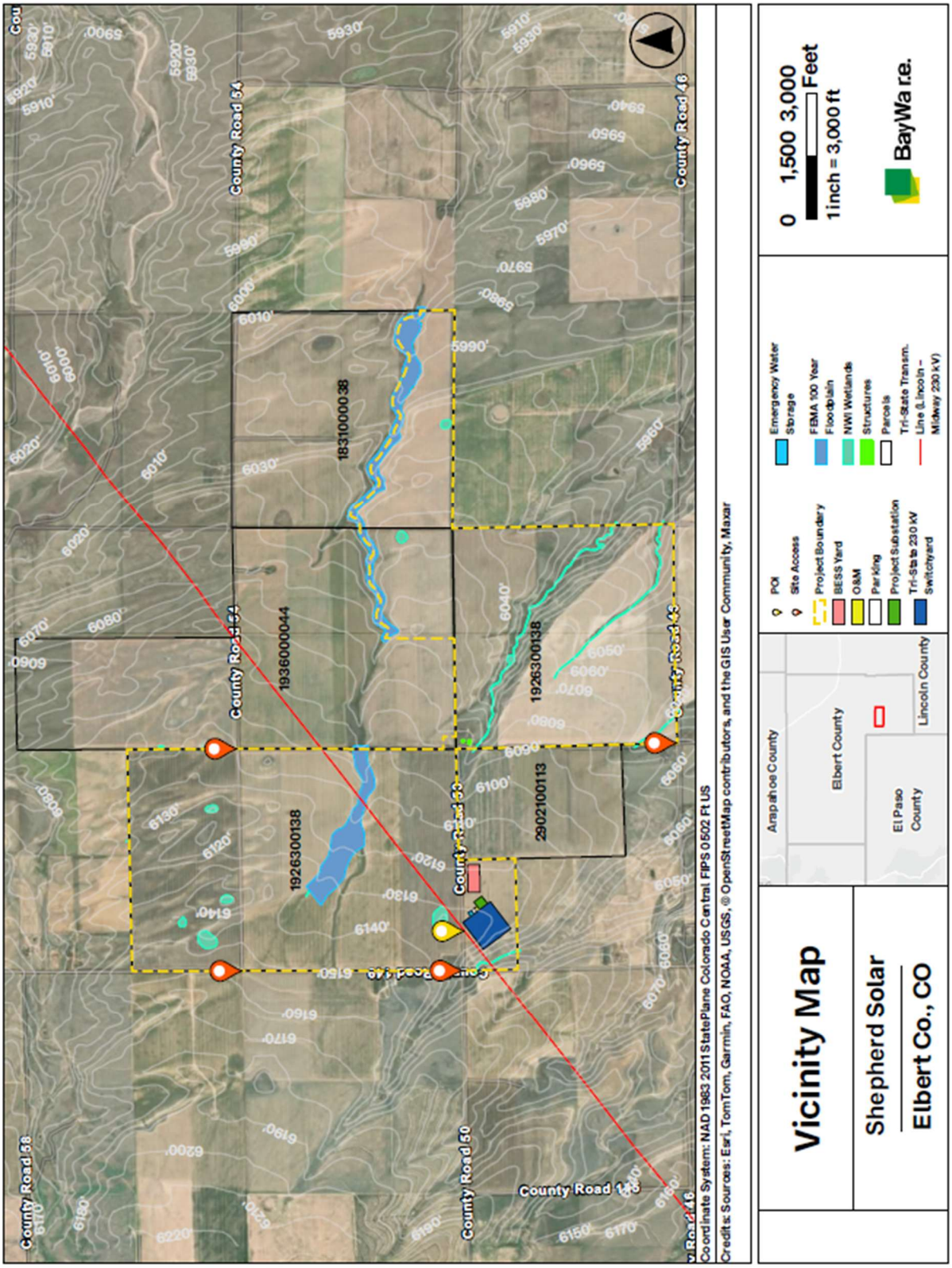


Source: Shepherd Solar, LLC

Figure 1-1. Shepherd Solar Project Preliminary Site Plan

1.3 Project Location

The Project would be located in unincorporated Elbert County, approximately 8 miles southeast of Simla. The proposed Project is contained within three parcels (parcel numbers 1926300138, 1936000044, and 1831000038) and is comprised of 1,990 acres, which are currently zoned as agricultural. The site is bisected by County Road 50, abuts the eastern right-of-way for County Road 149, and is bound to the south by County Road 46 development (Figure 1-2). Currently, the proposed Project area is being used for non-irrigated farming. Approximately 1,410 acres currently appear suitable for the proposed Project. This report delineates Elbert County as the primary impact area (socioeconomic environment). Impacts to surrounding counties and the state are provided secondarily.



Source: Shepherd Solar, LLC

Figure 1-2. Shepherd Solar Project Vicinity Map

1.4 Data Sources and Methodology

In order to assess the socioeconomic characteristics of Elbert County and local public services, a variety of documents and publications have been reviewed from local, state, federal, academic, nonprofit, and other private organizations. A list of primary organizations is shown below, with specific citations provided throughout the report.

- Colorado State Demography Office (SDO)
- Colorado Department of Local Affairs (DOLA)
- Impact analysis for planning (IMPLAN)
- Elbert County
- U.S. Census Bureau

Economic impacts are modeled using the IMPLAN system, which is described in Section 7 along with specific methodology adopted for this analysis. Fiscal impacts are estimated using the state-assessed property tax template provided by the Colorado DOLA.

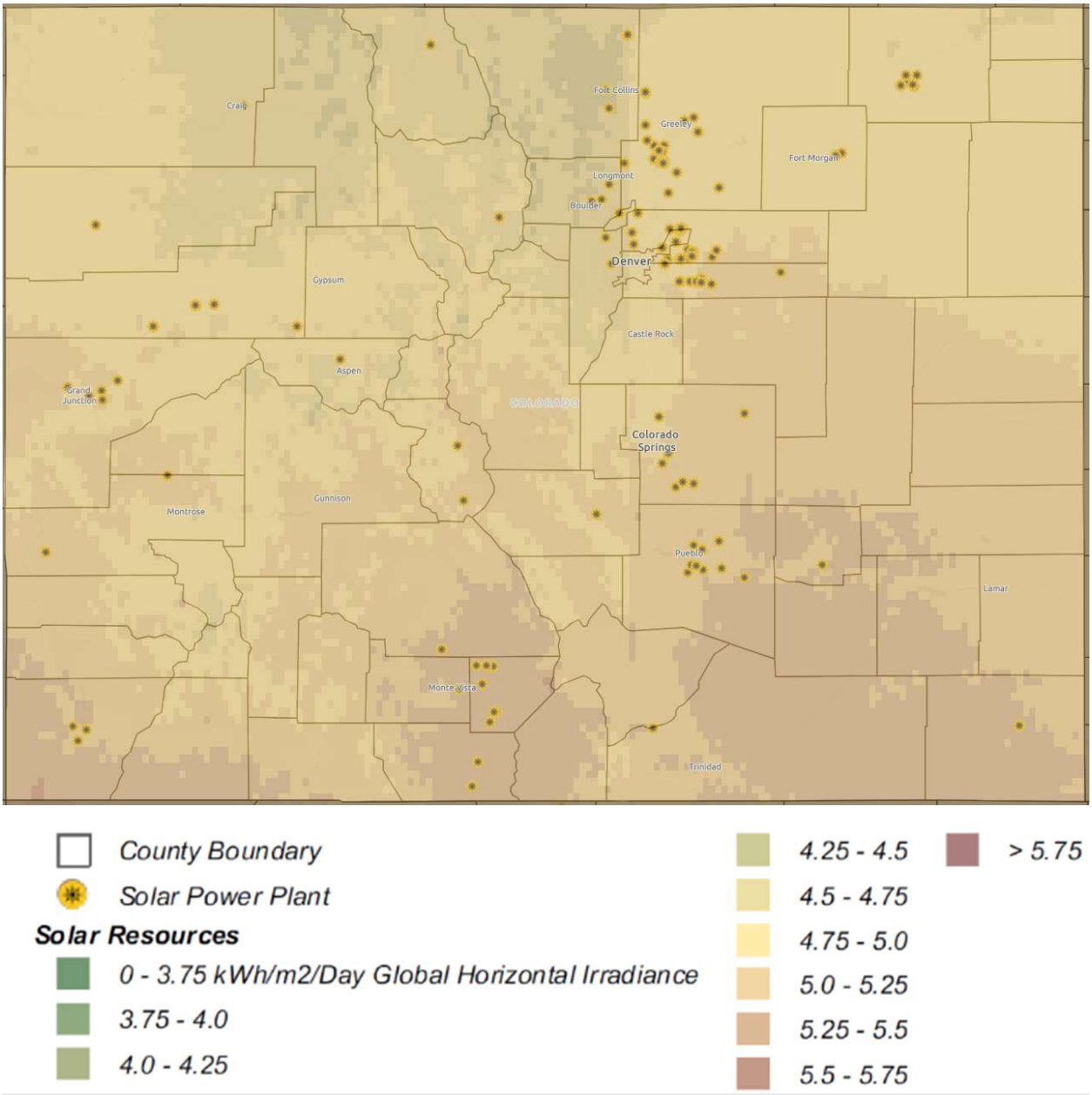
Unless otherwise noted, the information presented in this report is based on 2023 Census data (the most current available), with Census-related dollar figures in 2023 dollars. Projected Project costs, budgets, and economic and fiscal impact estimates are presented in 2025 dollars.

2 Solar Energy in Colorado

Colorado has become a leader in utility scale solar photovoltaic (PV) development, leveraging its high levels of solar irradiance with supportive state policies to encourage solar PV growth (Figure 2-1). According to the latest U.S. Energy Information Administration (EIA) state profile (updated July 2025), Colorado ranked 14th in the nation for utility-scale solar-power-generating capacity at the end of 2024, with 2,341 MW installed. EIA's generator inventory indicates another about 817 MW of utility-scale solar is scheduled to come online in Colorado by the end of 2026. Nationally, developers added a record 30 GW of utility-scale solar in 2024, and solar accounted for about 61 percent of all new U.S. electric-generating capacity that year (U.S. Energy Information Administration 2025).

According to the Solar Energy Industries Association (2024), 10.8 percent of Colorado's electricity is produced from solar power. Prices for solar have fallen by 43 percent over the last 10 years, while solar investment has reached $8 billion. Colorado's 414 solar companies, which include 40 manufacturers, 195 installers, and 179 "other" companies, employ 8,177 people. Note that this includes utility, commercial, and residential.

Since 2010, the installed costs for utility-scale PV have decreased by approximately 75 percent, an average 10 percent annual reduction. In 2023, the capacity-weighted average cost was $1.43 per watt alternating current (Wac), down from $1.56 per Wac in 2022 (Gilbert, Hoen and Gagarin 2024) (Energy Technologies Area, Berkeley Lab 2024). These cost reductions are accurate despite correcting for strong inflationary pressures. For larger solar projects ranging from 100 to 700 MW, the cost is approximately $1.05 per watt direct current (Wdc) for the nation.



Source: EIA.

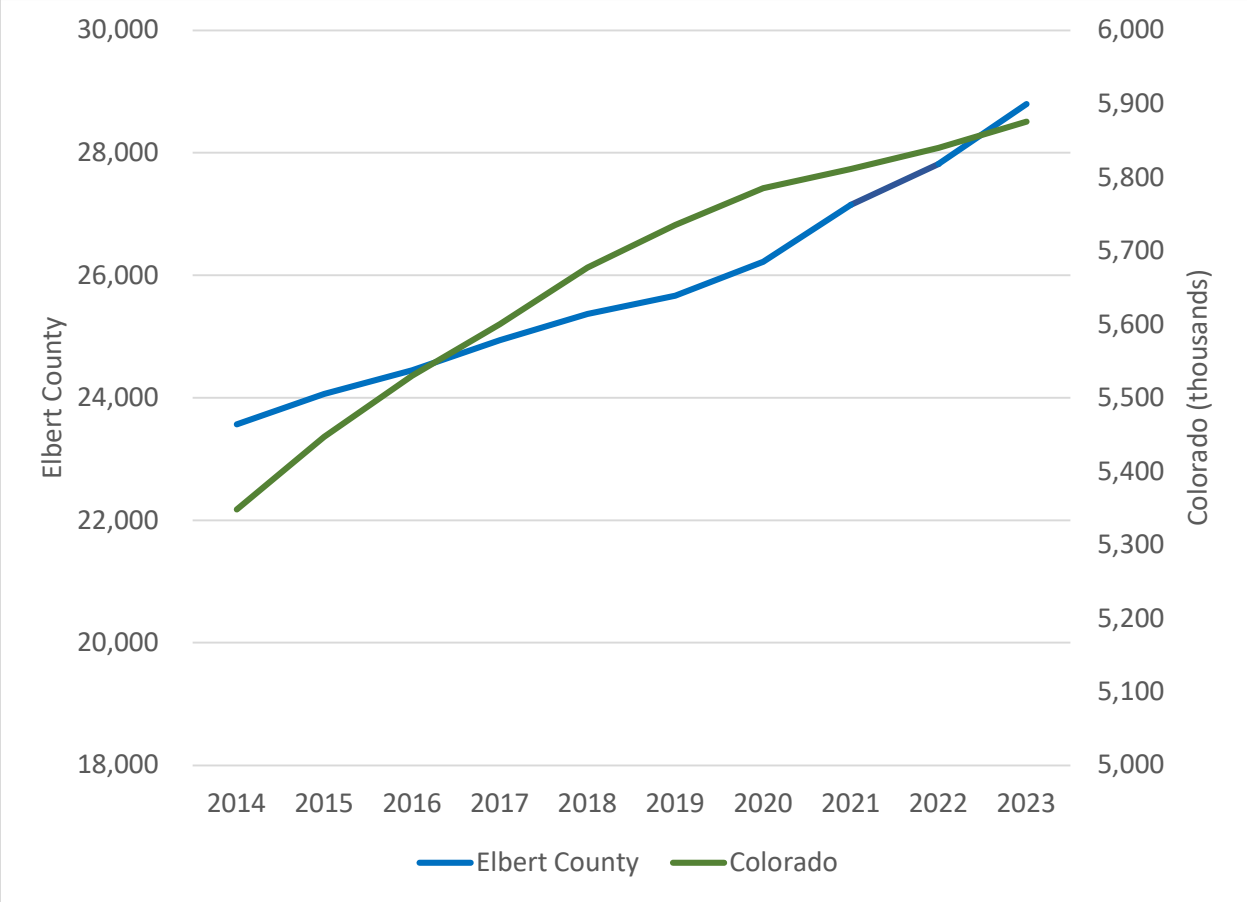
Figure 2-1. Colorado Solar Power Plants and Irradiance

3 Demographics

This section describes the demographic profile and trends of Elbert County, a rural county in eastern Colorado covering 1,851 square miles. The description of the local demographic and community trends focuses on several measures of population, household composition, race, age, and education. Every attempt has been made to provide the most current data available, however, much of the data presented is sourced from the Colorado SDO and the U.S. Census, which is generally available through 2023.

3.1 Population

The population of Elbert County was 28,795 in 2023, or about 16 residents per square mile. Figure 3-1 shows the county's population has grown consistently for the past 10 years. From 2014 through 2023, the county's population grew at an average annual rate of 2.3 percent (Colorado Department of Local Affairs 2024).



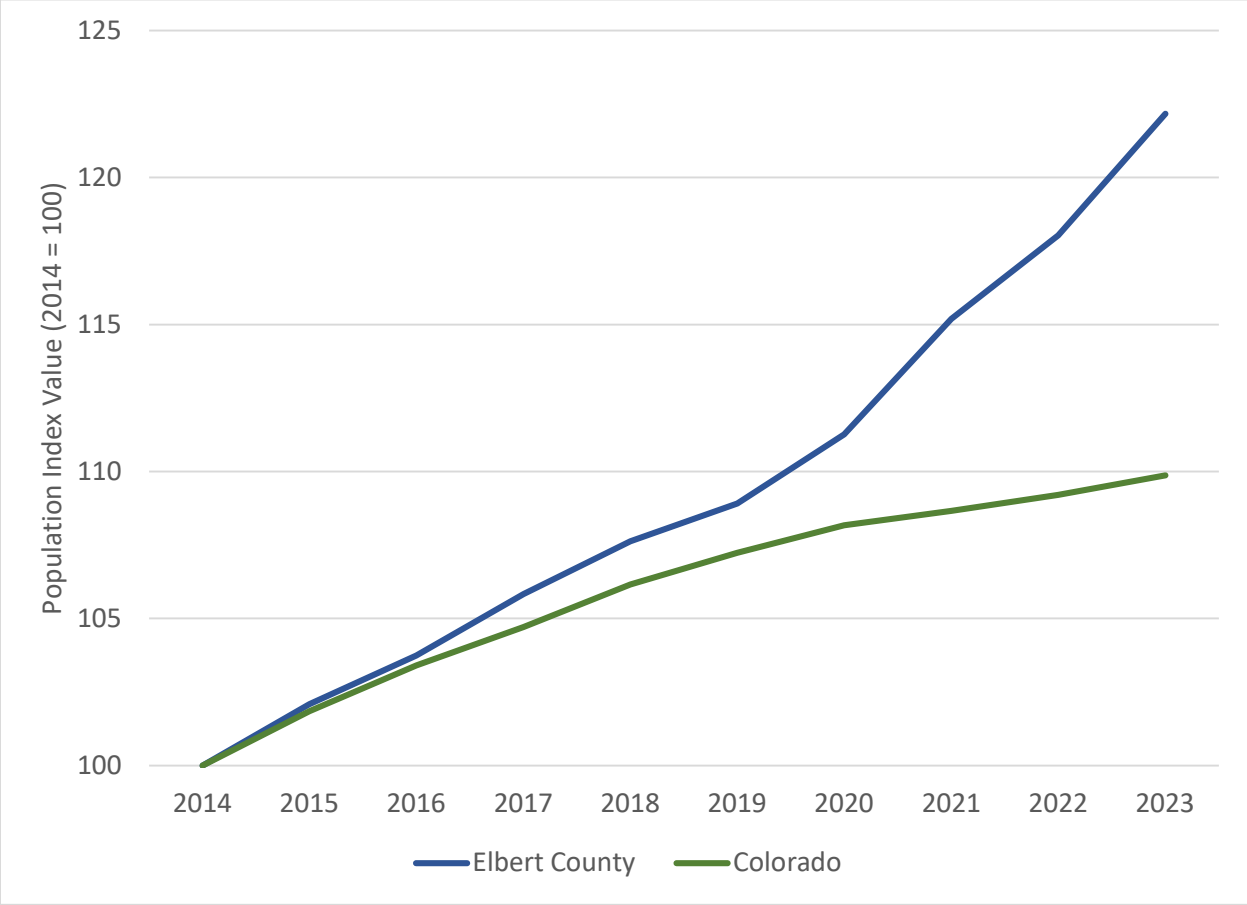
Source: Colorado SDO.

Figure 3-1. Elbert County and Colorado Population Growth, 2014 - 2023

3.2 Population Growth Rates

Figure 3-2 illustrates population trends for both Colorado and Elbert County, with the data indexed to the year 2014 to highlight relative trends between the two regions more clearly. Indexing numerical data allows for quick comparison and is common in economic and financial analysis. By normalizing data to a common starting point, the relative rate of change of variables over time is easily observed. Indexing enhances perspective of economic trends.

The graph reveals a steady increase in Colorado's population over time at an annual average growth rate of 1.1 percent. Elbert County's population growth rate matched or slightly exceeded Colorado's through 2019. Since 2020, the county's growth rate has averaged 2.9 percent annually. The SDO forecasts the population growth rate to gradually decline from 2 percent in 2024 to less than 1 percent by 2036 to near zero by 2050, when the county population is estimated to be 36,260.

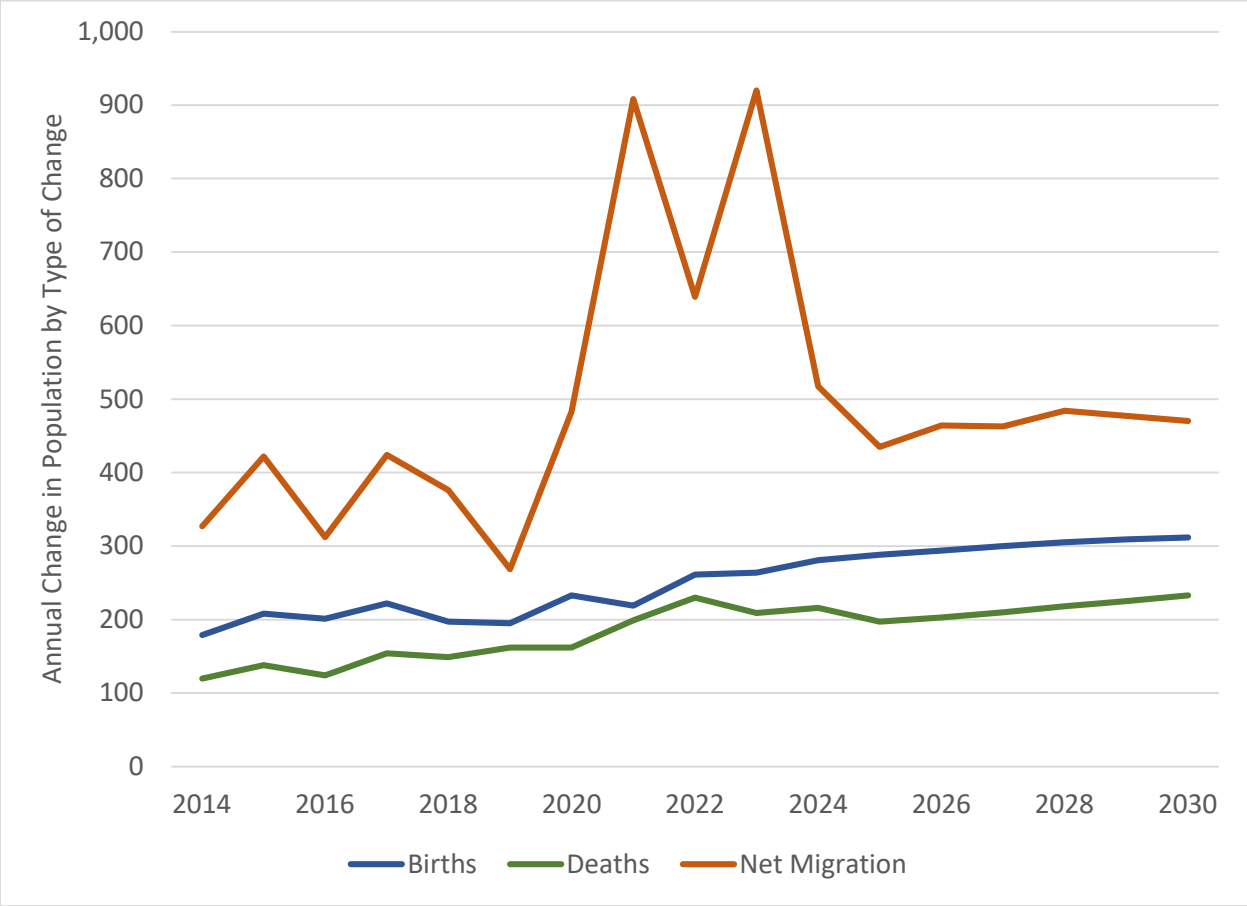


Source: Colorado SDO.

Figure 3-2. Elbert County and Colorado Population Growth, 2014 - 2023

3.3 Population Components of Change

Population change is a function of births, deaths, and net migration. The rate of natural increase is calculated as births minus deaths and rises when births outpace deaths. Net migration increases population when the number of people moving into an area exceeds the number moving away. Figure 3-3 shows the population growth was already primarily driven by net migration prior to the pandemic. From 2021 to 2023, net migration increased to roughly twice the annual amount of the preceding years due to people moving further from urban areas and housing growth in Elbert County.



Source: Colorado SDO.

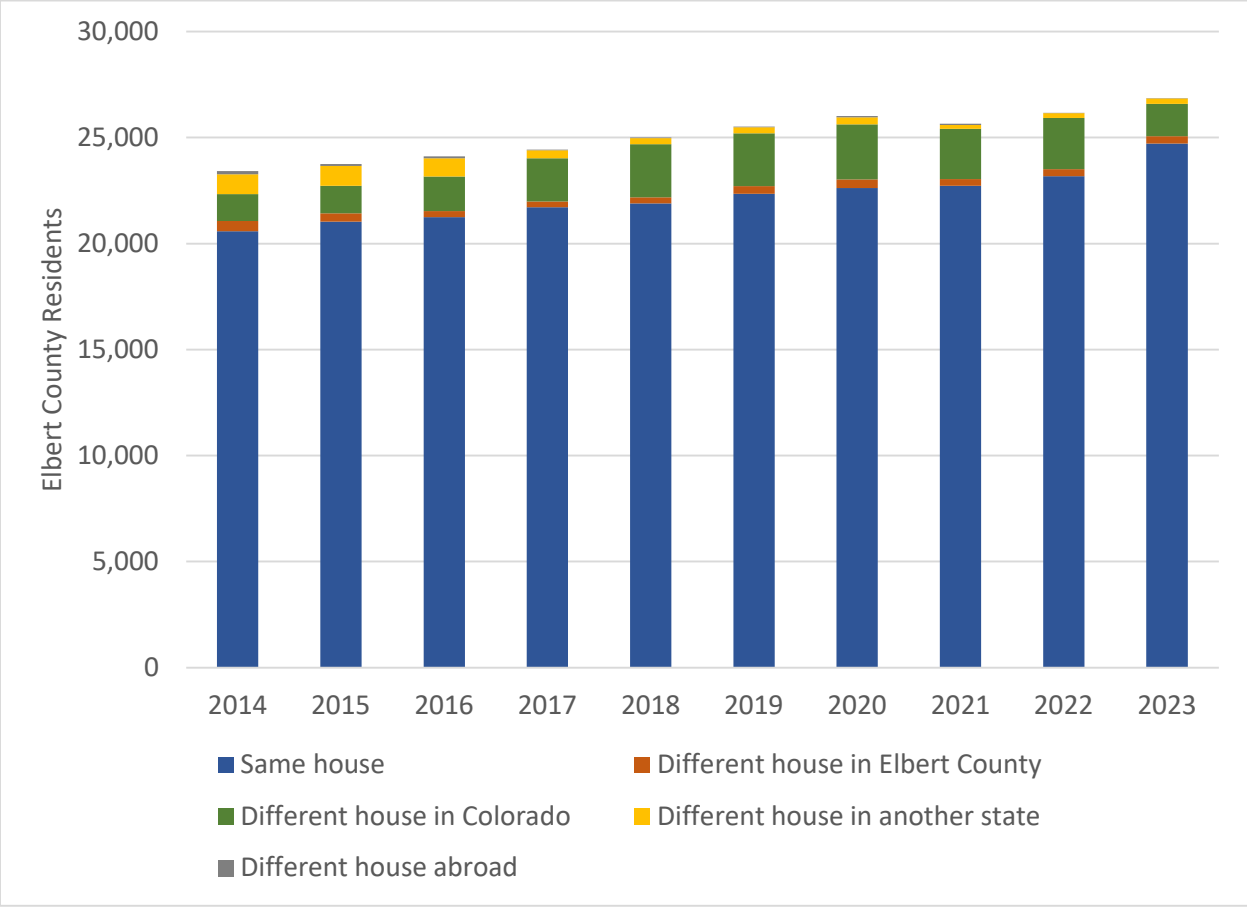
Figure 3-3. Components of Elbert County Population Change, 2014 - 2030

3.4 Population Mobility

Figure 3-4 shows the mobility of the county's population from one year to the next, based on surveying the location of residents' residence in the previous year. Increased mobility is an indication of economic activity and opportunity, as well as an indication of population change.

In 2023, 7 percent of Elbert County's population had lived outside the county in the previous year—down from 10 percent in 2014. Eight-five percent of the in-migration came from Colorado in 2023.

Figure 3-4 also shows Elbert County residents are now moving less within the county than a decade prior. In 2014, 2.1 percent of county residents moved within the county; by 2023, the share had fallen to 1.3 percent.



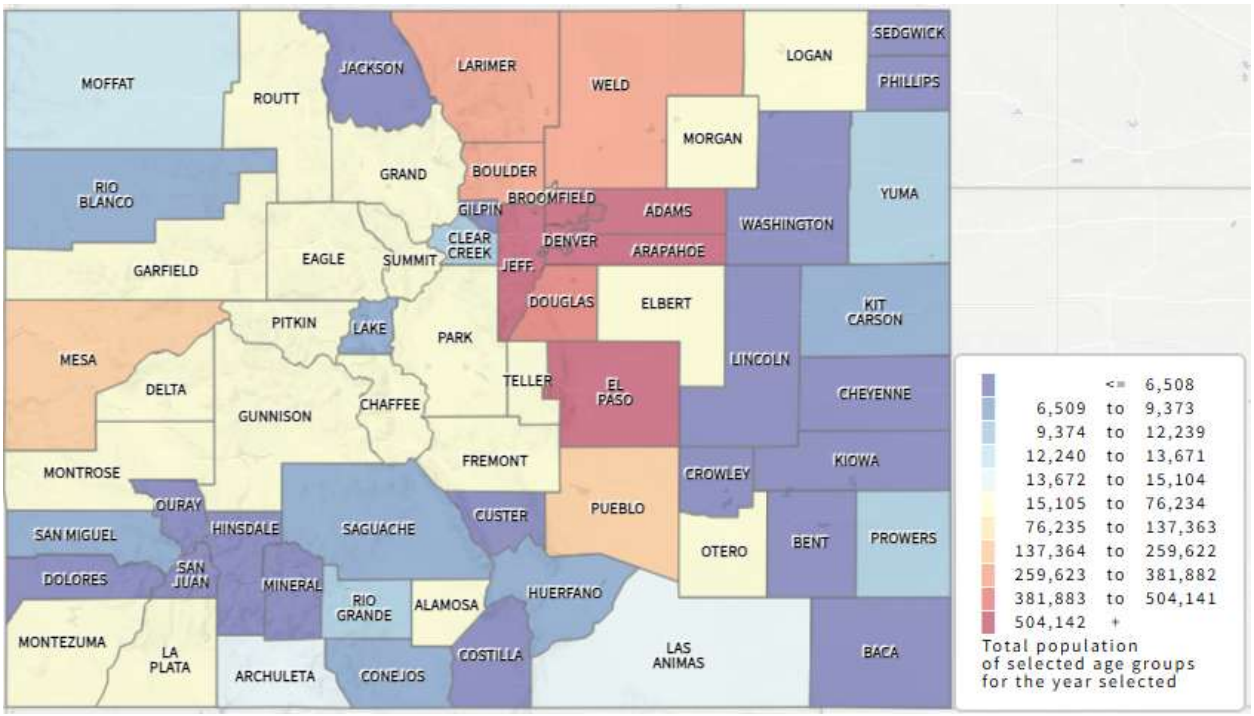
Source: U.S. Census.

Figure 3-4. Residence of Elbert County's Population "One Year Ago," 2014 - 2023

3.5 Population Density

Figure 3-5 shows that Elbert County lies between sparsely populated counties to the east and the Front Range urban corridor to the west. The Project would draw workers from neighboring urban and rural

counties who would live in the area temporarily and commute home on weekends, as well as workers from farther distances who would reside in the area temporarily.

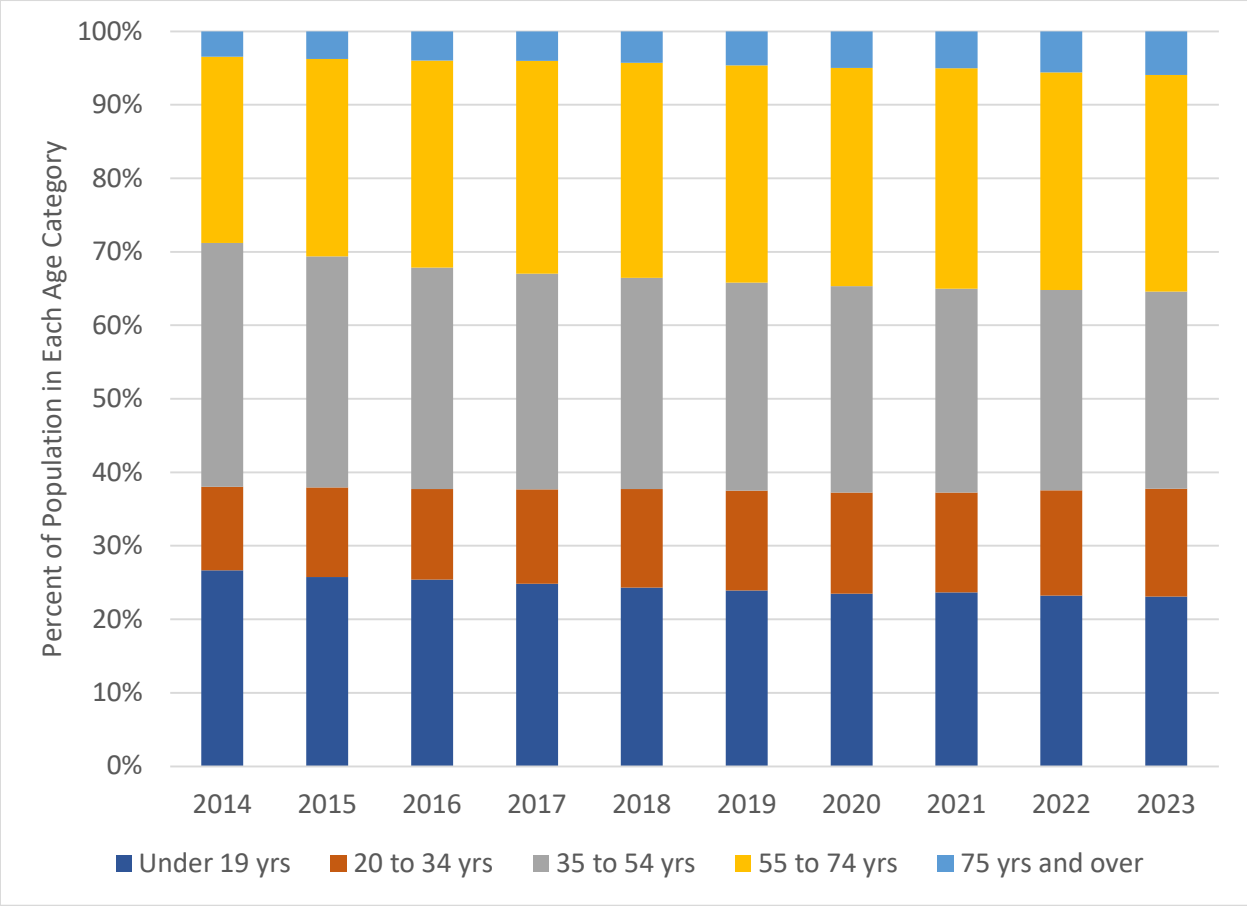


Source: Colorado SDO.

