

AGENDA
MORGAN COUNTY BOARD OF COUNTY COMMISSIONERS
Assembly Room, Administration Building
231 Ensign Street, Fort Morgan, CO 80701
Tuesday, March 12, 2024

To participate in the Citizen's Comment Period you must connect via Zoom Conferencing Access Information: <https://us02web.zoom.us/j/84648770345> If you cannot connect via Zoom, you may submit written public comment to morgancountybcc@co.morgan.co.us by email by 4 p.m. on Monday March 11, 2024.

To participate in Public Hearings you may connect via Zoom Conferencing Access Information: <https://us02web.zoom.us/j/84648770345> listen via phone, please dial: 1-312-626-6799, Meeting ID: 846 4877 0345

To watch and/or listen to the meeting but not participate, you may do so by connecting via Zoom Conferencing Access Information: <https://us02web.zoom.us/j/84648770345> or to listen via phone, please dial: 1-312-626-6799, Meeting ID: 846 4877 0345

9:00 A.M.

A. WELCOME – CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL:

Commissioner Westhoff
Commissioner Arndt
Commissioner Becker

B. CITIZEN'S COMMENT PERIOD

Citizens are invited to speak to the Commissioners on agenda or non-agenda items. There is a 3 minute time limit per person, unless otherwise noted by the Chairman. Please note that no formal action will be taken on these items during this time due to the open meeting law provision; however, they may be placed on future posted agenda if action is required.

C. CONSENT AGENDA

1. Ratify the Board of County Commissioners approval of FY 2025 EMTS Grant.

All matters under the consent agenda are considered to be routine by the Board of County Commissioners and will be enacted with a single vote. There will be no separate discussion of these items. If discussion is deemed necessary, any Board member may ask that the item be removed from the Consent Agenda and considered separately:

D. UNFINISHED BUSINESS

*Morgan County is committed to making its public meetings accessible to persons with disabilities. If you need special accommodations, please call (970)542-3500, extension 1410, at least 2 business days in advance of a meeting to make arrangements.

E. GENERAL BUSINESS AND ADMINISTRATIVE ITEMS

1. Consideration of Approval – Road Use Agreement for Pivot Solar 32, LLC.

F. COUNTY OFFICIAL AND DEPARTMENT HEAD REPORTS

1. Commissioner’s Calendar for the Week of March 8, 2024 through March 19, 2024.

G. PUBLIC HEARING

1) **Applicant:** Fortress Solar I, LLC

Landowners: Ruth Ann Odle and Shari A. Benotti

Fortress Solar Energy Facility Phase I

Legal Description: A part of Sections 5, 6, 7, and 8, Township 3 North, Range 55 West, a part of Sections 1 and 12, Township 3 North, Range 56 West of the 6th PM, Morgan County, Colorado.

Fortress Solar BESS Phase I

Legal Description: A part of Section 5, Township 3 North, Range 55 West of the 6th PM, Morgan County, Colorado.

Request: Fortress Solar I, LLC has submitted a Special Use Permit Application to construct and operate an up to 200 MW Solar Photovoltaic Panel (PV) project in conjunction with an 800 MWh (200MWac) Battery Energy Storage System (BESS).

Date of Application: December 8, 2024.

2) **Applicant:** Fortress Solar II, LLC

Landowners: Ruth Ann Odle

Fortress Solar Energy Facility Phase II

Legal Description: A part of Sections 3, 4, 5, and 8, Township 3 North, Range 55 West and a part of Section 32, Township 4 North, Range 55 of the 6th PM, Morgan County, Colorado.

Fortress Solar BESS Phase II

Legal Description: A part of Section 5, Township 3 North, Range 55 West of the 6th PM, Morgan County, Colorado.

Request: Fortress Solar II, LLC has submitted a Special Use Permit Application to construct and operate an up to 200 MW Solar Photovoltaic Panel (PV) project in conjunction with an 800 MWh (200MWac) Battery Energy Storage System (BESS).

Date of Application: December 8, 2024.

3) **Applicant:** Fortress Solar III, LLC

Landowners: Ruth Ann Odle

Fortress Solar Energy Facility Phase III

Legal Description: A part of Sections 3, 9 and 10, Township 3 North, Range 55 West of the 6th PM, Morgan County, Colorado.

Fortress Solar BESS Phase III

Legal Description: A part of Section 5, Township 3 North, Range 55 West of the 6th PM, Morgan County, Colorado.

Request: Fortress Solar III, LLC has submitted a Special Use Permit Application to construct and operate an up to 200 MW Solar Photovoltaic Panel (PV) project in conjunction with an 800 MWh (200MWac) Battery Energy Storage System (BESS).

Date of Application: December 8, 2024.

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Open for Public Comment
Close for Public Comment
Discussion and Decision

I. ADJOURNMENT

*Morgan County is committed to making its public meetings accessible to persons with disabilities. If you need special accommodations, please call (970)542-3500, extension 1410, at least 2 business days in advance of a meeting to make arrangements.

PREPARED BY: Mindi Cloyd, Administrative Services Manager for BCC
AGENDA POSTED by March 8, 2024 @ 4:00 P.M.

ROAD USE AGREEMENT

(Phase 1)

THIS ROAD USE AGREEMENT (hereinafter "Agreement") is made this 12th day of March, 2024 ("Effective Date"), by and between Morgan County, Colorado, whose address legal address is 218 W. Kiowa Avenue, Fort Morgan, Colorado 80701 (hereinafter "County") and Pivot Solar 32 LLC, whose legal address 1601 Wewatta St., Suite 700, Denver, CO 80202, its successors and assigns (the "Applicant").

RECITALS

WHEREAS, Applicant applied for and obtained a special use permit to construct and operate a solar collector facility in Morgan County (the "Project");

WHEREAS, Applicant's agents, employees, affiliates, contractors, subcontractors, workforce and related service companies may utilize equipment and heavy vehicles on Morgan County roads and Appurtenances in or around such roads (collectively, the "County Roads"), as identified herein, in connection with development of phase 1 of the Project;

WHEREAS, Applicant's use of County Roads may cause impacts which require mitigation and repair to ensure the public's continued ability to use County Roads; and

WHEREAS, as condition of the special use approval, the County requires Applicant to enter into this road use agreement to mitigate the impact on the County Roads due to the phase 1 of the Project.

NOW THEREFORE, in consideration of the mutual covenants and conditions contained herein, the sufficiency of which are hereby acknowledged, the County and Applicant agree as follows:

1. **Purpose of Agreement.** The purpose of this Agreement is to define the terms and conditions under which Applicant will pay for the cost of repairing any damage arising from the use of County Roads by Applicant and any contractors or subcontractors of Applicant ("Contracting Companies"). Applicant has indicated that it intends to use approximately 1.47 miles of County Roads, identified as Access Routes, of which approximately 1.47 miles are asphalt-paved. This Agreement is intended to mitigate the damage to County Roads, minimize interruptions to the traveling public, and compensate the County for the costs of repairing any damage to the County Roads and any increased maintenance costs resulting from phase 1 of the Project.
2. **Definitions.**
 - A. **Access Routes** means the following traffic access to the Project site: All traffic during construction of phase 1 of the Project shall access the Project site from County Road T, via County Road 27 or State Highway 71. County Road 27.5 shall not be used during construction for any traffic accessing the Project site. Applicant shall be responsible

for ensuring all construction traffic uses the approved Access Routes.

- B. **Appurtenance** means a ditch, culvert, or any type of wall, fence, guardrail, pavement marking, traffic control device, illumination device, mailbox or barrier adjacent to or in, along or on a road, or any construction, obstruction, erection or any situation, arrangement or disposition of any earth, rock, tree or other material or thing adjacent to or in, along or on a road that is not on the traveled portion of the road.
- C. **County Roads** means a roadway under the direction, control and management of the County, including:
 - i. A developed road on which improvements such as grading or surfacing have been made for the purpose of public access and included any Appurtenances, and includes a bridge forming part of a public road and any structure incidental to a public road; and/or
 - ii. An undeveloped road or right of way under the County's jurisdiction.
- D. **Mitigation Plan** means a plan, approved by the County Planning Department, detailing which County Roads will be used for phase 1 Project traffic, the route of phase 1 Project traffic, a schedule of when County Roads will be used (including daily hours of use), and plans for how impacts to the County Roads, neighboring properties, and traffic will be minimized.

3. **Repair and Maintenance Obligations.**

- A. Applicant has electronically submitted a pre-construction baseline survey to the County of the County Roads, which are identified as the Access Route. That baseline survey includes pre-construction geolocated photos of the Access Route documenting pavement conditions and a comparative traffic count along the Access Route, including average daily traffic (ADT), turn movements, and vehicle types and percentages.
- B. Applicant has submitted a Mitigation Plan for its and Contracting Companies' use of the County Roads, attached hereto as **Exhibit A**. Applicant and Contracting Companies shall comply with the Mitigation Plan at all times. Failure to comply with the Mitigation Plan shall be grounds for the County to suspend the special use permit until such time as the Company provides sufficient assurances to the County that Applicant will comply with the Mitigation Plan.
- C. Applicant shall be responsible for all costs and expenses required to restore County Roads used by Applicant or its Contracting Companies to conduct operations for the phase 1 of the Project to the extent any damage is directly attributable to Applicant or its Contracting Companies. This obligation shall require Applicant to restore roads to substantially the same condition.

- D. During the time when Applicant, or any of its Contracting Companies, is engaged in the use of a County Road for access to conduct operations for phase 1 of the Project, Applicant shall be responsible for road damage resulting from such use to the extent such road damage is directly attributable to Applicant or its Contracting Companies, including but not limited to examples of Road Damage (defined below) in this Agreement, to keep County Roads in safe condition for the public.
 - E. Upon the completion of construction of phase 1 of the Project, the Applicant shall submit post-construction geolocated photos of the entire Access Route post-construction to appropriately document the pavement condition for pre- and post-construction comparison. Such geolocated photos must be submitted to the County within fourteen (14) days after the completion of construction unless Applicant experiences weather-caused delays due to weather-specific requirements of the plane and instrumentation that is required to capture geo-located photos. Applicant will communicate any of these delays to the County and will perform these services in the next available window of availability.
 - F. Upon evaluation of the post-construction geolocated photos, the County shall promptly notify Applicant of any necessary repairs, but such notice shall be provided within fourteen (14) days of the submission of the post-construction geolocated photos.
 - G. All restoration of County Roads by Applicant shall be completed within sixty (60) days of the completion of the installation of the phase 1 of the Project. If Applicant does not undertake required improvement within this timeframe, the County may undertake such repairs and assess all costs to Applicant. Failure to complete the repairs or failure to pay for such repairs within thirty (30) days of the date of the invoice from the County for the costs of such repairs, may be grounds for revocation of the special use permit.
4. **Security.** Due to the minimal traffic and condition of the Access Route, the County has determined that no security shall be required. However, nothing herein shall be deemed to limit Applicant's responsibility to repair the County Roads as outlined in this Agreement.
 5. **Inspections.** Inspections of County Roads identified in this Agreement may be carried out after the baseline survey is completed, following completion of the construction of the phase 1 of the Project and again, following the restoration of the County Roads in the presence of official designates of both the County and Applicant at a time set by the County or the County's official designee if so agreed to by Applicant.
 6. **Road Damage.**
 - A. Examples of Road Damage include but are not limited to the following:
 - i. Potholes or wheel-depressed areas after the roads have been maintained or graded.
 - ii. Damage to shoulders due to heavy vehicles running off the edge of the road.
 - iii. Damage to ditches due to heavy vehicles squeezing the ditches closed by

- running on the shoulders of the road.
- iv. Damage to culverts crushed by heavy hauling activities or being "plugged" by sediment from closed ditches.
- v. Damage to road surface causing the re-cycling of the surface for the purpose of proper roadway drainage.
- vi. Damage to the existing base by heavy traffic.
- vii. Appropriate topping the road with driving surface aggregate after the road has been recycled or re-graded to restore a proper road profile.

7. **Emergencies.** The County may, in emergency situations, and acting reasonably, and without giving any notice to Applicant as required elsewhere in this Agreement, take immediate and all action necessary to complete repairs to County Roads that the County deems necessary for public safety.

8. **Indemnification.** Applicant shall indemnify, release and hold harmless the County and its officers, agents, employees, successors and assignees from any and all actions, proceedings causes of action, claims, demands and/or costs attributable to, whether directly and indirectly, damages or injuries arising out of or resulting from acts or omissions by Applicant or otherwise arising out of the performance under this Agreement by Applicant, its employees, agents, contractors or subcontractors, or its Contracting Companies, but such indemnity shall not apply to the intentional acts or negligence of the County, its officers, agents, employees, successors and assignees.

9. **Assignment.** Except as otherwise provided herein, or except as may be hereafter determined by the parties, no party to this Agreement may sell, assign, partially assign or transfer its interest in this Agreement, or any of its rights, duties, or obligations hereunder, without the prior written consent of the other party; provided, however, Applicant may collaterally assign its interest in this Agreement without consent to a financing source (whether debt or tax equity) in connection with Applicant's development of the Project and if such assignment occurs, the County may fully enforce this Agreement against the assignee. Applicant shall provide written notice within five (5) days to the County of such assignment. Whenever consent or the approval of a party is required herein, such party shall not unreasonably withhold, delay, or deny such consent or approval.

10. **Breach.**

- A. If Applicant breaches this Agreement, the County may take such action as permitted or authorized by law or this Agreement as the County deems necessary to protect the public health, safety, and welfare. The remedies include, but are not limited to:
 - i. A suspension or revocation of Applicant's special use permit;
 - ii. A demand that the security given for the completion of the public improvements be paid or honored; and
 - iii. Any other remedy available at law or in equity.

- B. Unless necessary to protect the immediate health, safety and welfare of the County, the County shall provide Applicant thirty (30) days' written notice of its intent to take any action under this Section, during which Applicant may cure the breach and prevent further action by the County. If the Applicant has taken substantial steps towards curing, the County shall extend the period to cure the breach accordingly.
 - C. The rights and remedies of the County under this Agreement are in addition to any other rights and remedies provided by law. The expiration of this Agreement shall in no way limit the County's legal or equitable remedies, or the period in which such remedies may be asserted, for Public Improvement work negligently or defectively performed.
 - D. Should this Agreement become the subject of litigation to resolve a claim of breach by Applicant and a court of competent jurisdiction determines that Applicant was in breach of this Agreement, Applicant shall pay the attorney fees, expenses, and court costs of the County.
11. **Nuisance Conditions.** Applicant shall prevent the existence of any nuisances by way of its maintenance or restoration of County Roads under this Agreement. If the County determines that a nuisance exists, it shall notify Applicant that such nuisance exists. If the nuisance is not abated or an abatement plan is not submitted to the satisfaction of the County, the County may undertake such abatement and invoice the costs of abating the nuisance to Applicant. Such an invoice shall be paid with thirty (30) days of the date of such invoice.
12. **Waivers.**
- A. Failure by either party to this Agreement to enforce or insist upon compliance with any of the terms or conditions of this Agreement shall not constitute a general waiver or relinquishment of any such terms or conditions, but the same shall be and remain at all times in full force and effect.
 - B. By entering this Agreement, the County does not waive, nor shall it be deemed to waive, any immunity or defense that would otherwise be available to it against claims arising by third parties.
13. **Successors and Assigns.** This Agreement shall inure to the benefit of and be binding upon the County and Applicant and their respective successors and permitted assigns.
14. **Severability.** If any provision of this Agreement shall be held invalid, illegal or unenforceable in any respect by a court of competent jurisdiction, such invalidity, illegality or unenforceability shall not affect any other provision of this Agreement.
15. **Venue and Jurisdiction.** This Agreement shall be interpreted in accordance with the laws of the State of Colorado. Venue of any suit or cause of action under this Agreement shall lie exclusively in Morgan County, Colorado.
16. **Entire Agreement.** This Agreement constitutes the entire agreement and understanding

between the parties and supersedes any prior agreement or understanding relating to the subject matter of this Agreement. However, Applicant remains subject to the conditions on its [type] Permit.


- 17. **Modification.** This Agreement may be modified or amended only by a duly authorized written instrument executed by the parties hereto.
- 18. **Notices.** All notices required to be given under the terms of this Agreement shall be in writing and may be mailed or electronically transmitted, addressed to the parties as follows:


Morgan County: Bruce Bass, Director of Public Works
 218 W. Kiowa Avenue
 Fort Morgan, Colorado 80701
 Email: bbass@co.morgan.co.us

Applicant: _____

IN WITNESS WHEREOF, the parties hereto have executed and delivered this Agreement as of the Effective Date.

MORGAN COUNTY

Mark A. Arndt, Chairman 

Jon J. Becker, Commissioner 

Gordon H. Westhoff, Commissioner

Attest:

Kevin Strauch, Clerk

APPLICANT

Applicant Representative

Print Name

Applicant Company Name

COMMISSIONERS CALENDAR

March 1, 2024 through March 12, 2024

March 8, 2024		Daily County Business
March 11, 2024	10:00 A.M. 11:00 A.M. 1:00 P.M. 2:00 P.M.	Region 4 Opioid Council Meeting Finance/HR Department Meeting Communications Department Meeting CPS HR Compensation Study Meeting
March 12, 2024	9:00 A.M. 10:00 A.M. 1:00 P.M.	Planning & Zoning Hearing - Fortress Solar (Assembly Room) (Please check https://morgancounty.colorado.gov/ for meeting options.) County Attorney Office Hours 911 Authority Board/Communication Board Meeting
March 13, 2024		Daily County Business
March 14, 2024	9:00 A.M.	Steering Committee Meeting (Hybrid)
March 15, 2024		Daily County Business
March 18, 2024	11:00 A.M. 1:00 P.M. 5:30 P.M.	HR Department Meeting BCC Office Meeting Board of Adjustment Meeting
March 19, 2024	9:00 A.M. Hearing - Immediately following Board Meeting 11:00 A.M.	Board of County Commissioners Meeting (Assembly Room) (Please check https://morgancounty.colorado.gov/ for meeting options.) Finance Department Meeting

Unless otherwise noted, all meetings with department heads and other non-BOCC elected officials listed above may include an update on the status of the department, a general discussion of projects, any matters or concerns that the County needs to address, and activities and operations of the department.

Department meetings may be by conference call or virtual meeting upon request.

CALENDAR SUBJECT TO CHANGE DUE TO AGREEABLE CANCELLATIONS AND/OR WALK IN BUSINESS

Posted 03/08/2024 @ 4:00 P.M. by Mindi Cloyd, Administrative Services Manager

** All meetings are held in the Commissioner's Office located at 218 West Kiowa Avenue, Fort Morgan unless otherwise noted

*Any meeting or event scheduled to be held at the Commissioners' Offices (218 West Kiowa Avenue, Fort Morgan, CO) will be relocated to a site with handicapped access upon request. For special assistance for the Morgan County Board of Commissioners meeting, please notify us 48 hours before the scheduled agenda item. Please call (970)542-3500, extension 1410, to request accommodation.

Fortress Solar Project, Phase I Special Use Permit Application



For Submittal to:



MORGAN COUNTY PLANNING
ZONING & BUILDING DEPT.
231 Ensign, P.O. Box 596
Fort Morgan, Colorado 80701
PHONE (970)542-3526
FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

Prepared for:

Fortress Solar I LLC,
11801 Domain Blvd, Suite 450
Austin, TX 78758

Prepared by:



1560 Broadway, Ste 1400
Denver, CO 80202



MORGAN COUNTY PLANNING
 ZONING & BUILDING DEPT.
 231 Ensign, P.O. Box 596
 Fort Morgan, Colorado 80701
 PHONE (970)542-3526
 FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

PERMIT # SW2023 - 0020

Date Received	<u>11 / 8 / 23</u>	Received By	<u>[Signature]</u>
App Fee	<u>\$5000</u>	Ck/CC #:	<u>091045071</u>
Paid	<u>11 / 14 / 23</u>		
Minor Amend Fee:	\$	CK/CC #:	
Paid	/ /		
Recording Fee	\$	Ck/CC #:	
Paid	/ /		
PC Date:	<u>2 / 12 / 24</u>	BOCC Date:	/ /
100 Year Floodplain?	<u>Y/N</u>	Taxes Current?	<u>Y/N</u>

SPECIAL USE PERMIT APPLICATION

(Also to be used as application for Amendments to Existing Special Use Permits)

Landowner **MUST** Sign Application and Right to Farm Policy

APPLICANT

Name Fortress Solar I LLC
 Address 11801 Domain Blvd, Suite 450
Austin, TX 78758
 Phone _____
 Email _____

LANDOWNER

Name See Attached Table
 Address _____
 Phone () _____
 Email _____

BRIEF DESCRIPTION OF APPLICATION

Proposed 200 MW utility scale solar facility. Phase I of the Fortress Solar Project.

PROPERTY LEGAL DESCRIPTION

Address (if available):

See attached parcel information table

S: ___ T: ___ R: ___ ___ 1/2 ___ 1/4 ___ 1/4 Property Size _____ (sq. ft. or acres)
 Parcel #: _____ - _____ - _____ Zone District: A
 Subdivision: _____ Lot #(s): _____

Is property located within 1320' (1/4 mile) of a livestock confinement facility? Y/N

SEE REQUIRED ATTACHMENT LIST ON BACK OF THIS PAGE.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED OR PROCESSED.

SPECIAL USE PERMIT REQUIRED ATTACHMENT LIST

Fee:

- Non-Refundable Application Fee**

**Additional fees and charges may be required pursuant to Section 2-160 of Morgan County Zoning Regulations*

Project Narrative:

- Narrative– Including the following:**

- Project Description
- Purpose of request
- How this proposal complies with the Morgan County Comprehensive Plan
See: <https://morgancounty.colorado.gov/sites/morgancounty/files/Comprehensive-Plan-2008.pdf>
- How this project/proposed use meets the criteria for Special Use Permit pursuant to Sec. 2-395 of the Zoning Regulations
- How the project/proposed use meets any specific criteria related to the project/proposed use. *See Morgan County Zoning Regulations Chapter 4-Supplementary Regulations, including but not limited to: Campgrounds, Livestock Confinement, Kennels, Outdoor Shooting Ranges, Home Occupations, Oil and Gas, Mobile Home Parks, Wireless Service Facilities, Solar, Wind and BESS*
- How project will relate to or impact existing adjacent uses
- All off-site impacts and proposed mitigation measures
- Development or implementation schedule of project
- Proposed length of time the permit, if applicable
- Discussion of any public improvements required to complete the project

Environmental Impacts:

- Discuss any environmental impacts the Special Use will have on the following and the proposed mitigation measures:

- | | | | |
|--------------------------------------|-----------------------------------|----------------------------------------------|------------------------------------------|
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Dust | <input type="checkbox"/> Existing Vegetation | <input type="checkbox"/> Land Forms |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Odor | <input type="checkbox"/> Storm Water Runoff | <input type="checkbox"/> Water Resources |
| <input type="checkbox"/> Wetlands | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Visual Amenities | <input type="checkbox"/> Other _____ |

Map & Plans: **Special Use Map** meeting the requirements of Sec. 2-420 and any specific map requirements for the proposed use including but not limited to: *Campgrounds, Livestock Confinement, Kennels, Outdoor Shooting Ranges, Home Occupations, Oil and Gas, Mobile Home Parks, Wireless Service Facilities, Solar, Wind and BESS. Sample Map attached to application for reference*

Drainage/Run-Off Control Plan may be required if the Planning Administrator determines that the use or building meets one of the following criteria:

- (1) The accessory use or building may have a drainage impact on adjacent properties;
- (2) The accessory use or building may have a drainage impact on adjacent right of ways;
- (3) The accessory structure is 5000 square feet or larger.

Decommissioning Plan [Wind, Solar, BESS]

Geotechnical Report [Wind, Solar]

Maintenance Statement [Wind, Solar, BESS]

Water and/or Wind Erosion Control Plan [Wind, Solar]

Fire Mitigation Plan [BESS]

Specification Sheet [BESS]

Emergency Operation Plan [BESS]

Ownership: **Current title insurance commitment (last 6 months)**

Mineral Rights Holders Notification

Notice to FFA & Approval Letter [Wind]

Notice to Operator of Communication Link (if applicable) [Wind]

Proof of current paid taxes

Utilities/Access: **Water tap (Engineering Report from Quality Water or proof of access to a well)**

Sewer (Septic Permit, Will Serve Letter from NCHD or proof of other public system)

Electric (Electric bill or letter of commitment from electricity provider)

Driveway Permit from CDOT or Morgan County Road & Bridge (If required by staff)

Ditch Company- Proof of contact if there is a ditch on or next to subject property

Architecture Control Approval (if applicable)

Utility Interconnection or Crossing Certification [Wind, Solar]

Road Agreement [Wind, Solar]

Electrical Diagram [BESS]

Vested Rights: **Vesting Rights** (Optional). If applying for vested rights with special use application, the following must be submitted:

- Period of time Vesting Rights are requested
- Development schedule including timeline and phases
- Reason for request
- Other pertinent factors concerning the development
- Additional application fee for vesting rights application

Miscellaneous: **Right to Farm Policy** signed by Landowner(attached)
 Liability Insurance for Solar, Wind and/or BESS projects

1 # Paper Application sets

1 Digital Copy of Application (One sided only)

Posted Public Notice Verification:

Notarized affidavit with photographs from a distance & close-up

This must be submitted PRIOR to Planning Commission hearing and PRIOR to Morgan County Board of Commissioners hearing

Additional Information required by staff:

APPLICANT & LANDOWNERS **MUST** SIGN APPLICATION ON NEXT PAGE

APPLICANT & LANDOWNER'S STATEMENT

I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge.
Application must be signed by landowners as shown on title insurance/commitment.

Charles Ndhlovu 10/18/2023
Applicant Signature Date

Leith Ann Odle 10/29/23
Landowner Signature Date

Applicant Signature Date

Landowner Signature Date

APPLICANT & LANDOWNER'S STATEMENT

I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge.
Application must be signed by landowners as shown on title insurance/commitment.

Charles Ndhlovu 10/18/2023
Applicant Signature Date

Shari A Benotte 10-24-23
Landowner Signature Date

Applicant Signature Date

Landowner Signature Date



MORGAN COUNTY, PLANNING, ZONING & BUILDING DEPT.

231 Ensign, P.O. Box 596

Fort Morgan, Colorado 80701

PHONE (970) 542-3526 FAX (970) 542-3509

MORGAN COUNTY RIGHT TO FARM POLICY / NOTICE

Morgan County is one of the most productive agricultural counties in Colorado. Ranching, farming, animal feeding, and all other manner of agricultural activities and operations in Morgan County are integral and necessary elements of the continued vitality of the county's economy, culture, landscape and lifestyle. Morgan County specifically recognizes the importance of agricultural operations as necessary and worthy of recognition and protection.

Landowners, residents and visitors must be prepared to accept as normal the effects of agriculture and rural living. These may include noise from tractors, equipment, and aerial spraying sometimes at night or in the early morning; dust from animal pens, field work, harvesting, and gravel roads; odor from animal confinement operations, silage and manure; smoke from ditch burning; flies and mosquitoes; the use of pesticides and fertilizers, including aerial spraying; and movement of livestock or machinery on public roads. Under the provisions of the State of Colorado's "Right to Farm" law (Section 35-3.5-101 and following, C.R.S.), all normal and non-negligent agricultural operations may not be considered nuisances.

Also public services in a rural area are not at the same level as in an urban or suburban setting. Road maintenance may be at a lower level, mail delivery may not be as frequent, utility services may be nonexistent or subject to interruption, law enforcement, fire protection and ambulance service will have considerably longer response times, snow may not be removed from county roads for several days after a major snow storm. First priority for snow removal is that school bus routes are normally cleared first.

Children are exposed to different hazards in a rural setting than they are in an urban or suburban area. Farm and oilfield equipment, ponds, and irrigation ditches, electrical service to pumps and oil field operations, high speed traffic, noxious weeds, livestock, and territorial farm dogs may present real threats to children. It is necessary that children's activities be properly supervised for both the protection of the children and protection of the farmer's livelihood.

All rural residents and property owners are encouraged to learn about their rights and responsibilities and to act as good neighbors and citizens of Morgan County. This includes but is not limited to obligations under Colorado State law and Morgan County Zoning Regulations regarding maintenance of fences, controlling weeds, keeping livestock and pets under control. There may be provisions of which you are unaware. For example, because Colorado is a Fence Law State, owners of property may be required to fence livestock out.

Information regarding these topics may be obtained from the Colorado State University Cooperative Extension Office and the County Planning and Zoning Department, and County Attorney.

RECEIPT AND STATEMENT OF UNDERSTANDING

I hereby certify that I have received, read, and understood the Morgan County Statement of Policy and Notice regarding Right to Farm.

I further state that I am aware that the conditions of living in an unincorporated area are different than living in a town or city and that the responsibilities of rural residents are different from urban or suburban residents. I understand that under Colorado law that a pre-existing, non-negligent agricultural operation may not be considered a public or private nuisance.

Ruth Ann Odle 10-25-23
Signature Date

Ruth Ann Odle
Printed Name

16218 Hwy. 71
Address
Brush, CO 80723

To Be Signed by Landowner

Adopted by the Morgan County Board of County Commissioners by Resolution #96BCC41 on July 23, 1996 and amended by Resolution 2008 BCC 34 on September 2, 2008.



MORGAN COUNTY, PLANNING, ZONING & BUILDING DEPT.
 231 Ensign, P.O. Box 596
 Fort Morgan, Colorado 80701
 PHONE (970) 542-3526 FAX (970) 542-3509

MORGAN COUNTY RIGHT TO FARM POLICY / NOTICE

Morgan County is one of the most productive agricultural counties in Colorado. Ranching, farming, animal feeding, and all other manner of agricultural activities and operations in Morgan County are integral and necessary elements of the continued vitality of the county's economy, culture, landscape and lifestyle. Morgan County specifically recognizes the importance of agricultural operations as necessary and worthy of recognition and protection.

Landowners, residents and visitors must be prepared to accept as normal the effects of agriculture and rural living. These may include noise from tractors, equipment, and aerial spraying sometimes at night or in the early morning; dust from animal pens, field work, harvesting, and gravel roads; odor from animal confinement operations, silage and manure; smoke from ditch burning; flies and mosquitoes; the use of pesticides and fertilizers, including aerial spraying; and movement of livestock or machinery on public roads. Under the provisions of the State of Colorado's "Right to Farm" law (Section 35-3.5-101 and following, C.R.S.), all normal and non-negligent agricultural operations may not be considered nuisances.

Also public services in a rural area are not at the same level as in an urban or suburban setting. Road maintenance may be at a lower level, mail delivery may not be as frequent, utility services may be nonexistent or subject to interruption, law enforcement, fire protection and ambulance service will have considerably longer response times, snow may not be removed from county roads for several days after a major snow storm. First priority for snow removal is that school bus routes are normally cleared first.

Children are exposed to different hazards in a rural setting than they are in an urban or suburban area. Farm and oilfield equipment, ponds, and irrigation ditches, electrical service to pumps and oil field operations, high speed traffic, noxious weeds, livestock, and territorial farm dogs may present real threats to children. It is necessary that children's activities be properly supervised for both the protection of the children and protection of the farmer's livelihood.

All rural residents and property owners are encouraged to learn about their rights and responsibilities and to act as good neighbors and citizens of Morgan County. This includes but is not limited to obligations under Colorado State law and Morgan County Zoning Regulations regarding maintenance of fences, controlling weeds, keeping livestock and pets under control. There may be provisions of which you are unaware. For example, because Colorado is a Fence Law State, owners of property may be required to fence livestock out.

Information regarding these topics may be obtained from the Colorado State University Cooperative Extension Office and the County Planning and Zoning Department, and County Attorney.

RECEIPT AND STATEMENT OF UNDERSTANDING

I hereby certify that I have received, read, and understood the Morgan County Statement of Policy and Notice regarding Right to Farm.

I further state that I am aware that the conditions of living in an unincorporated area are different than living in a town or city and that the responsibilities of rural residents are different from urban or suburban residents. I understand that under Colorado law that a pre-existing, non-negligent agricultural operation may not be considered a public or private nuisance.

Shari A. Benotti 10/24/23
 Signature Date

SHARI A. BENOTTI
 Printed Name

2420 THORNDON PARK CT.
 Address

LEAGUE CITY, TX 77573

To Be Signed by Landowner

Delaware

Page 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF FORMATION OF "FORTRESS SOLAR I LLC", FILED IN THIS OFFICE ON THE TWENTY-FIRST DAY OF AUGUST, A.D. 2023, AT 3:27 O`CLOCK P.M.




Jeffrey W. Bullock, Secretary of State

7632089 8100
SR# 20233301365

Authentication: 204019798
Date: 08-22-23

You may verify this certificate online at corp.delaware.gov/authver.shtml

STATE OF DELAWARE
CERTIFICATE OF FORMATION
OF LIMITED LIABILITY COMPANY

The undersigned authorized person, desiring to form a limited liability company pursuant to the Limited Liability Company Act of the State of Delaware, hereby certifies as follows:

1. The name of the limited liability company is Fortress Solar I LLC

2. The Registered Office of the limited liability company in the State of Delaware is located at 1209 Orange Street (street), in the City of Wilmington, Zip Code 19801. The name of the Registered Agent at such address upon whom process against this limited liability company may be served is The Corporation Trust Company

By: 
Authorized Person

Name: Christie Kneteman
Print or Type

Participating Landowners Contact Information

Name	Address	Phone	Email
Shari Benotti	2420 Thorndon Park League City, TX 77573	Available upon request	Available upon request
Ruth Ann Odle	16218 Hwy 71 Brush, CO 80723-9436	Available upon request	Available upon request
Tri State Generation	1100 W 116 Ave, Westminster, CO 80234	Available upon request	Available upon request

Aypa Power Story Solar Participating Landowner Parcel Information

APN	Account Number	Property Owner	Legal Description
1233-060-00-001	R002875	Tri-State Generation and Transmission Association Inc.	S: 06 T: 3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
123101000002	R004487	Tri-State Generation and Transmission Association Inc.	S: 01 T: 3 R: 56 E1/2E1/2 B908 P721 (CORRECTION SECTION)
123101000700	R700033	Tri-State Generation and Transmission Association Inc	S: 01 T: 3 R: 56 PARC E1/2 B801 P134 **STATE ASSESSED**
1233-060-00-002	R002949	Shari A Benotti	S: 06 T: 3 R: 55 S1/2S1/2 (CORRECTION SECTION)
1233-070-00-001	R002950	Shari A Benotti	S: 07 T: 3 R: 55 N1/2N1/2 (CORRECTION SECTION)
1231-120-00-001	R003925	Shari A Benotti	S: 12 T: 3 R: 56 N1/2NE1/4
1231-120-00-002	R003918	Ruth Ann Odle	S: 12 T: 3 R: 56 SE1/4NE1/4 & E1/2SE1/4
1233-070-00-002	R002827	Ruth Ann Odle	S: 07 T: 3 R: 55 S1/2N1/2 & S1/2 (CORRECTION SECTION)
1233-050-00-001	R002837	Ruth Ann Odle	S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T:

			4 R: 55 PARC SW1/4 S OF RR
1233-080-00- 001	R002838	Ruth Ann Odle	S: 08 T: 3 R: 55 ALL
1233-040-00- 002	R002841	Ruth Ann Odle	S: 04 T: 3 R: 55 ALL S OF RR (CORRECTION SECTION)
1233-090-00- 001	R002842	Ruth Ann Odle	S: 09 T: 3 R: 55 ALL
1233-030-00- 003	R002835	Ruth Ann Odle	S: 03 T: 3 R: 55 S1/2 S OF RR & S1/2NW1/4 S OF HWY 34
1233-100-00- 001	R002839	Ruth Ann Odle	S: 10 T: 3 R: 55 ALL

Special Use Permit Application

Fortress Solar Project- Phase I

Morgan County, Colorado

November 2023

Submitted to:

Morgan County Planning and Zoning
231 Ensign Street, PO Box 596
Fort Morgan, CO 80701



Prepared for

Fortress Solar I LLC

11801 Domain Blvd, Suite 450
Austin, TX 78758

Prepared by



1560 Broadway, Ste 1400
Denver, CO 80202

Morgan County Special Use Permit Application Submittal Requirements

The Morgan County Special Use Permit application package for the proposed Fortress Solar Project is organized by sections to follow the Morgan County SUP Application Checklist, provided below. The items identified in the Submittal Requirements are included in the table below with the listing of the application report section addressing the checklist item.

Morgan County Code 2-380 Submittal Requirements / SUP Application Checklist	Application Section
1. Applicant Information	2.5 / Application Form
2. Landowner Information	2.1 / Application Form
3. Property Legal Description	2.1 / Application Form
4. Applicant & Landowner's Statement	Application Form
5. Project Narrative Including the Following: <ul style="list-style-type: none"> a) Project Description b) Purpose of request c) How this proposal complies with the Morgan County Comprehensive Plan d) How this project/proposed use meets the criteria for the Special Use Permit pursuant to Sec. 2-395 of the Zoning Regulations e) How this project/proposed use meets the specific criteria per Morgan County Zoning Regulations Chapter 4- Supplementary Regulations (Solar) f) How the project will relate to or impact existing adjacent uses g) All off-site impacts and proposed mitigation measures h) Development or implementation schedule of project i) Proposed length of time of the permit j) Discussion of any public improvements required to complete the project 	2.0-3.0
6. Discuss any environmental impacts the Special Use will have on the following and the proposed mitigation measures: Air Quality, Dust, Existing Vegetation, Land Forms, Noise, Odor, Storm Water Runoff, Water Resources, Wetlands, Wildlife, Visual Amenities, Other	4.0
7. Maps and Plans <ul style="list-style-type: none"> a) Special Use Map b) Drainage/Run-off Control Plan c) Decommissioning Plan d) Geotechnical Report e) Maintenance Statement f) Water and Wind Erosion Control Plan g) Fire Mitigation Plan h) Specification Sheets i) Emergency Operation Plan 	5.0
	Appendix A-2
	Appendix A-2, L, & I
	Appendix O
	5.8
	Appendix P
	Appendix I
	Appendix H
	Appendix A-7
	Appendix H
8. Ownership Information <ul style="list-style-type: none"> a) Title Commitments b) Mineral Rights Holders Notification c) Proof of Current Paid Taxes 	2.2
	Appendix B
	2.2.6 / Appendix E
	2.2.4 / Appendix D
9. Utilities: <ul style="list-style-type: none"> a) Water tap (Will Serve letter or proof of access to a well) b) Sewer (Septic Permit, Will Serve Letter from NCHD or proof of other public system) 	2.6.2
	2.6.2.1
	2.6.2.2

c) Electric (Electric bill or letter of commitment from electricity provider)	2.6.2.3
d) Utility Interconnection or Crossing Certification	2.6.2.4
10. Access	2.7
a) Morgan County Driveway Permits	Appendix G
b) Ditch Company- Proof of contact if there's a ditch on or next to the subject property	2.2.8
c) Road Agreement	2.8.1
d) Electrical Diagram (BESS)	Appendix A-6
11. Vested Rights	8.0
12. Miscellaneous	
a) Right to Farm Policy	2.2.5 / Application Form
b) Liability Insurance	2.2.3 / Appendix C
c) Posted Public Notice Verification	7.0

Morgan County SUP Criteria Index

The following index is provided to direct the reader to the sections of this SUP Application that correlate to the Morgan County Chapter 2-395 “Review Criteria” identified for Special Use Permits.

The following criteria will be used by the Planning Commission and the Board of Commissioners when reviewing an application for a special use permit:

Morgan County Code 2-395 Special Use Permit Review Criteria	Application Section
A. The use and its location as proposed are in conformance with the Morgan County Comprehensive Plan;	2.11.A
B. All the application documents are complete and present a clear picture of how uses are to be arranged on the site or within Morgan County;	2.11.B
C. The site plan conforms to the district design standards of these regulations;	2.11.C
D. All on and off-site impacts have been satisfactorily mitigated either through agreement, public improvements, site plan requirements or other mitigation measures;	2.11.D
E. The special use proposed has made compatible with the surrounding uses and adequately buffered as determined by the County;	2.11.E
F. The special uses poses only the minimum amount of risk to the public health, safety, and welfare as set by either federal, state or county regulation, whichever is the strictest;	2.11.F
G. The special use proposed is not planned to be developed on a non-conforming parcel;	2.11.G
H. The applicant has adequately documented a public need for the project, all pertinent technical information, adequate financial resources to implement it, and has paid all fees and review costs levied by the County for application processing and review; and	2.11.H
I. For any special use requiring a supply of water that the applicant has demonstrated a source of water which is adequate for the proposed use in terms of quantity and reliability and in the case of human consumption, quantity, quality, and reliability	2.11.I

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Acronyms and Abbreviations

AADT	Average Annual Daily Traffic
AC	alternating current
AF	acre-feet
APEN	Air Pollutant Emissions Notice
APN	Assessor's Parcel Number
Applicant	Fortress Solar I LLC
Aypa	Aypa Power North America LLC
BESS	battery energy storage system
BMPs	best management practices
BNSF	Burlington Northern Santa Fe Corporation
CAPCD	Colorado Air Pollution Control Division
CDA	Colorado Department of Agriculture
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health & Environment
CPW	Colorado Parks and Wildlife
dBA	A-weighted decibel
EHS	Environmental Health & Safety
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FIRM	Flood Insurance Rate Map
Gen-tie	generation tie line
Highway 34	U.S. Highway 34
HVAC	heating, ventilation, and air conditioning
I-76	Interstate 76
IF	isolated finds
IPaC	Information for Planning and Consultation
kV	kilovolt
MW	megawatt
MWh	megawatt hours

NERC	North American Electric Reliability Corporation
NHD	National Hydrography Dataset
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
Project	A utility scale solar and BESS project known as the Fortress Solar Project
Project Area	4,259-acre fenced Project boundary
PV	photovoltaic
SGHAT	Sandia Laboratories Solar Glare Hazard Analysis Tool
Solar Project Area	4,069-acre solar project area
SUP	Special Use Permit
Tetra Tech	Tetra Tech, Inc.
Tri State	Tri State Generation and Transmission Association Inc.
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WOTUS	waters of the U.S.

1.0 INTRODUCTION

Fortress Solar I LLC (“Applicant”), an indirect subsidiary of Aypa Power North American LLC (“Aypa”), a Blackstone portfolio company submits this application in furtherance of the development of a utility scale solar and BESS project known as the Fortress Solar Project (the “Project”) in Morgan County, Colorado. The Project will be comprised of a solar collector facility and a BESS facility; the solar collector facility project is referred to herein as the “Solar Project” and the BESS facility project is referred to herein as the “BESS Project”. The Project will be developed in three phases, each phase shall contain one phase of the Solar Project and one phase of the BESS Project. In accordance with the Morgan County Zoning Regulations, three separate solar collector facility applications and three separate BESS facility applications, one for each phase, are submitted simultaneously. In order to provide Morgan County (“County”) with a complete picture of the Project, each of the three Solar Project applications includes information on all three phases, each phase corresponding to its own application. The total fenced Project boundary will encompass approximately 4,259 acres (the “Project Area”). The Solar Project, inclusive of all three phases, is an up to 600-megawatt (MW), 2,400 MW hour (MWh) solar photovoltaic (PV) array facility and will encompass up to 4,069 acres within the Project Area (“Solar Project Area”). This application is for Phase I of the Solar Project and is submitted in conjunction with the application for Phase I of the BESS Project. Phase I of the Solar Project will encompass approximately 1,305 acres.

In accordance with the foregoing, the Applicant respectfully submits this Special Use Permit (SUP) application to the Morgan County Planning and Development Department pursuant to Morgan County Code Chapter 4-820, and Chapter 4-825, to address utility-scale Solar Collector facilities. The Applicant is requesting an SUP to construct, operate, maintain, and decommission the Solar Project. The Project will be located on private land in unincorporated Morgan County located approximately 1.6 miles east of the city of Brush, Colorado (Figure 1, Project Location, Appendix A-1). The Project Area is comprised of eleven parcels, and the proposed generation tie (gen-tie) line would bisect three additional parcels (Appendix A-2) that are located within the Morgan County Agricultural Production Zone. The ALTA survey for the Project Area is included as Appendix A-3.

Phase I of the Project includes a 1,305-acre solar array area, a 2-acre Project substation, a 167-acre gen-tie line easement, and an operations and maintenance building. A 21-acre utility scale battery energy storage system (BESS) referred to as the BESS Project, is proposed within the Project boundary. The BESS component is addressed per separate SUP applications submitted simultaneously herewith. The SUP application submitted for Phase I of the BESS Project is to be reviewed concurrent with the subject Phase I solar SUP application.

The Project Vicinity Map is provided as Appendix A-1. The Site Plan and Special Use Map are included as Appendix A-2. The ALTA survey prepared for the Project is provided as Appendix A-3. A site access plan is included Appendix A-4. Schematic drawings of the Project components are detailed in Appendix A-5 and a one-line electrical drawing of the BESS is provided as Appendix A-6. Preliminary specification sheets are provided as Appendix A-7. The SUP application form and Right to Farm Policy is provided in front of this application narrative following the Applicant’s cover letter.

2.0 PROJECT NARRATIVE

2.1 Project Location & Participating Landowner Parcel Information

The Project is located on approximately 4,259 acres of private property currently held under purchase option by an affiliate of the Applicant, which will be assigned to the Applicant prior to the exercise of the option (Appendix A-2). Phase I of the Solar Project will encompass approximately 1,305 acres. The Project is located along U.S. Highway 34 (Highway 34), on existing rangeland approximately 1.6 miles east of Brush, Colorado. Table 1 below lists the assessor's parcel and property owner information for the Project parcels.

Table 1. Participating Property Owners Parcel Information

Assessor Parcel Number (APN)	Account Number	Property Owner	Legal Description
1233-060-00-001	R002875	Tri-State Generation and Transmission Association Inc.	S: 06 T: 3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
1231-010-00-002	R004487	Tri-State Generation and Transmission Association Inc.	S: 01 T: 3 R: 56 E1/2E1/2 B908 P721 (CORRECTION SECTION)
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1231-120-00-002	R003918	Ruth Ann Odle	S: 12 T: 3 R: 56 SE1/4NE1/4 & E1/2SE1/4
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1233-080-00-001	R002838	Ruth Ann Odle	S: 08 T: 3 R: 55 ALL
1233-040-00-002	R002841	Ruth Ann Odle	S: 04 T: 3 R: 55 ALL S OF RR (CORRECTION SECTION)
1233-090-00-001	R002842	Ruth Ann Odle	S: 09 T: 3 R: 55 ALL
1233-030-00-003	R002835	Ruth Ann Odle	S: 03 T: 3 R: 55 S1/2 S OF RR & S1/2NW1/4 S OF HWY 34
1233-100-00-001	R002839	Ruth Ann Odle	S: 10 T: 3 R: 55 ALL

Source: Morgan County 2023a

2.2 Property Interests, Rights, and Policies

2.2.1 Easements & Agreements

An affiliate of Applicant is currently the option holder for the Project site. The option to purchase agreement(s) are for a total of 4,473 acres (407 acres of Benotti; 1,897 acres of Odle Option 1; 2,170 acres of Odle Option 2) and extend until the end of 2024. On October 18th, 2023, the Applicant entered into a Temporary License Agreement with Tri State Generation and Transmission Association Inc. (Tri-State) to allow for completion of surveying and other investigative activities on the Tri-State owned properties. The Applicant intends to establish an access easement across Tri-State owned parcels for access to the Project from County Road R.5. In addition, the Applicant intends to establish an approximate 167-acre ROW utility easement for the proposed generation tie line to interconnect the Project to the Tri-State owned substation west of the Project.

2.2.2 Title Commitments

The title insurance commitments (last 6 months) for all participating landowners within the Solar Project Area are included as Appendix B, excluding the 80-acre Odle Parcel, 1233-040-00-002. The Applicant encountered a title conveyance issue when completing the title search for the Solar Project parcel 1233-040-00-002. The Applicant is working on curing the title issue for this parcel and anticipates completing a corrective deed. The Applicant will provide copy of the title insurance commitment for parcel 1233-040-00-002 when received.

2.2.3 Liability Insurance

The Applicant will carry liability insurance to cover loss or damage to persons or structures during construction and operation of the Solar Project. A copy of the Applicant's liability insurance policy certificate for the Odle property is included as Appendix C. The Applicant's contract for the Benotti property does not require them to obtain a liability insurance certificate.

2.2.4 Proof of Current Paid Taxes

Proof of current tax payment for the participating landowners are included as Appendix D.

2.2.5 Right to Farm Policy

Participating landowner signatures certifying the receipt, review, and understanding of the Morgan County Statement of Policy and Notice regarding the Right to Farm are provided on the SUP application form.

2.2.6 Mineral Right Holder Notification

The mineral right holders within the Solar Project boundary will be provided with a preliminary notice advising them of their right to comment or request information from Morgan County. At this time, a hearing date has not yet been scheduled for the SUP application. The Applicant will notify the individual mineral rights holders within the Project in advance of the scheduled hearing as required by Morgan County and statutory notification requirements. Upon finalization of the hearing schedule, the

Applicant will coordinate with Morgan County to ensure all appropriate mineral rights holders are provided proper notice of the scheduled hearing and an opportunity to provide comment.

A preliminary list of the mineral rights holders that will be notified in advance of the scheduled hearing is included as Appendix E.

2.2.7 Height Restrictions and FAA Hazard Review

According to the Federal Aviation Administration (FAA), the Brush Municipal Airport (FAA identifier 7V5) is located less than a mile northwest of the Project Area (FAA 2023a). Tetra Tech Inc. (Tetra Tech) consulted the FAA Obstruction Evaluation Notice Criteria Tool (FAA 2022b) for four locations in the Project Area and determined that the Project exceeds the Notice Criteria and would require filing. The Applicant will file notice with the FAA at least 45 days prior to the start of construction.

2.2.8 Ditch Company- Proof of Contact

No drainage or irrigation ditches have been identified within the Solar Project Area.

2.3 Zoning District

The Solar Project is located in the Agriculture Production zoning district (Morgan County 2023a). Per Morgan County Code Section 3-180, Solar Collector facilities may be permitted in the Agricultural Production zoning district through issuance of an SUP.

2.4 Purpose of Request

The purpose of this application is to provide Morgan County with pertinent information regarding the Solar Project, subject to the Morgan County Zoning Regulations concerning the regulation of wind energy, solar collector, and battery energy storage systems (Morgan County 2023b). Per Morgan County Code, Section 3-180, solar collector facilities greater than 20 acres in size may be permitted as a primary use in the Agriculture Production zoning district through issuance of a special use permit. Therefore, the purpose of the SUP is to authorize the proposed use of a Solar Collector facility on the Solar Project site to allow for the development and operation the Solar Project.

2.5 Applicant Information

The Applicant is an indirect subsidiary of Aypa. Aypa is a Blackstone portfolio company. Aypa has a proven track record of developing, financing, constructing, owning, and operating utility-scale renewable energy and battery energy storage projects. Aypa's existing portfolio and qualified development pipeline spans the continental United States and Ontario, Canada, including +15,000 MWs of projects in various stages of development. Aypa currently has an operating fleet of 30 projects, two projects are currently under construction, and over 70 projects are in the development pipeline.

2.6 Project Description

The Project is an up to 600-MW, 2,400 MWh hybrid solar and BESS project. The solar arrays, tracking systems, BESS, inverters, substation, and appurtenant facilities would be located on approximately 4,259 acres. The site layout is detailed per the Special Use Map/Site Plan included as Appendix A-2.

2.6.1 Development Schedule and Phasing

The Solar Project is expected to be constructed in three phases of approximately 200 MW, 800 MWh each. Construction of the Solar Project is anticipated to commence in Q2 2025 pending approval of County permits. The Project will be developed in parallel with the BESS Project.

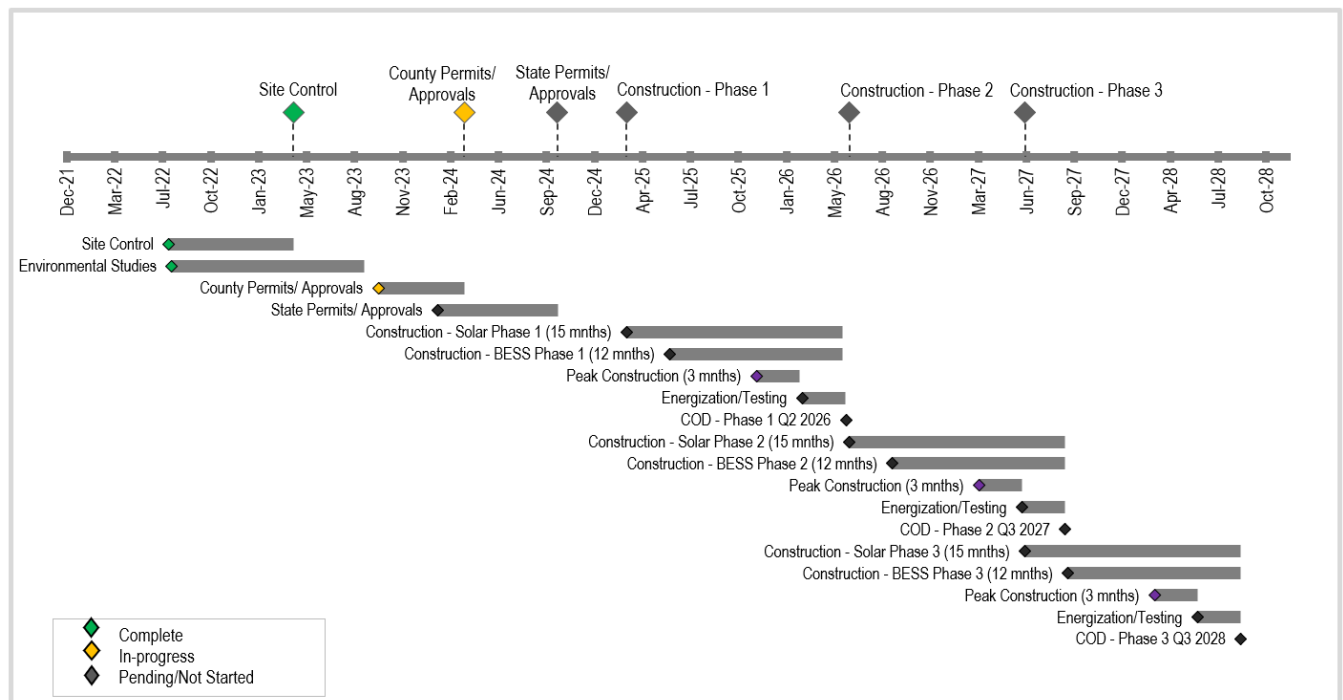
The proposed phasing is detailed per Table 2 below. All associated phasing quantum included in the application should be summed together in such cases in which multiple phases are constructed at the same time. This application is inclusive of maximum and minimum cases of individual and simultaneous phasing. As noted above, this application is for Phase I of the Solar Project.

Table 2. Project Construction Phasing

Phase	APNs	Solar MW	Solar MWh	Start Construction	End Construction	Commercial Operation Date
1	1231-120-00-001, 1231-120-00-002, 1233-060-00-002, 1233-070-00-001, 1233-070-00-002	200	800	Q2 2025	Q1 2026	Q2 2026
2	1233-050-00-001, 1233-080-00-001, 1233-040-00-002, 1233-030-00-003	200	800	Q1 2026	Q2 2027	Q3 2027
3	1233-090-00-001, 1233-100-00-001, 1233-030-00-003	200	800	Q1 2027	Q2 2028	Q3 2028

The overall development schedule for the Solar Project and BESS Project are detailed per Figure 2-1 below.

Figure 2-1. Fortress Solar I LLC - Overall Schedule (Solar & BESS)



2.6.2 Anticipated Permit Timeframe & Length of Permit

Per Section 4-845 of the Morgan County Solar Facility Regulations, a SUP for a Solar Collector facility is valid for three years, provided that substantial construction and installation of the facility is completed within that time. The Project construction for each phase is anticipated to be completed within 15 months upon issuance of a building permit. If construction is delayed due to unforeseen circumstances, the Applicant will request extensions, as permitted per Section 4-845 of the Morgan County Code. The Applicant understands the SUP approval may expire if substantial construction progress is not achieved within three years, or up to six years if such extensions are requested and granted.

2.6.3 Siting Considerations

The primary criteria for determining the location of Solar Collector facilities include the existence of compatible adjacent and nearby land uses, suitable topographic conditions, and the proximity to existing electrical infrastructure, major transportation corridors, utility corridors, and electrical load centers. The proposed Solar Project site meets these criteria. The Solar Project site was selected based on proximity to the existing infrastructure of the Tri State Generation and Transmission Association Inc. (Tri State) Story substation. Siting analysis confirms the proposed Project Area avoids areas or locations with a high potential for biological conflict, such as wilderness study areas, areas of environmental concern, historic trails, special management areas, or important wildlife habitat or corridors. The proposed site avoids visual corridors that are prominent scenic viewsheds or scenic areas. As discussed in Section 4.0, there are no known sensitive biological, hydrological, historical, cultural, or archeological resources within or near the proposed Project site.

2.6.4 Photovoltaic Solar Panels & Tracking System

The Solar Project would use PV technology by which the sun's light energy is converted directly into direct current (DC) electrical energy within the PV panels, referred to as modules. The PV modules are configured in solar arrays by electrically connecting them in series (strings) and connecting strings together at combiner boxes. The PV panels would be supported on single axis trackers that track the sun's position during the day.

Per the preliminary design, the Project will use a module blend of Vertex bifacial PV panels (Appendix A-7). The Project will consist of approximately 1,944,180 PV modules are proposed across 617,359 tracker rows. Phase I of the Solar Project would be comprised of approximately 648,060 PV modules across 205,786 tracker rows. The exact model and quantity of panels will be finalized during the detailed engineering phase. The panels would be installed on a racking system with support piles driven into the ground. For maximum efficiency, panels are typically installed between 16 and 24 inches off the ground when at their lowest point. The maximum proposed panel height at full tilt would be 10 feet to the top of the panels from the ground level, once installed.

2.6.5 Electrical Collection System

In accordance with Section 4-825(A)(1) of the Morgan County Code, all electrical interconnection and distribution lines within the Solar Project boundary will be underground, except for power lines that leave the Project or are within the substation. All electrical interconnections and distribution

components will comply the National Electrical Safety Code, requirements of the electric utility company, and applicable state and federal regulatory codes as required by Morgan County.

The electrical collection system would be designed to convert the output power from the PV modules from DC to alternating current (AC), transform the power from low voltage to transmission-level voltage for connection to the grid, and supply auxiliary power to the tracker systems. The DC output from the PV arrays would be transmitted to inverters through underground DC electrical cables. Collection cables from the inverters typically converge at the corners of each of the array blocks and lead underground to the proposed Project substation. Feeder cables enter the substation via conduit and route to the feeder breakers.

The resulting AC current from each individual inverter package is routed through to a medium-voltage step-up transformer. The output voltage from each inverter would be increased to the desired substation feed voltage of 34.5 kilovolts (kV) by these step-up transformers. From the inverter pads, the collected 34.5 kV of AC power would be delivered to the on-site Project substation, where the voltage is then stepped up to 230 kV.

A one-line electrical drawing for the Project is included as Appendix A-6.

2.6.6 Inverters and Transformers

Approximately 241 SMA Sunny Central 4000 UP-US inverters are proposed per the preliminary Project design (Appendix A-7). Phase I of the Solar Project would include approximately 80 inverters. The exact model and number of inverters will be determined at time of final engineering. The inverters are bi-directional and would be connected to the solar arrays via a common connection to the substation medium voltage bus. Each integrated inverter/transformer is expected to have a footprint that measures approximately 20 feet by 8 feet and will not exceed 10 feet in height (Appendix A-5 & A-7).

2.6.7 Battery Energy Storage System

The BESS area would occupy approximately 21 acres of the Project Area and is expected to store a net of 600 MW/2,400 MWh of electricity. The BESS would be initially comprised of 133 SunGrow SC5000UD-MV-US inverters and 1,064 BYD-MC Cube battery containers, augmented over the 25-year life up to approximately 1,330 BYD-MC Cubes located on concrete equipment pads. The exact model and number of containers will be determined at time of final engineering. The BESS will be charged from the Solar Project and the net 600 MWh output will be delivered to the Tri State Story Substation when called upon. The BESS is further addressed per the concurrent SUP applications.

2.6.8 Project Substation & Gen-tie Line Interconnection

The Project substation would occupy approximately 2-acres and is located north of the BESS Project area. The Project substation would consist of power transformers, overhead bus, feeder breakers, and miscellaneous supporting equipment.

The Project substation would include an overhead 1.25-mile, double circuit 230 kV generation-tie (gen-tie) line interconnection to the existing Tri State Story substation located west of the Project. The final engineering for the Project and the gen-tie line has not been completed yet. Nevertheless, Applicant is

considering two options for infrastructure: either H-frame or monopole designs and will be equipped with robust insulators, conductors, and grounding systems to uphold system reliability and safety standards. The anticipated transmission structure heights range from 90 to 110 feet aboveground. The span length between structures will depend on the chosen pole type and conductor. H-frames have an average span of around 750 feet, monopoles around 900 feet, and lattice towers around 1150 feet. Applicant anticipates installation of approximately 8 monopoles, 9 H-frames, or 6 lattice towers based on the final structure chosen during detailed engineering. The final design of these structures will be developed in collaboration with Tri-State and Public Service Company of Colorado to meet all relevant requirements.

The Applicant seeks administrative approval for transmission structures that may exceed the 100-foot height threshold defined for structures in Agriculture Zoning districts. Exceeding this threshold is deemed necessary to ensure adequate clearance for both existing and proposed transmission lines, as well as to comply with safety regulations. The need for structures that exceed 100 feet might be influenced by the procurement strategy that includes equipment availability and lead times. The Applicant will adhere to established utility pole standards, including those for transmission poles, as outlined by the American National Standards Institute and the National Electrical Safety Code.

2.6.9 Operations and Maintenance Building

A 60-foot by 40-foot, 2,400 square foot steel modular operations and maintenance building would be constructed east of the Project Substation, north of the BESS Project area. The O&M building would have a maximum height of fifteen feet and eight inches. Schematic elevation drawings of the O&M building are provided per Appendix A-5. Electric utilities will be extended to serve the O&M building. No water or wastewater services are anticipated for the O&M building. During construction and operation, on-site sanitary wastewater needs will be met with portable restrooms and handwashing units with routine off-site disposal and maintenance.

2.6.10 Perimeter Fencing & Site Security

The Project will be surrounded by an 8-foot-tall fence, consisting of 7-feet of chain-link and one foot of barbed wire (Appendix A-2 & A-5). The Applicant held an initial coordination call with CPW on October 13, 2023. CPW informed the Applicant that fencing recommendations may be provided by per their recommendation letter. The Applicant is awaiting receipt of CPW's letter of recommendation however anticipates receipt prior to the initial public hearing. The Applicant will send notice of the initial public hearing date to CPW when scheduled by the County. A copy of the letter will be provided to Morgan County once received. The Applicant will continue to coordinate with CPW and will consider fencing recommendations. Site entrances will be gated and locked to assure access is limited to authorized personnel.

Exterior lighting would be installed and strategically located to ensure safety and security of the facility without disturbing surrounding areas outside the Project. Lighting would be installed around the periphery of the BESS Project area, substation, and entry gates, for nighttime security. The lighting for facilities will be designed to meet the minimum number of lights and illumination required for safety and security and will not cause excessive reflected glare. The Project is also subject to lighting

requirements of the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC) and will comply with lighting regulations from these entities as well.

2.6.11 Utilities

2.6.11.1 Water System

Per Morgan County Code, Section 4-820 (H), Water System

If the proposed solar collector facility includes uses that must be served by water, the application shall describe the water source and sufficiency of the water supply for the solar collector facility, including decreed or conditional water rights. If a well is required, the applicant shall obtain the necessary permit from the State of Colorado Office of the State Engineer.

The Project will not require the use of a public water supply system. An affiliate of the Applicant is the option holder for the Project parcels, thus all real property rights, including all mineral and water rights for the Project are presently in the Applicant's control. There are several existing deep-water wells located on the subject property (Figure 4). Further studies will be performed by the Applicant to determine the feasibility of utilizing the existing deep-water wells for various Project needs. These studies will encompass a comprehensive analysis of water quality, assessing parameters such as pH, dissolved minerals, and contaminants. Additionally, an assessment of well yield will be conducted to ascertain the sustainable pumping rate and availability of water resources. By conducting rigorous studies in these areas, the Applicant aims to ensure that the Solar Project's water requirements align with the capacity and quality of the available deep-water wells, thus contributing to the overall success and sustainability of the Project.

If the event that offsite water is required, the necessary water input will be obtained from an external source and transported to the Project site via water trucks to be stored in an onsite water tank and/or cisterns. The water tank will be in strict compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency. Since this water supply would be rarely used, the Project will have minimal effects on overall water availability and will not burden local water resources. Consequently, no new water infrastructure will be necessary for the Project. Proposed estimates of anticipated water usage during construction and operations are further detailed in Section 4.7.

2.6.11.2 Sewer/Septic System

Per Morgan County Code, Section 4-820 (G), Septic System

If the proposed solar collector facility includes uses that must be served by a septic system, the applicant shall comply with applicable county requirements. The applicant shall provide a statement certifying that the septic system for the solar collector will comply with applicable County, State, and Federal requirements.

The Project will not require the use of a septic or wastewater system. During construction and operation, on-site sanitary wastewater needs will be met with portable restrooms and handwashing units with routine off-site disposal and maintenance.

2.6.11.3 Electric

The electric service provider for the proposed Project will be selected closer to commencement of construction. At this time, proof of an electric bill or a letter of commitment from the electricity provider will be made available to Morgan County.

2.6.11.4 Utility Interconnection Agreement

Per Morgan County Code, Section 4-820 (D), Utility Interconnection or Crossing

The applicant will provide certification of intent to enter into an interconnection agreement and crossing agreement(s) to/with applicable utilities.

The Project is expected to interconnect to the Tri State Story substation located approximately 1.25 miles west of the Project. The Applicant hereby certifies their intent to enter into an interconnection agreement and crossing agreement with Tri State. A copy of the Temporary Access agreement between Aypa and Tri-State is included as Appendix F.

2.7 Access, Transportation, & Traffic

2.7.1 Access Roads

Primary haul route and construction deliveries to the Solar Project will be provided via one new 20-foot-wide gravel access road constructed off County Road Q. The primary access for operations and construction commuter vehicles will be provided via a new 20-foot-wide gravel access road constructed off County Road R.5. Primary emergency access will also be provided via the access off County Road R.5. Secondary access for operations and construction commuter vehicles will be provided via a new 20-foot-wide gravel access road constructed off County Road R. The Project will be fenced, and security gates will be installed at each access point to limit access to authorized personnel. Gated entrances would be equipped with Knox boxes and keys to assure emergency personnel access. The proposed site access roads and entry points are depicted on Figure 2.

2.7.2 Morgan County Driveway Permits

The Applicant will obtain a driveway access permit from Morgan County for each of the access roads proposed to be constructed from County Roads Rand Q. A copy of the two driveway permit applications submitted to the Morgan County and Bridge Department are provided in Appendix G. The Applicant has entered into a Temporary License Agreement with Tri State and is in coordination with Tri State regarding the proposed access road from County Road R.5. Tri State will apply for and obtain the driveway access permit on behalf of the Applicant for the access road proposed to be constructed from County Road R.5.

2.7.3 Owner & Employee Commuter Routes

The access routes to be utilized by the landowner and employees during construction and operations are as follows:

Primary Commuter Route: I-76 to County Road R.5: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head

south on CO-71 for approximately .2 mile and will then head east on County Road R.5 until reaching the site entrance. The total Commuter Route length from I-76 is approximately 2.4 miles. This access route will be used for primary emergency access to the Project site.

Secondary Commuter Route: I-76 to County Road R: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately .8 mile and will then head east on County Road R until reaching the site entrance. The total Commuter Route length from I-76 is approximately 3.1 miles.

2.7.4 Construction Haul Route

The haul route to be utilized by heavy vehicle truck traffic throughout construction will be from I-76 to the site access off County Road Q. The Applicant will install a tire washout station at the entrance to the Project site off County Road Q to reduce track out. An exhibit detailing a typical tire washout station is included as Appendix A-8. The construction haul route is depicted on Figure 3 and the site access is also detailed per Appendix A-4, labeled as “Site Access #1”.

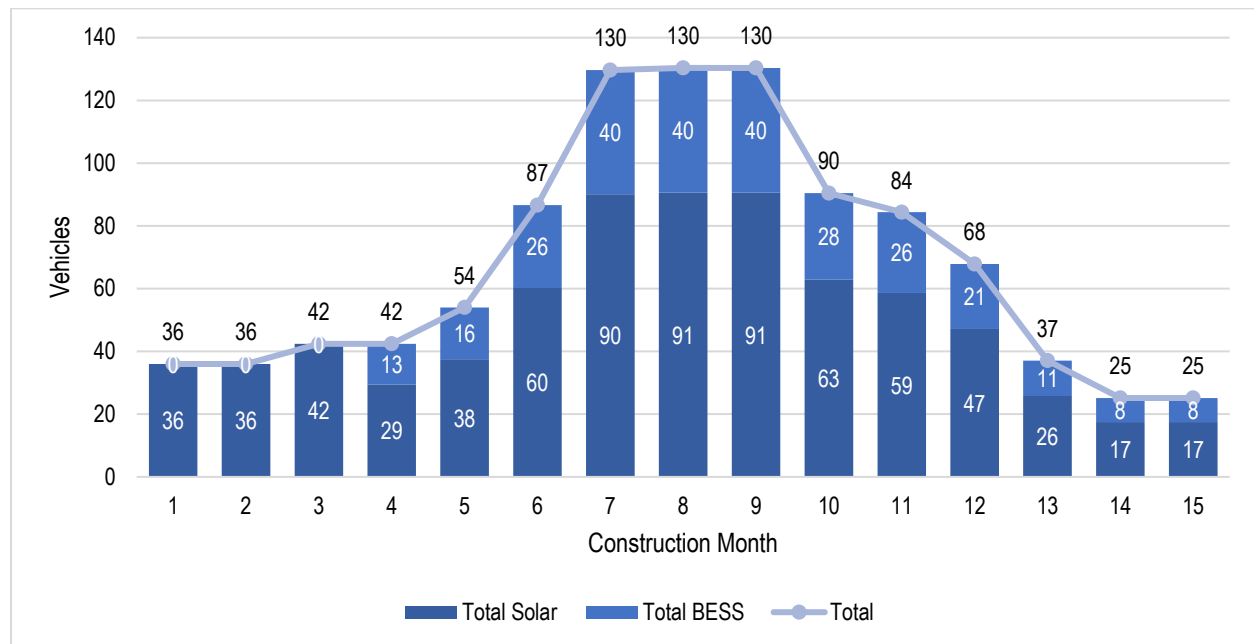
Haul Route: Interstate 76 (I-76) to County Road Q: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately 1.9 miles and will then head east on County Road Q until reaching the site entrance. The total Haul Route length from I-76 is approximately 4.5 miles.

2.7.5 Construction Transportation & Traffic

The construction process for each phase is estimated to take up to 15 months to complete, during which time there would be some variability in the number of workers each day. Project initiation and site preparation would occur over the first 5 months and will require fewer workers and fewer materials delivery truck trips. After the site is prepared for installation, the Project site would experience an increase to a higher maximum number of workers and material delivery truck trips. The peak of construction period for each phase is anticipated to occur over a 3-month period. Upon the completion of construction, testing of the installed equipment for operational reliability and safety will occur over the last 4 months of the construction period. This phase will not require the use of any heavy machinery and will involve a minimal number of workers.

The typical daily construction traffic count for each month in each phase of the Project including the concurrent proposed Fortress BESS facility is detailed per Figure 2-2 below.

Figure 2-2. Typical Daily Construction Traffic Count (Per Phase)



During the peak commuting hours each morning and evening at the peak of construction for each phase of the Solar Project construction, there would be an average of approximately 91 commuter vehicles arriving at or departing from the Project (Figure 2-2). It was estimated that 848 deliveries would be made over the course of each phase of construction. This amount includes 600 trucks delivering solar panel modules, 48 trucks delivering PV inverters, and 200 trucks delivering the panel pile/racking systems. During peak construction, there would be an average range of 7 material delivery truck trips per day. Material delivery trucks are not expected to coincide with the peak hour, rather they would arrive at the Project site throughout the day.

The Colorado Department of Transportation (CDOT) Traffic Data Explorer was accessed to obtain Annual Average Daily Traffic (AADT) counts along the Project haul routes. The AADT counts represent the average number of vehicles traveling on a road segment for a typical day of the year. The AADT data available for the count stations along the Project access routes, the anticipated number of daily trips, and maximum percentage increase in AADT per phase is detailed per Table 3 below.

Table 3. Existing and Anticipated Increase in AADT

Access Route	Existing AADT Counts ¹	Average Estimated Daily Trips	Maximum Percent Increase in AADT (%)
Primary Commuter, Secondary Commuter & Haul Route	Interstate 76, Station 103412: 12,000	196 (91 commuter & 7 delivery)	1.6
	U.S. Highway 34, Station 101481: 3,800		4.8
	State Highway 71, Station 103254: 2,700		7.3
	State Highway 71, Station 000213: 1,800		10.9

Source: CDOT 2023

2.7.6 Operations Transportation & Traffic

During operations once all three phases are complete, the Applicant anticipates 25 full-time operations and maintenance employees would commute daily to the facility. A total of up to 50 trips per day would occur along access roadways (Figure 2-3). Therefore, the transportation and traffic impacts associated with the Project operation are anticipated to be minimal. The operational phase of the Project is expected to be 30 years but may be extended if facility components are upgraded or replaced. The typical daily traffic count for each operational year of the Project including the concurrent proposed BESS Project is detailed per Figure 2-3 below.

Figure 2-3. Typical Operations Traffic Count



2.7.7 Oversized / Overweight Loads

There are expected to be up to approximately 105 oversized/overweight load deliveries per phase associated with the Project for the transport of high voltage substation equipment, solar inverters, and transformers. The remaining heavy vehicle traffic would be standard size five-axle tractor trailers—some of these would be enclosed, and some would be in the form of flatbed trucks or smaller vehicles. Smaller heavy vehicles are likely to include water trucks, concrete trucks, and aggregate trucks. The Applicant or its contractor would obtain the necessary oversize/overweight permit from CDOT prior to delivery of these oversize/overweight loads.

2.8 Required Public Improvements

2.8.1 Road Use Agreement

Per Morgan County Code, Section 4-820 (K),

If any County roads will be used during construction of a solar collector facility for the purpose of transporting parts, materials and/or equipment, the applicant shall enter into a road agreement with the County. The roads agreement shall comply with Section 4-825 and shall also include the following:

- 1) *A map showing which County roads will be used during construction.*

- 2) A pre-construction baseline survey of County roads to be used during construction to document their pre-construction condition. The applicant is responsible for obtaining and paying for the costs of the baseline survey.
- 3) A mitigation plan to address traffic congestion and potential impacts to County roads to be used during construction.
- 4) A legally binding agreement between the applicant and the County that requires the applicant to return any County roads to their pre-construction baseline condition.

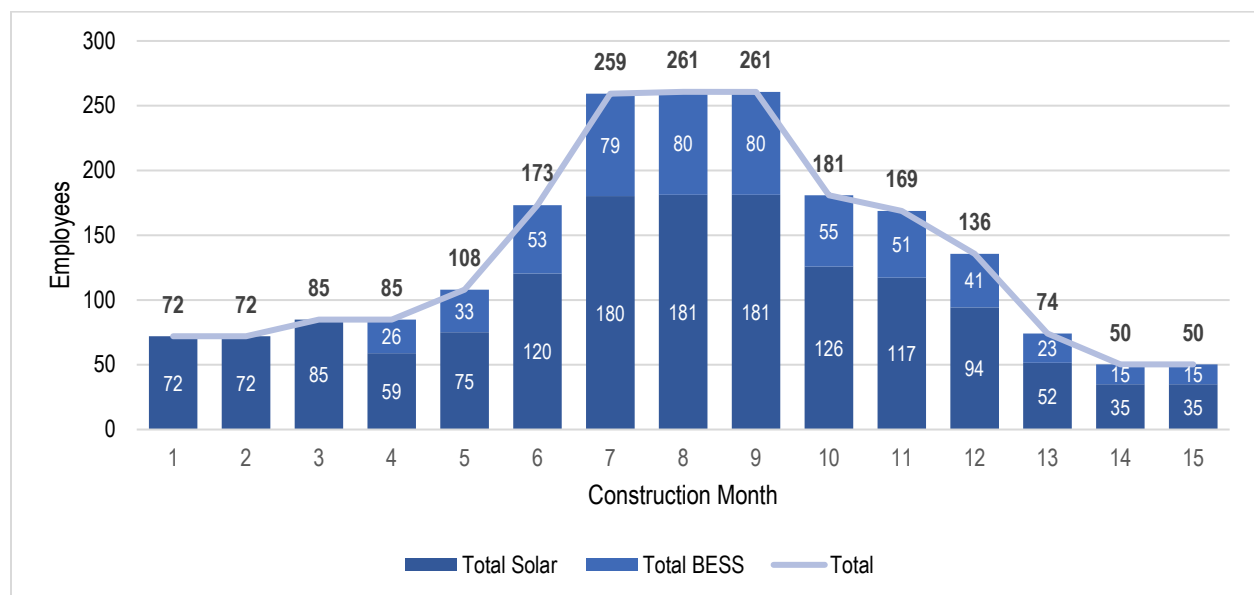
The Applicant will enter into a Road Use Agreement with Morgan County prior to the start of construction. The Applicant met with the Morgan County Road and Bridge Department on September 14th, 2023, to review the proposed haul route during construction and use of county roads. The Road Use Agreement will document the pre-construction condition of County roads to be utilized. Based on the pre-construction baseline survey of applicable County roads, the Applicant will be responsible for any road repairs and/or improvements consistent with the Road Use Agreement to be negotiated with Morgan County.

2.9 Employees, Equipment, and Facilities

2.9.1 Construction Crew, Equipment, & Facilities

The on-site construction workforce would consist of engineers, heavy equipment operators, truck drivers, laborers, craftsmen, electricians, supervisory personnel, and construction management personnel. In total, there would be an average of approximately 181 workers onsite during the 3-month peak construction period of each phase. The construction labor schedule for each phase of the Project including the concurrent proposed BESS Project is detailed per Figure 2-4 below.

Figure 2-4. Typical Construction Labor Schedule (Per Phase)



Construction would occur five days a week for an estimated 10 hours per day. Additional hours may be necessary to make up for schedule and weather delays.

Typical equipment that may be present on site as required includes, but is not limited to, graders, excavators, bulldozers, backhoes, cutting machines, end loaders, delivery trucks, trenching machines, flatbed trucks, cranes, rollers, electrical test equipment, off-road buggies, forklifts and carry decks, water supply trucks, water spray trucks, concrete mixers, compaction machines, survey equipment, and light trucks.

Vehicles will access the site through the proposed entrance gate off County Road Q for delivery of materials and crew transportation. Electrical construction will occur following the installation of equipment and be performed by NERC certified electricians.

Temporary staging areas will not extend beyond the overall boundary of the Project. Temporary staging areas would include a laydown area, parking, trash disposal facilities, construction trailers, and sufficient portable restrooms and potable water for use by construction staff. Mobile trailers, modular offices, or an equivalent would be used as construction offices for Project staff and subcontractor personnel.

2.9.2 Operations Workforce

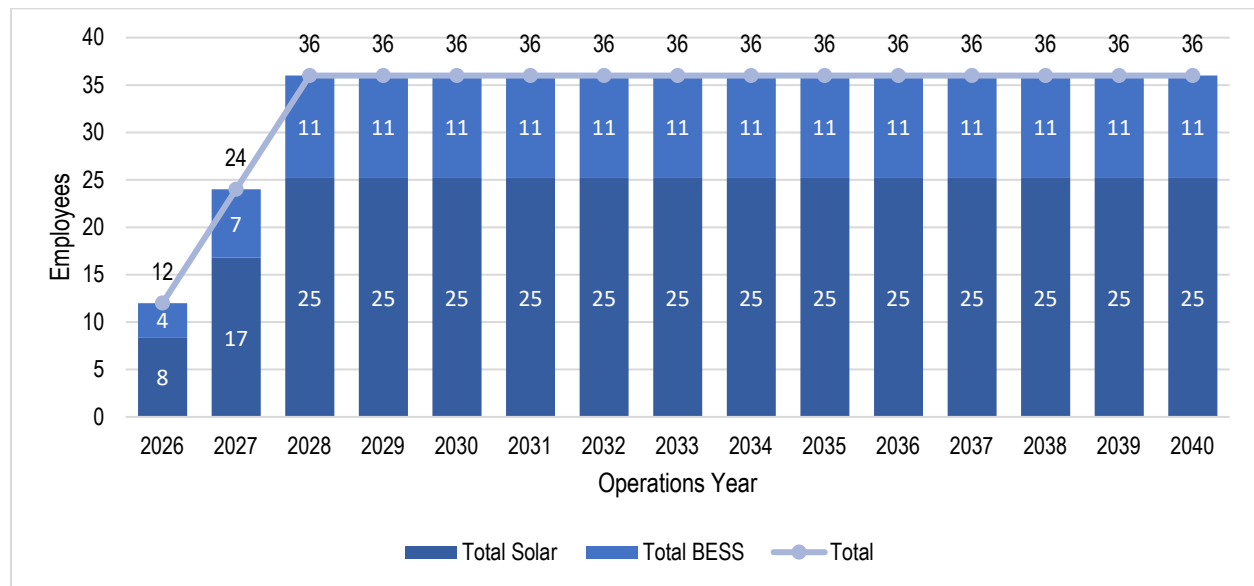
Upon completion of all three phases, operation of the Solar Project will require a minimum of 25 full-time positions including supervisory positions, miscellaneous crew members, and sitework crew members, as detailed per Table 4. Operations may also require third party contractors to perform specialized services.

Table 4. Project Operational Workforce

Worker Title	Quantity	Comments
Supervisory Crew	2	Supervision from inspection, engineering, project management, superintendent, assistant superintendent, etc.
Miscellaneous Crew	2	Miscellaneous including cleanup and materials handling
Sitework Crew	21	Sitework crew (Civil Works, then trenching etc. for elec. Installation)
TOTAL	25	

The labor schedule for each operational year of the Project including the concurrent proposed BESS Project is detailed per Figure 2-5 below.

Figure 2-5. Typical Operations Labor Schedule



2.10 Project Compliance with Morgan County Comprehensive Plan

As presented below, the Project is consistent with the following guiding principles, goals, and policies for utilities, economic development, environment, land use, and transportation as identified per the Morgan County 2008 Comprehensive Plan.

2.10.1 Utilities

GOAL: To ensure that adequate and financially secure public utilities are provided to all developments in Morgan County.

The Applicant intends to establish a power purchase agreement with multiple purchasers of power. Per the Morgan County Comprehensive Plan, “existing facilities should be expandable in addition to new facilities to allow service for any reasonable projected growth”. The Project would provide a clean renewable source of electric power to existing and future residents of Morgan County.

In addition, development of the Project will include an approximate 2,400 square foot O&M building. Electric utilities will be extended to serve the O&M building. No water or wastewater services are anticipated for the O&M building. The Project will require telecommunications services for internet which will be extended to the Project site. The Project substation will interconnect to Tri State’s existing Story substation located west of the Project through a 1.25-mile gen-tie line and will not adversely affect transmission uses existing on and adjacent to the Project site.

2.10.2 Economic Development

GOAL: Diversify the economy in Morgan County to broaden business employment opportunities for residents and to further economic growth.

Goal: Encourage the location of new industry and the expansion of existing businesses that will provide employment opportunities and increase the tax base to strengthen the economy of Morgan County.

In accordance with the Morgan County Comprehensive Plan, development of the Project would contribute to the Colorado New Energy Economy. Policy number 10, identified per the Comprehensive Plan specifically notes that Morgan County should work to attract and maintain renewable energy projects to meet this goal (Morgan County 2008).

Development of the Project would provide economic benefit to Morgan County through increased revenues to county, local municipality, and school district tax bases and local employment opportunities. The Applicant will utilize local labor as much as is practicable depending on the availability, experience, and qualifications of available local firms and laborers. Throughout the construction period, construction workers will support local businesses including hardware supply stores, restaurants, hotels, gas stations and hotels. Workers originating outside Morgan County will be expected to remain in the region only throughout the duration of construction.

2.10.3 Environment

Goal: Preserve the manmade and natural environment in order to enhance the quality of life in Morgan County and to make environment considerations part of the land use decision-making process.

Per the Morgan County Comprehensive Plan, new developments are to be reviewed and judged based on the identification of sensitive lands and the mitigation techniques used to minimize the impacts of physical development on the land (Morgan County 2008). Siting analysis confirms the proposed site location avoids areas or locations with a high potential for biological conflict, such as wilderness study areas, areas of environmental concern, historic trails, special management areas, or important wildlife habitat or corridors. The Project is sited outside of identified wetlands and floodplains and will avoid adverse impacts on plant and wildlife species. Tetra Tech has prepared a drainage study and wind and water erosion control plan to identify site drainage patterns, required improvements and appropriate best management practices to mitigate erosion and storm runoff potential. As further discussed in Section 4.0, there are no known sensitive biological, hydrological, historical, cultural, or archeological resources within or near the proposed Project site.

Furthermore, development of the Project would provide 600 MW of electricity produced by renewable energy and 600 MW of BESS, respectively. Development of the Project is in accordance with policy number 14 identified per the Morgan County Comprehensive Plan which notes that Morgan County shall encourage use of renewable resources and production of biofuels and electric power from such resources (Morgan County 2008).

2.10.4 Land Use

Goal: To encourage development where: 1) it is in proximity to the activity centers; 2) the proposed development is compatible with existing land uses; 3) there is access to established public infrastructure (primarily roads and utilities); and 4) where, in outlying areas of the county, there is access to utilities and there is little additional burden on rural services.

The Project site is located 1.6 miles southeast of the city limits of Brush, Colorado. Existing land uses in the Project Area include rangeland and overhead electric transmission lines. Existing adjacent land uses include rangeland, an electric substation, rural residences, a cattle feed lot, and the Brush Municipal Airport. The Project is compatible with these existing uses. The Project site is in the Agricultural Production zoning district which allows for permitting of large-scale solar facilities including BESS as an accessory use through issuance of an SUP. The Project site has access to established utilities and County Roads.

Goal: The county will encourage the preservation of agriculture production lands in balance with pressures for land use changes to higher intensity development.

Per the U.S. Department of Agriculture, Natural Resources Conservation Science, Web Soil Survey data, the Project Area does not include any soil types designated as prime, unique, or farmland of statewide importance. Therefore, development of the Project is not anticipated to result in impacts to or loss of prime, unique, or farmland of statewide importance.

2.10.5 Circulation and Transportation

Goal: To provide residents and businesses in Morgan County with a circulation system that connects the major county activity centers with the outlying communities of the county, regional employment generators and the rest of the state in the interests of providing economic opportunity, access efficiency and safety and improving the quality of life.

Policy 1: Traffic and Roads

- Require new developments to mitigate impacts to adjacent county roads.
- Require traffic generation studies for large developments.

As detailed per Section 2.7 traffic on county roads is anticipated to increase during construction of the Project and the Applicant will enter into a Road Use Agreement with Morgan County to address impacts on County Roadways resulting from construction.

2.11 Project Compliance with Special Use Permit Review Criteria

Per Morgan County Code Section 3-180, Solar Collector facilities may be permitted in the Agriculture Production zone through issuance of an SUP. The Applicant has reviewed Morgan County's Zoning Regulations for compliance under an SUP for a large-scale solar development including a BESS. The Project meets the following criteria required to approve a special use permit as outlined per the Morgan County Code, Section 2-395- Review Criteria.

(A) The use and its location as proposed are in conformance with the Morgan County Comprehensive Plan;

The Project aligns with the goals and policies identified per the Morgan County's Comprehensive Plan, adopted in 2008 as indicated per Section 2.10. Project development, proposed mitigation measures, and forecasted benefits are consistent with the County's goals and policies related to utilities, economic development, land use, environment, and transportation. The Project would

provide a long-term renewable energy source to the County with economic, environmental, and social benefits to current and future residents.

(B) All the application documents are complete and present a clear picture of how uses are to be arranged on the site or within Morgan County;

The Applicant has submitted a complete SUP application package for Phase I of the Solar Project. The Applicant will submit additional documents and/or revisions as requested by the Morgan County Planning Services Department upon their review of the application. The table at the beginning of this report details the SUP submittal requirements with the application report section addressing each checklist item. The submittal has been provided as a hard copy and electronically, fulfilling submittal requirements in Section 2-380 of the Morgan County Zoning Regulations.

(C) The site plan conforms to the district design standards of these regulations;

The Project site plan and special use map have been developed in accordance with Sections 2-410 and 2-420 of the Morgan County Zoning Regulations.

(D) All on and off-site impacts have been satisfactorily mitigated either through agreement, public improvements, site plan requirements or other mitigation measures;

Potential adverse environmental impacts and the correlating sufficient mitigation measures are detailed in Section 4.0, Environmental Impact Analysis.

(E) The special use proposed has been made compatible with the surrounding uses and adequately buffered as determined by the County;

Existing surrounding adjacent uses include the Tri State-owned Story substation to the west, low-density rural agricultural residences to the northwest, west, and southwest, open rangeland to the north, east, and south, the Brush Municipal Airport northeast, across Highway 34, and the existing Pinneo cattle feedlot north of Highway 34.

The Solar Project would be compatible with existing surrounding adjacent land uses. The Solar Project would not result in significant adverse impacts to surrounding properties. Potential impacts are limited to fugitive dust, traffic, and noise during the construction phase. During operations, the Solar Project would be operated remotely and onsite operational and maintenance activities are anticipated to generate minor daily traffic, generate no air emissions, emit no glare, and is sited and designed to minimize noise impacts. A discussion of potential impacts and proposed mitigation measures are detailed per Section 4.0.

The Project site layout has been designed in accordance with the minimum 70-foot setback required from exterior parcel lines and the 500' buffer required from adjacent buildings (Appendix A-2). The Applicant is requesting a waiver to the 30' setback required from internal sections lines and internal property lines (Figures 5 & 6).

(F) The special use poses only the minimum amount of risk to the public health, safety and welfare as set by either federal, state or county regulation, whichever is the strictest;

The Solar Project is not anticipated to be unduly detrimental or injurious to property or improvements in the vicinity and will not be detrimental to public health, safety, or general welfare.

Emergency access to the site will be provided via 20' wide access roads and gated entrances will be equipped with Knox boxes and keys. The Applicant will maintain sufficient water sources and portable fire extinguishers on site for emergency use. Water would be stored on site in above ground tanks and/or cisterns. The water tanks and/or cisterns will be located and installed per compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency.

The Applicant has developed an Emergency Operations and Fire Mitigation Plan for the Project detailing proper responses to emergency events, fire mitigation measures, and firefighting considerations. The Emergency Operations and Fire Mitigation Plan was provided to local officials of the Brush Volunteer Fire Department, the Brush Rural Fire Protection District, and the Hillrose-Snyder Volunteer Fire Department for review and comment and is included as Appendix H.

The presence of energized equipment within the facility could result in public health or safety concerns, however site access will be limited to authorized personnel and the Project will be developed in accordance with the physical security standards defined per the NERC Code Section, CIP-014-2 (NERC 2023). Proposed security measures include placement of warning signage along the perimeter and entrance points to the facility, installation of a site perimeter fencing with locked, gated entrances, installation of security lighting, and 24/7 remote site monitoring.

The Applicant is committed to developing and operating the facility in a safe and environmentally friendly manner. The Project will adhere to all applicable health and safety standards and regulations.

(G) The special use proposed is not planned to be developed on a non-conforming parcel;

The Solar Project is not proposed to be developed on non-conforming parcels. All parcels located within the Solar Project site are conforming parcels and meet the minimum 35-acre lot size required in the Agriculture Production zoning district.

(H) The applicant has adequately documented a public need for the project, all pertinent technical information, adequate financial resources to implement it, and has paid all fees and review costs levied by the County for application processing and review; and

The Project would advance Colorado's renewable energy portfolio standard, provide a local source of clean energy, and would provide an economic benefit to Morgan County through tax revenue generation and local job opportunities.

The Applicant will pay all fees and review costs required by Morgan County for application processing and review. The Applicant is an indirect subsidiary of Aypa. Aypa is a Blackstone portfolio company. Aypa has a proven track record of developing, financing, constructing, owning, and operating utility-scale renewable energy projects. Aypa currently has an operating fleet of 30 projects, two projects currently under construction, and over 70 projects in the development pipeline.

- (I) For any special use requiring a supply of water that the applicant has demonstrated a source of water which is adequate for the proposed use in terms of quantity and reliability and in the case of human consumption, quantity, quality, and reliability.**

The Applicant will source water needed during the construction and operations phases from the existing groundwater wells available on the Project site. In the event offsite water is required, water will be sourced from an off-site location, transported to the Project site via water trucks, and stored on site in above ground tanks and/or cisterns. The water tank will be in strict compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency. As this water supply would rarely be used, the Project will have minimal effects on overall water availability and will not burden local water resources. No new water infrastructure will be necessary for the Project.

2.12 Project Compliance with regulations for Solar Collector facilities

The Project meets the following standards defined per Morgan County Code Section 4-825 for the regulation of Solar Collector facilities.

2.12.1 General Standards for all Solar Collectors

All electrical interconnection and distribution lines within the Solar Project boundary will be underground, as required by Morgan County, except for power lines that leave the Project or are within the substation.

All electrical interconnections and distribution components will comply with the applicable County adopted building and electrical codes, requirements of the electric utility company, and applicable state and federal regulatory codes.

The Applicant intends to enter into an interconnection agreement with Tri State to connect the Project to the grid at the Tri State Story substation located 1.25 miles west of the Project. A letter from Tri-State is included as Appendix F. The Applicant will provide a copy of the interconnection agreement to Morgan County once finalized.

2.12.2 Principal Ground Mounted Solar Collectors

The Project has been designed in accordance with the 70-foot setback required from above ground public utility powerlines or communications lines, existing public roads, highways, or railroads, and exterior property lines. In addition, the Project meets the 500-foot setback required from inhabited buildings. The Solar Project also complies with the scenic resources setback as it is not within one-quarter (1/4) mile from any highway designated to be a scenic highway or roadway by the Morgan County Comprehensive Plan or the state.

Per Morgan County Code, Section 4-820 (N). Additional Information and Waivers,

The County may request additional information that may be required to evaluate the proposed solar collector facility. The County may waive or alter any of these minimum requirements if they are determined to be inappropriate or unnecessary to determining if the application satisfied applicable standards.

The two following waivers are being requested related to the setbacks required for Principal Ground Mounted Solar Collector Facilities (4-825 [D])

- 1) The Applicant respectfully requests a waiver from the minimum 30' setback required along section lines within the Project boundary. The setback is reserved for the future ROW of County roads not yet in existence. Please see Figure 5 detailing the sections lines from which the waiver is requested.
- 2) The Applicant respectfully requests a waiver from the minimum 70' setback required from all interior property lines within the Project boundary. The Applicant has coordinated with affected property owners throughout the site planning process and is under purchase options for the Project Area parcels. Please see Figure 6 detailing the internal parcel lines from which the waiver is requested.

The tallest Project component is the proposed overhead 230 kV gen-tie line connecting the Project substation to the Tri State Story substation. The gen-tie line is pending final design and engineering but is anticipated to reach up to 110' feet in height.

Pursuant to Appendix B of the Morgan County Zoning Regulations, the Agricultural Production zoning district does not have a maximum lot coverage limitation.

Development and operation of the Project would not result in significant drainage issues, stormwater runoff, glare, dust, noise, or adverse impacts to agricultural lands as further discussed in Section 4.0.

In accordance with Section 4-825(D)(19) of the Morgan County Zoning Regulations, upon completion of construction, (a) Solar Collector facilities shall be reviewed by a registered structural engineer, licensed in Colorado, to confirm their compliance with the applicable State, Federal and local regulations and to conform with good engineering practices, and (b) the electrical system shall be certified by a registered electrical engineer, licensed in Colorado, to be compliant with the applicable State, Federal and local regulations, and to conform with good engineering practices.

3.0 IMPACT ON ADJACENT USES AND OFF-SITE IMPACTS

Existing surrounding adjacent uses include the Tri State Story substation to the west, low-density rural agricultural residences to the northwest, west, and southwest, open rangeland to the north, east, and south, the Brush Municipal Airport northeast, across Highway 34, and an existing Pinneo cattle feedlot north of Highway 34.

The Solar Project would be compatible with existing surrounding adjacent land uses. The Solar Project would not result in significant adverse impacts to surrounding properties. Potential impacts are limited to fugitive dust, traffic, and noise during the construction phase. During operations, the solar facility would be operated remotely and generate little to no daily traffic, generate no air emissions, emit no glare, and is sited and designed to minimize noise impacts. A discussion of potential impacts and proposed mitigation measures are detailed per Section 4.0.

Offsite impacts are limited to increased traffic and potential noise and fugitive dust resulting from vehicle traffic during construction along the Project Haul Route detailed per Figure 3. Proposed mitigation measures to minimize fugitive dust and noise impacts are detailed in Section 4.0.

3.1 Impacts on County Services & Capital Facilities

3.1.1 Capital Facilities, Social Services, & Infrastructure

The Project is not expected to require additional community or local government services beyond those currently provided in the area. Project development is not expected to result in additional significant demand for transportation infrastructure, educational facilities, social services, housing, or public transportation.

The Applicant will enter into a Road Use Agreement with Morgan County to address impacts on County Roadways from transportation of heavy equipment resulting from construction as further discussed in Section 2.8.1. Oversized vehicles delivering Project components may result in temporary traffic delays. The Applicant or their contractors will hire flaggers to maintain adequate levels of traffic flow as needed and the Applicant's contractors will obtain necessary oversized and overweight vehicle permits to authorize transportation and delivery of these loads.

No new water or wastewater infrastructure will be necessary for the Project.

3.1.2 Waste Management

Solid waste generated by the Project during construction and operations will be handled by a solid waste hauling and management firm contracted by the Applicant or its designated contractor(s). Waste will be separated by type, collected, and transported to the appropriate facility in a manner that complies with applicable federal, state, and local regulations, and minimizes potential impacts to the surrounding community. Waste materials will be handled, stored, and disposed of in a manner that controls fugitive dust, fugitive particulate conditions, blowing debris, leakage into the soil or surface water or groundwater, and other potential nuisance conditions. Project construction is not expected to require onsite treatment, storage, or disposal of hazardous wastes that will require hazardous waste permits. No extremely hazardous materials, as defined by 40 Code of Federal Regulations part 355, are anticipated to be produced, used, transported, or disposed of during Project construction. Any hazardous wastes generated during construction will be properly characterized and managed by the Applicant and its contractor(s). The handling of hazardous materials and waste will be done in accordance with all federal, state, and local laws and regulations.

3.1.3 Public Safety Services

The Project is not anticipated to result in a significant increase in demand for public safety services.

The Project is located within the boundaries of the Brush Fire Protection District. Brush Fire Station 1 is located approximately 2.15 miles west of the Project site. The Hillrose-Snyder Fire Protection District boundary is approximately one mile north of the Project site. Prior to construction, the Applicant will work with Morgan County, The Brush Rural Fire Protection District, Brush Volunteer Fire Department, and the Hillrose-Snyder Fire Protection District.

During construction and operations, the Applicant will ensure local Fire Departments have 24/7 access to the Project site to respond to emergency incidents. Knox boxes and keys will be installed at locked entrance gates for emergency personnel access. Site access roads will be constructed up to 20 feet in

width with compacted all weather gravel. During site construction and operations, the Applicant will maintain sufficient water sources and portable fire extinguishers on site for emergency use. Water would be stored on site in above ground tanks and/or cisterns. The water tanks and/or cisterns will be located and installed per compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency.

The facility layout is designed to provide defensible space for fire protection throughout construction and operation of the facility. Ongoing maintenance would be provided to ensure removal of vegetation and other flammable materials from the defensible space areas. Vegetation control at the site will use materials and methods that ensure groundwater protection.

The Project solar arrays will consist of non-combustible materials (aluminum, steel, or glass). The Project solar modules are designed to be resistant to fire, and the racks are constructed of non-combustible steel and aluminum. The solar panels and other electrical equipment will meet applicable Underwriters Laboratories and International Electrotechnical Commission ratings for their resistance to fire.

An Emergency Operation Fire Mitigation Plan has been prepared for the Project and is included as Appendix H. The plan addresses proper response plans for potential emergency events, facility evacuation details, emergency contacts, system safety considerations, battery fire protection system information, and firefighting considerations. Prior to construction, the Applicant will work with local fire personnel to ensure the Project's compliance with applicable fire safety regulations. The Applicant will also provide on-site training for surrounding departments to reduce fire risk at the Project.

3.1.1 Benefits

The Project is anticipated to result in economic benefits for the following taxing jurisdictions: Morgan County and Morgan County School District RE-2 (Morgan County 2023c).

Local, regional, and state employment will benefit those in the construction trades including heavy equipment operators, truck drivers, engineers, laborers, craftsmen, electricians, supervisory personnel, and construction management personnel. Prior to and during construction, the Project will utilize both local and non-local consultants and contractors for the design and construction. The design and construction scopes of work are typically bid out to a range of consultants and contractors. It is the Applicant's preference to utilize local labor as much as is practicable and will direct those acting on their behalf to carry the same preference depending on the availability, experience, and qualifications of available local firms and laborers. Workers originating outside the labor market area will be expected to remain in the region only throughout the duration of construction.

4.0 ENVIRONMENTAL IMPACT ANALYSIS

4.1 Air Quality

The 1963 Clean Air Act (as amended; 42 U.S.C. 7401) requires government agencies to monitor air pollution and promote air pollution prevention and control programs. The Project Area is within the Eastern High Plains monitoring region of Colorado (CAPCD 2023). As of August 30, 2023, Morgan County, Colorado is in attainment for all U.S. Environmental Protection Agency (EPA) criteria pollutants (EPA

2023). Currently, local emission sources in the Project vicinity include personal and commercial vehicle emissions, aircraft emissions at the nearby Brush Municipal Airport, and agricultural operations.

It is anticipated that the Project construction and operations will result in additional, negligible amounts of pollutants including particulate matter, diesel particulates, and carbon monoxide. The construction phase of the Project will temporarily cause fugitive dust related to the following activities: grading activities, preparation of the staging and equipment laydown area, excavation and construction of equipment pads, the mixing and preparation of concrete, and construction of access roads. Fugitive dust may also be generated by vehicular traffic associated with construction and operation of the Project, and by the delivery of materials to and within the Project Area. The emissions from the Project construction would be limited in duration to 15 months per phase, and emissions from the Project operation would be zero or near zero. Therefore, Project emissions are not anticipated to significantly contribute to ozone, particulate matter, or other air pollutants within the Eastern High Plains monitoring region.

The Colorado Air Quality Control Commission requires an Air Pollutant Emissions Notice (APEN) and associated fees to be submitted to the Colorado Department of Public Health & Environment (CDPHE), Air Pollution Control Division when a Project proposes to disturb more than 25 acres or construction will last greater than 6 Months. The Applicant or its contractor will submit the Land Development APEN: Form APCD-223 prior to the start of construction. To comply with county and state air quality regulations, methods for limiting dust and maintaining air quality during construction would be implemented. Vehicles and equipment will comply with applicable state and federal emission standards and will be properly maintained to minimize exhaust emissions.

A Wind and Water Erosion Control Plan is included as Appendix I which details best management practices (BMPs) that will be utilized to prevent wind and water erosion and run-off during construction.

The Project will prepare a Fugitive Dust Control Plan in accordance with CDPHE requirements for the Land Development APEN prior to construction. Dust control measures include watering unpaved roads and earthen areas with limited vegetation, covering exposed piles of dirt, maintaining low vehicle speeds within the Project Area, covering stockpiles during sustained wind events, installing tire wash out stations at site entrances to minimize track out, and covering truck loads. Water would be applied regularly to disturbed areas and stockpiles during construction to prevent the addition of particulate matter/fugitive dust into the local airshed. Additional BMPs would be implemented as needed from the EPA national menu of BMPs and may be used as necessary during construction to help limit dust.

4.2 Dust and Odor

See Section 4.1 above for details on the potential fugitive dust impacts resulting from the Project and proposed mitigation measures.

Given the surrounding land use, current odors present at the Project Area likely include fugitive odors from the operation of the Brush Municipal Airport, Pinneo cattle feedlot, and vehicle emissions along nearby roads. Local traffic volume would increase in and around the Project Area during construction. The increased traffic would temporarily increase odors from vehicle emissions. Odors are also anticipated from the operation of heavy machinery during construction. Impacts from odors during

Project operation would be minimal and are likely limited to emissions from the vehicles of maintenance personnel. Overall, the impacts of odors from Project construction and operation are anticipated to be minimal and insignificant. As a result, no specific mitigation has been identified for odor impacts and no management of odors would be performed during construction or operation.

4.3 Noise Receptors, Ordinances, and Conformance

Current sources of noise in the Project Area include wind, distant road, and highway vehicles, and surrounding cattle feed lot and airport operations.

Temporary noise impacts during construction would occur during daylight hours from the operation of construction equipment, including, but not limited to, passenger vehicles, graders, loaders, water trucks, semi-tractor/trailer trucks, and hydraulic hammers. The spatial distribution of construction noise emissions would vary during the day and depend on the type of activity. Construction traffic would generate noise along the Project access routes (Figure 3). This noise would be temporary during commuting hours and when supplies are delivered over the course of construction.

Solar generation facilities emit lower sound levels in comparison to other power facilities and noise emissions are limited during daylight hours. Sources of noise during operation would include temporary vehicle noise from maintenance personnel access and typical noise emissions from the Project substation transformers, inverters, and rotation of the solar panel tracking system.

In accordance with Morgan County Code, Section 4-825.D.16, construction and operation of the Project will not significantly increase noise at surrounding properties and will comply with the statutory provisions for maximum permissible noise levels for industrial zoning as defined per C.R.S. § 25-12-103. Construction projects are subject to the noise standards specified for industrial zones. Table 5 details the noise standards defined by the state, as referenced per the Morgan County zoning regulations.

Table 5. Colorado Noise Standards

Zone	7:00 a.m. to 7:00 p.m.	7:00 p.m. to 7:00 a.m.
Residential	55 dBA	50 dBA
Commercial	60 dBA	55 dBA
Light Industrial	70 dBA	65 dBA
Industrial	80 dBA	75 dBA

The construction and operation of the Project will adhere to the decibel limits established for industrial zones. Construction activities will take place between the hours of 7:00 a.m. and 7:00 p.m., and noise levels will be kept to a minimum to the practical extent possible to maintain compliance with C.R.S. § 25-12-103. Noise generated from the solar panel tracking system, BESS and Project substation will be mitigated by the spatial layout of the Project. The Project layout is designed in accordance with the minimum setbacks required for solar collector facilities per the Morgan County Zoning regulations. Based on typical sound levels anticipated from Project operation, the distance from the equipment to the Project boundary will mitigate the effect of noise generated by the Project.

4.4 Existing Vegetation

According to the National Land Cover Database (USGS 2019), the dominant land cover in the Project Area is grassland/herbaceous covering 4,161.6 acres or 93.62 percent (Table 6). A Tetra Tech biologist visited the Project site April 25-26, 2023. The Project Area was dominated by needle and thread grass (*Hesperostipa comata*), blue gramma (*Bouteloua gracilis*), and smooth brome (*Bromus inermis*). The Project Area is located in a predominately arid rangeland comprised of shrubland and grassland. No irrigated activities were observed within the Project Area (Appendix J).

Table 6. Land Use and Land Cover in the Project Area

Land Use/Land Cover ¹	Acres	Percent of Project Area
Grassland/Herbaceous	4,161.6	93.62
Scrub/Shrub	271.8	6.11
Developed Open Space	8.7	0.20
Developed, Low Intensity	3.1	0.07
Cultivated Crops	0.01	0.00
Total	4,445.2	100%

Source: 2019 National Land Cover Database (USGS 2019)

Existing rangeland will be converted to power generation use for the lifetime of the Project. Construction will have long term impacts on existing vegetation as result of removal of vegetation within the Project Area for the installation of Project facilities and access roads.

Construction activities will also result in temporary impacts to existing vegetation, including soil disturbance and compaction. Disturbed areas outside of the proposed access roads, Project substation, and BESS Project area will be revegetated with a native seed mix. The Project proposes to use bifacial panels which track the sun throughout the day. Ground surface vegetation beneath the solar panels will receive rainfall and or runoff from the panels and will continue to grow. Site vegetation will be maintained throughout the Project life by the Applicant.

As required by the Colorado Noxious Weed Act (C.R.S. 35-5.5-103), Morgan County has defined specific management for each List B noxious weed species (CDA 2023). Per Morgan County Code Section 3-700, the Applicant will plan to employ a program to control the growth of noxious and other weeds as part of the general property maintenance.

4.5 Special-Status Wildlife and Other Species of Concern

The Applicant contracted Tetra Tech to prepare a Wildlife Habitat Assessment for the Project consisting of a desktop review and field survey to document existing habitat and biological resources, including special status species and raptor nests that may be impacted by Project development (Appendix J).

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) online tool and Colorado Parks and Wildlife (CPW) online databases were used to identify federally and state-listed species and other special status species (e.g., species protected by Bald and Golden Eagle Protection Act) that may occur within or near the vicinity of the Project Area.

Tetra Tech conducted a field survey on April 25th and 26th, 2023 to verify and characterize current land cover types in the Project Area that may provide suitable habitat for protected species. General landcover and wildlife observations within the Project Area were typical for the ecoregion. The following species were identified during the field visit: mourning dove (*Zenaida macroura*), coyote (*Canis latrans*), black-tailed prairie dog (*Cynomys ludovicianus*), European starling (*Sturnus vulgaris*), rock dove (*Columba livia*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), horned lark (*Eremophila alpestris*), and the western meadowlark (*Sturnella neglecta*). Unidentified small mammal burrows were also observed. Additionally, suitable nesting substrate within the Project Area was observed, however, no raptor nests were observed within a half-mile of the Project Area (Appendix J).

The USFWS and CPW sources reviewed for the assessment identified 10 protected species that have the potential to occur within the Project Area. However, no USFWS-designated critical habitat is present within the Project Area. A summary of the sensitive species' preferred habitat and potential for occurrence in the Project Area are detailed per Table 7 and further discussed in the Wildlife Habitat Assessment Report (Appendix J).

Based on the desktop analysis of land cover data, aerial imagery, range maps, and observations during the field survey, the following special status species may occur within the Project Area: bald eagle (foraging), burrowing owl (breeding) and golden eagle (foraging). All other special status species listed in Table 7 are unlikely to occur in the Project Area due to the absence of suitable habitat.

Table 7. Federally and State Listed Species Potentially Occurring within the Project

Common Name	Scientific Name	Status	Habitat Associations	Likelihood of Occurrence
Mammals				
Gray wolf	<i>Canis lupus</i>	FE; SE	Found in temperate forests, mountains, tundra, taiga, grasslands, and deserts. Morgan County is outside the current range of this species.	Unlikely—N/A. This species only needs to be considered for projects that include predatory management.
Bird				
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA	Typically found near large bodies of water that support fish populations and waterfowl. Will perch and nest in tall deciduous or coniferous trees near water.	Unlikely—Breeding Unlikely—Wintering Low—Foraging
Golden eagle	<i>Aquila chrysaetos</i>	BGEPA	Partly open country with native grassland vegetation. Nests on cliffs and in trees.	Unlikely—Breeding Unlikely—Wintering Low—Foraging
Burrowing owl	<i>Athene cunicularia</i>	ST	Typically found in prairie dog colonies in open areas with short grass and where suitable ground squirrel and badger burrows can be found, such as golf courses, cemeteries, airports, vacant lots, and pastures.	High to Moderate—Breeding Unlikely—Wintering
Piping Plover	<i>Charadrius melodus</i>	FT; ST	Occurs in reservoirs, lakes, and rivers with sand and gravel areas and sparse vegetation.	Unlikely

Common Name	Scientific Name	Status	Habitat Associations	Likelihood of Occurrence
Whooping crane	<i>Grus americana</i>	FE; SE	Occurs in freshwater marshes, wet prairies, shallow lakes, and lagoons.	Unlikely
Fish				
Pallid sturgeon	<i>Scaphirhynchus albus</i>	FE	Found in large river systems with firm sandy bottoms (e.g., the Missouri River). No streams are within the Project Area.	Unlikely
Flowering Plants				
Ute ladies'-tresses orchid	<i>Spiranthes diluvialis</i>	FT	Found in moist meadows associated with perennial stream terraces, floodplains, and oxbows at elevations below 6,500 feet.	Unlikely
Western prairie fringed orchid	<i>Platanthera praeclara</i>	FT	Found in unplowed, calcareous prairies and sedge meadows.	Unlikely
Insect				
Monarch butterfly	<i>Danaus plexippus</i>	FC	Found throughout the United States in open fields and meadows with milkweed (primarily <i>Asclepias</i> spp.). Milkweed is an obligate host plant for monarch larvae. Several milkweed species occur in Colorado in a variety of habitats such as grasslands, disturbed areas, wetlands, and irrigation ditches. Adults feed on milkweed and other flowering plants.	Unlikely

BGEPA = Bald and Golden Eagle Protection Act; FT = Federally Listed Threatened; FC = Candidate for Federal Listing (not a statutory category); ST = State Threatened; SE = State Endangered

The Applicant plans to implement the following measures to avoid, minimize, or mitigate potential impacts to protected species that could occur in the Project Area.

- If construction is to occur during the bird breeding season (generally from February 15 to July 31 for most species), a follow up raptor survey will be conducted prior to the start of construction to determine species and nest status prior to construction activities so that all raptor nests within 0.5 mile of the Project Area can be mapped and avoided. If raptor nests are active, species-specific nest avoidance buffers will be implemented per CPW's Recommended Buffer Zones and Seasonal Restriction for Colorado Raptors, of which the largest buffer is 0.5 mile for bald and golden eagles (Appendix J).
- A CPW-protocol burrowing owl survey will be conducted prior to construction activities to determine whether burrowing owls are present within 0.25 mile of the Project. CPW recommends no permitted, authorized, or human encroachment activities within 0.25 mile (1,320 feet, 400 meters) of the nest site for large industrial disturbances during the nesting season, March 15 through August 31.
- Project infrastructure, including facilities and access roads will be consolidated to the extent possible to minimize the amount of land that is disturbed and fragmented.

- Prior to installation of fencing, the interior of the fenced area would be searched to avoid entrapping wildlife. The enclosed facility would be checked regularly during operations to prevent accidental trapping of wildlife to the extent possible.
- The Project Area will not be lit at night to minimize wildlife attraction to Project infrastructure and limit impacts to hunting, migration, or other nocturnal activities of wildlife.

The Applicant has shared the results of the Wildlife Habitat Assessment with CPW and conducted an initial coordination call on October 13, 2023. The Applicant is awaiting receipt of CPW's letter of recommendation however anticipates receipt prior to the initial public hearing. The Applicant will send notice of the initial public hearing date to CPW when scheduled by the County. A copy of CPW's letter of recommendation will be provided to Morgan County once received. The Applicant will continue to coordinate with CPW to determine possible recommended BMPs and/or avoidance measures for construction activities.

4.6 Wetlands and Other Waters of the United States

The Applicant contracted Tetra Tech to prepare a wetland and other waters of the U.S. (WOTUS) assessment to identify potentially jurisdictional wetlands and/or other WOTUS within the Project Area. A Wetland Delineation Report was prepared for the Project in May 2023 and is included as Appendix K.

A desktop survey of surface waters was conducted using the National Wetlands Inventory (NWI) dataset (USFWS 2023), USGS National Hydrography Dataset (NHD) viewer (USGS 2023a), and Colorado Wetland Inventory database (CWI 2023). The results of the desktop analysis indicated no potential wetlands or waterways exist within the Project Area.

A Tetra Tech wetland scientist conducted a site visit on April 25th & 26th 2023, to perform a wetland and other WOTUS delineation within the Project Area. No wetlands or waterbodies were identified within the Project Area.

4.7 Water Use & Resources

The Applicant will implement strategies and practices that ensure responsible and efficient water consumption throughout the Project's construction and lifespan operations. The Project will prioritize the use of non-potable water sources for site maintenance and dust control. By minimizing water usage and maximizing conservation, the Project will contribute to sustainable development and reduced environmental impact.

The Project will not require the use of a public water supply system. An affiliate of the Applicant is the option holder for the Project parcels, thus all water rights for the Project would be obtained upon closing. There are several existing deep-water wells located on the subject property (Figure 4). The Applicant will perform further studies to determine the feasibility of utilizing the existing deep-water wells for various Project needs. These studies will encompass a comprehensive analysis of water quality, assessing parameters such as pH, dissolved minerals, and contaminants. Additionally, an assessment of well yield will be conducted to ascertain the sustainable pumping rate and availability of water resources. By conducting these studies, the Applicant aims to ensure that the solar project's

water requirements align with the capacity and quality of the available deep-water wells, thus contributing to the overall success and sustainability of the Project.

In the event offsite water is required, water will be sourced off site and transported to the Project site via water trucks to be stored onsite in above ground tanks and/or cisterns. The Project will have minimal effects on overall water availability and will not burden local water resources.

Water use during construction would occur over the 15 months needed to construct each phase of the Project. Much of this water would be used for dust control but would also be used for hydration and compaction, backfill, cement stabilization and equipment cooling. The estimated water use during construction is approximately 470-acre feet per phase of construction.

During operations, water would be used for periodic washing of the solar panels, cooling equipment, and supporting establishment of vegetation around the site. Approximately 30.6 acre-feet of water is estimated to be used per year during operations. The total estimated water usage during each phase of construction and during operations is detailed per Table 8 below.

Table 8. Estimated Water Usage

	Phased Construction (200 MW)	Operations (600 MW)
Assumed Acre Feet (AF) / MW ¹	2.35 Acre Feet (AF) / Year	0.051 AF / Year
Total Water Usage (non-potable)	470 AF.	30.6 AF / Year

Source: Klise et al., 2013

4.8 Floodplains

Tetra Tech reviewed the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels, 08087C0490E and 08087C0500E effective May 18, 2021, and FIRM panels 08087C0652D and 08087C0675D, effective April 4, 2018. The Project is located in Zone X, which are areas determined to be outside the .2% annual chance floodplain (FEMA 2023).

4.9 Storm Water Runoff

A Drainage and Run Off Control Plan, and supporting Drainage Study were prepared for the Project in October 2023 and are included as Appendix A-2 and L. Site grading and drainage improvements will be designed to contain post development stormwater run-off on site. Prior to the start of construction, the Applicant will obtain a permit for any stormwater discharges occurring during the construction phase of the Project in compliance with the COR400000 General Permit under the Colorado Water Quality Control Act.

In addition, the Applicant will manage temporary facilities to control erosion and sediment releases and to protect Project facilities from flooding during construction in accordance with the General Permit requirements. A Wind and Water Erosion Control Plan is also provided as Appendix I which identifies BMPs that will be utilized to prevent erosion and run off during construction.

4.10 Cultural Resources

The Applicant contracted Tetra Tech to prepare a Cultural Resources Survey for the Project in September 2023 (Appendix M). The Cultural Resources Survey documents the results of archival research including a records search, review of previously conducted survey reports, and review of historic maps. The purpose of the cultural investigation was to provide cultural and historical context of the Project site, identify cultural resources located within the Project Area, re-record a previously recorded site located within the Project site and determine the Project's potential to affect potential and recorded historic and cultural resources.

A desktop records search was conducted through the Colorado Historic Society/Office of Archaeology and Historic Preservation Cultural Records online database. The Research Area includes the Project Area and a one-mile buffer. The search revealed that 12 prior surveys have taken place within the Research Area, but do not intersect the Project Area.

A total of 18 cultural resources have been previously recorded in the Research Area, including structures, archeological sites, and isolated finds (IF). These resources include several transmission line segments, one prehistoric IF, three historic IFs, two agricultural complexes, an agricultural equipment dump, a trash dump, and a trash scatter. One site (5MR.698) is listed as recommended eligible for listing in the National Register of Historic Places (NRHP), although the site form states that the site is recommended not eligible. One segment of the Beaver Creek to Deering Lake transmission line (5MR.696) is the only resource located within the Project Area and has been determined not eligible for listing in the NRHP.

Tetra Tech Archeologists conducted a site visit on June 27, 2023, to review the site located within the Project Area (5MR.696). Site 5MR.696 is a segment of Western Area Power Association's Beaver Creek to Deering Lake Transmission line. The State Historic Preservation Office has determined the site is not eligible for listing in the NRHP. Tetra Tech agrees with this assessment of the site and recommends that the site is not eligible for listing in the NRHP.

The Cultural Resource Survey Report concludes the Project is unlikely to have an adverse effect on cultural resources as the identified site within the Project Area, 5MR.696 has been determined as not eligible for the NRHP. Therefore, no adverse effects are anticipated from construction-related disturbance of, or visual impacts to, this resource. In addition, the report concludes that the potential to encounter additional resources is low due to the low site density and relatively low archaeological sensitivity of the Project Area.

To reduce potential impacts on cultural resources, the Applicant will develop an Unanticipated Discovery Plan prior to the start of construction which will outline procedures to follow, in accordance with state and federal laws, if archaeological materials or human remains are discovered.

4.11 Visual Amenities

4.11.1 Visual Impacts

The visual setting within the Project is primarily undeveloped herbaceous grassland. Development within the vicinity of the Project site includes an electrical substation, overhead transmission lines, and rural residences.

The potential for aesthetic impacts from renewable projects is based on the type of technology, the scenic quality of the existing landscape, the degree to which the Project will change scenic quality, and the viewer response to the change. Visual sensitivity, a key component of viewer response, is dependent on viewer attitudes and the types of activities in which people are engaged when viewing the site. Overall, higher degrees of visual sensitivity are correlated with areas where people live, are engaged in recreational outdoor pursuits, or participate in scenic driving. Conversely, visual sensitivity is considered low to moderate in industrial, commercial, and rural areas where the scenic quality of the environment does not affect the value of the activity.

No state-designated scenic roads (including scenic roads, historic roads, and parkways designations) or federally designated scenic roads (including national scenic byways and All-American road designations) within the Project site or vicinity (CDOT 2023b).

There are no public parks, recreation areas, or public gathering areas within view of the Project site. Drivers on County Road R, R.5, Q, and Highway 34 and adjacent rural residences would be the closest sensitive receptors to the Project site.

Tetra Tech anticipates that the Project would be considered low-moderate for visual sensitivity. The Project would visually contrast with the existing undeveloped rangeland. However, the Project will be consistent with the existing Tri-State owned electrical substation located west of the Project site. In addition, the gently sloping topography of the site provides a visual buffer of the Project Area from some of the nearby surrounding residences and roadways.

The Project layout is sited to provide a 500' buffer from existing inhabited buildings, and a 70' buffer or greater from exterior parcel boundaries and existing roadways. Six-foot-tall chain link fencing with one foot of barbed wire will be installed along the perimeter of the Project site boundary to provide an additional visual buffer.

4.11.2 Glint & Glare Analysis

Tetra Tech conducted a glint and glare analysis for the Project (Appendix N). The FAA issued an Interim Policy (78 FR 63276) on October 23, 2013, describing methods for obtaining FAA review and approval of proposed solar arrays on airport property. These methods involved the use of the Sandia Laboratories Solar Glare Hazard Analysis Tool (SGHAT), a modeling/compliance analysis tool now licensed for public use within the ForgeSolar GlareGauge cloud software application. The SGHAT is considered an industry best practice for analysis of glare related to solar energy generating facilities and is required by the FAA under 78 FR 63276 to measure ocular impacts for solar projects located on federally obligated airports and is recommended for projects located off federally obligated airports. The Project has utilized the SGHAT tool as licensed for use in ForgeSolar GlareGauge cloud software application for modeling and analysis.

The SGHAT was utilized to evaluate the potential for glint and glare along:

- Proximal segments of County Road K/46, County Road N, County Road O, County Road Q, Heartland Expressway, Interstate 76, and US Route 34;
- 15 nearby locations selected to represent observer views at neighboring properties; and
- Final approach paths for the Brush Municipal Airport

The FAA Notice Criteria Tool allows the user to determine if a proposed structure would require a formal submission to the FAA under CFR Title 14 Part 77.9 (Safe, Efficient Use, and Preservation of the Navigable Airspace). This online tool was utilized to determine if the proposed Project would require formal filing to the FAA. Based on the results of the FAA Notice Criteria Tool, the Project does not exceed notice criteria; therefore, it is not required for the Project to be formally filed with the FAA Obstruction Evaluation Group.

The panels to be used on the proposed Solar Project are smooth glass surface material with an anti-reflection coating, which is noted in the glare analysis. The panel orientation, location, and specifications used in the analysis were based on the Solar Project design. Based upon the analysis conducted, no glare was predicted. Further details and description of methodology and modeled results are provided in Appendix N.

4.12 Landforms

Morgan County is located in the Colorado Piedmont section of the Great Plains Physiographic Province. Underlying bedrock consists primarily of the Cretaceous Age Foxhills Sandstone and Pierre Shale that gently slopes east. The landforms of Morgan County consist primarily of typical Great Plains uplands and the broad valley of the South Platte River (Morgan County 2008).

The Project will impact a small portion of this area and will not affect the general landform in the Project Area. The natural contours of the land will be returned where feasible following construction.

4.13 Soils

Tetra Tech reviewed the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey to identify and characterize the soils within the Project site. Based on desktop data, four distinct soil types are present within the Project Area (USDA 2023; Table 9). The dominate soil unit is Valent sand, 3 to 9 percent slopes (3,144 acres and 70.7 percent of the Project Area). The Project does not contain any prime farmland, and all present soil types are rated as non-hydric (USDA 2023).

Table 9. Soils that Occur in the Project Area

Soil Name	Soil Unit	Acres	Farmland Classification	Hydric Rating (%)	K Factor Rating	Wind Erodibility Rating	Drainage Class
Truckton loamy sand, 0 to 3 percent slopes	TuB	176.1	Not Prime Farmland	Non-Hydric (0%)	.17	2	Well Drained
Valent sand, 0 to 3 percent slopes	Va	1,123.1	Not Prime Farmland	Non-Hydric (0%)	.02	1	Excessively Drained
Valent sand, 3 to 9 percent slopes	VcD	3,144.6	Not Prime Farmland	Non-Hydric (0%)	.02	1	Excessively Drained

Valent sand, 3 to 9 percent slopes	VwD	1.7	Not Prime Farmland	Non-Hydric (0%)	.02	1	Excessively Drained
------------------------------------	-----	-----	--------------------	-----------------	-----	---	---------------------

Source: USDA 2023

Impacts to soils are anticipated to be temporary during the construction phase of the Project. Activities impacting soils include the clearing of vegetation and grading of areas for access roads and installation of Project facilities. Clearing and grading exposes soils to a risk of erosion from wind and stormwater. Impacts to soils during operations are anticipated to be minimal from use of access roads by operations and maintenance staff.

The NRCS assigns wind erodibility groups to measure soil susceptibility to wind erosion. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. Soil types within the Project site are in either group 1 or 2, indicating high susceptibility to wind erosion (USDA-NRCS 2023). The NRCS also assigns a K Factor Rating which indicates the susceptibility of a soil to sheet and rill erosion by water. K factor values range from 0.02 to 0.69. The higher the value, the more susceptible. Soil types within the Project site have a low K factor indicating low potential for sheet and rill erosion by water (USDA-NRCS 2023). A Water and Wind Erosion Control Plan is included as Appendix I, which details detail erosion control measures and construction stormwater runoff management for the Project.

4.14 Farmland of Statewide Importance

Tetra Tech reviewed the USDA NRCS Web Soil Survey, and the Project Area does not contain any prime, unique, or farmland of statewide importance. All soils within the Project Area are rated as “Not Prime Farmland” (USDA 2023). Therefore, no impacts to prime, unique, or farmland of statewide importance is anticipated to result from development of the Project.

5.0 SITE MAPS & PLANS

5.1 Vicinity Map

The Project vicinity map is provided as Appendix A-1.

5.2 Special Use Map/Site Plan

The Project Special Use Map/Site Plan is provided as Appendix A-2.

5.3 Schematic Drawings

Schematic elevation drawings of the PV array, tracking system, inverters, O&M building, and fencing are included in Appendix A-5.

5.4 One Line Drawing

A one-line electrical drawing of the Project is included as Appendix A-6.

5.5 Specification Sheets

Preliminary specification sheets for the PV array and inverters are included as Appendix A-7.

5.6 Drainage & Runoff Control Plan & Drainage Study

A Drainage and Runoff Control Plan and supporting Drainage Study are included as Appendix A-2 and L.

5.7 Water & Wind Erosion Control Plan

The Water and Wind Erosion Control Plan is provided as Appendix I.

5.8 Decommissioning Plan

The Decommissioning Plan prepared in accordance with Section 4-835 is provided as Appendix O.

5.9 Geotechnical Report

The Applicant certifies that prior to construction, a professional engineer licensed in Colorado will complete a geotechnical study that includes the following:

1. Soils engineering and engineering geologic characteristics of the site based upon on-site sampling and testing.
2. Foundation and tower systems design criteria for all proposed structures.
3. Slope stability analysis.
4. Grading criteria for ground preparation, cuts and fills, and soil compaction.

The geotechnical report detailing results of the study will be provided to Morgan County upon completion.

5.10 Maintenance Statement

The Applicant has prepared a maintenance statement for the system and property describing the anticipated maintenance and property upkeep that will occur during operation of the solar facility. The Maintenance Statement is provided as Appendix P.

5.11 Emergency Operations & Fire Mitigation Plan

The Project will implement adequate fire control and prevention measures during construction and operations as further detailed per the Emergency Operations and Fire Mitigation Plan included as Appendix H.

6.0 PUBLIC OUTREACH

The Applicant conducted a public open house meeting held on September 6, 2023, at Petteys Park golf course located at 2301 West Mill Street, Brush, Colorado. The public open house was noticed on the Project's website, through an informational flyer that was mailed to all landowners within a half-mile radius of the Project and was advertised in the local newspaper for two weekly circulations prior to the meeting. Additionally, the informational flyer was posted to the Morgan County Bulletin Board Facebook page.

Throughout the Project's planning and permitting process, the Applicant has contacted and coordinated with various agencies and local officials including the Morgan County Planning & Building Department, Morgan County Road and Bridge Department, Morgan County Economic Development Committee, City of Brush, Colorado Department of Wildlife, Colorado State Historic Preservation Office, Brush Volunteer Fire Department, Brush Rural Fire Protection District, Morgan County Sherriff's Office and Brush Police Department. In general, the purpose of these coordination efforts was to provide information on the Project, request feedback, and answer questions. In addition, the Applicant recently became a member of the Morgan County Economic Development Committee.

An Environmental Justice Analysis and Communications Plan were prepared for the Project. The plans are included as Appendix Q-1 and Q-2. A Public Outreach Summary detailing public outreach completed to date is included as Appendix Q-3.

7.0 CITIZEN REVIEW PROCESS

The SUP request will require a public hearing for which a minimum of 10 days' public notice is required. The SUP request will be noticed pursuant to Morgan County Zoning Regulations Section 2-390. A list of adjoining landowners within 1,320' of the Project site and their mailing addresses is provided as Appendix R.

Site notices will be posted on the property fronting each adjacent right of way at least 10 days prior to each scheduled public hearing date in accordance with Morgan County Zoning Regulations Section 2-390 (B).

8.0 VESTED RIGHTS

The Applicant hereby respectfully requests that vested rights be granted for the Solar Project for a period of six years. The development schedule and phase timing are set forth in Section 2.6.1 (Table 2) above. Vested right is appropriate here because this a multi-phase Project that will be built out over several years.

9.0 REFERENCES

- CAPCD (Colorado Air Pollution Control Division). 2023. 2023 Ambient Air Monitoring Network Plan. Available online at: https://apcd.state.co.us/tech_doc_repository.aspx?action=open&file=2023AnnualNetworkPlan.pdf. Accessed September 2023.
- CDOT (Colorado Department of Transportation). 2023. Online Traffic Information System Traffic Data Explorer. Available online at: [Traffic Data Explorer \(coloradodot.info\)](https://trafficdataexplorer.coloradodot.info). Accessed September 2023.
- CDA (Colorado Department of Agriculture). 2023. County Weed Programs. Available online at: <https://ag.colorado.gov/conservation/noxious-weeds/county-weed-programs>. Accessed September 2023.
- EPA (U.S. Environmental Protection Agency) 2023. Current Nonattainment Counties for All Criteria Pollutants. Available online at: <https://www3.epa.gov/airquality/greenbook/ancl.html>. Accessed September 2023.
- FAA (Federal Aviation Administration). 2023a. Circle Search for Airports. Available online at: <https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showCircleSearchAirportsForm>. Accessed September 2023.
- FAA. 2023b. Notice Criteria Tool. Available online at: <https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm>. Accessed September 2023.
- FEMA (Federal Emergency Management Agency). 2023. National Flood Hazard Layer. Available online at: <https://www.fema.gov/flood-maps/national-flood-hazard-layer>. Accessed September 2023.
- Klise, G., Tidwell, V., Reno, M., Moreland, B., Zemlick, K., & Macknick, J. (2013). Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern United States [Review of Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern United States]. Sandia National Laboratories. <https://www.osti.gov/servlets/purl/1090206>
- Morgan County. 2008. Morgan County Comprehensive Plan. Available online at: <https://morgancounty.colorado.gov/sites/morgancounty/files/Comprehensive-Plan-2008.pdf>. Accessed September 2023.
- Morgan County. 2023a. Parcel Viewer App. Available online at: <https://morgancountyco.maps.arcgis.com/apps/Solutions/s2.html?appid=98b97c7f37e2453f85938d547d2b7f11>. Accessed September 2023.
- Morgan County. 2023b. Morgan County Zoning Regulations. Available online at: <https://morgancounty.colorado.gov/sites/morgancounty/files/documents/Zoning%20Regulations%20-%2020012323.pdf>. Accessed September 2023.

Morgan County. 2023c. Morgan County School Districts. Available online at:

<https://morgancountyco.maps.arcgis.com/apps/Solutions/s2.html?appid=516c27c48c514af8bdb94071966688b8>. Accessed September 2023.

USDA-NRCS (U.S. Department of Agriculture Natural Resources Conservation Service). 2023. Web Soil Survey. Available online at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm> . Accessed September 2023.

Fortress BESS Project, Phase I Special Use Permit Application



For Submittal to:



MORGAN COUNTY PLANNING
ZONING & BUILDING DEPT.
231 Ensign, P.O. Box 596
Fort Morgan, Colorado 80701
PHONE (970)542-3526
FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

Prepared for:

Fortress Solar I LLC,
11801 Domain Blvd, Suite 450
Austin, TX 78758

Prepared by:



1560 Broadway, Ste 1400
Denver, CO 80202



MORGAN COUNTY PLANNING
 ZONING & BUILDING DEPT.
 231 Ensign, P.O. Box 596
 Fort Morgan, Colorado 80701
 PHONE (970)542-3526
 FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

PERMIT # SU2023 - 0021

Date Received	<u>11 / 8 / 23</u>	Received By	<u>JS</u>
App Fee	<u>\$5000</u>	CK/CC #:	<u>091045071</u>
Minor Amend Fee:	\$	CK/CC #:	
Recording Fee	\$	CK/CC #:	
PC Date:	<u>2 / 12 / 24</u>	BOCC Date:	<u> / /</u>
100 Year Floodplain?	<u>Y/N</u>	Taxes Current?	<u>Y/N</u>

SPECIAL USE PERMIT APPLICATION

(Also to be used as application for Amendments to Existing Special Use Permits)

Landowner **MUST** Sign Application and Right to Farm Policy

APPLICANT

LANDOWNER

Name Fortress Solar I LLC
 Address 11801 Domain Blvd, Suite 450
Austin, TX 78758
 Phone _____
 Email _____

Name Ruth Ann Odle
 Address 16218 Hwy 71 Brush, CO 80723-9436
 Phone () _____
 Email _____

BRIEF DESCRIPTION OF APPLICATION

Proposed 200 MW Battery Energy Storage system. Phase I of the Fortress Solar BESS Project.

PROPERTY LEGAL DESCRIPTION

Address (if available):

See attached parcel information table

S: ___ T: ___ R: ___ 1/2 1/4 1/4
 Parcel #: 1233 - 050 - 00 - 001
 Subdivision: _____

Property Size 645.85 (sq. ft. or acres)
 Zone District: A
 Lot #(s): _____

Is property located within 1320' (1/4 mile) of a livestock confinement facility? Y/N

SEE REQUIRED ATTACHMENT LIST ON BACK OF THIS PAGE.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED OR PROCESSED.

SPECIAL USE PERMIT REQUIRED ATTACHMENT LIST

Fee:

- Non-Refundable Application Fee**

**Additional fees and charges may be required pursuant to Section 2-160 of Morgan County Zoning Regulations*

Project Narrative:

- Narrative– Including the following:**

- Project Description
- Purpose of request
- How this proposal complies with the Morgan County Comprehensive Plan
See: <https://morgancounty.colorado.gov/sites/morgancounty/files/Comprehensive-Plan-2008.pdf>
- How this project/proposed use meets the criteria for Special Use Permit pursuant to Sec. 2-395 of the Zoning Regulations
- How the project/proposed use meets any specific criteria related to the project/proposed use. *See Morgan County Zoning Regulations Chapter 4-Supplementary Regulations, including but not limited to: Campgrounds, Livestock Confinement, Kennels, Outdoor Shooting Ranges, Home Occupations, Oil and Gas, Mobile Home Parks, Wireless Service Facilities, Solar, Wind and BESS*
- How project will relate to or impact existing adjacent uses
- All off-site impacts and proposed mitigation measures
- Development or implementation schedule of project
- Proposed length of time the permit, if applicable
- Discussion of any public improvements required to complete the project

Environmental Impacts:

- Discuss any environmental impacts the Special Use will have on the following and the proposed mitigation measures:

- | | | | |
|-------------------------------------------------|----------------------------------------------|---------------------------------------------------------|-----------------------------------------------------|
| <input checked="" type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Dust | <input checked="" type="checkbox"/> Existing Vegetation | <input checked="" type="checkbox"/> Land Forms |
| <input checked="" type="checkbox"/> Noise | <input checked="" type="checkbox"/> Odor | <input checked="" type="checkbox"/> Storm Water Runoff | <input checked="" type="checkbox"/> Water Resources |
| <input checked="" type="checkbox"/> Wetlands | <input checked="" type="checkbox"/> Wildlife | <input checked="" type="checkbox"/> Visual Amenities | <input type="checkbox"/> Other _____ |

Map & Plans: **Special Use Map** meeting the requirements of Sec. 2-420 and any specific map requirements for the proposed use including but not limited to: *Campgrounds, Livestock Confinement, Kennels, Outdoor Shooting Ranges, Home Occupations, Oil and Gas, Mobile Home Parks, Wireless Service Facilities, Solar, Wind and BESS. Sample Map attached to application for reference*

Drainage/Run-Off Control Plan may be required if the Planning Administrator determines that the use or building meets one of the following criteria:

- (1) The accessory use or building may have a drainage impact on adjacent properties;
- (2) The accessory use or building may have a drainage impact on adjacent right of ways;
- (3) The accessory structure is 5000 square feet or larger.

Decommissioning Plan [Wind, Solar, BESS]

Geotechnical Report [Wind, Solar]

Maintenance Statement [Wind, Solar, BESS]

Water and/or Wind Erosion Control Plan [Wind, Solar]

Fire Mitigation Plan [BESS]

Specification Sheet [BESS]

Emergency Operation Plan [BESS]

Ownership: **Current title insurance commitment (last 6 months)**

Mineral Rights Holders Notification

Notice to FFA & Approval Letter [Wind]

Notice to Operator of Communication Link (if applicable) [Wind]

Proof of current paid taxes

Utilities/Access: **Water tap (Engineering Report from Quality Water or proof of access to a well)**

Sewer (Septic Permit, Will Serve Letter from NCHD or proof of other public system)

Electric (Electric bill or letter of commitment from electricity provider)

Driveway Permit from CDOT or Morgan County Road & Bridge (If required by staff)

Ditch Company- Proof of contact if there is a ditch on or next to subject property

Architecture Control Approval (if applicable)

Utility Interconnection or Crossing Certification [Wind, Solar]

Road Agreement [Wind, Solar]

Electrical Diagram [BESS]

Vested Rights: **Vesting Rights** (Optional). If applying for vested rights with special use application, the following must be submitted:

- Period of time Vesting Rights are requested
- Development schedule including timeline and phases
- Reason for request
- Other pertinent factors concerning the development
- Additional application fee for vesting rights application

Miscellaneous: **Right to Farm Policy** signed by Landowner(attached)
 Liability Insurance for Solar, Wind and/or BESS projects

1 # Paper Application sets

1 Digital Copy of Application (One sided only)

Posted Public Notice Verification:

Notarized affidavit with photographs from a distance & close-up

This must be submitted PRIOR to Planning Commission hearing and PRIOR to Morgan County Board of Commissioners hearing

Additional Information required by staff:

APPLICANT & LANDOWNER'S STATEMENT

I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge.
Application must be signed by landowners as shown on title insurance/commitment.

Charles Ndhlovu 10/18/2023
Applicant Signature Date

Leith Ann Odle 10/29/23
Landowner Signature Date

Applicant Signature Date

Landowner Signature Date



MORGAN COUNTY, PLANNING, ZONING & BUILDING DEPT.

231 Ensign, P.O. Box 596
Fort Morgan, Colorado 80701
PHONE (970) 542-3526 FAX (970) 542-3509

MORGAN COUNTY RIGHT TO FARM POLICY / NOTICE

Morgan County is one of the most productive agricultural counties in Colorado. Ranching, farming, animal feeding, and all other manner of agricultural activities and operations in Morgan County are integral and necessary elements of the continued vitality of the county's economy, culture, landscape and lifestyle. Morgan County specifically recognizes the importance of agricultural operations as necessary and worthy of recognition and protection.

Landowners, residents and visitors must be prepared to accept as normal the effects of agriculture and rural living. These may include noise from tractors, equipment, and aerial spraying sometimes at night or in the early morning; dust from animal pens, field work, harvesting, and gravel roads; odor from animal confinement operations, silage and manure; smoke from ditch burning; flies and mosquitoes; the use of pesticides and fertilizers, including aerial spraying; and movement of livestock or machinery on public roads. Under the provisions of the State of Colorado's "Right to Farm" law (Section 35-3.5-101 and following, C.R.S.), all normal and non-negligent agricultural operations may not be considered nuisances.

Also public services in a rural area are not at the same level as in an urban or suburban setting. Road maintenance may be at a lower level, mail delivery may not be as frequent, utility services may be nonexistent or subject to interruption, law enforcement, fire protection and ambulance service will have considerably longer response times, snow may not be removed from county roads for several days after a major snow storm. First priority for snow removal is that school bus routes are normally cleared first.

Children are exposed to different hazards in a rural setting than they are in an urban or suburban area. Farm and oilfield equipment, ponds, and irrigation ditches, electrical service to pumps and oil field operations, high speed traffic, noxious weeds, livestock, and territorial farm dogs may present real threats to children. It is necessary that children's activities be properly supervised for both the protection of the children and protection of the farmer's livelihood.

All rural residents and property owners are encouraged to learn about their rights and responsibilities and to act as good neighbors and citizens of Morgan County. This includes but is not limited to obligations under Colorado State law and Morgan County Zoning Regulations regarding maintenance of fences, controlling weeds, keeping livestock and pets under control. There may be provisions of which you are unaware. For example, because Colorado is a Fence Law State, owners of property may be required to fence livestock out.

Information regarding these topics may be obtained from the Colorado State University Cooperative Extension Office and the County Planning and Zoning Department, and County Attorney.

RECEIPT AND STATEMENT OF UNDERSTANDING

I hereby certify that I have received, read, and understood the Morgan County Statement of Policy and Notice regarding Right to Farm.

I further state that I am aware that the conditions of living in an unincorporated area are different than living in a town or city and that the responsibilities of rural residents are different from urban or suburban residents. I understand that under Colorado law that a pre-existing, non-negligent agricultural operation may not be considered a public or private nuisance.

Ruth Ann Odle 10-25-23
Signature Date

Ruth Ann Odle
Printed Name

16218 Hwy. 71
Address

Brush, CO 80723

To Be Signed by Landowner

Adopted by the Morgan County Board of County Commissioners by Resolution #96BCC41 on July 23, 1996 and amended by Resolution 2008 BCC 34 on September 2, 2008.

Delaware

Page 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF FORMATION OF "FORTRESS SOLAR I LLC", FILED IN THIS OFFICE ON THE TWENTY-FIRST DAY OF AUGUST, A.D. 2023, AT 3:27 O`CLOCK P.M.




Jeffrey W. Bullock, Secretary of State

7632089 8100
SR# 20233301365

Authentication: 204019798
Date: 08-22-23

You may verify this certificate online at corp.delaware.gov/authver.shtml

STATE OF DELAWARE
CERTIFICATE OF FORMATION
OF LIMITED LIABILITY COMPANY

The undersigned authorized person, desiring to form a limited liability company pursuant to the Limited Liability Company Act of the State of Delaware, hereby certifies as follows:

1. The name of the limited liability company is Fortress Solar I LLC

2. The Registered Office of the limited liability company in the State of Delaware is located at 1209 Orange Street (street), in the City of Wilmington, Zip Code 19801. The name of the Registered Agent at such address upon whom process against this limited liability company may be served is The Corporation Trust Company

By: 
Authorized Person

Name: Christie Kneteman
Print or Type

Participating Landowner Parcel Information

APN	Account Number	Property Owner	Legal Description
1233-050-00-001	R002837	Ruth Ann Odle	S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T: 4 R: 55 PARC SW1/4 S OF RR

Special Use Permit Application

Fortress BESS Project- Phase I

Morgan County, Colorado

November 2023

Submitted to:

Morgan County Planning and Zoning
231 Ensign Street, PO Box 596
Fort Morgan, CO 80701



Prepared for

Fortress Solar I LLC

11801 Domain Blvd, Suite 450
Austin, TX 78758

Prepared by



1560 Broadway, Ste 1400
Denver, CO 80202

Morgan County Special Use Permit Application Submittal Requirements

The Morgan County Special Use Permit application package for the proposed Fortress BESS Project is organized by sections to follow the Morgan County SUP Application Checklist, provided below.

Morgan County Code 2-380 Submittal Requirements / SUP Application Checklist	Application Section
1. Applicant Information	2.5 / Application Form
2. Landowner Information	2.1 / Application Form
3. Property Legal Description	2.1 / Application Form
4. Applicant & Landowner's Statement	Application Form
5. Project Narrative Including the Following: a) Project Description b) Purpose of request c) How this proposal complies with the Morgan County Comprehensive Plan d) How this project/proposed use meets the criteria for the Special Use Permit pursuant to Sec. 2-395 of the Zoning Regulations e) How this project/proposed use meets the specific criteria per Morgan County Zoning Regulations Chapter 4- Supplementary Regulations (Solar) f) How the project will relate to or impact existing adjacent uses g) All off-site impacts and proposed mitigation measures h) Development or implementation schedule of project i) Proposed length of time of the permit j) Discussion of any public improvements required to complete the project	2.0-3.0
6. Discuss any environmental impacts the Special Use will have on the following and the proposed mitigation measures: Air Quality, Dust, Existing Vegetation, Land Forms, Noise, Odor, Storm Water Runoff, Water Resources, Wetlands, Wildlife, Visual Amenities, Other	4.0
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c) Decommissioning Plan	Appendix O
d) Geotechnical Report (Solar/Wind)	5.8
e) Maintenance Statement	Appendix P
f) Water and Wind Erosion Control Plan (Solar/Wind)	Appendix I
g) Fire Mitigation Plan	Appendix H
h) Specification Sheets	Appendix A-7
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Morgan County SUP Criteria Index

The following index is provided to direct the reader to the sections of this SUP Application that correlate to the Morgan County Chapter 2-395 “Review Criteria” identified for Special Use Permits.

The following criteria will be used by the Planning Commission and the Board of Commissioners when reviewing an application for a special use permit:

Morgan County Code 2-395 Special Use Permit Review Criteria	Application Section
A. The use and its location as proposed are in conformance with the Morgan County Comprehensive Plan;	2.11.A
B. All the application documents are complete and present a clear picture of how uses are to be arranged on the site or within Morgan County;	2.11.B
C. The site plan conforms to the district design standards of these regulations;	2.11.C
D. All on and off-site impacts have been satisfactorily mitigated either through agreement, public improvements, site plan requirements or other mitigation measures;	2.11.D
E. The special use proposed has made compatible with the surrounding uses and adequately buffered as determined by the County;	2.11.E
F. The special uses poses only the minimum amount of risk to the public health, safety, and welfare as set by either federal, state or county regulation, whichever is the strictest;	2.11.F
G. The special use proposed is not planned to be developed on a non-conforming parcel;	2.11.G
H. The applicant has adequately documented a public need for the project, all pertinent technical information, adequate financial resources to implement it, and has paid all fees and review costs levied by the County for application processing and review; and	2.11.H
I. For any special use requiring a supply of water that the applicant has demonstrated a source of water which is adequate for the proposed use in terms of quantity and reliability and in the case of human consumption, quantity, quality, and reliability	2.11.I

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APPENDIX R: MAILING LIST OF LANDOWNERS WITHIN 1,320 FEET

Acronyms and Abbreviations

AADT	Average Annual Daily Traffic
AC	alternating current
AF	acre-feet
APEN	Air Pollutant Emissions Notice
APN	Assessor's Parcel Number
Applicant	Fortress Solar I LLC
Aypa	Aypa Power North America LLC
BESS	battery energy storage system
BESS Project Area	21-acre BESS area
BMPs	best management practices
BNSF	Burlington Northern Santa Fe Corporation
CAPCD	Colorado Air Pollution Control Division
CDA	Colorado Department of Agriculture
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health & Environment
CPW	Colorado Parks and Wildlife
dBA	A-weighted decibel
EHS	Environmental Health & Safety
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FIRM	Flood Insurance Rate Map
Gen-tie	generation tie line
Highway 34	U.S. Highway 34
HVAC	heating, ventilation, and air conditioning
I-76	Interstate 76
IF	isolated finds
IPaC	Information for Planning and Consultation
kV	kilovolt
MW	megawatt

MWh	megawatt hours
NERC	North American Electric Reliability Corporation
NHD	National Hydrography Dataset
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
Project	A utility scale solar and BESS project known as the Fortress Solar Project
Project Area	4,259 acre fenced Project boundary
PV	photovoltaic
SGHAT	Sandia Laboratories Solar Glare Hazard Analysis Tool
SUP	Special Use Permit
Tetra Tech	Tetra Tech, Inc.
Tri State	Tri State Generation and Transmission Association Inc.
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WOTUS	waters of the U.S.

1.0 INTRODUCTION

Fortress Solar I LLC (“Applicant”), an indirect subsidiary of Aypa Power North American LLC (“Aypa”), a Blackstone portfolio company submits this application in furtherance of the development of a utility scale solar and BESS project known as the Fortress Solar Project (the “Project”) in Morgan County, Colorado. The Project will be comprised of a solar collector facility and a BESS facility; the solar collector facility project is referred to herein as the “Solar Project” and the BESS facility project is referred to herein as the “BESS Project”. The Project will be developed in three phases, each phase shall contain one phase of the Solar Project and one phase of the BESS Project. In accordance with the Morgan County Zoning Regulations, three separate solar collector facility applications and three separate BESS facility applications, one for each phase, are submitted simultaneously. In order to provide Morgan County (“County”) with a complete picture of the Project, each of the three BESS Project applications includes information on all three phases, each phase corresponding to its own application. The total fenced Project boundary will encompass approximately 4,259 acres (the “Project Area”). The BESS Project, inclusive of all three phases, is an up to 600-megawatt (MW), 2,400 MW hour (MWh) BESS and will encompass up to 21 acres within the Project Area (“BESS Project Area”). This application is for Phase I of the BESS Project and is submitted in conjunction with the application for Phase I of the Solar Project. Phase I of the BESS Project will encompass approximately seven acres.

In accordance with the foregoing, the Applicant respectfully submits this Special Use Permit (SUP) application to the Morgan County Planning and Development Department pursuant to Morgan County Code Chapter 4-855, and Chapter 4-860, to address utility-scale battery storage facilities. This Phase of the BESS Project is up to 200-megawatt (MW), 800 MW hour (MWh) BESS. The Applicant is requesting an SUP to construct, operate, maintain, and decommission this phase of the BESS Project. The BESS Project will be located approximately 1.6 miles east of the city of Brush, Colorado (Figure 1, Project Location, Appendix A-1). The BESS Project Area is comprised of one parcel, and the proposed generation tie (gen-tie) line would bisect three additional parcels (Appendix A-2) that are located within the Morgan County Agricultural Production Zone. The ALTA survey for the Project Area is included as Appendix A-3.

Additional Project related facilities include the Project substation, a gen-tie line, and an operations and maintenance building; which are included within the Solar Project’s SUP applications. These Project related facilities will serve more than one phase and are therefore included all of the Solar Project SUP applications. The SUP submitted for Phase I of the Solar Project is to be reviewed concurrent with the subject Phase I BESS SUP application.

The Project Vicinity Map is provided as Appendix A-1. The Site Plan and Special Use Map are included as Appendix A-2. The ALTA survey for the Project Area is provided as Appendix A-3. A site access plan is included Appendix A-4. Schematic drawings of the Project components are detailed in Appendix A-5 and a one-line electrical drawing of the BESS is provided as Appendix A-6. Preliminary specification sheets are provided as Appendix A-7. The SUP application form and Right to Farm Policy is provided in front of this application narrative following the Applicant’s cover letter.

2.0 PROJECT NARRATIVE

2.1 Project Location & Participating Landowner Parcel Information

The BESS Project is located on approximately 21 acres of private property currently held under purchase option by an affiliate of the Applicant, which will be assigned to the Applicant prior to the exercise of the option. (Appendix A-2). The Project is located along U.S Highway 34 (Highway 34), on existing rangeland approximately 1.6 miles east of Brush, Colorado. Table 1 below lists the assessor's parcel and property owner information for the project parcel.

Table 1. Participating Property Owners Parcel Information

APN	Account Number	Property Owner	Legal Description
1233-050-00-001	R002837	Ruth Ann Odle	S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T: 4 R: 55 PARC SW1/4 S OF RR

Source: Morgan County 2023a

2.2 Property interests, rights, and policies

2.2.1 Easements and Agreements

An affiliate of the Applicant is currently the option holder for the Project site. The option to purchase agreements for the full Project site are for a total of 4,473 acres (407 acres of Benotti; 1,897 acres of Odle Option 1; 2,170 acres of Odle Option 2) and extend until the end of 2024. On October 18th, 2023, the Applicant entered into a Temporary License Agreement with Tri State Generation and Transmission Association Inc. (Tri-State) to allow for completion of surveying and other investigative activities on the Tri-State owned properties. The Applicant intends to establish an access easement across Tri-State owned parcels for access to the Project from County Road R.5. In addition, the Applicant intends to establish an approximate 167-acre ROW utility easement for the proposed generation tie line to interconnect the Project to the Tri-State owned substation west of the Project.

2.2.2 Title Commitments

The title insurance commitments (last 6 months) for the participating landowner within the BESS Project Area is included as Appendix B.

2.2.3 Liability Insurance

The Applicant will carry liability insurance to cover loss or damage to persons or structures during construction and operation of the BESS Project. A copy of the Applicant's liability insurance policy for the Odle property is included per Appendix C.

2.2.4 Proof of Current Paid Taxes

Proof of current tax payment for the participating landowner is included as Appendix D.

2.2.5 Right to Farm Policy

The participating landowner signature certifying the receipt, review, and understanding of the Morgan County Statement of Policy and Notice regarding the Right to Farm is provided with the SUP application form.

2.2.6 Mineral Right Holder Notification

The mineral right holders within the Project boundary will be provided with a preliminary notice advising them of their right to comment or request information from Morgan County. At this time, a hearing date has not yet been scheduled for the SUP application. The Applicant will notify the individual mineral rights holders within the Project in advance of the scheduled hearing as required by Morgan County and statutory notification requirements. Upon finalization of the hearing schedule, the Applicant will coordinate with Morgan County to ensure all appropriate mineral rights holders are given proper notice of the scheduled hearing and an opportunity to provide comment.

A preliminary list of the mineral rights holders that will be notified in advance of the scheduled hearing is included as Appendix E.

2.2.7 Height Restrictions and FAA Hazard Review

According to the Federal Aviation Administration (FAA), the Brush Municipal Airport (FAA identifier 7V5) is located less than a mile northwest of the Project Area (FAA 2023a). Tetra Tech Inc. (Tetra Tech) consulted the FAA Obstruction Evaluation Notice Criteria Tool (FAA 2022b) for four locations in the Project Area and determined that the Project exceeds the Notice Criteria and would require filing. The Applicant will file notice with the FAA at least 45 days prior to the start of construction.

2.2.8 Ditch Company- Proof of Contact

No drainage or irrigation ditches have been identified within the BESS Project Area.

2.3 Zoning District

The BESS Project is located in the Agriculture Production zoning district (Morgan County 2023a). Per Morgan County Code, Section 3-180, BESS may be permitted as a primary or accessory use in the Agriculture Production zoning district through issuance of a SUP.

2.4 Purpose of Request

The purpose of this application is to provide Morgan County with pertinent information regarding the Project, subject to the Morgan County Zoning Regulations concerning the regulation of wind energy, solar collector, and battery energy storage systems (Morgan County 2023b). Per Morgan County Code, Section 3-180, BESS facilities may be permitted as a primary or accessory use in the Agriculture Production zoning district through issuance of a special use permit. Therefore, the purpose of the SUP is to authorize the proposed use of a BESS facility on the Project site to allow for the development and operation the BESS Project.

2.5 Applicant Information

The Applicant is an indirect subsidiary of Aypa. Aypa is a Blackstone portfolio company. Aypa has a proven track record of developing, financing, constructing, owning, and operating utility-scale renewable energy and battery energy storage projects. Aypa's existing portfolio and qualified development pipeline spans the continental United States and Ontario, Canada, including 15,000+ MWs of projects in various stages of development. Aypa currently has an operating fleet of 30 projects, two projects are currently under construction, and over 70 projects are in the development pipeline.

2.6 Project Description

The BESS Project is an up to 600-MW, 2,400 MWh Alternating Current (AC)-coupled BESS. This Phase I of the BESS Project is an up to 200-MW BESS, 800 MWh Alternative Current (AC)-coupled BESS. The BESS containers, inverters, and appurtenant facilities would be located on approximately 21 acres near the Project substation and switchyard. This Phase I of the BESS Project is located on approximately seven acres. The BESS is located within the fenced boundaries of the proposed Project which is further detailed per the concurrent SUP applications for the Solar Project. The site layout is detailed per the Special Use Map/Site Plan included as Appendix A-2.