Figure 3-5. Colorado Total Population Heat Map

3.6 Age Distribution

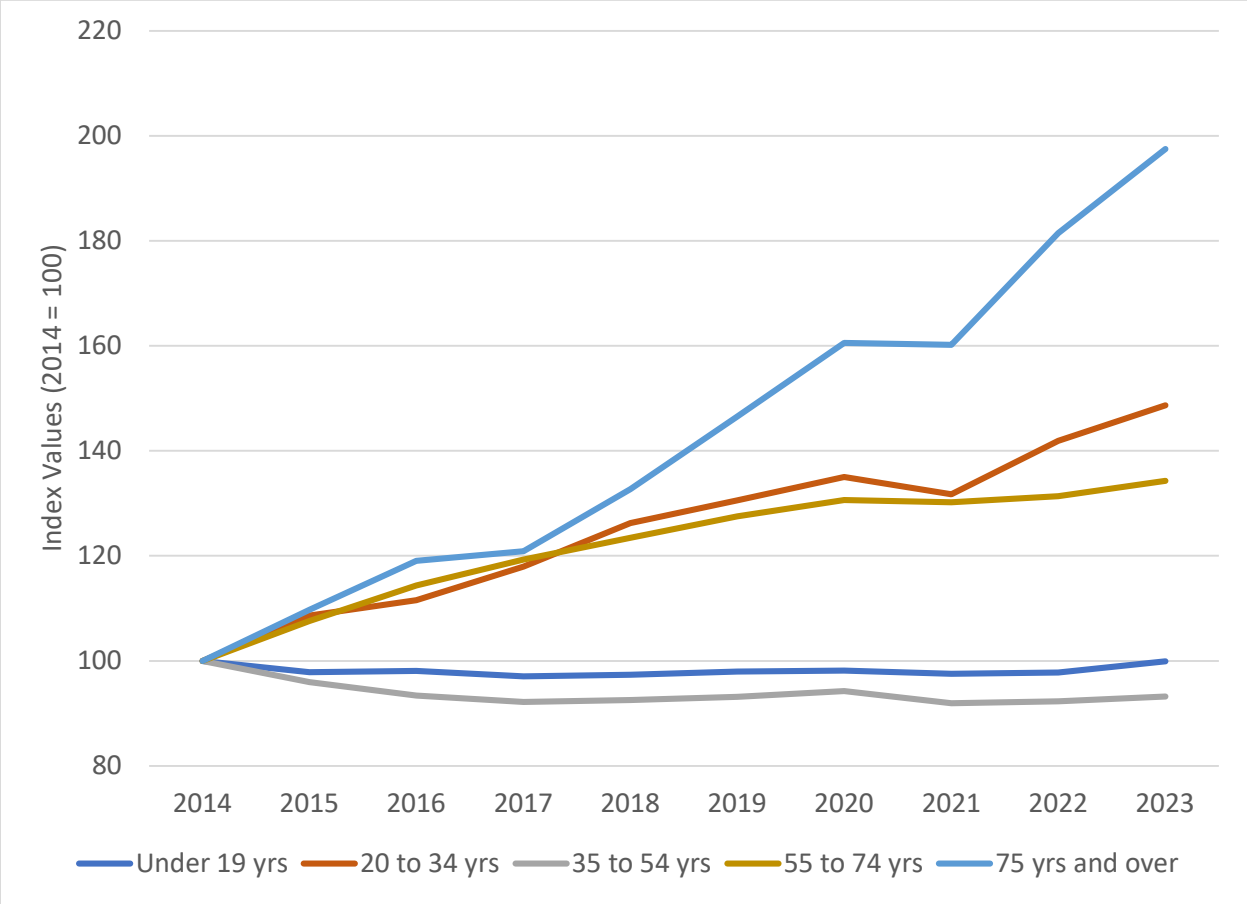
Figure 3-6 shows the age class distribution of Elbert County from 2014 to 2023. The two age categories with the greatest increases in share of population are 20 to 34 years and 75 years and older. As a result, the median age remained almost unchanged at 44 years, which is older than Colorado's overall 37.5 median age.



Source: U.S. Census.

Figure 3-6. Elbert County Age Distributions, 2014 - 2023

Figure 3-7 shows the age distribution trends as an index chart. From 2014 to 2023, the percentage of the population 55 years and older increased from 28.8 to 35.4 percent.



Source: U.S. Census.

Figure 3-7. Elbert County Age Distribution Trends, 2014 - 2023

3.7 Education Levels

Table 3-1 compares the educational characteristics of Elbert County to Colorado as of 2023. Almost 97 percent of the county's population 25 years and older have a high school degree or higher. The share of households with a broadband internet subscription was 94 percent, one percentage point greater than the state, and an increase from 91 percent prior to the pandemic in 2019.

Table 3-1. Elbert County Educational Attainment and Internet Access

Education Characteristics	Colorado	Elbert County
Percent with High School or Higher Degree	93%	97%
Percent with Bachelor's or Higher Degree	45%	35%
Percent with broadband internet subscription	93%	94%

Source: U.S. Census.

4 Elbert County Economy

According to the economic IMPLAN data, the total gross domestic product (GDP) of Elbert County was $948 million and total economic output was $1.9 billion in 2023 (IMPLAN Group LLC 2024). There are 185 industries operating in the county.

4.1 Primary Industries

Table 4-1 lists the top 15 industries in Elbert County (IMPLAN Group LLC 2024) as measured by total economic output. Home ownership is the largest "industry" with a total output of $260 million; however, as an "industry" there is no direct employment associated with it in IMPLAN, which is why it is not included in Table 4-1. The next-largest industry is the Other Real Estate category, which includes the value of operations for residential property managers, lessors of nonresidential buildings, and offices of real estate agents and brokers (offering services other than residential leasing) (Lucas 2020). Ranching and construction of single-family homes are the second- and third-largest by output.

Table 4-1. Top 15 Elbert County Industries by Total Economic Output

Industry	Total Output	Wage and Salary Jobs	Employee Compensation	Proprietor Jobs	Proprietor Income
Other real estate	$135,323,919	37.4	$2,926,352	917.5	$18,518,022
Beef cattle ranching and farming	$67,390,031	57.1	$1,620,425	1,150.4	($30,190,707)
Construction of new single-family residential structures	$58,127,859	232.5	$15,299,945	139.5	$8,239,476
Construction of other new residential structures	$48,525,486	110.7	$7,271,849	66.0	$3,894,641
Oil and gas extraction	$44,676,312	19.5	$1,679,812	67.3	$166,115
Employment and payroll of local public education	$38,033,003	675.7	$32,618,569	0.0	$0
Landscape and horticultural services	$31,457,925	125.2	$7,499,070	171.2	$4,820,471
Maintenance of nonresidential structures	$30,635,271	95.9	$6,318,672	57.6	$3,394,267
Construction of new commercial structures. Incl. farm	$28,776,413	100.2	$6,560,460	59.7	$3,468,141
Satellite all other telecommunications	$27,769,092	56.3	$8,390,918	10.9	($30,824)

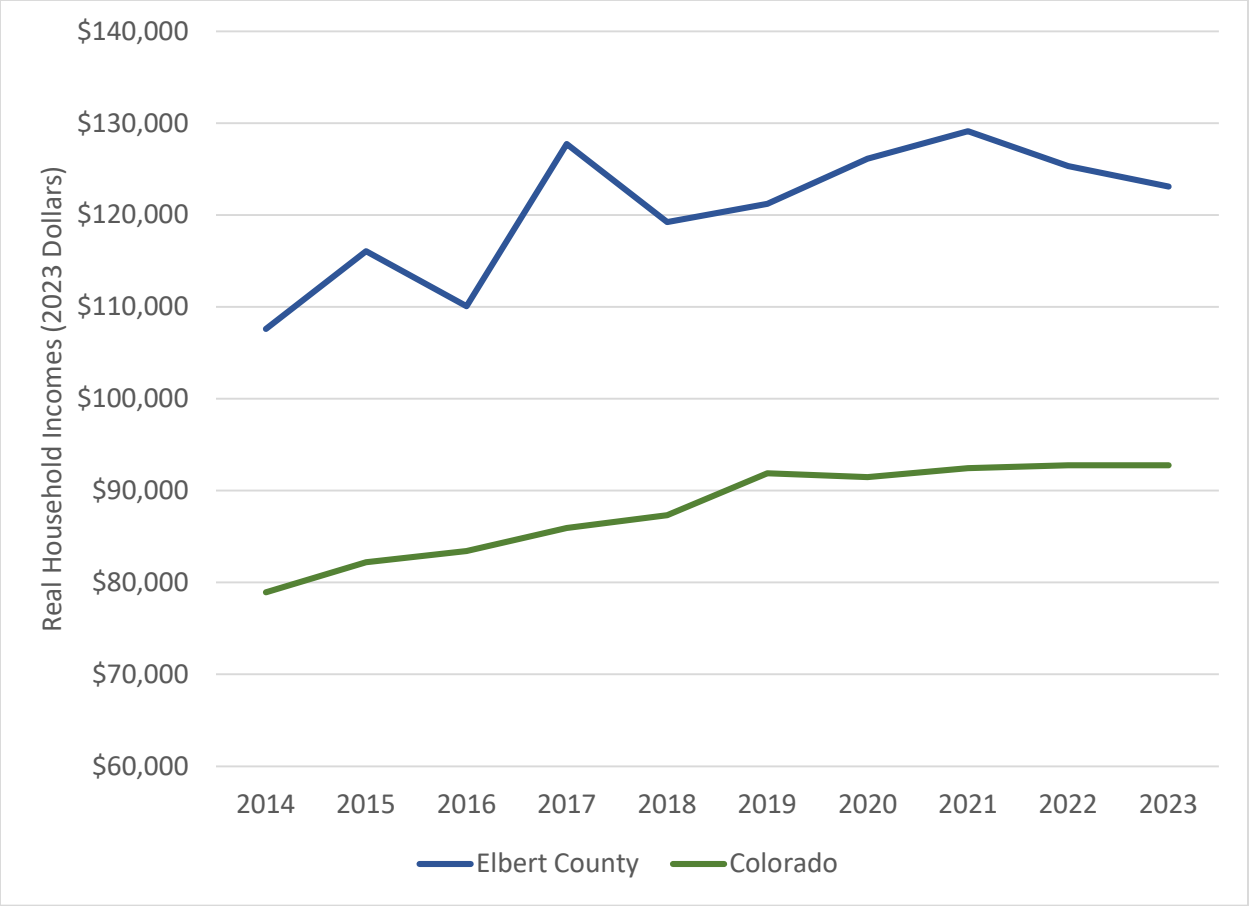
Industry	Total Output	Wage and Salary Jobs	Employee Compensation	Proprietor Jobs	Proprietor Income
Employment and payroll of local government	$27,455,723	313.6	$23,476,658	0.0	$0
Wholesale machinery, equipment, and supplies	$27,413,448	68.7	$10,096,125	35.8	$280,772
Scientific research and development services	$27,153,497	61.8	$5,664,088	65.5	$2,104,257
Custom computer programming services	$25,209,193	64.9	$11,736,103	188.2	$4,596,350
Electric power transmission and distribution	$23,961,837	10.4	$2,109,671	7.6	$810,327

Source: IMPLAN.

4.2 Household Income

The U.S. Census Bureau provides annual estimates of income and poverty statistics for all school districts, counties, and states through the Small Area Income and Poverty Estimates (SAIPE) program. SAIPE generally has lower variance for small areas like counties, especially those with populations below 65,000, because it combines American Community Survey data with other sources. For counties, SAIPE typically provides the best single-year estimates of median household income (U.S. Census Bureau 2024).

The median household income in Elbert County in 2023 was $123,083—significantly above the state median of $92,790. Figure 4-1 compares the county and state median income trends adjusted for inflation. Over the past 10 years, in real 2023 dollars, Elbert County's median household income increased at an annual average growth rate of 1.7 percent, compared to Colorado's 1.8 percent. Since 2021, Elbert's median has decreased at an annual average rate of 2.4 percent, while Colorado's increased by 0.2 percent annually.



Source: U.S. Census.

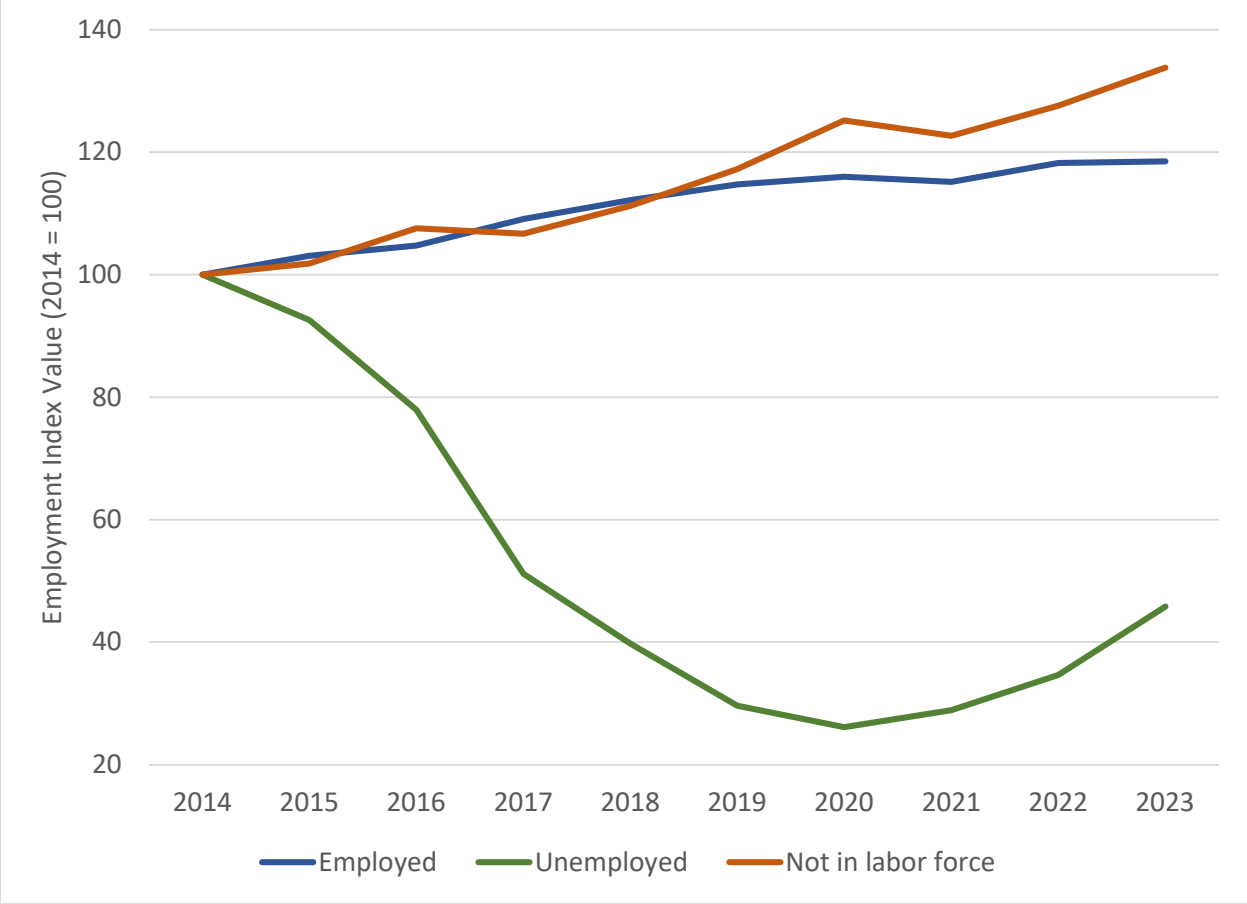
Figure 4-1. Elbert County and Colorado Median Household Incomes

5 Employment

This section describes the workforce and current employment within Elbert County.

5.1 Labor Force Trends

The labor force includes individuals who are either employed or actively seeking work. Those without a job but actively seeking employment are classified as unemployed, whereas individuals not seeking work are excluded from the labor force. Over the last decade (from 2014 to 2023), the number of civilian employed people 16 years and older in Elbert County increased at an average annual rate of 1.9 percent (Figure 5-1). The number of people not in the labor force increased at a rate of 3.3 percent.

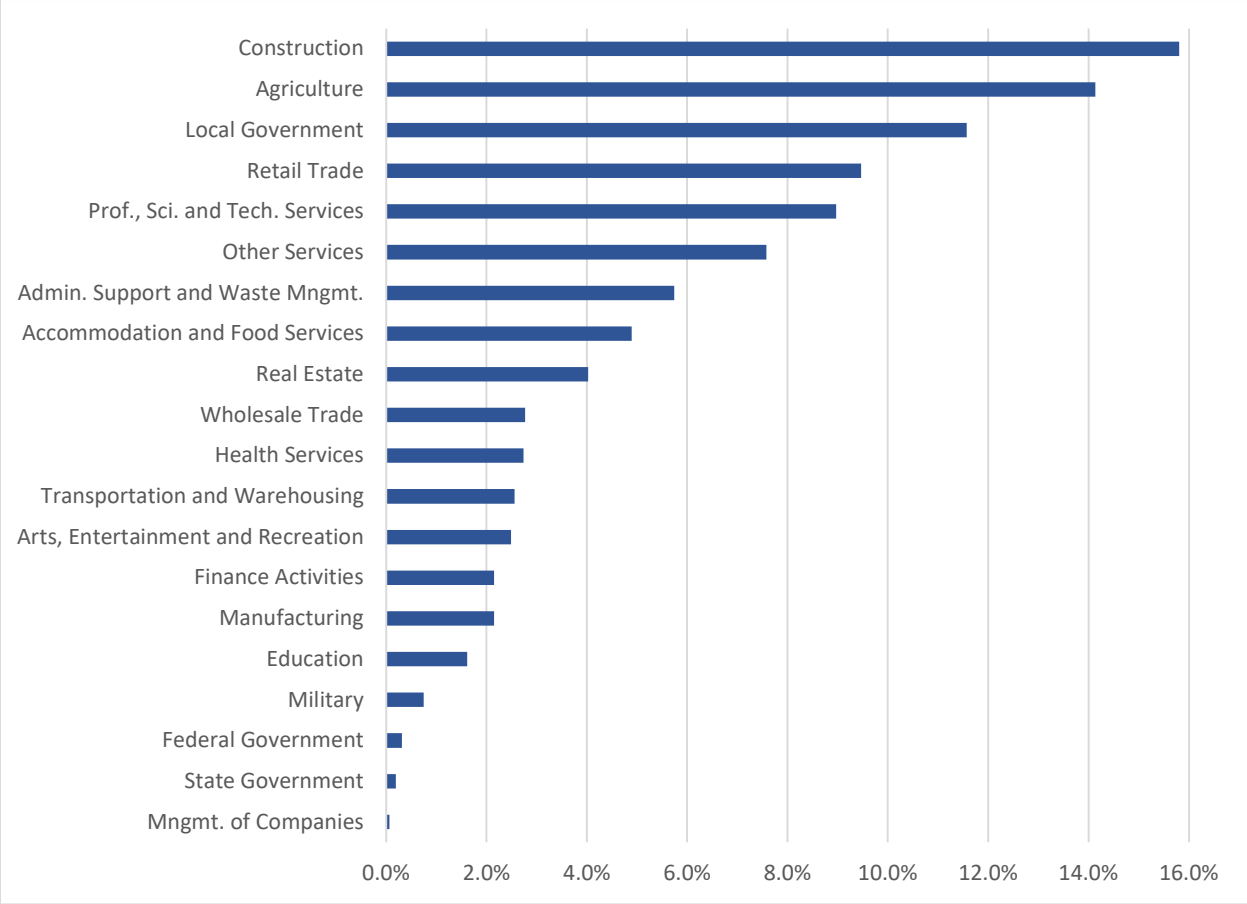


Source: U.S. Census.

Figure 5-1. Elbert County Labor Force and Employment

5.2 Employment by Industry

Real estate and cattle ranching are the primary industries in Elbert County (Section 4.1). As a result, almost a third of the jobs in the county are in either construction or agriculture (Figure 5-2). Retail and local government combined comprise another 21 percent of the jobs (Colorado Department of Local Affairs 2023).



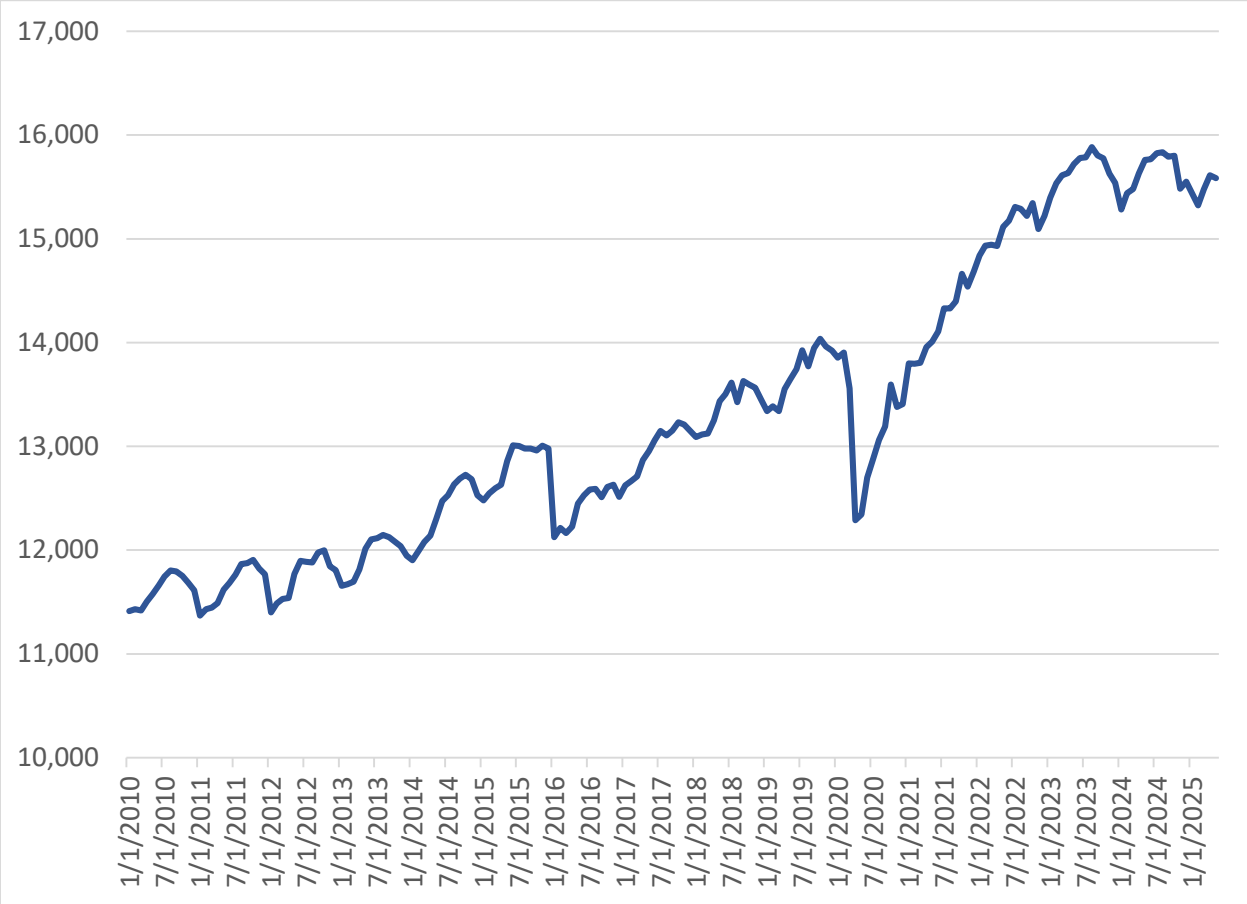
Source: Bureau of Labor Statistics (BLS).

Figure 5-2. Elbert County Share of Jobs by Industry

5.3 Current Employment

As of May 2025, there were 15,586 employed people in Elbert County (Figure 5-3). Since the pandemic, employment peaked in August 2023 and has remained at the same level for the past 2 years given seasonal variation (U.S. Bureau of Labor Statistics 2025).

In terms of seasonality, employment shows a consistent pattern of peaking in October and falling to a low in January. This pattern is consistent with an agricultural economy.



Source: BLS.

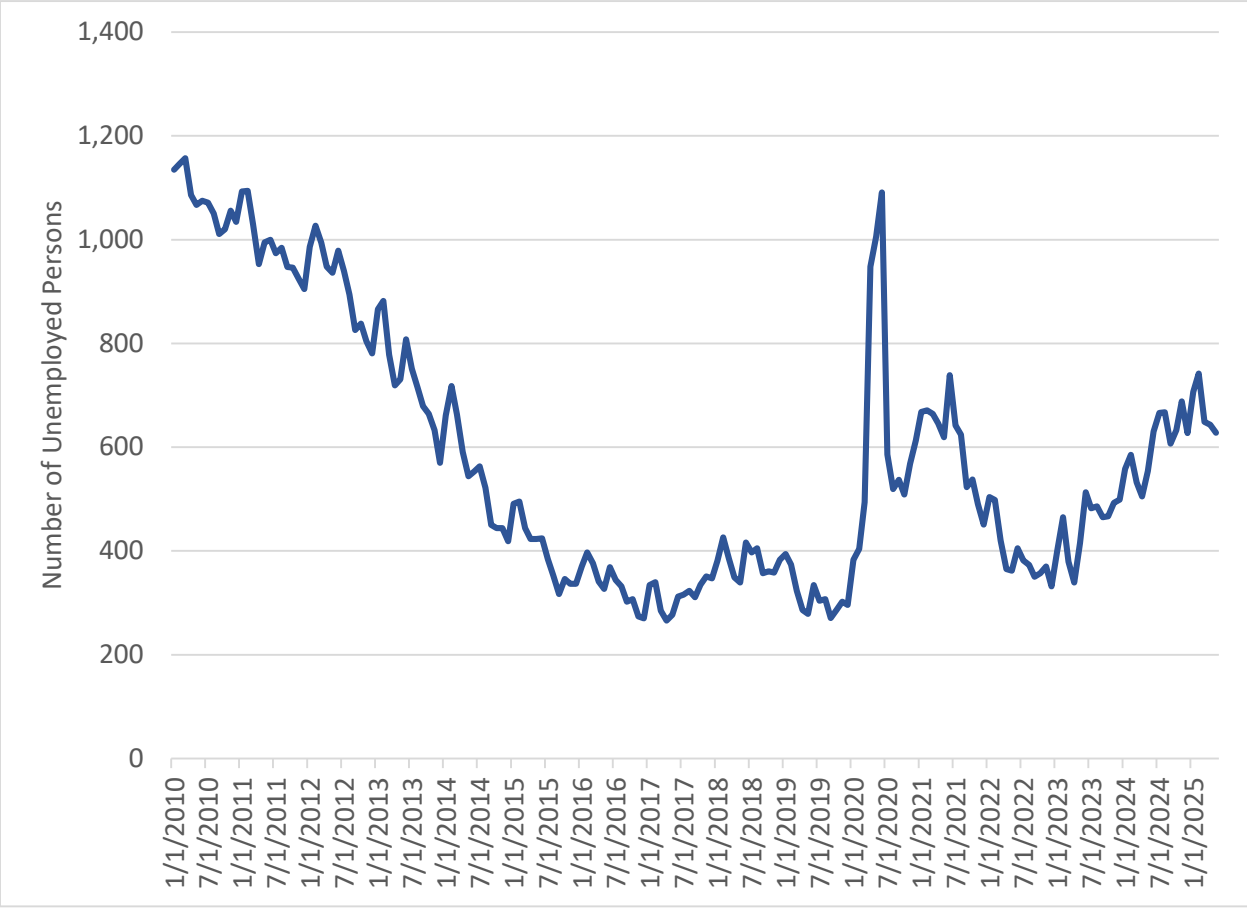
Figure 5-3. Monthly Employed People in Elbert County

5.4 Current Unemployment

As of May 2025, there were 628 unemployed people in Elbert County (Figure 5-4) (U.S. Bureau of Labor Statistics 2025), representing a 3.9 percent unemployment rate (U.S. Bureau of Labor Statistics 2025). After peaking during the pandemic, unemployment fell to a low in December 2022 with only 332 unemployed people. Since then, unemployment has trended upward.

Although the unemployment rate is low, the number of unemployed people is greater than the workforce required to construct the Project, which could offer work opportunities to unemployed people with the specific skills in addition to supporting those currently employed (refer to the Key Terminology section and Appendix A). Project operations would also provide employment opportunities for some unemployed people.

Project construction would have a positive impact on employment in Elbert County and put some downward pressure on the unemployment rate. The Project's operations would not have a significant impact on the unemployment rate.



Source: BLS

Figure 5-4. Monthly Unemployed People in Elbert County

5.5 Characteristics of Labor Pool

Location quotients (LQs) are a useful means for describing the characteristics of a local labor pool. The LQ measures an industry's share of its regional economy relative to the industry's share of the national economy. When a regional industry's LQ is greater than 1.0, the region will have a high concentration of firms and/or employees in that industry, and the region will likely export that industry's products or services. Likewise, an LQ less than 1.0 indicates a low concentration of that industry, and net imports are likely.

An industry's LQ is often considered along with the number of people it employs in that region. Local economies are particularly sensitive to the changes and trends of their industries that have high LQs and many employees. Perhaps the best example of this is Puget Sound's dependence on Boeing in the 1970s.

Table 5-1 presents LQs for Elbert County as of 2023 based on the BLS Standard Occupational Classification (SOC) codes at the two-digit level. Not surprisingly, the county's farming and construction industries have the highest LQs.

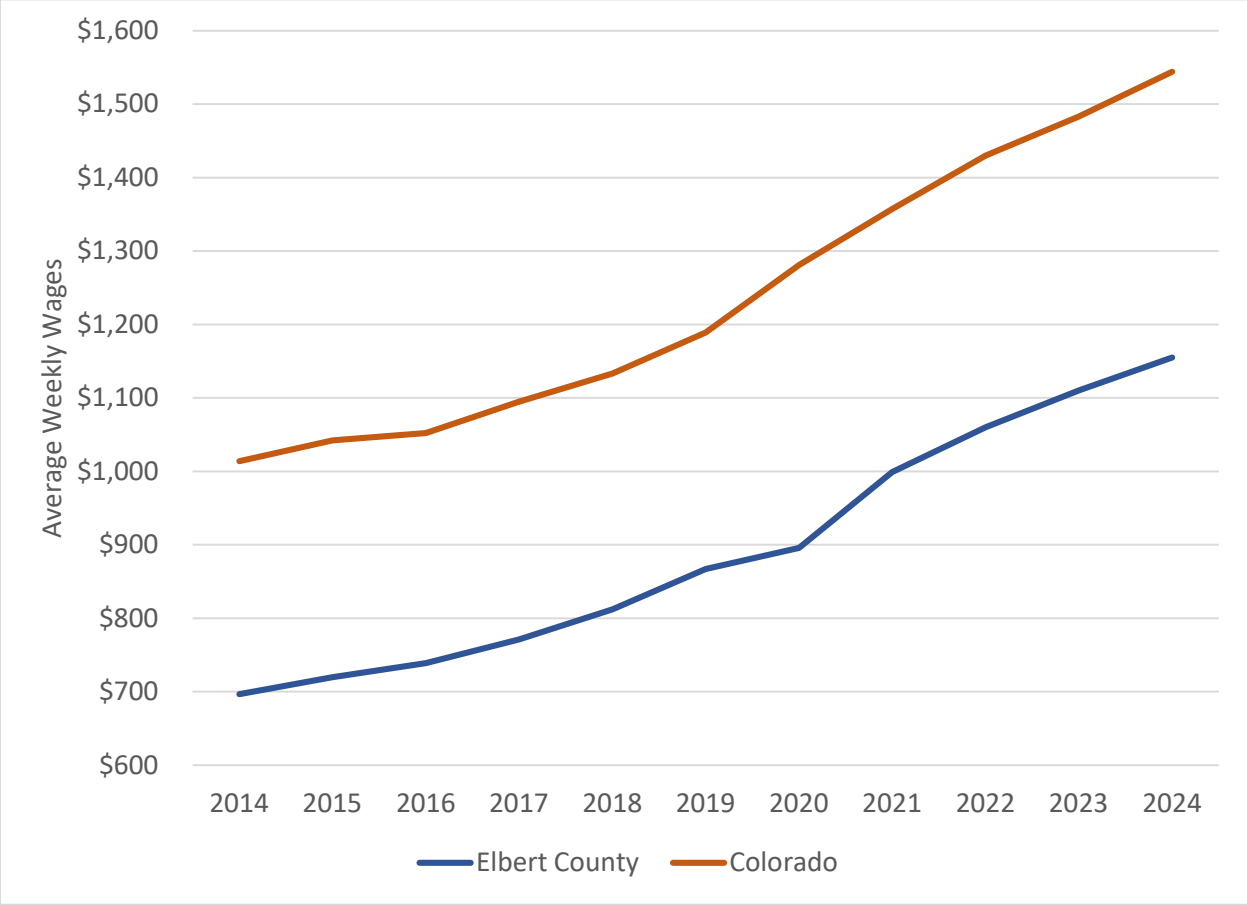
Table 5-1. Location Quotients for Elbert County

Occupation Code	Occupation	Elbert County's LQ
11-0000	Management	1.01
13-0000	Business and Financial Operations	0.83
15-0000	Computer and Mathematical	0.79
17-0000	Architecture and Engineering	0.88
19-0000	Life, Physical, and Social Science	0.73
21-0000	Community and Social Service	0.55
23-0000	Legal	0.38
25-0000	Educational Instruction and Library	1.68
27-0000	Arts, Design, Entertainment, Sports, and Media	0.59
29-0000	Health Care Practitioners and Technical	0.29
31-0000	Health Care Support	0.28
33-0000	Protective Service	1.03
35-0000	Food Preparation and Serving	0.95
37-0000	Building and Grounds Cleaning and Maintenance	1.43
39-0000	Personal Care and Service	0.80
41-0000	Sales and Related	1.03
43-0000	Office and Administrative Support	0.86
45-0000	Farming, Fishing, and Forestry	6.20
47-0000	Construction and Extraction	3.05
49-0000	Installation, Maintenance, and Repair	1.41

Occupation Code	Occupation	Elbert County's LQ
51-0000	Production	0.53
53-0000	Transportation and Material Moving	0.74
99-0000	Military	1.13

5.6 Wages

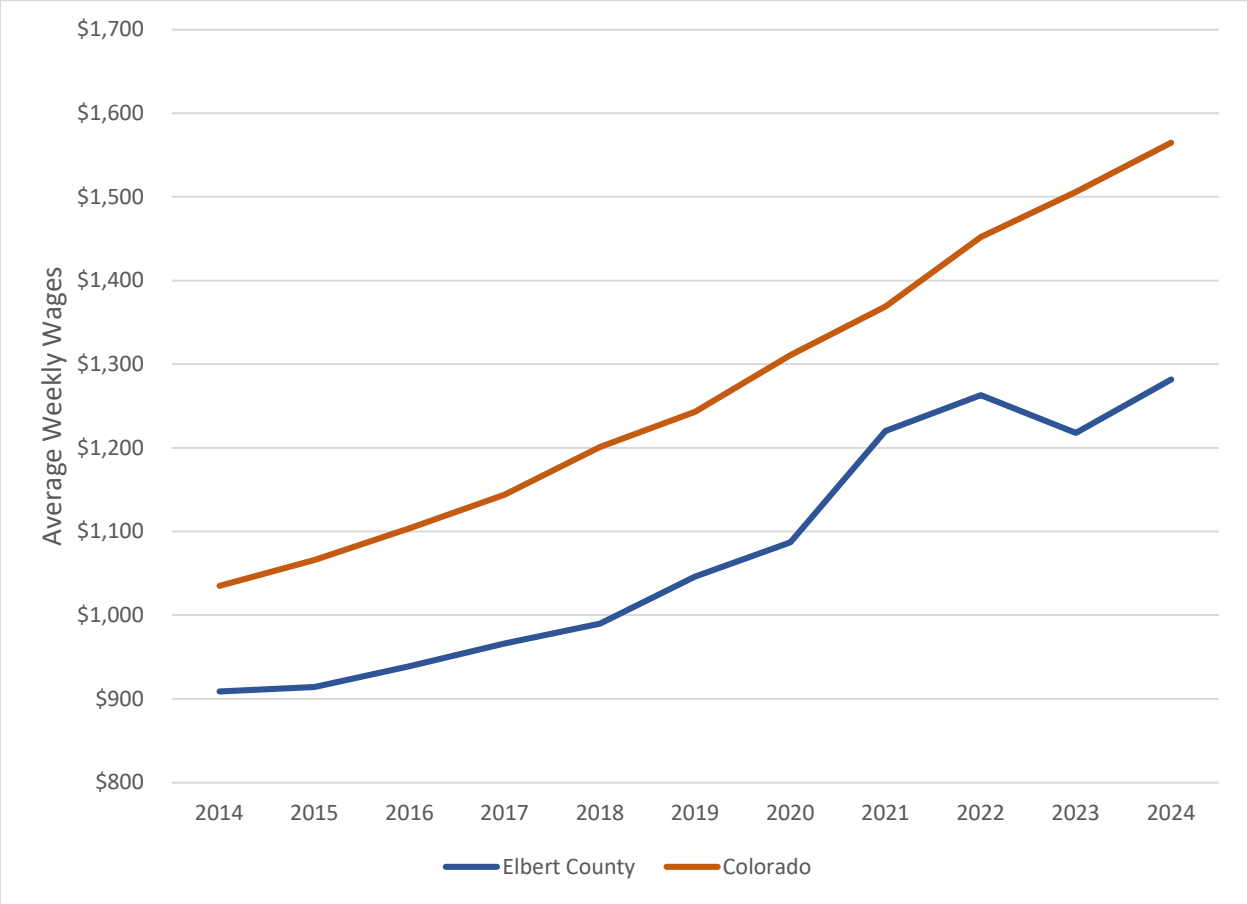
Figure 5-5 illustrates average weekly wages for Elbert County and Colorado. This averages all industries to show the difference in wages between the state and the county. Colorado's average weekly wages in 2024 were $1,544, while Elbert County's was $1,155. Elbert County's average weekly wages are 25 percent below the state average.



Source: Colorado Department of Labor and Employment.

Figure 5-5. Average Weekly Wages in Elbert County and Colorado

Figure 5-6 shows average weekly wages just for the construction industry. In 2024, the construction average weekly wage in Colorado was $1,565, while in Elbert County it was $1,282. Elbert County's construction average weekly wages are 18 percent below the state average.



Source: Colorado Department of Labor and Employment.

Figure 5-6. Average Weekly Construction Wages in Elbert County and Colorado

Table 5-2 shows the number of businesses operating in each industry in Elbert County along with average annual employment and average annual wage, which does not include supplements (benefits) to wages.

Table 5-2. Elbert County Employment and Average Wage by Industry

Elbert County 2023 Industry	Establishments	Average Employment	Average Annual Total Wage
Construction	196	1,020	$66,666
Educational Services	19	761	$38,224
Retail Trade	44	571	$33,771
Accommodation and Food Services	32	392	$21,733
Public Administration	20	391	$59,713
Professional and Technical Services	163	347	$108,527
Administrative and Waste Services	63	256	$67,617
Wholesale Trade	54	213	$129,204
Other Services, Ex. Public Admin	60	144	$57,476
Manufacturing	26	131	$53,609
Health Care and Social Assistance	42	128	$57,201
Finance and Insurance	41	114	$97,306
Information	16	90	$94,525
Arts, Entertainment, and Recreation	9	78	$26,772
Agriculture, Forestry, Fishing & Hunting	18	64	$38,786
Transportation and Warehousing	38	57	$57,792
Mining	6	50	$40,147
Real Estate and Rental and Leasing	38	47	$147,765
Management of Companies	11	26	$118,308
Utilities	3	6	$127,453
Unclassified	5	2	$70,080

Source: Colorado Quarterly Census of Employment and Wages.

6 Housing

Although the Applicant would strive to hire as many local workers for construction as possible, the share of local hiring would depend on the availability of skilled labor in the region at the time of construction. A portion of the construction workforce would most likely require temporary housing during all or part of construction. This section evaluates the supply of currently available local housing and the demand for housing from workers who would reside in the county temporarily during construction. Actual rental market conditions in 2028 may vary.

6.1 Projected Housing Requirements

Constructing the Project would require a direct workforce of 360.0 during the 1 year of construction. Residents working on Project construction presumably already have housing; however, workers residing in the region temporarily would need to find housing. Table 7-2 (Section 7.2.3.1) shows the county's electric power and construction workforce exceeds the Project's needs. However, many factors will determine the share of the Project's construction employment that would be filled by local residents including, but not limited to, selection of an engineering, procurement, and construction (or EPC) contractor; demand from other projects at the time of construction; specific skills required; scheduling; and competitiveness of compensation. For those workers relocating temporarily, some may live on the Front Range and return home on the weekends, while others may reside temporarily for the duration of construction. Indirect and induced employment impacts would support existing jobs, such as adding grocery store shifts or extra hours for a mechanic.

6.2 Housing Unit Inventory

Table 6-1 shows Colorado SDO data for housing units. In 2024, there were 11,138 total housing units, with 481 of the units vacant at the time of the census. Occupied units grew at an average annual growth rate (AAGR) of 2.4 percent from 2016. Vacant units increased at 3.4 percent AAGR, although the rate is only 2 percent using the compounded annual growth rate formula given the data variance.

Table 6-1. Elbert County Housing Unit Inventory

	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total Housing Units	9,236	9,328	9,463	9,673	9,858	10,144	10,550	10,768	11,138
Occupied Housing Units	8,827	8,997	9,142	9,242	9,432	9,738	10,053	10,332	10,657
Vacant Housing Units	409	331	321	431	426	406	497	436	481
Vacancy Percent	4.4%	3.5%	3.4%	4.5%	4.3%	4.0%	4.7%	4.0%	4.3%
Household Population to Total Housing Units Ratio	2.64	2.67	2.67	2.65	2.65	2.67	2.63	2.67	2.63

Source: Colorado State Demography Office.

According to the U.S. Census Bureau definition, adopted by the SDO, a housing unit is vacant if no one is living in it at the time of the interview unless its occupants are only temporarily absent. In addition, a vacant unit may be one that is entirely occupied by people who have a usual residence elsewhere.

6.3 Housing Tenure

Approximately 6 percent or 10,657 of the occupied housing units in Elbert County are rented (Table 6-2). This ratio is roughly half of what it was in 2016.

Table 6-2. Housing Tenure, 2016 and 2023

Tenure and Household Size by Tenure	2016	2023
Occupied housing units	8,827	10,657
Owner-occupied	7,837	10,063
Renter-occupied	990	594
Average household size of owner-occupied unit	2.82	2.82
Average household size of renter-occupied unit	2.83	2.54

Source: Colorado SDO, U.S. Census.

6.4 Housing Needs Assessment

The 2022 Elbert County Needs Assessment, based on 2020 data, found that rental inventory is limited throughout the county (Gruen Gruen + Associates 2022). There are very few purpose-built rental apartment buildings; thus, most of the rental inventory is single family homes. Over the past 5 years new units have been constructed and further additional units would likely be added through 2027, creating the possibility of more rental opportunities for workers choosing to reside temporarily in Elbert County.

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7 Modeling Economic Impacts

This and the following sections estimate the economic activity and benefits that would occur in Elbert County and Colorado as a result of constructing and operating the Project. All costs are presented in 2025 dollars unless otherwise noted. Fiscal benefits arising from the purchase and importation of specialized equipment are presented in Section 9.3 9 .

7.1 Methodology

An Input-Output (I-O) approach is used to model the economic impacts from constructing, operating, and maintaining the Project over its planned lifetime in the context of county-level data representing Elbert County's economy and data representing the rest of Colorado's economy. This assessment estimates the direct impacts resulting from development of the Project, as well as the indirect (supply chain spending) and induced (labor income spending) impacts. Employment, labor income, intermediate expenses, and tax revenues are provided. The IMPLAN I-O model is used to estimate Project impacts (IMPLAN Group LLC 2024). IMPLAN's methods are described in Appendix A.

7.2 IMPLAN Model Inputs

Developing an IMPLAN model for constructing the Project requires summary development plans, capital and operating expenditure budgets, the duration of construction in years, the starting year of construction, and a defined region of influence. In this case, the Project consists of a PV capacity of 199 megawatts of alternating current (MWac), BESS capacity of 100 MWac, and a substation. We assume the Project would be constructed over 12 to 18 months in 2028, followed by 40 years of operations. BESS augmentation occurs in Years 8, 15, and 26, with a significant portion occurring in year 26.

7.2.1 Capital Construction Budget

A summary projected capital budget is used as the basis for deriving the direct economic impacts resulting from construction. The proposed Project would include the following activities:

- Site preparation
- Grading and earthwork
- Dust control
- Panel installation
- Concrete foundations
- Structural steel work
- Electrical/instrumentation work
- Collector line installation
- Stormwater management facilities
- Architecture and landscaping

Table 7-1 shows a breakout of the three capital expenditure categories—PV generation, BESS, and substation—separating basic construction and assembly expenses from specialized equipment to be purchased from vendors outside Elbert County.

Specialized equipment is manufactured outside the region and imported to the site. The importation of equipment has fiscal impacts, presented in Section 9 , but not local economic impacts. Examples of specialized equipment items include the following:

- PV modules
- BESS
- Interconnection and substation equipment

Basic construction materials, such as concrete, are generally produced locally and thus have local economic impact. A workforce spending its labor income within the region would also have local economic impact as the spending ripples through the economy. Therefore, basic materials and labor to assemble the solar and storage facility represent the direct investment or impact to the economy that is modeled using IMPLAN. Examples include the following:

- Site preparation
- Construction of access and internal circulation roads
- Grading and earthwork
- Dust control
- Panel installation
- Concrete foundations
- Structural steel work
- Electrical/instrumentation work
- Collector line installation
- Stormwater management facilities
- Architecture and landscaping

Table 7-1. Shepherd Solar Project Capital Construction Budget Summary

Capital Expenditure Category	Construction Expenses [1]	Specialized Equipment [2]	Transaction Taxes on Specialized Equipment [3]	Total Capital Budget to Construct
PV	$133,769,715	$153,532,343	$1,535,323	$288,837,381
BESS	$50,882,145	$112,421,215	$4,384,427	$167,687,787
Interconnection	$10,566,725	$11,828,034	$461,293	$22,856,052
Total	**$195,218,585**	**$277,781,592**	**$6,381,044**	**$479,381,220**

Source: Shepherd, Consulting Team.

(1) Labor and basic materials. Includes transaction taxes.

(2) PV panels, BESS, inverters, etc. Does not include transaction taxes.

(3) The Project would be liable for sales and use taxes at the unincorporated county rate, assuming possession is taken in Elbert County. Purchase of solar electric generation equipment is exempt from state sales (see Section 9.6 for details).

7.2.2 Delineation of Impact Area

Given the rural nature of the county economy, a multi-region input-output (MRIO) model framework is adopted to show portions of labor and materials flowing between regions of the state, including the urban centers, which would also be impacted by Project construction and operations. Appendix A

provides a further description of the MRIO model structure. Within each region, construction and operations events were modeled using IMPLAN's Industry Impact Analysis (IIA) event type, which allows each region to have a unique production function realistically capturing likely sourcing of labor and materials as well as sales tax rates. Economic impact model results are estimated averages across each of these two regions (Elbert County and entire state of Colorado).

7.2.3 Local Employment Opportunities

IMPLAN assumes construction "supports" or hires existing job holders rather than creating new jobs. However, the ability of a local workforce to support a construction project depends on the size of the workforce and the employment required to construct the Project. Further, specific skills or specialized trades may need to be recruited from outside a region, again depending on the nature of the local workforce and Project construction requirements.

7.2.3.1 Opportunities for Employment of Local Citizens

Table 7-2 shows there were over 1,000 electric power transmission and construction wage and salary employees in Elbert County in 2023 and over 600 proprietors, for a total annual average of 1,630.6.

Table 7-2. Elbert County Electric Power and Construction Employment

Employment Occupation Description	Wage & Salary	Proprietor	Total
Electric power transmission and distribution	10.4	7.6	18.0
Construction of new health care structures	35.9	21.6	57.5
Construction of new manufacturing structures	42.4	25.3	67.7
Construction of new power and communication structures	71.5	46.9	118.4
Construction of new educational and vocational structures	61.7	34.5	96.2
Construction of new highways and streets	79.1	46.0	125.1
Construction of new commercial structures, including farm	100.2	59.7	159.9
Construction of other new nonresidential structures	65.5	38.5	104.0
Construction of new single-family residential structures	232.5	139.5	372.0
Construction of new multifamily residential structures	48.3	29.0	77.3
Construction of other new residential structures	110.7	66.0	176.6
Repair construction of nonresidential structures	95.9	57.6	153.5
Repair construction of residential structures	48.0	30.4	78.3
Repair construction of highways, streets, bridges	16.4	9.9	26.3
Total	**1,018.4**	**612.2**	**1,630.6**

Source: IMPLAN.

Construction of the Project would create opportunities for these industries specifically and support their workforces. Actual employment would depend on construction phase scheduling, individual worker availability, and skills-matching.

7.2.3.2 Training and Retraining Potential

The Project presents a strategic opportunity to advance workforce development and create opportunities for low-income and minority populations in Elbert County. The solar Project would create construction and operational roles that require minimal prior experience, creating opportunities for individuals transitioning from agriculture, service-sector, or other backgrounds, especially those characterized by frequent underemployment.

7.2.4 Construction Model Inputs

To accurately model the local economic activity that would result from Project construction, the budget for construction expenses ($195,218,585) is reduced to exclude off-site expenses such as engineering, design, permitting, and other corporate expenses, which are estimated to be 35 percent of the total. Table 7-3 shows the total amount of local investment in Colorado would be $126,892,080 or 65 percent of the $195 million construction expenses budget, roughly 40 percent of the total capital budget.

IMPLAN's IIA modeling option using IMPLAN Industry 47 (Construction of New Power and Communication Structures) was adopted. The equipment purchased outside the county would have fiscal impacts; however, these purchases would not have other economic impacts in the region and thus are not included in the IMPLAN model. These equipment purchases do generate local fiscal impacts (see Section 9).

Table 7-3. Construction Phase Inputs for IMPLAN Model

Capital Expenditure Category	Construction Expenses [(1)]
PV	$86,950,315
BESS	$33,073,394
Interconnection	$6,868,371
Total	**$126,892,080**

(1) Labor and basic materials. Includes sales and use taxes.

Economically, Elbert County is a relatively small county. In 2023, full-time equivalent (FTE) employment in Elbert County's Industry 47 was approximately 118. The MRIO model framework captures the distribution of economic impacts across the county and the rest of Colorado. The nature of the impacts varies as well; thus, a unique production function was constructed for each region. Table 7-4 shows the employment and direct total output (direct construction spending) allocated to each region.

Table 7-4. Distribution of Construction Employment and Direct Expenses

Capital Expenditure Category	Direct Employment	Construction Expenses [(1)]
Elbert County	180.0	$40,821,182
Rest of Colorado	180.0	$86,070,898
Total	**360.0**	**$126,892,080**

(1) Labor and basic materials. Includes sales and use taxes.

7.2.5 Annual Operations Budget

The first full year of operations is assumed to be 2029. Once the proposed Project is constructed, maintenance would generally be limited to the following:

- Cleaning of PV panels
- Monitoring electricity generation
- Providing site security
- Facility maintenance – replacing or repairing inverters, wiring, and PV modules

The total annual operating budget, less property taxes and other off-site corporate expenses, is estimated to be $4,677,409 (Table 7-5).

Table 7-5. Shepherd Solar Project Annual Operations Budget

Operations Expenditure Category	Operations Expenses	Specialized Replacement Equipment [(1)]	Transaction Taxes on Specialized Equipment [(2)]	Total Operations Budget, Less Off-Site and Property Tax
Total	$3,861,658	$797,023	$18,729	$4,677,409

(1) Specialized replacement equipment, excluding BESS augmentation equipment.

(2) The Project would be liable for sales and use taxes at the unincorporated county rate, assuming possession is taken in Elbert County. Purchase of solar electric generation equipment is exempt from state sales tax (see Section 9.6 for details).

7.2.6 Operations Model Inputs

The economic impact resulting from operations and maintenance of the Project is best represented by Industry 37 (Operations of Electric Power Generation – Solar). Since there are currently no solar power electricity generating facilities reporting in Elbert County, Colorado, averages were assumed. Using IMPLAN terminology, this creates a "custom region." Note that actual labor income and other economic impacts occurring in the future in Elbert County may vary from estimates based on state of Colorado averages. The total amount of spending (investment) in Colorado would be $3,861,658 per year. As with construction, unique production functions were developed for each region (Table 7-6).

Table 7-6. Distribution of Operations Employment and Direct Expenses

Region	Employment (FTE) [(1)]	Operations Expenses [(2)]
Elbert County	8.0	$1,567,254
Rest of Colorado	0.0	$2,294,404
Total	**8.0**	**$3,861,658**

(1) Approximately full-time equivalent (FTE).

(2) Labor and basic materials. Includes sales and use taxes.

7.3 Assumptions and Uncertainties

Estimating the direct, indirect, and induced impacts of the future in a regional economy is extremely complicated. IMPLAN averages labor compensation, production value, and other metrics for 528

different industries of the economy by region. For example, the previous section describes how data from the state of Colorado was assumed to represent a future Elbert County solar electricity generation industry. In another example, this study models the construction of the Project by assuming Industry 47 (Construction of New Power and Communication Structures). Actual future economic impacts depend on specific operating plans and may evolve over time as the result of technological innovation and alternating management strategies. Actual impacts also depend on final Project specifications and approvals.

For local construction purchases (e.g., concrete, fencing, fuel, small tools, office supplies), IMPLAN's data shows a 28 percent leakage rate for Elbert County. In other words, these are the portions of the modeled construction and operations expenditures that represent spending outside the region.

Actual tax revenues depend on final purchase prices, assessor appraisals, inflation, and other factors. The fiscal impacts in Section 9 are not estimated with IMPLAN.

Finally, forecasts of future events are inherently uncertain, as the coronavirus pandemic demonstrated.

8 Economic Benefits Results

8.1 Overview

This section estimates the economic activity and benefits that would occur in Elbert County and Colorado as a result of constructing and operating the Project, giving particular attention to total economic output, employment, labor income, industry growth, and tax revenues. All costs are presented in 2025 dollars unless otherwise noted.

IMPLAN models the multiplier spending that occurs as spending on construction and operations "ripples" through the economy. Direct impacts occur in the sector being modeled, while indirect and induced impacts occur in many sectors. For each category, each level of impact (direct, indirect, and induced) is estimated. Employment impacts are estimated at the occupation level. Indirect and induced impacts in other industries are presented, along with the growth of each industry in Elbert County. Total tax revenue impacts are summarized by type of impact and level of jurisdiction.

8.2 Economic Benefits to Elbert County from Construction

IMPLAN estimates economic impacts based on the total planned capital expenditure, construction plans, and the underlying model data. Table 8-1 shows the direct local capital expenditure of $40.8 million.

8.2.1 Total Output from Construction

IMPLAN defines the total production value of an industry as output. In this case, the industry is new power and communication construction (Industry Code 47) and the hybrid solar facility is the product. Table 8-1 shows a total economic impact to Elbert County of $49.1 million that would result from construction.

Table 8-1. Total Construction Impact to Elbert County by Impact Type and Category

Type Impact	Labor Income	Intermediate Expenditures	Other Property Income	Taxes on Production	Total Output
Direct	$19,033,812	$14,592,589	$6,566,665	$628,116	$40,821,182
Indirect	$1,050,408	$2,060,703	$442,778	$297,525	$3,851,414
Induced	$760,370	$1,705,754	$1,599,785	$404,166	$4,470,075
Total	**$20,844,590**	**$18,359,046**	**$8,609,228**	**$1,329,807**	**$49,142,671**

The indirect and induced labor income impacts would be 5.0 and 3.6 percent of total labor income impacts, respectively. The total output indirect and induced impacts would be 7.8 and 9.1 percent of total output, respectively.

Labor Income represents the total value of all forms of employment income, including benefits, payroll taxes, and payments received by self-employed individuals and/or unincorporated business owners across Elbert County's economy. Intermediate Expenditures are purchases of nondurable goods and

services such as energy, materials, and purchased services that are used for the production of other goods and services, rather than for final consumption. Other Property Income (OPI) represents Gross Operating Surplus minus Proprietor Income.

Taxes on Production and Imports, Net of Subsidies (TOPI) include transaction taxes, excise taxes, customs duties, property taxes, motor vehicle licenses, severance taxes, other taxes, and special assessments, less government subsidies. In other words, *TOPI does not include all taxes paid by an industry*. TOPI tax impacts are split into subcategories based on each region's contribution of the collected tax. TOPI are tax revenues, but not inclusive of all tax revenues, paid by an industry. For example, social insurance taxes are a part of employee compensation and profits taxes are part of OPI. In the case of TOPI direct impacts, property taxes on construction impacts are not property taxes on a built structure itself but rather on the construction companies' properties (refer to Appendix A for further explanation of IMPLAN's tax estimates).

8.2.2 Supported Employment

Table 8-2 shows the estimates of average annual employment during the 12 to 18 months of Project construction. The estimated average annual number of direct jobs held by those residing in the county permanently or temporarily and supported by construction is 180.0. This number is approximately FTE for the solar construction and operations industries; hence two half-time workers would be counted as one full-time worker. The number of indirect and induced jobs held by county residents and supported by construction is estimated to be 39.1. IMPLAN estimates the indirect and induced jobs. The average annual labor income per direct FTE would be $105,743 and the average annual labor income for all FTE would be $95,137.

Table 8-2. Construction Phase Employment Impacts to Elbert County

Type Impact	Average Annual Employment (FTE)	Average Annual Labor Income/FTE
Direct	180.0	$105,743
Indirect	16.4	$64,049
Induced	22.7	$33,496
Total	**219.1**	**$95,137**

Note: The average annual job estimates are approximately full-time equivalent (FTE).

8.2.3 Occupation Detail

Table 8-3 shows the top 10 direct construction wage and salary employee occupations supported by the Project based on the BLS SOC codes at the five-digit level and converted to FTE, which does not include proprietors. A total of 138 occupations would experience some impact. Total compensation includes benefits supplementing wages and salaries.

Table 8-3. Construction Phase Occupation Impacts to Elbert County for the Top 10 Occupations

Occupation	Average Annual Employment (FTE)	Average Annual Total Employee Compensation
Solar Photovoltaic Installers	17.1	$76,803
Electrical Power-Line Technicians	16.7	$115,412
First-Line Supervisors of Construction Workers	8.5	$129,199
Operating Engineers and Equipment Operators	7.9	$98,341
Telecommunications Line Technicians	6.7	$82,253
First-Line Supervisors of Technicians	6.1	$140,293
Electricians	4.3	$113,146
Construction Managers	3.5	$184,220
General and Operations Managers	2.9	$224,441
Project Management Specialists	2.7	$142,859

8.2.4 Economic Impact by Industry Growth Percentage

Table 8-4 shows the size of the impact relative to the size of the industry in Elbert County by estimating the growth percentage for each of the top 10 industries impacted. Constructing this Project would have a very large impact on Industry 47 (Construction of New Power and Communication Structures). The Project's $40.8 million construction spending in Elbert County would expand the county's economy by 2.2 percent to $1.9 billion in total output during construction.

Table 8-4. Impact to Elbert County by Industry Growth Percentage for the Top 10 Industries

Industry Description	County Output	Project Impact	Estimated Growth
Construction of new power structures	$16,720,423	$40,821,182	244.1%
Commercial equipment leasing	$7,173,593	$635,775	8.9%
Ready-mix concrete manufacturing	$657,737	$41,149	6.3%
Durable goods merchant wholesalers	$7,548,790	$221,420	2.9%
Building material supplies stores	$11,950,495	$269,797	2.3%
Petroleum refineries	$18,288,113	$297,872	1.6%
Management of companies	$2,378,189	$37,749	1.6%
General goods rental	$439,345	$6,340	1.4%
Architectural and engineering services	$21,260,795	$288,597	1.4%
Wholesale electronic goods	$33,064	$433	1.3%

8.2.5 Total Tax Revenue Impacts of Construction

As a result of Project construction, both direct and indirect tax revenues would accrue to Elbert County, local municipalities, and special districts, in addition to the state and federal governments. IMPLAN estimates these tax revenue impacts resulting from construction investment, capturing all tax revenue across all levels of government for the specific industries and institutions affected by an event or group of events.

Taxes are levied at different levels of government. IMPLAN estimates tax impacts at the following levels: Federal, State + Local, State, County, Sub-County General (primarily municipalities), and Sub-County Special Districts. IMPLAN's tax impact estimates are based on collected and reported taxes in the region for the given data year. Sub-County General includes city and township governments. Sub-County Special Districts include fire and public school districts.

IMPLAN estimates of tax impacts are based on collected and reported revenues averaged across industries and households. For example, in the case of sales taxes, IMPLAN estimates are not calculated as the explicit products of rates and sale prices, but rather reported revenues averaged across industries to give unit values per dollar of output (refer to Appendix A for further explanation of IMPLAN's tax estimates).

Table 8-5 shows the total tax impacts occurring within Elbert County that would result from Project construction, essentially assembling the imported equipment on the Project site. The fiscal impacts arising from the purchase and importation of special equipment are separate and presented in Section 9 . Total tax revenues are estimated to be $6.3 million, of which approximately $949,000 would be received at the local level (sub-county, special districts, and county combined). Note that the taxes on production (Table 8-1) are a subset of the total amount of tax revenue generated (refer to Appendix A for further explanation of IMPLAN's tax estimates).

Table 8-5. Tax Impact of Construction within Elbert County by Impact Type and Tax Category

Impact Type	Sub-County	Special Districts	County	State	Federal	Total Tax
Direct	$45,609	$235,931	$170,575	$596,476	$4,052,326	$5,100,917
Indirect	$21,675	$111,204	$80,582	$98,511	$247,383	$559,355
Induced	$28,761	$147,492	$106,891	$130,340	$228,466	$641,950
Total Impact	**$96,045**	**$494,627**	**$358,049**	**$825,327**	**$4,528,174**	**$6,302,222**

8.3 Economic Benefits to Elbert County from Operations

In this section, the portion of the annual operating budget (see Table 7-6) spent within Elbert County and the resulting impacts are presented as well as 40-year accumulative impacts. The first full year of operations would be 2029.

8.3.1 Total Annual Output from Operations

Table 8-6 shows an estimate of the economic impact to Elbert County that would result from operating the Project. Annually, the direct investment (portion of annual operating budget spent within Elbert

County) is estimated to be $1.6 million. Indirect and induced total outputs are estimated to generate $146,000 and $148,000 annually, respectively. Thus, the total annual economic output impacting Elbert County would be $1.9 million. Refer to the Key Terminology section for a further description of terms.

Table 8-6. Total Annual Operations Impact to Elbert County

Type Impact	Labor Income	Intermediate Expenditures	Other Property Income	Taxes on Production	Total Output
Direct	$810,948	$502,016	$228,803	$25,487	$1,567,254
Indirect	$30,965	$89,472	$17,972	$7,905	$146,313
Induced	$25,136	$55,550	$53,739	$13,467	$147,893
Total	**$867,050**	**$647,038**	**$300,514**	**$46,858**	**$1,861,460**

The indirect and induced labor income impacts are significant, accounting for 3.6 percent and 2.9 percent of total labor income impacts, respectively. The total output indirect and induced impacts are also significant, each accounting for 7.9 percent of total output.

8.3.2 Total Accumulative Output from Operations

IMPLAN is a linear model; therefore, we can extrapolate the 40-year accumulative operating impact by multiplying the annual impact by the number of years. Table 8-7 shows the total output over the 40-year planned lifetime to be $74.5 million.

Table 8-7. Total Accumulative Operations Impact to Elbert County

Type Impact	Labor Income	Intermediate Expenditures	Other Property Income	Taxes on Production	Total Output
Direct	$32,437,927	$20,080,622	$9,152,130	$1,019,478	$62,690,156
Indirect	$1,238,601	$3,578,877	$718,873	$316,181	$5,852,533
Induced	$1,005,458	$2,222,013	$2,149,555	$538,678	$5,915,705
Total	**$34,681,986**	**$25,881,512**	**$12,020,558**	**$1,874,337**	**$74,458,394**

8.3.3 Employment Created

Table 8-8 shows estimates of annual employment during the operations phase. The estimated average annual number of direct jobs created in Elbert County is 8.0. This number is approximately FTE for the solar construction and operations industries; hence two half-time workers would be counted as one full-time worker. The number of indirect and induced jobs created by operations is estimated to be 1.2. IMPLAN estimates the indirect and induced jobs. The average annual labor income per direct FTE would be $101,369 and the average annual labor income for all FTE would be $94,142.

Table 8-8. Operating Phase Employment Impacts to Elbert County

Type Impact	Average Annual Employment (FTE)	Average Annual Labor Income/FTE
Direct	8.0	$101,369
Indirect	0.5	$68,811
Induced	0.8	$33,074
Total	**9.3**	**$94,142**

Note: The average annual job estimates are approximately full-time equivalent (FTE).

8.3.4 Occupation Detail

Table 8-9 shows the top 10 direct operating occupations created by the Project based on the BLS SOC codes at the three-digit level and converted to FTE, which does not include proprietors. Total compensation includes benefits supplementing wages and salaries.

Table 8-9. Annual Operating Phase Occupation Impacts in Elbert County for the Top 10 Occupations

Occupation	Average Annual Employment (FTE)	Average Annual Total Employee Compensation
Construction Trades Workers	2.1	$53,994
Business Operations Specialists	1.0	$94,377
Top Executives	0.4	$145,304
Engineers	0.4	$105,134
Financial Specialists	0.3	$61,031
Plant and System Operators	0.3	$95,531
Other Management Occupations	0.3	$153,451
Supervisors of Construction Workers	0.3	$66,567
Helpers, Construction Trades	0.3	$41,122
Sales Representatives, Services	0.3	$83,260

8.3.5 Total Annual Tax Revenue Impact of Operations

As a result of Project operations, both direct and indirect tax revenues would accrue to Elbert County, local municipalities, and special districts, in addition to the state and federal governments. IMPLAN estimates these tax revenue impacts resulting from operational spending, capturing all tax revenue across all levels of government for the specific industries and institutions affected by an event or group of events.

Taxes are levied at different levels of government. IMPLAN estimates tax impacts at the following levels: Federal, State + Local, State, County, Sub-County General, and Sub-County Special Districts. IMPLAN's tax impact estimates are based on collected and reported taxes in the region for the given data year.

Sub-County General includes city and township governments. Sub-County Special Districts include fire and public school districts.

IMPLAN estimates of tax impacts are based on collected and reported revenues averaged across industries and households. Thus, in the case of sales taxes, IMPLAN estimates are not calculated as the explicit products of rates and sale prices (refer to Appendix A for further explanation of IMPLAN's tax estimates).

Table 8-10 shows the total annual tax impacts resulting from the Project's operations and maintenance. Total direct tax revenues are estimated to be $189,000 annually, with another $35,000 generated through indirect and induced spending. The total annual tax impact would be $224,000, of which $34,000 would be received at the local level (sub-county, special districts, and county combined). Note that the taxes on production (Table 8-6) are a subset of the total amount of tax revenue generated (refer to Appendix A for further explanation of IMPLAN's tax estimates).

Table 8-10. Annual Tax Impact within Elbert County from Operations by Type and Category

Impact Type	Sub-County	Special Districts	County	State	Federal	Total Tax
Direct	$1,872	$9,672	$6,995	$21,577	$148,764	$188,881
Indirect	$577	$2,961	$2,146	$2,667	$6,188	$14,540
Induced	$958	$4,912	$3,560	$4,205	$6,525	$20,159
Total Impact	**$3,407**	**$17,545**	**$12,701**	**$28,449**	**$161,477**	**$223,579**

8.3.6 Total Accumulative Tax Revenue Impact of Operations

Table 8-11 shows the accumulative tax impacts resulting from lifetime operations of the Project, simply 40-year multiples of the estimates shown in Table 8-11. Total tax revenues are estimated to be $8.9 million, of which $1.3 million would be received at the local level (refer to Appendix A for further explanation of IMPLAN's tax estimates).

Table 8-11. Accumulative Tax Impact of Operations by Type and Category

Impact Type	Sub-County	Special Districts	County	State	Federal	Total Tax
Direct	$74,892	$386,889	$279,817	$863,066	$5,950,569	$7,555,233
Indirect	$23,086	$118,447	$85,830	$106,698	$247,527	$581,588
Induced	$38,313	$196,462	$142,384	$168,202	$260,984	$806,344
Total Impact	**$136,291**	**$701,797**	**$508,032**	**$1,137,966**	**$6,459,079**	**$8,943,165**

8.4 Total Combined Economic Benefits to Colorado from Construction

This section shows the total impact to Colorado, including Elbert County. Table 8-12 shows the direct capital expenditure of $126.9 million that would occur within the state.

8.4.1 Total Output from Construction

Table 8-12 shows a total economic impact to Colorado of $210.3 million that would result from Project construction.