2.6.1 Development Schedule and Phasing

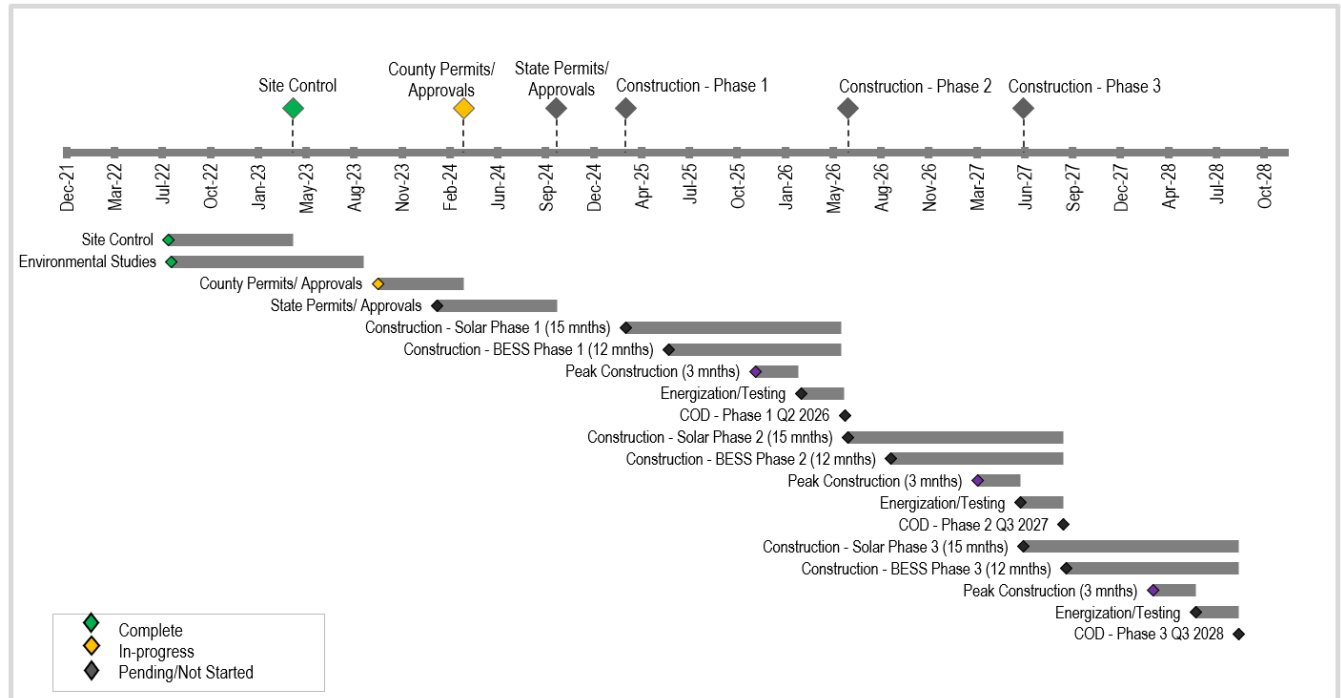
The BESS Project is expected to be constructed in three phases of approximately 200 MW, 800 MWh each. Construction of the Project is anticipated to commence in Q2 2025 pending approval of County permits. The BESS Project will be developed in parallel with the Solar Project. The proposed phasing is detailed per Table 2 below. All associated phasing quantum included in the application should be summed together in such cases in which multiple phases are constructed at the same time. This application is inclusive of maximum and minimum cases of individual and simultaneous phasing. As noted above, this application is for Phase I of the BESS Project.

Table 2. Project Construction Phasing

Phase	APNs	BESS MW	BESS MWh	Start Construction	End Construction	Commercial Operation Date
1	1233-050-00-001	200	800	Q2 2025	Q1 2026	Q2 2026
2	1233-050-00-001	200	800	Q1 2026	Q2 2027	Q3 2027
3	1233-050-00-001	200	800	Q1 2027	Q2 2028	Q3 2028

The overall development schedule for the Solar Project and BESS Project are detailed per Figure 2-1 below.

Figure 2-1. Fortress Solar I LLC - Overall Schedule (Solar & BESS)



2.6.2 Anticipated Permit Timeframe & Length of Permit

Per Section 4-880 of the Morgan County Solar Facility Regulations, a SUP for a BESS is valid for three years, provided that substantial construction and installation of the BESS is completed within that time. The Project construction for each phase is anticipated to be completed within 15 months upon issuance of a building permit. If construction is delayed due to unforeseen circumstances, the Applicant will request extensions, as permitted per Section 4-880 of the Morgan County Code. The Applicant understands the SUP approval may expire if substantial construction progress is not achieved within three years, or up to six years if such extensions are requested and granted.

2.6.3 Siting Considerations

The primary criteria for determining the location of BESS include the existence of compatible adjacent and nearby land uses, suitable topographic conditions, and the proximity to existing electrical infrastructure, major transportation corridors, utility corridors, and electrical load centers. The proposed BESS Project site meets these criteria. The BESS Project site was selected based on proximity to the existing infrastructure of the Tri State Generation and Transmission Association Inc. (Tri State) Story substation. Siting analysis confirms the proposed BESS Project Area avoids areas or locations with a high potential for biological conflict, such as wilderness study areas, areas of environmental concern, historic trails, special management areas, or important wildlife habitat or corridors. The proposed site avoids visual corridors that are prominent scenic viewsheds or scenic areas. As discussed in Section 4.0, there are no known sensitive biological, hydrological, historical, cultural, or archeological resources within or near the proposed BESS Project site.

2.6.4 Battery Energy Storage System

The BESS Project would be initially comprised of 133 SunGrow SC5000UD-MV-US inverters and 1,064 BYD-MC Cube battery containers, augmented over the 30-year life of the Project up to approximately 1,330 BYD-MC Cubes located on concrete equipment pads. Phase I of the BESS Project would be initially comprised of 44 inverters and 352 battery containers, augmented over the life of the project to up to approximately 440 battery containers. The BESS pads would be accessed via 20' wide gravel access roads. The BESS layout is detailed per Appendix A-2. Each battery enclosure would include steel cabinets that hold arrays of lithium-ion batteries. The BESS will be equipped with a heating, ventilation, and air conditioning (HVAC) cooling system with an operating temperature range of -30 to 55 degrees Celsius. Schematic drawings of the BESS Project components are included as Appendix A-5 and a one-line electrical drawing of the BESS is provided as Appendix A-6. Preliminary specification sheets for the inverters and BESS are included per Appendix A-7. The BESS would be charged by power generated from the proposed Solar Project detailed per the concurrent SUP applications and dispatched back to the grid when called upon.

2.6.4.1 BESS Contact Information

The Applicant will contract to hire a construction contractor to build the system /project. The Applicant is the owner, and operator of the BESS Project. The Applicant's address and contact information are detailed below.

System Owner, & Operator

Fortress Solar I LLC

Mailing Address: 11801 Domain Blvd, Suite 450, Austin, TX 78758

Telephone: (888) 287-9058

System Installer

As required by Morgan County Code, Section 4-855(A)(4), contact information for the contracted system installer will be provided to Morgan County prior to issuance of a building permit for the Project.

2.6.5 Project Substation & Generation Tie Line Interconnection

The Project substation would occupy approximately 2-acres and is located north of the BESS area. The Project substation would consist of power transformers, overhead bus, feeder breakers, and miscellaneous supporting equipment.

The Project substation would include an overhead 1.25-mile, double circuit 230 kilovolts (kV) gen-tie line interconnection to the existing Tri State Story substation located west of the Project. The final engineering for the Project and the gen-tie line has not been completed yet. The Applicant is considering two options for infrastructure: H-frame or monopole designs equipped with robust insulators, conductors, and grounding systems to uphold system reliability and safety standards. The anticipated transmission structure heights range from 90 to 110 feet aboveground. The span length between structures will depend on the final chosen pole type and conductor. H-frames have an average span of approximately 750 feet, monopoles have an average span of approximately 900 feet, and lattice

towers span an average of 1150 feet. The Applicant anticipates installation of approximately 8 monopoles, 9 H-frames, or 6 lattice towers based on the final structure chosen during detailed engineering. The final design of these structures will be developed in collaboration with Tri-State and Public Service Company of Colorado to meet all relevant requirements.

The Applicant seeks administrative approval for transmission structures that may exceed the 100-foot height threshold defined for structures in Agriculture Zoning districts. Exceeding this threshold is deemed necessary to ensure adequate clearance for both existing and proposed transmission lines, as well as to comply with safety regulations. The need for structures that exceed 100 feet might be influenced by the procurement strategy that includes equipment availability and lead times. The Applicant will adhere to established utility pole standards, including those for transmission poles, as outlined by the American National Standards Institute and the National Electrical Safety Code.

2.6.6 Electrical Collection System

All electrical interconnection and distribution lines within the BESS Project boundary will be underground, except for power lines that leave the BESS Project or are within the substation. All electrical interconnections and distribution components will comply the National Electrical Safety Code, requirements of the electric utility company, and applicable state and federal regulatory codes as required by Morgan County.

A one-line electrical diagram detailing the BESS layout, associated components, and electrical interconnection methods is included per Appendix A-6.

2.6.7 Operations and Maintenance Building

A 60-foot by 40-foot, 2,400 square foot steel modular operations and maintenance building would be constructed east of the Project Substation, north of the BESS area. The O&M building would have a maximum height of fifteen feet and eight inches. This building is further detailed in the accompanying Solar Project application.

2.6.8 Perimeter Fencing & Site Security

In accordance with Section 4-860(B) of the Morgan County Zoning Regulations, the Project will be surrounded by an 8-foot-tall fence, consisting of 7-feet of chain-link and one foot of barbed wire (Appendix A-2). The Applicant held an initial coordination call with CPW on October 13, 2023. CPW informed the Applicant that fencing recommendations may be provided by per their recommendation letter. The Applicant is awaiting receipt of CPW's letter of recommendation however anticipates receipt prior to the initial public hearing. The Applicant will send notice of the initial public hearing date to CPW when scheduled by the County. A copy of the letter will be provided to Morgan County once received. The Applicant will continue to coordinate with CPW and will consider fencing recommendations. Site entrances will be gated and locked to assure access is limited to authorized personnel.

Exterior lighting would be installed and strategically located to ensure safety and security of the facility without disturbing surrounding areas outside the Project. Lighting would be installed around the periphery of the BESS area, substation, and entry gates, for nighttime security. The lighting for facilities will be designed to meet the minimum number of lights and illumination required for safety and

security and will not cause excessive reflected glare. The Project is also subject to lighting requirements of the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC) and will comply with lighting regulations from these entities as well.

2.6.9 Utilities

2.6.9.1 Electric

The electric service provider for the proposed BESS Project will be selected closer to commencement of construction. At this time, proof of an electric bill or a letter of commitment from the electricity provider will be made available to Morgan County.

2.7 Access, Transportation, & Traffic

2.7.1 Access Roads

The BESS will be located within the proposed Project addressed per the concurrent SUP application submitted for the corresponding Solar Project. Primary haul route and construction deliveries to the Project will be provided via one new 20-foot-wide gravel access road constructed off County Road Q. The primary access for operations and construction commuter vehicles will be provided via a new 20-foot-wide gravel access road constructed off County Road R.5. Primary emergency access will also be provided via the access off County Road R.5. Secondary access for operations and construction commuter vehicles will be provided via a new 20-foot-wide gravel access road constructed off County Road R. The Project will be fenced, and security gates will be installed at each access point to limit access to authorized personnel. Gated entrances would be equipped with Knox boxes and keys to assure emergency personnel access. The proposed site access roads and entry points are depicted on Figure 2.

2.7.2 Morgan County Driveway Permits

The Applicant will obtain a driveway access permit for the access roads proposed to be constructed from County Roads R and Q. As noted per Appendix G, a copy of the two driveway permit applications submitted to the Morgan County and Bridge Department are provided per Appendix G of the SUP application submitted for Phase I of the Solar Project. The Applicant has entered into a Temporary License Agreement with Tri State and is in coordination with Tri State regarding the proposed access road from County Road R.5. Tri State will apply for and obtain the driveway access permit on behalf of the Applicant for the access road proposed to be constructed from County Road R.5.

2.7.3 Owner & Employee Commuter Routes

The access routes to be utilized by the landowner and employees during construction and operations are as follows:

Primary Commuter Route: I-76 to County Road R.5: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately .2 mile and will then head east on County Road R.5 until reaching the

site entrance. The total Commuter Route length from I-76 is approximately 2.4 miles. This access route may be used for emergency access to the Project site.

Secondary Commuter Route: I-76 to County Road R: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately .8 mile and will then head east on County Road R until reaching the site entrance. The total Commuter Route length from I-76 is approximately 3.1 miles.

2.7.4 Construction Haul Route

The haul route to be utilized by heavy vehicle truck traffic throughout construction will be from I-76 to the site access off County Road Q. The Applicant would install a tire washout station at the entrance to the Project site off County Road Q to reduce mud, rock, or debris tracked onto paved surfaces. An exhibit detailing a typical tire washout station is included as Appendix A-8. The route is depicted on Figure 3 and the site access is also detailed per Appendix A-4, labeled as 'Site Access #1'.

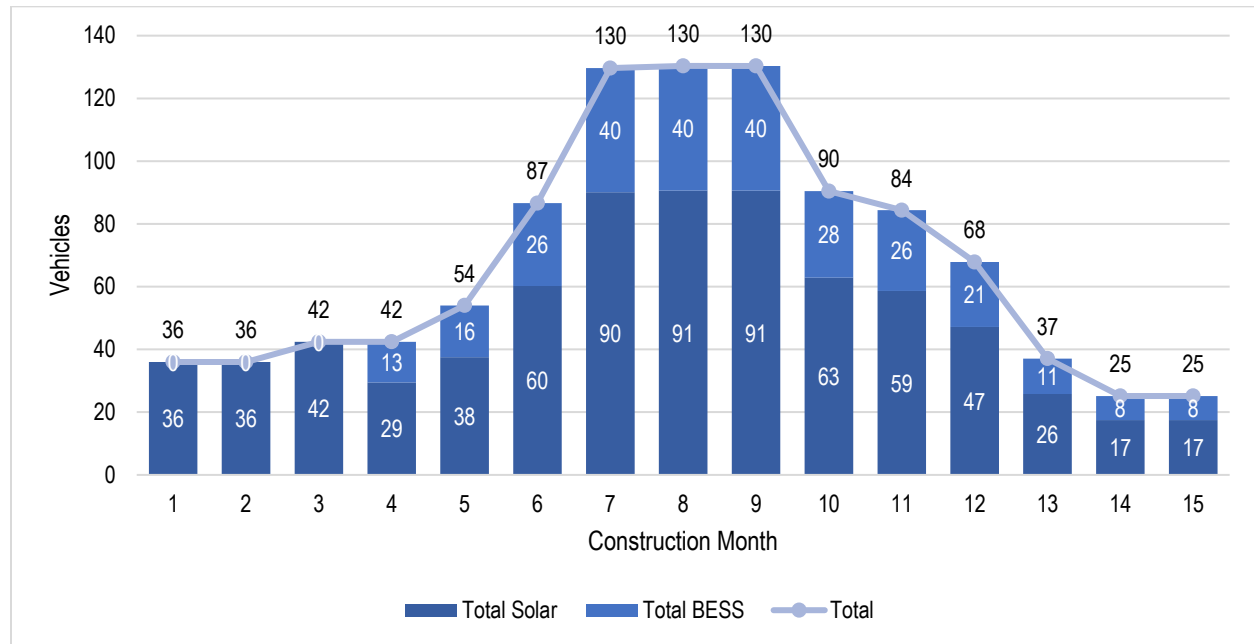
Haul Route: Interstate 76 (I-76) to County Road Q: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately 1.9 miles and will then head east on County Road Q until reaching the site entrance. The total Haul Route length from I-76 is approximately 4.5 miles.

2.7.5 Construction Transportation & Traffic

The construction process for each phase is estimated to take up to 12 months to complete, during which time there would be some variability in the number of workers each day. Project initiation and site preparation would occur over the first 5 months and will require fewer workers and fewer materials delivery truck trips. After the site is prepared for installation, the Project site would experience an increase to a higher maximum number of workers and material delivery truck trips. The peak of construction period for each phase is anticipated to occur over a 3-month period. Upon the completion of construction, testing of the installed equipment for operational reliability and safety will occur over the last 4 months of the construction period. This phase will not require the use of any heavy machinery and will involve a minimal number of workers.

The typical daily construction traffic count for each month in each phase of the Project including the concurrent proposed Solar Project is detailed per Figure 2-2 below.

Figure 2-2. Typical Daily Construction Traffic Count (Per Phase)



During the peak commuting hours each morning and evening at the peak of construction for each phase of BESS construction, there would be an average of approximately 40 commuter vehicles arriving at or departing from the Project (Figure 2-2). It was estimated that 200 deliveries would be made over the course of construction of each phase. This amount includes 100 trucks delivering the BESS components, and 100 trucks delivering battery inverter/transformer components. During peak construction, there would be an average range of 3 material delivery truck trips per day. Material delivery trucks are not expected to coincide with the peak hour, rather they would arrive at the Project site throughout the day.

The Colorado Department of Transportation (CDOT) Traffic Data Explorer was accessed to obtain Annual Average Daily Traffic (AADT) counts along the Project haul routes. The AADT counts represent the average number of vehicles traveling on a road segment for a typical day of the year. The AADT data available for the count stations along the Project access routes, the anticipated number of daily trips, and maximum percentage increase in AADT per phase is detailed per Table 3 below.

Table 3. Existing and Anticipated Increase in AADT

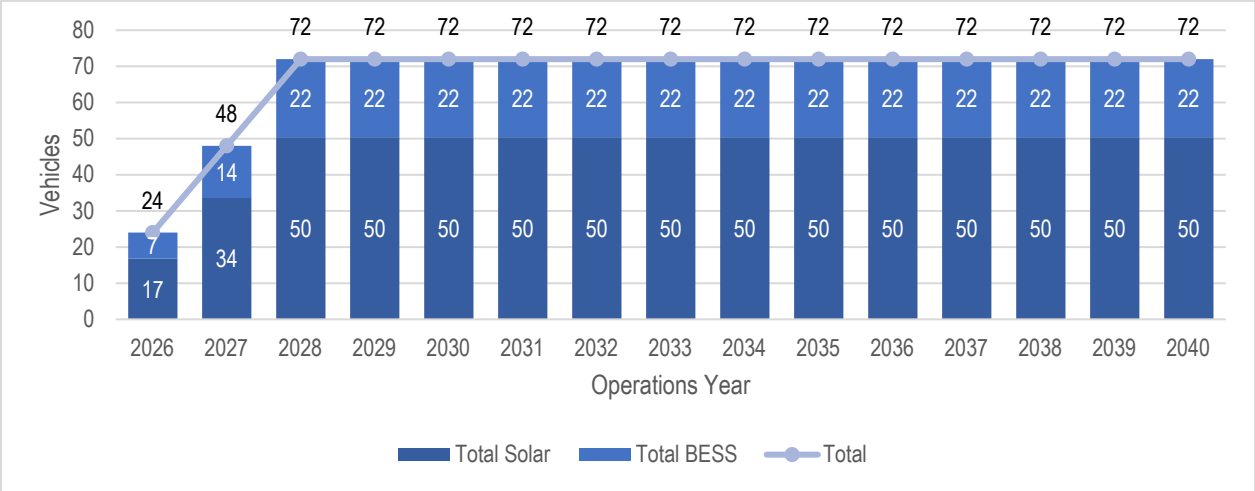
Access Route	Existing AADT Counts ¹	Average Estimated Daily Trips	Maximum Percent Increase in AADT (%)
Primary Commuter, Secondary Commuter, & Haul Route	Interstate 76, Station 103412: 12,000	86 (40 Commuter + 3 delivery)	.72
	U.S. Highway 34, Station 101481: 3,800		2.3
	State Highway 71, Station 103254: 2,700		3.2
	State Highway 71, Station 000213: 1,800		4.8

Source: CDOT 2023

2.7.6 Operations Transportation & Traffic

During operations once all three phases are constructed, the Applicant anticipates 11 full-time operations and maintenance employees would commute daily to the facility. A total of up to 22 trips per day would occur along access roadways (Figure 2-3). Therefore, the transportation and traffic impacts associated with the Project operation are anticipated to be minimal. The operational phase of the Project is expected to be 25 years but may be extended if facility components are upgraded or replaced. The typical daily traffic count for each operational year of the Project including the concurrent proposed Solar Project is detailed per Figure 2-3 below.

Figure 2-3. Typical Operations Traffic Count



2.7.7 Oversized / Overweight Loads

There are expected to be up to approximately 90 oversized/overweight load deliveries per phase associated with the BESS Project for the transport of the BESS containers, inverters, and transformers. The remaining heavy vehicle traffic would be standard size five-axle tractor trailers—some of these would be enclosed, and some would be in the form of flatbed trucks or smaller vehicles. Smaller heavy vehicles are likely to include water trucks, concrete trucks, and aggregate trucks. Applicant or their contractor would obtain the necessary oversize/overweight permit from CDOT prior to delivery of these oversize/overweight loads.

2.8 Required Public Improvements

2.8.1 Road Use Agreement

Applicant will enter into a Road Use Agreement with Morgan County prior to the start of construction, as further detailed in the corresponding application for Phase I of the Solar Project.

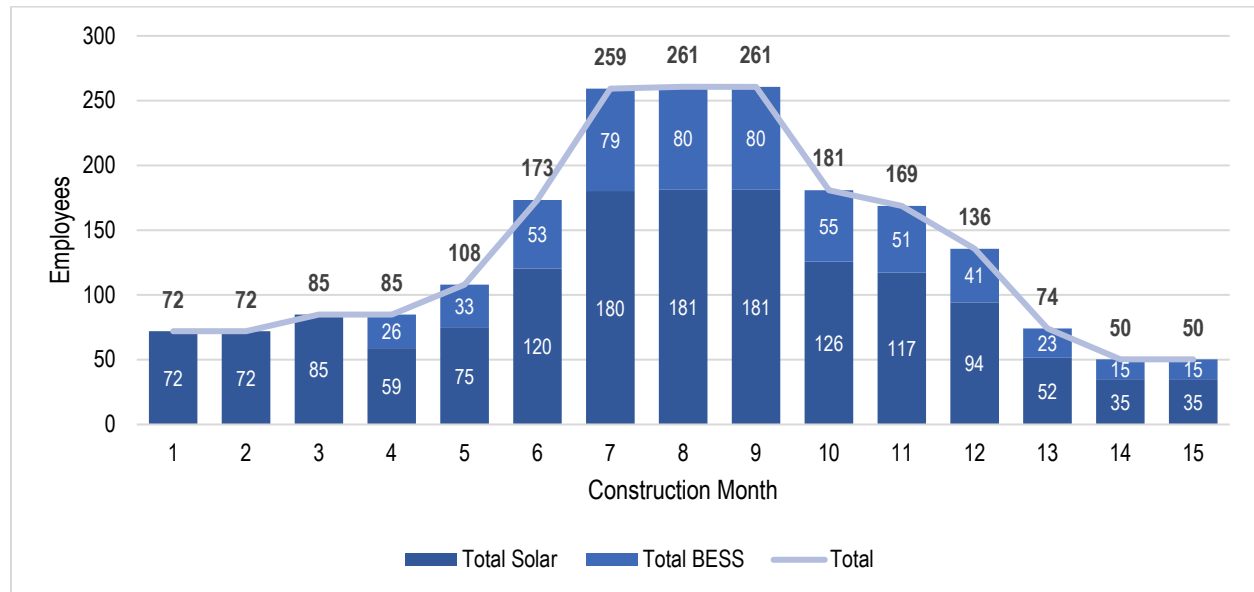
2.9 Employees, Equipment, and Facilities

2.9.1 Construction Crew, Equipment, & Facilities

The on-site construction workforce would consist of engineers, heavy equipment operators, truck drivers, laborers, craftsmen, electricians, supervisory personnel, and construction management

personnel. In total, there would be an average of approximately 80 workers onsite during the 3-month peak construction period of each phase of the BESS Project. The construction labor schedule for each phase of the Project including the BESS Project and the concurrent proposed Solar Project is detailed per Figure 2-4 below.

Figure 2-4. Typical Construction Labor Schedule (Per Phase)



Construction would occur five days a week for an estimated 10 hours per day. Additional hours may be necessary to make up for schedule and weather delays.

Typical equipment that may be present on site as required includes, but is not limited to, graders, excavators, bulldozers, backhoes, cutting machines, end loaders, delivery trucks, trenching machines, flatbed trucks, cranes, rollers, electrical test equipment, off-road buggies, forklifts and carry decks, water supply trucks, water spray trucks, concrete mixers, compaction machines, survey equipment, and light trucks.

Vehicles will access the site through the proposed entrance gate off Highway 34 for delivery of materials and crew transportation. Electrical construction will occur following the installation of equipment and be performed by NERC certified electricians.

Temporary staging areas will not extend beyond the overall boundary of the Project. Temporary staging areas would include a laydown area, parking, trash disposal facilities, construction trailers, and sufficient portable toilets and potable water for use by construction staff. Mobile trailers, modular offices, or an equivalent would be used as construction offices for Project staff and subcontractor personnel.

2.9.2 Operations Workforce

Upon completion of all three phases, operation of the BESS Project will require a minimum of 11 full-time positions including supervisory positions, sitework crew members, and miscellaneous crew

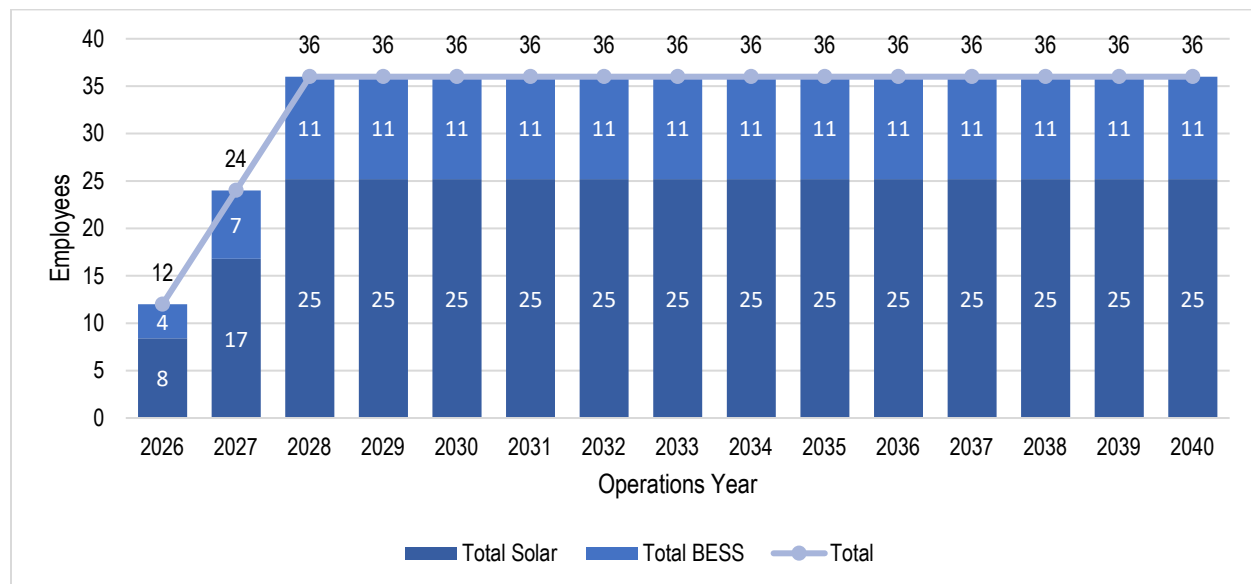
members, as detailed per Table 4. Operations may also require third party contractors to perform specialized services.

Table 4. Project Operational Workforce

Worker Title	Quantity	Comments
Supervisory Crew	1	Supervision from inspection, engineering, project management, superintendent, assistant superintendent, etc.
Miscellaneous Crew	1	Miscellaneous including cleanup and materials handling
Sitework Crew	9	Civil works, then trenching etc. for elec. Installation
TOTAL	11	

The labor schedule for each operational year of the Project including the BESS Project and the concurrent proposed Solar Project is detailed per Figure 2-5 below.

Figure 2-5. Typical Operations Labor Schedule



2.10 Project Compliance with Morgan County Comprehensive Plan

As presented below, the BESS Project is consistent with the following guiding principles, goals, and policies for utilities, economic development, environment, land use, and transportation as identified per the Morgan County 2008 Comprehensive Plan.

2.10.1 Utilities

GOAL: To ensure that adequate and financially secure public utilities are provided to all developments in Morgan County.

The Applicant intends to establish a power purchase agreement with multiple purchasers of power. Per the Morgan County Comprehensive Plan, “existing facilities should be expandable in addition to new

facilities to allow service for any reasonable projected growth”. The Project would provide grid resiliency and backup power to existing and future residents of Morgan County.

Development of the Project will include an approximate 2,400 sf operations and maintenance building. Electric utilities will be extended to serve the O&M building. No water or wastewater services are anticipated for the O&M building. The Project will require telecommunications services for internet which will be extended to the project site. The Project substation will interconnect to Tri State’s existing Story substation located west of the Project through a 1.25-mile gen-tie line and will not adversely affect transmission uses existing on and adjacent to the Project site.

2.10.2 Economic Development

GOAL: Diversify the economy in Morgan County to broaden business employment opportunities for residents and to further economic growth.

Goal: Encourage the location of new industry and the expansion of existing businesses that will provide employment opportunities and increase the tax base to strengthen the economy of Morgan County.

In accordance with the Morgan County Comprehensive Plan, development of the Project would contribute to the Colorado New Energy Economy. Policy number 10, identified per the Comprehensive Plan specifically notes that Morgan County should work to attract and maintain renewable energy projects to meet this goal (Morgan County 2008).

Development of the Project would provide economic benefit to Morgan County through increased revenues to county, local municipality, and school district tax bases and local employment opportunities. The Applicant will utilize local labor as much as is practicable depending on the availability, experience, and qualifications of available local firms and laborers. Throughout the construction period, construction workers will support local businesses including hardware supply stores, restaurants, hotels, gas stations and hotels. Workers originating outside Morgan County will be expected to remain in the region only throughout the duration of construction.

2.10.3 Environment

Goal: Preserve the manmade and natural environment in order to enhance the quality of life in Morgan County and to make environment considerations part of the land use decision-making process.

Per the Morgan County Comprehensive Plan, new developments are to be reviewed and judged based on the identification of sensitive lands and the mitigation techniques used to minimize the impacts of physical development on the land (Morgan County 2008). Siting analysis confirms the proposed site location avoids areas or locations with a high potential for biological conflict, such as wilderness study areas, areas of environmental concern, historic trails, special management areas, or important wildlife habitat or corridors. The BESS Project is sited outside of identified wetlands and floodplains and will avoid adverse impacts on plant and wildlife species. Tetra Tech has prepared a Drainage and Runoff Control Plan, supporting Drainage Study, and Wind and Water Erosion Control Plan to identify site drainage patterns, required improvements and mitigate erosion and storm runoff potential. As further discussed in Section 4.0, there are no known sensitive biological, hydrological, historical, cultural, or archeological resources within or near the proposed Project site.

Furthermore, development of the BESS Project and Solar Project would provide 600 MW of BESS and 600 MW of electricity produced by renewable energy, respectively. Development of the Project is in accordance with policy number 14 identified per the Morgan County Comprehensive Plan which notes that Morgan County shall encourage use of renewable resources and production of biofuels and electric power from such resources (Morgan County 2008).

2.10.4 Land Use

Goal: To encourage development where: 1) it is in proximity to the activity centers; 2) the proposed development is compatible with existing land uses; 3) there is access to established public infrastructure (primarily roads and utilities); and 4) where, in outlying areas of the county, there is access to utilities and there is little additional burden on rural services.

The BESS Project site is located 1.6 miles southeast of the city limits of Brush, Colorado. Existing land uses in the BESS Project Area include rangeland and overhead electric transmission lines. Existing adjacent land uses include rangeland, an electric substation, rural residences, a cattle feed lot, and the Brush Municipal Airport. The BESS Project is compatible with these existing uses. The Project site is in the Agricultural Production zoning district which allows for permitting of large-scale solar facilities including BESS as an accessory use through issuance of an SUP. The Project site has access to established utilities and County Roads.

Goal: The county will encourage the preservation of agriculture production lands in balance with pressures for land use changes to higher intensity development.

Per the U.S. Department of Agriculture, Natural Resources Conservation Science, Web Soil Survey data, the BESS Project Area does not include any soil types designated as prime, unique, or farmland of statewide importance. Therefore, development of the Project is not anticipated to not result in impacts to or loss of prime, unique, or farmland of statewide.

2.10.5 Circulation and Transportation

Goal: To provide residents and businesses in Morgan County with a circulation system that connects the major county activity centers with the outlying communities of the county, regional employment generators and the rest of the state in the interests of providing economic opportunity, access efficiency and safety and improving the quality of life.

Policy 1: Traffic and Roads

- Require new developments to mitigate impacts to adjacent county roads.
- Require traffic generation studies for large developments.

As detailed per Section 2.7 traffic on county roads is anticipated to increase during construction of the Project and Applicant will enter into a Road Use Agreement with Morgan County to address impacts on County Roadways resulting from construction.

2.11 Project Compliance with Special Use Permit Review Criteria

Per Morgan County Code Section 3-180, BESS facilities may be permitted in the Agriculture Production zone through issuance of a SUP. The BESS Project has been reviewed for accordance with, and meets the following criteria required to approve a special use permit as outlined per the Morgan County Code, Section 2-395.

(A) The use and its location as proposed are in conformance with the Morgan County Comprehensive Plan

The BESS Project aligns with Morgan County's Comprehensive Plan, adopted in 2008 as indicated per Section 2.10 above. Project development, proposed mitigation measures, and forecasted benefits are consistent with the County's goals and policies related to economic development, environment, land use, utilities, and transportation. The Project would support grid resiliency with economic, environmental, and social benefits to current and future residents.

(B) All the application documents are complete and present a clear picture of how uses are to be arranged on the site or within Morgan County;

The Applicant has submitted a complete SUP application package for Phase I of the BESS Project. The Applicant will submit any requested revisions and additional documents requested by the Morgan County Planning Services Department upon their review of the application. The table at the beginning of this report details each SUP submittal requirement with the application report section addressing each checklist item. The submittal has been provided as a hard copy and electronically, fulfilling submittal requirements in Section 2-380 of the Morgan County Zoning Regulations.

(C) The site plan conforms to the district design standards of these Regulations;

The Project site plan and special use map have been developed in accordance with Sections 2-410 and 2-420 of the Morgan County Zoning Regulations.

(D) All on and off-site impacts have been satisfactorily mitigated either through agreement, public improvements, site plan requirements or other mitigation measures;

Potential adverse environmental impacts and the correlating sufficient mitigation measures are detailed in Section 4.0, Environmental Impact Analysis.

(E) The special use proposed has been made compatible with the surrounding uses and adequately buffered as determined by the County;

Existing surrounding adjacent uses include the Tri State-owned Story substation to the west, low-density rural agricultural residences to the northwest, west, and southwest, open rangeland to the north, east, and south, the Brush Municipal Airport northeast, across Highway 34, and the existing Pinneo cattle feedlot north of Highway 34.

The BESS Project would be compatible with existing surrounding adjacent land uses. The BESS Project would not result in significant adverse impacts to surrounding properties. Potential impacts are limited to fugitive dust, traffic, and noise during the construction phase. During operations, the BESS Project would be operated remotely and generate little to no daily traffic, generate no air

emissions, emit no glare, and is sited and designed to minimize noise impacts. A discussion of potential impacts and proposed mitigation measures are detailed per Section 4.0.

The Project site layout has been designed in accordance with the minimum 70-foot setback required from exterior parcel lines and the 500' buffer required from adjacent buildings (Appendix A-2).

(F) The special use poses only the minimum amount of risk to the public health, safety and welfare as set by either federal, state or county regulation, whichever is the strictest;

The BESS Project is not anticipated to be unduly detrimental or injurious to property or improvements in the vicinity and will not be detrimental to public health, safety, or general welfare.

Emergency access to the site will be provided via 20' wide access roads and gated entrances will be equipped with Knox boxes and keys. The Applicant will maintain sufficient water sources and portable fire extinguishers on site for emergency use. Water would be stored on site in above ground tanks and/or cisterns. The water tanks and/or cisterns will be located and installed per compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency.

The Applicant has developed an Emergency Operations and Fire Mitigation Plan for the Project detailing proper responses to emergency events, fire mitigation measures, and firefighting considerations. The Emergency Operations and Fire Mitigation Plan was provided to local officials of the Brush Volunteer Fire Department, the Brush Rural Fire Protection District, and the Hillrose-Snyder Volunteer Fire Department for review and comment and is included as Appendix H.

The presence of energized equipment within the facility could result in public health or safety concerns, however site access will be limited to authorized personnel and the BESS Project will be developed in accordance with the physical security standards defined per the NERC Code Section, CIP-014-2 (NERC 2023). Proposed security measures include placement of warning signage along the perimeter and entrance points to the facility, installation of a site perimeter fencing with locked, gated entrances, installation of security lighting, and 24/7 remote site monitoring.

The Applicant is committed to developing and operating the facility in a safe and environmentally friendly manner. The Project will adhere to all applicable health and safety standards and regulations.

(G) The special use proposed is not planned to be developed on a non-conforming parcel;

The BESS Project is not proposed to be developed on non-conforming parcels. All parcels located within the Project site are conforming parcels and meet the minimum 35-acre lot size required in the Agricultural Production zoning district.

(H) The applicant has adequately documented a public need for the project, all pertinent technical information, adequate financial resources to implement it, and has paid all fees and review costs levied by the County for application processing and review; and

The Project would advance Colorado's renewable energy portfolio standard, provide a local source of clean energy, and would provide an economic benefit to Morgan County through tax revenue generation and local job opportunities.

The Applicant will pay all fees and review costs required by Morgan County for application processing and review. The Applicant is an indirect subsidiary of Aypa. Aypa is a Blackstone portfolio company. Aypa has a proven track record of developing, financing, constructing, owning, and operating utility-scale renewable energy projects. Aypa currently has an operating fleet of 30 projects, two projects currently under construction, and over 70 projects in the development pipeline.

(I) For any special use requiring a supply of water that the applicant has demonstrated a source of water which is adequate for the proposed use in terms of quantity and reliability and in the case of human consumption, quantity, quality, and reliability.

The Applicant will source water needed during the construction and operations phases from the existing groundwater wells available on the Project site. In the event offsite water is required, water will be sourced from an off-site location, transported to the Project site via water trucks, and stored on site in above ground tanks and/or cisterns. The water tank will be in strict compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency. As this water supply would rarely be used, The Project will have minimal effects on overall water availability and will not burden local water resources. No new water infrastructure will be necessary for the Project.

2.12 Project Compliance with Regulations for BESS Facilities

The Project meets the following standards defined per Morgan County Code Section 4-860 for the regulation of BESS facilities.

(A) BESS shall comply with all applicable requirements of the underlying zone district and the Accessory Uses and Structures requirements in Sec. 3-130 of these Zoning Regulations.

The BESS Project Area is in the Agricultural Production zoning district. BESS may be permitted as a primary or accessory use in the Agricultural Production zone through issuance of an SUP. The BESS Project will comply with standards defined for accessory structures per Section 3-130. The BESS is sited and designed in accordance with the setbacks and height limits defined for the Agricultural Production District. The BESS exceeds the minimum setbacks required in Agriculture zones per Appendix B of the Morgan County Zoning Regulations and is sited consistent with the setbacks required for solar collector facilities.

(B) All BESS, including all mechanical equipment, shall be enclosed by a minimum of a six (6) foot tall fence with a self-locking gate to prevent unauthorized access, unless housed in a building dedicated to the BESS. No fencing may interfere with any ventilation or exhaust ports.

The BESS Project and Solar Project will be enclosed by an eight-foot-tall fence, consisting of seven feet of chain link and one foot of barbed wiring. All four access points to the surrounding Project will be gated and locked to limit access to authorized personnel. The two proposed entry points to the BESS area will also be gated and locked. Knox boxes and keys will be provided at all locked entry points to assure emergency personnel access.

(C) All BESS, their components, and associated ancillary equipment shall be placed with required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with applicable electric code, as adopted by the State of Colorado.

The Applicant will ensure that the BESS is installed consistent with applicable electric codes and designed to comply with working space clearances and weatherproofing elements.

3.0 IMPACT ON ADJACENT USES, OFF-SITE IMPACTS, & IMPACTS TO COUNTY SERVICES & CAPITAL FACILITIES

3.1 Impacts on Existing Adjacent Uses & Off-site Impacts

Existing surrounding adjacent uses include the Tri State Story substation to the west, low-density rural agricultural residences to the northwest, west, and southwest, open rangeland to the north, east, and south, the Brush Municipal Airport northeast, across Highway 34, and an existing Pinneo cattle feedlot north of Highway 34.

The BESS Project would be compatible with existing surrounding adjacent land uses. The BESS Project would not result in significant adverse impacts to surrounding properties. Potential impacts are limited to fugitive dust, traffic, and noise during the construction phase. During operations, the BESS facility would be operated remotely and generate little to no daily traffic, generate no air emissions, emit no glare, and is sited and designed to minimize noise impacts. A discussion of potential impacts and proposed mitigation measures are detailed per Section 4.0.

Offsite impacts are limited to increased traffic and potential noise and fugitive dust resulting from vehicle traffic during construction along the Project Haul Route detailed per Figure 3. Proposed mitigation measures to minimize fugitive dust and noise impacts are detailed in Section 4.0.

3.2 Impacts on County Services & Capital Facilities

3.2.1 Capital Facilities, Social Services, & Infrastructure

The BESS Project is not expected to require additional community or local government services beyond those currently provided in the area. The BESS Project development is not expected to result in additional significant demand for transportation infrastructure, educational facilities, social services, housing, or public transportation.

The Applicant will enter into a Road Use Agreement with Morgan County to address impacts on County Roadways from transportation of heavy equipment resulting from construction as further discussed in Section 2.8.1. Oversized vehicles delivering BESS Project components may result in temporary traffic delays. Applicant or their contractors will hire flaggers to maintain adequate levels of traffic flow as needed and Applicant's contractors will obtain necessary oversized and overweight vehicle permits to authorize transportation and delivery of these loads.

No new water or wastewater infrastructure will be necessary for the Project.

3.2.2 Waste Management

Solid waste generated by the BESS Project during construction and operations will be handled by a solid waste hauling and management firm contracted by the Applicant or its designated contractor(s). Waste will be separated by type, collected, and transported to the appropriate facility in a manner that complies with applicable federal, state, and local regulations, and minimizes potential impacts to the surrounding community. Waste materials will be handled, stored, and disposed of in a manner that controls fugitive dust, fugitive particulate conditions, blowing debris, leakage into the soil or surface water or groundwater, and other potential nuisance conditions. Project construction is not expected to require onsite treatment, storage, or disposal of hazardous wastes that will require hazardous waste permits. No extremely hazardous materials, as defined by 40 Code of Federal Regulations part 355, are anticipated to be produced, used, transported, or disposed of during Project construction. Any hazardous wastes generated during construction will be properly characterized and managed by the Applicant and their contractor(s). The handling of hazardous materials and waste will be done in accordance with all federal, state, and local laws and regulations.

3.2.3 Public Safety Services

The BESS Project is not anticipated to result in a significant increase in demand for public safety services.

The BESS Project is located within the boundaries of the Brush Fire Protection District. Brush Fire Station 1 is located approximately 2.15 miles west of the Project site. The Hillrose-Snyder Fire Protection District boundary is approximately one mile north of the Project site. Prior to construction, the Applicant will work with Morgan County, The Brush Rural Fire Protection District, Brush Volunteer Fire Department, and the Hillrose-Snyder Fire Protection District.

During construction and operations, the Applicant will ensure local Fire Departments have 24/7 access to the BESS Project site to respond to emergency incidents. Knox boxes and keys will be installed at locked entrance gates for emergency personnel access. Site access roads will be constructed up to 20 feet in width with compacted all weather gravel. During site construction and operations, the Applicant will maintain sufficient water sources and portable fire extinguishers on site for emergency use. Water would be stored on site in above ground tanks and/or cisterns. The water tanks and/or cisterns will be located and installed per compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency.

The Project facility layout is designed to provide defensible space for fire protection throughout construction and operation of the facility. Ongoing maintenance would be provided to ensure removal of vegetation and other flammable materials from the defensible space areas. Vegetation control at the site will use materials and methods that ensure groundwater protection.

The Solar Project arrays will consist of non-combustible materials (aluminum, steel, or glass). The Project solar modules are designed to be resistant to fire, and the racks are constructed of non-combustible steel and aluminum. The solar panels and other electrical equipment will meet applicable Underwriters Laboratories and International Electrotechnical Commission ratings for their resistance to fire.

The BESS components are detailed on the specifications attached hereto as Appendix A-7. The BESS is outfitted with a liquid cooled thermal management system, a fire detection and suppression system including a fire suppression clean agent to prevent the spread of fire, gas detection, and NFPA 69 ventilation system for explosion control. E-Stops are also provided on the terminal ends of each BESS container to facility an emergency shutdown if necessary.

An Emergency Operation Fire Mitigation Plan has been prepared for the Project and is included as Appendix H. The plan addresses proper response plans for potential emergency events, facility evacuation details, emergency contacts, system safety considerations, battery fire protection system information, and firefighting considerations. Prior to construction, the Applicant will work with local fire personnel to ensure the Project's compliance with applicable fire safety regulations. The Applicant will also provide on-site training for surrounding departments to reduce fire risk at the Project.

3.2.4 Benefits

The Project is anticipated to result in economic benefits for the following taxing jurisdictions: Morgan County and Morgan County School District RE-2 (Morgan County 2023c).

Local, regional, and state employment will benefit those in the construction trades including heavy equipment operators, truck drivers, engineers, laborers, craftsmen, electricians, supervisory personnel, and construction management personnel. Prior to and during construction, the Project will utilize both local and non-local consultants and contractors for the design and construction. The design and construction scopes of work are typically bid out to a range of consultants and contractors. It is the Applicant's preference to utilize local labor as much as is practicable and will direct those acting on their behalf to carry the same preference depending on the availability, experience, and qualifications of available local firms and laborers. Workers originating outside the labor market area will be expected to remain in the region only throughout the duration of construction.

4.0 ENVIRONMENTAL IMPACT ANALYSIS

4.1 Air Quality

The 1963 Clean Air Act (as amended; 42 U.S.C. 7401) requires government agencies to monitor air pollution and promote air pollution prevention and control programs. The BESS Project Area is within the Eastern High Plains monitoring region of Colorado (CAPCD 2023). As of August 30, 2023, Morgan County, Colorado is in attainment for all U.S. Environmental Protection Agency (EPA) criteria pollutants (EPA 2023). Currently, local emission sources in the Project vicinity include personal and commercial vehicle emissions, aircraft emissions at the nearby Brush Municipal Airport, and agricultural operations.

It is anticipated that the Project construction and operations will result in additional, negligible amounts of pollutants including particulate matter, diesel particulates, and carbon monoxide. The construction phase of the Project will temporarily cause fugitive dust related to the following activities: grading activities, preparation of the staging and equipment laydown area, excavation and construction of equipment pads, the mixing and preparation of concrete, and construction of access roads. Fugitive dust may also be generated by vehicular traffic associated with construction and operation of the Project, and by the delivery of materials to and within the Project Area. The emissions

from the Project construction would be limited in duration to 12 months per phase and emissions from the Project operation would be zero or near zero. Therefore, Project emissions are not anticipated to significantly contribute to ozone, particulate matter, or other air pollutants within the Eastern High Plains monitoring region.

The Colorado Air Quality Control Commission requires an Air Pollutant Emissions Notice (APEN) and associated fees to be submitted to the Colorado Department of Public Health & Environment (CDPHE), Air Pollution Control Division when a Project proposes to disturb more than 25 acres or construction will last greater than 6 Months. The Applicant or their contractor will submit the Land Development APEN: Form APCD-223 prior to the start of construction. To comply with county and state air quality regulations, methods for limiting dust and maintaining air quality during construction would be implemented. Vehicles and equipment will comply with applicable state and federal emission standards and will be properly maintained to minimize exhaust emissions.

A Wind and Water Erosion Control Plan is included as Appendix I which details best management practices (BMPs) that will be utilized to prevent wind and water erosion and run-off during construction.

The Applicant will prepare a Fugitive Dust Control Plan in accordance with CDPHE requirements for the Land Development APEN prior to construction. Dust control measures include watering unpaved roads and earthen areas with limited vegetation, covering exposed piles of dirt, maintaining low vehicle speeds within the Project Area, covering stockpiles during sustained wind events, installing tire wash out stations at site entrances to minimize track out, and covering truck loads. Water would be applied regularly to disturbed areas and stockpiles during construction to prevent the addition of particulate matter/fugitive dust into the local airshed. Additional BMPs would be implemented as needed from the EPA national menu of BMPs and may be used as necessary during construction to help limit dust.

4.2 Dust and Odor

See Section 4.1 above for details on the potential fugitive dust impacts resulting from the Project and proposed mitigation measures.

Given the surrounding land use, current odors present at the BESS Project Area likely include fugitive odors from the operation of the Brush Municipal Airport, Pinneo cattle feedlot, and vehicle emissions along nearby roads. Local traffic volume would increase in and around the BESS Project Area during construction. The increased traffic would temporarily increase odors from vehicle emissions. Odors are also anticipated from the operation of heavy machinery during construction. Impacts from odors during Project operation would be minimal and are likely limited to emissions from the vehicles of maintenance personnel. Overall, the impacts of odors from Project construction and operation are anticipated to be minimal and insignificant. As a result, no specific mitigation has been identified for odor impacts and no management of odors would be performed during construction or operation.

4.3 Noise Receptors, Ordinances, and Conformance

Current sources of noise in the BESS Project Area include wind, distant road and highway vehicles, and surrounding cattle feed lot and airport operations.

Temporary noise impacts during construction would occur during daylight hours through the operation of construction equipment, including, but not limited to, passenger vehicles, graders, loaders, water trucks, semi-tractor/trailer trucks, and hydraulic hammers. The spatial distribution of construction noise emissions would vary during the day and depend on the type of activity. Construction traffic would generate noise along the project access routes (Figure 3). This noise would be temporary during commuting hours and when supplies are delivered over the course of construction.

Sources of noise during operation would include temporary vehicle noise from maintenance personnel access and typical noise emissions from the Project substation transformers, inverters, and BESS. The metal frame battery energy storage containers are insulated and air conditioned. Operation of the air conditioning equipment used to cool the batteries would be the dominant source of noise during operation of the proposed project. Each BESS container utilizes HVAC units. A secondary noise source would be the inverters which generate sound while converting generated electricity from direct current to alternating current. The proposed Project locate the inverter units between the BESS containers, providing noise shielding.

Construction and operation of the Project will not significantly increase noise at surrounding properties and will comply with the statutory provisions for maximum permissible noise levels for industrial zoning as defined per C.R.S. § 25-12-103. Construction projects are subject to the noise standards specified for industrial zones. Table 5 details the noise standards defined by the state, as referenced per the Morgan County zoning regulations.

Table 5. Colorado Noise Standards

Zone	7:00 a.m. to 7:00 p.m.	7:00 p.m. to 7:00 a.m.
Residential	55 dBA	50 dBA
Commercial	60 dBA	55 dBA
Light Industrial	70 dBA	65 dBA
Industrial	80 dBA	75 dBA

BESS Project construction activity would only occur during daylight hours, limiting the period for potential construction noise disturbance. Noise from inverters would be mitigated by the spatial layout of the Project and by the design of the inverters used. Typically, inverters are placed towards the interior of the BESS containers to minimize cable lengths. This causes inverters to be located in between BESS containers. Therefore, noise emitted from the inverters would be shielded by the BESS, and indistinguishable from background noise levels. Inverter noise emissions would be further minimized by the design of the inverter model(s), which would be equipped with shielding, filtering, and noise cancellation. BESS facilities generate noise from HVAC components; however, based on the proposed BESS facility location, no impacts to surrounding residences would occur. The BESS Project layout is designed in accordance with the minimum setbacks required for BESS facilities per the Morgan County Zoning regulations. The BESS area is sited more than one mile from existing rural residences located in the vicinity of the BESS Project Area. Based on typical sound levels anticipated from Project operation, the distance from the equipment to the Project boundary will mitigate the effect of noise generated by the Project.

4.4 Existing Vegetation

According to the U.S. Geological Survey (USGS) National Land Cover Database (USGS 2019), the dominant land cover in the Project Area is grassland/herbaceous covering 4,161.6 acres or 93.62 percent (Table 6). A Tetra Tech biologist visited the Project site April 25-26, 2023. The Project Area was dominated by needle and thread grass (*Hesperostipa comata*), blue gramma (*Bouteloua gracilis*), and smooth brome (*Bromus inermis*). The Project Area is located in a predominately arid rangeland comprised of shrubland and grassland. No irrigated activities were observed within the Project Area (Appendix J).

Table 6. Land Use and Land Cover Present in the Project Area

Land Use/Land Cover ¹	Acres	Percent of Project Area
Grassland/Herbaceous	4,161.6	93.62
Scrub/Shrub	271.8	6.11
Developed Open Space	8.7	0.20
Developed, Low Intensity	3.1	0.07
Cultivated Crops	0.01	0.00
Total	4,445.2	100%

Source: 2019 National Land Cover Database (USGS 2019)

Existing rangeland will be converted to power generation use for the lifetime of the Project. Construction will have long term impacts on existing vegetation as result of removal of vegetation within the Project Area for the installation of project facilities and access roads.

Construction activities will also result in temporary impacts to existing vegetation, including soil disturbance and compaction. Disturbed areas outside of the proposed access roads, project substation, and BESS area will be revegetated with a native seed mix. Site vegetation will be maintained throughout the Project life by the Applicant.

As required by the Colorado Noxious Weed Act (C.R.S. 35-5.5-103), Morgan County has defined specific management for each List B noxious weed species (CDA 2023). Per Morgan County Code Section 3-700, The Applicant will plan to employ a program to control the growth of noxious and other weeds as part of the general property maintenance.

4.5 Special-Status Wildlife and Other Species of Concern

The Applicant contracted Tetra Tech to prepare a Wildlife Habitat Assessment for the Project consisting of a desktop review and field survey to document existing habitat and biological resources, including special status species and raptor nests that may be impacted by Project development (Appendix J).

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) online tool and Colorado Parks and Wildlife (CPW) online databases were used to identify federally and state-listed species and other special status species (e.g., species protected by Bald and Golden Eagle Protection Act) that may occur within or near the vicinity of the Project Area.

Tetra Tech conducted a field survey on April 25th and 26th, 2023 to verify and characterize current land cover types in the Project Area that may provide suitable habitat for protected species. General landcover and wildlife observations within the Project Area were typical for the ecoregion. The

following species were identified during the field visit: mourning dove (*Zenaida macroura*), coyote (*Canis latrans*), black-tailed prairie dog (*Cynomys ludovicianus*), European starling (*Sturnus vulgaris*), rock dove (*Columba livia*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), horned lark (*Eremophila alpestris*), and the western meadowlark (*Sturnella neglecta*). Unidentified small mammal burrows were also observed. Additionally, suitable nesting substrate within the Project Area was observed, however, no raptor nests were observed within a half-mile of the Project Area (Appendix J).

The USFWS and CPW sources reviewed for the assessment identified 10 protected species that have the potential to occur within the Project Area. However, no USFWS-designated critical habitat is present within the Project Area. A summary of the sensitive species' preferred habitat and potential for occurrence in the Project Area are detailed per Table 7 and further discussed in the Wildlife Habitat Assessment Report (Appendix J).

Based on the desktop analysis of land cover data, aerial imagery, range maps, and observations during the field survey, the following special status species may occur within the Project Area: bald eagle (foraging), burrowing owl (breeding) and golden eagle (foraging). All other special status species listed in Table 7 are unlikely to occur in the Project Area due to the absence of suitable habitat.

Table 7. Federally and State Listed Species Potentially Occurring within the Project

Common Name	Scientific Name	Status	Habitat Associations	Likelihood of Occurrence
Mammals				
Gray wolf	<i>Canis lupus</i>	FE; SE	Found in temperate forests, mountains, tundra, taiga, grasslands, and deserts. Morgan County is outside the current range of this species.	Unlikely—N/A. This species only needs to be considered for projects that include predatory management.
Bird				
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA	Typically found near large bodies of water that support fish populations and waterfowl. Will perch and nest in tall deciduous or coniferous trees near water.	Unlikely—Breeding Unlikely—Wintering Low—Foraging
Golden eagle	<i>Aquila chrysaetos</i>	BGEPA	Partly open country with native grassland vegetation. Nests on cliffs and in trees.	Unlikely—Breeding Unlikely—Wintering Low—Foraging
Burrowing owl	<i>Athene cunicularia</i>	ST	Typically found in prairie dog colonies in open areas with short grass and where suitable ground squirrel and badger burrows can be found, such as golf courses, cemeteries, airports, vacant lots, and pastures.	High to Moderate—Breeding Unlikely—Wintering
Piping Plover	<i>Charadrius melodus</i>	FT; ST	Occurs in reservoirs, lakes, and rivers with sand and gravel areas and sparse vegetation.	Unlikely
Whooping crane	<i>Grus americana</i>	FE; SE	Occurs in freshwater marshes, wet prairies, shallow lakes, and lagoons.	Unlikely
Fish				

Common Name	Scientific Name	Status	Habitat Associations	Likelihood of Occurrence
Pallid sturgeon	<i>Scaphirhynchus albus</i>	FE	Found in large river systems with firm sandy bottoms (e.g., the Missouri River). No streams are within the Project Area.	Unlikely
Flowering Plants				
Ute ladies'-tresses orchid	<i>Spiranthes diluvialis</i>	FT	Found in moist meadows associated with perennial stream terraces, floodplains, and oxbows at elevations below 6,500 feet.	Unlikely
Western prairie fringed orchid	<i>Platanthera praeclara</i>	FT	Found in unplowed, calcareous prairies and sedge meadows.	Unlikely
Insect				
Monarch butterfly	<i>Danaus plexippus</i>	FC	Found throughout the United States in open fields and meadows with milkweed (primarily <i>Asclepias</i> spp.). Milkweed is an obligate host plant for monarch larvae. Several milkweed species occur in Colorado in a variety of habitats such as grasslands, disturbed areas, wetlands, and irrigation ditches. Adults feed on milkweed and other flowering plants.	Unlikely

BGEPA = Bald and Golden Eagle Protection Act; FT = Federally Listed Threatened; FC = Candidate for Federal Listing (not a statutory category); ST = State Threatened; SE = State Endangered

The Applicant plans to implement the following measures to avoid, minimize, or mitigate potential impacts to protected species that could occur in the Project Area.

- If construction is to occur during the bird breeding season (generally from February 15 to July 31 for most species), a follow up raptor survey will be conducted prior to the start of construction to determine species and nest status prior to construction activities so that all raptor nests within 0.5 mile of the Project Area can be mapped and avoided. If raptor nests are active, species-specific nest avoidance buffers will be implemented per CPW's Recommended Buffer Zones and Seasonal Restriction for Colorado Raptors (CPW 2020), of which the largest buffer is 0.5 mile for bald and golden eagles (CPW 2020).
- A CPW-protocol burrowing owl survey (CPW 2021) will be conducted prior to construction activities to determine whether burrowing owls are present within 0.25 mile of the Project. CPW recommends no permitted, authorized, or human encroachment activities within 0.25 mile (1,320 feet, 400 meters) of the nest site for large industrial disturbances during the nesting season, March 15 through August 31.
- Project infrastructure, including facilities and access roads will be consolidated to the extent possible to minimize the amount of land that is disturbed and fragmented.
- Prior to installation of fencing, the interior of the fenced area would be searched to avoid entrapping wildlife. The enclosed facility would be checked regularly during operations to prevent accidental trapping of wildlife to the extent possible.

- The Project Area will not be lit at night to minimize wildlife attraction to Project infrastructure and limit impacts to hunting, migration, or other nocturnal activities of wildlife.

The Applicant has shared the results of the Wildlife Habitat Assessment with CPW and conducted an initial coordination call on October 13, 2023. The Applicant is awaiting receipt of CPW's letter of recommendation however anticipates receipt prior to the initial public hearing. The Applicant will send notice of the initial public hearing date to CPW when scheduled by the County. A copy of CPW's letter of recommendation will be provided to Morgan County once received. The Applicant will continue to coordinate with CPW to determine possible recommended BMPs and/or avoidance measures for construction activities.

4.6 Wetlands and Other Waters of the United States

The Applicant contracted Tetra Tech to prepare a wetland and other waters of the U.S. (WOTUS) assessment to identify potentially jurisdictional wetlands and/or other WOTUS within the Project Area. A Wetland Delineation Report was prepared for the Project in May 2023 and is included as Appendix K.

A desktop survey of surface waters was conducted using the USFWS National Wetlands Inventory (NWI) dataset (USFWS 2023), USGS National Hydrography Dataset (NHD) viewer (USGS 2023a), and Colorado Wetland Inventory database (CWI 2023). The results of the desktop analysis indicated no potential wetlands and waterways exist within the Project Area.

A Tetra Tech wetland scientist conducted a site visit on April 25th & 26th 2023, to perform a wetland and other WOTUS delineation within the Project Area. No wetlands or waterbodies were identified within the Project Area.

4.7 Water Use & Resources

The Applicant will implement strategies and practices that ensure responsible and efficient water consumption throughout the project's construction and lifespan operations. The Project will prioritize the use of non-potable water sources for site maintenance and dust control. By minimizing water usage and maximizing conservation, the Project will contribute to sustainable development and reduced environmental impact.

The Project will not require the use of a public water supply system. An affiliate of the Applicant is the option holder for the Project parcels, thus all water rights for the Project would be obtained upon closing. There are several existing deep-water wells located on the subject property (Figure 4). The Applicant will perform further studies to determine the feasibility of utilizing the existing deep-water wells for various project needs. These studies will encompass a comprehensive analysis of water quality, assessing parameters such as pH, dissolved minerals, and contaminants. Additionally, an assessment of well yield will be conducted to ascertain the sustainable pumping rate and availability of water resources. By conducting these studies, the Applicant aims to ensure that the Project's water requirements align with the capacity and quality of the available deep-water wells, thus contributing to the overall success and sustainability of the Project.

In the event offsite water is required, water will be sourced off site and transported to the Project site via water trucks to be stored onsite in above ground tanks and/or cisterns. The Project will have minimal effects on overall water availability and will not burden local water resources.

Water use during construction would occur over the 12 months needed to construct each phase of the Project. Much of this water would be used for dust control but would also be used for hydration and compaction, backfill, cement stabilization and equipment cooling. The estimated water use during construction is approximately 470-acre feet per phase of construction.

During operations, water would be used for cooling equipment and supporting establishment of vegetation around the site. Approximately 30.6 acre-feet of water is estimated to be used per year during operations. The total estimated water usage during each phase of construction and during operations is detailed per Table 8 below.

Table 8. Estimated Water Usage

	Phased Construction (200 MW)	Operations (600 MW)
Assumed Acre Feet (AF) / MW ¹	2.35 AF / Year	0.051 AF / Year
Total Water Usage (non-potable)	470 AF	30.6 AF / Year

Source: Klise et al., 2013

4.8 Floodplains

Tetra Tech reviewed the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels, 08087C0490E and 08087C0500E effective May 18, 2021, and FIRM panels 08087C0652D and 08087C0675D, effective April 4, 2018. The Project is located in Zone X, which are areas determined to be outside the .2% annual chance floodplain (FEMA 2023).

4.9 Stormwater Runoff

A Drainage and Run Off Control Plan, and supporting Drainage Study were prepared for the project in October 2023 and are included as Appendix A-2 and L. Site grading and drainage improvements will be designed to contain post development stormwater run-off on site. Prior to the start of construction, the Applicant will obtain a permit for any stormwater discharges occurring during the construction phase of the Project in compliance with the COR400000 General Permit under the Colorado Water Quality Control Act.

In addition, the Applicant will manage temporary facilities to control erosion and sediment releases and to protect Project facilities from flooding during construction in accordance with the General Permit requirements. A Wind and Water Erosion Control Plan is included as Appendix I which identifies BMPs that will be utilized to prevent erosion and run off during construction.

4.10 Cultural Resources

The Applicant contracted Tetra Tech to prepare a Cultural Resources Survey Report for the Project in September 2023 (Appendix M). The Cultural Resources Survey Report documents the results of archival research including a records search, review of previously conducted survey reports, and review of historic maps. The purpose of the cultural investigation was to provide cultural and historical context

of the Project site, identify any cultural resources located within the Project site, re-record a previously recorded site located within the Project Area and determine the Project's potential to affect potential and recorded historic and cultural resources.

A desktop records search was conducted through the Colorado Historic Society/Office of Archaeology and Historic Preservation Cultural Records online database. The Research Area includes the Project Area and a one-mile buffer. The search revealed that 12 prior surveys have taken place within the Research Area, but do not intersect the Project Area.

A total of 18 cultural resources have been previously recorded in the Research Area, including structures, archeological sites, and isolated finds (IF). These resources include several transmission line segments, one prehistoric IF, three historic IFs, two agricultural complexes, an agricultural equipment dump, a trash dump, and a trash scatter. One site (5MR.698) is listed as recommended eligible for listing in the National Register of Historic Places (NRHP), although the site form states that the site is recommended not eligible. One segment of the Beaver Creek to Deering Lake transmission line (5MR.696) is the only resource located within the Project Area and has been determined not eligible for listing in the NRHP.

Tetra Tech Archeologists conducted a site visit on June 27, 2023, to review the site located within the Project Area (5MR.696). Site 5MR.696 is a segment of Western Area Power Association's Beaver Creek to Deering Lake Transmission line. The State Historic Preservation Office has been previously determined the site as not eligible for listing in the NRHP. Tetra Tech agrees with this assessment of the site and recommends that the site is not eligible for listing in the NRHP.

The Cultural Resource Survey Report concludes the Project is unlikely to have an adverse effect on cultural resources. Site 5MR.696 has been determined as not eligible for the NRHP. Thus, construction-related disturbance of, or visual impacts to, this resource would not be considered an adverse effect. In addition, the potential to encounter additional resources is considered low due to the low site density and relatively low archaeological sensitivity of the Project Area.

Prior to construction, the Applicant will develop an Unanticipated Discovery Plan which will outline procedures to follow, in accordance with state and federal laws, if archaeological materials or human remains are discovered.

4.11 Visual Amenities

4.11.1 Visual Impacts

The visual setting within the Project is primarily undeveloped herbaceous grassland. Development within the vicinity of the Project site includes an electrical substation, overhead transmission lines, and rural residences.

The potential for aesthetic impacts from BESS projects is based on the type of technology, the scenic quality of the existing landscape, the degree to which the project will change scenic quality, and the viewer response to the change. Visual sensitivity, a key component of viewer response, is dependent on viewer attitudes and the types of activities in which people are engaged when viewing the site. Overall, higher degrees of visual sensitivity are correlated with areas where people live, are engaged in recreational outdoor pursuits, or participate in scenic driving. Conversely, visual sensitivity is

considered low to moderate in industrial, commercial, and rural areas where the scenic quality of the environment does not affect the value of the activity.

No state-designated scenic roads (including scenic roads, historic roads, and parkways designations) or federally designated scenic roads (including national scenic byways and All-American road designations) within the Project site or vicinity (CDOT 2023b).

There are no public parks, recreation areas, or public gathering areas within view of the Project site. Drivers on County Road R, R.5, Q, and Highway 34 and adjacent rural residences would be the closest sensitive receptors to the Project site. The BESS area is sited more than a mile from existing rural residences in the vicinity of the Project site.

Tetra Tech anticipates that the Project would be considered low-moderate for visual sensitivity. The Project would visually contrast with the existing undeveloped rangeland. However, the Project will be consistent with the existing Tri-State owned electrical substation located west of the Project site. In addition, the gently sloping topography of the site provides a visual buffer of the Project Area from the nearby surrounding residences and roadways.

The Project is sited to provide a 500' buffer from existing inhabited buildings, and a 70' buffer or greater from exterior parcel boundaries and existing roadways. Six-foot-tall chain link fencing with one foot of barbed wire will be installed along the perimeter of the Project site boundary to provide an additional visual buffer.

4.11.1 Glint & Glare Analysis

Tetra Tech conducted a Glint and Glare analysis for the Solar Project which is included as Appendix N and further detailed per the concurrent Solar Project SUP applications.

4.12 Landforms

Morgan County is located in the Colorado Piedmont section of the Great Plains Physiographic Province. Underlying bedrock consists primarily of the Cretaceous Age Foxhills Sandstone and Pierre Shale that gently slopes east. The landforms of Morgan County consist primarily of typical Great Plains uplands and the broad valley of the South Platte River (Morgan County 2008).

The BESS Project will impact a small portion of this area and will not affect the general landform in the Project Area. The natural contours of the land will be returned where feasible following construction.

4.13 Soils

Tetra Tech reviewed the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey to identify and characterize the soils within the Project site. Based on desktop data, four distinct soil types are present within the Project Area (USDA 2023; Table 9). The dominate soil unit is Valent sand, 3 to 9 percent slopes (3,144 acres and 70.7 percent of the Project Area). The Project does not contain any prime farmland, and all present soil types are rated as non-hydric (USDA 2023).

Table 9. Soils that Occur in the Project Area

Soil Name	Soil Unit	Acres	Farmland Classification	Hydric Rating (%)	Drainage Class
Truckton loamy sand, 0 to 3 percent slopes	TuB	176.1	Not Prime Farmland	Non-Hydric (0%)	Well Drained
Valent sand, 0 to 3 percent slopes	Va	1,123.1	Not Prime Farmland	Non-Hydric (0%)	Excessively Drained
Valent sand, 3 to 9 percent slopes	VcD	3,144.6	Not Prime Farmland	Non-Hydric (0%)	Excessively Drained
Valent sand, 3 to 9 percent slopes	VwD	1.7	Not Prime Farmland	Non-Hydric (0%)	Excessively Drained

Source: USDA 2023

Impacts to soils are anticipated to be temporary during the construction phase of the BESS Project. Activities impacting soils include the clearing of vegetation and grading of areas for access roads and installation of BESS Project facilities. Clearing and grading exposes soils to a risk of erosion from wind and stormwater. Impacts to soils during operations are anticipated to be minimal from use of access roads by operations and maintenance staff. The NRCS assigns wind erodibility groups to measure soil susceptibility to wind erosion. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. Soil types within the Project site are in either group 1 or 2, indicating high susceptibility to wind erosion (USDA-NRCS 2023). The NRCS also assigns a K Factor Rating which indicates the susceptibility of a soil to sheet and rill erosion by water. K factor values range from 0.02 to 0.69. The higher the value, the more susceptible. Soil types within the Project site have a low K factor indicating low potential for sheet and rill erosion by water (USDA-NRCS 2023). A Water and Wind Erosion Control Plan is included as Appendix I, which details detail erosion control measures and construction stormwater runoff management for the Project.

Appropriate BMPs and stormwater mitigation measures will be employed during construction and operation of the Project to avoid erosion that might be caused by the Project.

4.14 Farmland of Statewide Importance

Tetra Tech reviewed the USDA NRCS Web Soil Survey, and the Project Area does not contain any prime, unique, or farmland of statewide importance. All soils within the Project Area are rated as “Not Prime Farmland” (USDA 2023). Therefore, no impacts to prime, unique, or farmland of statewide importance is anticipated to result from development of the Project.

5.0 SITE MAPS & PLANS

5.1 Vicinity Map

The Project vicinity map is provided as Appendix A-1.

5.2 Special Use Map/Site Plan

The Project Special Use Map/Site Plan is provided as Appendix A-2.

5.3 Schematic Drawings

Schematic elevation drawings of the BESS and inverters are included in Appendix A-5.

5.4 One-Line Drawing

A one-line drawing of the BESS is included as Appendix A-6.

5.5 Specification Sheets

Preliminary specification sheets for the BESS and inverters are included as Appendix A-7.

5.6 Drainage & Runoff Control Plan & Drainage Study

A Drainage and Runoff Control Plan and supporting Drainage Study are included as Appendix A-2 and L.

5.7 Water & Wind Erosion Control Plan

The Water and Wind Erosion Control Plan is provided as Appendix I.

5.8 Decommissioning Plan

The Decommissioning Plan prepared in accordance with Section 4-835 is provided as Appendix O.

5.9 Geotechnical Report

The Applicant certifies that prior to construction, a professional engineer licensed in Colorado will complete a geotechnical study that includes the following:

1. Soils engineering and engineering geologic characteristics of the site based upon on-site sampling and testing.
2. Foundation and tower systems design criteria for all proposed structures.
3. Slope stability analysis.
4. Grading criteria for ground preparation, cuts and fills, and soil compaction.

The geotechnical report detailing results of the study will be provided to Morgan County upon completion.

5.10 Maintenance Statement

The Applicant has prepared a maintenance statement for the system and property describing the anticipated maintenance and property upkeep that will occur during operation of the hybrid solar and BESS facility. The Maintenance Statement is provided as Appendix P.

5.11 Emergency Operations & Fire Mitigation Plan

The Project will implement adequate fire control and prevention measures during construction and operations as further detailed per the Emergency Operations and Fire Mitigation Plan included as Appendix H.

6.0 PUBLIC OUTREACH

The Applicant conducted a public open house meeting held on September 6, 2023, at Petteys Park golf course located at 2301 West Mill Street, Brush, Colorado. The public open house was noticed on the Project's website, through an informational flyer that was mailed to all landowners within a half-mile radius of the Project and was advertised in the local newspaper for two weekly circulations prior to the meeting. Additionally, the informational flyer was posted to the Morgan County Bulletin Board Facebook page.

Throughout the Project's planning and permitting process, the Applicant has contacted and coordinated with various agencies and local officials including the Morgan County Planning & Building Department, Morgan County Road and Bridge Department, Morgan County Economic Development Committee, City of Brush, Colorado Department of Wildlife, Colorado State Historic Preservation Office, Brush Volunteer Fire Department, Brush Rural Fire Protection District, Morgan County Sherriff's Office and Brush Police Department. In general, the purpose of these coordination efforts was to provide information on the Project, request feedback, and answer questions. In addition, the Applicant recently became a new member of the Morgan County Economic Development Committee.

An Environmental Justice Analysis and Communications Plan were prepared for the Project. The plans are included as Appendix Q-1 and Q-2. A Public Outreach Summary detailing public outreach completed to date is included as Appendix Q-3.

7.0 CITIZEN REVIEW PROCESS

The SUP request will require a public hearing for which a minimum of 10 days' public notice is required. The SUP request will be noticed pursuant to Morgan County Zoning Regulations Section 2-390. A list of adjoining landowners within 1,320' of the Project site and their mailing addresses is provided as Appendix R.

Site notices will be posted on the property fronting each adjacent right of way at least 10 days prior to each scheduled public hearing date in accordance with Morgan County Zoning Regulations Section 2-390 (B).

8.0 VESTED RIGHTS

The Applicant hereby respectfully requests that vested rights be granted for the BESS Project for a period of six years. The development schedule and phase timing are set forth in Section 2.6.1 (Table 2) above. Vested right is appropriate here because this a multi-phase Project that will be built out over several years.

9.0 REFERENCES

- CAPCD (Colorado Air Pollution Control Division). 2022. 2021 Air Quality Data Report, Technical Services Program, Colorado Department of Public Health and Environment. Available online at: tech_doc_repository.aspx (colorado.gov) (accessed May 2023).
- CDOT (Colorado Department of Transportation). 2023. Online Traffic Information System Traffic Data Explorer. Available online at: [Traffic Data Explorer \(coloradodot.info\)](https://trafficdataexplorer.coloradodot.info). Accessed September 2023.
- CDA (Colorado Department of Agriculture). 2023. County Weed Programs. Available online at: <https://ag.colorado.gov/conservation/noxious-weeds/county-weed-programs>. Accessed September 2023.
- EPA (U.S. Environmental Protection Agency) 2023. Current Nonattainment Counties for All Criteria Pollutants. Available online at: <https://www3.epa.gov/airquality/greenbook/ancl.html>. Accessed September 2023.
- FAA (Federal Aviation Administration). 2023a. Circle Search for Airports. Available online at: <https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showCircleSearchAirportsForm>. Accessed February 2023.
- FAA. 2023b. Notice Criteria Tool. Available online at: <https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm>. Accessed February 2023.
- FEMA (Federal Emergency Management Agency). 2023. National Flood Hazard Layer. Available online at: <https://www.fema.gov/flood-maps/national-flood-hazard-layer>. Accessed February 2023.
- Klise, G., Tidwell, V., Reno, M., Moreland, B., Zemlick, K., & Macknick, J. (2013). Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern United States [Review of Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern United States]. Sandia National Laboratories. <https://www.osti.gov/servlets/purl/1090206>
- Morgan County. 2008. Morgan County Comprehensive Plan. Available online at: <https://morgancounty.colorado.gov/sites/morgancounty/files/Comprehensive-Plan-2008.pdf>. Accessed September 2023.
- Morgan County. 2023a. Parcel Viewer App. Available online at: <https://morgancountyco.maps.arcgis.com/apps/Solutions/s2.html?appid=98b97c7f37e2453f85938d547d2b7f11> (accessed May 2023).
- Morgan County. 2023b. Morgan County Zoning Regulations. Available online at: <https://morgancounty.colorado.gov/sites/morgancounty/files/documents/Zoning%20Regulations%20-%20012323.pdf> (accessed May 2023).
- Morgan County. 2023c. Morgan County School Districts. Available online at: <https://morgancountyco.maps.arcgis.com/apps/Solutions/s2.html?appid=516c27c48c514af8bdb94071966688b8>. Accessed September 2023.

USDA-NRCS (U.S. Department of Agriculture Natural Resources Conservation Service). 2023. Web Soil Survey. Available online at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm> . Accessed September 2023.

Fortress Solar Project, Phase II Special Use Permit Application



For Submittal to:



MORGAN COUNTY PLANNING
ZONING & BUILDING DEPT.
231 Ensign, P.O. Box 596
Fort Morgan, Colorado 80701
PHONE (970)542-3526
FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

Prepared for:

Fortress Solar II LLC,
11801 Domain Blvd, Suite 450
Austin, TX 78758

Prepared by:



1560 Broadway, Ste 1400
Denver, CO 80202



MORGAN COUNTY PLANNING
 ZONING & BUILDING DEPT.
 231 Ensign, P.O. Box 596
 Fort Morgan, Colorado 80701
 PHONE (970)542-3526
 FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

PERMIT # SU 2023 - 0022

Date Received	<u>11 / 8 / 23</u>	Received By	<u>JS</u>
App Fee	<u>\$5000</u>	CK/CC #:	<u>091045071</u>
Minor Amend Fee:	\$	CK/CC #:	
Recording Fee	\$	CK/CC #:	
PC Date:	<u>2/12/24</u>	BOCC Date:	<u> / /</u>
100 Year Floodplain?	<u>Y/N</u>	Taxes Current?	<u>Y/N</u>

SPECIAL USE PERMIT APPLICATION

(Also to be used as application for Amendments to Existing Special Use Permits)

Landowner **MUST** Sign Application and Right to Farm Policy

APPLICANT

LANDOWNER

Name Fortress Solar II LLC
 Address 11801 Domain Blvd, Suite 450
Austin, TX 78758
 Phone _____
 Email _____

Name See Attached Table
 Address _____
 Phone () _____
 Email _____

BRIEF DESCRIPTION OF APPLICATION

Proposed 200 MW utility scale solar facility. Phase II of the Fortress Solar Project.

PROPERTY LEGAL DESCRIPTION

Address (if available):

See attached parcel information table

S: ___ T: ___ R: ___ ___ 1/2 ___ 1/4 ___ 1/4 Property Size _____ (sq. ft. or acres)
 Parcel #: _____ - _____ - _____ Zone District: A
 Subdivision: _____ Lot #(s): _____

Is property located within 1320' (1/4 mile) of a livestock confinement facility? Y/N

SEE REQUIRED ATTACHMENT LIST ON BACK OF THIS PAGE.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED OR PROCESSED.

SPECIAL USE PERMIT REQUIRED ATTACHMENT LIST

Fee:

Non-Refundable Application Fee

**Additional fees and charges may be required pursuant to Section 2-160 of Morgan County Zoning Regulations*

Project Narrative:

Narrative– Including the following:

- Project Description
- Purpose of request
- How this proposal complies with the Morgan County Comprehensive Plan
See: <https://morgancounty.colorado.gov/sites/morgancounty/files/Comprehensive-Plan-2008.pdf>
- How this project/proposed use meets the criteria for Special Use Permit pursuant to Sec. 2-395 of the Zoning Regulations
- How the project/proposed use meets any specific criteria related to the project/proposed use. *See Morgan County Zoning Regulations Chapter 4-Supplementary Regulations, including but not limited to: Campgrounds, Livestock Confinement, Kennels, Outdoor Shooting Ranges, Home Occupations, Oil and Gas, Mobile Home Parks, Wireless Service Facilities, Solar, Wind and BESS*
- How project will relate to or impact existing adjacent uses
- All off-site impacts and proposed mitigation measures
- Development or implementation schedule of project
- Proposed length of time the permit, if applicable
- Discussion of any public improvements required to complete the project

Environmental Impacts:

- Discuss any environmental impacts the Special Use will have on the following and the proposed mitigation measures:

- | | | | |
|--------------------------------------|-----------------------------------|----------------------------------------------|------------------------------------------|
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Dust | <input type="checkbox"/> Existing Vegetation | <input type="checkbox"/> Land Forms |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Odor | <input type="checkbox"/> Storm Water Runoff | <input type="checkbox"/> Water Resources |
| <input type="checkbox"/> Wetlands | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Visual Amenities | <input type="checkbox"/> Other _____ |

Map & Plans: **Special Use Map** meeting the requirements of Sec. 2-420 and any specific map requirements for the proposed use including but not limited to: *Campgrounds, Livestock Confinement, Kennels, Outdoor Shooting Ranges, Home Occupations, Oil and Gas, Mobile Home Parks, Wireless Service Facilities, Solar, Wind and BESS. Sample Map attached to application for reference*

Drainage/Run-Off Control Plan may be required if the Planning Administrator determines that the use or building meets one of the following criteria:

- (1) The accessory use or building may have a drainage impact on adjacent properties;
- (2) The accessory use or building may have a drainage impact on adjacent right of ways;
- (3) The accessory structure is 5000 square feet or larger.

Decommissioning Plan [Wind, Solar, BESS]

Geotechnical Report [Wind, Solar]

Maintenance Statement [Wind, Solar, BESS]

Water and/or Wind Erosion Control Plan [Wind, Solar]

Fire Mitigation Plan [BESS]

Specification Sheet [BESS]

Emergency Operation Plan [BESS]

Ownership: **Current title insurance commitment (last 6 months)**

Mineral Rights Holders Notification

Notice to FFA & Approval Letter [Wind]

Notice to Operator of Communication Link (if applicable) [Wind]

Proof of current paid taxes

Utilities/Access: **Water tap (Engineering Report from Quality Water or proof of access to a well)**

Sewer (Septic Permit, Will Serve Letter from NCHD or proof of other public system)

Electric (Electric bill or letter of commitment from electricity provider)

Driveway Permit from CDOT or Morgan County Road & Bridge (If required by staff)

Ditch Company- Proof of contact if there is a ditch on or next to subject property

Architecture Control Approval (if applicable)

Utility Interconnection or Crossing Certification [Wind, Solar]

Road Agreement [Wind, Solar]

Electrical Diagram [BESS]

Vested Rights: **Vesting Rights** (Optional). If applying for vested rights with special use application, the following must be submitted:

- Period of time Vesting Rights are requested
- Development schedule including timeline and phases
- Reason for request
- Other pertinent factors concerning the development
- Additional application fee for vesting rights application

Miscellaneous: **Right to Farm Policy** signed by Landowner(attached)
 Liability Insurance for Solar, Wind and/or BESS projects

1 # Paper Application sets

1 Digital Copy of Application (One sided only)

Posted Public Notice Verification:

Notarized affidavit with photographs from a distance & close-up

This must be submitted PRIOR to Planning Commission hearing and PRIOR to Morgan County Board of Commissioners hearing

Additional Information required by staff:

APPLICANT & LANDOWNERS **MUST** SIGN APPLICATION ON NEXT PAGE

APPLICANT & LANDOWNER'S STATEMENT

I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge.
Application must be signed by landowners as shown on title insurance/commitment.

Charles Ndhlovu 10/18/2023
Applicant Signature Date

Leith Ann Odle 10/25/23
Landowner Signature Date

Applicant Signature Date

Landowner Signature Date

APPLICANT & LANDOWNER'S STATEMENT

I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge.
Application must be signed by landowners as shown on title insurance/commitment.

Charles Ndhlovu

Applicant Signature

10/18/2023

Date

Shari A Benotte

Landowner Signature

10-24-23

Date

Applicant Signature

Date

Landowner Signature

Date



MORGAN COUNTY, PLANNING, ZONING & BUILDING DEPT.

231 Ensign, P.O. Box 596
 Fort Morgan, Colorado 80701
 PHONE (970) 542-3526 FAX (970) 542-3509

MORGAN COUNTY RIGHT TO FARM POLICY / NOTICE

Morgan County is one of the most productive agricultural counties in Colorado. Ranching, farming, animal feeding, and all other manner of agricultural activities and operations in Morgan County are integral and necessary elements of the continued vitality of the county's economy, culture, landscape and lifestyle. Morgan County specifically recognizes the importance of agricultural operations as necessary and worthy of recognition and protection.

Landowners, residents and visitors must be prepared to accept as normal the effects of agriculture and rural living. These may include noise from tractors, equipment, and aerial spraying sometimes at night or in the early morning; dust from animal pens, field work, harvesting, and gravel roads; odor from animal confinement operations, silage and manure; smoke from ditch burning; flies and mosquitoes; the use of pesticides and fertilizers, including aerial spraying; and movement of livestock or machinery on public roads. Under the provisions of the State of Colorado's "Right to Farm" law (Section 35-3.5-101 and following, C.R.S.), all normal and non-negligent agricultural operations may not be considered nuisances.

Also public services in a rural area are not at the same level as in an urban or suburban setting. Road maintenance may be at a lower level, mail delivery may not be as frequent, utility services may be nonexistent or subject to interruption, law enforcement, fire protection and ambulance service will have considerably longer response times, snow may not be removed from county roads for several days after a major snow storm. First priority for snow removal is that school bus routes are normally cleared first.

Children are exposed to different hazards in a rural setting than they are in an urban or suburban area. Farm and oilfield equipment, ponds, and irrigation ditches, electrical service to pumps and oil field operations, high speed traffic, noxious weeds, livestock, and territorial farm dogs may present real threats to children. It is necessary that children's activities be properly supervised for both the protection of the children and protection of the farmer's livelihood.

All rural residents and property owners are encouraged to learn about their rights and responsibilities and to act as good neighbors and citizens of Morgan County. This includes but is not limited to obligations under Colorado State law and Morgan County Zoning Regulations regarding maintenance of fences, controlling weeds, keeping livestock and pets under control. There may be provisions of which you are unaware. For example, because Colorado is a Fence Law State, owners of property may be required to fence livestock out.

Information regarding these topics may be obtained from the Colorado State University Cooperative Extension Office and the County Planning and Zoning Department, and County Attorney.

RECEIPT AND STATEMENT OF UNDERSTANDING

I hereby certify that I have received, read, and understood the Morgan County Statement of Policy and Notice regarding Right to Farm.

I further state that I am aware that the conditions of living in an unincorporated area are different than living in a town or city and that the responsibilities of rural residents are different from urban or suburban residents. I understand that under Colorado law that a pre-existing, non-negligent agricultural operation may not be considered a public or private nuisance.

Ruth Ann Odle _____ 10-25-23
 Signature Date
 Ruth Ann Odle _____
 Printed Name
 16218 Hwy. 71 _____
 Address
 Brush, CO 80723 _____

To Be Signed by Landowner

Adopted by the Morgan County Board of County Commissioners by Resolution #96BCC41 on July 23, 1996 and amended by Resolution 2008 BCC 34 on September 2, 2008.



MORGAN COUNTY, PLANNING, ZONING & BUILDING DEPT.
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Shari A. Benotti 10/24/23
 Signature Date

SHARI A. BENOTTI
 Printed Name

2420 THORNDON PARK CT.
 Address

LEAGUE CITY, TX 77573

To Be Signed by Landowner

Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF FORMATION OF "FORTRESS SOLAR II LLC", FILED IN THIS OFFICE ON THE THIRTIETH DAY OF OCTOBER, A.D. 2023, AT 2:42 O`CLOCK P.M.




Jeffrey W. Bullock, Secretary of State

2556335 8100
SR# 20233846648

Authentication: 204478325
Date: 10-30-23

You may verify this certificate online at corp.delaware.gov/authver.shtml

STATE OF DELAWARE
CERTIFICATE OF FORMATION
OF LIMITED LIABILITY COMPANY

The undersigned authorized person, desiring to form a limited liability company pursuant to the Limited Liability Company Act of the State of Delaware, hereby certifies as follows:

1. The name of the limited liability company is Fortress Solar II LLC
_____.

2. The Registered Office of the limited liability company in the State of Delaware is located at 1209 Orange Street (street), in the City of Wilmington, Zip Code 19801. The name of the Registered Agent at such address upon whom process against this limited liability company may be served is The Corporation Trust Company
_____.

By: 
Authorized Person

Name: Christie Kneteman
Print or Type

Participating Landowners Contact Information

Name	Address	Phone	Email
Shari Benotti	2420 Thorndon Park League City, TX 77573	Available upon request	Available upon request
Ruth Ann Odle	16218 Hwy 71 Brush, CO 80723-9436	Available upon request	Available upon request
Tri State Generation	1100 W 116 Ave, Westminster, CO 80234	Available upon request	Available upon request

Aypa Power Story Solar Participating Landowner Parcel Information

APN	Account Number	Property Owner	Legal Description
1233-060-00-001	R002875	Tri-State Generation and Transmission Association Inc.	S: 06 T: 3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
123101000002	R004487	Tri-State Generation and Transmission Association Inc.	S: 01 T: 3 R: 56 E1/2E1/2 B908 P721 (CORRECTION SECTION)
123101000700	R700033	Tri-State Generation and Transmission Association Inc	S: 01 T: 3 R: 56 PARC E1/2 B801 P134 **STATE ASSESSED**
1233-060-00-002	R002949	Shari A Benotti	S: 06 T: 3 R: 55 S1/2S1/2 (CORRECTION SECTION)
1233-070-00-001	R002950	Shari A Benotti	S: 07 T: 3 R: 55 N1/2N1/2 (CORRECTION SECTION)
1231-120-00-001	R003925	Shari A Benotti	S: 12 T: 3 R: 56 N1/2NE1/4
1231-120-00-002	R003918	Ruth Ann Odle	S: 12 T: 3 R: 56 SE1/4NE1/4 & E1/2SE1/4
1233-070-00-002	R002827	Ruth Ann Odle	S: 07 T: 3 R: 55 S1/2N1/2 & S1/2 (CORRECTION SECTION)
1233-050-00-001	R002837	Ruth Ann Odle	S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T:

			4 R: 55 PARC SW1/4 S OF RR
1233-080-00- 001	R002838	Ruth Ann Odle	S: 08 T: 3 R: 55 ALL
1233-040-00- 002	R002841	Ruth Ann Odle	S: 04 T: 3 R: 55 ALL S OF RR (CORRECTION SECTION)
1233-090-00- 001	R002842	Ruth Ann Odle	S: 09 T: 3 R: 55 ALL
1233-030-00- 003	R002835	Ruth Ann Odle	S: 03 T: 3 R: 55 S1/2 S OF RR & S1/2NW1/4 S OF HWY 34
1233-100-00- 001	R002839	Ruth Ann Odle	S: 10 T: 3 R: 55 ALL

Special Use Permit Application

Fortress Solar Project- Phase II

Morgan County, Colorado

November 2023

Submitted to:

Morgan County Planning and Zoning
231 Ensign Street, PO Box 596
Fort Morgan, CO 80701



Prepared for

Fortress Solar II LLC

11801 Domain Blvd, Suite 450
Austin, TX 78758

Prepared by



1560 Broadway, Ste 1400
Denver, CO 80202

Morgan County Special Use Permit Application Submittal Requirements

The Morgan County Special Use Permit application package for the proposed Fortress Solar Project is organized by sections to follow the Morgan County SUP Application Checklist, provided below. The items identified in the Submittal Requirements are included in the table below with the listing of the application report section addressing the checklist item.

Morgan County Code 2-380 Submittal Requirements / SUP Application Checklist	Application Section
1. Applicant Information	2.5 / Application Form
2. Landowner Information	2.1 / Application Form
3. Property Legal Description	2.1 / Application Form
4. Applicant & Landowner's Statement	Application Form
5. Project Narrative Including the Following: a) Project Description b) Purpose of request c) How this proposal complies with the Morgan County Comprehensive Plan d) How this project/proposed use meets the criteria for the Special Use Permit pursuant to Sec. 2-395 of the Zoning Regulations e) How this project/proposed use meets the specific criteria per Morgan County Zoning Regulations Chapter 4- Supplementary Regulations (Solar) f) How the project will relate to or impact existing adjacent uses g) All off-site impacts and proposed mitigation measures h) Development or implementation schedule of project i) Proposed length of time of the permit j) Discussion of any public improvements required to complete the project	2.0-3.0
6. Discuss any environmental impacts the Special Use will have on the following and the proposed mitigation measures: Air Quality, Dust, Existing Vegetation, Land Forms, Noise, Odor, Storm Water Runoff, Water Resources, Wetlands, Wildlife, Visual Amenities, Other	4.0
7. Maps and Plans	5.0
a) Special Use Map	Appendix A-2
b) Drainage/Run-off Control Plan	Appendix A-2, L, & I
c) Decommissioning Plan	Appendix O
d) Geotechnical Report	5.8
e) Maintenance Statement	Appendix P
f) Water and Wind Erosion Control Plan	Appendix I
g) Fire Mitigation Plan	Appendix H
h) Specification Sheets	Appendix A-7
i) Emergency Operation Plan	Appendix H
8. Ownership Information	2.2
a) Title Commitments	Appendix B
b) Mineral Rights Holders Notification	2.2.6 / Appendix E
c) Proof of Current Paid Taxes	2.2.4 / Appendix D
9. Utilities:	2.6.2
a) Water tap (Will Serve letter or proof of access to a well)	2.6.2.1
b) Sewer (Septic Permit, Will Serve Letter from NCHD or proof of other public system)	2.6.2.2

c) Electric (Electric bill or letter of commitment from electricity provider)	2.6.2.3
d) Utility Interconnection or Crossing Certification	2.6.2.4
10. Access	2.7
a) Morgan County Driveway Permits	Appendix G
b) Ditch Company- Proof of contact if there's a ditch on or next to the subject property	2.2.8
c) Road Agreement	2.8.1
d) Electrical Diagram (BESS)	Appendix A-6
11. Vested Rights	8.0
12. Miscellaneous	
a) Right to Farm Policy	2.2.5 / Application Form
b) Liability Insurance	2.2.3 / Appendix C
c) Posted Public Notice Verification	7.0

Morgan County SUP Criteria Index

The following index is provided to direct the reader to the sections of this SUP Application that correlate to the Morgan County Chapter 2-395 “Review Criteria” identified for Special Use Permits.

The following criteria will be used by the Planning Commission and the Board of Commissioners when reviewing an application for a special use permit:

Morgan County Code 2-395 Special Use Permit Review Criteria	Application Section
A. The use and its location as proposed are in conformance with the Morgan County Comprehensive Plan;	2.11.A
B. All the application documents are complete and present a clear picture of how uses are to be arranged on the site or within Morgan County;	2.11.B
C. The site plan conforms to the district design standards of these regulations;	2.11.C
D. All on and off-site impacts have been satisfactorily mitigated either through agreement, public improvements, site plan requirements or other mitigation measures;	2.11.D
E. The special use proposed has made compatible with the surrounding uses and adequately buffered as determined by the County;	2.11.E
F. The special uses poses only the minimum amount of risk to the public health, safety, and welfare as set by either federal, state or county regulation, whichever is the strictest;	2.11.F
G. The special use proposed is not planned to be developed on a non-conforming parcel;	2.11.G
H. The applicant has adequately documented a public need for the project, all pertinent technical information, adequate financial resources to implement it, and has paid all fees and review costs levied by the County for application processing and review; and	2.11.H
I. For any special use requiring a supply of water that the applicant has demonstrated a source of water which is adequate for the proposed use in terms of quantity and reliability and in the case of human consumption, quantity, quality, and reliability	2.11.I

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APPENDIX N: GLINT & GLARE ANALYSIS

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APPENDIX P: MAINTENANCE STATEMENT

APPENDIX Q-1: ENVIRONMENTAL JUSTICE ANALYSIS

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APPENDIX Q-3: PUBLIC OUTREACH SUMMARY

APPENDIX R: MAILING LIST OF LANDOWNERS WITHIN 1,320 FEET

Acronyms and Abbreviations

AADT	Average Annual Daily Traffic
AC	alternating current
AF	acre-feet
APEN	Air Pollutant Emissions Notice
APN	Assessor's Parcel Number
Applicant	Fortress Solar II LLC
Aypa	Aypa Power North America LLC
BESS	battery energy storage system
BMPs	best management practices
BNSF	Burlington Northern Santa Fe Corporation
CAPCD	Colorado Air Pollution Control Division
CDA	Colorado Department of Agriculture
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health & Environment
CPW	Colorado Parks and Wildlife
dBA	A-weighted decibel
EHS	Environmental Health & Safety
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FIRM	Flood Insurance Rate Map
Gen-tie	generation tie line
Highway 34	U.S. Highway 34
HVAC	heating, ventilation, and air conditioning
I-76	Interstate 76
IF	isolated finds
IPaC	Information for Planning and Consultation
kV	kilovolt
MW	megawatt
MWh	megawatt hours

NERC	North American Electric Reliability Corporation
NHD	National Hydrography Dataset
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
Project	A utility scale solar and BESS project known as the Fortress Solar Project
Project Area	4,259 acre fenced Project boundary
PV	photovoltaic
SGHAT	Sandia Laboratories Solar Glare Hazard Analysis Tool
Solar Project Area	4,069-acre solar project area
SUP	Special Use Permit
Tetra Tech	Tetra Tech, Inc.
Tri State	Tri State Generation and Transmission Association Inc.
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WOTUS	waters of the U.S.

1.0 INTRODUCTION

Fortress Solar II LLC (“Applicant”), an indirect subsidiary of Aypa Power North American LLC (“Aypa”), a Blackstone portfolio company submits this application in furtherance of the development of a utility scale solar and BESS project known as the Fortress Solar Project (the “Project”) in Morgan County, Colorado. The Project will be comprised of a solar collector facility and a BESS facility; the solar collector facility project is referred to herein as the “Solar Project” and the BESS facility project is referred to herein as the “BESS Project”. The Project will be developed in three phases, each phase shall contain one phase of the Solar Project and one phase of the BESS Project. In accordance with the Morgan County Zoning Regulations, three separate solar collector facility applications and three separate BESS facility applications, one for each phase, are submitted simultaneously. In order to provide Morgan County (“County”) with a complete picture of the Project, each of the three Solar Project applications includes information on all three phases, each phase corresponding to its own application. The total fenced Project boundary will encompass approximately 4,259 acres (the “Project Area”). The Solar Project, inclusive of all three phases, is an up to 600-megawatt (MW), 2,400 MW hour (MWh) solar photovoltaic (PV) array facility and will encompass up to 4,069 acres within the Project Area (“Solar Project Area”). This application is for Phase II of the Solar Project and is submitted in conjunction with the application for Phase II of the BESS Project. Phase II of the Solar Project will encompass approximately 1,439 acres.

In accordance with the foregoing, the Applicant respectfully submits this Special Use Permit (SUP) application to the Morgan County Planning and Development Department pursuant to Morgan County Code Chapter 4-820, and Chapter 4-825, to address utility-scale Solar Collector facilities. The Applicant is requesting an SUP to construct, operate, maintain, and decommission the Solar Project. The Project will be located on private land in unincorporated Morgan County located approximately 1.6 miles east of the city of Brush, Colorado (Figure 1, Project Location, Appendix A-1). The Project Area is comprised of eleven parcels, and the proposed generation tie (gen-tie) line would bisect three additional parcels (Appendix A-2) that are located within the Morgan County Agricultural Production Zone. The ALTA survey for the Project Area is included as Appendix A-3.

Phase II of the Project includes an approximately 1,439-acre solar array area. Associated with Phase II are the Project’s 2-acre Project substation, a 167-acre gen-tie line easement, and an operations and maintenance building. A 21-acre utility scale battery energy storage system (BESS) referred to as the BESS Project, is proposed within the Project boundary. The BESS component is addressed per separate SUP applications submitted simultaneously herewith. The SUP application submitted for Phase II of the BESS Project is to be reviewed concurrent with the subject Phase II solar SUP application.

The Project Vicinity Map is provided as Appendix A-1. The Site Plan and Special Use Map are included as Appendix A-2. The ALTA survey prepared for the Project is provided as Appendix A-3. A site access plan is included Appendix A-4. Schematic drawings of the Project components are detailed in Appendix A-5 and a one-line electrical drawing of the BESS is provided as Appendix A-6. Preliminary specification sheets are provided as Appendix A-7. The SUP application form and Right to Farm Policy is provided in front of this application narrative following the Applicant’s cover letter.

2.0 PROJECT NARRATIVE

2.1 Project Location & Participating Landowner Parcel Information

The Project is located on approximately 4,259 acres of private property currently held under purchase option by an affiliate of the Applicant, which will be assigned to the Applicant prior to the exercise of the option (Appendix A-2). Phase II of the Solar Project will encompass approximately 1,439 acres. The Project is located along U.S. Highway 34 (Highway 34), on existing rangeland approximately 1.6 miles east of Brush, Colorado. Table 1 below lists the assessor's parcel and property owner information for the Project parcels.

Table 1. Participating Property Owners Parcel Information

Assessor Parcel Number (APN)	Account Number	Property Owner	Legal Description
1233-060-00-001	R002875	Tri-State Generation and Transmission Association Inc.	S: 06 T: 3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
1231-010-00-002	R004487	Tri-State Generation and Transmission Association Inc.	S: 01 T: 3 R: 56 E1/2E1/2 B908 P721 (CORRECTION SECTION)
1231-010-00-700	R700033	Tri-State Generation and Transmission Association Inc	S: 01 T: 3 R: 56 PARC E1/2 B801 P134 **STATE ASSESSED**
1233-060-00-002	R002949	Shari A Benotti	S: 06 T: 3 R: 55 S1/2S1/2 (CORRECTION SECTION)
1233-070-00-001	R002950	Shari A Benotti	S: 07 T: 3 R: 55 N1/2N1/2 (CORRECTION SECTION)
1231-120-00-001	R003925	Shari A Benotti	S: 12 T: 3 R: 56 N1/2NE1/4
1231-120-00-002	R003918	Ruth Ann Odle	S: 12 T: 3 R: 56 SE1/4NE1/4 & E1/2SE1/4
1233-070-00-002	R002827	Ruth Ann Odle	S: 07 T: 3 R: 55 S1/2N1/2 & S1/2 (CORRECTION SECTION)
1233-050-00-001	R002837	Ruth Ann Odle	S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T: 4 R: 55 PARC SW1/4 S OF RR
1233-080-00-001	R002838	Ruth Ann Odle	S: 08 T: 3 R: 55 ALL
1233-040-00-002	R002841	Ruth Ann Odle	S: 04 T: 3 R: 55 ALL S OF RR (CORRECTION SECTION)
1233-090-00-001	R002842	Ruth Ann Odle	S: 09 T: 3 R: 55 ALL
1233-030-00-003	R002835	Ruth Ann Odle	S: 03 T: 3 R: 55 S1/2 S OF RR & S1/2NW1/4 S OF HWY 34
1233-100-00-001	R002839	Ruth Ann Odle	S: 10 T: 3 R: 55 ALL

Source: Morgan County 2023a

2.2 Property Interests, Rights, and Policies

2.2.1 Easements & Agreements

An affiliate of Applicant is currently the option holder for the Project site. The option to purchase agreement(s) are for a total of 4,473 acres (407 acres of Benotti; 1,897 acres of Odle Option 1; 2,170 acres of Odle Option 2) and extend until the end of 2024. On October 18th, 2023, an affiliate of the Applicant entered into a Temporary License Agreement with Tri State Generation and Transmission Association Inc. (Tri-State) to allow for completion of surveying and other investigative activities on the Tri-State owned properties. The Applicant intends to establish an access easement across Tri-State owned parcels for access to the Project from County Road R.5. In addition, the Applicant intends to establish an approximate 167-acre ROW utility easement for the proposed generation tie line to interconnect the Project to the Tri-State owned substation west of the Project.

2.2.2 Title Commitments

The title insurance commitments (last 6 months) for all participating landowners within the Solar Project Area are included as Appendix B, excluding the 80-acre Odle Parcel, 1233-040-00-002. The Applicant encountered a title conveyance issue when completing the title search for the Solar Project parcel 1233-040-00-002. The Applicant is working on curing the title issue for this parcel and anticipates completing a corrective deed. The Applicant will provide copy of the title insurance commitment for parcel 1233-040-00-002 when received.

2.2.3 Liability Insurance

The Applicant will carry liability insurance to cover loss or damage to persons or structures during construction and operation of the Solar Project. A copy of the Applicant's liability insurance policy certificate for the Odle property is included as Appendix C. The Applicant's contract for the Benotti property does not require them to obtain a liability insurance certificate.

2.2.4 Proof of Current Paid Taxes

Proof of current tax payment for the participating landowners are included as Appendix D.

2.2.5 Right to Farm Policy

Participating landowner signatures certifying the receipt, review, and understanding of the Morgan County Statement of Policy and Notice regarding the Right to Farm are provided on the SUP application form.

2.2.6 Mineral Right Holder Notification

The mineral right holders within the Solar Project boundary will be provided with a preliminary notice advising them of their right to comment or request information from Morgan County. At this time, a hearing date has not yet been scheduled for the SUP application. The Applicant will notify the individual mineral rights holders within the Project in advance of the scheduled hearing as required by Morgan County and statutory notification requirements. Upon finalization of the hearing schedule, the

Applicant will coordinate with Morgan County to ensure all appropriate mineral rights holders are provided proper notice of the scheduled hearing and an opportunity to provide comment.

A preliminary list of the mineral rights holders that will be notified in advance of the scheduled hearing is included as Appendix E.

2.2.7 Height Restrictions and FAA Hazard Review

According to the Federal Aviation Administration (FAA), the Brush Municipal Airport (FAA identifier 7V5) is located less than a mile northwest of the Project Area (FAA 2023a). Tetra Tech Inc. (Tetra Tech) consulted the FAA Obstruction Evaluation Notice Criteria Tool (FAA 2022b) for four locations in the Project Area and determined that the Project exceeds the Notice Criteria and would require filing. The Applicant will file notice with the FAA at least 45 days prior to the start of construction.

2.2.8 Ditch Company- Proof of Contact

No drainage or irrigation ditches have been identified within the Solar Project Area.

2.3 Zoning District

The Solar Project is located in the Agriculture Production zoning district (Morgan County 2023a). Per Morgan County Code Section 3-180, Solar Collector facilities may be permitted in the Agricultural Production zoning district through issuance of an SUP.

2.4 Purpose of Request

The purpose of this application is to provide Morgan County with pertinent information regarding the Solar Project, subject to the Morgan County Zoning Regulations concerning the regulation of wind energy, solar collector, and battery energy storage systems (Morgan County 2023b). Per Morgan County Code, Section 3-180, solar collector facilities greater than 20 acres in size may be permitted as a primary use in the Agriculture Production zoning district through issuance of a special use permit. Therefore, the purpose of the SUP is to authorize the proposed use of a Solar Collector facility on the Solar Project site to allow for the development and operation the Solar Project.

2.5 Applicant Information

The Applicant is an indirect subsidiary of Aypa. Aypa is a Blackstone portfolio company. Aypa has a proven track record of developing, financing, constructing, owning, and operating utility-scale renewable energy and battery energy storage projects. Aypa's existing portfolio and qualified development pipeline spans the continental United States and Ontario, Canada, including +15,000 MWs of projects in various stages of development. Aypa currently has an operating fleet of 30 projects, two projects are currently under construction, and over 70 projects are in the development pipeline.

2.6 Project Description

The Project is an up to 600-MW, 2,400 MWh hybrid solar and BESS project. The solar arrays, tracking systems, BESS, inverters, substation, and appurtenant facilities would be located on approximately 4,259 acres. The site layout is detailed per the Special Use Map/Site Plan included as Appendix A-2.

2.6.1 Development Schedule and Phasing

The Solar Project is expected to be constructed in three phases of approximately 200 MW, 800 MWh each. Construction of the Solar Project is anticipated to commence in Q2 2025 pending approval of County permits. The Project will be developed in parallel with the BESS Project.

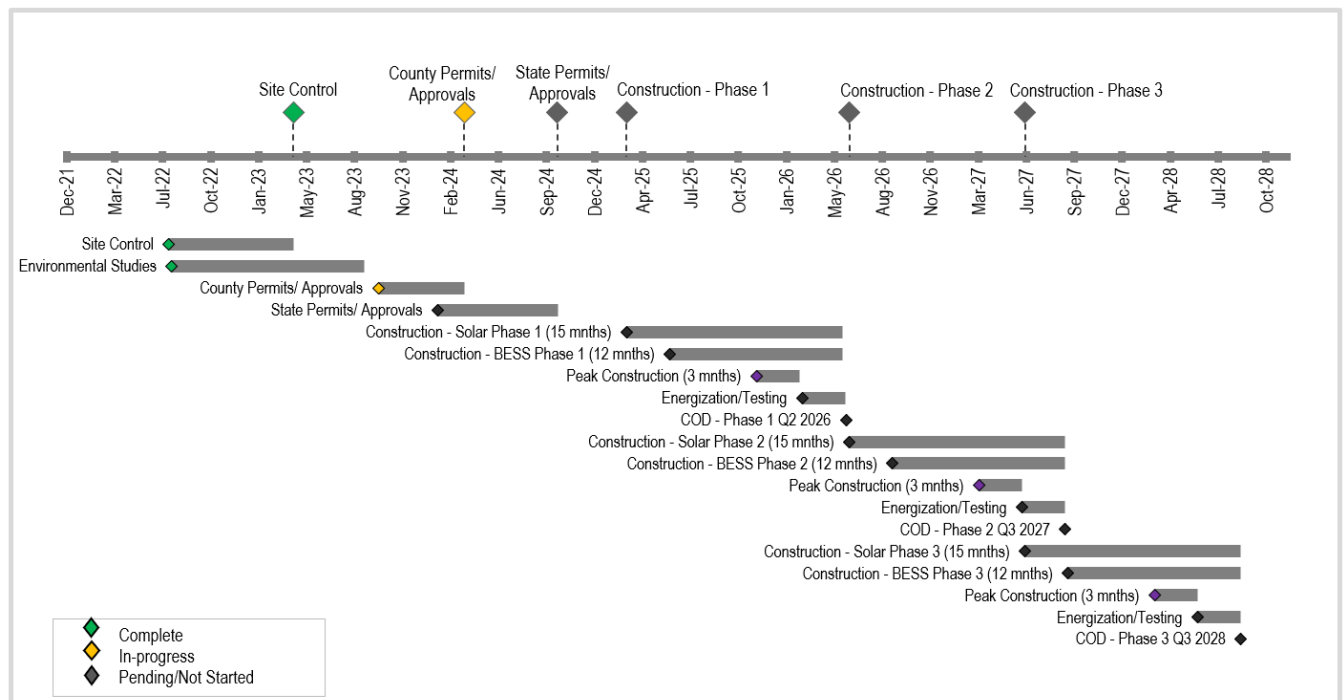
The proposed phasing is detailed per Table 2 below. All associated phasing quantum included in the application should be summed together in such cases in which multiple phases are constructed at the same time. This application is inclusive of maximum and minimum cases of individual and simultaneous phasing. As noted above, this application is for Phase II of the Solar Project.

Table 2. Project Construction Phasing

Phase	APNs	Solar MW	Solar MWh	Start Construction	End Construction	Commercial Operation Date
1	1231-120-00-001, 1231-120-00-002, 1233-060-00-002, 1233-070-00-001, 1233-070-00-002	200	800	Q2 2025	Q1 2026	Q2 2026
2	1233-050-00-001, 1233-080-00-001, 1233-040-00-002, 1233-030-00-003	200	800	Q1 2026	Q2 2027	Q3 2027
3	1233-090-00-001, 1233-100-00-001, 1233-030-00-003	200	800	Q1 2027	Q2 2028	Q3 2028

The overall development schedule for the Solar Project and BESS Project are detailed per Figure 2-1 below.

Figure 2-1. Fortress Solar II LLC - Overall Schedule (Solar & BESS)



2.6.2 Anticipated Permit Timeframe & Length of Permit

Per Section 4-845 of the Morgan County Solar Facility Regulations, a SUP for a Solar Collector facility is valid for three years, provided that substantial construction and installation of the facility is completed within that time. The Project construction for each phase is anticipated to be completed within 15 months upon issuance of a building permit. If construction is delayed due to unforeseen circumstances, the Applicant will request extensions, as permitted per Section 4-845 of the Morgan County Code. The Applicant understands the SUP approval may expire if substantial construction progress is not achieved within three years, or up to six years if such extensions are requested and granted.

2.6.3 Siting Considerations

The primary criteria for determining the location of Solar Collector facilities include the existence of compatible adjacent and nearby land uses, suitable topographic conditions, and the proximity to existing electrical infrastructure, major transportation corridors, utility corridors, and electrical load centers. The proposed Solar Project site meets these criteria. The Solar Project site was selected based on proximity to the existing infrastructure of the Tri State Generation and Transmission Association Inc. (Tri State) Story substation. Siting analysis confirms the proposed Project Area avoids areas or locations with a high potential for biological conflict, such as wilderness study areas, areas of environmental concern, historic trails, special management areas, or important wildlife habitat or corridors. The proposed site avoids visual corridors that are prominent scenic viewsheds or scenic areas. As discussed in Section 4.0, there are no known sensitive biological, hydrological, historical, cultural, or archeological resources within or near the proposed Project site.

2.6.4 Photovoltaic Solar Panels & Tracking System

The Solar Project would use PV technology by which the sun's light energy is converted directly into direct current (DC) electrical energy within the PV panels, referred to as modules. The PV modules are configured in solar arrays by electrically connecting them in series (strings) and connecting strings together at combiner boxes. The PV panels would be supported on single axis trackers that track the sun's position during the day.

Per the preliminary design, the Project will use a module blend of Vertex bifacial PV panels (Appendix A-7). Approximately 1,944,180 PV modules are proposed across 617,359 tracker rows. Phase II of the Solar Project would be comprised of approximately 648,060 PV modules across 205,786 tracker rows. The exact model and quantity of panels will be finalized during the detailed engineering phase. The panels would be installed on a racking system with support piles driven into the ground. For maximum efficiency, panels are typically installed between 16 and 24 inches off the ground when at their lowest point. The maximum proposed panel height at full tilt would be 10 feet to the top of the panels from the ground level, once installed.

2.6.5 Electrical Collection System

In accordance with Section 4-825(A)(1) of the Morgan County Code, all electrical interconnection and distribution lines within the Solar Project boundary will be underground, except for power lines that leave the Project or are within the substation. All electrical interconnections and distribution

components will comply the National Electrical Safety Code, requirements of the electric utility company, and applicable state and federal regulatory codes as required by Morgan County.

The electrical collection system would be designed to convert the output power from the PV modules from DC to alternating current (AC), transform the power from low voltage to transmission-level voltage for connection to the grid, and supply auxiliary power to the tracker systems. The DC output from the PV arrays would be transmitted to inverters through underground DC electrical cables. Collection cables from the inverters typically converge at the corners of each of the array blocks and lead underground to the proposed Project substation. Feeder cables enter the substation via conduit and route to the feeder breakers.

The resulting AC current from each individual inverter package is routed through to a medium-voltage step-up transformer. The output voltage from each inverter would be increased to the desired substation feed voltage of 34.5 kilovolts (kV) by these step-up transformers. From the inverter pads, the collected 34.5 kV of AC power would be delivered to the on-site Project substation, where the voltage is then stepped up to 230 kV.

A one-line electrical drawing for the Project is included as Appendix A-6.

2.6.6 Inverters and Transformers

Approximately 241 SMA Sunny Central 4000 UP-US inverters are proposed per the preliminary Project design (Appendix A-7). Phase II of the Solar Project would include approximately 80 inverters. The exact model and number of inverters will be determined at time of final engineering. The inverters are bi-directional and would be connected to the solar arrays via a common connection to the substation medium voltage bus. Each integrated inverter/transformer is expected to have a footprint that measures approximately 20 feet by 8 feet and will not exceed 10 feet in height (Appendix A-5 & A-7).

2.6.7 Battery Energy Storage System

The BESS area would occupy approximately 21 acres of the Project Area and is expected to store a net of 600 MW/2,400 MWh of electricity. The BESS would be initially comprised of 133 SunGrow SC5000UD-MV-US inverters and 1,064 BYD-MC Cube battery containers, augmented over the 25-year life up to approximately 1,330 BYD-MC Cubes located on concrete equipment pads. The exact model and number of containers will be determined at time of final engineering. The BESS will be charged from the Solar Project and the net 600 MWh output will be delivered to the Tri State Story Substation when called upon. The BESS is further addressed per the concurrent SUP applications.

2.6.8 Project Substation & Gen-tie Line Interconnection

The Project substation would occupy approximately 2-acres and is located north of the BESS Project area. The Project substation would consist of power transformers, overhead bus, feeder breakers, and miscellaneous supporting equipment.

The Project substation would include an overhead 1.25-mile, double circuit 230 kV generation-tie (gen-tie) line interconnection to the existing Tri State Story substation located west of the Project. The final engineering for the Project and the gen-tie line has not been completed yet. Nevertheless, Applicant is

considering two options for infrastructure: either H-frame or monopole designs and will be equipped with robust insulators, conductors, and grounding systems to uphold system reliability and safety standards. The anticipated transmission structure heights range from 90 to 110 feet aboveground. The span length between structures will depend on the chosen pole type and conductor. H-frames have an average span of around 750 feet, monopoles around 900 feet, and lattice towers around 1150 feet. Applicant anticipates installation of approximately 8 monopoles, 9 H-frames, or 6 lattice towers based on the final structure chosen during detailed engineering. The final design of these structures will be developed in collaboration with Tri-State and Public Service Company of Colorado to meet all relevant requirements.

The Applicant seeks administrative approval for transmission structures that may exceed the 100-foot height threshold defined for structures in Agriculture Zoning districts. Exceeding this threshold is deemed necessary to ensure adequate clearance for both existing and proposed transmission lines, as well as to comply with safety regulations. The need for structures that exceed 100 feet might be influenced by the procurement strategy that includes equipment availability and lead times. The Applicant will adhere to established utility pole standards, including those for transmission poles, as outlined by the American National Standards Institute and the National Electrical Safety Code.

2.6.9 Operations and Maintenance Building

A 60-foot by 40-foot, 2,400 square foot steel modular operations and maintenance building would be constructed east of the Project Substation, north of the BESS Project area. The O&M building would have a maximum height of fifteen feet and eight inches. Schematic elevation drawings of the O&M building are provided per Appendix A-5. Electric utilities will be extended to serve the O&M building. No water or wastewater services are anticipated for the O&M building. During construction and operation, on-site sanitary wastewater needs will be met with portable restrooms and handwashing units with routine off-site disposal and maintenance.

2.6.10 Perimeter Fencing & Site Security

The Project will be surrounded by an 8-foot-tall fence, consisting of 7-feet of chain-link and one foot of barbed wire (Appendix A-2 & A-5). The Applicant held an initial coordination call with CPW on October 13, 2023. CPW informed the Applicant that fencing recommendations may be provided by per their recommendation letter. The Applicant is awaiting receipt of CPW's letter of recommendation however anticipates receipt prior to the initial public hearing. The Applicant will send notice of the initial public hearing date to CPW when scheduled by the County. A copy of the letter will be provided to Morgan County once received. The Applicant will continue to coordinate with CPW and will consider fencing recommendations. Site entrances will be gated and locked to assure access is limited to authorized personnel.

Exterior lighting would be installed and strategically located to ensure safety and security of the facility without disturbing surrounding areas outside the Project. Lighting would be installed around the periphery of the BESS Project area, substation, and entry gates, for nighttime security. The lighting for facilities will be designed to meet the minimum number of lights and illumination required for safety and security and will not cause excessive reflected glare. The Project is also subject to lighting

requirements of the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC) and will comply with lighting regulations from these entities as well.

2.6.11 Utilities

2.6.11.1 Water System

Per Morgan County Code, Section 4-820 (H), Water System

If the proposed solar collector facility includes uses that must be served by water, the application shall describe the water source and sufficiency of the water supply for the solar collector facility, including decreed or conditional water rights. If a well is required, the applicant shall obtain the necessary permit from the State of Colorado Office of the State Engineer.

The Project will not require the use of a public water supply system. An affiliate of the Applicant is the option holder for the Project parcels, thus all real property rights, including all mineral and water rights for the Project are presently in the Applicant's control. There are several existing deep-water wells located on the subject property (Figure 4). Further studies will be performed by the Applicant to determine the feasibility of utilizing the existing deep-water wells for various Project needs. These studies will encompass a comprehensive analysis of water quality, assessing parameters such as pH, dissolved minerals, and contaminants. Additionally, an assessment of well yield will be conducted to ascertain the sustainable pumping rate and availability of water resources. By conducting rigorous studies in these areas, the Applicant aims to ensure that the Solar Project's water requirements align with the capacity and quality of the available deep-water wells, thus contributing to the overall success and sustainability of the Project.

If the event that offsite water is required, the necessary water input will be obtained from an external source and transported to the Project site via water trucks to be stored in an onsite water tank and/or cisterns. The water tank will be in strict compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency. Since this water supply would be rarely used, the Project will have minimal effects on overall water availability and will not burden local water resources. Consequently, no new water infrastructure will be necessary for the Project. Proposed estimates of anticipated water usage during construction and operations are further detailed in Section 4.7.

2.6.11.2 Sewer/Septic System

Per Morgan County Code, Section 4-820 (G), Septic System

If the proposed solar collector facility includes uses that must be served by a septic system, the applicant shall comply with applicable county requirements. The applicant shall provide a statement certifying that the septic system for the solar collector will comply with applicable County, State, and Federal requirements.

The Project will not require the use of a septic or wastewater system. During construction and operation, on-site sanitary wastewater needs will be met with portable restrooms and handwashing units with routine off-site disposal and maintenance.

2.6.11.3 Electric

The electric service provider for the proposed Project will be selected closer to commencement of construction. At this time, proof of an electric bill or a letter of commitment from the electricity provider will be made available to Morgan County.

2.6.11.4 Utility Interconnection Agreement

Per Morgan County Code, Section 4-820 (D), Utility Interconnection or Crossing

The applicant will provide certification of intent to enter into an interconnection agreement and crossing agreement(s) to/with applicable utilities.

The Project is expected to interconnect to the Tri State Story substation located approximately 1.25 miles west of the Project. The Applicant hereby certifies their intent to enter into an interconnection agreement and crossing agreement with Tri State. A copy of the Temporary Access agreement between Aypa and Tri-State is included as Appendix F.

2.7 Access, Transportation, & Traffic

2.7.1 Access Roads

Primary haul route and construction deliveries to the Solar Project will be provided via one new 20-foot-wide gravel access road constructed off County Road Q. The primary access for operations and construction commuter vehicles will be provided via a new 20-foot-wide gravel access road constructed off County Road R.5. Primary emergency access will also be provided via the access off County Road R.5. Secondary access for operations and construction commuter vehicles will be provided via a new 20-foot-wide gravel access road constructed off County Road R. The Project will be fenced, and security gates will be installed at each access point to limit access to authorized personnel. Gated entrances would be equipped with Knox boxes and keys to assure emergency personnel access. The proposed site access roads and entry points are depicted on Figure 2.

2.7.2 Morgan County Driveway Permits

The Applicant will obtain a driveway access permit from Morgan County for each of the access roads proposed to be constructed from County Roads Rand Q. As noted per Appendix G, a copy of the two driveway permit applications submitted to the Morgan County and Bridge Department are provided per Appendix G of the SUP application submitted for Phase I of the Solar Project. An affiliate of the Applicant has entered into a Temporary License Agreement with Tri State and is in coordination with Tri State regarding the proposed access road from County Road R.5. Tri State will apply for and obtain the driveway access permit on behalf of the Applicant for the access road proposed to be constructed from County Road R.5.

2.7.3 Owner & Employee Commuter Routes

The access routes to be utilized by the landowner and employees during construction and operations are as follows:

Primary Commuter Route: I-76 to County Road R.5: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately .2 mile and will then head east on County Road R.5 until reaching the site entrance. The total Commuter Route length from I-76 is approximately 2.4 miles. This access route will be used for primary emergency access to the Project site.

Secondary Commuter Route: I-76 to County Road R: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately .8 mile and will then head east on County Road R until reaching the site entrance. The total Commuter Route length from I-76 is approximately 3.1 miles.

2.7.4 Construction Haul Route

The haul route to be utilized by heavy vehicle truck traffic throughout construction will be from I-76 to the site access off County Road Q. The Applicant will install a tire washout station at the entrance to the Project site off County Road Q to reduce track out. An exhibit detailing a typical tire washout station is included as Appendix A-8. The construction haul route is depicted on Figure 3 and the site access is also detailed per Appendix A-4, labeled as “Site Access #1”.

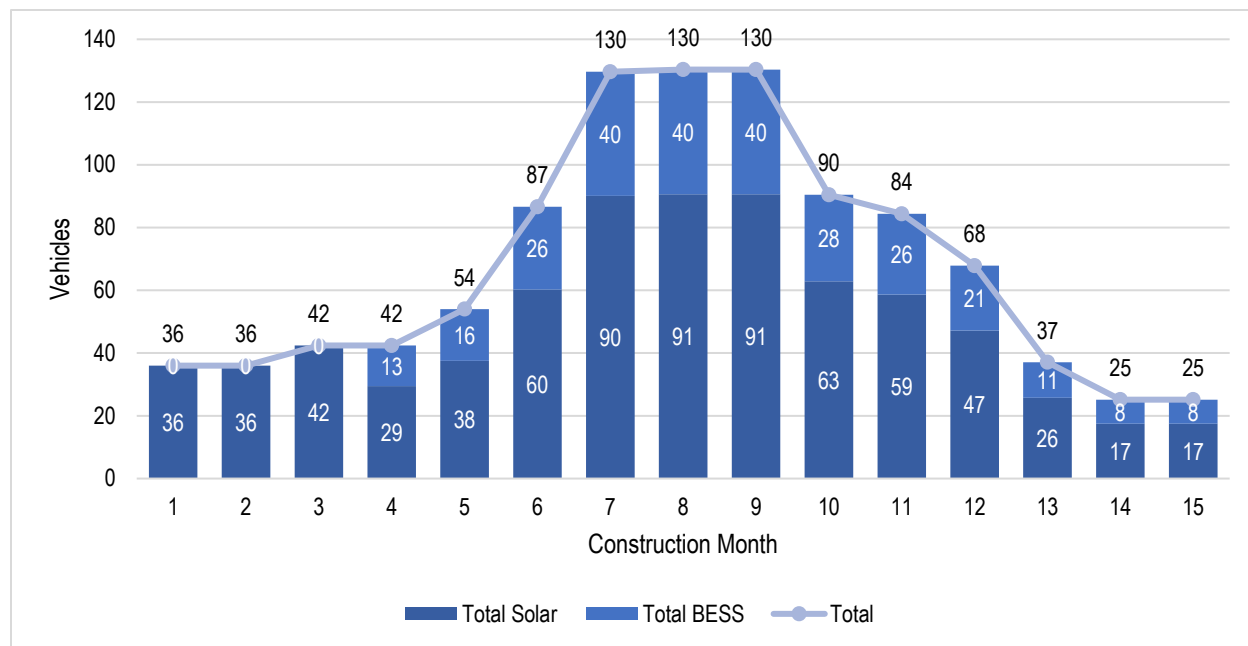
Haul Route: Interstate 76 (I-76) to County Road Q: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately 1.9 miles and will then head east on County Road Q until reaching the site entrance. The total Haul Route length from I-76 is approximately 4.5 miles.

2.7.5 Construction Transportation & Traffic

The construction process for each phase is estimated to take up to 15 months to complete, during which time there would be some variability in the number of workers each day. Project initiation and site preparation would occur over the first 5 months and will require fewer workers and fewer materials delivery truck trips. After the site is prepared for installation, the Project site would experience an increase to a higher maximum number of workers and material delivery truck trips. The peak of construction period for each phase is anticipated to occur over a 3-month period. Upon the completion of construction, testing of the installed equipment for operational reliability and safety will occur over the last 4 months of the construction period. This phase will not require the use of any heavy machinery and will involve a minimal number of workers.

The typical daily construction traffic count for each month in each phase of the Project including the concurrent proposed Fortress BESS facility is detailed per Figure 2-2 below.

Figure 2-2. Typical Daily Construction Traffic Count (Per Phase)



During the peak commuting hours each morning and evening at the peak of construction for each phase of the Solar Project construction, there would be an average of approximately 91 commuter vehicles arriving at or departing from the Project (Figure 2-2). It was estimated that 848 deliveries would be made over the course of each phase of construction. This amount includes 600 trucks delivering solar panel modules, 48 trucks delivering PV inverters, and 200 trucks delivering the panel pile/racking systems. During peak construction, there would be an average range of 7 material delivery truck trips per day. Material delivery trucks are not expected to coincide with the peak hour, rather they would arrive at the Project site throughout the day.

The Colorado Department of Transportation (CDOT) Traffic Data Explorer was accessed to obtain Annual Average Daily Traffic (AADT) counts along the Project haul routes. The AADT counts represent the average number of vehicles traveling on a road segment for a typical day of the year. The AADT data available for the count stations along the Project access routes, the anticipated number of daily trips, and maximum percentage increase in AADT per phase is detailed per Table 3 below.

Table 3. Existing and Anticipated Increase in AADT

Access Route	Existing AADT Counts ¹	Average Estimated Daily Trips	Maximum Percent Increase in AADT (%)
Primary Commuter, Secondary Commuter	Interstate 76, Station 103412: 12,000	196 (91 commuter & 7 delivery)	1.6
	U.S. Highway 34, Station 101481: 3,800		4.8
	State Highway 71, Station 103254: 2,700		7.3

Access Route	Existing AADT Counts ¹	Average Estimated Daily Trips	Maximum Percent Increase in AADT (%)
& Haul Route	State Highway 71, Station 000213: 1,800		10.9

Source: CDOT 2023

2.7.6 Operations Transportation & Traffic

During operations once all three phases are complete, the Applicant anticipates 25 full-time operations and maintenance employees would commute daily to the facility. A total of up to 50 trips per day would occur along access roadways (Figure 2-3). Therefore, the transportation and traffic impacts associated with the Project operation are anticipated to be minimal. The operational phase of the Project is expected to be 30 years but may be extended if facility components are upgraded or replaced. The typical daily traffic count for each operational year of the Project including the concurrent proposed BESS Project is detailed per Figure 2-3 below.

Figure 2-3. Typical Operations Traffic Count



2.7.7 Oversized / Overweight Loads

There are expected to be up to approximately 105 oversized/overweight load deliveries per phase associated with the Project for the transport of high voltage substation equipment, solar inverters, and transformers. The remaining heavy vehicle traffic would be standard size five-axle tractor trailers—some of these would be enclosed, and some would be in the form of flatbed trucks or smaller vehicles. Smaller heavy vehicles are likely to include water trucks, concrete trucks, and aggregate trucks. The Applicant or its contractor would obtain the necessary oversize/overweight permit from CDOT prior to delivery of these oversize/overweight loads.

2.8 Required Public Improvements

2.8.1 Road Use Agreement

Per Morgan County Code, Section 4-820 (K),

If any County roads will be used during construction of a solar collector facility for the purpose of transporting parts, materials and/or equipment, the applicant shall enter into a road agreement with the County. The roads agreement shall comply with Section 4-825 and shall also include the following:

- 1) A map showing which County roads will be used during construction.*
- 2) A pre-construction baseline survey of County roads to be used during construction to document their pre-construction condition. The applicant is responsible for obtaining and paying for the costs of the baseline survey.*
- 3) A mitigation plan to address traffic congestion and potential impacts to County roads to be used during construction.*
- 4) A legally binding agreement between the applicant and the County that requires the applicant to return any County roads to their pre-construction baseline condition.*

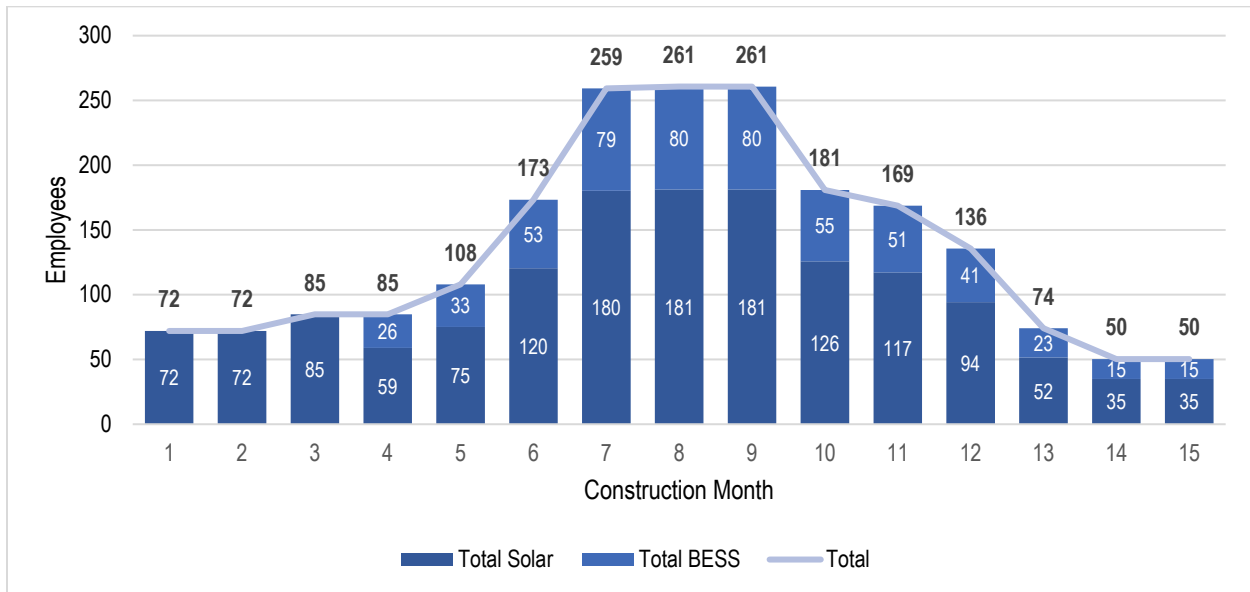
The Applicant will enter into a Road Use Agreement with Morgan County prior to the start of construction. The Applicant met with the Morgan County Road and Bridge Department on September 14th, 2023, to review the proposed haul route during construction and use of county roads. The Road Use Agreement will document the pre-construction condition of County roads to be utilized. Based on the pre-construction baseline survey of applicable County roads, the Applicant will be responsible for any road repairs and/or improvements consistent with the Road Use Agreement to be negotiated with Morgan County.

2.9 Employees, Equipment, and Facilities

2.9.1 Construction Crew, Equipment, & Facilities

The on-site construction workforce would consist of engineers, heavy equipment operators, truck drivers, laborers, craftsmen, electricians, supervisory personnel, and construction management personnel. In total, there would be an average of approximately 181 workers onsite during the 3-month peak construction period of each phase. The construction labor schedule for each phase of the Project including the concurrent proposed BESS Project is detailed per Figure 2-4 below.

Figure 2-4. Typical Construction Labor Schedule (Per Phase)



Construction would occur five days a week for an estimated 10 hours per day. Additional hours may be necessary to make up for schedule and weather delays.

Typical equipment that may be present on site as required includes, but is not limited to, graders, excavators, bulldozers, backhoes, cutting machines, end loaders, delivery trucks, trenching machines, flatbed trucks, cranes, rollers, electrical test equipment, off-road buggies, forklifts and carry decks, water supply trucks, water spray trucks, concrete mixers, compaction machines, survey equipment, and light trucks.

Vehicles will access the site through the proposed entrance gate off County Road Q for delivery of materials and crew transportation. Electrical construction will occur following the installation of equipment and be performed by NERC certified electricians.

Temporary staging areas will not extend beyond the overall boundary of the Project. Temporary staging areas would include a laydown area, parking, trash disposal facilities, construction trailers, and sufficient portable restrooms and potable water for use by construction staff. Mobile trailers, modular offices, or an equivalent would be used as construction offices for Project staff and subcontractor personnel.

2.9.2 Operations Workforce

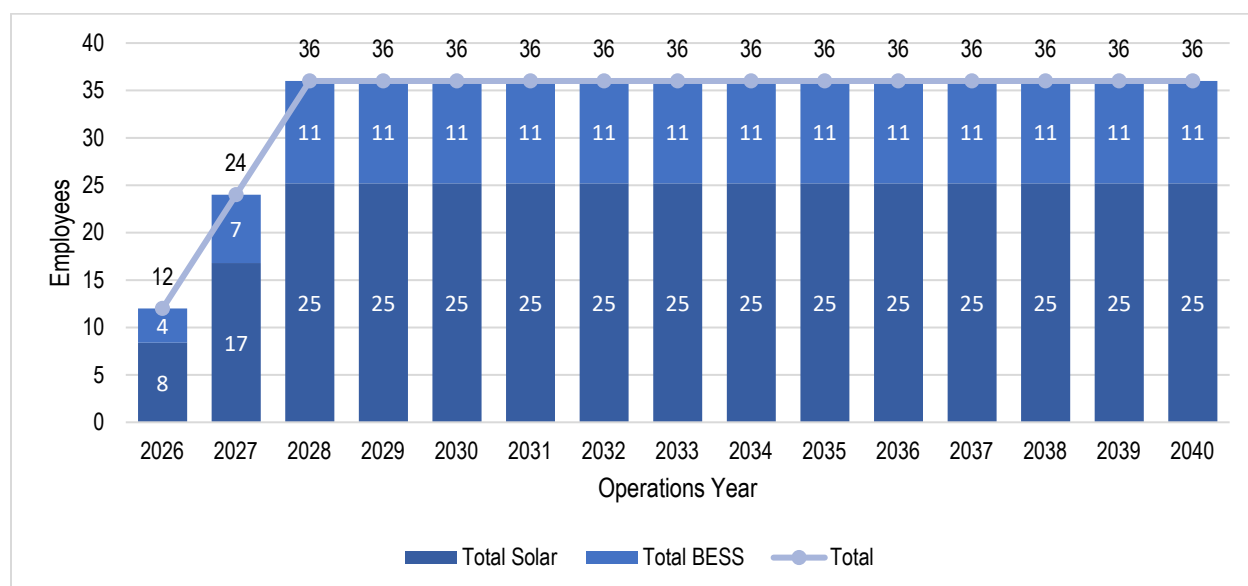
Upon completion of all three phases, operation of the Solar Project will require a minimum of 25 full-time positions including supervisory positions, miscellaneous crew members, and sitework crew members, as detailed per Table 4. Operations may also require third party contractors to perform specialized services.

Table 4. Project Operational Workforce

Worker Title	Quantity	Comments
Supervisory Crew	2	Supervision from inspection, engineering, project management, superintendent, assistant superintendent, etc.
Miscellaneous Crew	2	Miscellaneous including cleanup and materials handling
Sitework Crew	21	Sitework crew (Civil Works, then trenching etc. for elec. Installation)
TOTAL	25	

The labor schedule for each operational year of the Project including the concurrent proposed BESS Project is detailed per Figure 2-5 below.

Figure 2-5. Typical Operations Labor Schedule



2.10 Project Compliance with Morgan County Comprehensive Plan

As presented below, the Project is consistent with the following guiding principles, goals, and policies for utilities, economic development, environment, land use, and transportation as identified per the Morgan County 2008 Comprehensive Plan.

2.10.1 Utilities

GOAL: To ensure that adequate and financially secure public utilities are provided to all developments in Morgan County.

The Applicant intends to establish a power purchase agreement with multiple purchasers of power. Per the Morgan County Comprehensive Plan, “existing facilities should be expandable in addition to new facilities to allow service for any reasonable projected growth”. The Project would provide a clean renewable source of electric power to existing and future residents of Morgan County.

In addition, development of the Project will include an approximate 2,400 square foot O&M building. Electric utilities will be extended to serve the O&M building. No water or wastewater services are anticipated for the O&M building. The Project will require telecommunications services for internet which will be extended to the Project site. The Project substation will interconnect to Tri State's existing Story substation located west of the Project through a 1.25-mile gen-tie line and will not adversely affect transmission uses existing on and adjacent to the Project site.

2.10.2 Economic Development

GOAL: Diversify the economy in Morgan County to broaden business employment opportunities for residents and to further economic growth.

Goal: Encourage the location of new industry and the expansion of existing businesses that will provide employment opportunities and increase the tax base to strengthen the economy of Morgan County.

In accordance with the Morgan County Comprehensive Plan, development of the Project would contribute to the Colorado New Energy Economy. Policy number 10, identified per the Comprehensive Plan specifically notes that Morgan County should work to attract and maintain renewable energy projects to meet this goal (Morgan County 2008).

Development of the Project would provide economic benefit to Morgan County through increased revenues to county, local municipality, and school district tax bases and local employment opportunities. The Applicant will utilize local labor as much as is practicable depending on the availability, experience, and qualifications of available local firms and laborers. Throughout the construction period, construction workers will support local businesses including hardware supply stores, restaurants, hotels, gas stations and hotels. Workers originating outside Morgan County will be expected to remain in the region only throughout the duration of construction.

2.10.3 Environment

Goal: Preserve the manmade and natural environment in order to enhance the quality of life in Morgan County and to make environment considerations part of the land use decision-making process.

Per the Morgan County Comprehensive Plan, new developments are to be reviewed and judged based on the identification of sensitive lands and the mitigation techniques used to minimize the impacts of physical development on the land (Morgan County 2008). Siting analysis confirms the proposed site location avoids areas or locations with a high potential for biological conflict, such as wilderness study areas, areas of environmental concern, historic trails, special management areas, or important wildlife habitat or corridors. The Project is sited outside of identified wetlands and floodplains and will avoid adverse impacts on plant and wildlife species. Tetra Tech has prepared a drainage study and wind and water erosion control plan to identify site drainage patterns, required improvements and appropriate best management practices to mitigate erosion and storm runoff potential. As further discussed in Section 4.0, there are no known sensitive biological, hydrological, historical, cultural, or archeological resources within or near the proposed Project site.

Furthermore, development of the Project would provide 600 MW of electricity produced by renewable energy and 600 MW of BESS, respectively. Development of the Project is in accordance with policy

number 14 identified per the Morgan County Comprehensive Plan which notes that Morgan County shall encourage use of renewable resources and production of biofuels and electric power from such resources (Morgan County 2008).

2.10.4 Land Use

Goal: To encourage development where: 1) it is in proximity to the activity centers; 2) the proposed development is compatible with existing land uses; 3) there is access to established public infrastructure (primarily roads and utilities); and 4) where, in outlying areas of the county, there is access to utilities and there is little additional burden on rural services.

The Project site is located 1.6 miles southeast of the city limits of Brush, Colorado. Existing land uses in the Project Area include rangeland and overhead electric transmission lines. Existing adjacent land uses include rangeland, an electric substation, rural residences, a cattle feed lot, and the Brush Municipal Airport. The Project is compatible with these existing uses. The Project site is in the Agricultural Production zoning district which allows for permitting of large-scale solar facilities including BESS as an accessory use through issuance of an SUP. The Project site has access to established utilities and County Roads.

Goal: The county will encourage the preservation of agriculture production lands in balance with pressures for land use changes to higher intensity development.

Per the U.S. Department of Agriculture, Natural Resources Conservation Science, Web Soil Survey data, the Project Area does not include any soil types designated as prime, unique, or farmland of statewide importance. Therefore, development of the Project is not anticipated to result in impacts to or loss of prime, unique, or farmland of statewide importance.

2.10.5 Circulation and Transportation

Goal: To provide residents and businesses in Morgan County with a circulation system that connects the major county activity centers with the outlying communities of the county, regional employment generators and the rest of the state in the interests of providing economic opportunity, access efficiency and safety and improving the quality of life.

Policy 1: Traffic and Roads

- Require new developments to mitigate impacts to adjacent county roads.
- Require traffic generation studies for large developments.

As detailed per Section 2.7 traffic on county roads is anticipated to increase during construction of the Project and the Applicant will enter into a Road Use Agreement with Morgan County to address impacts on County Roadways resulting from construction.

2.11 Project Compliance with Special Use Permit Review Criteria

Per Morgan County Code Section 3-180, Solar Collector facilities may be permitted in the Agriculture Production zone through issuance of an SUP. The Applicant has reviewed Morgan County's Zoning Regulations for compliance under an SUP for a large-scale solar development including a BESS. The

Project meets the following criteria required to approve a special use permit as outlined per the Morgan County Code, Section 2-395- Review Criteria.

(A) The use and its location as proposed are in conformance with the Morgan County Comprehensive Plan;

The Project aligns with the goals and policies identified per the Morgan County's Comprehensive Plan, adopted in 2008 as indicated per Section 2.10. Project development, proposed mitigation measures, and forecasted benefits are consistent with the County's goals and policies related to utilities, economic development, land use, environment, and transportation. The Project would provide a long-term renewable energy source to the County with economic, environmental, and social benefits to current and future residents.

(B) All the application documents are complete and present a clear picture of how uses are to be arranged on the site or within Morgan County;

The Applicant has submitted a complete SUP application package for Phase II of the Solar Project. The Applicant will submit additional documents and/or revisions as requested by the Morgan County Planning Services Department upon their review of the application. The table at the beginning of this report details the SUP submittal requirements with the application report section addressing each checklist item. The submittal has been provided as a hard copy and electronically, fulfilling submittal requirements in Section 2-380 of the Morgan County Zoning Regulations.

(C) The site plan conforms to the district design standards of these regulations;

The Project site plan and special use map have been developed in accordance with Sections 2-410 and 2-420 of the Morgan County Zoning Regulations.

(D) All on and off-site impacts have been satisfactorily mitigated either through agreement, public improvements, site plan requirements or other mitigation measures;

Potential adverse environmental impacts and the correlating sufficient mitigation measures are detailed in Section 4.0, Environmental Impact Analysis.

(E) The special use proposed has been made compatible with the surrounding uses and adequately buffered as determined by the County;

Existing surrounding adjacent uses include the Tri State-owned Story substation to the west, low-density rural agricultural residences to the northwest, west, and southwest, open rangeland to the north, east, and south, the Brush Municipal Airport northeast, across Highway 34, and the existing Pinneo cattle feedlot north of Highway 34.

The Solar Project would be compatible with existing surrounding adjacent land uses. The Solar Project would not result in significant adverse impacts to surrounding properties. Potential impacts are limited to fugitive dust, traffic, and noise during the construction phase. During operations, the Solar Project would be operated remotely and onsite operational and maintenance activities are anticipated to generate minor daily traffic, generate no air emissions, emit no glare, and is sited and designed to minimize noise impacts. A discussion of potential impacts and proposed mitigation measures are detailed per Section 4.0.

The Project site layout has been designed in accordance with the minimum 70-foot setback required from exterior parcel lines and the 500' buffer required from adjacent buildings (Appendix A-2). The Applicant is requesting a waiver to the 30' setback required from internal sections lines and internal property lines (Figures 5 & 6).

(F) The special use poses only the minimum amount of risk to the public health, safety and welfare as set by either federal, state or county regulation, whichever is the strictest;

The Solar Project is not anticipated to be unduly detrimental or injurious to property or improvements in the vicinity and will not be detrimental to public health, safety, or general welfare.

Emergency access to the site will be provided via 20' wide access roads and gated entrances will be equipped with Knox boxes and keys. The Applicant will maintain sufficient water sources and portable fire extinguishers on site for emergency use. Water would be stored on site in above ground tanks and/or cisterns. The water tanks and/or cisterns will be located and installed per compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency.

The Applicant has developed an Emergency Operations and Fire Mitigation Plan for the Project detailing proper responses to emergency events, fire mitigation measures, and firefighting considerations. The Emergency Operations and Fire Mitigation Plan was provided to local officials of the Brush Volunteer Fire Department, the Brush Rural Fire Protection District, and the Hillrose-Snyder Volunteer Fire Department for review and comment and is included as Appendix H.

The presence of energized equipment within the facility could result in public health or safety concerns, however site access will be limited to authorized personnel and the Project will be developed in accordance with the physical security standards defined per the NERC Code Section, CIP-014-2 (NERC 2023). Proposed security measures include placement of warning signage along the perimeter and entrance points to the facility, installation of a site perimeter fencing with locked, gated entrances, installation of security lighting, and 24/7 remote site monitoring.

The Applicant is committed to developing and operating the facility in a safe and environmentally friendly manner. The Project will adhere to all applicable health and safety standards and regulations.

(G) The special use proposed is not planned to be developed on a non-conforming parcel;

The Solar Project is not proposed to be developed on non-conforming parcels. All parcels located within the Solar Project site are conforming parcels and meet the minimum 35-acre lot size required in the Agriculture Production zoning district.

(H) The applicant has adequately documented a public need for the project, all pertinent technical information, adequate financial resources to implement it, and has paid all fees and review costs levied by the County for application processing and review; and

The Project would advance Colorado's renewable energy portfolio standard, provide a local source of clean energy, and would provide an economic benefit to Morgan County through tax revenue generation and local job opportunities.

The Applicant will pay all fees and review costs required by Morgan County for application processing and review. The Applicant is an indirect subsidiary of Aypa. Aypa is a Blackstone portfolio company. Aypa has a proven track record of developing, financing, constructing, owning, and operating utility-scale renewable energy projects. Aypa currently has an operating fleet of 30 projects, two projects currently under construction, and over 70 projects in the development pipeline.

(I) For any special use requiring a supply of water that the applicant has demonstrated a source of water which is adequate for the proposed use in terms of quantity and reliability and in the case of human consumption, quantity, quality, and reliability.

The Applicant will source water needed during the construction and operations phases from the existing groundwater wells available on the Project site. In the event offsite water is required, water will be sourced from an off-site location, transported to the Project site via water trucks, and stored on site in above ground tanks and/or cisterns. The water tank will be in strict compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency. As this water supply would rarely be used, the Project will have minimal effects on overall water availability and will not burden local water resources. No new water infrastructure will be necessary for the Project.

2.12 Project Compliance with regulations for Solar Collector facilities

The Project meets the following standards defined per Morgan County Code Section 4-825 for the regulation of Solar Collector facilities.

2.12.1 General Standards for all Solar Collectors

All electrical interconnection and distribution lines within the Solar Project boundary will be underground, as required by Morgan County, except for power lines that leave the Project or are within the substation.

All electrical interconnections and distribution components will comply with the applicable County adopted building and electrical codes, requirements of the electric utility company, and applicable state and federal regulatory codes.

The Applicant intends to enter into an interconnection agreement with Tri State to connect the Project to the grid at the Tri State Story substation located 1.25 miles west of the Project. A letter from Tri-State is included as Appendix F. The Applicant will provide a copy of the interconnection agreement to Morgan County once finalized.

2.12.2 Principal Ground Mounted Solar Collectors

The Project has been designed in accordance with the 70-foot setback required from above ground public utility powerlines or communications lines, existing public roads, highways, or railroads, and exterior property lines. In addition, the Project meets the 500-foot setback required from inhabited buildings. The Solar Project also complies with the scenic resources setback as it is not within one-quarter (1/4) mile from any highway designated to be a scenic highway or roadway by the Morgan County Comprehensive Plan or the state.

Per Morgan County Code, Section 4-820 (N). Additional Information and Waivers,

The County may request additional information that may be required to evaluate the proposed solar collector facility. The County may waive or alter any of these minimum requirements if they are determined to be inappropriate or unnecessary to determining if the application satisfied applicable standards.

The two following waivers are being requested related to the setbacks required for Principal Ground Mounted Solar Collector Facilities (4-825 [D])

- 1) The Applicant respectfully requests a waiver from the minimum 30' setback required along section lines within the Project boundary. The setback is reserved for the future ROW of County roads not yet in existence. Please see Figure 5 detailing the sections lines from which the waiver is requested.
- 2) The Applicant respectfully requests a waiver from the minimum 70' setback required from all interior property lines within the Project boundary. The Applicant has coordinated with affected property owners throughout the site planning process and is under purchase options for the Project Area parcels. Please see Figure 6 detailing the internal parcel lines from which the waiver is requested.

The tallest Project component is the proposed overhead 230 kV gen-tie line connecting the Project substation to the Tri State Story substation. The gen-tie line is pending final design and engineering but is anticipated to reach up to 110' feet in height.

Pursuant to Appendix B of the Morgan County Zoning Regulations, the Agricultural Production zoning district does not have a maximum lot coverage limitation.

Development and operation of the Project would not result in significant drainage issues, stormwater runoff, glare, dust, noise, or adverse impacts to agricultural lands as further discussed in Section 4.0.

In accordance with Section 4-825(D)(19) of the Morgan County Zoning Regulations, upon completion of construction, (a) Solar Collector facilities shall be reviewed by a registered structural engineer, licensed in Colorado, to confirm their compliance with the applicable State, Federal and local regulations and to conform with good engineering practices, and (b) the electrical system shall be certified by a registered electrical engineer, licensed in Colorado, to be compliant with the applicable State, Federal and local regulations, and to conform with good engineering practices.

3.0 IMPACT ON ADJACENT USES AND OFF-SITE IMPACTS

Existing surrounding adjacent uses include the Tri State Story substation to the west, low-density rural agricultural residences to the northwest, west, and southwest, open rangeland to the north, east, and south, the Brush Municipal Airport northeast, across Highway 34, and an existing Pinneo cattle feedlot north of Highway 34.

The Solar Project would be compatible with existing surrounding adjacent land uses. The Solar Project would not result in significant adverse impacts to surrounding properties. Potential impacts are limited to fugitive dust, traffic, and noise during the construction phase. During operations, the solar facility would be operated remotely and generate little to no daily traffic, generate no air emissions, emit no

glare, and is sited and designed to minimize noise impacts. A discussion of potential impacts and proposed mitigation measures are detailed per Section 4.0.

Offsite impacts are limited to increased traffic and potential noise and fugitive dust resulting from vehicle traffic during construction along the Project Haul Route detailed per Figure 3. Proposed mitigation measures to minimize fugitive dust and noise impacts are detailed in Section 4.0.

3.1 Impacts on County Services & Capital Facilities

3.1.1 Capital Facilities, Social Services, & Infrastructure

The Project is not expected to require additional community or local government services beyond those currently provided in the area. Project development is not expected to result in additional significant demand for transportation infrastructure, educational facilities, social services, housing, or public transportation.

The Applicant will enter into a Road Use Agreement with Morgan County to address impacts on County Roadways from transportation of heavy equipment resulting from construction as further discussed in Section 2.8.1. Oversized vehicles delivering Project components may result in temporary traffic delays. The Applicant or their contractors will hire flaggers to maintain adequate levels of traffic flow as needed and the Applicant's contractors will obtain necessary oversized and overweight vehicle permits to authorize transportation and delivery of these loads.

No new water or wastewater infrastructure will be necessary for the Project.

3.1.2 Waste Management

Solid waste generated by the Project during construction and operations will be handled by a solid waste hauling and management firm contracted by the Applicant or its designated contractor(s). Waste will be separated by type, collected, and transported to the appropriate facility in a manner that complies with applicable federal, state, and local regulations, and minimizes potential impacts to the surrounding community. Waste materials will be handled, stored, and disposed of in a manner that controls fugitive dust, fugitive particulate conditions, blowing debris, leakage into the soil or surface water or groundwater, and other potential nuisance conditions. Project construction is not expected to require onsite treatment, storage, or disposal of hazardous wastes that will require hazardous waste permits. No extremely hazardous materials, as defined by 40 Code of Federal Regulations part 355, are anticipated to be produced, used, transported, or disposed of during Project construction. Any hazardous wastes generated during construction will be properly characterized and managed by the Applicant and its contractor(s). The handling of hazardous materials and waste will be done in accordance with all federal, state, and local laws and regulations.

3.1.3 Public Safety Services

The Project is not anticipated to result in a significant increase in demand for public safety services.

The Project is located within the boundaries of the Brush Fire Protection District. Brush Fire Station 1 is located approximately 2.15 miles west of the Project site. The Hillrose-Snyder Fire Protection District boundary is approximately one mile north of the Project site. Prior to construction, the Applicant will

work with Morgan County, The Brush Rural Fire Protection District, Brush Volunteer Fire Department, and the Hillrose-Snyder Fire Protection District.

During construction and operations, the Applicant will ensure local Fire Departments have 24/7 access to the Project site to respond to emergency incidents. Knox boxes and keys will be installed at locked entrance gates for emergency personnel access. Site access roads will be constructed up to 20 feet in width with compacted all weather gravel. During site construction and operations, the Applicant will maintain sufficient water sources and portable fire extinguishers on site for emergency use. Water would be stored on site in above ground tanks and/or cisterns. The water tanks and/or cisterns will be located and installed per compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency.

The facility layout is designed to provide defensible space for fire protection throughout construction and operation of the facility. Ongoing maintenance would be provided to ensure removal of vegetation and other flammable materials from the defensible space areas. Vegetation control at the site will use materials and methods that ensure groundwater protection.

The Project solar arrays will consist of non-combustible materials (aluminum, steel, or glass). The Project solar modules are designed to be resistant to fire, and the racks are constructed of non-combustible steel and aluminum. The solar panels and other electrical equipment will meet applicable Underwriters Laboratories and International Electrotechnical Commission ratings for their resistance to fire.

An Emergency Operation Fire Mitigation Plan has been prepared for the Project and is included as Appendix H. The plan addresses proper response plans for potential emergency events, facility evacuation details, emergency contacts, system safety considerations, battery fire protection system information, and firefighting considerations. Prior to construction, the Applicant will work with local fire personnel to ensure the Project's compliance with applicable fire safety regulations. The Applicant will also provide on-site training for surrounding departments to reduce fire risk at the Project.

3.1.1 Benefits

The Project is anticipated to result in economic benefits for the following taxing jurisdictions: Morgan County and Morgan County School District RE-2 (Morgan County 2023c).

Local, regional, and state employment will benefit those in the construction trades including heavy equipment operators, truck drivers, engineers, laborers, craftsmen, electricians, supervisory personnel, and construction management personnel. Prior to and during construction, the Project will utilize both local and non-local consultants and contractors for the design and construction. The design and construction scopes of work are typically bid out to a range of consultants and contractors. It is the Applicant's preference to utilize local labor as much as is practicable and will direct those acting on their behalf to carry the same preference depending on the availability, experience, and qualifications of available local firms and laborers. Workers originating outside the labor market area will be expected to remain in the region only throughout the duration of construction.