Table 8-12. Total Construction Impact to Colorado by Impact Type and Category

Type Impact	Labor Income	Intermediate Expenditures	Other Property Income	Taxes on Production	Total Output
Direct	$38,067,624	$58,370,357	$26,266,661	$4,187,439	$126,892,080
Indirect	$16,175,004	$22,729,014	$7,498,204	$1,884,888	$48,287,110
Induced	$10,856,768	$13,158,008	$9,076,548	$2,020,485	$35,111,809
Total	**$65,099,396**	**$94,257,379**	**$42,841,412**	**$8,092,812**	**$210,290,999**

The indirect and induced labor income impacts would be 24.8 and 16.7 percent of total labor income impacts, respectively. The total output indirect and induced impacts would be 23.0 and 16.7 percent of total output, respectively.

8.4.2 Supported Employment

Table 8-13 shows the estimates of annual employment during the 12 to 18 months of Project construction. The average annual number of direct jobs held by those residing in the state permanently or temporarily and supported by construction is estimated to be 360.0. This number is approximately FTE for the solar construction and operations industries; hence two half-time workers would be counted as one full-time worker. The number of indirect and induced jobs held by county residents and supported by construction is estimated to be 349.7. IMPLAN estimates the indirect and induced jobs. The average annual labor income per direct FTE would be $105,743 and the average annual labor income for all FTE would be $91,728.

Table 8-13. Construction Phase Employment Impacts to Colorado

Type Impact	Average Annual Employment (FTE)	Average Annual Labor Income/FTE
Direct	360.0	$105,743
Indirect	174.8	$92,534
Induced	174.9	$62,074
Total	**709.7**	**$91,728**

Note: The average annual job estimates are approximately full-time equivalent (FTE).

8.4.3 Occupation Detail

Table 8-14 shows the top 10 direct construction occupations supported by the Project based on the BLS SOC codes at the five-digit level and converted to FTE, which does not include proprietors. A total of 138

occupations would experience some impact. Total compensation includes benefits supplementing wages and salaries.

Table 8-14. Construction Phase Occupation Impacts to Colorado for the Top 10 Occupations

Occupation	Average Annual Employment (FTE)	Average Annual Total Employee Compensation
Solar Photovoltaic Installers	36.2	$76,803
Electrical Power-Line Technicians	35.3	$115,412
First-Line Supervisors of Construction Workers	18.0	$129,199
Operating Engineers and Equipment Operators	16.8	$98,341
Telecommunications Line Technicians	14.3	$82,253
First-Line Supervisors of Technicians	13.0	$140,293
Electricians	9.1	$113,146
Construction Managers	7.5	$184,220
General and Operations Managers	6.1	$224,441
Project Management Specialists	5.8	$142,859

8.4.4 Economic Impact by Type and Industry

The $126.9 million of total economic output would have ripple effects throughout Elbert County's economy and would impact many other industries. Table 8-15 shows the distribution of output by type of impact for the top 10 industries most impacted as measured by the dollar value of total output. A total of 460 industries would be impacted. Industry 47 (Construction of New Power and Communication Structures) would experience the most impact since that is the industry in which the direct capital investment would occur.

Table 8-15. Impact by Type and Industry for the Top 10 Industries

Total Output Impact by Industry	Direct	Indirect	Induced	Total
Construction of new power structures	$126,892,080	$0	$0	$126,892,080
Owner-occupied housing	$0	$0	$5,845,592	$5,845,592
Durable goods merchant wholesalers	$0	$5,169,307	$242,079	$5,411,386
Management of companies	$0	$3,461,475	$531,319	$3,992,794
Other real estate	$0	$1,881,960	$1,091,099	$2,973,059
Commercial equipment leasing	$0	$2,760,198	$68,976	$2,829,174
Architectural and engineering services	$0	$2,716,265	$70,483	$2,786,749
Building material and supplies stores	$0	$1,484,352	$182,989	$1,667,341
Ready-mix concrete manufacturing	$0	$1,608,878	$8,341	$1,617,219
Monetary authorities	$0	$942,797	$599,828	$1,542,625

8.4.5 Economic Impact by Industry Growth Percentage

Table 8-16 shows the size of the impact relative to the size of the industry in Colorado by estimating the growth percentage for each of the top 10 industries impacted. Constructing this Project would have a very large impact on Industry 47 (Construction of New Power and Communication Structures). Overall, the total economic impact of the Project's construction investment of $126.9 million in Colorado would increase the size of the state's economy by 0.01 percent during construction to $894.4 billion, as measured by total output.

Table 8-16. Impact to Colorado by Industry Growth Percentage for the Top 10 Industries

Industry Description	State Output	Project Impact	Estimated Growth
Construction of new power structures	$3,847,763,796	$126,892,080	3.3%
Prefabricated components manufacturing	$144,151,760	$1,186,859	0.8%
Turned product manufacturing	$175,519,125	$356,911	0.2%
Cut stock, resawing lumber, and planing	$27,774,747	$42,815	0.2%
Ready-mix concrete manufacturing	$1,264,187,971	$1,617,219	0.1%
Commercial equipment leasing	$2,657,146,678	$2,829,174	0.1%
Sand and gravel mining	$245,709,017	$231,633	0.1%
Fabricated structural metal manufacturing	$849,017,232	$783,449	0.1%
Stone mining and quarrying	$177,876,993	$161,480	0.1%
Cement manufacturing	$307,415,973	$276,593	0.1%

8.4.6 Total Tax Revenue Impacts of Construction

Table 8-17 shows the total tax impacts to Colorado that would result from Project construction, essentially assembling the special equipment on the Project site. The fiscal impacts arising from the purchase and importation of special equipment are separate and presented in Section 9 . Total tax revenues are estimated to be $25.1 million, of which approximately $5.6 million would be received at the local level (sub-county, special districts, and county combined). Note that the taxes on production (Table 8-12) are a subset of the total amount of tax revenue generated (refer to Appendix A for further explanation of IMPLAN's tax estimates).

Table 8-17. Total tax Impact of Construction within Colorado by Impact Type and Tax Category

Impact Type	Sub-County	Special Districts	County	State	Federal	Total Tax
Direct	$837,621	$1,497,403	$549,604	$2,315,291	$8,829,683	$14,029,602
Indirect	$378,263	$681,109	$251,824	$986,097	$3,750,337	$6,047,630
Induced	$386,294	$717,383	$278,128	$912,864	$2,694,454	$4,989,124
Total	**$1,602,178**	**$2,895,895**	**$1,079,556**	**$4,214,252**	**$15,274,474**	**$25,066,356**

8.4.7 State Tax Revenue Impacts of Construction

The state of Colorado receives tax revenues in the amount of $4.2 million, which are detailed in Table 8-18.

Table 8-18. Total State Construction Tax Impact Detail

Description	Employee Compensation	TOPI	Corporations	Households	Total
Social Insurance Tax-Employee Contribution	$42,250	$0	$0	$0	$42,250
Social Insurance Tax-Employer Contribution	$49,679	$0	$0	$0	$49,679
TOPI: Sales Tax	$0	$2,052,606	$0	$0	$2,052,606
TOPI: Motor Vehicle License	$0	$46,530	$0	$0	$46,530
TOPI: Severance Tax	$0	$95,787	$0	$0	$95,787
TOPI: Other Taxes	$0	$37,408	$0	$0	$37,408
OPI: Corporate Profits Tax	$0	$0	$611,090	$0	$611,090
Personal Tax: Income Tax	$0	$0	$0	$1,156,378	$1,156,378
Personal Tax: Motor Vehicle License	$0	$0	$0	$28,488	$28,488
Personal Tax: Other Tax (Fish/Hunt)	$0	$0	$0	$94,036	$94,036
Total	**$91,929**	**$2,232,330**	**$611,090**	**$1,278,902**	**$4,214,252**

8.5 Total Combined Economic Benefits to Colorado from Operations

In this section, the annual operating budget (see Table 7-5) spent within Colorado and the resulting impacts are presented as well as 40-year accumulative impacts. The first full year of operations would be 2029.

8.5.1 Total Annual Output from Operations

Table 8-19 shows an estimate of the economic impact to Colorado that would result from operating the Project. Annually, the direct investment (portion of annual operating budget spent within Colorado) is estimated to be $3.9 million. Indirect and induced total outputs are estimated to generate $2.2 million and $685,000 annually, respectively. Thus, the total annual economic output impacting Colorado would be $6.7 million. Refer to the Key Terminology section for a further description of terms.

Table 8-19. Total Annual Operations Impact to Colorado

Type Impact	Labor Income	Intermediate Expenditures	Other Property Income	Taxes on Production	Total Output
Direct	$810,948	$2,008,062	$915,213	$127,435	$3,861,658
Indirect	$564,326	$1,136,681	$357,707	$103,401	$2,162,115
Induced	$202,230	$256,429	$184,877	$41,817	$685,352
Total	**$1,577,504**	**$3,401,172**	**$1,457,797**	**$272,653**	**$6,709,125**

The indirect and induced labor income impacts are significant, accounting for 35.8 percent and 12.8 percent of total labor income impacts, respectively. The total output indirect and induced impacts are also significant, accounting for 32.2 percent and 10.2 percent of total output, respectively.

8.5.2 Total Accumulative Output from Operations

IMPLAN is a linear model; therefore, we can extrapolate the 40-year accumulative operating impact by multiplying the annual impact by the number of years. Table 8-20 shows the total output over the 40-year planned lifetime to be $268.4 million.

Table 8-20. Total Accumulative Operations Impact to Colorado

Type Impact	Labor Income	Intermediate Expenditures	Other Property Income	Taxes on Production	Total Output
Direct	$32,437,927	$80,322,486	$36,608,518	$5,097,388	$154,466,320
Indirect	$22,573,020	$45,467,255	$14,308,281	$4,136,046	$86,484,602
Induced	$8,089,198	$10,257,155	$7,395,073	$1,672,668	$27,414,094
Total	**$63,100,146**	**$136,046,896**	**$58,311,872**	**$10,906,102**	**$268,365,017**

8.5.3 Employment Created

Table 8-21 shows estimates of average annual employment within Colorado during the operations phase. The estimated average annual number of direct jobs created is the same for Colorado as Elbert County (Table 8-8) based on the assumption that all direct employment would reside in the county. The number of indirect and induced jobs created by operations within Colorado is estimated to be 8.0. The average annual labor income for all FTE would be $98,226. Note that more employment is indirectly created and induced at the state level than at the county level because the state's economy is larger. Furthermore, the wage levels of the indirect and induced employment occurring across the state are higher than in Elbert County.

Table 8-21. Operating Phase Employment Impacts to Colorado

Type Impact	Average Annual Employment (FTE)	Average Annual Labor Income/FTE
Direct	8.0	$101,369
Indirect	4.6	$121,885
Induced	3.4	$58,959
Total	**16.0**	**$98,226**

Note: The average annual job estimates are approximately full-time equivalent (FTE).

8.5.4 Occupation Detail

Since the direct operations employment is assumed to occur within Elbert County, the direct operations occupations created at the state level are equivalent to those at the county level shown in Table 8-9.

8.5.5 Annual Economic Impact by Type and Industry

The $3.9 million of total direct economic output would have ripple effects throughout Colorado's economy and would impact many other industries. Table 8-22 shows the distribution of output by type of impact for the top 10 industries most impacted as measured by the dollar value of total output. A total of 456 industries would be impacted. Sector 37 would experience the most impact since that is the sector in which the direct investment would occur.

Table 8-22. Impact to Colorado by Type and Industry for the Top 10 Industries

Total Output Impact by Industry	Direct	Indirect	Induced	Total
Electric power generation - solar	$3,861,658	$30,027	$192	$3,891,876
Electric power transmission and distribution	$0	$873,678	$6,534	$880,212
Local government electric utilities	$0	$179,003	$1,183	$180,186
Owner-occupied housing	$0	$0	$130,761	$130,761
Electric power generation - wind	$0	$98,411	$628	$99,039
Other real estate	$0	$58,246	$21,107	$79,353
Electric power generation - fossil fuel	$0	$78,543	$501	$79,045
Scientific research and development services	$0	$74,399	$2,842	$77,241
Employment services	$0	$55,822	$4,880	$60,701
Data processing, hosting, and related services	$0	$48,727	$8,490	$57,216

8.5.6 Total Annual Tax Revenue Impact of Operations

Table 8-23 shows the total annual tax impacts resulting from the Project's operations and maintenance. Total direct tax revenues are estimated to be $335,000 annually, with another $348,000 generated through indirect and induced spending. The total annual tax impact would be $682,000, of which $189,000 would be received at the local level (sub-county, special districts, and county combined) across

the region and state. Note that the taxes on production (Table 8-19) are a subset of the total amount of tax revenue generated (refer to Appendix A for further explanation of IMPLAN's tax estimates).

Table 8-23. Annual Tax Impact within Colorado from Operations by Type and Category

Impact Type	Sub-County	Special Districts	County	State	Federal	Total Tax
Direct	$24,794	$46,019	$17,916	$61,129	$184,782	$334,640
Indirect	$22,123	$37,285	$12,459	$46,921	$132,634	$251,422
Induced	$7,229	$14,907	$6,563	$17,930	$49,778	$96,408
Total Impact	**$54,147**	**$98,211**	**$36,938**	**$125,981**	**$367,194**	**$682,470**

8.5.7 Total Accumulative Tax Revenue Impact of Operations

Table 8-24 shows the accumulative tax impacts resulting from lifetime operations of the Project, simply 40-year multiples of the estimates shown in Table 8-23. Total tax revenues are estimated to be $27.3 million, of which $7.6 million would be received at the local level across the region and state (refer to Appendix A for further explanation of IMPLAN's tax estimates).

Table 8-24. Accumulative Tax Impact of Operations by Type and Category

Impact Type	Sub-County	Special Districts	County	State	Federal	Total Tax
Direct	$991,770	$1,840,743	$716,651	$2,445,170	$7,391,280	$13,385,614
Indirect	$884,938	$1,491,402	$498,358	$1,876,844	$5,305,350	$10,056,892
Induced	$289,154	$596,290	$262,521	$717,214	$1,991,134	$3,856,312
Total Impact	**$2,165,861**	**$3,928,435**	**$1,477,530**	**$5,039,227**	**$14,687,764**	**$27,298,818**

8.5.8 State Tax Revenue Impacts of Operations

The state of Colorado would receive an estimated annual tax revenue amount of $125,981, which are detailed in Table 8-25.

Table 8-25. Total State Operations Tax Impact Detail

Description	Employee Compensation	TOPI	Corporations	Households	Total
Social Insurance Tax-Employee Contribution	$935	$0	$0	$0	$935
Social Insurance Tax-Employer Contribution	$1,099	$0	$0	$0	$1,099
TOPI: Sales Tax	$0	$69,745	$0	$0	$69,745
TOPI: Motor Vehicle License	$0	$1,592	$0	$0	$1,592

Description	Employee Compensation	TOPI	Corporations	Households	Total
TOPI: Severance Tax	$0	$3,276	$0	$0	$3,276
TOPI: Other Taxes	$0	$1,280	$0	$0	$1,280
OPI: Corporate Profits Tax	$0	$0	$20,594	$0	$20,594
Personal Tax: Income Tax	$0	$0	$0	$24,807	$24,807
Personal Tax: Motor Vehicle License	$0	$0	$0	$612	$612
Personal Tax: Other Tax (Fish/Hunt)	$0	$0	$0	$2,041	$2,041
Total	**$2,034**	**$75,892**	**$20,594**	**$27,460**	**$125,981**

8.6 Decommissioning Impacts

During Project decommissioning, structures that would not be needed for subsequent use would be removed. The site would revert to undeveloped land that supports agricultural production and wildlife habitat. The decommissioning and restoration process involves removing aboveground and belowground structures, restoring topsoil, revegetation, and seeding. Temporary erosion and sedimentation control best management practices would be used during the decommissioning phase.

Equipment would be de-energized prior to removal, salvaged (where possible), and shipped off-site to be recycled or disposed of at an appropriately licensed disposal facility. Once the solar modules are removed, the racks would be disassembled, and the structures supporting the racks would be removed. Other site infrastructure would also be removed, including fences, as well as concrete pads that may support the inverters, transformers, and related equipment. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried by standard construction equipment. The fencing and gates would be removed, and all materials would be recycled to the extent practical. Project roads would be restored to their pre-construction condition unless they may be used for subsequent land use. The area would be thoroughly cleaned and all debris removed. Materials would be recycled to the extent feasible, with the remainder disposed of in landfills in compliance with all applicable laws.

Decommissioning would also require expenditures with economic impacts. Given that utility-scale solar power generation facilities are based on new technology, there is little precedent for their decommissioning, and the technology that would be used to dispose of solar panels three decades or more in the future may not yet have been developed.

A 2019 study by Swift Current estimated the cost of decommissioning a 100 MW solar facility in Maine in 50 years to be $2.2 million (Swift Current 2019). A 2020 study by the Commercial Solar Guy estimated the cost of decommissioning a 5 MW solar facility in Massachusetts in 20 years to be $287,798 (Weaver 2020). A June 2022 study by the Center for Rural Affairs cites a low estimate of $9,090 per MW from South Dakota and a high estimate of $56,300 per MW from Minnesota (Kolbeck-Urlacher 2022). The cost to decommission a 99 MW BESS in Wisconsin was estimated to be $10.7 million (Wisconsin Power and Light Company 2023). Based on scaling this limited information, the estimated cost of

decommissioning this Project's 199 MW generation facility and 100 MW BESS could be $12.6 million to $22 million.

9 Fiscal Impacts

9.1 Overview

As previously mentioned, the Project would require the purchase of large equipment, including solar panels and inverters, from outside Elbert County. The production of this equipment would impact the region(s) in which the equipment is produced but would not impact Elbert County's economy. Therefore, these anticipated expenses were not included as inputs to the IMPLAN economic impact model. However, property, sales, and use taxes apply to the transaction and ownership of this equipment for both the construction and operational phases of the Project. This section provides estimates of these tax revenues.

9.2 Colorado Renewable Energy Tax Incentives

According to Colorado Revised Statutes (CRS) § 39-26-724(1)(a), the components used in the production of alternating current electricity from a renewable energy source are exempt from sales and use tax (Colorado Office of the State Auditor 2022). See Section 9.6 for further description. Components include—but are not limited to—solar modules, trackers, supporting structures/racks, inverters, towers, and foundations. Components not directly used in the creation of renewable energy, such as energy storage devices and remote monitoring systems, are not eligible (Colorado Department of Revenue 2021).

Regarding property tax, all renewable energy systems with greater than 2 MWac electricity generation capacity are valued as public utility property by the Colorado Division of Property Taxation and subject to state assessment (Colorado Department of Local Affairs 2021). Effectively, this incentivizes the development of renewable energy by "leveling" the annual payments over time rather than applying a depreciation schedule in which a greater share of the total taxes is paid in the initial operating years. It also helps to ensure that renewable energy projects are not subject to higher property taxes than their non-renewable counterparts.

9.3 State-Assessed Property Tax

The Colorado Department of Local Affairs Division of Property Taxation publishes a template used to calculate property taxes for renewable energy projects placed in service on or after January 1, 2021 (Colorado Department of Local Affairs 2024). The template first determines a depreciated value based on a capital cost threshold rate per kilowatt, taxpayer-specific inputs including nameplate capacity and power purchase agreement details, and an assumed deprecation over a 20-year period. Second, the total depreciated value is then levelized by using the template to estimate the levelized annual payment of property taxes over the life of the Project. Following the state template, our calculation uses a flat millage rate over the life of the Project. Pursuant to CRS § 39-4-102, our model follows the prescribed formula for the 30-year period. For tax years beyond 30, we follow state guidance that the Project would be assessed and taxed at a 20 percent floor, although the state has indicated that income or market approaches may be considered at that time.

The template is the basis for estimating the total annual property tax payments shown in Table 9-1. This method levels the payments as mentioned in Section 9.2 . By basing the calculations on energy production, this approach factors in the replacement equipment that would be purchased occasionally throughout the lifetime of the Project in the course of normal operations and maintenance.

For reference, the Division of Property Taxation provides a benchmark estimate of annual property tax payments based on the depreciating nonrenewable cost basis. The benchmark payments are also shown in Table 9-1, and Figure 9-1 shows a graphical comparison. The estimated annual payments assume no change in the mill levy rates over time.

Table 9-1. Annual Property Tax Payments

Year	Total Levelized Property Tax Payment	Total Benchmark Property Tax Payment	Year	Total Levelized Property Tax Payment	Total Benchmark Property Tax Payment
2029	$715,368	$1,699,000	2049	$715,368	$357,684
2030	$715,368	$1,609,579	2050	$715,368	$357,684
2031	$715,368	$1,520,158	2051	$715,368	$357,684
2032	$715,368	$1,430,736	2052	$715,368	$357,684
2033	$715,368	$1,341,315	2053	$715,368	$357,684
2034	$715,368	$1,251,894	2054	$715,368	$357,684
2035	$715,368	$1,162,473	2055	$715,368	$357,684
2036	$715,368	$1,073,052	2056	$715,368	$357,684
2037	$715,368	$983,631	2057	$715,368	$357,684
2038	$715,368	$894,210	2058	$715,368	$357,684
2039	$715,368	$804,789	2059	$357,684	$357,684
2040	$715,368	$715,368	2060	$357,684	$357,684
2041	$715,368	$625,947	2061	$357,684	$357,684
2042	$715,368	$536,526	2062	$357,684	$357,684
2043	$715,368	$447,105	2063	$357,684	$357,684
2044	$715,368	$357,684	2064	$357,684	$357,684
2045	$715,368	$357,684	2065	$357,684	$357,684
2046	$715,368	$357,684	2066	$357,684	$357,684
2047	$715,368	$357,684	2067	$357,684	$357,684
2048	$715,368	$357,684	2068	$357,684	$357,684
			Total	**$25,037,889**	**$25,037,889**

Note: figures may not add due to rounding.

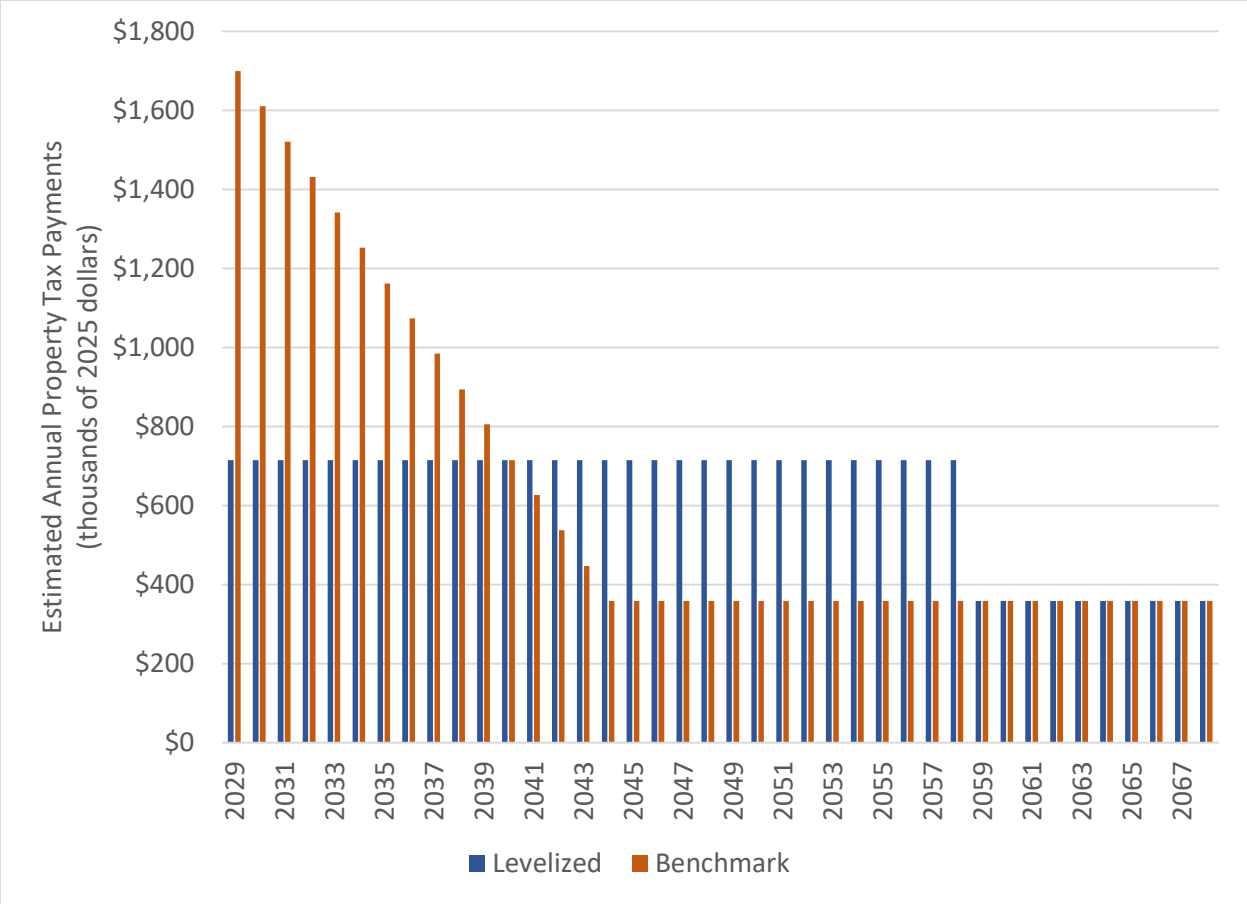


Figure 9-1. Comparison of State Assessed (Levelized) vs. Benchmark Property Tax over the Project Lifetime

At the end of the 40-year lifetime, both tax calculation methods give a total lifetime payment of $25,037,889. Although renewable energy generation systems are state assessed in the manner described in this section, the tax revenue would be returned to the applicable taxing authorities in the tax district where the Project is located. The Project would be located in Tax District 0015. We have not assumed an escalation of the tax rates in future years. Table 9-2 shows the estimated tax revenue to be received by each jurisdiction.

Table 9-2. Estimated Property Tax over Project Lifetime by Tax Jurisdiction

Tax District 0015 Jurisdictions	Tax Rate	Lifetime Tax Revenue
Elbert County General	1.4831%	$5,387,394
Elbert County Road and Bridge	0.9500%	$3,450,896
Elbert County Social Service	0.1500%	$544,878
Elbert County Retirement	0.0996%	$361,799
Big Sandy Schools General	2.7097%	$9,843,046

Tax District 0015 Jurisdictions	Tax Rate	Lifetime Tax Revenue
Big Sandy Schools Bond	0.4484%	$1,628,823
Double El Conservation District	0.0000%	$0
Elbert County Library	0.2519%	$915,032
Big Sandy Fire Protection District	0.8000%	$2,906,018
Total for Tax District 0015	**6.8927%**	**$25,037,889**

9.4 Real Property Tax

The underlying leased private land would be locally assessed and valued by the county assessor. The agricultural classification would remain in place and the underlying land value of the Project would not increase because the land would be leased. Thus, there would not be an incremental real property tax fiscal impact. This method is developed in accordance with CRS § 39-4-102, as well as the land classification for renewable energy projects.

9.5 Impact on Neighboring Property Values

The development of the Project is not expected to impact neighboring property values. Nationally, several studies have been conducted on the impact of utility-scale solar facilities on surrounding property values. A 2018 study conducted at the University of Texas found that large solar facilities have very little impact on nearby residential home values (Al-Hamoodah, et al. 2018). Another study in 2018, found "no consistent negative impact" occurring to properties adjacent to solar farms in Illinois and Indiana (McGarr and Lines 2018). A 2019 report from the Solar Energy Industries Association cited McGarr and Line's study, another Illinois study, and an appraisal study in North Carolina and Tennessee; these studies determined there was a less than 1 percent change in property values surrounding solar farms (Solar Energy Industries Association 2019). A 2020 study from the University of Rhode Island found no associated impact on property values for solar farms located in rural areas (Gaur and Lang 2020). In Chisago County, Minnesota, the assessor found no adverse impacts on nearby property values resulting from the 1,000-acre "North Star" solar project (Chisago County Press 2017). Further, there have been some examples of positive impacts on surrounding property values as the additional demand for solar production increases overall demand for land (American Society of Farm Managers & Rural Appraisers 2021).

More recently, a study conducted at Lawrence Berkeley National Laboratory found that residential home values within a mile of a large-scale solar facility declined by 2.3 percent on average and that homes more than a mile away were not affected (Elmallah, et al. 2023). A study specific to agricultural land values found no effect on land values near utility-scale solar farms. This study further points out that the adjacent land could be positively impacted if also converted to solar production and that transmission line construction may also have a positive impact for a similar reason (Abashidze and Taylor 2023). A 2022 undergraduate thesis conducted at Duke University found only a modest impact on low-income homes, which decreased in value 1.4 percent within 3 miles of solar farms in North Carolina (Wang 2022).

Basic research conducted by Triple Point Strategic Consulting in western Nebraska in 2021 found that agricultural property values were primarily dependent on irrigation rather than other factors, such as neighboring use.

9.6 Sales and Use Tax

In Colorado, all sales of components used in the production of AC electricity from renewable energy sources are exempt from the taxes imposed by the State of Colorado, Regional Transportation District, and Scientific and Cultural Facilities District under a Renewable Energy Exemption. However, the exemption does not apply to any city or county sales tax administered by the Colorado Department of Revenue, unless the city or county has adopted the exemption by ordinance or resolution. Components that qualify for exemption include wind turbines, rotors/blades, solar modules, trackers, generating equipment, supporting structures or racks, inverters, towers and foundations, balance of system components (e.g., wiring, control systems, switchgears, generator step-up transformers), and concentrating solar power components (e.g., mirrors, plumbing, heat exchangers). Components that qualify for exemption do not include, labor, energy storage devices, remote monitoring systems, or any item used beyond the point of generator step-up transformers located at the production site (Colorado Office of the State Auditor 2022) (Colorado Department of Revenue 2021).

Elbert County imposes a county sale and use tax across the county and honors the state sales and use exemption for solar power generation components. The county sales tax rate in unincorporated Elbert County is 1 percent.

Although the energy generation components are exempt from state sales tax, the BESS and interconnection equipment purchased at the time of construction would be subject to the state and county sales taxes applicable in unincorporated Elbert County. The estimated equipment cost and resulting sales tax amount is shown in Table 9-3.

Table 9-3. Estimated Sales Tax Revenue from Initial Equipment Purchase

Equipment	Equipment Cost	State Sales Tax (2.9%)	County Sales Tax (1.0%)	Total Tax
PV	$165,475,964	Exempt	Exempt	$0
BESS	$101,001,066	$2,929,031	$1,010,011	$3,939,042
Interconnection	$11,828,034	$343,013	$118,280	$461,293
Total	**$278,305,063**	**$3,272,044**	**$1,128,291**	**$4,400,335**

The estimated total accumulative replacement equipment costs and resulting sales tax amounts are shown in Table 9-4.

Table 9-4. Estimated Annual Sales Tax Revenue from Replacement Equipment Purchase

Equipment	Replacement Equipment Cost	State Sales Tax (2.9%)	County Sales Tax (1.0%)	Total Tax
PV	$21,842,827	Exempt	Exempt	$0
BESS	$13,332,141	$386,632	$133,321	$519,953
Interconnection (gen-tie and substation)	$1,561,300	$45,278	$15,613	$60,891
BESS augmentation	$50,414,480	$1,462,020	$504,145	$1,966,165
Total	**$87,150,748**	**$1,893,930**	**$653,079**	**$2,547,009**

9.7 Colorado Tax Incentives

Colorado legislature created the Enterprise Zone (EZ) program to encourage development in economically distressed areas of the state. In designated EZs, businesses are eligible for various incentives. EZ areas in rural counties that meet additional economic distress criteria receive enhanced rural EZ status. The Project is located in an EZ in the North-East-Central EZ. This section describes EZ opportunities and other incentives the Project may be eligible to receive.

9.7.1 Property Tax Incentive

The valuation of renewable property using the capital cost threshold rate is intended to be a form of statutory incentive since the threshold rate is based on comparable nonrenewable cost to construct (gas turbines), which historically are lower than the cost to construct a renewable facility of equal capacity. As a result, local discretionary property tax incentives are not typically granted for renewable facilities and we have not contemplated a discretionary incentive in our calculation. However, any city, county, or special district within an EZ is authorized to consider entering into a property tax incentive agreement with individual taxpayers who have qualifying new business facilities, provided that the incentive is limited to the incremental property tax liability over pre-EZ levels.

9.7.2 Sales and Use Tax Incentive

Any city, county, or special district within an EZ is authorized to negotiate with individual taxpayers who have qualifying new business facilities for a refund of local sales taxes on purchases of equipment, machinery, machine tools, or supplies used in the taxpayer's business in the EZ.

9.7.3 Non-Tax Local Incentives

Local government and community organizations can offer incentives such as fee waivers, expedited land use review and approval, actual cash payments, and grant sponsorship. These incentives are highly discretionary and further discussion would be necessary to determine the level of support. Note that the Colorado Investment Tax Credit specifically applies to state income taxes and is separate from the federal Investment Tax Credit.

9.7.4 Colorado Investment Tax Credit

A taxpayer operating a business facility in an EZ may take a Colorado income tax credit of 3 percent on qualified investments made during the tax year for property used solely and exclusively in an EZ for at least 1 year. The credit is based on provisions of the federal Internal Revenue Code (IRC) as it existed immediately prior to the enactment of the federal Revenue Reconciliation Act of 1990. Qualified property is defined as "section 38 property" in Section 48 of the IRC. Section 38 property generally includes tangible personal property that is depreciable under Section 168 of the IRC. Renewable energy investment qualifies, but the option to receive a refund expired in 2020. The amount of credit that can be used in a given year is the taxpayer's net tax liability or $750,000, whichever is less. The remaining credit can be carried forward for 14 years.

9.7.5 New Employee Tax Credits

A taxpayer who operates a business facility in an EZ is allowed a credit for the net increase of employees working at the facility during the tax year. In order to meet the definition of a qualified facility, a renewable project must have an operations and maintenance building or temporary trailer or office space within the EZ in order to qualify the employees. The number of employees is calculated by adding the number of employees on the last business day of each month of the tax year and dividing the total by 12 or by the number of months the business was operating in Year 1. Any unused credit can be carried forward for up to 7 years.

9.7.6 Employer-Sponsored Health Insurance Tax Credits

If a business in an EZ offers a qualified health insurance plan and it contributes at least 50 percent of the total cost of the health plan, the business can earn a tax credit of $1,000 per employee. The number of employees is calculated by adding the number of employees on the last business day of each month of the tax year and dividing the total by 12. The credit amount is available for all employees covered by a qualified health plan for 2 years only.

9.7.7 Job Training Tax Credits

If a business in an EZ provides job training, it may claim a state income tax credit equal to 12 percent of the eligible job training costs. To qualify, the training program must be a structured training or basic education program to improve the job skills of the taxpayer's employees who work predominantly within an EZ. Nonqualifying expenses include regular operations of a business, on-the-job training that is not part of a qualified job-training program, wages paid to employees being trained, or training employees who work outside the EZ. The combined amount of investment tax credit and job training investment tax credit a taxpayer applies to offset tax for a given tax year cannot exceed the limits on credit use. Any excess credit that cannot be used to offset tax can be carried forward for 14 years.

9.8 Federal Investment Tax Credits

The Inflation Reduction Act, enacted in August 2022, extends federal renewable energy tax credits. Beginning January 1, 2025, the traditional Investment Tax Credit under Section 48 and the Production Tax Credit under Section 45 were replaced by technology-neutral credits: the Clean Electricity

Investment Tax Credit (Section 48E) and the Clean Electricity Production Tax Credit (Section 45Y), respectively. Federal policy continues to evolve and further changes are possible. The Project would likely qualify for the Section 48E Investment Tax Credit, subject to meeting eligibility criteria and final guidance from the Internal Revenue Service. The Applicant anticipates qualifying for a 40-percent Investment Tax Credit, reflecting bonus credits for meeting prevailing wage and apprenticeship requirements, and potentially for domestic content or energy community siting. Additional eligibility conditions, such as workforce development and apprenticeship standards, appear applicable, and the Project is expected to meet those requirements.

10 Existing Tax Base and Current Levels of Taxation

The Project is located in unincorporated Elbert County and is subject to Elbert County tax code.

10.1 Sales Tax

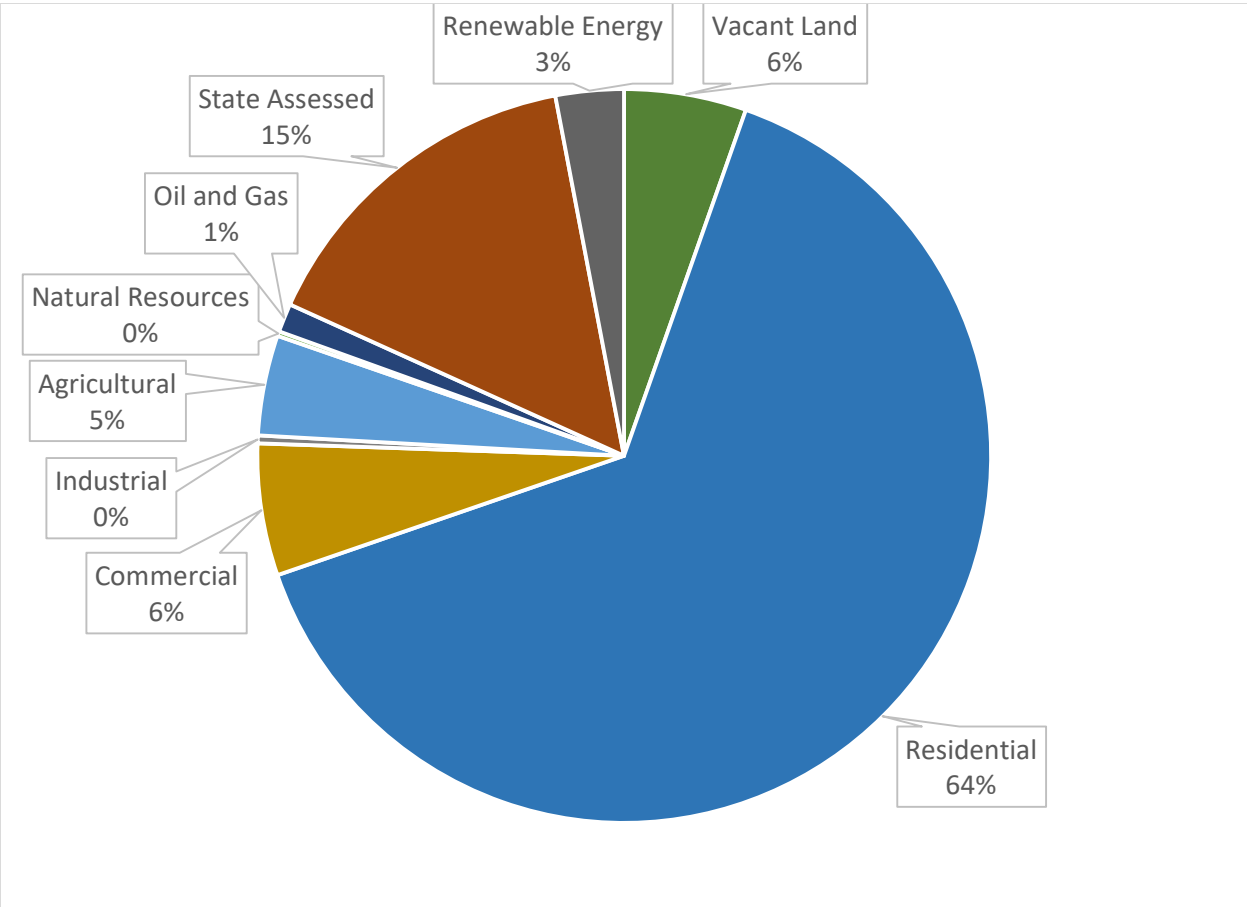
Elbert County imposes 1 percent sales and use tax county-wide. The tax was approved by a vote of the citizens of Elbert County to be used for public works capital projects. Elbert County residents are also subject to the Colorado sales tax of 2.9 percent. The Colorado Department of Revenue collects both the county and state sales tax. In 2025, the county anticipates receiving over $8.54 million in sales and use tax revenue (see Table 11-1).

10.2 Highway User's Tax

The Highway Users Tax Fund (HUTF) is the primary source of transportation funding in Colorado. The HUTF revenues come from state motor fuel taxes (22 cents per gallon for gasoline and 20.5 cents per gallon for diesel), vehicle registration fees, and smaller sources including driver's license fees and fines (Bernard, et al. 2022). Elbert County allocates this revenue to roads and bridges. Approximately $3.5 million is budgeted by Elbert County for 2025 (Elbert County 2024).

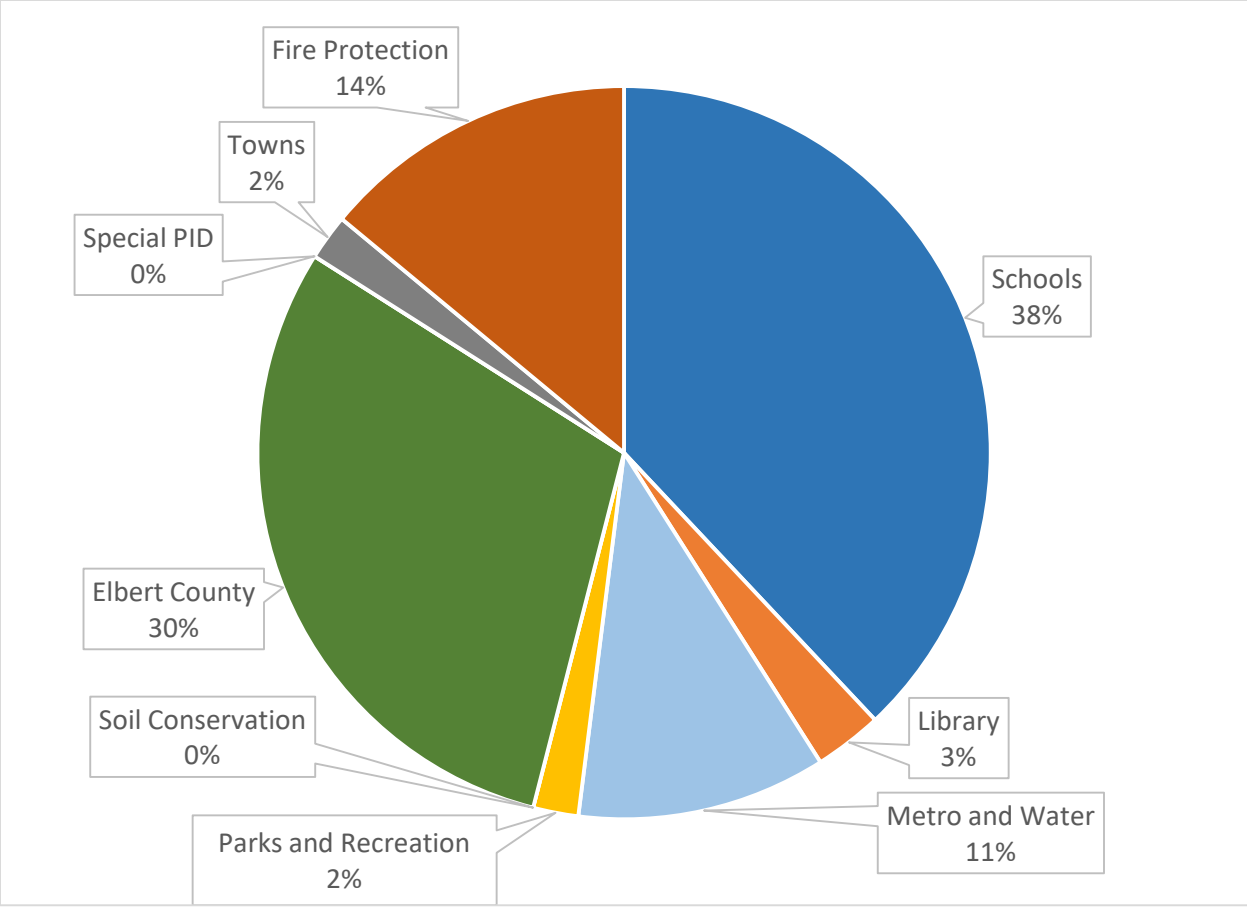
10.3 Property Tax

Residential property comprises the majority of taxable property value in Elbert County (Figure 10-1). The 2023 county abstract shows a total assessed value of $631 million. Schools and the county are the largest recipients of the tax revenue collected (Figure 10-2).



Source: Elbert County Assessor.

Figure 10-1. Elbert County Taxable Property Distribution by Value of Classification, 2023



Source: Elbert County Assessor.

Figure 10-2. Elbert County Property Tax Revenue Distribution by Jurisdiction, 2023

11 Local Governments and Special Districts

This section reviews public services that would be impacted by Project construction and operations. Given the Project's location in unincorporated Elbert County, law enforcement would fall under the sheriff's office, and fire protection and emergency medical services (EMS) under the Big Sandy Fire Protection District. The location is also within the Big Sandy School District, Elbert County Library District, and Double El Soil Conservation District.

11.1 Anticipated Population Changes

Given the size of the construction workforce (Table 8-13) and considering the intention to hire locally, along with ongoing operations employment (Table 8-21), including indirect and induced impacts relative to the size of the county, any changes to the county's population and social characteristics would be negligible.

11.2 Elbert County

Elbert County's fiscal year (FY) ends December 31. The FY 2025 total revenue budget is $52.5 million, as shown in Table 11-1 (Elbert County 2024). FY 2025 is budgeted to reduce fund balances. Roughly 34 percent of the revenue comes from property tax; about 16 percent from sales tax; and the balance from permits, fees, fines, grants, other taxes, and state allocations.

Table 11-1. Elbert County Budget Summary

Elbert County	FY23 Actual	FY24 Budget	FY25 Budget
Property Tax	$13,886,686	$15,712,587	$18,083,602
Sales and Use Tax	$3,891,237	$5,702,803	$8,540,000
Other Tax Revenue	$4,655,160	$4,100,117	$2,758,288
Other Revenue	$23,319,601	$19,050,133	$23,125,233
Subtotal Revenue	$45,752,684	$44,565,640	$52,507,123
Expenses	$53,413,803	$53,708,560	$57,042,326
Net	($7,661,119)	($9,142,920)	($4,535,203)

Source: Elbert County.

Table 11-2 shows the total tax revenue impact to Elbert County for comparison to the county budget. Over the lifetime of the Project, the county would receive $12.4 million in tax revenue. Ostensibly, these tax revenues would be available to increase funding for social services, provide job training, mitigate negative impacts, and many other potential local governmental functions.

Table 11-2. Total Tax Impact to Elbert County Government

Tax	County Tax Revenue
Personal property tax (lifetime)	$9,744,968
Sales tax (initial equipment purchase)	$1,128,291
Construction spending	$358,048
Operations spending (lifetime)	$508,032
Sales tax (replacement equipment)	$653,079
Total County Tax Revenue	**$12,392,418**

11.3 Elbert County Sheriff

The Project's proposed location in unincorporated Elbert County falls under the jurisdiction of the Elbert County Sheriff's Office. The Sheriff's Office is responsible for law enforcement, criminal investigations, and detentions for Elbert County. The Sheriff's Office's statutory responsibilities include maintaining a jail and transporting prisoners, acting as Fire Marshal, serving civil process, preserving the peace, providing court security, and enforcing County ordinances. The Sheriff's Office is supported by volunteer Posse members and reserve officers. The Sheriff's Office is the only law enforcement agency in the county that operates 24 hours a day and 7 days a week, and covers unincorporated areas of Elbert County and the three incorporated towns of Elizabeth, Kiowa, and Simla. As shown in Table 11-3, the FY 2025 Sheriff's Office total expense budget is $5.2 million, which includes a staffing level of 39 FTE (Elbert County 2024). Various accounting shifts and anomalies explain the greater amount in FY 2024.

Table 11-3. Elbert County Sheriff's Office Expense Budget

Sheriff's Office Expenses	FY23 Actual	FY24 Budget	FY25 Budget
Salaries and Benefits	$3,173,501	$10,932,826	$4,253,596
Other Expenses	$728,637	$2,185,517	$965,499
Total	**$3,902,138**	**$13,118,343**	**$5,219,095**

Source: Elbert County.

The Sheriff's Office is located in Kiowa, approximately 40 northwest of the Project's location. The office covers over 1,850 square miles and handles approximately 18,000 calls per year (Elbert County n.d.). Based on the 2023 population of 28,795, the per capita sheriff expense was $135.51. To put the Project's impact into perspective, we can apply this rate to the expected workforce. As shown in Table 8-13, an average of 360 workers would be directly employed per year during the 12 to 18 months of construction, giving a total expense of $48,785. However, as some of the workforce already reside in the county, the incremental expense could be less.

During operations, the need for law enforcement would be very low and calls to sheriff's office are expected to be infrequent, if not rare. Thus, it is difficult to estimate an incremental cost burden with any certainty, other than to note it would most likely be minimal.

11.4 Big Sandy Fire Protection District

The Project's location falls within the Big Sandy Fire Protection District, otherwise known as the Simla Volunteer Fire Department, was formed in 2004. The district covers 500 square miles in Elbert and El Paso Counties, including the towns and areas of Matheson, Ramah and Simla (Simla Volunteer Fire Department 2025). In addition to firefighting equipment, the district operates two ambulances. Officers include an EMS Captain and a full-time staff of three EMT-Bs.

The district does not post budgets on its website, but a 2019 news article cites the chief referencing a $140,000 annual budget (CBS Colorado 2019). The Project would generate almost $3 million to the district over its lifetime or an annual average of $72,650 (Table 9-2), which would be a significant increase in revenue assuming no significant change in budget in recent years. The Project's water tower would be quickly accessible by local firefighters in the event of an emergency in the community.

During operations, the need for local fire and emergency services is not anticipated to create a burden on the district. These services would be required only in rare instances. Solar energy and battery storage facilities are safe and operate using simple, proven technologies. The Project would be designed in accordance with the highest local and industry safety standards for utility-scale solar and battery storage facilities. Thus, it is difficult to estimate an incremental cost burden with any certainty, other than to note it would most likely be minimal.

11.5 Medical Facilities

The Project is not located in a health service district. The nearest hospital emergency rooms are in Colorado Springs, approximately 45 miles to the west. St. Francis Hospital provides a full range of services including emergency care and is the home base for the Flight for Life Colorado air ambulance helicopter service (CommonSpirit Mountain Region 2025). UCHealth Memorial Hospital North is located 4 miles from St. Francis and also provides a full range of services, including emergency care (UCHealth 2025).

During operations, the Project is not anticipated to create a burden on these medical facilities. These services would be required only in rare instances. Solar energy and battery storage facilities are safe and operate using simple, proven technologies.

11.6 Big Sandy Schools District

Big Sandy Schools District 100J is a small, rural public school district located in Simla, Colorado, serving students from pre-kindergarten through 12th grade (Simla n.d.). The district comprises three schools for the elementary, junior high and high school levels. Total enrollment for the 2021-22 school year was 328 students, with 30.9 FTE teachers in the classroom and 31.3 FTE staff (National Center for Education Statistics 2025).

Table 11-4 shows the district's budget for the FY 2025 school year assuming a pupil count of 300. Expenditures are budgeted to exceed revenues. The district's fund balance is budgeted to be reduced by $1,003,149, including other adjustments, to $2,493,943. Over its lifetime, the Project is estimated to generate over $9.1 million for the district and over $1.5 million for the district bond in property tax revenue. Given the temporary nature of construction and the limited FTE estimates, enrollment is not

expected to be significantly impacted by the Project. Incremental enrollment resulting from operations would be very minimal, if any. Schools in Colorado received funding from local, state, and federal sources determined by a complicated formula. Thus, the net benefit from the Project may be less.

Table 11-4. Big Sandy Schools District Budget FY25

FY25 School Year	Budget
State Funding	$4,239,258
Local Funding	$2,481,028
Federal Funding	$110,380
Total Revenue	**$6,830,666**
Instructional Expenditures	$4,026,733
Supporting Services	$3,075,025
Other	$572,489
Total Expenditures	**$7,674,247**
Net	($843,581)
Ending Fund Balance	**$2,493,943**

11.7 Elbert County Library District

Four Pines and Plains Libraries are located in Elbert, Elizabeth, Kiowa, and Simla. The mission of the district is to provide individuals with resources to achieve aspirations through literacy, technology, and community engagement. Strategic plan goals include expanding the Elizabeth library and updating other locations for Americans with Disabilities Act compliance, increasing awareness and usage, increasing services for seniors and children, and updating technology. The 2025 budget plans for $1.9 million in revenues and $1.6 million in expenses, not including a $300,000 contribution to the capital improvement fund (Table 11-5) (Pines & Plains Libraries 2021).

The Project would generate a total of $915,000 for the library district over its lifetime or an annual average of $22,876 (Table 9-2). Project construction and operations would not place burdens on the library district.

Table 11-5. Elbert County Library District Budget

Elbert County Library	2023 Actual	2024 Budget	2025 Budget
Revenues	$1,488,785	$1,765,662	$1,906,662
Expenses	$991,971	$1,430,526	$1,551,894
Net	**$496,814**	**$335,136**	**$354,768**

Source: Pines and Plains Libraries

11.8 Double El Conservation District

The Double El Conservation District has the authority to levy property taxes in District 0015; however, the governing board did not find this necessary in 2024. This explains why the 2024 mill levy rates in Table 9-2 show zero for the Double El Conservation District.

The mission of the district is to assist ranchers, farmers, and other land users to accomplish their conservation goals now and for the future through educational, financial, and technical assistance (Double El Conservation District 2025). The district spans approximately 631,590 acres in portions of three counties, including Elbert, and dates back to the Dust Bowl era of the 1930s. Services include tree purchase, tree survival, conservation workshops, windbreak design, living snow fence projects, youth scholarships, funding assistance for conservation projects, and other related services.

Project construction and operations would not place burdens on the soil conservation district.

11.9 Water Supply

Currently, the proposed Project area is being used for non-irrigated farming. There are no known existing wells or irrigation ditches in the Project area. The ongoing agricultural practices at the proposed Project location produce wheat and millet. There are no existing potable water sources on the proposed site and the Project does not have any potable water sources planned. Further, the Project site does not currently contain, nor will it implement, any sewage disposal systems on-site.

As shown in Table 11-6, the U.S. Geological Survey published estimates of water use in the United States at the county level based on a 2015 study (U.S. Geological Survey 2017).

Table 11-6. Elbert County Water Withdrawal, 2015

Water Type	Withdrawal (Mgal/day)	Withdrawal (AFY)
Total water, fresh	18.55	20,780

Source: U.S. Geological Survey.
Notes: AFY = acre-feet per year; Mgal = million gallons

The 2018 Elbert County Rural Water Supply Study (Forsgren Associates Inc. 2018) estimated total consumptive demand to be 17,907 AFY in 2017 (Table 11-7).

Table 11-7. Elbert County Annual Water Demand, 2017

Category	AFY
Residential	4,185
Commercial	418
Irrigated agriculture	12,422
Livestock	882
Total	**17,907**

Source: Elbert County Rural Water Supply Study 2018.

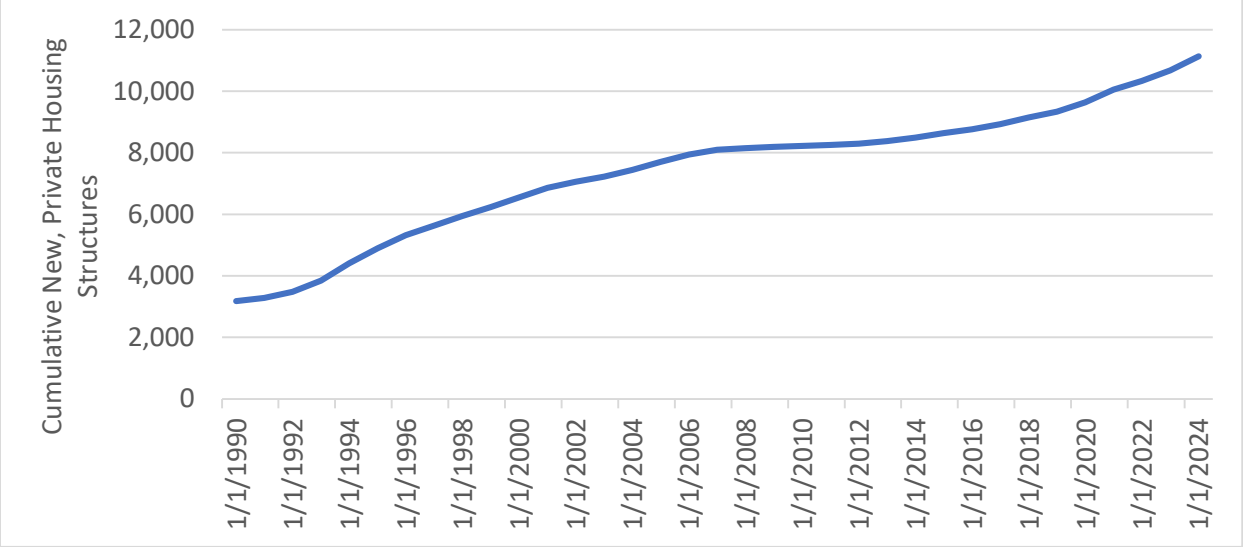
Constructing the Project would require an estimated 300 to 400 acre-feet of water over the year of construction. At that rate, the Project would account for no more than 2.2 percent of annual county water use. This water would be used primarily for compaction, dust suppression (including truck wheel washing), and concrete mixing. Equipment and vehicular traffic throughout the site may create small amounts of dust, which will be managed by water tenders throughout the site. These water tenders will be using water sources off-site in order to keep soils damp to prevent dust migration.

Over the 40-year operating lifetime, the Project would use relatively little water to produce electricity. In fact, solar PV is second only to wind for using the least amount of water per megawatt hour of electricity produced (Cutler and Louf 2024). Water demand for panel washing would be the primary use and is not expected to exceed 10 AFY. Water is anticipated to be delivered via truck from an off-site source (or sources) in the Project vicinity to minimize truck trips/lengths in transporting water to/from the site.

12 Socioeconomic Balance

The Project's market function would fulfill user needs by increasing the supply of electric energy, supporting and creating skilled jobs, and generating public revenues as described throughout this report. The regional energy demand is driven by residential and agricultural users, particularly during peak summer months. It supports the shift toward renewable energy mandated by Colorado's clean energy goals and aligns with growing daytime load from electrification and irrigation systems. Elbert County already produces 2.2 million MWh of energy per year from Rush Creek Wind, 100 percent of the county's total production (Find Energy 2025).

Elbert County has population and housing growth needs that make electricity production important. According to the Elbert County Housing Needs Assessment, a total of 2,920 incremental units will be needed by 2031. Using an average of 7,944 kilowatt hours/year per housing unit, that equates to 23.2 gigawatt hours/year in electricity demand for the county (U.S. Energy Information Administration n.d.). Figure 12-1 shows the cumulative number of county building permits issued over the past three decades (U.S. Census Bureau 2025). As a proxy for housing development, this data corresponds to an annual average growth rate of 3.8 percent since 1990 and 2.2 percent since 2010. The trajectory of housing unit growth points to continued and sustained demand for electricity well into the future.



Source: U.S. Census.

Figure 12-1. New Private Housing Structures Authorized by Building Permits for Elbert County

The proposed Project area is currently being used for non-irrigated farming of wheat and millet. Only 1 percent of farmland in Elbert County is irrigated. According to the 2022 agricultural census (National Agricultural Statistics Service 2022), there were over 929,000 acres of land in farms in Elbert County. The 1,990 acres that would be removed from farming for the Project represent 0.2 percent of this total. The census also shows the total value of crops produced in 2022 was $47.1 million. Estimating the Project site would produce $400,000 gross revenue annually of wheat and millet, the economic loss would be less than 1 percent. In comparison, the annual average property tax revenue generated by the Project would be over $625,000, in addition to annual sales tax and operating activity.

13 Conclusion

Construction of the Shepherd Solar Project would help achieve state and utility company goals for increasing the generating capacity of non-hydroelectric renewable energy. The federal government continues to support renewable energy through established goals and financial incentives; however, the evolving political environment introduces some uncertainty about the future trajectory of these programs. Economically, the region is dependent on agriculture and residential development, which have been growing along with the population.

The economic benefits—including skilled and well-paying operations jobs, ongoing tax revenues, and increased availability of energy—would last for the 40-year lifespan of the Project. Renewable energy generation would also be a welcome step toward greater economic diversification.

In the short-term, for the 12- to 18-month duration of the construction phase, the Project would bring a substantial amount of economic activity to the region and support many workers. This would place some incremental demands on socioeconomic sectors of the region—including housing, law enforcement, and transportation—depending on how many workers would relocate temporarily. Advanced planning of Project construction would mitigate and reduce negative impacts, and incremental tax revenues would help fund additional services.

The Project is a unique opportunity to achieve both a clean energy supply and economic development, which may offset temporary strains on public and community services and housing from construction. Advanced planning would help mitigate environmental impacts. A visual buffer matching the surrounding landscape would be developed. Temporary negative impacts to roads due to construction traffic would be negated by the positive impacts and road improvements. Over the long-term, Project operations would provide many ongoing positive benefits. Solar power generation is a growing industry that would further diversify the economy and create new, skilled jobs along with a steady flow of tax revenues and clean energy.

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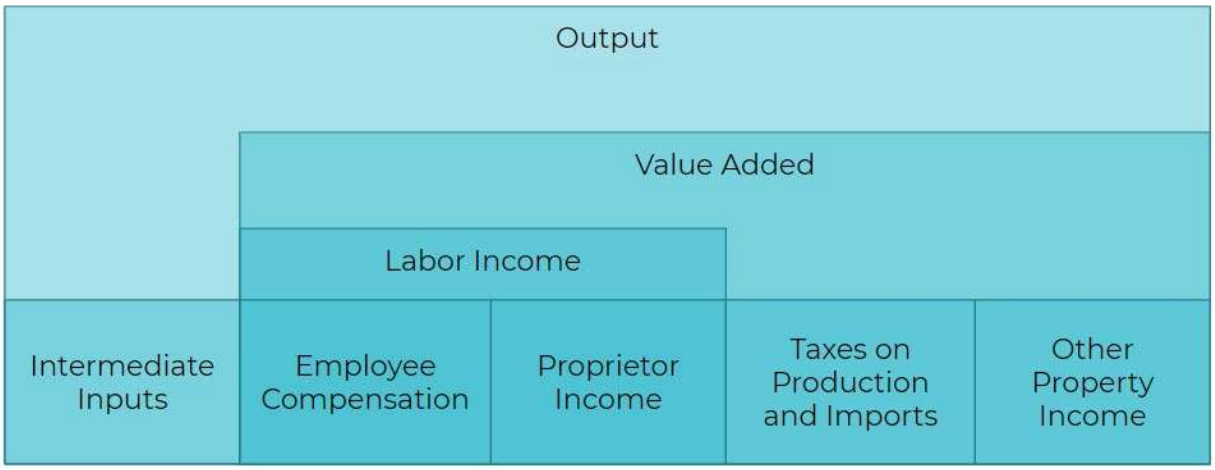
Appendix A – The IMPLAN Economic Impact Model

Input-Output (I-O) modeling is based on the foundational concept that all industries, households, and governments in an economy are connected through buy-sell relationships; therefore, a given economic activity supports a ripple of additional economic activity throughout the economy. IMPLAN is an I-O modeling system that uses annual, regional data to map these buy-sell relationships so users can predict how specific economic changes would impact a given regional economy or estimate the effect of past or existing economic activity.

Output is the value of products and services produced by an industry in a calendar year. Total output is broken down into the following four categories (see the Key Terminology section for definitions):

- Intermediate expenditures
- Labor income
- Taxes on production and imports, less subsidies (TOPI)
- Other Property Income (OPI)

The allocation of output into these categories is determined by a Leontief Production Function (LPF). IMPLAN derives a unique LPF for each industry in each region and for each year. Graphically, the LPF is shown in Figure A-1.



Source: IMPLAN.

Figure A-1. Diagram of a Leontief Production Function

IMPLAN incorporates all available economic data for each county in the country. Employment and labor income data are sourced from the Bureau of Labor Statistics (BLS) Census of Employment and Wages, Census Bureau's County Business Patterns Reports, and Bureau of Economic Analysis' (BEA's) Regional Economic Accounts information, which also provides information on annual gross domestic product. Data regarding industry inputs, byproducts, margins, and industry spending patterns are also sourced from the BEA's Input-Output Benchmark Table and other sources.

For estimating economic output, IMPLAN sources information from several federal surveys, such as the Census' Annual Survey of Manufacturers and the BEA's Output Series. Other sources include the National Agricultural Statistical Service, National Bureau of Economic Research, Internal Revenue Service, and Energy Information Administration.

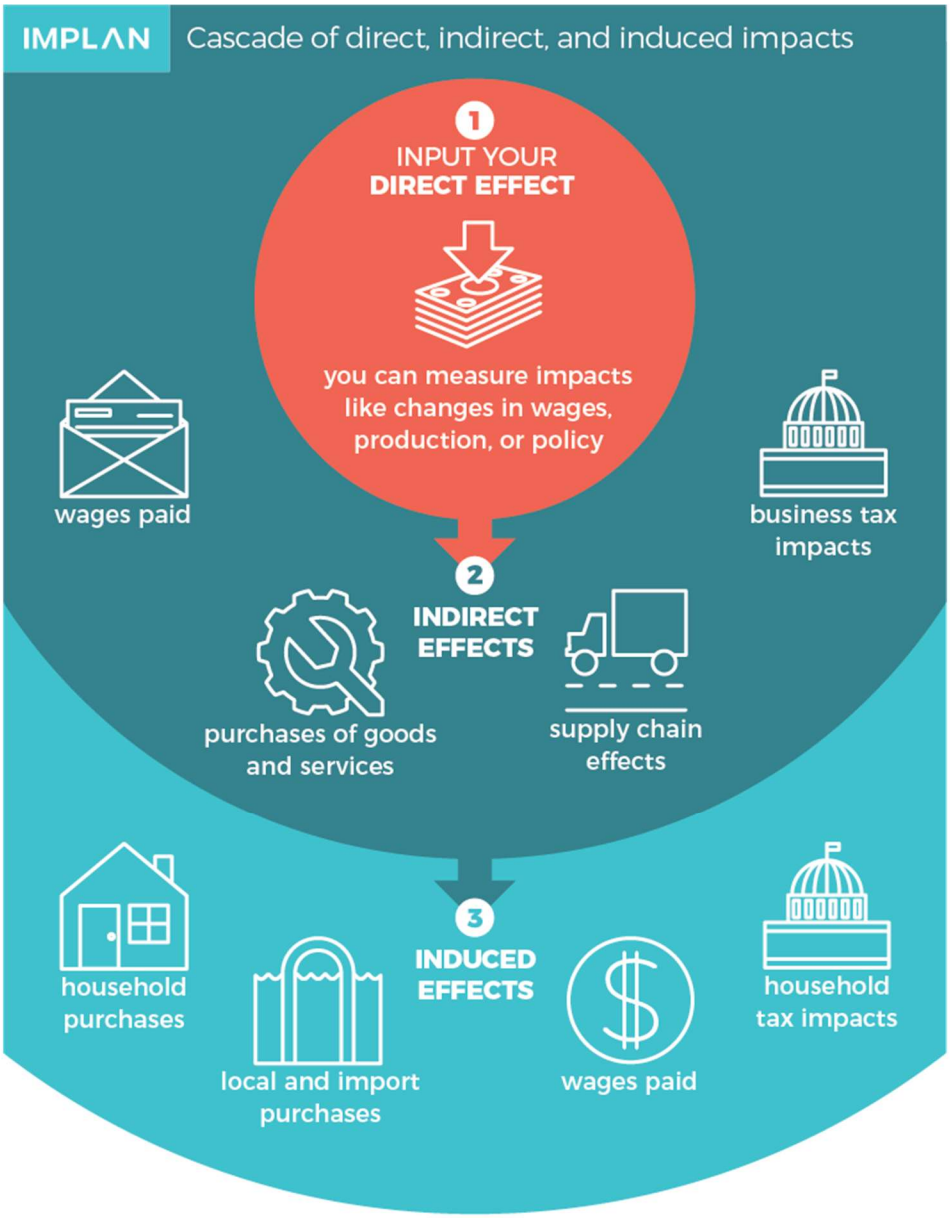
IMPLAN was originally conceived in 1972 as part of the Rural Development Act of 1972. After initial development by the U.S. Forest Service, IMPLAN was further developed by the University of Minnesota during the 1980s. In the 1990s, IMPLAN was privatized, and the Minnesota IMPLAN Group began taking commercial orders. IMPLAN is now widely used for modeling economic impacts across many business sectors.

This analysis uses the latest version of IMPLAN, which currently incorporates 528 industry sectors as defined by the BEA and the latest datasets from 2024.

For a particular producing industry, multipliers estimate three components of total change within the local area (see Figure A-2):

- *Direct effects* represent the initial change in the industry in question. For example, building a new transmission line will directly expand the size of that industry within the region it is located.
- *Indirect effects* are changes in inter-industry transactions as supplying industries respond to increased demands from the directly affected industries. Supply-chain purchases are indirect economic impacts.
- *Induced effects* reflect local spending changes resulting from income changes in the directly and indirectly affected industries. Spending of both direct and indirect labor income generates induced economic impacts. Workers purchasing groceries is an example of an induced impact.