4.0 ENVIRONMENTAL IMPACT ANALYSIS

4.1 Air Quality

The 1963 Clean Air Act (as amended; 42 U.S.C. 7401) requires government agencies to monitor air pollution and promote air pollution prevention and control programs. The Project Area is within the Eastern High Plains monitoring region of Colorado (CAPCD 2023). As of August 30, 2023, Morgan County, Colorado is in attainment for all U.S. Environmental Protection Agency (EPA) criteria pollutants (EPA 2023). Currently, local emission sources in the Project vicinity include personal and commercial vehicle emissions, aircraft emissions at the nearby Brush Municipal Airport, and agricultural operations.

It is anticipated that the Project construction and operations will result in additional, negligible amounts of pollutants including particulate matter, diesel particulates, and carbon monoxide. The construction phase of the Project will temporarily cause fugitive dust related to the following activities: grading activities, preparation of the staging and equipment laydown area, excavation and construction of equipment pads, the mixing and preparation of concrete, and construction of access roads. Fugitive dust may also be generated by vehicular traffic associated with construction and operation of the Project, and by the delivery of materials to and within the Project Area. The emissions from the Project construction would be limited in duration to 15 months per phase, and emissions from the Project operation would be zero or near zero. Therefore, Project emissions are not anticipated to significantly contribute to ozone, particulate matter, or other air pollutants within the Eastern High Plains monitoring region.

The Colorado Air Quality Control Commission requires an Air Pollutant Emissions Notice (APEN) and associated fees to be submitted to the Colorado Department of Public Health & Environment (CDPHE), Air Pollution Control Division when a Project proposes to disturb more than 25 acres or construction will last greater than 6 Months. The Applicant or its contractor will submit the Land Development APEN: Form APCD-223 prior to the start of construction. To comply with county and state air quality regulations, methods for limiting dust and maintaining air quality during construction would be implemented. Vehicles and equipment will comply with applicable state and federal emission standards and will be properly maintained to minimize exhaust emissions.

A Wind and Water Erosion Control Plan is included as Appendix I which details best management practices (BMPs) that will be utilized to prevent wind and water erosion and run-off during construction.

The Project will prepare a Fugitive Dust Control Plan in accordance with CDPHE requirements for the Land Development APEN prior to construction. Dust control measures include watering unpaved roads and earthen areas with limited vegetation, covering exposed piles of dirt, maintaining low vehicle speeds within the Project Area, covering stockpiles during sustained wind events, installing tire wash out stations at site entrances to minimize track out, and covering truck loads. Water would be applied regularly to disturbed areas and stockpiles during construction to prevent the addition of particulate matter/fugitive dust into the local airshed. Additional BMPs would be implemented as needed from the EPA national menu of BMPs and may be used as necessary during construction to help limit dust.

4.2 Dust and Odor

See Section 4.1 above for details on the potential fugitive dust impacts resulting from the Project and proposed mitigation measures.

Given the surrounding land use, current odors present at the Project Area likely include fugitive odors from the operation of the Brush Municipal Airport, Pinneo cattle feedlot, and vehicle emissions along nearby roads. Local traffic volume would increase in and around the Project Area during construction. The increased traffic would temporarily increase odors from vehicle emissions. Odors are also anticipated from the operation of heavy machinery during construction. Impacts from odors during Project operation would be minimal and are likely limited to emissions from the vehicles of maintenance personnel. Overall, the impacts of odors from Project construction and operation are anticipated to be minimal and insignificant. As a result, no specific mitigation has been identified for odor impacts and no management of odors would be performed during construction or operation.

4.3 Noise Receptors, Ordinances, and Conformance

Current sources of noise in the Project Area include wind, distant road, and highway vehicles, and surrounding cattle feed lot and airport operations.

Temporary noise impacts during construction would occur during daylight hours from the operation of construction equipment, including, but not limited to, passenger vehicles, graders, loaders, water trucks, semi-tractor/trailer trucks, and hydraulic hammers. The spatial distribution of construction noise emissions would vary during the day and depend on the type of activity. Construction traffic would generate noise along the Project access routes (Figure 3). This noise would be temporary during commuting hours and when supplies are delivered over the course of construction.

Solar generation facilities emit lower sound levels in comparison to other power facilities and noise emissions are limited during daylight hours. Sources of noise during operation would include temporary vehicle noise from maintenance personnel access and typical noise emissions from the Project substation transformers, inverters, and rotation of the solar panel tracking system.

In accordance with Morgan County Code, Section 4-825.D.16, construction and operation of the Project will not significantly increase noise at surrounding properties and will comply with the statutory provisions for maximum permissible noise levels for industrial zoning as defined per C.R.S. § 25-12-103. Construction projects are subject to the noise standards specified for industrial zones. Table 5 details the noise standards defined by the state, as referenced per the Morgan County zoning regulations.

Table 5. Colorado Noise Standards

Zone	7:00 a.m. to 7:00 p.m.	7:00 p.m. to 7:00 a.m.
Residential	55 dBA	50 dBA
Commercial	60 dBA	55 dBA
Light Industrial	70 dBA	65 dBA
Industrial	80 dBA	75 dBA

The construction and operation of the Project will adhere to the decibel limits established for industrial zones. Construction activities will take place between the hours of 7:00 a.m. and 7:00 p.m., and noise levels will be kept to a minimum to the practical extent possible to maintain compliance with C.R.S. § 25-12-103. Noise generated from the solar panel tracking system, BESS and Project substation will be mitigated by the spatial layout of the Project. The Project layout is designed in accordance with the minimum setbacks required for solar collector facilities per the Morgan County Zoning regulations. Based on typical sound levels anticipated from Project operation, the distance from the equipment to the Project boundary will mitigate the effect of noise generated by the Project.

4.4 Existing Vegetation

According to the National Land Cover Database (USGS 2019), the dominant land cover in the Project Area is grassland/herbaceous covering 4,161.6 acres or 93.62 percent (Table 6). A Tetra Tech biologist visited the Project site April 25-26, 2023. The Project Area was dominated by needle and thread grass (*Hesperostipa comata*), blue gramma (*Bouteloua gracilis*), and smooth brome (*Bromus inermis*). The Project Area is located in a predominately arid rangeland comprised of shrubland and grassland. No irrigated activities were observed within the Project Area (Appendix J).

Table 6. Land Use and Land Cover in the Project Area

Land Use/Land Cover ¹	Acres	Percent of Project Area
Grassland/Herbaceous	4,161.6	93.62
Scrub/Shrub	271.8	6.11
Developed Open Space	8.7	0.20
Developed, Low Intensity	3.1	0.07
Cultivated Crops	0.01	0.00
Total	4,445.2	100%

Source: 2019 National Land Cover Database (USGS 2019)

Existing rangeland will be converted to power generation use for the lifetime of the Project. Construction will have long term impacts on existing vegetation as result of removal of vegetation within the Project Area for the installation of Project facilities and access roads.

Construction activities will also result in temporary impacts to existing vegetation, including soil disturbance and compaction. Disturbed areas outside of the proposed access roads, Project substation, and BESS Project area will be revegetated with a native seed mix. The Project proposes to use bifacial panels which track the sun throughout the day. Ground surface vegetation beneath the solar panels will receive rainfall and or runoff from the panels and will continue to grow. Site vegetation will be maintained throughout the Project life by the Applicant.

As required by the Colorado Noxious Weed Act (C.R.S. 35-5.5-103), Morgan County has defined specific management for each List B noxious weed species (CDA 2023). Per Morgan County Code Section 3-700, the Applicant will plan to employ a program to control the growth of noxious and other weeds as part of the general property maintenance.

4.5 Special-Status Wildlife and Other Species of Concern

The Applicant contracted Tetra Tech to prepare a Wildlife Habitat Assessment for the Project consisting of a desktop review and field survey to document existing habitat and biological resources, including special status species and raptor nests that may be impacted by Project development (Appendix J).

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) online tool and Colorado Parks and Wildlife (CPW) online databases were used to identify federally and state-listed species and other special status species (e.g., species protected by Bald and Golden Eagle Protection Act) that may occur within or near the vicinity of the Project Area.

Tetra Tech conducted a field survey on April 25th and 26th, 2023 to verify and characterize current land cover types in the Project Area that may provide suitable habitat for protected species. General landcover and wildlife observations within the Project Area were typical for the ecoregion. The following species were identified during the field visit: mourning dove (*Zenaida macroura*), coyote (*Canis latrans*), black-tailed prairie dog (*Cynomys ludovicianus*), European starling (*Sturnus vulgaris*), rock dove (*Columba livia*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), horned lark (*Eremophila alpestris*), and the western meadowlark (*Sturnella neglecta*). Unidentified small mammal burrows were also observed. Additionally, suitable nesting substrate within the Project Area was observed, however, no raptor nests were observed within a half-mile of the Project Area (Appendix J).

The USFWS and CPW sources reviewed for the assessment identified 10 protected species that have the potential to occur within the Project Area. However, no USFWS-designated critical habitat is present within the Project Area. A summary of the sensitive species' preferred habitat and potential for occurrence in the Project Area are detailed per Table 7 and further discussed in the Wildlife Habitat Assessment Report (Appendix J).

Based on the desktop analysis of land cover data, aerial imagery, range maps, and observations during the field survey, the following special status species may occur within the Project Area: bald eagle (foraging), burrowing owl (breeding) and golden eagle (foraging). All other special status species listed in Table 7 are unlikely to occur in the Project Area due to the absence of suitable habitat.

Table 7. Federally and State Listed Species Potentially Occurring within the Project

Common Name	Scientific Name	Status	Habitat Associations	Likelihood of Occurrence
Mammals				
Gray wolf	<i>Canis lupus</i>	FE; SE	Found in temperate forests, mountains, tundra, taiga, grasslands, and deserts. Morgan County is outside the current range of this species.	Unlikely—N/A. This species only needs to be considered for projects that include predatory management.
Bird				
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA	Typically found near large bodies of water that support fish populations and waterfowl. Will perch and nest in tall deciduous or coniferous trees near water.	Unlikely—Breeding Unlikely—Wintering Low—Foraging

Common Name	Scientific Name	Status	Habitat Associations	Likelihood of Occurrence
Golden eagle	<i>Aquila chrysaetos</i>	BGEPA	Partly open country with native grassland vegetation. Nests on cliffs and in trees.	Unlikely—Breeding Unlikely—Wintering Low—Foraging
Burrowing owl	<i>Athene cunicularia</i>	ST	Typically found in prairie dog colonies in open areas with short grass and where suitable ground squirrel and badger burrows can be found, such as golf courses, cemeteries, airports, vacant lots, and pastures.	High to Moderate—Breeding Unlikely—Wintering
Piping Plover	<i>Charadrius melodus</i>	FT; ST	Occurs in reservoirs, lakes, and rivers with sand and gravel areas and sparse vegetation.	Unlikely
Whooping crane	<i>Grus americana</i>	FE; SE	Occurs in freshwater marshes, wet prairies, shallow lakes, and lagoons.	Unlikely
Fish				
Pallid sturgeon	<i>Scaphirhynchus albus</i>	FE	Found in large river systems with firm sandy bottoms (e.g., the Missouri River). No streams are within the Project Area.	Unlikely
Flowering Plants				
Ute ladies'-tresses orchid	<i>Spiranthes diluvialis</i>	FT	Found in moist meadows associated with perennial stream terraces, floodplains, and oxbows at elevations below 6,500 feet.	Unlikely
Western prairie fringed orchid	<i>Platanthera praecleara</i>	FT	Found in unplowed, calcareous prairies and sedge meadows.	Unlikely
Insect				
Monarch butterfly	<i>Danaus plexippus</i>	FC	Found throughout the United States in open fields and meadows with milkweed (primarily <i>Asclepias</i> spp.). Milkweed is an obligate host plant for monarch larvae. Several milkweed species occur in Colorado in a variety of habitats such as grasslands, disturbed areas, wetlands, and irrigation ditches. Adults feed on milkweed and other flowering plants.	Unlikely

BGEPA = Bald and Golden Eagle Protection Act; FT = Federally Listed Threatened; FC = Candidate for Federal Listing (not a statutory category); ST = State Threatened; SE = State Endangered

The Applicant plans to implement the following measures to avoid, minimize, or mitigate potential impacts to protected species that could occur in the Project Area.

- If construction is to occur during the bird breeding season (generally from February 15 to July 31 for most species), a follow up raptor survey will be conducted prior to the start of construction to determine species and nest status prior to construction activities so that all raptor nests within 0.5 mile of the Project Area can be mapped and avoided. If raptor nests are active, species-specific nest avoidance buffers will be implemented per CPW's Recommended Buffer Zones and Seasonal Restriction for Colorado Raptors, of which the largest buffer is 0.5 mile for bald and golden eagles (Appendix J).

- A CPW-protocol burrowing owl survey will be conducted prior to construction activities to determine whether burrowing owls are present within 0.25 mile of the Project. CPW recommends no permitted, authorized, or human encroachment activities within 0.25 mile (1,320 feet, 400 meters) of the nest site for large industrial disturbances during the nesting season, March 15 through August 31.
- Project infrastructure, including facilities and access roads will be consolidated to the extent possible to minimize the amount of land that is disturbed and fragmented.
- Prior to installation of fencing, the interior of the fenced area would be searched to avoid entrapping wildlife. The enclosed facility would be checked regularly during operations to prevent accidental trapping of wildlife to the extent possible.
- The Project Area will not be lit at night to minimize wildlife attraction to Project infrastructure and limit impacts to hunting, migration, or other nocturnal activities of wildlife.

The Applicant has shared the results of the Wildlife Habitat Assessment with CPW and conducted an initial coordination call on October 13, 2023. The Applicant is awaiting receipt of CPW's letter of recommendation however anticipates receipt prior to the initial public hearing. The Applicant will send notice of the initial public hearing date to CPW when scheduled by the County. A copy of CPW's letter of recommendation will be provided to Morgan County once received. The Applicant will continue to coordinate with CPW to determine possible recommended BMPs and/or avoidance measures for construction activities.

4.6 Wetlands and Other Waters of the United States

The Applicant contracted Tetra Tech to prepare a wetland and other waters of the U.S. (WOTUS) assessment to identify potentially jurisdictional wetlands and/or other WOTUS within the Project Area. A Wetland Delineation Report was prepared for the Project in May 2023 and is included as Appendix K.

A desktop survey of surface waters was conducted using the National Wetlands Inventory (NWI) dataset (USFWS 2023), USGS National Hydrography Dataset (NHD) viewer (USGS 2023a), and Colorado Wetland Inventory database (CWI 2023). The results of the desktop analysis indicated no potential wetlands or waterways exist within the Project Area.

A Tetra Tech wetland scientist conducted a site visit on April 25th & 26th 2023, to perform a wetland and other WOTUS delineation within the Project Area. No wetlands or waterbodies were identified within the Project Area.

4.7 Water Use & Resources

The Applicant will implement strategies and practices that ensure responsible and efficient water consumption throughout the Project's construction and lifespan operations. The Project will prioritize the use of non-potable water sources for site maintenance and dust control. By minimizing water usage and maximizing conservation, the Project will contribute to sustainable development and reduced environmental impact.

The Project will not require the use of a public water supply system. An affiliate of the Applicant is the option holder for the Project parcels, thus all water rights for the Project would be obtained upon closing. There are several existing deep-water wells located on the subject property (Figure 4). The Applicant will perform further studies to determine the feasibility of utilizing the existing deep-water wells for various Project needs. These studies will encompass a comprehensive analysis of water quality, assessing parameters such as pH, dissolved minerals, and contaminants. Additionally, an assessment of well yield will be conducted to ascertain the sustainable pumping rate and availability of water resources. By conducting these studies, the Applicant aims to ensure that the solar project's water requirements align with the capacity and quality of the available deep-water wells, thus contributing to the overall success and sustainability of the Project.

In the event offsite water is required, water will be sourced off site and transported to the Project site via water trucks to be stored onsite in above ground tanks and/or cisterns. The Project will have minimal effects on overall water availability and will not burden local water resources.

Water use during construction would occur over the 15 months needed to construct each phase of the Project. Much of this water would be used for dust control but would also be used for hydration and compaction, backfill, cement stabilization and equipment cooling. The estimated water use during construction is approximately 470-acre feet per phase of construction.

During operations, water would be used for periodic washing of the solar panels, cooling equipment, and supporting establishment of vegetation around the site. Approximately 30.6 acre-feet of water is estimated to be used per year during operations. The total estimated water usage during each phase of construction and during operations is detailed per Table 8 below.

Table 8. Estimated Water Usage

	Phased Construction (200 MW)	Operations (600 MW)
Assumed Acre Feet (AF) / MW ¹	2.35 Acre Feet (AF) / Year	0.051 AF / Year
Total Water Usage (non-potable)	470 AF.	30.6 AF / Year

Source: Klise et al., 2013

4.8 Floodplains

Tetra Tech reviewed the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels, 08087C0490E and 08087C0500E effective May 18, 2021, and FIRM panels 08087C0652D and 08087C0675D, effective April 4, 2018. The Project is located in Zone X, which are areas determined to be outside the .2% annual chance floodplain (FEMA 2023).

4.9 Storm Water Runoff

A Drainage and Run Off Control Plan, and supporting Drainage Study were prepared for the Project in October 2023 and are included as Appendix A-2 and L. Site grading and drainage improvements will be designed to contain post development stormwater run-off on site. Prior to the start of construction, the Applicant will obtain a permit for any stormwater discharges occurring during the construction phase

of the Project in compliance with the COR400000 General Permit under the Colorado Water Quality Control Act.

In addition, the Applicant will manage temporary facilities to control erosion and sediment releases and to protect Project facilities from flooding during construction in accordance with the General Permit requirements. A Wind and Water Erosion Control Plan is also provided as Appendix I which identifies BMPs that will be utilized to prevent erosion and run off during construction.

4.10 Cultural Resources

The Applicant contracted Tetra Tech to prepare a Cultural Resources Survey for the Project in September 2023 (Appendix M). The Cultural Resources Survey documents the results of archival research including a records search, review of previously conducted survey reports, and review of historic maps. The purpose of the cultural investigation was to provide cultural and historical context of the Project site, identify cultural resources located within the Project Area, re-record a previously recorded site located within the Project site and determine the Project's potential to affect potential and recorded historic and cultural resources.

A desktop records search was conducted through the Colorado Historic Society/Office of Archaeology and Historic Preservation Cultural Records online database. The Research Area includes the Project Area and a one-mile buffer. The search revealed that 12 prior surveys have taken place within the Research Area, but do not intersect the Project Area.

A total of 18 cultural resources have been previously recorded in the Research Area, including structures, archeological sites, and isolated finds (IF). These resources include several transmission line segments, one prehistoric IF, three historic IFs, two agricultural complexes, an agricultural equipment dump, a trash dump, and a trash scatter. One site (5MR.698) is listed as recommended eligible for listing in the National Register of Historic Places (NRHP), although the site form states that the site is recommended not eligible. One segment of the Beaver Creek to Deering Lake transmission line (5MR.696) is the only resource located within the Project Area and has been determined not eligible for listing in the NRHP.

Tetra Tech Archeologists conducted a site visit on June 27, 2023, to review the site located within the Project Area (5MR.696). Site 5MR.696 is a segment of Western Area Power Association's Beaver Creek to Deering Lake Transmission line. The State Historic Preservation Office has determined the site is not eligible for listing in the NRHP. Tetra Tech agrees with this assessment of the site and recommends that the site is not eligible for listing in the NRHP.

The Cultural Resource Survey Report concludes the Project is unlikely to have an adverse effect on cultural resources as the identified site within the Project Area, 5MR.696 has been determined as not eligible for the NRHP. Therefore, no adverse effects are anticipated from construction-related disturbance of, or visual impacts to, this resource. In addition, the report concludes that the potential to encounter additional resources is low due to the low site density and relatively low archaeological sensitivity of the Project Area.

To reduce potential impacts on cultural resources, the Applicant will develop an Unanticipated Discovery Plan prior to the start of construction which will outline procedures to follow, in accordance with state and federal laws, if archaeological materials or human remains are discovered.

4.11 Visual Amenities

4.11.1 Visual Impacts

The visual setting within the Project is primarily undeveloped herbaceous grassland. Development within the vicinity of the Project site includes an electrical substation, overhead transmission lines, and rural residences.

The potential for aesthetic impacts from renewable projects is based on the type of technology, the scenic quality of the existing landscape, the degree to which the Project will change scenic quality, and the viewer response to the change. Visual sensitivity, a key component of viewer response, is dependent on viewer attitudes and the types of activities in which people are engaged when viewing the site. Overall, higher degrees of visual sensitivity are correlated with areas where people live, are engaged in recreational outdoor pursuits, or participate in scenic driving. Conversely, visual sensitivity is considered low to moderate in industrial, commercial, and rural areas where the scenic quality of the environment does not affect the value of the activity.

No state-designated scenic roads (including scenic roads, historic roads, and parkways designations) or federally designated scenic roads (including national scenic byways and All-American road designations) within the Project site or vicinity (CDOT 2023b).

There are no public parks, recreation areas, or public gathering areas within view of the Project site. Drivers on County Road R, R.5, Q, and Highway 34 and adjacent rural residences would be the closest sensitive receptors to the Project site.

Tetra Tech anticipates that the Project would be considered low-moderate for visual sensitivity. The Project would visually contrast with the existing undeveloped rangeland. However, the Project will be consistent with the existing Tri-State owned electrical substation located west of the Project site. In addition, the gently sloping topography of the site provides a visual buffer of the Project Area from some of the nearby surrounding residences and roadways.

The Project layout is sited to provide a 500' buffer from existing inhabited buildings, and a 70' buffer or greater from exterior parcel boundaries and existing roadways. Six-foot-tall chain link fencing with one foot of barbed wire will be installed along the perimeter of the Project site boundary to provide an additional visual buffer.

4.11.2 Glint & Glare Analysis

Tetra Tech conducted a glint and glare analysis for the Project (Appendix N). The FAA issued an Interim Policy (78 FR 63276) on October 23, 2013, describing methods for obtaining FAA review and approval of proposed solar arrays on airport property. These methods involved the use of the Sandia Laboratories Solar Glare Hazard Analysis Tool (SGHAT), a modeling/compliance analysis tool now licensed for public use within the ForgeSolar GlareGauge cloud software application. The SGHAT is considered an industry best practice for analysis of glare related to solar energy generating facilities and is required by the FAA under 78 FR 63276 to measure ocular impacts for solar projects located on federally obligated airports

and is recommended for projects located off federally obligated airports. The Project has utilized the SGHAT tool as licensed for use in ForgeSolar GlareGauge cloud software application for modeling and analysis.

The SGHAT was utilized to evaluate the potential for glint and glare along:

- Proximal segments of County Road K/46, County Road N, County Road O, County Road Q, Heartland Expressway, Interstate 76, and US Route 34;
- 15 nearby locations selected to represent observer views at neighboring properties; and
- Final approach paths for the Brush Municipal Airport

The FAA Notice Criteria Tool allows the user to determine if a proposed structure would require a formal submission to the FAA under CFR Title 14 Part 77.9 (Safe, Efficient Use, and Preservation of the Navigable Airspace). This online tool was utilized to determine if the proposed Project would require formal filing to the FAA. Based on the results of the FAA Notice Criteria Tool, the Project does not exceed notice criteria; therefore, it is not required for the Project to be formally filed with the FAA Obstruction Evaluation Group.

The panels to be used on the proposed Solar Project are smooth glass surface material with an anti-reflection coating, which is noted in the glare analysis. The panel orientation, location, and specifications used in the analysis were based on the Solar Project design. Based upon the analysis conducted, no glare was predicted. Further details and description of methodology and modeled results are provided in Appendix N.

4.12 Landforms

Morgan County is located in the Colorado Piedmont section of the Great Plains Physiographic Province. Underlying bedrock consists primarily of the Cretaceous Age Foxhills Sandstone and Pierre Shale that gently slopes east. The landforms of Morgan County consist primarily of typical Great Plains uplands and the broad valley of the South Platte River (Morgan County 2008).

The Project will impact a small portion of this area and will not affect the general landform in the Project Area. The natural contours of the land will be returned where feasible following construction.

4.13 Soils

Tetra Tech reviewed the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey to identify and characterize the soils within the Project site. Based on desktop data, four distinct soil types are present within the Project Area (USDA 2023; Table 9). The dominate soil unit is Valent sand, 3 to 9 percent slopes (3,144 acres and 70.7 percent of the Project Area). The Project does not contain any prime farmland, and all present soil types are rated as non-hydric (USDA 2023).

Table 9. Soils that Occur in the Project Area

Soil Name	Soil Unit	Acres	Farmland Classification	Hydric Rating (%)	K Factor Rating	Wind Erodibility Rating	Drainage Class
Truckton loamy sand, 0 to 3 percent slopes	TuB	176.1	Not Prime Farmland	Non-Hydric (0%)	.17	2	Well Drained
Valent sand, 0 to 3 percent slopes	Va	1,123.1	Not Prime Farmland	Non-Hydric (0%)	.02	1	Excessively Drained
Valent sand, 3 to 9 percent slopes	VcD	3,144.6	Not Prime Farmland	Non-Hydric (0%)	.02	1	Excessively Drained
Valent sand, 3 to 9 percent slopes	VwD	1.7	Not Prime Farmland	Non-Hydric (0%)	.02	1	Excessively Drained

Source: USDA 2023

Impacts to soils are anticipated to be temporary during the construction phase of the Project. Activities impacting soils include the clearing of vegetation and grading of areas for access roads and installation of Project facilities. Clearing and grading exposes soils to a risk of erosion from wind and stormwater. Impacts to soils during operations are anticipated to be minimal from use of access roads by operations and maintenance staff.

The NRCS assigns wind erodibility groups to measure soil susceptibility to wind erosion. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. Soil types within the Project site are in either group 1 or 2, indicating high susceptibility to wind erosion (USDA-NRCS 2023). The NRCS also assigns a K Factor Rating which indicates the susceptibility of a soil to sheet and rill erosion by water. K factor values range from 0.02 to 0.69. The higher the value, the more susceptible. Soil types within the Project site have a low K factor indicating low potential for sheet and rill erosion by water (USDA-NRCS 2023). A Water and Wind Erosion Control Plan is included as Appendix I, which details detail erosion control measures and construction stormwater runoff management for the Project.

4.14 Farmland of Statewide Importance

Tetra Tech reviewed the USDA NRCS Web Soil Survey, and the Project Area does not contain any prime, unique, or farmland of statewide importance. All soils within the Project Area are rated as “Not Prime Farmland” (USDA 2023). Therefore, no impacts to prime, unique, or farmland of statewide importance is anticipated to result from development of the Project.

5.0 SITE MAPS & PLANS

5.1 Vicinity Map

The Project vicinity map is provided as Appendix A-1.

5.2 Special Use Map/Site Plan

The Project Special Use Map/Site Plan is provided as Appendix A-2.

5.3 Schematic Drawings

Schematic elevation drawings of the PV array, tracking system, inverters, O&M building, and fencing are included in Appendix A-5.

5.4 One Line Drawing

A one-line electrical drawing of the Project is included as Appendix A-6.

5.5 Specification Sheets

Preliminary specification sheets for the PV array and inverters are included as Appendix A-7.

5.6 Drainage & Runoff Control Plan & Drainage Study

A Drainage and Runoff Control Plan and supporting Drainage Study are included as Appendix A-2 and M.

5.7 Water & Wind Erosion Control Plan

The Water and Wind Erosion Control Plan is provided as Appendix I.

5.8 Decommissioning Plan

The Decommissioning Plan prepared in accordance with Section 4-835 is provided as Appendix O.

5.9 Geotechnical Report

The Applicant certifies that prior to construction, a professional engineer licensed in Colorado will complete a geotechnical study that includes the following:

1. Soils engineering and engineering geologic characteristics of the site based upon on-site sampling and testing.
2. Foundation and tower systems design criteria for all proposed structures.
3. Slope stability analysis.
4. Grading criteria for ground preparation, cuts and fills, and soil compaction.

The geotechnical report detailing results of the study will be provided to Morgan County upon completion.

5.10 Maintenance Statement

The Applicant has prepared a maintenance statement for the system and property describing the anticipated maintenance and property upkeep that will occur during operation of the solar facility. The Maintenance Statement is provided as Appendix P.

5.11 Emergency Operations & Fire Mitigation Plan

The Project will implement adequate fire control and prevention measures during construction and operations as further detailed per the Emergency Operations and Fire Mitigation Plan included as Appendix H.

6.0 PUBLIC OUTREACH

The Applicant conducted a public open house meeting held on September 6, 2023, at Petteys Park golf course located at 2301 West Mill Street, Brush, Colorado. The public open house was noticed on the Project's website, through an informational flyer that was mailed to all landowners within a half-mile radius of the Project and was advertised in the local newspaper for two weekly circulations prior to the meeting. Additionally, the informational flyer was posted to the Morgan County Bulletin Board Facebook page.

Throughout the Project's planning and permitting process, the Applicant has contacted and coordinated with various agencies and local officials including the Morgan County Planning & Building Department, Morgan County Road and Bridge Department, Morgan County Economic Development Committee, City of Brush, Colorado Department of Wildlife, Colorado State Historic Preservation Office, Brush Volunteer Fire Department, Brush Rural Fire Protection District, Morgan County Sherriff's Office and Brush Police Department. In general, the purpose of these coordination efforts was to provide information on the Project, request feedback, and answer questions. In addition, the Applicant recently became a member of the Morgan County Economic Development Committee.

An Environmental Justice Analysis and Communications Plan were prepared for the Project. The plans are included as Appendix Q-1 and Q-2. A Public Outreach Summary detailing public outreach completed to date is included as Appendix Q-3.

7.0 CITIZEN REVIEW PROCESS

The SUP request will require a public hearing for which a minimum of 10 days' public notice is required. The SUP request will be noticed pursuant to Morgan County Zoning Regulations Section 2-390. A list of adjoining landowners within 1,320' of the Project site and their mailing addresses is provided as Appendix R.

Site notices will be posted on the property fronting each adjacent right of way at least 10 days prior to each scheduled public hearing date in accordance with Morgan County Zoning Regulations Section 2-390 (B).

8.0 VESTED RIGHTS

The Applicant hereby respectfully requests that vested rights be granted for the Solar Project for a period of six years. The development schedule and phase timing are set forth in Section 2.6.1 (Table 2) above. Vested right is appropriate here because this a multi-phase Project that will be built out over several years.

9.0 REFERENCES

- CAPCD (Colorado Air Pollution Control Division). 2023. 2023 Ambient Air Monitoring Network Plan. Available online at: https://apcd.state.co.us/tech_doc_repository.aspx?action=open&file=2023AnnualNetworkPlan.pdf. Accessed September 2023.
- CDOT (Colorado Department of Transportation). 2023. Online Traffic Information System Traffic Data Explorer. Available online at: [Traffic Data Explorer \(coloradodot.info\)](https://trafficdataexplorer.coloradodot.info). Accessed September 2023.
- CDA (Colorado Department of Agriculture). 2023. County Weed Programs. Available online at: <https://ag.colorado.gov/conservation/noxious-weeds/county-weed-programs>. Accessed September 2023.
- EPA (U.S. Environmental Protection Agency) 2023. Current Nonattainment Counties for All Criteria Pollutants. Available online at: <https://www3.epa.gov/airquality/greenbook/ancl.html>. Accessed September 2023.
- FAA (Federal Aviation Administration). 2023a. Circle Search for Airports. Available online at: <https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showCircleSearchAirportsForm>. Accessed September 2023.
- FAA. 2023b. Notice Criteria Tool. Available online at: <https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm>. Accessed September 2023.
- FEMA (Federal Emergency Management Agency). 2023. National Flood Hazard Layer. Available online at: <https://www.fema.gov/flood-maps/national-flood-hazard-layer>. Accessed September 2023.
- Klise, G., Tidwell, V., Reno, M., Moreland, B., Zemlick, K., & Macknick, J. (2013). Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern United States [Review of Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern United States]. Sandia National Laboratories. <https://www.osti.gov/servlets/purl/1090206>
- Morgan County. 2008. Morgan County Comprehensive Plan. Available online at: <https://morgancounty.colorado.gov/sites/morgancounty/files/Comprehensive-Plan-2008.pdf>. Accessed September 2023.
- Morgan County. 2023a. Parcel Viewer App. Available online at: <https://morgancountyco.maps.arcgis.com/apps/Solutions/s2.html?appid=98b97c7f37e2453f85938d547d2b7f11>. Accessed September 2023.
- Morgan County. 2023b. Morgan County Zoning Regulations. Available online at: <https://morgancounty.colorado.gov/sites/morgancounty/files/documents/Zoning%20Regulations%20-%2020012323.pdf>. Accessed September 2023.

Morgan County. 2023c. Morgan County School Districts. Available online at:

<https://morgancountyco.maps.arcgis.com/apps/Solutions/s2.html?appid=516c27c48c514af8bdb94071966688b8>. Accessed September 2023.

USDA-NRCS (U.S. Department of Agriculture Natural Resources Conservation Service). 2023. Web Soil Survey. Available online at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm> . Accessed September 2023.

Fortress BESS Project, Phase II Special Use Permit Application



For Submittal to:



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231 Ensign, P.O. Box 596
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PERMIT # SU2023 - 0023

Date Received	<u>11 / 8 / 23</u>	Received By	<u>\$</u>
App Fee	<u>\$5000</u>	Ck/CC #:	<u>091045071</u>
		Paid	<u>11 / 14 / 23</u>
Minor Amend Fee:	\$	CK/CC #:	
		Paid	<u>/ /</u>
Recording Fee	\$	Ck/CC #:	
		Paid	<u>/ /</u>
PC Date:	<u>2 / 12 / 24</u>	BOCC Date:	<u>/ /</u>
100 Year Floodplain?	<u>Y/N</u>	Taxes Current?	<u>Y/N</u>

SPECIAL USE PERMIT APPLICATION

(Also to be used as application for Amendments to Existing Special Use Permits)

Landowner **MUST** Sign Application and Right to Farm Policy

APPLICANT

LANDOWNER

Name Fortress Solar II LLC
 Address 11801 Domain Blvd, Suite 450
Austin, TX 78758
 Phone _____
 Email _____

Name Ruth Ann Odle
 Address 16218 Hwy 71 Brush, CO 80723-9436
 Phone () _____
 Email _____

BRIEF DESCRIPTION OF APPLICATION

Proposed 200 MW Battery Energy Storage system. Phase II of the Fortress Solar BESS Project.

PROPERTY LEGAL DESCRIPTION

Address (if available):

See attached parcel information table

S: ___ T: ___ R: ___ _____ 1/2 ___ 1/4 ___ 1/4 Property Size 645.85 (sq. ft. or acres)
 Parcel #: 1233 _050 _00 _001 Zone District: A
 Subdivision: _____ Lot #(s): _____

Is property located within 1320' (1/4 mile) of a livestock confinement facility? Y/N

SEE REQUIRED ATTACHMENT LIST ON BACK OF THIS PAGE.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED OR PROCESSED.

SPECIAL USE PERMIT REQUIRED ATTACHMENT LIST

Fee:

Non-Refundable Application Fee

**Additional fees and charges may be required pursuant to Section 2-160 of Morgan County Zoning Regulations*

Project Narrative:

Narrative– Including the following:

- Project Description
- Purpose of request
- How this proposal complies with the Morgan County Comprehensive Plan
See: <https://morgancounty.colorado.gov/sites/morgancounty/files/Comprehensive-Plan-2008.pdf>
- How this project/proposed use meets the criteria for Special Use Permit pursuant to Sec. 2-395 of the Zoning Regulations
- How the project/proposed use meets any specific criteria related to the project/proposed use. *See Morgan County Zoning Regulations Chapter 4-Supplementary Regulations, including but not limited to: Campgrounds, Livestock Confinement, Kennels, Outdoor Shooting Ranges, Home Occupations, Oil and Gas, Mobile Home Parks, Wireless Service Facilities, Solar, Wind and BESS*
- How project will relate to or impact existing adjacent uses
- All off-site impacts and proposed mitigation measures
- Development or implementation schedule of project
- Proposed length of time the permit, if applicable
- Discussion of any public improvements required to complete the project

Environmental Impacts:

- Discuss any environmental impacts the Special Use will have on the following and the proposed mitigation measures:

- | | | | |
|-------------------------------------------------|----------------------------------------------|---------------------------------------------------------|-----------------------------------------------------|
| <input checked="" type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Dust | <input checked="" type="checkbox"/> Existing Vegetation | <input checked="" type="checkbox"/> Land Forms |
| <input checked="" type="checkbox"/> Noise | <input checked="" type="checkbox"/> Odor | <input checked="" type="checkbox"/> Storm Water Runoff | <input checked="" type="checkbox"/> Water Resources |
| <input checked="" type="checkbox"/> Wetlands | <input checked="" type="checkbox"/> Wildlife | <input checked="" type="checkbox"/> Visual Amenities | <input type="checkbox"/> Other _____ |

Map & Plans: **Special Use Map** meeting the requirements of Sec. 2-420 and any specific map requirements for the proposed use including but not limited to: *Campgrounds, Livestock Confinement, Kennels, Outdoor Shooting Ranges, Home Occupations, Oil and Gas, Mobile Home Parks, Wireless Service Facilities, Solar, Wind and BESS. Sample Map attached to application for reference*

Drainage/Run-Off Control Plan may be required if the Planning Administrator determines that the use or building meets one of the following criteria:

- (1) The accessory use or building may have a drainage impact on adjacent properties;
- (2) The accessory use or building may have a drainage impact on adjacent right of ways;
- (3) The accessory structure is 5000 square feet or larger.

Decommissioning Plan [Wind, Solar, BESS]

Geotechnical Report [Wind, Solar]

Maintenance Statement [Wind, Solar, BESS]

Water and/or Wind Erosion Control Plan [Wind, Solar]

Fire Mitigation Plan [BESS]

Specification Sheet [BESS]

Emergency Operation Plan [BESS]

Ownership: **Current title insurance commitment (last 6 months)**

Mineral Rights Holders Notification

Notice to FFA & Approval Letter [Wind]

Notice to Operator of Communication Link (if applicable) [Wind]

Proof of current paid taxes

Utilities/Access: **Water tap (Engineering Report from Quality Water or proof of access to a well)**

Sewer (Septic Permit, Will Serve Letter from NCHD or proof of other public system)

Electric (Electric bill or letter of commitment from electricity provider)

Driveway Permit from CDOT or Morgan County Road & Bridge (If required by staff)

Ditch Company- Proof of contact if there is a ditch on or next to subject property

Architecture Control Approval (if applicable)

Utility Interconnection or Crossing Certification [Wind, Solar]

Road Agreement [Wind, Solar]

Electrical Diagram [BESS]

Vested Rights: **Vesting Rights** (Optional). If applying for vested rights with special use application, the following must be submitted:

- Period of time Vesting Rights are requested
- Development schedule including timeline and phases
- Reason for request
- Other pertinent factors concerning the development
- Additional application fee for vesting rights application

Miscellaneous: **Right to Farm Policy** signed by Landowner(attached)
 Liability Insurance for Solar, Wind and/or BESS projects

1 # Paper Application sets

1 Digital Copy of Application (One sided only)

Posted Public Notice Verification:

Notarized affidavit with photographs from a distance & close-up

This must be submitted PRIOR to Planning Commission hearing and PRIOR to Morgan County Board of Commissioners hearing

Additional Information required by staff:

APPLICANT & LANDOWNERS **MUST** SIGN APPLICATION ON NEXT PAGE

APPLICANT & LANDOWNER'S STATEMENT

I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge.
Application must be signed by landowners as shown on title insurance/commitment.

Charles Ndhlovu 10/18/2023
Applicant Signature Date

Leith Ann Odle 10/25/23
Landowner Signature Date

Applicant Signature Date

Landowner Signature Date



MORGAN COUNTY, PLANNING, ZONING & BUILDING DEPT.
 231 Ensign, P.O. Box 596
 Fort Morgan, Colorado 80701
 PHONE (970) 542-3526 FAX (970) 542-3509

MORGAN COUNTY RIGHT TO FARM POLICY / NOTICE

Morgan County is one of the most productive agricultural counties in Colorado. Ranching, farming, animal feeding, and all other manner of agricultural activities and operations in Morgan County are integral and necessary elements of the continued vitality of the county's economy, culture, landscape and lifestyle. Morgan County specifically recognizes the importance of agricultural operations as necessary and worthy of recognition and protection.

Landowners, residents and visitors must be prepared to accept as normal the effects of agriculture and rural living. These may include noise from tractors, equipment, and aerial spraying sometimes at night or in the early morning; dust from animal pens, field work, harvesting, and gravel roads; odor from animal confinement operations, silage and manure; smoke from ditch burning; flies and mosquitoes; the use of pesticides and fertilizers, including aerial spraying; and movement of livestock or machinery on public roads. Under the provisions of the State of Colorado's "Right to Farm" law (Section 35-3.5-101 and following, C.R.S.), all normal and non-negligent agricultural operations may not be considered nuisances.

Also public services in a rural area are not at the same level as in an urban or suburban setting. Road maintenance may be at a lower level, mail delivery may not be as frequent, utility services may be nonexistent or subject to interruption, law enforcement, fire protection and ambulance service will have considerably longer response times, snow may not be removed from county roads for several days after a major snow storm. First priority for snow removal is that school bus routes are normally cleared first.

Children are exposed to different hazards in a rural setting than they are in an urban or suburban area. Farm and oilfield equipment, ponds, and irrigation ditches, electrical service to pumps and oil field operations, high speed traffic, noxious weeds, livestock, and territorial farm dogs may present real threats to children. It is necessary that children's activities be properly supervised for both the protection of the children and protection of the farmer's livelihood.

All rural residents and property owners are encouraged to learn about their rights and responsibilities and to act as good neighbors and citizens of Morgan County. This includes but is not limited to obligations under Colorado State law and Morgan County Zoning Regulations regarding maintenance of fences, controlling weeds, keeping livestock and pets under control. There may be provisions of which you are unaware. For example, because Colorado is a Fence Law State, owners of property may be required to fence livestock out.

Information regarding these topics may be obtained from the Colorado State University Cooperative Extension Office and the County Planning and Zoning Department, and County Attorney.

RECEIPT AND STATEMENT OF UNDERSTANDING

I hereby certify that I have received, read, and understood the Morgan County Statement of Policy and Notice regarding Right to Farm.

I further state that I am aware that the conditions of living in an unincorporated area are different than living in a town or city and that the responsibilities of rural residents are different from urban or suburban residents. I understand that under Colorado law that a pre-existing, non-negligent agricultural operation may not be considered a public or private nuisance.

Ruth Ann Odle 10-25-23
 Signature Date

Ruth Ann Odle
 Printed Name

16218 Hwy. 71
 Address
Brush, CO 80723

To Be Signed by Landowner

Adopted by the Morgan County Board of County Commissioners by Resolution #96BCC41 on July 23, 1996 and amended by Resolution 2008 BCC 34 on September 2, 2008.

Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF FORMATION OF "FORTRESS SOLAR II LLC", FILED IN THIS OFFICE ON THE THIRTIETH DAY OF OCTOBER, A.D. 2023, AT 2:42 O`CLOCK P.M.



Jeffrey W. Bullock, Secretary of State

2556335 8100
SR# 20233846648

Authentication: 204478325
Date: 10-30-23

You may verify this certificate online at corp.delaware.gov/authver.shtml

STATE OF DELAWARE
CERTIFICATE OF FORMATION
OF LIMITED LIABILITY COMPANY

The undersigned authorized person, desiring to form a limited liability company pursuant to the Limited Liability Company Act of the State of Delaware, hereby certifies as follows:

1. The name of the limited liability company is Fortress Solar II LLC
_____.

2. The Registered Office of the limited liability company in the State of Delaware is located at 1209 Orange Street (street), in the City of Wilmington, Zip Code 19801. The name of the Registered Agent at such address upon whom process against this limited liability company may be served is The Corporation Trust Company
_____.

By: 
Authorized Person

Name: Christie Kneteman
Print or Type

Participating Landowner Parcel Information

APN	Account Number	Property Owner	Legal Description
1233-050-00-001	R002837	Ruth Ann Odle	S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T: 4 R: 55 PARC SW1/4 S OF RR

Special Use Permit Application

Fortress BESS Project- Phase II

Morgan County, Colorado

November 2023

Submitted to:

Morgan County Planning and Zoning
231 Ensign Street, PO Box 596
Fort Morgan, CO 80701



Prepared for

Fortress Solar II LLC
11801 Domain Blvd, Suite 450
Austin, TX 78758

Prepared by



TETRA TECH

1560 Broadway, Ste 1400
Denver, CO 80202

Morgan County Special Use Permit Application Submittal Requirements

The Morgan County Special Use Permit application package for the proposed Fortress BESS Project is organized by sections to follow the Morgan County SUP Application Checklist, provided below.

Morgan County Code 2-380 Submittal Requirements / SUP Application Checklist	Application Section
1. Applicant Information	2.5 / Application Form
2. Landowner Information	2.1 / Application Form
3. Property Legal Description	2.1 / Application Form
4. Applicant & Landowner's Statement	Application Form
5. Project Narrative Including the Following: a) Project Description b) Purpose of request c) How this proposal complies with the Morgan County Comprehensive Plan d) How this project/proposed use meets the criteria for the Special Use Permit pursuant to Sec. 2-395 of the Zoning Regulations e) How this project/proposed use meets the specific criteria per Morgan County Zoning Regulations Chapter 4- Supplementary Regulations (Solar) f) How the project will relate to or impact existing adjacent uses g) All off-site impacts and proposed mitigation measures h) Development or implementation schedule of project i) Proposed length of time of the permit j) Discussion of any public improvements required to complete the project	2.0-3.0
6. Discuss any environmental impacts the Special Use will have on the following and the proposed mitigation measures: Air Quality, Dust, Existing Vegetation, Land Forms, Noise, Odor, Storm Water Runoff, Water Resources, Wetlands, Wildlife, Visual Amenities, Other	4.0
7. Maps and Plans	5.0
a) Special Use Map	Appendix A-2
b) Drainage/Run-off Control Plan	Appendix A-2, L, & I
c) Decommissioning Plan	Appendix O
d) Geotechnical Report (Solar/Wind)	5.8
e) Maintenance Statement	Appendix P
f) Water and Wind Erosion Control Plan (Solar/Wind)	Appendix I
g) Fire Mitigation Plan	Appendix H
h) Specification Sheets	Appendix A-7
i) Emergency Operation Plan	Appendix H
8. Ownership Information	2.2
a) Title Commitments	Appendix B
b) Mineral Rights Holders Notification	2.2.6 / Appendix E
c) Proof of Current Paid Taxes	2.2.4 / Appendix D
9. Utilities:	2.6.2
a) Water tap (Will Serve letter or proof of access to a well)	2.6.2.1
b) Sewer (Septic Permit, Will Serve Letter from NCHD or proof of other public system)	2.6.2.2
c) Electric (Electric bill or letter of commitment from electricity provider)	2.6.2.3
d) Utility Interconnection or Crossing Certification (Wind/Solar)	2.6.2.4

10. Access	2.7
a) Morgan County Driveway Permits	Appendix G
b) Ditch Company- Proof of contact if there's a ditch on or next to the subject property	2.2.8
c) Road Agreement (Wind/Solar)	2.8.1
d) Electrical Diagram	Appendix A-6
11. Vested Rights	8.0
12. Miscellaneous	
a) Right to Farm Policy	2.2.5 / Application Form
b) Liability Insurance	2.2.3 / Appendix C
c) Posted Public Notice Verification	7.0

Morgan County SUP Criteria Index

The following index is provided to direct the reader to the sections of this SUP Application that correlate to the Morgan County Chapter 2-395 “Review Criteria” identified for Special Use Permits.

The following criteria will be used by the Planning Commission and the Board of Commissioners when reviewing an application for a special use permit:

Morgan County Code 2-395 Special Use Permit Review Criteria	Application Section
A. The use and its location as proposed are in conformance with the Morgan County Comprehensive Plan;	2.11.A
B. All the application documents are complete and present a clear picture of how uses are to be arranged on the site or within Morgan County;	2.11.B
C. The site plan conforms to the district design standards of these regulations;	2.11.C
D. All on and off-site impacts have been satisfactorily mitigated either through agreement, public improvements, site plan requirements or other mitigation measures;	2.11.D
E. The special use proposed has made compatible with the surrounding uses and adequately buffered as determined by the County;	2.11.E
F. The special uses poses only the minimum amount of risk to the public health, safety, and welfare as set by either federal, state or county regulation, whichever is the strictest;	2.11.F
G. The special use proposed is not planned to be developed on a non-conforming parcel;	2.11.G
H. The applicant has adequately documented a public need for the project, all pertinent technical information, adequate financial resources to implement it, and has paid all fees and review costs levied by the County for application processing and review; and	2.11.H
I. For any special use requiring a supply of water that the applicant has demonstrated a source of water which is adequate for the proposed use in terms of quantity and reliability and in the case of human consumption, quantity, quality, and reliability	2.11.I

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APPENDIX N: GLINT & GLARE ANALYSIS (SEE FORTRESS SOLAR SUP APPLICATIONS)

APPENDIX O: DECOMMISSIONING PLAN

APPENDIX P: MAINTENANCE STATEMENT

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APPENDIX Q-2: COMMUNICATIONS PLAN

APPENDIX Q-3: PUBLIC OUTREACH SUMMARY

APPENDIX R: MAILING LIST OF LANDOWNERS WITHIN 1,320 FEET

Acronyms and Abbreviations

AADT	Average Annual Daily Traffic
AC	alternating current
AF	acre-feet
APEN	Air Pollutant Emissions Notice
APN	Assessor's Parcel Number
Applicant	Fortress Solar II LLC
Aypa	Aypa Power North America LLC
BESS	battery energy storage system
BESS Project Area	21-acre BESS area
BMPs	best management practices
BNSF	Burlington Northern Santa Fe Corporation
CAPCD	Colorado Air Pollution Control Division
CDA	Colorado Department of Agriculture
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health & Environment
CPW	Colorado Parks and Wildlife
dBA	A-weighted decibel
EHS	Environmental Health & Safety
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FIRM	Flood Insurance Rate Map
Gen-tie	generation tie line
Highway 34	U.S. Highway 34
HVAC	heating, ventilation, and air conditioning
I-76	Interstate 76
IF	isolated finds
IPaC	Information for Planning and Consultation
kV	kilovolt
MW	megawatt

MWh	megawatt hours
NERC	North American Electric Reliability Corporation
NHD	National Hydrography Dataset
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
Project	A utility scale solar and BESS project known as the Fortress Solar Project
Project Area	4,259 acre fenced Project boundary
PV	photovoltaic
SGHAT	Sandia Laboratories Solar Glare Hazard Analysis Tool
SUP	Special Use Permit
Tetra Tech	Tetra Tech, Inc.
Tri State	Tri State Generation and Transmission Association Inc.
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WOTUS	waters of the U.S.

1.0 INTRODUCTION

Fortress Solar II LLC (“Applicant”), an indirect subsidiary of Aypa Power North American LLC (“Aypa”), a Blackstone portfolio company submits this application in furtherance of the development of a utility scale solar and BESS project known as the Fortress Solar Project (the “Project”) in Morgan County, Colorado. The Project will be comprised of a solar collector facility and a BESS facility; the solar collector facility project is referred to herein as the “Solar Project” and the BESS facility project is referred to herein as the “BESS Project”. The Project will be developed in three phases, each phase shall contain one phase of the Solar Project and one phase of the BESS Project. In accordance with the Morgan County Zoning Regulations, three separate solar collector facility applications and three separate BESS facility applications, one for each phase, are submitted simultaneously. In order to provide Morgan County (“County”) with a complete picture of the Project, each of the three BESS Project applications includes information on all three phases, each phase corresponding to its own application. The total fenced Project boundary will encompass approximately 4,259 acres (the “Project Area”). The BESS Project, inclusive of all three phases, is an up to 600-megawatt (MW), 2,400 MW hour (MWh) BESS and will encompass up to 21 acres within the Project Area (“BESS Project Area”). This application is for Phase II of the BESS Project and is submitted in conjunction with the application for Phase II of the Solar Project. Phase II of the BESS Project will encompass approximately seven acres.

In accordance with the foregoing, the Applicant respectfully submits this Special Use Permit (SUP) application to the Morgan County Planning and Development Department pursuant to Morgan County Code Chapter 4-855, and Chapter 4-860, to address utility-scale battery storage facilities. This Phase of the BESS Project is up to 200-megawatt (MW), 800 MW hour (MWh) BESS. The Applicant is requesting an SUP to construct, operate, maintain, and decommission this phase of the BESS Project. The BESS Project will be located approximately 1.6 miles east of the city of Brush, Colorado (Figure 1, Project Location, Appendix A-1). The BESS Project Area is comprised of one parcel, and the proposed generation tie (gen-tie) line would bisect three additional parcels (Appendix A-2) that are located within the Morgan County Agricultural Production Zone. The ALTA survey for the Project Area is included as Appendix A-3.

Additional Project related facilities include the Project substation, a gen-tie line, and an operations and maintenance building; which are included within the Solar Project’s SUP applications. These Project related facilities will serve more than one phase and are therefore included all of the Solar Project SUP applications. The SUP submitted for Phase II of the Solar Project is to be reviewed concurrent with the subject Phase II BESS SUP application.

The Project Vicinity Map is provided as Appendix A-1. The Site Plan and Special Use Map are included as Appendix A-2. The ALTA survey for the Project Area is provided as Appendix A-3. A site access plan is included Appendix A-4. Schematic drawings of the Project components are detailed in Appendix A-5 and a one-line electrical drawing of the BESS is provided as Appendix A-6. Preliminary specification sheets are provided as Appendix A-7. The SUP application form and Right to Farm Policy is provided in front of this application narrative following the Applicant’s cover letter.

2.0 PROJECT NARRATIVE

2.1 Project Location & Participating Landowner Parcel Information

The BESS Project is located on approximately 21 acres of private property currently held under purchase option by an affiliate of the Applicant, which will be assigned to the Applicant prior to the exercise of the option. (Appendix A-2). The Project is located along U.S Highway 34 (Highway 34), on existing rangeland approximately 1.6 miles east of Brush, Colorado. Table 1 below lists the assessor's parcel and property owner information for the project parcel.

Table 1. Participating Property Owners Parcel Information

APN	Account Number	Property Owner	Legal Description
1233-050-00-001	R002837	Ruth Ann Odle	S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T: 4 R: 55 PARC SW1/4 S OF RR

Source: Morgan County 2023a

2.2 Property interests, rights, and policies

2.2.1 Easements and Agreements

An affiliate of the Applicant is currently the option holder for the Project site. The option to purchase agreements for the full Project site are for a total of 4,473 acres (407 acres of Benotti; 1,897 acres of Odle Option 1; 2,170 acres of Odle Option 2) and extend until the end of 2024. On October 18th, 2023, an affiliate of the Applicant entered into a Temporary License Agreement with Tri State Generation and Transmission Association Inc. (Tri-State) to allow for completion of surveying and other investigative activities on the Tri-State owned properties. The Applicant intends to establish an access easement across Tri-State owned parcels for access to the Project from County Road R.5. In addition, the Applicant intends to establish an approximate 167-acre ROW utility easement for the proposed generation tie line to interconnect the Project to the Tri-State owned substation west of the Project.

2.2.2 Title Commitments

The title insurance commitments (last 6 months) for the participating landowner within the BESS Project Area is included as Appendix B.

2.2.3 Liability Insurance

The Applicant will carry liability insurance to cover loss or damage to persons or structures during construction and operation of the BESS Project. A copy of the Applicant's liability insurance policy for the Odle property is included per Appendix C.

2.2.4 Proof of Current Paid Taxes

Proof of current tax payment for the participating landowner is included as Appendix D.

2.2.5 Right to Farm Policy

The participating landowner signature certifying the receipt, review, and understanding of the Morgan County Statement of Policy and Notice regarding the Right to Farm is provided with the SUP application form.

2.2.6 Mineral Right Holder Notification

The mineral right holders within the Project boundary will be provided with a preliminary notice advising them of their right to comment or request information from Morgan County. At this time, a hearing date has not yet been scheduled for the SUP application. The Applicant will notify the individual mineral rights holders within the Project in advance of the scheduled hearing as required by Morgan County and statutory notification requirements. Upon finalization of the hearing schedule, the Applicant will coordinate with Morgan County to ensure all appropriate mineral rights holders are given proper notice of the scheduled hearing and an opportunity to provide comment.

A preliminary list of the mineral rights holders that will be notified in advance of the scheduled hearing is included as Appendix E.

2.2.7 Height Restrictions and FAA Hazard Review

According to the Federal Aviation Administration (FAA), the Brush Municipal Airport (FAA identifier 7V5) is located less than a mile northwest of the Project Area (FAA 2023a). Tetra Tech Inc. (Tetra Tech) consulted the FAA Obstruction Evaluation Notice Criteria Tool (FAA 2022b) for four locations in the Project Area and determined that the Project exceeds the Notice Criteria and would require filing. The Applicant will file notice with the FAA at least 45 days prior to the start of construction.

2.2.8 Ditch Company- Proof of Contact

No drainage or irrigation ditches have been identified within the BESS Project Area.

2.3 Zoning District

The BESS Project is located in the Agriculture Production zoning district (Morgan County 2023a). Per Morgan County Code, Section 3-180, BESS may be permitted as a primary or accessory use in the Agriculture Production zoning district through issuance of a SUP.

2.4 Purpose of Request

The purpose of this application is to provide Morgan County with pertinent information regarding the Project, subject to the Morgan County Zoning Regulations concerning the regulation of wind energy, solar collector, and battery energy storage systems (Morgan County 2023b). Per Morgan County Code, Section 3-180, BESS facilities may be permitted as a primary or accessory use in the Agriculture Production zoning district through issuance of a special use permit. Therefore, the purpose of the SUP is to authorize the proposed use of a BESS facility on the Project site to allow for the development and operation the BESS Project.

2.5 Applicant Information

The Applicant is an indirect subsidiary of Aypa. Aypa is a Blackstone portfolio company. Aypa has a proven track record of developing, financing, constructing, owning, and operating utility-scale renewable energy and battery energy storage projects. Aypa's existing portfolio and qualified development pipeline spans the continental United States and Ontario, Canada, including 15,000+ MWs of projects in various stages of development. Aypa currently has an operating fleet of 30 projects, two projects are currently under construction, and over 70 projects are in the development pipeline.

2.6 Project Description

The BESS Project is an up to 600-MW, 2,400 MWh Alternating Current (AC)-coupled BESS. This Phase II of the BESS Project is an up to 200-MW BESS, 800 MWh Alternative Current (AC)-coupled BESS. The BESS containers, inverters, and appurtenant facilities would be located on approximately 21 acres near the Project substation and switchyard. This Phase II of the BESS Project is located on approximately seven acres. The BESS is located within the fenced boundaries of the proposed Project which is further detailed per the concurrent SUP applications for the Solar Project. The site layout is detailed per the Special Use Map/Site Plan included as Appendix A-2.

2.6.1 Development Schedule and Phasing

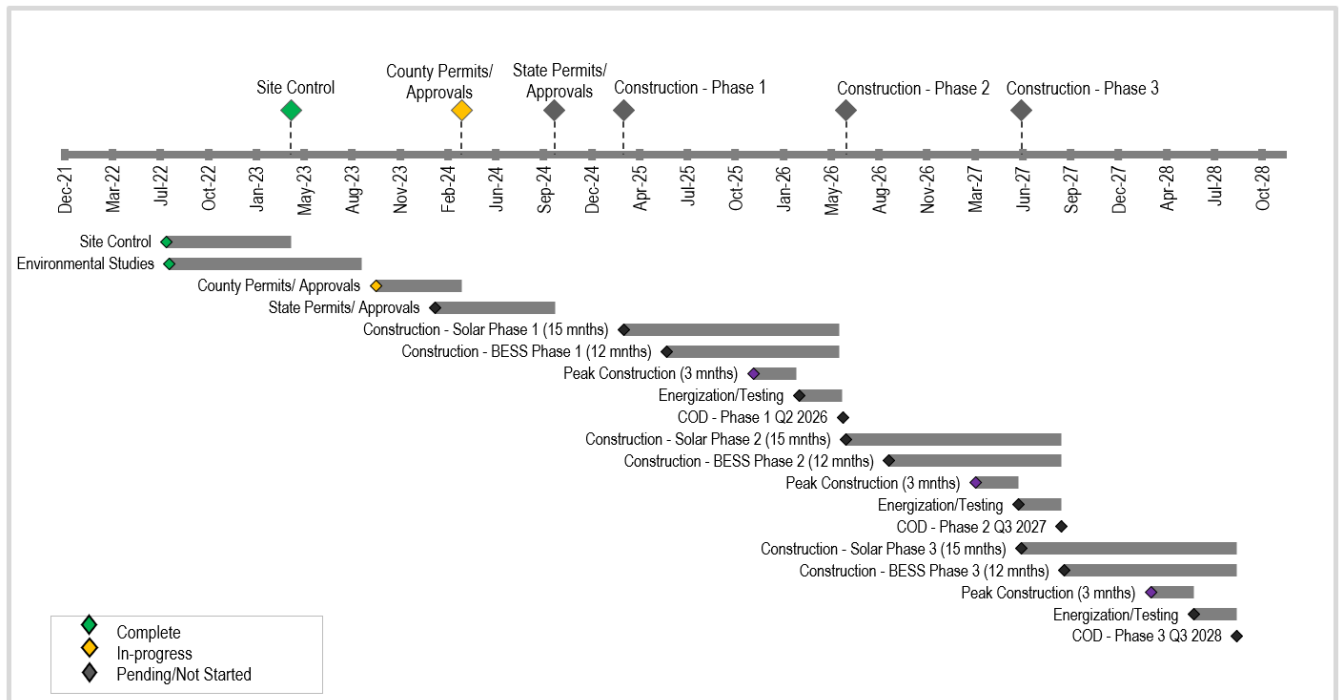
The BESS Project is expected to be constructed in three phases of approximately 200 MW, 800 MWh each. Construction of the Project is anticipated to commence in Q2 2025 pending approval of County permits. The BESS Project will be developed in parallel with the Solar Project. The proposed phasing is detailed per Table 2 below. All associated phasing quantum included in the application should be summed together in such cases in which multiple phases are constructed at the same time. This application is inclusive of maximum and minimum cases of individual and simultaneous phasing. As noted above, this application is for Phase II of the BESS Project.

Table 2. Project Construction Phasing

Phase	APNs	BESS MW	BESS MWh	Start Construction	End Construction	Commercial Operation Date
I	1233-050-00-001	200	800	Q2 2025	Q1 2026	Q2 2026
II	1233-050-00-001	200	800	Q1 2026	Q2 2027	Q3 2027
III	1233-050-00-001	200	800	Q1 2027	Q2 2028	Q3 2028

The overall development schedule for the Solar Project and BESS Project are detailed per Figure 2-1 below.

Figure 2-1. Fortress Solar II LLC - Overall Schedule (Solar & BESS)



2.6.2 Anticipated Permit Timeframe & Length of Permit

Per Section 4-880 of the Morgan County Solar Facility Regulations, a SUP for a BESS is valid for three years, provided that substantial construction and installation of the BESS is completed within that time. The Project construction for each phase is anticipated to be completed within 15 months upon issuance of a building permit. If construction is delayed due to unforeseen circumstances, the Applicant will request extensions, as permitted per Section 4-880 of the Morgan County Code. The Applicant understands the SUP approval may expire if substantial construction progress is not achieved within three years, or up to six years if such extensions are requested and granted.

2.6.3 Siting Considerations

The primary criteria for determining the location of BESS include the existence of compatible adjacent and nearby land uses, suitable topographic conditions, and the proximity to existing electrical infrastructure, major transportation corridors, utility corridors, and electrical load centers. The proposed BESS Project site meets these criteria. The BESS Project site was selected based on proximity to the existing infrastructure of the Tri State Generation and Transmission Association Inc. (Tri State) Story substation. Siting analysis confirms the proposed BESS Project Area avoids areas or locations with a high potential for biological conflict, such as wilderness study areas, areas of environmental concern, historic trails, special management areas, or important wildlife habitat or corridors. The proposed site avoids visual corridors that are prominent scenic viewsheds or scenic areas. As discussed in Section 4.0, there are no known sensitive biological, hydrological, historical, cultural, or archeological resources within or near the proposed BESS Project site.

2.6.4 Battery Energy Storage System

The BESS Project would be initially comprised of 133 SunGrow SC5000UD-MV-US inverters and 1,064 BYD-MC Cube battery containers, augmented over the 30-year life of the Project up to approximately 1,330 BYD-MC Cubes located on concrete equipment pads. Phase II of the BESS Project would be initially comprised of 44 inverters and 352 battery containers, augmented over the life of the project to up to approximately 440 battery containers. The BESS pads would be accessed via 20' wide gravel access roads. The BESS layout is detailed per Appendix A-2. Each battery enclosure would include steel cabinets that hold arrays of lithium-ion batteries. The BESS will be equipped with a heating, ventilation, and air conditioning (HVAC) cooling system with an operating temperature range of -30 to 55 degrees Celsius. Schematic drawings of the BESS Project components are included as Appendix A-5 and a one-line electrical drawing of the BESS is provided as Appendix A-6. Preliminary specification sheets for the inverters and BESS are included per Appendix A-7. The BESS would be charged by power generated from the proposed Solar Project detailed per the concurrent SUP applications and dispatched back to the grid when called upon.

2.6.4.1 BESS Contact Information

The Applicant will contract to hire a construction contractor to build the system/project. The Applicant is the owner, and operator of the BESS Project. The Applicant's address and contact information are detailed below.

System Owner, & Operator

Fortress Solar II LLC

Mailing Address: 11801 Domain Blvd, Suite 450, Austin, TX 78758

Telephone: (888) 287-9058

System Installer

As required by Morgan County Code, Section 4-855(A)(4), contact information for the contracted system installer will be provided to Morgan County prior to issuance of a building permit for the Project.

2.6.5 Project Substation & Generation Tie Line Interconnection

The Project substation would occupy approximately 2-acres and is located north of the BESS area. The Project substation would consist of power transformers, overhead bus, feeder breakers, and miscellaneous supporting equipment.

The Project substation would include an overhead 1.25-mile, double circuit 230 kilovolts (kV) gen-tie line interconnection to the existing Tri State Story substation located west of the Project. The final engineering for the Project and the gen-tie line has not been completed yet. The Applicant is considering two options for infrastructure: H-frame or monopole designs equipped with robust insulators, conductors, and grounding systems to uphold system reliability and safety standards. The anticipated transmission structure heights range from 90 to 110 feet aboveground. The span length between structures will depend on the final chosen pole type and conductor. H-frames have an average span of approximately 750 feet, monopoles have an average span of approximately 900 feet, and lattice

towers span an average of 1150 feet. The Applicant anticipates installation of approximately 8 monopoles, 9 H-frames, or 6 lattice towers based on the final structure chosen during detailed engineering. The final design of these structures will be developed in collaboration with Tri-State and Public Service Company of Colorado to meet all relevant requirements.

The Applicant seeks administrative approval for transmission structures that may exceed the 100-foot height threshold defined for structures in Agriculture Zoning districts. Exceeding this threshold is deemed necessary to ensure adequate clearance for both existing and proposed transmission lines, as well as to comply with safety regulations. The need for structures that exceed 100 feet might be influenced by the procurement strategy that includes equipment availability and lead times. The Applicant will adhere to established utility pole standards, including those for transmission poles, as outlined by the American National Standards Institute and the National Electrical Safety Code.

2.6.6 Electrical Collection System

All electrical interconnection and distribution lines within the BESS Project boundary will be underground, except for power lines that leave the BESS Project or are within the substation. All electrical interconnections and distribution components will comply the National Electrical Safety Code, requirements of the electric utility company, and applicable state and federal regulatory codes as required by Morgan County.

A one-line electrical diagram detailing the BESS layout, associated components, and electrical interconnection methods is included per Appendix A-6.

2.6.7 Operations and Maintenance Building

A 60-foot by 40-foot, 2,400 square foot steel modular operations and maintenance building would be constructed east of the Project Substation, north of the BESS area. The O&M building would have a maximum height of fifteen feet and eight inches. This building is further detailed in the accompanying Solar Project application.

2.6.8 Perimeter Fencing & Site Security

In accordance with Section 4-860(B) of the Morgan County Zoning Regulations, the Project will be surrounded by an 8-foot-tall fence, consisting of 7-feet of chain-link and one foot of barbed wire (Appendix A-2). The Applicant held an initial coordination call with CPW on October 13, 2023. CPW informed the Applicant that fencing recommendations may be provided by per their recommendation letter. The Applicant is awaiting receipt of CPW's letter of recommendation however anticipates receipt prior to the initial public hearing. The Applicant will send notice of the initial public hearing date to CPW when scheduled by the County. A copy of the letter will be provided to Morgan County once received. The Applicant will continue to coordinate with CPW and will consider fencing recommendations. Site entrances will be gated and locked to assure access is limited to authorized personnel.

Exterior lighting would be installed and strategically located to ensure safety and security of the facility without disturbing surrounding areas outside the Project. Lighting would be installed around the periphery of the BESS area, substation, and entry gates, for nighttime security. The lighting for facilities will be designed to meet the minimum number of lights and illumination required for safety and

security and will not cause excessive reflected glare. The Project is also subject to lighting requirements of the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC) and will comply with lighting regulations from these entities as well.

2.6.9 Utilities

2.6.9.1 Electric

The electric service provider for the proposed BESS Project will be selected closer to commencement of construction. At this time, proof of an electric bill or a letter of commitment from the electricity provider will be made available to Morgan County.

2.7 Access, Transportation, & Traffic

2.7.1 Access Roads

The BESS will be located within the proposed Project addressed per the concurrent SUP application submitted for the corresponding Solar Project. Primary haul route and construction deliveries to the Project will be provided via one new 20-foot-wide gravel access road constructed off County Road Q. The primary access for operations and construction commuter vehicles will be provided via a new 20-foot-wide gravel access road constructed off County Road R.5. Primary emergency access will also be provided via the access off County Road R.5. Secondary access for operations and construction commuter vehicles will be provided via a new 20-foot-wide gravel access road constructed off County Road R. The Project will be fenced, and security gates will be installed at each access point to limit access to authorized personnel. Gated entrances would be equipped with Knox boxes and keys to assure emergency personnel access. The proposed site access roads and entry points are depicted on Figure 2.

2.7.2 Morgan County Driveway Permits

The Applicant will obtain a driveway access permit for the access roads proposed to be constructed from County Roads R and Q. As noted per Appendix G, a copy of the two driveway permit applications submitted to the Morgan County and Bridge Department are provided per Appendix G of the SUP application submitted for Phase I of the Solar Project. An affiliate of the Applicant has entered into a Temporary License Agreement with Tri State, and the Applicant is in coordination with Tri State regarding the proposed access road from County Road R.5. Tri State will apply for and obtain the driveway access permit on behalf of the Applicant for the access road proposed to be constructed from County Road R.5.

2.7.3 Owner & Employee Commuter Routes

The access routes to be utilized by the landowner and employees during construction and operations are as follows:

Primary Commuter Route: I-76 to County Road R.5: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately .2 mile and will then head east on County Road R.5 until reaching the

site entrance. The total Commuter Route length from I-76 is approximately 2.4 miles. This access route may be used for emergency access to the Project site.

Secondary Commuter Route: I-76 to County Road R: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately .8 mile and will then head east on County Road R until reaching the site entrance. The total Commuter Route length from I-76 is approximately 3.1 miles.

2.7.4 Construction Haul Route

The haul route to be utilized by heavy vehicle truck traffic throughout construction will be from I-76 to the site access off County Road Q. The Applicant would install a tire washout station at the entrance to the Project site off County Road Q to reduce mud, rock, or debris tracked onto paved surfaces. An exhibit detailing a typical tire washout station is included as Appendix A-8. The route is depicted on Figure 3 and the site access is also detailed per Appendix A-4, labeled as 'Site Access #1'.

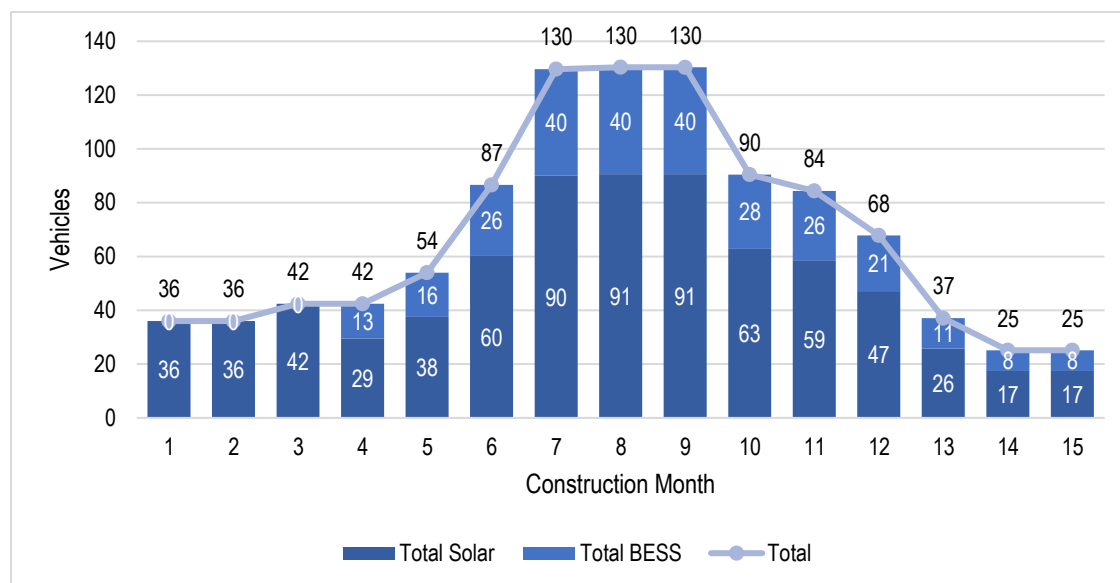
Haul Route: Interstate 76 (I-76) to County Road Q: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately 1.9 miles and will then head east on County Road Q until reaching the site entrance. The total Haul Route length from I-76 is approximately 4.5 miles.

2.7.5 Construction Transportation & Traffic

The construction process for each phase is estimated to take up to 12 months to complete, during which time there would be some variability in the number of workers each day. Project initiation and site preparation would occur over the first 5 months and will require fewer workers and fewer materials delivery truck trips. After the site is prepared for installation, the Project site would experience an increase to a higher maximum number of workers and material delivery truck trips. The peak of construction period for each phase is anticipated to occur over a 3-month period. Upon the completion of construction, testing of the installed equipment for operational reliability and safety will occur over the last 4 months of the construction period. This phase will not require the use of any heavy machinery and will involve a minimal number of workers.

The typical daily construction traffic count for each month in each phase of the Project including the concurrent proposed Solar Project is detailed per Figure 2-2 below.

Figure 2-2. Typical Daily Construction Traffic Count (Per Phase)



During the peak commuting hours each morning and evening at the peak of construction for each phase of BESS construction, there would be an average of approximately 40 commuter vehicles arriving at or departing from the Project (Figure 2-2). It was estimated that 200 deliveries would be made over the course of construction of each phase. This amount includes 100 trucks delivering the BESS components, and 100 trucks delivering battery inverter/transformer components. During peak construction, there would be an average range of 3 material delivery truck trips per day. Material delivery trucks are not expected to coincide with the peak hour, rather they would arrive at the Project site throughout the day.

The Colorado Department of Transportation (CDOT) Traffic Data Explorer was accessed to obtain Annual Average Daily Traffic (AADT) counts along the Project haul routes. The AADT counts represent the average number of vehicles traveling on a road segment for a typical day of the year. The AADT data available for the count stations along the Project access routes, the anticipated number of daily trips, and maximum percentage increase in AADT per phase is detailed per Table 3 below.

Table 3. Existing and Anticipated Increase in AADT

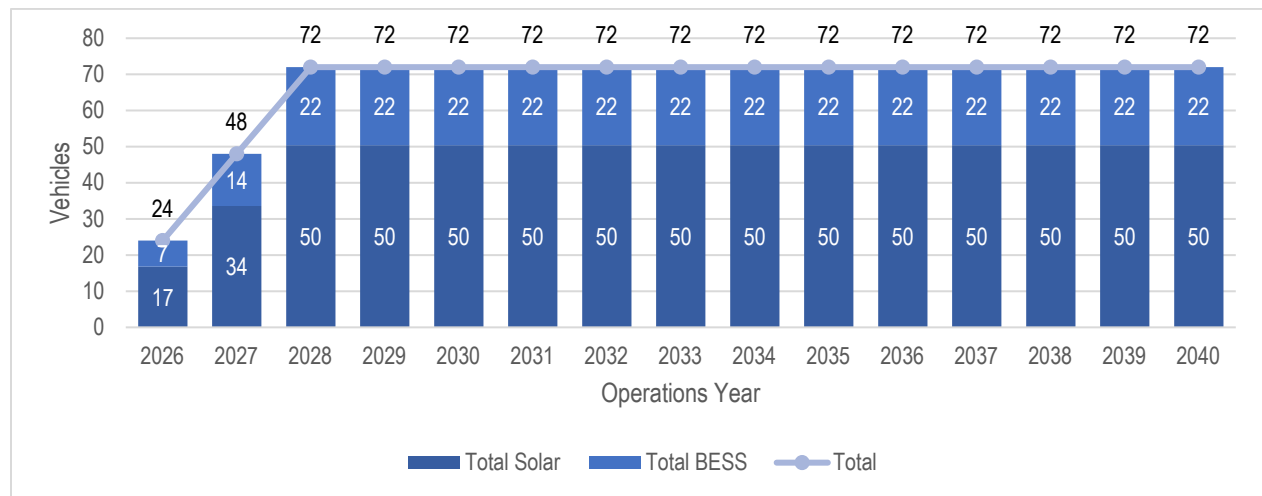
Access Route	Existing AADT Counts ¹	Average Estimated Daily Trips	Maximum Percent Increase in AADT (%)
Primary Commuter, Secondary Commuter, & Haul Route	Interstate 76, Station 103412: 12,000	86 (40 Commuter + 3 delivery)	.72
	U.S. Highway 34, Station 101481: 3,800		2.3
	State Highway 71, Station 103254: 2,700		3.2
	State Highway 71, Station 000213: 1,800		4.8

Source: CDOT 2023

2.7.6 Operations Transportation & Traffic

During operations once all three phases are constructed, the Applicant anticipates 11 full-time operations and maintenance employees would commute daily to the facility. A total of up to 22 trips per day would occur along access roadways (Figure 2-3). Therefore, the transportation and traffic impacts associated with the Project operation are anticipated to be minimal. The operational phase of the Project is expected to be 25 years but may be extended if facility components are upgraded or replaced. The typical daily traffic count for each operational year of the Project including the concurrent proposed Solar Project is detailed per Figure 2-3 below.

Figure 2-3. Typical Operations Traffic Count



2.7.7 Oversized / Overweight Loads

There are expected to be up to approximately 90 oversized/overweight load deliveries per phase associated with the BESS Project for the transport of the BESS containers, inverters, and transformers. The remaining heavy vehicle traffic would be standard size five-axle tractor trailers—some of these would be enclosed, and some would be in the form of flatbed trucks or smaller vehicles. Smaller heavy vehicles are likely to include water trucks, concrete trucks, and aggregate trucks. Applicant or their contractor would obtain the necessary oversize/overweight permit from CDOT prior to delivery of these oversize/overweight loads.

2.8 Required Public Improvements

2.8.1 Road Use Agreement

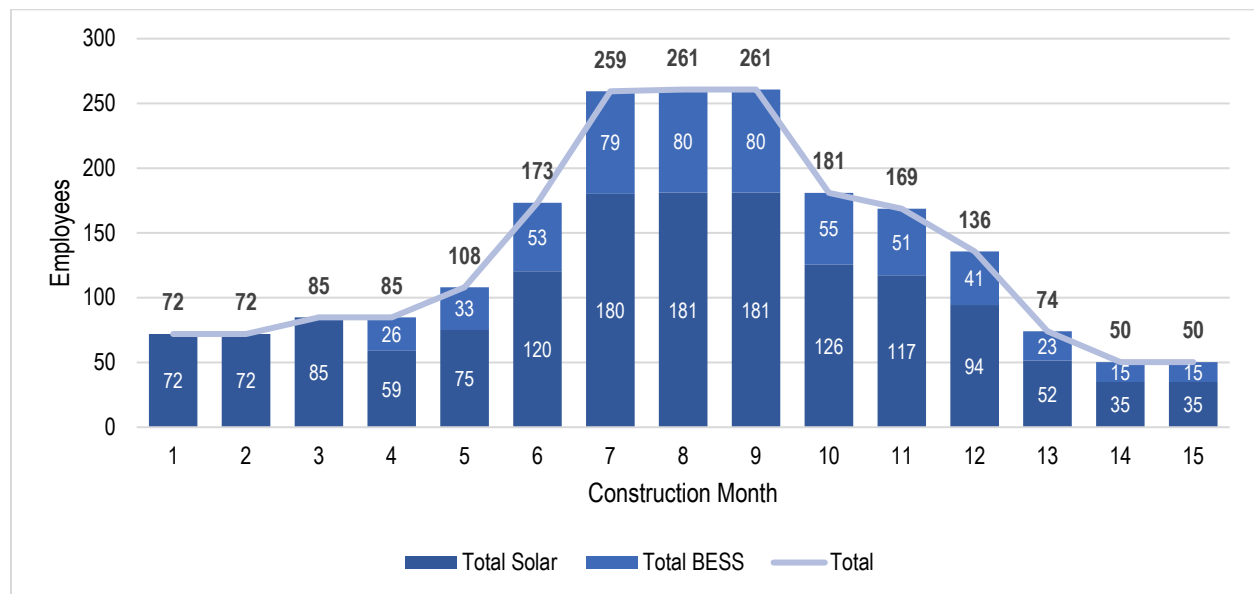
Applicant will enter into a Road Use Agreement with Morgan County prior to the start of construction, as further detailed in the corresponding application for Phase II of the Solar Project.

2.9 Employees, Equipment, and Facilities

2.9.1 Construction Crew, Equipment, & Facilities

The on-site construction workforce would consist of engineers, heavy equipment operators, truck drivers, laborers, craftsmen, electricians, supervisory personnel, and construction management personnel. In total, there would be an average of approximately 80 workers onsite during the 3-month peak construction period of each phase of the BESS Project. The construction labor schedule for each phase of the Project including the BESS Project and the concurrent proposed Solar Project is detailed per Figure 2-4 below.

Figure 2-4. Typical Construction Labor Schedule (Per Phase)



Construction would occur five days a week for an estimated 10 hours per day. Additional hours may be necessary to make up for schedule and weather delays.

Typical equipment that may be present on site as required includes, but is not limited to, graders, excavators, bulldozers, backhoes, cutting machines, end loaders, delivery trucks, trenching machines, flatbed trucks, cranes, rollers, electrical test equipment, off-road buggies, forklifts and carry decks, water supply trucks, water spray trucks, concrete mixers, compaction machines, survey equipment, and light trucks.

Vehicles will access the site through the proposed entrance gate off Highway 34 for delivery of materials and crew transportation. Electrical construction will occur following the installation of equipment and be performed by NERC certified electricians.

Temporary staging areas will not extend beyond the overall boundary of the Project. Temporary staging areas would include a laydown area, parking, trash disposal facilities, construction trailers, and sufficient portable toilets and potable water for use by construction staff. Mobile trailers, modular

offices, or an equivalent would be used as construction offices for Project staff and subcontractor personnel.

2.9.2 Operations Workforce

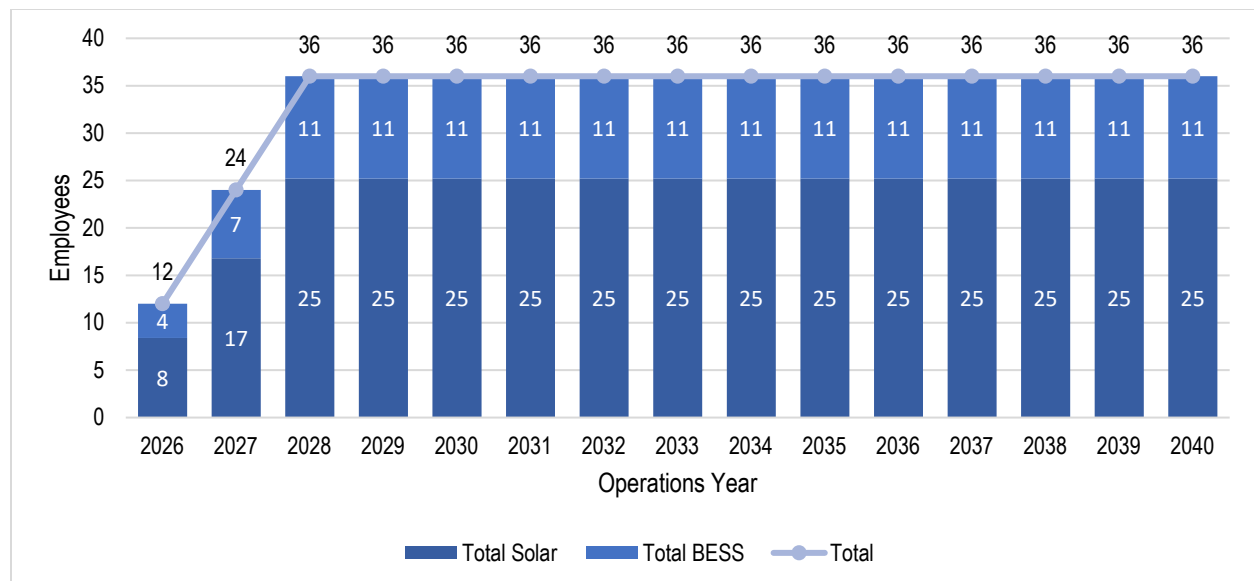
Upon completion of all three phases, operation of the BESS Project will require a minimum of 11 full-time positions including supervisory positions, sitework crew members, and miscellaneous crew members, as detailed per Table 4. Operations may also require third party contractors to perform specialized services.

Table 4. Project Operational Workforce

Worker Title	Quantity	Comments
Supervisory Crew	1	Supervision from inspection, engineering, project management, superintendent, assistant superintendent, etc.
Miscellaneous Crew	1	Miscellaneous including cleanup and materials handling
Sitework Crew	9	Civil works, then trenching etc. for elec. Installation
TOTAL	11	

The labor schedule for each operational year of the Project including the BESS Project and the concurrent proposed Solar Project is detailed per Figure 2-5 below.

Figure 2-5. Typical Operations Labor Schedule



2.10 Project Compliance with Morgan County Comprehensive Plan

As presented below, the BESS Project is consistent with the following guiding principles, goals, and policies for utilities, economic development, environment, land use, and transportation as identified per the Morgan County 2008 Comprehensive Plan.

2.10.1 Utilities

GOAL: To ensure that adequate and financially secure public utilities are provided to all developments in Morgan County.

The Applicant intends to establish a power purchase agreement with multiple purchasers of power. Per the Morgan County Comprehensive Plan, “existing facilities should be expandable in addition to new facilities to allow service for any reasonable projected growth”. The Project would provide grid resiliency and backup power to existing and future residents of Morgan County.

Development of the Project will include an approximate 2,400 sf operations and maintenance building. Electric utilities will be extended to serve the O&M building. No water or wastewater services are anticipated for the O&M building. The Project will require telecommunications services for internet which will be extended to the project site. The Project substation will interconnect to Tri State’s existing Story substation located west of the Project through a 1.25-mile gen-tie line and will not adversely affect transmission uses existing on and adjacent to the Project site.

2.10.2 Economic Development

GOAL: Diversify the economy in Morgan County to broaden business employment opportunities for residents and to further economic growth.

Goal: Encourage the location of new industry and the expansion of existing businesses that will provide employment opportunities and increase the tax base to strengthen the economy of Morgan County.

In accordance with the Morgan County Comprehensive Plan, development of the Project would contribute to the Colorado New Energy Economy. Policy number 10, identified per the Comprehensive Plan specifically notes that Morgan County should work to attract and maintain renewable energy projects to meet this goal (Morgan County 2008).

Development of the Project would provide economic benefit to Morgan County through increased revenues to county, local municipality, and school district tax bases and local employment opportunities. The Applicant will utilize local labor as much as is practicable depending on the availability, experience, and qualifications of available local firms and laborers. Throughout the construction period, construction workers will support local businesses including hardware supply stores, restaurants, hotels, gas stations and hotels. Workers originating outside Morgan County will be expected to remain in the region only throughout the duration of construction.

2.10.3 Environment

Goal: Preserve the manmade and natural environment in order to enhance the quality of life in Morgan County and to make environment considerations part of the land use decision-making process.

Per the Morgan County Comprehensive Plan, new developments are to be reviewed and judged based on the identification of sensitive lands and the mitigation techniques used to minimize the impacts of physical development on the land (Morgan County 2008). Siting analysis confirms the proposed site location avoids areas or locations with a high potential for biological conflict, such as wilderness study areas, areas of environmental concern, historic trails, special management areas, or important wildlife habitat or corridors. The BESS Project is sited outside of identified wetlands and floodplains and will avoid adverse impacts on plant and wildlife species. Tetra Tech has prepared a Drainage and Runoff Control Plan, supporting Drainage Study, and Wind and Water Erosion Control Plan to identify site drainage patterns, required improvements and mitigate erosion and storm runoff potential. As further discussed in Section 4.0, there are no known sensitive biological, hydrological, historical, cultural, or archeological resources within or near the proposed Project site.

Furthermore, development of the BESS Project and Solar Project would provide 600 MW of BESS and 600 MW of electricity produced by renewable energy, respectively. Development of the Project is in accordance with policy number 14 identified per the Morgan County Comprehensive Plan which notes that Morgan County shall encourage use of renewable resources and production of biofuels and electric power from such resources (Morgan County 2008).

2.10.4 Land Use

Goal: To encourage development where: 1) it is in proximity to the activity centers; 2) the proposed development is compatible with existing land uses; 3) there is access to established public infrastructure (primarily roads and utilities); and 4) where, in outlying areas of the county, there is access to utilities and there is little additional burden on rural services.

The BESS Project site is located 1.6 miles southeast of the city limits of Brush, Colorado. Existing land uses in the BESS Project Area include rangeland and overhead electric transmission lines. Existing adjacent land uses include rangeland, an electric substation, rural residences, a cattle feed lot, and the Brush Municipal Airport. The BESS Project is compatible with these existing uses. The Project site is in the Agricultural Production zoning district which allows for permitting of large-scale solar facilities including BESS as an accessory use through issuance of an SUP. The Project site has access to established utilities and County Roads.

Goal: The county will encourage the preservation of agriculture production lands in balance with pressures for land use changes to higher intensity development.

Per the U.S. Department of Agriculture, Natural Resources Conservation Science, Web Soil Survey data, the BESS Project Area does not include any soil types designated as prime, unique, or farmland of statewide importance. Therefore, development of the Project is not anticipated to not result in impacts to or loss of prime, unique, or farmland of statewide.

2.10.5 Circulation and Transportation

Goal: To provide residents and businesses in Morgan County with a circulation system that connects the major county activity centers with the outlying communities of the county, regional employment

generators and the rest of the state in the interests of providing economic opportunity, access efficiency and safety and improving the quality of life.

Policy 1: Traffic and Roads

- Require new developments to mitigate impacts to adjacent county roads.
- Require traffic generation studies for large developments.

As detailed per Section 2.7 traffic on county roads is anticipated to increase during construction of the Project and Applicant will enter into a Road Use Agreement with Morgan County to address impacts on County Roadways resulting from construction.

2.11 Project Compliance with Special Use Permit Review Criteria

Per Morgan County Code Section 3-180, BESS facilities may be permitted in the Agriculture Production zone through issuance of a SUP. The BESS Project has been reviewed for accordance with, and meets the following criteria required to approve a special use permit as outlined per the Morgan County Code, Section 2-395.

(A) The use and its location as proposed are in conformance with the Morgan County Comprehensive Plan

The BESS Project aligns with Morgan County's Comprehensive Plan, adopted in 2008 as indicated per Section 2.10 above. Project development, proposed mitigation measures, and forecasted benefits are consistent with the County's goals and policies related to economic development, environment, land use, utilities, and transportation. The Project would support grid resiliency with economic, environmental, and social benefits to current and future residents.

(B) All the application documents are complete and present a clear picture of how uses are to be arranged on the site or within Morgan County;

The Applicant has submitted a complete SUP application package for Phase II of the BESS Project. The Applicant will submit any requested revisions and additional documents requested by the Morgan County Planning Services Department upon their review of the application. The table at the beginning of this report details each SUP submittal requirement with the application report section addressing each checklist item. The submittal has been provided as a hard copy and electronically, fulfilling submittal requirements in Section 2-380 of the Morgan County Zoning Regulations.

(C) The site plan conforms to the district design standards of these Regulations;

The Project site plan and special use map have been developed in accordance with Sections 2-410 and 2-420 of the Morgan County Zoning Regulations.

(D) All on and off-site impacts have been satisfactorily mitigated either through agreement, public improvements, site plan requirements or other mitigation measures;

Potential adverse environmental impacts and the correlating sufficient mitigation measures are detailed in Section 4.0, Environmental Impact Analysis.

(E) The special use proposed has been made compatible with the surrounding uses and adequately buffered as determined by the County;

Existing surrounding adjacent uses include the Tri State-owned Story substation to the west, low-density rural agricultural residences to the northwest, west, and southwest, open rangeland to the north, east, and south, the Brush Municipal Airport northeast, across Highway 34, and the existing Pinneo cattle feedlot north of Highway 34.

The BESS Project would be compatible with existing surrounding adjacent land uses. The BESS Project would not result in significant adverse impacts to surrounding properties. Potential impacts are limited to fugitive dust, traffic, and noise during the construction phase. During operations, the BESS Project would be operated remotely and generate little to no daily traffic, generate no air emissions, emit no glare, and is sited and designed to minimize noise impacts. A discussion of potential impacts and proposed mitigation measures are detailed per Section 4.0.

The Project site layout has been designed in accordance with the minimum 70-foot setback required from exterior parcel lines and the 500' buffer required from adjacent buildings (Appendix A-2).

(F) The special use poses only the minimum amount of risk to the public health, safety and welfare as set by either federal, state or county regulation, whichever is the strictest;

The BESS Project is not anticipated to be unduly detrimental or injurious to property or improvements in the vicinity and will not be detrimental to public health, safety, or general welfare.

Emergency access to the site will be provided via 20' wide access roads and gated entrances will be equipped with Knox boxes and keys. The Applicant will maintain sufficient water sources and portable fire extinguishers on site for emergency use. Water would be stored on site in above ground tanks and/or cisterns. The water tanks and/or cisterns will be located and installed per compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency.

The Applicant has developed an Emergency Operations and Fire Mitigation Plan for the Project detailing proper responses to emergency events, fire mitigation measures, and firefighting considerations. The Emergency Operations and Fire Mitigation Plan was provided to local officials of the Brush Volunteer Fire Department, the Brush Rural Fire Protection District, and the Hillrose-Snyder Volunteer Fire Department for review and comment and is included as Appendix H.

The presence of energized equipment within the facility could result in public health or safety concerns, however site access will be limited to authorized personnel and the BESS Project will be developed in accordance with the physical security standards defined per the NERC Code Section, CIP-014-2 (NERC 2023). Proposed security measures include placement of warning signage along the perimeter and entrance points to the facility, installation of a site perimeter fencing with locked, gated entrances, installation of security lighting, and 24/7 remote site monitoring.

The Applicant is committed to developing and operating the facility in a safe and environmentally friendly manner. The Project will adhere to all applicable health and safety standards and regulations.

(G) The special use proposed is not planned to be developed on a non-conforming parcel;

The BESS Project is not proposed to be developed on non-conforming parcels. All parcels located within the Project site are conforming parcels and meet the minimum 35-acre lot size required in the Agricultural Production zoning district.

(H) The applicant has adequately documented a public need for the project, all pertinent technical information, adequate financial resources to implement it, and has paid all fees and review costs levied by the County for application processing and review; and

The Project would advance Colorado's renewable energy portfolio standard, provide a local source of clean energy, and would provide an economic benefit to Morgan County through tax revenue generation and local job opportunities.

The Applicant will pay all fees and review costs required by Morgan County for application processing and review. The Applicant is an indirect subsidiary of Aypa. Aypa is a Blackstone portfolio company. Aypa has a proven track record of developing, financing, constructing, owning, and operating utility-scale renewable energy projects. Aypa currently has an operating fleet of 30 projects, two projects currently under construction, and over 70 projects in the development pipeline.

(I) For any special use requiring a supply of water that the applicant has demonstrated a source of water which is adequate for the proposed use in terms of quantity and reliability and in the case of human consumption, quantity, quality, and reliability.

The Applicant will source water needed during the construction and operations phases from the existing groundwater wells available on the Project site. In the event offsite water is required, water will be sourced from an off-site location, transported to the Project site via water trucks, and stored on site in above ground tanks and/or cisterns. The water tank will be in strict compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency. As this water supply would rarely be used, The Project will have minimal effects on overall water availability and will not burden local water resources. No new water infrastructure will be necessary for the Project.

2.12 Project Compliance with Regulations for BESS Facilities

The Project meets the following standards defined per Morgan County Code Section 4-860 for the regulation of BESS facilities.

(A) BESS shall comply with all applicable requirements of the underlying zone district and the Accessory Uses and Structures requirements in Sec. 3-130 of these Zoning Regulations.

The BESS Project Area is in the Agricultural Production zoning district. BESS may be permitted as a primary or accessory use in the Agricultural Production zone through issuance of an SUP. The BESS Project will comply with standards defined for accessory structures per Section 3-130. The BESS is sited and designed in accordance with the setbacks and height limits defined for the Agricultural Production District. The BESS exceeds the minimum setbacks required in Agriculture zones per

Appendix B of the Morgan County Zoning Regulations and is sited consistent with the setbacks required for solar collector facilities.

(B) All BESS, including all mechanical equipment, shall be enclosed by a minimum of a six (6) foot tall fence with a self-locking gate to prevent unauthorized access, unless housed in a building dedicated to the BESS. No fencing may interfere with any ventilation or exhaust ports.

The BESS Project and Solar Project will be enclosed by an eight-foot-tall fence, consisting of seven feet of chain link and one foot of barbed wiring. All four access points to the surrounding Project will be gated and locked to limit access to authorized personnel. The two proposed entry points to the BESS area will also be gated and locked. Knox boxes and keys will be provided at all locked entry points to assure emergency personnel access.

(C) All BESS, their components, and associated ancillary equipment shall be placed with required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with applicable electric code, as adopted by the State of Colorado.

The Applicant will ensure that the BESS is installed consistent with applicable electric codes and designed to comply with working space clearances and weatherproofing elements.

3.0 IMPACT ON ADJACENT USES, OFF-SITE IMPACTS, & IMPACTS TO COUNTY SERVICES & CAPITAL FACILITIES

3.1 Impacts on Existing Adjacent Uses & Off-site Impacts

Existing surrounding adjacent uses include the Tri State Story substation to the west, low-density rural agricultural residences to the northwest, west, and southwest, open rangeland to the north, east, and south, the Brush Municipal Airport northeast, across Highway 34, and an existing Pinneo cattle feedlot north of Highway 34.

The BESS Project would be compatible with existing surrounding adjacent land uses. The BESS Project would not result in significant adverse impacts to surrounding properties. Potential impacts are limited to fugitive dust, traffic, and noise during the construction phase. During operations, the BESS facility would be operated remotely and generate little to no daily traffic, generate no air emissions, emit no glare, and is sited and designed to minimize noise impacts. A discussion of potential impacts and proposed mitigation measures are detailed per Section 4.0.

Offsite impacts are limited to increased traffic and potential noise and fugitive dust resulting from vehicle traffic during construction along the Project Haul Route detailed per Figure 3. Proposed mitigation measures to minimize fugitive dust and noise impacts are detailed in Section 4.0.

3.2 Impacts on County Services & Capital Facilities

3.2.1 Capital Facilities, Social Services, & Infrastructure

The BESS Project is not expected to require additional community or local government services beyond those currently provided in the area. The BESS Project development is not expected to result in

additional significant demand for transportation infrastructure, educational facilities, social services, housing, or public transportation.

The Applicant will enter into a Road Use Agreement with Morgan County to address impacts on County Roadways from transportation of heavy equipment resulting from construction as further discussed in Section 2.8.1. Oversized vehicles delivering BESS Project components may result in temporary traffic delays. Applicant or their contractors will hire flaggers to maintain adequate levels of traffic flow as needed and Applicant's contractors will obtain necessary oversized and overweight vehicle permits to authorize transportation and delivery of these loads.

No new water or wastewater infrastructure will be necessary for the Project.

3.2.2 Waste Management

Solid waste generated by the BESS Project during construction and operations will be handled by a solid waste hauling and management firm contracted by the Applicant or its designated contractor(s). Waste will be separated by type, collected, and transported to the appropriate facility in a manner that complies with applicable federal, state, and local regulations, and minimizes potential impacts to the surrounding community. Waste materials will be handled, stored, and disposed of in a manner that controls fugitive dust, fugitive particulate conditions, blowing debris, leakage into the soil or surface water or groundwater, and other potential nuisance conditions. Project construction is not expected to require onsite treatment, storage, or disposal of hazardous wastes that will require hazardous waste permits. No extremely hazardous materials, as defined by 40 Code of Federal Regulations part 355, are anticipated to be produced, used, transported, or disposed of during Project construction. Any hazardous wastes generated during construction will be properly characterized and managed by the Applicant and their contractor(s). The handling of hazardous materials and waste will be done in accordance with all federal, state, and local laws and regulations.

3.2.3 Public Safety Services

The BESS Project is not anticipated to result in a significant increase in demand for public safety services.

The BESS Project is located within the boundaries of the Brush Fire Protection District. Brush Fire Station 1 is located approximately 2.15 miles west of the Project site. The Hillrose-Snyder Fire Protection District boundary is approximately one mile north of the Project site. Prior to construction, the Applicant will work with Morgan County, The Brush Rural Fire Protection District, Brush Volunteer Fire Department, and the Hillrose-Snyder Fire Protection District.

During construction and operations, the Applicant will ensure local Fire Departments have 24/7 access to the BESS Project site to respond to emergency incidents. Knox boxes and keys will be installed at locked entrance gates for emergency personnel access. Site access roads will be constructed up to 20 feet in width with compacted all weather gravel. During site construction and operations, the Applicant will maintain sufficient water sources and portable fire extinguishers on site for emergency use. Water would be stored on site in above ground tanks and/or cisterns. The water tanks and/or cisterns will be

located and installed per compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency.

The Project facility layout is designed to provide defensible space for fire protection throughout construction and operation of the facility. Ongoing maintenance would be provided to ensure removal of vegetation and other flammable materials from the defensible space areas. Vegetation control at the site will use materials and methods that ensure groundwater protection.

The Solar Project arrays will consist of non-combustible materials (aluminum, steel, or glass). The Project solar modules are designed to be resistant to fire, and the racks are constructed of non-combustible steel and aluminum. The solar panels and other electrical equipment will meet applicable Underwriters Laboratories and International Electrotechnical Commission ratings for their resistance to fire.

The BESS components are detailed on the specifications attached hereto as Appendix A-7. The BESS is outfitted with a liquid cooled thermal management system, a fire detection and suppression system including a fire suppression clean agent to prevent the spread of fire, gas detection, and NFPA 69 ventilation system for explosion control. E-Stops are also provided on the terminal ends of each BESS container to facility an emergency shutdown if necessary.

An Emergency Operation Fire Mitigation Plan has been prepared for the Project and is included as Appendix H. The plan addresses proper response plans for potential emergency events, facility evacuation details, emergency contacts, system safety considerations, battery fire protection system information, and firefighting considerations. Prior to construction, the Applicant will work with local fire personnel to ensure the Project's compliance with applicable fire safety regulations. The Applicant will also provide on-site training for surrounding departments to reduce fire risk at the Project.

3.2.4 Benefits

The Project is anticipated to result in economic benefits for the following taxing jurisdictions: Morgan County and Morgan County School District RE-2 (Morgan County 2023c).

Local, regional, and state employment will benefit those in the construction trades including heavy equipment operators, truck drivers, engineers, laborers, craftsmen, electricians, supervisory personnel, and construction management personnel. Prior to and during construction, the Project will utilize both local and non-local consultants and contractors for the design and construction. The design and construction scopes of work are typically bid out to a range of consultants and contractors. It is the Applicant's preference to utilize local labor as much as is practicable and will direct those acting on their behalf to carry the same preference depending on the availability, experience, and qualifications of available local firms and laborers. Workers originating outside the labor market area will be expected to remain in the region only throughout the duration of construction.

4.0 ENVIRONMENTAL IMPACT ANALYSIS

4.1 Air Quality

The 1963 Clean Air Act (as amended; 42 U.S.C. 7401) requires government agencies to monitor air pollution and promote air pollution prevention and control programs. The BESS Project Area is within the Eastern High Plains monitoring region of Colorado (CAPCD 2023). As of August 30, 2023, Morgan County, Colorado is in attainment for all U.S. Environmental Protection Agency (EPA) criteria pollutants (EPA 2023). Currently, local emission sources in the Project vicinity include personal and commercial vehicle emissions, aircraft emissions at the nearby Brush Municipal Airport, and agricultural operations.

It is anticipated that the Project construction and operations will result in additional, negligible amounts of pollutants including particulate matter, diesel particulates, and carbon monoxide. The construction phase of the Project will temporarily cause fugitive dust related to the following activities: grading activities, preparation of the staging and equipment laydown area, excavation and construction of equipment pads, the mixing and preparation of concrete, and construction of access roads. Fugitive dust may also be generated by vehicular traffic associated with construction and operation of the Project, and by the delivery of materials to and within the Project Area. The emissions from the Project construction would be limited in duration to 12 months per phase and emissions from the Project operation would be zero or near zero. Therefore, Project emissions are not anticipated to significantly contribute to ozone, particulate matter, or other air pollutants within the Eastern High Plains monitoring region.

The Colorado Air Quality Control Commission requires an Air Pollutant Emissions Notice (APEN) and associated fees to be submitted to the Colorado Department of Public Health & Environment (CDPHE), Air Pollution Control Division when a Project proposes to disturb more than 25 acres or construction will last greater than 6 Months. The Applicant or their contractor will submit the Land Development APEN: Form APCD-223 prior to the start of construction. To comply with county and state air quality regulations, methods for limiting dust and maintaining air quality during construction would be implemented. Vehicles and equipment will comply with applicable state and federal emission standards and will be properly maintained to minimize exhaust emissions.

A Wind and Water Erosion Control Plan is included as Appendix I which details best management practices (BMPs) that will be utilized to prevent wind and water erosion and run-off during construction.

The Applicant will prepare a Fugitive Dust Control Plan in accordance with CDPHE requirements for the Land Development APEN prior to construction. Dust control measures include watering unpaved roads and earthen areas with limited vegetation, covering exposed piles of dirt, maintaining low vehicle speeds within the Project Area, covering stockpiles during sustained wind events, installing tire wash out stations at site entrances to minimize track out, and covering truck loads. Water would be applied regularly to disturbed areas and stockpiles during construction to prevent the addition of particulate matter/fugitive dust into the local airshed. Additional BMPs would be implemented as needed from the EPA national menu of BMPs and may be used as necessary during construction to help limit dust.

4.2 Dust and Odor

See Section 4.1 above for details on the potential fugitive dust impacts resulting from the Project and proposed mitigation measures.

Given the surrounding land use, current odors present at the BESS Project Area likely include fugitive odors from the operation of the Brush Municipal Airport, Pinneo cattle feedlot, and vehicle emissions along nearby roads. Local traffic volume would increase in and around the BESS Project Area during construction. The increased traffic would temporarily increase odors from vehicle emissions. Odors are also anticipated from the operation of heavy machinery during construction. Impacts from odors during Project operation would be minimal and are likely limited to emissions from the vehicles of maintenance personnel. Overall, the impacts of odors from Project construction and operation are anticipated to be minimal and insignificant. As a result, no specific mitigation has been identified for odor impacts and no management of odors would be performed during construction or operation.

4.3 Noise Receptors, Ordinances, and Conformance

Current sources of noise in the BESS Project Area include wind, distant road and highway vehicles, and surrounding cattle feed lot and airport operations.

Temporary noise impacts during construction would occur during daylight hours through the operation of construction equipment, including, but not limited to, passenger vehicles, graders, loaders, water trucks, semi-tractor/trailer trucks, and hydraulic hammers. The spatial distribution of construction noise emissions would vary during the day and depend on the type of activity. Construction traffic would generate noise along the project access routes (Figure 3). This noise would be temporary during commuting hours and when supplies are delivered over the course of construction.

Sources of noise during operation would include temporary vehicle noise from maintenance personnel access and typical noise emissions from the Project substation transformers, inverters, and BESS. The metal frame battery energy storage containers are insulated and air conditioned. Operation of the air conditioning equipment used to cool the batteries would be the dominant source of noise during operation of the proposed project. Each BESS container utilizes HVAC units. A secondary noise source would be the inverters which generate sound while converting generated electricity from direct current to alternating current. The proposed Project locate the inverter units between the BESS containers, providing noise shielding.

Construction and operation of the Project will not significantly increase noise at surrounding properties and will comply with the statutory provisions for maximum permissible noise levels for industrial zoning as defined per C.R.S. § 25-12-103. Construction projects are subject to the noise standards specified for industrial zones. Table 5 details the noise standards defined by the state, as referenced per the Morgan County zoning regulations.

Table 5. Colorado Noise Standards

Zone	7:00 a.m. to 7:00 p.m.	7:00 p.m. to 7:00 a.m.
Residential	55 dBA	50 dBA
Commercial	60 dBA	55 dBA
Light Industrial	70 dBA	65 dBA

Zone	7:00 a.m. to 7:00 p.m.	7:00 p.m. to 7:00 a.m.
Industrial	80 dBA	75 dBA

BESS Project construction activity would only occur during daylight hours, limiting the period for potential construction noise disturbance. Noise from inverters would be mitigated by the spatial layout of the Project and by the design of the inverters used. Typically, inverters are placed towards the interior of the BESS containers to minimize cable lengths. This causes inverters to be located in between BESS containers. Therefore, noise emitted from the inverters would be shielded by the BESS, and indistinguishable from background noise levels. Inverter noise emissions would be further minimized by the design of the inverter model(s), which would be equipped with shielding, filtering, and noise cancellation. BESS facilities generate noise from HVAC components; however, based on the proposed BESS facility location, no impacts to surrounding residences would occur. The BESS Project layout is designed in accordance with the minimum setbacks required for BESS facilities per the Morgan County Zoning regulations. The BESS area is sited more than one mile from existing rural residences located in the vicinity of the BESS Project Area. Based on typical sound levels anticipated from Project operation, the distance from the equipment to the Project boundary will mitigate the effect of noise generated by the Project.

4.4 Existing Vegetation

According to the U.S. Geological Survey (USGS) National Land Cover Database (USGS 2019), the dominant land cover in the Project Area is grassland/herbaceous covering 4,161.6 acres or 93.62 percent (Table 6). A Tetra Tech biologist visited the Project site April 25-26, 2023. The Project Area was dominated by needle and thread grass (*Hesperostipa comata*), blue gramma (*Bouteloua gracilis*), and smooth brome (*Bromus inermis*). The Project Area is located in a predominately arid rangeland comprised of shrubland and grassland. No irrigated activities were observed within the Project Area (Appendix J).

Table 6. Land Use and Land Cover Present in the Project Area

Land Use/Land Cover ¹	Acres	Percent of Project Area
Grassland/Herbaceous	4,161.6	93.62
Scrub/Shrub	271.8	6.11
Developed Open Space	8.7	0.20
Developed, Low Intensity	3.1	0.07
Cultivated Crops	0.01	0.00
Total	4,445.2	100%

Source: 2019 National Land Cover Database (USGS 2019)

Existing rangeland will be converted to power generation use for the lifetime of the Project. Construction will have long term impacts on existing vegetation as result of removal of vegetation within the Project Area for the installation of project facilities and access roads.

Construction activities will also result in temporary impacts to existing vegetation, including soil disturbance and compaction. Disturbed areas outside of the proposed access roads, project substation,

and BESS area will be revegetated with a native seed mix. Site vegetation will be maintained throughout the Project life by the Applicant.

As required by the Colorado Noxious Weed Act (C.R.S. 35-5.5-103), Morgan County has defined specific management for each List B noxious weed species (CDA 2023). Per Morgan County Code Section 3-700, The Applicant will plan to employ a program to control the growth of noxious and other weeds as part of the general property maintenance.

4.5 Special-Status Wildlife and Other Species of Concern

The Applicant contracted Tetra Tech to prepare a Wildlife Habitat Assessment for the Project consisting of a desktop review and field survey to document existing habitat and biological resources, including special status species and raptor nests that may be impacted by Project development (Appendix J).

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) online tool and Colorado Parks and Wildlife (CPW) online databases were used to identify federally and state-listed species and other special status species (e.g., species protected by Bald and Golden Eagle Protection Act) that may occur within or near the vicinity of the Project Area.

Tetra Tech conducted a field survey on April 25th and 26th, 2023 to verify and characterize current land cover types in the Project Area that may provide suitable habitat for protected species. General landcover and wildlife observations within the Project Area were typical for the ecoregion. The following species were identified during the field visit: mourning dove (*Zenaida macroura*), coyote (*Canis latrans*), black-tailed prairie dog (*Cynomys ludovicianus*), European starling (*Sturnus vulgaris*), rock dove (*Columba livia*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), horned lark (*Eremophila alpestris*), and the western meadowlark (*Sturnella neglecta*). Unidentified small mammal burrows were also observed. Additionally, suitable nesting substrate within the Project Area was observed, however, no raptor nests were observed within a half-mile of the Project Area (Appendix J).

The USFWS and CPW sources reviewed for the assessment identified 10 protected species that have the potential to occur within the Project Area. However, no USFWS-designated critical habitat is present within the Project Area. A summary of the sensitive species' preferred habitat and potential for occurrence in the Project Area are detailed per Table 7 and further discussed in the Wildlife Habitat Assessment Report (Appendix J).

Based on the desktop analysis of land cover data, aerial imagery, range maps, and observations during the field survey, the following special status species may occur within the Project Area: bald eagle (foraging), burrowing owl (breeding) and golden eagle (foraging). All other special status species listed in Table 7 are unlikely to occur in the Project Area due to the absence of suitable habitat.

Table 7. Federally and State Listed Species Potentially Occurring within the Project

Common Name	Scientific Name	Status	Habitat Associations	Likelihood of Occurrence
Mammals				
Gray wolf	<i>Canis lupus</i>	FE; SE	Found in temperate forests, mountains, tundra, taiga, grasslands, and deserts.	Unlikely—N/A. This species only needs to be

Common Name	Scientific Name	Status	Habitat Associations	Likelihood of Occurrence
			Morgan County is outside the current range of this species.	considered for projects that include predatory management.
Bird				
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA	Typically found near large bodies of water that support fish populations and waterfowl. Will perch and nest in tall deciduous or coniferous trees near water.	Unlikely—Breeding Unlikely—Wintering Low—Foraging
Golden eagle	<i>Aquila chrysaetos</i>	BGEPA	Partly open country with native grassland vegetation. Nests on cliffs and in trees.	Unlikely—Breeding Unlikely—Wintering Low—Foraging
Burrowing owl	<i>Athene cunicularia</i>	ST	Typically found in prairie dog colonies in open areas with short grass and where suitable ground squirrel and badger burrows can be found, such as golf courses, cemeteries, airports, vacant lots, and pastures.	High to Moderate—Breeding Unlikely—Wintering
Piping Plover	<i>Charadrius melodus</i>	FT; ST	Occurs in reservoirs, lakes, and rivers with sand and gravel areas and sparse vegetation.	Unlikely
Whooping crane	<i>Grus americana</i>	FE; SE	Occurs in freshwater marshes, wet prairies, shallow lakes, and lagoons.	Unlikely
Fish				
Pallid sturgeon	<i>Scaphirhynchus albus</i>	FE	Found in large river systems with firm sandy bottoms (e.g., the Missouri River). No streams are within the Project Area.	Unlikely
Flowering Plants				
Ute ladies'-tresses orchid	<i>Spiranthes diluvialis</i>	FT	Found in moist meadows associated with perennial stream terraces, floodplains, and oxbows at elevations below 6,500 feet.	Unlikely
Western prairie fringed orchid	<i>Platanthera praeclara</i>	FT	Found in unplowed, calcareous prairies and sedge meadows.	Unlikely
Insect				
Monarch butterfly	<i>Danaus plexippus</i>	FC	Found throughout the United States in open fields and meadows with milkweed (primarily <i>Asclepias</i> spp.). Milkweed is an obligate host plant for monarch larvae. Several milkweed species occur in Colorado in a variety of habitats such as grasslands, disturbed areas, wetlands, and irrigation ditches. Adults feed on milkweed and other flowering plants.	Unlikely

BGEPA = Bald and Golden Eagle Protection Act; FT = Federally Listed Threatened; FC = Candidate for Federal Listing (not a statutory category); ST = State Threatened; SE = State Endangered

The Applicant plans to implement the following measures to avoid, minimize, or mitigate potential impacts to protected species that could occur in the Project Area.

- If construction is to occur during the bird breeding season (generally from February 15 to July 31 for most species), a follow up raptor survey will be conducted prior to the start of construction to determine species and nest status prior to construction activities so that all raptor nests within 0.5 mile of the Project Area can be mapped and avoided. If raptor nests are active, species-specific nest avoidance buffers will be implemented per CPW's Recommended Buffer Zones and Seasonal Restriction for Colorado Raptors (CPW 2020), of which the largest buffer is 0.5 mile for bald and golden eagles (CPW 2020).
- A CPW-protocol burrowing owl survey (CPW 2021) will be conducted prior to construction activities to determine whether burrowing owls are present within 0.25 mile of the Project. CPW recommends no permitted, authorized, or human encroachment activities within 0.25 mile (1,320 feet, 400 meters) of the nest site for large industrial disturbances during the nesting season, March 15 through August 31.
- Project infrastructure, including facilities and access roads will be consolidated to the extent possible to minimize the amount of land that is disturbed and fragmented.
- Prior to installation of fencing, the interior of the fenced area would be searched to avoid entrapping wildlife. The enclosed facility would be checked regularly during operations to prevent accidental trapping of wildlife to the extent possible.
- The Project Area will not be lit at night to minimize wildlife attraction to Project infrastructure and limit impacts to hunting, migration, or other nocturnal activities of wildlife.

The Applicant has shared the results of the Wildlife Habitat Assessment with CPW and conducted an initial coordination call on October 13, 2023. The Applicant is awaiting receipt of CPW's letter of recommendation however anticipates receipt prior to the initial public hearing. The Applicant will send notice of the initial public hearing date to CPW when scheduled by the County. A copy of CPW's letter of recommendation will be provided to Morgan County once received. The Applicant will continue to coordinate with CPW to determine possible recommended BMPs and/or avoidance measures for construction activities.

4.6 Wetlands and Other Waters of the United States

The Applicant contracted Tetra Tech to prepare a wetland and other waters of the U.S. (WOTUS) assessment to identify potentially jurisdictional wetlands and/or other WOTUS within the Project Area. A Wetland Delineation Report was prepared for the Project in May 2023 and is included as Appendix K.

A desktop survey of surface waters was conducted using the USFWS National Wetlands Inventory (NWI) dataset (USFWS 2023), USGS National Hydrography Dataset (NHD) viewer (USGS 2023a), and Colorado Wetland Inventory database (CWI 2023). The results of the desktop analysis indicated no potential wetlands and waterways exist within the Project Area.

A Tetra Tech wetland scientist conducted a site visit on April 25th & 26th 2023, to perform a wetland and other WOTUS delineation within the Project Area. No wetlands or waterbodies were identified within the Project Area.

4.7 Water Use & Resources

The Applicant will implement strategies and practices that ensure responsible and efficient water consumption throughout the project's construction and lifespan operations. The Project will prioritize the use of non-potable water sources for site maintenance and dust control. By minimizing water usage and maximizing conservation, the Project will contribute to sustainable development and reduced environmental impact.

The Project will not require the use of a public water supply system. An affiliate of the Applicant is the option holder for the Project parcels, thus all water rights for the Project would be obtained upon closing. There are several existing deep-water wells located on the subject property (Figure 4). The Applicant will perform further studies to determine the feasibility of utilizing the existing deep-water wells for various project needs. These studies will encompass a comprehensive analysis of water quality, assessing parameters such as pH, dissolved minerals, and contaminants. Additionally, an assessment of well yield will be conducted to ascertain the sustainable pumping rate and availability of water resources. By conducting these studies, the Applicant aims to ensure that the Project's water requirements align with the capacity and quality of the available deep-water wells, thus contributing to the overall success and sustainability of the Project.

In the event offsite water is required, water will be sourced off site and transported to the Project site via water trucks to be stored onsite in above ground tanks and/or cisterns. The Project will have minimal effects on overall water availability and will not burden local water resources.

Water use during construction would occur over the 12 months needed to construct each phase of the Project. Much of this water would be used for dust control but would also be used for hydration and compaction, backfill, cement stabilization and equipment cooling. The estimated water use during construction is approximately 470-acre feet per phase of construction.

During operations, water would be used for cooling equipment and supporting establishment of vegetation around the site. Approximately 30.6 acre-feet of water is estimated to be used per year during operations. The total estimated water usage during each phase of construction and during operations is detailed per Table 8 below.

Table 8. Estimated Water Usage

	Phased Construction (200 MW)	Operations (600 MW)
Assumed Acre Feet (AF) / MW ¹	2.35 AF / Year	0.051 AF / Year
Total Water Usage (non-potable)	470 AF	30.6 AF / Year

Source: Klise et al., 2013

4.8 Floodplains

Tetra Tech reviewed the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels, 08087C0490E and 08087C0500E effective May 18, 2021, and FIRM panels 08087C0652D and 08087C0675D, effective April 4, 2018. The Project is located in Zone X, which are areas determined to be outside the .2% annual chance floodplain (FEMA 2023).

4.9 Stormwater Runoff

A Drainage and Run Off Control Plan, and supporting Drainage Study were prepared for the project in October 2023 and are included as Appendix A-2 and L. Site grading and drainage improvements will be designed to contain post development stormwater run-off on site. Prior to the start of construction, the Applicant will obtain a permit for any stormwater discharges occurring during the construction phase of the Project in compliance with the COR400000 General Permit under the Colorado Water Quality Control Act.

In addition, the Applicant will manage temporary facilities to control erosion and sediment releases and to protect Project facilities from flooding during construction in accordance with the General Permit requirements. A Wind and Water Erosion Control Plan is included as Appendix I which identifies BMPs that will be utilized to prevent erosion and run off during construction.

4.10 Cultural Resources

The Applicant contracted Tetra Tech to prepare a Cultural Resources Survey Report for the Project in September 2023 (Appendix M). The Cultural Resources Survey Report documents the results of archival research including a records search, review of previously conducted survey reports, and review of historic maps. The purpose of the cultural investigation was to provide cultural and historical context of the Project site, identify any cultural resources located within the Project site, re-record a previously recorded site located within the Project Area and determine the Project's potential to affect potential and recorded historic and cultural resources.

A desktop records search was conducted through the Colorado Historic Society/Office of Archaeology and Historic Preservation Cultural Records online database. The Research Area includes the Project Area and a one-mile buffer. The search revealed that 12 prior surveys have taken place within the Research Area, but do not intersect the Project Area.

A total of 18 cultural resources have been previously recorded in the Research Area, including structures, archeological sites, and isolated finds (IF). These resources include several transmission line segments, one prehistoric IF, three historic IFs, two agricultural complexes, an agricultural equipment dump, a trash dump, and a trash scatter. One site (5MR.698) is listed as recommended eligible for listing in the National Register of Historic Places (NRHP), although the site form states that the site is recommended not eligible. One segment of the Beaver Creek to Deering Lake transmission line (5MR.696) is the only resource located within the Project Area and has been determined not eligible for listing in the NRHP.

Tetra Tech Archeologists conducted a site visit on June 27, 2023, to review the site located within the Project Area (5MR.696). Site 5MR.696 is a segment of Western Area Power Association's Beaver Creek to Deering Lake Transmission line. The State Historic Preservation Office has been previously determined the site as not eligible for listing in the NRHP. Tetra Tech agrees with this assessment of the site and recommends that the site is not eligible for listing in the NRHP.

The Cultural Resource Survey Report concludes the Project is unlikely to have an adverse effect on cultural resources. Site 5MR.696 has been determined as not eligible for the NRHP. Thus, construction-related disturbance of, or visual impacts to, this resource would not be considered an adverse effect. In

addition, the potential to encounter additional resources is considered low due to the low site density and relatively low archaeological sensitivity of the Project Area.

Prior to construction, the Applicant will develop an Unanticipated Discovery Plan which will outline procedures to follow, in accordance with state and federal laws, if archaeological materials or human remains are discovered.

4.11 Visual Amenities

4.11.1 Visual Impacts

The visual setting within the Project is primarily undeveloped herbaceous grassland. Development within the vicinity of the Project site includes an electrical substation, overhead transmission lines, and rural residences.

The potential for aesthetic impacts from BESS projects is based on the type of technology, the scenic quality of the existing landscape, the degree to which the project will change scenic quality, and the viewer response to the change. Visual sensitivity, a key component of viewer response, is dependent on viewer attitudes and the types of activities in which people are engaged when viewing the site. Overall, higher degrees of visual sensitivity are correlated with areas where people live, are engaged in recreational outdoor pursuits, or participate in scenic driving. Conversely, visual sensitivity is considered low to moderate in industrial, commercial, and rural areas where the scenic quality of the environment does not affect the value of the activity.

No state-designated scenic roads (including scenic roads, historic roads, and parkways designations) or federally designated scenic roads (including national scenic byways and All-American road designations) within the Project site or vicinity (CDOT 2023b).

There are no public parks, recreation areas, or public gathering areas within view of the Project site. Drivers on County Road R, R.5, Q, and Highway 34 and adjacent rural residences would be the closest sensitive receptors to the Project site. The BESS area is sited more than a mile from existing rural residences in the vicinity of the Project site.

Tetra Tech anticipates that the Project would be considered low-moderate for visual sensitivity. The Project would visually contrast with the existing undeveloped rangeland. However, the Project will be consistent with the existing Tri-State owned electrical substation located west of the Project site. In addition, the gently sloping topography of the site provides a visual buffer of the Project Area from the nearby surrounding residences and roadways.

The Project is sited to provide a 500' buffer from existing inhabited buildings, and a 70' buffer or greater from exterior parcel boundaries and existing roadways. Six-foot-tall chain link fencing with one foot of barbed wire will be installed along the perimeter of the Project site boundary to provide an additional visual buffer.

4.11.1 Glint & Glare Analysis

Tetra Tech conducted a Glint and Glare analysis for the Solar Project which is included as Appendix N and further detailed per the concurrent Solar Project SUP applications.

4.12 Landforms

Morgan County is located in the Colorado Piedmont section of the Great Plains Physiographic Province. Underlying bedrock consists primarily of the Cretaceous Age Foxhills Sandstone and Pierre Shale that gently slopes east. The landforms of Morgan County consist primarily of typical Great Plains uplands and the broad valley of the South Platte River (Morgan County 2008).

The BESS Project will impact a small portion of this area and will not affect the general landform in the Project Area. The natural contours of the land will be returned where feasible following construction.

4.13 Soils

Tetra Tech reviewed the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey to identify and characterize the soils within the Project site. Based on desktop data, four distinct soil types are present within the Project Area (USDA 2023; Table 9). The dominate soil unit is Valent sand, 3 to 9 percent slopes (3,144 acres and 70.7 percent of the Project Area). The Project does not contain any prime farmland, and all present soil types are rated as non-hydric (USDA 2023).

Table 9. Soils that Occur in the Project Area

Soil Name	Soil Unit	Acres	Farmland Classification	Hydric Rating (%)	Drainage Class
Truckton loamy sand, 0 to 3 percent slopes	TuB	176.1	Not Prime Farmland	Non-Hydric (0%)	Well Drained
Valent sand, 0 to 3 percent slopes	Va	1,123.1	Not Prime Farmland	Non-Hydric (0%)	Excessively Drained
Valent sand, 3 to 9 percent slopes	VcD	3,144.6	Not Prime Farmland	Non-Hydric (0%)	Excessively Drained
Valent sand, 3 to 9 percent slopes	VwD	1.7	Not Prime Farmland	Non-Hydric (0%)	Excessively Drained

Source: USDA 2023

Impacts to soils are anticipated to be temporary during the construction phase of the BESS Project. Activities impacting soils include the clearing of vegetation and grading of areas for access roads and installation of BESS Project facilities. Clearing and grading exposes soils to a risk of erosion from wind and stormwater. Impacts to soils during operations are anticipated to be minimal from use of access roads by operations and maintenance staff. The NRCS assigns wind erodibility groups to measure soil susceptibility to wind erosion. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. Soil types within the Project site are in either group 1 or 2, indicating high susceptibility to wind erosion (USDA-NRCS 2023). The NRCS also assigns a K Factor Rating which indicates the susceptibility of a soil to sheet and rill erosion by water. K factor values range from 0.02 to 0.69. The higher the value, the more susceptible. Soil types within the Project site have a low K factor indicating low potential for sheet and rill erosion by water (USDA-NRCS 2023). A Water and Wind Erosion Control Plan is included as Appendix I, which details detail erosion control measures and construction stormwater runoff management for the Project.

Appropriate BMPs and stormwater mitigation measures will be employed during construction and operation of the Project to avoid erosion that might be caused by the Project.

4.14 Farmland of Statewide Importance

Tetra Tech reviewed the USDA NRCS Web Soil Survey, and the Project Area does not contain any prime, unique, or farmland of statewide importance. All soils within the Project Area are rated as “Not Prime Farmland” (USDA 2023). Therefore, no impacts to prime, unique, or farmland of statewide importance is anticipated to result from development of the Project.

5.0 SITE MAPS & PLANS

5.1 Vicinity Map

The Project vicinity map is provided as Appendix A-1.

5.2 Special Use Map/Site Plan

The Project Special Use Map/Site Plan is provided as Appendix A-2.

5.3 Schematic Drawings

Schematic elevation drawings of the BESS and inverters are included in Appendix A-5.

5.4 One-Line Drawing

A one-line drawing of the BESS is included as Appendix A-6.

5.5 Specification Sheets

Preliminary specification sheets for the BESS and inverters are included as Appendix A-7.

5.6 Drainage & Runoff Control Plan & Drainage Study

A Drainage and Runoff Control Plan and supporting Drainage Study are included as Appendix A-2 and M.

5.7 Water & Wind Erosion Control Plan

The Water and Wind Erosion Control Plan is provided as Appendix I.

5.8 Decommissioning Plan

The Decommissioning Plan prepared in accordance with Section 4-835 is provided as Appendix O.

5.9 Geotechnical Report

The Applicant certifies that prior to construction, a professional engineer licensed in Colorado will complete a geotechnical study that includes the following:

1. Soils engineering and engineering geologic characteristics of the site based upon on-site sampling and testing.
2. Foundation and tower systems design criteria for all proposed structures.
3. Slope stability analysis.

4. Grading criteria for ground preparation, cuts and fills, and soil compaction.

The geotechnical report detailing results of the study will be provided to Morgan County upon completion.

5.10 Maintenance Statement

The Applicant has prepared a maintenance statement for the system and property describing the anticipated maintenance and property upkeep that will occur during operation of the hybrid solar and BESS facility. The Maintenance Statement is provided as Appendix P.

5.11 Emergency Operations & Fire Mitigation Plan

The Project will implement adequate fire control and prevention measures during construction and operations as further detailed per the Emergency Operations and Fire Mitigation Plan included as Appendix H.

6.0 PUBLIC OUTREACH

The Applicant conducted a public open house meeting held on September 6, 2023, at Petteys Park golf course located at 2301 West Mill Street, Brush, Colorado. The public open house was noticed on the Project's website, through an informational flyer that was mailed to all landowners within a half-mile radius of the Project and was advertised in the local newspaper for two weekly circulations prior to the meeting. Additionally, the informational flyer was posted to the Morgan County Bulletin Board Facebook page.

Throughout the Project's planning and permitting process, the Applicant has contacted and coordinated with various agencies and local officials including the Morgan County Planning & Building Department, Morgan County Road and Bridge Department, Morgan County Economic Development Committee, City of Brush, Colorado Department of Wildlife, Colorado State Historic Preservation Office, Brush Volunteer Fire Department, Brush Rural Fire Protection District, Morgan County Sherriff's Office and Brush Police Department. In general, the purpose of these coordination efforts was to provide information on the Project, request feedback, and answer questions. In addition, the Applicant recently became a new member of the Morgan County Economic Development Committee.

An Environmental Justice Analysis and Communications Plan were prepared for the Project. The plans are included as Appendix Q-1 and Q-2. A Public Outreach Summary detailing public outreach completed to date is included as Appendix Q-3.

7.0 CITIZEN REVIEW PROCESS

The SUP request will require a public hearing for which a minimum of 10 days' public notice is required. The SUP request will be noticed pursuant to Morgan County Zoning Regulations Section 2-390. A list of adjoining landowners within 1,320' of the Project site and their mailing addresses is provided as Appendix R.

Site notices will be posted on the property fronting each adjacent right of way at least 10 days prior to each scheduled public hearing date in accordance with Morgan County Zoning Regulations Section 2-390 (B).

8.0 VESTED RIGHTS

The Applicant hereby respectfully requests that vested rights be granted for the BESS Project for a period of six years. The development schedule and phase timing are set forth in Section 2.6.1 (Table 2) above. Vested right is appropriate here because this a multi-phase Project that will be built out over several years.

9.0 REFERENCES

- CAPCD (Colorado Air Pollution Control Division). 2022. 2021 Air Quality Data Report, Technical Services Program, Colorado Department of Public Health and Environment. Available online at: tech_doc_repository.aspx (colorado.gov) (accessed May 2023).
- CDOT (Colorado Department of Transportation). 2023. Online Traffic Information System Traffic Data Explorer. Available online at: [Traffic Data Explorer \(coloradodot.info\)](https://trafficdataexplorer.coloradodot.info). Accessed September 2023.
- CDA (Colorado Department of Agriculture). 2023. County Weed Programs. Available online at: <https://ag.colorado.gov/conservation/noxious-weeds/county-weed-programs>. Accessed September 2023.
- EPA (U.S. Environmental Protection Agency) 2023. Current Nonattainment Counties for All Criteria Pollutants. Available online at: <https://www3.epa.gov/airquality/greenbook/ancl.html>. Accessed September 2023.
- FAA (Federal Aviation Administration). 2023a. Circle Search for Airports. Available online at: <https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showCircleSearchAirportsForm>. Accessed February 2023.
- FAA. 2023b. Notice Criteria Tool. Available online at: <https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm>. Accessed February 2023.
- FEMA (Federal Emergency Management Agency). 2023. National Flood Hazard Layer. Available online at: <https://www.fema.gov/flood-maps/national-flood-hazard-layer>. Accessed February 2023.
- Klise, G., Tidwell, V., Reno, M., Moreland, B., Zemlick, K., & Macknick, J. (2013). Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern United States [Review of Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern United States]. Sandia National Laboratories. <https://www.osti.gov/servlets/purl/1090206>
- Morgan County. 2008. Morgan County Comprehensive Plan. Available online at: <https://morgancounty.colorado.gov/sites/morgancounty/files/Comprehensive-Plan-2008.pdf>. Accessed September 2023.
- Morgan County. 2023a. Parcel Viewer App. Available online at: <https://morgancountyco.maps.arcgis.com/apps/Solutions/s2.html?appid=98b97c7f37e2453f85938d547d2b7f11> (accessed May 2023).
- Morgan County. 2023b. Morgan County Zoning Regulations. Available online at: <https://morgancounty.colorado.gov/sites/morgancounty/files/documents/Zoning%20Regulations%20-%20012323.pdf> (accessed May 2023).
- Morgan County. 2023c. Morgan County School Districts. Available online at: <https://morgancountyco.maps.arcgis.com/apps/Solutions/s2.html?appid=516c27c48c514af8bdb94071966688b8>. Accessed September 2023.

USDA-NRCS (U.S. Department of Agriculture Natural Resources Conservation Service). 2023. Web Soil Survey. Available online at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm> . Accessed September 2023.

Fortress Solar Project, Phase III Special Use Permit Application



For Submittal to:



MORGAN COUNTY PLANNING
ZONING & BUILDING DEPT.
231 Ensign, P.O. Box 596
Fort Morgan, Colorado 80701
PHONE (970)542-3526
FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

Prepared for:

Fortress Solar III LLC,
11801 Domain Blvd, Suite 450
Austin, TX 78758

Prepared by:



1560 Broadway, Ste 1400
Denver, CO 80202



MORGAN COUNTY PLANNING
 ZONING & BUILDING DEPT.
 231 Ensign, P.O. Box 596
 Fort Morgan, Colorado 80701
 PHONE (970)542-3526
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EMAIL: permits_licensing@co.morgan.us

PERMIT # SU2023 - 0024

Date Received	<u>11 / 8 / 23</u>	Received By	<u>[Signature]</u>
App Fee	<u>\$5000</u>	CK/CC #:	<u>091045071</u>
Minor Amend Fee:	\$	CK/CC #:	
Recording Fee	\$	CK/CC #:	
PC Date:	<u>2 / 12 / 24</u>	BOCC Date:	<u> / /</u>
100 Year Floodplain?	<u>Y/N</u>	Taxes Current?	<u>Y/N</u>

SPECIAL USE PERMIT APPLICATION

(Also to be used as application for Amendments to Existing Special Use Permits)

Landowner **MUST** Sign Application and Right to Farm Policy

APPLICANT

LANDOWNER

Name Fortress Solar III LLC
 Address 11801 Domain Blvd, Suite 450
Austin, TX 78758
 Phone _____
 Email _____

Name See Attached Table
 Address _____
 Phone () _____
 Email _____

BRIEF DESCRIPTION OF APPLICATION

Proposed 200 MW utility scale solar facility. Phase III of the Fortress Solar Project.

PROPERTY LEGAL DESCRIPTION

Address (if available):

See attached parcel information table

S: ___ T: ___ R: ___ 1/2 1/4 1/4 Property Size _____ (sq. ft. or acres)
 Parcel #: _____ Zone District: A
 Subdivision: _____ Lot #(s): _____

Is property located within 1320' (1/4 mile) of a livestock confinement facility? Y/N

SEE REQUIRED ATTACHMENT LIST ON BACK OF THIS PAGE.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED OR PROCESSED.

SPECIAL USE PERMIT REQUIRED ATTACHMENT LIST

Fee:

Non-Refundable Application Fee

**Additional fees and charges may be required pursuant to Section 2-160 of Morgan County Zoning Regulations*

Project Narrative:

Narrative– Including the following:

- Project Description
- Purpose of request
- How this proposal complies with the Morgan County Comprehensive Plan
See: <https://morgancounty.colorado.gov/sites/morgancounty/files/Comprehensive-Plan-2008.pdf>
- How this project/proposed use meets the criteria for Special Use Permit pursuant to Sec. 2-395 of the Zoning Regulations
- How the project/proposed use meets any specific criteria related to the project/proposed use. *See Morgan County Zoning Regulations Chapter 4-Supplementary Regulations, including but not limited to: Campgrounds, Livestock Confinement, Kennels, Outdoor Shooting Ranges, Home Occupations, Oil and Gas, Mobile Home Parks, Wireless Service Facilities, Solar, Wind and BESS*
- How project will relate to or impact existing adjacent uses
- All off-site impacts and proposed mitigation measures
- Development or implementation schedule of project
- Proposed length of time the permit, if applicable
- Discussion of any public improvements required to complete the project

Environmental Impacts:

- Discuss any environmental impacts the Special Use will have on the following and the proposed mitigation measures:

- | | | | |
|--------------------------------------|-----------------------------------|----------------------------------------------|------------------------------------------|
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Dust | <input type="checkbox"/> Existing Vegetation | <input type="checkbox"/> Land Forms |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Odor | <input type="checkbox"/> Storm Water Runoff | <input type="checkbox"/> Water Resources |
| <input type="checkbox"/> Wetlands | <input type="checkbox"/> Wildlife | <input type="checkbox"/> Visual Amenities | <input type="checkbox"/> Other _____ |

Map & Plans: **Special Use Map** meeting the requirements of Sec. 2-420 and any specific map requirements for the proposed use including but not limited to: *Campgrounds, Livestock Confinement, Kennels, Outdoor Shooting Ranges, Home Occupations, Oil and Gas, Mobile Home Parks, Wireless Service Facilities, Solar, Wind and BESS.* *Sample Map attached to application for reference*

Drainage/Run-Off Control Plan may be required if the Planning Administrator determines that the use or building meets one of the following criteria:

- (1) The accessory use or building may have a drainage impact on adjacent properties;
- (2) The accessory use or building may have a drainage impact on adjacent right of ways;
- (3) The accessory structure is 5000 square feet or larger.

Decommissioning Plan [Wind, Solar, BESS]

Geotechnical Report [Wind, Solar]

Maintenance Statement [Wind, Solar, BESS]

Water and/or Wind Erosion Control Plan [Wind, Solar]

Fire Mitigation Plan [BESS]

Specification Sheet [BESS]

Emergency Operation Plan [BESS]

Ownership: **Current title insurance commitment (last 6 months)**

Mineral Rights Holders Notification

Notice to FFA & Approval Letter [Wind]

Notice to Operator of Communication Link (if applicable) [Wind]

Proof of current paid taxes

Utilities/Access: **Water tap (Engineering Report from Quality Water or proof of access to a well)**

Sewer (Septic Permit, Will Serve Letter from NCHD or proof of other public system)

Electric (Electric bill or letter of commitment from electricity provider)

Driveway Permit from CDOT or Morgan County Road & Bridge (If required by staff)

Ditch Company- Proof of contact if there is a ditch on or next to subject property

Architecture Control Approval (if applicable)

Utility Interconnection or Crossing Certification [Wind, Solar]

Road Agreement [Wind, Solar]

Electrical Diagram [BESS]

Vested Rights: **Vesting Rights** (Optional). If applying for vested rights with special use application, the following must be submitted:

- Period of time Vesting Rights are requested
- Development schedule including timeline and phases
- Reason for request
- Other pertinent factors concerning the development
- Additional application fee for vesting rights application

Miscellaneous: **Right to Farm Policy** signed by Landowner(attached)
 Liability Insurance for Solar, Wind and/or BESS projects

1 # Paper Application sets

1 Digital Copy of Application (One sided only)

Posted Public Notice Verification:

Notarized affidavit with photographs from a distance & close-up

This must be submitted PRIOR to Planning Commission hearing and PRIOR to Morgan County Board of Commissioners hearing

Additional Information required by staff:

APPLICANT & LANDOWNERS **MUST** SIGN APPLICATION ON NEXT PAGE

APPLICANT & LANDOWNER'S STATEMENT

I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge.
Application must be signed by landowners as shown on title insurance/commitment.

Charles Ndhlovu 10/18/2023
Applicant Signature Date

Leith Ann Odle 10/29/23
Landowner Signature Date

Applicant Signature Date

Landowner Signature Date

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Charles Ndhlovu

Applicant Signature

10/18/2023

Date

Shari A Benotte 10-24-23

Landowner Signature

Date

Applicant Signature

Date

Landowner Signature

Date



MORGAN COUNTY, PLANNING, ZONING & BUILDING DEPT.

231 Ensign, P.O. Box 596
Fort Morgan, Colorado 80701
PHONE (970) 542-3526 FAX (970) 542-3509

MORGAN COUNTY RIGHT TO FARM POLICY / NOTICE

Morgan County is one of the most productive agricultural counties in Colorado. Ranching, farming, animal feeding, and all other manner of agricultural activities and operations in Morgan County are integral and necessary elements of the continued vitality of the county's economy, culture, landscape and lifestyle. Morgan County specifically recognizes the importance of agricultural operations as necessary and worthy of recognition and protection.

Landowners, residents and visitors must be prepared to accept as normal the effects of agriculture and rural living. These may include noise from tractors, equipment, and aerial spraying sometimes at night or in the early morning; dust from animal pens, field work, harvesting, and gravel roads; odor from animal confinement operations, silage and manure; smoke from ditch burning; flies and mosquitoes; the use of pesticides and fertilizers, including aerial spraying; and movement of livestock or machinery on public roads. Under the provisions of the State of Colorado's "Right to Farm" law (Section 35-3.5-101 and following, C.R.S.), all normal and non-negligent agricultural operations may not be considered nuisances.

Also public services in a rural area are not at the same level as in an urban or suburban setting. Road maintenance may be at a lower level, mail delivery may not be as frequent, utility services may be nonexistent or subject to interruption, law enforcement, fire protection and ambulance service will have considerably longer response times, snow may not be removed from county roads for several days after a major snow storm. First priority for snow removal is that school bus routes are normally cleared first.

Children are exposed to different hazards in a rural setting than they are in an urban or suburban area. Farm and oilfield equipment, ponds, and irrigation ditches, electrical service to pumps and oil field operations, high speed traffic, noxious weeds, livestock, and territorial farm dogs may present real threats to children. It is necessary that children's activities be properly supervised for both the protection of the children and protection of the farmer's livelihood.

All rural residents and property owners are encouraged to learn about their rights and responsibilities and to act as good neighbors and citizens of Morgan County. This includes but is not limited to obligations under Colorado State law and Morgan County Zoning Regulations regarding maintenance of fences, controlling weeds, keeping livestock and pets under control. There may be provisions of which you are unaware. For example, because Colorado is a Fence Law State, owners of property may be required to fence livestock out.

Information regarding these topics may be obtained from the Colorado State University Cooperative Extension Office and the County Planning and Zoning Department, and County Attorney.

RECEIPT AND STATEMENT OF UNDERSTANDING

I hereby certify that I have received, read, and understood the Morgan County Statement of Policy and Notice regarding Right to Farm.

I further state that I am aware that the conditions of living in an unincorporated area are different than living in a town or city and that the responsibilities of rural residents are different from urban or suburban residents. I understand that under Colorado law that a pre-existing, non-negligent agricultural operation may not be considered a public or private nuisance.

Ruth Ann Odle 10-25-23
Signature Date
Ruth Ann Odle
Printed Name
16218 Hwy. 71
Address
Brush, CO 80723

To Be Signed by Landowner

Adopted by the Morgan County Board of County Commissioners by Resolution #96BCC41 on July 23, 1996 and amended by Resolution 2008 BCC 34 on September 2, 2008.



MORGAN COUNTY, PLANNING, ZONING & BUILDING DEPT.
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Shari A. Benotti 10/24/23
 Signature Date

SHARI A. BENOTTI
 Printed Name

2420 THORNDON PARK CT.
 Address

LEAGUE CITY, TX 77573

To Be Signed by Landowner

Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF FORMATION OF "FORTRESS SOLAR III LLC", FILED IN THIS OFFICE ON THE THIRTIETH DAY OF OCTOBER, A.D. 2023, AT 12:23 O`CLOCK P.M.




Jeffrey W. Bullock, Secretary of State

2554795 8100
SR# 20233844312

Authentication: 204486059
Date: 10-31-23

You may verify this certificate online at corp.delaware.gov/authver.shtml

STATE OF DELAWARE
CERTIFICATE OF FORMATION
OF LIMITED LIABILITY COMPANY

The undersigned authorized person, desiring to form a limited liability company pursuant to the Limited Liability Company Act of the State of Delaware, hereby certifies as follows:

1. The name of the limited liability company is Fortress Solar III LLC

2. The Registered Office of the limited liability company in the State of Delaware is located at 1209 Orange Street (street), in the City of Wilmington, Zip Code 19801. The name of the Registered Agent at such address upon whom process against this limited liability company may be served is The Corporation Trust Company

By: 
Authorized Person

Name: Christie Kneteman
Print or Type

Participating Landowners Contact Information

Name	Address	Phone	Email
Shari Benotti	2420 Thorndon Park League City, TX 77573	Available upon request	Available upon request
Ruth Ann Odle	16218 Hwy 71 Brush, CO 80723-9436	Available upon request	Available upon request
Tri State Generation	1100 W 116 Ave, Westminster, CO 80234	Available upon request	Available upon request

Aypa Power Story Solar Participating Landowner Parcel Information

APN	Account Number	Property Owner	Legal Description
1233-060-00-001	R002875	Tri-State Generation and Transmission Association Inc.	S: 06 T: 3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
123101000002	R004487	Tri-State Generation and Transmission Association Inc.	S: 01 T: 3 R: 56 E1/2E1/2 B908 P721 (CORRECTION SECTION)
123101000700	R700033	Tri-State Generation and Transmission Association Inc	S: 01 T: 3 R: 56 PARC E1/2 B801 P134 **STATE ASSESSED**
1233-060-00-002	R002949	Shari A Benotti	S: 06 T: 3 R: 55 S1/2S1/2 (CORRECTION SECTION)
1233-070-00-001	R002950	Shari A Benotti	S: 07 T: 3 R: 55 N1/2N1/2 (CORRECTION SECTION)
1231-120-00-001	R003925	Shari A Benotti	S: 12 T: 3 R: 56 N1/2NE1/4
1231-120-00-002	R003918	Ruth Ann Odle	S: 12 T: 3 R: 56 SE1/4NE1/4 & E1/2SE1/4
1233-070-00-002	R002827	Ruth Ann Odle	S: 07 T: 3 R: 55 S1/2N1/2 & S1/2 (CORRECTION SECTION)
1233-050-00-001	R002837	Ruth Ann Odle	S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T:

			4 R: 55 PARC SW1/4 S OF RR
1233-080-00- 001	R002838	Ruth Ann Odle	S: 08 T: 3 R: 55 ALL
1233-040-00- 002	R002841	Ruth Ann Odle	S: 04 T: 3 R: 55 ALL S OF RR (CORRECTION SECTION)
1233-090-00- 001	R002842	Ruth Ann Odle	S: 09 T: 3 R: 55 ALL
1233-030-00- 003	R002835	Ruth Ann Odle	S: 03 T: 3 R: 55 S1/2 S OF RR & S1/2NW1/4 S OF HWY 34
1233-100-00- 001	R002839	Ruth Ann Odle	S: 10 T: 3 R: 55 ALL

Special Use Permit Application

Fortress Solar Project- Phase III

Morgan County, Colorado

November 2023

Submitted to:

Morgan County Planning and Zoning
231 Ensign Street, PO Box 596
Fort Morgan, CO 80701



Prepared for

Fortress Solar III LLC

11801 Domain Blvd, Suite 450
Austin, TX 78758

Prepared by



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Morgan County Special Use Permit Application Submittal Requirements

The Morgan County Special Use Permit application package for the proposed Fortress Solar Project is organized by sections to follow the Morgan County SUP Application Checklist, provided below. The items identified in the Submittal Requirements are included in the table below with the listing of the application report section addressing the checklist item.

Morgan County Code 2-380 Submittal Requirements / SUP Application Checklist	Application Section
1. Applicant Information	2.5 / Application Form
2. Landowner Information	2.1 / Application Form
3. Property Legal Description	2.1 / Application Form
4. Applicant & Landowner's Statement	Application Form
5. Project Narrative Including the Following: a) Project Description b) Purpose of request c) How this proposal complies with the Morgan County Comprehensive Plan d) How this project/proposed use meets the criteria for the Special Use Permit pursuant to Sec. 2-395 of the Zoning Regulations e) How this project/proposed use meets the specific criteria per Morgan County Zoning Regulations Chapter 4- Supplementary Regulations (Solar) f) How the project will relate to or impact existing adjacent uses g) All off-site impacts and proposed mitigation measures h) Development or implementation schedule of project i) Proposed length of time of the permit j) Discussion of any public improvements required to complete the project	2.0-3.0
6. Discuss any environmental impacts the Special Use will have on the following and the proposed mitigation measures: Air Quality, Dust, Existing Vegetation, Land Forms, Noise, Odor, Storm Water Runoff, Water Resources, Wetlands, Wildlife, Visual Amenities, Other	4.0
7. Maps and Plans	5.0
a) Special Use Map	Appendix A-2
b) Drainage/Run-off Control Plan	Appendix A-2, L, & I
c) Decommissioning Plan	Appendix O
d) Geotechnical Report	5.8
e) Maintenance Statement	Appendix P
f) Water and Wind Erosion Control Plan	Appendix I
g) Fire Mitigation Plan	Appendix H
h) Specification Sheets	Appendix A-7
i) Emergency Operation Plan	Appendix H
8. Ownership Information	2.2
a) Title Commitments	Appendix B
b) Mineral Rights Holders Notification	2.2.6 / Appendix E
c) Proof of Current Paid Taxes	2.2.4 / Appendix D
9. Utilities:	2.6.2
a) Water tap (Will Serve letter or proof of access to a well)	2.6.2.1
b) Sewer (Septic Permit, Will Serve Letter from NCHD or proof of other public system)	2.6.2.2

c) Electric (Electric bill or letter of commitment from electricity provider)	2.6.2.3
d) Utility Interconnection or Crossing Certification	2.6.2.4
10. Access	2.7
a) Morgan County Driveway Permits	Appendix G
b) Ditch Company- Proof of contact if there's a ditch on or next to the subject property	2.2.8
c) Road Agreement	2.8.1
d) Electrical Diagram (BESS)	Appendix A-6
11. Vested Rights	8.0
12. Miscellaneous	
a) Right to Farm Policy	2.2.5 / Application Form
b) Liability Insurance	2.2.3 / Appendix C
c) Posted Public Notice Verification	7.0

Morgan County SUP Criteria Index

The following index is provided to direct the reader to the sections of this SUP Application that correlate to the Morgan County Chapter 2-395 “Review Criteria” identified for Special Use Permits.

The following criteria will be used by the Planning Commission and the Board of Commissioners when reviewing an application for a special use permit:

Morgan County Code 2-395 Special Use Permit Review Criteria	Application Section
A. The use and its location as proposed are in conformance with the Morgan County Comprehensive Plan;	2.11.A
B. All the application documents are complete and present a clear picture of how uses are to be arranged on the site or within Morgan County;	2.11.B
C. The site plan conforms to the district design standards of these regulations;	2.11.C
D. All on and off-site impacts have been satisfactorily mitigated either through agreement, public improvements, site plan requirements or other mitigation measures;	2.11.D
E. The special use proposed has made compatible with the surrounding uses and adequately buffered as determined by the County;	2.11.E
F. The special uses poses only the minimum amount of risk to the public health, safety, and welfare as set by either federal, state or county regulation, whichever is the strictest;	2.11.F
G. The special use proposed is not planned to be developed on a non-conforming parcel;	2.11.G
H. The applicant has adequately documented a public need for the project, all pertinent technical information, adequate financial resources to implement it, and has paid all fees and review costs levied by the County for application processing and review; and	2.11.H
I. For any special use requiring a supply of water that the applicant has demonstrated a source of water which is adequate for the proposed use in terms of quantity and reliability and in the case of human consumption, quantity, quality, and reliability	2.11.I

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Acronyms and Abbreviations

AADT	Average Annual Daily Traffic
AC	alternating current
AF	acre-feet
APEN	Air Pollutant Emissions Notice
APN	Assessor's Parcel Number
Applicant	Fortress Solar III LLC
Aypa	Aypa Power North America LLC
BESS	battery energy storage system
BMPs	best management practices
BNSF	Burlington Northern Santa Fe Corporation
CAPCD	Colorado Air Pollution Control Division
CDA	Colorado Department of Agriculture
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health & Environment
CPW	Colorado Parks and Wildlife
dBA	A-weighted decibel
EHS	Environmental Health & Safety
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FIRM	Flood Insurance Rate Map
Gen-tie	generation tie line
Highway 34	U.S. Highway 34
HVAC	heating, ventilation, and air conditioning
I-76	Interstate 76
IF	isolated finds
IPaC	Information for Planning and Consultation
kV	kilovolt
MW	megawatt
MWh	megawatt hours

NERC	North American Electric Reliability Corporation
NHD	National Hydrography Dataset
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
Project	A utility scale solar and BESS project known as the Fortress Solar Project
Project Area	4,259 acre fenced Project boundary
PV	photovoltaic
SGHAT	Sandia Laboratories Solar Glare Hazard Analysis Tool
Solar Project Area	4,069-acre solar project area
SUP	Special Use Permit
Tetra Tech	Tetra Tech, Inc.
Tri State	Tri State Generation and Transmission Association Inc.
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WOTUS	waters of the U.S.

1.0 INTRODUCTION

Fortress Solar III LLC (“Applicant”), an indirect subsidiary of Aypa Power North American LLC (“Aypa”), a Blackstone portfolio company submits this application in furtherance of the development of a utility scale solar and BESS project known as the Fortress Solar Project (the “Project”) in Morgan County, Colorado. The Project will be comprised of a solar collector facility and a BESS facility; the solar collector facility project is referred to herein as the “Solar Project” and the BESS facility project is referred to herein as the “BESS Project”. The Project will be developed in three phases, each phase shall contain one phase of the Solar Project and one phase of the BESS Project. In accordance with the Morgan County Zoning Regulations, three separate solar collector facility applications and three separate BESS facility applications, one for each phase, are submitted simultaneously. In order to provide Morgan County (“County”) with a complete picture of the Project, each of the three Solar Project applications includes information on all three phases, each phase corresponding to its own application. The total fenced Project boundary will encompass approximately 4,259 acres (the “Project Area”). The Solar Project, inclusive of all three phases, is an up to 600-megawatt (MW), 2,400 MW hour (MWh) solar photovoltaic (PV) array facility and will encompass up to 4,069 acres within the Project Area (“Solar Project Area”). This application is for Phase III of the Solar Project and is submitted in conjunction with the application for Phase III of the BESS Project. Phase III of the Solar Project will encompass approximately 1,325 acres.

In accordance with the foregoing, the Applicant respectfully submits this Special Use Permit (SUP) application to the Morgan County Planning and Development Department pursuant to Morgan County Code Chapter 4-820, and Chapter 4-825, to address utility-scale Solar Collector facilities. The Applicant is requesting an SUP to construct, operate, maintain, and decommission the Solar Project. The Project will be located on private land in unincorporated Morgan County located approximately 1.6 miles east of the city of Brush, Colorado (Figure 1, Project Location, Appendix A-1). The Project Area is comprised of eleven parcels, and the proposed generation tie (gen-tie) line would bisect three additional parcels (Appendix A-2) that are located within the Morgan County Agricultural Production Zone. The ALTA survey for the Project Area is included as Appendix A-3.

Phase III of the Project includes an approximately 1,325-acre solar array area. Associated with Phase III are the Project’s 2-acre Project substation, a 167-acre gen-tie line easement, and an operations and maintenance building. A 21-acre utility scale battery energy storage system (BESS) referred to as the BESS Project, is proposed within the Project boundary. The BESS component is addressed per separate SUP applications submitted simultaneously herewith. The SUP application submitted for Phase III of the BESS Project is to be reviewed concurrent with the subject Phase III solar SUP application.

The Project Vicinity Map is provided as Appendix A-1. The Site Plan and Special Use Map are included as Appendix A-2. The ALTA survey prepared for the Project is provided as Appendix A-3. A site access plan is included Appendix A-4. Schematic drawings of the Project components are detailed in Appendix A-5 and a one-line electrical drawing of the BESS is provided as Appendix A-6. Preliminary specification sheets are provided as Appendix A-7. The SUP application form and Right to Farm Policy is provided in front of this application narrative following the Applicant’s cover letter.

2.0 PROJECT NARRATIVE

2.1 Project Location & Participating Landowner Parcel Information

The Project is located on approximately 4,259 acres of private property currently held under purchase option by an affiliate of the Applicant, which will be assigned to the Applicant prior to the exercise of the option (Appendix A-2). Phase III of the Solar Project will encompass approximately 1,325 acres. The Project is located along U.S. Highway 34 (Highway 34), on existing rangeland approximately 1.6 miles east of Brush, Colorado. Table 1 below lists the assessor's parcel and property owner information for the Project parcels.

Table 1. Participating Property Owners Parcel Information

Assessor Parcel Number (APN)	Account Number	Property Owner	Legal Description
1233-060-00-001	R002875	Tri-State Generation and Transmission Association Inc.	S: 06 T: 3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
1231-010-00-002	R004487	Tri-State Generation and Transmission Association Inc.	S: 01 T: 3 R: 56 E1/2E1/2 B908 P721 (CORRECTION SECTION)
1231-010-00-700	R700033	Tri-State Generation and Transmission Association Inc	S: 01 T: 3 R: 56 PARC E1/2 B801 P134 **STATE ASSESSED**
1233-060-00-002	R002949	Shari A Benotti	S: 06 T: 3 R: 55 S1/2S1/2 (CORRECTION SECTION)
1233-070-00-001	R002950	Shari A Benotti	S: 07 T: 3 R: 55 N1/2N1/2 (CORRECTION SECTION)
1231-120-00-001	R003925	Shari A Benotti	S: 12 T: 3 R: 56 N1/2NE1/4
1231-120-00-002	R003918	Ruth Ann Odle	S: 12 T: 3 R: 56 SE1/4NE1/4 & E1/2SE1/4
1233-070-00-002	R002827	Ruth Ann Odle	S: 07 T: 3 R: 55 S1/2N1/2 & S1/2 (CORRECTION SECTION)
1233-050-00-001	R002837	Ruth Ann Odle	S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T: 4 R: 55 PARC SW1/4 S OF RR
1233-080-00-001	R002838	Ruth Ann Odle	S: 08 T: 3 R: 55 ALL
1233-040-00-002	R002841	Ruth Ann Odle	S: 04 T: 3 R: 55 ALL S OF RR (CORRECTION SECTION)
1233-090-00-001	R002842	Ruth Ann Odle	S: 09 T: 3 R: 55 ALL
1233-030-00-003	R002835	Ruth Ann Odle	S: 03 T: 3 R: 55 S1/2 S OF RR & S1/2NW1/4 S OF HWY 34
1233-100-00-001	R002839	Ruth Ann Odle	S: 10 T: 3 R: 55 ALL

Source: Morgan County 2023a

2.2 Property Interests, Rights, and Policies

2.2.1 Easements & Agreements

An affiliate of Applicant is currently the option holder for the Project site. The option to purchase agreement(s) are for a total of 4,473 acres (407 acres of Benotti; 1,897 acres of Odle Option 1; 2,170 acres of Odle Option 2) and extend until the end of 2024. On October 18th, 2023, an affiliate of the Applicant entered into a Temporary License Agreement with Tri State Generation and Transmission Association Inc. (Tri-State) to allow for completion of surveying and other investigative activities on the Tri-State owned properties. The Applicant intends to establish an access easement across Tri-State owned parcels for access to the Project from County Road R.5. In addition, the Applicant intends to establish an approximate 167-acre ROW utility easement for the proposed generation tie line to interconnect the Project to the Tri-State owned substation west of the Project.

2.2.2 Title Commitments

The title insurance commitments (last 6 months) for all participating landowners within the Solar Project Area are included as Appendix B, excluding the 80-acre Odle Parcel, 1233-040-00-002. The Applicant encountered a title conveyance issue when completing the title search for the Solar Project parcel 1233-040-00-002. The Applicant is working on curing the title issue for this parcel and anticipates completing a corrective deed. The Applicant will provide copy of the title insurance commitment for parcel 1233-040-00-002 when received.

2.2.3 Liability Insurance

The Applicant will carry liability insurance to cover loss or damage to persons or structures during construction and operation of the Solar Project. A copy of the Applicant's liability insurance policy certificate for the Odle property is included as Appendix C. The Applicant's contract for the Benotti property does not require them to obtain a liability insurance certificate.

2.2.4 Proof of Current Paid Taxes

Proof of current tax payment for the participating landowners are included as Appendix D.

2.2.5 Right to Farm Policy

Participating landowner signatures certifying the receipt, review, and understanding of the Morgan County Statement of Policy and Notice regarding the Right to Farm are provided on the SUP application form.

2.2.6 Mineral Right Holder Notification

The mineral right holders within the Solar Project boundary will be provided with a preliminary notice advising them of their right to comment or request information from Morgan County. At this time, a hearing date has not yet been scheduled for the SUP application. The Applicant will notify the individual mineral rights holders within the Project in advance of the scheduled hearing as required by Morgan County and statutory notification requirements. Upon finalization of the hearing schedule, the

Applicant will coordinate with Morgan County to ensure all appropriate mineral rights holders are provided proper notice of the scheduled hearing and an opportunity to provide comment.

A preliminary list of the mineral rights holders that will be notified in advance of the scheduled hearing is included as Appendix E.

2.2.7 Height Restrictions and FAA Hazard Review

According to the Federal Aviation Administration (FAA), the Brush Municipal Airport (FAA identifier 7V5) is located less than a mile northwest of the Project Area (FAA 2023a). Tetra Tech Inc. (Tetra Tech) consulted the FAA Obstruction Evaluation Notice Criteria Tool (FAA 2022b) for four locations in the Project Area and determined that the Project exceeds the Notice Criteria and would require filing. The Applicant will file notice with the FAA at least 45 days prior to the start of construction.

2.2.8 Ditch Company- Proof of Contact

No drainage or irrigation ditches have been identified within the Solar Project Area.

2.3 Zoning District

The Solar Project is located in the Agriculture Production zoning district (Morgan County 2023a). Per Morgan County Code Section 3-180, Solar Collector facilities may be permitted in the Agricultural Production zoning district through issuance of an SUP.

2.4 Purpose of Request

The purpose of this application is to provide Morgan County with pertinent information regarding the Solar Project, subject to the Morgan County Zoning Regulations concerning the regulation of wind energy, solar collector, and battery energy storage systems (Morgan County 2023b). Per Morgan County Code, Section 3-180, solar collector facilities greater than 20 acres in size may be permitted as a primary use in the Agriculture Production zoning district through issuance of a special use permit. Therefore, the purpose of the SUP is to authorize the proposed use of a Solar Collector facility on the Solar Project site to allow for the development and operation the Solar Project.

2.5 Applicant Information

The Applicant is an indirect subsidiary of Aypa. Aypa is a Blackstone portfolio company. Aypa has a proven track record of developing, financing, constructing, owning, and operating utility-scale renewable energy and battery energy storage projects. Aypa's existing portfolio and qualified development pipeline spans the continental United States and Ontario, Canada, including +15,000 MWs of projects in various stages of development. Aypa currently has an operating fleet of 30 projects, two projects are currently under construction, and over 70 projects are in the development pipeline.

2.6 Project Description

The Project is an up to 600-MW, 2,400 MWh hybrid solar and BESS project. The solar arrays, tracking systems, BESS, inverters, substation, and appurtenant facilities would be located on approximately 4,259 acres. The site layout is detailed per the Special Use Map/Site Plan included as Appendix A-2.

2.6.1 Development Schedule and Phasing

The Solar Project is expected to be constructed in three phases of approximately 200 MW, 800 MWh each. Construction of the Solar Project is anticipated to commence in Q2 2025 pending approval of County permits. The Project will be developed in parallel with the BESS Project.

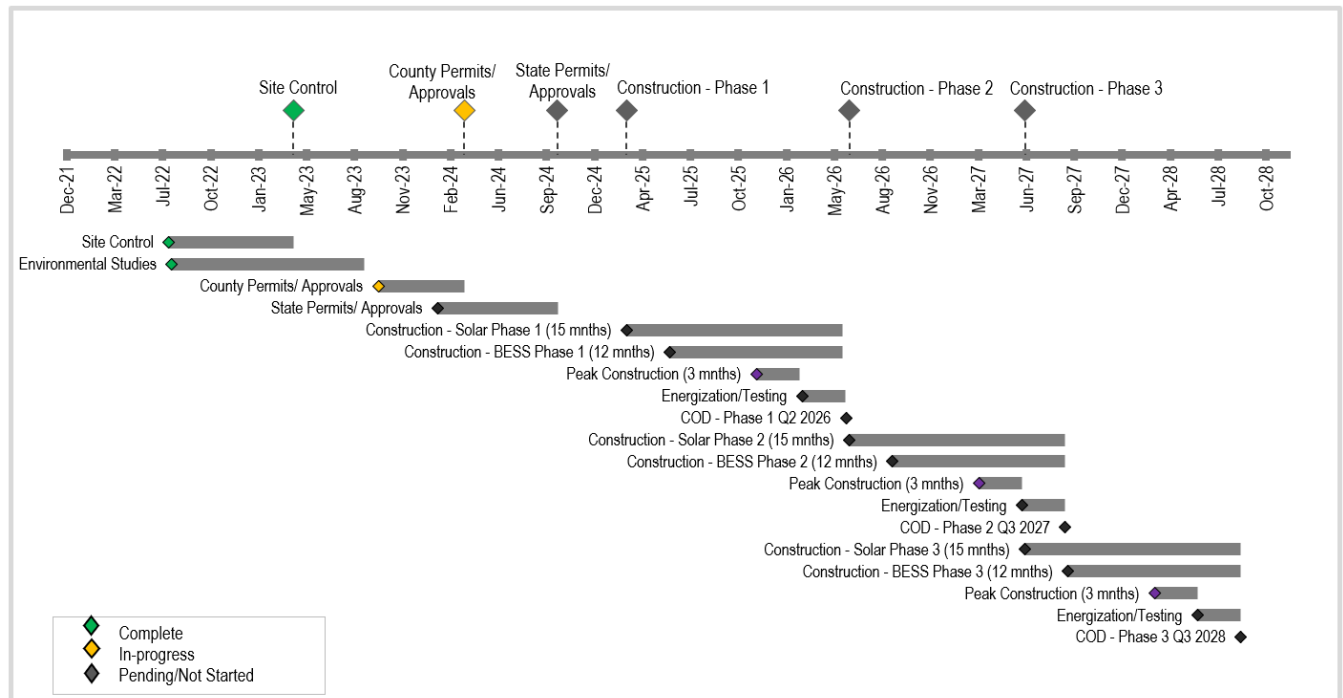
The proposed phasing is detailed per Table 2 below. All associated phasing quantum included in the application should be summed together in such cases in which multiple phases are constructed at the same time. This application is inclusive of maximum and minimum cases of individual and simultaneous phasing. As noted above, this application is for Phase III of the Solar Project.

Table 2. Project Construction Phasing

Phase	APNs	Solar MW	Solar MWh	Start Construction	End Construction	Commercial Operation Date
1	1231-120-00-001, 1231-120-00-002, 1233-060-00-002, 1233-070-00-001, 1233-070-00-002	200	800	Q2 2025	Q1 2026	Q2 2026
2	1233-050-00-001, 1233-080-00-001, 1233-040-00-002, 1233-030-00-003	200	800	Q1 2026	Q2 2027	Q3 2027
3	1233-090-00-001, 1233-100-00-001, 1233-030-00-003	200	800	Q1 2027	Q2 2028	Q3 2028

The overall development schedule for the Solar Project and BESS Project are detailed per Figure 2-1 below.

Figure 2-1. Fortress Solar III LLC - Overall Schedule (Solar & BESS)



2.6.2 Anticipated Permit Timeframe & Length of Permit

Per Section 4-845 of the Morgan County Solar Facility Regulations, a SUP for a Solar Collector facility is valid for three years, provided that substantial construction and installation of the facility is completed within that time. The Project construction for each phase is anticipated to be completed within 15 months upon issuance of a building permit. If construction is delayed due to unforeseen circumstances, the Applicant will request extensions, as permitted per Section 4-845 of the Morgan County Code. The Applicant understands the SUP approval may expire if substantial construction progress is not achieved within three years, or up to six years if such extensions are requested and granted.

2.6.3 Siting Considerations

The primary criteria for determining the location of Solar Collector facilities include the existence of compatible adjacent and nearby land uses, suitable topographic conditions, and the proximity to existing electrical infrastructure, major transportation corridors, utility corridors, and electrical load centers. The proposed Solar Project site meets these criteria. The Solar Project site was selected based on proximity to the existing infrastructure of the Tri State Generation and Transmission Association Inc. (Tri State) Story substation. Siting analysis confirms the proposed Project Area avoids areas or locations with a high potential for biological conflict, such as wilderness study areas, areas of environmental concern, historic trails, special management areas, or important wildlife habitat or corridors. The proposed site avoids visual corridors that are prominent scenic viewsheds or scenic areas. As discussed in Section 4.0, there are no known sensitive biological, hydrological, historical, cultural, or archeological resources within or near the proposed Project site.

2.6.4 Photovoltaic Solar Panels & Tracking System

The Solar Project would use PV technology by which the sun's light energy is converted directly into direct current (DC) electrical energy within the PV panels, referred to as modules. The PV modules are configured in solar arrays by electrically connecting them in series (strings) and connecting strings together at combiner boxes. The PV panels would be supported on single axis trackers that track the sun's position during the day.

Per the preliminary design, the Project will use a module blend of Vertex bifacial PV panels (Appendix A-7). Approximately 1,944,180 PV modules are proposed across 617,359 tracker rows. Phase III of the Solar Project would be comprised of approximately 648,060 PV modules across 205,787 tracker rows. The exact model and quantity of panels will be finalized during the detailed engineering phase. The panels would be installed on a racking system with support piles driven into the ground. For maximum efficiency, panels are typically installed between 16 and 24 inches off the ground when at their lowest point. The maximum proposed panel height at full tilt would be 10 feet to the top of the panels from the ground level, once installed.

2.6.5 Electrical Collection System

In accordance with Section 4-825(A)(1) of the Morgan County Code, all electrical interconnection and distribution lines within the Solar Project boundary will be underground, except for power lines that leave the Project or are within the substation. All electrical interconnections and distribution

components will comply the National Electrical Safety Code, requirements of the electric utility company, and applicable state and federal regulatory codes as required by Morgan County.

The electrical collection system would be designed to convert the output power from the PV modules from DC to alternating current (AC), transform the power from low voltage to transmission-level voltage for connection to the grid, and supply auxiliary power to the tracker systems. The DC output from the PV arrays would be transmitted to inverters through underground DC electrical cables. Collection cables from the inverters typically converge at the corners of each of the array blocks and lead underground to the proposed Project substation. Feeder cables enter the substation via conduit and route to the feeder breakers.

The resulting AC current from each individual inverter package is routed through to a medium-voltage step-up transformer. The output voltage from each inverter would be increased to the desired substation feed voltage of 34.5 kilovolts (kV) by these step-up transformers. From the inverter pads, the collected 34.5 kV of AC power would be delivered to the on-site Project substation, where the voltage is then stepped up to 230 kV.

A one-line electrical drawing for the Project is included as Appendix A-6.

2.6.6 Inverters and Transformers

Approximately 241 SMA Sunny Central 4000 UP-US inverters are proposed per the preliminary Project design (Appendix A-7). Phase III of the Solar Project would include approximately 81 inverters. The exact model and number of inverters will be determined at time of final engineering. The inverters are bi-directional and would be connected to the solar arrays via a common connection to the substation medium voltage bus. Each integrated inverter/transformer is expected to have a footprint that measures approximately 20 feet by 8 feet and will not exceed 10 feet in height (Appendix A-5 & A-7).

2.6.7 Battery Energy Storage System

The BESS area would occupy approximately 21 acres of the Project Area and is expected to store a net of 600 MW/2,400 MWh of electricity. The BESS would be initially comprised of 133 SunGrow SC5000UD-MV-US inverters and 1,064 BYD-MC Cube battery containers, augmented over the 25-year life up to approximately 1,330 BYD-MC Cubes located on concrete equipment pads. The exact model and number of containers will be determined at time of final engineering. The BESS will be charged from the Solar Project and the net 600 MWh output will be delivered to the Tri State Story Substation when called upon. The BESS is further addressed per the concurrent SUP applications.

2.6.8 Project Substation & Gen-tie Line Interconnection

The Project substation would occupy approximately 2-acres and is located north of the BESS Project area. The Project substation would consist of power transformers, overhead bus, feeder breakers, and miscellaneous supporting equipment.

The Project substation would include an overhead 1.25-mile, double circuit 230 kV generation-tie (gen-tie) line interconnection to the existing Tri State Story substation located west of the Project. The final engineering for the Project and the gen-tie line has not been completed yet. Nevertheless, Applicant is

considering two options for infrastructure: either H-frame or monopole designs and will be equipped with robust insulators, conductors, and grounding systems to uphold system reliability and safety standards. The anticipated transmission structure heights range from 90 to 110 feet aboveground. The span length between structures will depend on the chosen pole type and conductor. H-frames have an average span of around 750 feet, monopoles around 900 feet, and lattice towers around 1150 feet. Applicant anticipates installation of approximately 8 monopoles, 9 H-frames, or 6 lattice towers based on the final structure chosen during detailed engineering. The final design of these structures will be developed in collaboration with Tri-State and Public Service Company of Colorado to meet all relevant requirements.

The Applicant seeks administrative approval for transmission structures that may exceed the 100-foot height threshold defined for structures in Agriculture Zoning districts. Exceeding this threshold is deemed necessary to ensure adequate clearance for both existing and proposed transmission lines, as well as to comply with safety regulations. The need for structures that exceed 100 feet might be influenced by the procurement strategy that includes equipment availability and lead times. The Applicant will adhere to established utility pole standards, including those for transmission poles, as outlined by the American National Standards Institute and the National Electrical Safety Code.

2.6.9 Operations and Maintenance Building

A 60-foot by 40-foot, 2,400 square foot steel modular operations and maintenance building would be constructed east of the Project Substation, north of the BESS Project area. The O&M building would have a maximum height of fifteen feet and eight inches. Schematic elevation drawings of the O&M building are provided per Appendix A-5. Electric utilities will be extended to serve the O&M building. No water or wastewater services are anticipated for the O&M building. During construction and operation, on-site sanitary wastewater needs will be met with portable restrooms and handwashing units with routine off-site disposal and maintenance.

2.6.10 Perimeter Fencing & Site Security

The Project will be surrounded by an 8-foot-tall fence, consisting of 7-feet of chain-link and one foot of barbed wire (Appendix A-2 & A-5). The Applicant held an initial coordination call with CPW on October 13, 2023. CPW informed the Applicant that fencing recommendations may be provided by per their recommendation letter. The Applicant is awaiting receipt of CPW's letter of recommendation however anticipates receipt prior to the initial public hearing. The Applicant will send notice of the initial public hearing date to CPW when scheduled by the County. A copy of the letter will be provided to Morgan County once received. The Applicant will continue to coordinate with CPW and will consider fencing recommendations. Site entrances will be gated and locked to assure access is limited to authorized personnel.

Exterior lighting would be installed and strategically located to ensure safety and security of the facility without disturbing surrounding areas outside the Project. Lighting would be installed around the periphery of the BESS Project area, substation, and entry gates, for nighttime security. The lighting for facilities will be designed to meet the minimum number of lights and illumination required for safety and security and will not cause excessive reflected glare. The Project is also subject to lighting

requirements of the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC) and will comply with lighting regulations from these entities as well.

2.6.11 Utilities

2.6.11.1 Water System

Per Morgan County Code, Section 4-820 (H), Water System

If the proposed solar collector facility includes uses that must be served by water, the application shall describe the water source and sufficiency of the water supply for the solar collector facility, including decreed or conditional water rights. If a well is required, the applicant shall obtain the necessary permit from the State of Colorado Office of the State Engineer.

The Project will not require the use of a public water supply system. An affiliate of the Applicant is the option holder for the Project parcels, thus all real property rights, including all mineral and water rights for the Project are presently in the Applicant's control. There are several existing deep-water wells located on the subject property (Figure 4). Further studies will be performed by the Applicant to determine the feasibility of utilizing the existing deep-water wells for various Project needs. These studies will encompass a comprehensive analysis of water quality, assessing parameters such as pH, dissolved minerals, and contaminants. Additionally, an assessment of well yield will be conducted to ascertain the sustainable pumping rate and availability of water resources. By conducting rigorous studies in these areas, the Applicant aims to ensure that the Solar Project's water requirements align with the capacity and quality of the available deep-water wells, thus contributing to the overall success and sustainability of the Project.

If the event that offsite water is required, the necessary water input will be obtained from an external source and transported to the Project site via water trucks to be stored in an onsite water tank and/or cisterns. The water tank will be in strict compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency. Since this water supply would be rarely used, the Project will have minimal effects on overall water availability and will not burden local water resources. Consequently, no new water infrastructure will be necessary for the Project. Proposed estimates of anticipated water usage during construction and operations are further detailed in Section 4.7.

2.6.11.2 Sewer/Septic System

Per Morgan County Code, Section 4-820 (G), Septic System

If the proposed solar collector facility includes uses that must be served by a septic system, the applicant shall comply with applicable county requirements. The applicant shall provide a statement certifying that the septic system for the solar collector will comply with applicable County, State, and Federal requirements.

The Project will not require the use of a septic or wastewater system. During construction and operation, on-site sanitary wastewater needs will be met with portable restrooms and handwashing units with routine off-site disposal and maintenance.

2.6.11.3 Electric

The electric service provider for the proposed Project will be selected closer to commencement of construction. At this time, proof of an electric bill or a letter of commitment from the electricity provider will be made available to Morgan County.

2.6.11.4 Utility Interconnection Agreement

Per Morgan County Code, Section 4-820 (D), Utility Interconnection or Crossing

The applicant will provide certification of intent to enter into an interconnection agreement and crossing agreement(s) to/with applicable utilities.

The Project is expected to interconnect to the Tri State Story substation located approximately 1.25 miles west of the Project. The Applicant hereby certifies their intent to enter into an interconnection agreement and crossing agreement with Tri State. A copy of the Temporary Access agreement between Aypa and Tri-State is included as Appendix F.

2.7 Access, Transportation, & Traffic

2.7.1 Access Roads

Primary haul route and construction deliveries to the Solar Project will be provided via one new 20-foot-wide gravel access road constructed off County Road Q. The primary access for operations and construction commuter vehicles will be provided via a new 20-foot-wide gravel access road constructed off County Road R.5. Primary emergency access will also be provided via the access off County Road R.5. Secondary access for operations and construction commuter vehicles will be provided via a new 20-foot-wide gravel access road constructed off County Road R. The Project will be fenced, and security gates will be installed at each access point to limit access to authorized personnel. Gated entrances would be equipped with Knox boxes and keys to assure emergency personnel access. The proposed site access roads and entry points are depicted on Figure 2.

2.7.2 Morgan County Driveway Permits

The Applicant will obtain a driveway access permit from Morgan County for each of the access roads proposed to be constructed from County Roads Rand Q. As noted per Appendix G, a copy of the two driveway permit applications submitted to the Morgan County and Bridge Department are provided per Appendix G of the SUP application submitted for Phase I of the Solar Project. An affiliate of the Applicant has entered into a Temporary License Agreement with Tri State and is in coordination with Tri State regarding the proposed access road from County Road R.5. Tri State will apply for and obtain the driveway access permit on behalf of the Applicant for the access road proposed to be constructed from County Road R.5.

2.7.3 Owner & Employee Commuter Routes

The access routes to be utilized by the landowner and employees during construction and operations are as follows:

Primary Commuter Route: I-76 to County Road R.5: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately .2 mile and will then head east on County Road R.5 until reaching the site entrance. The total Commuter Route length from I-76 is approximately 2.4 miles. This access route will be used for primary emergency access to the Project site.

Secondary Commuter Route: I-76 to County Road R: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately .8 mile and will then head east on County Road R until reaching the site entrance. The total Commuter Route length from I-76 is approximately 3.1 miles.

2.7.4 Construction Haul Route

The haul route to be utilized by heavy vehicle truck traffic throughout construction will be from I-76 to the site access off County Road Q. The Applicant will install a tire washout station at the entrance to the Project site off County Road Q to reduce track out. An exhibit detailing a typical tire washout station is included as Appendix A-8. The construction haul route is depicted on Figure 3 and the site access is also detailed per Appendix A-4, labeled as “Site Access #1”.

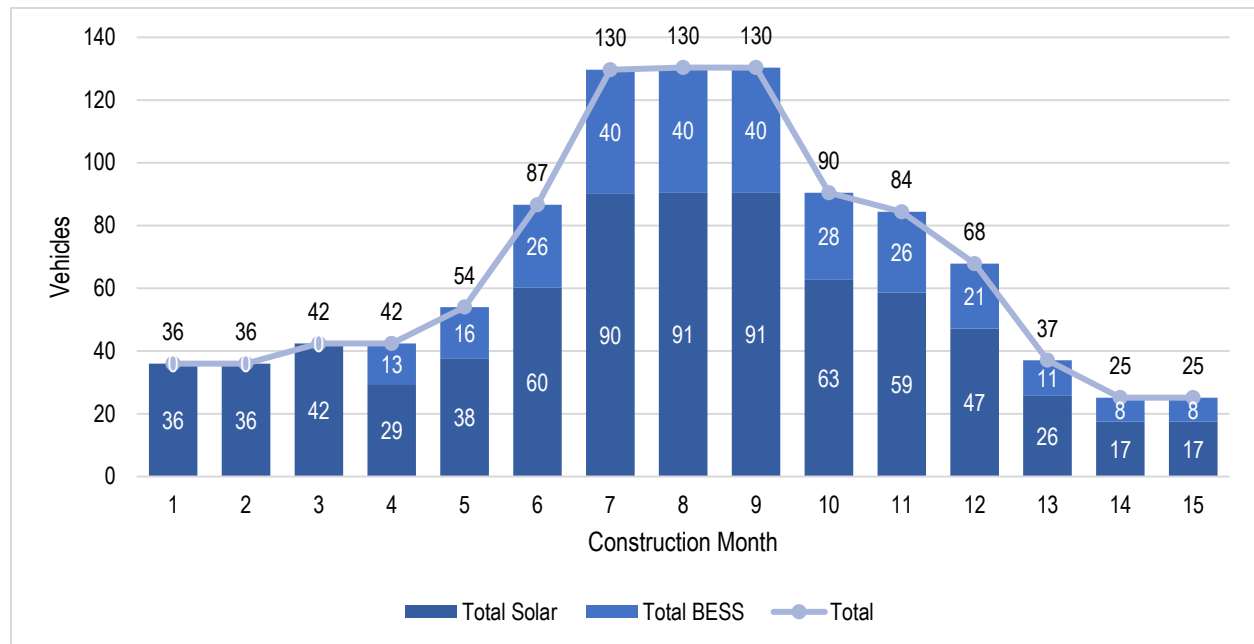
Haul Route: Interstate 76 (I-76) to County Road Q: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately 1.9 miles and will then head east on County Road Q until reaching the site entrance. The total Haul Route length from I-76 is approximately 4.5 miles.

2.7.5 Construction Transportation & Traffic

The construction process for each phase is estimated to take up to 15 months to complete, during which time there would be some variability in the number of workers each day. Project initiation and site preparation would occur over the first 5 months and will require fewer workers and fewer materials delivery truck trips. After the site is prepared for installation, the Project site would experience an increase to a higher maximum number of workers and material delivery truck trips. The peak of construction period for each phase is anticipated to occur over a 3-month period. Upon the completion of construction, testing of the installed equipment for operational reliability and safety will occur over the last 4 months of the construction period. This phase will not require the use of any heavy machinery and will involve a minimal number of workers.

The typical daily construction traffic count for each month in each phase of the Project including the concurrent proposed Fortress BESS facility is detailed per Figure 2-2 below.

Figure 2-2. Typical Daily Construction Traffic Count (Per Phase)



During the peak commuting hours each morning and evening at the peak of construction for each phase of the Solar Project construction, there would be an average of approximately 91 commuter vehicles arriving at or departing from the Project (Figure 2-2). It was estimated that 848 deliveries would be made over the course of each phase of construction. This amount includes 600 trucks delivering solar panel modules, 48 trucks delivering PV inverters, and 200 trucks delivering the panel pile/racking systems. During peak construction, there would be an average range of 7 material delivery truck trips per day. Material delivery trucks are not expected to coincide with the peak hour, rather they would arrive at the Project site throughout the day.

The Colorado Department of Transportation (CDOT) Traffic Data Explorer was accessed to obtain Annual Average Daily Traffic (AADT) counts along the Project haul routes. The AADT counts represent the average number of vehicles traveling on a road segment for a typical day of the year. The AADT data available for the count stations along the Project access routes, the anticipated number of daily trips, and maximum percentage increase in AADT per phase is detailed per Table 3 below.

Table 3. Existing and Anticipated Increase in AADT

Access Route	Existing AADT Counts ¹	Average Estimated Daily Trips	Maximum Percent Increase in AADT (%)
Primary Commuter, Secondary Commuter & Haul Route	Interstate 76, Station 103412: 12,000	196 (91 commuter & 7 delivery)	1.6
	U.S. Highway 34, Station 101481: 3,800		4.8
	State Highway 71, Station 103254: 2,700		7.3
	State Highway 71, Station 000213: 1,800		10.9

Source: CDOT 2023

2.7.6 Operations Transportation & Traffic

During operations once all three phases are complete, the Applicant anticipates 25 full-time operations and maintenance employees would commute daily to the facility. A total of up to 50 trips per day would occur along access roadways (Figure 2-3). Therefore, the transportation and traffic impacts associated with the Project operation are anticipated to be minimal. The operational phase of the Project is expected to be 30 years but may be extended if facility components are upgraded or replaced. The typical daily traffic count for each operational year of the Project including the concurrent proposed BESS Project is detailed per Figure 2-3 below.

Figure 2-3. Typical Operations Traffic Count



2.7.7 Oversized / Overweight Loads

There are expected to be up to approximately 105 oversized/overweight load deliveries per phase associated with the Project for the transport of high voltage substation equipment, solar inverters, and transformers. The remaining heavy vehicle traffic would be standard size five-axle tractor trailers—some of these would be enclosed, and some would be in the form of flatbed trucks or smaller vehicles. Smaller heavy vehicles are likely to include water trucks, concrete trucks, and aggregate trucks. The Applicant or its contractor would obtain the necessary oversize/overweight permit from CDOT prior to delivery of these oversize/overweight loads.

2.8 Required Public Improvements

2.8.1 Road Use Agreement

Per Morgan County Code, Section 4-820 (K),

If any County roads will be used during construction of a solar collector facility for the purpose of transporting parts, materials and/or equipment, the applicant shall enter into a road agreement with the County. The roads agreement shall comply with Section 4-825 and shall also include the following:

- 1) A map showing which County roads will be used during construction.*
- 2) A pre-construction baseline survey of County roads to be used during construction to document their pre-construction condition. The applicant is responsible for obtaining and paying for the costs of the baseline survey.*
- 3) A mitigation plan to address traffic congestion and potential impacts to County roads to be used during construction.*
- 4) A legally binding agreement between the applicant and the County that requires the applicant to return any County roads to their pre-construction baseline condition.*

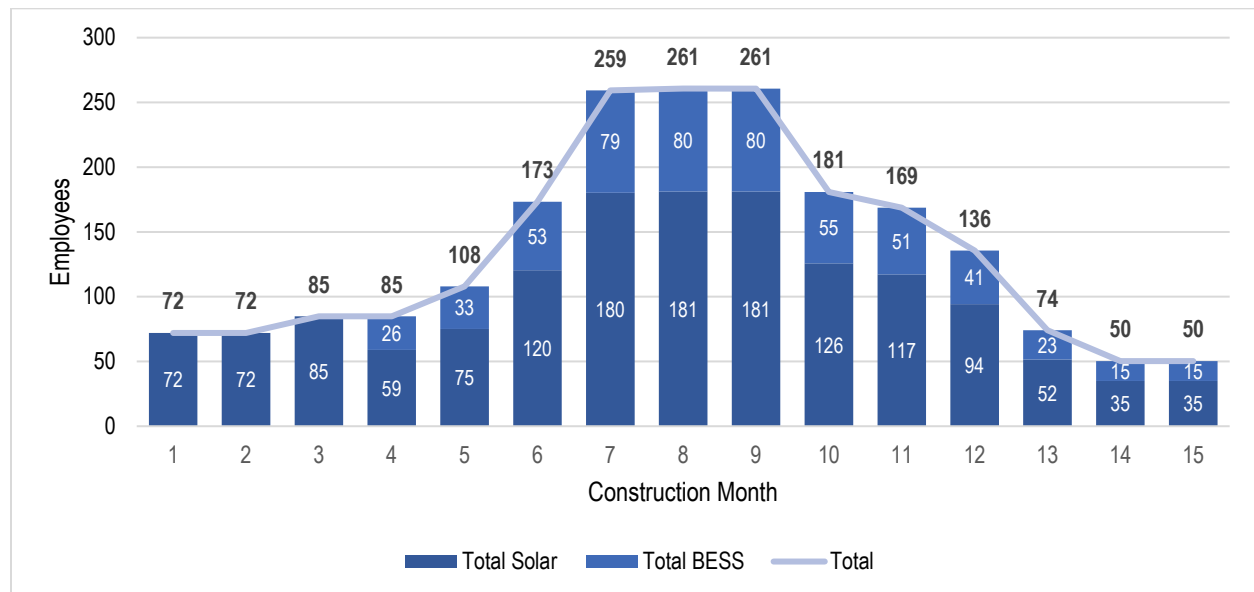
The Applicant will enter into a Road Use Agreement with Morgan County prior to the start of construction. The Applicant met with the Morgan County Road and Bridge Department on September 14th, 2023, to review the proposed haul route during construction and use of county roads. The Road Use Agreement will document the pre-construction condition of County roads to be utilized. Based on the pre-construction baseline survey of applicable County roads, the Applicant will be responsible for any road repairs and/or improvements consistent with the Road Use Agreement to be negotiated with Morgan County.

2.9 Employees, Equipment, and Facilities

2.9.1 Construction Crew, Equipment, & Facilities

The on-site construction workforce would consist of engineers, heavy equipment operators, truck drivers, laborers, craftsmen, electricians, supervisory personnel, and construction management personnel. In total, there would be an average of approximately 181 workers onsite during the 3-month peak construction period of each phase. The construction labor schedule for each phase of the Project including the concurrent proposed BESS Project is detailed per Figure 2-4 below.

Figure 2-4. Typical Construction Labor Schedule (Per Phase)



Construction would occur five days a week for an estimated 10 hours per day. Additional hours may be necessary to make up for schedule and weather delays.

Typical equipment that may be present on site as required includes, but is not limited to, graders, excavators, bulldozers, backhoes, cutting machines, end loaders, delivery trucks, trenching machines, flatbed trucks, cranes, rollers, electrical test equipment, off-road buggies, forklifts and carry decks, water supply trucks, water spray trucks, concrete mixers, compaction machines, survey equipment, and light trucks.

Vehicles will access the site through the proposed entrance gate off County Road Q for delivery of materials and crew transportation. Electrical construction will occur following the installation of equipment and be performed by NERC certified electricians.

Temporary staging areas will not extend beyond the overall boundary of the Project. Temporary staging areas would include a laydown area, parking, trash disposal facilities, construction trailers, and sufficient portable restrooms and potable water for use by construction staff. Mobile trailers, modular offices, or an equivalent would be used as construction offices for Project staff and subcontractor personnel.

2.9.2 Operations Workforce

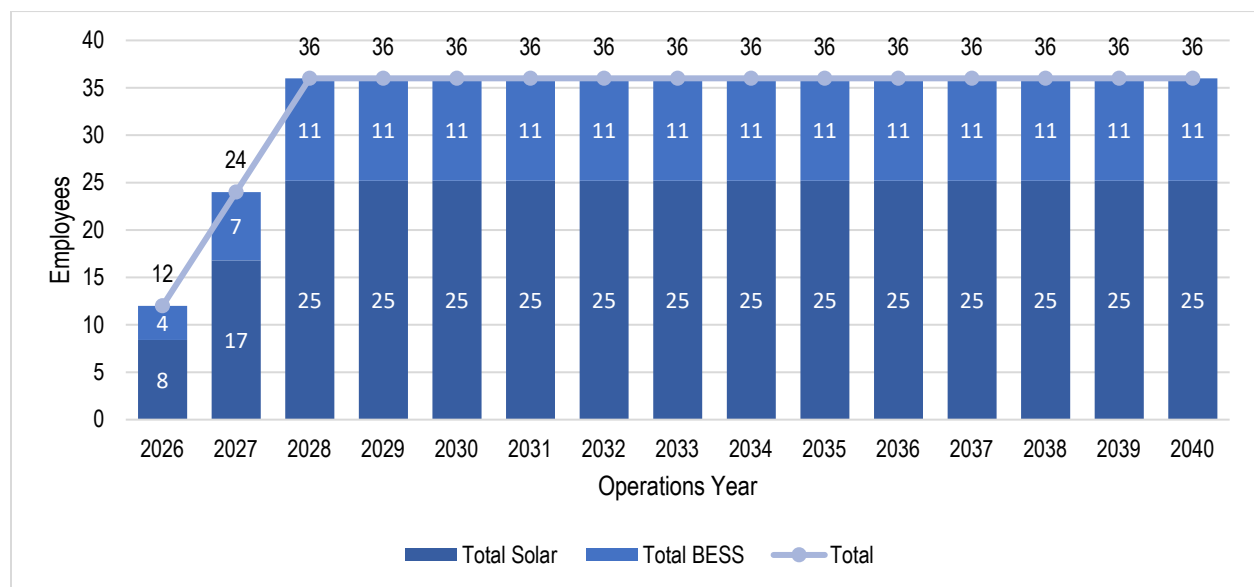
Upon completion of all three phases, operation of the Solar Project will require a minimum of 25 full-time positions including supervisory positions, miscellaneous crew members, and sitework crew members, as detailed per Table 4. Operations may also require third party contractors to perform specialized services.

Table 4. Project Operational Workforce

Worker Title	Quantity	Comments
Supervisory Crew	2	Supervision from inspection, engineering, project management, superintendent, assistant superintendent, etc.
Miscellaneous Crew	2	Miscellaneous including cleanup and materials handling
Sitework Crew	21	Sitework crew (Civil Works, then trenching etc. for elec. Installation)
TOTAL	25	

The labor schedule for each operational year of the Project including the concurrent proposed BESS Project is detailed per Figure 2-5 below.

Figure 2-5. Typical Operations Labor Schedule



2.10 Project Compliance with Morgan County Comprehensive Plan

As presented below, the Project is consistent with the following guiding principles, goals, and policies for utilities, economic development, environment, land use, and transportation as identified per the Morgan County 2008 Comprehensive Plan.

2.10.1 Utilities

GOAL: To ensure that adequate and financially secure public utilities are provided to all developments in Morgan County.

The Applicant intends to establish a power purchase agreement with multiple purchasers of power. Per the Morgan County Comprehensive Plan, “existing facilities should be expandable in addition to new facilities to allow service for any reasonable projected growth”. The Project would provide a clean renewable source of electric power to existing and future residents of Morgan County.

In addition, development of the Project will include an approximate 2,400 square foot O&M building. Electric utilities will be extended to serve the O&M building. No water or wastewater services are anticipated for the O&M building. The Project will require telecommunications services for internet which will be extended to the Project site. The Project substation will interconnect to Tri State's existing Story substation located west of the Project through a 1.25-mile gen-tie line and will not adversely affect transmission uses existing on and adjacent to the Project site.

2.10.2 Economic Development

GOAL: Diversify the economy in Morgan County to broaden business employment opportunities for residents and to further economic growth.

Goal: Encourage the location of new industry and the expansion of existing businesses that will provide employment opportunities and increase the tax base to strengthen the economy of Morgan County.

In accordance with the Morgan County Comprehensive Plan, development of the Project would contribute to the Colorado New Energy Economy. Policy number 10, identified per the Comprehensive Plan specifically notes that Morgan County should work to attract and maintain renewable energy projects to meet this goal (Morgan County 2008).

Development of the Project would provide economic benefit to Morgan County through increased revenues to county, local municipality, and school district tax bases and local employment opportunities. The Applicant will utilize local labor as much as is practicable depending on the availability, experience, and qualifications of available local firms and laborers. Throughout the construction period, construction workers will support local businesses including hardware supply stores, restaurants, hotels, gas stations and hotels. Workers originating outside Morgan County will be expected to remain in the region only throughout the duration of construction.

2.10.3 Environment

Goal: Preserve the manmade and natural environment in order to enhance the quality of life in Morgan County and to make environment considerations part of the land use decision-making process.

Per the Morgan County Comprehensive Plan, new developments are to be reviewed and judged based on the identification of sensitive lands and the mitigation techniques used to minimize the impacts of physical development on the land (Morgan County 2008). Siting analysis confirms the proposed site location avoids areas or locations with a high potential for biological conflict, such as wilderness study areas, areas of environmental concern, historic trails, special management areas, or important wildlife habitat or corridors. The Project is sited outside of identified wetlands and floodplains and will avoid adverse impacts on plant and wildlife species. Tetra Tech has prepared a drainage study and wind and water erosion control plan to identify site drainage patterns, required improvements and appropriate best management practices to mitigate erosion and storm runoff potential. As further discussed in Section 4.0, there are no known sensitive biological, hydrological, historical, cultural, or archeological resources within or near the proposed Project site.

Furthermore, development of the Project would provide 600 MW of electricity produced by renewable energy and 600 MW of BESS, respectively. Development of the Project is in accordance with policy

number 14 identified per the Morgan County Comprehensive Plan which notes that Morgan County shall encourage use of renewable resources and production of biofuels and electric power from such resources (Morgan County 2008).

2.10.4 Land Use

Goal: To encourage development where: 1) it is in proximity to the activity centers; 2) the proposed development is compatible with existing land uses; 3) there is access to established public infrastructure (primarily roads and utilities); and 4) where, in outlying areas of the county, there is access to utilities and there is little additional burden on rural services.

The Project site is located 1.6 miles southeast of the city limits of Brush, Colorado. Existing land uses in the Project Area include rangeland and overhead electric transmission lines. Existing adjacent land uses include rangeland, an electric substation, rural residences, a cattle feed lot, and the Brush Municipal Airport. The Project is compatible with these existing uses. The Project site is in the Agricultural Production zoning district which allows for permitting of large-scale solar facilities including BESS as an accessory use through issuance of an SUP. The Project site has access to established utilities and County Roads.

Goal: The county will encourage the preservation of agriculture production lands in balance with pressures for land use changes to higher intensity development.

Per the U.S. Department of Agriculture, Natural Resources Conservation Science, Web Soil Survey data, the Project Area does not include any soil types designated as prime, unique, or farmland of statewide importance. Therefore, development of the Project is not anticipated to result in impacts to or loss of prime, unique, or farmland of statewide importance.

2.10.5 Circulation and Transportation

Goal: To provide residents and businesses in Morgan County with a circulation system that connects the major county activity centers with the outlying communities of the county, regional employment generators and the rest of the state in the interests of providing economic opportunity, access efficiency and safety and improving the quality of life.

Policy 1: Traffic and Roads

- Require new developments to mitigate impacts to adjacent county roads.
- Require traffic generation studies for large developments.

As detailed per Section 2.7 traffic on county roads is anticipated to increase during construction of the Project and the Applicant will enter into a Road Use Agreement with Morgan County to address impacts on County Roadways resulting from construction.

2.11 Project Compliance with Special Use Permit Review Criteria

Per Morgan County Code Section 3-180, Solar Collector facilities may be permitted in the Agriculture Production zone through issuance of an SUP. The Applicant has reviewed Morgan County's Zoning Regulations for compliance under an SUP for a large-scale solar development including a BESS. The

Project meets the following criteria required to approve a special use permit as outlined per the Morgan County Code, Section 2-395- Review Criteria.

(A) The use and its location as proposed are in conformance with the Morgan County Comprehensive Plan;

The Project aligns with the goals and policies identified per the Morgan County's Comprehensive Plan, adopted in 2008 as indicated per Section 2.10. Project development, proposed mitigation measures, and forecasted benefits are consistent with the County's goals and policies related to utilities, economic development, land use, environment, and transportation. The Project would provide a long-term renewable energy source to the County with economic, environmental, and social benefits to current and future residents.

(B) All the application documents are complete and present a clear picture of how uses are to be arranged on the site or within Morgan County;

The Applicant has submitted a complete SUP application package for Phase III of the Solar Project. The Applicant will submit additional documents and/or revisions as requested by the Morgan County Planning Services Department upon their review of the application. The table at the beginning of this report details the SUP submittal requirements with the application report section addressing each checklist item. The submittal has been provided as a hard copy and electronically, fulfilling submittal requirements in Section 2-380 of the Morgan County Zoning Regulations.

(C) The site plan conforms to the district design standards of these regulations;

The Project site plan and special use map have been developed in accordance with Sections 2-410 and 2-420 of the Morgan County Zoning Regulations.

(D) All on and off-site impacts have been satisfactorily mitigated either through agreement, public improvements, site plan requirements or other mitigation measures;

Potential adverse environmental impacts and the correlating sufficient mitigation measures are detailed in Section 4.0, Environmental Impact Analysis.

(E) The special use proposed has been made compatible with the surrounding uses and adequately buffered as determined by the County;

Existing surrounding adjacent uses include the Tri State-owned Story substation to the west, low-density rural agricultural residences to the northwest, west, and southwest, open rangeland to the north, east, and south, the Brush Municipal Airport northeast, across Highway 34, and the existing Pinneo cattle feedlot north of Highway 34.

The Solar Project would be compatible with existing surrounding adjacent land uses. The Solar Project would not result in significant adverse impacts to surrounding properties. Potential impacts are limited to fugitive dust, traffic, and noise during the construction phase. During operations, the Solar Project would be operated remotely and onsite operational and maintenance activities are anticipated to generate minor daily traffic, generate no air emissions, emit no glare, and is sited and designed to minimize noise impacts. A discussion of potential impacts and proposed mitigation measures are detailed per Section 4.0.

The Project site layout has been designed in accordance with the minimum 70-foot setback required from exterior parcel lines and the 500' buffer required from adjacent buildings (Appendix A-2). The Applicant is requesting a waiver to the 30' setback required from internal sections lines and internal property lines (Figures 5 & 6).

(F) The special use poses only the minimum amount of risk to the public health, safety and welfare as set by either federal, state or county regulation, whichever is the strictest;

The Solar Project is not anticipated to be unduly detrimental or injurious to property or improvements in the vicinity and will not be detrimental to public health, safety, or general welfare.

Emergency access to the site will be provided via 20' wide access roads and gated entrances will be equipped with Knox boxes and keys. The Applicant will maintain sufficient water sources and portable fire extinguishers on site for emergency use. Water would be stored on site in above ground tanks and/or cisterns. The water tanks and/or cisterns will be located and installed per compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency.

The Applicant has developed an Emergency Operations and Fire Mitigation Plan for the Project detailing proper responses to emergency events, fire mitigation measures, and firefighting considerations. The Emergency Operations and Fire Mitigation Plan was provided to local officials of the Brush Volunteer Fire Department, the Brush Rural Fire Protection District, and the Hillrose-Snyder Volunteer Fire Department for review and comment and is included as Appendix H.

The presence of energized equipment within the facility could result in public health or safety concerns, however site access will be limited to authorized personnel and the Project will be developed in accordance with the physical security standards defined per the NERC Code Section, CIP-014-2 (NERC 2023). Proposed security measures include placement of warning signage along the perimeter and entrance points to the facility, installation of a site perimeter fencing with locked, gated entrances, installation of security lighting, and 24/7 remote site monitoring.

The Applicant is committed to developing and operating the facility in a safe and environmentally friendly manner. The Project will adhere to all applicable health and safety standards and regulations.

(G) The special use proposed is not planned to be developed on a non-conforming parcel;

The Solar Project is not proposed to be developed on non-conforming parcels. All parcels located within the Solar Project site are conforming parcels and meet the minimum 35-acre lot size required in the Agriculture Production zoning district.

(H) The applicant has adequately documented a public need for the project, all pertinent technical information, adequate financial resources to implement it, and has paid all fees and review costs levied by the County for application processing and review; and

The Project would advance Colorado's renewable energy portfolio standard, provide a local source of clean energy, and would provide an economic benefit to Morgan County through tax revenue generation and local job opportunities.

The Applicant will pay all fees and review costs required by Morgan County for application processing and review. The Applicant is an indirect subsidiary of Aypa. Aypa is a Blackstone portfolio company. Aypa has a proven track record of developing, financing, constructing, owning, and operating utility-scale renewable energy projects. Aypa currently has an operating fleet of 30 projects, two projects currently under construction, and over 70 projects in the development pipeline.

(I) For any special use requiring a supply of water that the applicant has demonstrated a source of water which is adequate for the proposed use in terms of quantity and reliability and in the case of human consumption, quantity, quality, and reliability.

The Applicant will source water needed during the construction and operations phases from the existing groundwater wells available on the Project site. In the event offsite water is required, water will be sourced from an off-site location, transported to the Project site via water trucks, and stored on site in above ground tanks and/or cisterns. The water tank will be in strict compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency. As this water supply would rarely be used, the Project will have minimal effects on overall water availability and will not burden local water resources. No new water infrastructure will be necessary for the Project.

2.12 Project Compliance with regulations for Solar Collector facilities

The Project meets the following standards defined per Morgan County Code Section 4-825 for the regulation of Solar Collector facilities.

2.12.1 General Standards for all Solar Collectors

All electrical interconnection and distribution lines within the Solar Project boundary will be underground, as required by Morgan County, except for power lines that leave the Project or are within the substation.

All electrical interconnections and distribution components will comply with the applicable County adopted building and electrical codes, requirements of the electric utility company, and applicable state and federal regulatory codes.

The Applicant intends to enter into an interconnection agreement with Tri State to connect the Project to the grid at the Tri State Story substation located 1.25 miles west of the Project. A letter from Tri-State is included as Appendix F. The Applicant will provide a copy of the interconnection agreement to Morgan County once finalized.

2.12.2 Principal Ground Mounted Solar Collectors

The Project has been designed in accordance with the 70-foot setback required from above ground public utility powerlines or communications lines, existing public roads, highways, or railroads, and exterior property lines. In addition, the Project meets the 500-foot setback required from inhabited buildings. The Solar Project also complies with the scenic resources setback as it is not within one-quarter (1/4) mile from any highway designated to be a scenic highway or roadway by the Morgan County Comprehensive Plan or the state.

Per Morgan County Code, Section 4-820 (N). Additional Information and Waivers,

The County may request additional information that may be required to evaluate the proposed solar collector facility. The County may waive or alter any of these minimum requirements if they are determined to be inappropriate or unnecessary to determining if the application satisfied applicable standards.

The two following waivers are being requested related to the setbacks required for Principal Ground Mounted Solar Collector Facilities (4-825 [D])

- 1) The Applicant respectfully requests a waiver from the minimum 30' setback required along section lines within the Project boundary. The setback is reserved for the future ROW of County roads not yet in existence. Please see Figure 5 detailing the sections lines from which the waiver is requested.
- 2) The Applicant respectfully requests a waiver from the minimum 70' setback required from all interior property lines within the Project boundary. The Applicant has coordinated with affected property owners throughout the site planning process and is under purchase options for the Project Area parcels. Please see Figure 6 detailing the internal parcel lines from which the waiver is requested.

The tallest Project component is the proposed overhead 230 kV gen-tie line connecting the Project substation to the Tri State Story substation. The gen-tie line is pending final design and engineering but is anticipated to reach up to 110' feet in height.

Pursuant to Appendix B of the Morgan County Zoning Regulations, the Agricultural Production zoning district does not have a maximum lot coverage limitation.

Development and operation of the Project would not result in significant drainage issues, stormwater runoff, glare, dust, noise, or adverse impacts to agricultural lands as further discussed in Section 4.0.

In accordance with Section 4-825(D)(19) of the Morgan County Zoning Regulations, upon completion of construction, (a) Solar Collector facilities shall be reviewed by a registered structural engineer, licensed in Colorado, to confirm their compliance with the applicable State, Federal and local regulations and to conform with good engineering practices, and (b) the electrical system shall be certified by a registered electrical engineer, licensed in Colorado, to be compliant with the applicable State, Federal and local regulations, and to conform with good engineering practices.

3.0 IMPACT ON ADJACENT USES AND OFF-SITE IMPACTS

Existing surrounding adjacent uses include the Tri State Story substation to the west, low-density rural agricultural residences to the northwest, west, and southwest, open rangeland to the north, east, and south, the Brush Municipal Airport northeast, across Highway 34, and an existing Pinneo cattle feedlot north of Highway 34.

The Solar Project would be compatible with existing surrounding adjacent land uses. The Solar Project would not result in significant adverse impacts to surrounding properties. Potential impacts are limited to fugitive dust, traffic, and noise during the construction phase. During operations, the solar facility would be operated remotely and generate little to no daily traffic, generate no air emissions, emit no

glare, and is sited and designed to minimize noise impacts. A discussion of potential impacts and proposed mitigation measures are detailed per Section 4.0.

Offsite impacts are limited to increased traffic and potential noise and fugitive dust resulting from vehicle traffic during construction along the Project Haul Route detailed per Figure 3. Proposed mitigation measures to minimize fugitive dust and noise impacts are detailed in Section 4.0.

3.1 Impacts on County Services & Capital Facilities

3.1.1 Capital Facilities, Social Services, & Infrastructure

The Project is not expected to require additional community or local government services beyond those currently provided in the area. Project development is not expected to result in additional significant demand for transportation infrastructure, educational facilities, social services, housing, or public transportation.

The Applicant will enter into a Road Use Agreement with Morgan County to address impacts on County Roadways from transportation of heavy equipment resulting from construction as further discussed in Section 2.8.1. Oversized vehicles delivering Project components may result in temporary traffic delays. The Applicant or their contractors will hire flaggers to maintain adequate levels of traffic flow as needed and the Applicant's contractors will obtain necessary oversized and overweight vehicle permits to authorize transportation and delivery of these loads.

No new water or wastewater infrastructure will be necessary for the Project.

3.1.2 Waste Management

Solid waste generated by the Project during construction and operations will be handled by a solid waste hauling and management firm contracted by the Applicant or its designated contractor(s). Waste will be separated by type, collected, and transported to the appropriate facility in a manner that complies with applicable federal, state, and local regulations, and minimizes potential impacts to the surrounding community. Waste materials will be handled, stored, and disposed of in a manner that controls fugitive dust, fugitive particulate conditions, blowing debris, leakage into the soil or surface water or groundwater, and other potential nuisance conditions. Project construction is not expected to require onsite treatment, storage, or disposal of hazardous wastes that will require hazardous waste permits. No extremely hazardous materials, as defined by 40 Code of Federal Regulations part 355, are anticipated to be produced, used, transported, or disposed of during Project construction. Any hazardous wastes generated during construction will be properly characterized and managed by the Applicant and its contractor(s). The handling of hazardous materials and waste will be done in accordance with all federal, state, and local laws and regulations.

3.1.3 Public Safety Services

The Project is not anticipated to result in a significant increase in demand for public safety services.

The Project is located within the boundaries of the Brush Fire Protection District. Brush Fire Station 1 is located approximately 2.15 miles west of the Project site. The Hillrose-Snyder Fire Protection District boundary is approximately one mile north of the Project site. Prior to construction, the Applicant will

work with Morgan County, The Brush Rural Fire Protection District, Brush Volunteer Fire Department, and the Hillrose-Snyder Fire Protection District.

During construction and operations, the Applicant will ensure local Fire Departments have 24/7 access to the Project site to respond to emergency incidents. Knox boxes and keys will be installed at locked entrance gates for emergency personnel access. Site access roads will be constructed up to 20 feet in width with compacted all weather gravel. During site construction and operations, the Applicant will maintain sufficient water sources and portable fire extinguishers on site for emergency use. Water would be stored on site in above ground tanks and/or cisterns. The water tanks and/or cisterns will be located and installed per compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency.

The facility layout is designed to provide defensible space for fire protection throughout construction and operation of the facility. Ongoing maintenance would be provided to ensure removal of vegetation and other flammable materials from the defensible space areas. Vegetation control at the site will use materials and methods that ensure groundwater protection.

The Project solar arrays will consist of non-combustible materials (aluminum, steel, or glass). The Project solar modules are designed to be resistant to fire, and the racks are constructed of non-combustible steel and aluminum. The solar panels and other electrical equipment will meet applicable Underwriters Laboratories and International Electrotechnical Commission ratings for their resistance to fire.

An Emergency Operation Fire Mitigation Plan has been prepared for the Project and is included as Appendix H. The plan addresses proper response plans for potential emergency events, facility evacuation details, emergency contacts, system safety considerations, battery fire protection system information, and firefighting considerations. Prior to construction, the Applicant will work with local fire personnel to ensure the Project's compliance with applicable fire safety regulations. The Applicant will also provide on-site training for surrounding departments to reduce fire risk at the Project.

3.1.1 Benefits

The Project is anticipated to result in economic benefits for the following taxing jurisdictions: Morgan County and Morgan County School District RE-2 (Morgan County 2023c).

Local, regional, and state employment will benefit those in the construction trades including heavy equipment operators, truck drivers, engineers, laborers, craftsmen, electricians, supervisory personnel, and construction management personnel. Prior to and during construction, the Project will utilize both local and non-local consultants and contractors for the design and construction. The design and construction scopes of work are typically bid out to a range of consultants and contractors. It is the Applicant's preference to utilize local labor as much as is practicable and will direct those acting on their behalf to carry the same preference depending on the availability, experience, and qualifications of available local firms and laborers. Workers originating outside the labor market area will be expected to remain in the region only throughout the duration of construction.

4.0 ENVIRONMENTAL IMPACT ANALYSIS

4.1 Air Quality

The 1963 Clean Air Act (as amended; 42 U.S.C. 7401) requires government agencies to monitor air pollution and promote air pollution prevention and control programs. The Project Area is within the Eastern High Plains monitoring region of Colorado (CAPCD 2023). As of August 30, 2023, Morgan County, Colorado is in attainment for all U.S. Environmental Protection Agency (EPA) criteria pollutants (EPA 2023). Currently, local emission sources in the Project vicinity include personal and commercial vehicle emissions, aircraft emissions at the nearby Brush Municipal Airport, and agricultural operations.

It is anticipated that the Project construction and operations will result in additional, negligible amounts of pollutants including particulate matter, diesel particulates, and carbon monoxide. The construction phase of the Project will temporarily cause fugitive dust related to the following activities: grading activities, preparation of the staging and equipment laydown area, excavation and construction of equipment pads, the mixing and preparation of concrete, and construction of access roads. Fugitive dust may also be generated by vehicular traffic associated with construction and operation of the Project, and by the delivery of materials to and within the Project Area. The emissions from the Project construction would be limited in duration to 15 months per phase, and emissions from the Project operation would be zero or near zero. Therefore, Project emissions are not anticipated to significantly contribute to ozone, particulate matter, or other air pollutants within the Eastern High Plains monitoring region.

The Colorado Air Quality Control Commission requires an Air Pollutant Emissions Notice (APEN) and associated fees to be submitted to the Colorado Department of Public Health & Environment (CDPHE), Air Pollution Control Division when a Project proposes to disturb more than 25 acres or construction will last greater than 6 Months. The Applicant or its contractor will submit the Land Development APEN: Form APCD-223 prior to the start of construction. To comply with county and state air quality regulations, methods for limiting dust and maintaining air quality during construction would be implemented. Vehicles and equipment will comply with applicable state and federal emission standards and will be properly maintained to minimize exhaust emissions.

A Wind and Water Erosion Control Plan is included as Appendix I which details best management practices (BMPs) that will be utilized to prevent wind and water erosion and run-off during construction.

The Project will prepare a Fugitive Dust Control Plan in accordance with CDPHE requirements for the Land Development APEN prior to construction. Dust control measures include watering unpaved roads and earthen areas with limited vegetation, covering exposed piles of dirt, maintaining low vehicle speeds within the Project Area, covering stockpiles during sustained wind events, installing tire wash out stations at site entrances to minimize track out, and covering truck loads. Water would be applied regularly to disturbed areas and stockpiles during construction to prevent the addition of particulate matter/fugitive dust into the local airshed. Additional BMPs would be implemented as needed from the EPA national menu of BMPs and may be used as necessary during construction to help limit dust.

4.2 Dust and Odor

See Section 4.1 above for details on the potential fugitive dust impacts resulting from the Project and proposed mitigation measures.

Given the surrounding land use, current odors present at the Project Area likely include fugitive odors from the operation of the Brush Municipal Airport, Pinneo cattle feedlot, and vehicle emissions along nearby roads. Local traffic volume would increase in and around the Project Area during construction. The increased traffic would temporarily increase odors from vehicle emissions. Odors are also anticipated from the operation of heavy machinery during construction. Impacts from odors during Project operation would be minimal and are likely limited to emissions from the vehicles of maintenance personnel. Overall, the impacts of odors from Project construction and operation are anticipated to be minimal and insignificant. As a result, no specific mitigation has been identified for odor impacts and no management of odors would be performed during construction or operation.

4.3 Noise Receptors, Ordinances, and Conformance

Current sources of noise in the Project Area include wind, distant road, and highway vehicles, and surrounding cattle feed lot and airport operations.

Temporary noise impacts during construction would occur during daylight hours from the operation of construction equipment, including, but not limited to, passenger vehicles, graders, loaders, water trucks, semi-tractor/trailer trucks, and hydraulic hammers. The spatial distribution of construction noise emissions would vary during the day and depend on the type of activity. Construction traffic would generate noise along the Project access routes (Figure 3). This noise would be temporary during commuting hours and when supplies are delivered over the course of construction.

Solar generation facilities emit lower sound levels in comparison to other power facilities and noise emissions are limited during daylight hours. Sources of noise during operation would include temporary vehicle noise from maintenance personnel access and typical noise emissions from the Project substation transformers, inverters, and rotation of the solar panel tracking system.

In accordance with Morgan County Code, Section 4-825.D.16, construction and operation of the Project will not significantly increase noise at surrounding properties and will comply with the statutory provisions for maximum permissible noise levels for industrial zoning as defined per C.R.S. § 25-12-103. Construction projects are subject to the noise standards specified for industrial zones. Table 5 details the noise standards defined by the state, as referenced per the Morgan County zoning regulations.

Table 5. Colorado Noise Standards

Zone	7:00 a.m. to 7:00 p.m.	7:00 p.m. to 7:00 a.m.
Residential	55 dBA	50 dBA
Commercial	60 dBA	55 dBA
Light Industrial	70 dBA	65 dBA
Industrial	80 dBA	75 dBA

The construction and operation of the Project will adhere to the decibel limits established for industrial zones. Construction activities will take place between the hours of 7:00 a.m. and 7:00 p.m., and noise levels will be kept to a minimum to the practical extent possible to maintain compliance with C.R.S. § 25-12-103. Noise generated from the solar panel tracking system, BESS and Project substation will be mitigated by the spatial layout of the Project. The Project layout is designed in accordance with the minimum setbacks required for solar collector facilities per the Morgan County Zoning regulations. Based on typical sound levels anticipated from Project operation, the distance from the equipment to the Project boundary will mitigate the effect of noise generated by the Project.

4.4 Existing Vegetation

According to the National Land Cover Database (USGS 2019), the dominant land cover in the Project Area is grassland/herbaceous covering 4,161.6 acres or 93.62 percent (Table 6). A Tetra Tech biologist visited the Project site April 25-26, 2023. The Project Area was dominated by needle and thread grass (*Hesperostipa comata*), blue gramma (*Bouteloua gracilis*), and smooth brome (*Bromus inermis*). The Project Area is located in a predominately arid rangeland comprised of shrubland and grassland. No irrigated activities were observed within the Project Area (Appendix J).

Table 6. Land Use and Land Cover in the Project Area

Land Use/Land Cover ¹	Acres	Percent of Project Area
Grassland/Herbaceous	4,161.6	93.62
Scrub/Shrub	271.8	6.11
Developed Open Space	8.7	0.20
Developed, Low Intensity	3.1	0.07
Cultivated Crops	0.01	0.00
Total	4,445.2	100%

Source: 2019 National Land Cover Database (USGS 2019)

Existing rangeland will be converted to power generation use for the lifetime of the Project. Construction will have long term impacts on existing vegetation as result of removal of vegetation within the Project Area for the installation of Project facilities and access roads.

Construction activities will also result in temporary impacts to existing vegetation, including soil disturbance and compaction. Disturbed areas outside of the proposed access roads, Project substation, and BESS Project area will be revegetated with a native seed mix. The Project proposes to use bifacial panels which track the sun throughout the day. Ground surface vegetation beneath the solar panels will receive rainfall and or runoff from the panels and will continue to grow. Site vegetation will be maintained throughout the Project life by the Applicant.

As required by the Colorado Noxious Weed Act (C.R.S. 35-5.5-103), Morgan County has defined specific management for each List B noxious weed species (CDA 2023). Per Morgan County Code Section 3-700, the Applicant will plan to employ a program to control the growth of noxious and other weeds as part of the general property maintenance.

4.5 Special-Status Wildlife and Other Species of Concern

The Applicant contracted Tetra Tech to prepare a Wildlife Habitat Assessment for the Project consisting of a desktop review and field survey to document existing habitat and biological resources, including special status species and raptor nests that may be impacted by Project development (Appendix J).

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) online tool and Colorado Parks and Wildlife (CPW) online databases were used to identify federally and state-listed species and other special status species (e.g., species protected by Bald and Golden Eagle Protection Act) that may occur within or near the vicinity of the Project Area.

Tetra Tech conducted a field survey on April 25th and 26th, 2023 to verify and characterize current land cover types in the Project Area that may provide suitable habitat for protected species. General landcover and wildlife observations within the Project Area were typical for the ecoregion. The following species were identified during the field visit: mourning dove (*Zenaida macroura*), coyote (*Canis latrans*), black-tailed prairie dog (*Cynomys ludovicianus*), European starling (*Sturnus vulgaris*), rock dove (*Columba livia*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), horned lark (*Eremophila alpestris*), and the western meadowlark (*Sturnella neglecta*). Unidentified small mammal burrows were also observed. Additionally, suitable nesting substrate within the Project Area was observed, however, no raptor nests were observed within a half-mile of the Project Area (Appendix J).

The USFWS and CPW sources reviewed for the assessment identified 10 protected species that have the potential to occur within the Project Area. However, no USFWS-designated critical habitat is present within the Project Area. A summary of the sensitive species' preferred habitat and potential for occurrence in the Project Area are detailed per Table 7 and further discussed in the Wildlife Habitat Assessment Report (Appendix J).

Based on the desktop analysis of land cover data, aerial imagery, range maps, and observations during the field survey, the following special status species may occur within the Project Area: bald eagle (foraging), burrowing owl (breeding) and golden eagle (foraging). All other special status species listed in Table 7 are unlikely to occur in the Project Area due to the absence of suitable habitat.

Table 7. Federally and State Listed Species Potentially Occurring within the Project

Common Name	Scientific Name	Status	Habitat Associations	Likelihood of Occurrence
Mammals				
Gray wolf	<i>Canis lupus</i>	FE; SE	Found in temperate forests, mountains, tundra, taiga, grasslands, and deserts. Morgan County is outside the current range of this species.	Unlikely—N/A. This species only needs to be considered for projects that include predatory management.
Bird				
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA	Typically found near large bodies of water that support fish populations and waterfowl. Will perch and nest in tall deciduous or coniferous trees near water.	Unlikely—Breeding Unlikely—Wintering Low—Foraging

Common Name	Scientific Name	Status	Habitat Associations	Likelihood of Occurrence
Golden eagle	<i>Aquila chrysaetos</i>	BGEPA	Partly open country with native grassland vegetation. Nests on cliffs and in trees.	Unlikely—Breeding Unlikely—Wintering Low—Foraging
Burrowing owl	<i>Athene cunicularia</i>	ST	Typically found in prairie dog colonies in open areas with short grass and where suitable ground squirrel and badger burrows can be found, such as golf courses, cemeteries, airports, vacant lots, and pastures.	High to Moderate—Breeding Unlikely—Wintering
Piping Plover	<i>Charadrius melodus</i>	FT; ST	Occurs in reservoirs, lakes, and rivers with sand and gravel areas and sparse vegetation.	Unlikely
Whooping crane	<i>Grus americana</i>	FE; SE	Occurs in freshwater marshes, wet prairies, shallow lakes, and lagoons.	Unlikely
Fish				
Pallid sturgeon	<i>Scaphirhynchus albus</i>	FE	Found in large river systems with firm sandy bottoms (e.g., the Missouri River). No streams are within the Project Area.	Unlikely
Flowering Plants				
Ute ladies'-tresses orchid	<i>Spiranthes diluvialis</i>	FT	Found in moist meadows associated with perennial stream terraces, floodplains, and oxbows at elevations below 6,500 feet.	Unlikely
Western prairie fringed orchid	<i>Platanthera praecleara</i>	FT	Found in unplowed, calcareous prairies and sedge meadows.	Unlikely
Insect				
Monarch butterfly	<i>Danaus plexippus</i>	FC	Found throughout the United States in open fields and meadows with milkweed (primarily <i>Asclepias</i> spp.). Milkweed is an obligate host plant for monarch larvae. Several milkweed species occur in Colorado in a variety of habitats such as grasslands, disturbed areas, wetlands, and irrigation ditches. Adults feed on milkweed and other flowering plants.	Unlikely

BGEPA = Bald and Golden Eagle Protection Act; FT = Federally Listed Threatened; FC = Candidate for Federal Listing (not a statutory category); ST = State Threatened; SE = State Endangered

The Applicant plans to implement the following measures to avoid, minimize, or mitigate potential impacts to protected species that could occur in the Project Area.

- If construction is to occur during the bird breeding season (generally from February 15 to July 31 for most species), a follow up raptor survey will be conducted prior to the start of construction to determine species and nest status prior to construction activities so that all raptor nests within 0.5 mile of the Project Area can be mapped and avoided. If raptor nests are active, species-specific nest avoidance buffers will be implemented per CPW's Recommended Buffer Zones and Seasonal Restriction for Colorado Raptors, of which the largest buffer is 0.5 mile for bald and golden eagles (Appendix J).

- A CPW-protocol burrowing owl survey will be conducted prior to construction activities to determine whether burrowing owls are present within 0.25 mile of the Project. CPW recommends no permitted, authorized, or human encroachment activities within 0.25 mile (1,320 feet, 400 meters) of the nest site for large industrial disturbances during the nesting season, March 15 through August 31.
- Project infrastructure, including facilities and access roads will be consolidated to the extent possible to minimize the amount of land that is disturbed and fragmented.
- Prior to installation of fencing, the interior of the fenced area would be searched to avoid entrapping wildlife. The enclosed facility would be checked regularly during operations to prevent accidental trapping of wildlife to the extent possible.
- The Project Area will not be lit at night to minimize wildlife attraction to Project infrastructure and limit impacts to hunting, migration, or other nocturnal activities of wildlife.

The Applicant has shared the results of the Wildlife Habitat Assessment with CPW and conducted an initial coordination call on October 13, 2023. The Applicant is awaiting receipt of CPW's letter of recommendation however anticipates receipt prior to the initial public hearing. The Applicant will send notice of the initial public hearing date to CPW when scheduled by the County. A copy of CPW's letter of recommendation will be provided to Morgan County once received. The Applicant will continue to coordinate with CPW to determine possible recommended BMPs and/or avoidance measures for construction activities.

4.6 Wetlands and Other Waters of the United States

The Applicant contracted Tetra Tech to prepare a wetland and other waters of the U.S. (WOTUS) assessment to identify potentially jurisdictional wetlands and/or other WOTUS within the Project Area. A Wetland Delineation Report was prepared for the Project in May 2023 and is included as Appendix K.

A desktop survey of surface waters was conducted using the National Wetlands Inventory (NWI) dataset (USFWS 2023), USGS National Hydrography Dataset (NHD) viewer (USGS 2023a), and Colorado Wetland Inventory database (CWI 2023). The results of the desktop analysis indicated no potential wetlands or waterways exist within the Project Area.

A Tetra Tech wetland scientist conducted a site visit on April 25th & 26th 2023, to perform a wetland and other WOTUS delineation within the Project Area. No wetlands or waterbodies were identified within the Project Area.

4.7 Water Use & Resources

The Applicant will implement strategies and practices that ensure responsible and efficient water consumption throughout the Project's construction and lifespan operations. The Project will prioritize the use of non-potable water sources for site maintenance and dust control. By minimizing water usage and maximizing conservation, the Project will contribute to sustainable development and reduced environmental impact.

The Project will not require the use of a public water supply system. An affiliate of the Applicant is the option holder for the Project parcels, thus all water rights for the Project would be obtained upon closing. There are several existing deep-water wells located on the subject property (Figure 4). The Applicant will perform further studies to determine the feasibility of utilizing the existing deep-water wells for various Project needs. These studies will encompass a comprehensive analysis of water quality, assessing parameters such as pH, dissolved minerals, and contaminants. Additionally, an assessment of well yield will be conducted to ascertain the sustainable pumping rate and availability of water resources. By conducting these studies, the Applicant aims to ensure that the solar project's water requirements align with the capacity and quality of the available deep-water wells, thus contributing to the overall success and sustainability of the Project.

In the event offsite water is required, water will be sourced off site and transported to the Project site via water trucks to be stored onsite in above ground tanks and/or cisterns. The Project will have minimal effects on overall water availability and will not burden local water resources.

Water use during construction would occur over the 15 months needed to construct each phase of the Project. Much of this water would be used for dust control but would also be used for hydration and compaction, backfill, cement stabilization and equipment cooling. The estimated water use during construction is approximately 470-acre feet per phase of construction.

During operations, water would be used for periodic washing of the solar panels, cooling equipment, and supporting establishment of vegetation around the site. Approximately 30.6 acre-feet of water is estimated to be used per year during operations. The total estimated water usage during each phase of construction and during operations is detailed per Table 8 below.

Table 8. Estimated Water Usage

	Phased Construction (200 MW)	Operations (600 MW)
Assumed Acre Feet (AF) / MW ¹	2.35 Acre Feet (AF) / Year	0.051 AF / Year
Total Water Usage (non-potable)	470 AF.	30.6 AF / Year

Source: Klise et al., 2013

4.8 Floodplains

Tetra Tech reviewed the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels, 08087C0490E and 08087C0500E effective May 18, 2021, and FIRM panels 08087C0652D and 08087C0675D, effective April 4, 2018. The Project is located in Zone X, which are areas determined to be outside the .2% annual chance floodplain (FEMA 2023).

4.9 Storm Water Runoff

A Drainage and Run Off Control Plan, and supporting Drainage Study were prepared for the Project in October 2023 and are included as Appendix A-2 and L. Site grading and drainage improvements will be designed to contain post development stormwater run-off on site. Prior to the start of construction, the Applicant will obtain a permit for any stormwater discharges occurring during the construction phase

of the Project in compliance with the COR400000 General Permit under the Colorado Water Quality Control Act.

In addition, the Applicant will manage temporary facilities to control erosion and sediment releases and to protect Project facilities from flooding during construction in accordance with the General Permit requirements. A Wind and Water Erosion Control Plan is also provided as Appendix I which identifies BMPs that will be utilized to prevent erosion and run off during construction.

4.10 Cultural Resources

The Applicant contracted Tetra Tech to prepare a Cultural Resources Survey for the Project in September 2023 (Appendix M). The Cultural Resources Survey documents the results of archival research including a records search, review of previously conducted survey reports, and review of historic maps. The purpose of the cultural investigation was to provide cultural and historical context of the Project site, identify cultural resources located within the Project Area, re-record a previously recorded site located within the Project site and determine the Project's potential to affect potential and recorded historic and cultural resources.

A desktop records search was conducted through the Colorado Historic Society/Office of Archaeology and Historic Preservation Cultural Records online database. The Research Area includes the Project Area and a one-mile buffer. The search revealed that 12 prior surveys have taken place within the Research Area, but do not intersect the Project Area.

A total of 18 cultural resources have been previously recorded in the Research Area, including structures, archeological sites, and isolated finds (IF). These resources include several transmission line segments, one prehistoric IF, three historic IFs, two agricultural complexes, an agricultural equipment dump, a trash dump, and a trash scatter. One site (5MR.698) is listed as recommended eligible for listing in the National Register of Historic Places (NRHP), although the site form states that the site is recommended not eligible. One segment of the Beaver Creek to Deering Lake transmission line (5MR.696) is the only resource located within the Project Area and has been determined not eligible for listing in the NRHP.

Tetra Tech Archeologists conducted a site visit on June 27, 2023, to review the site located within the Project Area (5MR.696). Site 5MR.696 is a segment of Western Area Power Association's Beaver Creek to Deering Lake Transmission line. The State Historic Preservation Office has determined the site is not eligible for listing in the NRHP. Tetra Tech agrees with this assessment of the site and recommends that the site is not eligible for listing in the NRHP.

The Cultural Resource Survey Report concludes the Project is unlikely to have an adverse effect on cultural resources as the identified site within the Project Area, 5MR.696 has been determined as not eligible for the NRHP. Therefore, no adverse effects are anticipated from construction-related disturbance of, or visual impacts to, this resource. In addition, the report concludes that the potential to encounter additional resources is low due to the low site density and relatively low archaeological sensitivity of the Project Area.

To reduce potential impacts on cultural resources, the Applicant will develop an Unanticipated Discovery Plan prior to the start of construction which will outline procedures to follow, in accordance with state and federal laws, if archaeological materials or human remains are discovered.

4.11 Visual Amenities

4.11.1 Visual Impacts

The visual setting within the Project is primarily undeveloped herbaceous grassland. Development within the vicinity of the Project site includes an electrical substation, overhead transmission lines, and rural residences.

The potential for aesthetic impacts from renewable projects is based on the type of technology, the scenic quality of the existing landscape, the degree to which the Project will change scenic quality, and the viewer response to the change. Visual sensitivity, a key component of viewer response, is dependent on viewer attitudes and the types of activities in which people are engaged when viewing the site. Overall, higher degrees of visual sensitivity are correlated with areas where people live, are engaged in recreational outdoor pursuits, or participate in scenic driving. Conversely, visual sensitivity is considered low to moderate in industrial, commercial, and rural areas where the scenic quality of the environment does not affect the value of the activity.

No state-designated scenic roads (including scenic roads, historic roads, and parkways designations) or federally designated scenic roads (including national scenic byways and All-American road designations) within the Project site or vicinity (CDOT 2023b).

There are no public parks, recreation areas, or public gathering areas within view of the Project site. Drivers on County Road R, R.5, Q, and Highway 34 and adjacent rural residences would be the closest sensitive receptors to the Project site.

Tetra Tech anticipates that the Project would be considered low-moderate for visual sensitivity. The Project would visually contrast with the existing undeveloped rangeland. However, the Project will be consistent with the existing Tri-State owned electrical substation located west of the Project site. In addition, the gently sloping topography of the site provides a visual buffer of the Project Area from some of the nearby surrounding residences and roadways.

The Project layout is sited to provide a 500' buffer from existing inhabited buildings, and a 70' buffer or greater from exterior parcel boundaries and existing roadways. Six-foot-tall chain link fencing with one foot of barbed wire will be installed along the perimeter of the Project site boundary to provide an additional visual buffer.

4.11.2 Glint & Glare Analysis

Tetra Tech conducted a glint and glare analysis for the Project (Appendix N). The FAA issued an Interim Policy (78 FR 63276) on October 23, 2013, describing methods for obtaining FAA review and approval of proposed solar arrays on airport property. These methods involved the use of the Sandia Laboratories Solar Glare Hazard Analysis Tool (SGHAT), a modeling/compliance analysis tool now licensed for public use within the ForgeSolar GlareGauge cloud software application. The SGHAT is considered an industry best practice for analysis of glare related to solar energy generating facilities and is required by the FAA under 78 FR 63276 to measure ocular impacts for solar projects located on federally obligated airports

and is recommended for projects located off federally obligated airports. The Project has utilized the SGHAT tool as licensed for use in ForgeSolar GlareGauge cloud software application for modeling and analysis.

The SGHAT was utilized to evaluate the potential for glint and glare along:

- Proximal segments of County Road K/46, County Road N, County Road O, County Road Q, Heartland Expressway, Interstate 76, and US Route 34;
- 15 nearby locations selected to represent observer views at neighboring properties; and
- Final approach paths for the Brush Municipal Airport

The FAA Notice Criteria Tool allows the user to determine if a proposed structure would require a formal submission to the FAA under CFR Title 14 Part 77.9 (Safe, Efficient Use, and Preservation of the Navigable Airspace). This online tool was utilized to determine if the proposed Project would require formal filing to the FAA. Based on the results of the FAA Notice Criteria Tool, the Project does not exceed notice criteria; therefore, it is not required for the Project to be formally filed with the FAA Obstruction Evaluation Group.

The panels to be used on the proposed Solar Project are smooth glass surface material with an anti-reflection coating, which is noted in the glare analysis. The panel orientation, location, and specifications used in the analysis were based on the Solar Project design. Based upon the analysis conducted, no glare was predicted. Further details and description of methodology and modeled results are provided in Appendix N.

4.12 Landforms

Morgan County is located in the Colorado Piedmont section of the Great Plains Physiographic Province. Underlying bedrock consists primarily of the Cretaceous Age Foxhills Sandstone and Pierre Shale that gently slopes east. The landforms of Morgan County consist primarily of typical Great Plains uplands and the broad valley of the South Platte River (Morgan County 2008).

The Project will impact a small portion of this area and will not affect the general landform in the Project Area. The natural contours of the land will be returned where feasible following construction.

4.13 Soils

Tetra Tech reviewed the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey to identify and characterize the soils within the Project site. Based on desktop data, four distinct soil types are present within the Project Area (USDA 2023; Table 9). The dominate soil unit is Valent sand, 3 to 9 percent slopes (3,144 acres and 70.7 percent of the Project Area). The Project does not contain any prime farmland, and all present soil types are rated as non-hydric (USDA 2023).

Table 9. Soils that Occur in the Project Area

Soil Name	Soil Unit	Acres	Farmland Classification	Hydric Rating (%)	K Factor Rating	Wind Erodibility Rating	Drainage Class
Truckton loamy sand, 0 to 3 percent slopes	TuB	176.1	Not Prime Farmland	Non-Hydric (0%)	.17	2	Well Drained
Valent sand, 0 to 3 percent slopes	Va	1,123.1	Not Prime Farmland	Non-Hydric (0%)	.02	1	Excessively Drained
Valent sand, 3 to 9 percent slopes	VcD	3,144.6	Not Prime Farmland	Non-Hydric (0%)	.02	1	Excessively Drained
Valent sand, 3 to 9 percent slopes	VwD	1.7	Not Prime Farmland	Non-Hydric (0%)	.02	1	Excessively Drained

Source: USDA 2023

Impacts to soils are anticipated to be temporary during the construction phase of the Project. Activities impacting soils include the clearing of vegetation and grading of areas for access roads and installation of Project facilities. Clearing and grading exposes soils to a risk of erosion from wind and stormwater. Impacts to soils during operations are anticipated to be minimal from use of access roads by operations and maintenance staff.

The NRCS assigns wind erodibility groups to measure soil susceptibility to wind erosion. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. Soil types within the Project site are in either group 1 or 2, indicating high susceptibility to wind erosion (USDA-NRCS 2023). The NRCS also assigns a K Factor Rating which indicates the susceptibility of a soil to sheet and rill erosion by water. K factor values range from 0.02 to 0.69. The higher the value, the more susceptible. Soil types within the Project site have a low K factor indicating low potential for sheet and rill erosion by water (USDA-NRCS 2023). A Water and Wind Erosion Control Plan is included as Appendix I, which details detail erosion control measures and construction stormwater runoff management for the Project.

4.14 Farmland of Statewide Importance

Tetra Tech reviewed the USDA NRCS Web Soil Survey, and the Project Area does not contain any prime, unique, or farmland of statewide importance. All soils within the Project Area are rated as “Not Prime Farmland” (USDA 2023). Therefore, no impacts to prime, unique, or farmland of statewide importance is anticipated to result from development of the Project.

5.0 SITE MAPS & PLANS

5.1 Vicinity Map

The Project vicinity map is provided as Appendix A-1.

5.2 Special Use Map/Site Plan

The Project Special Use Map/Site Plan is provided as Appendix A-2.

5.3 Schematic Drawings

Schematic elevation drawings of the PV array, tracking system, inverters, O&M building, and fencing are included in Appendix A-5.

5.4 One Line Drawing

A one-line electrical drawing of the Project is included as Appendix A-6.

5.5 Specification Sheets

Preliminary specification sheets for the PV array and inverters are included as Appendix A-7.

5.6 Drainage & Runoff Control Plan & Drainage Study

A Drainage and Runoff Control Plan and supporting Drainage Study are included as Appendix A-2 and M.

5.7 Water & Wind Erosion Control Plan

The Water and Wind Erosion Control Plan is provided as Appendix I.

5.8 Decommissioning Plan

The Decommissioning Plan prepared in accordance with Section 4-835 is provided as Appendix O.

5.9 Geotechnical Report

The Applicant certifies that prior to construction, a professional engineer licensed in Colorado will complete a geotechnical study that includes the following:

1. Soils engineering and engineering geologic characteristics of the site based upon on-site sampling and testing.
2. Foundation and tower systems design criteria for all proposed structures.
3. Slope stability analysis.
4. Grading criteria for ground preparation, cuts and fills, and soil compaction.

The geotechnical report detailing results of the study will be provided to Morgan County upon completion.

5.10 Maintenance Statement

The Applicant has prepared a maintenance statement for the system and property describing the anticipated maintenance and property upkeep that will occur during operation of the solar facility. The Maintenance Statement is provided as Appendix P.

5.11 Emergency Operations & Fire Mitigation Plan

The Project will implement adequate fire control and prevention measures during construction and operations as further detailed per the Emergency Operations and Fire Mitigation Plan included as Appendix H.

6.0 PUBLIC OUTREACH

The Applicant conducted a public open house meeting held on September 6, 2023, at Petteys Park golf course located at 2301 West Mill Street, Brush, Colorado. The public open house was noticed on the Project's website, through an informational flyer that was mailed to all landowners within a half-mile radius of the Project and was advertised in the local newspaper for two weekly circulations prior to the meeting. Additionally, the informational flyer was posted to the Morgan County Bulletin Board Facebook page.

Throughout the Project's planning and permitting process, the Applicant has contacted and coordinated with various agencies and local officials including the Morgan County Planning & Building Department, Morgan County Road and Bridge Department, Morgan County Economic Development Committee, City of Brush, Colorado Department of Wildlife, Colorado State Historic Preservation Office, Brush Volunteer Fire Department, Brush Rural Fire Protection District, Morgan County Sherriff's Office and Brush Police Department. In general, the purpose of these coordination efforts was to provide information on the Project, request feedback, and answer questions. In addition, the Applicant recently became a member of the Morgan County Economic Development Committee.

An Environmental Justice Analysis and Communications Plan were prepared for the Project. The plans are included as Appendix Q-1 and Q-2. A Public Outreach Summary detailing public outreach completed to date is included as Appendix Q-3.

7.0 CITIZEN REVIEW PROCESS

The SUP request will require a public hearing for which a minimum of 10 days' public notice is required. The SUP request will be noticed pursuant to Morgan County Zoning Regulations Section 2-390. A list of adjoining landowners within 1,320' of the Project site and their mailing addresses is provided as Appendix R.

Site notices will be posted on the property fronting each adjacent right of way at least 10 days prior to each scheduled public hearing date in accordance with Morgan County Zoning Regulations Section 2-390 (B).

8.0 VESTED RIGHTS

The Applicant hereby respectfully requests that vested rights be granted for the Solar Project for a period of six years. The development schedule and phase timing are set forth in Section 2.6.1 (Table 2) above. Vested right is appropriate here because this a multi-phase Project that will be built out over several years.

9.0 REFERENCES

- CAPCD (Colorado Air Pollution Control Division). 2023. 2023 Ambient Air Monitoring Network Plan. Available online at: https://apcd.state.co.us/tech_doc_repository.aspx?action=open&file=2023AnnualNetworkPlan.pdf. Accessed September 2023.
- CDOT (Colorado Department of Transportation). 2023. Online Traffic Information System Traffic Data Explorer. Available online at: [Traffic Data Explorer \(coloradodot.info\)](https://trafficdataexplorer.coloradodot.info). Accessed September 2023.
- CDA (Colorado Department of Agriculture). 2023. County Weed Programs. Available online at: <https://ag.colorado.gov/conservation/noxious-weeds/county-weed-programs>. Accessed September 2023.
- EPA (U.S. Environmental Protection Agency) 2023. Current Nonattainment Counties for All Criteria Pollutants. Available online at: <https://www3.epa.gov/airquality/greenbook/ancl.html>. Accessed September 2023.
- FAA (Federal Aviation Administration). 2023a. Circle Search for Airports. Available online at: <https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showCircleSearchAirportsForm>. Accessed September 2023.
- FAA. 2023b. Notice Criteria Tool. Available online at: <https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm>. Accessed September 2023.
- FEMA (Federal Emergency Management Agency). 2023. National Flood Hazard Layer. Available online at: <https://www.fema.gov/flood-maps/national-flood-hazard-layer>. Accessed September 2023.
- Klise, G., Tidwell, V., Reno, M., Moreland, B., Zemlick, K., & Macknick, J. (2013). Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern United States [Review of Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern United States]. Sandia National Laboratories. <https://www.osti.gov/servlets/purl/1090206>
- Morgan County. 2008. Morgan County Comprehensive Plan. Available online at: <https://morgancounty.colorado.gov/sites/morgancounty/files/Comprehensive-Plan-2008.pdf>. Accessed September 2023.
- Morgan County. 2023a. Parcel Viewer App. Available online at: <https://morgancountyco.maps.arcgis.com/apps/Solutions/s2.html?appid=98b97c7f37e2453f85938d547d2b7f11>. Accessed September 2023.
- Morgan County. 2023b. Morgan County Zoning Regulations. Available online at: <https://morgancounty.colorado.gov/sites/morgancounty/files/documents/Zoning%20Regulations%20-%2020012323.pdf>. Accessed September 2023.

Morgan County. 2023c. Morgan County School Districts. Available online at:

<https://morgancountyco.maps.arcgis.com/apps/Solutions/s2.html?appid=516c27c48c514af8bdb94071966688b8>. Accessed September 2023.

USDA-NRCS (U.S. Department of Agriculture Natural Resources Conservation Service). 2023. Web Soil Survey. Available online at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm> . Accessed September 2023.

Fortress BESS Project, Phase III Special Use Permit Application



For Submittal to:



MORGAN COUNTY PLANNING
ZONING & BUILDING DEPT.
231 Ensign, P.O. Box 596
Fort Morgan, Colorado 80701
PHONE (970)542-3526
FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

Prepared for:

Fortress Solar III LLC,
11801 Domain Blvd, Suite 450
Austin, TX 78758

Prepared by:



1560 Broadway, Ste 1400
Denver, CO 80202



MORGAN COUNTY PLANNING
 ZONING & BUILDING DEPT.
 231 Ensign, P.O. Box 596
 Fort Morgan, Colorado 80701
 PHONE (970)542-3526
 FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

PERMIT # SM 2023 - 0025

Date Received	<u>11 / 8 / 23</u>	Received By	<u>S</u>
App Fee	<u>\$5000</u>	CK/CC #:	<u>091045701</u>
		Paid	<u>11 / 14 / 23</u>
Minor Amend Fee:	\$	CK/CC #:	
		Paid	<u>/ /</u>
Recording Fee	\$	CK/CC #:	
		Paid	<u>/ /</u>
PC Date:	<u>2 / 12 / 24</u>	BOCC Date:	<u>/ /</u>
100 Year Floodplain?	<u>Y/N</u>	Taxes Current?	<u>Y/N</u>

SPECIAL USE PERMIT APPLICATION

(Also to be used as application for Amendments to Existing Special Use Permits)

Landowner **MUST** Sign Application and Right to Farm Policy

APPLICANT

LANDOWNER

Name Fortress Solar III LLC
 Address 11801 Domain Blvd, Suite 450
Austin, TX 78758
 Phone _____
 Email _____

Name Ruth Ann Odle
 Address 16218 Hwy 71 Brush, CO 80723-9436
 Phone () _____
 Email _____

BRIEF DESCRIPTION OF APPLICATION

Proposed 200 MW Battery Energy Storage system. Phase III of the Fortress Solar BESS Project.

PROPERTY LEGAL DESCRIPTION

Address (if available):

See attached parcel information table

S: ___ T: ___ R: ___ 1/2 1/4 1/4
 Parcel #: 1233 050 00 001
 Subdivision: _____

Property Size 645.85 (sq. ft. or acres)
 Zone District: A
 Lot #(s): _____

Is property located within 1320' (1/4 mile) of a livestock confinement facility? Y/N

SEE REQUIRED ATTACHMENT LIST ON BACK OF THIS PAGE.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED OR PROCESSED.

SPECIAL USE PERMIT REQUIRED ATTACHMENT LIST

Fee:

- Non-Refundable Application Fee**

**Additional fees and charges may be required pursuant to Section 2-160 of Morgan County Zoning Regulations*

Project Narrative:

- Narrative– Including the following:**

- Project Description
- Purpose of request
- How this proposal complies with the Morgan County Comprehensive Plan
See: <https://morgancounty.colorado.gov/sites/morgancounty/files/Comprehensive-Plan-2008.pdf>
- How this project/proposed use meets the criteria for Special Use Permit pursuant to Sec. 2-395 of the Zoning Regulations
- How the project/proposed use meets any specific criteria related to the project/proposed use. *See Morgan County Zoning Regulations Chapter 4-Supplementary Regulations, including but not limited to: Campgrounds, Livestock Confinement, Kennels, Outdoor Shooting Ranges, Home Occupations, Oil and Gas, Mobile Home Parks, Wireless Service Facilities, Solar, Wind and BESS*
- How project will relate to or impact existing adjacent uses
- All off-site impacts and proposed mitigation measures
- Development or implementation schedule of project
- Proposed length of time the permit, if applicable
- Discussion of any public improvements required to complete the project

Environmental Impacts:

- Discuss any environmental impacts the Special Use will have on the following and the proposed mitigation measures:

- | | | | |
|-------------------------------------------------|----------------------------------------------|---------------------------------------------------------|-----------------------------------------------------|
| <input checked="" type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Dust | <input checked="" type="checkbox"/> Existing Vegetation | <input checked="" type="checkbox"/> Land Forms |
| <input checked="" type="checkbox"/> Noise | <input checked="" type="checkbox"/> Odor | <input checked="" type="checkbox"/> Storm Water Runoff | <input checked="" type="checkbox"/> Water Resources |
| <input checked="" type="checkbox"/> Wetlands | <input checked="" type="checkbox"/> Wildlife | <input checked="" type="checkbox"/> Visual Amenities | <input type="checkbox"/> Other _____ |

Map & Plans: **Special Use Map** meeting the requirements of Sec. 2-420 and any specific map requirements for the proposed use including but not limited to: *Campgrounds, Livestock Confinement, Kennels, Outdoor Shooting Ranges, Home Occupations, Oil and Gas, Mobile Home Parks, Wireless Service Facilities, Solar, Wind and BESS. Sample Map attached to application for reference*

Drainage/Run-Off Control Plan may be required if the Planning Administrator determines that the use or building meets one of the following criteria:

- (1) The accessory use or building may have a drainage impact on adjacent properties;
- (2) The accessory use or building may have a drainage impact on adjacent right of ways;
- (3) The accessory structure is 5000 square feet or larger.

Decommissioning Plan [Wind, Solar, BESS]

Geotechnical Report [Wind, Solar]

Maintenance Statement [Wind, Solar, BESS]

Water and/or Wind Erosion Control Plan [Wind, Solar]

Fire Mitigation Plan [BESS]

Specification Sheet [BESS]

Emergency Operation Plan [BESS]

Ownership: **Current title insurance commitment (last 6 months)**

Mineral Rights Holders Notification

Notice to FFA & Approval Letter [Wind]

Notice to Operator of Communication Link (if applicable) [Wind]

Proof of current paid taxes

Utilities/Access: **Water tap (Engineering Report from Quality Water or proof of access to a well)**

Sewer (Septic Permit, Will Serve Letter from NCHD or proof of other public system)

Electric (Electric bill or letter of commitment from electricity provider)

Driveway Permit from CDOT or Morgan County Road & Bridge (If required by staff)

Ditch Company- Proof of contact if there is a ditch on or next to subject property

Architecture Control Approval (if applicable)

Utility Interconnection or Crossing Certification [Wind, Solar]

Road Agreement [Wind, Solar]

Electrical Diagram [BESS]

Vested Rights: **Vesting Rights** (Optional). If applying for vested rights with special use application, the following must be submitted:

- Period of time Vesting Rights are requested
- Development schedule including timeline and phases
- Reason for request
- Other pertinent factors concerning the development
- Additional application fee for vesting rights application

Miscellaneous: **Right to Farm Policy** signed by Landowner(attached)
 Liability Insurance for Solar, Wind and/or BESS projects

1 # Paper Application sets

1 Digital Copy of Application (One sided only)

Posted Public Notice Verification:

Notarized affidavit with photographs from a distance & close-up

This must be submitted PRIOR to Planning Commission hearing and PRIOR to Morgan County Board of Commissioners hearing

Additional Information required by staff:

APPLICANT & LANDOWNERS **MUST** SIGN APPLICATION ON NEXT PAGE

APPLICANT & LANDOWNER'S STATEMENT

I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge.
Application must be signed by landowners as shown on title insurance/commitment.

Charles Ndhlovu 10/18/2023
Applicant Signature Date

Leith Ann Odle 10/29/23
Landowner Signature Date

Applicant Signature Date

Landowner Signature Date



MORGAN COUNTY, PLANNING, ZONING & BUILDING DEPT.
231 Ensign, P.O. Box 596
Fort Morgan, Colorado 80701
PHONE (970) 542-3526 FAX (970) 542-3509

MORGAN COUNTY RIGHT TO FARM POLICY / NOTICE

Morgan County is one of the most productive agricultural counties in Colorado. Ranching, farming, animal feeding, and all other manner of agricultural activities and operations in Morgan County are integral and necessary elements of the continued vitality of the county's economy, culture, landscape and lifestyle. Morgan County specifically recognizes the importance of agricultural operations as necessary and worthy of recognition and protection.

Landowners, residents and visitors must be prepared to accept as normal the effects of agriculture and rural living. These may include noise from tractors, equipment, and aerial spraying sometimes at night or in the early morning; dust from animal pens, field work, harvesting, and gravel roads; odor from animal confinement operations, silage and manure; smoke from ditch burning; flies and mosquitoes; the use of pesticides and fertilizers, including aerial spraying; and movement of livestock or machinery on public roads. Under the provisions of the State of Colorado's "Right to Farm" law (Section 35-3.5-101 and following, C.R.S.), all normal and non-negligent agricultural operations may not be considered nuisances.

Also public services in a rural area are not at the same level as in an urban or suburban setting. Road maintenance may be at a lower level, mail delivery may not be as frequent, utility services may be nonexistent or subject to interruption, law enforcement, fire protection and ambulance service will have considerably longer response times, snow may not be removed from county roads for several days after a major snow storm. First priority for snow removal is that school bus routes are normally cleared first.

Children are exposed to different hazards in a rural setting than they are in an urban or suburban area. Farm and oilfield equipment, ponds, and irrigation ditches, electrical service to pumps and oil field operations, high speed traffic, noxious weeds, livestock, and territorial farm dogs may present real threats to children. It is necessary that children's activities be properly supervised for both the protection of the children and protection of the farmer's livelihood.

All rural residents and property owners are encouraged to learn about their rights and responsibilities and to act as good neighbors and citizens of Morgan County. This includes but is not limited to obligations under Colorado State law and Morgan County Zoning Regulations regarding maintenance of fences, controlling weeds, keeping livestock and pets under control. There may be provisions of which you are unaware. For example, because Colorado is a Fence Law State, owners of property may be required to fence livestock out.

Information regarding these topics may be obtained from the Colorado State University Cooperative Extension Office and the County Planning and Zoning Department, and County Attorney.

RECEIPT AND STATEMENT OF UNDERSTANDING

I hereby certify that I have received, read, and understood the Morgan County Statement of Policy and Notice regarding Right to Farm.

I further state that I am aware that the conditions of living in an unincorporated area are different than living in a town or city and that the responsibilities of rural residents are different from urban or suburban residents. I understand that under Colorado law that a pre-existing, non-negligent agricultural operation may not be considered a public or private nuisance.

Ruth Ann Odle 10-25-23
Signature Date
Ruth Ann Odle
Printed Name
16218 Hwy. 71
Address
Brush, CO 80723

To Be Signed by Landowner

Special Use Permit Application

Fortress BESS Project- Phase III

Morgan County, Colorado

November 2023

Submitted to:

Morgan County Planning and Zoning
231 Ensign Street, PO Box 596
Fort Morgan, CO 80701



Prepared for

Fortress Solar III LLC
11801 Domain Blvd, Suite 450
Austin, TX 78758

Prepared by



TETRA TECH

1560 Broadway, Ste 1400
Denver, CO 80202

Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF FORMATION OF "FORTRESS SOLAR III LLC", FILED IN THIS OFFICE ON THE THIRTIETH DAY OF OCTOBER, A.D. 2023, AT 12:23 O`CLOCK P.M.



Jeffrey W. Bullock, Secretary of State

2554795 8100
SR# 20233844312

Authentication: 204486059
Date: 10-31-23


You may verify this certificate online at corp.delaware.gov/authver.shtml

STATE OF DELAWARE
CERTIFICATE OF FORMATION
OF LIMITED LIABILITY COMPANY

The undersigned authorized person, desiring to form a limited liability company pursuant to the Limited Liability Company Act of the State of Delaware, hereby certifies as follows:

1. The name of the limited liability company is Fortress Solar III LLC

2. The Registered Office of the limited liability company in the State of Delaware is located at 1209 Orange Street (street), in the City of Wilmington, Zip Code 19801. The name of the Registered Agent at such address upon whom process against this limited liability company may be served is The Corporation Trust Company

By: 
Authorized Person

Name: Christie Kneteman
Print or Type

Participating Landowner Parcel Information

APN	Account Number	Property Owner	Legal Description
1233-050-00-001	R002837	Ruth Ann Odle	S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T: 4 R: 55 PARC SW1/4 S OF RR

Morgan County Special Use Permit Application Submittal Requirements

The Morgan County Special Use Permit application package for the proposed Fortress BESS Project is organized by sections to follow the Morgan County SUP Application Checklist, provided below.

Morgan County Code 2-380 Submittal Requirements / SUP Application Checklist	Application Section
1. Applicant Information	2.5 / Application Form
2. Landowner Information	2.1 / Application Form
3. Property Legal Description	2.1 / Application Form
4. Applicant & Landowner's Statement	Application Form
5. Project Narrative Including the Following: a) Project Description b) Purpose of request c) How this proposal complies with the Morgan County Comprehensive Plan d) How this project/proposed use meets the criteria for the Special Use Permit pursuant to Sec. 2-395 of the Zoning Regulations e) How this project/proposed use meets the specific criteria per Morgan County Zoning Regulations Chapter 4- Supplementary Regulations (Solar) f) How the project will relate to or impact existing adjacent uses g) All off-site impacts and proposed mitigation measures h) Development or implementation schedule of project i) Proposed length of time of the permit j) Discussion of any public improvements required to complete the project	2.0-3.0
6. Discuss any environmental impacts the Special Use will have on the following and the proposed mitigation measures: Air Quality, Dust, Existing Vegetation, Land Forms, Noise, Odor, Storm Water Runoff, Water Resources, Wetlands, Wildlife, Visual Amenities, Other	4.0
7. Maps and Plans	5.0
a) Special Use Map	Appendix A-2
b) Drainage/Run-off Control Plan	Appendix A-2, L, & I
c) Decommissioning Plan	Appendix O
d) Geotechnical Report (Solar/Wind)	5.8
e) Maintenance Statement	Appendix P
f) Water and Wind Erosion Control Plan (Solar/Wind)	Appendix I
g) Fire Mitigation Plan	Appendix H
h) Specification Sheets	Appendix A-7
i) Emergency Operation Plan	Appendix H
8. Ownership Information	2.2
a) Title Commitments	Appendix B
b) Mineral Rights Holders Notification	2.2.6 / Appendix E
c) Proof of Current Paid Taxes	2.2.4 / Appendix D
9. Utilities:	2.6.2
a) Water tap (Will Serve letter or proof of access to a well)	2.6.2.1
b) Sewer (Septic Permit, Will Serve Letter from NCHD or proof of other public system)	2.6.2.2
c) Electric (Electric bill or letter of commitment from electricity provider)	2.6.2.3
d) Utility Interconnection or Crossing Certification (Wind/Solar)	2.6.2.4

10. Access	2.7
a) Morgan County Driveway Permits	Appendix G
b) Ditch Company- Proof of contact if there's a ditch on or next to the subject property	2.2.8
c) Road Agreement (Wind/Solar)	2.8.1
d) Electrical Diagram	Appendix A-6
11. Vested Rights	8.0
12. Miscellaneous	
a) Right to Farm Policy	2.2.5 / Application Form
b) Liability Insurance	2.2.3 / Appendix C
c) Posted Public Notice Verification	7.0

Morgan County SUP Criteria Index

The following index is provided to direct the reader to the sections of this SUP Application that correlate to the Morgan County Chapter 2-395 “Review Criteria” identified for Special Use Permits.

The following criteria will be used by the Planning Commission and the Board of Commissioners when reviewing an application for a special use permit:

Morgan County Code 2-395 Special Use Permit Review Criteria	Application Section
A. The use and its location as proposed are in conformance with the Morgan County Comprehensive Plan;	2.11.A
B. All the application documents are complete and present a clear picture of how uses are to be arranged on the site or within Morgan County;	2.11.B
C. The site plan conforms to the district design standards of these regulations;	2.11.C
D. All on and off-site impacts have been satisfactorily mitigated either through agreement, public improvements, site plan requirements or other mitigation measures;	2.11.D
E. The special use proposed has made compatible with the surrounding uses and adequately buffered as determined by the County;	2.11.E
F. The special uses poses only the minimum amount of risk to the public health, safety, and welfare as set by either federal, state or county regulation, whichever is the strictest;	2.11.F
G. The special use proposed is not planned to be developed on a non-conforming parcel;	2.11.G
H. The applicant has adequately documented a public need for the project, all pertinent technical information, adequate financial resources to implement it, and has paid all fees and review costs levied by the County for application processing and review; and	2.11.H
I. For any special use requiring a supply of water that the applicant has demonstrated a source of water which is adequate for the proposed use in terms of quantity and reliability and in the case of human consumption, quantity, quality, and reliability	2.11.I

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Acronyms and Abbreviations

AADT	Average Annual Daily Traffic
AC	alternating current
AF	acre-feet
APEN	Air Pollutant Emissions Notice
APN	Assessor's Parcel Number
Applicant	Fortress Solar III LLC
Aypa	Aypa Power North America LLC
BESS	battery energy storage system
BESS Project Area	21-acre BESS area
BMPs	best management practices
BNSF	Burlington Northern Santa Fe Corporation
CAPCD	Colorado Air Pollution Control Division
CDA	Colorado Department of Agriculture
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health & Environment
CPW	Colorado Parks and Wildlife
dBA	A-weighted decibel
EHS	Environmental Health & Safety
EPA	U.S. Environmental Protection Agency
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FIRM	Flood Insurance Rate Map
Gen-tie	generation tie line
Highway 34	U.S. Highway 34
HVAC	heating, ventilation, and air conditioning
I-76	Interstate 76
IF	isolated finds
IPaC	Information for Planning and Consultation
kV	kilovolt
MW	megawatt

MWh	megawatt hours
NERC	North American Electric Reliability Corporation
NHD	National Hydrography Dataset
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
Project	A utility scale solar and BESS project known as the Fortress Solar Project
Project Area	4,259 acre fenced Project boundary
PV	photovoltaic
SGHAT	Sandia Laboratories Solar Glare Hazard Analysis Tool
SUP	Special Use Permit
Tetra Tech	Tetra Tech, Inc.
Tri State	Tri State Generation and Transmission Association Inc.
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WOTUS	waters of the U.S.

1.0 INTRODUCTION

Fortress Solar III LLC (“Applicant”), an indirect subsidiary of Aypa Power North American LLC (“Aypa”), a Blackstone portfolio company submits this application in furtherance of the development of a utility scale solar and BESS project known as the Fortress Solar Project (the “Project”) in Morgan County, Colorado. The Project will be comprised of a solar collector facility and a BESS facility; the solar collector facility project is referred to herein as the “Solar Project” and the BESS facility project is referred to herein as the “BESS Project”. The Project will be developed in three phases, each phase shall contain one phase of the Solar Project and one phase of the BESS Project. In accordance with the Morgan County Zoning Regulations, three separate solar collector facility applications and three separate BESS facility applications, one for each phase, are submitted simultaneously. In order to provide Morgan County (“County”) with a complete picture of the Project, each of the three BESS Project applications includes information on all three phases, each phase corresponding to its own application. The total fenced Project boundary will encompass approximately 4,259 acres (the “Project Area”). The BESS Project, inclusive of all three phases, is an up to 600-megawatt (MW), 2,400 MW hour (MWh) BESS and will encompass up to twenty-one acres within the Project Area (“BESS Project Area”). This application is for Phase III of the BESS Project and is submitted in conjunction with the application for Phase III of the Solar Project. Phase III of the BESS Project will encompass approximately seven acres.

In accordance with the foregoing, the Applicant respectfully submits this Special Use Permit (SUP) application to the Morgan County Planning and Development Department pursuant to Morgan County Code Chapter 4-855, and Chapter 4-860, to address utility-scale battery storage facilities. This Phase of the BESS Project is up to 200-megawatt (MW), 800 MW hour (MWh) BESS. The Applicant is requesting an SUP to construct, operate, maintain, and decommission this phase of the BESS Project. The BESS Project will be located approximately 1.6 miles east of the city of Brush, Colorado (Figure 1, Project Location, Appendix A-1). The BESS Project Area is comprised of one parcel, and the proposed generation tie (gen-tie) line would bisect three additional parcels (Appendix A-2) that are located within the Morgan County Agricultural Production Zone. The ALTA survey for the Project Area is included as Appendix A-3.

Additional Project related facilities include the Project substation, a gen-tie line, and an operations and maintenance building; which are included within the Solar Project’s SUP applications. These Project related facilities will serve more than one phase and are therefore included all of the Solar Project SUP applications. The SUP submitted for Phase III of the Solar Project is to be reviewed concurrent with the subject Phase III BESS SUP application.

The Project Vicinity Map is provided as Appendix A-1. The Site Plan and Special Use Map are included as Appendix A-2. The ALTA survey for the Project Area is provided as Appendix A-3. A site access plan is included Appendix A-4. Schematic drawings of the Project components are detailed in Appendix A-5 and a one-line electrical drawing of the BESS is provided as Appendix A-6. Preliminary specification sheets are provided as Appendix A-7. The SUP application form and Right to Farm Policy is provided in front of this application narrative following the Applicant’s cover letter.

2.0 PROJECT NARRATIVE

2.1 Project Location & Participating Landowner Parcel Information

The BESS Project is located on approximately 21 acres of private property currently held under purchase option by an affiliate of the Applicant, which will be assigned to the Applicant prior to the exercise of the option. (Appendix A-2). The Project is located along U.S Highway 34 (Highway 34), on existing rangeland approximately 1.6 miles east of Brush, Colorado. Table 1 below lists the assessor's parcel and property owner information for the project parcel.

Table 1. Participating Property Owners Parcel Information

APN	Account Number	Property Owner	Legal Description
1233-050-00-001	R002837	Ruth Ann Odle	S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T: 4 R: 55 PARC SW1/4 S OF RR

Source: Morgan County 2023a

2.2 Property interests, rights, and policies

2.2.1 Easements and Agreements

An affiliate of the Applicant is currently the option holder for the Project site. The option to purchase agreements for the full Project site are for a total of 4,473 acres (407 acres of Benotti; 1,897 acres of Odle Option 1; 2,170 acres of Odle Option 2) and extend until the end of 2024. On October 18th, 2023, an affiliate of the Applicant entered into a Temporary License Agreement with Tri State Generation and Transmission Association Inc. (Tri-State) to allow for completion of surveying and other investigative activities on the Tri-State owned properties. The Applicant intends to establish an access easement across Tri-State owned parcels for access to the Project from County Road R.5. In addition, the Applicant intends to establish an approximate 167-acre ROW utility easement for the proposed generation tie line to interconnect the Project to the Tri-State owned substation west of the Project.

2.2.2 Title Commitments

The title insurance commitments (last 6 months) for the participating landowner within the BESS Project Area is included as Appendix B.

2.2.3 Liability Insurance

The Applicant will carry liability insurance to cover loss or damage to persons or structures during construction and operation of the BESS Project. A copy of the Applicant's liability insurance policy for the Odle property is included per Appendix C.

2.2.4 Proof of Current Paid Taxes

Proof of current tax payment for the participating landowner is included as Appendix D.

2.2.5 Right to Farm Policy

The participating landowner signature certifying the receipt, review, and understanding of the Morgan County Statement of Policy and Notice regarding the Right to Farm is provided with the SUP application form.

2.2.6 Mineral Right Holder Notification

The mineral right holders within the Project boundary will be provided with a preliminary notice advising them of their right to comment or request information from Morgan County. At this time, a hearing date has not yet been scheduled for the SUP application. The Applicant will notify the individual mineral rights holders within the Project in advance of the scheduled hearing as required by Morgan County and statutory notification requirements. Upon finalization of the hearing schedule, the Applicant will coordinate with Morgan County to ensure all appropriate mineral rights holders are given proper notice of the scheduled hearing and an opportunity to provide comment.

A preliminary list of the mineral rights holders that will be notified in advance of the scheduled hearing is included as Appendix E.

2.2.7 Height Restrictions and FAA Hazard Review

According to the Federal Aviation Administration (FAA), the Brush Municipal Airport (FAA identifier 7V5) is located less than a mile northwest of the Project Area (FAA 2023a). Tetra Tech Inc. (Tetra Tech) consulted the FAA Obstruction Evaluation Notice Criteria Tool (FAA 2022b) for four locations in the Project Area and determined that the Project exceeds the Notice Criteria and would require filing. The Applicant will file notice with the FAA at least 45 days prior to the start of construction.

2.2.8 Ditch Company- Proof of Contact

No drainage or irrigation ditches have been identified within the BESS Project Area.

2.3 Zoning District

The BESS Project is located in the Agriculture Production zoning district (Morgan County 2023a). Per Morgan County Code, Section 3-180, BESS may be permitted as a primary or accessory use in the Agriculture Production zoning district through issuance of a SUP.

2.4 Purpose of Request

The purpose of this application is to provide Morgan County with pertinent information regarding the Project, subject to the Morgan County Zoning Regulations concerning the regulation of wind energy, solar collector, and battery energy storage systems (Morgan County 2023b). Per Morgan County Code, Section 3-180, BESS facilities may be permitted as a primary or accessory use in the Agriculture Production zoning district through issuance of a special use permit. Therefore, the purpose of the SUP is to authorize the proposed use of a BESS facility on the Project site to allow for the development and operation the BESS Project.

2.5 Applicant Information

The Applicant is an indirect subsidiary of Aypa. Aypa is a Blackstone portfolio company. Aypa has a proven track record of developing, financing, constructing, owning, and operating utility-scale renewable energy and battery energy storage projects. Aypa’s existing portfolio and qualified development pipeline spans the continental United States and Ontario, Canada, including 15,000+ MWs of projects in various stages of development. Aypa currently has an operating fleet of 30 projects, two projects are currently under construction, and over 70 projects are in the development pipeline.

2.6 Project Description

The BESS Project is an up to 600-MW, 2,400 MWh Alternating Current (AC)-coupled BESS. This Phase III of the BESS Project is an up to 200-MW BESS, 800 MWh Alternative Current (AC)-coupled BESS. The BESS containers, inverters, and appurtenant facilities would be located on approximately 21 acres near the Project substation and switchyard. This Phase III of the BESS Project is located on approximately seven acres. The BESS is located within the fenced boundaries of the proposed Project which is further detailed per the concurrent SUP applications for the Solar Project. The site layout is detailed per the Special Use Map/Site Plan included as Appendix A-2.

2.6.1 Development Schedule and Phasing

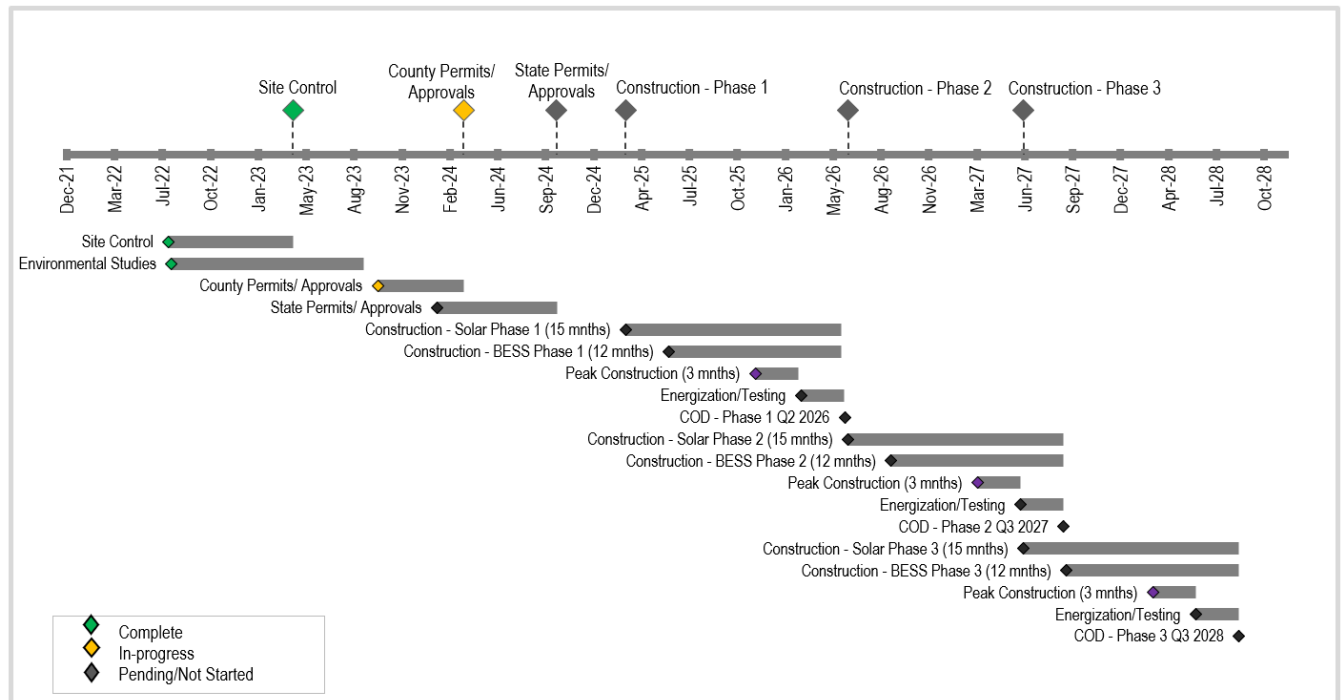
The BESS Project is expected to be constructed in three phases of approximately 200 MW, 800 MWh each. Construction of the Project is anticipated to commence in Q2 2025 pending approval of County permits. The BESS Project will be developed in parallel with the Solar Project. The proposed phasing is detailed per Table 2 below. All associated phasing quantum included in the application should be summed together in such cases in which multiple phases are constructed at the same time. This application is inclusive of maximum and minimum cases of individual and simultaneous phasing. As noted above, this application is for Phase III of the BESS Project.

Table 2. Project Construction Phasing

Phase	APNs	BESS MW	BESS MWh	Start Construction	End Construction	Commercial Operation Date
I	1233-050-00-001	200	800	Q2 2025	Q1 2026	Q2 2026
II	1233-050-00-001	200	800	Q1 2026	Q2 2027	Q3 2027
III	1233-050-00-001	200	800	Q1 2027	Q2 2028	Q3 2028

The overall development schedule for the Solar Project and BESS Project are detailed per Figure 2-1 below.

Figure 2-1. Fortress Solar III LLC - Overall Schedule (Solar & BESS)



2.6.2 Anticipated Permit Timeframe & Length of Permit

Per Section 4-880 of the Morgan County Solar Facility Regulations, a SUP for a BESS is valid for three years, provided that substantial construction and installation of the BESS is completed within that time. The Project construction for each phase is anticipated to be completed within 15 months upon issuance of a building permit. If construction is delayed due to unforeseen circumstances, the Applicant will request extensions, as permitted per Section 4-880 of the Morgan County Code. The Applicant understands the SUP approval may expire if substantial construction progress is not achieved within three years, or up to six years if such extensions are requested and granted.

2.6.3 Siting Considerations

The primary criteria for determining the location of BESS include the existence of compatible adjacent and nearby land uses, suitable topographic conditions, and the proximity to existing electrical infrastructure, major transportation corridors, utility corridors, and electrical load centers. The proposed BESS Project site meets these criteria. The BESS Project site was selected based on proximity to the existing infrastructure of the Tri State Generation and Transmission Association Inc. (Tri State) Story substation. Siting analysis confirms the proposed BESS Project Area avoids areas or locations with a high potential for biological conflict, such as wilderness study areas, areas of environmental concern, historic trails, special management areas, or important wildlife habitat or corridors. The proposed site avoids visual corridors that are prominent scenic viewsheds or scenic areas. As discussed in Section 4.0, there are no known sensitive biological, hydrological, historical, cultural, or archeological resources within or near the proposed BESS Project site.

2.6.4 Battery Energy Storage System

The BESS Project would be initially comprised of 133 SunGrow SC5000UD-MV-US inverters and 1,064 BYD-MC Cube battery containers, augmented over the 30-year life of the Project up to approximately 1,330 BYD-MC Cubes located on concrete equipment pads. Phase III of the BESS Project would be initially comprised of 45 inverters and 360 battery containers, augmented over the life of the project to up to approximately 450 battery containers. The BESS pads would be accessed via 20' wide gravel access roads. The BESS layout is detailed per Appendix A-2. Each battery enclosure would include steel cabinets that hold arrays of lithium-ion batteries. The BESS will be equipped with a heating, ventilation, and air conditioning (HVAC) cooling system with an operating temperature range of -30 to 55 degrees Celsius. Schematic drawings of the BESS Project components are included as Appendix A-5 and a one-line electrical drawing of the BESS is provided as Appendix A-6. Preliminary specification sheets for the inverters and BESS are included per Appendix A-7. The BESS would be charged by power generated from the proposed Solar Project detailed per the concurrent SUP applications and dispatched back to the grid when called upon.

2.6.4.1 BESS Contact Information

The Applicant will contract to hire a construction contractor to build the system/project. The Applicant is the owner, and operator of the BESS Project. The Applicant's address and contact information are detailed below.

System Owner, & Operator

Fortress Solar III LLC

Mailing Address: 11801 Domain Blvd, Suite 450, Austin, TX 78758

Telephone: (888) 287-9058

System Installer

As required by Morgan County Code, Section 4-855(A)(4), contact information for the contracted system installer will be provided to Morgan County prior to issuance of a building permit for the Project.

2.6.5 Project Substation & Generation Tie Line Interconnection

The Project substation would occupy approximately 2-acres and is located north of the BESS area. The Project substation would consist of power transformers, overhead bus, feeder breakers, and miscellaneous supporting equipment.

The Project substation would include an overhead 1.25-mile, double circuit 230 kilovolts (kV) gen-tie line interconnection to the existing Tri State Story substation located west of the Project. The final engineering for the Project and the gen-tie line has not been completed yet. The Applicant is considering two options for infrastructure: H-frame or monopole designs equipped with robust insulators, conductors, and grounding systems to uphold system reliability and safety standards. The anticipated transmission structure heights range from 90 to 110 feet aboveground. The span length between structures will depend on the final chosen pole type and conductor. H-frames have an average span of approximately 750 feet, monopoles have an average span of approximately 900 feet, and lattice

towers span an average of 1150 feet. The Applicant anticipates installation of approximately 8 monopoles, 9 H-frames, or 6 lattice towers based on the final structure chosen during detailed engineering. The final design of these structures will be developed in collaboration with Tri-State and Public Service Company of Colorado to meet all relevant requirements.

The Applicant seeks administrative approval for transmission structures that may exceed the 100-foot height threshold defined for structures in Agriculture Zoning districts. Exceeding this threshold is deemed necessary to ensure adequate clearance for both existing and proposed transmission lines, as well as to comply with safety regulations. The need for structures that exceed 100 feet might be influenced by the procurement strategy that includes equipment availability and lead times. The Applicant will adhere to established utility pole standards, including those for transmission poles, as outlined by the American National Standards Institute and the National Electrical Safety Code.

2.6.6 Electrical Collection System

All electrical interconnection and distribution lines within the BESS Project boundary will be underground, except for power lines that leave the BESS Project or are within the substation. All electrical interconnections and distribution components will comply the National Electrical Safety Code, requirements of the electric utility company, and applicable state and federal regulatory codes as required by Morgan County.

A one-line electrical diagram detailing the BESS layout, associated components, and electrical interconnection methods is included per Appendix A-6.

2.6.7 Operations and Maintenance Building

A 60-foot by 40-foot, 2,400 square foot steel modular operations and maintenance building would be constructed east of the Project Substation, north of the BESS area. The O&M building would have a maximum height of fifteen feet and eight inches. This building is further detailed in the accompanying Solar Project application.

2.6.8 Perimeter Fencing & Site Security

In accordance with Section 4-860(B) of the Morgan County Zoning Regulations, the Project will be surrounded by an 8-foot-tall fence, consisting of 7-feet of chain-link and one foot of barbed wire (Appendix A-2). The Applicant held an initial coordination call with CPW on October 13, 2023. CPW informed the Applicant that fencing recommendations may be provided by per their recommendation letter. The Applicant is awaiting receipt of CPW's letter of recommendation however anticipates receipt prior to the initial public hearing. The Applicant will send notice of the initial public hearing date to CPW when scheduled by the County. A copy of the letter will be provided to Morgan County once received. The Applicant will continue to coordinate with CPW and will consider fencing recommendations. Site entrances will be gated and locked to assure access is limited to authorized personnel.

Exterior lighting would be installed and strategically located to ensure safety and security of the facility without disturbing surrounding areas outside the Project. Lighting would be installed around the periphery of the BESS area, substation, and entry gates, for nighttime security. The lighting for facilities will be designed to meet the minimum number of lights and illumination required for safety and

security and will not cause excessive reflected glare. The Project is also subject to lighting requirements of the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC) and will comply with lighting regulations from these entities as well.

2.6.9 Utilities

2.6.9.1 Electric

The electric service provider for the proposed BESS Project will be selected closer to commencement of construction. At this time, proof of an electric bill or a letter of commitment from the electricity provider will be made available to Morgan County.

2.7 Access, Transportation, & Traffic

2.7.1 Access Roads

The BESS will be located within the proposed Project addressed per the concurrent SUP application submitted for the corresponding Solar Project. Primary haul route and construction deliveries to the Project will be provided via one new 20-foot-wide gravel access road constructed off County Road Q. The primary access for operations and construction commuter vehicles will be provided via a new 20-foot-wide gravel access road constructed off County Road R.5. Primary emergency access will also be provided via the access off County Road R.5. Secondary access for operations and construction commuter vehicles will be provided via a new 20-foot-wide gravel access road constructed off County Road R. The Project will be fenced, and security gates will be installed at each access point to limit access to authorized personnel. Gated entrances would be equipped with Knox boxes and keys to assure emergency personnel access. The proposed site access roads and entry points are depicted on Figure 2.

2.7.2 Morgan County Driveway Permits

The Applicant will obtain a driveway access permit for the access roads proposed to be constructed from County Roads R and Q. As noted per Appendix G, a copy of the two driveway permit applications submitted to the Morgan County and Bridge Department are provided per Appendix G of the SUP application submitted for Phase I of the Solar Project. An affiliate of the Applicant has entered into a Temporary License Agreement with Tri State, and the Applicant is in coordination with Tri State regarding the proposed access road from County Road R.5. Tri State will apply for and obtain the driveway access permit on behalf of the Applicant for the access road proposed to be constructed from County Road R.5.

2.7.3 Owner & Employee Commuter Routes

The access routes to be utilized by the landowner and employees during construction and operations are as follows:

Primary Commuter Route: I-76 to County Road R.5: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately .2 mile and will then head east on County Road R.5 until reaching the

site entrance. The total Commuter Route length from I-76 is approximately 2.4 miles. This access route may be used for emergency access to the Project site.

Secondary Commuter Route: I-76 to County Road R: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately .8 mile and will then head east on County Road R until reaching the site entrance. The total Commuter Route length from I-76 is approximately 3.1 miles.

2.7.4 Construction Haul Route

The haul route to be utilized by heavy vehicle truck traffic throughout construction will be from I-76 to the site access off County Road Q. The Applicant would install a tire washout station at the entrance to the Project site off County Road Q to reduce mud, rock, or debris tracked onto paved surfaces. An exhibit detailing a typical tire washout station is included as Appendix A-8. The route is depicted on Figure 3 and the site access is also detailed per Appendix A-4, labeled as 'Site Access #1'.

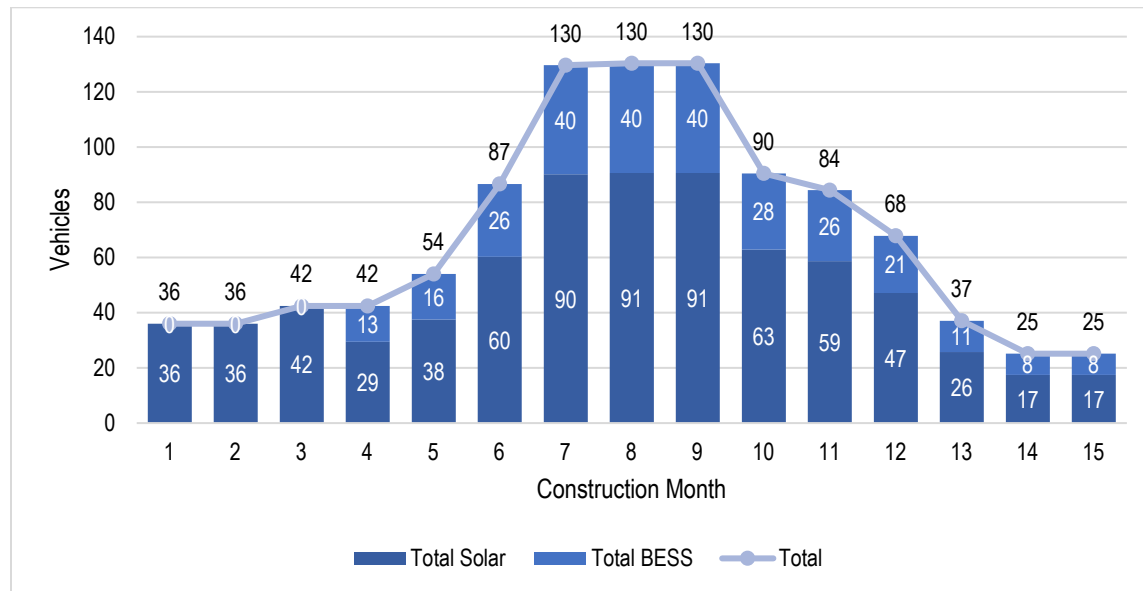
Haul Route: Interstate 76 (I-76) to County Road Q: From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately 1.9 miles and will then head east on County Road Q until reaching the site entrance. The total Haul Route length from I-76 is approximately 4.5 miles.

2.7.5 Construction Transportation & Traffic

The construction process for each phase is estimated to take up to 12 months to complete, during which time there would be some variability in the number of workers each day. Project initiation and site preparation would occur over the first 5 months and will require fewer workers and fewer materials delivery truck trips. After the site is prepared for installation, the Project site would experience an increase to a higher maximum number of workers and material delivery truck trips. The peak of construction period for each phase is anticipated to occur over a 3-month period. Upon the completion of construction, testing of the installed equipment for operational reliability and safety will occur over the last 4 months of the construction period. This phase will not require the use of any heavy machinery and will involve a minimal number of workers.

The typical daily construction traffic count for each month in each phase of the Project including the concurrent proposed Solar Project is detailed per Figure 2-2 below.

Figure 2-2. Typical Daily Construction Traffic Count (Per Phase)



During the peak commuting hours each morning and evening at the peak of construction for each phase of BESS construction, there would be an average of approximately 40 commuter vehicles arriving at or departing from the Project (Figure 2-2). It was estimated that 200 deliveries would be made over the course of construction of each phase. This amount includes 100 trucks delivering the BESS components, and 100 trucks delivering battery inverter/transformer components. During peak construction, there would be an average range of 3 material delivery truck trips per day. Material delivery trucks are not expected to coincide with the peak hour, rather they would arrive at the Project site throughout the day.

The Colorado Department of Transportation (CDOT) Traffic Data Explorer was accessed to obtain Annual Average Daily Traffic (AADT) counts along the Project haul routes. The AADT counts represent the average number of vehicles traveling on a road segment for a typical day of the year. The AADT data available for the count stations along the Project access routes, the anticipated number of daily trips, and maximum percentage increase in AADT per phase is detailed per Table 3 below.

Table 3. Existing and Anticipated Increase in AADT

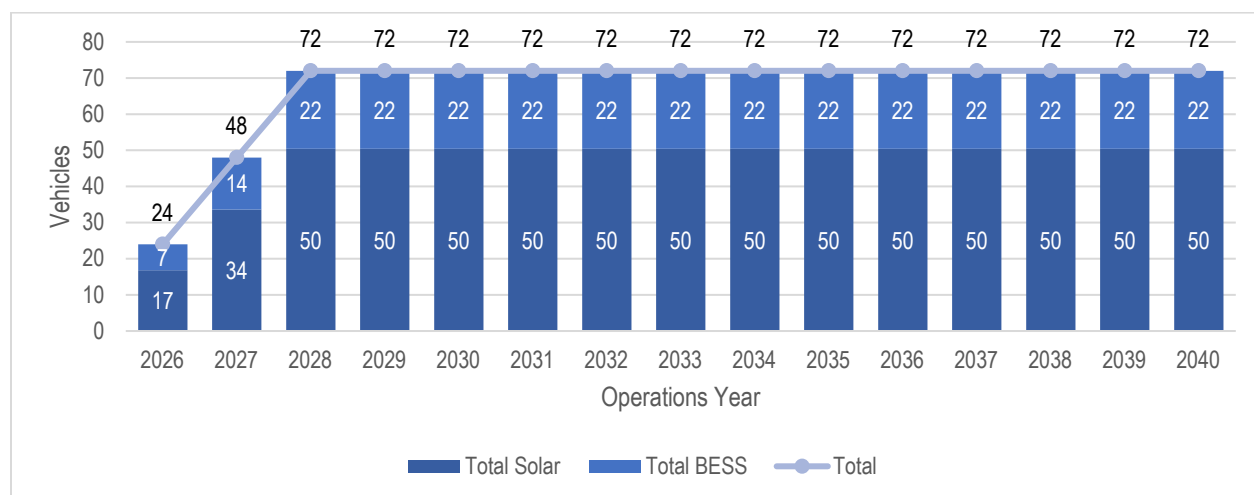
Access Route	Existing AADT Counts ¹	Average Estimated Daily Trips	Maximum Percent Increase in AADT (%)
Primary Commuter, Secondary Commuter, & Haul Route	Interstate 76, Station 103412: 12,000	86 (40 Commuter + 3 delivery)	.72
	U.S. Highway 34, Station 101481: 3,800		2.3
	State Highway 71, Station 103254: 2,700		3.2
	State Highway 71, Station 000213: 1,800		4.8

Source: CDOT 2023

2.7.6 Operations Transportation & Traffic

During operations once all three phases are constructed, the Applicant anticipates 11 full-time operations and maintenance employees would commute daily to the facility. A total of up to 22 trips per day would occur along access roadways (Figure 2-3). Therefore, the transportation and traffic impacts associated with the Project operation are anticipated to be minimal. The operational phase of the Project is expected to be 25 years but may be extended if facility components are upgraded or replaced. The typical daily traffic count for each operational year of the Project including the concurrent proposed Solar Project is detailed per Figure 2-3 below.

Figure 2-3. Typical Operations Traffic Count



2.7.7 Oversized / Overweight Loads

There are expected to be up to approximately 90 oversized/overweight load deliveries per phase associated with the BESS Project for the transport of the BESS containers, inverters, and transformers. The remaining heavy vehicle traffic would be standard size five-axle tractor trailers—some of these would be enclosed, and some would be in the form of flatbed trucks or smaller vehicles. Smaller heavy vehicles are likely to include water trucks, concrete trucks, and aggregate trucks. Applicant or their contractor would obtain the necessary oversize/overweight permit from CDOT prior to delivery of these oversize/overweight loads.

2.8 Required Public Improvements

2.8.1 Road Use Agreement

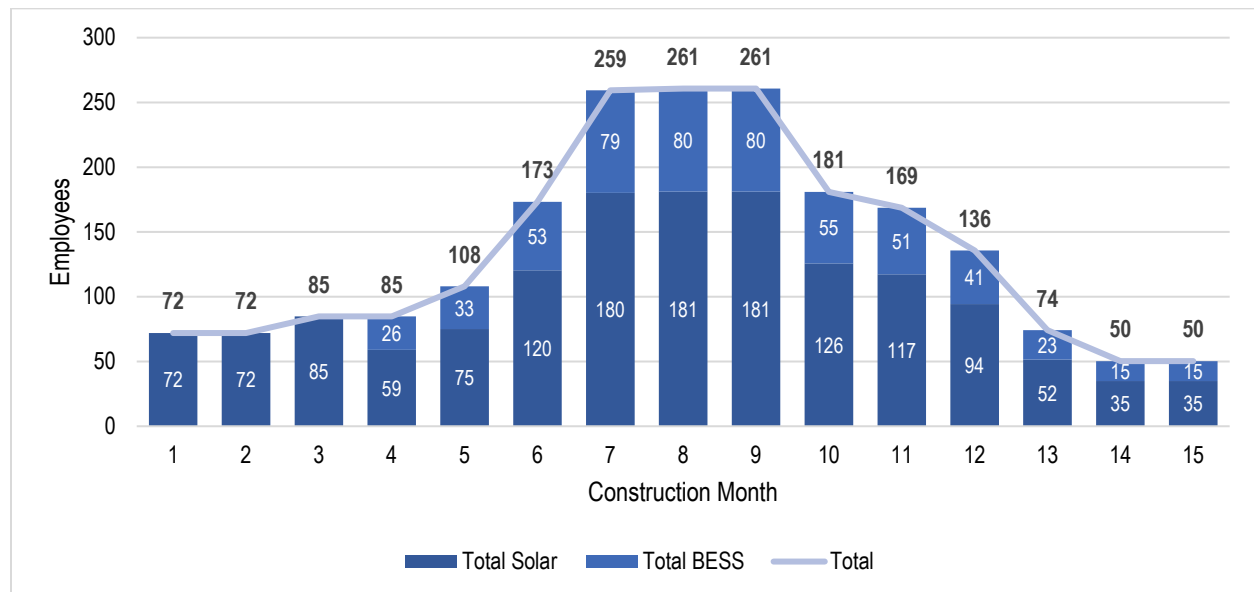
Applicant will enter into a Road Use Agreement with Morgan County prior to the start of construction, as further detailed in the corresponding application for Phase III of the Solar Project.

2.9 Employees, Equipment, and Facilities

2.9.1 Construction Crew, Equipment, & Facilities

The on-site construction workforce would consist of engineers, heavy equipment operators, truck drivers, laborers, craftsmen, electricians, supervisory personnel, and construction management personnel. In total, there would be an average of approximately 80 workers onsite during the 3-month peak construction period of each phase of the BESS Project. The construction labor schedule for each phase of the Project including the BESS Project and the concurrent proposed Solar Project is detailed per Figure 2-4 below.

Figure 2-4. Typical Construction Labor Schedule (Per Phase)



Construction would occur five days a week for an estimated 10 hours per day. Additional hours may be necessary to make up for schedule and weather delays.

Typical equipment that may be present on site as required includes, but is not limited to, graders, excavators, bulldozers, backhoes, cutting machines, end loaders, delivery trucks, trenching machines, flatbed trucks, cranes, rollers, electrical test equipment, off-road buggies, forklifts and carry decks, water supply trucks, water spray trucks, concrete mixers, compaction machines, survey equipment, and light trucks.

Vehicles will access the site through the proposed entrance gate off Highway 34 for delivery of materials and crew transportation. Electrical construction will occur following the installation of equipment and be performed by NERC certified electricians.

Temporary staging areas will not extend beyond the overall boundary of the Project. Temporary staging areas would include a laydown area, parking, trash disposal facilities, construction trailers, and sufficient portable toilets and potable water for use by construction staff. Mobile trailers, modular offices, or an equivalent would be used as construction offices for Project staff and subcontractor personnel.

2.9.2 Operations Workforce

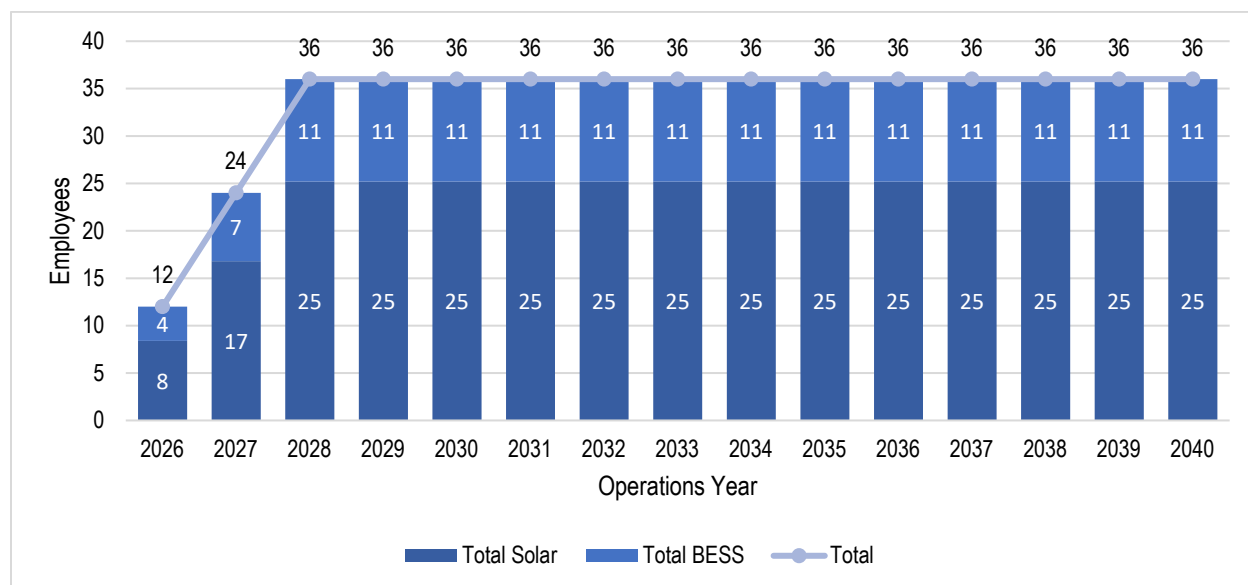
Upon completion of all three phases, operation of the BESS Project will require a minimum of 11 full-time positions including supervisory positions, sitework crew members, and miscellaneous crew members, as detailed per Table 4. Operations may also require third party contractors to perform specialized services.

Table 4. Project Operational Workforce

Worker Title	Quantity	Comments
Supervisory Crew	1	Supervision from inspection, engineering, project management, superintendent, assistant superintendent, etc.
Miscellaneous Crew	1	Miscellaneous including cleanup and materials handling
Sitework Crew	9	Civil works, then trenching etc. for elec. Installation
TOTAL	11	

The labor schedule for each operational year of the Project including the BESS Project and the concurrent proposed Solar Project is detailed per Figure 2-5 below.

Figure 2-5. Typical Operations Labor Schedule



2.10 Project Compliance with Morgan County Comprehensive Plan

As presented below, the BESS Project is consistent with the following guiding principles, goals, and policies for utilities, economic development, environment, land use, and transportation as identified per the Morgan County 2008 Comprehensive Plan.

2.10.1 Utilities

GOAL: To ensure that adequate and financially secure public utilities are provided to all developments in Morgan County.

The Applicant intends to establish a power purchase agreement with multiple purchasers of power. Per the Morgan County Comprehensive Plan, “existing facilities should be expandable in addition to new facilities to allow service for any reasonable projected growth”. The Project would provide grid resiliency and backup power to existing and future residents of Morgan County.

Development of the Project will include an approximate 2,400 sf operations and maintenance building. Electric utilities will be extended to serve the O&M building. No water or wastewater services are anticipated for the O&M building. The Project will require telecommunications services for internet which will be extended to the project site. The Project substation will interconnect to Tri State’s existing Story substation located west of the Project through a 1.25-mile gen-tie line and will not adversely affect transmission uses existing on and adjacent to the Project site.

2.10.2 Economic Development

GOAL: Diversify the economy in Morgan County to broaden business employment opportunities for residents and to further economic growth.

Goal: Encourage the location of new industry and the expansion of existing businesses that will provide employment opportunities and increase the tax base to strengthen the economy of Morgan County.

In accordance with the Morgan County Comprehensive Plan, development of the Project would contribute to the Colorado New Energy Economy. Policy number 10, identified per the Comprehensive Plan specifically notes that Morgan County should work to attract and maintain renewable energy projects to meet this goal (Morgan County 2008).

Development of the Project would provide economic benefit to Morgan County through increased revenues to county, local municipality, and school district tax bases and local employment opportunities. The Applicant will utilize local labor as much as is practicable depending on the availability, experience, and qualifications of available local firms and laborers. Throughout the construction period, construction workers will support local businesses including hardware supply stores, restaurants, hotels, gas stations and hotels. Workers originating outside Morgan County will be expected to remain in the region only throughout the duration of construction.

2.10.3 Environment

Goal: Preserve the manmade and natural environment in order to enhance the quality of life in Morgan County and to make environment considerations part of the land use decision-making process.

Per the Morgan County Comprehensive Plan, new developments are to be reviewed and judged based on the identification of sensitive lands and the mitigation techniques used to minimize the impacts of physical development on the land (Morgan County 2008). Siting analysis confirms the proposed site location avoids areas or locations with a high potential for biological conflict, such as wilderness study areas, areas of environmental concern, historic trails, special management areas, or important wildlife

habitat or corridors. The BESS Project is sited outside of identified wetlands and floodplains and will avoid adverse impacts on plant and wildlife species. Tetra Tech has prepared a Drainage and Runoff Control Plan, supporting Drainage Study, and Wind and Water Erosion Control Plan to identify site drainage patterns, required improvements and mitigate erosion and storm runoff potential. As further discussed in Section 4.0, there are no known sensitive biological, hydrological, historical, cultural, or archeological resources within or near the proposed Project site.

Furthermore, development of the BESS Project and Solar Project would provide 600 MW of BESS and 600 MW of electricity produced by renewable energy, respectively. Development of the Project is in accordance with policy number 14 identified per the Morgan County Comprehensive Plan which notes that Morgan County shall encourage use of renewable resources and production of biofuels and electric power from such resources (Morgan County 2008).

2.10.4 Land Use

Goal: To encourage development where: 1) it is in proximity to the activity centers; 2) the proposed development is compatible with existing land uses; 3) there is access to established public infrastructure (primarily roads and utilities); and 4) where, in outlying areas of the county, there is access to utilities and there is little additional burden on rural services.

The BESS Project site is located 1.6 miles southeast of the city limits of Brush, Colorado. Existing land uses in the BESS Project Area include rangeland and overhead electric transmission lines. Existing adjacent land uses include rangeland, an electric substation, rural residences, a cattle feed lot, and the Brush Municipal Airport. The BESS Project is compatible with these existing uses. The Project site is in the Agricultural Production zoning district which allows for permitting of large-scale solar facilities including BESS as an accessory use through issuance of an SUP. The Project site has access to established utilities and County Roads.

Goal: The county will encourage the preservation of agriculture production lands in balance with pressures for land use changes to higher intensity development.

Per the U.S. Department of Agriculture, Natural Resources Conservation Science, Web Soil Survey data, the BESS Project Area does not include any soil types designated as prime, unique, or farmland of statewide importance. Therefore, development of the Project is not anticipated to not result in impacts to or loss of prime, unique, or farmland of statewide.

2.10.5 Circulation and Transportation

Goal: To provide residents and businesses in Morgan County with a circulation system that connects the major county activity centers with the outlying communities of the county, regional employment generators and the rest of the state in the interests of providing economic opportunity, access efficiency and safety and improving the quality of life.

Policy 1: Traffic and Roads

- *Require new developments to mitigate impacts to adjacent county roads.*
- *Require traffic generation studies for large developments.*

As detailed per Section 2.7 traffic on county roads is anticipated to increase during construction of the Project and Applicant will enter into a Road Use Agreement with Morgan County to address impacts on County Roadways resulting from construction.

2.11 Project Compliance with Special Use Permit Review Criteria

Per Morgan County Code Section 3-180, BESS facilities may be permitted in the Agriculture Production zone through issuance of a SUP. The BESS Project has been reviewed for accordance with, and meets the following criteria required to approve a special use permit as outlined per the Morgan County Code, Section 2-395.

(A) The use and its location as proposed are in conformance with the Morgan County Comprehensive Plan

The BESS Project aligns with Morgan County's Comprehensive Plan, adopted in 2008 as indicated per Section 2.10 above. Project development, proposed mitigation measures, and forecasted benefits are consistent with the County's goals and policies related to economic development, environment, land use, utilities, and transportation. The Project would support grid resiliency with economic, environmental, and social benefits to current and future residents.

(B) All the application documents are complete and present a clear picture of how uses are to be arranged on the site or within Morgan County;

The Applicant has submitted a complete SUP application package for Phase III of the BESS Project. The Applicant will submit any requested revisions and additional documents requested by the Morgan County Planning Services Department upon their review of the application. The table at the beginning of this report details each SUP submittal requirement with the application report section addressing each checklist item. The submittal has been provided as a hard copy and electronically, fulfilling submittal requirements in Section 2-380 of the Morgan County Zoning Regulations.

(C) The site plan conforms to the district design standards of these Regulations;

The Project site plan and special use map have been developed in accordance with Sections 2-410 and 2-420 of the Morgan County Zoning Regulations.

(D) All on and off-site impacts have been satisfactorily mitigated either through agreement, public improvements, site plan requirements or other mitigation measures;

Potential adverse environmental impacts and the correlating sufficient mitigation measures are detailed in Section 4.0, Environmental Impact Analysis.

(E) The special use proposed has been made compatible with the surrounding uses and adequately buffered as determined by the County;

Existing surrounding adjacent uses include the Tri State-owned Story substation to the west, low-density rural agricultural residences to the northwest, west, and southwest, open rangeland to the north, east, and south, the Brush Municipal Airport northeast, across Highway 34, and the existing Pinneo cattle feedlot north of Highway 34.

The BESS Project would be compatible with existing surrounding adjacent land uses. The BESS Project would not result in significant adverse impacts to surrounding properties. Potential impacts are limited to fugitive dust, traffic, and noise during the construction phase. During operations, the BESS Project would be operated remotely and generate little to no daily traffic, generate no air emissions, emit no glare, and is sited and designed to minimize noise impacts. A discussion of potential impacts and proposed mitigation measures are detailed per Section 4.0.

The Project site layout has been designed in accordance with the minimum 70-foot setback required from exterior parcel lines and the 500' buffer required from adjacent buildings (Appendix A-2).

(F) The special use poses only the minimum amount of risk to the public health, safety and welfare as set by either federal, state or county regulation, whichever is the strictest;

The BESS Project is not anticipated to be unduly detrimental or injurious to property or improvements in the vicinity and will not be detrimental to public health, safety, or general welfare.

Emergency access to the site will be provided via 20' wide access roads and gated entrances will be equipped with Knox boxes and keys. The Applicant will maintain sufficient water sources and portable fire extinguishers on site for emergency use. Water would be stored on site in above ground tanks and/or cisterns. The water tanks and/or cisterns will be located and installed per compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency.

The Applicant has developed an Emergency Operations and Fire Mitigation Plan for the Project detailing proper responses to emergency events, fire mitigation measures, and firefighting considerations. The Emergency Operations and Fire Mitigation Plan was provided to local officials of the Brush Volunteer Fire Department, the Brush Rural Fire Protection District, and the Hillrose-Snyder Volunteer Fire Department for review and comment and is included as Appendix H.

The presence of energized equipment within the facility could result in public health or safety concerns, however site access will be limited to authorized personnel and the BESS Project will be developed in accordance with the physical security standards defined per the NERC Code Section, CIP-014-2 (NERC 2023). Proposed security measures include placement of warning signage along the perimeter and entrance points to the facility, installation of a site perimeter fencing with locked, gated entrances, installation of security lighting, and 24/7 remote site monitoring.

The Applicant is committed to developing and operating the facility in a safe and environmentally friendly manner. The Project will adhere to all applicable health and safety standards and regulations.

(G) The special use proposed is not planned to be developed on a non-conforming parcel;

The BESS Project is not proposed to be developed on non-conforming parcels. All parcels located within the Project site are conforming parcels and meet the minimum 35-acre lot size required in the Agricultural Production zoning district.

(H) The applicant has adequately documented a public need for the project, all pertinent technical information, adequate financial resources to implement it, and has paid all fees and review costs levied by the County for application processing and review; and

The Project would advance Colorado's renewable energy portfolio standard, provide a local source of clean energy, and would provide an economic benefit to Morgan County through tax revenue generation and local job opportunities.

The Applicant will pay all fees and review costs required by Morgan County for application processing and review. The Applicant is an indirect subsidiary of Aypa. Aypa is a Blackstone portfolio company. Aypa has a proven track record of developing, financing, constructing, owning, and operating utility-scale renewable energy projects. Aypa currently has an operating fleet of 30 projects, two projects currently under construction, and over 70 projects in the development pipeline.

(I) For any special use requiring a supply of water that the applicant has demonstrated a source of water which is adequate for the proposed use in terms of quantity and reliability and in the case of human consumption, quantity, quality, and reliability.

The Applicant will source water needed during the construction and operations phases from the existing groundwater wells available on the Project site. In the event offsite water is required, water will be sourced from an off-site location, transported to the Project site via water trucks, and stored on site in above ground tanks and/or cisterns. The water tank will be in strict compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency. As this water supply would rarely be used, The Project will have minimal effects on overall water availability and will not burden local water resources. No new water infrastructure will be necessary for the Project.

2.12 Project Compliance with regulations for BESS facilities

The Project meets the following standards defined per Morgan County Code Section 4-860 for the regulation of BESS facilities.

(A) BESS shall comply with all applicable requirements of the underlying zone district and the Accessory Uses and Structures requirements in Sec. 3-130 of these Zoning Regulations.

The BESS Project Area is in the Agricultural Production zoning district. BESS may be permitted as a primary or accessory use in the Agricultural Production zone through issuance of an SUP. The BESS Project will comply with standards defined for accessory structures per Section 3-130. The BESS is sited and designed in accordance with the setbacks and height limits defined for the Agricultural Production District. The BESS exceeds the minimum setbacks required in Agriculture zones per Appendix B of the Morgan County Zoning Regulations and is sited consistent with the setbacks required for solar collector facilities.

(B) All BESS, including all mechanical equipment, shall be enclosed by a minimum of a six (6) foot tall fence with a self-locking gate to prevent unauthorized access, unless housed in a building dedicated to the BESS. No fencing may interfere with any ventilation or exhaust ports.

The BESS Project and Solar Project will be enclosed by an eight-foot-tall fence, consisting of seven feet of chain link and one foot of barbed wiring. All four access points to the surrounding Project will be gated and locked to limit access to authorized personnel. The two proposed entry points to the BESS area will also be gated and locked. Knox boxes and keys will be provided at all locked entry points to assure emergency personnel access.

(C) All BESS, their components, and associated ancillary equipment shall be placed with required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with applicable electric code, as adopted by the State of Colorado.

The Applicant will ensure that the BESS is installed consistent with applicable electric codes and designed to comply with working space clearances and weatherproofing elements.

3.0 IMPACT ON ADJACENT USES, OFF-SITE IMPACTS, & IMPACTS TO COUNTY SERVICES & CAPITAL FACILITIES

3.1 Impacts on Existing Adjacent Uses & Off-site Impacts

Existing surrounding adjacent uses include the Tri State Story substation to the west, low-density rural agricultural residences to the northwest, west, and southwest, open rangeland to the north, east, and south, the Brush Municipal Airport northeast, across Highway 34, and an existing Pinneo cattle feedlot north of Highway 34.

The BESS Project would be compatible with existing surrounding adjacent land uses. The BESS Project would not result in significant adverse impacts to surrounding properties. Potential impacts are limited to fugitive dust, traffic, and noise during the construction phase. During operations, the BESS facility would be operated remotely and generate little to no daily traffic, generate no air emissions, emit no glare, and is sited and designed to minimize noise impacts. A discussion of potential impacts and proposed mitigation measures are detailed per Section 4.0.

Offsite impacts are limited to increased traffic and potential noise and fugitive dust resulting from vehicle traffic during construction along the Project Haul Route detailed per Figure 3. Proposed mitigation measures to minimize fugitive dust and noise impacts are detailed in Section 4.0.

3.2 Impacts on County Services & Capital Facilities

3.2.1 Capital Facilities, Social Services, & Infrastructure

The BESS Project is not expected to require additional community or local government services beyond those currently provided in the area. The BESS Project development is not expected to result in additional significant demand for transportation infrastructure, educational facilities, social services, housing, or public transportation.

The Applicant will enter into a Road Use Agreement with Morgan County to address impacts on County Roadways from transportation of heavy equipment resulting from construction as further discussed in Section 2.8.1. Oversized vehicles delivering BESS Project components may result in temporary traffic delays. The Applicant or their contractors will hire flaggers to maintain adequate levels of traffic flow as

needed and Applicant's contractors will obtain necessary oversized and overweight vehicle permits to authorize transportation and delivery of these loads.

No new water or wastewater infrastructure will be necessary for the Project.