The economic impacts derived in this analysis are presented in 2025 dollars.



Source: IMPLAN.

Figure A-2. Diagram of Economic Multiplier Impacts

Estimating Tax Revenue Impacts Using the IMPLAN Model

Taxes are levied at different levels of government. IMPLAN estimates tax impacts at the following levels: Federal, State + Local, State, County, Sub-County General, and Sub-County Special Districts. IMPLAN's tax impact estimates are based on collected and reported taxes in the region for the given data year. Sub-County General includes city and township governments. Sub-County Special Districts include fire and public school districts.

TOPI, less subsidies, include sales and excise taxes, customs duties, property taxes, motor vehicle licenses, severance taxes, other taxes, and special assessments. TOPI tax impacts are split into

subcategories based on each region's contribution of the collected tax (IMPLAN 2023). TOPI are tax revenues, but not inclusive of all tax revenues, paid by an industry (refer to the Key Terminology section for definitions). For example, social insurance taxes are a part of employee compensation and profits taxes are part of OPI. In the case of TOPI direct impacts, property taxes on construction impacts are not property taxes on a built structure itself but rather on the construction companies' properties.

In IMPLAN, taxes are specific to the industry and geographic region. However, the breakout by tax category (e.g., sales tax, property tax) is not industry specific because of raw data limitations. Thus, the distribution for a given geographic region is an all-industry average. Also, in IMPLAN there is no way to know the breakout of the components of each subset of tax (e.g., sales tax) into additional detail, as the raw data does not have this level of detail. However, the ratios for TOPI:Output and OPI:Output are industry specific. I-O models by default treat TOPI as a leakage, meaning that any TOPI generated as part of an analysis will not generate any additional effects. OPI generally refers to profits and returns to capital and will be negative if the industry is operating at a deficit.

For detailed itemization of taxes modeled in IMPLAN by category, refer to Taxes: Where's the Tax? (Clouse 2020).

Estimating Employment Using the IMPLAN Model

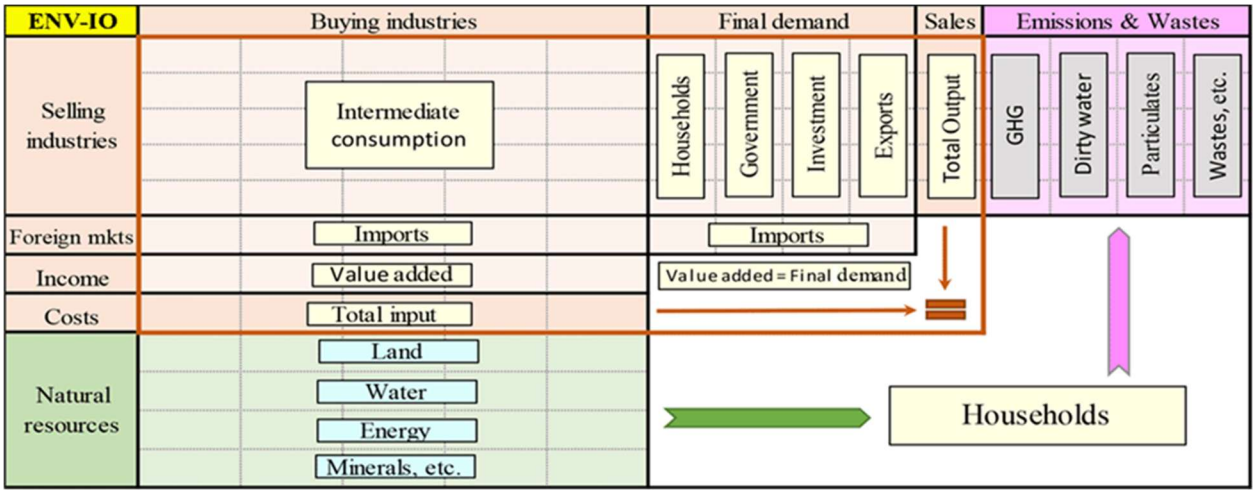
Employment data in IMPLAN follows the same definition used by the BEA and BLS, which is full-time/part-time annual average. Because a person can hold more than one job, a job count is not necessarily the same as a count of employed people. However, for the electric power industries, the IMPLAN conversion factors are almost 1.0, therefore the IMPLAN employment estimates are approximately FTE whereby 1 job lasting 12 months = 2 jobs lasting 6 months each = 3 jobs lasting 4 months each. A job can be either full-time or part-time. Similarly, a job that lasts one quarter of the year would be 0.25 job. IMPLAN employment include workers that are not accounted for by a number of other data sources. This often means that IMPLAN jobs are larger than many other sources report.

Construction jobs are considered "supported" since the building of a facility requires or supports a region's workforce. In the case of this Project, the operations and maintenance jobs are considered "created" since they would not exist prior to construction of the Project.

Estimating Environmental Impacts Using the IMPLAN Model

IMPLAN's environmental impact estimates rely on industry-specific coefficients representing physical emissions or resource use per dollar of industry output, with the physical unit depending on the particular pollutant or resource under consideration. IMPLAN's environmental coefficients are sourced from the U.S. Environmental Protection Agency's U.S. Environmentally-Extended Input-Output (USEEIO) model data (version 1.1).

Figure A-1 depicts the flow of goods and services between production and consumption along with the use of natural resources.

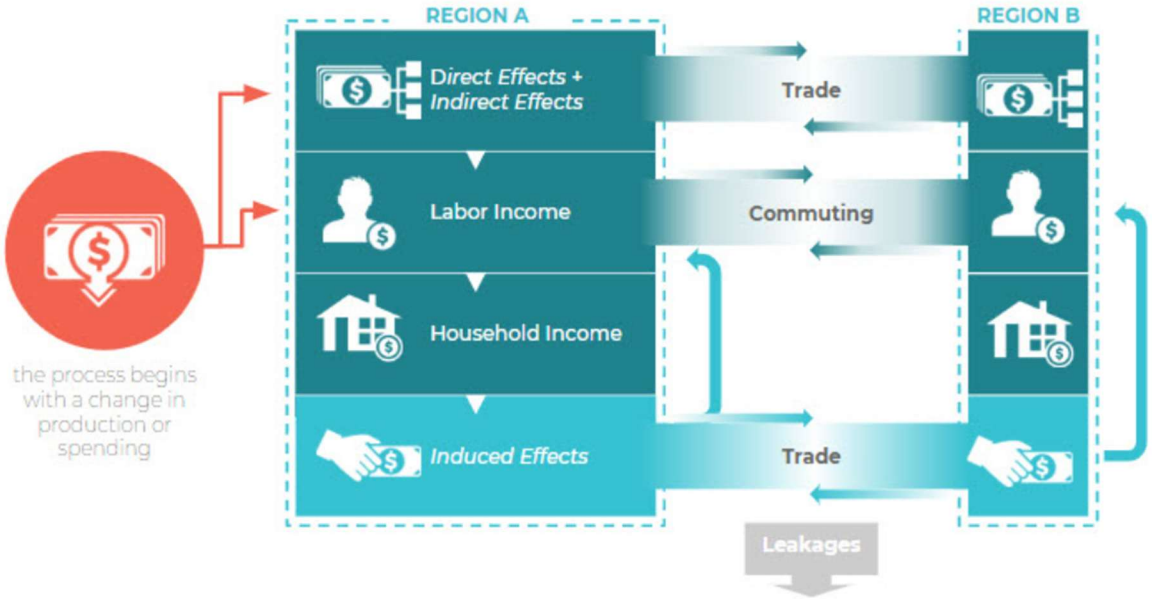


Source: IMPLAN.

Figure A-3. Schematic Diagram of an Environmentally-Extended Input-Output Model

Multi-Regional Input-Output Models

Multi-Regional Input-Output (MRIO) analysis models how an impact on any of the 528 BEA Industries in a region affect the production of all 528 Industries and household spending in any other region, including zip code to zip code. MRIO analyses utilize interregional commodity trade and commuting flows to quantify the demand changes across many regions stemming from a change in production and/or income in another region (Figure A-4).



Source: IMPLAN.

Figure A-4. Schematic Diagram of Multi-Region Input-Output Model

SUR Appendix I

Vegetation Management Plan

Shepherd Solar

Vegetation Management Plan

Elbert County, Colorado



March 10, 2026

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Introduction

The Shepherd Solar Project (Project) is a proposed utility-scale renewable energy development located in Elbert County, Colorado, approximately 7.32 miles south of the Town of Matheson. The Project consists of a 199-megawatt (MW) photovoltaic solar energy facility with an associated 100 MW battery energy storage system (BESS). The facility will be constructed on approximately 1,990 acres of private agricultural land (Site).

The Project's Vegetation Management Plan (VMP) is currently in draft form. The VMP is intended to be refined as additional Site information becomes available, input is received from local and technical experts, and as the Project advances towards construction. The VMP will be finalized prior to construction.

Existing Vegetation Onsite

Site vegetative communities primarily consist of tilled soils with sparse vegetation or cultivated wheatgrass (*Triticum aestivum*). Other terrestrial communities are less common onsite and contain native shortgrass prairie species with a range of degradation. The higher-quality communities contained species such as blue grama (*Bouteloua gracilis*), buffalograss (*Bouteloua dactyloides*), side oats grama (*Bouteloua curtipendula*), three-awn (*Aristida purpurea*), cheatgrass (*Bromus tectorum*), and yucca (*Yucca glauca*), among other common shortgrass prairie species. The degraded communities contained higher levels of headcut erosion and dense nonnative species. The species observed included annual sunflower (*Helianthus annus*), pennycress (*Thlaspi arvense*), cheatgrass, bindweed (*Convolvulus arvensis*), smooth brome (*Bromus inermis*), and western wheatgrass (*Pascopyrum smithii*). No dwarf milkweed (*Asclepias uncialis*) has been identified onsite to date. .

Wetland species are sparsely distributed across the Site and, when present, are primarily located in depressional areas within gullies. Observed vegetation included predominantly Nebraska sedge (*Carex nebrascensis*), spikerush (*Eleocharis* spp.), and soft rush (*Juncus effusus*). No aquatic plant life was observed during the Site assessment.

Noxious Weeds

To address noxious weeds, the Project and its contractors will implement control measures during both the construction and operations phases of the Project in accordance with the Colorado Noxious Weed Act (Colorado Noxious Weed Act 1990). Onsite personnel will be trained to identify noxious weeds listed by the Elbert County

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Noxious Weed Advisory Board[1] for eradication purposes. During construction, soil disturbance will be minimized to the extent practicable to reduce the potential for the introduction or spread of noxious weeds. Disturbed areas will be stabilized in accordance with the Project's stormwater permit requirements and Elbert County Construction Standards and Specifications. Weed control may include targeted chemical or manual treatment. Herbicides will be applied in accordance with label instructions and all applicable environmental and regulatory requirements.

To date, the Applicant has consulted with the United States Department of Agriculture (USDA) Natural Resources and Conservation Service (NRCS) field office in Simla to further understand noxious weeds known in eastern Elbert County. The NRCS Resource Conservationist indicated the most common listed noxious weeds expected in eastern Elbert County are mullein (*Verbascum thapsus*), cheatgrass/downy brome (*Bromus tectorum*), and field bindweed (*Convolvulus arvensis*). Knapweed (*Centaurea* sp.) and redstem filaree (*Erodium cicutarium*) may be present in eastern Elbert County as well.

Stormwater Permitting

Vegetation that stabilizes site soils to minimize erosion is an important part of compliance with local and state stormwater management requirements. The Project will require a stormwater permit from the Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Division as the Project site disturbance would be greater than one acre. The stormwater permit will include a Stormwater Management Plan (SWMP). The SWMP will describe structural and non-structural (vegetation) control measures (CMs) as well as erosion and sediment controls that will be implemented to prevent, reduce, or eliminate possible water quality impacts. The SWMP will also reflect procedures for implementing the CMs, stabilization practices, and materials handling and spill prevention procedures, as well as inspection schedules and CM maintenance procedures.

Vegetation Management Plan Objectives

The objectives of this VMP include:

- Minimize the duration and extent of exposed soils during constructions
- Stabilize disturbed areas as quickly as practicable following completion of civil work
- Prevent erosion caused by wind and stormwater runoff

[1] Elbert County Noxious Weed List. 2023. Available online at: https://www.elbertcounty-co.gov/DocumentCenter/View/3363/Approved-Elbert-County-Noxious-Weed-List-2023-PDF

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- Promote successful germination and vegetation establishment
- Use practicable, construction-compatible seeding methods to ensure efficient site stabilization and revegetation
- Prevent the spread of invasive or noxious plant species
- Maintain compliance with all applicable erosion control and land disturbance requirements

In addition, the Project seeks to minimize the potential for soil surface crusting. Consultation with the local United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Simla, CO Field Office personnel identified that if soils remain exposed for extended periods, a hardened soil crust can form. This crust can inhibit seed-to-soil contact and reduce water infiltration, which may affect successful germination and vegetation establishment. To address this concern, construction sequencing and stabilization practices will be designed to minimize the amount of time that soils remain exposed and prioritize seeding and stabilization following completion of grading activities.

Topsoil Management

Topsoil will be carefully managed during construction to ensure successful vegetation establishment. Where required for construction activities, topsoil will be striped from disturbance areas and stockpiled for later reuse during site restoration.

Topsoil stockpiles will be located in areas that do not interfere with drainage patterns or construction operations. Stockpiles will be managed to prevent erosion, sediment transport, and degradation of soil quality. Topsoil stockpiles will be stabilized if they remain in place for extended periods. Stabilization methods may include: temporary seeding, straw mulch, coconut fiber matting, erosion control matting, and/or other appropriate stabilization practices. Stabilizing the stockpiles will reduce erosion potential and help preserve topsoil quality.

Revegetation

Disturbed areas will be revegetated as soon as practicable following completion of civil work. Drill seeding is the preferred method as it places seed directly into the soil, improving seed-to-soil contact, reduced seed loss from wind, and uniform distribution of seed, thereby increasing germination success.

Drill seeding will be implemented wherever site conditions and schedule allow. Erosion control measures, such as straw mulch and/or coconut fiber matting may be applied to seeded areas as needed to help retain soil moisture and reduce potential for wind erosion

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during germination. Temporary cover crops may also be used to temporarily stabilize soils, if construction schedule and seasonal conditions align. Hydroseeding may be used as a contingency method if needed due to site constraints, weather conditions, construction schedule, or access limitations.

Monitoring and Maintenance

Following seeding and stabilization, disturbed areas will be monitored to ensure vegetation establishment is progressing successfully. If areas fail to establish adequate vegetative cover, correction actions may include reseeding, soil amendment, fertilization, or additional erosion control measures, if monitoring indicates that vegetation establishment is limited.

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SUR Appendix K

Colorado Parks and Wildlife (CPW) Coordination Letter

COLORADO
Parks and Wildlife
Department of Natural Resources

Southeast Region
4255 Sinton Road
Colorado Springs, CO 80907
P 719.227.5200

27 February 2026

Natalie Aiello, Central Permitting Manager
BayWa r.e. Americas
Delray Beach, FL
natalie.aiello@baywa-re.com

RE: CPW Comments on the Shepherd Solar Project, Elbert County

Dear Natalie Aiello,

Colorado Parks and Wildlife (CPW) received your request for comment on the Shepherd Solar and Storage Project (the Project), to be developed by BayWa r.e. Americas in Elbert County. CPW staff are familiar with the location of the Project as well as the area surrounding the site. In a meeting on December 5, 2025, BayWa r.e. Americas shared plans for the Project and results from the initial site assessment and habitat surveys. CPW appreciates that BayWa r.e. Americas is coordinating during the initial planning stages of this Project so that recommendations to avoid and reduce impacts can be incorporated early in the process. CPW comments include a summary of our statutory responsibility, understanding of the project, general recommendations, and recommendations to avoid or minimize adverse impacts to wildlife and wildlife resources within the Project area.

Laura Clellan, Director, Colorado Parks and Wildlife
Parks and Wildlife Commission: Richard Reading, Chair · James 'Jay' Tutchton, Vice-Chair · Eden Vardy, Secretary · Jessica Beaulieu · Frances Silva Blayney · John Emerick · Tai Jacober · Dallas May · Jack Murphy · Gabriel Otero

CPW'S STATUTORY RESPONSIBILITY

CPW has a statutory responsibility to manage all wildlife species in Colorado; as such we encourage protection for Colorado's wildlife species and habitats through responsible energy development and land use planning. Protection of core wildlife areas, quality fisheries and habitat, big game winter range and seasonal migration corridors, and raptor nesting locations are of extreme importance. CPW recommends that all proposed projects be assessed to avoid, minimize, or mitigate impacts to sensitive wildlife habitats and species. That includes species of concern as well as Federal and/or State listed species, big game wildlife (migration corridors, winter range, and parturition areas), breeding and nesting habitats for sensitive ground-nesting birds, and nests of raptors sensitive to development in order to prevent loss of habitat or fragmentation of habitat. US Fish and Wildlife Service should be consulted on any Federally-listed Endangered and Threatened Species that might be present at the location.

GENERAL RECOMMENDATIONS

CPW recommends that, when selecting sites for solar development, the developer focuses on options that avoid critical wildlife habitats over the use of mitigation strategies. If developers can consolidate facilities and roads to the extent possible, this will minimize the amount of land that is disturbed and fragmented. New transmission lines should follow existing transmission corridors and pre-disturbed areas, such as roads, whenever feasible, to minimize additional impacts on wildlife and habitat fragmentation. If there are multiple developments planned for an area, CPW recommends consideration of wildlife movements at a larger scale. Please refer to the Colorado Parks and Wildlife Best Management Practices (BMPs) for Solar Energy Development and other guidance for developers available at the CPW Energy and Land Use website. Early consultation between CPW and developers of energy projects is critical for avoiding impacts to sensitive species, and we appreciate that BayWa r.e. Americas is incorporating CPW's recommended BMPs for solar development and coordinating with CPW during the early phases of the Project.

Laura Clellan, Director, Colorado Parks and Wildlife
Parks and Wildlife Commission: Richard Reading, Chair · James 'Jay' Tutchton, Vice-Chair · Eden Vardy, Secretary · Jessica Beaulieu · Frances Silva Blayney · John Emerick · Tai Jacober · Dallas May · Jack Murphy · Gabriel Otero

UNDERSTANDING OF THE PROJECT

The proposed Project will be located in Elbert County, south of Highway 24 and the town of Matheson, Colorado. It will produce up to 200 megawatts (MW) and have a 100-MW battery energy storage system (BESS). The Project will be located on 2,275 acres of private land. Other Project components likely will include a collection system, access roads, operations building, and perimeter fencing. A Tri-State transmission line runs through the Project area.

Land cover in the area is mostly dryland agriculture with some shortgrass prairie remnants, based on information from BayWa r.e. Americas as well as aerial imagery and land cover data. Playa Lakes Joint Venture has some playa features mapped within the Project boundary. No raptor nests are mapped in the area by CPW. Initial habitat surveys indicated no threatened or endangered species, no prairie dogs, and no burrowing owls. No raptor nests were observed, and few trees occur in the Project area.

POTENTIAL IMPACTS TO WILDLIFE RESOURCES

High Priority Habitats (HPH) are sensitive areas identified using CPW's Species Activity Mapping (SAM) database, which incorporates scientific data and wildlife observations. These publicly available maps inform environmental assessments and planning. The Project does not intersect any mapped HPH, though there is Aquatic Native Species Conservation Waters HPH (Middle and South Rush Creek) within 0.5 mile of the north and south boundaries of the Project.

CPW also considers Species of Greatest Conservation Need (SGCN) and Species of Concern (SC) identified in the State Wildlife Action Plan (SWAP). SGCN and SC are species experiencing population declines, habitat threats, or ecological vulnerabilities requiring proactive conservation. These may include federally or state-listed threatened, endangered, or special-concern species.

Laura Clellan, Director, Colorado Parks and Wildlife
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A number of SGCN and SC species have been documented in the area or may be present based on modeling and range maps. These SGCN species include nine (9) bird species, three (3) invertebrate species, five (5) mammal species, and four (4) reptile species. All SGCN and SC are listed in the table below.

CPW Project Area Species of Greatest Conservation Need*			
Major Group	**Scientific Name**	**Common Name**	**CPW Status#**
Birds	*Anarhynchus montanus*	Mountain Plover	SWAP Tier 1, SC
Birds	*Antigone canadensis*	Sandhill Crane	SWAP Tier 2
Birds	*Athene cunicularia*	Burrowing Owl	SWAP Tier 2, ST
Birds	*Buteo regalis*	Ferruginous Hawk	SC
Birds	*Calamospiza melanocorys*	Lark Bunting	SWAP Tier 2
Birds	*Circus cyaneus*	Northern Harrier	SWAP Tier 2
Birds	*Falco mexicanus*	Prairie Falcon	SWAP Tier 1
Birds	*Rhynchophanes mccowni*	Thick-billed Longspur	SWAP Tier 1
Birds	*Selasphorus rufus*	Rufous Hummingbird	SWAP Tier 2
Invertebrates	*Argia alberta*	Paiute Dancer	SWAP Tier 2
Invertebrates	*Bombus fervidus*	Golden Northern Bumble Bee	SWAP Tier 2
Invertebrates	*Bombus pensylvanicus*	American Bumble Bee	SWAP Tier 1
Mammals	*Cynomys ludovicianus*	Black-tailed Prairie Dog	SWAP Tier 2
Mammals	*Lasionycteris noctivagans*	Silver-haired Bat	SWAP Tier 2
Mammals	*Lasiurus borealis*	Eastern Red Bat	SWAP Tier 2
Mammals	*Lasiurus cinereus*	Northern Hoary Bat	SWAP Tier 1
Mammals	*Vulpes velox*	Swift Fox	SC
Reptiles	*Heterodon nasicus*	Plains Hog-nosed Snake	SWAP Tier 2
Reptiles	*Phrynosoma hernandesi*	Hernandez's Short-horned Lizard	SWAP Tier 2
Reptiles	*Sistrurus tergeminus*	Western Massasauga	SWAP Tier 2, SC
Reptiles	*Terrapene ornata ornata*	Plains Box Turtle	SWAP Tier 2

* All species listed in this table have been documented in or within one mile of the Project area
# Species Wildlife Action Plan=SWAP; Species of Concern=SC; State Threatened=ST

Laura Clellan, Director, Colorado Parks and Wildlife
Parks and Wildlife Commission: Richard Reading, Chair · James 'Jay' Tutchton, Vice-Chair · Eden Vardy, Secretary · Jessica Beaulieu · Frances Silva Blayney · John Emerick · Tai Jacober · Dallas May · Jack Murphy · Gabriel Otero

IMPACT AVOIDANCE, MINIMIZATION AND/OR MITIGATION RECOMMENDATIONS

Raptors and Migratory Birds

The Project is in the breeding range of golden eagle (*Aquila chrysaetos*), though no nests are known in the area. The Project area contains suitable habitat for nesting raptors and migratory birds, including SGCN and SC species listed above. To ensure compliance with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act, CPW recommends consultation with USFWS. All migratory birds are protected under the Migratory Bird Treaty Act, and any removal or disturbance of an active migratory bird nest requires prior consultation with CPW and USFWS. Both active and potential nest sites, as well as winter night roosts, should be considered when evaluating potential disturbance during ground-disturbing activities.

CPW mapping data does not identify any raptor nests in the vicinity of the Project; however, the CPW mapping data are not a complete census and lack of data does not mean that raptors don't nest in the area. CPW appreciates the commitment to conducting preconstruction surveys and adhering to seasonal buffers and time restrictions to mitigate impacts on nesting migratory birds to the greatest extent feasible.

To minimize impacts on nesting migratory birds, CPW recommends the following:

- Conduct ground disturbance and vegetation clearing activities outside of the breeding season (March 15 to August 31) if possible. If construction must occur during the breeding season, surveys for active nests of ground-nesting species as well as tree-nesting raptors should be conducted prior to groundbreaking.
- Prairie dog colonies may occur within the Project area. If development in prairie dog colonies occurs during the spring through late summer months (February 1 to October 31), burrowing owl surveys should be conducted. If

nesting burrowing owls are present, no human encroachment or surface disturbance should occur within 100 meters of nesting burrows during March 1 to August 15. If burrowing owls merely occupy the site, it is recommended that earthmoving and other disturbance activities be delayed until late fall after they have migrated.

- Preconstruction surveys should be conducted to identify raptor nests within the Project area and implement appropriate restrictions. CPW recommends adherence to the recommended buffer distances and timing stipulations identified in the CPW document "Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors," available on the CPW website.

Mountain Plover (SGCN)

The Project area is within the mapped potential nesting range for mountain plovers. Mountain plovers nest in areas with short vegetation or bare ground including shortgrass prairie, grazed pasture, and fallow or tilled fields. To avoid or minimize adverse impacts to mountain plovers, CPW recommends:

- If initial ground disturbance is planned to occur between April and August, survey suitable nesting habitat using USFWS protocols. Any active mountain plover nests should be flagged for avoidance. These surveys may be conducted at the same time as burrowing owl surveys.
- If mountain plover nests are detected, no surface disturbance should occur within 300 feet of active nest sites until young are hatched, independent, and fledged (April 1 to August 15).

<u>OTHER CPW RECOMMENDATIONS</u>

Habitat Loss and Fragmentation

The Project location provides habitat to big game, including pronghorn and mule deer. Security fencing prevents the movement of wildlife throughout the site and without breaks in the Project fence, wildlife species will be forced to move to one

end, or completely go around the entire Project. That impact would be in addition to the habitat loss and the wildlife displaced by the planned infrastructure and fencing. CPW commends efforts by BayWa r.e. Americas to locate Project development on previously disturbed agricultural land to the extent possible. To further minimize habitat loss and fragmentation impacts that could adversely impact big game, CPW recommends the following:

- Design facility footprint and fence layout to allow for unfenced wildlife movement corridors through the project. CPW appreciates that BayWa r.e. Americas is planning for unfenced breaks along drainages in the Project that allow wildlife to pass through the area.
- Ensure wildlife movement corridors are sufficiently wide (200–300 meters) to accommodate large herds.
- CPW is happy to provide more detailed suggestions as Project plans progress.

Native plant management

Soil disturbance from construction activities may introduce invasive plant species that degrade habitat quality, reduce forage availability for wildlife and livestock, and increase fire risk. While land cover in much of the Project is dryland agriculture, proper reclamation is essential for soil stabilization, noxious weed control, and fostering plant communities that provide structural diversity and resources necessary to support wildlife. CPW recommends the following additional measures:

- CPW prefers that native vegetation be retained on site during the operational lifespan of the Project, both as habitat for wildlife and to ensure successful reclamation of the Project area.
- Where ground disturbance occurs, re-establish a diverse plant community including native grasses, woody plants, and broadleaf forbs, to support wildlife nutrition and cover.
- Revegetate with native species using a native seed blend that closely matches the surrounding vegetation to restore ecological function and

maintain habitat integrity. Strict adherence to the Natural Resources Conservation Service's recommendations for seed mixes is advised.

- Prevent the spread of invasive plant species and listed Noxious Weeds by incorporating a comprehensive weed management plan, including monitoring and treatment as needed. CPW would appreciate the opportunity to review the Project's Noxious Weed Management Plan prior to the start of construction.
- Conduct long-term monitoring to assess revegetation success and complete weed control and maintenance to ensure the establishment of a functional, native plant community.

Fencing

The CPW document "Fencing with Wildlife in Mind" provides general suggestions for wildlife-friendly fencing. In addition to the measures outlined in the report, CPW recommends the following:

- For security fencing, CPW requests that the security fence be tall enough to discourage deer from jumping, at least 8 feet in height, and have a smooth top with no protrusions or wire that can risk entanglement or impalement.
- Security fencing should allow for movement of small and medium sized wildlife by providing a 6-inch gap at the bottom of the fence, or using woven wire fencing as described in the Colorado Department of Transportation Standard Plan No. M-607-4. CPW is happy to discuss this recommendation in more detail with the developer as site plans progress.
- External security fence corners near roads should be angled so that big game traveling along the fence are less likely to "overshoot" corners, causing them to run onto roadways or other hazardous areas.
- Anywhere that security fencing is not required on the site, CPW recommends the use of wildlife permeable fencing (wildlife-friendly) to allow movement of wildlife to the extent possible.
- Project design should continue to consider wildlife movement and the inclusion of wildlife movement corridors through the Project to avoid

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potential impacts to big game and other wildlife moving through the area. Any planning should consider the entire Project area with the goal of allowing wildlife movements through the larger development site.

Above-ground Electrical Infrastructure

The Project is in the golden eagle breeding range. The Avian Power Line Interaction Committee (APLIC) provides guidance on power line design that reduces collision and electrocution risk (https://www.aplic.org/documents). APLIC also provides recommendations for riser poles associated with underground collection systems (https://www.aplic.org/poles-at-wind-energy-facilities), which can reduce the risk of electrocution for eagles and other raptors that may perch on above-ground electrical infrastructure associated with the project.

We appreciate your consideration of our comments and recommendations. As always, CPW staff are available to work with operators on how best to minimize development impacts to both wildlife and their habitats. If you have questions or would like clarification about any of our comments, please contact District Wildlife Manager Sarah Watson at 719-439-9636 or sarah.watson@state.co.us or Renewable Energy Liaison Victoria Poulton at 719-661-7269 or victoria.poulton@state.co.us.

Sincerely,

Tim Kroening

Digitally signed by TIM KROENING
Date: 2026.02.27 14:46:59 -07'00'

Tim Kroening
Area Wildlife Manager - Area 14
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Laura Clellan, Director, Colorado Parks and Wildlife
Parks and Wildlife Commission: Richard Reading, Chair · James 'Jay' Tutchton, Vice-Chair · Eden Vardy, Secretary · Jessica Beaulieu · Frances Silva Blayney · John Emerick · Tai Jacober · Dallas May · Jack Murphy · Gabriel Otero

Cc: Sarah Watson - District Wildlife Manager - sarah.watson@state.co.us
Travis Sauder - Area Assistant Wildlife Manager - travis.sauder@state.co.us
Victoria Poulton - Renewable Energy Liaison - victoria.poulton@state.co.us

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SUR Appendix L

Spatial Analysis of Ground-Mounted Solar Arrays and Agricultural Land in Colorado



A SPATIAL ANALYSIS OF GROUND-MOUNTED SOLAR ARRAYS AND AGRICULTURAL LAND IN COLORADO

COSSA INSTITUTE – JANUARY 2026

JEREMIAH GARRICK



ABOUT THE AUTHOR

Jeremiah Garrick is a Colorado native solar photovoltaic (PV), battery energy storage (BESS), land use, and community engagement professional. As the Manager of Community Engagement and Strategy at the COSSA Institute, he leads efforts to track changes to land use regulations for solar and energy storage while helping counties plan for balanced and responsible renewable energy growth. In this role, he bridges the gap between local governments, utilities, developers, and community stakeholders to ensure Colorado can meet its clean energy and greenhouse gas reduction goals.

***About the COSSA Institute**: The COSSA Institute is a Colorado-based 501(c)(3) organization focused on accelerating the clean energy movement through community investment. The COSSA Institute provides the necessary tools, training, and resources to grow and expand the solar and storage industry, keeping up with market demand for clean energy.*

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1 EXECUTIVE SUMMARY

Colorado is rapidly scaling development of solar energy, yet questions persist about whether solar development is compatible with the agricultural economy and local land-use priorities across the state.

Overstating the impacts to farmland and agricultural productivity risks hindering energy development and jeopardizing Colorado's ability to meet its clean energy and climate goals. Conversely, understating the potential impacts risks overlooking localized pressures on farmland and rural communities that depend on agricultural and grazing operations.

To put the issue in context, this paper provides a statewide assessment of the footprint of ground-mounted solar arrays in Colorado as of 2024. The analysis draws on multiple sources to quantify where utility-scale solar development intersects with county boundaries, farmland, and soils of importance across the state, including but not limited to: the Ground-Mounted Solar Energy in the United States (GM-SEUS) v1.0 dataset,[1] the National Cooperative Soil Survey's Soil Survey Geographic Database,[2] the USDA Censuses of Agriculture,[3] and the U.S. Large-Scale PV Database.[4]



COLORADO:

Total[5]: 64 Counties, 66,330,835 acres of land

- **Total Farmland[3]**: 30,213,899 acres
  - **Cropland**: 10,479,125 acres
  - **Pastureland:** 18,877,254 acres
  - **Irrigated Land:** 2,287,808 acres
- **Total Classified Soils[6]:** ~16,143,182 acres
- **Solar Projects as of 2024[6]:** ~14,326 acres
  - **Total Solar Projects on Classified Soils as of 2024:** ~5,436 acres
- **Total projected solar development by 2050[1]:** 60,000–80,000 acres

KEY FINDINGS BY ACREAGE[6]:

As of 2024…

- **Colorado had ~14,326 acres of active solar projects located in 39 counties**
  - **~89.5% located in 8 counties** (Adams, Alamosa, Arapahoe, Crowley, El Paso, Logan, Pueblo, and Weld Counties)
  - **~82.3% located in the Front Range Urban Corridor (FRUC)**
  - **~14.99% located in the Denver Metro**
  - Counties containing solar outside of the FRUC had an average of ~101 acres of solar arrays
  - 25 counties had no solar projects, 21 of which located outside of the FRUC

2 INTRODUCTION

Colorado has committed to ambitious clean energy goals, including a 50% reduction in greenhouse gas emissions by 2030 (compared to 2005 levels), and aims to decarbonize the electricity sector by mid-century[7] with Governor Polis committed to reaching 100% renewable energy by 2040 or earlier.[8] Meeting these goals in both a cost effective and reliable manner will require a significant expansion of renewable energy generation, including utility-scale solar.[7] As development accelerates, communities around the state are navigating how best to balance solar development with existing land uses, particularly agricultural uses.

Public debate often frames solar and agriculture as competing, zero-sum land uses; however, statewide data indicate a more nuanced reality. Farmland remains overwhelmingly the largest use of land in Colorado, with farms and ranches comprising nearly half of the state's total acreage. As of 2024, ground-mounted solar, by contrast, occupied only a fraction of 1% of total farmland or classified soils,[6] with approximately 14,326 acres occupied by ground-mounted solar statewide.[6] Late 2025 acreage is reported around 21,000 acres.[9] The majority of Colorado's ground-mounted solar development was located on land without prime farmland or soils of importance,[6] and agrivoltaic systems in operation and being constructed continue to demonstrate opportunities for agricultural production beneath and around solar arrays.