3.2.2 Waste Management

Solid waste generated by the BESS Project during construction and operations will be handled by a solid waste hauling and management firm contracted by the Applicant or its designated contractor(s). Waste will be separated by type, collected, and transported to the appropriate facility in a manner that complies with applicable federal, state, and local regulations, and minimizes potential impacts to the surrounding community. Waste materials will be handled, stored, and disposed of in a manner that controls fugitive dust, fugitive particulate conditions, blowing debris, leakage into the soil or surface water or groundwater, and other potential nuisance conditions. Project construction is not expected to require onsite treatment, storage, or disposal of hazardous wastes that will require hazardous waste permits. No extremely hazardous materials, as defined by 40 Code of Federal Regulations part 355, are anticipated to be produced, used, transported, or disposed of during Project construction. Any hazardous wastes generated during construction will be properly characterized and managed by the Applicant and their contractor(s). The handling of hazardous materials and waste will be done in accordance with all federal, state, and local laws and regulations.

3.2.3 Public Safety Services

The BESS Project is not anticipated to result in a significant increase in demand for public safety services.

The BESS Project is located within the boundaries of the Brush Fire Protection District. Brush Fire Station 1 is located approximately 2.15 miles west of the Project site. The Hillrose-Snyder Fire Protection District boundary is approximately one mile north of the Project site. Prior to construction, the Applicant will work with Morgan County, The Brush Rural Fire Protection District, Brush Volunteer Fire Department, and the Hillrose-Snyder Fire Protection District.

During construction and operations, the Applicant will ensure local Fire Departments have 24/7 access to the BESS Project site to respond to emergency incidents. Knox boxes and keys will be installed at locked entrance gates for emergency personnel access. Site access roads will be constructed up to 20 feet in width with compacted all weather gravel. During site construction and operations, the Applicant will maintain sufficient water sources and portable fire extinguishers on site for emergency use. Water would be stored on site in above ground tanks and/or cisterns. The water tanks and/or cisterns will be located and installed per compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency.

The Project facility layout is designed to provide defensible space for fire protection throughout construction and operation of the facility. Ongoing maintenance would be provided to ensure removal of vegetation and other flammable materials from the defensible space areas. Vegetation control at the site will use materials and methods that ensure groundwater protection.

The Solar Project arrays will consist of non-combustible materials (aluminum, steel, or glass). The Project solar modules are designed to be resistant to fire, and the racks are constructed of non-combustible steel and aluminum. The solar panels and other electrical equipment will meet applicable Underwriters Laboratories and International Electrotechnical Commission ratings for their resistance to fire.

The BESS components are detailed on the specifications attached hereto as Appendix A-7. The BESS is outfitted with a liquid cooled thermal management system, a fire detection and suppression system including a fire suppression clean agent to prevent the spread of fire, gas detection, and NFPA 69 ventilation system for explosion control. E-Stops are also provided on the terminal ends of each BESS container to facility an emergency shutdown if necessary.

An Emergency Operation Fire Mitigation Plan has been prepared for the Project and is included as Appendix H. The plan addresses proper response plans for potential emergency events, facility evacuation details, emergency contacts, system safety considerations, battery fire protection system information, and firefighting considerations. Prior to construction, the Applicant will work with local fire personnel to ensure the Project's compliance with applicable fire safety regulations. The Applicant will also provide on-site training for surrounding departments to reduce fire risk at the Project.

3.2.4 Benefits

The Project is anticipated to result in economic benefits for the following taxing jurisdictions: Morgan County and Morgan County School District RE-2 (Morgan County 2023c).

Local, regional, and state employment will benefit those in the construction trades including heavy equipment operators, truck drivers, engineers, laborers, craftsmen, electricians, supervisory personnel, and construction management personnel. Prior to and during construction, the Project will utilize both local and non-local consultants and contractors for the design and construction. The design and construction scopes of work are typically bid out to a range of consultants and contractors. It is the Applicant's preference to utilize local labor as much as is practicable and will direct those acting on their behalf to carry the same preference depending on the availability, experience, and qualifications of available local firms and laborers. Workers originating outside the labor market area will be expected to remain in the region only throughout the duration of construction.

4.0 ENVIRONMENTAL IMPACT ANALYSIS

4.1 Air Quality

The 1963 Clean Air Act (as amended; 42 U.S.C. 7401) requires government agencies to monitor air pollution and promote air pollution prevention and control programs. The BESS Project Area is within the Eastern High Plains monitoring region of Colorado (CAPCD 2023). As of August 30, 2023, Morgan County, Colorado is in attainment for all U.S. Environmental Protection Agency (EPA) criteria pollutants (EPA 2023). Currently, local emission sources in the Project vicinity include personal and commercial vehicle emissions, aircraft emissions at the nearby Brush Municipal Airport, and agricultural operations.

It is anticipated that the Project construction and operations will result in additional, negligible amounts of pollutants including particulate matter, diesel particulates, and carbon monoxide. The

construction phase of the Project will temporarily cause fugitive dust related to the following activities: grading activities, preparation of the staging and equipment laydown area, excavation and construction of equipment pads, the mixing and preparation of concrete, and construction of access roads. Fugitive dust may also be generated by vehicular traffic associated with construction and operation of the Project, and by the delivery of materials to and within the Project Area. The emissions from the Project construction would be limited in duration to 12 months per phase and emissions from the Project operation would be zero or near zero. Therefore, Project emissions are not anticipated to significantly contribute to ozone, particulate matter, or other air pollutants within the Eastern High Plains monitoring region.

The Colorado Air Quality Control Commission requires an Air Pollutant Emissions Notice (APEN) and associated fees to be submitted to the Colorado Department of Public Health & Environment (CDPHE), Air Pollution Control Division when a Project proposes to disturb more than 25 acres or construction will last greater than 6 Months. The Applicant or their contractor will submit the Land Development APEN: Form APCD-223 prior to the start of construction. To comply with county and state air quality regulations, methods for limiting dust and maintaining air quality during construction would be implemented. Vehicles and equipment will comply with applicable state and federal emission standards and will be properly maintained to minimize exhaust emissions.

A Wind and Water Erosion Control Plan is included as Appendix I which details best management practices (BMPs) that will be utilized to prevent wind and water erosion and run-off during construction.

The Applicant will prepare a Fugitive Dust Control Plan in accordance with CDPHE requirements for the Land Development APEN prior to construction. Dust control measures include watering unpaved roads and earthen areas with limited vegetation, covering exposed piles of dirt, maintaining low vehicle speeds within the Project Area, covering stockpiles during sustained wind events, installing tire wash out stations at site entrances to minimize track out, and covering truck loads. Water would be applied regularly to disturbed areas and stockpiles during construction to prevent the addition of particulate matter/fugitive dust into the local airshed. Additional BMPs would be implemented as needed from the EPA national menu of BMPs and may be used as necessary during construction to help limit dust.

4.2 Dust and Odor

See Section 4.1 above for details on the potential fugitive dust impacts resulting from the Project and proposed mitigation measures.

Given the surrounding land use, current odors present at the BESS Project Area likely include fugitive odors from the operation of the Brush Municipal Airport, Pinneo cattle feedlot, and vehicle emissions along nearby roads. Local traffic volume would increase in and around the BESS Project Area during construction. The increased traffic would temporarily increase odors from vehicle emissions. Odors are also anticipated from the operation of heavy machinery during construction. Impacts from odors during Project operation would be minimal and are likely limited to emissions from the vehicles of maintenance personnel. Overall, the impacts of odors from Project construction and operation are anticipated to be minimal and insignificant. As a result, no specific mitigation has been identified for odor impacts and no management of odors would be performed during construction or operation.

4.3 Noise Receptors, Ordinances, and Conformance

Current sources of noise in the BESS Project Area include wind, distant road and highway vehicles, and surrounding cattle feed lot and airport operations.

Temporary noise impacts during construction would occur during daylight hours through the operation of construction equipment, including, but not limited to, passenger vehicles, graders, loaders, water trucks, semi-tractor/trailer trucks, and hydraulic hammers. The spatial distribution of construction noise emissions would vary during the day and depend on the type of activity. Construction traffic would generate noise along the project access routes (Figure 3). This noise would be temporary during commuting hours and when supplies are delivered over the course of construction.

Sources of noise during operation would include temporary vehicle noise from maintenance personnel access and typical noise emissions from the Project substation transformers, inverters, and BESS. The metal frame battery energy storage containers are insulated and air conditioned. Operation of the air conditioning equipment used to cool the batteries would be the dominant source of noise during operation of the proposed project. Each BESS container utilizes HVAC units. A secondary noise source would be the inverters which generate sound while converting generated electricity from direct current to alternating current. The proposed Project locate the inverter units between the BESS containers, providing noise shielding.

Construction and operation of the Project will not significantly increase noise at surrounding properties and will comply with the statutory provisions for maximum permissible noise levels for industrial zoning as defined per C.R.S. § 25-12-103. Construction projects are subject to the noise standards specified for industrial zones. Table 5 details the noise standards defined by the state, as referenced per the Morgan County zoning regulations.

Table 5. Colorado Noise Standards

Zone	7:00 a.m. to 7:00 p.m.	7:00 p.m. to 7:00 a.m.
Residential	55 dBA	50 dBA
Commercial	60 dBA	55 dBA
Light Industrial	70 dBA	65 dBA
Industrial	80 dBA	75 dBA

BESS Project construction activity would only occur during daylight hours, limiting the period for potential construction noise disturbance. Noise from inverters would be mitigated by the spatial layout of the Project and by the design of the inverters used. Typically, inverters are placed towards the interior of the BESS containers to minimize cable lengths. This causes inverters to be located in between BESS containers. Therefore, noise emitted from the inverters would be shielded by the BESS, and indistinguishable from background noise levels. Inverter noise emissions would be further minimized by the design of the inverter model(s), which would be equipped with shielding, filtering, and noise cancellation. BESS facilities generate noise from HVAC components; however, based on the proposed BESS facility location, no impacts to surrounding residences would occur. The BESS Project layout is designed in accordance with the minimum setbacks required for BESS facilities per the Morgan County Zoning regulations. The BESS area is sited more than one mile from existing rural residences located in

the vicinity of the BESS Project Area. Based on typical sound levels anticipated from Project operation, the distance from the equipment to the Project boundary will mitigate the effect of noise generated by the Project.

4.4 Existing Vegetation

According to the U.S. Geological Survey (USGS) National Land Cover Database (USGS 2019), the dominant land cover in the Project Area is grassland/herbaceous covering 4,161.6 acres or 93.62 percent (Table 6). A Tetra Tech biologist visited the Project site April 25-26, 2023. The Project Area was dominated by needle and thread grass (*Hesperostipa comata*), blue gramma (*Bouteloua gracilis*), and smooth brome (*Bromus inermis*). The Project Area is located in a predominately arid rangeland comprised of shrubland and grassland. No irrigated activities were observed within the Project Area (Appendix J).

Table 6. Land Use and Land Cover Present in the Project Area

Land Use/Land Cover ¹	Acres	Percent of Project Area
Grassland/Herbaceous	4,161.6	93.62
Scrub/Shrub	271.8	6.11
Developed Open Space	8.7	0.20
Developed, Low Intensity	3.1	0.07
Cultivated Crops	0.01	0.00
Total	4,445.2	100%

Source: 2019 National Land Cover Database (USGS 2019)

Existing rangeland will be converted to power generation use for the lifetime of the Project. Construction will have long term impacts on existing vegetation as result of removal of vegetation within the Project Area for the installation of project facilities and access roads.

Construction activities will also result in temporary impacts to existing vegetation, including soil disturbance and compaction. Disturbed areas outside of the proposed access roads, project substation, and BESS area will be revegetated with a native seed mix. Site vegetation will be maintained throughout the Project life by the Applicant.

As required by the Colorado Noxious Weed Act (C.R.S. 35-5.5-103), Morgan County has defined specific management for each List B noxious weed species (CDA 2023). Per Morgan County Code Section 3-700, The Applicant will plan to employ a program to control the growth of noxious and other weeds as part of the general property maintenance.

4.5 Special-Status Wildlife and Other Species of Concern

The Applicant contracted Tetra Tech to prepare a Wildlife Habitat Assessment for the Project consisting of a desktop review and field survey to document existing habitat and biological resources, including special status species and raptor nests that may be impacted by Project development (Appendix J).

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) online tool and Colorado Parks and Wildlife (CPW) online databases were used to identify federally and state-listed

species and other special status species (e.g., species protected by Bald and Golden Eagle Protection Act) that may occur within or near the vicinity of the Project Area.

Tetra Tech conducted a field survey on April 25th and 26th, 2023 to verify and characterize current land cover types in the Project Area that may provide suitable habitat for protected species. General landcover and wildlife observations within the Project Area were typical for the ecoregion. The following species were identified during the field visit: mourning dove (*Zenaida macroura*), coyote (*Canis latrans*), black-tailed prairie dog (*Cynomys ludovicianus*), European starling (*Sturnus vulgaris*), rock dove (*Columba livia*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), horned lark (*Eremophila alpestris*), and the western meadowlark (*Sturnella neglecta*). Unidentified small mammal burrows were also observed. Additionally, suitable nesting substrate within the Project Area was observed, however, no raptor nests were observed within a half-mile of the Project Area (Appendix J).

The USFWS and CPW sources reviewed for the assessment identified 10 protected species that have the potential to occur within the Project Area. However, no USFWS-designated critical habitat is present within the Project Area. A summary of the sensitive species' preferred habitat and potential for occurrence in the Project Area are detailed per Table 7 and further discussed in the Wildlife Habitat Assessment Report (Appendix J).

Based on the desktop analysis of land cover data, aerial imagery, range maps, and observations during the field survey, the following special status species may occur within the Project Area: bald eagle (foraging), burrowing owl (breeding) and golden eagle (foraging). All other special status species listed in Table 7 are unlikely to occur in the Project Area due to the absence of suitable habitat.

Table 7. Federally and State Listed Species Potentially Occurring within the Project

Common Name	Scientific Name	Status	Habitat Associations	Likelihood of Occurrence
Mammals				
Gray wolf	<i>Canis lupus</i>	FE; SE	Found in temperate forests, mountains, tundra, taiga, grasslands, and deserts. Morgan County is outside the current range of this species.	Unlikely—N/A. This species only needs to be considered for projects that include predatory management.
Bird				
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA	Typically found near large bodies of water that support fish populations and waterfowl. Will perch and nest in tall deciduous or coniferous trees near water.	Unlikely—Breeding Unlikely—Wintering Low—Foraging
Golden eagle	<i>Aquila chrysaetos</i>	BGEPA	Partly open country with native grassland vegetation. Nests on cliffs and in trees.	Unlikely—Breeding Unlikely—Wintering Low—Foraging
Burrowing owl	<i>Athene cunicularia</i>	ST	Typically found in prairie dog colonies in open areas with short grass and where suitable ground squirrel and badger burrows can be found, such as golf courses, cemeteries, airports, vacant lots, and pastures.	High to Moderate—Breeding Unlikely—Wintering

Common Name	Scientific Name	Status	Habitat Associations	Likelihood of Occurrence
Piping Plover	<i>Charadrius melodus</i>	FT; ST	Occurs in reservoirs, lakes, and rivers with sand and gravel areas and sparse vegetation.	Unlikely
Whooping crane	<i>Grus americana</i>	FE; SE	Occurs in freshwater marshes, wet prairies, shallow lakes, and lagoons.	Unlikely
Fish				
Pallid sturgeon	<i>Scaphirhynchus albus</i>	FE	Found in large river systems with firm sandy bottoms (e.g., the Missouri River). No streams are within the Project Area.	Unlikely
Flowering Plants				
Ute ladies'-tresses orchid	<i>Spiranthes diluvialis</i>	FT	Found in moist meadows associated with perennial stream terraces, floodplains, and oxbows at elevations below 6,500 feet.	Unlikely
Western prairie fringed orchid	<i>Platanthera praeclara</i>	FT	Found in unplowed, calcareous prairies and sedge meadows.	Unlikely
Insect				
Monarch butterfly	<i>Danaus plexippus</i>	FC	Found throughout the United States in open fields and meadows with milkweed (primarily <i>Asclepias</i> spp.). Milkweed is an obligate host plant for monarch larvae. Several milkweed species occur in Colorado in a variety of habitats such as grasslands, disturbed areas, wetlands, and irrigation ditches. Adults feed on milkweed and other flowering plants.	Unlikely

BGEPA = Bald and Golden Eagle Protection Act; FT = Federally Listed Threatened; FC = Candidate for Federal Listing (not a statutory category); ST = State Threatened; SE = State Endangered

The Applicant plans to implement the following measures to avoid, minimize, or mitigate potential impacts to protected species that could occur in the Project Area.

- If construction is to occur during the bird breeding season (generally from February 15 to July 31 for most species), a follow up raptor survey will be conducted prior to the start of construction to determine species and nest status prior to construction activities so that all raptor nests within 0.5 mile of the Project Area can be mapped and avoided. If raptor nests are active, species-specific nest avoidance buffers will be implemented per CPW's Recommended Buffer Zones and Seasonal Restriction for Colorado Raptors (CPW 2020), of which the largest buffer is 0.5 mile for bald and golden eagles (CPW 2020).
- A CPW-protocol burrowing owl survey (CPW 2021) will be conducted prior to construction activities to determine whether burrowing owls are present within 0.25 mile of the Project. CPW recommends no permitted, authorized, or human encroachment activities within 0.25 mile (1,320 feet, 400 meters) of the nest site for large industrial disturbances during the nesting season, March 15 through August 31.

- Project infrastructure, including facilities and access roads will be consolidated to the extent possible to minimize the amount of land that is disturbed and fragmented.
- Prior to installation of fencing, the interior of the fenced area would be searched to avoid entrapping wildlife. The enclosed facility would be checked regularly during operations to prevent accidental trapping of wildlife to the extent possible.
- The Project Area will not be lit at night to minimize wildlife attraction to Project infrastructure and limit impacts to hunting, migration, or other nocturnal activities of wildlife.

The Applicant has shared the results of the Wildlife Habitat Assessment with CPW and conducted an initial coordination call on October 13, 2023. The Applicant is awaiting receipt of CPW's letter of recommendation however anticipates receipt prior to the initial public hearing. The Applicant will send notice of the initial public hearing date to CPW when scheduled by the County. A copy of CPW's letter of recommendation will be provided to Morgan County once received. The Applicant will continue to coordinate with CPW to determine possible recommended BMPs and/or avoidance measures for construction activities.

4.6 Wetlands and Other Waters of the United States

The Applicant contracted Tetra Tech to prepare a wetland and other waters of the U.S. (WOTUS) assessment to identify potentially jurisdictional wetlands and/or other WOTUS within the Project Area. A Wetland Delineation Report was prepared for the Project in May 2023 and is included as Appendix K.

A desktop survey of surface waters was conducted using the USFWS National Wetlands Inventory (NWI) dataset (USFWS 2023), USGS National Hydrography Dataset (NHD) viewer (USGS 2023a), and Colorado Wetland Inventory database (CWI 2023). The results of the desktop analysis indicated no potential wetlands and waterways exist within the Project Area.

A Tetra Tech wetland scientist conducted a site visit on April 25th & 26th 2023, to perform a wetland and other WOTUS delineation within the Project Area. No wetlands or waterbodies were identified within the Project Area.

4.7 Water Use & Resources

The Applicant will implement strategies and practices that ensure responsible and efficient water consumption throughout the project's construction and lifespan operations. The Project will prioritize the use of non-potable water sources for site maintenance and dust control. By minimizing water usage and maximizing conservation, the Project will contribute to sustainable development and reduced environmental impact.

The Project will not require the use of a public water supply system. An affiliate of the Applicant is the option holder for the Project parcels, thus all water rights for the Project would be obtained upon closing. There are several existing deep-water wells located on the subject property (Figure 4). The Applicant will perform further studies to determine the feasibility of utilizing the existing deep-water wells for various project needs. These studies will encompass a comprehensive analysis of water quality, assessing parameters such as pH, dissolved minerals, and contaminants. Additionally, an assessment of well yield will be conducted to ascertain the sustainable pumping rate and availability of

water resources. By conducting these studies, the Applicant aims to ensure that the Project's water requirements align with the capacity and quality of the available deep-water wells, thus contributing to the overall success and sustainability of the Project.

In the event offsite water is required, water will be sourced off site and transported to the Project site via water trucks to be stored onsite in above ground tanks and/or cisterns. The Project will have minimal effects on overall water availability and will not burden local water resources.

Water use during construction would occur over the 12 months needed to construct each phase of the Project. Much of this water would be used for dust control but would also be used for hydration and compaction, backfill, cement stabilization and equipment cooling. The estimated water use during construction is approximately 470-acre feet per phase of construction.

During operations, water would be used for cooling equipment and supporting establishment of vegetation around the site. Approximately 30.6 acre-feet of water is estimated to be used per year during operations. The total estimated water usage during each phase of construction and during operations is detailed per Table 8 below.

Table 8. Estimated Water Usage

	Phased Construction (200 MW)	Operations (600 MW)
Assumed Acre Feet (AF) / MW ¹	2.35 AF / Year	0.051 AF / Year
Total Water Usage (non-potable)	470 AF	30.6 AF / Year

Source: Klise et al., 2013

4.8 Floodplains

Tetra Tech reviewed the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels, 08087C0490E and 08087C0500E effective May 18, 2021, and FIRM panels 08087C0652D and 08087C0675D, effective April 4, 2018. The Project is located in Zone X, which are areas determined to be outside the .2% annual chance floodplain (FEMA 2023).

4.9 Stormwater Runoff

A Drainage and Run Off Control Plan, and supporting Drainage Study were prepared for the project in October 2023 and are included as Appendix A-2 and L. Site grading and drainage improvements will be designed to contain post development stormwater run-off on site. Prior to the start of construction, the Applicant will obtain a permit for any stormwater discharges occurring during the construction phase of the Project in compliance with the COR400000 General Permit under the Colorado Water Quality Control Act.

In addition, the Applicant will manage temporary facilities to control erosion and sediment releases and to protect Project facilities from flooding during construction in accordance with the General Permit requirements. A Wind and Water Erosion Control Plan is included as Appendix I which identifies BMPs that will be utilized to prevent erosion and run off during construction.

4.10 Cultural Resources

The Applicant contracted Tetra Tech to prepare a Cultural Resources Survey Report for the Project in September 2023 (Appendix M). The Cultural Resources Survey Report documents the results of archival research including a records search, review of previously conducted survey reports, and review of historic maps. The purpose of the cultural investigation was to provide cultural and historical context of the Project site, identify any cultural resources located within the Project site, re-record a previously recorded site located within the Project Area and determine the Project's potential to affect potential and recorded historic and cultural resources.

A desktop records search was conducted through the Colorado Historic Society/Office of Archaeology and Historic Preservation Cultural Records online database. The Research Area includes the Project Area and a one-mile buffer. The search revealed that 12 prior surveys have taken place within the Research Area, but do not intersect the Project Area.

A total of 18 cultural resources have been previously recorded in the Research Area, including structures, archeological sites, and isolated finds (IF). These resources include several transmission line segments, one prehistoric IF, three historic IFs, two agricultural complexes, an agricultural equipment dump, a trash dump, and a trash scatter. One site (5MR.698) is listed as recommended eligible for listing in the National Register of Historic Places (NRHP), although the site form states that the site is recommended not eligible. One segment of the Beaver Creek to Deering Lake transmission line (5MR.696) is the only resource located within the Project Area and has been determined not eligible for listing in the NRHP.

Tetra Tech Archeologists conducted a site visit on June 27, 2023, to review the site located within the Project Area (5MR.696). Site 5MR.696 is a segment of Western Area Power Association's Beaver Creek to Deering Lake Transmission line. The State Historic Preservation Office has been previously determined the site as not eligible for listing in the NRHP. Tetra Tech agrees with this assessment of the site and recommends that the site is not eligible for listing in the NRHP.

The Cultural Resource Survey Report concludes the Project is unlikely to have an adverse effect on cultural resources. Site 5MR.696 has been determined as not eligible for the NRHP. Thus, construction-related disturbance of, or visual impacts to, this resource would not be considered an adverse effect. In addition, the potential to encounter additional resources is considered low due to the low site density and relatively low archaeological sensitivity of the Project Area.

Prior to construction, the Applicant will develop an Unanticipated Discovery Plan which will outline procedures to follow, in accordance with state and federal laws, if archaeological materials or human remains are discovered.

4.11 Visual Amenities

4.11.1 Visual Impacts

The visual setting within the Project is primarily undeveloped herbaceous grassland. Development within the vicinity of the Project site includes an electrical substation, overhead transmission lines, and rural residences.

The potential for aesthetic impacts from BESS projects is based on the type of technology, the scenic quality of the existing landscape, the degree to which the project will change scenic quality, and the viewer response to the change. Visual sensitivity, a key component of viewer response, is dependent on viewer attitudes and the types of activities in which people are engaged when viewing the site. Overall, higher degrees of visual sensitivity are correlated with areas where people live, are engaged in recreational outdoor pursuits, or participate in scenic driving. Conversely, visual sensitivity is considered low to moderate in industrial, commercial, and rural areas where the scenic quality of the environment does not affect the value of the activity.

No state-designated scenic roads (including scenic roads, historic roads, and parkways designations) or federally designated scenic roads (including national scenic byways and All-American road designations) within the Project site or vicinity (CDOT 2023b).

There are no public parks, recreation areas, or public gathering areas within view of the Project site. Drivers on County Road R, R.5, Q, and Highway 34 and adjacent rural residences would be the closest sensitive receptors to the Project site. The BESS area is sited more than a mile from existing rural residences in the vicinity of the Project site.

Tetra Tech anticipates that the Project would be considered low-moderate for visual sensitivity. The Project would visually contrast with the existing undeveloped rangeland. However, the Project will be consistent with the existing Tri-State owned electrical substation located west of the Project site. In addition, the gently sloping topography of the site provides a visual buffer of the Project Area from the nearby surrounding residences and roadways.

The Project is sited to provide a 500' buffer from existing inhabited buildings, and a 70' buffer or greater from exterior parcel boundaries and existing roadways. Six-foot-tall chain link fencing with one foot of barbed wire will be installed along the perimeter of the Project site boundary to provide an additional visual buffer.

4.11.1 Glint & Glare Analysis

Tetra Tech conducted a Glint and Glare analysis for the Solar Project which is included as Appendix N and further detailed per the concurrent Solar Project SUP applications.

4.12 Landforms

Morgan County is located in the Colorado Piedmont section of the Great Plains Physiographic Province. Underlying bedrock consists primarily of the Cretaceous Age Foxhills Sandstone and Pierre Shale that gently slopes east. The landforms of Morgan County consist primarily of typical Great Plains uplands and the broad valley of the South Platte River (Morgan County 2008).

The BESS Project will impact a small portion of this area and will not affect the general landform in the Project Area. The natural contours of the land will be returned where feasible following construction.

4.13 Soils

Tetra Tech reviewed the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey to identify and characterize the soils within the Project site. Based on desktop data, four distinct soil types are present within the Project Area (USDA 2023; Table 9). The dominate soil

unit is Valent sand, 3 to 9 percent slopes (3,144 acres and 70.7 percent of the Project Area). The Project does not contain any prime farmland, and all present soil types are rated as non-hydric (USDA 2023).

Table 9. Soils that Occur in the Project Area

Soil Name	Soil Unit	Acres	Farmland Classification	Hydric Rating (%)	Drainage Class
Truckton loamy sand, 0 to 3 percent slopes	TuB	176.1	Not Prime Farmland	Non-Hydric (0%)	Well Drained
Valent sand, 0 to 3 percent slopes	Va	1,123.1	Not Prime Farmland	Non-Hydric (0%)	Excessively Drained
Valent sand, 3 to 9 percent slopes	VcD	3,144.6	Not Prime Farmland	Non-Hydric (0%)	Excessively Drained
Valent sand, 3 to 9 percent slopes	VwD	1.7	Not Prime Farmland	Non-Hydric (0%)	Excessively Drained

Source: USDA 2023

Impacts to soils are anticipated to be temporary during the construction phase of the BESS Project. Activities impacting soils include the clearing of vegetation and grading of areas for access roads and installation of BESS Project facilities. Clearing and grading exposes soils to a risk of erosion from wind and stormwater. Impacts to soils during operations are anticipated to be minimal from use of access roads by operations and maintenance staff. The NRCS assigns wind erodibility groups to measure soil susceptibility to wind erosion. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. Soil types within the Project site are in either group 1 or 2, indicating high susceptibility to wind erosion (USDA-NRCS 2023). The NRCS also assigns a K Factor Rating which indicates the susceptibility of a soil to sheet and rill erosion by water. K factor values range from 0.02 to 0.69. The higher the value, the more susceptible. Soil types within the Project site have a low K factor indicating low potential for sheet and rill erosion by water (USDA-NRCS 2023). A Water and Wind Erosion Control Plan is included as Appendix I, which details detail erosion control measures and construction stormwater runoff management for the Project.

Appropriate BMPs and stormwater mitigation measures will be employed during construction and operation of the Project to avoid erosion that might be caused by the Project.

4.14 Farmland of Statewide Importance

Tetra Tech reviewed the USDA NRCS Web Soil Survey, and the Project Area does not contain any prime, unique, or farmland of statewide importance. All soils within the Project Area are rated as “Not Prime Farmland” (USDA 2023). Therefore, no impacts to prime, unique, or farmland of statewide importance is anticipated to result from development of the Project.

5.0 SITE MAPS & PLANS

5.1 Vicinity Map

The Project vicinity map is provided as Appendix A-1.

5.2 Special Use Map/Site Plan

The Project Special Use Map/Site Plan is provided as Appendix A-2.

5.3 Schematic Drawings

Schematic elevation drawings of the BESS and inverters are included in Appendix A-5.

5.4 One-Line Drawing

A one-line drawing of the BESS is included as Appendix A-6.

5.5 Specification Sheets

Preliminary specification sheets for the BESS and inverters are included as Appendix A-7.

5.6 Drainage & Runoff Control Plan & Drainage Study

A Drainage and Runoff Control Plan and supporting Drainage Study are included as Appendix A-2 and M.

5.7 Water & Wind Erosion Control Plan

The Water and Wind Erosion Control Plan is provided as Appendix I.

5.8 Decommissioning Plan

The Decommissioning Plan prepared in accordance with Section 4-835 is provided as Appendix O.

5.9 Geotechnical Report

The Applicant certifies that prior to construction, a professional engineer licensed in Colorado will complete a geotechnical study that includes the following:

1. Soils engineering and engineering geologic characteristics of the site based upon on-site sampling and testing.
2. Foundation and tower systems design criteria for all proposed structures.
3. Slope stability analysis.
4. Grading criteria for ground preparation, cuts and fills, and soil compaction.

The geotechnical report detailing results of the study will be provided to Morgan County upon completion.

5.10 Maintenance Statement

The Applicant has prepared a maintenance statement for the system and property describing the anticipated maintenance and property upkeep that will occur during operation of the hybrid solar and BESS facility. The Maintenance Statement is provided as Appendix P.

5.11 Emergency Operations & Fire Mitigation Plan

The Project will implement adequate fire control and prevention measures during construction and operations as further detailed per the Emergency Operations and Fire Mitigation Plan included as Appendix H.

6.0 PUBLIC OUTREACH

The Applicant conducted a public open house meeting held on September 6, 2023, at Petteys Park golf course located at 2301 West Mill Street, Brush, Colorado. The public open house was noticed on the Project's website, through an informational flyer that was mailed to all landowners within a half-mile radius of the Project and was advertised in the local newspaper for two weekly circulations prior to the meeting. Additionally, the informational flyer was posted to the Morgan County Bulletin Board Facebook page.

Throughout the Project's planning and permitting process, the Applicant has contacted and coordinated with various agencies and local officials including the Morgan County Planning & Building Department, Morgan County Road and Bridge Department, Morgan County Economic Development Committee, City of Brush, Colorado Department of Wildlife, Colorado State Historic Preservation Office, Brush Volunteer Fire Department, Brush Rural Fire Protection District, Morgan County Sherriff's Office and Brush Police Department. In general, the purpose of these coordination efforts was to provide information on the Project, request feedback, and answer questions. In addition, the Applicant recently became a member of the Morgan County Economic Development Committee.

An Environmental Justice Analysis and Communications Plan were prepared for the Project. The plans are included as Appendix Q-1 and Q-2. A Public Outreach Summary detailing public outreach completed to date is included as Appendix Q-3.

7.0 CITIZEN REVIEW PROCESS

The SUP request will require a public hearing for which a minimum of 10 days' public notice is required. The SUP request will be noticed pursuant to Morgan County Zoning Regulations Section 2-390. A list of adjoining landowners within 1,320' of the Project site and their mailing addresses is provided as Appendix R.

Site notices will be posted on the property fronting each adjacent right of way at least 10 days prior to each scheduled public hearing date in accordance with Morgan County Zoning Regulations Section 2-390 (B).

8.0 VESTED RIGHTS

The Applicant hereby respectfully requests that vested rights be granted for the BESS Project for a period of six years. The development schedule and phase timing are set forth in Section 2.6.1 (Table 2) above. Vested right is appropriate here because this a multi-phase Project that will be built out over several years.

9.0 REFERENCES

- CAPCD (Colorado Air Pollution Control Division). 2022. 2021 Air Quality Data Report, Technical Services Program, Colorado Department of Public Health and Environment. Available online at: tech_doc_repository.aspx (colorado.gov) (accessed May 2023).
- CDOT (Colorado Department of Transportation). 2023. Online Traffic Information System Traffic Data Explorer. Available online at: [Traffic Data Explorer \(coloradodot.info\)](https://trafficdataexplorer.coloradodot.info). Accessed September 2023.
- CDA (Colorado Department of Agriculture). 2023. County Weed Programs. Available online at: <https://ag.colorado.gov/conservation/noxious-weeds/county-weed-programs>. Accessed September 2023.
- EPA (U.S. Environmental Protection Agency) 2023. Current Nonattainment Counties for All Criteria Pollutants. Available online at: <https://www3.epa.gov/airquality/greenbook/ancl.html>. Accessed September 2023.
- FAA (Federal Aviation Administration). 2023a. Circle Search for Airports. Available online at: <https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showCircleSearchAirportsForm>. Accessed February 2023.
- FAA. 2023b. Notice Criteria Tool. Available online at: <https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm>. Accessed February 2023.
- FEMA (Federal Emergency Management Agency). 2023. National Flood Hazard Layer. Available online at: <https://www.fema.gov/flood-maps/national-flood-hazard-layer>. Accessed February 2023.
- Klise, G., Tidwell, V., Reno, M., Moreland, B., Zemlick, K., & Macknick, J. (2013). Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern United States [Review of Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern United States]. Sandia National Laboratories. <https://www.osti.gov/servlets/purl/1090206>
- Morgan County. 2008. Morgan County Comprehensive Plan. Available online at: <https://morgancounty.colorado.gov/sites/morgancounty/files/Comprehensive-Plan-2008.pdf>. Accessed September 2023.
- Morgan County. 2023a. Parcel Viewer App. Available online at: <https://morgancountyco.maps.arcgis.com/apps/Solutions/s2.html?appid=98b97c7f37e2453f85938d547d2b7f11> (accessed May 2023).
- Morgan County. 2023b. Morgan County Zoning Regulations. Available online at: <https://morgancounty.colorado.gov/sites/morgancounty/files/documents/Zoning%20Regulations%20-%20012323.pdf> (accessed May 2023).
- Morgan County. 2023c. Morgan County School Districts. Available online at: <https://morgancountyco.maps.arcgis.com/apps/Solutions/s2.html?appid=516c27c48c514af8bdb94071966688b8>. Accessed September 2023.

USDA-NRCS (U.S. Department of Agriculture Natural Resources Conservation Service). 2023. Web Soil Survey. Available online at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm> . Accessed September 2023.

FIGURES

Fortress I Solar LLC

Fortress Solar and BESS Project

Figure 1
Project Location

Morgan County, CO

Project Features

- Gen-Tie Line
- Project Boundary

Transportation

- Interstate Highway
- US Highway
- State Highway
- Railroad

Boundaries

- County Boundary

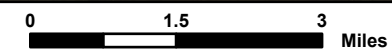


NOT FOR CONSTRUCTION

Reference Map



1:125,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet



Source: ESRI, USDA NAIP, US CENSUS, BTS

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



Fortress I Solar LLC

Fortress Solar and BESS Project






Figure 2
Site Access Locations

Morgan County, CO

Project Features

-  Site Access Location
-  Access Road
-  Gen-Tie Line
-  Project Boundary

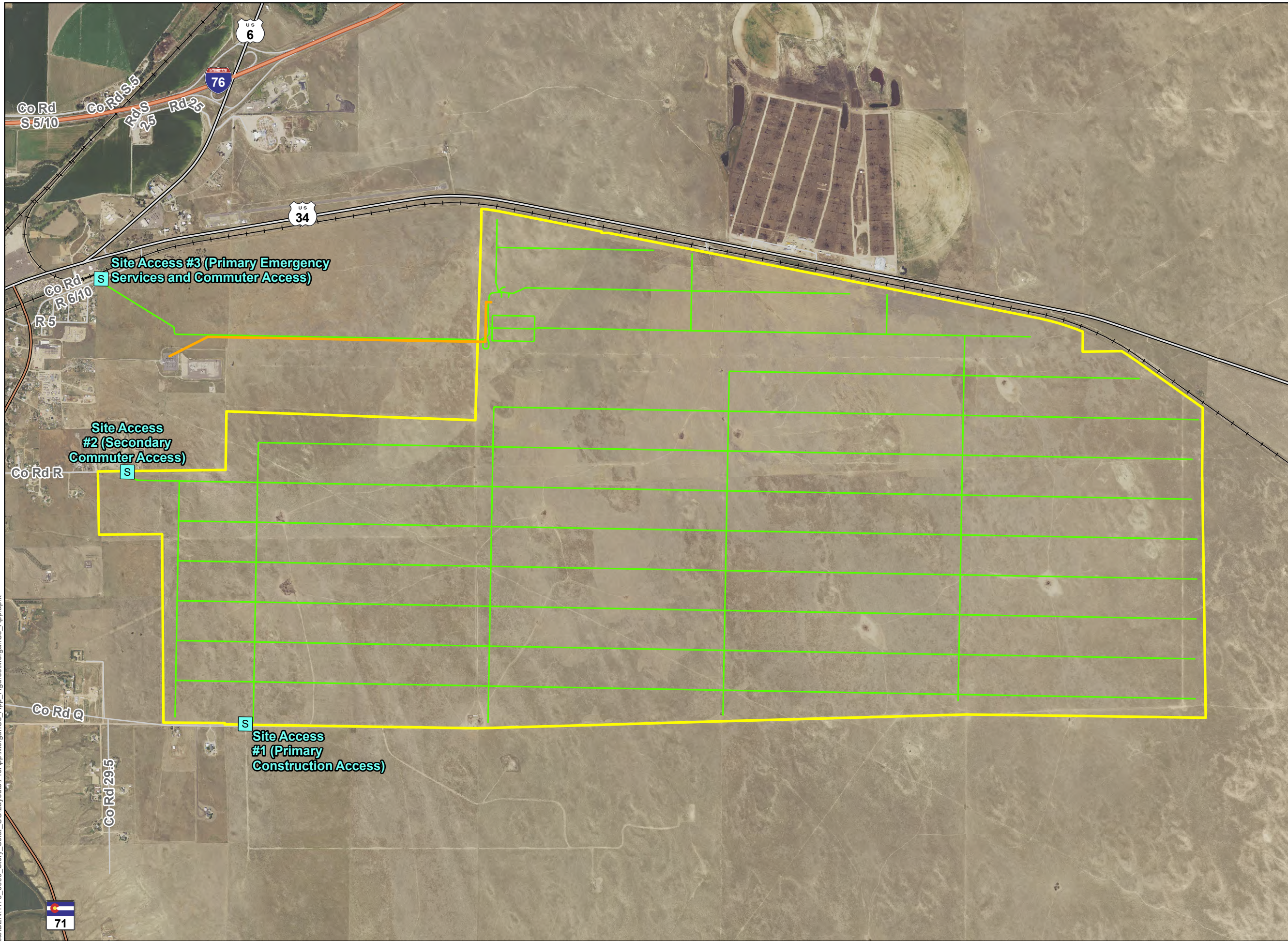
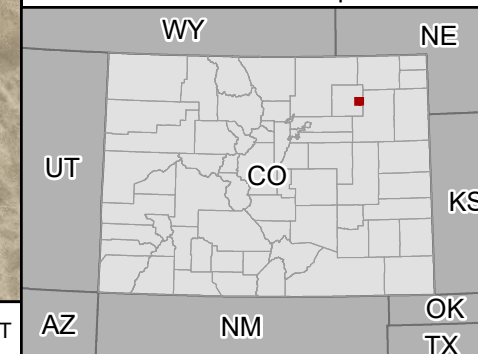
Transportation

-  Interstate Highway
-  US Highway
-  State Highway
-  Local Road
-  Railroad



NOT FOR CONSTRUCTION

Reference Map



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1:24,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet

0 0.5 1 Miles

Source: ESRI, USDA NAIP, US CENSUS, BTS, CDOT

Fortress I Solar LLC

Fortress Solar and BESS Project

Figure 3 Haul and Access Routes

Morgan County, CO

Project Features

- Site Access Location
- Access Road
- Gen-Tie Line
- Project Boundary

Transportation

- Interstate Highway
- US Highway
- State Highway
- Local Road
- Railroad

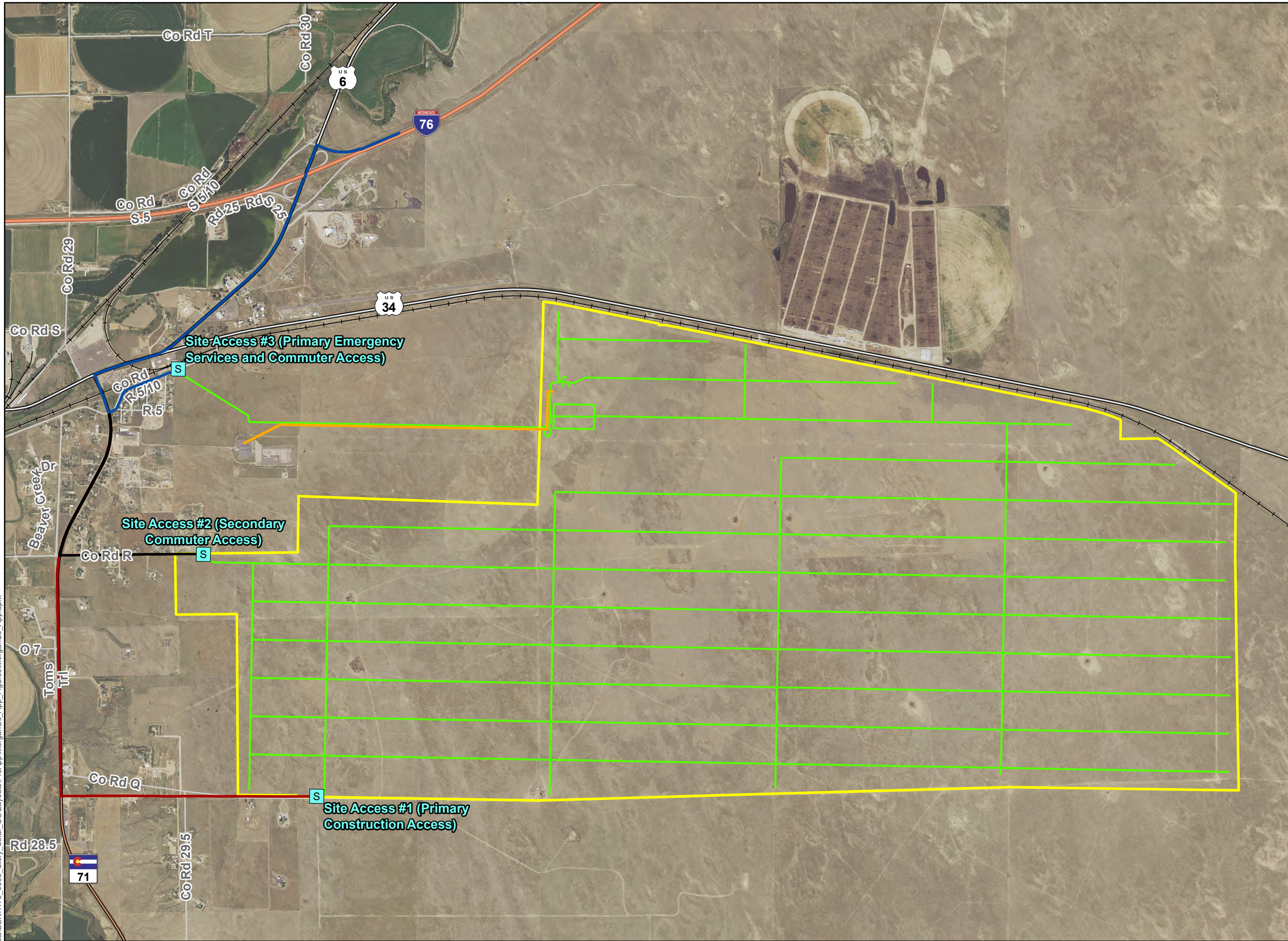
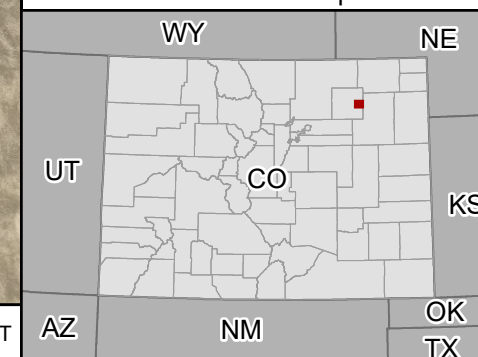
Haul and Access Routes

- Primary Haul Route During Construction and Decommissioning
- Secondary Access Route for Commuters
- Primary Access Route for Emergency Services and Commuters



NOT FOR CONSTRUCTION

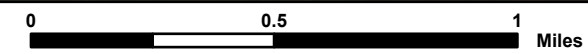
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1:25,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet



Source: ESRI, USDA NAIP, US CENSUS, BTS, CDOT

Fortress I Solar LLC

Fortress Solar and BESS Project

Figure 4
Groundwater Wells

Morgan County, CO

Project Features

- Gen-Tie Line
- Project Boundary

Transportation

- Interstate Highway
- US Highway
- State Highway
- Local Road
- Railroad

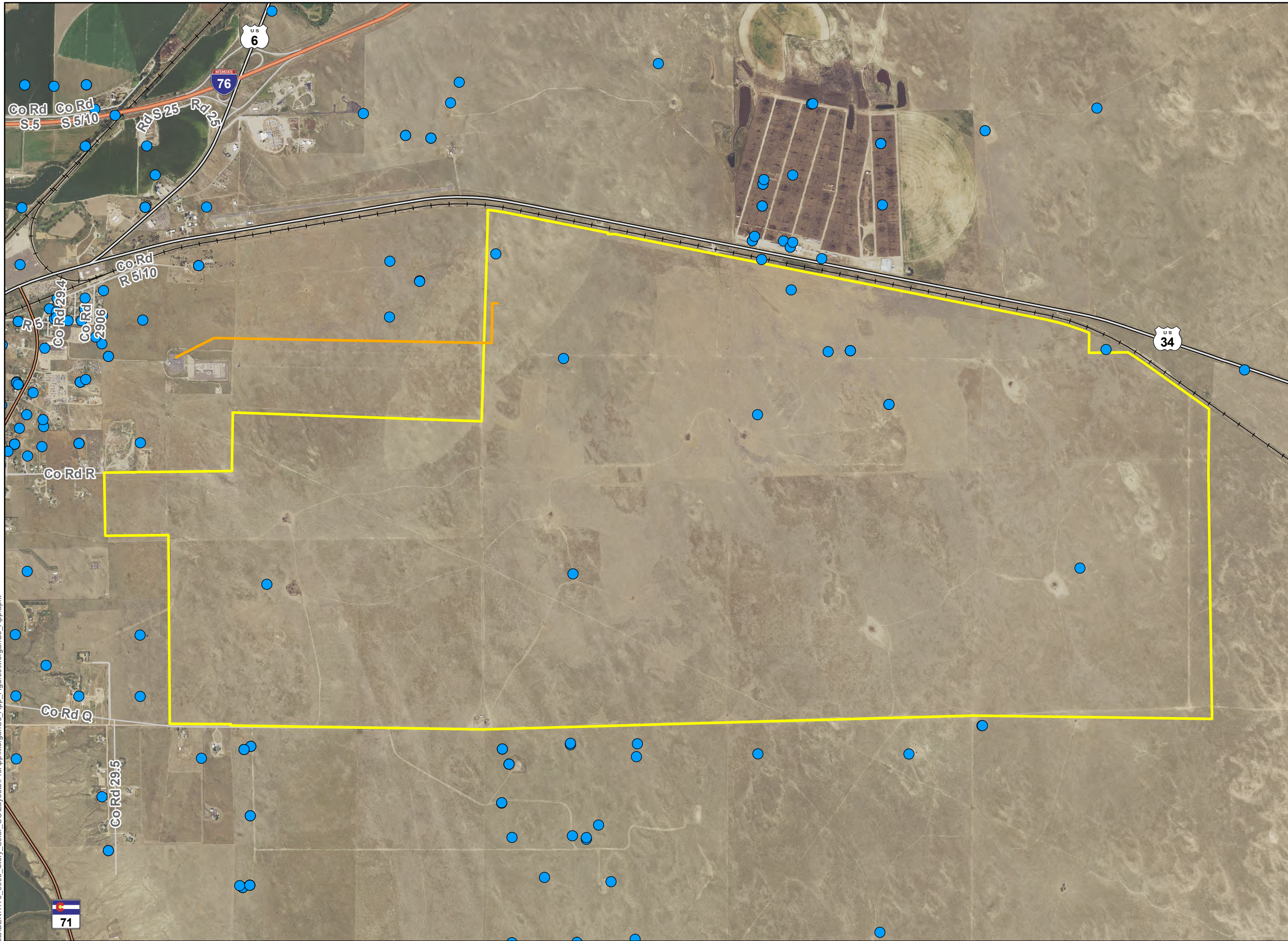
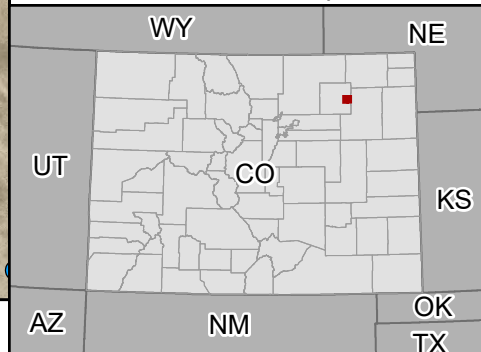
Existing Infrastructure

- Water Well



NOT FOR CONSTRUCTION

Reference Map



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1:24,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet

0 0.5 1 Miles

Source: ESRI, USDA NAIP, US CENSUS, BTS, CDOT, CDSS

Fortress I Solar LLC

Fortress Solar and BESS Project

Figure 5 Section Line Setback Waiver Request

Morgan County, CO

Project Features

- Gen-Tie Line
- Project Boundary

Transportation

- Interstate Highway
- US Highway
- State Highway
- Local Road
- Railroad

Boundaries

- PLSS Section
- PLSS Township

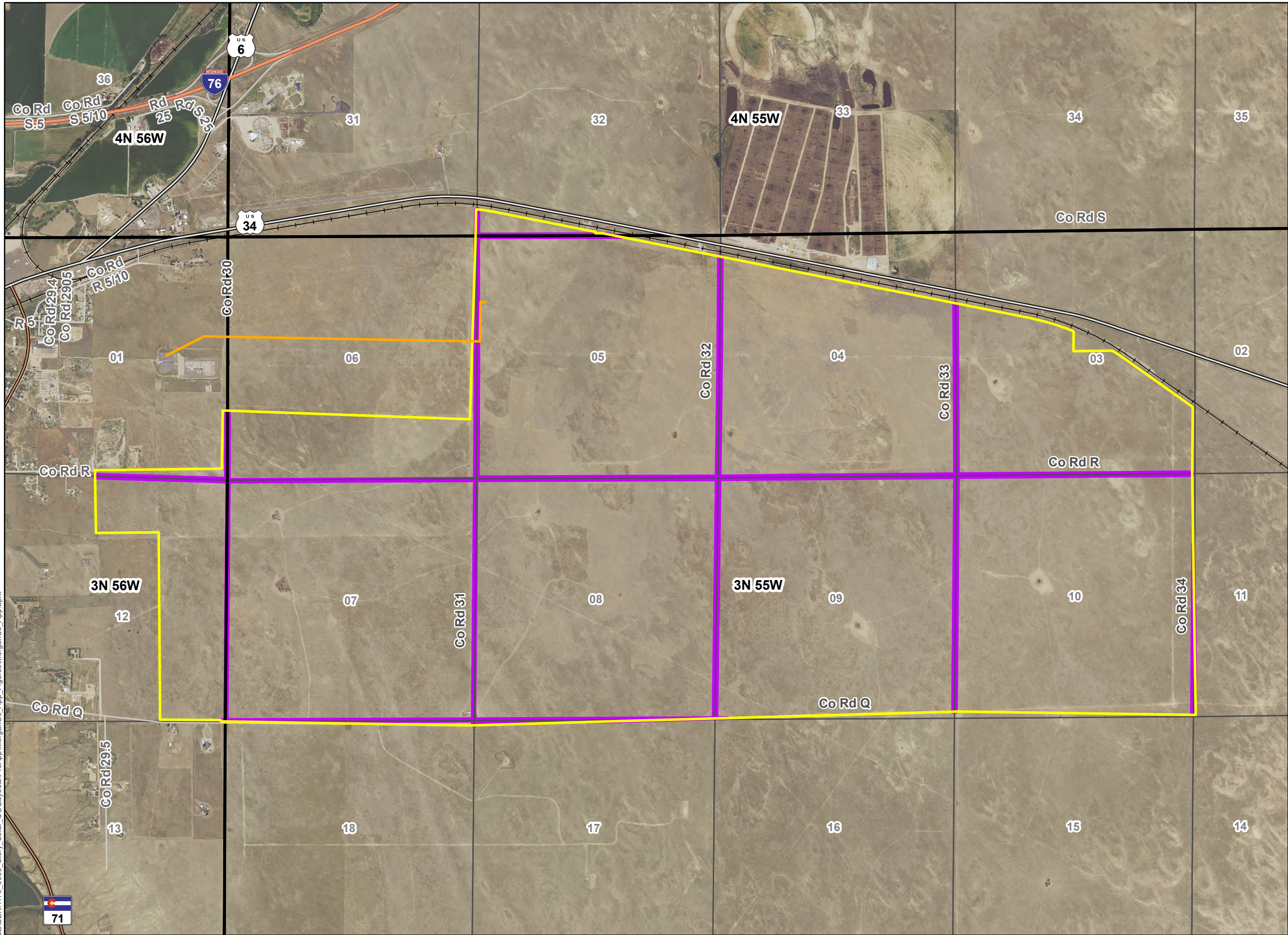
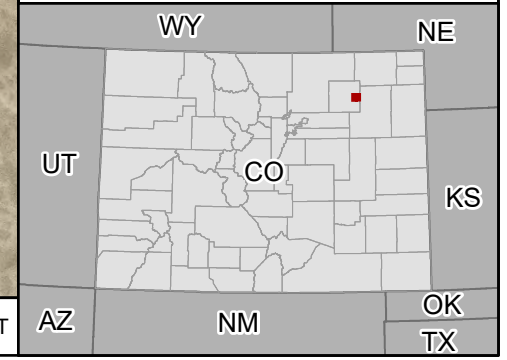
Section Line Setback Waiver Request

- Internal Section Line Setback (30 feet) Requested to be Waived



NOT FOR CONSTRUCTION

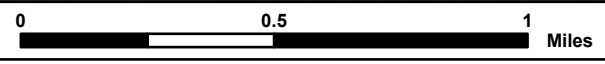
Reference Map



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1:24,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet



Source: ESRI, USDA NAIP, US CENSUS, BTS, CDOT

Fortress I Solar LLC

Fortress Solar and BESS Project

Figure 6
Internal Property Line
Setback Waiver Request

Morgan County, CO

Project Features

- Gen-Tie Line
- Project Boundary

Transportation

- Interstate Highway
- US Highway
- State Highway
- Local Road
- Railroad

Boundaries

- Alta Survey Property Line
- Morgan County Parcel

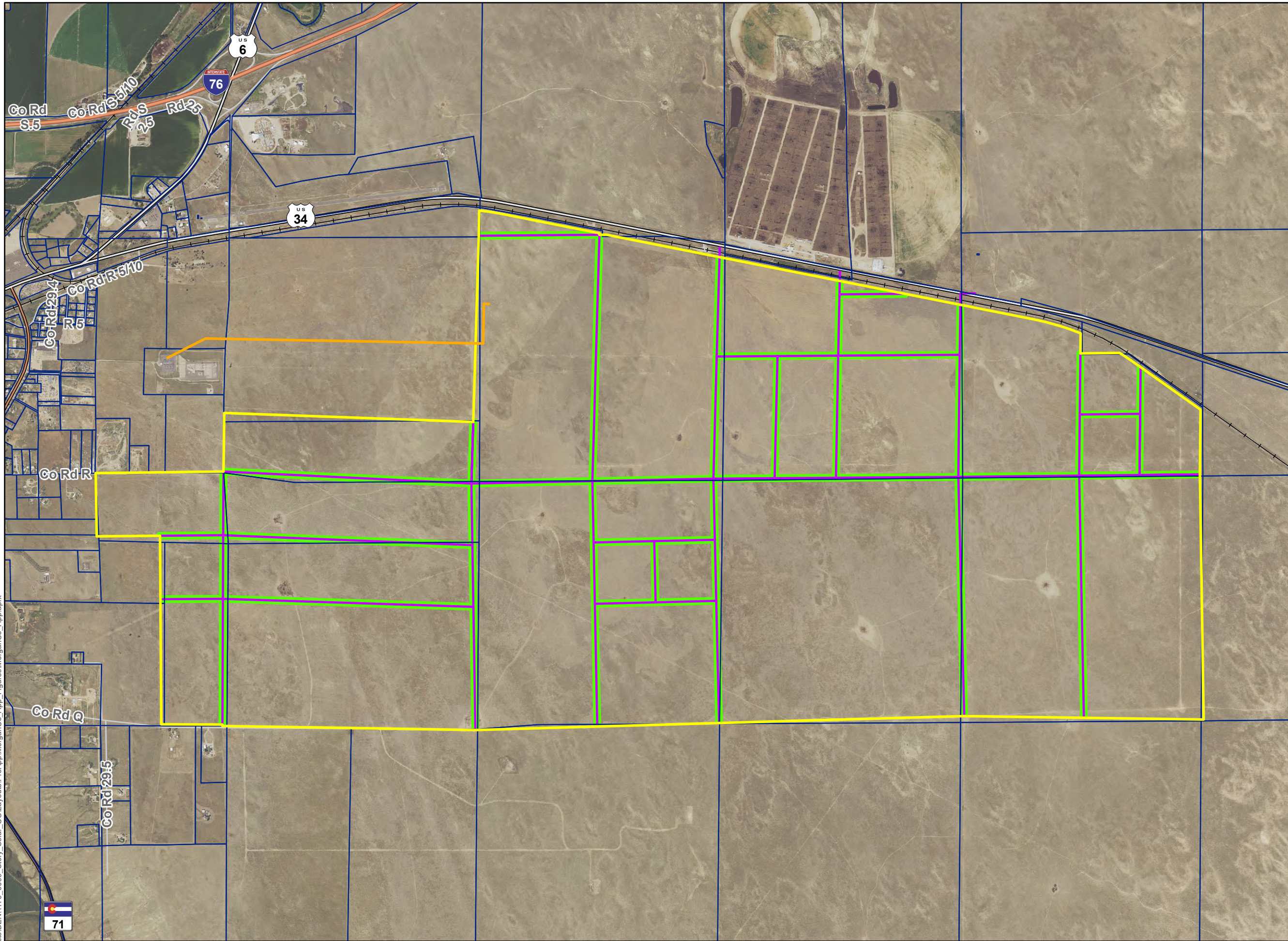
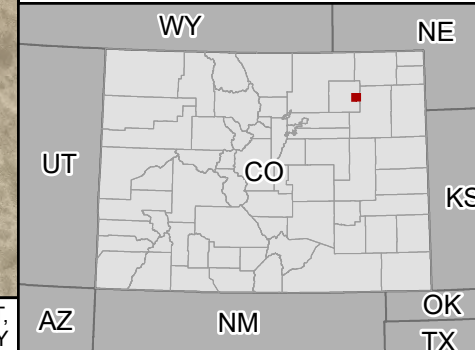
Internal Property Line Setback Waiver Request

- Property Line Setback (70 feet) Requested to be Waived



NOT FOR CONSTRUCTION

Reference Map



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71

1:24,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet

0 0.5 1 Miles

Source: ESRI, USDA NAIP, US CENSUS, BTS, CDOT, MORGAN COUNTY

APPENDIX A-1: VICINITY MAP

Fortress I Solar LLC

Fortress Solar and BESS Project

Appendix A-1 Vicinity Map - Overview

Morgan County, CO

Project Features

- Site Access Location
- Access Road
- Gen-Tie Line
- BESS - Phase I
- BESS - Phase II
- BESS - Phase III
- BESS Area
- Switchyard & Substation
- PV Array - Phase 1
- PV Array - Phase 2
- PV Array - Phase 3
- Project Boundary

Transportation

- Interstate Highway
- US Highway
- State Highway
- Local Road

Boundaries

- Morgan County Parcel
- Morgan County Subdivision
- PLSS Section
- PLSS Township

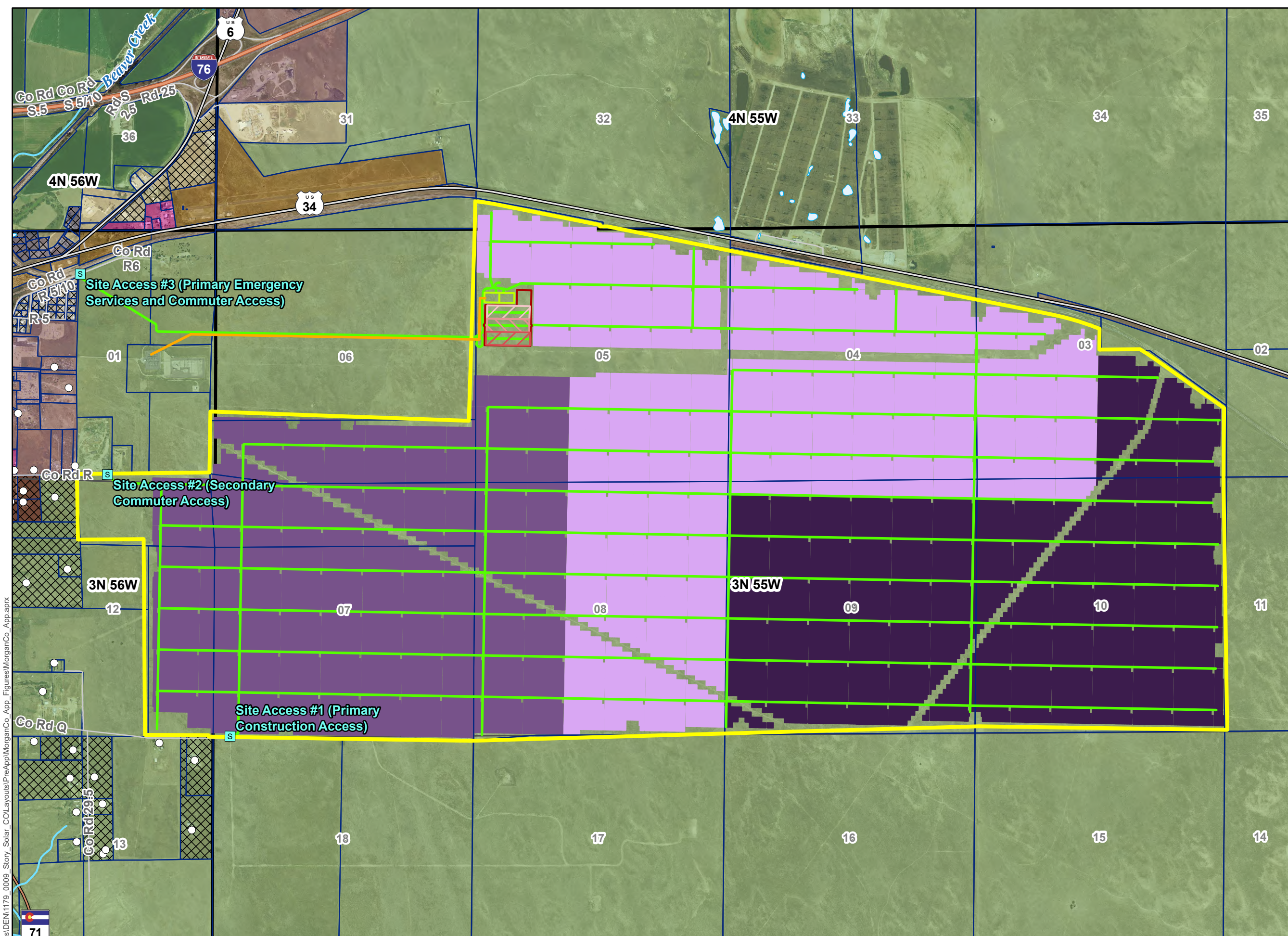
Morgan Counting Zoning Districts

- Existing Residence
- Agriculture Production District
- Agriculture/Agri-Business District
- Commercial District
- Estate Residential District
- Light Industrial District
- Mobile Home District
- Planned Development - Rural Residential District
- Rural Residential District



NOT FOR CONSTRUCTION

Reference Map



Site Access #3 (Primary Emergency Services and Commuter Access)

Site Access #2 (Secondary Commuter Access)

Site Access #1 (Primary Construction Access)

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Fortress I Solar LLC

Fortress Solar and BESS Project

Appendix A-1 Vicinity Map - Sheet 1 of 4

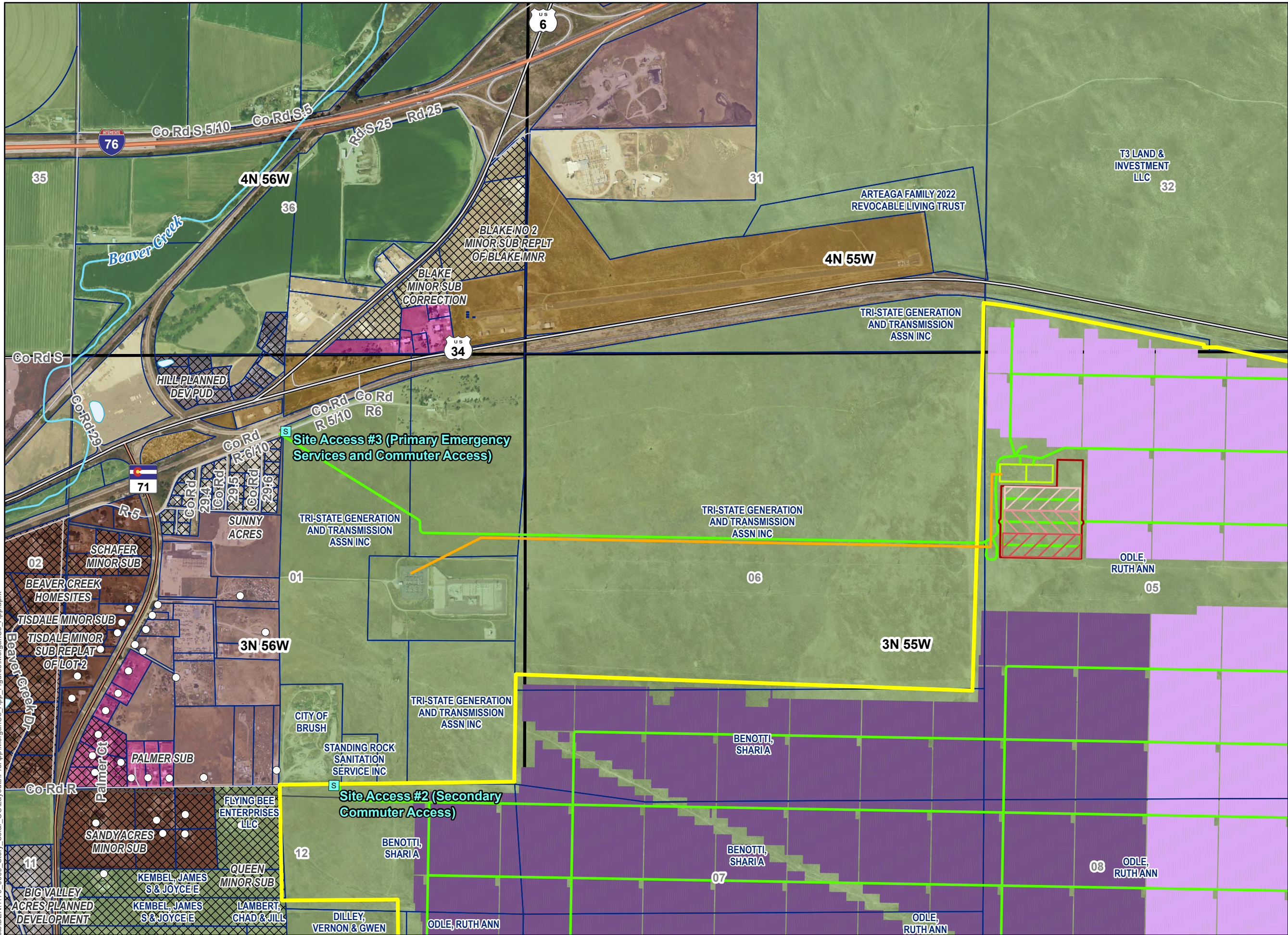
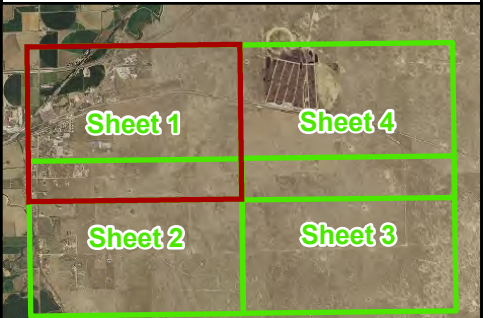
Morgan County, CO

- Project Features**
- Site Access Location
 - BESS Area
 - Access Road
 - Gen-Tie Line
 - BESS - Phase I
 - BESS - Phase II
 - BESS - Phase III
 - PV Array - Phase 1
 - PV Array - Phase 2
 - Switchyard/Substation
 - Project Boundary
- Transportation**
- Interstate Highway
 - US Highway
 - State Highway
 - Local Road
- Boundaries**
- Morgan County Parcel
 - Morgan County Subdivision
 - PLSS Section
 - PLSS Township
- Morgan Counting Zoning Districts**
- Existing Residence
 - Agriculture Production District
 - Agriculture/Agri-Business District
 - Commercial District
 - Estate Residential District
 - Light Industrial District
 - Mobile Home District
 - Planned Development - Estate Residential District
 - Planned Development - Rural Residential District
 - Rural Residential District



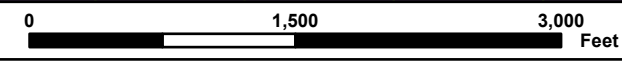
NOT FOR CONSTRUCTION

Reference Map



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1:13,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet



Source: ESRI, USDA NAIP, US CENSUS, BTS, MORGAN COUNTY, CDOT

Fortress I Solar LLC

Fortress Solar and BESS Project

Appendix A-1 Vicinity Map - Sheet 2 of 4

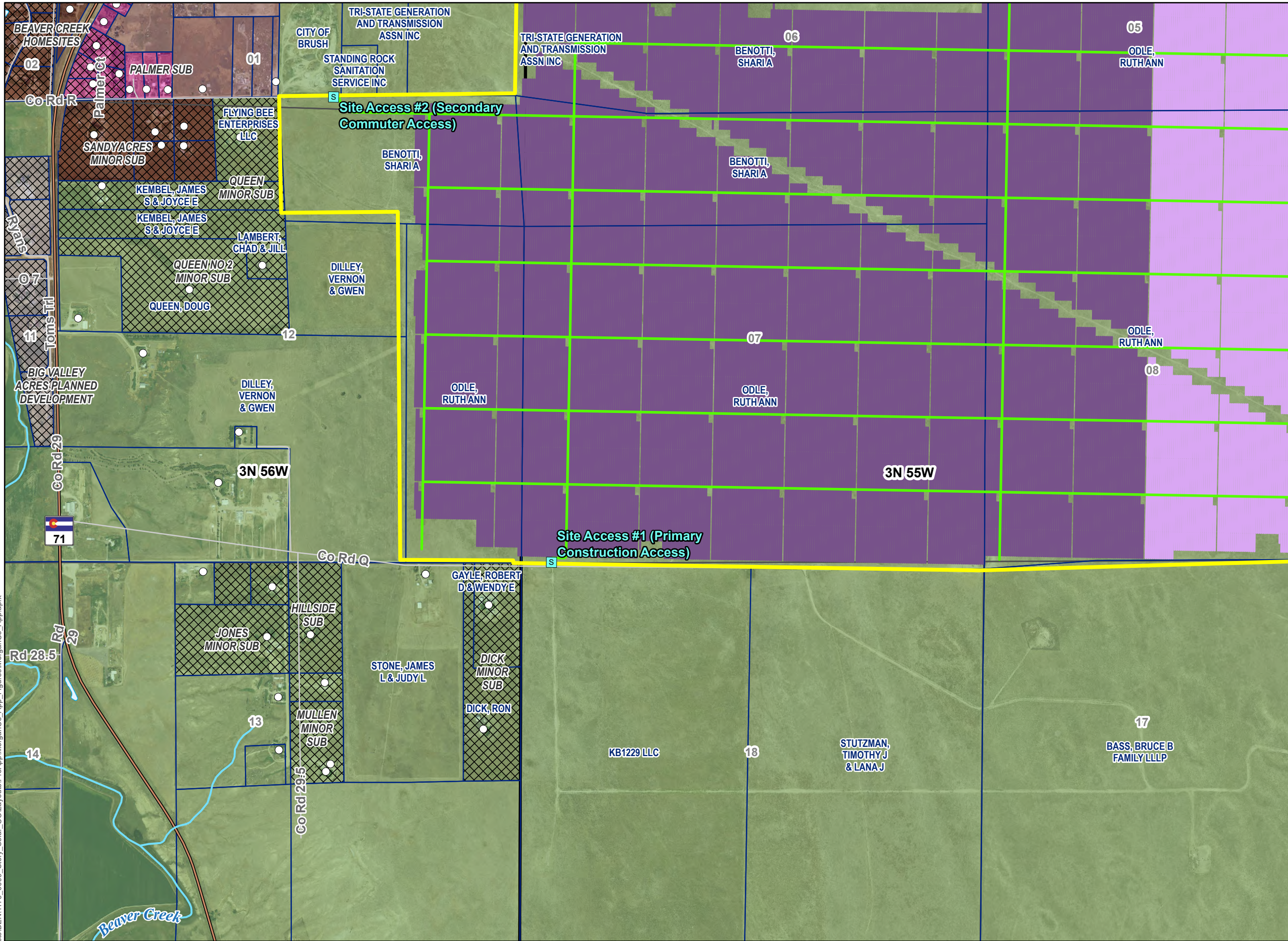
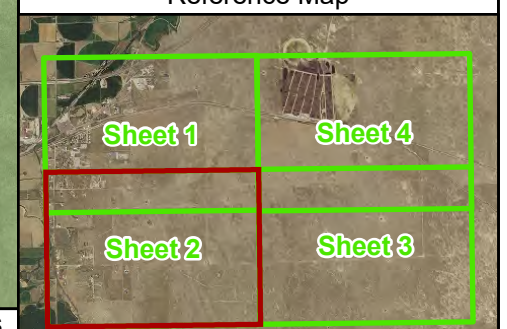
Morgan County, CO

- Project Features**
- Site Access Location
 - Access Road
 - PV Array - Phase 1
 - PV Array - Phase 2
 - Project Boundary
- Transportation**
- Interstate Highway
 - US Highway
 - State Highway
 - Local Road
- Boundaries**
- Morgan County Parcel
 - Morgan County Subdivision
 - PLSS Section
 - PLSS Township
- Morgan Counting Zoning Districts**
- Existing Residence
 - Agriculture Production District
 - Commercial District
 - Estate Residential District
 - Planned Development - Estate Residential District
 - Rural Residential District



NOT FOR CONSTRUCTION

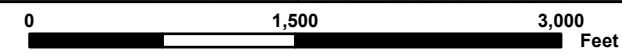
Reference Map



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1:13,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet



Source: ESRI, USDA NAIP, US CENSUS, BTS, MORGAN COUNTY, CDOT

Fortress I Solar LLC

Fortress Solar and BESS Project

Appendix A-1 Vicinity Map - Sheet 3 of 4

Morgan County, CO

Project Features

- Access Road
- PV Array - Phase 2
- PV Array - Phase 3
- Project Boundary

Transportation

- Interstate Highway
- US Highway
- State Highway
- Local Road

Boundaries

- Morgan County Parcel
- PLSS Section
- PLSS Township

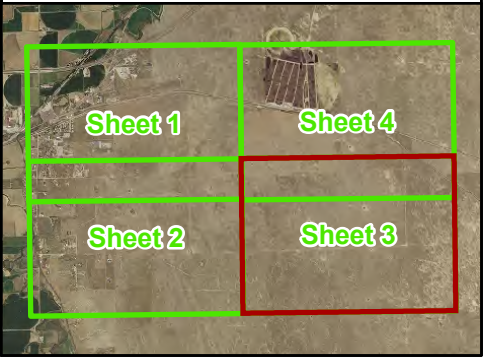
Morgan Counting Zoning Districts

- Agriculture Production District



NOT FOR CONSTRUCTION

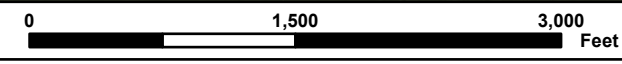
Reference Map



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1:13,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet



Source: ESRI, USDA NAIP, US CENSUS, BTS, MORGAN COUNTY, CDOT

Fortress I Solar LLC

Fortress Solar and BESS Project

Appendix A-1 Vicinity Map - Sheet 4 of 4

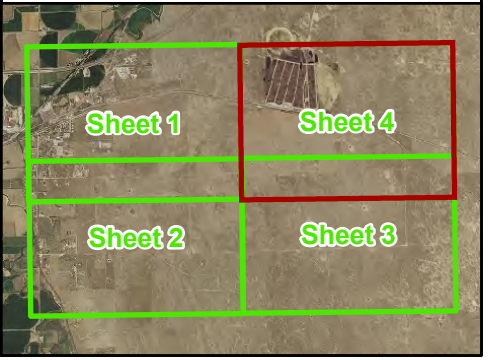
Morgan County, CO

- Project Features**
- Access Road
 - PV Array - Phase 2
 - PV Array - Phase 3
 - Project Boundary
- Transportation**
- Interstate Highway
 - US Highway
 - State Highway
 - Local Road
- Boundaries**
- Morgan County Parcel
 - PLSS Section
 - PLSS Township
- Morgan Counting Zoning Districts**
- Agriculture Production District



NOT FOR CONSTRUCTION

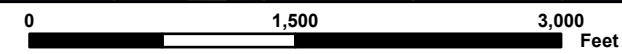
Reference Map



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1:13,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet



Source: ESRI, USDA NAIP, US CENSUS, BTS, MORGAN COUNTY, CDOT

APPENDIX A-2: SITE PLAN/SPECIAL USE MAP

CIVIL DEVELOPMENT PLANS

FOR FORTRESS SOLAR FACILITY

MORGAN COUNTY, COLORADO
OCTOBER 2023

PROJECT SPONSOR
FORTRESS SOLAR I, LLC
11804 DOMAIN BOULEVARD
SUITE 450
AUSTIN, TEXAS 78758

PROJECT SURVEYOR
MERRICK AND COMPANY
5970 GREENWOOD PLAZA BOULEVARD
GREENWOOD VILLAGE, COLORADO 80111

PROJECT CIVIL ENGINEER
TETRA TECH, INCORPORATED
4101 COX ROAD
SUITE 100
GLEN ALLEN, VIRGINIA 23026

PROJECT DESCRIPTION
THE PROPOSED PROJECT CONSISTS OF OF THE INSTALLATION OF A SOLAR ELECTRIC GENERATING PLANT, ELECTRICAL SUBSTATION, ELECTRICAL SWITCHYARD, BATTERY ENERGY STORAGE SYSTEM, AND ANCILLARY FACILITIES LOCATED ON APPROXIMATELY 4.062 ACRES (PROJECT AREA) IN MORGAN COUNTY, COLORADO, EAST OF U.S. HIGHWAY 71 AND SOUTH OF U.S. HIGHWAY 34, EAST OF THE CITY OF BRUSH. THE PROJECT AREA CONSISTS OF THREE PARCELS LOCATED IN UNINCORPORATED MORGAN COUNTY IN THE AGRICULTURAL ZONING DISTRICT.

BASIS OF BEARING
BEARINGS ARE BASED UPON THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 3 NORTH, RANGE 55 WEST OF THE 6TH PRINCIPAL MERIDIAN, CITY OF BRUSH, COUNTY OF MORGAN, STATE OF COLORADO AS BEARING 58°16'40"E BETWEEN THE NORTHWEST CORNER OF SAID SECTION 7 BEING MONUMENTED BY A FOUND 2-1/2" ALUMINUM PIPE WITH A 3-1/4" ALUMINUM CAP STAMPED "LS 13155 1990" AND THE NORTH QUARTER CORNER OF SAID SECTION 7 BEING MONUMENTED BY A FOUND #6 REBAR WITH A 3-1/4" ALUMINUM CAP STAMPED "MERRICK & CO PLS 33200 2007".

UNIT OF MEASUREMENT
THE UNIT OF MEASUREMENT USED IN THE SURVEY DEPICTED HERE ON IS US SURVEY FEET.

SURVEYOR'S NOTES

- THAT PORTION OF SECTION 5 LYING NORTHERLY OF HIGHWAY 34 IS OWNED BY RUTH ANN ODLE PER TITLE COMMITMENT NO. 22000480730 DATED JULY 25, 2022, BUT IS NOT A PART OF THIS LEASE BOUNDARY.
- THE FENCE LINES ARE NOT COINCIDENT WITH THE PROPERTY LINES OR SECTION LINES AS SHOWN HEREON.
- THE TRANSMISSION LINE EASEMENT RECORDED 3/31/1949 IN BOOK 463 AT PAGE 329 WAS RESEARCHED BY MERRICK & COMPANY AND IS NOT LISTED ON ANY OF THE PROVIDED TITLE COMMITMENTS.
- THE COLORADO STATE HIGHWAY DEPARTMENT FEDERAL AID PROJECT NO. F-40 (3) FOR STATE HIGHWAY NO. 34 APPEARS TO FOLLOW FENCE LINES THAT WERE BELIEVED TO BE SECTION LINES WHEN CONSTRUCTED. FOUND RIGHT-OF-WAY MONUMENTS SET BY THE STATE HIGHWAY DEPARTMENT WERE USED TO CALCULATE THE LOCATION OF THE RIGHT-OF-WAY FOR HIGHWAY 34 AS SHOWN HEREON.
- THE COLORADO STATE HIGHWAY DEPARTMENT FEDERAL AID PROJECT NO. F-40 (3) FOR STATE HIGHWAY NO. 34 SHOWS ANGLE POINTS ALONG THE SOUTHERN BOUNDARY OF THE RIGHT-OF-WAY WHICH IS INTENDED TO BE COINCIDENT WITH THE BNSF RAILROAD RIGHT-OF-WAY. ACCORDING TO THE BNSF RAILWAY RIGHT OF WAY AND TRACK MAP LINE SEGMENT 0002

C.E. R77359 REVISED 10-11-2006 THERE ARE NO ANGLE POINTS AND WAS THEREFORE HELD AS A STRAIGHT LINE ALONG THE SOUTHERN RIGHT-OF-WAY BOUNDARY FOR HIGHWAY 34.

6. TRANSMISSION LINES CROSS THE SUBJECT PROPERTY WITHOUT THE BENEFIT OF AN EASEMENT REPORTED IN THE PROVIDED TITLE COMMITMENTS.

REFERENCE NOTES

- SURVEY SHOWN HEREON PROVIDED BY MERRICK AND COMPANY "ALTA SPS LAND TITLE SURVEY" DATED AUGUST 31, 2023.
- AQUATIC RESOURCE DELINEATIONS PERFORMED BY TETRA TECH, INC "WETLAND DELINEATION REPORT" DATED MAY, 2023. NO DELINEATED AQUATIC RESOURCES PRESENT WITHIN THE PROJECT BOUNDARY WERE DETERMINED DURING FIELD INVESTIGATION.
- BESS LAYOUT PROVIDED BY FORTRESS SOLAR I, LLC.
- PROJECT COORDINATES ARE COLORADO STATE PLANE NORTH MODIFIED. REFER TO ALTA SURVEY FOR MODIFICATION TRANSFORMATION INFORMATION.
- SOLAR ARRAY LAYOUT PROVIDED HEREON IS CONCEPTUAL, APPROXIMATE, AND NOT FOR CONSTRUCTION.

SOLAR FACILITY DATA

SOLAR MODULE	VERTEX TSM-DE09R.08 430W MODULE
CENTRAL INVERTER	SMA SC 4000-UP-US
GCR	35%
MODULES/STRING	28
STRINGS/ROW	4
PIER REVEAL, MIN (FT)	4.0
PIER REVEAL, MAX (FT)	6.0
STRINGS	69,435
PITCH (FT)	22.34
MWDC	836
ILR	1.39
MWAC	600
INVERTER (EA)	241

BESS FACILITY DATA

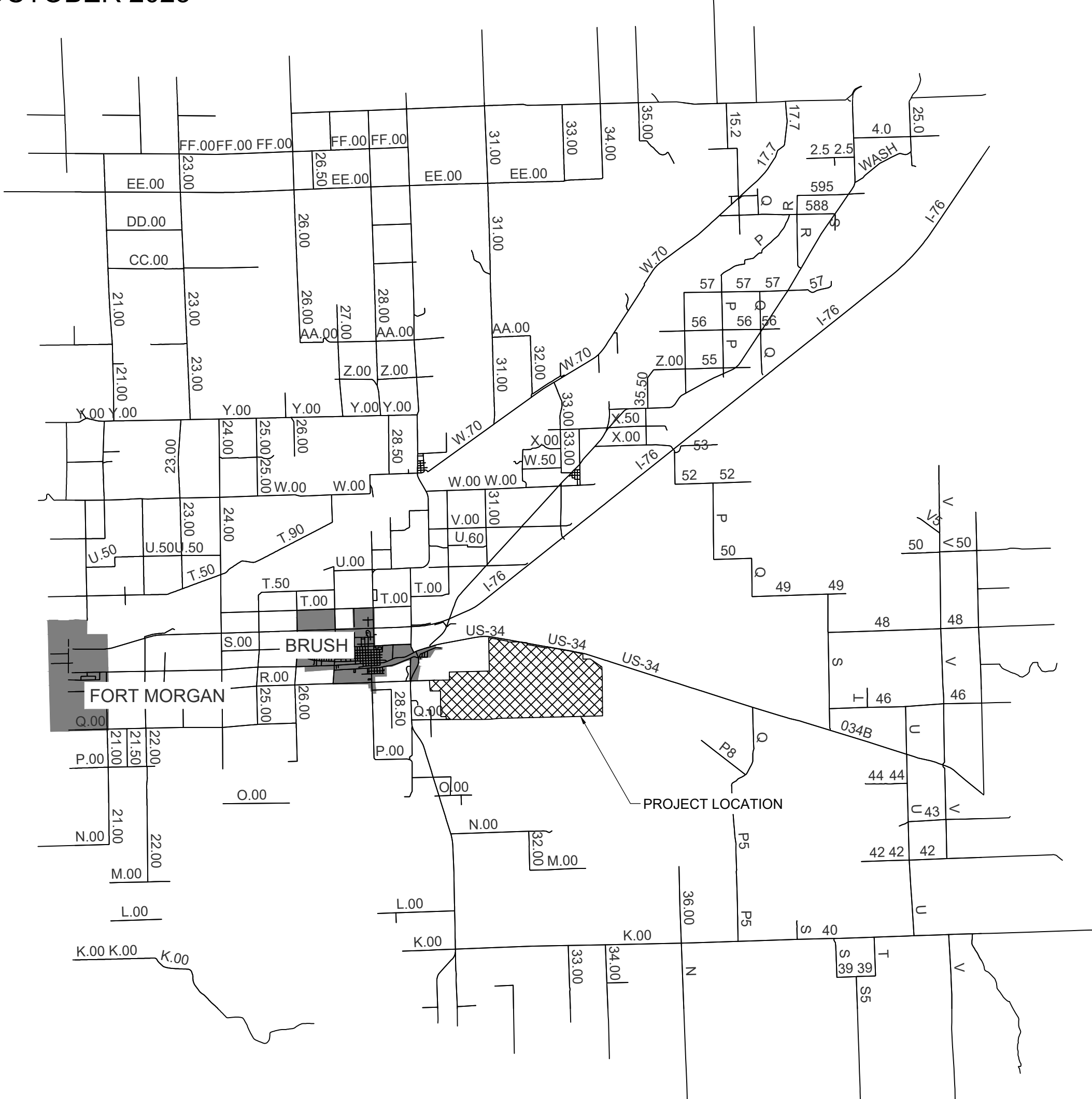
BATTERY CONTAINER	BYD MC CUBE
CENTRAL INVERTER	SC5000UD-MV-US
QTY BATTERY AT BOL (EA)	1,064
QTY INVERTER (EA)	133
QTY BATTERY AT EOL W/AUGMENTATION (EA)	1,330

PARTICIPATING PROPERTY OWNERS

ASSESSOR PARCEL NUMBER (APN)	ACCOUNT NUMBER	PROPERTY OWNER	LEGAL DESCRIPTION
1233-060-00-001	R002875	TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION INC	S: 06 T: 3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
123101000002	R004487	TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION INC	S: 01 T: 3 R: 56 E1/2E1/2 B908 P721 (CORRECTION SECTION)
123101000700	R700033	TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION INC	S: 01 T: 3 R: 56 PARC E1/2 B801 P1347**STATE ASSESSED**
1233-060-00-002	R002949	SHARI A BENOTTI	S: 06 T: 3 R: 55 S1/2S1/2 (CORRECTION SECTION)
1233-070-00-001	R002950	SHARI A BENOTTI	S: 07 T: 3 R: 55 N1/2N1/2 (CORRECTION SECTION)
1231-120-00-001	R003925	SHARI A BENOTTI	S: 12 T: 3 R: 56 N1/2NE1/4
1231-120-00-002	R003918	RUTH ANN ODLE	S: 12 T: 3 R: 56 SE1/4NE1/4 & E1/2SE1/4
1233-070-00-002	R002827	RUTH ANN ODLE	S: 07 T: 3 R: 55 S1/2N1/2 & S1/2 (CORRECTION SECTION)
1233-050-00-001	R002837	RUTH ANN ODLE	S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T: 4 R: 55 PARC SW1/4 S OF RR
1233-080-00-001	R002838	RUTH ANN ODLE	S: 08 T: 3 R: 55 ALL
1233-040-00-002	R002841	RUTH ANN ODLE	S: 04 T: 3 R: 55 ALL S OF RR (CORRECTION SECTION)
1233-090-00-001	R002842	RUTH ANN ODLE	S: 09 T: 3 R: 55 ALL
1233-030-00-003	R002835	RUTH ANN ODLE	S: 03 T: 3 R: 55 S1/2 S OF RR & S1/2NW1/4 S OF HWY 34
1233-100-00-001	R002839	RUTH ANN ODLE	S: 10 T: 3 R: 55 ALL

PHASING DATA

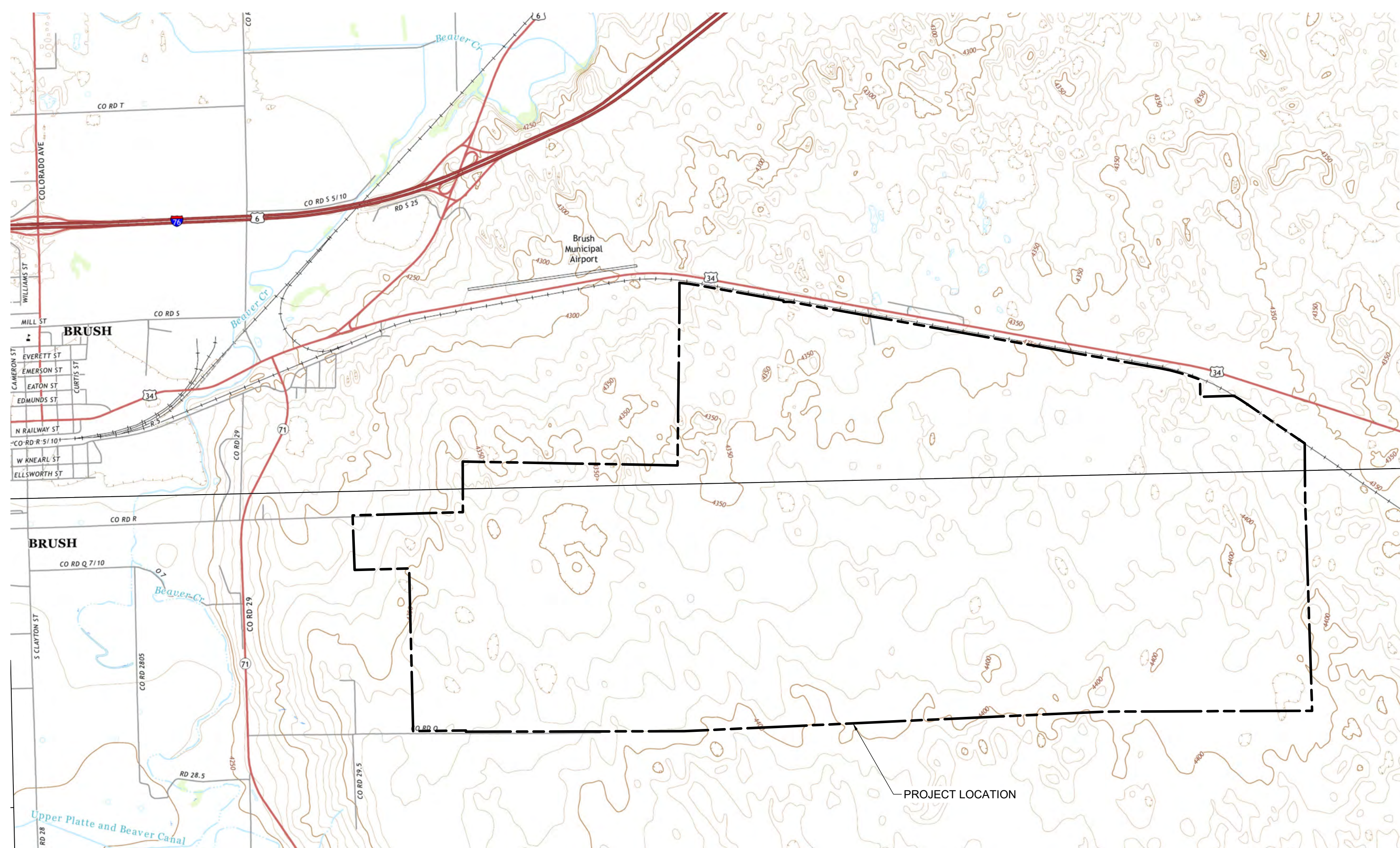
SUBSTATION AREA (AC)	2
SWITCHYARD AREA (AC)	2
BESS AREA (AC)	21 (7 / PHASE)
PHASE I PV AREA (AC)	1,305
PHASE II PV AREA (AC)	1,439
PHASE III PV AREA (AC)	1,325
TOTAL FENCED AREA (AC)	4,259



VICINITY MAP
SCALE: N.T.S.



REGIONAL MAP
SCALE: N.T.S.



7.5' USGS QUAD MAP (MILLER RANCH, CO & BRUSH EAST, CO)
SCALE: 1" = 2,000'



TETRA TECH, INC.
4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

STAMP:
NOT FOR CONSTRUCTION

PRELIMINARY

FORTRESS SOLAR FACILITY
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
COVER SHEET

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 1/2" 1"

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B	IFP	10/17/2023	TTI
C	REVISED	10/20/2023	TTI
D	REVISED	10/24/2023	TTI



DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE: AS SHOWN

SHEET NO.:
C-000

DRAWING INDEX	
SHEET NUMBER	SHEET
1	COVER SHEET
2	SHEET INDEX
3	PHASING PLAN
4	CIVIL DEMOLITION PLAN OVERALL
5	CIVIL DEMOLITION PLAN
6	CIVIL DEMOLITION PLAN
7	CIVIL DEMOLITION PLAN
8	CIVIL DEMOLITION PLAN
9	CIVIL DEMOLITION PLAN
10	CIVIL DEMOLITION PLAN
11	CIVIL DEMOLITION PLAN
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18	CIVIL DEMOLITION PLAN
19	CIVIL SITE PLAN OVERALL
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30	CIVIL SITE PLAN
31	CIVIL SITE PLAN
32	CIVIL SITE PLAN
33	CIVIL SITE PLAN
34	CIVIL SITE PLAN BESS AREA
35	CIVIL SITE PLAN GENTIE AREA OVERALL
36	CIVIL SITE PLAN GENTIE AREA
37	CIVIL SITE PLAN GENTIE AREA
38	CIVIL SITE PLAN GENTIE AREA
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40	CIVIL SITE PLAN GENTIE AREA
41	CIVIL SITE PLAN GENTIE AREA
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55	CIVIL GRADING PLAN
56	CIVIL GRADING PLAN
57	CIVIL GRADING PLAN BESS AREA
58	CIVIL GRADING PLAN GENTIE AREA OVERALL
59	CIVIL GRADING PLAN GENTIE AREA
60	CIVIL GRADING PLAN GENTIE AREA
61	CIVIL GRADING PLAN GENTIE AREA
62	CIVIL GRADING PLAN GENTIE AREA
63	CIVIL GRADING PLAN GENTIE AREA
64	CIVIL GRADING PLAN GENTIE AREA



TETRA TECH, INC.
4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

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CONSTRUCTION**

PRELIMINARY

**FORTRESS SOLAR
FACILITY
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO**

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
SHEET INDEX

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C	REVISED	10/20/2023	TTI
D	REVISED	10/24/2023	TTI

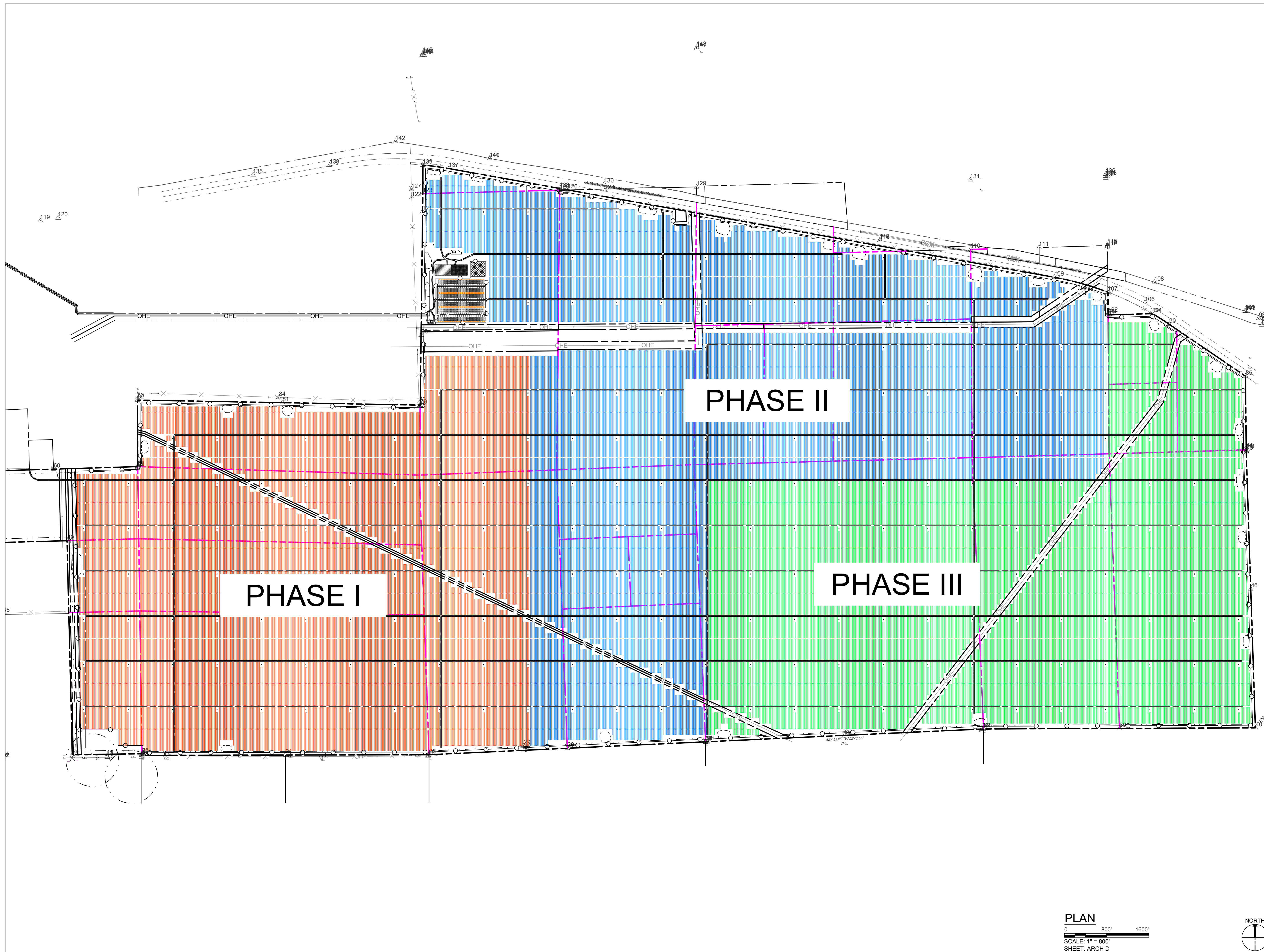


DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
C-001



TETRA TECH
 TETRA TECH, INC.
 4101 COX ROAD,
 SUITE 100
 GLEN ALLEN, VA 23060
 TEL: (804) 290-4321
 FAX: (804) 270-2739

STAMP:
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PRELIMINARY

FORTRESS SOLAR FACILITY
 AYPa POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
 PHASING PLAN

SHEET SIZE: ARCH "D"
 24" X 36" (610 X 914)

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C	REVISED	10/20/2023	TTI
D	REVISED	10/24/2023	TTI



DATE: 10/12/2023
 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

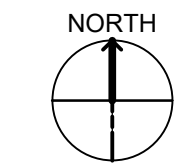
PROJECT PHASE:
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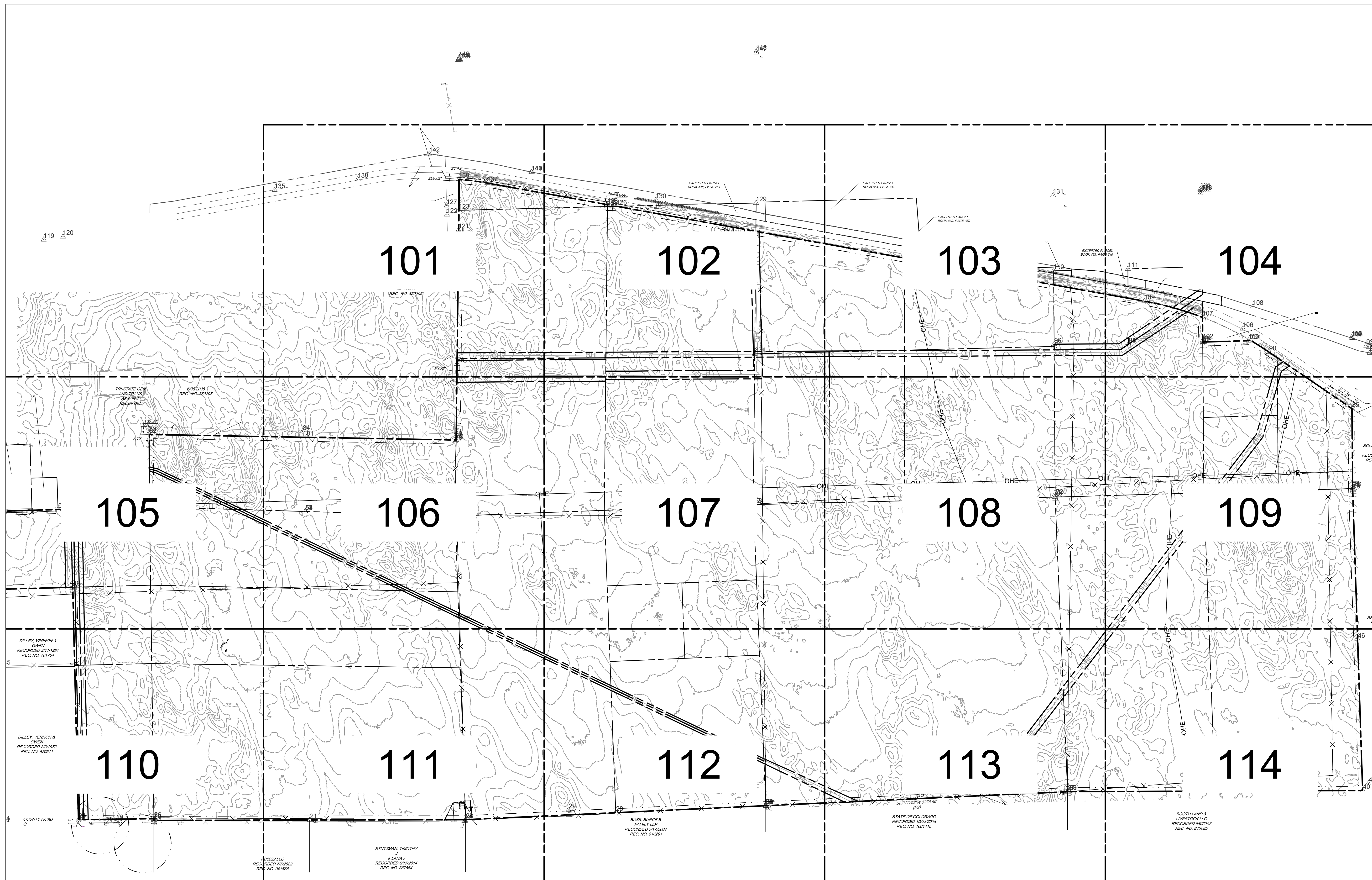
SCALE:
 AS SHOWN

SHEET NO.:
CP100

PLAN

 SCALE: 1" = 800'
 SHEET: ARCH D





TETRA TECH
 TETRA TECH, INC.
 4101 COX ROAD,
 SUITE 100
 GLEN ALLEN, VA 23060
 TEL: (804) 290-4321
 FAX: (804) 270-2739

STAMP:

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PRELIMINARY

FORTRESS SOLAR FACILITY
 AYPa POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
EXISTING CONDITIONS AND DEMOLITION PLAN OVERALL

SHEET SIZE: ARCH "D"
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C	REVISED	10/20/2023	TTI
D	REVISED	10/24/2023	TTI



DATE: 10/12/2023
 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
 ISSUED FOR PERMIT

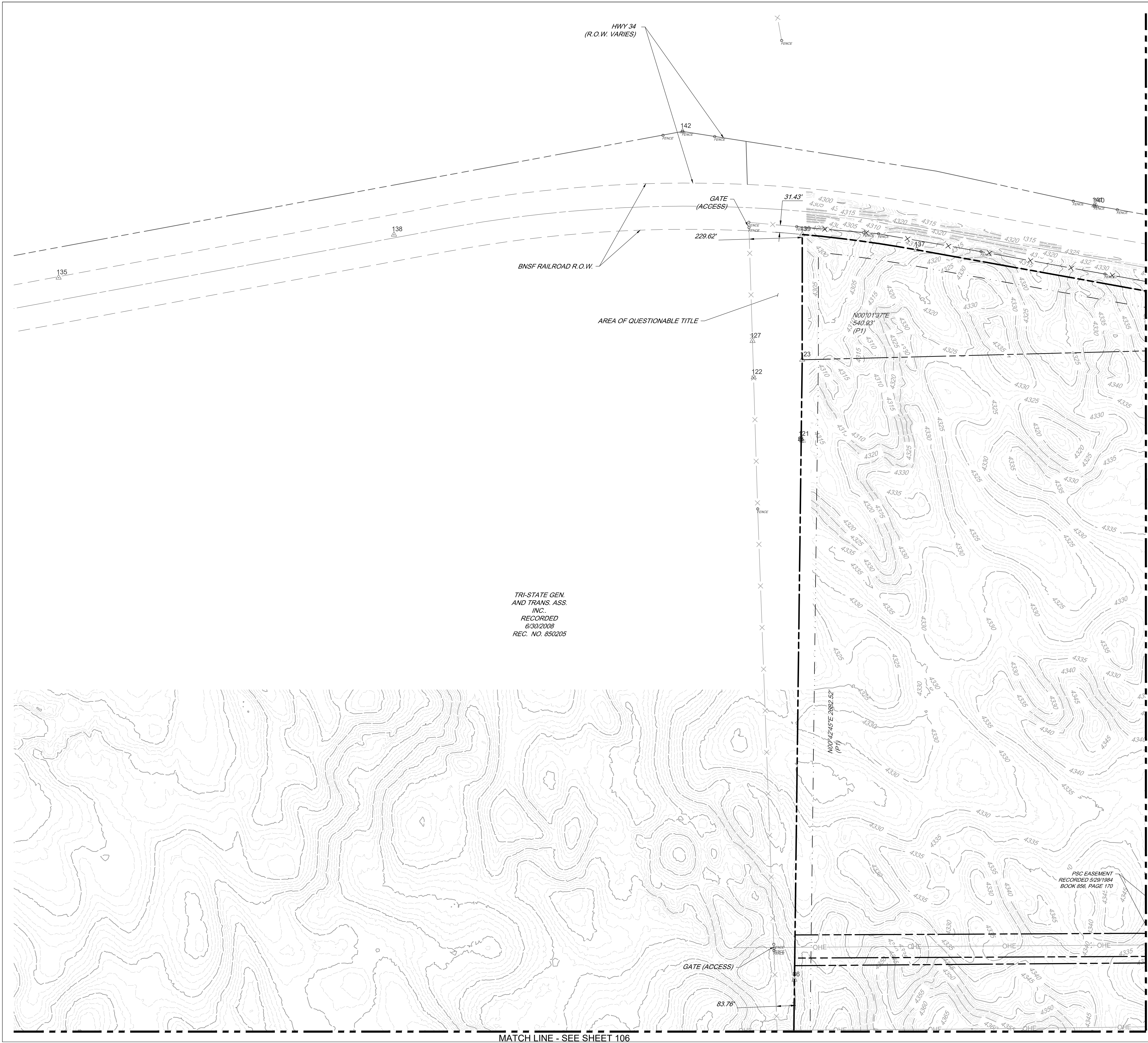
SCALE:
 AS SHOWN

SHEET NO.:
CD100

PLAN

 SCALE: 1" = 800'
 SHEET: ARCH D



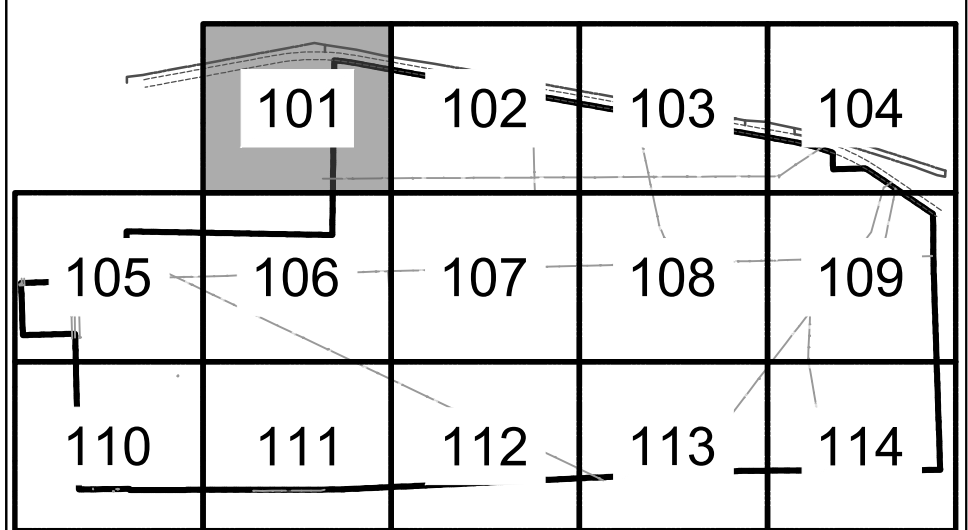


TRI-STATE GEN.
AND TRANS. ASS.
INC.
RECORDED
6/30/2018
REC. NO. 850205

GENERAL NOTES
1. REFER TO C-000 FOR GENERAL PROJECT NOTES

- LEGEND**
- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL DEMOLITION**
- INTERNAL #
 - MISC. STRUCTURE
 - SURVEY MONUMENTS
 - FENCE
 - MISC. UTILITY
 - POWER POLE
 - OHE
 - OVERHEAD ELECTRIC LINE
 - SURFACE WATER APPURTENANCE

KEY MAP



PLAN
SCALE: 1" = 200'
SHEET: ARCH D



TETRA TECH, INC.
4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

STAMP:
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PRELIMINARY

**FORTRESS SOLAR
FACILITY**
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
**EXISTING CONDITIONS
AND DEMOLITION PLAN**

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 1/2" 1"

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C	REVISED	10/20/2023	TTI
D	REVISED	10/24/2023	TTI

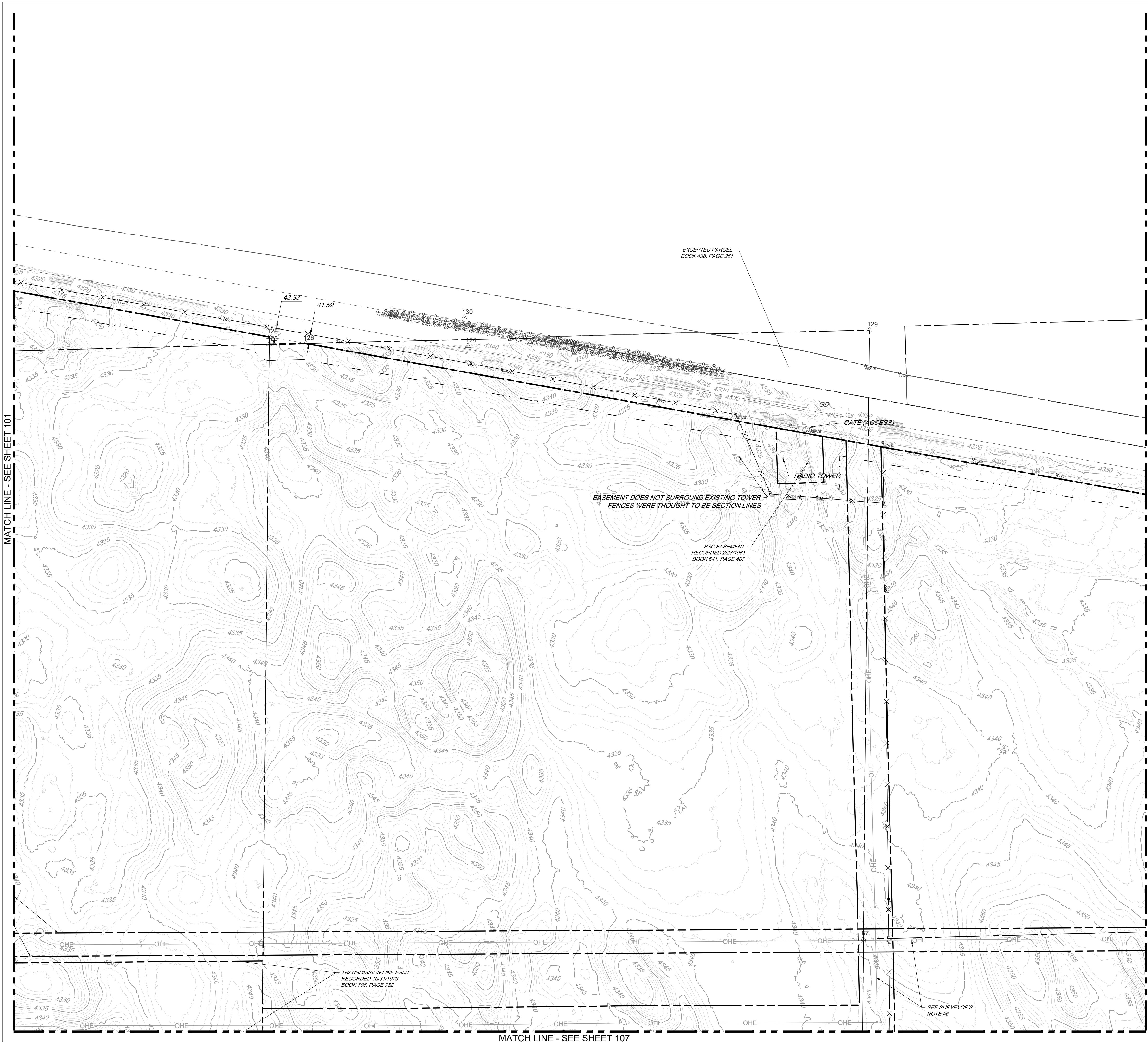


DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CD101



GENERAL NOTES
 1. REFER TO C-000 FOR GENERAL PROJECT NOTES

- LEGEND**
- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
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 - SIGN
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 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL DEMOLITION**
- INTERNAL #
 - MISC. STRUCTURE
 - SURVEY MONUMENTS
 - FENCE
 - MISC. UTILITY
 - POWER POLE
 - OVERHEAD ELECTRIC LINE
 - SURFACE WATER APPURTENANCE



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 AYPa POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

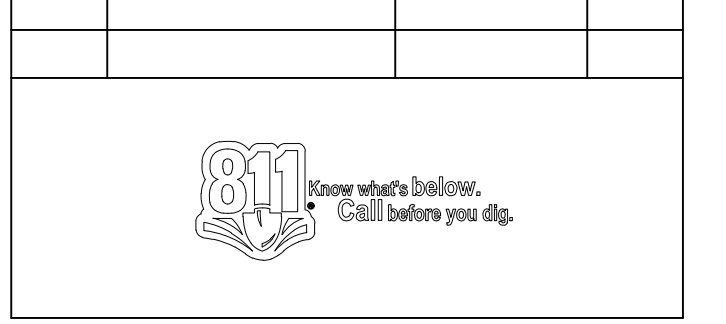
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SHEET TITLE:
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SHEET SIZE: ARCH "D"
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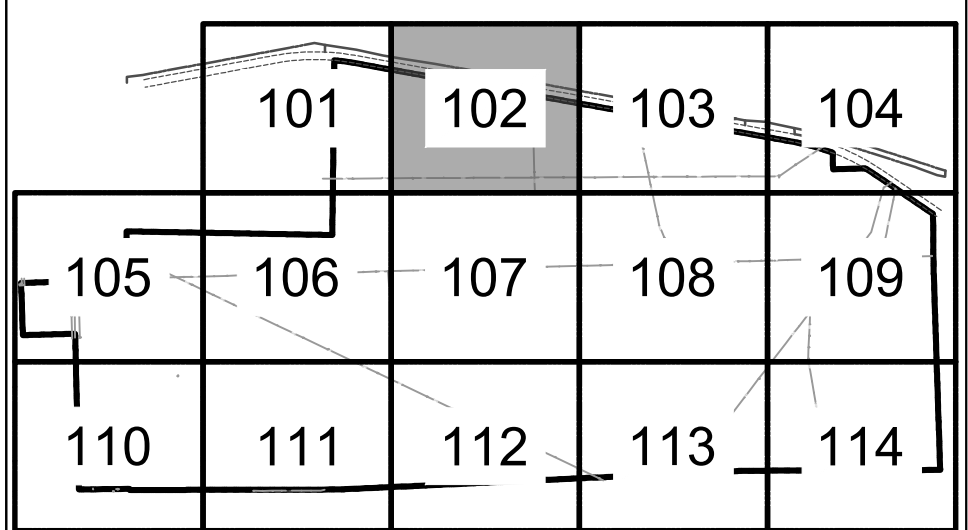
DATE: 10/12/2023
 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
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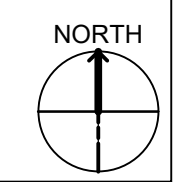
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CD102

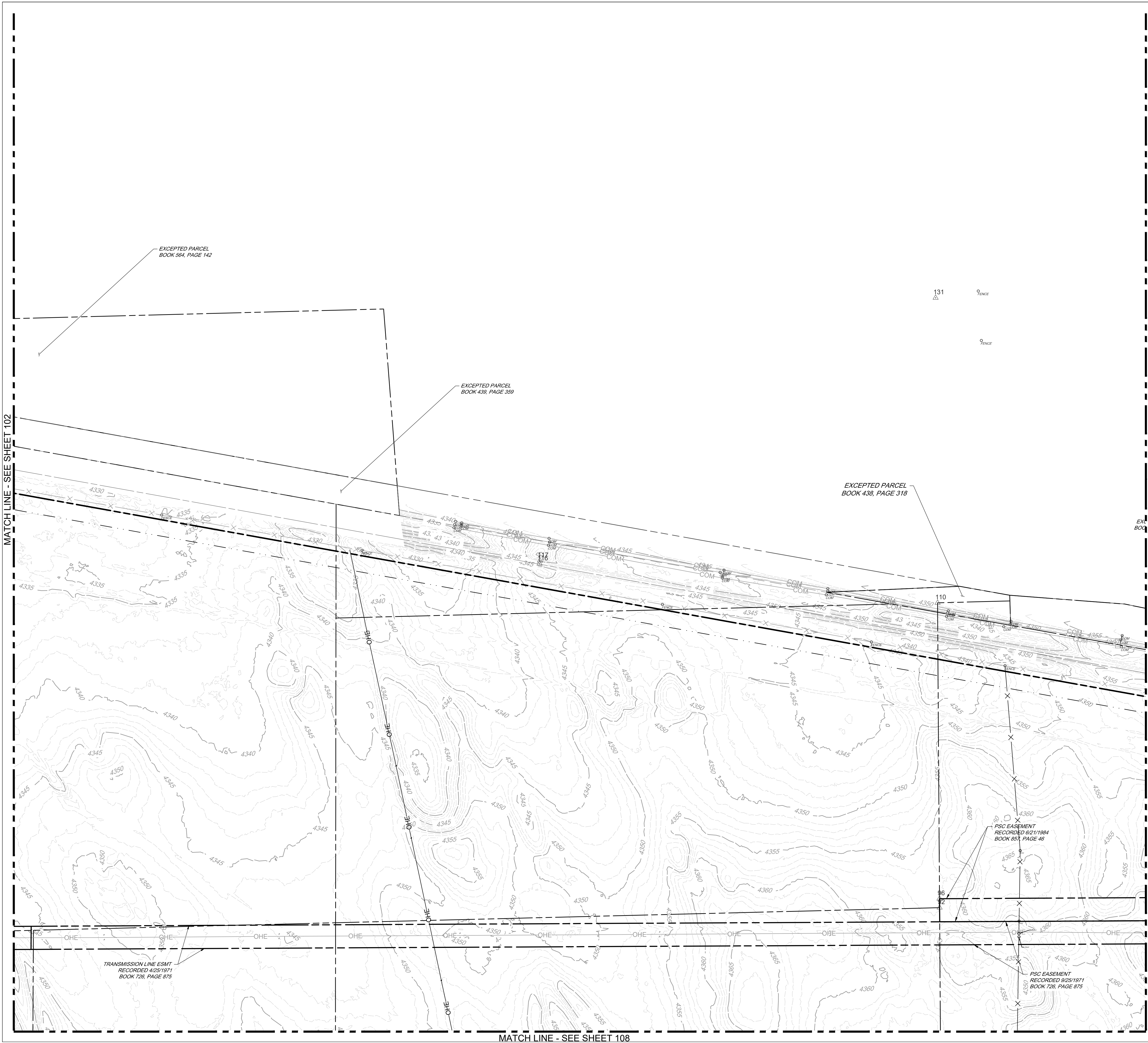
KEY MAP



PLAN

SCALE: 1" = 200'
 SHEET: ARCH D





GENERAL NOTES
 1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

EXISTING CONDITIONS

- ADJACENT #
- BUILDING/STRUCTURE
- COMMUNICATIONS/FO APPURTENANCE
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CDOT ROW
- EASEMENT
- EASEMENT (PRESUMED)
- FENCING
- SURVEY MARKER/TRAVERSE
- SECTION LINE
- OVERHEAD ELECTRIC LINE
- RAILROAD ROW
- RAILROAD #
- SANITARY SEWER MANHOLE
- SIGN
- STRUCTURE (MISC)
- SUBJECT #
- ZONING SETBACK
- UG COMMUNICATIONS/FIBER OPTIC
- UG GAS LINE
- UG SANITARY SEWER FORCEMAIN
- UG WATERLINE
- UTILITY POLE/GUY WIRE
- WATER APPURTENANCE

CIVIL DEMOLITION

- INTERNAL #
- MISC. STRUCTURE
- SURVEY MONUMENTS
- FENCE
- MISC. UTILITY
- POWER POLE
- OHE
- OVERHEAD ELECTRIC LINE
- SURFACE WATER APPURTENANCE



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 AYPD POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

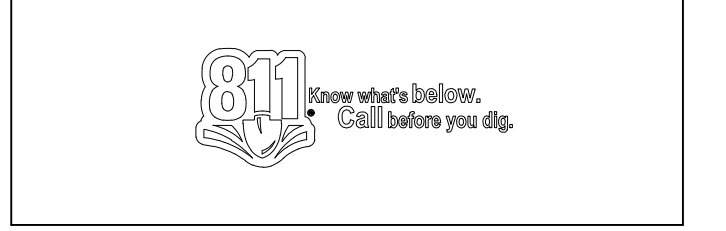
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SHEET TITLE:
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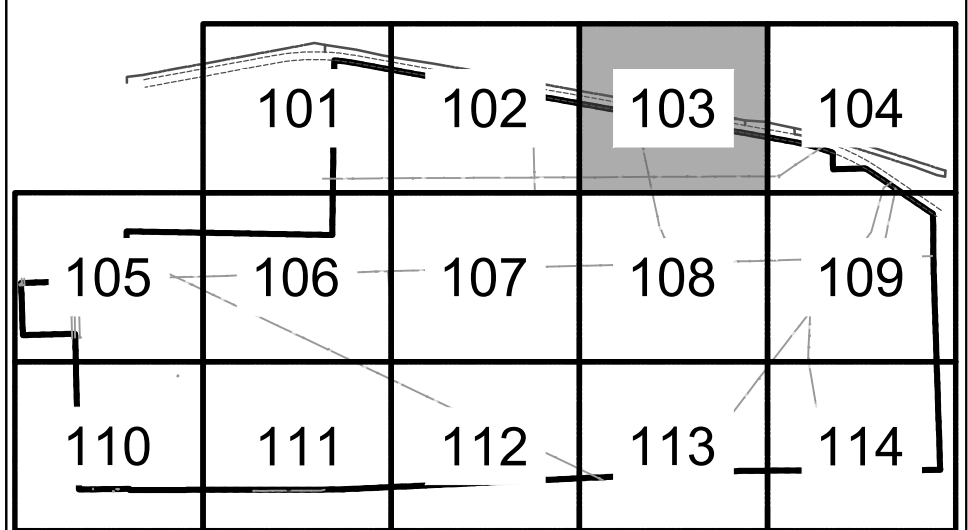
DATE: 10/12/2023
 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
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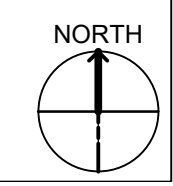
SCALE:
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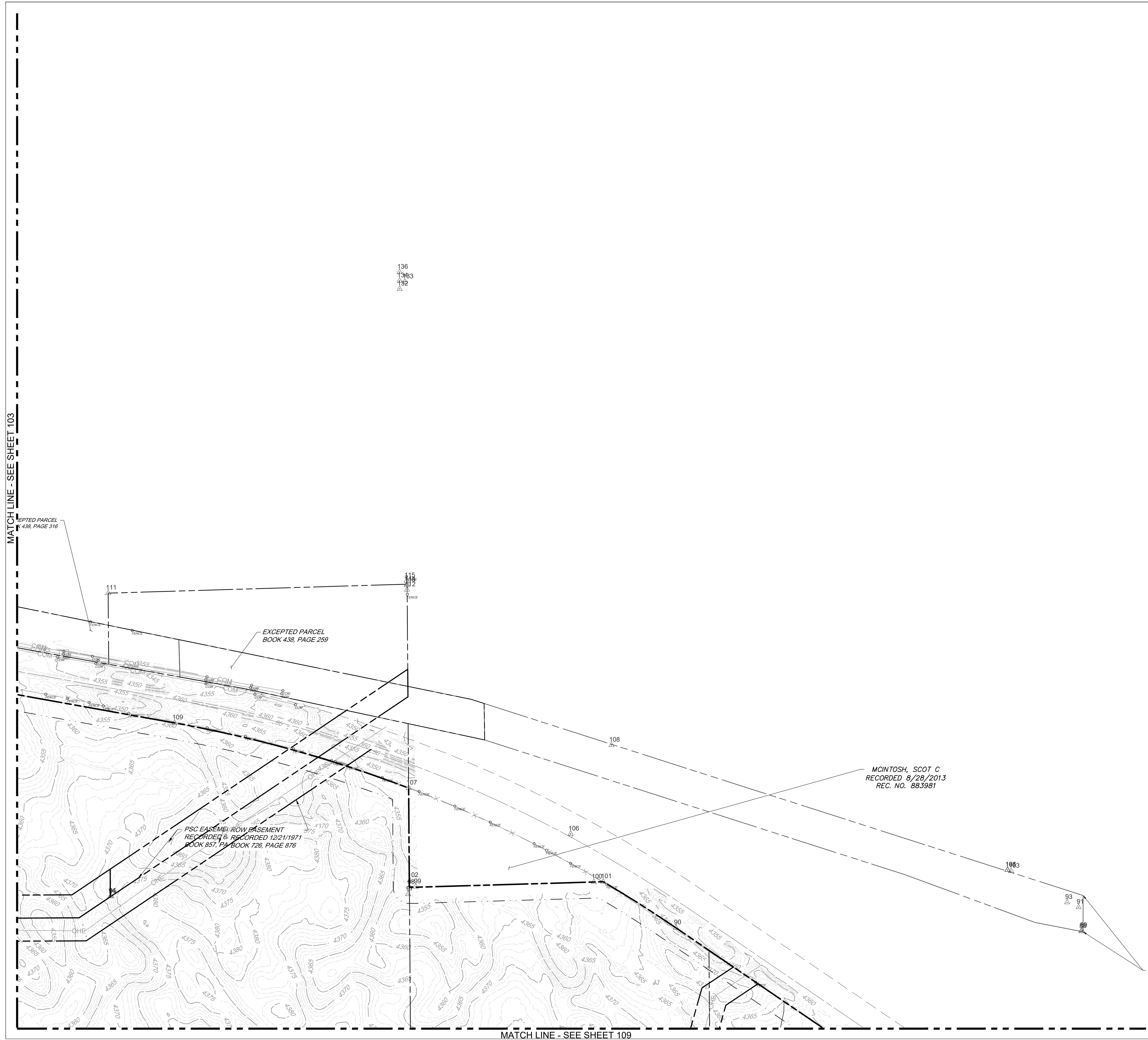
SHEET NO.:
CD103

KEY MAP



PLAN
 SCALE: 1" = 200'
 SHEET: ARCH D





GENERAL NOTES
 1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

EXISTING CONDITIONS

- ADJACENT #
- BUILDING/STRUCTURE
- COMMUNICATIONS/FO APPURTENANCE
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CDOT ROW
- EASEMENT
- EASEMENT (PRESUMED)
- FENCING
- SURVEY MARKER/TRAVERSE
- SECTION LINE
- OVERHEAD ELECTRIC LINE
- RAILROAD ROW
- RAILROAD #
- SANITARY SEWER MANHOLE
- SIGN
- STRUCTURE (MISC)
- SUBJECT #
- ZONING SETBACK
- UG COMMUNICATIONS/FIBER OPTIC
- UG GAS LINE
- UG SANITARY SEWER FORCEMAIN
- UG WATERLINE
- UTILITY POLE/GUY WIRE
- WATER APPURTENANCE

CIVIL DEMOLITION

- INTERNAL #
- MISC. STRUCTURE
- SURVEY MONUMENTS
- FENCE
- MISC. UTILITY
- POWER POLE
- OVERHEAD ELECTRIC LINE
- SURFACE WATER APPURTENANCE



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FORTRESS SOLAR FACILITY
 AYPa POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
EXISTING CONDITIONS AND DEMOLITION PLAN

SHEET SIZE: ARCH "D"
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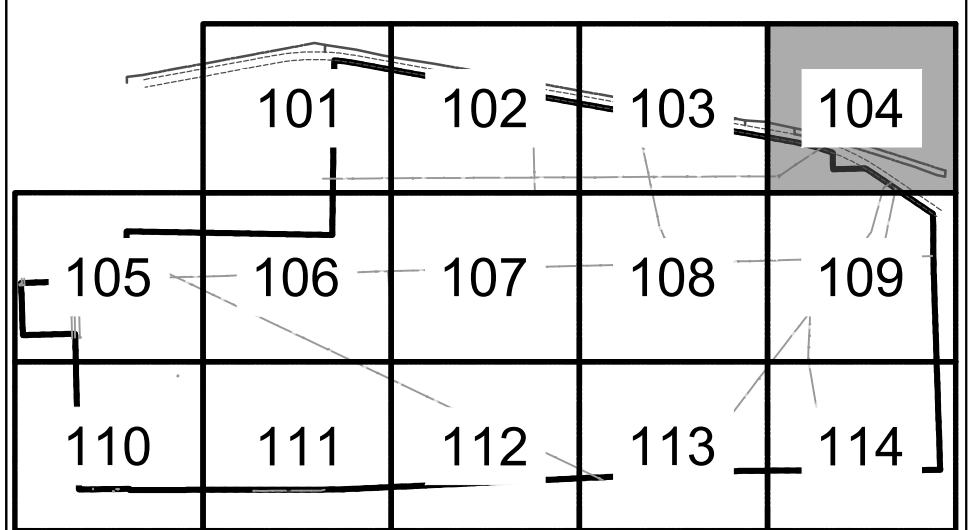
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 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
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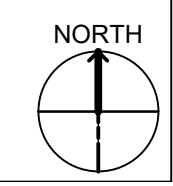
SCALE:
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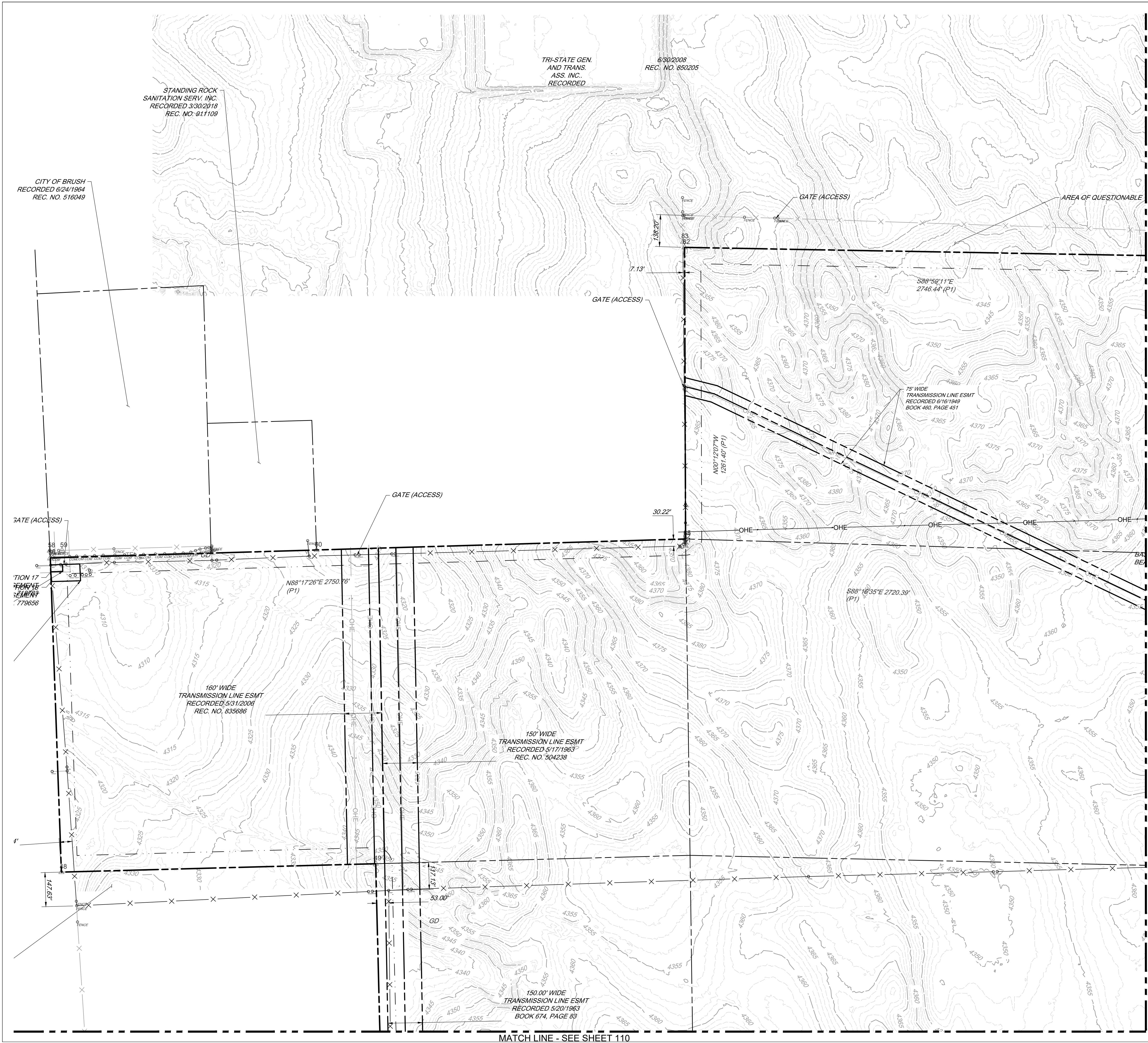
SHEET NO.:
CD104

KEY MAP



PLAN
 SCALE: 1" = 200'
 SHEET: ARCH D





GENERAL NOTES
 1. REFER TO C-000 FOR GENERAL PROJECT NOTES

- LEGEND**
- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
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 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL DEMOLITION**
- INTERNAL #
 - MISC. STRUCTURE
 - SURVEY MONUMENTS
 - FENCE
 - MISC. UTILITY
 - POWER POLE
 - OHE
 - OVERHEAD ELECTRIC LINE
 - SURFACE WATER APPURTENANCE



TETRA TECH, INC.
 4101 COX ROAD,
 SUITE 100
 GLEN ALLEN, VA 23060
 TEL: (804) 290-4321
 FAX: (804) 270-2739

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**FORTRESS SOLAR
 FACILITY
 AYPa POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO**

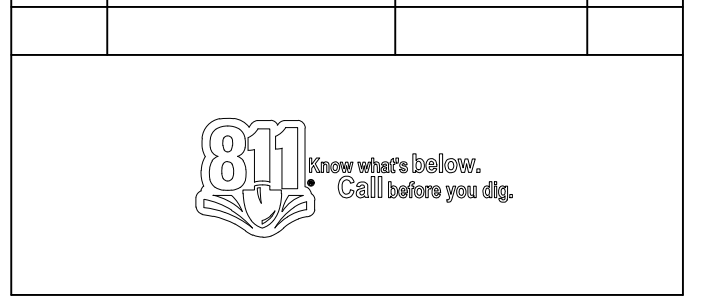
PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
**EXISTING CONDITIONS
 AND DEMOLITION PLAN**

SHEET SIZE: ARCH "D"
 24" X 36" (610 x 914)

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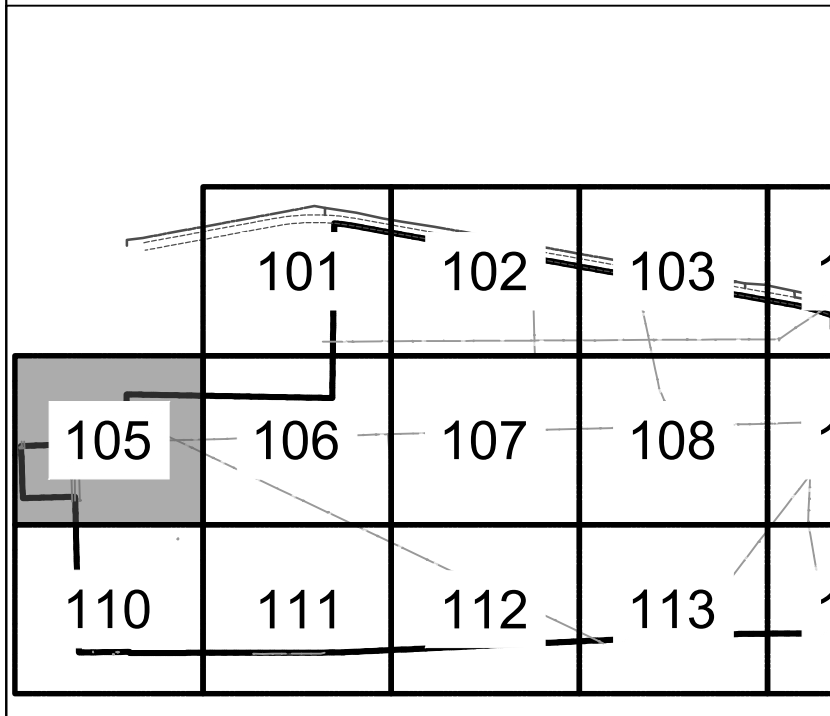
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 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
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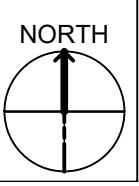
SHEET NO.:
CD105

KEY MAP

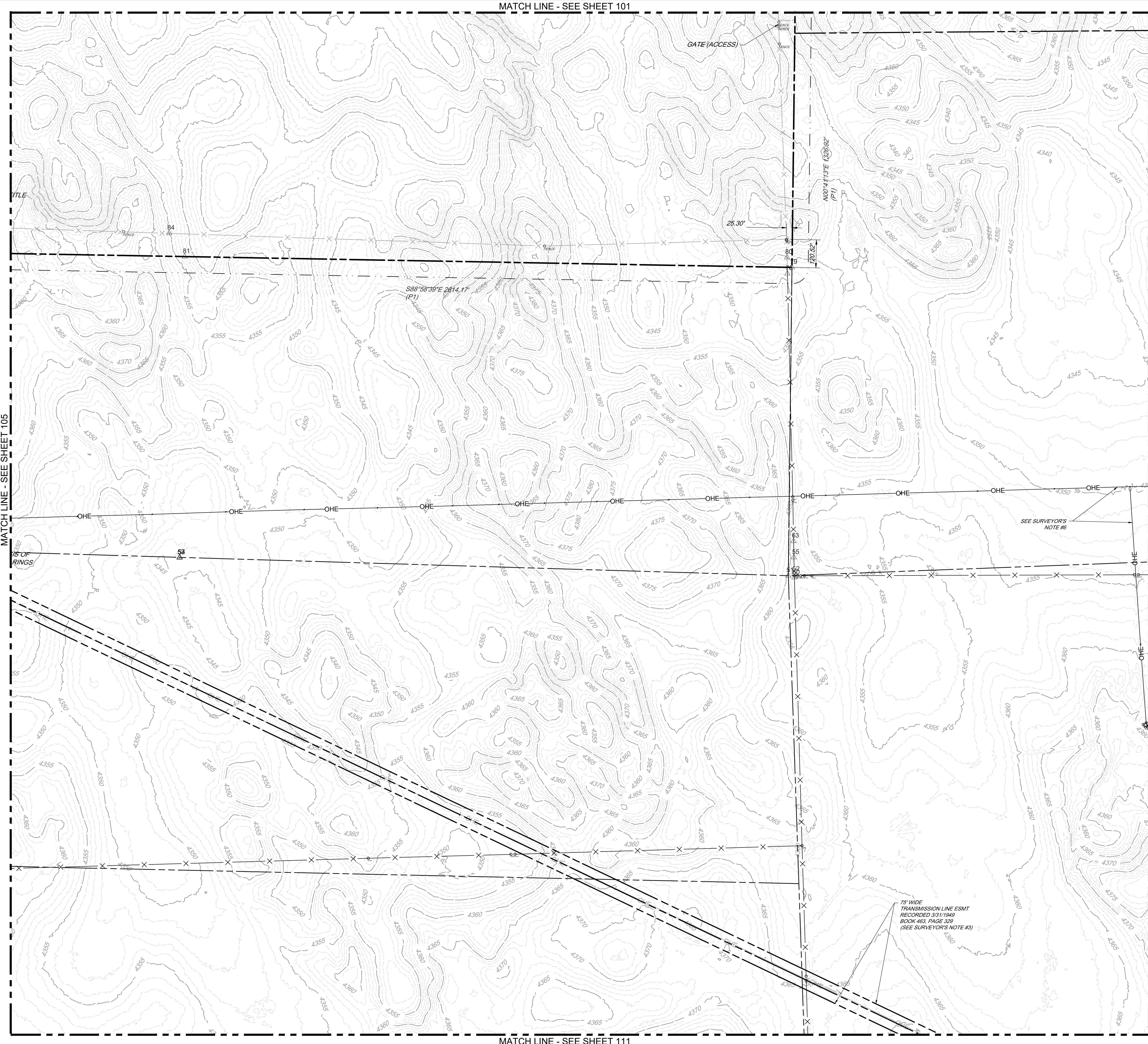


PLAN

 SCALE: 1" = 200'
 SHEET: ARCH D



MATCH LINE - SEE SHEET 101



MATCH LINE - SEE SHEET 111

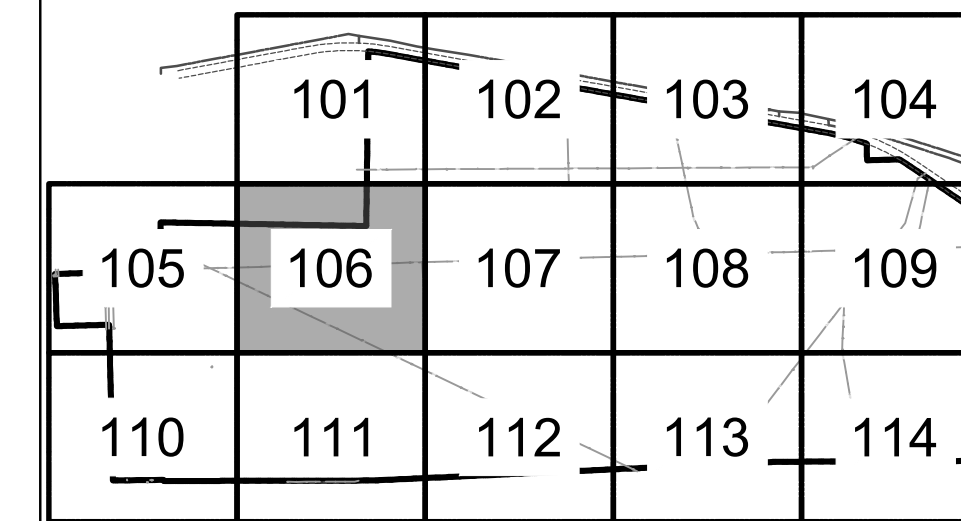
GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRaverse
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
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 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL DEMOLITION**
- INTERNAL #
 - MISC. STRUCTURE
 - SURVEY MONUMENTS
 - FENCE
 - MISC. UTILITY
 - POWER POLE
 - OHE
 - OVERHEAD ELECTRIC LINE
 - SURFACE WATER APPURTENANCE

KEY MAP



PLAN

0 200' 400'

SCALE: 1" = 200'

SHEET: ARCH D



TETRA TECH, INC.
4101 COX ROAD,
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**FORTRESS SOLAR
FACILITY**

**AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO**

PROJECT NUMBERS:
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SHEET TITLE:
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AND DEMOLITION PLAN**

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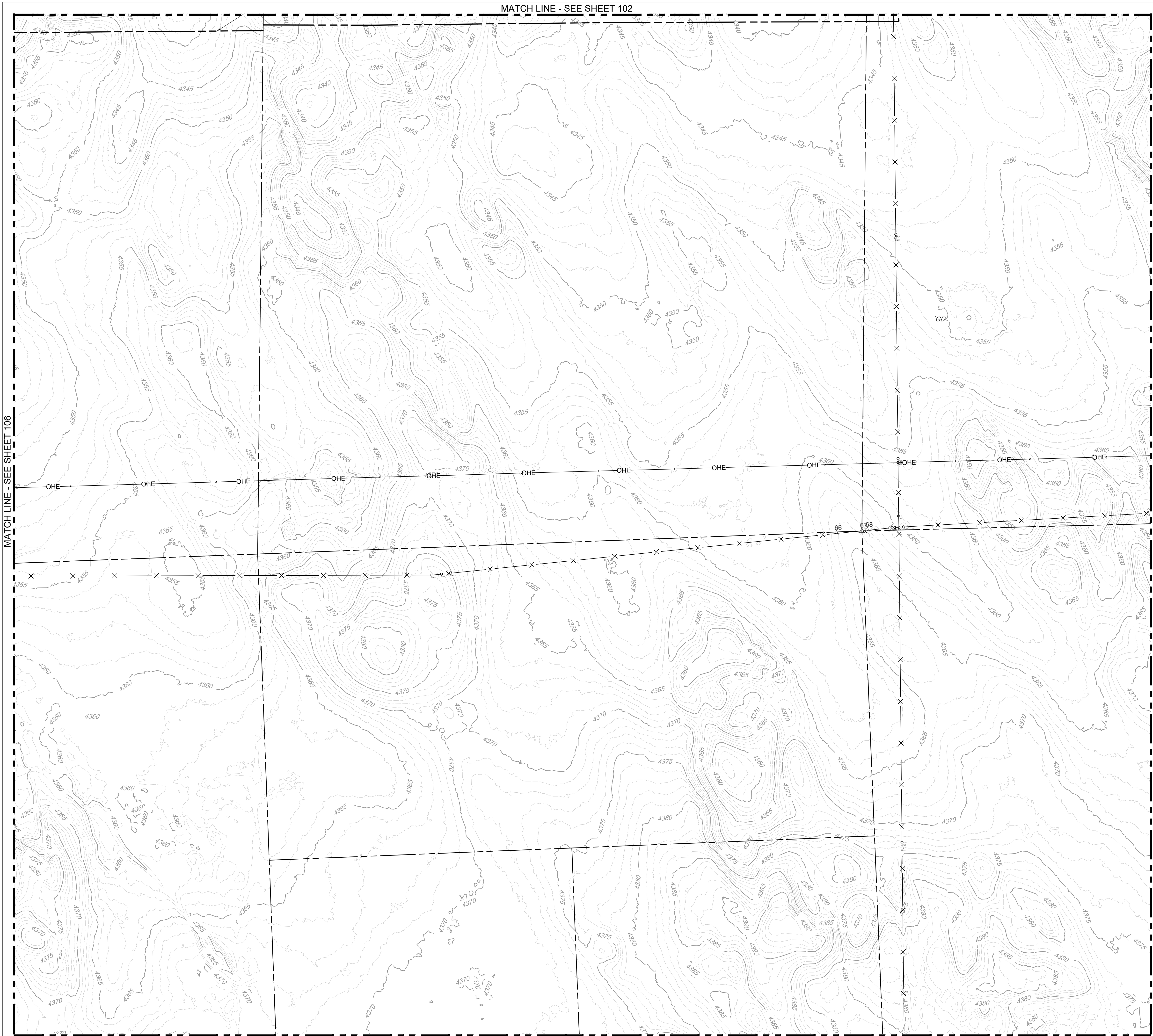
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DRAWN BY: TTI
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PROJECT PHASE:
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SCALE:
AS SHOWN

SHEET NO.:
CD106

MATCH LINE - SEE SHEET 102



MATCH LINE - SEE SHEET 106

MATCH LINE - SEE SHEET 108

MATCH LINE - SEE SHEET 112

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
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 - RAILROAD #
 - SANITARY SEWER MANHOLE
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 - STRUCTURE (MISC)
- COM**
- ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
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 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL DEMOLITION**
- INTERNAL #
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**FORTRESS SOLAR
FACILITY**
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
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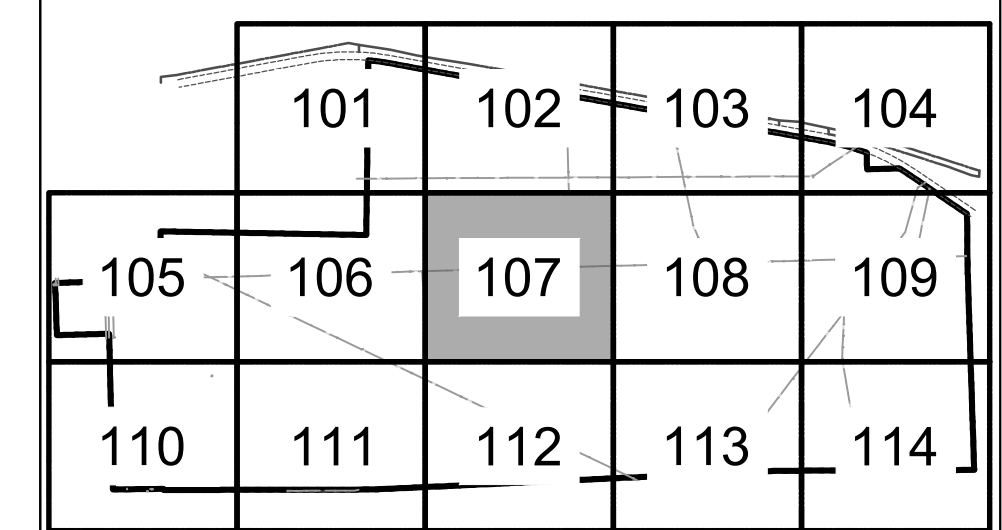
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
AS SHOWN

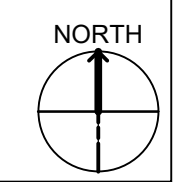
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CD107

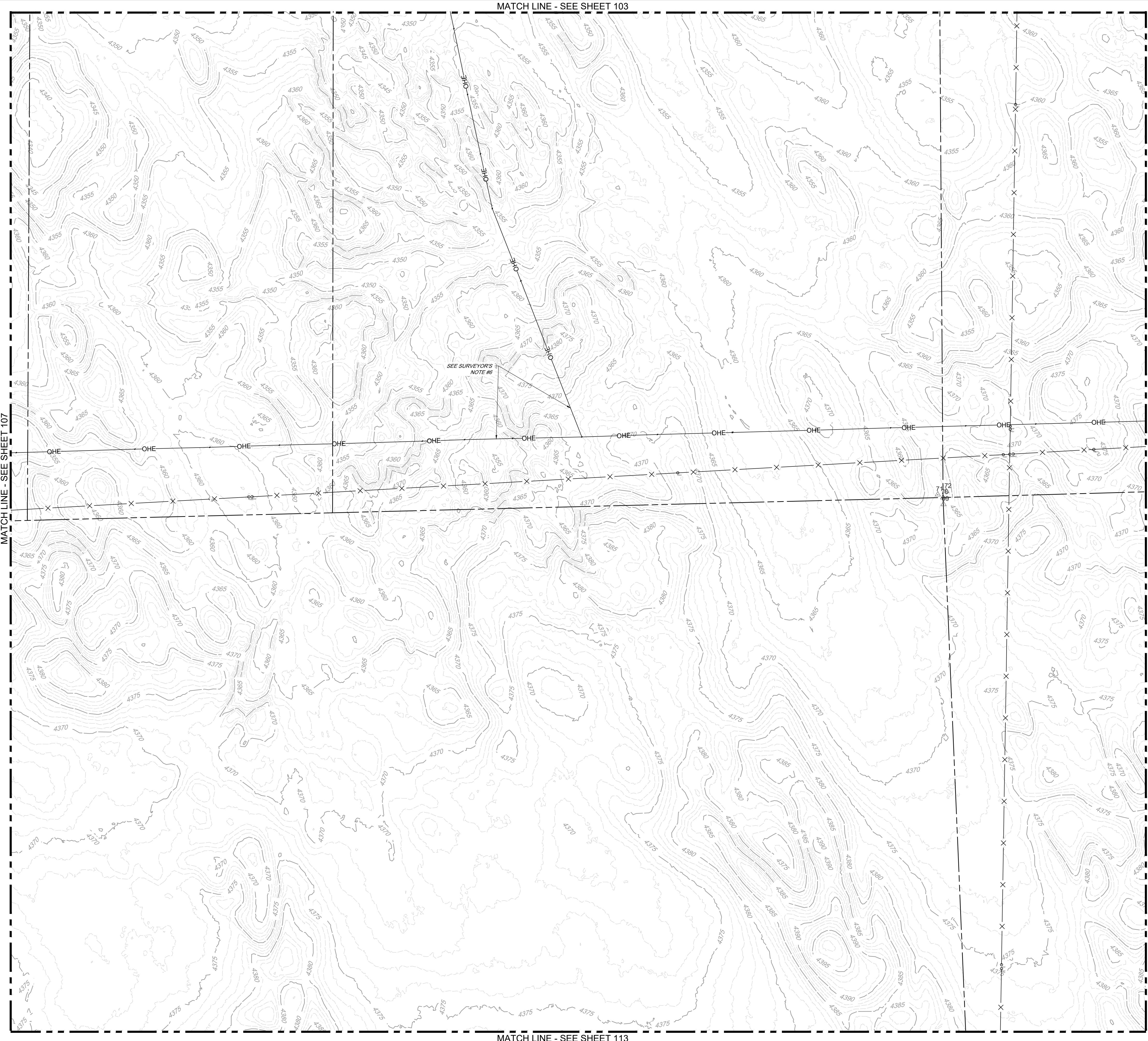
KEY MAP



PLAN

SCALE: 1" = 200'
SHEET: ARCH D





GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
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 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL DEMOLITION**
- INTERNAL #
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 - SURVEY MONUMENTS
 - FENCE
 - MISC. UTILITY
 - POWER POLE
 - OVERHEAD ELECTRIC LINE
 - SURFACE WATER APPURTENANCE



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24" X 36" (610 x 914)
0 1/2" 1"

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A	DRAFT	10/12/2023	TTI
B	IFP	10/17/2023	TTI
C	REVISED	10/20/2023	TTI
D	REVISED	10/24/2023	TTI