Understanding the footprint of solar within Colorado's broader land-use landscape is essential for informed planning. This analysis establishes a baseline for understanding the distribution of ground-mounted solar arrays in Colorado and their overlap with agricultural soils. By integrating the Ground-Mounted Solar Energy in the United States (GM-SEUS) v1.0 dataset,[1] with USDA farmland census statistics,[3] the U.S. Large-Scale PV Database (USPVDB) v3.0 dataset,[4] and SSURGO county-level soil classifications,[2] it quantifies how much land ground-mounted solar arrays occupied through 2024, where projects are concentrated, and how the footprint of solar overlaps and compares to the state's agricultural soils.

3 METHODOLOGY

3.1 Data Sources

- **County-Level Soil Data (SSURGO / NRCS)[2]:** Used to map and classify land by agricultural suitability, including Prime Farmland, Prime if Irrigated (with or without conditions), Farmland of Statewide or Local Importance, Unique Farmland, and Non-Prime categories.
- **Ground-Mounted Solar Energy in the United States (GM-SEUS) v1.0[1]:** Used to identify and map ground-mounted solar arrays in Colorado.
- **TIGER/Line Shapefile, 2023, Nation, U.S., County and Equivalent Entities[10]:** Used for county boundaries and acreage totals. For this reason, total acreage of counties used for percentage-based comparisons include both land and water acreage and total acreage of solar projects for each county include projects within municipal limits.
- **U.S. Large-Scale PV Database (USPVDB) v3.0 (April 2025)[4]:** Used to identify and map large-scale (nameplate capacity of 1 megawatt or greater) solar facilities in Colorado.
- **USDA Census of Agriculture (1987–2022)[3]:** Used to calculate total farmland, cropland, and grazing land at the state and county level and to estimate farmland change over time.

3.2 Data Preparation

- **Projection:** All spatial analyses in this report were performed using the NAD83 / Conus Albers equal-area projection (EPSG:5070). All datasets were reprojected to EPSG:5070 prior to calculating acreage or conducting spatial intersections to ensure consistent area measurements.
- **Solar Facility Acreage:** Calculated directly from GM-SEUS and USPVDB v3.0 array polygons. Polygons were imported into QGIS and areas were computed in acres.
- **County Totals:** GM-SEUS polygons were overlaid with Colorado county boundaries in QGIS. Acreage values for total project footprints and agrivoltaic facilities were summed statewide, by region, and by county.
- **Soil Classification Overlays:** Solar polygons were intersected with NRCS SSURGO soil layers to determine the proportion of solar acreage located on agricultural soils (Prime, Prime if Irrigated, Statewide/Local Importance, and Unique).

3.3 Caveats

- **Coverage Lag:** USPVDB v3.0 includes projects operational through Q3 2024. GM-SEUS contains projects through the end of 2024, but has its own limitations due to source data and analysis. **Projects that came online in 2025 are not represented in this analysis.**
- **Potential Undercount:** Because USPVDB and GM-SEUS depend on EIA filings and aerial imagery, some pre-2024 facilities and/or polygons may be omitted or under-traced. See data notes in Section 5.

3.4 Analytical Approach

- **Statewide Totals:** Aggregated all county-level values to calculate solar acreage as a percentage of farmland, classified soils, and total land.
- **County Rankings:** Counties were ranked by absolute solar acreage, total farmland, and farmland change. Rankings were also produced for total acreage of each classified soil type and for correlations among these factors.
- **Regional Analysis:** Results were summarized for the Denver Metro Area, the Front Range Urban Corridor (FRUC), and counties outside the FRUC to highlight geographic disparities.

4 DEFINITIONS

“Classified soils”
For this analysis, classified soil refers to all soil designations of agricultural importance in the SSURGO dataset,[2] specifically Prime Farmland, Prime if Irrigated (with or without conditions), and Farmland of Statewide, Local, and Unique Importance. For simplicity, soils categorized as Not Prime Farmland or land not categorized by USDA are not considered “classified soils” when used throughout this analysis. These categories do not reflect actual agricultural use, but rather the inherent suitability of the land based on physical and chemical characteristics, independent of how the land is currently managed or used.

“Farmland”
For this analysis, farmland refers to the acreage reported by the USDA Census of Agriculture,[3] including cropland, pastureland, and rangeland used for agricultural production. This differs from “classified soils,” which indicate suitability rather than current agricultural use.

“Front Range Urban Corridor (FRUC)”
For this analysis, the FRUC refers to the group of 17 Colorado counties identified by the state and federal planning literature as forming the Front Range population and infrastructure corridor.

Includes: Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, El Paso, Elbert, Fremont, Gilpin, Jefferson, Larimer, Park, Pueblo, Teller, and Weld Counties

“Ground-mounted solar”
For this analysis, ground-mounted solar refers to solar arrays represented in the Ground-Mounted Solar Energy in the United States (GM-SEUS) dataset. GM-SEUS compiles the most complete open-source inventory of solar arrays across the contiguous United States through December 2024, integrating data from multiple freely available repositories to ensure transparency and reproducibility.[1]

“Large-scale solar”
For this analysis, large-scale solar refers to operating projects represented in the U.S. Large-Scale PV Database (USPVDB v3.0, April 2025). The dataset includes facilities greater than 1 MW nameplate capacity that were fully operational through Q3 2024. Projects commissioned after that period are not yet represented within USPVDB v3.0.[4]

5 DATA NOTES

County-Level Calculations
Acreage is attributed to the county (or counties) in which the array is geographically located. Arrays that cross or are located inside municipal boundaries are still summarized only at the county level.

Ground-Mounted Solar Energy in the United States (GM-SEUS)[1]:
Relevant to Colorado, GM-SEUS includes array-level data derived from: the United States Large-Scale Photovoltaic Database v2.0 (USPVDB); OpenStreetMap (OSM) project and panel-row annotations; the TransitionZero Global Solar Asset Mapper Q3-2024 (TZ-SAM); and value-added datasets from the National Laboratory of the Rockies (NLR), Lawrence Berkeley National Laboratory (LBNL), Global Energy Monitor's (GEM) Global Solar Power Tracker (GSPT), and the World Resources Institute's (WRI) Global Power Plant Database v1.3.0 (GPPDB).

GM-SEUS has inherent limitations due to its source data, including imagery-based detection uncertainties, variable metadata completeness, and occasional under- or over-estimation of array boundaries. GM-SEUS boundaries are intentionally spatially conservative, representing the extent of solar panel rows rather than total project parcels or associated infrastructure (e.g., setbacks, roads, or substations). **Acreage derived from GM-SEUS should therefore be interpreted as an approximation of panel-covered area through 2024.** Further, GM-SEUS at times omits array and panel-row area and under-representing the actual spatial footprint of the array due to the exclusion of panel-rows that were not geometrically consistent and panel-rows that produced unreasonable array boundaries.

Nevertheless, the dataset provides the most comprehensive high-fidelity, national-scale basis for quantifying the geographic distribution and land-use footprint of ground-mounted solar facilities through 2024. GM-SEUS utilizes USPVDB v2.0, however, when compared to USPVDB v3.0 the most recent arrays in Colorado that are represented in USPVDB v3.0 are accounted for in GM-SEUS through other data sources.[6]

United States Large-Scale Solar Photovoltaic Database (USPVDB):
According to U.S. Energy Information Administration (EIA) data, Colorado had 2,341 MW of installed large-scale solar capacity (>1 MW nameplate capacity) by the end of 2024.[11] Using a conversion factor of 6.6 acres per MW, used in the Department of Energy's Solar Futures Study,[12] 2,341 MW would equate to roughly 15,450 acres of large-scale solar statewide. This analysis identifies approximately 12,600 acres of large-scale solar (through Q3 2024) in part due to timing lags or undercounting. Therefore, assume this analysis is conservative when interpreting large-scale solar (not "ground-mounted") acreage totals as of the end of 2024. No adjustment has been applied to the data in this report to preserve alignment with the raw datasets and maintain a clear distinction between data and inferred estimates.

6 FINDINGS AND ANALYSIS

6.1 Statewide Land Use Context

Farmland accounts for over 45% of Colorado's total land area. By contrast, ground-mounted solar development occupied roughly 14,326 acres—about two-hundredths of 1% (~0.022%)—of the state's total land area, as of 2024.[6]

Data show a persistent reduction in total farmland and number of farms over many decades,[3] reflecting many pressures from trends in Colorado's economy, agricultural markets, population growth, and water availability. The data indicate that solar development plays a minimal role relative to other economic and demographic pressures. This pattern holds true across the state, even with considerable variation in population density, soil quality, topography, and the extent of solar development among regions and counties.[6]

Understanding the distribution and character of farmland and solar development provides additional context for how these land-use patterns are evolving in Colorado.

- **Total Land in Colorado[5]:** 66,330,835 acres
- **Total Ground-Mounted Solar Development[6]:** ~14,326 acres (~0.022% of total land in Colorado)
- **Total Large-Scale Solar Development[6]:** ~12,601 acres (~0.019% of total land in Colorado)
- **Total Farmland[3]:** 30,213,899 acres (~45.55% of total land in Colorado)
    - **Number of Farms:** 36,056
    - **Total Pastureland:** 18,877,254 acres
    - **Total Cropland:** 10,479,125 acres
        - **Total Harvested Cropland:** 4,951,986 acres
    - **Total Irrigated Farmland:** 2,287,808 acres
- **Total Classified Soils[6]:** ~16,143,500 acres
    - **Total Soils Designated as Prime or Prime if Irrigated** (including all conditional designations such as "if irrigated and drained" or "if irrigated and protected from flooding"): ~11,830,000 acres
    - **Total Soils Designated of Local, Statewide, or Unique Importance:** ~4,313,500 acres

6.2 Farmland Trends in Colorado

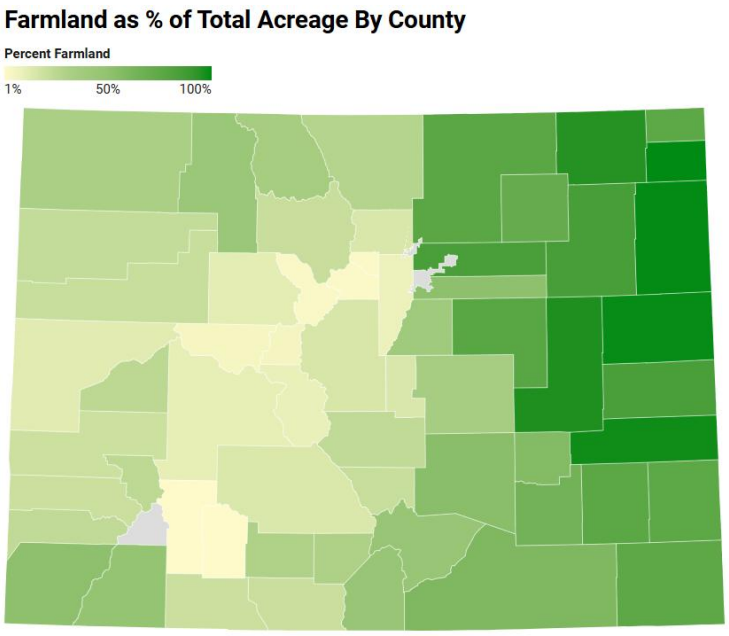
Between 2017 and 2022, Colorado experienced a net decline of 2,837 farms (−7.3%) and a net decline of approximately 1.6 million acres of farmland (−5.1%).[3] Due to significant diversity of land across Colorado, farmland is not evenly distributed. When looking at counties on the Eastern Plains, it becomes evident that any form of development, not just energy development, would likely take place on farmland (see Figure 1). Six counties in Colorado are over 95% farmland: Kiowa, Kit Carson, Logan, Lincoln, Phillips, and Yuma.[3,6]

The number of farms has declined faster than total agricultural acreage, suggesting that smaller operations are being absorbed into larger enterprises or exiting production entirely. Farms in the 1–9 acre range declined by

more than 19% between 2017 and 2022, underscoring the disproportionate loss among the smallest producers. Mid-sized farms between 180 and 999 acres remained relatively stable during this period, showing modest increases of between 2.9–3.6%. However, the number of the largest farms, those exceeding 1,000 acres, declined by roughly 13–14%, indicating some contraction even among high-acreage operations.[3]

These patterns suggest Colorado's agricultural landscape is consolidating, which is further reflected in farm income data. Over the past decade, the number of farms reporting annual sales under $50,000 declined by more than 55% between 2012 and 2022, far surpassing reductions in any other sales category and signaling the exit of smaller, lower-revenue producers. The number of farms in the highest sales categories ($250,000–$499,999 and $500,000 or more), while still lower than a decade ago, increased modestly from 2017 to 2022 by about 1% and 6.8%, respectively.[3]

When evaluating solar development on agricultural land, it is more appropriate to compare changes in agricultural acreage rather than the change in number of farms to avoid conflating farm consolidation with the true reduction of farmland. The change in farmland across Colorado varies greatly with 22 counties seeing increases in farmland acreage from 2017 to 2022 and the remaining 42 counties experiencing a net loss of farmland in the same period (see Figure 2).[3]



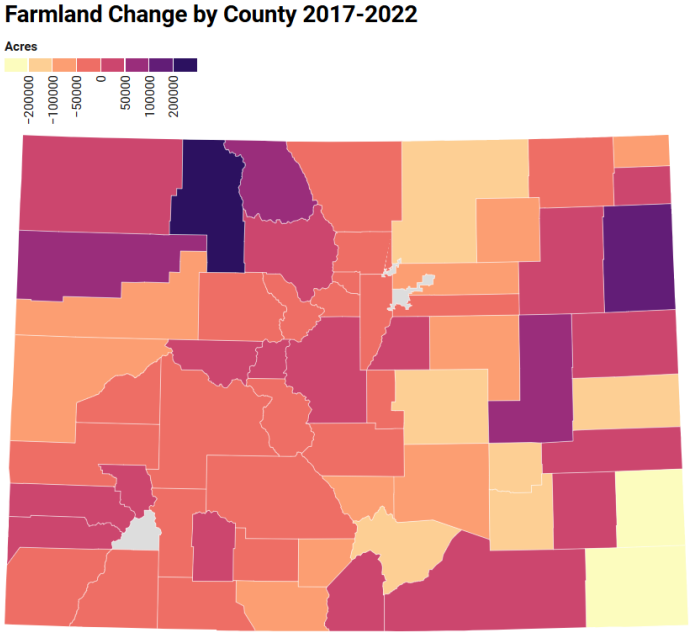


Figure 1 (left) – Farmland as a percentage of total acreage by county[3,6]
Figure 2 (right) – Farmland change in net acreage by county 2017-2022[3]

Counties with higher levels of ground-mounted solar development have not experienced greater rates of farmland loss than those without.[6] The top ten counties, shown in Table 1, account for more than 90% of Colorado's net farmland loss from 2017 to 2022.[3] In these counties, the total acreage of ground-mounted solar amounted to well under 1% of the farmland decline. Even in the highest case, El Paso County, the footprint of ground-mounted solar could have accounted for at most about 1.3% of farmland reduction during this period. This assumes that all solar development occurred on farmland, which it did not. More than 1,200 acres of the arrays in El Paso County occurred on soils not categorized as prime (with or without conditions) or farmland of importance.[6]

County	Farmland Change[3]	Solar on all lands[6]	Solar on Classified Soils[6]
Baca County	-235,609 acres	27.82 acres	27.82 acres
Prowers County	-209,079 acres	42.09 acres	42.09 acres
Crowley County	-193,595 acres	420.68 acres	171.72 acres
Otero County	-158,256 acres	9.06 acres	8.58 acres
El Paso County	-139,293 acres	1,819.02 acres	567.64 acres
Huerfano County	-114,258 acres	0 acres	0 acres
Cheyenne County	-112,408 acres	0 acres	0 acres
Weld County	-111,590 acres	757.91 acres	566.91 acres
Conejos County	-97,227 acres	20.41 acres	12.18 acres
Elbert County	-89,027 acres	0 acres	0 acres

Note: For "Farmland Change" negative values indicate net farmland loss between 2017 and 2022.
Table 1 – Top 10 counties in Colorado by net farmland reduction between 2017 and 2022

Notably, among the top ten counties with the largest solar footprints in Colorado, nine experienced farmland reduction between 2017 and 2022 (see Table 2).[6] The amount of farmland reduction substantially exceeds the footprint of ground-mounted solar arrays, suggesting that solar development is not a primary driver of agricultural land-use change. Rather, the data point to broader economic and structural shifts within these counties.

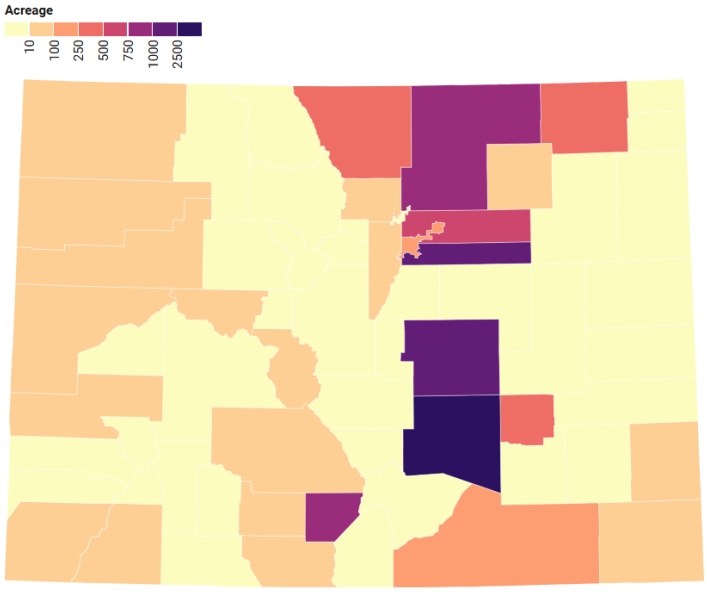
County	Farmland Change[3]	Solar on all lands[6]	Solar on Classified Soils[6]
Pueblo County	-61,768 acres	6696.73 acres	1,428.67 acres
El Paso County	-139,293 acres	1819.02 acres	567.64 acres
Arapahoe County	-13,484 acres	1069.86 acres	496.19 acres
Alamosa County	-50,688 acres	825.18 acres	287.52 acres
Weld County	-111,590 acres	757.91 acres	566.91 acres
Adams County	-67,099 acres	738.63 acres	645.66 acres
Logan County	-12,053 acres	497.37 acres	341.97 acres
Crowley County	-193,595 acres	420.68 acres	171.72 acres
Larimer County	-15,299 acres	358.93 acres	216.57 acres
Las Animas County	+9,570 acres	213.46 acres	213.14 acres

Note: For "Farmland Change" negative values indicate net farmland loss between 2017 and 2022. Positive values indicate net gains.
Table 2 – Top 10 counties in Colorado by ground-mounted solar array acreage as of 2024

6.3 Solar Development[6]

As of 2024, ground-mounted solar development in Colorado remained fairly concentrated and relatively modest in overall footprint. A handful of counties hosted facilities that together comprise the majority of the state's total ground-mounted solar footprint, while 25 counties had no ground-mounted solar development (see Figure 3 and Figure 4). Notably, Pueblo County housed nearly 47% of ground-mounted solar projects in Colorado by acreage.

Data show that no county in Colorado had ground-mounted solar development covering more than 0.5% of its total area. Only Pueblo County (at 0.43%), exceeds 0.2%, and just five counties—Alamosa, Arapahoe, Denver, El Paso, and Pueblo—exceed 0.1%.



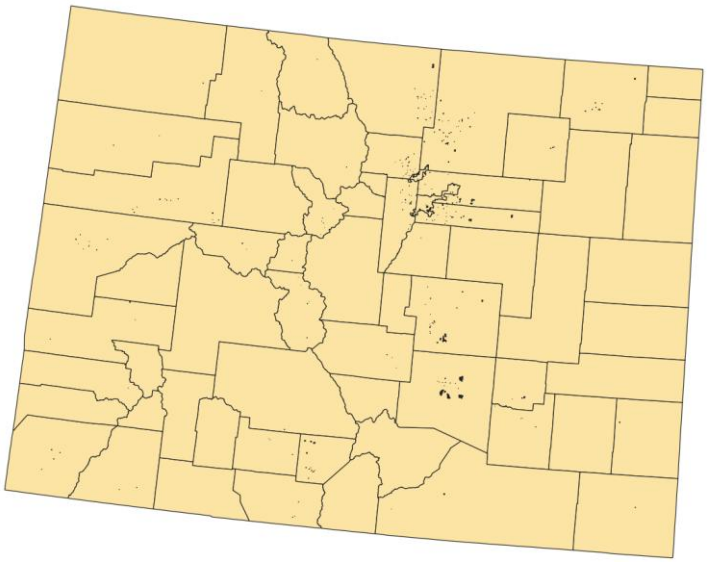


Figure 3 (left) – Total acreage of ground-mounted solar development by county as of 2024[6]
Figure 4 (right) – Visual overlay of GM-SEUS and Colorado County Boundaries[6]

In contrast, farmland comprises more than half of all acreage in 22 counties and more than one-quarter in 34 counties, while nine counties fall below 10% (see Figure 1).[3,6]

Most projects were located within the 17 counties that make up the Front Range Urban Corridor (FRUC), which accounts for more than 82% of Colorado's total ground-mounted solar acreage. Many counties have limited or no development as of 2024 due to a range of factors, including permitting requirements, land-use regulations, terrain and infrastructure constraints, conservation priorities, and competition from other land uses.

6.4 Ground-Mounted Solar Arrays by Region[6]

Counties in the Denver Metro: ~2,147 acres (~14.99% of statewide total)
Includes: Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, and Jefferson Counties (~4.36% of Colorado's total area)

Counties in the Front Range Urban Corridor: ~11,789 acres (~82.29% of statewide total)
Includes: Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, El Paso, Elbert, Fremont, Gilpin, Jefferson, Larimer, Park, Pueblo, Teller, and Weld Counties (~22.28% of Colorado's total area)

Counties outside of the Front Range Urban Corridor: ~2,537 acres (~17.71% of statewide total)
Includes all 47 counties not included in the FRUC (~77.72% of Colorado's total area)

Number of Counties with No Large-Scale Solar Development: 35
Number of Counties with No Ground-Mounted Solar Development: 25

See Figure 5.

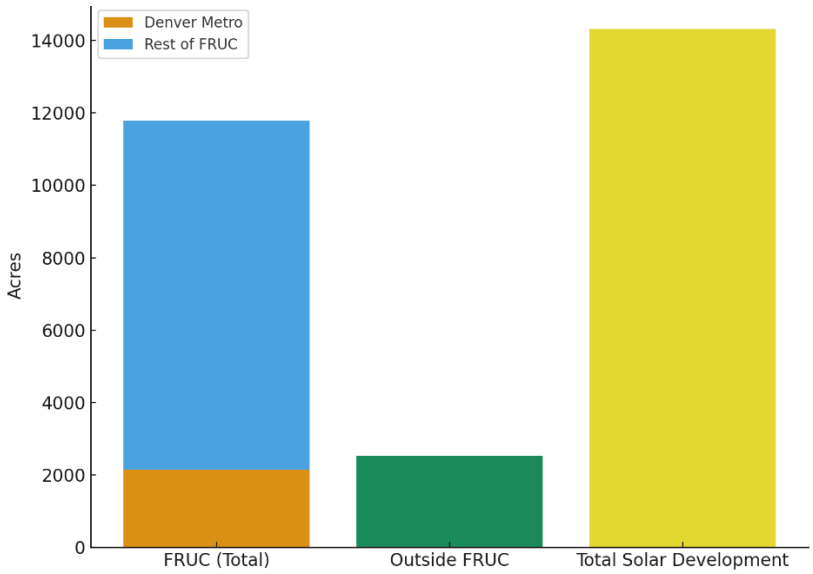


Figure 5 – Ground-mounted solar development by region as of 2024[6]

6.5 Ground-Mounted Solar Arrays on Agricultural Soils

Given the vast extent of agricultural land in Colorado and the inherent qualities that farmland commonly possesses, such as flat topography, stable soils, and proximity to transmission lines, it is not uncommon that ground-mounted solar development occurs on or near agricultural land. In some counties, farmland is so predominant that ground-mounted solar development inevitably overlaps with it (see Figure 1).

While the publicly available data from the 2022 USDA Agricultural Census[3] do not include farmland locations or suitability, the USDA SSURGO database categorizes soils by characteristics, including Prime Farmland, Prime if Irrigated, Prime if Irrigated with Conditions, Farmland of Local Importance, Farmland of Statewide Importance, and Farmland of Unique Importance[2] (see Figure 6). Overlaying these soil classifications with large-scale solar development provides insight into where solar projects overlap with agricultural soils.

Of the approximately 14,326 acres of ground-mounted solar development across the state, about 37.95% (~5,437 acres) is located on soils classified as farmland of some type; 30.07% (~4,308 acres) on Prime if Irrigated soils (including all conditions) and 7.88% (~1,129 acres) on soils classified as farmland of local, statewide, or unique importance. This development exceeds 0.25% of total classified soil acreage in only two counties, Denver County (~0.55%) and Pueblo County (~0.50%) (see Figure 7).[6]

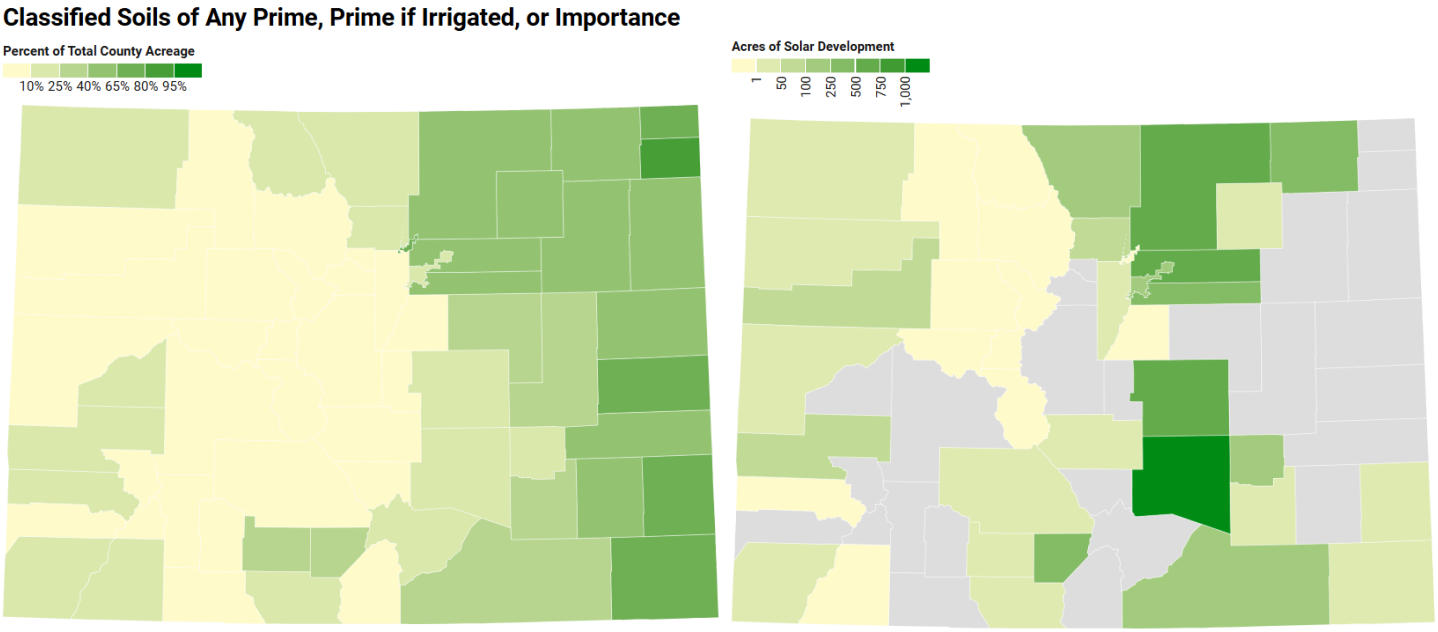


Figure 6 (left) – Classified soils by percent of total county acreage[6]
Figure 7 (right) – Ground-mounted solar array acreage on any classified soils by county[6]

Unsurprisingly, given the concentration of development within the Front Range Urban Corridor (FRUC), more than 75% of all solar development on classified soils in Colorado occurs in counties within the FRUC—specifically Adams, Arapahoe, Boulder, Denver, El Paso, Fremont, Larimer, Pueblo, and Weld Counties—which together average over 30% of their total land area mapped as classified soils.[6] While soil quality varies across these counties, many contain significant tracts of classified soils interspersed with developed or previously disturbed land and dense energy infrastructure.

As of 2024, the FRUC brought together the key attributes that attract solar developers, including flat terrain, straightforward grid access, and well-established and defined permitting frameworks. The overlap occurs because suitable, infrastructure-adjacent land coincided with clear and practicable solar-permitting requirements already in place. It is important to note that many counties that previously lacked solar regulations have adopted new ordinances and approved projects within the past several years, and these changes will appear as new data become available and further analysis is conducted.

In some locations, agrivoltaic systems demonstrate that solar and agriculture can coexist, and many innovative approaches are evolving from agrivoltaic research. These dual-use sites support continued grazing, pollinator habitat, and/or specialty crop production beneath and between panels, offering opportunities to diversify farm income and maintain agricultural operations even where solar is present. Approximately 2,129 acres of large-scale solar development in Colorado are classified as agrivoltaic in the USPVDB (~16.9% of the total large-scale solar development in Colorado).

This reflects part of the overlap between agrivoltaics and classified soils, as about 1,130 acres—over half of statewide agrivoltaic acreage—fall on classified soils. Most of this acreage (over 1,000 acres) is in Pueblo County, with additional smaller projects in Boulder, Jefferson, and Weld Counties.[6] USPVDB uses the InSPIRE interactive agrivoltaic map (InSPIRE) maintained by the National Laboratory of the Rockies (NLR) to identify agrivoltaic projects.[4]

Over the past several decades, residential and exurban development have been the primary drivers of landscape and farmland transformation in Colorado, with millions of acres of farmland and open space permanently converted to non-agricultural uses. According to American Farmland Trust's *Farms Under Threat*

report, approximately 417,500 acres of Colorado farmland are projected to be at risk of conversion between 2016 and 2040, primarily due to urban, residential, and low-density exurban development.[13] USDA Census of Agriculture data from 1987 to 2022 reveals a 4.3-million-acre reduction in farmland statewide.[8] Even under aggressive solar-deployment scenarios, the land needed for solar to meet Colorado's greenhouse-gas reduction goals remains minor compared with the ongoing pace of urban conversion and other pressures contributing to farmland loss.

6.6 Projected Land Need

To reach 100% renewable electricity, the Colorado Energy Office (CEO) estimates the state will need to quintuple solar resources, ultimately assuming an additional 60,000–80,000 acres of large-scale solar.[7] Colorado Parks and Wildlife (CPW) has consulted on hundreds of thousands of acres of proposed renewable energy project sites to date, far exceeding both today's built total and the acreage CEO projects will ultimately be needed.

This divergence between the project pipeline and current built footprint is substantial, but not unexpected. Many proposed projects will not materialize, as developers often consult with CPW early in the planning process to assess feasibility of sites. Additionally, developers typically include more land in their initial site assessments than is ultimately developed, allowing flexibility for alternative analyses and incorporating adjustments to project design or layout in response to recommendations from CPW and local communities.

Assuming an additional 60,000–80,000 acres of large-scale solar development statewide, total solar buildout would occupy approximately 0.10%–0.12% of Colorado's total land area.[5] If current siting patterns persist—where about 38% of solar arrays are located on classified soils[6]—this would translate to roughly 22,800–30,400 acres, or 0.19% of classified soils statewide. Actual figures will vary depending on the location of future projects, as a few large installations could shift the distribution considerably, especially as more projects are sited in Eastern Colorado (see Figures 1 and 6). Under this scenario, ground-mounted solar development would overlap less than 0.2% of all classified soils in Colorado and would be equivalent to less than 1.9% of the farmland reduction between just 2017 and 2022.[3]

6.7 Future Analysis

This analysis provides a baseline understanding of how ground-mounted solar development interacts with Colorado's agricultural landscape. Future updates can build upon this foundation by integrating additional datasets and expanding the scope of land-use and environmental considerations.

Inclusion of municipalities

This analysis aggregates project acreage at the county level. Future versions may incorporate municipal boundaries to distinguish projects located within municipal limits.

Comparison to other land uses

Expanding the analysis to further compare solar development with other major land-use drivers—such as urban expansion, wind development, oil and gas surface cover, irrigated agriculture, transportation corridors, gravel mining, and other major land uses—would help contextualize the footprint of solar arrays relative to long-standing pressures on farmland and open space.

Updated Datasets and Additional Datasets

Future iterations or similar analysis should incorporate updated releases of the GM-SEUS,[1] USPVDB,[4] the 2027 USDA Census of Agriculture,[3] and refreshed NRCS SSURGO soil data.[2] The analysis would be further strengthened by incorporating additional data, such as NRCS forage-production values, irrigated-land locations, and footprints of other competing land uses.

Regional Projections Based on Current and Planned Transmission Infrastructure
Modeling future solar build-out by region or utility territory, particularly around planned transmission expansions, upgrades, and permitting activity, can help state and local planners anticipate where future development pressure is likely to be concentrated.

Federal and State Land Considerations
Expanding the analysis to include federal surface lands, state trust lands, tribal jurisdictions, state parks, Colorado Parks & Wildlife properties, and private conservation easements would provide a clearer picture of the viable land base for renewable development.

Moratoria, New Regulations, and Post-Adoption Outcomes
Several Colorado counties have recently adopted temporary moratoria or newly updated renewable-energy land-use codes. A future phase of this analysis can evaluate outcomes, identifying which counties resumed permitting and successfully facilitated projects after adopting new regulations, versus which counties saw little or no new development.

7 CONCLUSIONS

This analysis finds that the footprint of ground-mounted solar arrays currently represents a minor share of Colorado's land base. As of 2024, ground-mounted solar arrays occupied approximately 14,326 acres statewide—just 0.022% of total land area and a fraction of 1% of Colorado's farmland and classified soils.[6] Even under aggressive buildout scenarios aligned with state clean energy goals, total ground-mounted solar acreage would remain around 0.12% of Colorado's total land area.[5]

Colorado's agricultural landscape is undergoing substantial change from multiple pressures. Farmland loss remains a significant policy concern. Between 2017 and 2022, the state lost more than 1.6 million acres of farmland. Over the longer term, urban and exurban growth has had the single greatest impact, with two million acres converted to rural subdivisions between 1972 and 2000, and USDA data showing a net loss of 4.3 million acres of farmland since 1987.[3]

As of 2024, the Front Range Urban Corridor (FRUC) illustrates the intersection of infrastructure access, load centers, and market opportunity, attracting the majority of the state's solar deployment. Coordinated, science- and impact-driven approaches to land-use policy and renewable-energy planning will be essential to guide future development statewide.