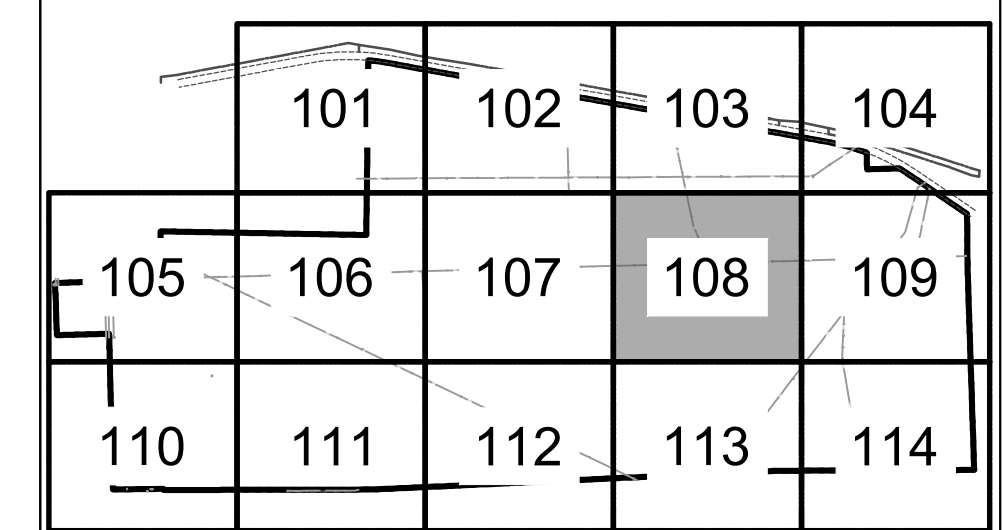
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

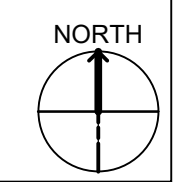
SHEET NO.:
CD108

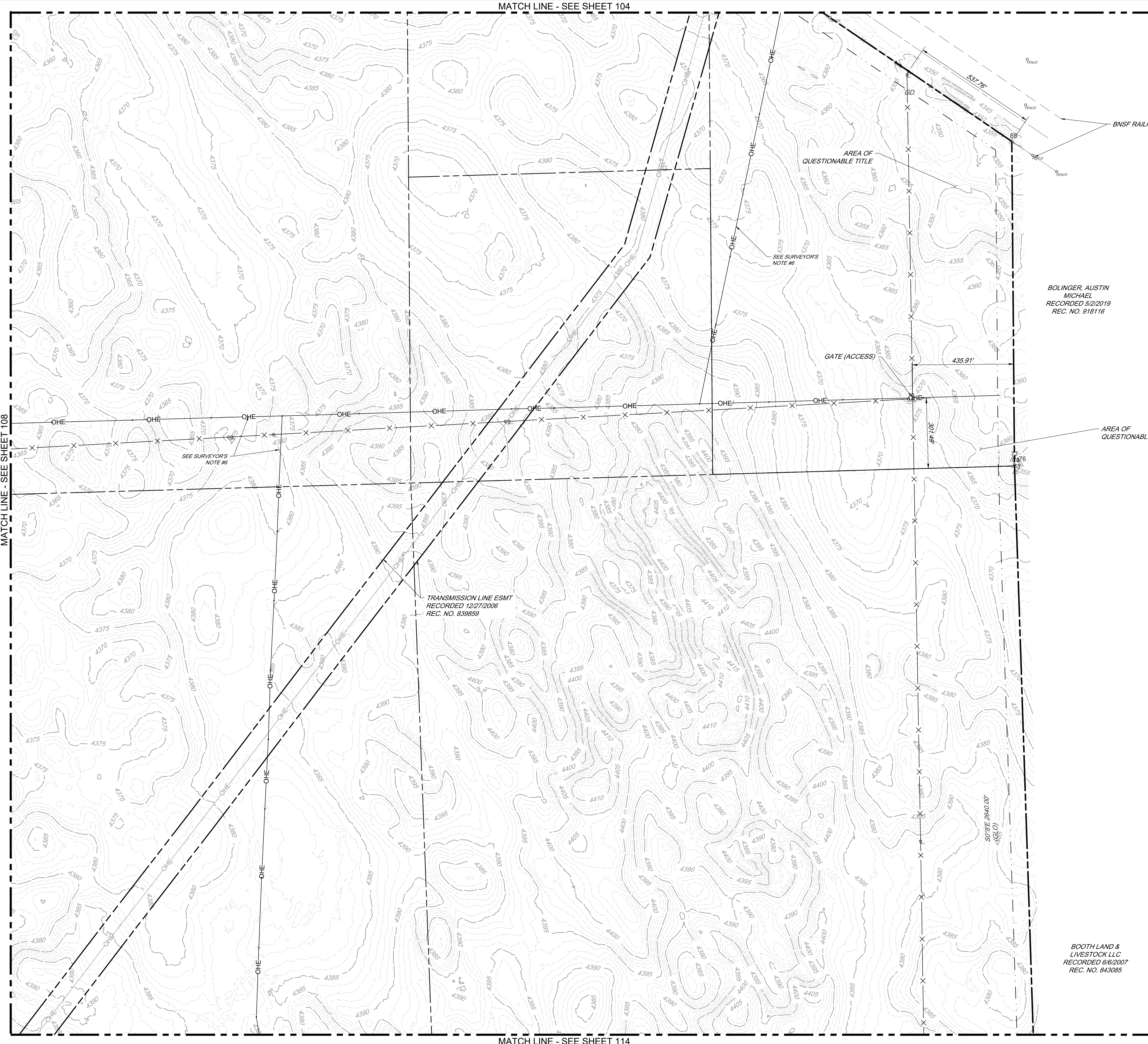
KEY MAP



PLAN

SCALE: 1" = 200'
SHEET: ARCH D





GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT & BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT & ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL DEMOLITION**
- INTERNAL & MISC. STRUCTURE
 - SURVEY MONUMENTS
 - FENCE
 - MISC. UTILITY
 - POWER POLE
 - OVERHEAD ELECTRIC LINE
 - SURFACE WATER APPURTENANCE



TETRA TECH, INC.
4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

STAMP:

NOT FOR CONSTRUCTION

PRELIMINARY

**FORTRESS SOLAR
FACILITY**
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
**EXISTING CONDITIONS
AND DEMOLITION PLAN**

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 1/2" 1"

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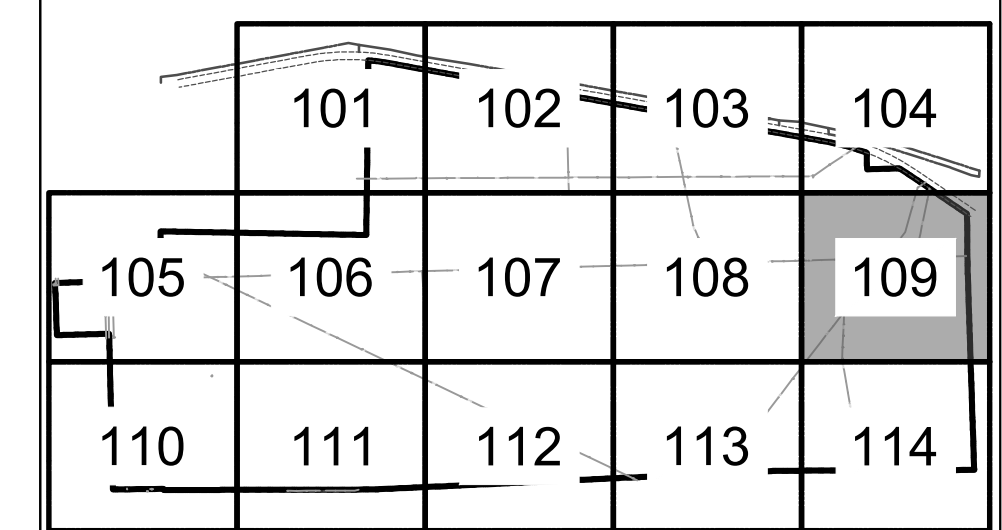
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

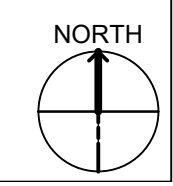
SHEET NO.:
CD109

KEY MAP



PLAN

SCALE: 1" = 200'
SHEET: ARCH D

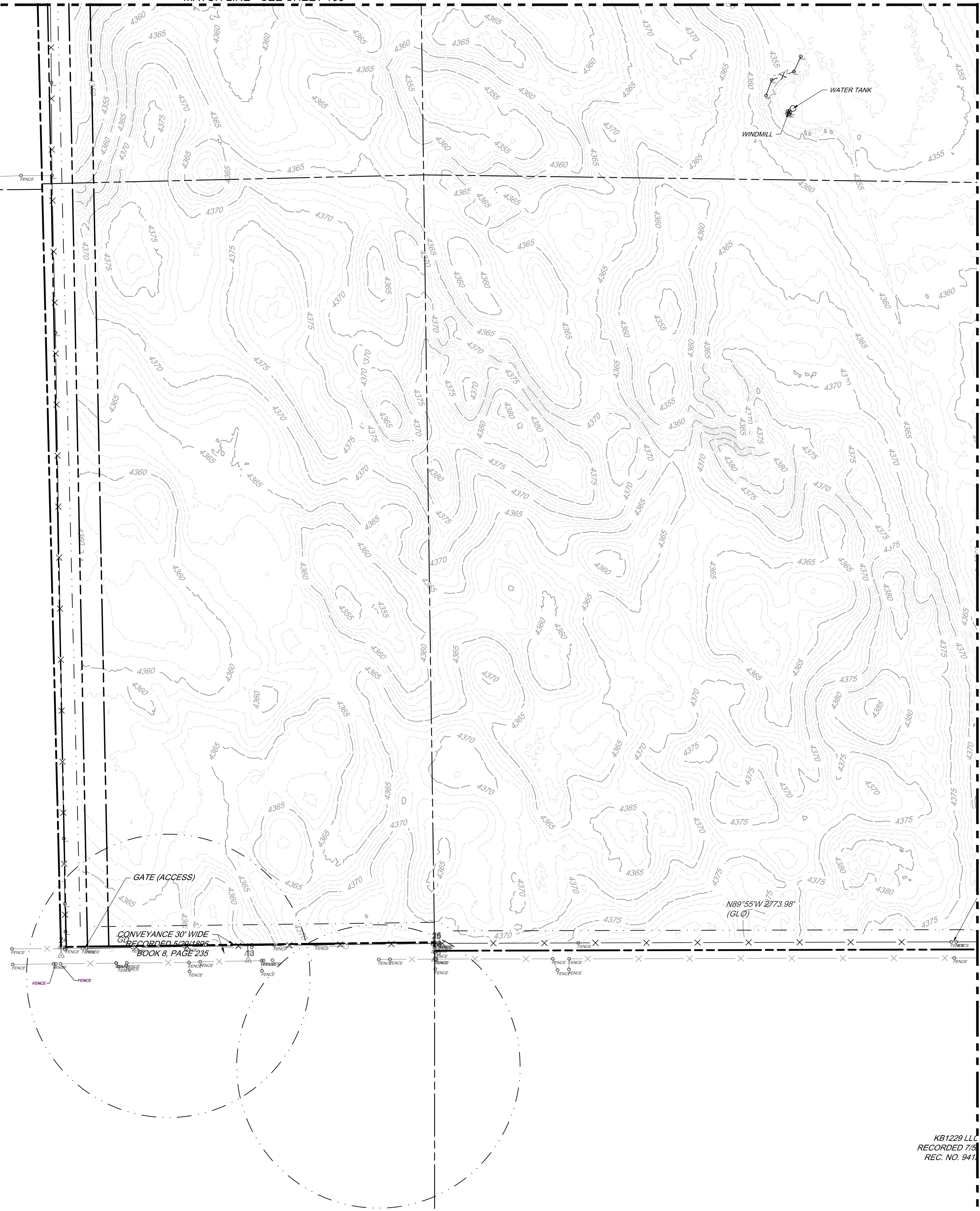


MATCH LINE - SEE SHEET 105

DILLEY, VERNON &
GWEN
RECORDED 3/11/1987
REC. NO. 701704

DILLEY, VERNON &
GWEN
RECORDED 2/2/1972
REC. NO. 570511

COUNTY ROAD
Q



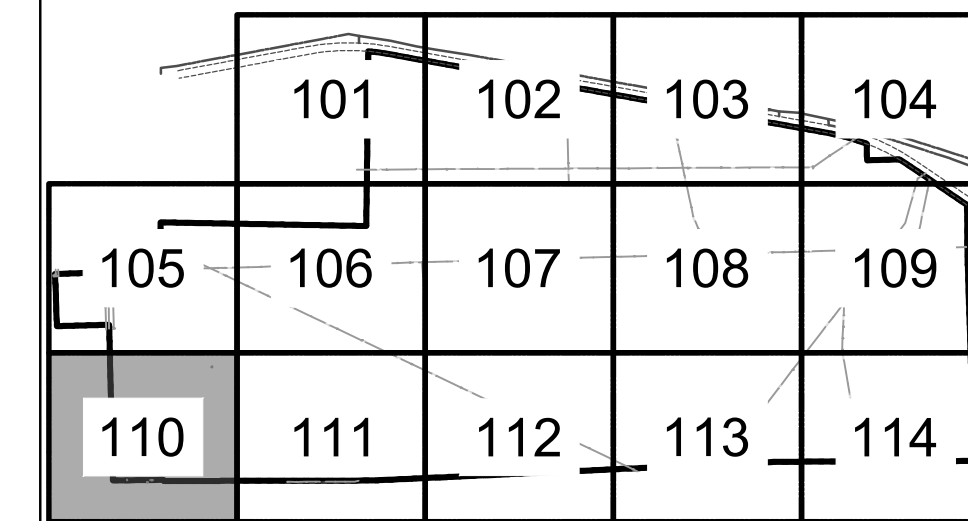
GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

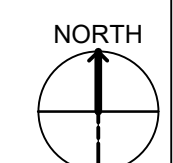
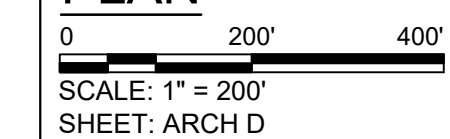
LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL DEMOLITION**
- INTERNAL #
 - MISC. STRUCTURE
 - SURVEY MONUMENTS
 - FENCE
 - MISC. UTILITY
 - POWER POLE
 - OVERHEAD ELECTRIC LINE
 - SURFACE WATER APPURTENANCE

KEY MAP



PLAN



TETRA TECH, INC.
4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

STAMP:

**NOT FOR
CONSTRUCTION**

PRELIMINARY

**FORTRESS SOLAR
FACILITY**
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
**EXISTING CONDITIONS
AND DEMOLITION PLAN**

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 1/2" 1"

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D	REVISED	10/24/2023	TTI



DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

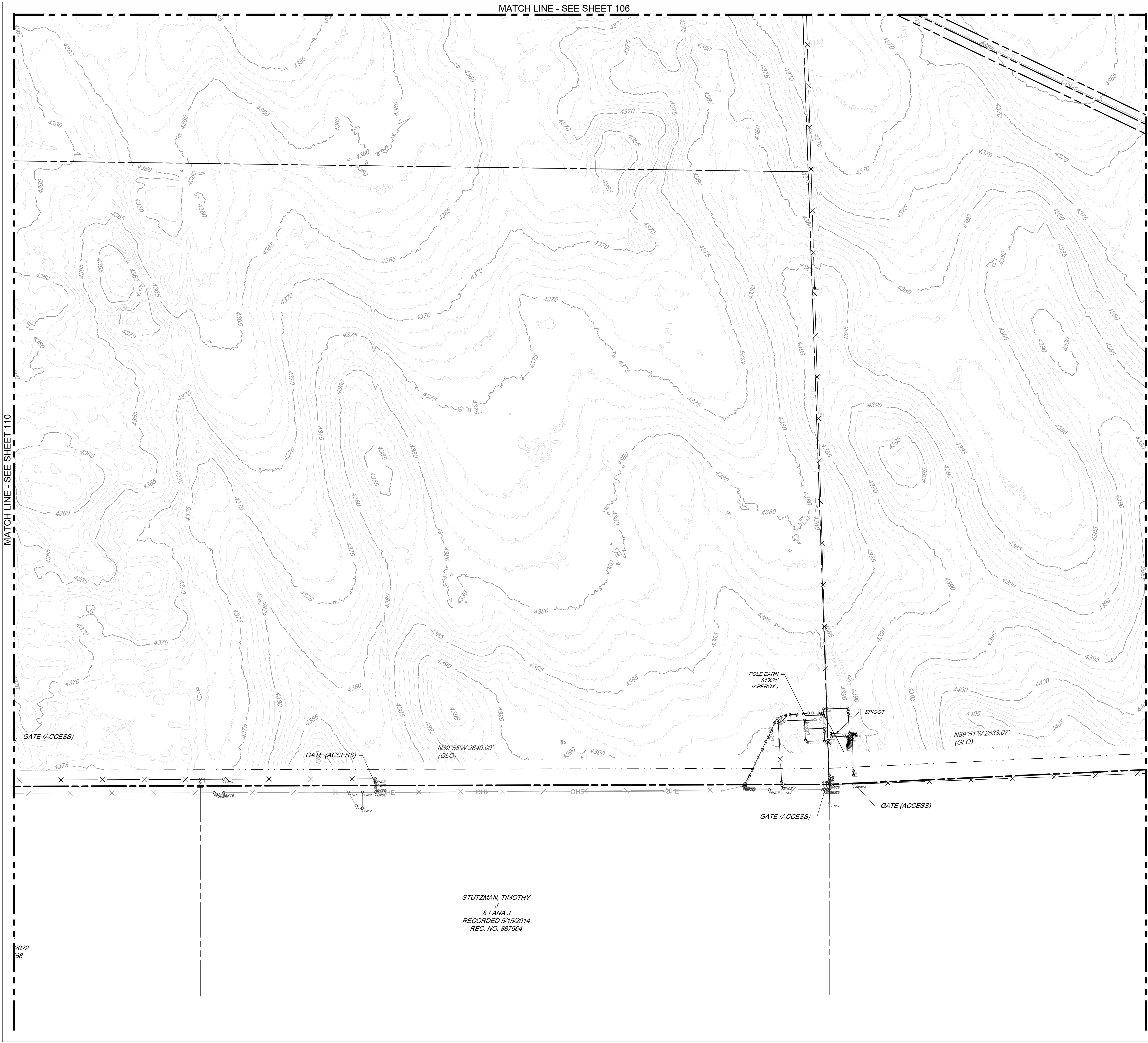
PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CD110

KB1229 LLC
RECORDED 7/3
REC. NO. 941

MATCH LINE - SEE SHEET 106



MATCH LINE - SEE SHEET 110

MATCH LINE - SEE SHEET 112

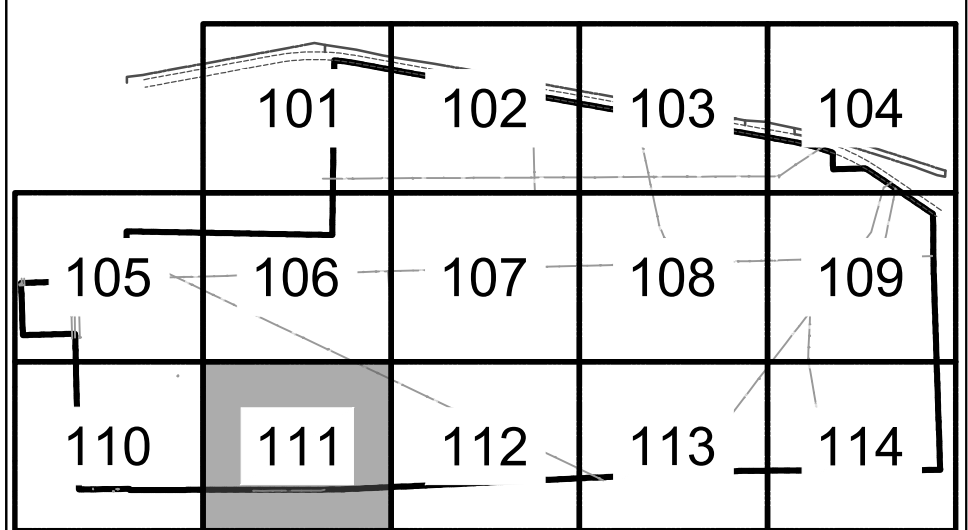
2022
68

STUTZMAN, TIMOTHY
& LANA, J
RECORDED 5/15/2014
REC. NO. 887664

GENERAL NOTES
1. REFER TO C-000 FOR GENERAL PROJECT NOTES

- LEGEND**
- EXISTING CONDITIONS**
- ADJACENT E
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT E
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL DEMOLITION**
- INTERNAL E
 - MISC. STRUCTURE
 - SURVEY MONUMENTS
 - FENCE
 - MISC. UTILITY
 - POWER POLE
 - OVERHEAD ELECTRIC LINE
 - SURFACE WATER APPURTENANCE

KEY MAP



PLAN
0 200' 400'
SCALE: 1" = 200'
SHEET: ARCH D



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4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
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FAX: (804) 270-2739

STAMP:
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PRELIMINARY

**FORTRESS SOLAR
FACILITY
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO**

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
**EXISTING CONDITIONS
AND DEMOLITION PLAN**

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0 1/2" 1"

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D	REVISED	10/24/2023	TTI

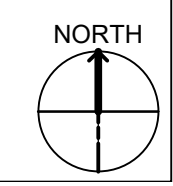


DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

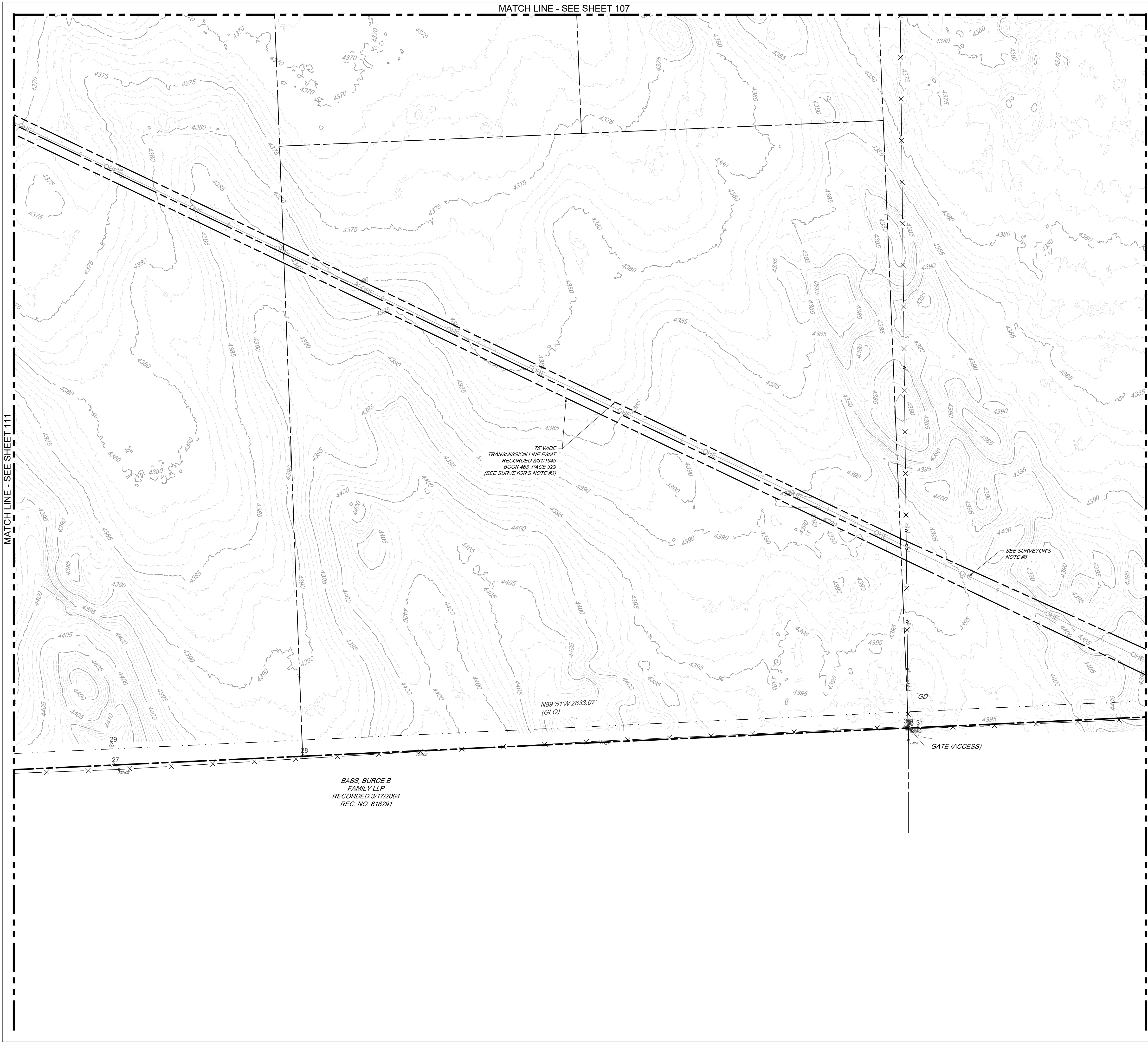
PROJECT PHASE:
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SCALE:
AS SHOWN

SHEET NO.:
CD111



MATCH LINE - SEE SHEET 107



BASS, BURCE B
FAMILY LLP
RECORDED 3/17/2004
REC. NO. 816291

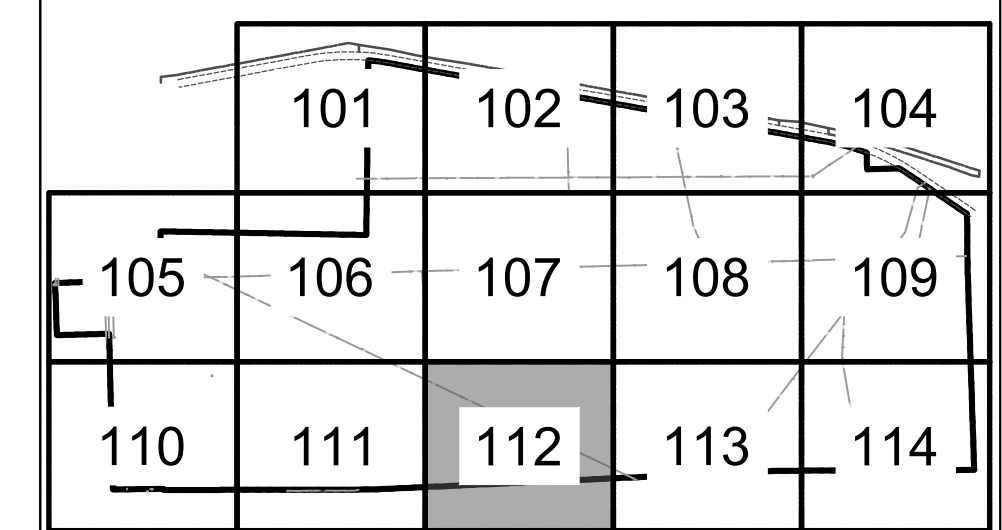
GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

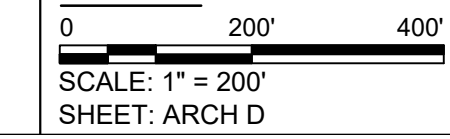
LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL DEMOLITION**
- INTERNAL #
 - MISC. STRUCTURE
 - SURVEY MONUMENTS
 - FENCE
 - MISC. UTILITY
 - POWER POLE
 - OVERHEAD ELECTRIC LINE
 - SURFACE WATER APPURTENANCE

KEY MAP



PLAN



TETRA TECH, INC.
4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

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**FORTRESS SOLAR
FACILITY
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO**

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
**EXISTING CONDITIONS
AND DEMOLITION PLAN**

SHEET SIZE: ARCH "D"
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0 1/2" 1"

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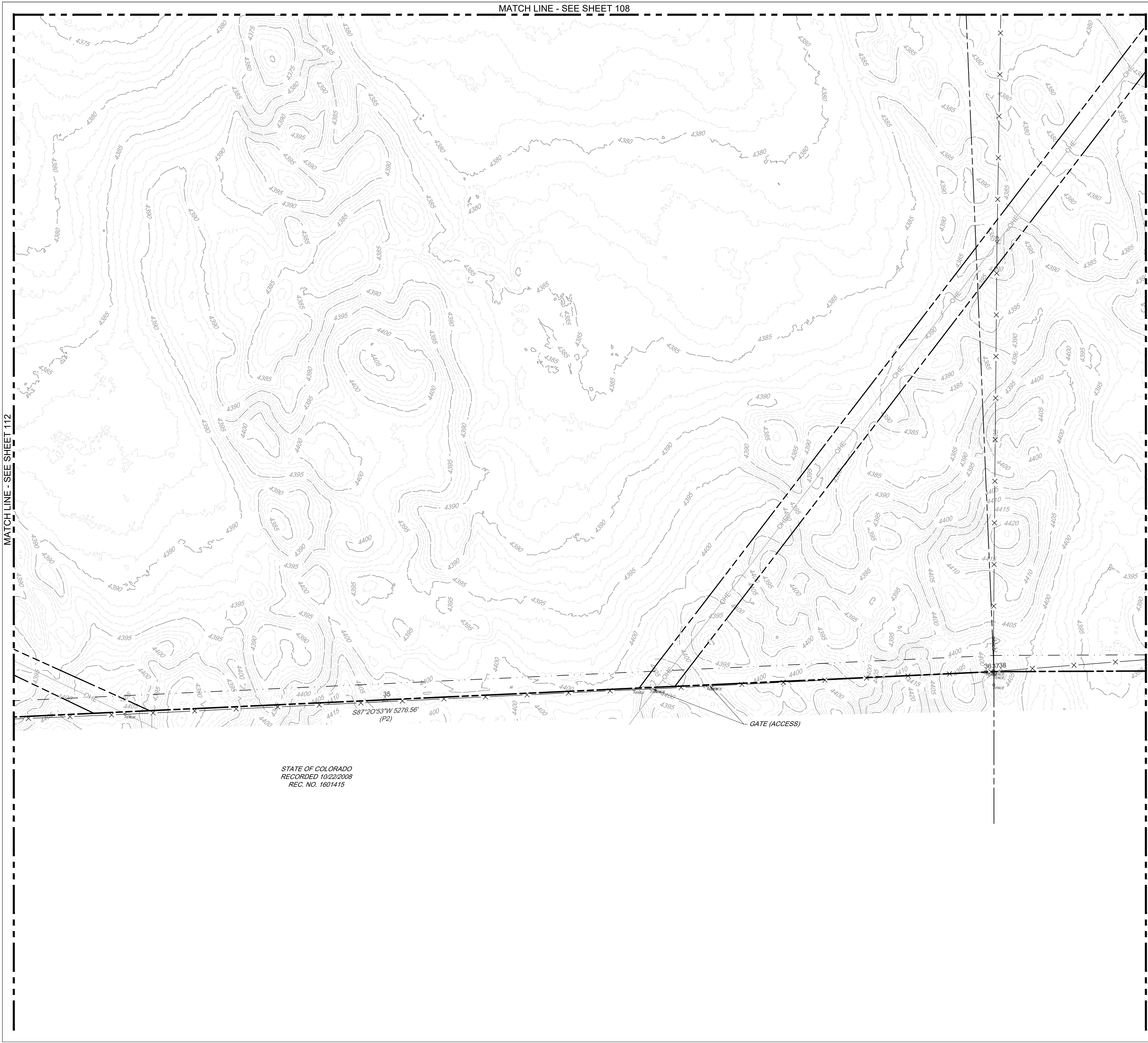
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CD112

MATCH LINE - SEE SHEET 108



STATE OF COLORADO
RECORDED 10/22/2008
REC. NO. 1601415

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT &
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD
 - RAILROAD &
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT &
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL DEMOLITION**
- INTERNAL &
 - MISC. STRUCTURE
 - SURVEY MONUMENTS
 - FENCE
 - MISC. UTILITY
 - POWER POLE
 - OVERHEAD ELECTRIC LINE
 - SURFACE WATER APPURTENANCE



TETRA TECH, INC.
4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

STAMP:

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CONSTRUCTION**

PRELIMINARY

**FORTRESS SOLAR
FACILITY**
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
**EXISTING CONDITIONS
AND DEMOLITION PLAN**

SHEET SIZE: ARCH "D"
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C	REVISED	10/20/2023	TTI
D	REVISED	10/24/2023	TTI



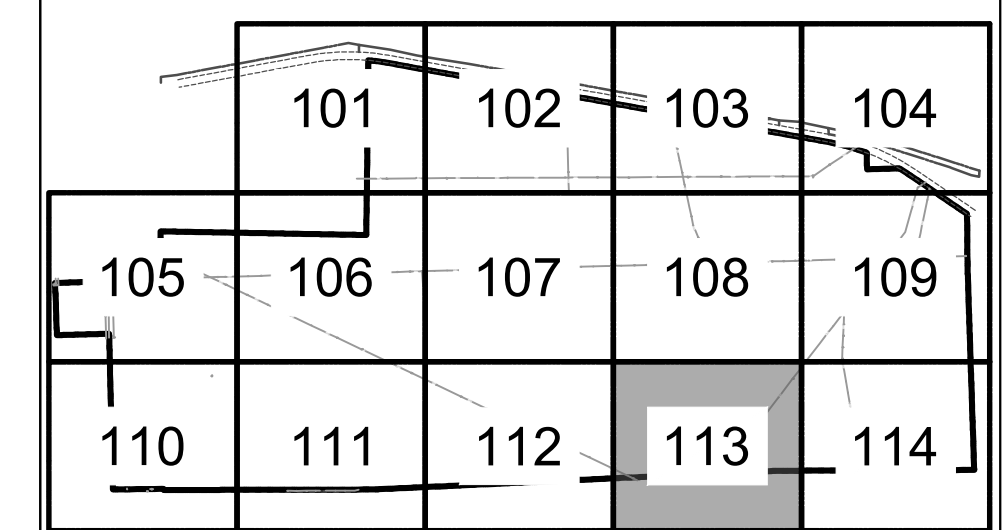
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
AS SHOWN

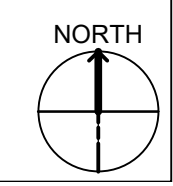
SHEET NO.:
CD113

KEY MAP

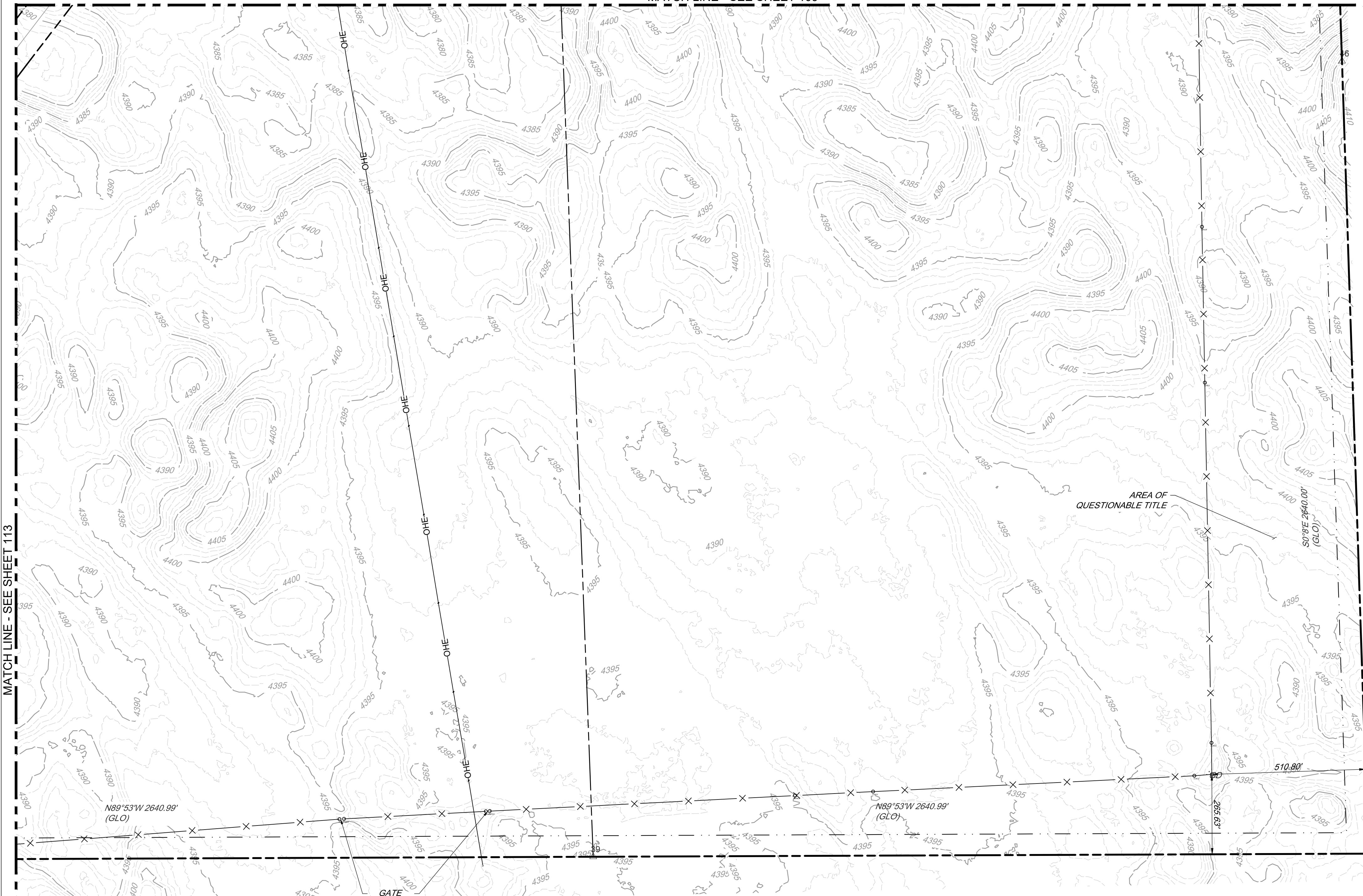


PLAN

SCALE: 1" = 200'
SHEET: ARCH D



MATCH LINE - SEE SHEET 109



BOOTH LAND &
LIVESTOCK LLC
RECORDED 6/6/2007
REC. NO. 843085

BOOTH LAND &
LIVESTOCK LLC
RECORDED 6/6/2007
REC. NO. 843085

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL DEMOLITION**
- INTERNAL #
 - MISC. STRUCTURE
 - SURVEY MONUMENTS
 - FENCE
 - MISC. UTILITY
 - POWER POLE
 - OVERHEAD ELECTRIC LINE
 - SURFACE WATER APPURTENANCE



TETRA TECH, INC.
4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

STAMP:

**NOT FOR
CONSTRUCTION**

PRELIMINARY

**FORTRESS SOLAR
FACILITY**
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
**EXISTING CONDITIONS
AND DEMOLITION PLAN**

SHEET SIZE: ARCH "D"
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0 1/2" 1"

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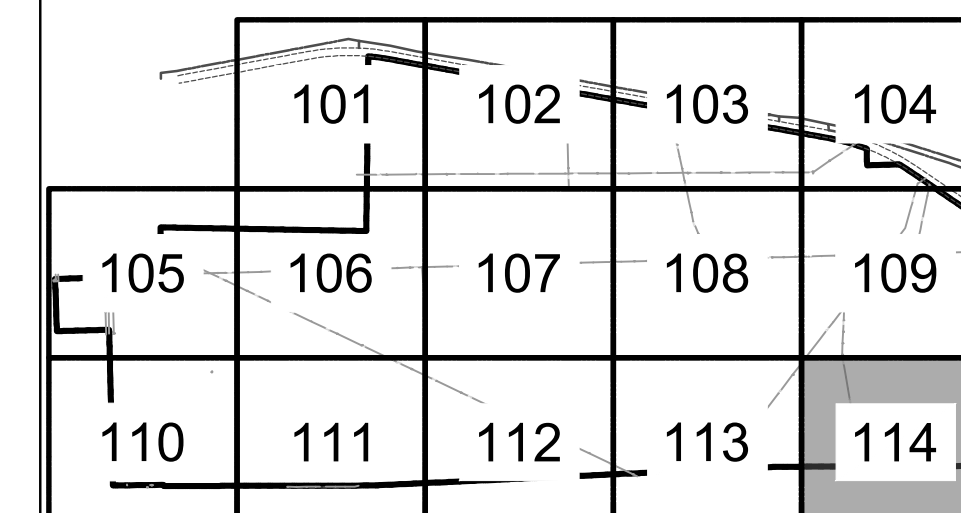
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CD114

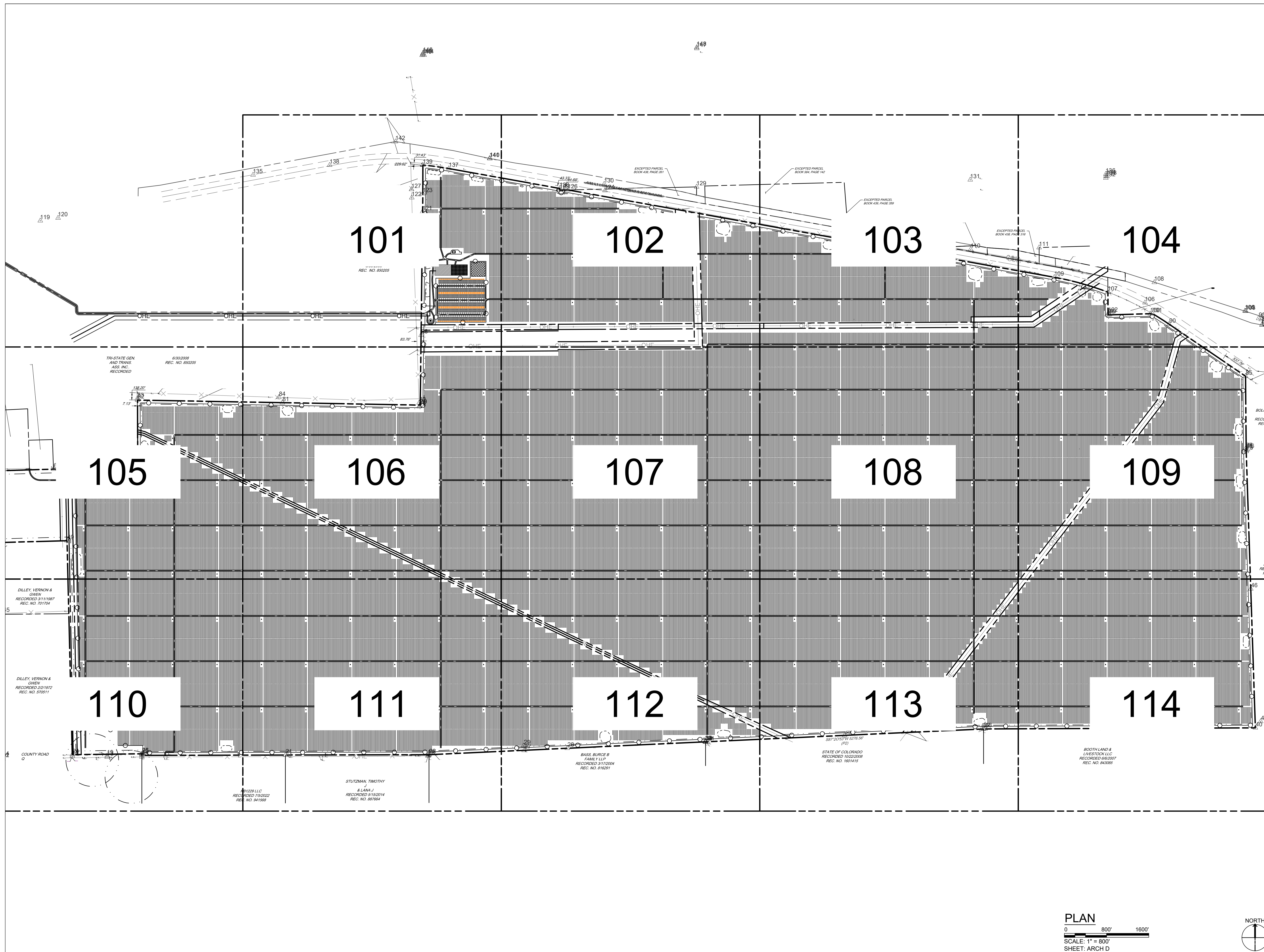
KEY MAP



PLAN

0 200' 400'
SCALE: 1" = 200'
SHEET: ARCH D





TETRA TECH
 TETRA TECH, INC.
 4101 COX ROAD,
 SUITE 100
 GLEN ALLEN, VA 23060
 TEL: (804) 290-4321
 FAX: (804) 270-2739

STAMP:
NOT FOR CONSTRUCTION

PRELIMINARY

FORTRESS SOLAR FACILITY
 AYPA POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
CIVIL SITE PLAN OVERALL

SHEET SIZE: ARCH "D"
 24" X 36" (610 x 914)

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B	IFP	10/17/2023	TTI
C	REVISED	10/20/2023	TTI
D	REVISED	10/24/2023	TTI



DATE: 10/12/2023
 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
 ISSUED FOR PERMIT

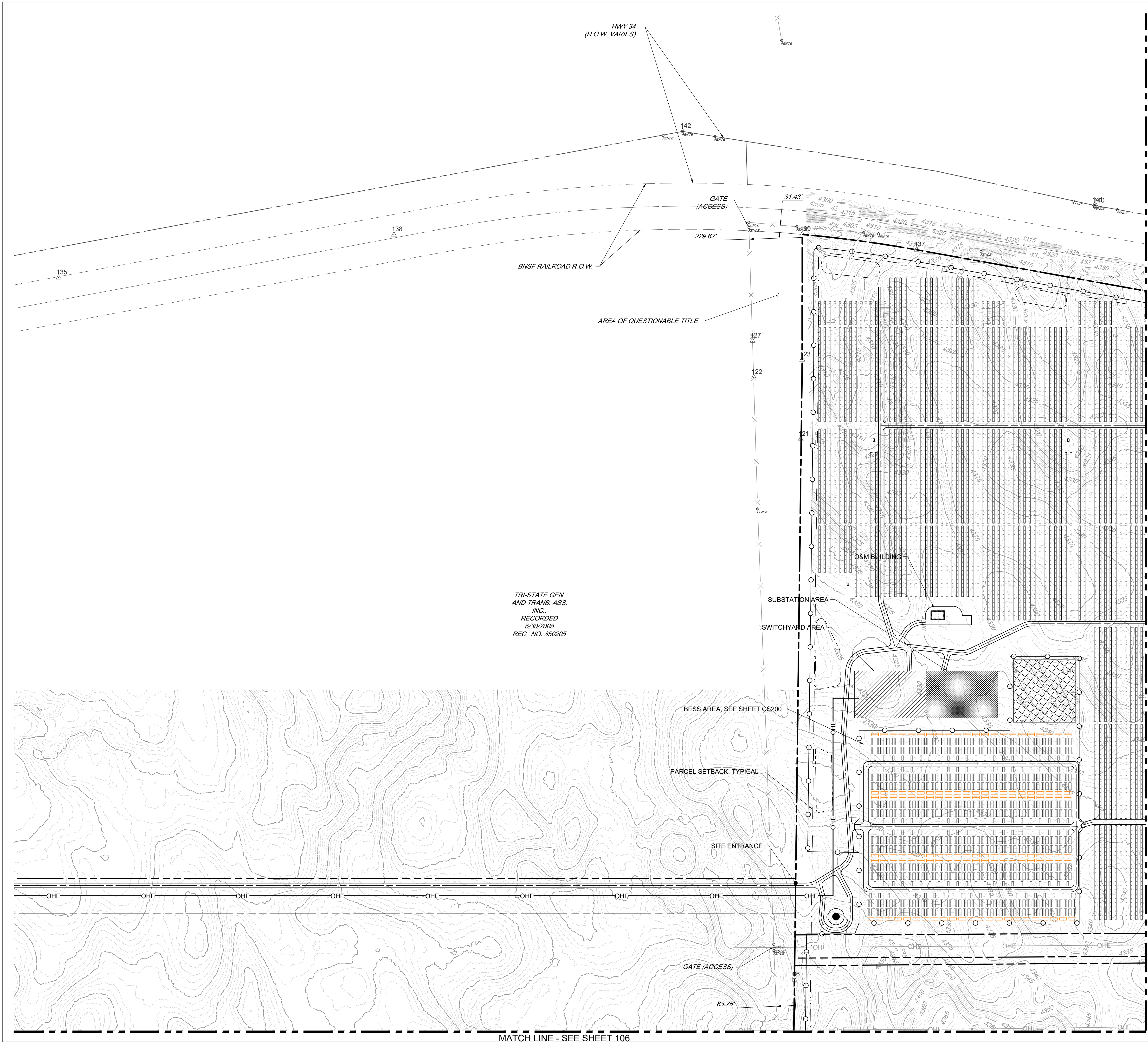
SCALE:
 AS SHOWN

SHEET NO.:
CS100

PLAN

 SCALE: 1" = 800'
 SHEET: ARCH D





GENERAL NOTES
 1. REFER TO C-000 FOR GENERAL PROJECT NOTES

- LEGEND**
- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY #
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH



TETRA TECH, INC.
 4101 COX ROAD,
 SUITE 100
 GLEN ALLEN, VA 23060
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FORTRESS SOLAR FACILITY
 AYPa POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

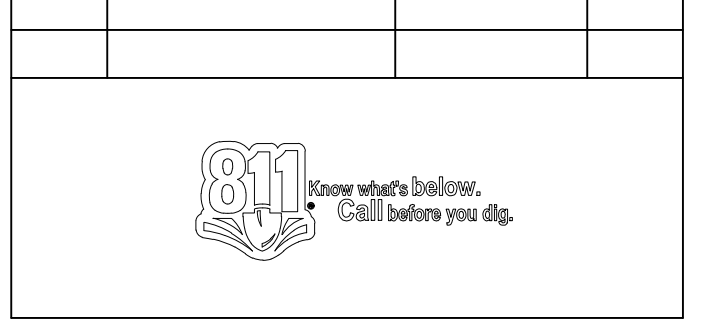
PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
 CIVIL SITE PLAN

SHEET SIZE: ARCH "D"
 24" X 36" (610 x 914)

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B	IFP	10/17/2023	TTI
C	REVISED	10/20/2023	TTI
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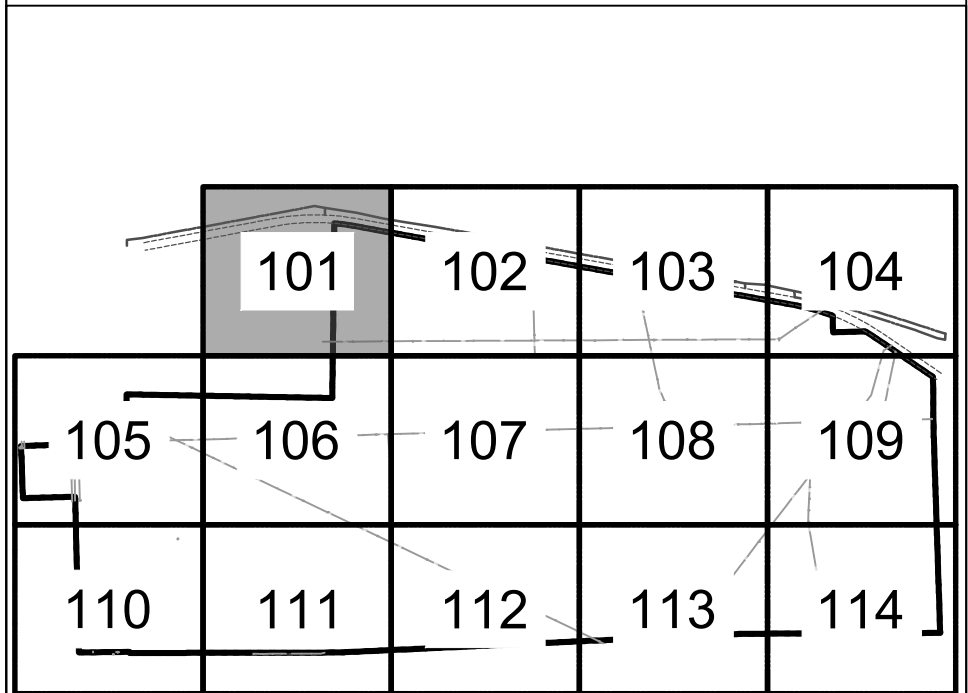
DATE: 10/12/2023
 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
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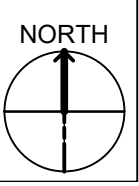
SCALE:
 AS SHOWN

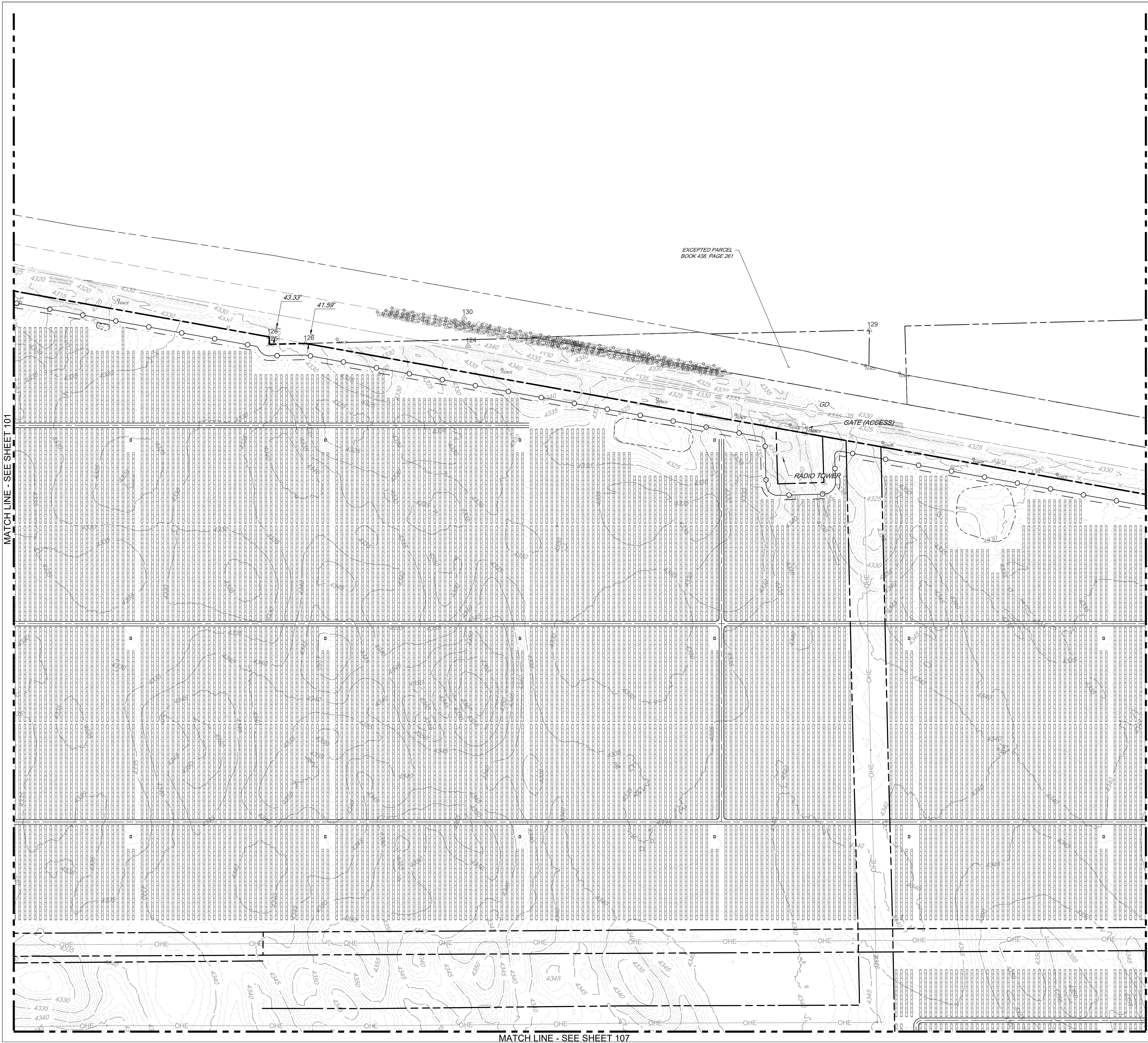
SHEET NO.:
CS101

KEY MAP



PLAN
 SCALE: 1" = 200'
 SHEET: ARCH D





GENERAL NOTES
 1. REFER TO C-000 FOR GENERAL PROJECT NOTES

- LEGEND**
- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY #
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH



TETRA TECH, INC.
 4101 COX ROAD,
 SUITE 100
 GLEN ALLEN, VA 23060
 TEL: (804) 290-4321
 FAX: (804) 270-2739

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 AYPa POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

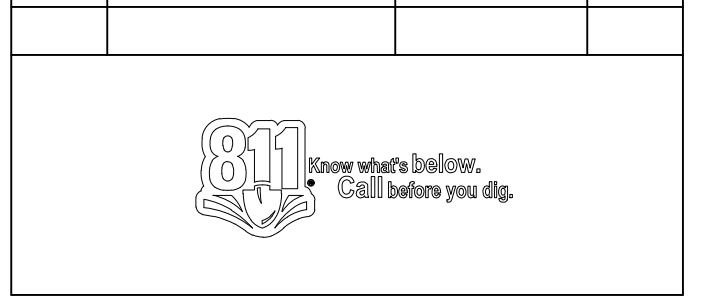
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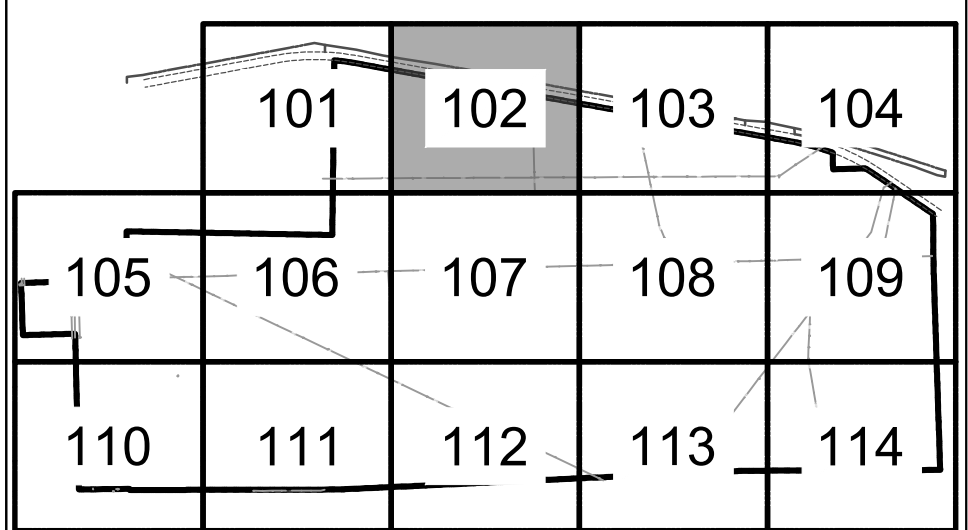


DATE: 10/12/2023
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 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
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 SCALE:
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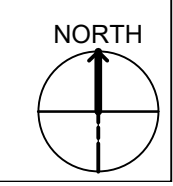
SHEET NO.:
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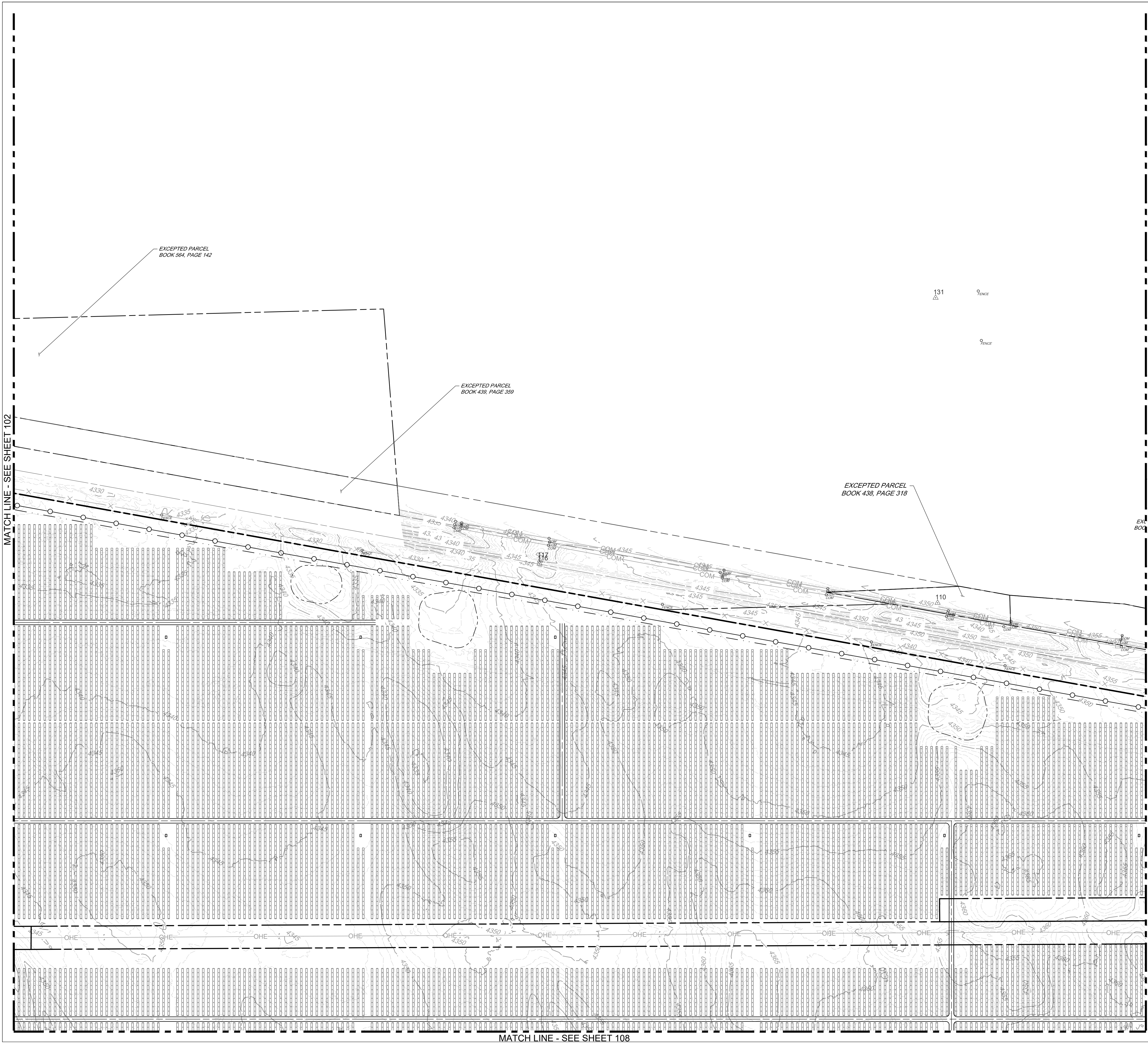
KEY MAP



PLAN

SCALE: 1" = 200'
 SHEET: ARCH D





GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
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 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH



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**FORTRESS SOLAR
FACILITY**
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
CIVIL SITE PLAN

SHEET SIZE: ARCH "D"
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D	REVISED	10/24/2023	TTI



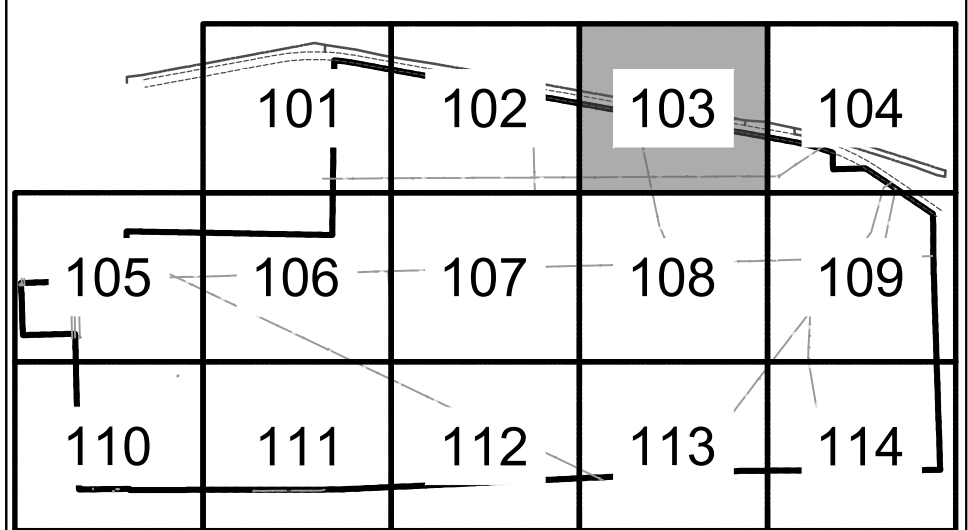
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
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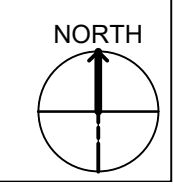
SHEET NO.:
CS103

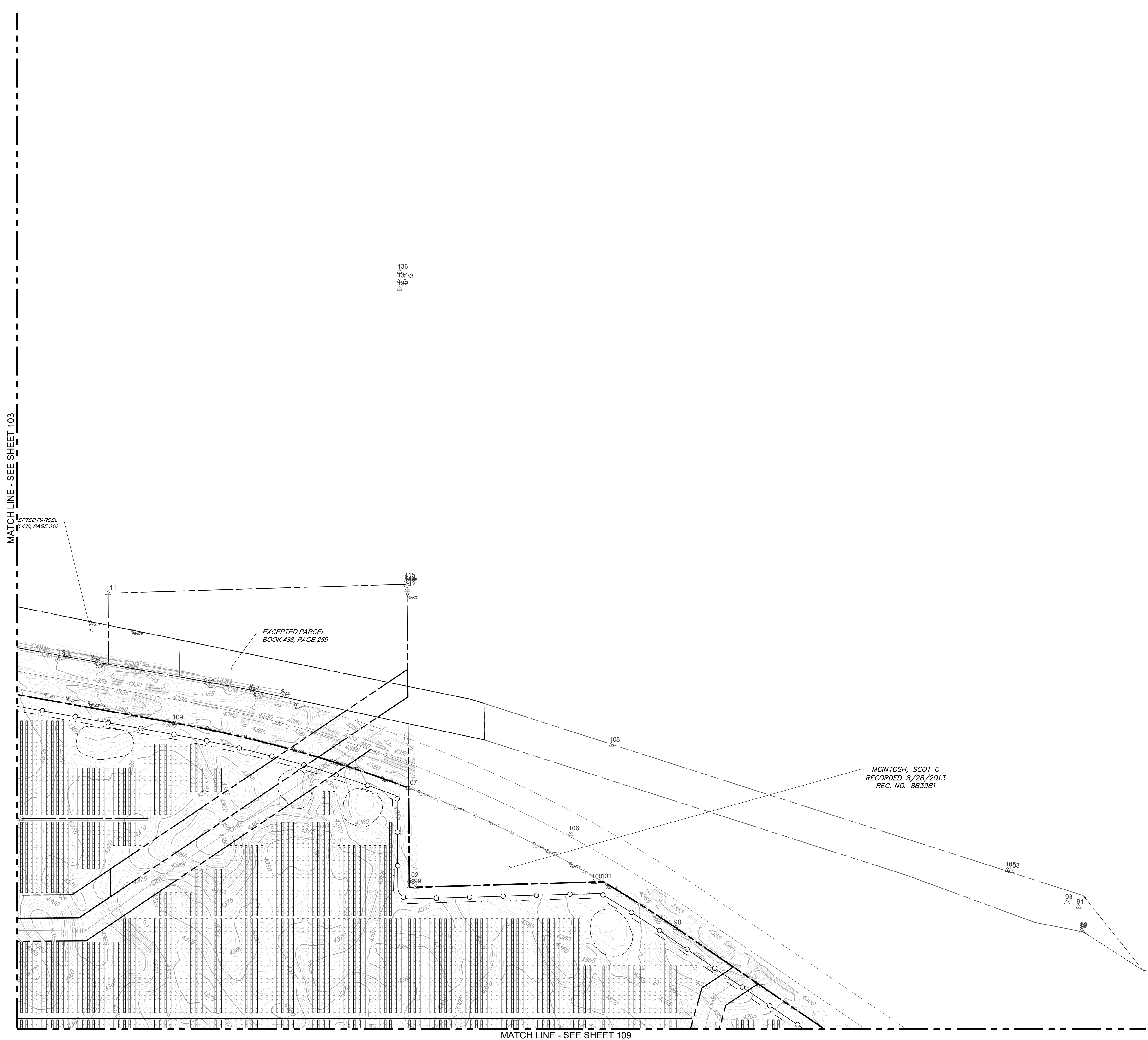
KEY MAP



PLAN

SCALE: 1" = 200'
SHEET: ARCH D





GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
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 - SANITARY SEWER MANHOLE
 - SIGN
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 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY #
 - POWER STATION (PCS)
 - PV RACKING/PIER
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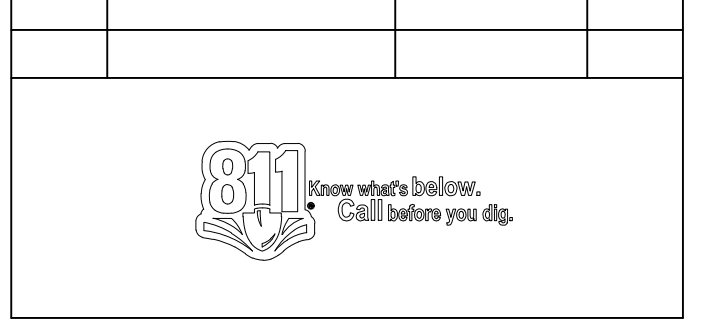
PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
CIVIL SITE PLAN

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 1/2" 1"

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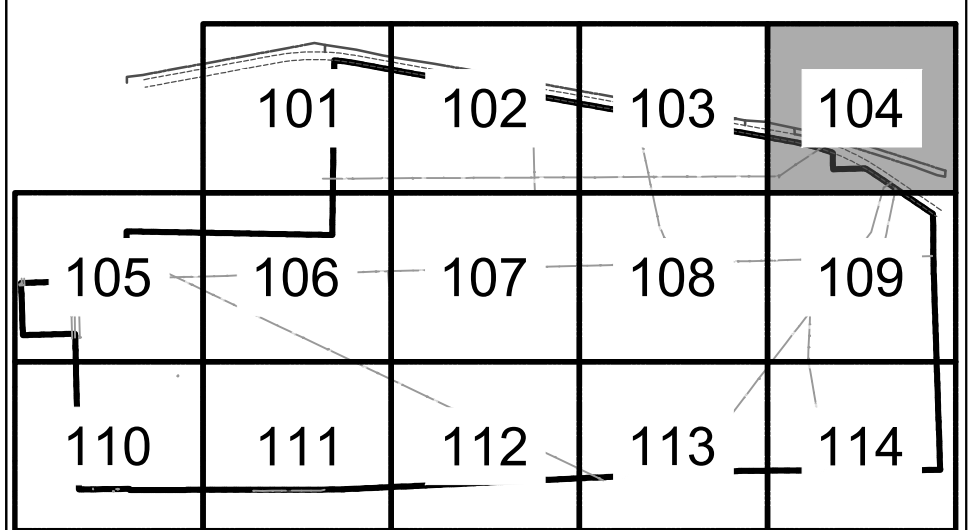
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ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
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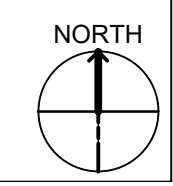
SHEET NO.:
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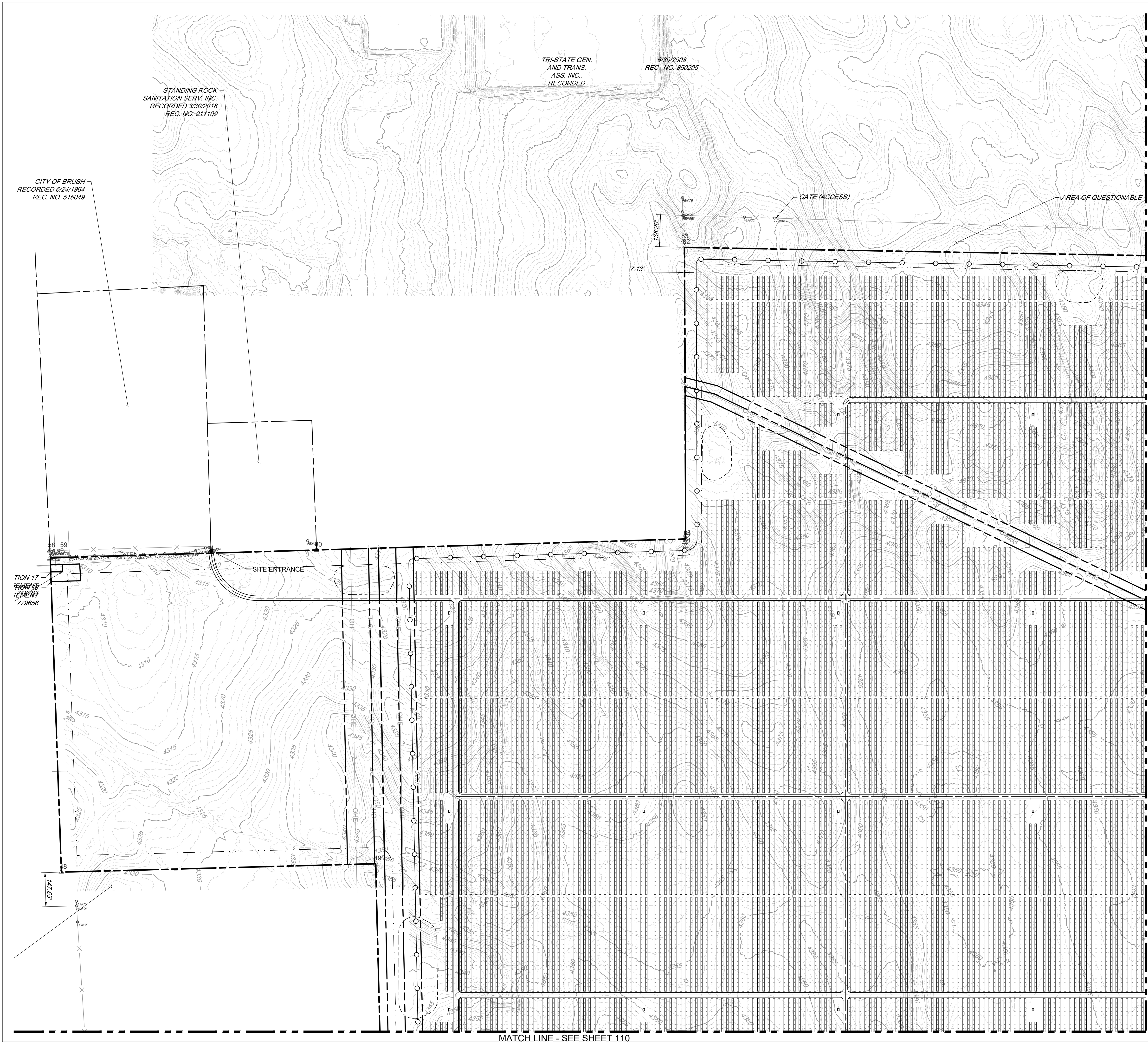
KEY MAP



PLAN

SCALE: 1" = 200'
SHEET: ARCH D





GENERAL NOTES
 1. REFER TO C-000 FOR GENERAL PROJECT NOTES

- LEGEND**
- EXISTING CONDITIONS**
- ADJACENT E
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT E
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
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- CIVIL SITE**
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 - INTERNAL ROADWAY
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 - POWER STATION (PCS)
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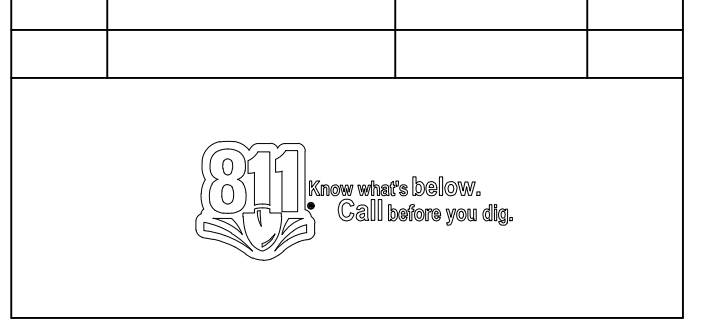
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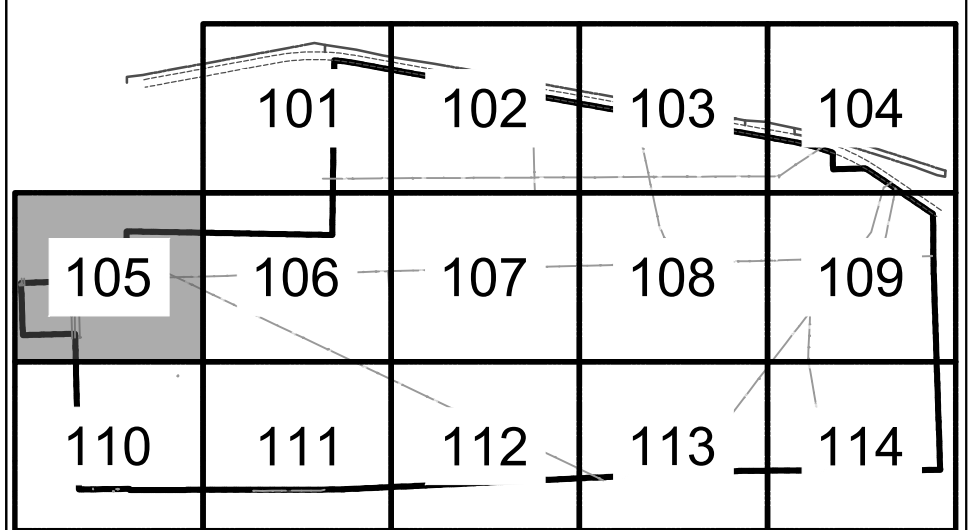
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 ENGINEER: TTI
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PROJECT PHASE:
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SCALE:
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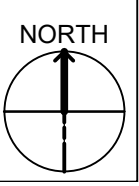
SHEET NO.:
CS105

KEY MAP

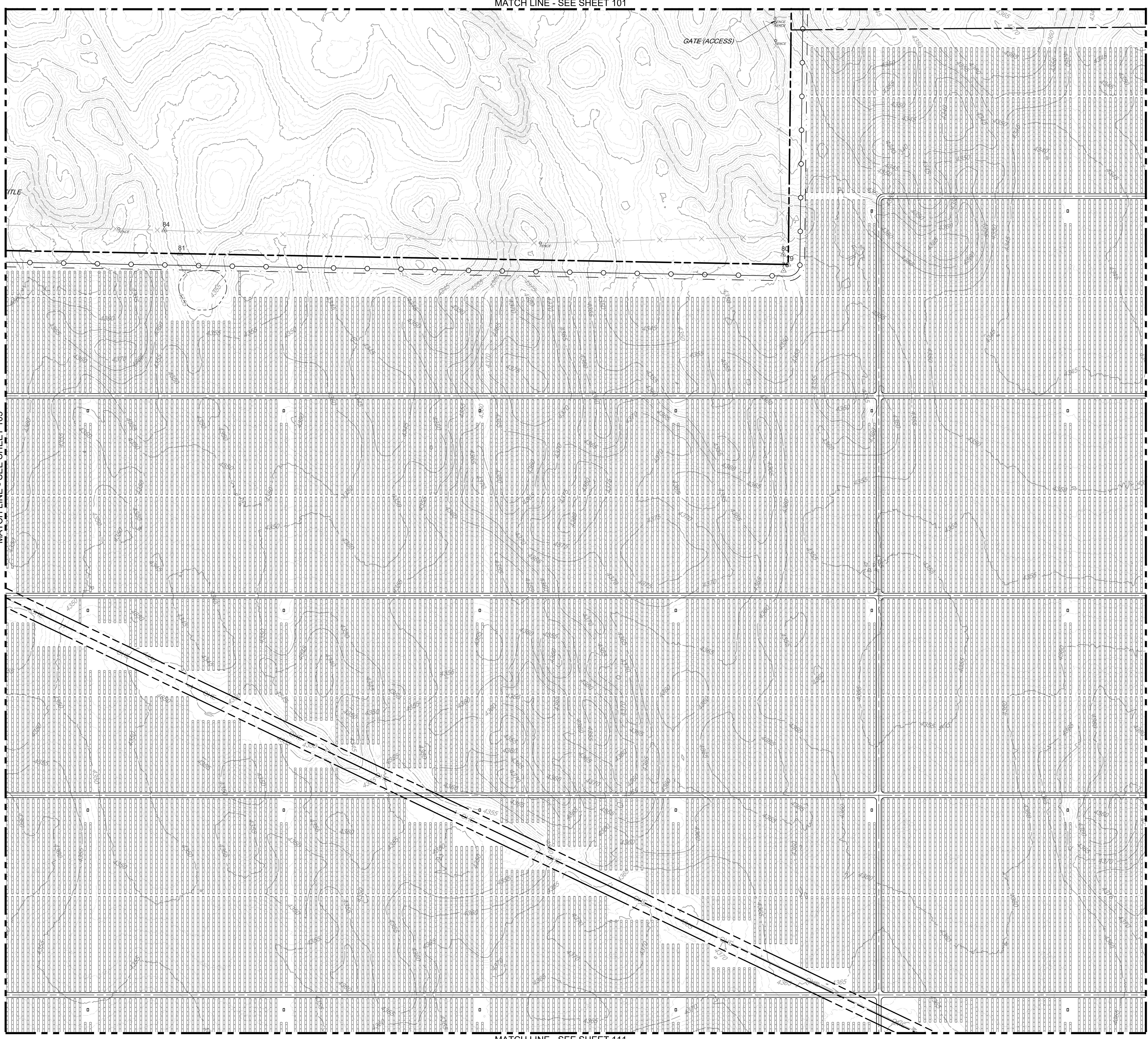


PLAN

 SCALE: 1" = 200'
 SHEET: ARCH D



MATCH LINE - SEE SHEET 101



MATCH LINE - SEE SHEET 105

MATCH LINE - SEE SHEET 107

MATCH LINE - SEE SHEET 111

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

EXISTING CONDITIONS

- ADJACENT #
- BUILDING/STRUCTURE
- COMMUNICATIONS/FO APPURTENANCE
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CDOT ROW
- EASEMENT
- EASEMENT (PRESUMED)
- FENCING
- SURVEY MARKER/TRAVERSE
- SECTION LINE
- OVERHEAD ELECTRIC LINE
- RAILROAD ROW
- RAILROAD #
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- SIGN
- STRUCTURE (MISC)
- SUBJECT #
- ZONING SETBACK
- UG COMMUNICATIONS/FIBER OPTIC
- UG GAS LINE
- UG SANITARY SEWER FORCEMAIN
- UG WATERLINE
- UTILITY POLE/GUY WIRE
- WATER APPURTENANCE

CIVIL SITE

- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CULVERT
- INTERNAL ROADWAY
- INTERNAL ROADWAY #
- POWER STATION (PCS)
- PV RACKING/PIER
- ROADWAY CL
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FACILITY**
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
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SHEET TITLE:
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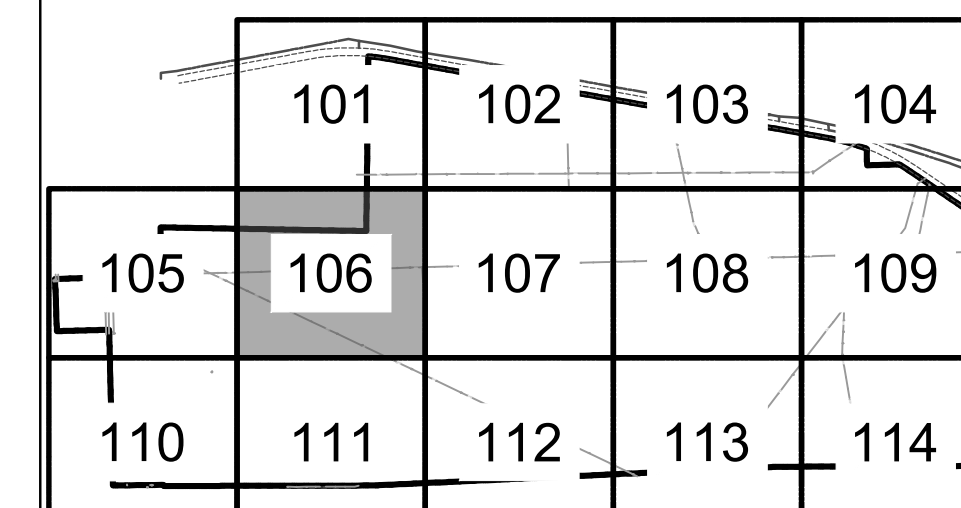
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
AS SHOWN

SHEET NO.:
CS106

KEY MAP

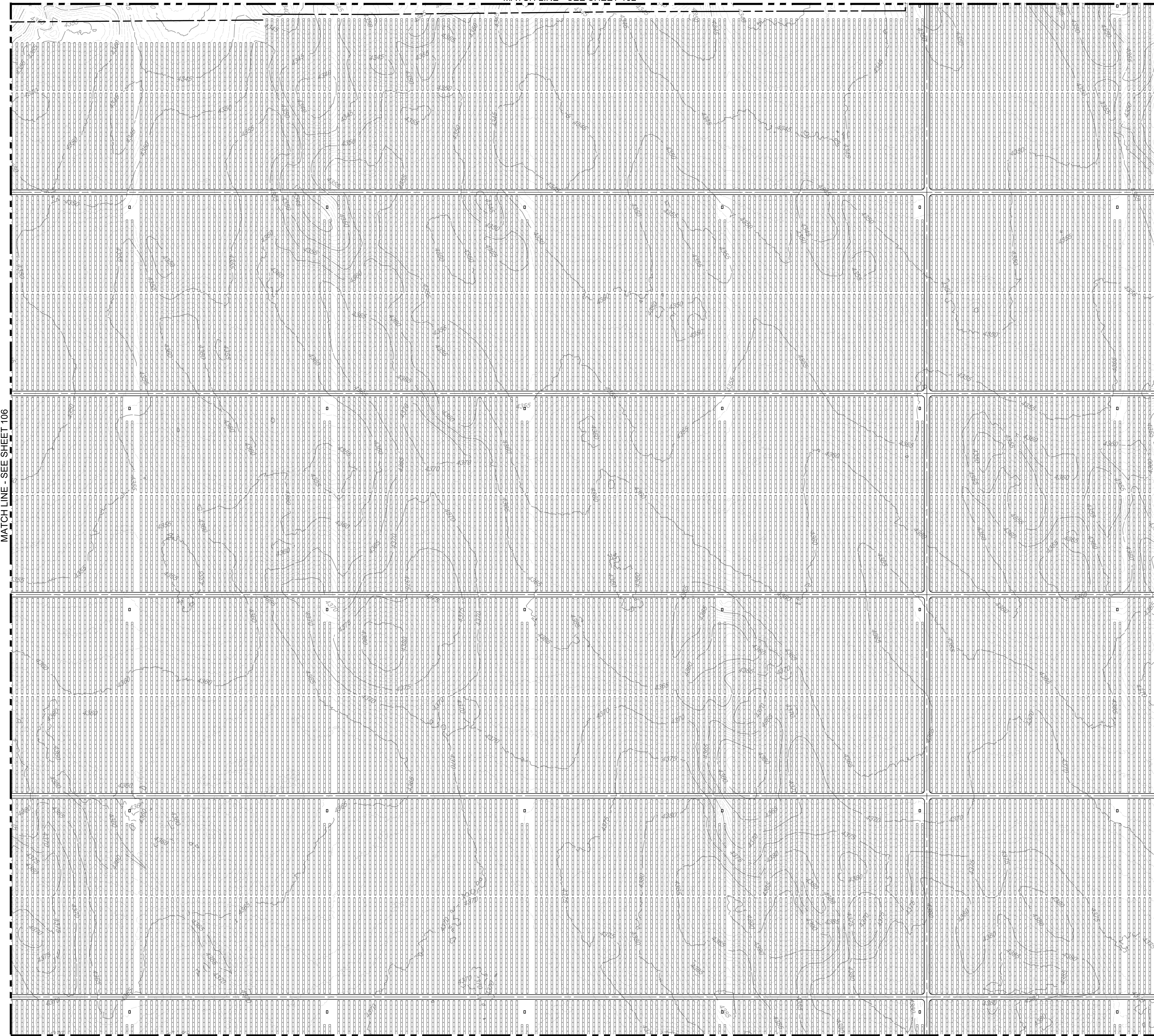


PLAN

SCALE: 1" = 200'
SHEET: ARCH D



MATCH LINE - SEE SHEET 102



MATCH LINE - SEE SHEET 112

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
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AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

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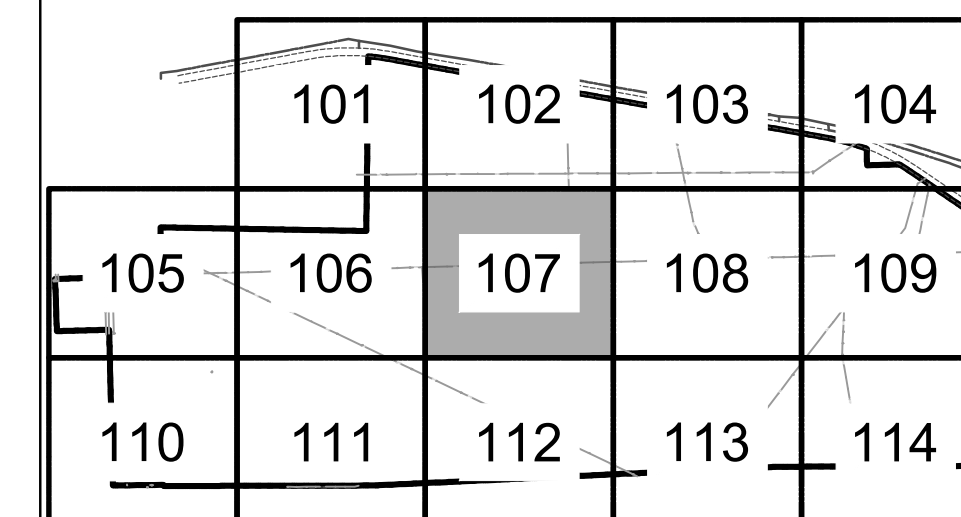
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DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CS107

KEY MAP



PLAN

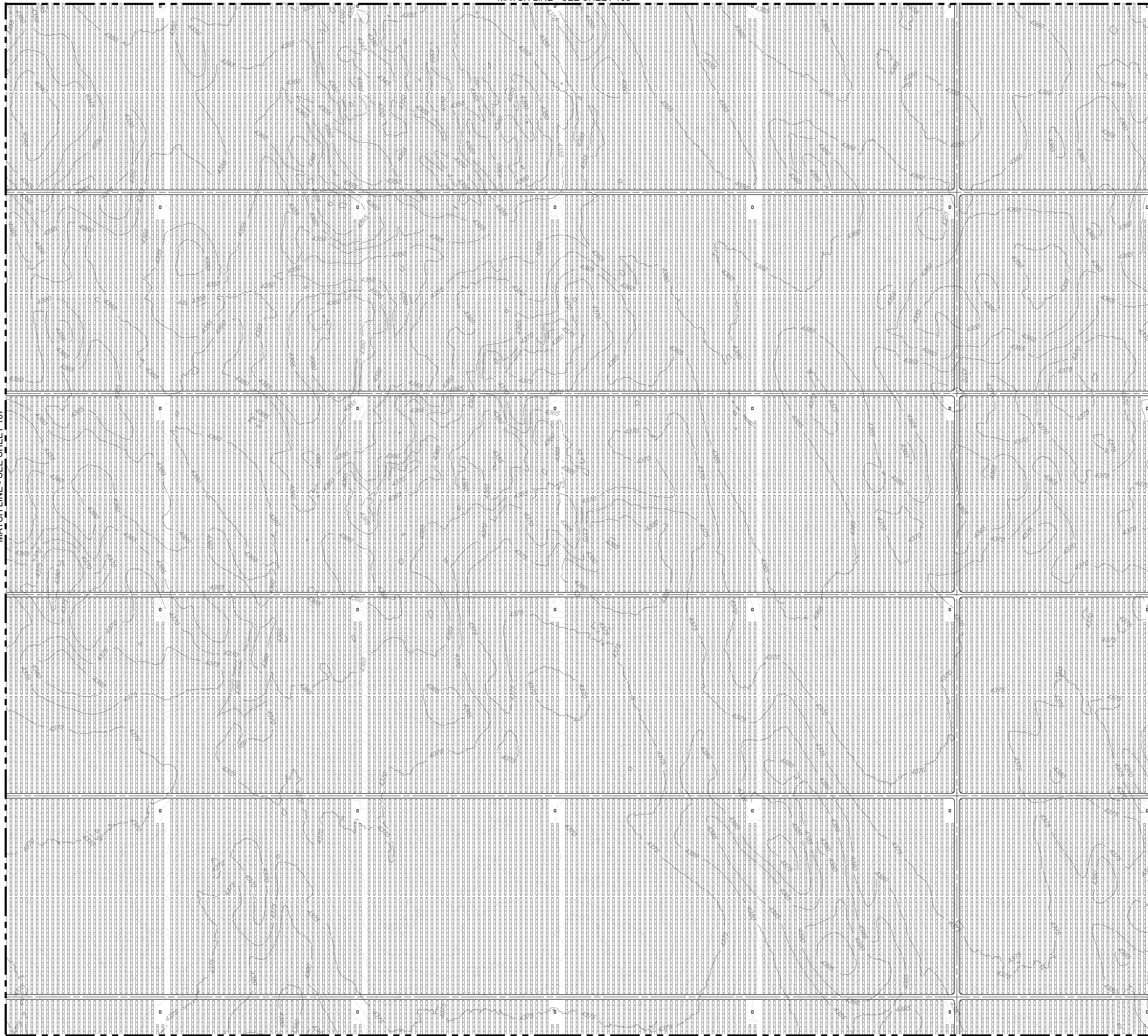
SCALE: 1" = 200'
SHEET: ARCH D



MATCH LINE - SEE SHEET 106

MATCH LINE - SEE SHEET 108

MATCH LINE - SEE SHEET 103



MATCH LINE - SEE SHEET 113

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
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 - EASEMENT
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- CIVIL SITE**
- CONTOUR (MAJOR)
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 - INTERNAL ROADWAY
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 - POWER STATION (PCS)
 - PV RACKING/PIER
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MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

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0 1/2" 1"

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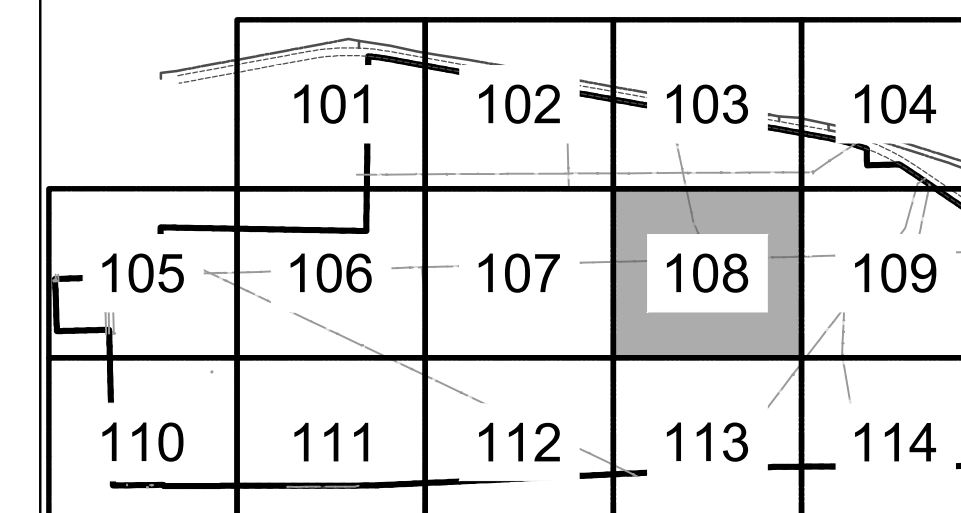
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CS108

KEY MAP



PLAN

0 200' 400'
SCALE: 1" = 200'
SHEET: ARCH D



MATCH LINE - SEE SHEET 104



BOLINGER, AUSTIN
MICHAEL
RECORDED 5/2/2019
REC. NO. 918116

BOOTH LAND &
LIVESTOCK LLC
RECORDED 6/6/2007
REC. NO. 843085

MATCH LINE - SEE SHEET 114

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT & BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT & ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY & POWER STATION (PCS)
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH



TETRA TECH, INC.
4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

STAMP:

**NOT FOR
CONSTRUCTION**

PRELIMINARY

**FORTRESS SOLAR
FACILITY**
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
CIVIL SITE PLAN

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 1/2" 1"

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A	DRAFT	10/12/2023	TTI
B	IFP	10/17/2023	TTI
C	REVISED	10/20/2023	TTI
D	REVISED	10/24/2023	TTI



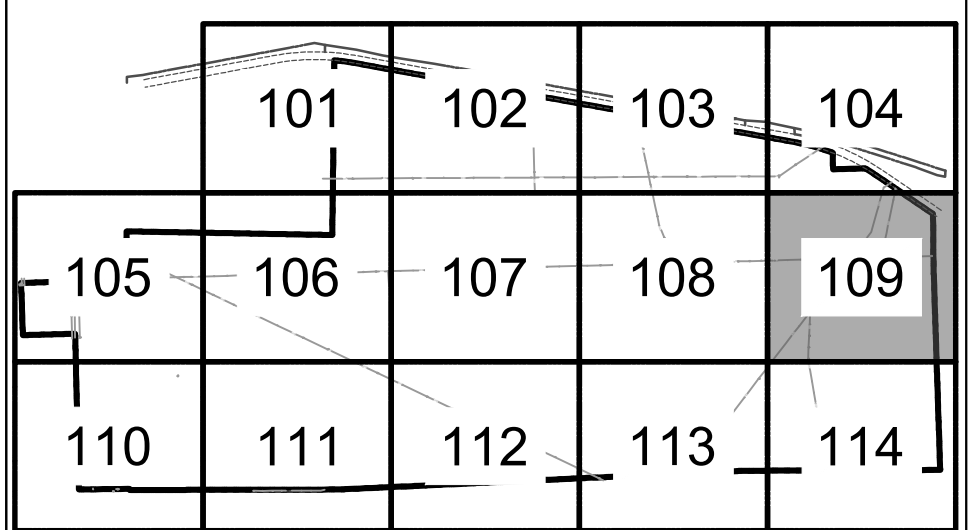
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

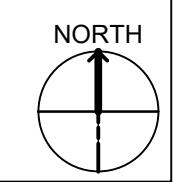
SHEET NO.:
CS109

KEY MAP



PLAN

0 200' 400'
SCALE: 1" = 200'
SHEET: ARCH D



MATCH LINE - SEE SHEET 105

DILLEY, VERNON &
GWEN
RECORDED 3/11/1987
REC. NO. 701704

DILLEY, VERNON &
GWEN
RECORDED 2/2/1972
REC. NO. 570511

COUNTY ROAD
Q

CONVEYANCE 30' WIDE
RECORDED 5/20/1996
BOOK 8, PAGE 235

SITE ENTRANCE

KB1229 LLC
RECORDED 7/3
REC. NO. 9471

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

EXISTING CONDITIONS

- ADJACENT & BUILDING/STRUCTURE
- COMMUNICATIONS/FO APPURTENANCE
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CDOT ROW
- EASEMENT
- EASEMENT (PRESUMED)
- FENCING
- SURVEY MARKER/TRVERSE
- SECTION LINE
- OVERHEAD ELECTRIC LINE
- RAILROAD ROW
- RAILROAD & SANITARY SEWER MANHOLE
- SIGN
- STRUCTURE (MISC)
- SUBJECT & ZONING SETBACK
- UG COMMUNICATIONS/FIBER OPTIC
- UG GAS LINE
- UG SANITARY SEWER FORCEMAIN
- UG WATERLINE
- UTILITY POLE/GUY WIRE
- WATER APPURTENANCE

CIVIL SITE

- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CULVERT
- INTERNAL ROADWAY
- INTERNAL ROADWAY & POWER STATION (PCS)
- PV RACKING/PIER
- ROADWAY CL
- SECURITY FENCE
- STORMWATER POND/DIVERSION DITCH



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AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
CIVIL SITE PLAN

SHEET SIZE: ARCH "D"
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D	REVISED	10/24/2023	TTI



DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

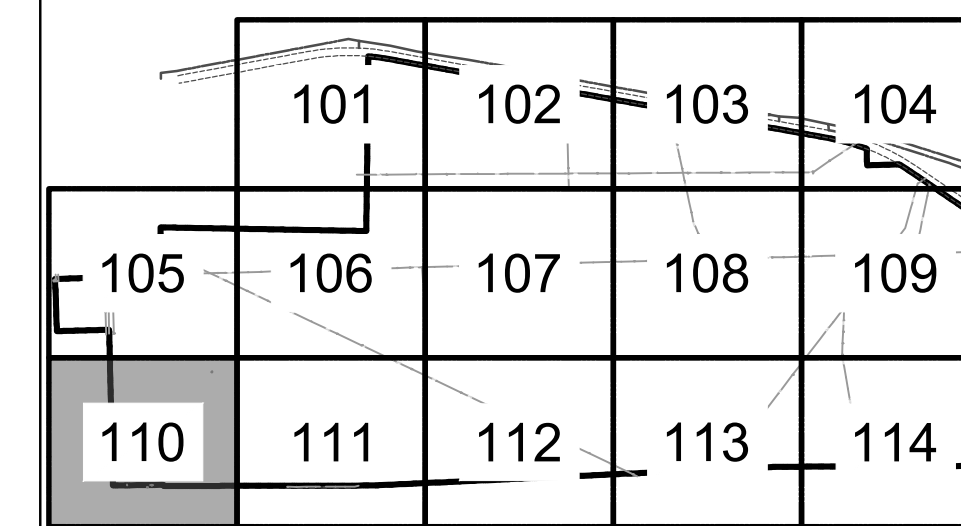
PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CS110

MATCH LINE - SEE SHEET 111

KEY MAP

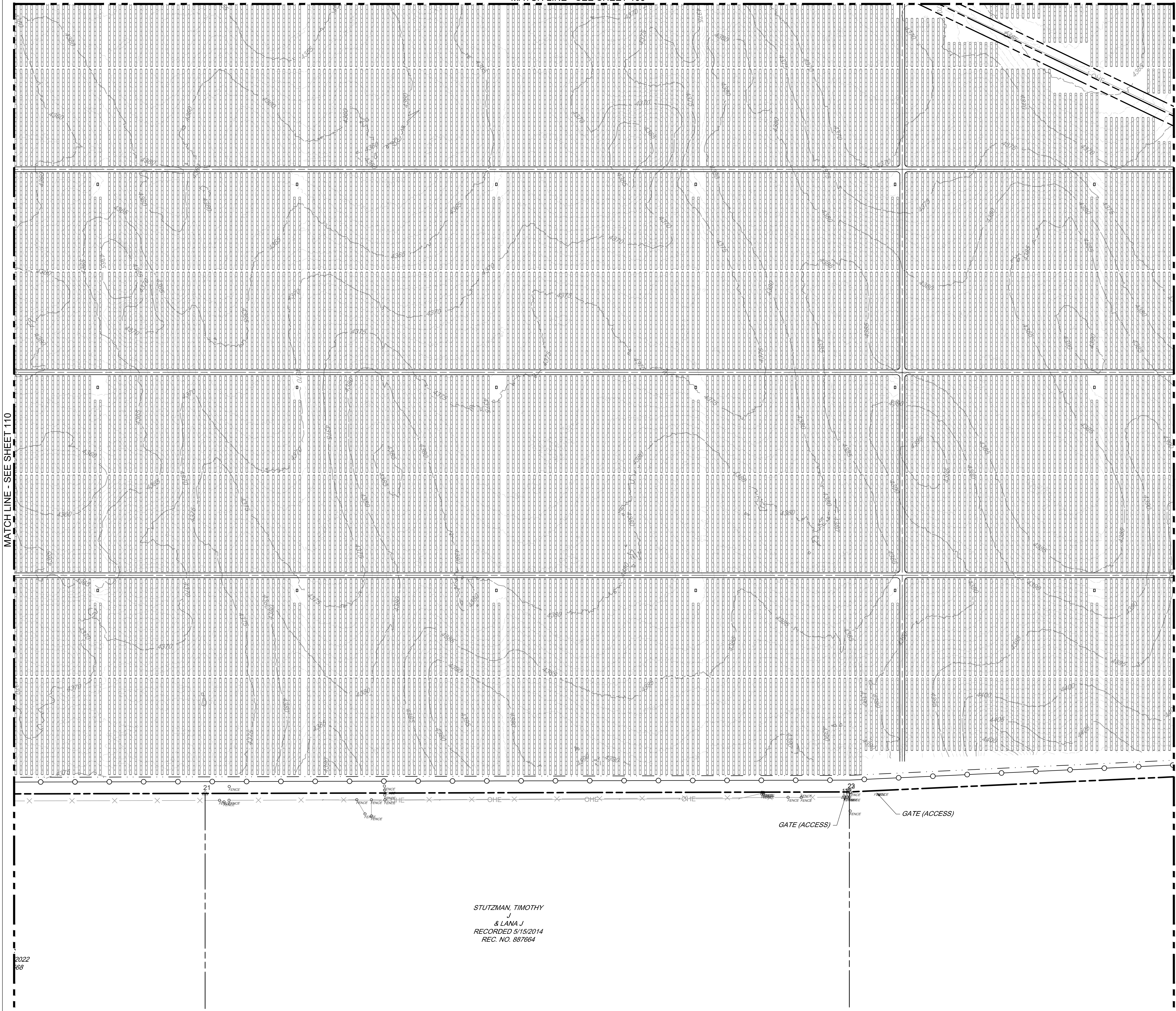


PLAN

SCALE: 1" = 200'
SHEET: ARCH D



MATCH LINE - SEE SHEET 106



MATCH LINE - SEE SHEET 110

MATCH LINE - SEE SHEET 112

2022
68

STUTZMAN, TIMOTHY
& LANA, J
RECORDED 5/15/2014
REC. NO. 887664

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
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GLEN ALLEN, VA 23060
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FAX: (804) 270-2739

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PRELIMINARY

**FORTRESS SOLAR
FACILITY**
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
CIVIL SITE PLAN

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 1/2" 1"

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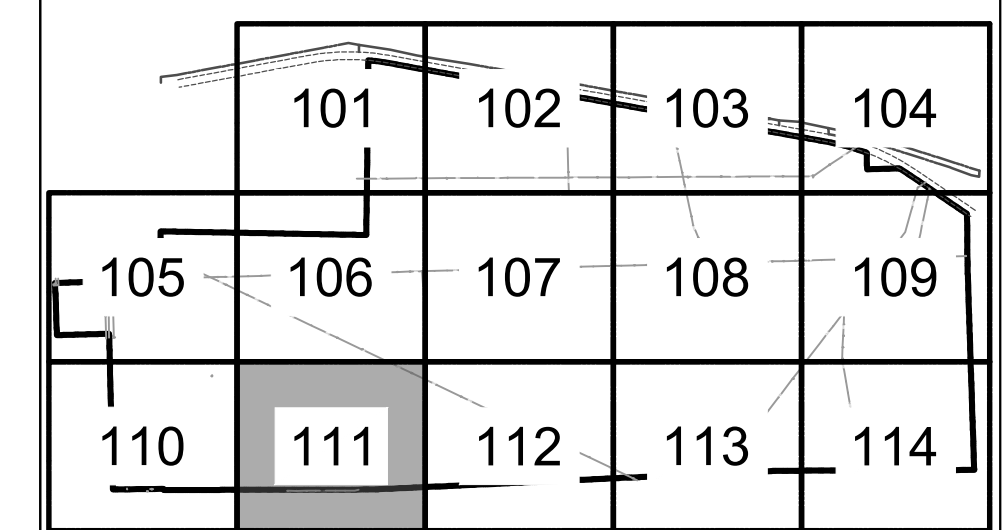
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

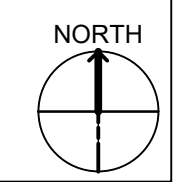
SHEET NO.:
CS111

KEY MAP

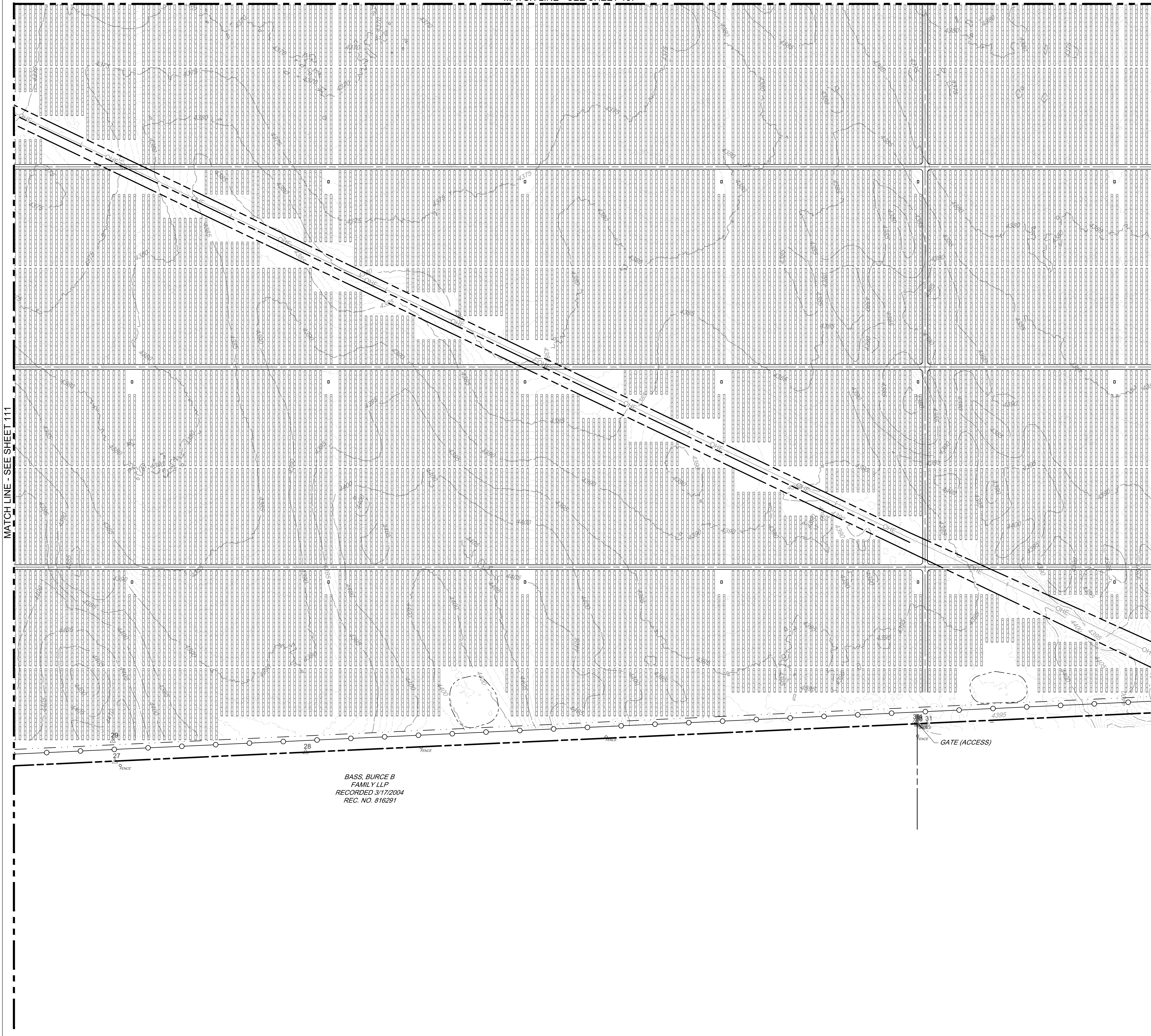


PLAN

SCALE: 1" = 200'
SHEET: ARCH D



MATCH LINE - SEE SHEET 107



BASS, BURCE B
 FAMILY LLP
 RECORDED 3/17/2004
 REC. NO. 816291

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT & BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD &
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT &
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY &
 - POWER STATION (PCS)
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 - ROADWAY CL
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 4101 COX ROAD,
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 GLEN ALLEN, VA 23060
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STAMP:

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**FORTRESS SOLAR
 FACILITY
 AYPa POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO**

PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
 CIVIL SITE PLAN

SHEET SIZE: ARCH "D"
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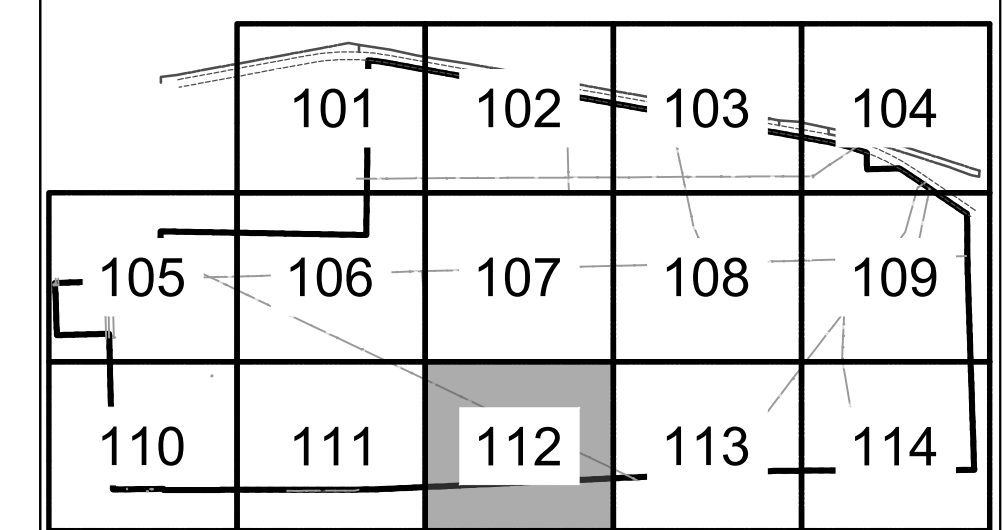
DATE: 10/12/2023
 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
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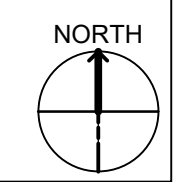
SHEET NO.:
CS112

KEY MAP

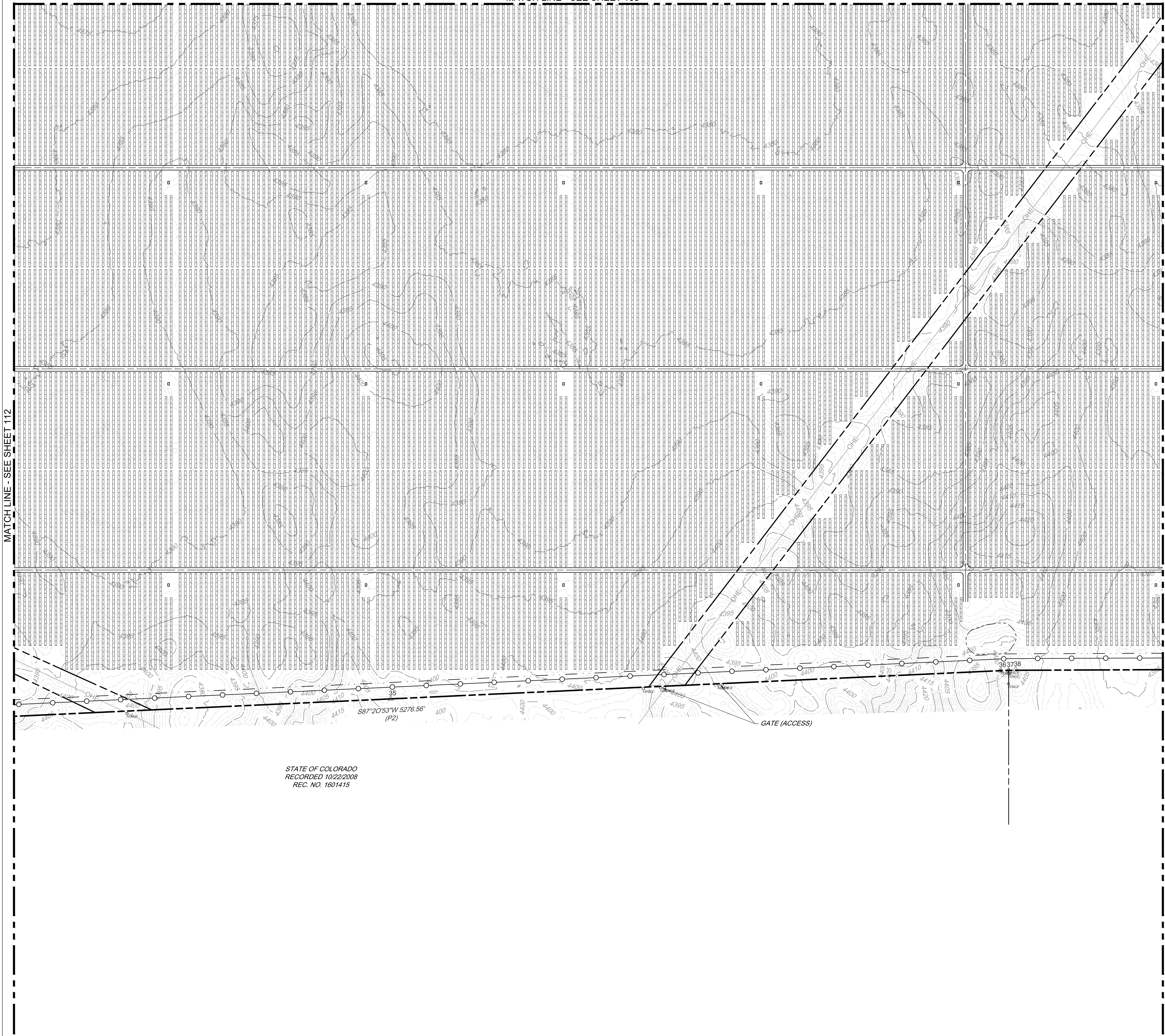


PLAN

SCALE: 1" = 200'
 SHEET: ARCH D



MATCH LINE - SEE SHEET 108



STATE OF COLORADO
RECORDED 10/22/2008
REC. NO. 1601415

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
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 - EASEMENT
 - EASEMENT (PRESUMED)
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 - OVERHEAD ELECTRIC LINE
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 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
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 - INTERNAL ROADWAY
 - INTERNAL ROADWAY #
 - POWER STATION (PCS)
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SUITE 100
GLEN ALLEN, VA 23060
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FAX: (804) 270-2739

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**FORTRESS SOLAR
FACILITY**
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
CIVIL SITE PLAN

SHEET SIZE: ARCH "D"
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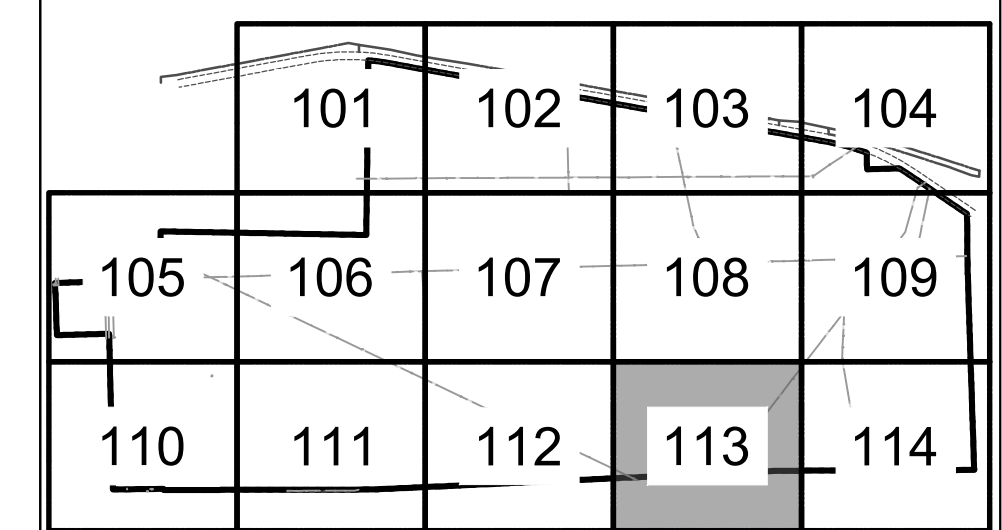
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
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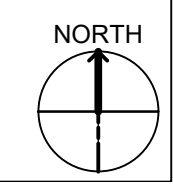
SHEET NO.:
CS113

KEY MAP

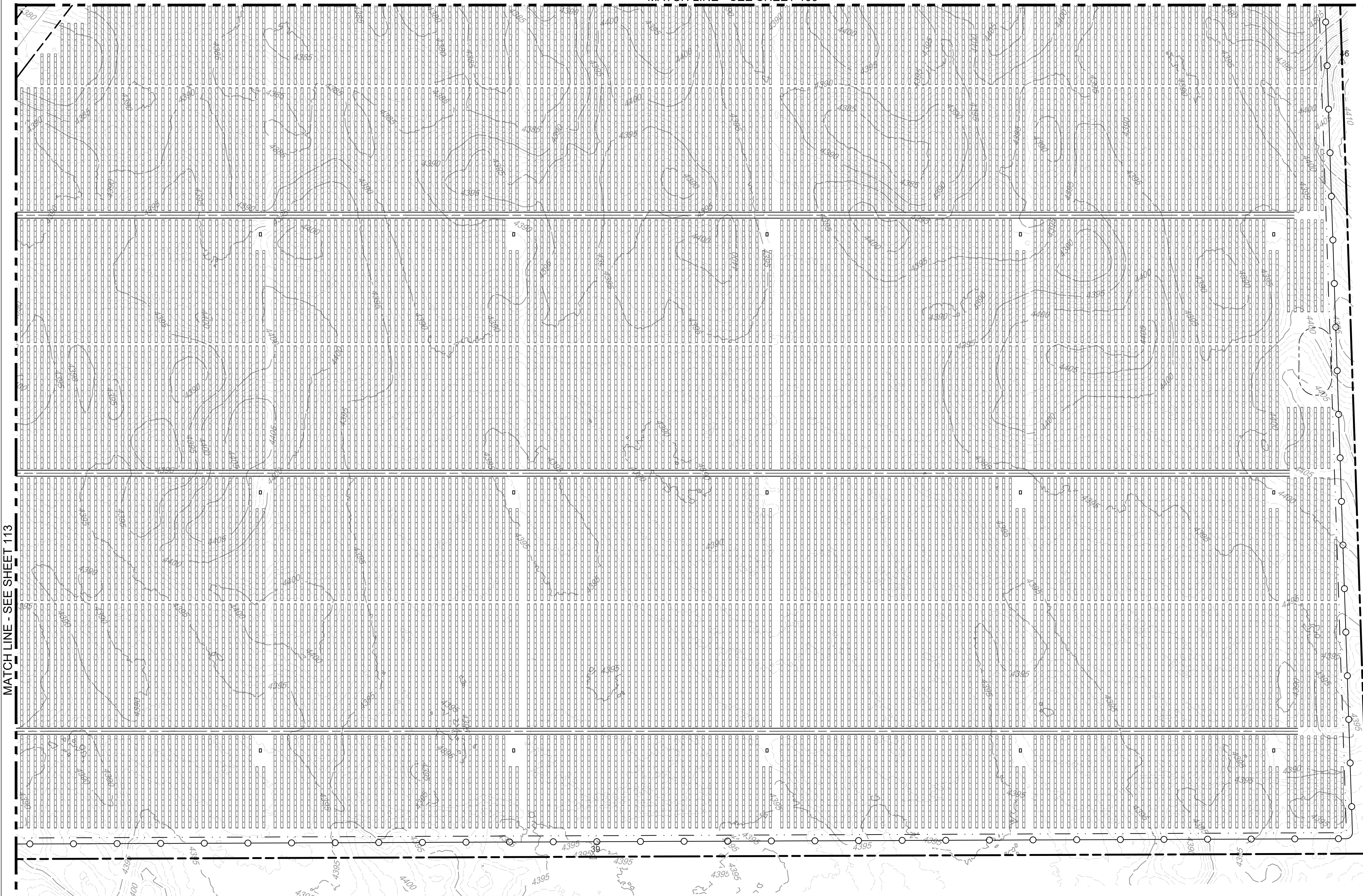


PLAN

SCALE: 1" = 200'
SHEET: ARCH D



MATCH LINE - SEE SHEET 109



BOOTH LAND &
LIVESTOCK LLC
RECORDED 6/6/2007
REC. NO. 843085

BOOTH LAND &
LIVESTOCK LLC
RECORDED 6/6/2007
REC. NO. 843085

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

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- ADJACENT & BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD &
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT &
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
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 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY &
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
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FORTRESS SOLAR FACILITY
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

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CIVIL SITE PLAN

SHEET SIZE: ARCH "D"
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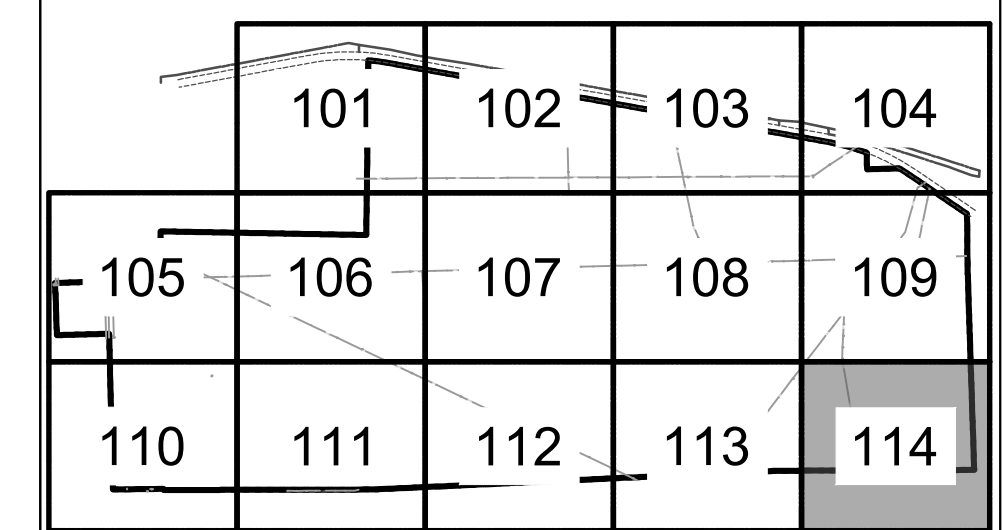
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ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
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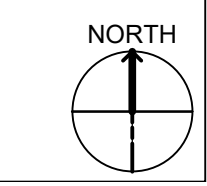
SHEET NO.:
CS114

KEY MAP



PLAN

0 200' 400'
SCALE: 1" = 200'
SHEET: ARCH D





GENERAL NOTES
 1. REFER TO C-000 FOR GENERAL PROJECT NOTES

- LEGEND**
- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY #
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH



TETRA TECH, INC.
 4101 COX ROAD,
 SUITE 100
 GLEN ALLEN, VA 23060
 TEL: (804) 290-4321
 FAX: (804) 270-2739

STAMP:
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PRELIMINARY

FORTRESS SOLAR FACILITY
 AYPa POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
CIVIL SITE PLAN
BESS AREA

SHEET SIZE: ARCH "D"
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DATE: 10/12/2023
 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

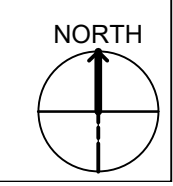
PROJECT PHASE:
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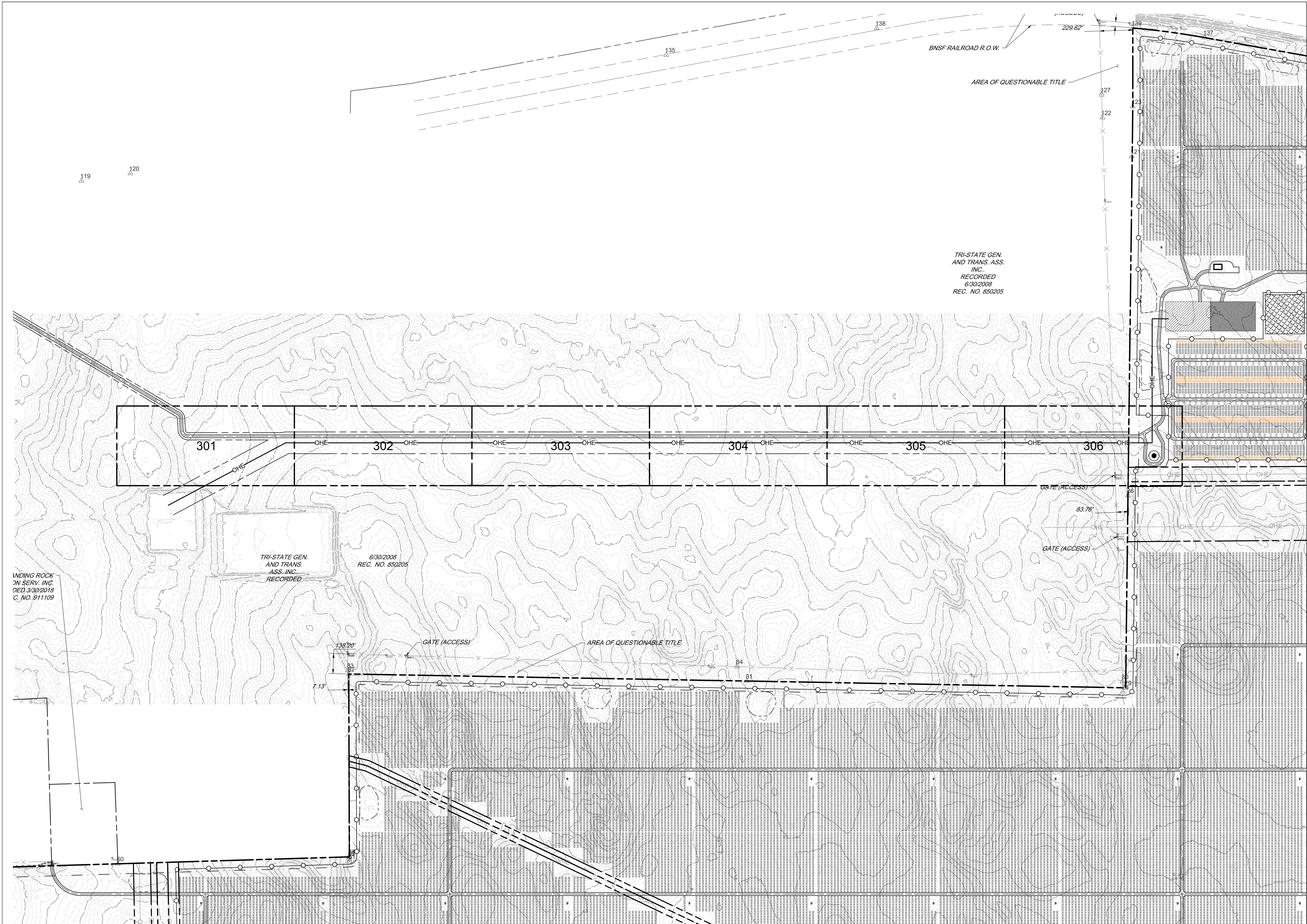
SCALE:
 AS SHOWN

SHEET NO.:
CS200

PLAN

 SCALE: 1" = 100'
 SHEET: ARCH D



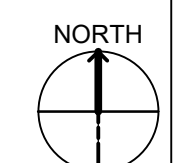


WINDING ROCK
ON SERV. INC.
DED 3/30/2018
C. NO. 911109

TRI-STATE GEN.
AND TRANS.
ASS. INC.
RECORDED
6/30/2008
REC. NO. 850205

TRI-STATE GEN.
AND TRANS. ASS.
INC.
RECORDED
6/30/2008
REC. NO. 850205

PLAN
SCALE: 1" = 300'
SHEET: ARCH D



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**FORTRESS SOLAR
FACILITY**
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
**CIVIL SITE PLAN
GENTIE AREA OVERALL**

SHEET SIZE: ARCH "D"
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0 1/2" 1"

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DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CS300



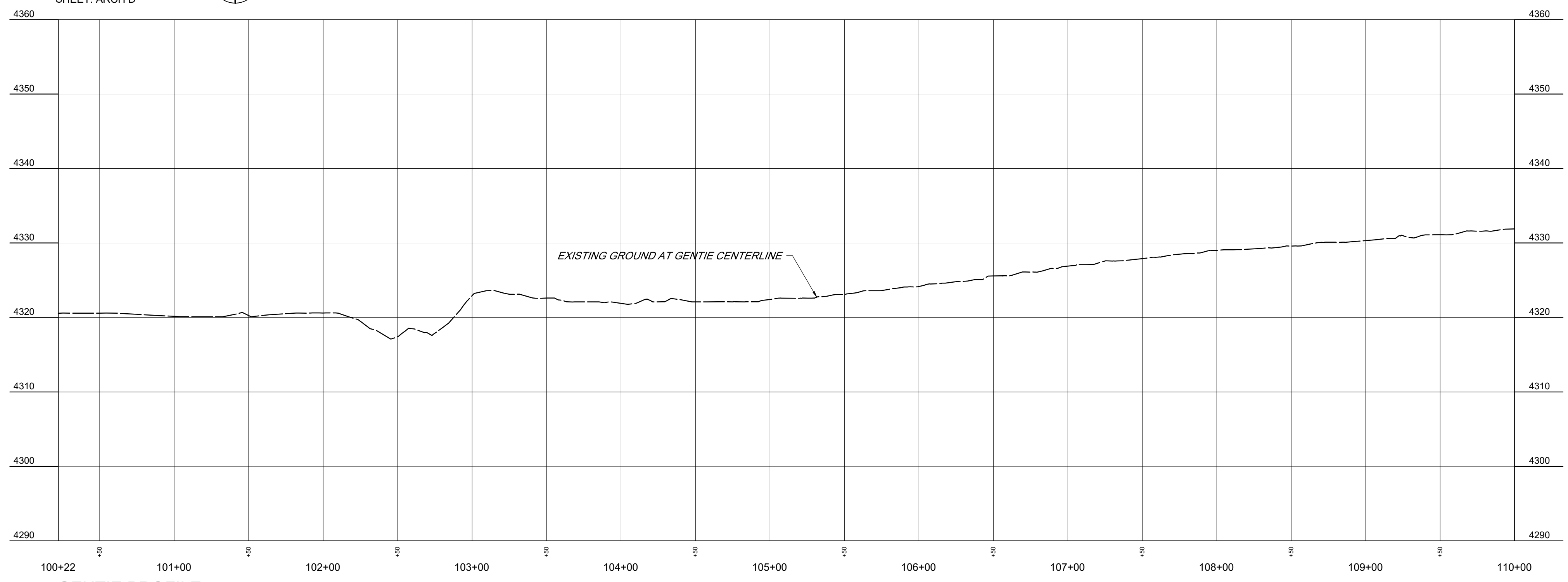
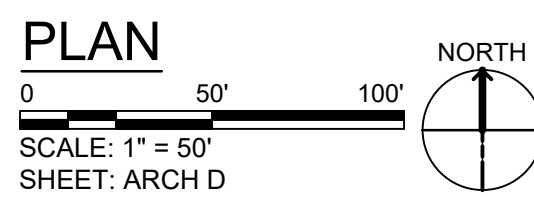
GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY #
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH

MATCH LINE - SEE SHEET 302



GENTIE PROFILE
SCALE H:1"=50'; V:1"=10'



TETRA TECH, INC.
4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

STAMP:

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CONSTRUCTION

PRELIMINARY

FORTRESS SOLAR
FACILITY
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
**CIVIL SITE PLAN
GENTIE AREA**

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)

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B	IFP	10/17/2023	TTI
C	REVISED	10/20/2023	TTI
D	REVISED	10/24/2023	TTI

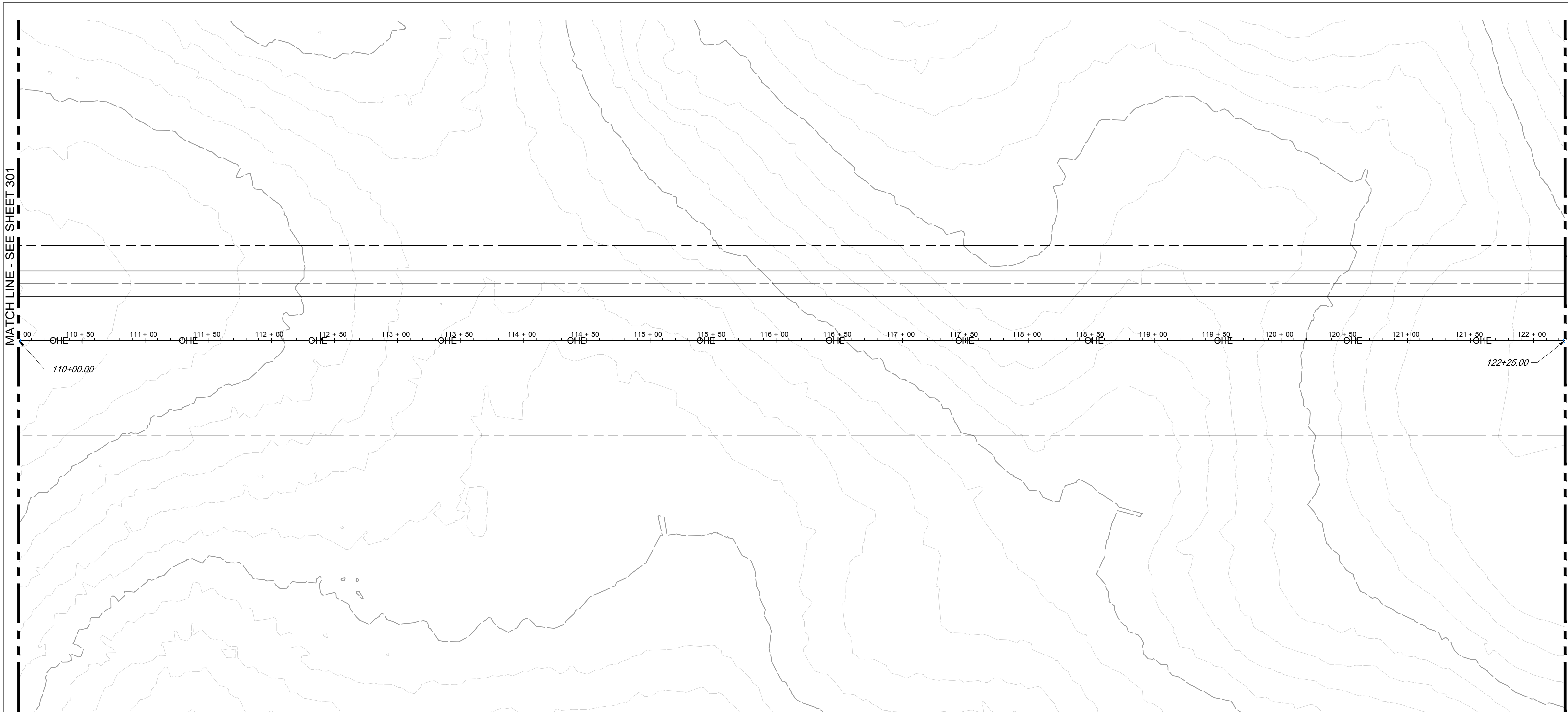


DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
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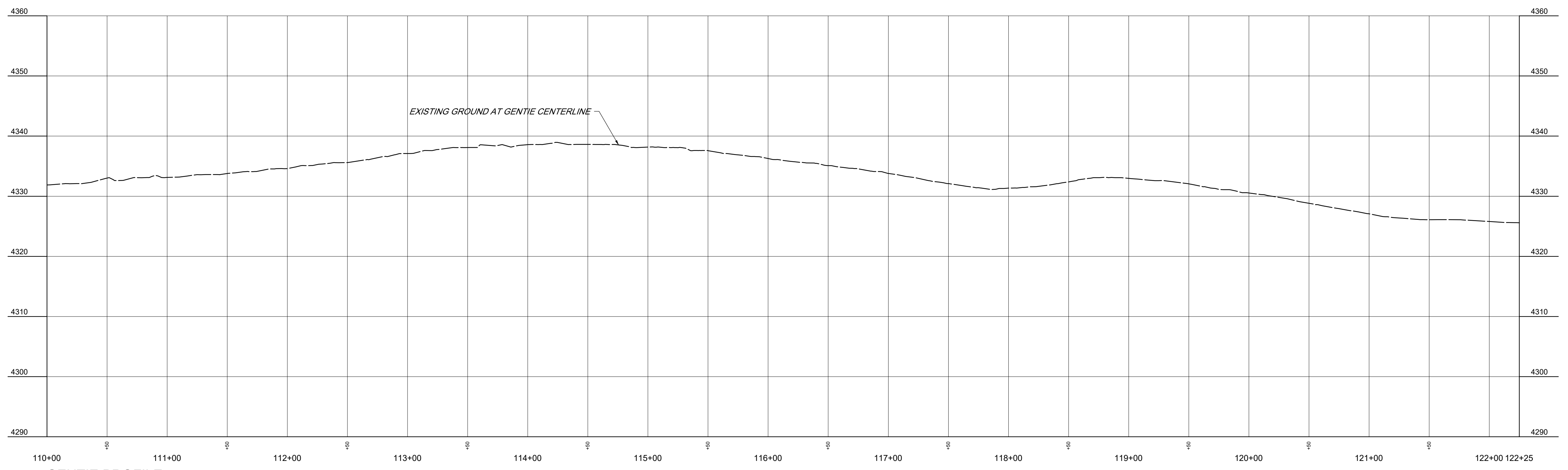
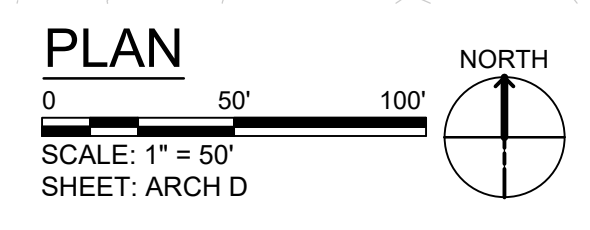
SCALE:
AS SHOWN

SHEET NO.:
CS301



GENERAL NOTES
 1. REFER TO C-000 FOR GENERAL PROJECT NOTES

- LEGEND**
- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY #
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH



GENTIE PROFILE
 SCALE H:1"=50'; V:1"=10'



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 SUITE 100
 GLEN ALLEN, VA 23060
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 MORGAN COUNTY
 COLORADO

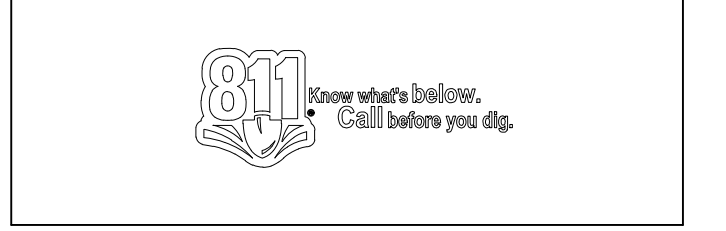
PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
CIVIL SITE PLAN
GENTIE AREA

SHEET SIZE: ARCH "D"
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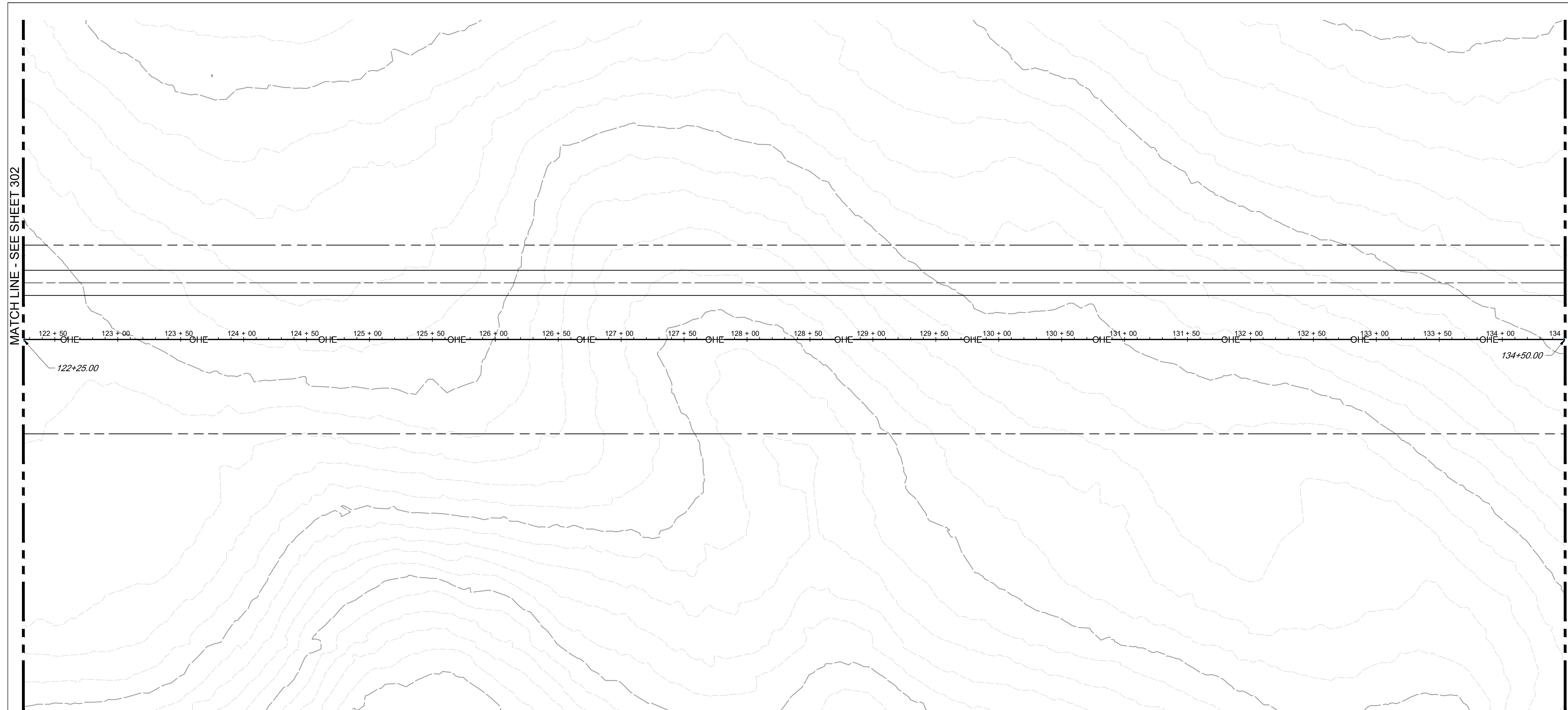


DATE: 10/12/2023
 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
 ISSUED FOR PERMIT

SCALE:
 AS SHOWN

SHEET NO.:
CS302

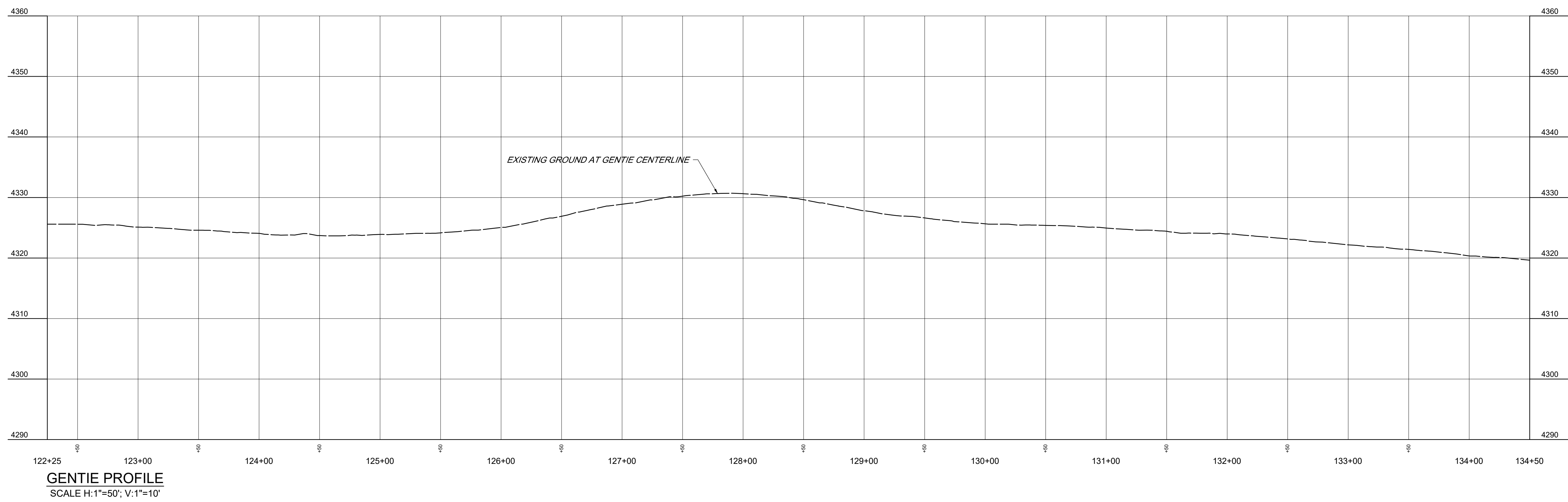
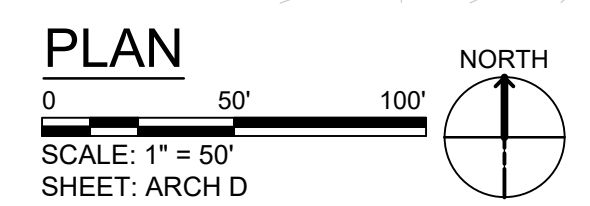


GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
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 - INTERNAL ROADWAY
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AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
**CIVIL SITE PLAN
GENTIE AREA**

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 1/2" 1"

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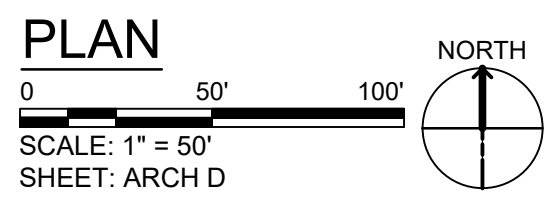
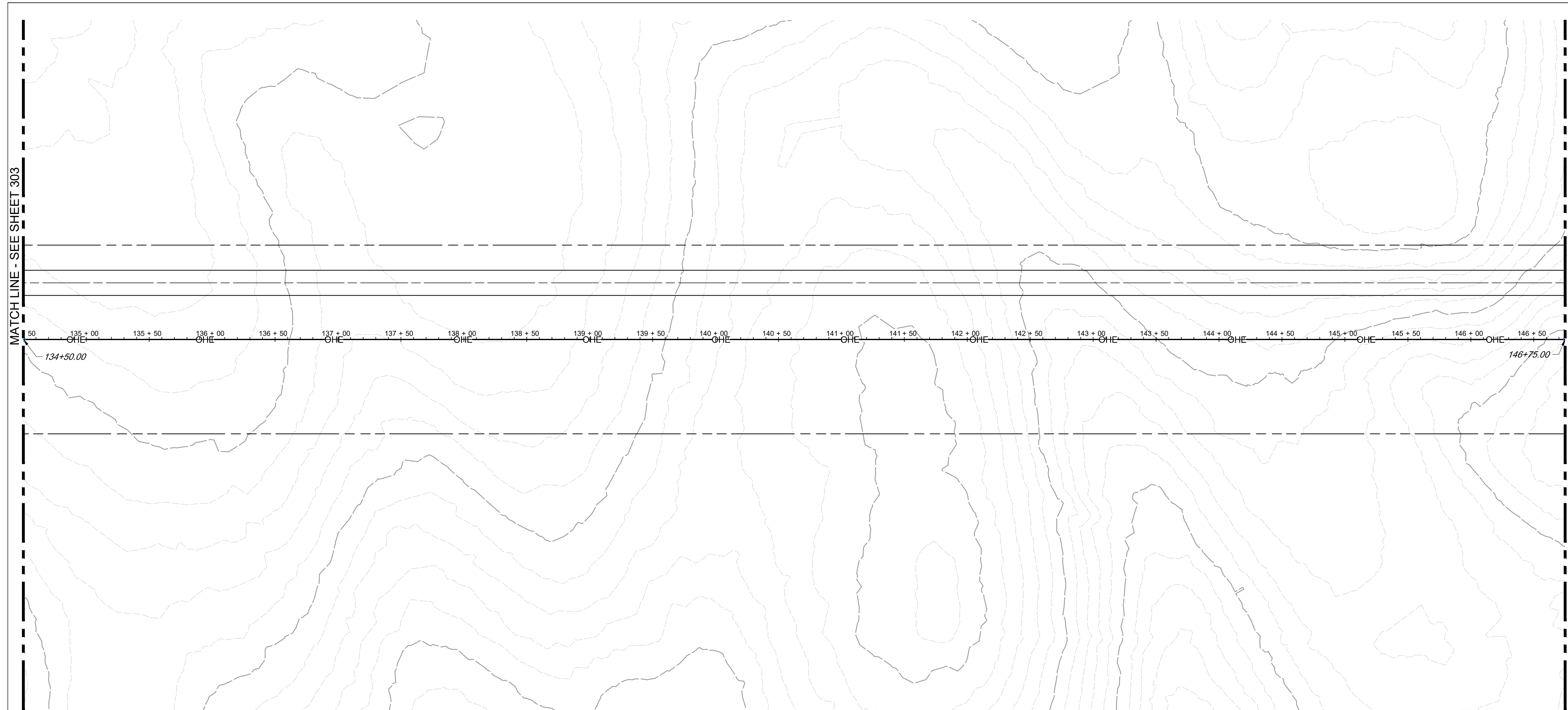


DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
AS SHOWN

SHEET NO.:
CS303



GENERAL NOTES
1. REFER TO C-000 FOR GENERAL PROJECT NOTES

- LEGEND**
- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
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 - SECTION LINE
 - OHE OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - COM UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
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 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY #
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - ROADWAY #
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH



TETRA TECH
TETRA TECH, INC.
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FAX: (804) 270-2739

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AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
**CIVIL SITE PLAN
GENTIE AREA**

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 1/2" 1"

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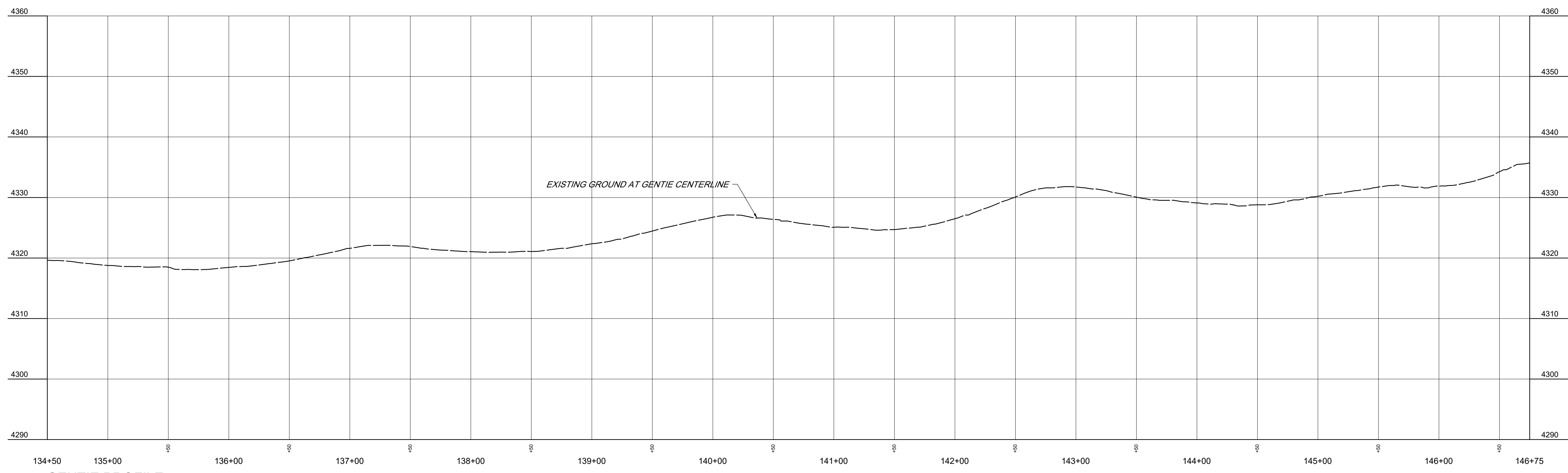


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DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

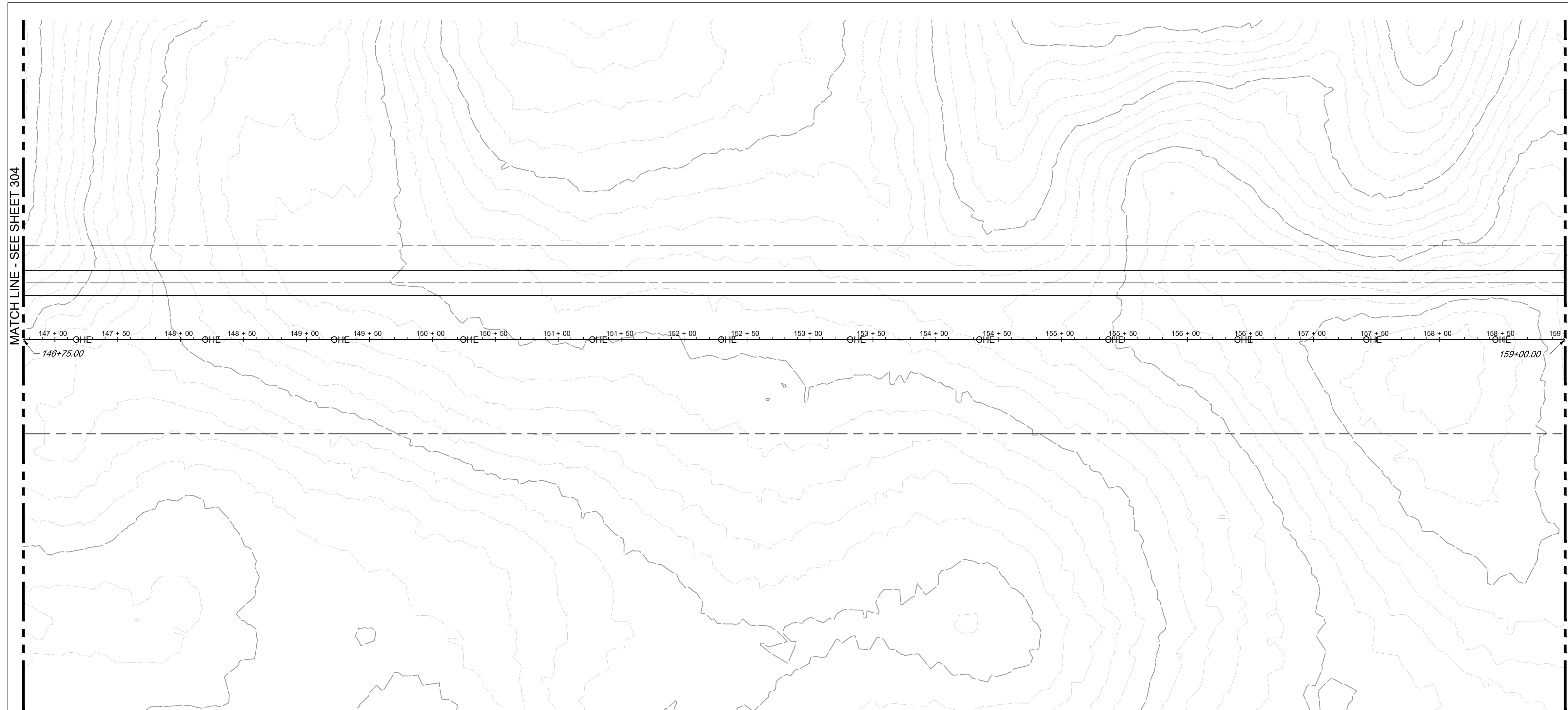
PROJECT PHASE:
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SCALE:
AS SHOWN

SHEET NO.:
CS304

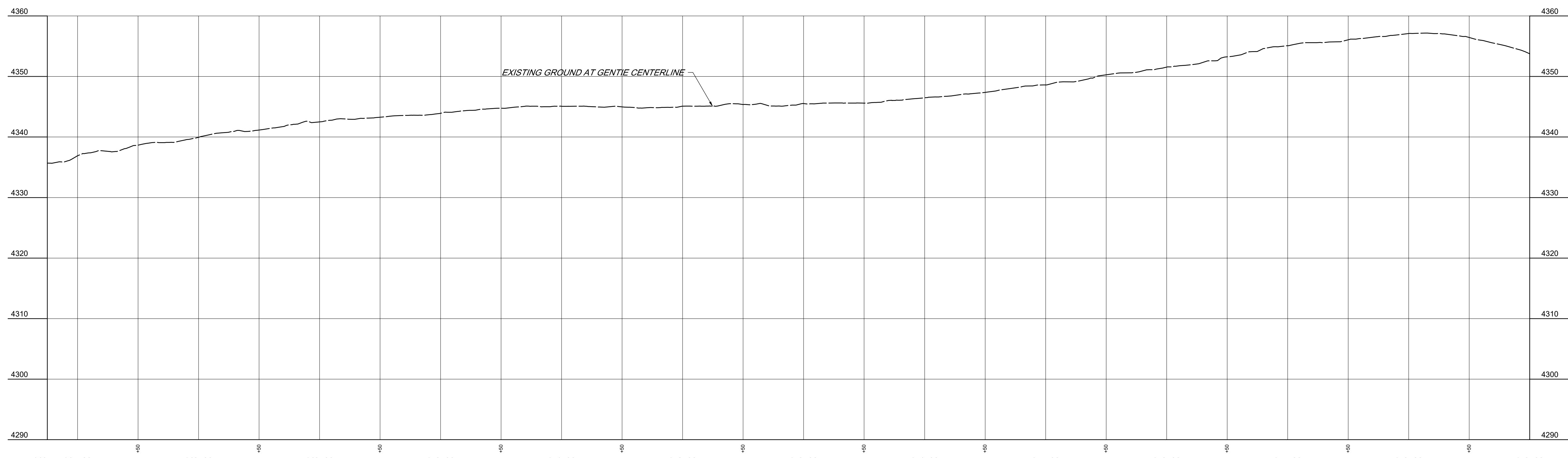
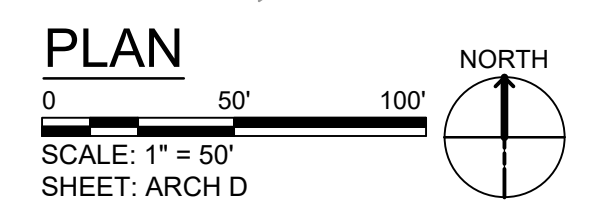


GENTIE PROFILE
SCALE H:1"=50'; V:1"=10'



GENERAL NOTES
1. REFER TO C-000 FOR GENERAL PROJECT NOTES

- LEGEND**
- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
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 - SECTION LINE
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 - RAILROAD ROW
 - RAILROAD
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
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- CIVIL SITE**
- CONTOUR (MAJOR)
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 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH



GENTIE PROFILE
SCALE H:1"=50'; V:1"=10'



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4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
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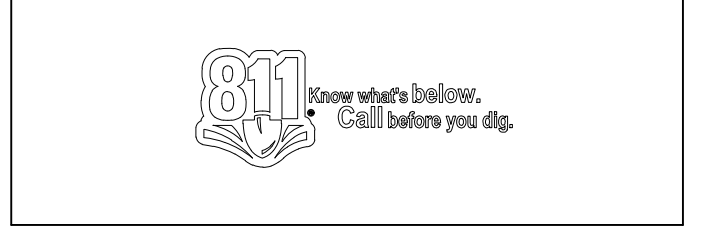
PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
**CIVIL SITE PLAN
GENTIE AREA**

SHEET SIZE: ARCH "D"
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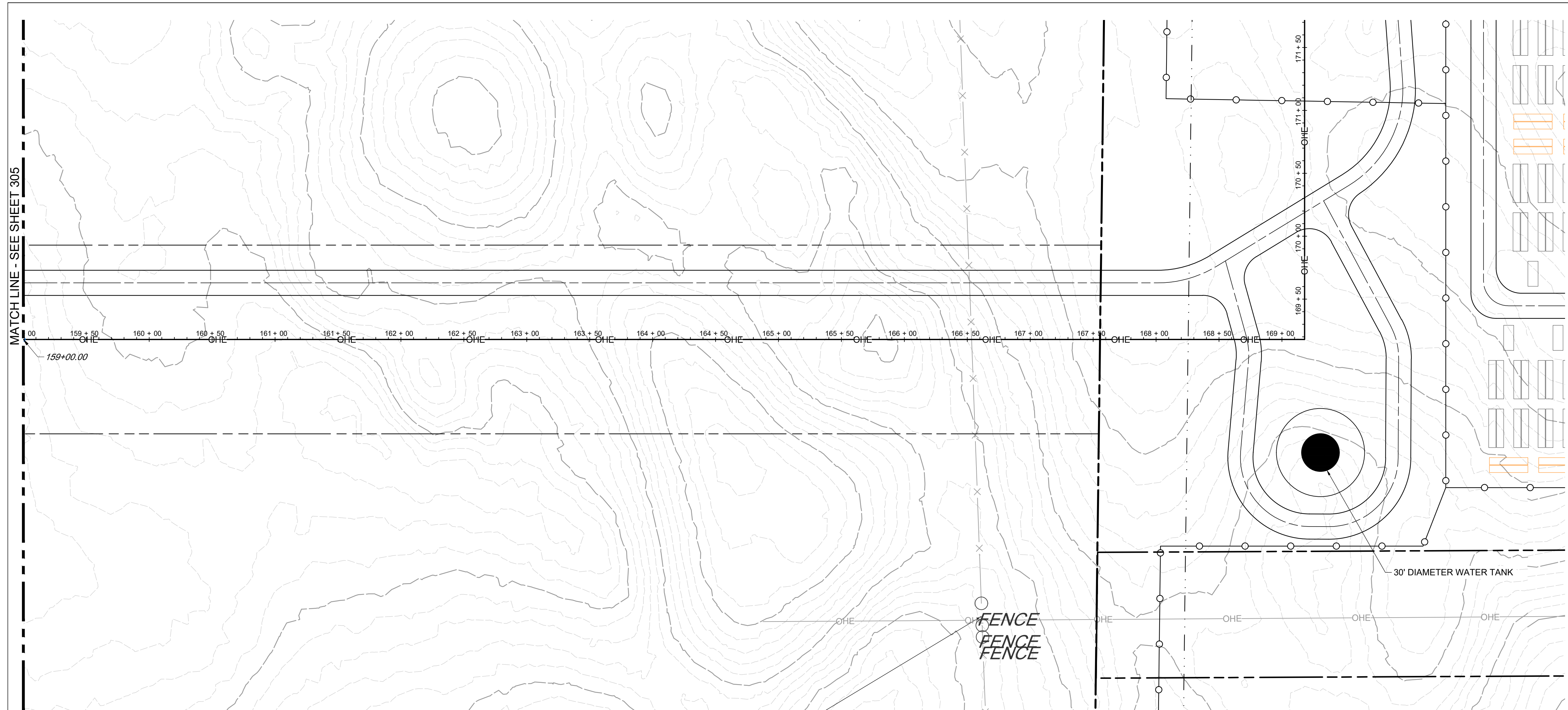


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DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
AS SHOWN

SHEET NO.:
CS305



GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRaverse
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
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 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY #
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH



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SUITE 100
GLEN ALLEN, VA 23060
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FAX: (804) 270-2739

STAMP:

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AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

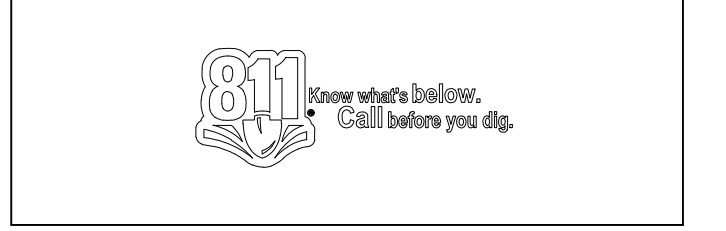
PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
CIVIL SITE PLAN
GENTIE AREA

SHEET SIZE: ARCH "D"
24" X 36" (610 X 914)
0 1/2" 1"

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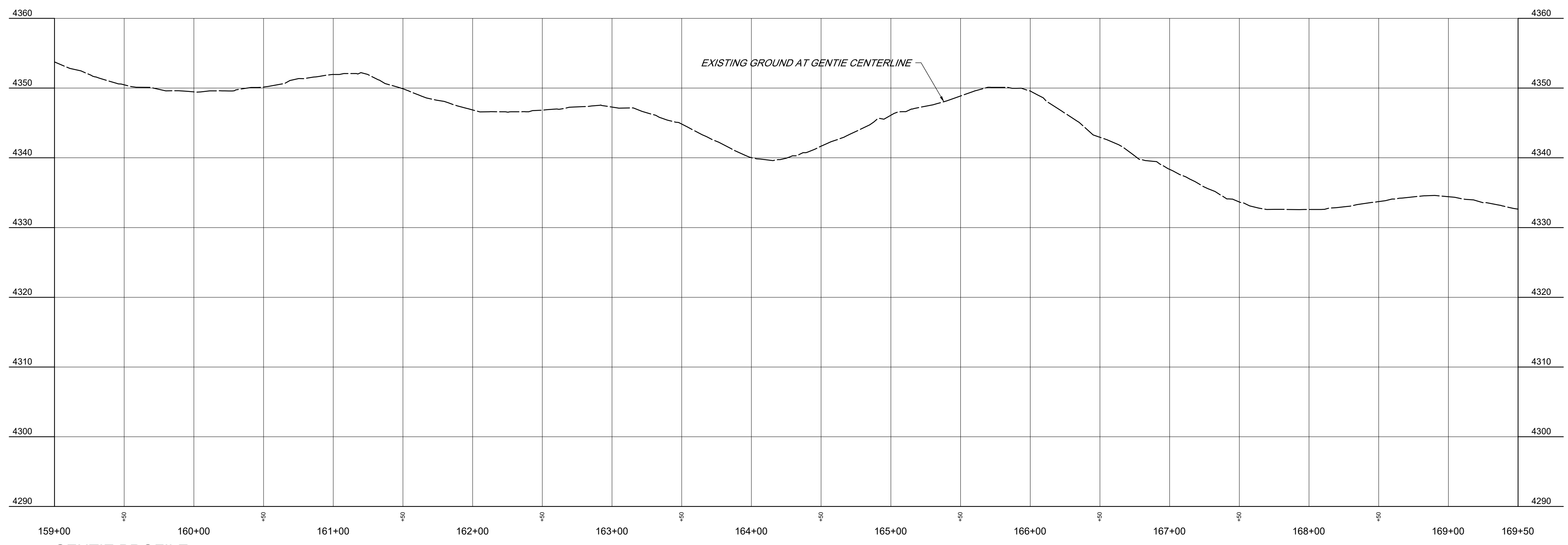
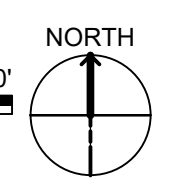
DATE: 10/12/2023
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ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
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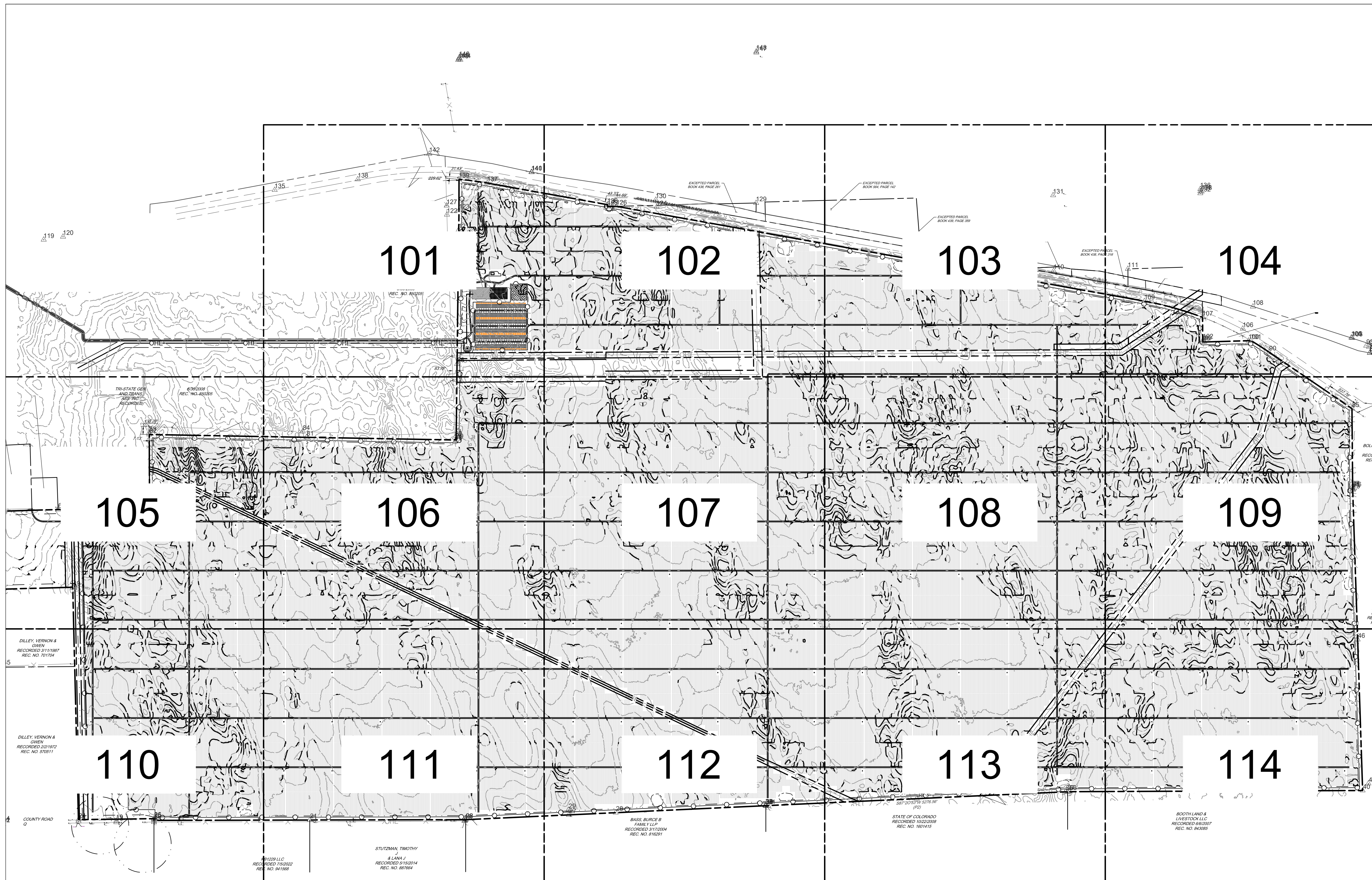
SCALE:
AS SHOWN

SHEET NO.:
CS306

PLAN
SCALE: 1" = 50'
SHEET: ARCH D



GENTIE PROFILE
SCALE H:1"=50'; V:1"=10'



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PRELIMINARY

FORTRESS SOLAR FACILITY
 AYPa POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
CIVIL GRADING PLAN OVERALL

SHEET SIZE: ARCH "D"
 24" X 36" (610 x 914)

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DATE: 10/12/2023
 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
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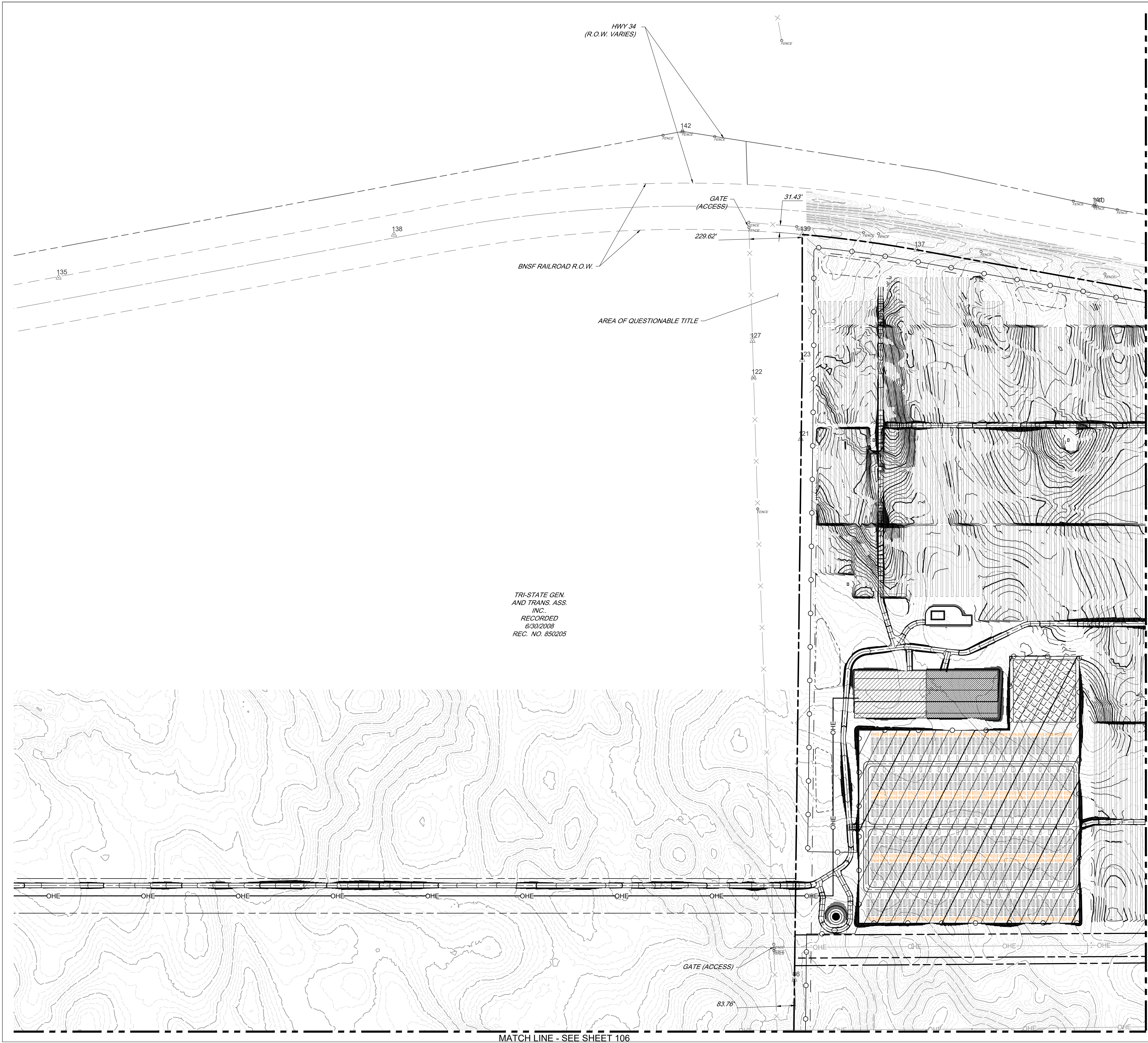
SCALE:
 AS SHOWN

SHEET NO.:
CG100

PLAN

 SCALE: 1" = 800'
 SHEET: ARCH D

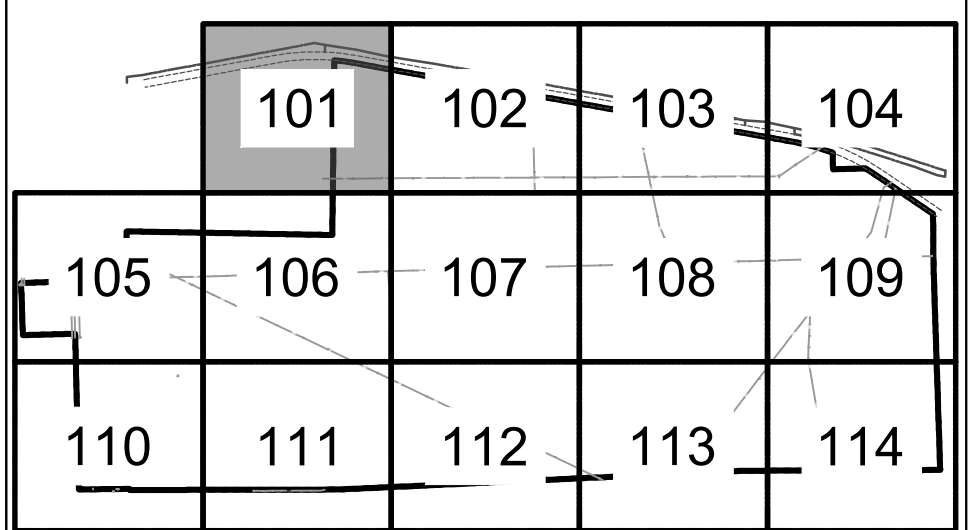




GENERAL NOTES
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- LEGEND**
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- ADJACENT #
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 - UG WATERLINE
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 - WATER APPURTENANCE
- CIVIL SITE**
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 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY #
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH

KEY MAP



PLAN
SCALE: 1" = 200'
SHEET: ARCH D



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MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
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SHEET TITLE:
CIVIL GRADING PLAN

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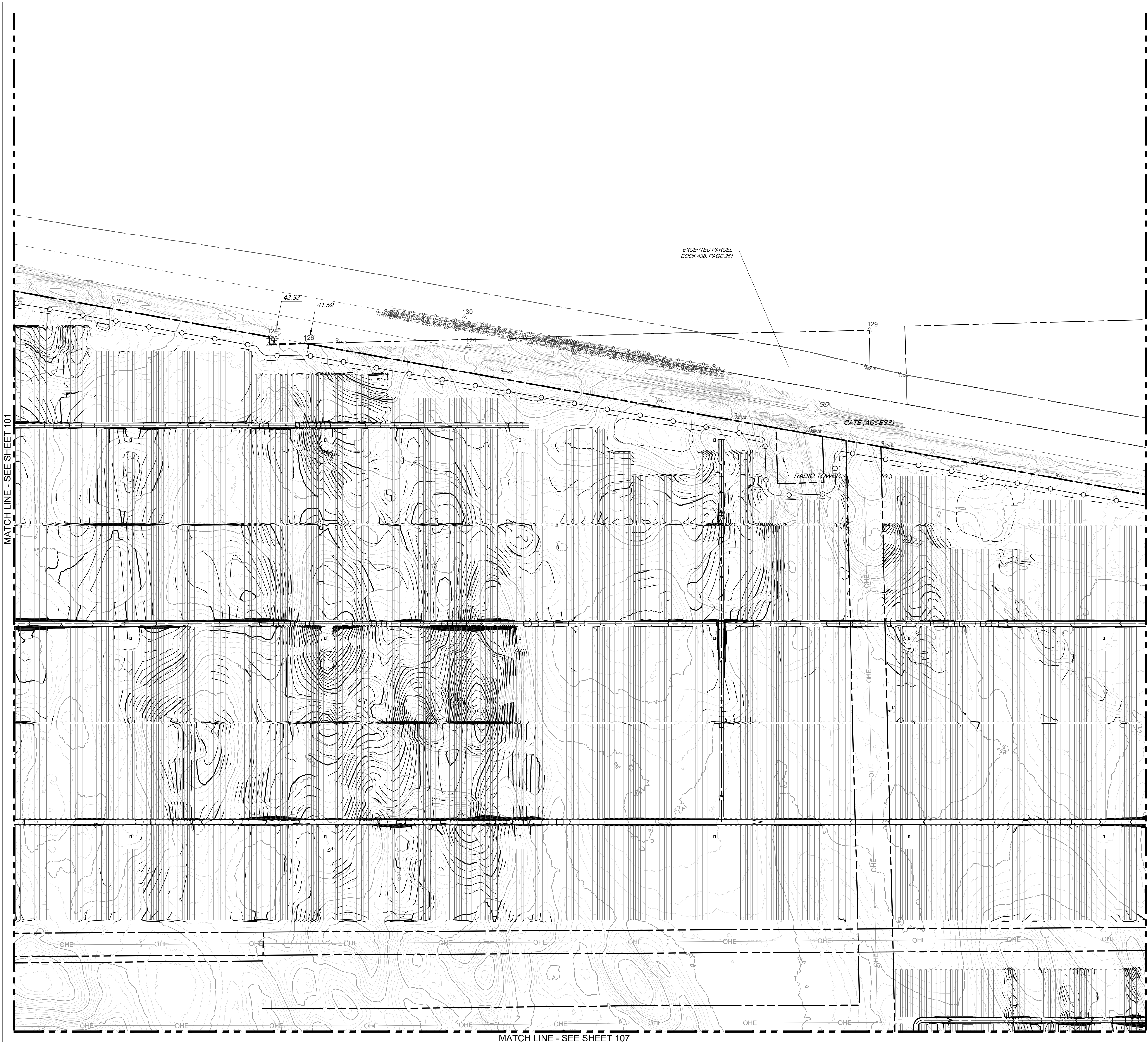


DATE: 10/12/2023
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ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
AS SHOWN

SHEET NO.:
CG101



GENERAL NOTES
 1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

EXISTING CONDITIONS	
—	ADJACENT &
▭	BUILDING/STRUCTURE
—	COMMUNICATIONS/FO APPURTENANCE
—	CONTOUR (MAJOR)
—	CONTOUR (MINOR)
—	CDOT ROW
—	EASEMENT
—	EASEMENT (PRESUMED)
⊙	FENCING
⊗	SURVEY MARKER/TRVERSE
—	SECTION LINE
—	OVERHEAD ELECTRIC LINE
—	RAILROAD ROW
—	RAILROAD &
⊙	SANITARY SEWER MANHOLE
⊙	SIGN
⊙	STRUCTURE (MISC)
—	SUBJECT &
—	ZONING SETBACK
—	UG COMMUNICATIONS/FIBER OPTIC
—	UG GAS LINE
—	UG SANITARY SEWER FORCEMAIN
—	UG WATERLINE
—	UTILITY POLE/GUY WIRE
—	WATER APPURTENANCE
CIVIL SITE	
—	CONTOUR (MAJOR)
—	CONTOUR (MINOR)
—	CULVERT
—	INTERNAL ROADWAY
—	INTERNAL ROADWAY &
—	POWER STATION (PCS)
—	PV RACKING/PIER
—	ROADWAY CL
—	SECURITY FENCE
—	STORMWATER POND/DIVERSION DITCH



TETRA TECH, INC.
 4101 COX ROAD,
 SUITE 100
 GLEN ALLEN, VA 23060
 TEL: (804) 290-4321
 FAX: (804) 270-2739

STAMP:
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PRELIMINARY

FORTRESS SOLAR FACILITY
 AYPa POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
 CIVIL GRADING PLAN

SHEET SIZE: ARCH "D"
 24" X 36" (610 x 914)

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B	IFP	10/17/2023	TTI
C	REVISED	10/20/2023	TTI
D	REVISED	10/24/2023	TTI



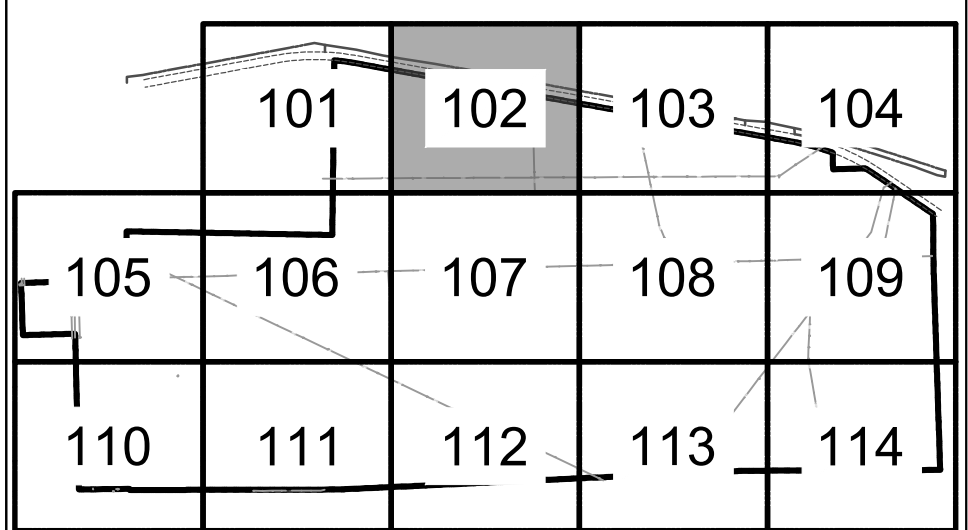
DATE: 10/12/2023
 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
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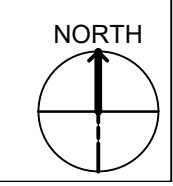
SHEET NO.:
CG102

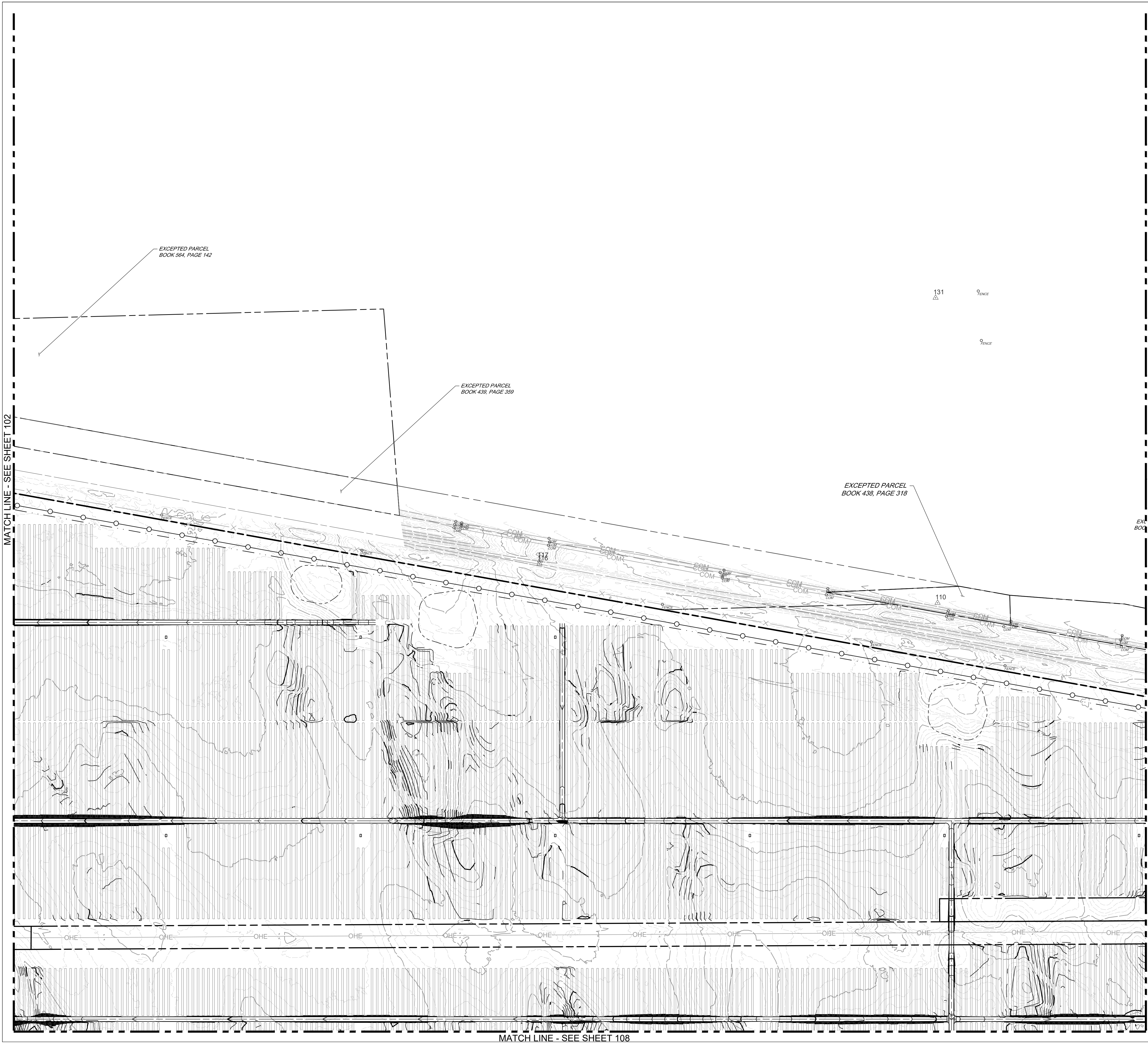
KEY MAP



PLAN

 SCALE: 1" = 200'
 SHEET: ARCH D





GENERAL NOTES
 1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

EXISTING CONDITIONS

- ADJACENT #
- BUILDING/STRUCTURE
- COMMUNICATIONS/FO APPURTENANCE
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CDOT ROW
- EASEMENT
- EASEMENT (PRESUMED)
- FENCING
- SURVEY MARKER/TRaverse
- SECTION LINE
- OVERHEAD ELECTRIC LINE
- RAILROAD ROW
- RAILROAD #
- SANITARY SEWER MANHOLE
- SIGN
- STRUCTURE (MISC)
- SUBJECT #
- ZONING SETBACK
- UG COMMUNICATIONS/FIBER OPTIC
- UG GAS LINE
- UG SANITARY SEWER FORCEMAIN
- UG WATERLINE
- UTILITY POLE/GUY WIRE
- WATER APPURTENANCE

CIVIL SITE

- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CULVERT
- INTERNAL ROADWAY
- INTERNAL ROADWAY #
- POWER STATION (PCS)
- PV RACKING/PIER
- ROADWAY CL
- SECURITY FENCE
- STORMWATER POND/DIVERSION DITCH



TETRA TECH
 TETRA TECH, INC.
 4101 COX ROAD,
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 GLEN ALLEN, VA 23060
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FORTRESS SOLAR FACILITY
 AYPD POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

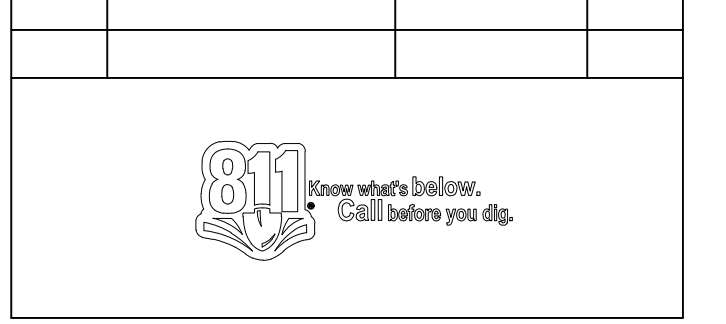
PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
 CIVIL GRADING PLAN

SHEET SIZE: ARCH "D"
 24" X 36" (610 x 914)

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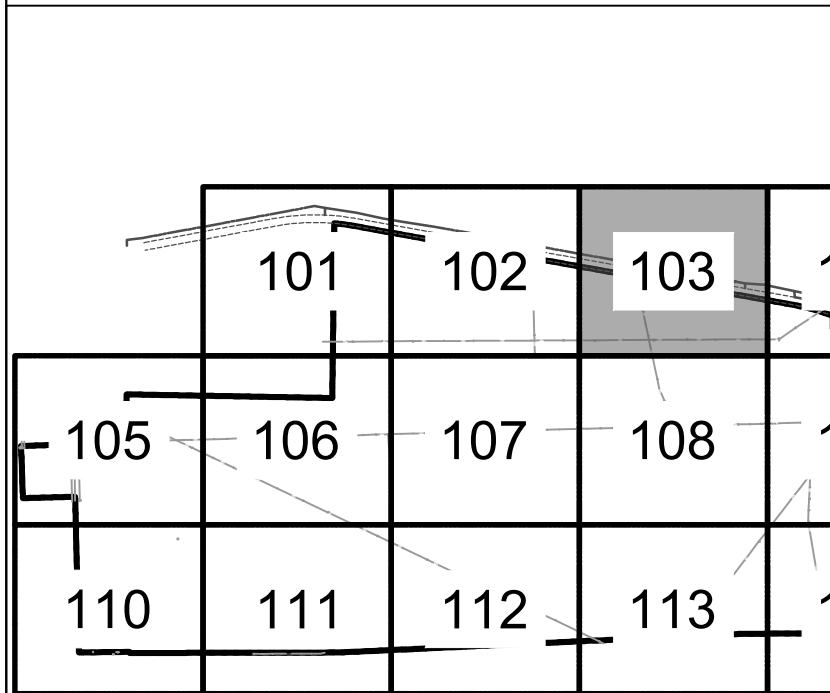
DATE: 10/12/2023
 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
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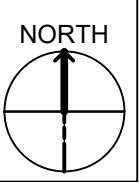
SCALE:
 AS SHOWN

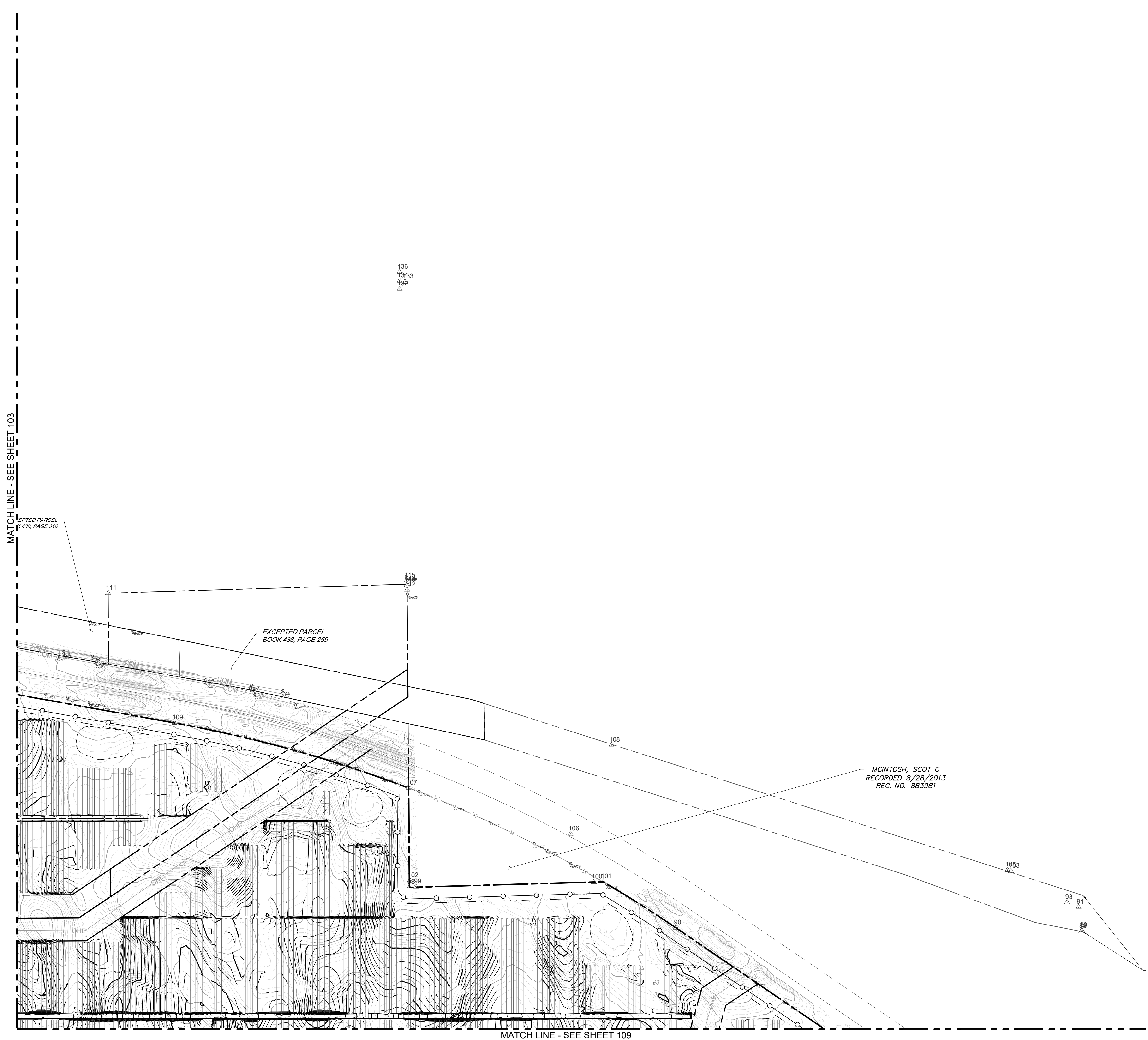
SHEET NO.:
CG103

KEY MAP



PLAN
 SCALE: 1" = 200'
 SHEET: ARCH D





GENERAL NOTES
 1. REFER TO C-000 FOR GENERAL PROJECT NOTES

- LEGEND**
- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY #
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH



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**FORTRESS SOLAR
 FACILITY
 AYPE POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO**

PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
 CIVIL GRADING PLAN

SHEET SIZE: ARCH "D"
 24" X 36" (610 x 914)

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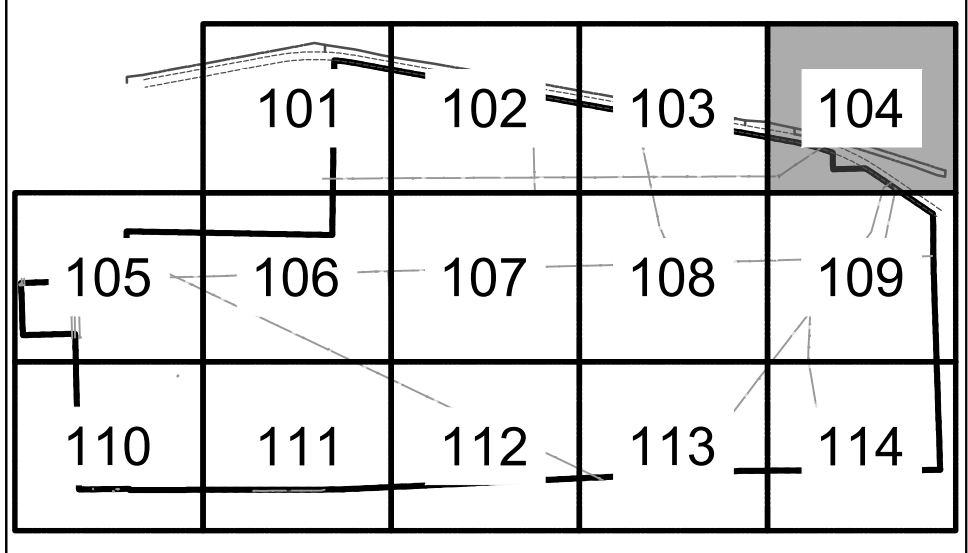
DATE: 10/12/2023
 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
 AS SHOWN

SHEET NO.:
CG104

KEY MAP



PLAN
 SCALE: 1" = 200'
 SHEET: ARCH D

MATCH LINE - SEE SHEET 103

MATCH LINE - SEE SHEET 109



GENERAL NOTES
 1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

EXISTING CONDITIONS

- ADJACENT & BUILDING/STRUCTURE
- COMMUNICATIONS/FO APPURTENANCE
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CDOT ROW
- EASEMENT
- EASEMENT (PRESUMED)
- FENCING
- SURVEY MARKER/TRAVVERSE
- SECTION LINE
- OVERHEAD ELECTRIC LINE
- RAILROAD ROW
- RAILROAD &
- SANITARY SEWER MANHOLE
- SIGN
- STRUCTURE (MISC)
- SUBJECT &
- ZONING SETBACK
- UG COMMUNICATIONS/FIBER OPTIC
- UG GAS LINE
- UG SANITARY SEWER FORCEMAIN
- UG WATERLINE
- UTILITY POLE/GUY WIRE
- WATER APPURTENANCE

CIVIL SITE

- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CULVERT
- INTERNAL ROADWAY
- INTERNAL ROADWAY &
- POWER STATION (PCS)
- PV RACKING/PIER
- ROADWAY CL
- SECURITY FENCE
- STORMWATER POND/DIVERSION DITCH



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 AYPa POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
CIVIL GRADING PLAN

SHEET SIZE: ARCH "D"
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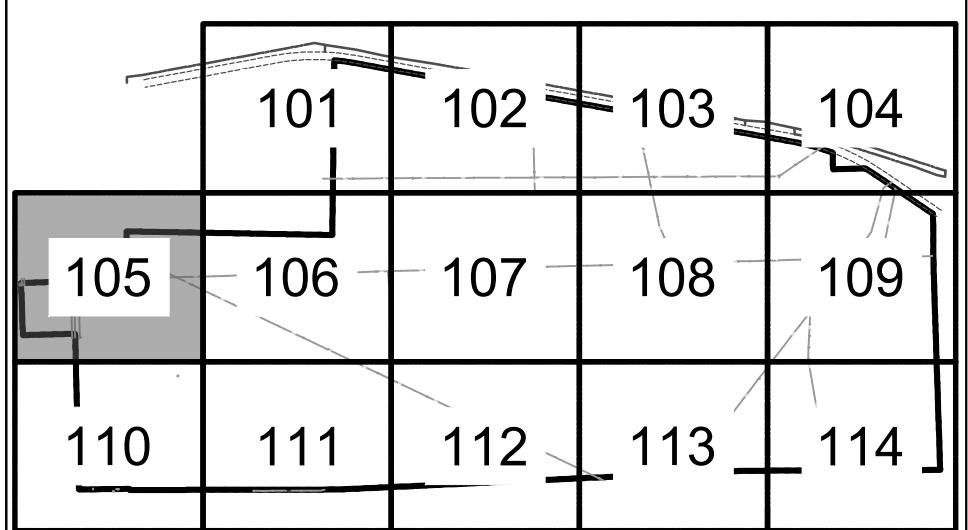
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 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
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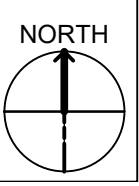
SHEET NO.:
CG105

KEY MAP

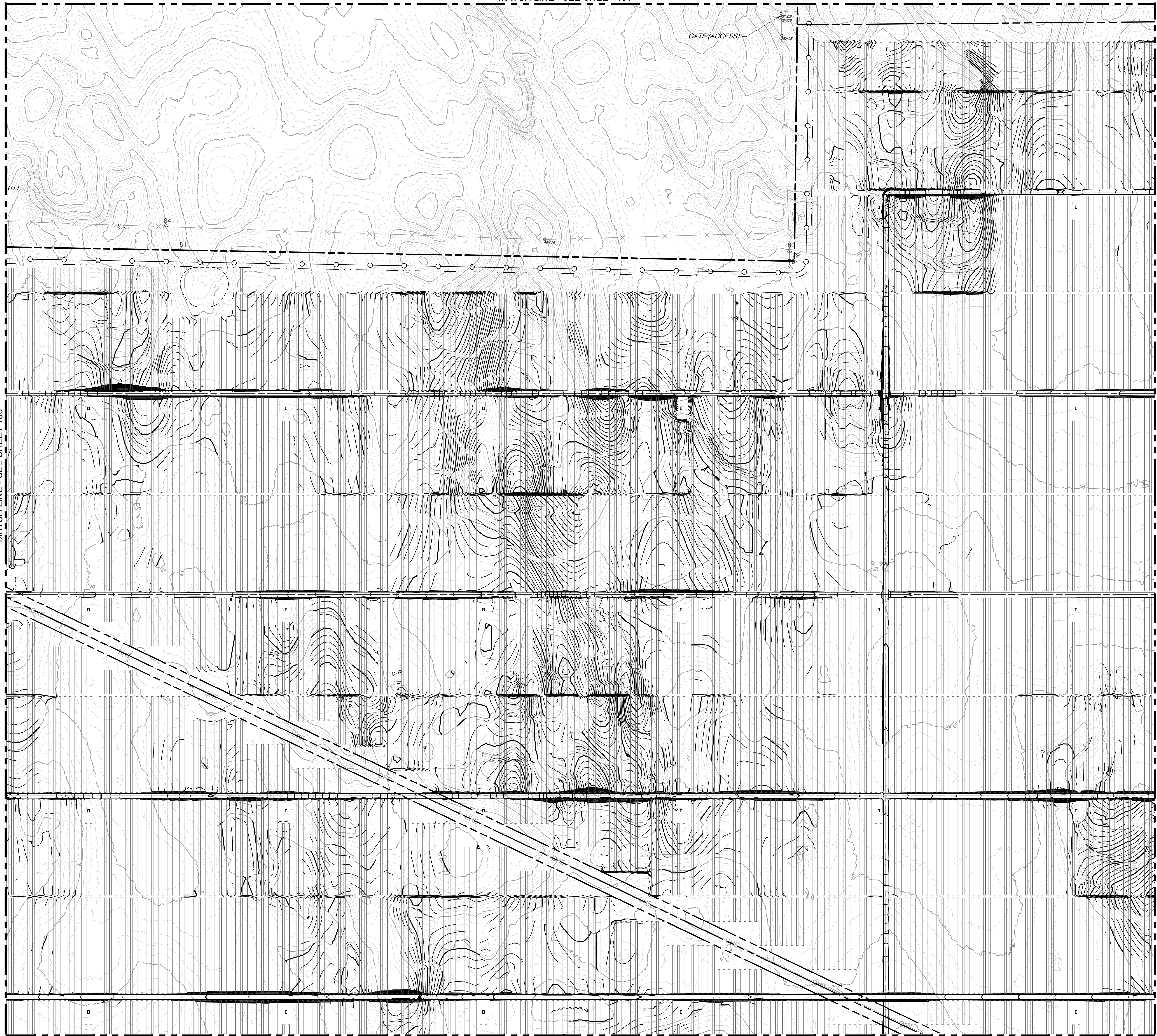


PLAN

 SCALE: 1" = 200'
 SHEET: ARCH D



MATCH LINE - SEE SHEET 101



MATCH LINE - SEE SHEET 111

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY #
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH



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GLEN ALLEN, VA 23060
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FAX: (804) 270-2739

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**FORTRESS SOLAR
FACILITY**
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
CIVIL GRADING PLAN

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)

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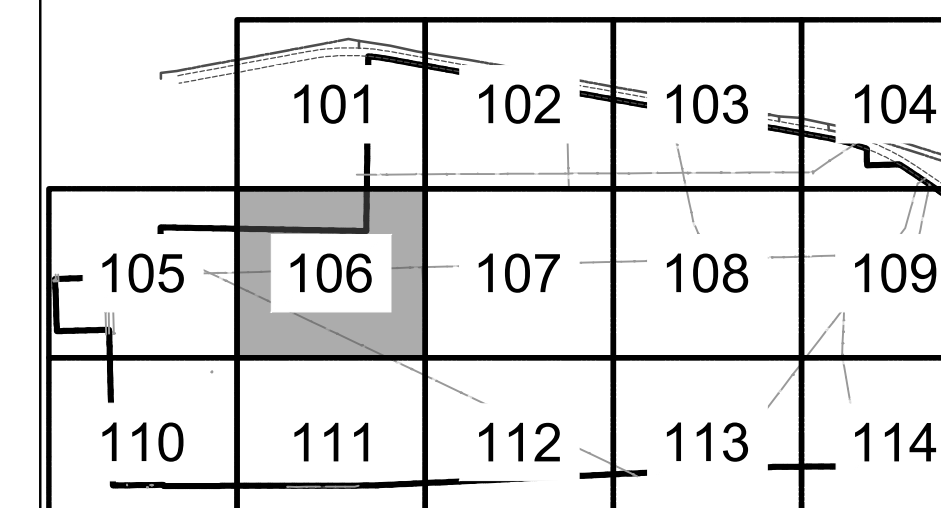
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CG106

KEY MAP

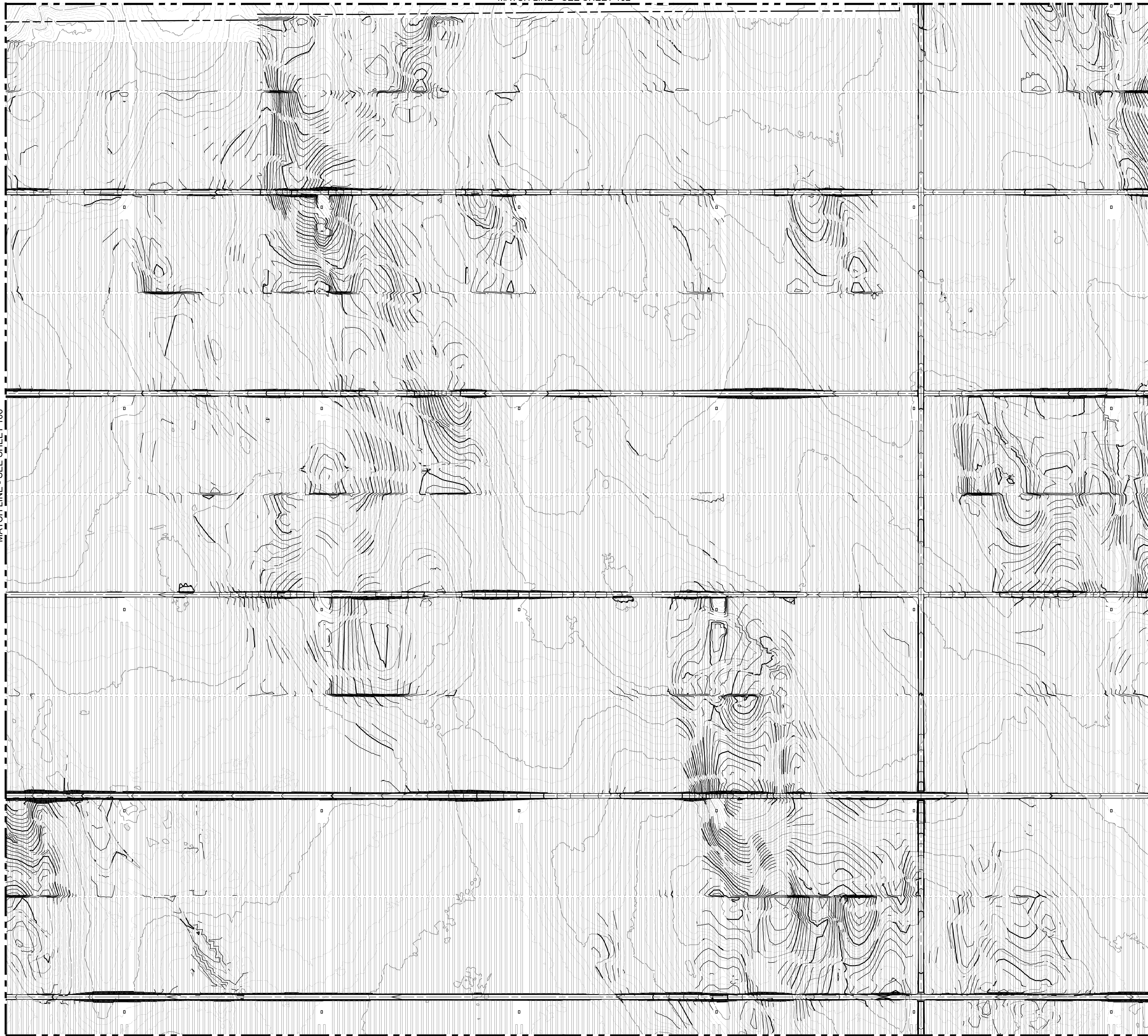


PLAN

SCALE: 1" = 200'
SHEET: ARCH D



MATCH LINE - SEE SHEET 102



MATCH LINE - SEE SHEET 106

MATCH LINE - SEE SHEET 108

MATCH LINE - SEE SHEET 112

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

EXISTING CONDITIONS

- ADJACENT #
- BUILDING/STRUCTURE
- COMMUNICATIONS/FO APPURTENANCE
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CDOT ROW
- EASEMENT
- EASEMENT (PRESUMED)
- FENCING
- SURVEY MARKER/TRVERSE
- SECTION LINE
- OVERHEAD ELECTRIC LINE
- RAILROAD ROW
- RAILROAD #
- SANITARY SEWER MANHOLE
- SIGN
- STRUCTURE (MISC)
- SUBJECT #
- ZONING SETBACK
- UG COMMUNICATIONS/FIBER OPTIC
- UG GAS LINE
- UG SANITARY SEWER FORCEMAIN
- UG WATERLINE
- UTILITY POLE/GUY WIRE
- WATER APPURTENANCE

CIVIL SITE

- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CULVERT
- INTERNAL ROADWAY
- INTERNAL ROADWAY #
- POWER STATION (PCS)
- PV RACKING/PIER
- ROADWAY CL
- SECURITY FENCE
- STORMWATER POND/DIVERSION DITCH



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SUITE 100
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
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PRELIMINARY

FORTRESS SOLAR FACILITY
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
CIVIL GRADING PLAN

SHEET SIZE: ARCH "D"
24" X 36" (610 X 914)

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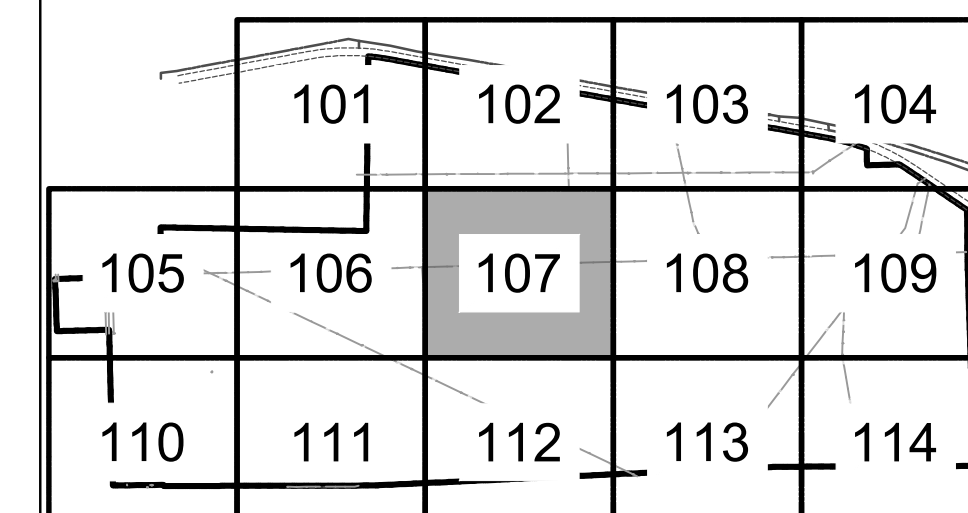
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CG107

KEY MAP

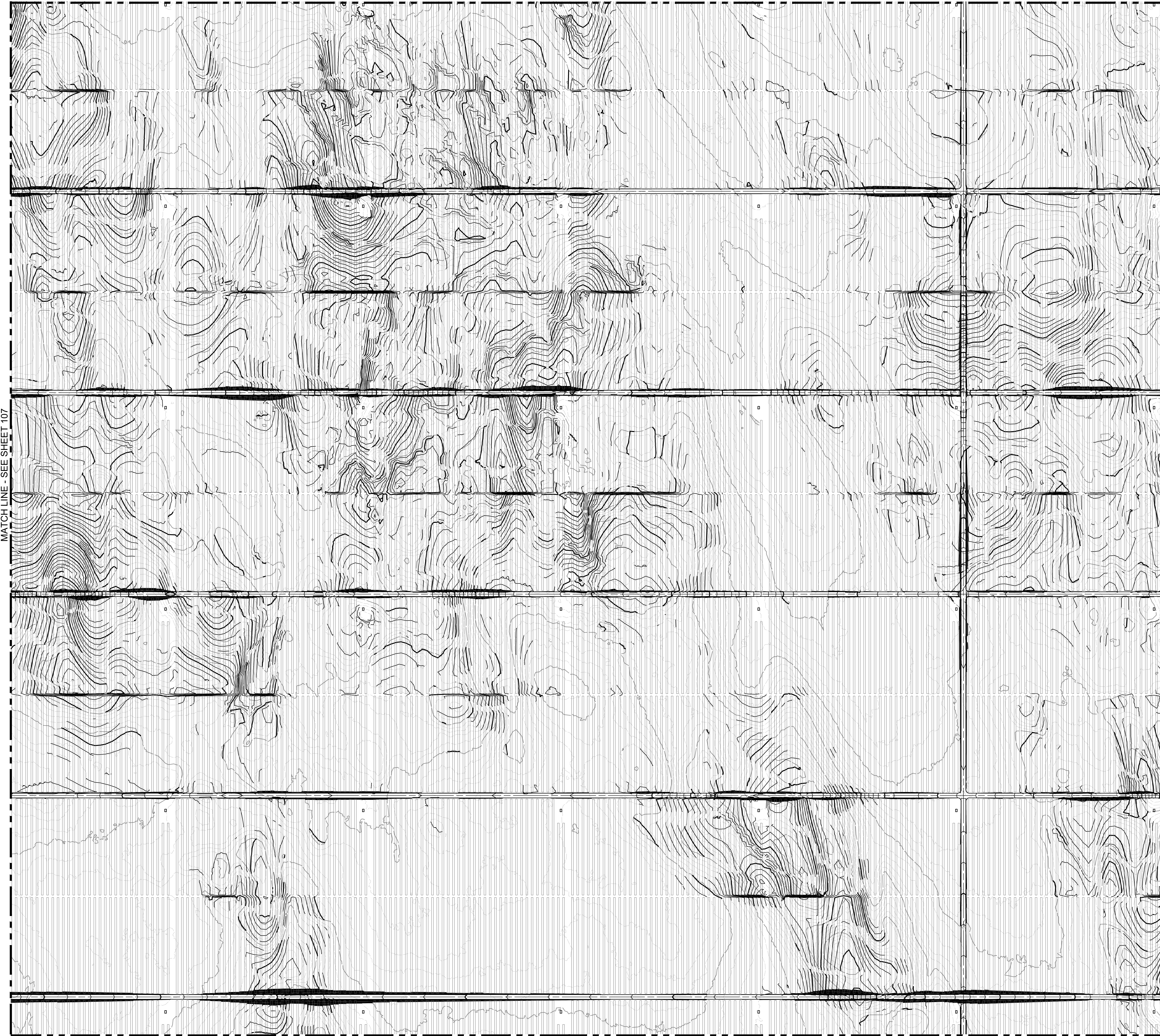


PLAN

SCALE: 1" = 200'
SHEET: ARCH D



MATCH LINE - SEE SHEET 103



MATCH LINE - SEE SHEET 113

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

EXISTING CONDITIONS

- ADJACENT &
- BUILDING/STRUCTURE
- COMMUNICATIONS/FO APPURTENANCE
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CDOT ROW
- EASEMENT
- EASEMENT (PRESUMED)
- FENCING
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- RAILROAD &
- SANITARY SEWER MANHOLE
- SIGN
- STRUCTURE (MISC)
- SUBJECT &
- ZONING SETBACK
- UG COMMUNICATIONS/FIBER OPTIC
- UG GAS LINE
- UG SANITARY SEWER FORCEMAIN
- UG WATERLINE
- UTILITY POLE/GUY WIRE
- WATER APPURTENANCE

CIVIL SITE

- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CULVERT
- INTERNAL ROADWAY
- INTERNAL ROADWAY &
- POWER STATION (PCS)
- PV RACKING/PIER
- ROADWAY CL
- SECURITY FENCE
- STORMWATER POND/DIVERSION DITCH



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GLEN ALLEN, VA 23060
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FACILITY
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO**

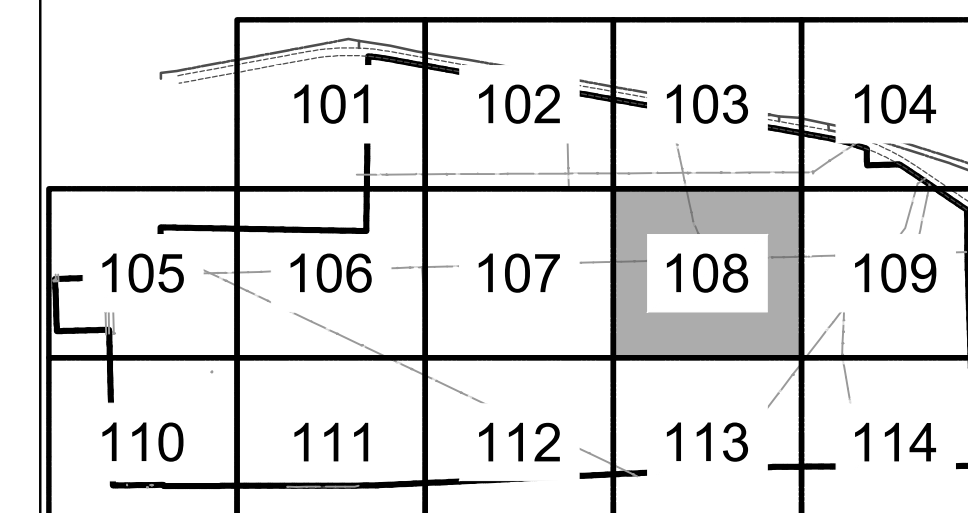
PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
CIVIL GRADING PLAN

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 1/2" 1"

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KEY MAP



PLAN

SCALE: 1" = 200'
SHEET: ARCH D



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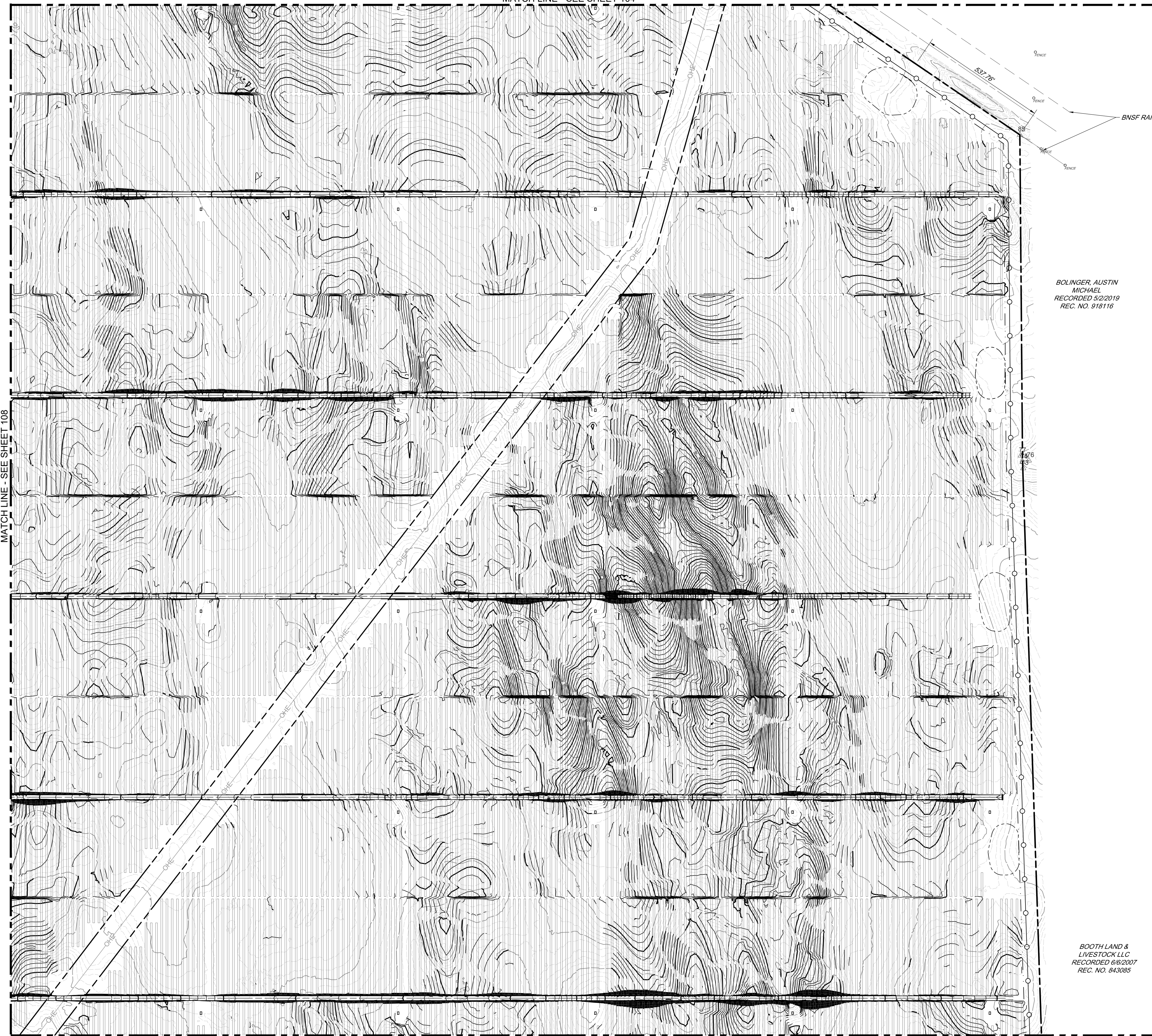
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CG108

MATCH LINE - SEE SHEET 104



BOLINGER, AUSTIN
MICHAEL
RECORDED 5/2/2019
REC. NO. 918116

BOOTH LAND &
LIVESTOCK LLC
RECORDED 6/6/2007
REC. NO. 843085

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

EXISTING CONDITIONS

- ADJACENT & BUILDING/STRUCTURE
- COMMUNICATIONS/FO APPURTENANCE
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CDOT ROW
- EASEMENT
- EASEMENT (PRESUMED)
- FENCING
- SURVEY MARKER/TRAVVERSE
- SECTION LINE
- OHE OVERHEAD ELECTRIC LINE
- RAILROAD ROW
- RAILROAD &
- SANITARY SEWER MANHOLE
- SIGN
- STRUCTURE (MISC)
- SUBJECT &
- ZONING SETBACK
- UG COMMUNICATIONS/FIBER OPTIC
- UG GAS LINE
- UG SANITARY SEWER FORCEMAIN
- UG WATERLINE
- UTILITY POLE/GUY WIRE
- WATER APPURTENANCE

CIVIL SITE

- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CULVERT
- INTERNAL ROADWAY
- INTERNAL ROADWAY &
- POWER STATION (PCS)
- PV RACKING/PIER
- ROADWAY CL
- SECURITY FENCE
- STORMWATER POND/DIVERSION DITCH



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MORGAN COUNTY
COLORADO

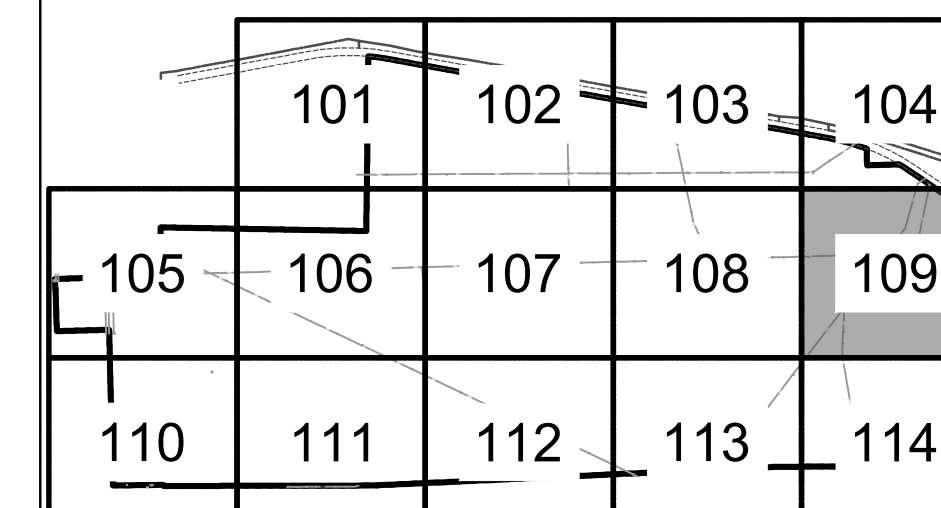
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SHEET TITLE:
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SHEET SIZE: ARCH "D"
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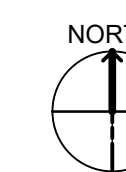
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KEY MAP



PLAN

0 200' 400'
SCALE: 1" = 200'
SHEET: ARCH D



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B	IFP	10/17/2023	TTI
C	REVISED	10/20/2023	TTI
D	REVISED	10/24/2023	TTI



DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CG109

MATCH LINE - SEE SHEET 114

MATCH LINE - SEE SHEET 105

DILLEY, VERNON &
GWEN
RECORDED 3/11/1987
REC. NO. 701704

DILLEY, VERNON &
GWEN
RECORDED 2/2/1972
REC. NO. 570511

COUNTY ROAD
Q

CONVEYANCE 30' WIDE
RECORDED 5/20/1996
BOOK 8, PAGE 235

KB1229 LLC
RECORDED 7/3
REC. NO. 941

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

EXISTING CONDITIONS

- ADJACENT &
- BUILDING/STRUCTURE
- COMMUNICATIONS/FO APPURTENANCE
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CDOT ROW
- EASEMENT
- EASEMENT (PRESUMED)
- FENCING
- SURVEY MARKER/TRAVVERSE
- SECTION LINE
- OVERHEAD ELECTRIC LINE
- RAILROAD ROW
- RAILROAD &
- SANITARY SEWER MANHOLE
- SIGN
- STRUCTURE (MISC)
- SUBJECT &
- ZONING SETBACK
- UG COMMUNICATIONS/FIBER OPTIC
- UG GAS LINE
- UG SANITARY SEWER FORCEMAIN
- UG WATERLINE
- UTILITY POLE/GUY WIRE
- WATER APPURTENANCE

CIVIL SITE

- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CULVERT
- INTERNAL ROADWAY
- INTERNAL ROADWAY &
- POWER STATION (PCS)
- PV RACKING/PIER
- ROADWAY CL
- SECURITY FENCE
- STORMWATER POND/DIVERSION DITCH



TETRA TECH, INC.
4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

STAMP:

**NOT FOR
CONSTRUCTION**

PRELIMINARY

**FORTRESS SOLAR
FACILITY**
AYPE POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
CIVIL GRADING PLAN

SHEET SIZE: ARCH "D"
24" X 36" (610 X 914)

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D	REVISED	10/24/2023	TTI



DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

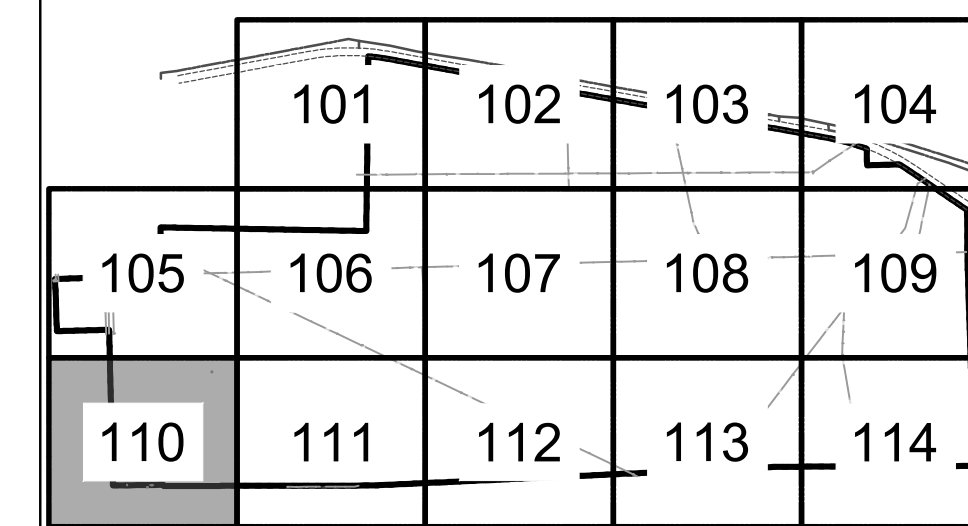
PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CG110

MATCH LINE - SEE SHEET 111

KEY MAP

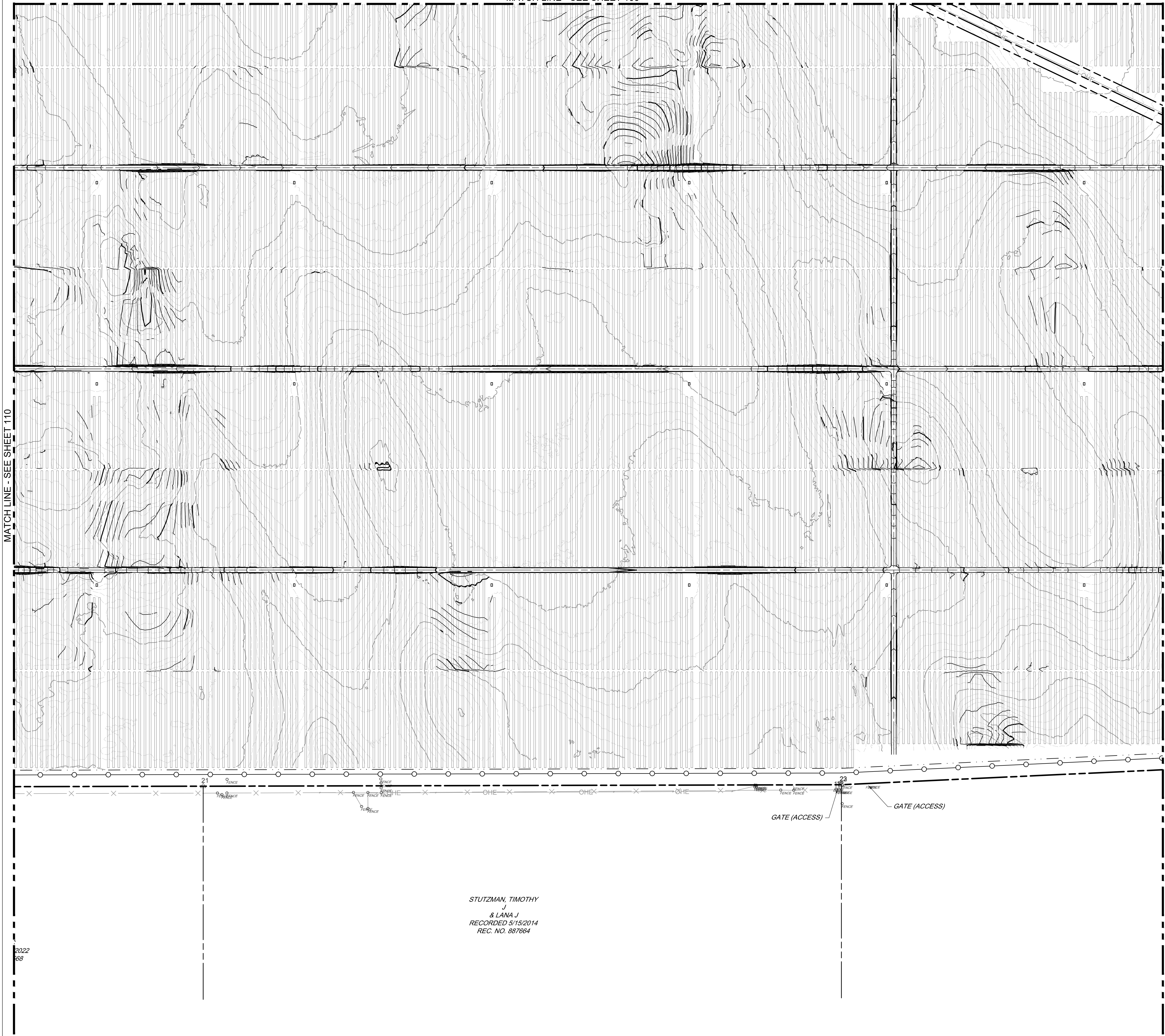


PLAN

SCALE: 1" = 200'
SHEET: ARCH D



MATCH LINE - SEE SHEET 106



MATCH LINE - SEE SHEET 110

MATCH LINE - SEE SHEET 112

2022
603

STUTZMAN, TIMOTHY
& LANA, J
RECORDED 5/15/2014
REC. NO. 887664

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH



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4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
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PRELIMINARY

**FORTRESS SOLAR
FACILITY**
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
CIVIL GRADING PLAN

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 1/2" 1"

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D	REVISED	10/24/2023	TTI



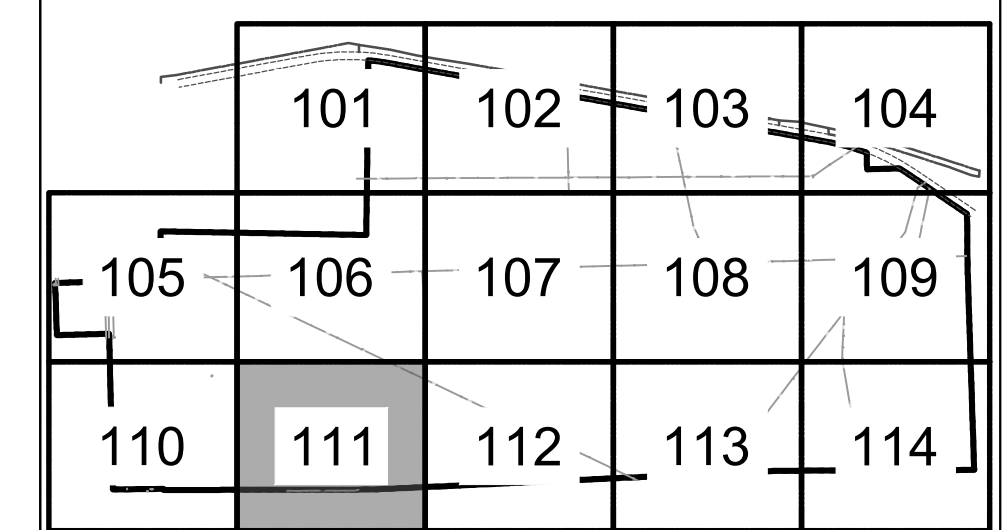
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

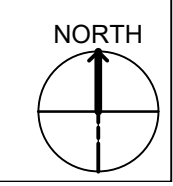
SHEET NO.:
CG111

KEY MAP

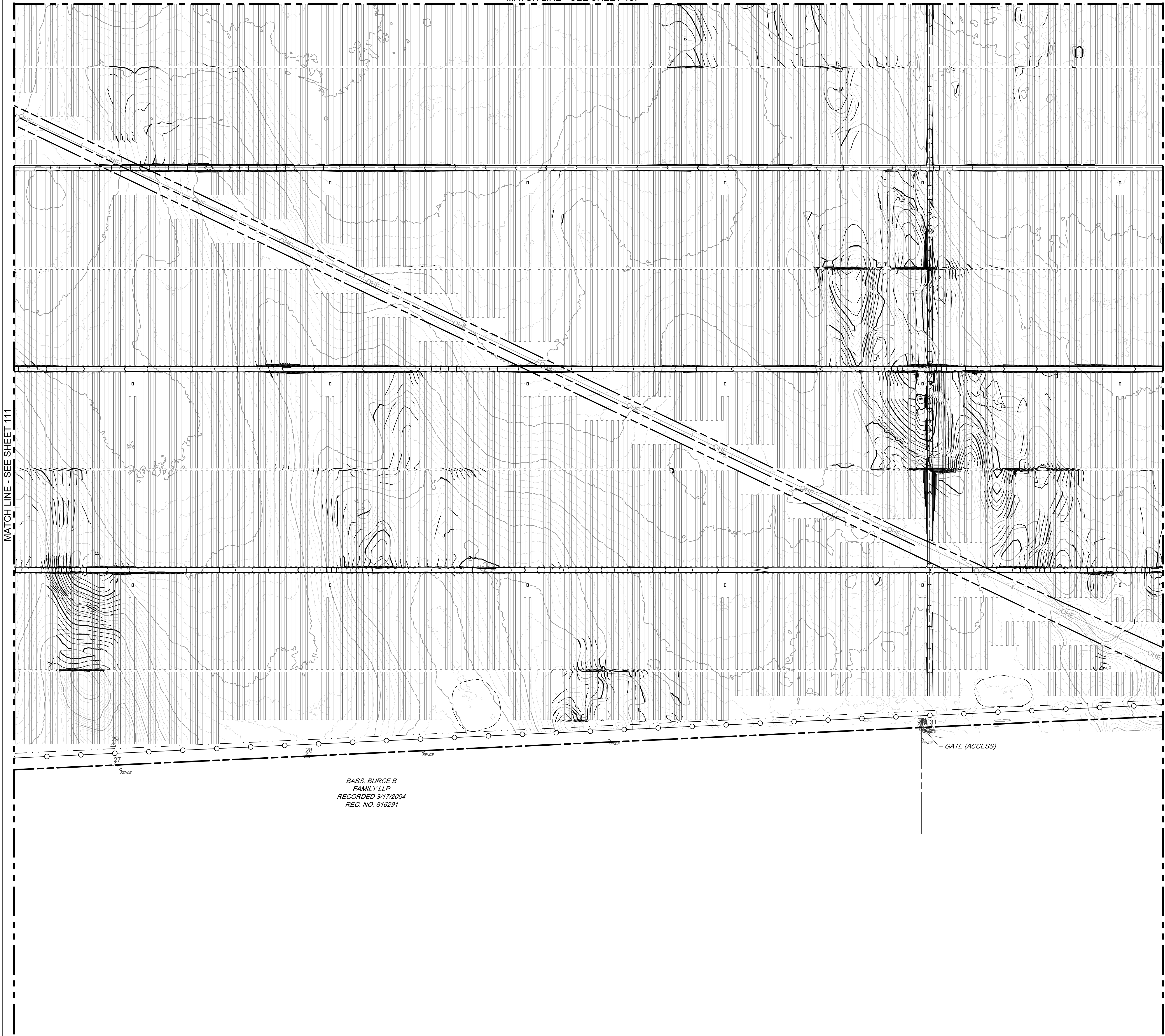


PLAN

SCALE: 1" = 200'
SHEET: ARCH D



MATCH LINE - SEE SHEET 107



BASS, BURCE & B
 FAMILY LLP
 RECORDED 3/17/2004
 REC. NO. 816291

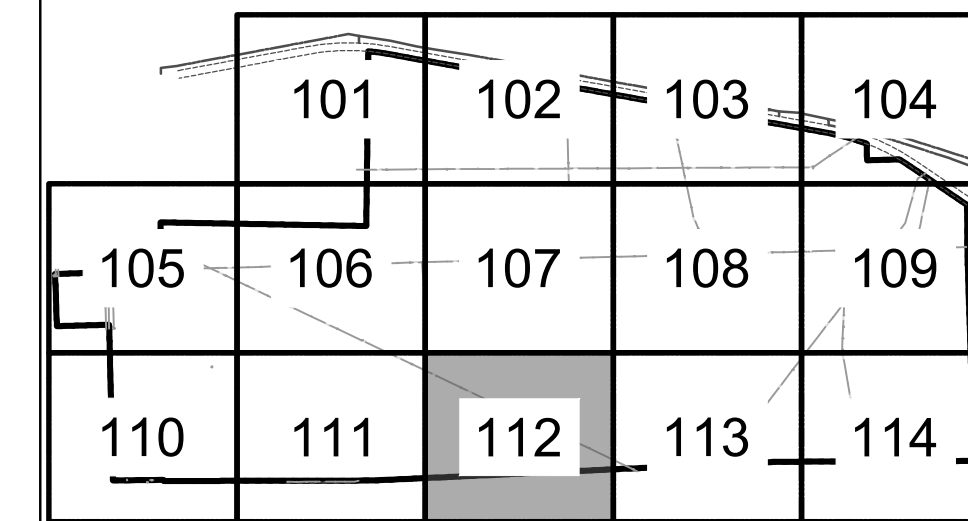
GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

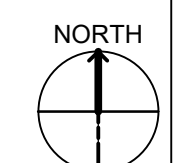
- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY #
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH

KEY MAP



PLAN

0 200' 400'
 SCALE: 1" = 200'
 SHEET: ARCH D



TETRA TECH, INC.
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**FORTRESS SOLAR
 FACILITY**
 AYPa POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
 CIVIL GRADING PLAN

SHEET SIZE: ARCH "D"
 24" X 36" (610 X 914)
 0 1/2" 1"

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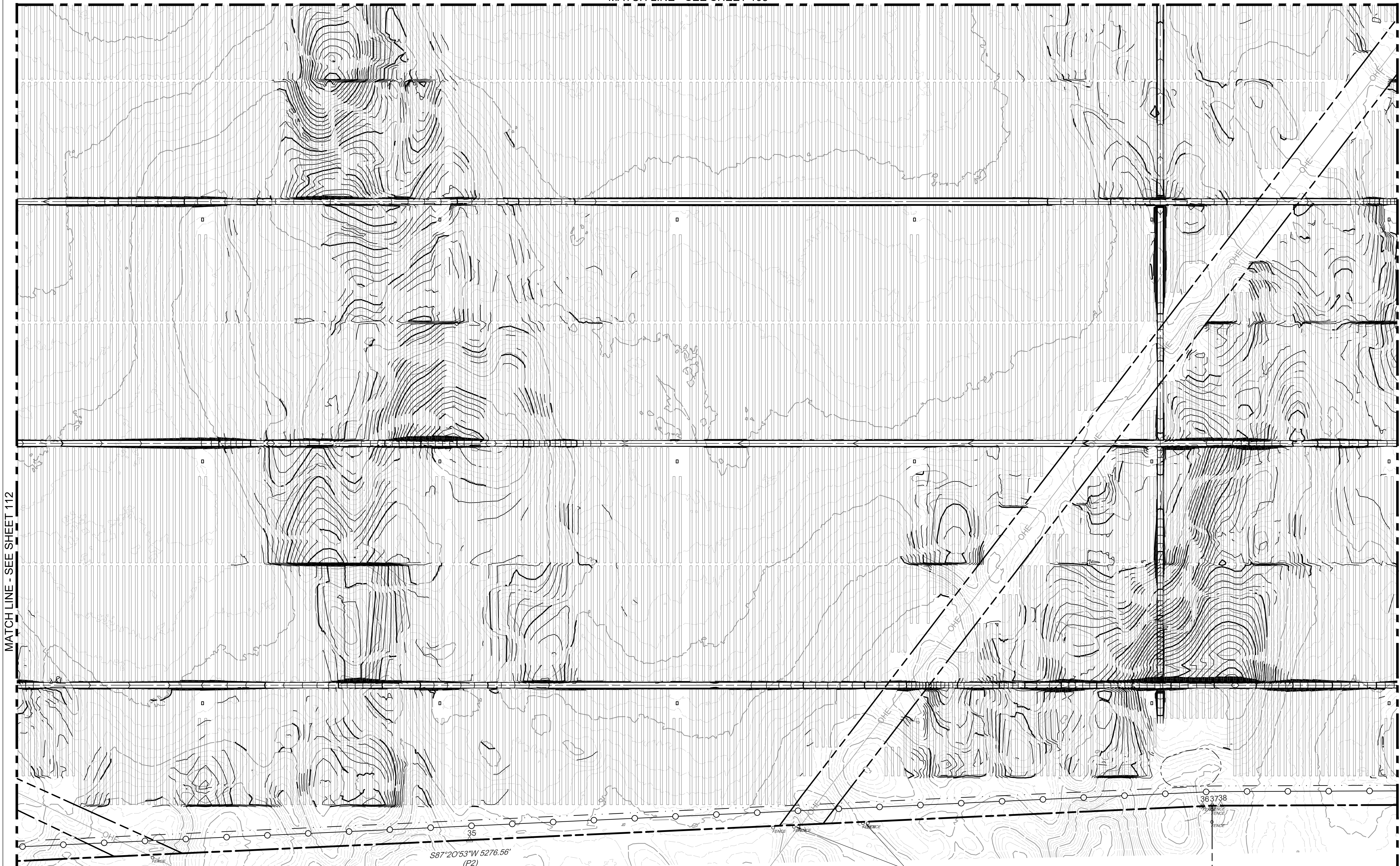
DATE: 10/12/2023
 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

PROJECT PHASE:
 ISSUED FOR PERMIT

SCALE:
 AS SHOWN

SHEET NO.:
CG112

MATCH LINE - SEE SHEET 108



S87°20'53"W 5276.56'
(P2)

GATE (ACCESS)

STATE OF COLORADO
RECORDED 10/22/2008
REC. NO. 1601415

GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY & POWER STATION (PCS)
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH



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SUITE 100
GLEN ALLEN, VA 23060
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FAX: (804) 270-2739

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PRELIMINARY

FORTRESS SOLAR FACILITY
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
CIVIL GRADING PLAN

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 1/2" 1"

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C	REVISED	10/20/2023	TTI
D	REVISED	10/24/2023	TTI



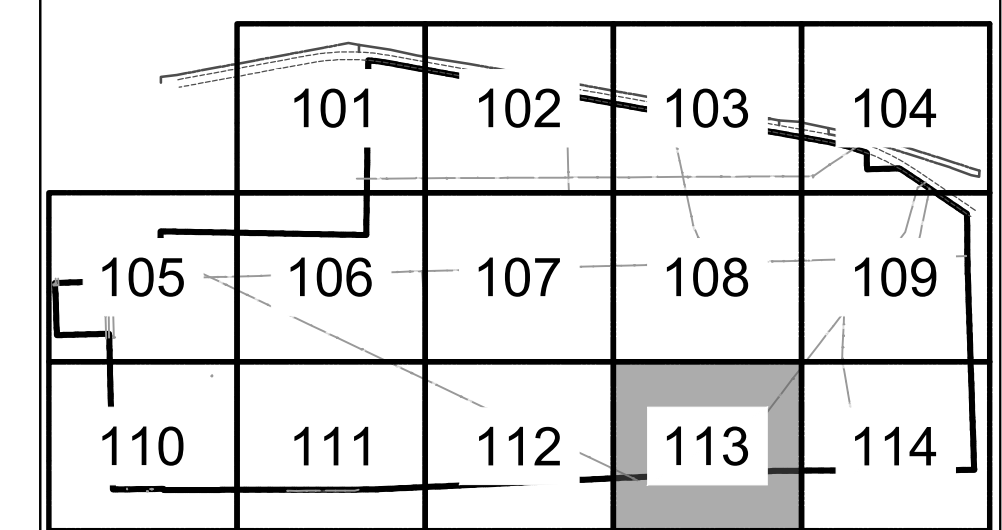
DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

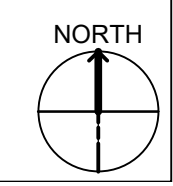
SHEET NO.:
CG113

KEY MAP

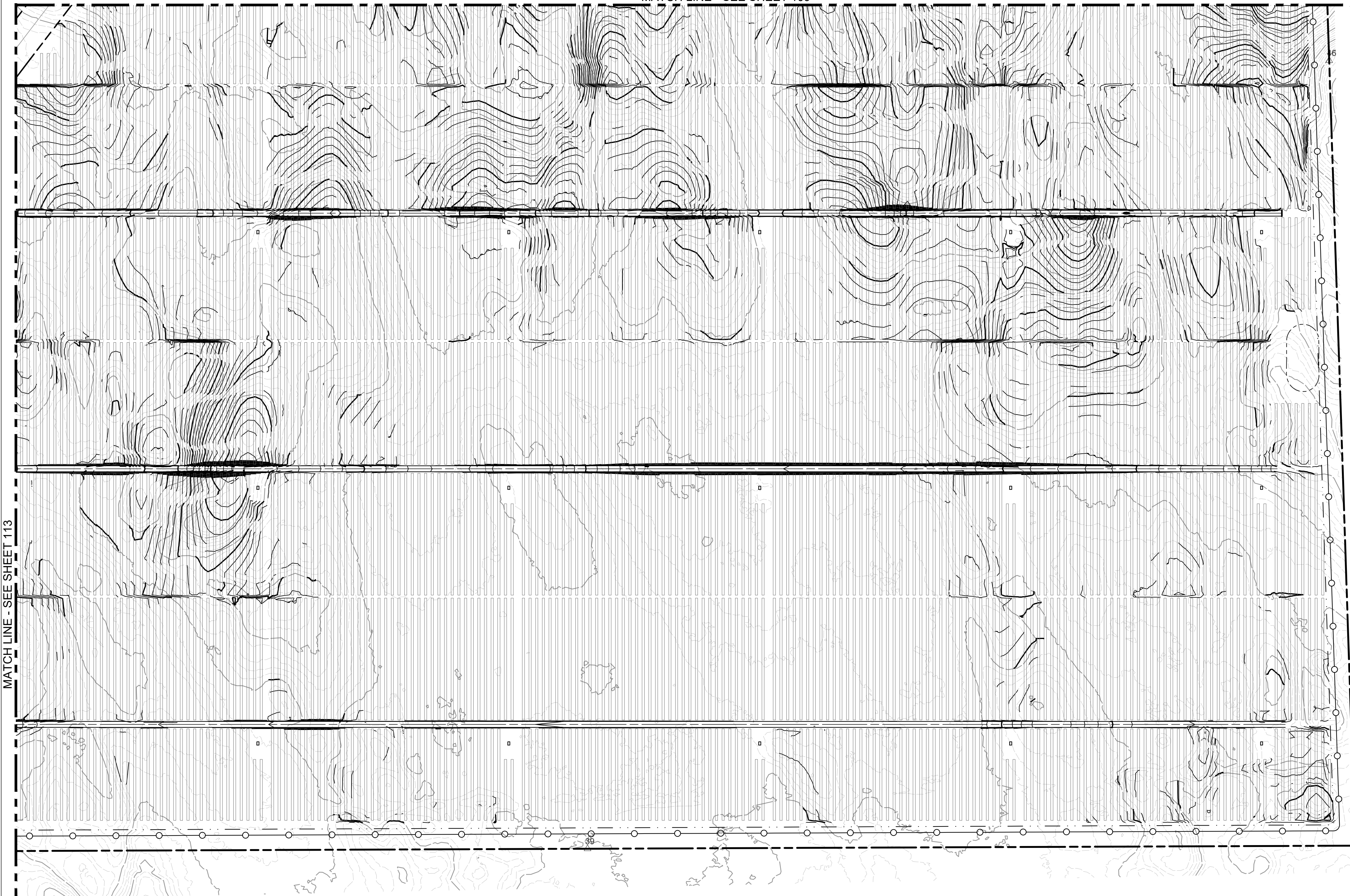


PLAN

SCALE: 1" = 200'
SHEET: ARCH D



MATCH LINE - SEE SHEET 109



MATCH LINE - SEE SHEET 113

BOOTH LAND &
LIVESTOCK LLC
RECORDED 6/6/2007
REC. NO. 843085

BOOTH LAND &
LIVESTOCK LLC
RECORDED 6/6/2007
REC. NO. 843085

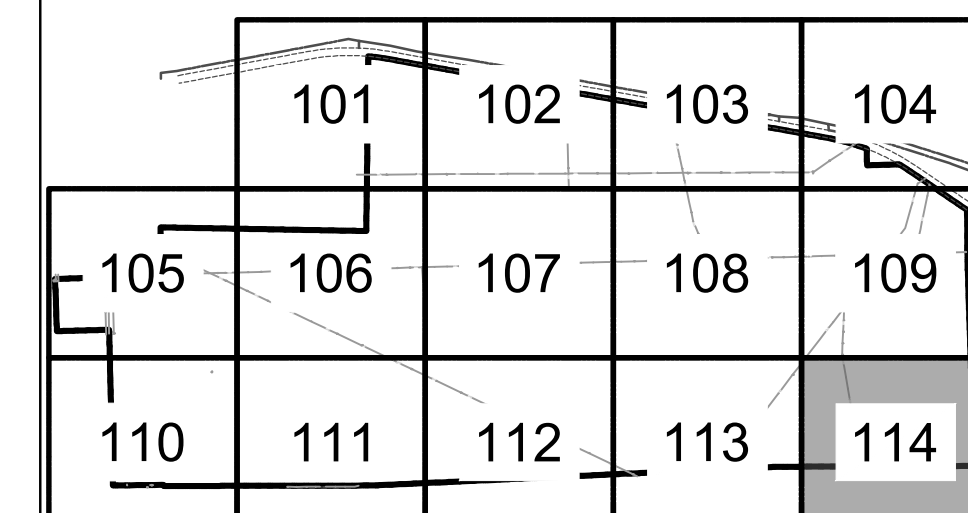
GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT #
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVERSE
 - SECTION LINE
 - OHE OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD #
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT #
 - ZONING SETBACK
 - COM UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
 - CIVIL SITE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - SD CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY #
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH

KEY MAP



PLAN

0 200' 400'
SCALE: 1" = 200'
SHEET: ARCH D



TETRA TECH, INC.
4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

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PRELIMINARY

**FORTRESS SOLAR
FACILITY
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO**

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
CIVIL GRADING PLAN

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 1/2" 1"

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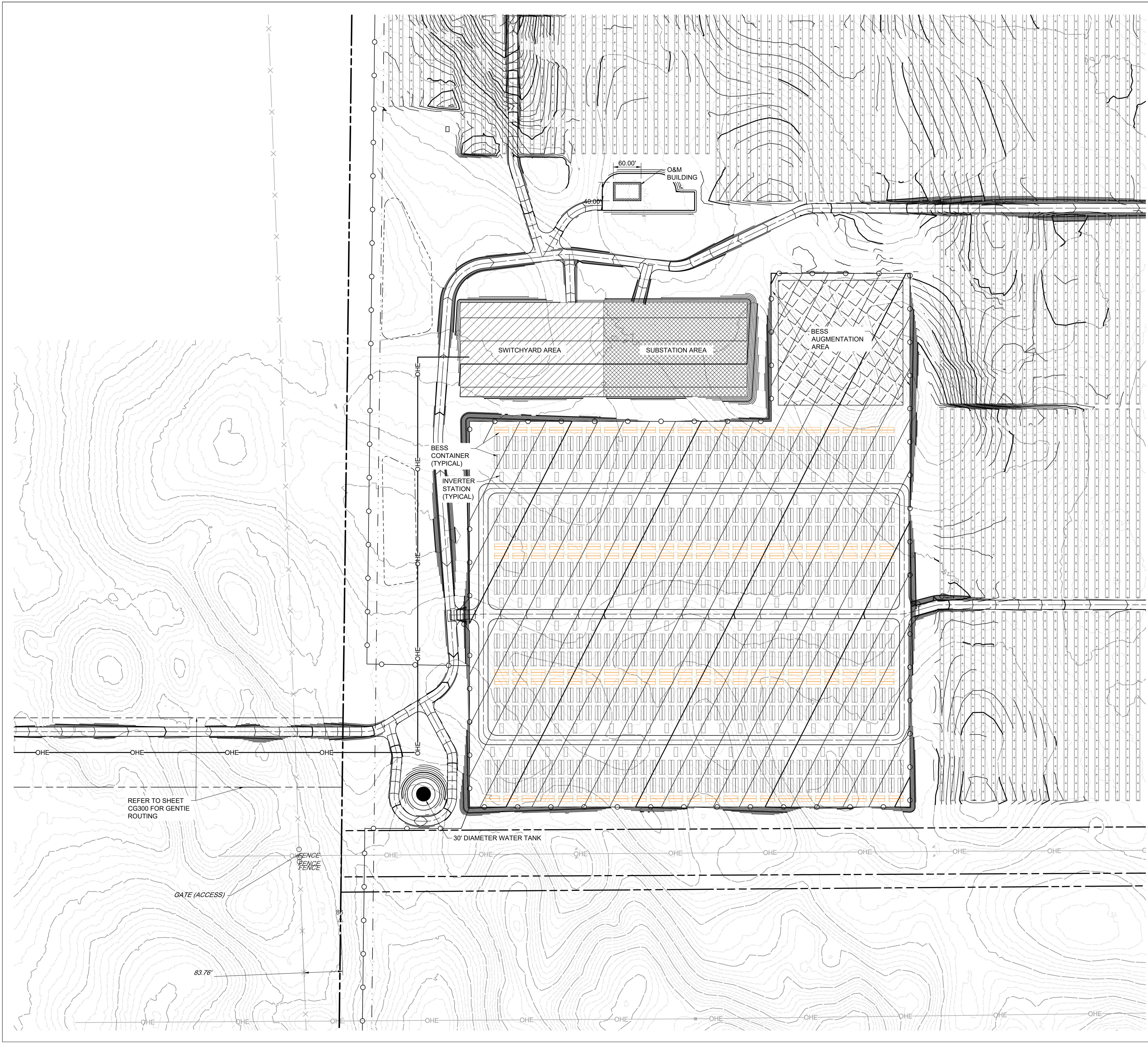


DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CG114



GENERAL NOTES
 1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

EXISTING CONDITIONS

- ADJACENT #
- BUILDING/STRUCTURE
- COMMUNICATIONS/FO APPURTENANCE
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CDOT ROW
- EASEMENT
- EASEMENT (PRESUMED)
- FENCING
- SURVEY MARKER/TRAVVERSE
- SECTION LINE
- OVERHEAD ELECTRIC LINE
- RAILROAD ROW
- RAILROAD #
- SANITARY SEWER MANHOLE
- SIGN
- STRUCTURE (MISC)
- SUBJECT #
- ZONING SETBACK
- UG COMMUNICATIONS/FIBER OPTIC
- UG GAS LINE
- UG SANITARY SEWER FORCEMAIN
- UG WATERLINE
- UTILITY POLE/GUY WIRE
- WATER APPURTENANCE

CIVIL SITE

- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CULVERT
- INTERNAL ROADWAY
- INTERNAL ROADWAY #
- POWER STATION (PCS)
- PV RACKING/PIER
- ROADWAY CL
- SECURITY FENCE
- STORMWATER POND/DIVERSION DITCH



TETRA TECH, INC.
 4101 COX ROAD,
 SUITE 100
 GLEN ALLEN, VA 23060
 TEL: (804) 290-4321
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FORTRESS SOLAR FACILITY
 AYPa POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

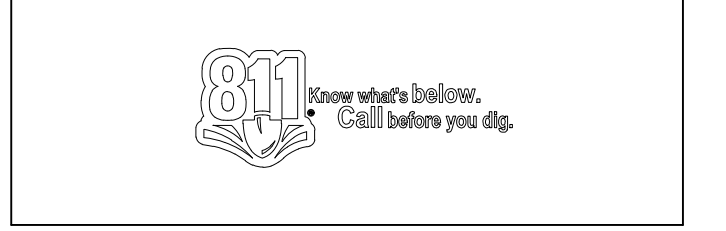
PROJECT NUMBERS:
 194-1179-0009

SHEET TITLE:
**CIVIL GRADING PLAN
 BESS AREA**

SHEET SIZE: ARCH "D"
 24" X 36" (610 x 914)

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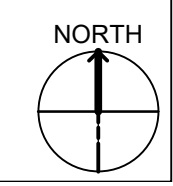
DATE: 10/12/2023
 DRAWN BY: TTI
 ENGINEER: TTI
 APPROVED BY: TTI

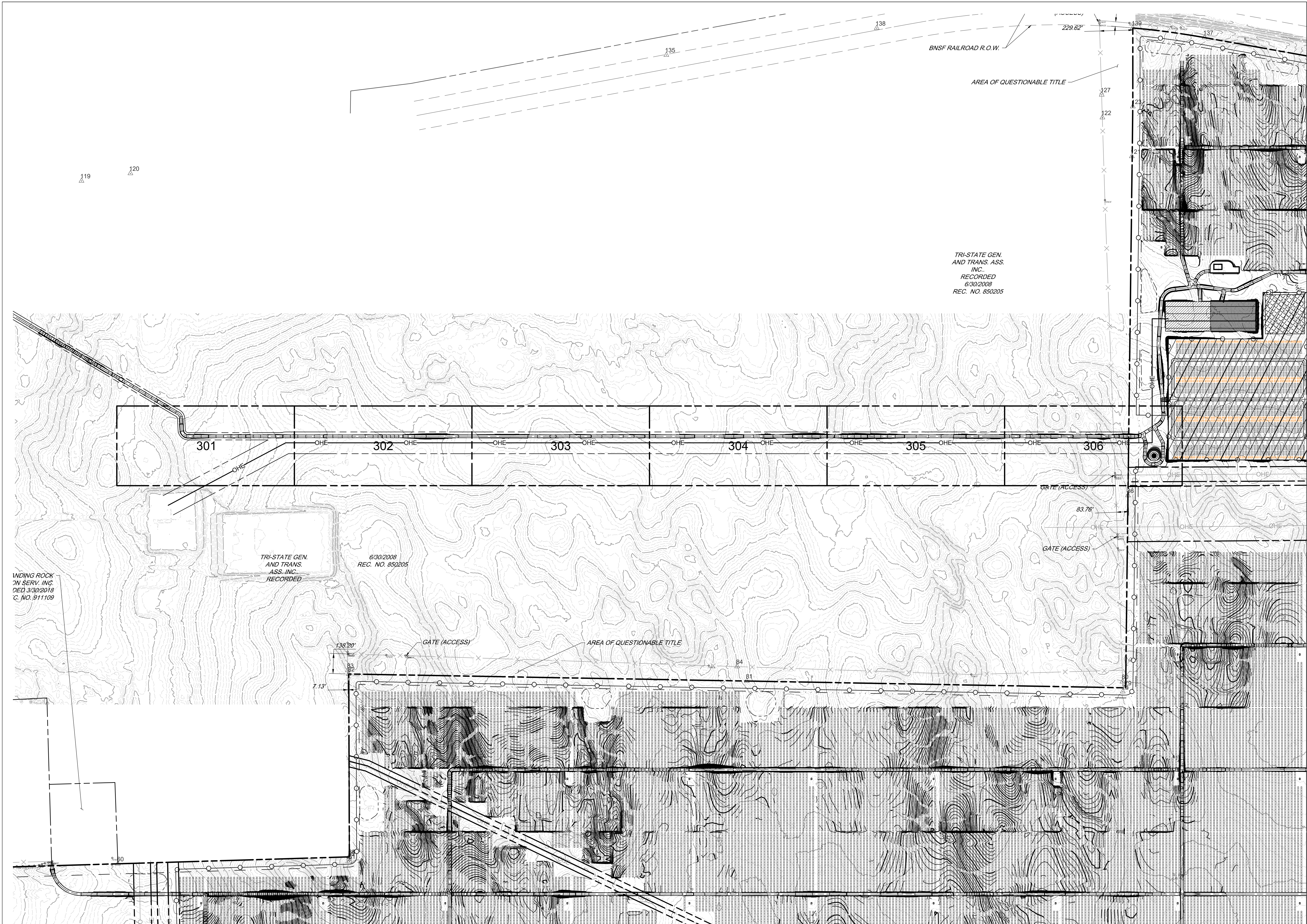
PROJECT PHASE:
 ISSUED FOR PERMIT

SCALE:
 AS SHOWN

SHEET NO.:
CG200

PLAN
 SCALE: 1" = 100'
 SHEET: ARCH D



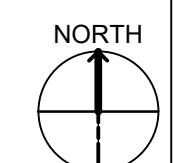


WINDING ROCK
ON SERV. INC.
DED 3/30/2018
C. NO. 911109

TRI-STATE GEN.
AND TRANS.
ASS. INC.
RECORDED
6/30/2008
REC. NO. 850205

TRI-STATE GEN.
AND TRANS. ASS.
INC.
RECORDED
6/30/2008
REC. NO. 850205

PLAN
0 300' 600'
SCALE: 1" = 300'
SHEET: ARCH D



TETRA TECH, INC.
4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

STAMP:

**NOT FOR
CONSTRUCTION**

PRELIMINARY

**FORTRESS SOLAR
FACILITY**
AYPE POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
**CIVIL GRADING PLAN
GENTIE AREA OVERALL**

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 1/2" 1"

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C	REVISED	10/20/2023	TTI
D	REVISED	10/24/2023	TTI

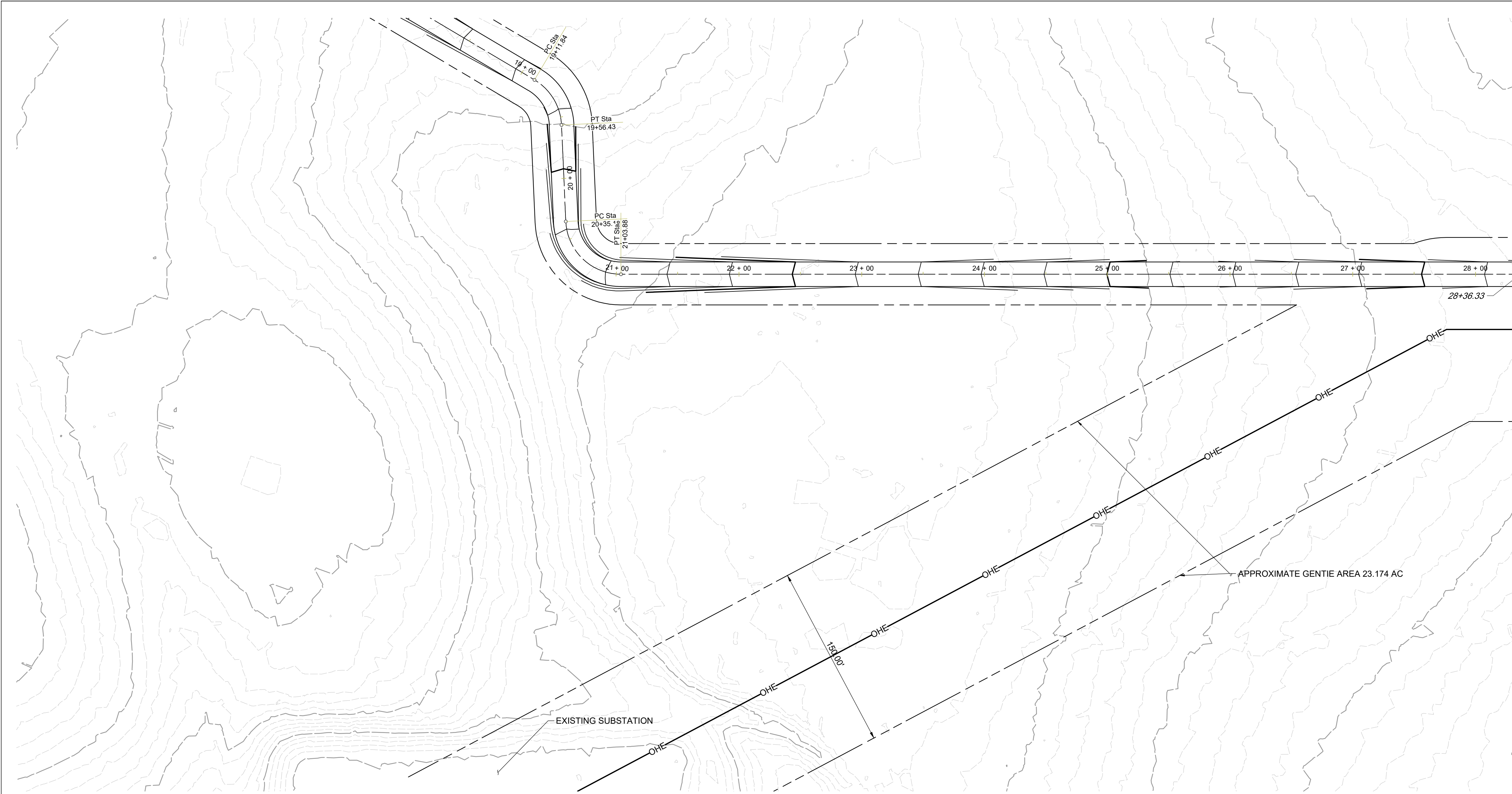


DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CG300

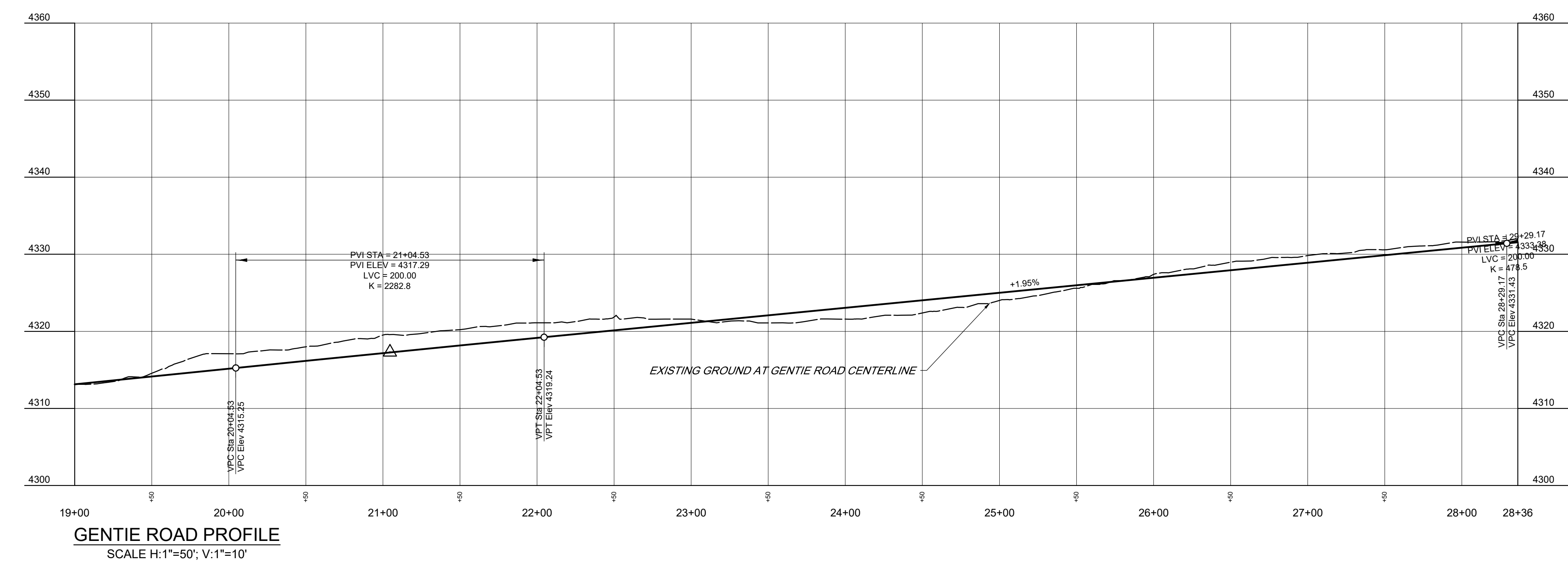
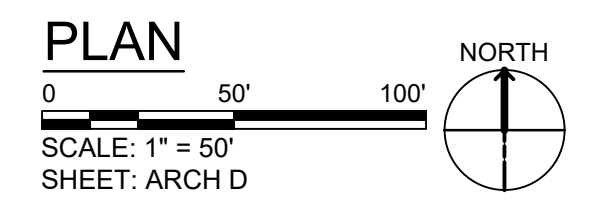


GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT EASEMENT
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
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 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT EASEMENT
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH



GENTIE ROAD PROFILE
SCALE H:1"=50'; V:1"=10'



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PRELIMINARY

FORTRESS SOLAR FACILITY
AYPA POWER DEVELOPMENT
MORGAN COUNTY
COLORADO

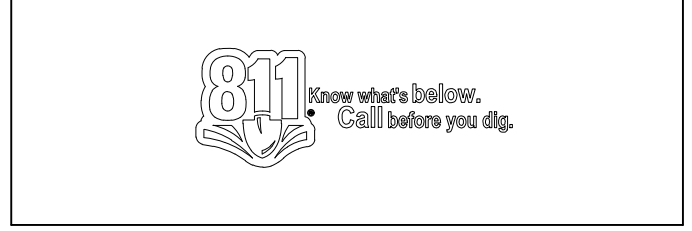
PROJECT NUMBERS:
194-1179-0009

SHEET TITLE:
**CIVIL GRADING PLAN
GENTIE AREA**

SHEET SIZE: ARCH "D"
24" X 36" (610 x 914)
0 1/2" 1"

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B	IFP	10/17/2023	TTI
C	REVISED	10/20/2023	TTI
D	REVISED	10/24/2023	TTI

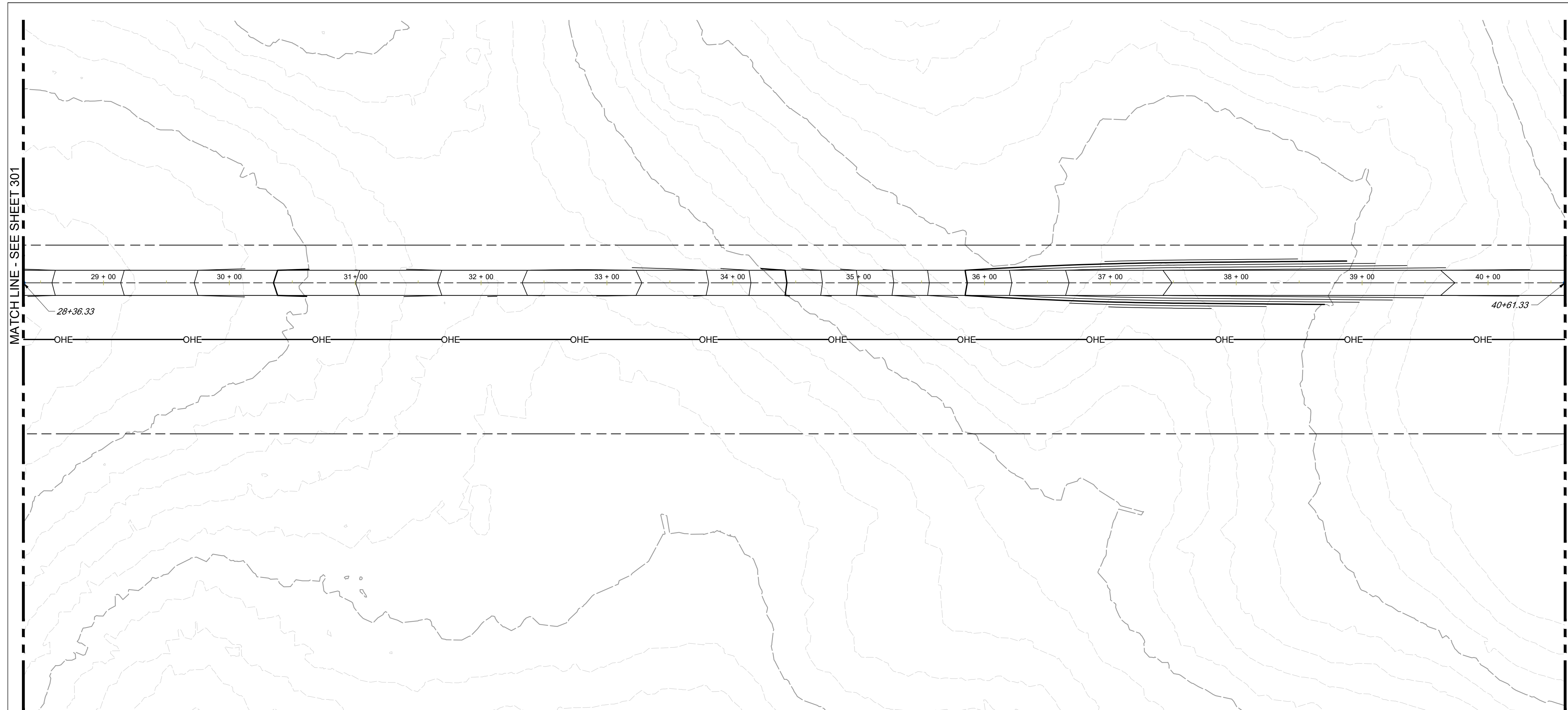


DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CG301

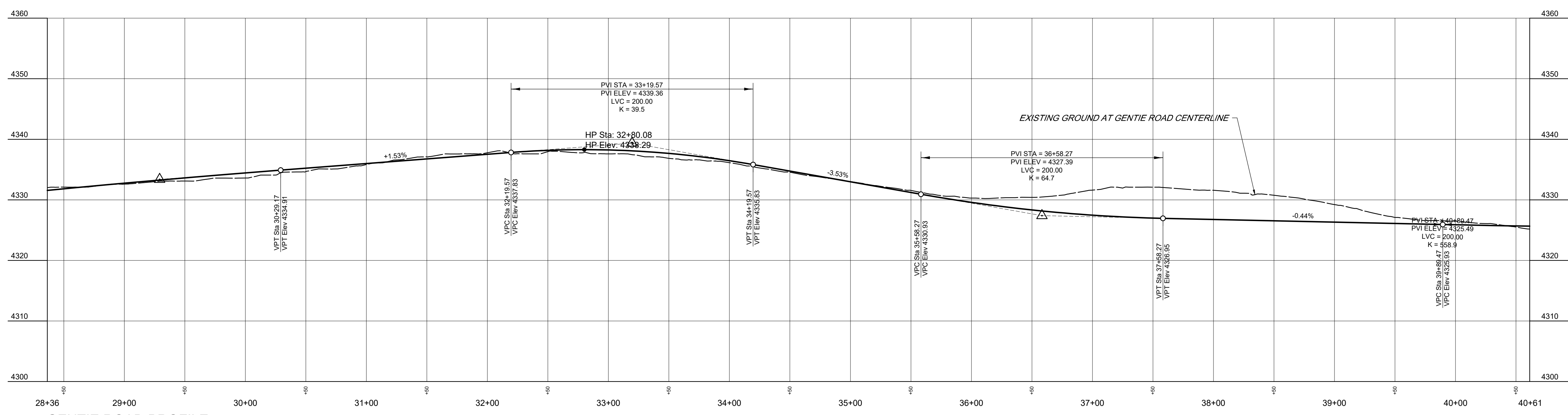
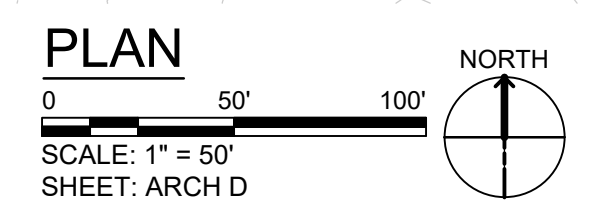


GENERAL NOTES

1. REFER TO C-000 FOR GENERAL PROJECT NOTES

LEGEND

- EXISTING CONDITIONS**
- ADJACENT &
 - BUILDING/STRUCTURE
 - COMMUNICATIONS/FO APPURTENANCE
 - CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CDOT ROW
 - EASEMENT
 - EASEMENT (PRESUMED)
 - FENCING
 - SURVEY MARKER/TRAVERSE
 - SECTION LINE
 - OVERHEAD ELECTRIC LINE
 - RAILROAD ROW
 - RAILROAD &
 - SANITARY SEWER MANHOLE
 - SIGN
 - STRUCTURE (MISC)
 - SUBJECT &
 - ZONING SETBACK
 - UG COMMUNICATIONS/FIBER OPTIC
 - UG GAS LINE
 - UG SANITARY SEWER FORCEMAIN
 - UG WATERLINE
 - UTILITY POLE/GUY WIRE
 - WATER APPURTENANCE
- CIVIL SITE**
- CONTOUR (MAJOR)
 - CONTOUR (MINOR)
 - CULVERT
 - INTERNAL ROADWAY
 - INTERNAL ROADWAY &
 - POWER STATION (PCS)
 - PV RACKING/PIER
 - ROADWAY CL
 - SECURITY FENCE
 - STORMWATER POND/DIVERSION DITCH



TETRA TECH, INC.
4101 COX ROAD,
SUITE 100
GLEN ALLEN, VA 23060
TEL: (804) 290-4321
FAX: (804) 270-2739

STAMP:

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 AYPD POWER DEVELOPMENT
 MORGAN COUNTY
 COLORADO

PROJECT NUMBERS:
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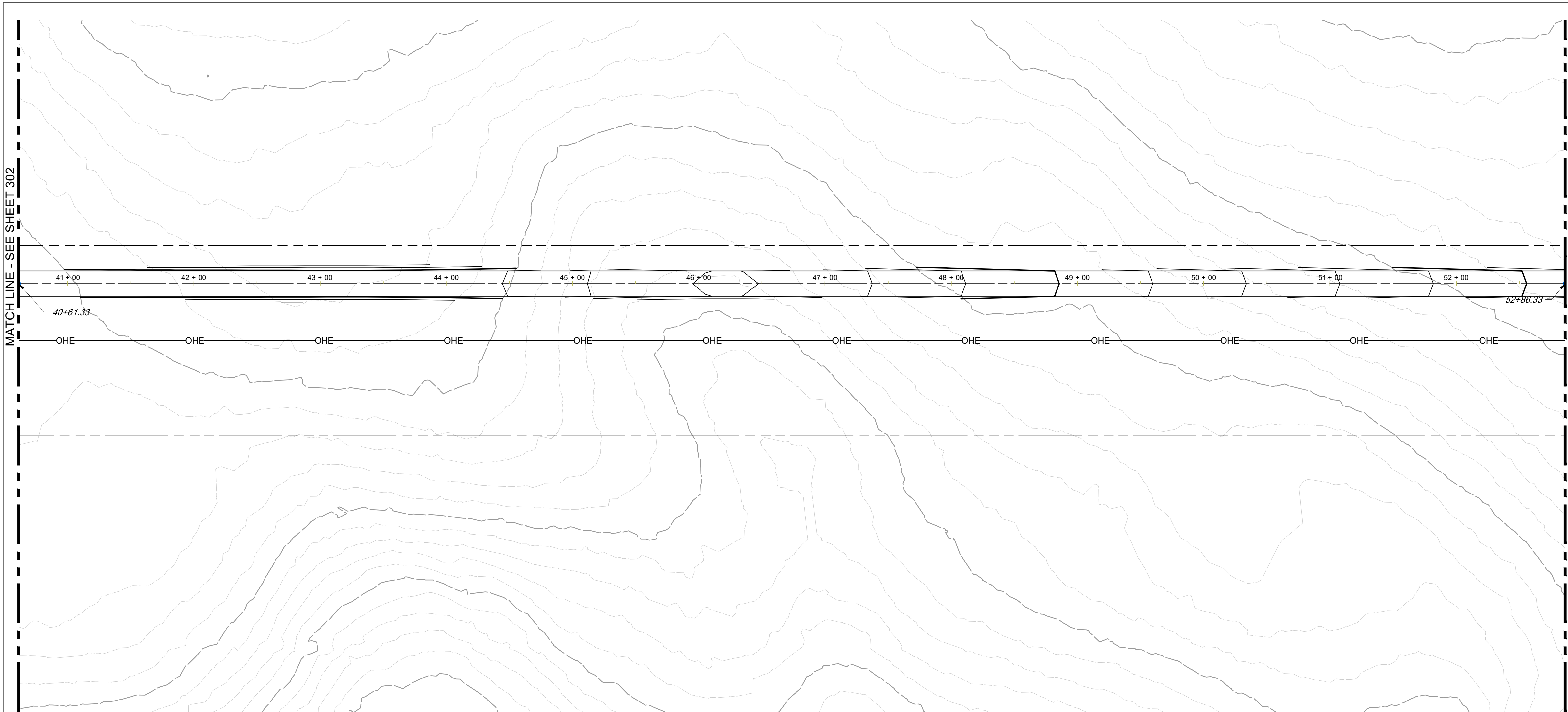


DATE: 10/12/2023
DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CG302

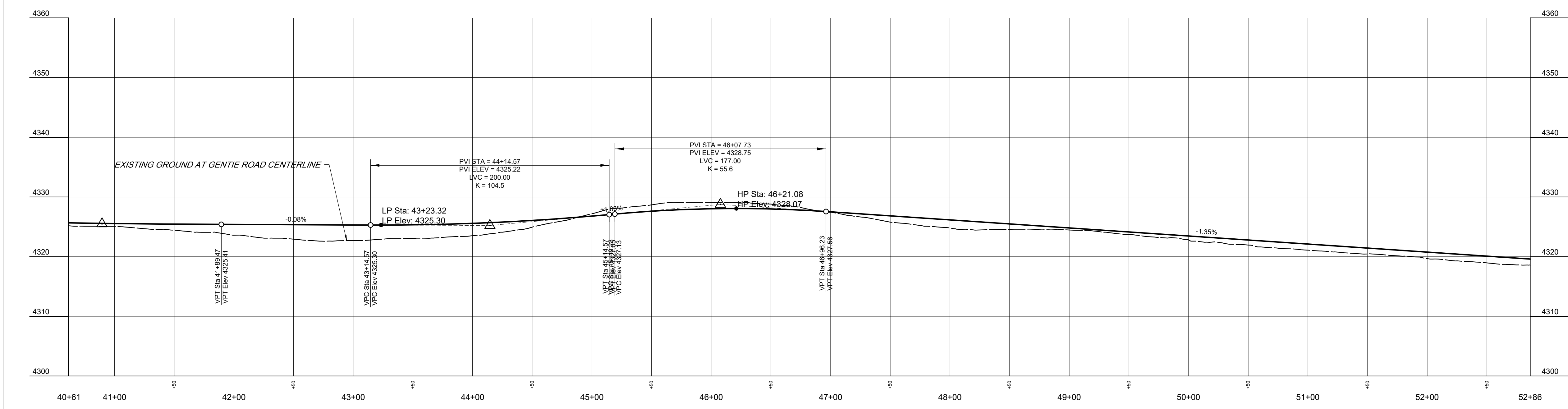
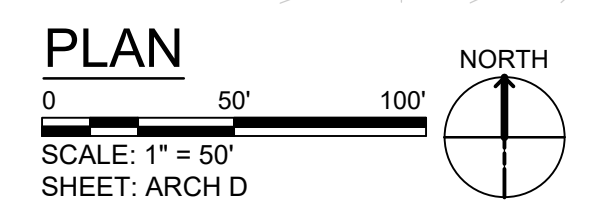


GENERAL NOTES

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GENTIE ROAD PROFILE
SCALE H:1"=50'; V:1"=10'



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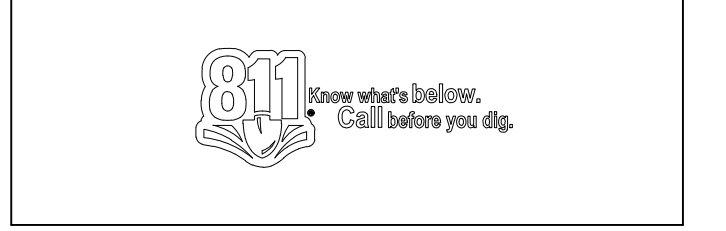
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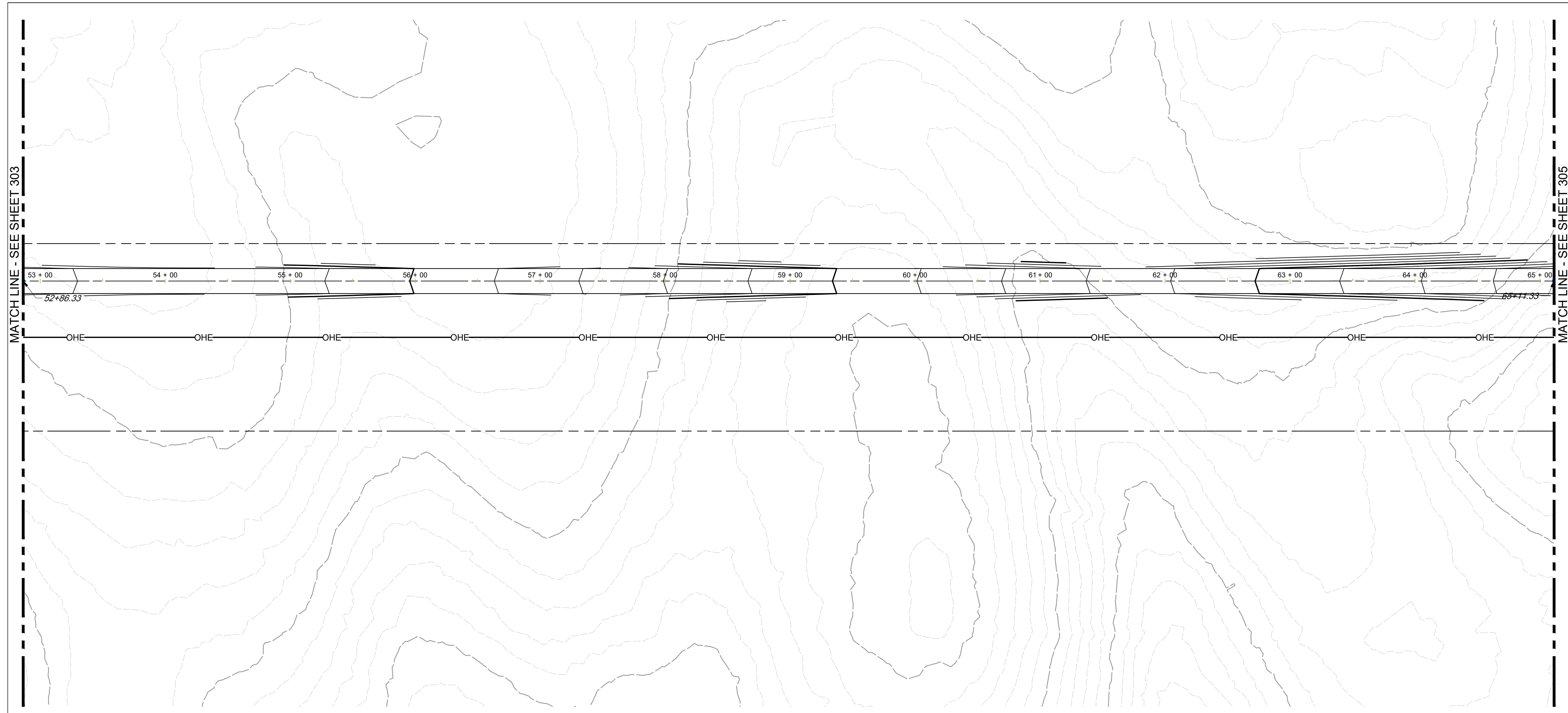


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ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
AS SHOWN

SHEET NO.:
CG303

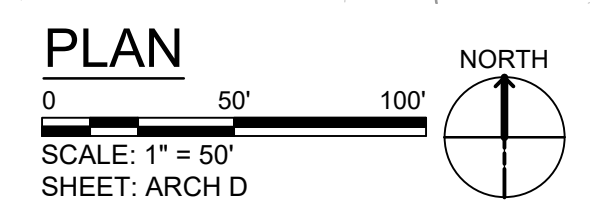


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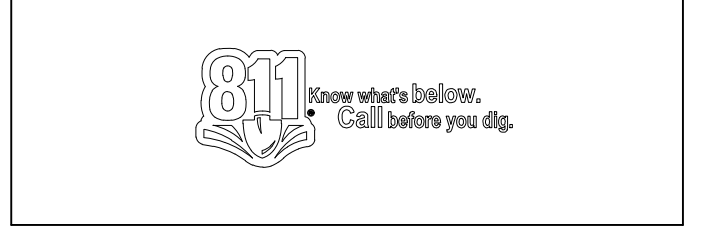
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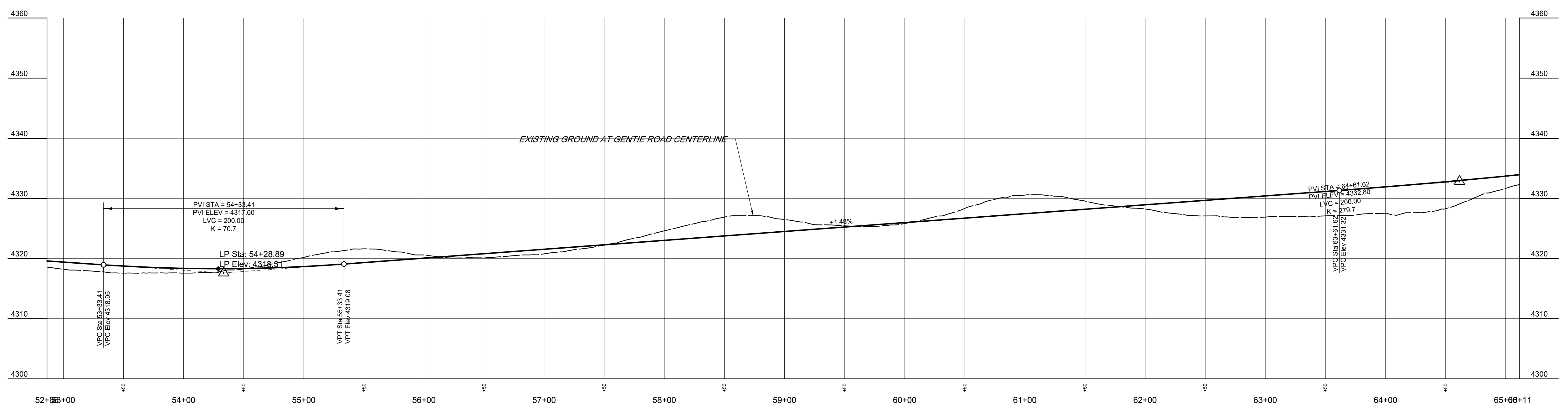


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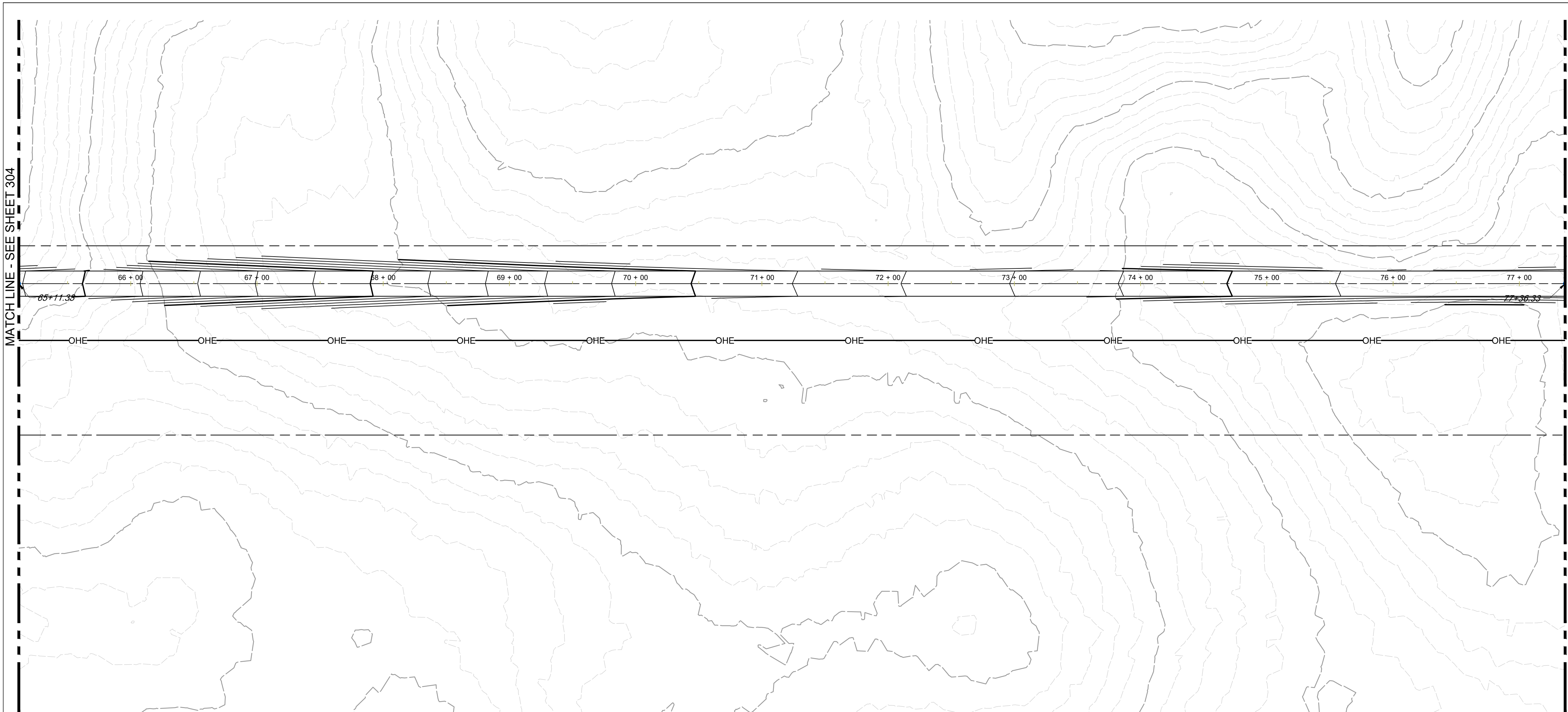
PROJECT PHASE:
ISSUED FOR PERMIT

SCALE:
AS SHOWN

SHEET NO.:
CG304



GENTIE ROAD PROFILE
SCALE H:1"=50'; V:1"=10'

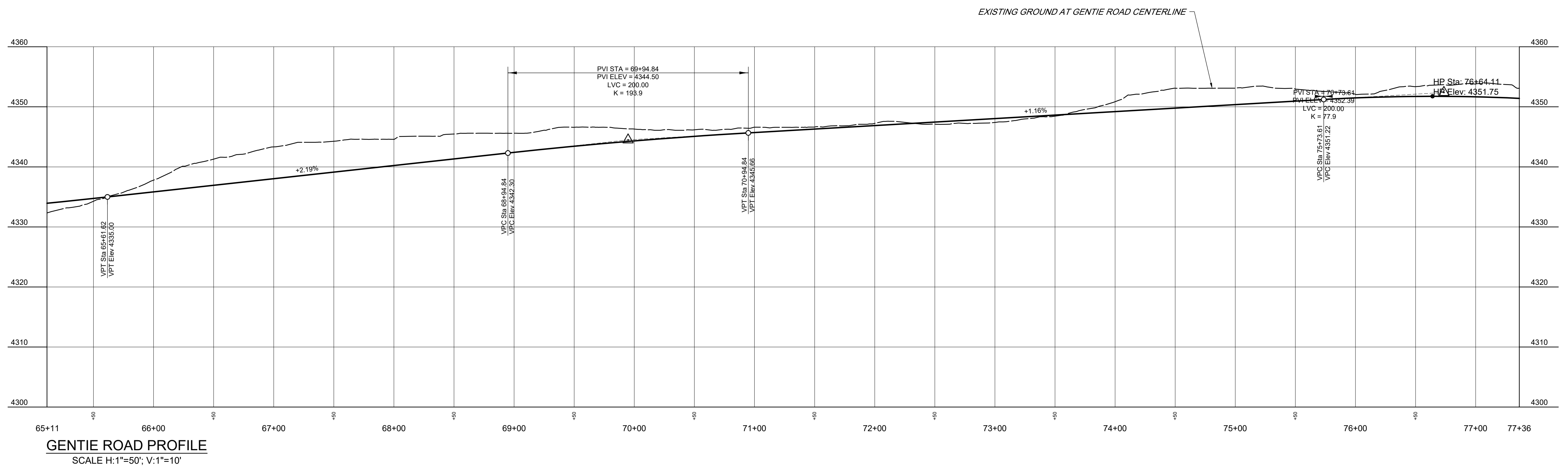
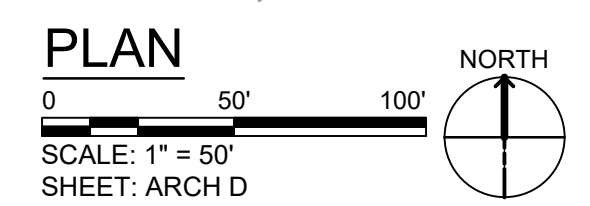


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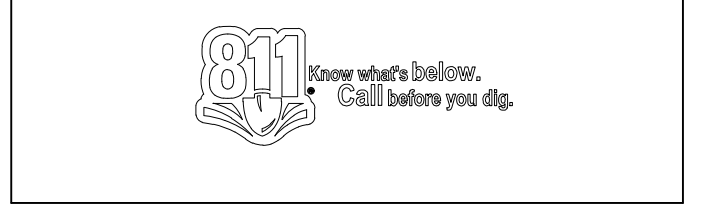
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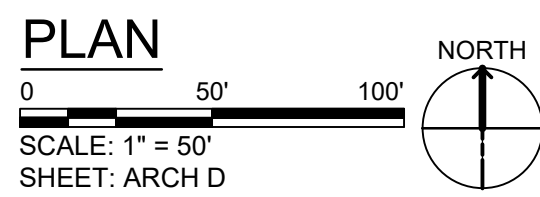
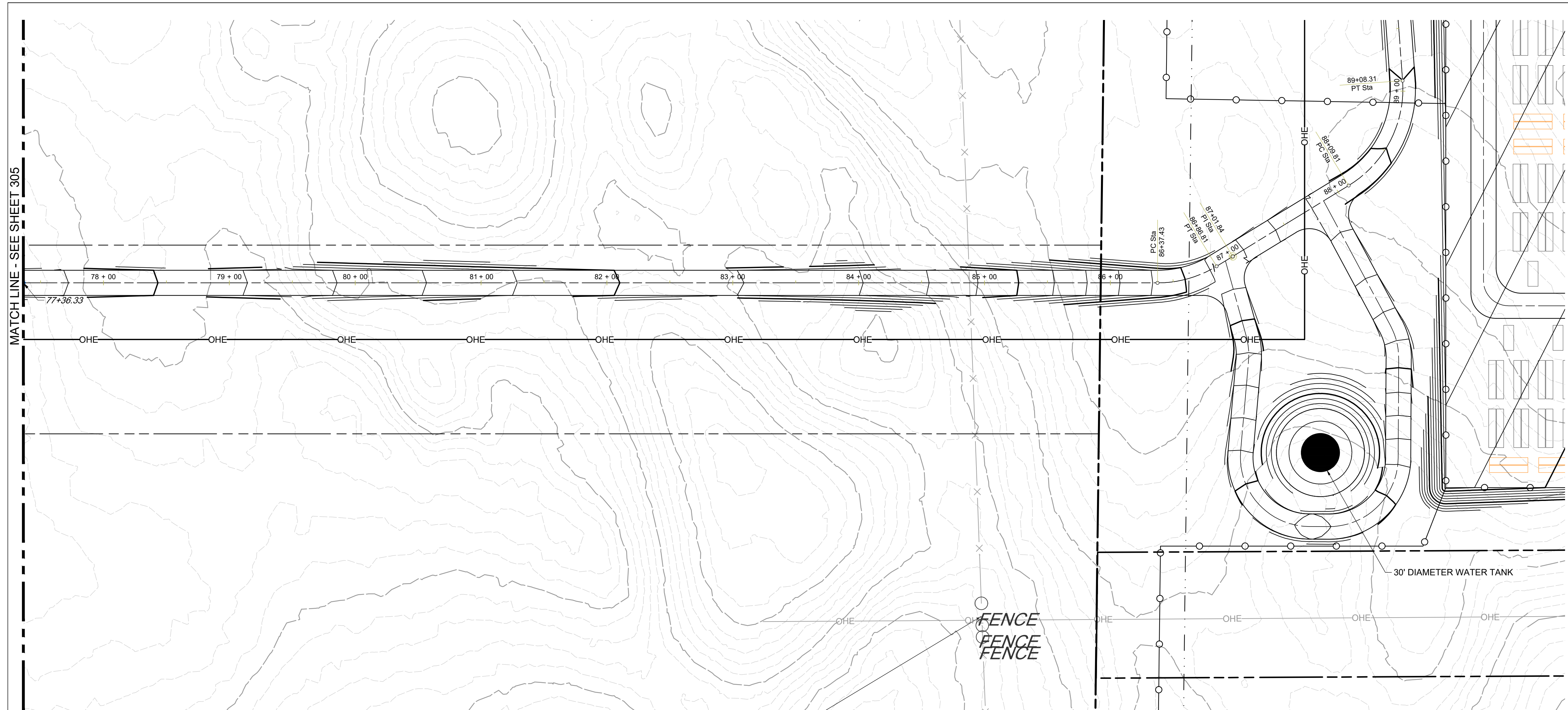


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DRAWN BY: TTI
ENGINEER: TTI
APPROVED BY: TTI

PROJECT PHASE:
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SCALE:
AS SHOWN

SHEET NO.:
CG305



GENERAL NOTES

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- EXISTING CONDITIONS**
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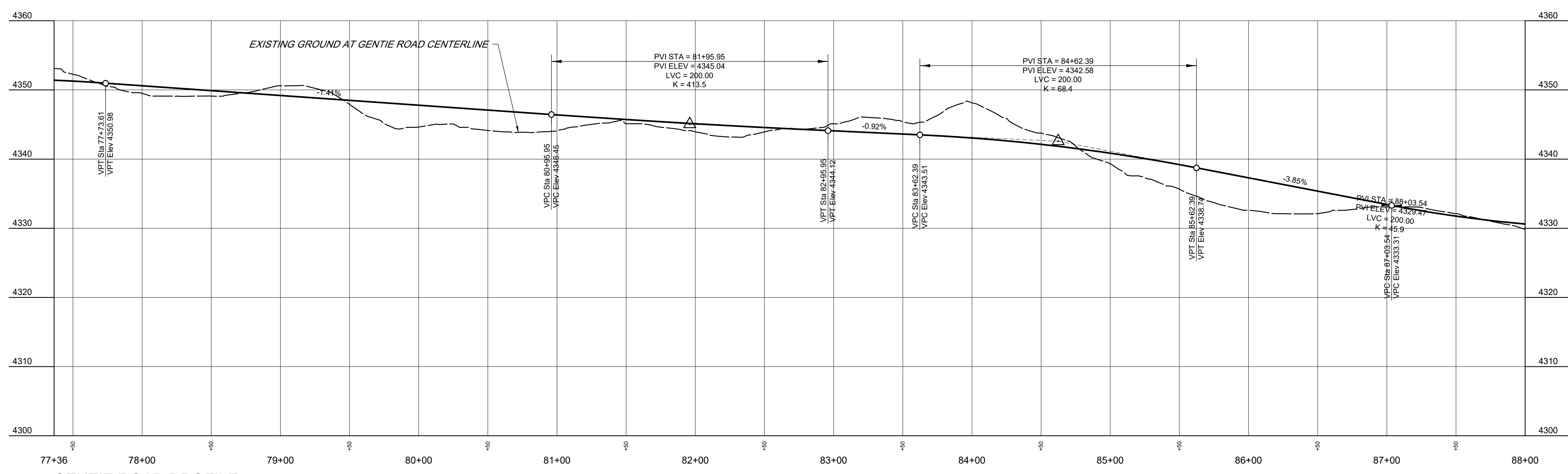


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APPROVED BY: TTI

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SCALE:
AS SHOWN

SHEET NO.:
CG306



GENTIE ROAD PROFILE
SCALE H:1"=50'; V:1"=10'

APPENDIX A-3: ALTA SURVEY

ALTA/NSPS Land Title Survey

A PORTION OF SECTIONS 3, 4, 5 AND 6 AND ALL OF SECTIONS 7, 8, 9 AND 10, TOWNSHIP 3 NORTH, RANGE 55 WEST OF THE 6TH P.M.
 AND A PORTION OF SECTION 12, TOWNSHIP 3 NORTH, RANGE 56 WEST OF THE 6TH P.M.
 AND A PORTION OF SECTION 32, TOWNSHIP 4 NORTH, RANGE 55 WEST OF THE 6TH P.M.,
 COUNTY OF MORGAN, STATE OF COLORADO

PROPERTY DESCRIPTION, BEING THE SAME PROPERTY AS DESCRIBED IN TITLE COMMITMENT BELOW

BY THESE PRESENTS, the undersigned being the owner of the following described parcel:
 PROPERTY DESCRIBED AS SURVEYED:

That portion of the Southeast Quarter and the Northwest Quarter of Section 3, Section 4 and Section 5 lying south of the BNSF Railroad right-of-way according to the BNSF Railway Right of Way and Track Map Line Segment 0002 C.E. r77359 Revised 10-11-2006; the Southwest Quarter of Section 3; the South-Half of the South-Half of Section 6; all of Sections 7, 8, 9 and 10 all in Township 3 South, Range 55 West of the 6th Principal Meridian; that portion of the Southwest Quarter of Section 32 lying south of the BNSF Railroad right-of-way according to the BNSF Railway Right of Way and Track Map Line Segment 0002 C.E. r77360 Revised 10-11-2006 in Township 4 North, Range 55 West of the 6th P.M.; the North-Half of the Northeast Quarter, the Southeast Quarter of the Northeast Quarter, and the East-Half of the Southeast Quarter lying northerly of the County Road Q right-of-way recorded May 29, 1896 in Book 8 at Page 235 in the Morgan County Clerk and Recorder's Office all in Section 12, Township 3 North, Range 56 West of the 6th Principal Meridian all in the County of Morgan, State of Colorado.

Containing 4401.883 Acres, more or less.

NOTE: That portion of Section 5 lying northerly of Highway 34 is in the Title below, but per client's request is not a part of the description above.
 The area of questionable title, being LOTS 1 and 2, S1/2NE1/4 (NE1/4) of Section 4 lying south of the railroad row is believed to be owned by Ruth Ann Odle. Client is working on curing this area with outside legal counsel. At the request of the client, this area was included in this survey but is not included in the title below.

PROPERTY DESCRIPTION PER TITLE COMMITMENT NO. 22000370945-02 REVISION 2: APRIL 28, 2023

Parcel 1:
 Parcel ID No.: 123306000002

S1/2S1/2 Section 6, Township 3 North, Range 55 West of the 6th P.M., Morgan County, Colorado.

Parcel 2:
 Parcel ID No.: 123307000001

N1/2N1/2 Section 7, Township 3 North, Range 55 West of the 6th P.M., Morgan County, Colorado.

Parcel 3:
 Parcel ID No.: 123112000001

N1/2NE1/4 Section 12, Township 3 North, Range 56 West of the 6th P.M., Morgan County, Colorado.

PROPERTY DESCRIPTION PER TITLE COMMITMENT NO. 22000480730: JULY 25, 2022

Parcel I:

All of Section 5, Township 3 North, Range 55 West of the 6th P.M., EXCEPT that parcel deeded in Book 438 at Page 261, County of Morgan, State of Colorado.

Parcel II:

All of Section 8, Township 3 North, Range 55 West of the 6th P.M., County of Morgan, State of Colorado.

Parcel III:

The South 1/2 of the North 1/2 and the South 1/2 of Section 7, Township 3 North, Range 55 West of the 6th P.M., County of Morgan, State of Colorado.

Parcel IV:

That part of the Southwest 1/4 of Section 32, Township 4, North, Range 55 West of the 6th P.M., lying South of the Railroad, County of Morgan, State of Colorado.