Key areas of focus may include:

- Emphasizing impact- and data-driven planning on a site-by-site basis rather than blanket acreage caps or restrictions;
- Developing clear, consistent siting standards that support multiple land uses, including agrivoltaics;
- Expanding agrivoltaic incentives and research partnerships to demonstrate co-benefits such as water efficiency, crop productivity, and biodiversity; and
- Increasing coordination across state agencies, local governments, landowners, conservation partners, and developers to align permitting, habitat conservation, and transmission planning.

Solar development can reinforce Colorado's rural character and agricultural heritage while supporting diversified landowner income, improving grid resilience, meeting rising energy demand, and strengthening local tax bases. With proper planning, land used for ground-mounted solar can return to agricultural or other uses following decommissioning.

Continued analysis using updated GIS datasets, agricultural censuses, and Colorado Parks and Wildlife habitat mapping will strengthen and refine future assessments. The framework presented here provides a reproducible, data-informed foundation for analyzing ground-mounted solar within Colorado's broader land-use landscape.

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SUR Appendix M

Solar and BESS Decommissioning Plan

SHEPHERD SOLAR - BESS

Elbert County, CO

Date: March 5, 2026

Prepared for:

Shepherd Solar, LLC

5901 Priestly Drive, Suite 300

Carlsbad, CA 92008

WSB PROJECT NO. 032487-000

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0053515	March 5, 2026
CO Registration No.	Date

Earth Evans, P.E.

SHEPHERD SOLAR BESS DECOMISSIONING PLAN
ELBERT COUNTY, CO
March 5TH, 2026

Introduction

This decommissioning plan has been prepared by Shepherd Solar, LLC ("Project Company") and details the decommissioning demands and requirements associated with the Battery Energy Storage System (BESS) portion of the Shepherd Solar, LLC project ("Project").

Shepherd Solar, LLC to develop Shepherd BESS project, a 100 MW battery energy storage system (BESS). The project is located in Elbert County, Colorado near coordinates 39° 02’ 30.75"N, 103°58'24"W and within tax parcel identification numbers 7321300266 & 7327200027 ("Property"). Shepherd Solar BESS has an anticipated project life of 40 years and is expected to be operational for the full forty (40) years.

Shepherd Solar, LLC will design and permit the project with the authorities having jurisdiction. Upon permit issuance, Shepherd Solar, LLC. will manage the construction, operation, and decommissioning of the project.

This decommissioning plan has been provided per the request of Shepherd Solar, LLC. The purpose of this decommissioning plan is to provide procedures and an opinion of probable construction cost for full closure and removal of the BESS facility. This decommissioning plan assumes the site will be restored to a predeveloped state, or other agreed upon, nonhazardous condition. This decommissioning plan shall include the following:

Reasons for commencement of decommissioning

The manner in which the battery energy storage system will be decommissioned

- Removal of above ground and below ground equipment, structures, and foundations
- Restoration of the surface grade and soil after removal of equipment
- Revegetation of restored soil areas with native and/or naturalized to the region seed mixes, excluding any invasive species
- The time frame for the completion of site restoration work

Project Components

Site Work Preparation

Prior to construction, appropriate construction best management practices shall be installed. This includes, but is not limited to, construction entrance, fencing, security measures, soil stabilization, silt fencing and other appropriate erosion and sediment control practices. The stockpile area, if applicable, shall be delineated upon the implementation of silt fence.

Proposed Site Improvements

Under existing conditions, the project area is generally flat where the proposed BESS is to be located. Existing vegetation consists of a grassy field. Proposed site improvements in the BESS area of the site include two large pads with foundations- one for the battery storage infrastructure and one for a project substation, as well as roads, underground conduit and cabling, and landscaped areas. Utility conduit shall be trenched and buried below grade to minimize visual impacts to above grade development.

BESS and Electrical Equipment

Sixty (60) battery containers are proposed with associated equipment including thrity (30) medium voltage transformers, and an on-site substation. Each battery container has three (3) battery modules. All BESS equipment shall be mounted on one large concrete pad and shall maintain clearances and slopes as required by the County Ordinances, National Electric Code ("NEC"), National Fire Protection Association ("NFPA"), and all other applicable codes. Approximately 4054 linear feet of medium voltage underground conduit is proposed within the BESS area from the inverters to on-site substation. Conduit lengths are approximate and subject to change pending final design and POI coordination with the electric utility company.

Project Decommissioning and Recycling

Decommissionning Preparation

Unless the system is purchased by the County or other entity, the facility shall be decommissioned in accordance with this decommissioning plan ("Plan"), restoring the site to as close to its agreed upon post decommissioned state as practicably possible upon expiration or termination of the Power Purchase Agreement. The BESS facility has an anticipated project lifespan of 40 years.

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

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

The Owner/Operator is responsible for this decommissioning, however the Owner/Operator may contract with a third-party to perform the decommissioning on its behalf. Nothing in this plan relieves any obligation that the real estate property owner may have to remove the Facility as outlined in the Land Use Permit in the event the operator of the Facility does not fulfill this obligation.

Decommissioning responsibilities include the removal of all batteries, electrical equipment, fencing, roads, basins, and any other associated equipment, facilities and structures to a depth of at least 36 inches. Underground conduit deeper than 36 inches will be abandoned in place, as this is the normal practice for abandonment of underground utility infrastructure, and otherwise restoring the premises to its original position or mutually-agreed upon state. If the landowners wish to keep any project-related roads, landscaping, fencing, or any other features on the property, and if acceptable to the site operator, then those identified features may remain on the property. Other plan activities include the management of materials and waste, projected costs, and a decommissioning fund agreement overview.

Partial or full decommissioning of the non-utility owned equipment will consist of the following general steps with the goal of restoring the property to its original condition and use:

- Video and/or photographic documentation of the project site in its pre-construction condition
- Disconnection from the utility power grid
- Removal of all Facility components: e.g. Removal of batteries and above ground supporting equipment, Removal of above ground utility infrastructure

- 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 and/or naturalized 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., landscape improvements, concrete sidewalk, etc.

The decommissioning process will maximize the recycling of applicable facility components, which are outlined in the opinion of probable construction costs. Based on the extent of decommissioning, prior to beginning construction activities, the developer will submit applicable demolition and construction plans and permit application(s) 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, including the issuance of an approved demolition permit by the County. Permits will be obtained as required and notification will be given to necessary stakeholders prior to decommissioning.

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. It is typical the decommissioning plan and opinion of probable cost is updated every five years to ensure accuracy of labor, equipment, and material costs.

BESS and Electrical Equipment Removal

All aboveground batteries, electrical equipment, and supporting structures will be removed using conventional construction equipment and tractor trailer (for hauling) from the site. Electrical equipment of significant value with remaining useful life, such as transformers and inverters, will be resold at an appropriate cost. Low value equipment and items with little to no remaining useful life, including the BESS batteries, shall be transported to an offsite recycling center. Items not able to be recycled will be disposed of in accordance with County and State regulations.

Non-electrical equipment will be recycled if applicable at the time of decommissioning. Otherwise, these items will be disposed of in accordance with County and State regulations.

It is the responsibility of the utility owner to bear the cost of decommissioning and removal of their equipment.

Site Restoration

Evaluations of Restoration Requirements

In order to adequately 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, if required. Pre-construction documentation will also consist of detailed descriptions of existing vegetative and soil conditions, as well as existing topography and drainage patterns.

Prior to site restoration, the owner/operator will evaluate the site compared to the pre-construction information and provide a site restoration plan as described below.

Restoration Plan and Criteria

Restoration of the site will begin following removal of all above ground equipment as described in the section above. The restoration will consist of re-grading to re-establish the pre-construction topography, if required. The Owner/Operator will provide dust control during site restoration. The entire project area will be seeded and fertilized with native and/or naturalized seed mixes and vegetation, excluding any invasive species, as required by the County Ordinance. Any trees or plantings removed to facilitate decommissioning shall be replaced with native and/or naturalized species as specified on demolition plans to be submitted for decommissioning activities.

Monitoring

The Owner/Operator will monitor vegetation and drainage following restoration until permanent vegetation is established and erosion and sediment control will be removed when appropriate. Re-seeding, soil stabilization, weed control and fertilization will be provided by the Owner/Operator as needed until the site is stabilized.

Reporting and Schedule

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

Decomissioning Costs

An engineer's opinion of probable construction cost and analysis of material salvage value were prepared as part of this decommissioning plan. Table 1 summarizes the probable costs and salvage values associated with decommissioning. Table 2 summarizes the probable costs associated with trucking.

The owner/operator shall submit engineering plans at the time of decommissioning, and obtain construction permits as required by appropriate authorities.

Industry standard prices in 2024 for removal costs and material salvage value were determined using RSMeans cost data supplemented with other local data. Removal cost includes materials, contractor installation/demolition, mobilization and demobilization, overhead and profit, performance bonding, contingency, and engineering plans and permitting. Resale value of equipment of significant value were calculated with straight-line depreciation of the original material cost. The following assumptions were included in our estimate:

- Batteries will be recycled and are anticipated to not have salvage value.
- Fencing could be scrapped for $180/ton.
- Pad-mounted transformers could be sold/re-used for $5,400/each.
- Low voltage wiring could be sold for $3.5111b.

Elbert County code requires the decommissioning cost opinion to be updated every five years, this cost opinion was performed assuming decommissioning in Year 5. The net probable value of decommissioning was calculated as the removal value subtracted from the salvage and resale values adjusted for inflation in Year 5. The expected removal and restoration value subtotal is $2,111,000 The probable total salvage and resale value is $219,000. Approximately $264,000 is assumed for soft costs and contingencies, bringing the probable net present value of decommissioning including contingencies to $2,346,000. Assuming an inflation rate of 1.5% for 5 years, the probable value of decommissioning is estimated to be $2,528,000.

Table 1
Engineer's Opinion of Probable Construction Cost

Project Name: Shepherd Solar, LLC

Prepared by: Earth Evans, P.E. & Jared Dummer

Date of OPC February 25th, 2026

Item Description	Quantity	Unit	Price	Total
Disassembly, Removal and Demolition (COST)				
Removal of BESS Batteries (Modules)	180	EA	$215.42	$39,000.00
BESS Battery Disassembly and Removal of BESS Containers (with Inverters) and Pads	60	EA	$392.67	$24,000.00
Transformers	30	EA	$449.00	$13,470.00
Low Voltage Wiring		LF	$1.59	$0.00
Medium Voltage Wiring	4054	LF	$2.55	$10,337.58
Fence (8' Tall chain Link)	5025	LF	$28.82	$144,812.35
General Conditions	1	LS	$10,000.00	$10,000.00
Substation	1	EA	$190,987.00	$190,987.00
Sub-Total				$432,606.93
Haul-Off and Disposal (COST)				
Concrete Rubble	2500	CY	$35.00	$87,500.00
BESS Equipment*	1	LS	$83,000.00	$83,000.00
Sub-Total				$170,500.00
Restoration Grade & Seed (COST)				
Topsoiling, Grading	82541.12	SY	$11.97	$988,017.15
Seeding, Fertilizing, and Stabilization	82541.12	SY	$6.29	$519,183.61
Sub-Total				$1,507,200.76
Salvage Value (Credit)				
Transformers/Inverters	30	EA	$5,400.00	$162,000.00
Cable Wire (copper/aluminum	2643	LB	$3.51	$9,275.42
Fence	15.07	TON	$180.00	$2,713.35
Fence Posts	33.92	TON	$180.00	$6,105.03
Substation	1	EA	$38,200.00	$38,200.00
Sub-Total				$219,000.00
			SUBTOTAL (w/o Salvage)	$2,111,000.00
			SUBTOTAL (w/ Salvage)	$1,892,000.00
			10% Contingency	$189,200.00
			12.5% Soft Costs	$264,000.00
			Present Value TOTAL	$2,346,000.00
			1.5% Inflation	$182,000.00
			TOTAL (YR5)	$2,528,000.00

General Notes

1. A negative number in the total represents that the salvage value exceeds the cost to perform the decommissioning
2. Equipment removal costs include associated pad removal and conduit removal or abandonment
3. Costs based on RSMans city cost index (CCI, Heavy Construction 2024) for Elbert County, CO and locally provided data.
4. The Engineer has no control over the cost of labor, materials, equipment, or over the contractor's methods of determining price or over competitve bidding or market conditions, Opinions of Probable Costs provided herein area based on the infromation known to the engieer at this time and represent only the Eningeer's judgement as a design or actual construction costs will not vary from its Opinions of Probable Costs.
5. The followings assumptions were made in the Analysis: 3 Batteries per Battery container, 2 Battery Containers Per Transformers

TABLE 2

Engineer's Opinion of Probable Construction Cost – BESS Trucking

Shepherd Solar, LLC	
Elbert County, Colorado	
Panel Trucking Costs	
$/mo./truck rental	$5,000.00
$/mo./truck labor (FT benefits) *	$6,000.00
$/mo./truck maintenance	$750.00
$/mo./truck insurance	$1,250.00
Total $/mo./truck cost	**$13,000.00**
$/gallon gas	$4.00
miles/gallon	8
Mileage (Kiowa, Co to Pheonix, AZ) roundtrip	1000
Total fuel cost per trip	**500**
Capacity in tons per trip	20
total number of megapacks	60
pack weight (tons)	1200
Misc. Waste (tons)	20
Total Trips	**61**
Loading/unloading hours per trip	1
road hours per trip	12
hours per day	10
days/month	21
trips per month per truck	16.2
Total truck Months	**4**
Subtotal of Truck and Labor Cost	$52,000.00
Fuel Cost	$30,500.00
Total Trucking Cost	**$83,000.00**

*Assumes truck labor only works half of the month at standard heavy truck operator

SHEPHERD SOLAR LLC
ELBERT COUNTY, CO

Date: March 5, 2026

Prepared for:

Shepherd Solar, LLC

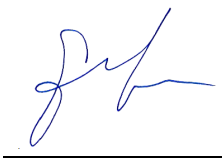
5901 Priestly Drive, Suite 300

Carlsbad, CA 92008

WSB PROJECT NO. 032487-000

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0053515	March 5, 2026
Earth Evans, P.E. CO Registration No.	Date

SHEPHERD SOLAR PHOTOVOLTAIC (PV) PLAN
DECOMMISSIONING PLAN
March 5TH, 2026

Introduction

This Decommissioning plan is provided by Shepherd Solar, LLC (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 fulll closure of the solar facility. Elbert County 1041 regulations require a Decommissioning Plan for all major utilities.

Site Location

Shepherd Solar, LLC proposes to build a photovoltaic (PV) solar facility ("Solar Facility") with a nameplate capacity of approximately 200 MWAc ("Project"), in Elbert County, Colorado. The Facility is located near 39°02'30.75"N, 103°58’15.12"W and within tax parcel identification numbers 1926300138, 1936000044, & 1831000038 ("Property").

Anticipated Service Life of the Project

Once the Shepherd Solar project has ceased operations, the project will enter decommissioning phase. Decommissioning shall restore the site to the agreed-upon post-decommissioned condition, or as close thereto as reasonably practicable.

The Solar Facility is designed for an expected useful life of forty (40) years and is anticipated to operate for the full forty-year term.

Decommissioning obligations shall include, but are not limited to, the removal of all project-related improvements and equipment, including perimeter fencing; concrete and steel foundations; metal structures; pipelines; alternators; generators; aboveground and underground cables; transformers; inverters; fans; switch boxes; fixtures; and any other associated infrastructure. If the landowners wish to keep any project-related roads, landscaping, fencing, or any other features on the property, and if acceptable to the site operator, then those identified features may remain on the property. Following removal, the site shall be restored to its original condition or to another condition mutually agreed upon by the parties.

The Plan shall also address procedures for materials handling and waste management, provide a detailed estimate of projected decommissioning costs, and outline the structure and administration of the decommissioning fund agreement.

Decommissioning Risk Over the Lifecycle of a Project

The probability of an event that would lead to abandonment or long-term interruption is extremely low during the first 25 to 30 years of the Project life. Accordingly, the risk of decommissioning the Project is extremely low during this time frame. The reasons why the risk to decommission the Project is extremely low in the early phases of the Project include, but are not limited to:

Project owners have sophisticated financing structures that allow the lender or tax equity partner to step in and rectify the event that may lead to abandonment.

Most critical solar components have original equipment manufacturer (OEM) warranties with terms exceeding five years that include labor and parts. A warranty is an agreement or guarantee outlined by a manufacturer to a customer that defines performance requirements for a product or service. Warranties give customers a form of insurance if the purchased product or service does not adhere to quality standards. These warranties assure the Project owner, financing parties, and other stakeholders, that equipment will perform as expected which minimizes the risk of a decommissioning event. Average warranty lengths for critical solar components range from 5 to 10 years, with production warranties on solar panels extending to 25 years.Solar projects consist of many networked components designed to convert solar energy into electrical energy. The failure of any single component is unlikely toresult in a substantial reduction of energy generation that could lead to a decommissioning event.

Solar projects are required to maintain replacement value property damage insurance coverage and business interruption insurance coverage. Business interruption insurance covers the loss of income that a business suffers after a disaster or equipment failure. Typical solar business interruption insurance covers income loss for twelve months from the date of the event triggering the loss.

The replacement costs of solar components will typically decline over time, and accordingly, costs to replace failed or damaged equipment after lapsed OEM warranties will not create large financial hurdles for the Project.

In the early stages of the Project, the resale value of the equipment is significantly higher than the decommissioning costs, resulting in a net positive (revenue).

Considering the reasons stated above, a decommissioning bond early in the life of a solar project life is not required to assure the coverage facility removal and site restoration costs.

Solar power is an increasingly popular form of renewable energy around the world and as an alternative to the burning of fossil fuels, solar ranks alongside wind and hydropower as essential energy options for the future of the planet. Solar also offers the additional benefit of being easier to build, operate, and decommission with minimal environmental risks. Recent rises in popularity and use can be linked to lower installation and operation costs and it is expected that this pattern will continue, further reducing the risk of a decommissioning event.

Commencement of Decommissioning

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

- System abandonment or discontinuation of operation
- 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.
- 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.
- The system is damaged and will not be repaired or replaced.

Removal of Non-utility Owned Equipment

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 and/or naturalized 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, driveways, or landscape features.

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, which are outlined in the opinion of probable construction costs. 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.

Restoration of Property

In order to adequately 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 an agreed-upon condition. All waste and excess materials will be disposed of in accordance with municipal, provincial and federal regulations. Waste that 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.

The restoration will consist of de-compaction of the topsoil by discing or tilling and re-vegetation of the property where impervious surfaces were used, such as access roads, inverter pads, substation, etc. 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 and/or naturalized vegetation as needed to return the site to an initially agreed-upon condition.

The developer will 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.

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

Time Period to Complete Decommissioning

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.

Party Responsible for Decommissioning

The Project Company is responsible for this decommissioning, however the Project Company may contract a third-party to perform the decommissioning on its behalf. Nothing in this plan relieves any obligation that the real estate property owner may have to remove the Facility as outlined in the major 1041 permit conditions in the event the operator of the Facility does not fulfill this obligation.

Decommissioning Cost Estimate and Bonding

An engineer's opinion of probable construction cost and analysis of material salvage value were prepared as part of this decommissioning plan. Table A summarizes the probable costs and salvage values associated with decommissioning. Table B summarizes probable costs associated with decommissioning exclusive of salvage values. Table C summarizes probable costs associated with trucking panels to approved recycling facilities.

Elbert County Zoning Regulations require Shepherd Solar, LLC to provide a faithful performance bond as a financial guarantee for proper decommissioning. This bond is separate from, and in addition to, performance bonding submitted for permitting. Furthermore, Shepherd Solar, LLC will be required to submit detailed engineering plans at the time of decommissioning, and obtain construction permits as required by appropriate authorities.

Industry standard prices in 2026 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, exclusive of salvage value, in Year 5 is estimated to be $10,192,000.

Resale/Salvage Value Estimate

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.

A current sampling of reused solar panels indicates a wide range of pricing depending on age and condition ($0.10 to $0.50 per watt). Future pricing of solar panels is difficult to predict currently, due to the relatively young age of the market, changes to solar panel technology, and the ever-increasing product demand. A conservative estimation of the value of solar panels in Year 5 at $0.18 per watt would yield approximately $37,826,000. Increased costs of removal, for resale versus salvage, would be expected to preserve the integrity of the panels; however, the net revenue would still be substantially higher than the estimated salvage value.

The resale value of components such as trackers, may decline more quickly; however, the salvage value of the steel that makes up a larger portion of the tracker is expected to stay at or above the value used in this report.

The price used to value the steel in this report is $220.00 per ton. The price used to value copper in this report is $3.43 per lb.

Total probable cost of decommissioning, including salvage value, in Year 5 is estimated to be a surplus of $33,484,000.

TABLE A
DECOMMISSISISONING COST ESTIMATE

SHEPHERD SOLAR
ELBERT COUNTY, COLORADO
DECOMMISSIONING ESTIMATE W/ SALVAGE

ITEM	QUANTITY	UNIT	Rate	Salvage	Total Price (incl. markups)	Total Price
Mobilization	1	LS		$ -	$2,637,053.80	-$2,637,053.80
Supervision	350	HR	$92.00	$0.00	$32,200.00	-$33,000.00
Temporary Facilities	1	LS	$13,860.00	$0.00	$13,860.00	-$14,000.00
Safety	1	LS	$9,390.00	$0.00	$9,390.00	-$10,000.00
Legal Expenses	1	LS	$2,460.00	$0.00	$2,460.00	-$3,000.00
General Liability	1	LS	$10,060.00	$0.00	$10,060.00	-$11,000.00
Contractor's G&A	1	LS	$19,000.00	$0.00	$19,000.00	-$19,000.00
SWPPP, Erosion Control Measures)	1	LS	$400,000.00	$0.00	$400,000.00	-$400,000.00
Seeding	1203.80955	AC	$2,195.08	$0.00	$2,642,458.27	-$2,642,458.27
Tilling 6" topsoil scarifying access road and rough grading existing soil	19.36538737	AC	$4,205.40	$0.00	$81,439.20	-$81,439.20
Remove and Recycle Chain link Fence	89441.86	LF	$4.14	$55,453.95	$370,289.30	-$314,835.35
Disconnection and Demolition of Switchyard/Substation Equipment	2	EA	$125,318.68	$50,127.47	$250,637.36	-$200,509.89
Remove and Recycle AC Cables	71773	LF	$1.08	$12,201.47	$77,515.20	-$65,313.73
Remove and Recycle DC Cables	4028629.333	LF	$0.14	$684,866.99	$564,008.11	$120,858.88
Backfill AC and DC Trenches	2071773	LF	$0.21	$0.00	$435,072.40	-$435,072.40
Remove and Recycle Inverters/Transformers	51	EA	$433.66	$275,400.00	$22,116.66	$253,283.34
Remove and Recycle Photovoltaic Modules	496548	EA	$3.23	$37,826.00	$1,603,850.04	$36,221,686.96
Remove and Recycle Piles	79376	EA	$8.13	$977,912.32	$645,326.88	$332,585.44
Remove and Recycle Support Assemblies	5787135	lbs.	$0.06	$636,584.85	$347,228.10	$289,356.75
Contaminated Soils Testing	1	LS		$0.00	$8,000.00	-$8,000.00
Reclamation Monitoring and Maintenance	1	LS		$0.00	$20,000.00	-$20,000.00
			Subtotal	$40,519,000.00	$10,192,000.00	$30,327,000.00
					Inflation (2%/year):	$3,157,000.00
					Total:	$33,484,000.00

GENERAL NOTES

1. A site of similar size was used to derive potential quantities for erosion and sediment cotnrol. Quantities were dtermined by comparing “unit/MW”
2. A labor productivity and unit rates were derived from RSMeans Online (Heavy Construction Data
3. Labor, Material, and equipment rates are based pm the RSMeans City Cost Index (CCI) for Colorado Spring, CO.
4. Material Salvage values were based off current US salvage exchange rates
5. Equipment rental rates determined from RSMeans and/or local rental facilities
6. Photovoltaic Module material salvage rate is based on straight-line depreciation of modules (-0.5% per year)
7. For PV module Removal/Recycle labor and equipment costs are computed as present values, while Salvage value is computed as depreciated
8. Material Salvage values were determined using the most prevalent salvage metal in each component. Copper Wire @$0.17/LF (AC and DC Cables) and Steel @0.62/LF of fence, @0.77/Pile, and $0.11/LB
9. 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)

TABLE B
DECOMMISSIONING COST ESTIMATE EXCLUDING SALVAGE VALUE

ITEM	QUANTITY	UNIT	Rate	Total Price (incl. markups)
Mobilization	1	LS		$ 2,637,053.80
Supervision	350	HR	$ 92.00	$ 32,200.00
Temporary Facilities	1	LS	$ 13,860.00	$ 13,860.00
Safety	1	LS	$ 9,390.00	$ 9,390.00
Legal Expenses	1	LS	$ 2,460.00	$ 2,460.00
General Liability	1	LS	$ 10,060.00	$ 10,060.00
Contractor's G&A	1	LS	$ 19,000.00	$ 19,000.00
SWPPP, Erosion Control Measures)	1	LS	$ 400,000.00	$ 400,000.00
Seeding	1203.80955	AC	$ 2,195.08	$ 2,642,458.27
Tilling 6" topsoil scarifying access road and rough grading existing soil	19.3653874	AC	$ 4,205.40	$ 81,439.20
Remove and Recycle Chain link Fence	89441.86	LF	$ 4.14	$ 370,289.30
Disconnection and Demolition of Switchyard/Substation Equipment	2	EA	$ 125,318.68	$ 250,637.36
Remove and Recycle AC Cables	71773	LF	$ 1.08	$ 77,515.20
Remove and Recycle DC Cables	4028629.33	LF	$ 0.14	$ 564,008.11
Backfill AC and DC Trenches	2071773	LF	$ 0.21	$ 435,072.40
Remove and Recycle Inverters/Transformers	51	EA	$ 433.66	$ 22,116.66
Remove and Recycle Photovoltaic Modules	496548	EA	$ 3.23	$ 1,603,850.04
Remove and Recycle Piles	79376	EA	$ 8.13	$ 645,326.88
Remove and Recycle Support Assemblies	5787135	lbs.	$ 0.06	$ 347,228.10
Contaminated Soils Testing	1	LS	-	$ 8,000.00
Reclamation Monitoring and Maintenance	1	LS	-	$ 20,000.00
			Subtotal	$ 10,192,000.00
			Inflation (2%/Yr)	$ 1,061,000.00
			Total:	$ 11,253,000.00

TABLE C
TRUCK COST BREAKDOWN

Shepherd Solar, LLC **Elbert County, Colorado** **Panel Trucking Costs**	
$/mo./truck rental	$5,000.00
$/mo./truck labor (FT benefits) *	$6,000.00
$/mo./truck maintenance	$750.00
$/mo./truck insurance	$1,250.00
Total $/mo./truck cost	**$13,000.00**
$/gallon gas	$4.00
miles/gallon	$8.00
Milage (Kiowa, Co to Pheonix, AZ) roundtrip	$1,000.00
Total fuel cost per trip	**$500.00**
Capacity in tons per trip	20
Total Number of panels	496548
Panel Weight (tons)	14896
Misc. Waste (tons)	20
Total Trips	**746**
Loading/unloading hours per trip	1
road hours per trip	12
hours per day	10
days/month	21
trips per month per truck	16.2
Total truck Months	**47**
Subtotal of Truck and Labor Cost	$611,000.00
Fuel Cost	$373,000.00
Total Trucking Cost	**$984,000.00**
*Assumes truck labor only works half of the month at standard heavy truck operator	

SUR Appendix N

Elbert County Assessor's Office Radius Report for Properties within 2,640 ft of the Project

COUNTY RD 70
COUNTY RD 153
COUNTY RD 161
COUNTY RD 165
COUNTY RD 66
COUNTY RD 62
T11S R59W
R118794
R114188
R113215
R101357
R101359
R101360
R126304
R126304
R118685
R118686
R122794
R101361
R101314
R101312
COUNTY RD 149
COUNTY RD 157
R122795
R122726
R119705
R113518
COUNTY RD 54
R122727
R116310
R120882
R101383
R116309
R101318
R101317
R113660
COUNTY RD 50
R101455
R120883
R113456
R120882
R118815
R120649
COUNTY RD 145
R101454
R117708
R117709
R113458
COUNTY RD 46
R114039
COUNTY RD 165
COUNTY RD 42
T12S R59W
COUNTY RD 38
COUNTY RD 153

Parcel ID	Account	Location Address	City	State	Zip	Owner	Care of	Address	City	State	Zip
2806100071	R114039		MATHESON	CO	80830	ASHCRAFT L P		PO BOX 5487	WOODLAND PARK	CO	80866
1832100074	R113660		MATHESON	CO	80830	ASHCRAFT TERRY L	ASHCRAFT JAYNE A	368 7TH ST	LIMON	CO	80828
1924300078	R101359	14504 COUNTY RD 153	MATHESON	CO	80830	ASHMORE WILLIAM J		14504 COUNTY RD 153	MATHESON	CO	80830
2902400114	R113458	37957 COUNTY RD 46	MATHESON	CO	80830	BATE ALMON PAUL	BATE KIMBERLIE ANN	37957 COUNTY RD 46	MATHESON	CO	80830
2903400160	R117708		MATHESON	CO	80830	BROWN ROBERT WAYNE	BROWN CHRISTINE DEE	11220 COUNTY RD 149	MATHESON	CO	80830
2902300002	R101454	11220 COUNTY RD 149	MATHESON	CO	80830	BROWN ROBERT WAYNE	BROWN CHRISTINE DEE	11220 COUNTY RD 149	MATHESON	CO	80830
1830300071	R113518	39233 COUNTY RD 54	MATHESON	CO	80830	CARTWRIGHT AARON M		39233 COUNTY RD 54	MATHESON	CO	80830
1925400001	R122726		MATHESON	CO	80830	DIECK STEPHANIE		41150 US HIGHWAY 24	MATHESON	CO	80830-9716
1832100039	R101318		MATHESON	CO	80830	FARM CREDIT OF SOUTHERN COLORADO		5110 EDISON AVENUE	COLORADO SPRINGS	CO	80915
1819300001	R126304		MATHESON	CO	80830	FARM CREDIT OF SOUTHERN COLORADO		5110 EDISON AVENUE	COLORADO SPRINGS	CO	80915
1819300001	R126304		MATHESON	CO	80830	FARM CREDIT OF SOUTHERN COLORADO		5110 EDISON AVENUE	COLORADO SPRINGS	CO	80915
1923000029	R101357	37506 COUNTY RD 62	MATHESON	CO	80830	GLOVER RODNEY		19120 DZURIS WAY	CALHAN	CO	80808
2902100113	R113456		MATHESON	CO	80830	GORDON JUANITA LIFE ESTATE	GORDON RICKY L, et al.	PO BOX 339	LIMON	CO	80828-0339
1926100130	R118685	13950 COUNTY RD 149	MATHESON	CO	80830	HANKINS MONTY D	HANKINS DANNI I	13950 COUNTY RD 149	MATHESON	CO	80830
1829000036	R101312		MATHESON	CO	80830	HENDRICKS TED R		36060 COUNTY RD 66	SIMLA	CO	80835-9601
1915200133	R118794	36060 COUNTY RD 66	SIMLA	CO	80835	HENDRICKS TED R		36060 COUNTY RD 66	SIMLA	CO	80835-9601
1926300138	R120882		MATHESON	CO	80830	J AND D FARM PROPERTIES LLC		37345 BROADWAY	MATHESON	CO	80830-9710
1926300138	R120882		MATHESON	CO	80830	J AND D FARM PROPERTIES LLC		37345 BROADWAY	MATHESON	CO	80830-9710
1830400091	R119705		MATHESON	CO	80830	LEE ARCE DEVELOPMENT CO INC	RLO HOLDINGS LLC	1116 EAST EDNA PLACE	COVINA	CA	91724
1936000044	R122727		MATHESON	CO	80830	MARANVILLE CHAD	MARANVILLE CINDY	9880 COUNTY RD 149	MATHESON	CO	80830
2903200042	R101455		SIMLA	CO	80835	MARANVILLE CHAD N		9880 COUNTY RD 149	MATHESON	CO	80830-9609
2903100184	R120883					MARANVILLE CHAD N	MARANVILLE CINDY A	9880 COUNTY RD 149	MATHESON	CO	80830
1934400119	R116309	12301 COUNTY RD 149	MATHESON	CO	80830	MARANVILLE JACK S	MARANVILLE LINDA F	12301 COUNTY RD 149	MATHESON	CO	80830
1831000038	R101317		MATHESON	CO	80830	MARANVILLE JACK S	MARANVILLE LINDA F	12301 COUNTY RD 149	MATHESON	CO	80830
1934100120	R116310		MATHESON	CO	80830	MARANVILLE LLC		12301 COUNTY RD 149	MATHESON	CO	80830
1927400001	R122795		MATHESON	CO	80830	MARKEN4 LLC		PO BOX 1413	BUENA VISTA	CO	81211
1924100105	R113215	14995 COUNTY RD 157	MATHESON	CO	80830	MONREAL JUAN MANUEL DIAZ		1130 ASH CT	THORNTON	CO	80229
1927100001	R122794		MATHESON	CO	80830	MOORE FAMILY TRUST		33721 COUNTY RD 58	SIMLA	CO	80835
2805200083	R118815		MATHESON	CO	80830	NALL CASEY NICOLE		12760 KENEDO CIRCLE	ELBERT	CO	80106
2805100096	R120649					NALL MARIANNA	NALL CASEY NICOLE	12760 KENEDO CIRCLE	ELBERT	CO	80106
1925100030	R101361	13531 COUNTY RD 157	MATHESON	CO	80830	NORRIS LINDA LOU		37910 HARRISVILLE ROAD	RAMAH	CO	80832
1830100057	R101314	13590 COUNTY RD 157	MATHESON	CO	80830	NORRIS LINDA LOU		37910 HARRISVILLE ROAD	RAMAH	CO	80832
1924300079	R101360	14001 COUNTY RD 157	MATHESON	CO	80830	NORRIS LINDA LOU		37910 HARRISVILLE ROAD	RAMAH	CO	80832
2902300161	R117709	37501 COUNTY RD 46	MATHESON	CO	80830	STANKO CURTIS L	STANKO REBECCA K	37501 COUNTY RD 46	MATHESON	CO	80830-9505
1926100131	R118686	13732 COUNTY RD 149	MATHESON	CO	80830	THIRD RIVER RANCH LLC		13950 COUNTY RD 149	MATHESON	CO	80830
1934200042	R101383		MATHESON	CO	80830	WILLIAMS CONSUELO A		1435 MONTEZUMA RD	COLORADO SPRINGS	CO	80920
1924200110	R114188		MATHESON	CO	80830	ZERO RANGE LLC		14900 COUNTY RD 153	MATHESON	CO	80830