Parcel V:

The Southeast 1/4 of the Northeast 1/4 and the East 1/2 of the Southeast 1/4 of Section 12, Township 3 North, Range 56 West of the 6th P.M., EXCEPT a strip of land 30 feet wide off the South side throughout the entire length of the Southeast 1/4 of said Section as conveyed to County of Morgan in Quit Claim Deed recorded May 29, 1896 in Book 8 at Page 235, County of Morgan, State of Colorado.

PROPERTY DESCRIPTION PER TITLE COMMITMENT NO. 22000370945 REVISION 2: DECEMBER 10, 2022

Parcel 1:
 Parcel ID No.: 1233-030-00-003

The NW1/4SE1/4 and the E1/2SE1/4 of Section 3 lying South of railroad; the SE1/4NW1/4 of Section 3, EXCEPT that parcel deeded in Book 438 at page 259, all in Township 3 North, Range 55 West of the 6th P.M., Morgan County, Colorado.

And

SW1/4, SW1/4SE1/4, SW1/4NW1/4 Except that parcel of land deeded to Colorado State Highway Department recorded in Book 438 at Page 316 and Except any portion of the SW1/4NW1/4 and SW1/4 lying north of Highway 34, all in Section 3, Township 3 North, Range 55 West of the 6th P.M., Morgan County, Colorado.

Parcel 2:
 Parcel ID No.: 1233-040-00-002

Lots 3 and 4, S1/2NW1/4 (also being the NW1/4) and the W1/2SW1/4 of Section 4, EXCEPT parcels lying in the NW1/4 deeded in Book 564 at page 142 and in Book 439 at page 359, all in Township 3 North, Range 55 West of the 6th Morgan County, Colorado.

And

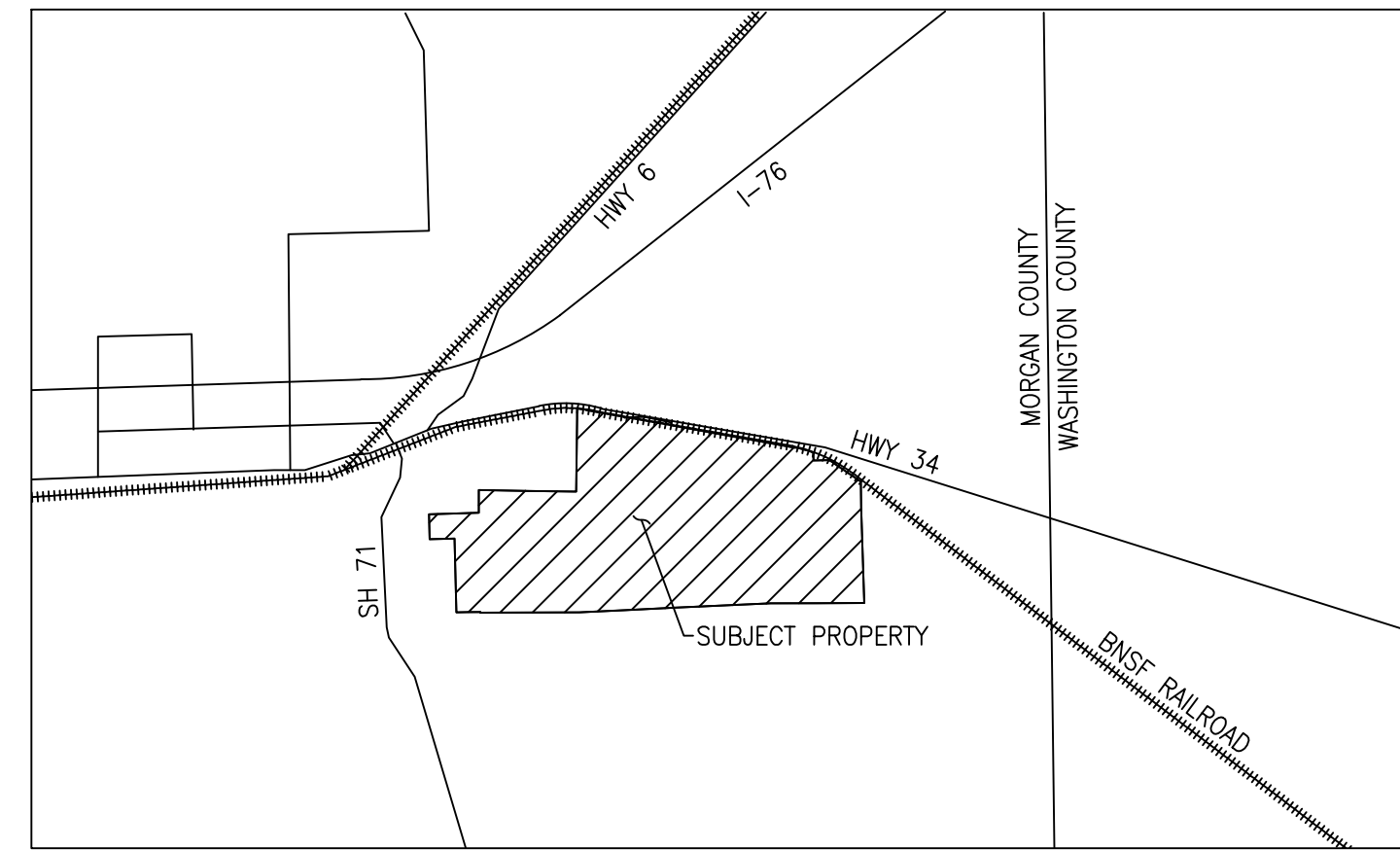
SE1/4, E1/2SW1/4 EXCEPT that parcel of land deeded to Colorado State Highway Department recorded in Book 438 at Page 318 and Except any portion of the S1/2NE1/4 lying North of Highway 34, all in Section 4, Township 3 North, Range 55 West of the 6th P.M., Morgan County, Colorado.

Parcel 3:
 Parcel ID No.: 1233-090-00-001

Section 9, Township 3 North, Range 55 West, of the 6th Principal Meridian, Morgan County, Colorado.

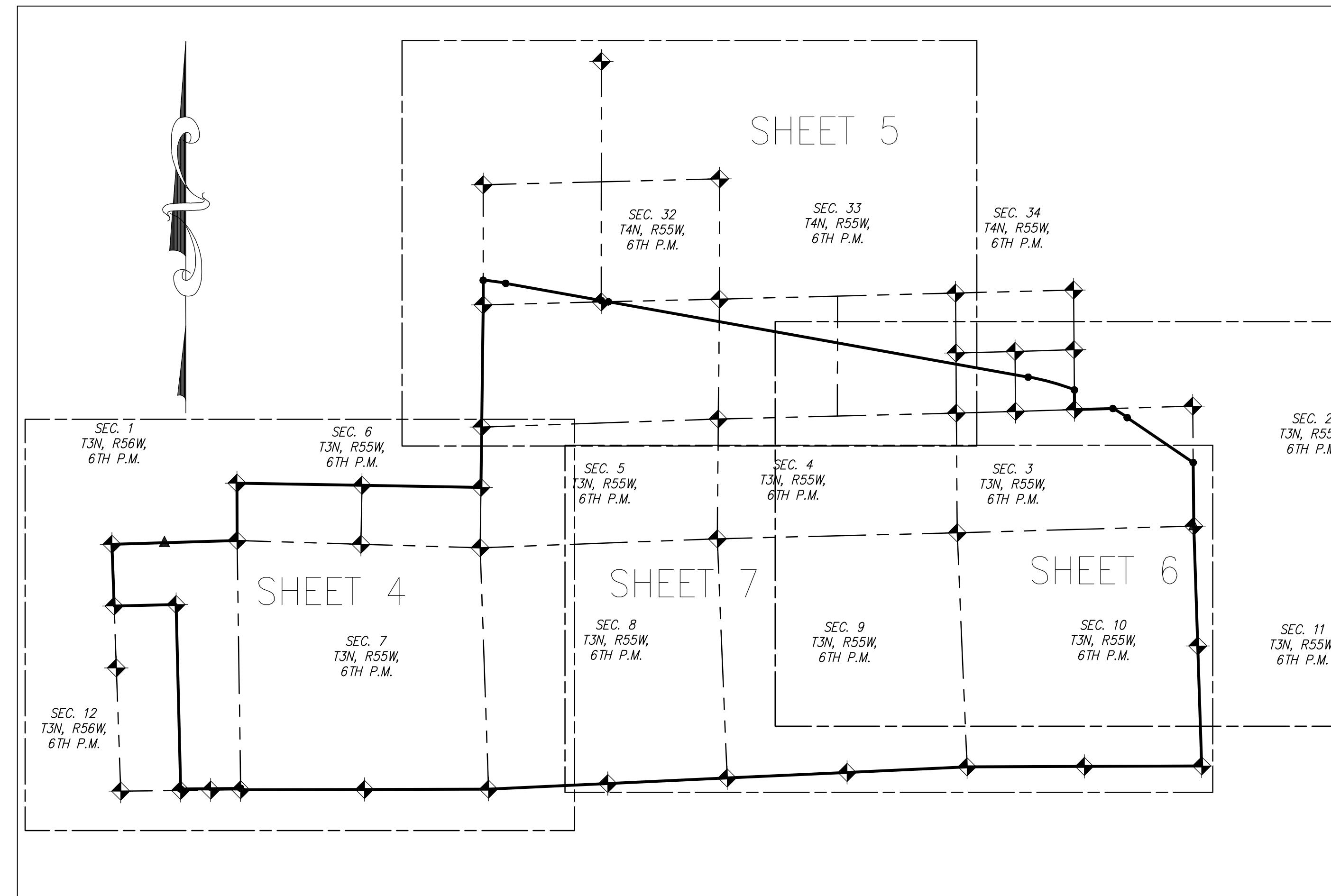
Parcel 4:
 Parcel ID No.: 1233-100-00-001

Section 10, Township 3 North, Range 55 West, of the 6th Principal Meridian, Morgan County, Colorado.



VICINITY MAP
(NOT TO SCALE)

SHEET KEY
(NOT TO SCALE)



SURVEYOR'S NOTES

- That portion of Section 5 lying northerly of Highway 34 is owned by Ruth Ann Odle per Title Commitment No. 22000480730 dated JULY 25, 2022, but is not a part of this lease boundary.
- The fence lines are not coincident with the property lines or section lines as shown hereon. Fenceline locations are believed to have been used to develop some of the easements and the Highway 34 right-of-way takes without a proper search for monumentation.
- The transmission line easement recorded 3/31/1949 in Book 463 at Page 329 was researched by Merrick & Company and is not listed on any of the provided title commitments.
- The Colorado State Highway Department Federal Aid Project No. F-40 (3) for State Highway No. 34 appears to follow fence lines that were assumed to be section lines when constructed. Found right-of-way monuments set by the State Highway Department were used to calculate the location of the right-of-way for Highway 34 as shown hereon.
- The Colorado State Highway Department Federal Aid Project No. F-40 (3) for State Highway No. 34 shows angle points along the southern boundary of the right-of-way which is intended to be coincident with the BNSF Railroad right-of-way. According to the BNSF Railway Right of Way and Track Map Line Segment 0002 C.E. r77359 Revised 10-11-2006 there are no angle points and was therefore held as a straight line along the southern right-of-way boundary for Highway 34.
- Transmission lines cross the subject property without the benefit of an easement reported in the provided title commitments.
- Area of questionable title, being LOTS 1 and 2, S1/2NE1/4 (NE1/4) of Section 4 lying south of the railroad row is believed to be owned by Ruth Ann Odle, but is not included in the Title documents. Client is working on curing this area with outside legal counsel. At the request of the client, this area was included in this survey and accounts for 80.340 Acres.
- Areas of questionable ownership indicate that lines of apparent occupation (fencelines) do not correspond with title lines based on found monumentation.
- ALTA TABLE A
 1.) Monuments were placed at all major corners of the boundary. 2.) Addresses were not observed or discovered. 3.) See flood zone note above. 4.) Cross land area is not hereon. 5.) Vertical relief is on 1-foot contour interval mapping from aerial LIDAR data flown by Merrick & Company. 6.b.) A zoning report was not provided. 8.) Substantial features were not observed during the course of the field work. 9.) No parking spaces were observed within the boundary. 10.) Division or party walls were not observed during the course of the survey. 11.b.) Utilities are surveyed as shown hereon. 14.) Public access to the property abuts County Road Q and County Road R. 15.) Rectified orthophotography and LIDAR mapping was used to locate planimetric features including building footprints. The orthophotography consisted of 3 inch pixel resolution color (RGB) ortho imagery in GeoTIFF format flown by Merrick & Company on June 14, 2023 using a Phase One iXM-RS150F sensor with a resolution of 0.25 feet. 16.) Evidence of recent earth moving work, building construction, or building additions was not observed. 17.) Proposed changes in street right of way lines recent street or sidewalk construction or repairs observed in the process of conducting the fieldwork was not observed. 18.) Platiable offsite easements disclosed in documents provided to or obtained by the surveyor were not found.

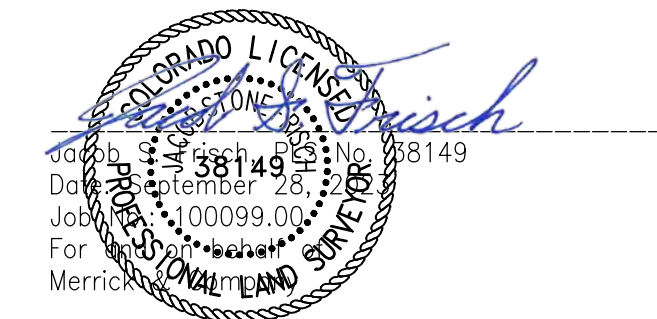
SURVEYOR'S STATEMENT

I, Jacob S. Frisch, a Licensed Professional Land Surveyor in the State of Colorado do hereby state that the survey (as defined in 12-120-302(5)(a), C.R.S.) and this resulting plat was made under my responsible charge and is in accordance with applicable standards of practice and that the monuments shown hereon actually exist and that this plat and the notes shown hereon accurately represents said survey to the best of my knowledge, information and belief. This statement is not a warranty or warranty, either expressed or implied.

SURVEYOR'S CERTIFICATION

To Fortress Solar I LLC, STEWART TITLE GUARANTEE COMPANY, Cedar Holdco LLC:

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(b), 8, 9, 10, 11(b), 14, 15, 16, 17 and 18 of Table A thereof. The field work was completed on June 28, 2023.



CLERK AND RECORDER'S CERTIFICATE

I hereby certify that this instrument was filed in my office at _____ o'clock P.M., this day of _____, 20____, and is duly recorded in Plat File _____.

Clerk and Recorder

REV	REVISION DESCRIPTION	DATE	CHANGED BY	CHECKED BY	APPROVED BY



MERRICK	SIGNATURE	DATE
DRAWN	ALF	8/31/2023
DESIGNED		
QC REVIEW	JSF	9/27/2023
APPROVED	JSF	9/28/2023
CLIENT	SIGNATURE	DATE
REVIEW		
APPROVED		
CAD FILE NAME	100099.00_Story_ALTA[mod].dwg	

MERRICK PROJECT NO.	
	100099.00
SCALE:	

FORTRESS SOLAR I PROJECT	
Brush, Colorado	
CLIENT PROJECT NO.	
MERRICK PROJECT NO.	
	100099.00
SCALE:	

TITLE:		
A PORTION OF SEC. 3, 4, 5 & 6 AND ALL OF SEC. 7, 8, 9 & 10		
T3N, R55W OF THE 6TH P.M.		
AND A PORTION OF SEC. 12 T3N, R56W OF THE 6TH P.M.		
AND A PORTION OF SEC. 32 T4N, R55W OF THE 6TH P.M.		
COUNTY OF MORGAN, STATE OF COLORADO		
REVISION:	DRAWING NO.	SHEET NO.
		1 of 7

ALTA/NSPS Land Title Survey

A PORTION OF SECTIONS 3, 4, 5 AND 6 AND ALL OF SECTIONS 7, 8, 9 AND 10, TOWNSHIP 3 NORTH, RANGE 55 WEST OF THE 6TH P.M.
 AND A PORTION OF SECTION 12, TOWNSHIP 3 NORTH, RANGE 56 WEST OF THE 6TH P.M.
 AND A PORTION OF SECTION 32, TOWNSHIP 4 NORTH, RANGE 55 WEST OF THE 6TH P.M.,
 COUNTY OF MORGAN, STATE OF COLORADO

LEGEND

- ▲ MONUMENT FOUND
- MONUMENT SET
- ◆ ALIQUOT CORNER
- (C) CALCULATED BASED ON MONUMENTATION AND RECORD INFORMATION
- (AM) AS MEASURED AT THE TIME OF SURVEY
- (P1) PER ALTA/ACSM LAND TITLE SURVEY BRADSHAW HOMESTEAD
- (P1) PER ALTA/ACSM LAND TITLE SURVEY RECORDED 10/22/2008 AT REC. NO. 1601415
- ☐ ELECTRIC BOX
- ELECTRIC GUY
- ELECTRIC METER
- ⊙ ELECTRIC POLE
- ⊠ ELECTRIC TOWER
- WOOD POST
- GATE POST
- SIGN STEEL POST
- TELEPHONE PEDESTAL
- WATER METER
- WATER RISER
- WATER VALVE
- ELECTRIC-OVERHEAD
- ELECTRIC-UNDERGROUND
- FENCE-BARBED WIRE
- FENCE-STEEL POST
- PHONE-FIBER OPTIC
- PHONE-UNDERGROUND
- WATER SECTION LINE
- EASEMENT
- ROW LINE

SEC. 1
T3N, R56W,
6TH P.M.

SEC. 6
T3N, R55W,
6TH P.M.

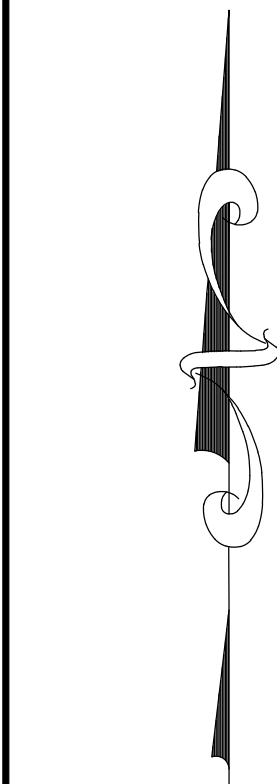
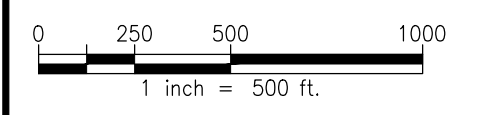
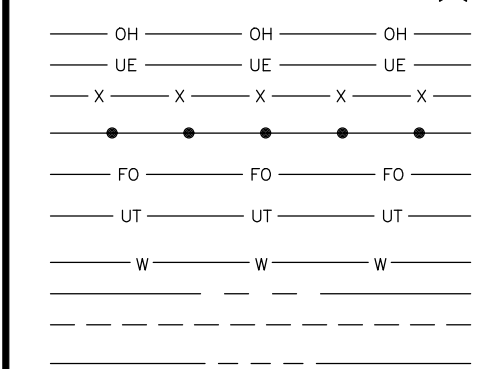
SEC. 5
T3N, R55W,
6TH P.M.

SEC. 7
T3N, R55W,
6TH P.M.

SEC. 8
T3N, R55W,
6TH P.M.

SEC. 12
T3N, R56W,
6TH P.M.

AREA=4401.883 ACRES ±



REV	REVISION DESCRIPTION	DATE	CHANGED BY	CHECKED BY	APPROVED BY

NO.	DATE	DESCRIPTION

MERRICK
 5970 Greenwood Plaza Blvd., Greenwood Village, CO 80111
 THIS AND ANY OTHER ELECTRONIC MEDIA COUNTERPART IS AN INSTRUMENT OF SERVICE PREPARED BY MERRICK AND COMPANY FOR A DEFINED PROJECT. IT IS NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE IN WHOLE OR IN PART ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. REUSE OR MODIFICATION OF ANY UTILIZATION IF NOT A FINISHED INSTRUMENT, WITHOUT THE PRIOR EXPRESS WRITTEN CONSENT OF MERRICK AND COMPANY, SHALL BE AT THE SOLE RISK FOR THE UNAUTHORIZED USER WITHOUT LIABILITY OR LOSS EXPOSURE TO MERRICK AND COMPANY.

MERRICK	SIGNATURE	DATE
DRAWN	ALF	8/31/2023
DESIGNED		
QC REVIEW	JSF	9/27/2023
APPROVED	JSF	9/28/2023
CLIENT	SIGNATURE	DATE
REVIEW		
APPROVED		
CAD FILE NAME	100099.00_Story_ALTA[mod].dwg	

FORTRESS SOLAR I PROJECT
 Brush, Colorado
 CLIENT PROJECT NO. _____
 MERRICK PROJECT NO. 100099.00
 SCALE: 1" = 500'

COLORADO LICENSE
 38149
 100099.00
 For MERRICK & COMPANY

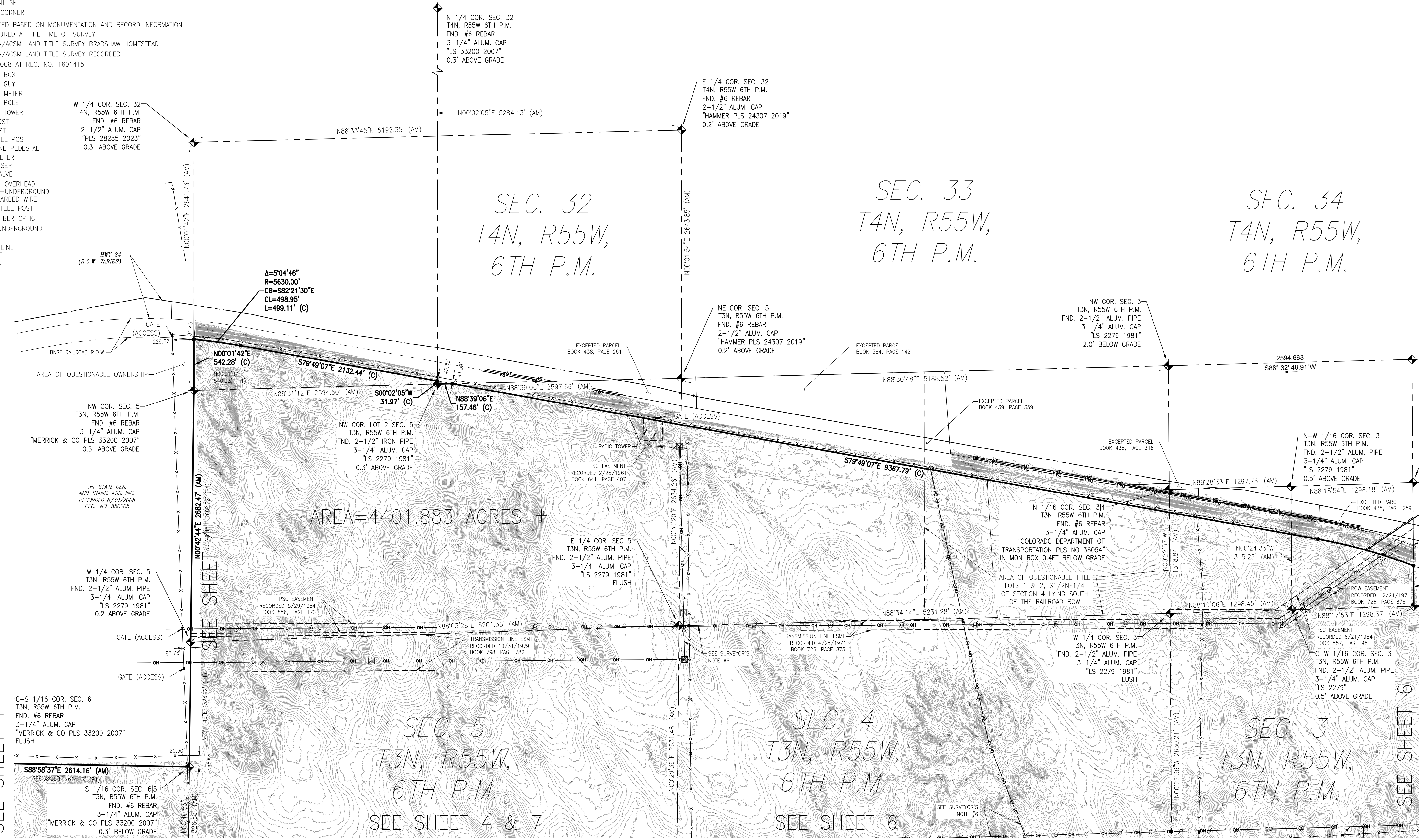
TITLE	REVISION	DRAWING NO.	SHEET NO.
A PORTION OF SEC. 3, 4, 5 & 6 AND ALL OF SEC. 7, 8, 9 & 10 T3N, R55W OF THE 6TH P.M. AND A PORTION OF SEC. 12 T3N, R56W OF THE 6TH P.M. AND A PORTION OF SEC. 32 T4N, R55W OF THE 6TH P.M. COUNTY OF MORGAN, STATE OF COLORADO			4 of 7

ALTA/NSPS Land Title Survey

A PORTION OF SECTIONS 3, 4, 5 AND 6 AND ALL OF SECTIONS 7, 8, 9 AND 10, TOWNSHIP 3 NORTH, RANGE 55 WEST OF THE 6TH P.M.
 AND A PORTION OF SECTION 12, TOWNSHIP 3 NORTH, RANGE 56 WEST OF THE 6TH P.M.
 AND A PORTION OF SECTION 32, TOWNSHIP 4 NORTH, RANGE 55 WEST OF THE 6TH P.M.,
 COUNTY OF MORGAN, STATE OF COLORADO

LEGEND

- ▲ MONUMENT FOUND
- MONUMENT SET
- ◆ ALIQUOT CORNER
- (C) CALCULATED BASED ON MONUMENTATION AND RECORD INFORMATION
- (AM) AS MEASURED AT THE TIME OF SURVEY
- (P1) PER ALTA/ACSM LAND TITLE SURVEY BRADSHAW HOMESTEAD
- (P1) PER ALTA/ACSM LAND TITLE SURVEY RECORDED 10/22/2008 AT REC. NO. 1601415
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- ELECTRIC GUY
- ⊙ ELECTRIC METER
- ⊖ ELECTRIC POLE
- ⊕ ELECTRIC TOWER
- ⊞ WOOD POST
- ⊞ GATE POST
- ⊞ SIGN STEEL POST
- ⊞ TELEPHONE PEDESTAL
- ⊞ WATER METER
- ⊞ WATER RISER
- ⊞ WATER VALVE
- OH ELECTRIC-OVERHEAD
- UE ELECTRIC-UNDERGROUND
- X X X X X X X X X X FENCE-BARBED WIRE
- · · · · · FENCE-STEEL POST
- FO FO FO FO PHONE-FIBER OPTIC
- UT UT UT UT PHONE-UNDERGROUND
- W W W W WATER SECTION LINE
- EASEMENT
- ROW LINE




SEE SHEET 4

SEE SHEET 6

REV	REVISION DESCRIPTION	DATE	CHANGED BY	CHECKED BY	APPROVED BY

SEE SHEET 4 & 7



5970 Greenwood Plaza Blvd., Greenwood Village, CO 80111

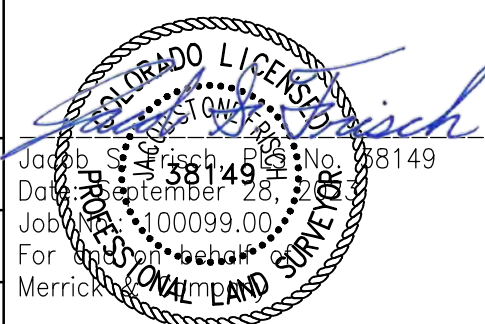
THIS AND ANY OTHER ELECTRONIC MEDIA COUNTERPART IS AN INSTRUMENT OF SERVICE PREPARED BY MERRICK AND COMPANY FOR A DEFINED PROJECT. IT IS NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE IN WHOLE OR IN PART ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. REUSE OR MODIFICATION OF ANY UTILIZATION IF NOT A FINISHED INSTRUMENT, WITHOUT THE PRIOR EXPRESS WRITTEN CONSENT OF MERRICK AND COMPANY, SHALL BE AT THE SOLE RISK FOR THE UNAUTHORIZED USER WITHOUT LIABILITY OR LOSS EXPOSURE TO MERRICK AND COMPANY.

MERRICK	SIGNATURE	DATE
DRAWN	ALF	8/31/2023
DESIGNED		
QC REVIEW	JSF	9/27/2023
APPROVED	JSF	9/28/2023
CLIENT	SIGNATURE	DATE
REVIEW		
APPROVED		

CAD FILE NAME: 100099_00_Story_ALTA[mod].dwg

FORTRESS SOLAR I PROJECT
Brush, Colorado

CLIENT PROJECT NO.	
MERRICK PROJECT NO.	100099.00
SCALE:	1" = 500'

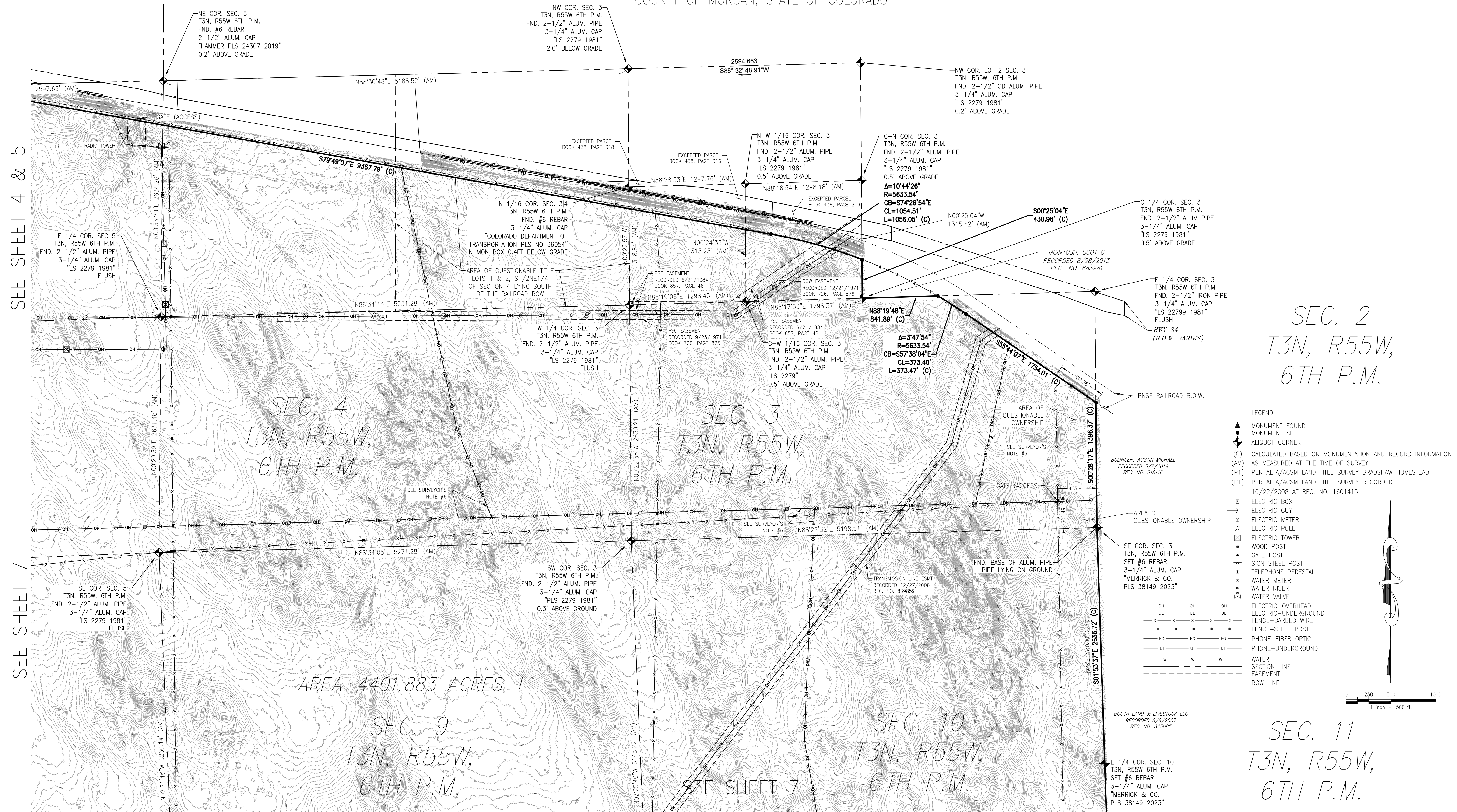


TITLE:
A PORTION OF SEC. 3, 4, 5 & 6 AND ALL OF SEC. 7, 8, 9 & 10
T3N, R55W OF THE 6TH P.M.
AND A PORTION OF SEC. 12 T3N, R56W OF THE 6TH P.M.
AND A PORTION OF SEC. 32 T4N, R55W OF THE 6TH P.M.
COUNTY OF MORGAN, STATE OF COLORADO

REVISION: DRAWING NO. SHEET NO. 5 of 7

ALTA/NSPS Land Title Survey

A PORTION OF SECTIONS 3, 4, 5 AND 6 AND ALL OF SECTIONS 7, 8, 9 AND 10, TOWNSHIP 3 NORTH, RANGE 55 WEST OF THE 6TH P.M.
 AND A PORTION OF SECTION 12, TOWNSHIP 3 NORTH, RANGE 56 WEST OF THE 6TH P.M.
 AND A PORTION OF SECTION 32, TOWNSHIP 4 NORTH, RANGE 55 WEST OF THE 6TH P.M.,
 COUNTY OF MORGAN, STATE OF COLORADO



SEC. 2
T3N, R55W,
6TH P.M.

SEC. 4
T3N, R55W,
6TH P.M.

SEC. 3
T3N, R55W,
6TH P.M.

AREA=4401.883 ACRES ±

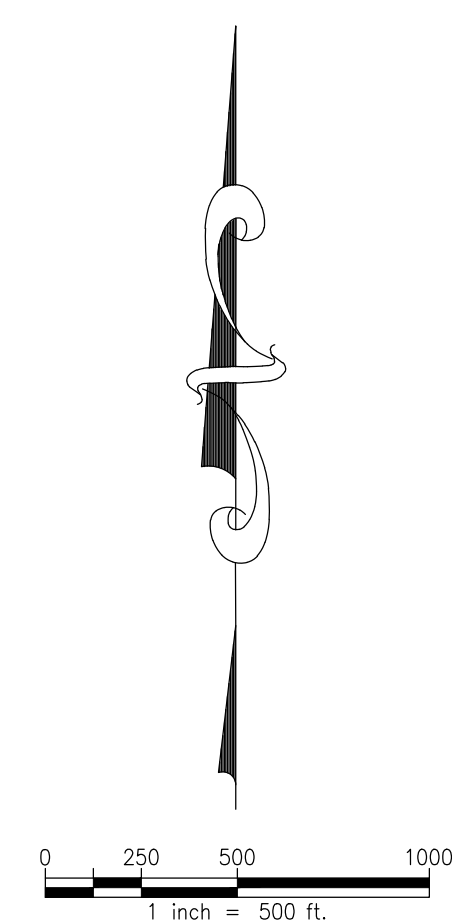
SEC. 9
T3N, R55W,
6TH P.M.

SEC. 10
T3N, R55W,
6TH P.M.

SEC. 11
T3N, R55W,
6TH P.M.

LEGEND

- ▲ MONUMENT FOUND
- MONUMENT SET
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- WOOD POST
- GATE POST
- GATE SIGN
- TELEPHONE PEDESTAL
- WATER METER
- WATER RISER
- WATER VALVE
- OH — OVERHEAD ELECTRIC
- UE — UNDERGROUND ELECTRIC
- X — BARBED WIRE FENCE
- ● — STEEL POST FENCE
- FO — FIBER OPTIC PHONE
- UT — UNDERGROUND PHONE
- W — WATER SECTION LINE
- — — — — EASEMENT
- — — — — ROW LINE



SEE SHEET 4 & 5

SEE SHEET 7

SEE SHEET 7

REV	REVISION DESCRIPTION	DATE	CHANGED BY	CHECKED BY	APPROVED BY



MERRICK	SIGNATURE	DATE
DRAWN	ALF	8/31/2023
DESIGNED		
QC REVIEW	JSF	9/27/2023
APPROVED	JSF	9/28/2023
CLIENT	SIGNATURE	DATE
REVIEW		
APPROVED		
CAD FILE NAME 100099.00_Story_ALTA[mod].dwg		

FORTRESS SOLAR I PROJECT
Brush, Colorado

CLIENT PROJECT NO. _____
 MERRICK PROJECT NO. 100099.00
 SCALE: 1" = 500'

Job No. 38149
 Date 9/28/2023
 Job Title 100099.00
 For Merrick

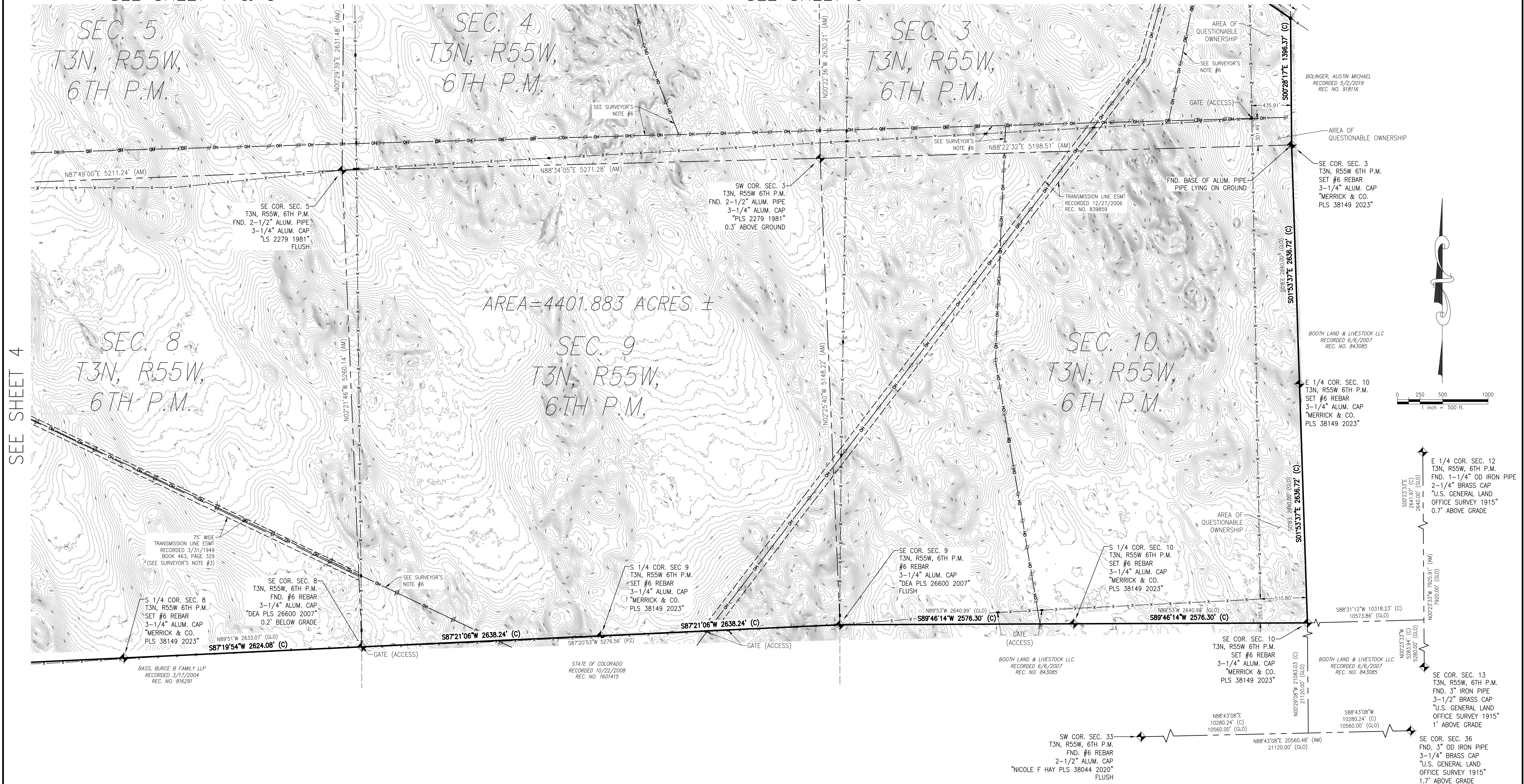
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REVISION:	DRAWING NO.	SHEET NO.
		6 of 7

ALTA/NSPS Land Title Survey

A PORTION OF SECTIONS 3, 4, 5 AND 6 AND ALL OF SECTIONS 7, 8, 9 AND 10, TOWNSHIP 3 NORTH, RANGE 55 WEST OF THE 6TH P.M.
 AND A PORTION OF SECTION 12, TOWNSHIP 3 NORTH, RANGE 56 WEST OF THE 6TH P.M.
 AND A PORTION OF SECTION 32, TOWNSHIP 4 NORTH, RANGE 55 WEST OF THE 6TH P.M.,
 COUNTY OF MORGAN, STATE OF COLORADO

SEE SHEET 4 & 5

SEE SHEET 6



SEE SHEET 4

REV	REVISION DESCRIPTION	DATE	CHANGED BY	CHECKED BY	APPROVED BY



MERRICK	SIGNATURE	DATE
DRAWN	ALF	8/31/2023
DESIGNED		
QC REVIEW	JSF	9/27/2023
APPROVED	JSF	9/28/2023
CLIENT	SIGNATURE	DATE
REVIEW		
APPROVED		
CAD FILE NAME	100099_00_Story_ALTA[mod].dwg	





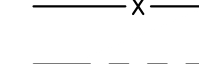
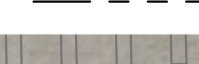
FORTRESS SOLAR I PROJECT
 Brush, Colorado

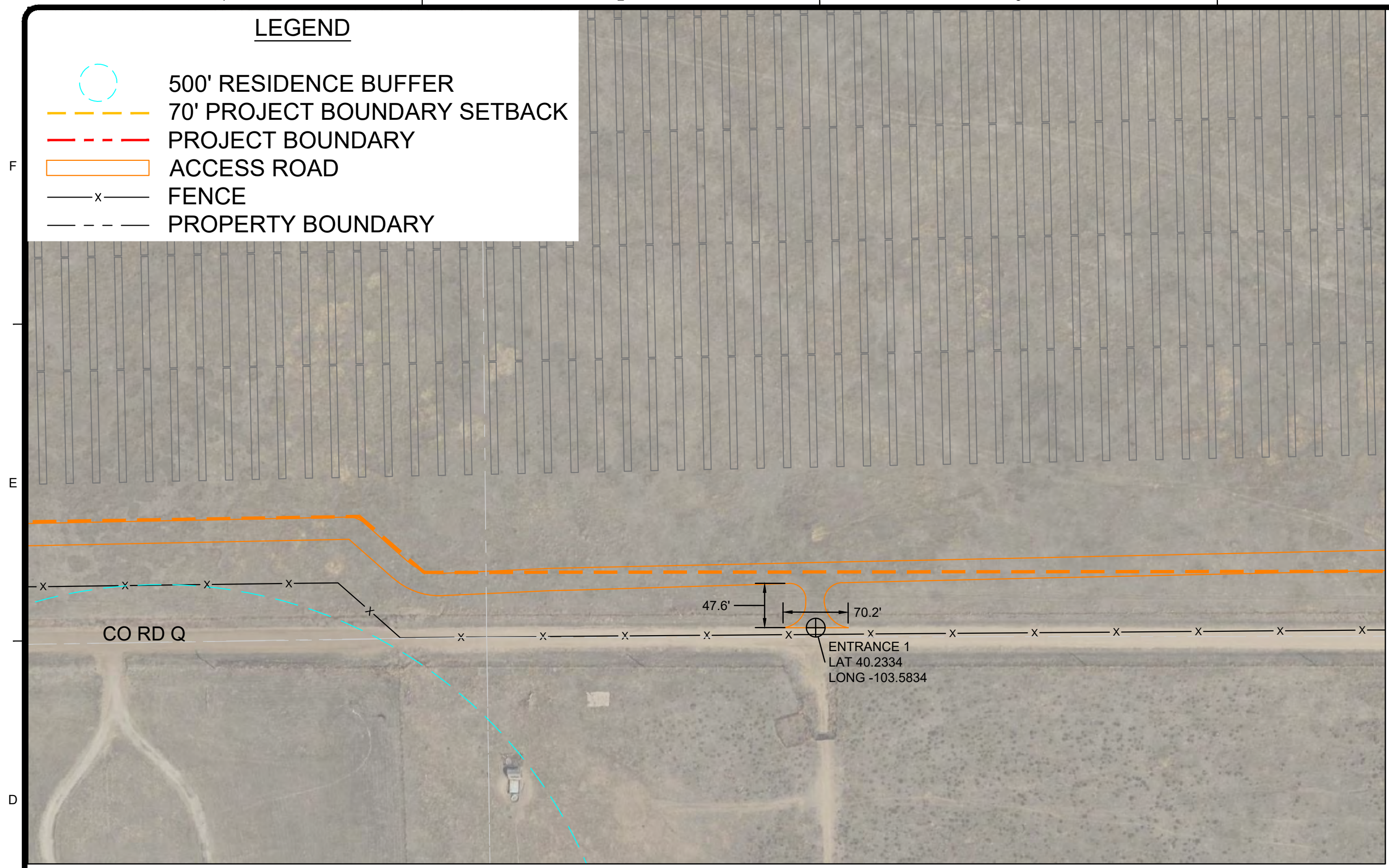
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 MERRICK PROJECT NO. 100099.00
 SCALE: 1" = 500'

TITLE
A PORTION OF SEC. 3, 4, 5 & 6 AND ALL OF SEC. 7, 8, 9 & 10 T3N, R55W OF THE 6TH P.M. AND A PORTION OF SEC. 12 T3N, R56W OF THE 6TH P.M. AND A PORTION OF SEC. 32 T4N, R55W OF THE 6TH P.M. COUNTY OF MORGAN, STATE OF COLORADO
REVISION:
DRAWING NO.
SHEET NO.
7 of 7

APPENDIX A-4: SITE ACCESS PLAN

LEGEND

-  500' RESIDENCE BUFFER
-  70' PROJECT BOUNDARY SETBACK
-  PROJECT BOUNDARY
-  ACCESS ROAD
-  FENCE
-  PROPERTY BOUNDARY



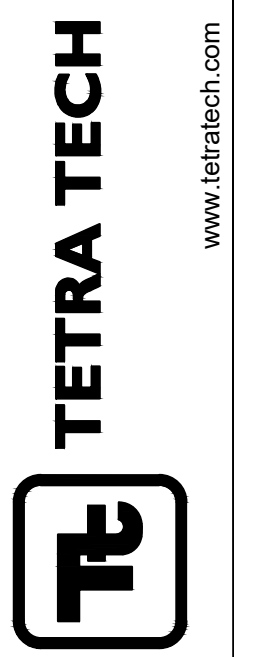
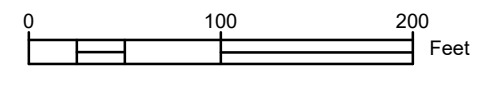
SITE ACCESS #1
PLAN
 SCALE: 1" = 100'
 2
 C-200



SITE ACCESS #2
PLAN
 SCALE: 1" = 100'
 3
 C-200



SITE ACCESS #3
PLAN
 SCALE: 1" = 100'
 4
 C-200



MARK	DATE	DESCRIPTION	BY
A	08/24/23	SITE PLAN	CAN
B	10/03/23	SITE PLAN	AML

AYPA POWER
 FORTRESS SOLAR PROJECT
 MORGAN COUNTY, COLORADO
SITE ACCESS
LOCATIONS

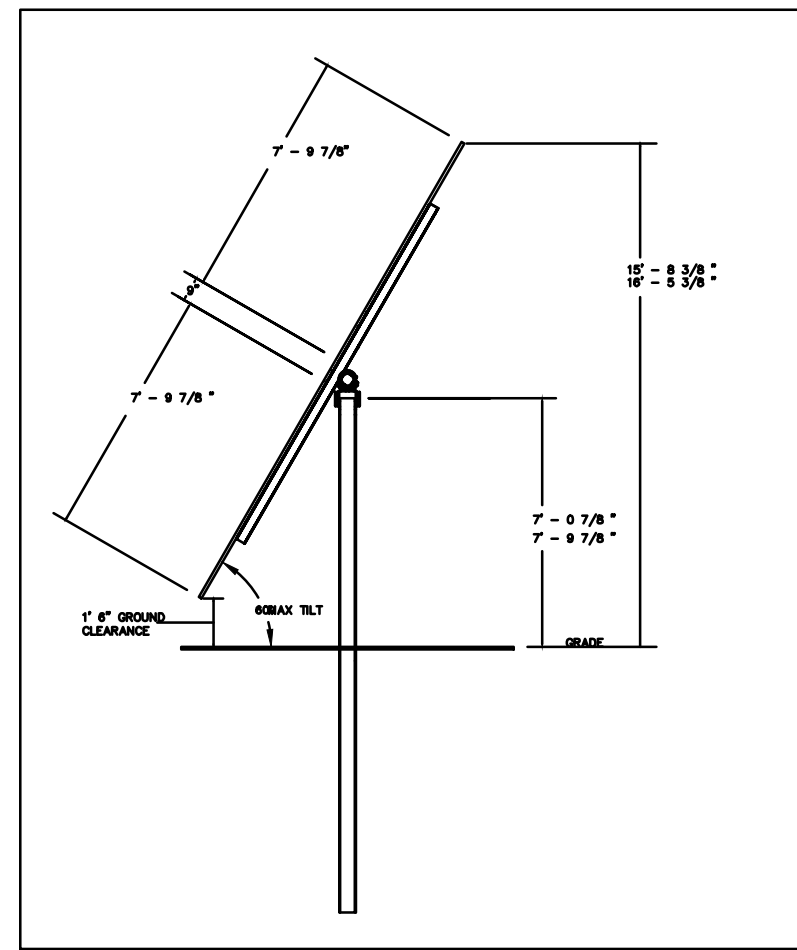
PROJ: 194-1179-0010
 DESN: CAN
 DRWN: CAN
 CHKD: JPP

C-202

10/2/2023 11:18:50 PM - P:\DENVER OFFICE\ENGINEERING\SOLAR\AYPA POWER\STORY BESS\CADD\C-200-C202 - SITE PLAN.DWG - LINTZ, ANDREW

APPENDIX A-5: SCHEMATIC DRAWINGS

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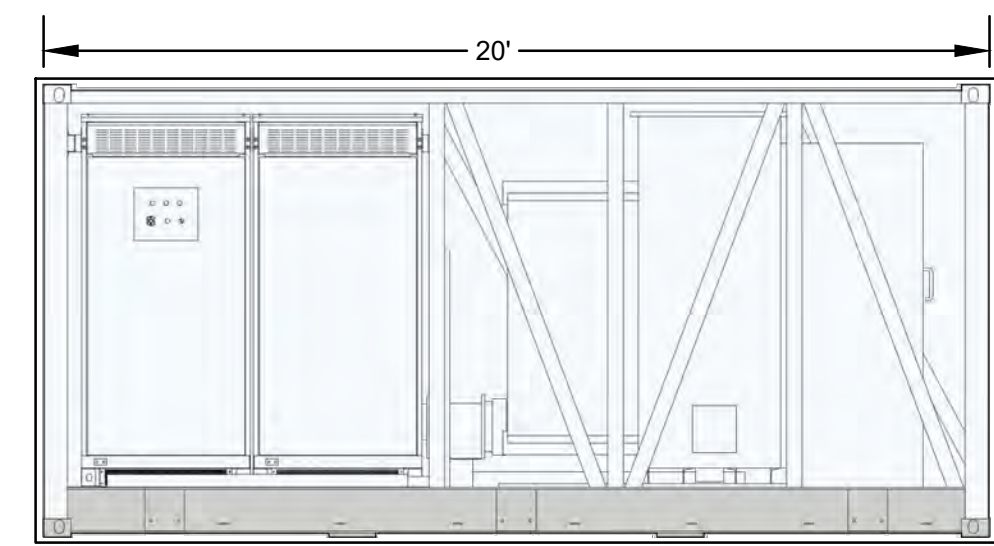


TYPICAL PV ARRAY

ELEVATION

SCALE: N.T.S.

2
C-201

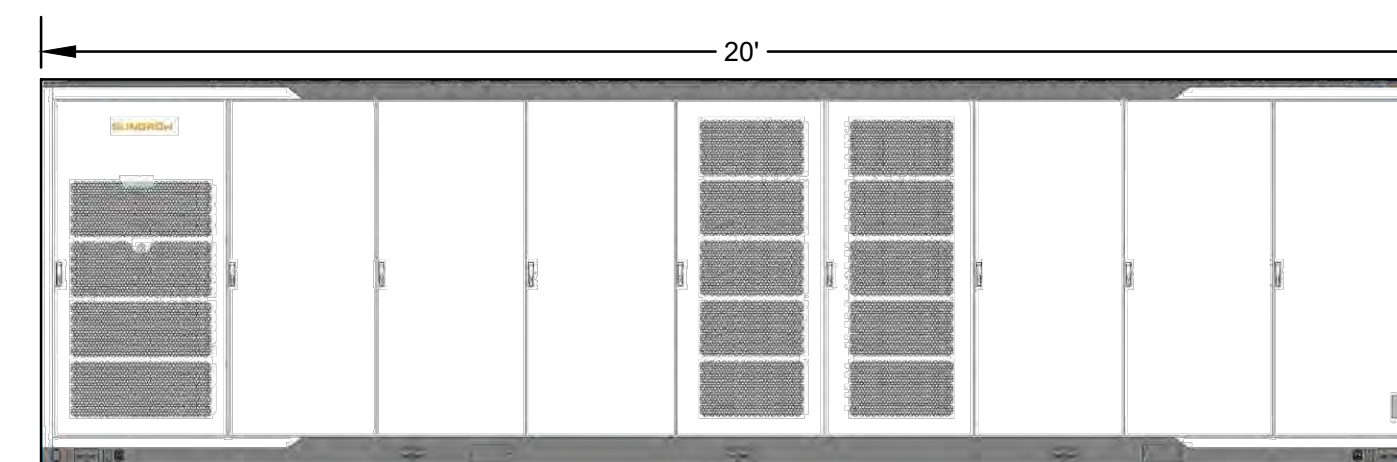
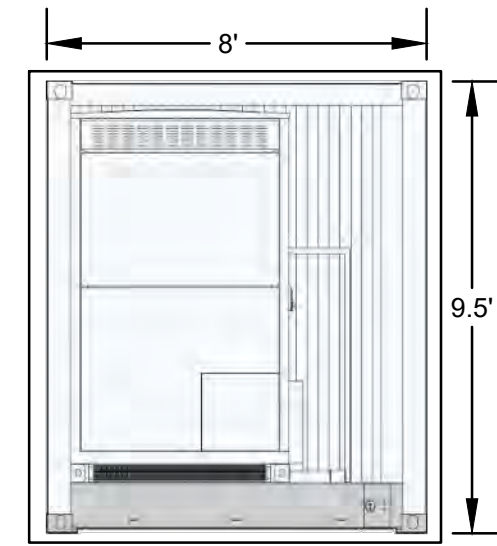


TYPICAL PCS INVERTER

ELEVATION

SCALE: N.T.S.

3
C-201

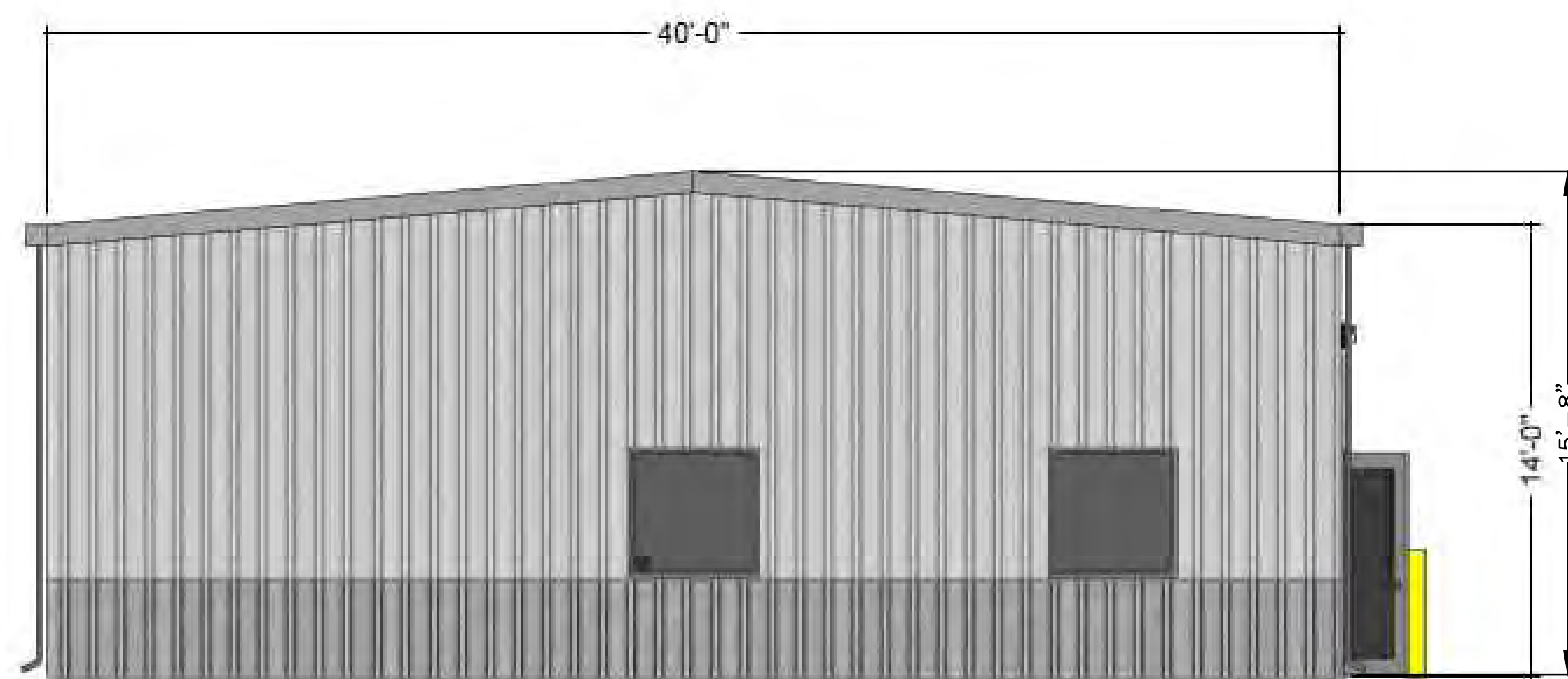
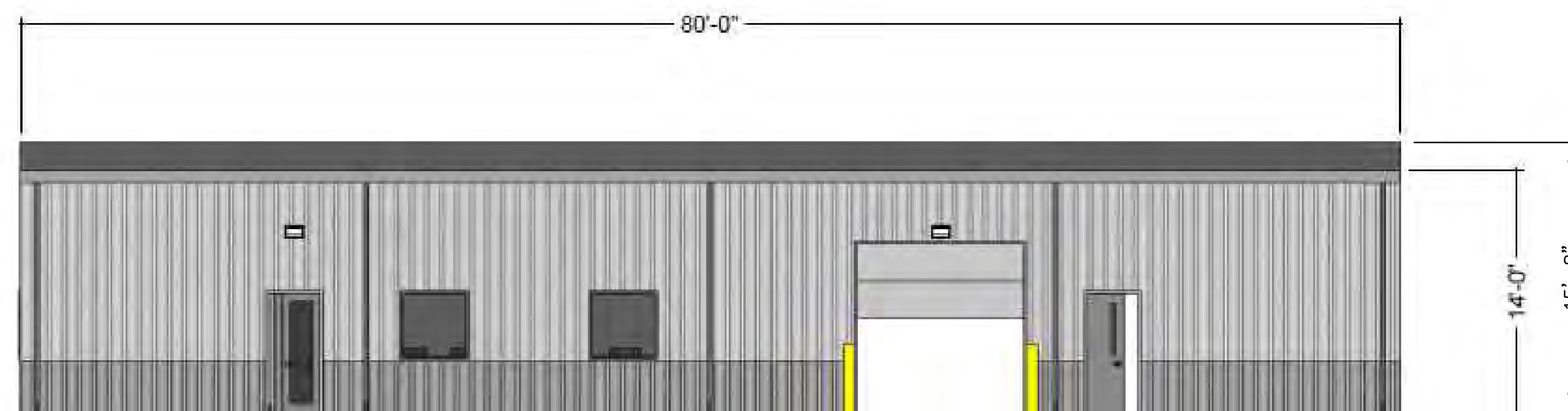
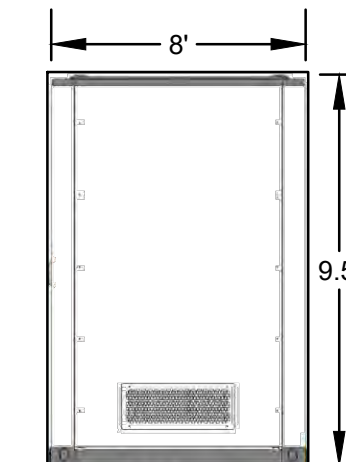


TYPICAL BATTERY ENERGY STORAGE SYSTEM

ELEVATION

SCALE: N.T.S.

4
C-201

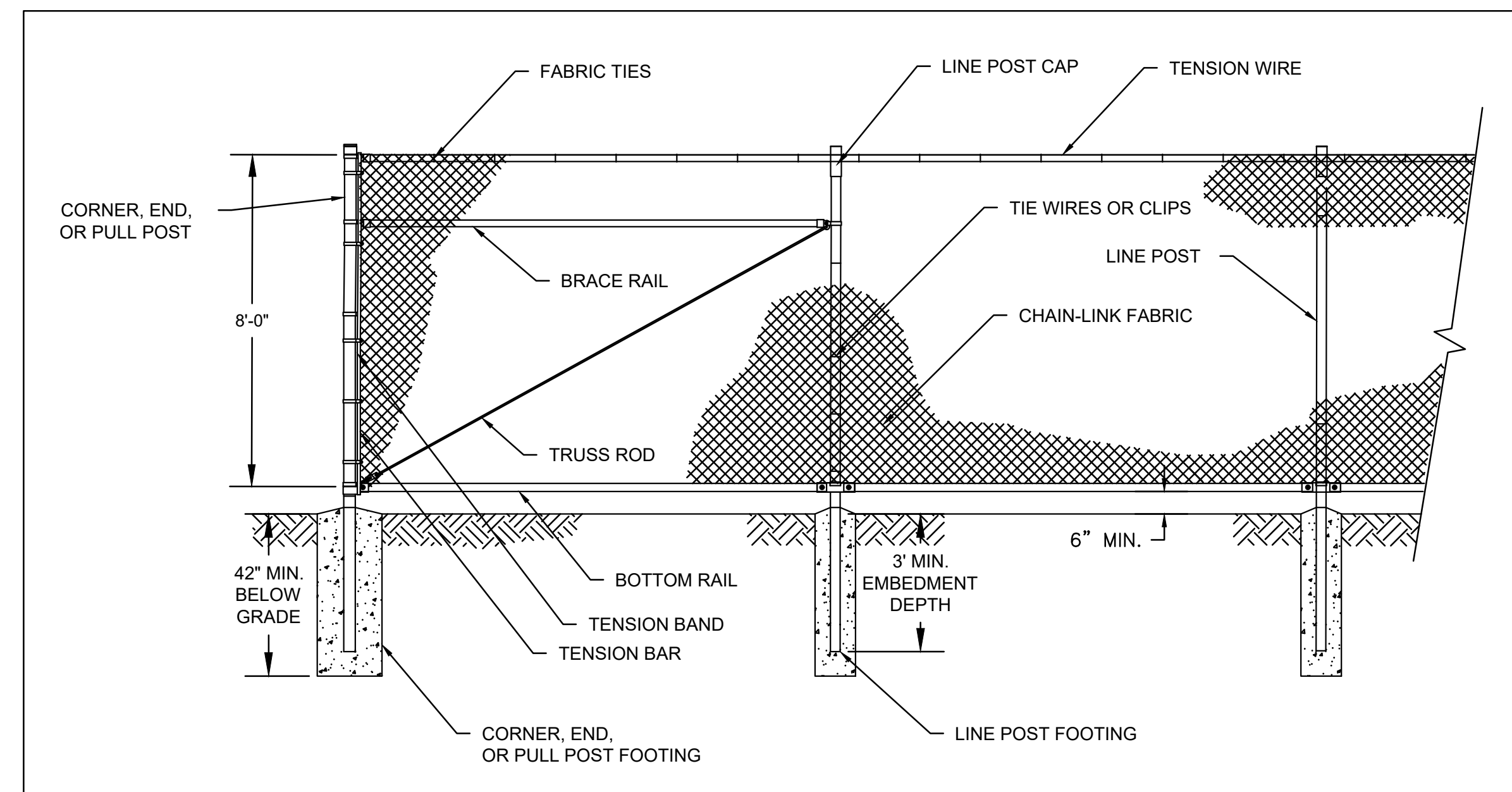


TYPICAL OPERATIONS AND MAINTENANCE BUILDING

ELEVATION

SCALE: N.T.S.

5
C-201



TYPICAL PERIMETER FENCE

ELEVATION

SCALE: N.T.S.

5
C-201

TETRA TECH



www.tetra.tech.com

MARK	DATE	DESCRIPTION	BY
A	10/03/23	CONCEPT & DEVELOPMENT PLAN	CAN
B	10/06/23	CONCEPT & DEVELOPMENT PLAN	CAN

AYPA POWER
FORTRESS SOLAR PROJECT
MORGAN COUNTY, COLORADO
DEVELOPMENT PLAN
ELEVATIONS

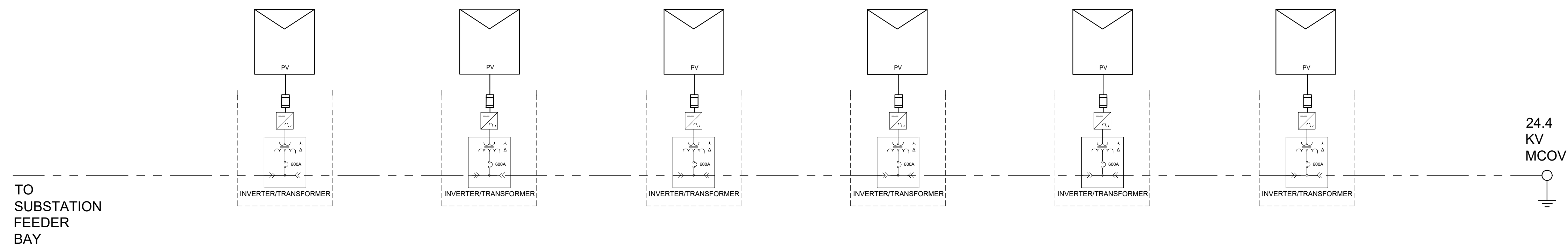
PROJ:	194-1179-0010
DESN:	CAN
DRWN:	CAN
CHKD:	JPP

C-2XX

Copyright: Tetra Tech

APPENDIX A-6: ONE LINE ELECTRICAL DRAWING

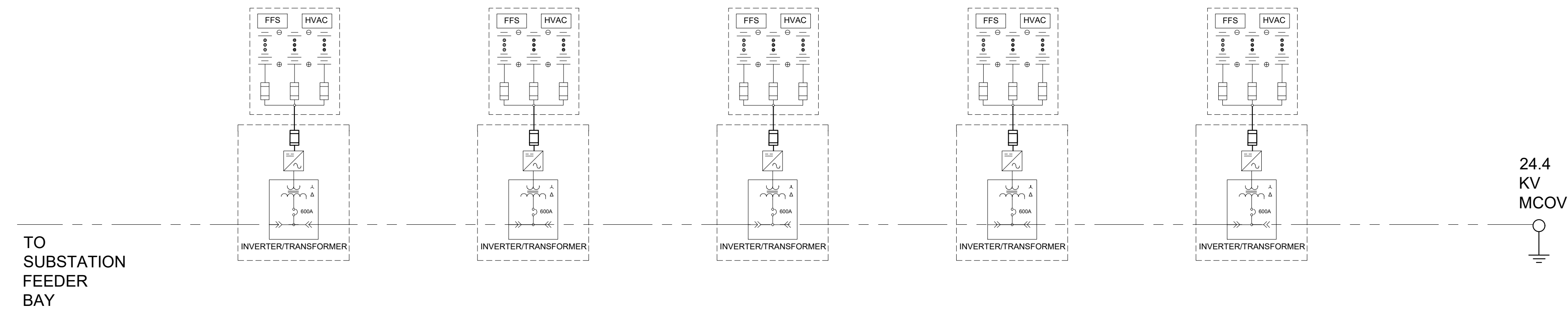
TYPICAL OF PV FEEDERS WITH 6 INVERTER/TRANSFORMER SKIDS



LEGEND

- UNDERGROUND CABLE
- INVERTER
- TRANSFORMER
- BREAKER
- CABLE TERMINATION
- FUSE
- BESS HVAC
- BESS FIRE PROTECTION
- BESS STORAGE
- ARRESTER
- PV MODULES

TYPICAL OF BESS FEEDERS WITH 5 INVERTER/TRANSFORMER SKIDS



NOTES

1. EQUIPMENT MANUFACTURER, MODEL, RATINGS, AND QUANTITY SUBJECT TO CHANGE DURING DETAILED DESIGN BASED ON ENGINEERING AND PROCURMENT
2. INVERTER QUANTITY ASSUMED TO OVERSIZED ENOUGH TO MAINTAIN A 0.95 POWER FACTOR AT THE POI. CONFIRMATION WILL BE REQUIRED DURING DETAILED DESIGN.
3. SYSTEM SIZED FOR SELF FEEDING AUX POWER DURING DISCHARGE
4. ONE LINE IS FOR DIAGRAMMATIC PURPOSES ONLY, AND SHOULD NOT BE USED FOR LAYOUT PURPOSES
5. SYSTEM WILL MAINTAIN UTILITY PHASE ROTATION THROUGHOUT THE PLANT
6. PLANT IS ASSUMED TO BE FUNCTIONALLY GROUNDED
7. ONE LINES ARE TYPICAL FOR FEEDERS BASED ON THE NUMBERS OF INVERTERS PER FEEDER.

SYSTEM SUMMARY	
MWAC AT POI	600
MWh AC AT POI	2400
BESS INVERTER MODEL	SC5000UD-MV-US
BESS INVERTER QUANTITY	133
BATTERY MODEL	BYD
MINIMUM BATTERY QUANTITY	1330
PV INVERTER MODEL	SMA SC 4000-UP-US
PV INVERTER QTY	241
PV MODULE	VERTEX TSM-DEG21C.20 665W

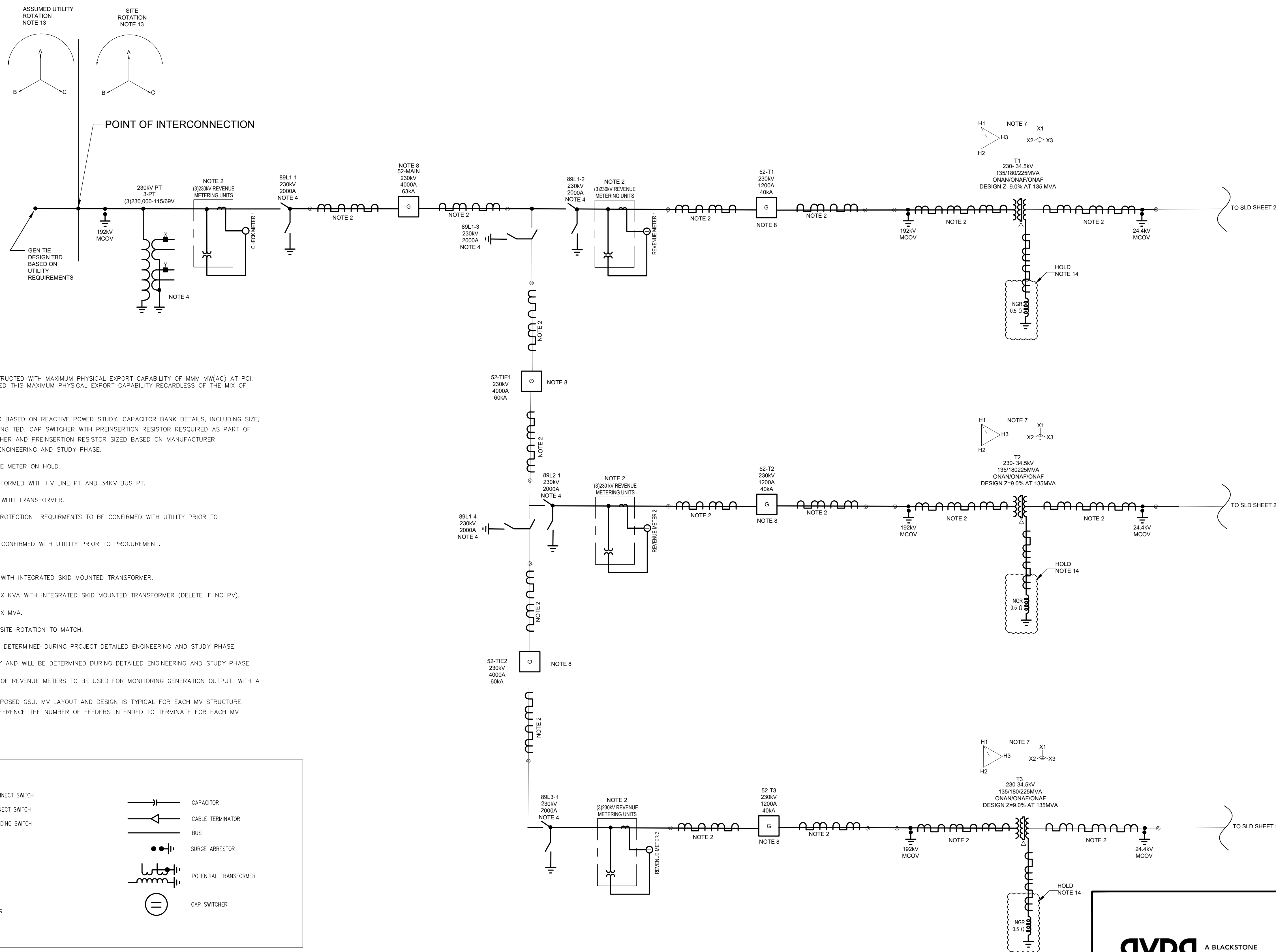
A BLACKSTONE PORTFOLIO COMPANY

FORTRESS SOLAR FACILITY
SINGLE LINE DIAGRAM

DESIGNED	CEKR	DETAILED	CEKR
MW	600	MWhr	2400
DWG	EXHIBIT	REV	0
DATE	10/25/2023		

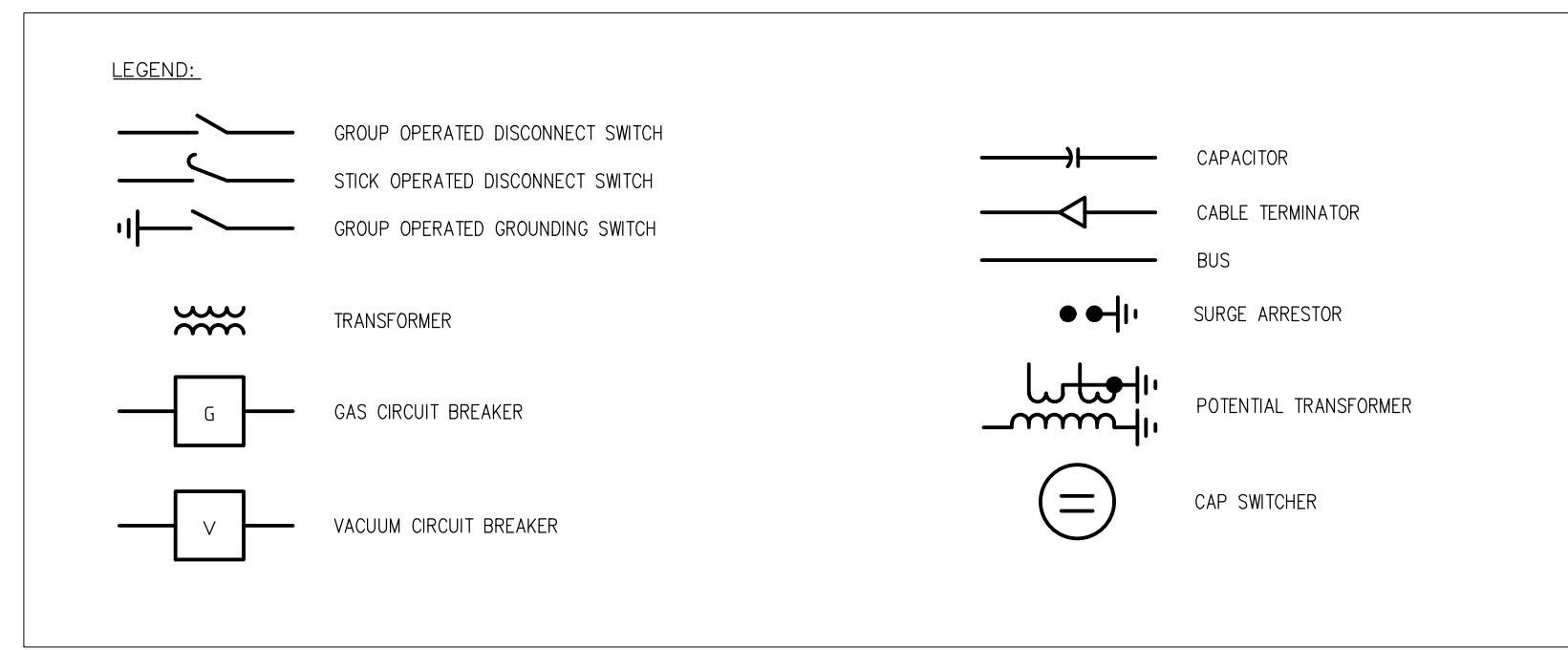
PRELIMINARY - NOT FOR CONSTRUCTION

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NOTES:

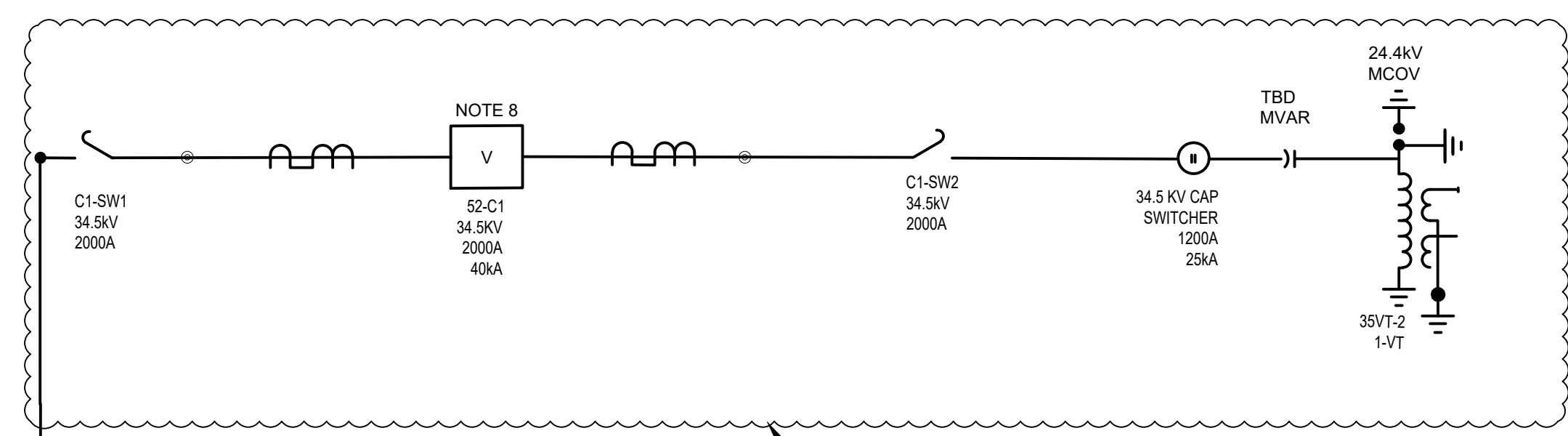
1. NEW FACILITY TO BE DESIGNED AND CONSTRUCTED WITH MAXIMUM PHYSICAL EXPORT CAPABILITY OF MMM MW(AC) AT POI. HYBRID SYSTEM DESIGNED TO NEVER EXCEED THIS MAXIMUM PHYSICAL EXPORT CAPABILITY REGARDLESS OF THE MIX OF GENERATION BEING EXPORTED.
2. CT RATIOS TBD.
3. REQUIREMENT FOR A CAPACITOR BANK TBD BASED ON REACTIVE POWER STUDY. CAPACITOR BANK DETAILS, INCLUDING SIZE, PROTECTION AND CONTROLS, AND GROUNDING TBD. CAP SWITCHER WITH PREINSERTION RESISTOR REQUIRED AS PART OF CAPACITOR BANK DESIGN, WITH CAP SWITCHER AND PREINSERTION RESISTOR SIZED BASED ON MANUFACTURER RECOMMENDATIONS AND VERIFIED DURING ENGINEERING AND STUDY PHASE.
4. CTPT LOCATION AND DISC SW FOR REVENUE METER ON HOLD.
5. SYNC CHECK FOR HV BREAKER CLOSE PERFORMED WITH HV LINE PT AND 34KV BUS PT.
6. ALL TRANSFORMER ARRESTERS PROCURED WITH TRANSFORMER.
7. TRANSFORMER WINDING, GROUNDING AND PROTECTION REQUIREMENTS TO BE CONFIRMED WITH UTILITY PRIOR TO PROCUREMENT.
8. FAULT CONTRIBUTION FROM UTILITY TO BE CONFIRMED WITH UTILITY PRIOR TO PROCUREMENT.
9. RAS SCHEME TBD WITH UTILITY.
10. EACH BESS INVERTER RATED AT XXX KVA WITH INTEGRATED SKID MOUNTED TRANSFORMER.
11. EACH PV CENTRAL INVERTER RATED AT XXX KVA WITH INTEGRATED SKID MOUNTED TRANSFORMER (DELETE IF NO PV).
12. AUX LOAD ESTIMATED TO BE LESS THAN XX MVA.
13. PHASE ROTATION DETERMINED BY UTILITY, SITE ROTATION TO MATCH.
14. NEUTRAL GROUNDING REACTOR SIZE TO BE DETERMINED DURING PROJECT DETAILED ENGINEERING AND STUDY PHASE.
15. EQUIPMENT RATING SIZES ARE PRELIMINARY AND WILL BE DETERMINED DURING DETAILED ENGINEERING AND STUDY PHASE.
16. EACH HV BLOCK WILL HAVE ITS OWN SET OF REVENUE METERS TO BE USED FOR MONITORING GENERATION OUTPUT, WITH A MAIN REVENUE METER AT THE POI.
17. ONE MV STRUCTURE IS INTENDED PER PROPOSED GSU. MV LAYOUT AND DESIGN IS TYPICAL FOR EACH MV STRUCTURE. PLEASE REFER TO PROVIDED TABLE TO REFERENCE THE NUMBER OF FEEDERS INTENDED TO TERMINATE FOR EACH MV STRUCTURE.



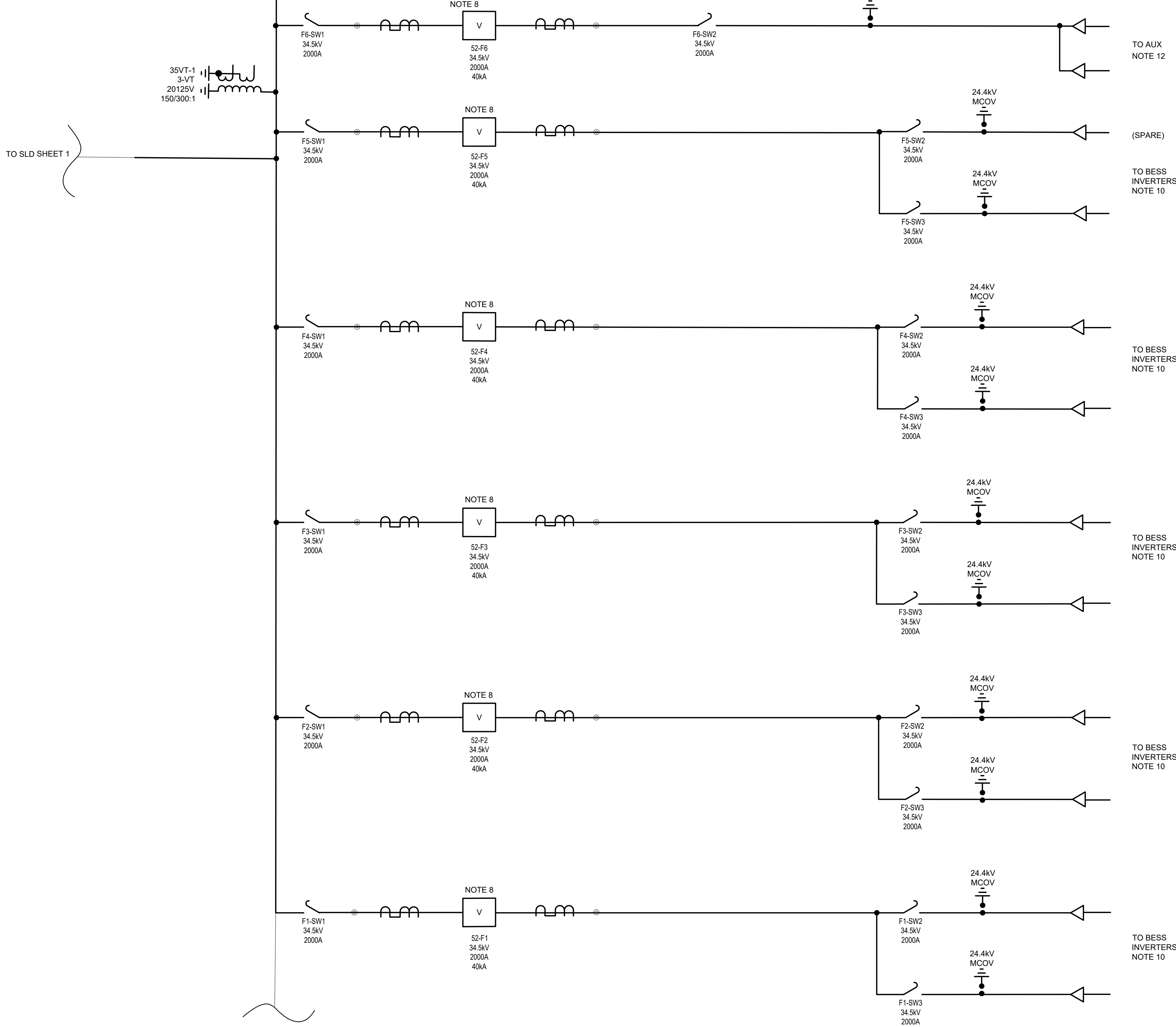
PRELIMINARY - NOT FOR CONSTRUCTION

A BLACKSTONE PORTFOLIO COMPANY		FORTRESS SINGLE LINE DIAGRAM SH1-HV	
DESIGNED	CEKR	DETAILED	CEKR
DATE 10/26/2023		DWG EXHIBIT REV 0	

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GSU ID	MV STRUCTURE ID	MAXIMUM PHYSICAL EXPORT (MW)	NUMBER OF PV FEEDERS	NUMBER OF INVERTERS PER FEEDER	NUMBER OF BESS FEEDERS	NUMBER OF INVERTERS PER FEEDER
T1	MV1	200	13	6	9	5
T2	MV2	200	13	6	9	5
T3	MV3	200	14	6	9	4-5

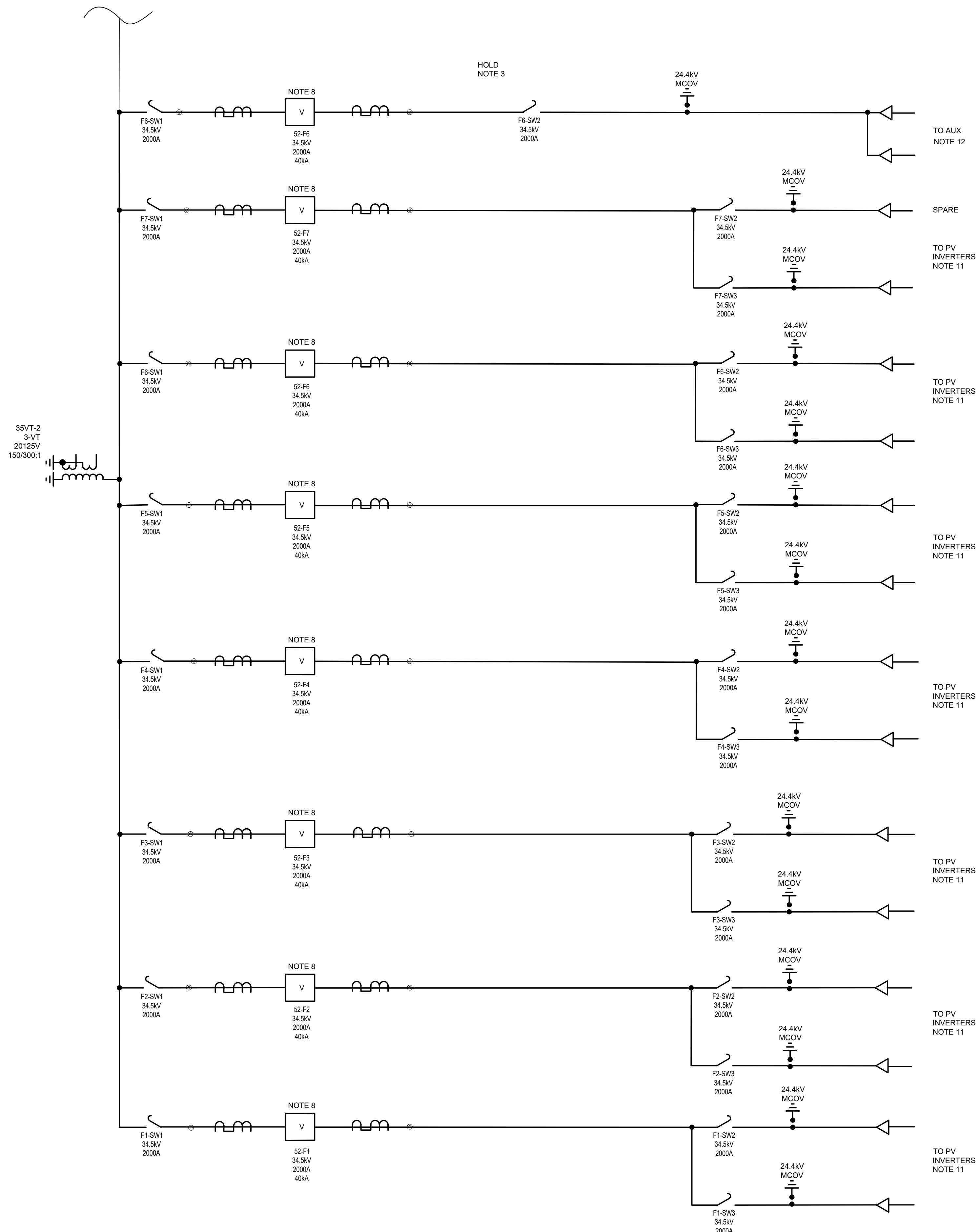


PRELIMINARY - NOT FOR CONSTRUCTION

A BLACKSTONE PORTFOLIO COMPANY		FORTRESS SINGLE LINE DIAGRAM SH2 BESS	
DESIGNED	CEKR	DETAILED	CEKR
MW	600	MWhr	2400
DWG	EXHIBIT	REV	0
DATE	10/26/2023		


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TO SLD SHEET 2



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PRELIMINARY - NOT FOR CONSTRUCTION

 A BLACKSTONE PORTFOLIO COMPANY		FORTRESS SINGLE LINE DIAGRAM - PV	
DESIGNED	CEKR	DATE	10/26/2023
CEKR	CEKR	REV	0

APPENDIX A-7: PRELIMINARY SPECIFICATION SHEETS



BIFACIAL DUAL GLASS MONOCRYSTALLINE MODULE

PRODUCT: TSM-DEG21C.20

POWER RANGE: 645-665W

665W

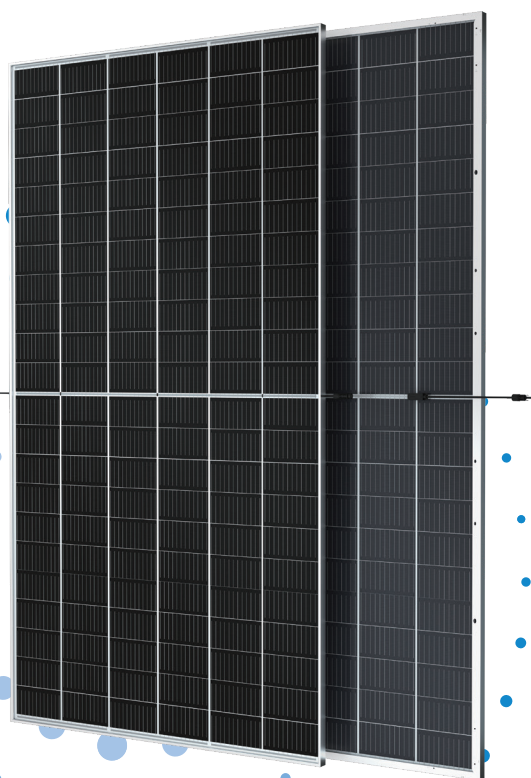
MAXIMUM POWER OUTPUT

0~+5W

POSITIVE POWER TOLERANCE

21.4%

MAXIMUM EFFICIENCY



High customer value

- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance of System) cost, shorter payback time
- Lowest guaranteed first year and annual degradation;
- Designed for compatibility with existing mainstream system components



High power up to 665W

- Up to 21.4% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection



High reliability

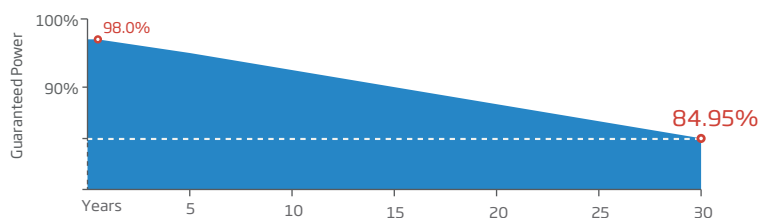
- Minimized micro-cracks with innovative non-destructive cutting technology
- Ensured PID resistance through cell process and module material control
- Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity areas
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load



High energy yield

- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions
- Lower temperature coefficient (-0.34%) and operating temperature
- Up to 25% additional power gain from back side depending on albedo

Trina Solar's Vertex Bifacial Dual Glass Performance Warranty



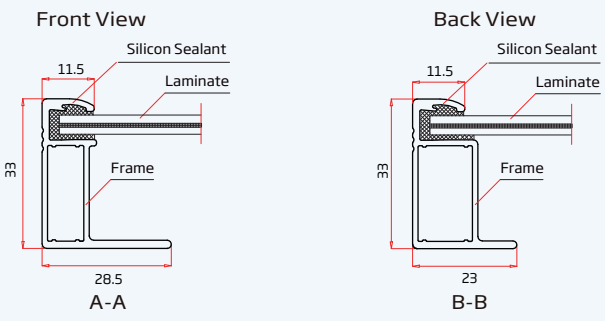
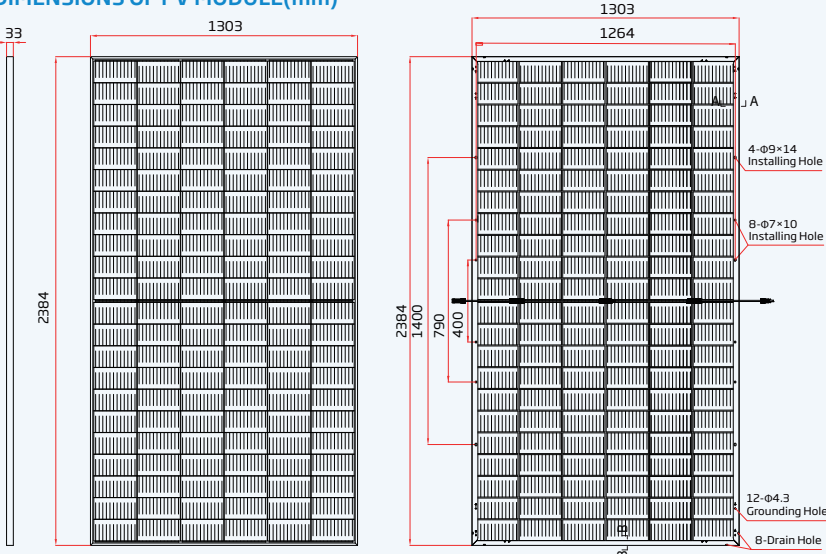
Comprehensive Products and System Certificates



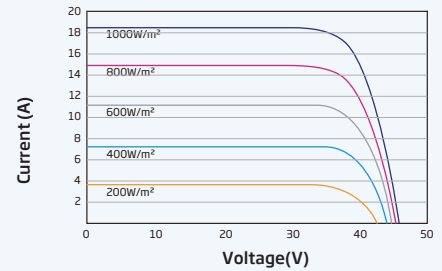
IEC61215/IEC61730/IEC61701/IEC62716/UL61730
 ISO 9001: Quality Management System
 ISO 14001: Environmental Management System
 ISO14064: Greenhouse Gases Emissions Verification
 ISO45001: Occupational Health and Safety Management System



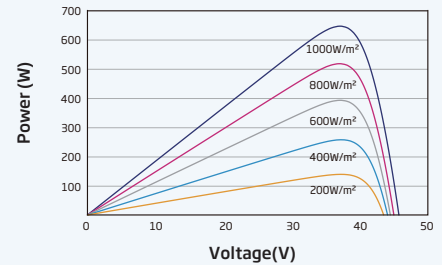
DIMENSIONS OF PV MODULE(mm)



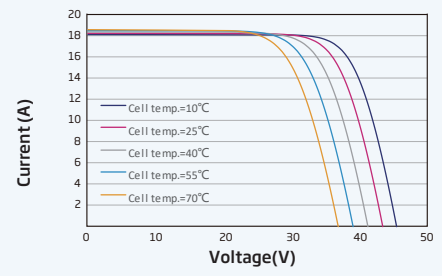
I-V CURVES OF PV MODULE(650 W)



P-V CURVES OF PV MODULE(650W)



I-V CURVES OF PV MODULE(650 W)



ELECTRICAL DATA (STC)

Peak Power Watts - P_{MAX} (Wp)*	645	650	655	660	665
Power Tolerance- P_{MAX} (W)	0 ~ +5				
Maximum Power Voltage - V_{MPP} (V)	37.5	37.7	37.9	38.1	38.3
Maximum Power Current - I_{MPP} (A)	17.23	17.27	17.31	17.35	17.39
Open Circuit Voltage - V_{OC} (V)	45.3	45.5	45.7	45.9	46.1
Short Circuit Current - I_{SC} (A)	18.31	18.35	18.40	18.45	18.50
Module Efficiency η_m (%)	20.8	20.9	21.1	21.2	21.4

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%.

Electrical characteristics with different power bin (reference to 10% Irradiance ratio)

Total Equivalent power - P_{MAX} (Wp)	690	696	701	706	712
Maximum Power Voltage - V_{MPP} (V)	37.5	37.7	37.9	38.1	38.3
Maximum Power Current - I_{MPP} (A)	18.44	18.48	18.52	18.56	18.60
Open Circuit Voltage - V_{OC} (V)	45.3	45.5	45.7	45.9	46.1
Short Circuit Current - I_{SC} (A)	19.59	19.63	19.69	19.74	19.79
Irradiance ratio (rear/front)	10%				

Power Bifaciality: 70±5%.

ELECTRICAL DATA (NOCT)

Maximum Power - P_{MAX} (Wp)	488	492	495	499	504
Maximum Power Voltage - V_{MPP} (V)	34.9	35.1	35.2	35.4	35.6
Maximum Power Current - I_{MPP} (A)	13.98	14.01	14.05	14.10	14.16
Open Circuit Voltage - V_{OC} (V)	42.7	42.9	43.0	43.2	43.4
Short Circuit Current - I_{SC} (A)	14.75	14.79	14.83	14.87	14.91

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline
No. of cells	132 cells
Module Dimensions	2384×1303×33 mm (93.86×51.30×1.30 inches)
Weight	38.3 kg (84.4 lb)
Front Glass	2.0 mm (0.08 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	POE/EVA
Back Glass	2.0 mm (0.08 inches), Heat Strengthened Glass (White Grid Glass)
Frame	33mm(1.30 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²), Portrait: 350/280 mm(13.78/11.02 inches) Length can be customized
Connector	MC4 EV02 / TS4*

*Please refer to regional datasheet for specified connector.

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P_{MAX}	-0.34%/°C
Temperature Coefficient of V_{OC}	-0.25%/°C
Temperature Coefficient of I_{SC}	0.04%/°C

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC) 1500V DC (UL)
Max Series Fuse Rating	35A

WARRANTY

- 12 year Product Workmanship Warranty
- 30 year Power Warranty
- 2% first year degradation
- 0.45% Annual Power Attenuation

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

- Modules per box: 33 pieces
- Modules per 40' container: 594 pieces

SUNNY CENTRAL

4000 UP-US / 4200 UP-US / 4400 UP-US / 4600 UP-US



Efficient

- Up to 4 inverters can be transported in one standard shipping container
- Over-sizing up to 180% is possible
- Full power at ambient temperatures of up to 35°C

Robust

- Intelligent air cooling system OptiCool for efficient cooling
- Suitable for outdoor use in all climatic ambient conditions worldwide

Flexible

- Conforms to all known grid requirements worldwide
- Q on demand
- DC-coupled storage with optional charging from grid

Easy to Use

- Improved DC connection area
- Connection area for customer equipment
- Integrated voltage support for internal and external loads

SUNNY CENTRAL

4000 UP-US / 4200 UP-US / 4400 UP-US / 4600 UP-US

The new Sunny Central: more power per cubic meter

With an output of up to 4600 kVA and system voltages of 1500 V DC, the SMA central inverter allows for more efficient system design and a reduction in specific costs for PV power plants. A separate voltage supply and additional space are available for the installation of customer equipment. True 1500 V technology and the intelligent cooling system OptiCool ensure smooth operation even in extreme ambient temperature as well as a long service life of 25 years.

SUNNY CENTRAL 4000 UP-US / 4200 UP-US

Technical data	SC 4000 UP-US	SC 4200 UP-US
Input (DC)		
MPP voltage range V_{DC} (at 25 °C / at 50 °C)	880 to 1325 V / 1050 V	921 to 1325 V / 1050 V
Min. input voltage $V_{DC, min}$ / Start voltage $V_{DC, Start}$	849 V / 1030 V	891 V / 1071 V
Max. input voltage $V_{DC, max}$	1500 V	1500 V
Max. input current $I_{DC, max}$	4750 A	4750 A
Max. short-circuit current $I_{DC, sc}$	8400 A	8400 A
Number of DC inputs	24 double pole fused (32 single pole fused)	
Number of DC inputs with optional DC coupling of battery	18 double pole fused (36 single pole fused) for PV, 6 double pole fused for batteries	
Max. number of DC cables per DC input (for each polarity)	2 x 800 kcmil, 2 x 400 mm ²	
Integrated zone monitoring	○	
Available PV fuse sizes (per input)	200 A, 250 A, 315 A, 350 A, 400 A, 450 A, 500 A	
Available battery fuse size (per input)	750 A	
Output (AC)		
Nominal AC power at $\cos \phi = 1$ (at 35 °C / at 50 °C)	4000 kVA ¹¹⁾ / 3600 kVA	4200 kVA ¹¹⁾ / 3780 kVA
Nominal AC power at $\cos \phi = 0.8$ (at 35 °C / at 50 °C)	3200 kW ¹¹⁾ / 2880 kW	3360 kW ¹¹⁾ / 3024 kW
Nominal AC current $I_{AC, nom}$ (at 35 °C / at 50 °C)	3850 A / 3465 A	3850 A / 3465 A
Max. total harmonic distortion	< 3% at nominal power	
Nominal AC voltage / nominal AC voltage range ¹⁾ 8)	600 V / 480 V to 720 V	630 V / 504 V to 756 V
AC power frequency / range	50 Hz / 47 Hz to 53 Hz 60 Hz / 57 Hz to 63 Hz	
Min. short-circuit ratio at the AC terminals ⁹⁾	> 2	
Power factor at rated power / displacement power factor adjustable ⁸⁾ 10)	1 / 0.8 overexcited to 0.8 underexcited	
Efficiency		
Max. efficiency ²⁾ / European efficiency ²⁾ / CEC efficiency ³⁾	98.8% / 98.6% / 98.5%	98.8% / 98.7% / 98.5%
Protective Devices		
Input-side disconnection point	DC load break switch	
Output-side disconnection point	AC circuit breaker	
DC overvoltage protection	Surge arrester, type I	
AC overvoltage protection (optional)	Surge arrester, class I	
Lightning protection (according to IEC 62305-1)	Lightning Protection Level III	
Ground-fault monitoring / remote ground-fault monitoring	○ / ○	
Insulation monitoring	○	
Degree of protection	NEMA 3R	
General Data		
Dimensions (W / H / D)	2780 / 2318 / 1588 mm (109.4 / 91.3 / 62.5 inch)	
Weight	< 3700 kg / < 8158 lb	
Self-consumption (max. ⁴⁾ / partial load ⁵⁾ / average ⁶⁾	< 8100 W / < 1800 W / < 2000 W	
Self-consumption (standby)	< 370 W	
Internal auxiliary power supply	○ Integrated 8.4 kVA transformer	
Operating temperature range (optional) ⁸⁾	(-37 °C) -25 °C to 60 °C / (-37 °C) -13 °F to 140 °F	
Noise emission ⁷⁾	65.0 dB(A)*	
Temperature range (standby)	-40 °C to 60 °C / -40 °F to 140 °F	
Temperature range (storage)	-40 °C to 70 °C / -40 °F to 158 °F	
Max. permissible value for relative humidity (condensing / non-condensing)	95% to 100% (2 month/year) / 0% to 95%	
Maximum operating altitude above MSL ⁸⁾ 1000 m / 2000 m	● / ○ (earlier temperature-dependent derating)	
Fresh air consumption	6500 m ³ /h	
Features		
DC connection	Terminal lug on each input (without fuse)	
AC connection	With busbar system (three busbars, one per line conductor)	
Communication	Ethernet, Modbus Master, Modbus Slave	
Communication with SMA string monitor (transmission medium)	Modbus TCP / Ethernet (FO MM, Cat-5)	
Enclosure / roof color	RAL 9016 / RAL 7004	
Supply transformer for external loads	○ (2.5 kVA)	
Standards and directives complied with	UL 62109-1, UL 1741 (Chapter 31, CDR 61), NERC, UL 1741-SB, UL 1998, IEEE 1547-2018 ¹²⁾ , MIL-STD-810G	
EMC standards	FCC Part 15 Class A	
Quality standards and directives complied with	VDI/VDE 2862 page 2, DIN EN ISO 9001	
● Standard features ○ Optional		

1) At nominal AC voltage, nominal AC power decreases in the same proportion

2) Efficiency measured without internal power supply

3) Efficiency measured with internal power supply

4) Self-consumption at rated operation

5) Self-consumption at < 75% Pn at 25 °C

6) Self-consumption averaged out from 5% to 100% Pn at 25 °C

7) Sound pressure level at a distance of 10 m

8) Values apply only to inverters. Permissible values for SMA MV solutions from SMA can be found in the corresponding data sheets.

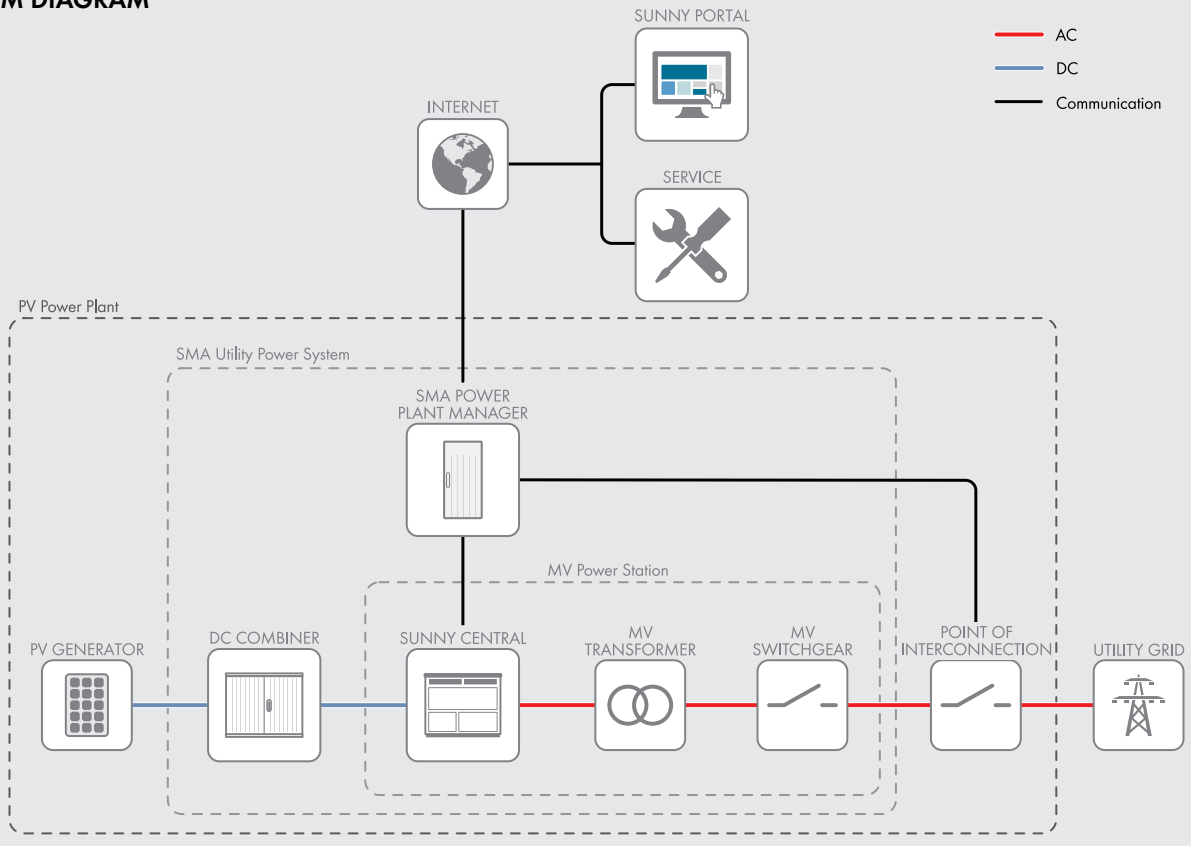
9) A short-circuit ratio of < 2 requires a special approval from SMA

10) Depending on the DC voltage

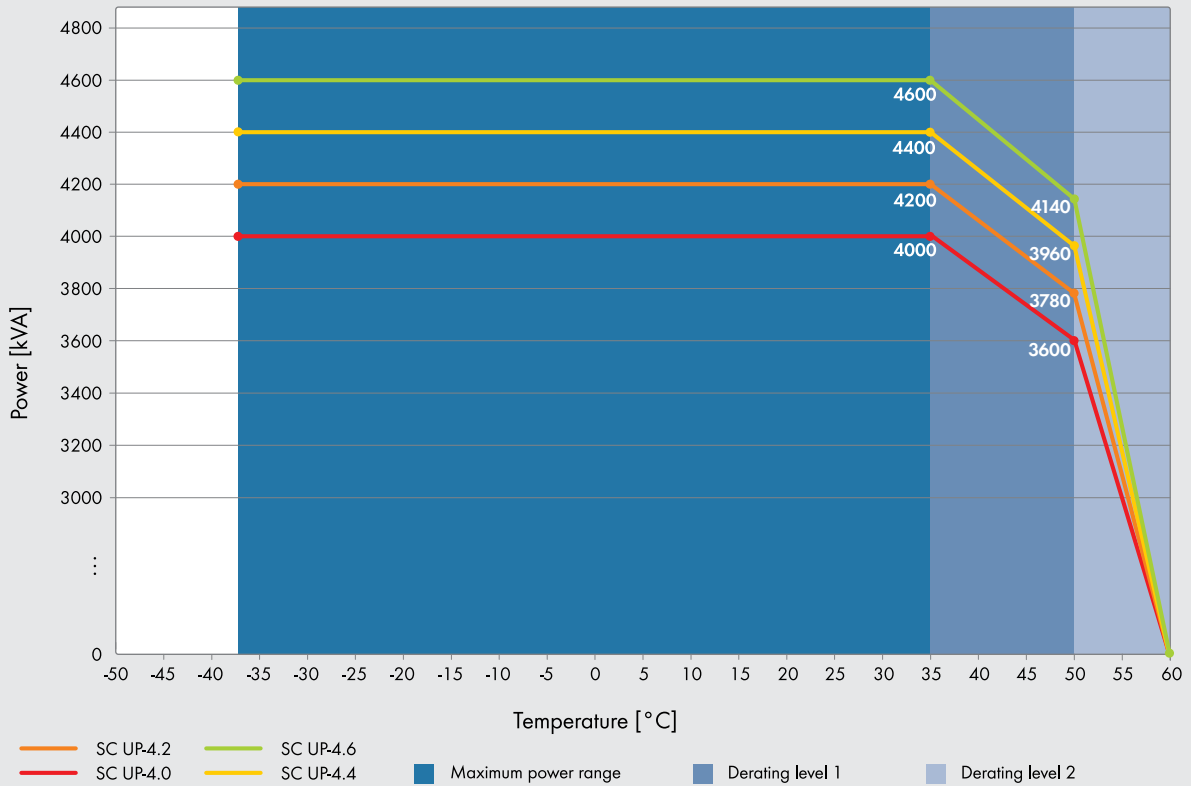
11) Nominal power at 35 °C max DC voltage of 1050 V

12) Harmonics are within IEEE 1547-2018 limits with at least 2 inverters in operation

SYSTEM DIAGRAM



TEMPERATURE BEHAVIOR (at 1000 m)



SCXXXXUP-US-DS-en-27 All products and services described and all technical data are subject to change, even for reasons of country-specific deviations, at any time without notice. SMA assumes no liability for typographical or other errors. For current information, please see www.SMA-Solar.com.

BYD - MC Cube

MC10C-B5365-U-R4M01



System Features

High Energy Density

- Compact mechanical design, minimized footprint

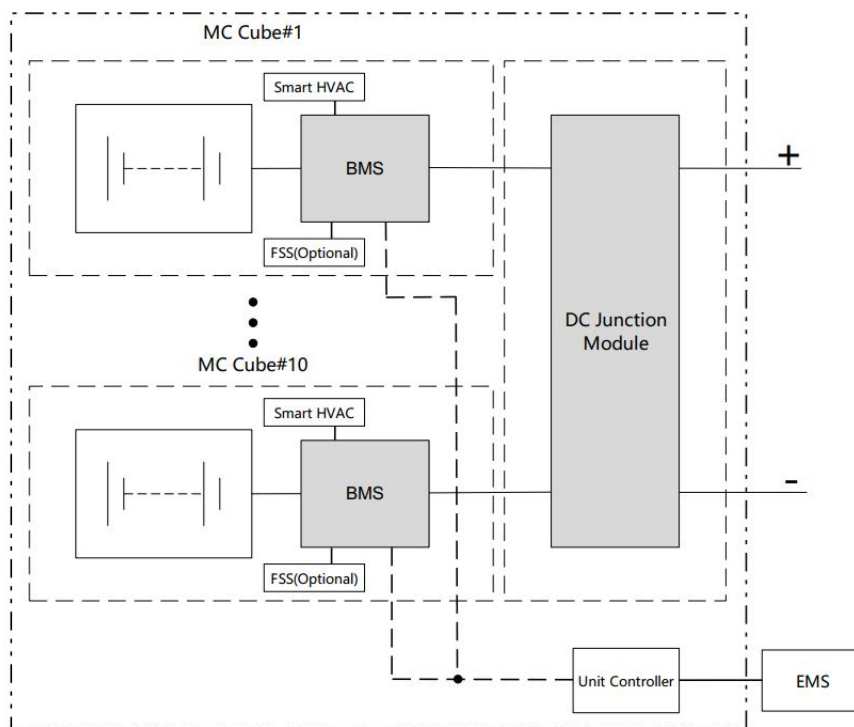
Safe & Long Lifecycle

- High efficient system with safe and long lifecycle LFP battery

Highly Integrated

- Highly integrated system to allow flexible transportation and on-site installation
- ALL IN ONE design, integrated local controller, HVAC and FSS to ensure system safety

Circuit Diagram



System Parameter

System Type	MC10C-B5365-U-R4M01
Cell type	LFP
Pack type	1P416S
System configuration	10 × 1P416S
Battery capacity (BOL)	5365kWh
DC usable energy (BOL)@FAT	5099kWh
DC usable energy (BOL)@SAT (90 days after FAT)	4946kWh
Battery voltage range	1081.6 ~ 1497.6
Nominal power	1236kW
Dimensions (W×D×H)	6058×2438×2896mm
Weight	~41035kg
IP rating	IP55
Ambient operating temperature range	-30℃ ~ +55℃ 【1】
Relative humidity	5% ~ 100%
Max. working altitude	< 2000m 【2】
Cooling concept	Smart air cooling
Noise	≤75dBA
Fire suppression system	With fire alarm system
Auxiliary power interface	AC480V/60Hz, 3P4W
Auxiliary system peak power requirement @45℃, PF0.8	39kVA
Communication interfaces	Ethernet
Communication protocols	Modbus TCP/IP
Standard color	RAL 9003
Compliance	UL1973, NFPA69, NFPA72, NFPA855, CFC UN3536, UL9540A, UL9540

Note:

【1】 Power derating is performed when the ambient temperature is below -15℃ or above +45℃.

【2】 Power derating is performed when the altitude is between 2000-3000m.

SC5000UD-MV

Power Conversion System



HIGH YIELD

- Advanced three-level technology, max. efficiency 99%
- Wide DC voltage operation window, full power operation at 1500V



SMART O&M

- Modular design, easy for maintenance
- IP65 protection degree, easy for outdoor installation
- C5 anti-corrosion degree, adjust to applications close to the sea



FLEXIBLE APPLICATION

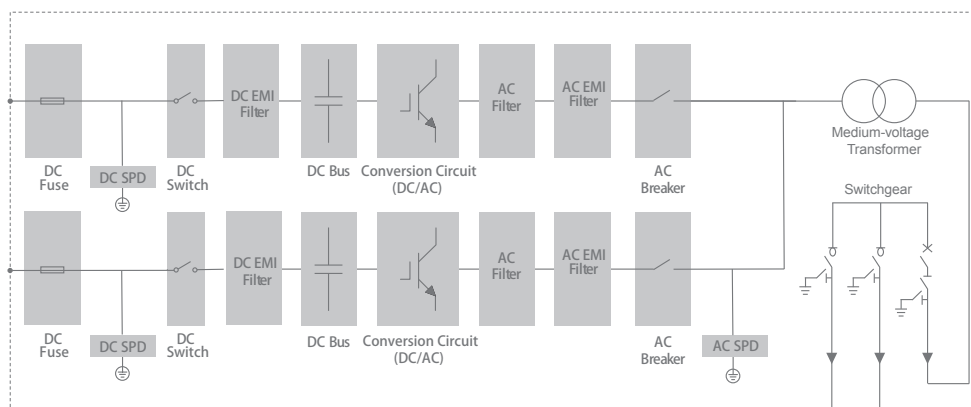
- Bidirectional power conversion system with full four-quadrant operation
- Compatible with high voltage battery system, low system cost
- Battery charge & dis-charge management and black start function integrated



GRID SUPPORT

- Compliant with CE, IEC 62477, IEC 61000 and grid regulations
- Fast active/reactive power response
- L/HVRT, FRT, soft start/stop, specified power factor control and reactive power support

CIRCUIT DIAGRAM

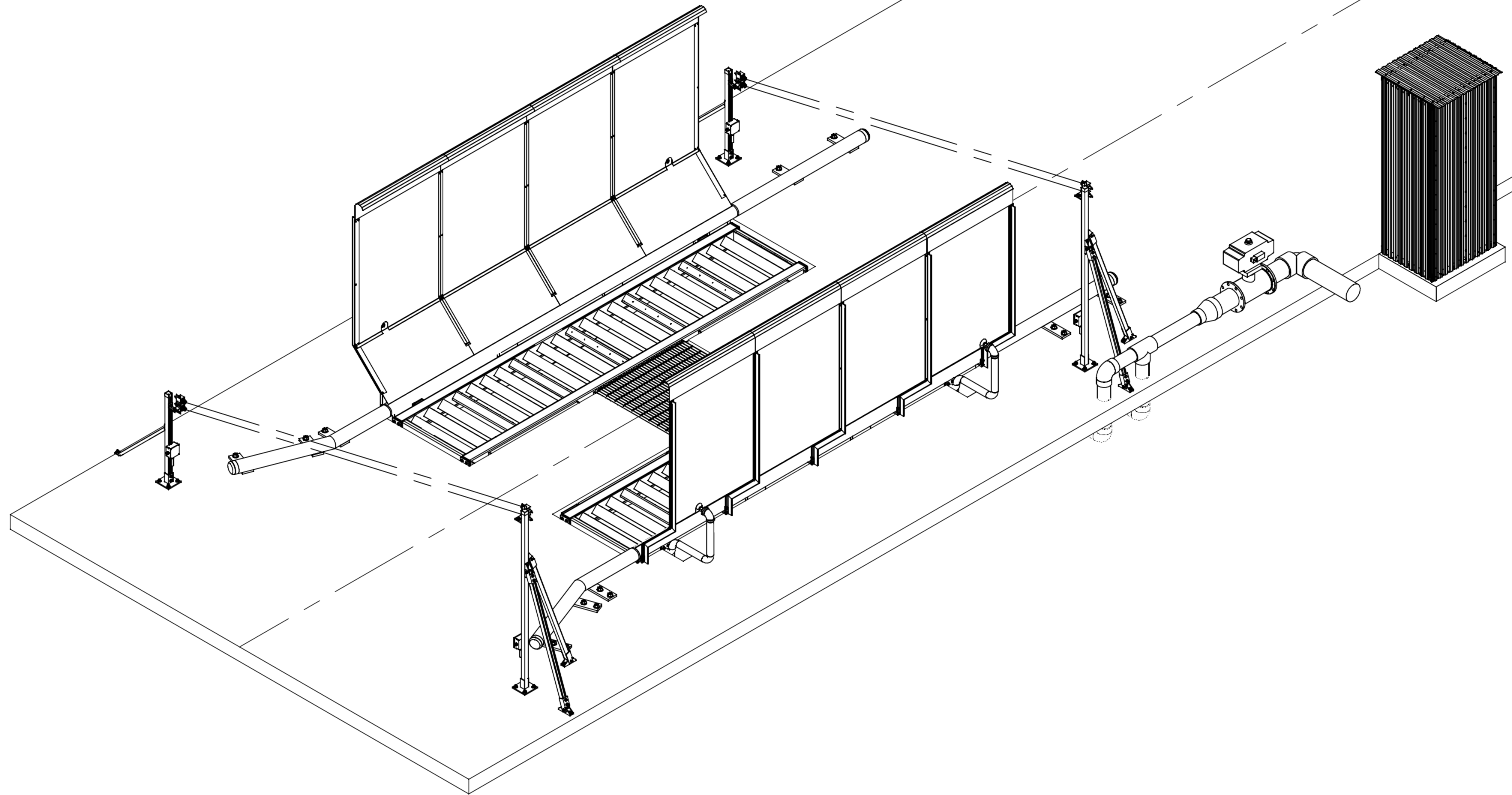


Type Designation	SC5000UD-MV
DC side	
Max. DC voltage	1500 V
Min. DC voltage	1300 V
DC voltage range	1300 – 1500 V
Max. DC current	2154 A*2
No. of DC inputs	2
AC side (Grid)	
AC output power	5000 kVA @ 40 °C / 5500 kVA @ 30 °C
Converter port max. AC output current	3208 A @ 40 °C / 3528 A @ 30 °C
Converter port nominal AC voltage	900 V
Converter port AC voltage range	792 – 990 V
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz
Harmonic (THD)	< 3 % (at nominal power)
Power factor at nominal power / Adjustable power factor	> 0.99 / 1 leading – 1 lagging
Adjustable reactive power range	-100 % – 100 %
Feed-in phases / AC connection	3 / 3
AC side (Off-Grid)	
Converter port nominal AC voltage	900 V
Converter port AC voltage range	792 – 990 V
AC voltage Distortion	< 3 % (Linear load)
DC voltage component	< 0.5 % Un (Linear balance load)
Unbalance load Capacity	100 %
Nominal frequency / Frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz
Efficiency	
Converter max. efficiency	99 %
Transformer	
Transformer rated power	5000 kVA
Transformer max. power	5500 kVA
LV / MV voltage	0.9 kV / 20 – 35 kV
Transformer vector	Dy11
Transformer cooling type	ONAN
Oil type	Mineral oil (PCB free) or degradable oil on request
Protection	
DC input protection	Load break switch + fuse
Converter output protection	Circuit breaker
AC output protection	Circuit breaker
Surge protection	DC Type II / AC Type II
Grid monitoring / Ground fault monitoring	Yes / Yes
Insulation monitoring	Yes
Overheat protection	Yes
General Data	
Dimensions (W*H*D)	6058*2896*2438 mm
Weight	18000 kg
Degree of protection	IP54 (Converter: IP65)
Operating ambient temperature range	-35 to 60 °C (> 40 °C derating)
Allowable relative humidity range	0 – 100 %
Cooling method	Temperature controlled forced air cooling
Max. operating altitude	4000 m (> 2000 m derating)
Display	LED, WEB HMI
Communication	RS485, CAN, Ethernet
Compliance	CE, IEC 62477-1, IEC 61000-6-2, IEC 61000-6-4
Grid support	L/HVRT, FRT, active & reactive power control and power ramp rate control, Volt-var, Volt-watt, Frequency-watt



APPENDIX A-8: TIRE WASH OUT STATION

NOTE:
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 FOR ANY WORK OTHER THAN THAT OF INTERCLEAN
 EQUIPMENT INC. WITHOUT SAID COMPANY'S
 EXPRESSED PERMISSION. ALL RIGHTS OF INVENTION
 OR DESIGN ARE RESERVED.



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InterClean Equipment

DESIGN:	DRAWN:
Ed	Ed
CHECK:	APPR:
SL	SL
SCALE:	
NO SCALE	

XT40 FRESH WATER WASH SYSTEM
 3-D VIEW

APPENDIX B: TITLE INSURANCE COMMITMENTS

**ALTA Commitment
SCHEDULE A**

[Transaction Identification Data, for which the Company assumes no liability as set forth in Commitment Condition 5.e.:

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

Commitment Number: 22000370945-02

Revision Number: 2

Agreement Number:]

1. Commitment Date: April 28, 2023, 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:

[Shari A. Benotti](#)

5. The Land is described as follows:

SEE ATTACHED SCHEDULE A - EXHIBIT A

SCHEDULE A - EXHIBIT A

Parcel 1:

Parcel ID No.: 123306000002

S½S½ Section 6, Township 3 North, Range 55 West of the 6th P.M., Morgan County, Colorado.

Parcel 2:

Parcel ID No.: 123307000001

N½N½ Section 7, Township 3 North, Range 55 West of the 6th P.M, Morgan County, Colorado.

Parcel 3:

Parcel ID No.: 123112000001

N½NE¼ Section 12, Township 3 North, Range 56 West of the 6th P.M., Morgan County, Colorado.

SCHEDULE B – I

Requirements

File No.: 22000370945-02

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.
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.

COMMITMENT FOR TITLE INSURANCE

SCHEDULE B – II

Exceptions

File No.: 22000370945-02

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.

Special Exceptions:

11. Taxes for 2022 in the amount of \$137.96 are paid.
Parcel ID No.: 123306000002 (Parcel 1)

Taxes for 2022 in the amount of \$137.08 are paid.
Parcel ID No.: 123307000001 (Parcel 2)

Taxes for 2022 in the amount of \$67.80 are paid.
Parcel ID No.: 123112000001 (Parcel 3)
12. The effect of inclusions in any general or specific water conservancy, fire protection, soil conservation or other district
13. Reservations or exceptions contained in U.S. Patents, or in Acts authorizing the issuance thereof, recorded January 18, 1926 as [Reception No. 156857](#) in Public Records of Morgan County, Colorado, reserving 1) all coal and other minerals, and the right to prospect for, mine, and remove coal from the same 2) rights of way for ditches and canals constructed under the authority of the United States. (Parcel 1, 2, 3)
14. Lease for Oil and Gas by and between United States Department of the Interior Bureau of Land Management, as Grantor and Floyd H. Hoffman, as Grantee dated June 1, 1971, and recorded May 25, 1971 as [Reception No. 565738](#) in Public Records of Morgan County, Colorado. (Parcel 3)

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. Lease for Oil and Gas Lands by and between United States Department of the Interior Bureau of Land Management, as Grantor and Adah G. Macauley, as Grantee dated March 1, 1951, and recorded April 6, 1951 as [Reception No. 367006](#) in Public Records of Morgan County, Colorado. (Parcel 1 and 2)

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. Offer to Lease and Lease for Oil and Gas by and between United States Department of the Interior Bureau of Land Management, as Grantor and Anadarko Petroleum Corporation, as Grantee dated February 29, 1988, and recorded March 7, 1988 as [Reception No. 707678](#) in Public Records of Morgan County, Colorado. (Parcel 1 and 2)

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.
17. Easement in favor of Public Service Company of Colorado, a Colorado corporation, dated March 2, 1990, and recorded April 10, 1990 as [Reception No. 718783](#) in Public Records of Morgan County, Colorado. (Parcel 3)
18. Public Service Company of Colorado Easement in favor of Public Service Company of Colorado, a Colorado corporation, dated July 19, 1999, and recorded July 30, 1999 as [Reception No. 779656](#) in Public Records of Morgan County, Colorado. (Parcel 3)
19. Contract and Grant of Easement by and between Lila Uhlenhopp, and the United States of America, Department of Energy, Western Area Power Administration, dated May 5, 2006, and recorded May 31, 2006 as [Reception No. 835686](#) in Public Records of Morgan County, Colorado. (Parcel 3)
20. Easement in favor of Public Service Company of Colorado dated May 17, 1963, recorded June 11, 1963 as

[Reception No. 504238](#) in Public Records of Morgan County, Colorado. (Parcel 3)

21. Contract and Grant of Easement by and between John P. Nygaard and The United States of America dated April 1, 1949, recorded June 16, 1949 in [Book 460, Page 451](#), Public Records, Morgan County, Colorado. (Parcel 1 and 2)

**ALTA Commitment
SCHEDULE A**

[Transaction Identification Data, for which the Company assumes no liability as set forth in Commitment Condition 5.e.:

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

Commitment Number: 22000370945-02

Revision Number: 1

Agreement Number:]

1. Commitment Date: April 28, 2023, 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:

[Shari A. Benotti](#)

5. The Land is described as follows:

SEE ATTACHED SCHEDULE A - EXHIBIT A

SCHEDULE A - EXHIBIT A

Parcel 1:

Parcel ID No.: 123306000002

S½S½ Section 6, Township 3 North, Range 55 West of the 6th P.M., Morgan County, Colorado.

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Parcel ID No.: 123307000001

N½N½ Section 7, Township 3 North, Range 55 West of the 6th P.M, Morgan County, Colorado.

Parcel 3:

Parcel ID No.: 123112000001

N½NE¼ Section 12, Township 3 North, Range 56 West of the 6th P.M., Morgan County, Colorado.

SCHEDULE B – I

Requirements

File No.: 22000370945-02

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.
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.

COMMITMENT FOR TITLE INSURANCE

SCHEDULE B – II

Exceptions

File No.: 22000370945-02

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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.

Special Exceptions:

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Parcel ID No.: 123306000002 (Parcel 1)

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13. Reservations or exceptions contained in U.S. Patents, or in Acts authorizing the issuance thereof, recorded January 18, 1926 as [Reception No. 156857](#) in Public Records of Morgan County, Colorado, reserving 1) all coal and other minerals, and the right to prospect for, mine, and remove coal from the same 2) rights of way for ditches and canals constructed under the authority of the United States. (Parcel 1, 2, 3)
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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.
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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.
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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.
17. Easement in favor of Public Service Company of Colorado, a Colorado corporation, dated March 2, 1990, and recorded April 10, 1990 as [Reception No. 718783](#) in Public Records of Morgan County, Colorado. (Parcel 3)
18. Public Service Company of Colorado Easement in favor of Public Service Company of Colorado, a Colorado corporation, dated July 19, 1999, and recorded July 30, 1999 as [Reception No. 779656](#) in Public Records of Morgan County, Colorado. (Parcel 3)
19. Contract and Grant of Easement by and between Lila Uhlenhopp, and the United States of America, Department of Energy, Western Area Power Administration, dated May 5, 2006, and recorded May 31, 2006 as [Reception No. 835686](#) in Public Records of Morgan County, Colorado. (Parcel 3)
20. Easement in favor of Public Service Company of Colorado dated May 17, 1963, recorded June 11, 1963 as

[Reception No. 504238](#) in Public Records of Morgan County, Colorado. (Parcel 3)

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55 Madison Street, Suite 400
Denver, CO 80206

Date: August 03, 2022
File Number: 22000480730
Property: Sec's 5, 7 & 8 Twn 3N Range 55W, CO 80723
Sec 12 Twn 3N Range 56W, CO
Sec 32 T4N Range 55W, CO

Please direct all Closing inquiries to:

Carla Burchard
Phone:
Email Address:

SELLER:
Ruth Ann Odle

Please direct all Title inquiries to:

Chesney Horn
Phone:
Email Address:

BUYER:
Cedar Holdco LLC, a Delaware limited liability company
Contact: Nate Crain
Contact: Philip Zaranka

BUYER ATTORNEY:
Reed Smith
Contact: Stephane D. Nguyen
Email:

SETTLEMENT AGENT:
Stewart Title Commercial Services - San Diego
7676 Hazard Center Drive, Ste. 1400
San Diego, CA 92108
Contact: Carla Burchard
Email:
Contact: Loretta Johnson
Email:
Delivery Method: Emailed

ATTACHED PLEASE FIND THE FOLLOWING:

Linked Title Commitment
Tax Information Report

We Appreciate Your Business and Look Forward to Serving You in the Future.



ALTA COMMITMENT FOR TITLE INSURANCE

ISSUED BY
STEWART TITLE GUARANTY COMPANY

NOTICE

IMPORTANT - READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY’S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I - Requirements; Schedule B, Part II - Exceptions; and the Commitment Conditions, STEWART TITLE GUARANTY COMPANY, a Texas corporation (the “Company”), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I - Requirements have not been met within six months after the Commitment Date, this Commitment terminates and the Company’s liability and obligation end.

Countersigned by:


Authorized Countersignature




Frederick H. Eppinger
President and CEO


David Hisey
Secretary

Stewart Title Guaranty Company
7676 Hazard Center Drive, Ste 1400
San Diego, CA 92108
(619) 692-1600
Agent ID: 06J050

This page is only a part of a 2016 ALTA® Commitment for Title Insurance. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I - Requirements; and Schedule B, Part II - Exceptions; and a countersignature by the Company or its issuing agent that may be in electronic form.

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COMMITMENT CONDITIONS

1. DEFINITIONS

- (a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
- (b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
- (c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
- (d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
- (e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
- (f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
- (g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
- (h) "Title": The estate or interest described in Schedule A.

2. If all of the Schedule B, Part I - Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:

- (a) the Notice;
- (b) the Commitment to Issue Policy;
- (c) the Commitment Conditions;
- (d) Schedule A;
- (e) Schedule B, Part I - Requirements;
- (f) Schedule B, Part II - Exceptions; and
- (g) a countersignature by the Company or its issuing agent that may be in electronic form.

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

- (a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
 - (i) comply with the Schedule B, Part I - Requirements;
 - (ii) eliminate, with the Company's written consent, any Schedule B, Part II - Exceptions; or
 - (iii) acquire the Title or create the Mortgage covered by this Commitment.
- (b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
- (c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.

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File No. 22000480730

ALTA Commitment For Title Insurance 8-1-16 (4-2-18)

Page 2 of 3



- (d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
- (e) The Company shall not be liable for the content of the Transaction Identification Data, if any.
- (f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I - Requirements have been met to the satisfaction of the Company.
- (g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT

- (a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
- (b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
- (c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
- (d) The deletion or modification of any Schedule B, Part II - Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
- (e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
- (f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. ARBITRATION

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is \$2,000,000 or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at <<http://www.alta.org/arbitration>>.

STEWART TITLE GUARANTY COMPANY

All notices required to be given the Company and any statement in writing required to be furnished the Company shall be addressed to it at P.O. Box 2029, Houston, Texas 77252-2029.

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File No. 22000480730

ALTA Commitment For Title Insurance 8-1-16 (4-2-18)

Page 3 of 3



**ALTA COMMITMENT FOR TITLE INSURANCE
SCHEDULE A**

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Transaction Identification Data for reference only:

Issuing Agent: Stewart Title Guaranty Company
Issuing Office: 7676 Hazard Center Drive, Ste 1400, San Diego, CA 92108
Issuing Office's ALTA® Registry ID: 1027978
Loan ID Number: N/A
Commitment Number: 22000480730
Issuing Office File Number: 22000480730
Property Address: Sec's 5, 7 & 8 Twn 3N Range 55W, CO 80723
Sec 12 Twn 3N Range 56W, CO
Sec 32 T4N Range 55W, CO

Revision Number:

1. Commitment Date: July 25, 2022 at 5:30 P.M.

2. Policy to be issued:	Proposed Policy Amount
(a) ALTA Owner's Policy Extended	\$11,250,000.00
Proposed Insured: Cedar Holdco LLC, a Delaware limited liability company	
(b) ALTA Loan Policy Extended	TBD
Proposed Insured: To Be Determined	

3. The estate or interest in the Land described or referred to in this Commitment is:

Fee Simple

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

Ruth Ann Odle

5. The Land is described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

STEWART TITLE GUARANTY COMPANY

STATEMENT OF CHARGES

These charges are due and payable before a policy can be issued
See Attached Statement of Charges



Authorized Countersignature

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**ALTA COMMITMENT FOR TITLE INSURANCE
SCHEDULE A**

ISSUED BY
STEWART TITLE GUARANTY COMPANY

**EXHIBIT "A"
SCHEDULE A**

LEGAL DESCRIPTION

++++Preliminary Legal Description subject to Schedule B-I Requirements++++

Parcel I:

All of Section 5, Township 3 North, Range 55 West of the 6th P.M., EXCEPT that parcel deeded in [Book 438 at Page 261](#),
County of Morgan,
State of Colorado.

Parcel II:

All of Section 8, Township 3 North, Range 55 West of the 6th P.M.,
County of Morgan,
State of Colorado.

Parcel III:

The South 1/2 of the North 1/2 and the South 1/2 of Section 7, Township 3 North, Range 55 West of the 6th P.M.,
County of Morgan,
State of Colorado.

Parcel IV:

That part of the Southwest 1/4 of Section 32, Township 4, North, Range 55 West of the 6th P.M., lying South of the
Railroad,
County of Morgan,
State of Colorado.

Parcel V:

The Southeast 1/4 of the Northeast 1/4 and the East 1/2 of the Southeast 1/4 of Section 12, Township 3 North, Range 56
West of the 6th P.M., EXCEPT a strip of land 30 feet wide off the South side throughout the entire length of the Southeast
1/4 of said Section as conveyed to County of Morgan in Quit Claim Deed recorded May 29, 1896 in Book 8 at Page 235,
County of Morgan,
State of Colorado.

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File No. 22000480730

CO ALTA Commitment For Title Insurance Schedule 8-1-16 (4-2-18)

Page 2 of 3



**ALTA COMMITMENT FOR TITLE INSURANCE
SCHEDULE A**

ISSUED BY
STEWART TITLE GUARANTY COMPANY

STATEMENT OF CHARGES

Morgan Basic Rate	
2006 ALTA Owner's Policy:	\$19,254.00
Owner's Extended Coverage:	\$65.00
ALTA 39-06:	N/C
2006 ALTA Loan Policy:	\$175.00
Lender's Extended Coverage:	N/C
ALTA 39-06:	N/C
Tax Certificates:	\$120.00
(Sch. # 123112000002	
Sch. # 123307000002	
Sch. # 123305000001	
Sch. # 123308000001):	

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ALTA COMMITMENT FOR TITLE INSURANCE SCHEDULE B PART I

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Requirements

File No.: 22000480730

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. Proper instrument(s) creating the estate or interest to be insured must be executed and duly filed for record:
 - a. Provide the Company with an ALTA/NSPS Land Title Survey creating the legal description of the Land to be conveyed and excluding those portions of Sections 5 and 8 that will be retained by seller.
 - b. Warranty Deed from Ruth Ann Odle, vesting fee simple title in Cedar Holdco LLC, a Delaware limited liability company.
NOTE: A [Real Property Transfer Declaration \(TD-1000\)](#) is required with each transfer in the State of Colorado.
NOTE: Deed must include a notation as to the legal address of the grantee.
 - c. Deed of Trust from Cedar Holdco LLC, a Delaware limited liability company, to the Public Trustee, for the benefit of Proposed Lender.
6. Receipt by the Company of [Commercial Lien Affidavit](#), executed by Ruth Ann Odle.
NOTE: If the property is currently under construction or new improvements have been made, this commitment is subject to additional requirements.
NOTE: Affiant must affirm that no lease contains any option to purchase, right of first offer, or right of first refusal.
7. Receipt by the Company of [Commercial Lien Affidavit](#), executed by Cedar Holdco LLC, a Delaware limited liability company.
NOTE: If the property is currently under construction or new improvements have been made, this commitment is subject to additional requirements.
8. Payment of taxes and assessments now due and payable.
9. Approval to issue this policy must be obtained from authorized Underwriting Personnel of Stewart Title Guaranty Company. This commitment and any policies to be issued are subject to additional limitations, requirements or exceptions made by Stewart Title Guaranty Company.
10. Receipt by the Company relating to Cedar Holdco LLC, a Delaware limited liability company, the Company requires for its review the following:
 - a.) Copy of the fully executed Operating Agreement of the limited liability company and any amendments thereof,
 - b.) Execution and recordation of Statement of Authority pursuant to the provisions of Section 38-30-172 C.R.S.

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ALTA COMMITMENT FOR TITLE INSURANCE SCHEDULE B PART I

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Requirements

NOTE: The company reserves the right to make additional requirements upon its review of this document.

NOTE: If the sales price of the subject property exceeds \$100,000.00, the seller shall be required to comply with the Disclosure of Withholding Provisions of C.R.S. § 39-22-604.5, by completing [Colorado DR 1083](#) (Nonresident Withholding).

NOTE: Please be advised that our search did not disclose any open Deed of Trust of record. If you should have knowledge of any outstanding obligations, please contact the Title Department immediately for further review prior to closing.

NOTE: Please be advised that our search did not disclose any activity related to the cultivation, manufacture, distribution and/or sale of marijuana. If you should have knowledge of any of these activities, please contact the Title Department immediately for further review by senior underwriting prior to closing.

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ALTA COMMITMENT FOR TITLE INSURANCE

SCHEDULE B PART II

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Exceptions

File No.: 22000480730

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

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

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. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the title that would be disclosed by an accurate and complete land survey of the Land and not shown by the public records.
4. Any lien, or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the public records.
5. 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.
6. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) minerals of whatsoever kind, subsurface and surface substances, in, on, under and that may be produced from the Land, together with all rights, privileges, and immunities relating thereto, whether or not the matters excepted under (a), (b) or (c) are shown by the Public Records or listed in Schedule B.
7. Water rights, claims or title to water.
8. a. Taxes for the year 2022, and subsequent years; special assessments or charges not certified to the County Treasurer.
(NOTE: This will appear on the Owner's Policy, upon proof of payment.)
b. Taxes for the year 2022, a lien, but not yet due or payable.
(NOTE: This will appear on the Loan Policy, upon proof of payment.)
9. Conveyance of a 30 foot wide strip of land on the South side of the entire length of the Southeast Quarter of Section 12, Township 3 North, Range 55 West, to Morgan County in Quit Claim Deed recorded May 29, 1896 in Book 8 at Page 235, as disclosed on Warranty Deeds recorded September 3, 1985 in Book 871 at [Pages 590-593](#) and in Warranty Deed recorded June 23, 1989 in [Book 913 at Page 786](#).
(Affects Parcel V)
10. Reservations contained in an unrecorded [Patent No. 248813](#), dated February 19, 1912, subject to any vested and

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ALTA COMMITMENT FOR TITLE INSURANCE

SCHEDULE B PART II

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Exceptions

accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcel V)

11. Reservations contained in an unrecorded [Patent No. 366307](#), dated November 21, 1913, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcel III)
12. Reservations contained in an unrecorded [Patent No. 427401](#), dated August 26, 1914, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcels I & II)
13. Reservations contained in an unrecorded [Patent No. 510913](#), dated January 31, 1916, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcel III)
14. Reservations contained in an unrecorded [Patent No. 632401](#), dated May 29, 1918, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcel II)
15. Reservations contained in an unrecorded [Patent No. 706662](#), dated September 15, 1919, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and

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ALTA COMMITMENT FOR TITLE INSURANCE

SCHEDULE B PART II

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Exceptions

reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcel II)

16. Reservations contained in an unrecorded [Patent No. 724245](#), dated December 15, 1919, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcel II)
17. Reservations contained in an unrecorded [Patent No. 755346](#), dated June 10, 1920, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts, and also subject to the right of the proprietor of a vein or lode to extract and remove his ore therefrom, should the same be found to penetrate or intersect the premises hereby granted as provided by law.
NOTE: 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.
(Affects Parcels I & II)
18. Reservations contained in an unrecorded [Patent No. 785387](#), dated December 8, 1920, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by the authority of the United States.
(Affects Parcel IV)
19. Reservations contained in an unrecorded [Patent No. 833066](#), dated November 18, 1921, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcel I)
20. Reservations of all the coal and other minerals, together with the right to prospect for, mine and remove the same, as reserved in the United States Patent recorded June 21, 1930 in [Book 295 at Page 103](#).
NOTE: 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.
(Affects Parcels I & II)

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ALTA COMMITMENT FOR TITLE INSURANCE

SCHEDULE B PART II

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Exceptions

21. Reservations contained in an unrecorded [Patent No. 1056654](#), dated August 17, 1932, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts, and also subject to the right of the proprietor of a vein or lode to extract and remove his ore therefrom, should the same be found to penetrate or intersect the premises hereby granted as provided by law.
NOTE: 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.
(Affects Parcels I & II)
22. Oil and Gas Lease recorded August 17, 1950 in [Book 477 at Page 11](#).
NOTE: Partial Assignment of Oil and Gas Lease recorded May 26, 1958 in [Book 573 at Page 330](#).
NOTE: Mineral Deed recorded July 20, 1960 in [Book 633 at Page 116](#).
NOTE: Oil and Gas Lease recorded September 23, 1960 in [Book 635 at Page 117](#).
NOTE: Mineral Deed recorded October 28, 1960 in [Book 636 at Page 288](#).
NOTE: Mineral Deed recorded September 17, 1981 in [Book 820 at Page 1000](#).
NOTE: Mineral Deed recorded September 21, 1981 in [Book 821 at Page 41](#).
NOTE: Mineral Deed recorded September 21, 1981 in [Book 821 at Page 43](#).
NOTE: Mineral Deed recorded September 24, 1981 in [Book 821 at Page 165](#).
NOTE: Mineral Deed recorded September 28, 1981 in [Book 821 at Page 275](#).
NOTE: Mineral Deed recorded October 7, 1981 in [Book 821 at Page 629](#).
NOTE: Mineral Deed recorded December 28, 1981 in [Book 824 at Page 891](#).
NOTE: Mineral Deed recorded December 28, 1981 in [Book 824 at Page 893](#).
NOTE: 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.
(Affects Parcels I-IV)
23. Oil and Gas Lease recorded November 30, 1950 in [Book 480 at Page 276](#).
NOTE: 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.
(Affects Parcel I)
24. Oil and Gas Lease recorded February 27, 1951 in [Book 487 at Page 101](#).
NOTE: Notice of Transfer recorded February 27, 1951 in Book 487 at Page 119.
NOTE: 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.
(Affects Parcel V)
25. Oil and Gas Lease recorded March 16, 1951 in [Book 490 at Page 105](#).
NOTE: 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.
(Affects Parcel II)
26. Oil and Gas Lease recorded April 6, 1951 in [Book 490 at Page 183](#).
NOTE: 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.

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ALTA COMMITMENT FOR TITLE INSURANCE

SCHEDULE B PART II

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Exceptions

(Affects Parcel I)

27. Right Of Way granted to Goodall Pipe Line Company recorded September 30, 1953 in [Book 621 at Page 68](#).
28. Oil and Gas Lease recorded September 23, 1960 in [Book 635 at Page 123](#).
NOTE: 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.
(Affects Parcel II)
29. Oil and Gas Lease recorded September 23, 1960 in [Book 635 at Page 135](#).
NOTE: 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.
(Affects Parcel II)
30. Terms, provisions, conditions and reservations contained in Easement granted to Public Service Company of Colorado recorded February 28, 1961 in [Book 641 at Page 407](#).
(Affects Parcel I)
31. Easement granted to Public Service Company of Colorado recorded June 11, 1967 in [Book 674 at Page 83](#).
(Affects Parcel V)
32. Right-Of-Way Easement granted to Tri-State Generation and Transmission Association, Inc., recorded December 21, 1971 in [Book 726 at Page 873](#).
(Affects Parcel I)
33. Easement granted to Tri-State Generation & Transmission Association, Inc., recorded November 28, 1979 in [Book 798 at Page 782](#).
(Affects Parcel I)
34. Oil and Gas Lease recorded March 18, 1981 in [Book 813 at Page 218](#).
NOTE: 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.
(Affects Parcels II & III)
35. Oil and Gas Lease recorded March 23, 1981 in [Book 813 at Page 415](#).
NOTE: 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.
(Affects Parcel II)
36. Oil and Gas Lease recorded September 17, 1981 in [Book 814 at Page 722](#).
NOTE: 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.
(Affects Parcels II & III)
37. Easement granted to Public Service Company of Colorado recorded May 29, 1984 in [Book 856 at Pages 170, 172 and 174](#).

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ALTA COMMITMENT FOR TITLE INSURANCE

SCHEDULE B PART II

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Exceptions

(Affects Parcel I)

38. Oil and Gas Lease recorded June 5, 1986 in [Book 880 at Page 308](#).
NOTE: Oil and Gas Lease recorded June 5, 1986 in [Book 880 at Page 310](#).
NOTE: Oil and Gas Lease recorded June 5, 1986 in [Book 880 at Page 312](#).
NOTE: 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.
(Affects Parcels II & III)
39. Oil and Gas Lease recorded January 28, 1986 in [Book 880 at Page 298](#).
NOTE: Oil and Gas Lease recorded January June 5, 1986 in [Book 880 at Page 300](#).
NOTE: Oil and Gas Lease recorded January June 5, 1986 in [Book 880 at Page 302](#).
NOTE: Oil and Gas Lease recorded June 5, 1986 in [Book 880 at Page 304](#).
NOTE: 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.
(Affects Parcels I, II & III)
40. Oil and Gas Lease recorded June 5, 1986 in [Book 880 at Page 306](#).
NOTE: 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.
(Affects Parcel III)
41. Reservation of oil, gas and other minerals as contained in Warranty Deeds recorded October 27, 1988 in [Book 907 at Page 228](#) and in [Book 907 at Page 229](#) and in [Book 907 at Page 230](#) and [Book 907 at Page 231](#).
NOTE: 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.
(Affects Parcels I, II & IV)
42. Resolution 90 BCC 19 Road Vacation, vacating County Road Q East of Road 30, specifically between Sections 7 and 18, recorded April 27, 1990 in [Book 921 at Page 810](#).
43. Case No. 13282, An Order for the inclusion of the subject property into the Morgan County Quality Water District, Morgan County, Colorado, recorded July 25, 1991 in [Book 934 at Page 731](#).
(Affects Parcel III)
44. Case No. 13282, An Order for the inclusion of the subject property into the Morgan County Quality Water District, Morgan County, Colorado, recorded December 10, 1999 at [Reception No. 782123](#).
(Affects Parcel V)
45. Terms, conditions, provisions, obligations and agreements contained in Lease Granting Rights to Nonpotable Water recorded November 9, 2007 at [Reception No. 846215](#).
NOTE: First Amendment to Lease Granting Rights to Nonpotable Water recorded November 9, 2007 at [Reception No. 846218](#).
(Affects Parcels I, II and III)
46. Terms, conditions, provisions and obligations of Easement Deed by Court Order in Settlement of Landowner

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ALTA COMMITMENT FOR TITLE INSURANCE SCHEDULE B PART II

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STEWART TITLE GUARANTY COMPANY

Exceptions

Action granted to Qwest Communications Company, LLC, a Delaware limited liability company, et al; recorded March 13, 2013 at [Reception No. 880959](#).
(Affects Parcel IV)

47. Terms, provisions and reservations contained in Memorandum of Lease for Nontributary Ground Water recorded April 14, 2015 at [Reception No. 892842](#).

NOTE: Ratification of Nontributary Ground Water Lease recorded October 12, 2021 at [Reception No. 936002](#).
(Affects Parcels I-III)

48. Memorandum of Water Pipeline Agreement recorded June 9, 2017 at [Reception No. 906050](#).
(Affects Parcels I-III)

49. Easement granted in Easement Purchase Agreement referenced in Memorandum of Water Pipeline Agreement recorded June 9, 2017 at [Reception No. 906051](#).
(Affects Parcel IV)

50. Right of Way for County Road Q along the Southern boundary line of Section 12.
(Affects Parcel V)

51. Right of Way for Railroad as shown on Warranty Deed recorded May 27, 1925 in [Book 222 at Page 421](#).
(Affects Parcel IV)

52. Existing leases and tenancies.
NOTE: Upon receipt by the Company of the Commercial Lien Affidavit, this exception may be modified or deleted.

NOTE: Exceptions 1 and 4 may be deleted from the policies, provided the seller and buyer execute the Company's affidavits, as required herein, and the Company approves such deletions. Exceptions 2 and 3 may be deleted from the policies, provided the Company receives and approves the survey or survey affidavit required herein. Exception 5 will not appear on the policies, provided the Company, or its authorized agent, conducts the closing of the proposed transaction and is responsible for the recordation of the documents.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I - Requirements; and Schedule B, Part II - Exceptions; and a countersignature by the Company or its issuing agent that may be in electronic form.

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File No. 22000480730

CO ALTA Commitment For Title Insurance Schedule 8-1-16 (4-2-18) COM

Page 7 of 7





Carla Burchard

Stewart Title Guaranty Company -
Commercial Services
7676 Hazard Center Drive, Ste 1400
San Diego, CA 92108
(760) 602-4299 Phone
(619) 923-2921 Fax

MINERAL DISCLOSURE

To comply with the provisions of C.R.S. 10-11-123, the Company makes the following disclosure:

- a. That there is recorded evidence that a mineral estate has been severed, leased or otherwise conveyed from the surface estate and that there is a substantial likelihood that a third party holds some or all interest in oil, gas, other minerals, or geothermal energy in the property; and
- b. That such mineral estate may include the right to enter and use the property without the surface owner's permission.

NOTE: THIS DISCLOSURE APPLIED ONLY IF SCHEDULE B, SECTION 2 OF THE TITLE COMMITMENT HEREIN INCLUDES AN EXCEPTION FOR SEVERED MINERALS.

Stewart Title Guaranty Company - Commercial Services

FUNDS DISCLOSURE

The title company, Stewart Title Guaranty Company - Commercial Services in its capacity as escrow agent, has been authorized to receive funds and disburse them when all funds received are either: (a) available for immediate withdrawal as a matter of right from the financial institution in which the funds are deposited, or (b) are available for immediate withdrawal as a consequence of an agreement of a financial institution in which the funds are to be deposited or a financial institution upon which the funds are to be drawn.

The title company is disclosing to you that the financial institution may provide the title company with computer accounting or auditing services, or other bank services, either directly or through a separate entity which may or may not be affiliated with the title company. This separate entity may charge the financial institution reasonable and proper compensation for these services and retain any profits there from.

The title company may also receive benefits from the financial institution in the form of advantageous interest rates on loans, sometimes referred to as preferred rate loan programs, relating to loans the title company has with the financial institution. The title company shall not be liable for any interest or other charges on the earnest money and shall be under no duty to invest or reinvest funds held by it at any time. In the event that the parties to this transaction have agreed to have interest on earnest money deposit transferred to a fund established for the purpose of providing affordable housing to Colorado residents, then the earnest money shall remain in an account designated for such purpose, and the interest money shall be delivered to the title company at closing.

STG Privacy Notice Stewart Title Companies

WHAT DO THE STEWART TITLE COMPANIES DO WITH YOUR PERSONAL INFORMATION?

Federal and applicable state law and regulations give consumers the right to limit some but not all sharing. Federal and applicable state law regulations also require us to tell you how we collect, share, and protect your personal information. Please read this notice carefully to understand how we use your personal information. This privacy notice is distributed on behalf of the Stewart Title Guaranty Company and its title affiliates (the Stewart Title Companies), pursuant to Title V of the Gramm-Leach-Bliley Act (GLBA).

The types of personal information we collect and share depend on the product or service that you have sought through us. This information can include social security numbers and driver's license number.

All financial companies, such as the Stewart Title Companies, need to share customers' personal information to run their everyday business—to process transactions and maintain customer accounts. In the section below, we list the reasons that we can share customers' personal information; the reasons that we choose to share; and whether you can limit this sharing.

Reasons we can share your personal information.	Do we share	Can you limit this sharing?
For our everyday business purposes — to process your transactions and maintain your account. This may include running the business and managing customer accounts, such as processing transactions, mailing, and auditing services, and responding to court orders and legal investigations.	Yes	No
For our marketing purposes — to offer our products and services to you.	Yes	No
For joint marketing with other financial companies	No	We don't share
For our affiliates' everyday business purposes — information about your transactions and experiences. Affiliates are companies related by common ownership or control. They can be financial and non-financial companies. <i>Our affiliates may include companies with a Stewart name; financial companies, such as Stewart Title Company</i>	Yes	No
For our affiliates' everyday business purposes — information about your creditworthiness.	No	We don't share
For our affiliates to market to you — For your convenience, Stewart has developed a means for you to opt out from its affiliates marketing even though such mechanism is not legally required.	Yes	Yes, send your first and last name, the email address used in your transaction, your Stewart file number and the Stewart office location that is handling your transaction by email to optout@stewart.com or fax to 1-800-335-9591.
For non-affiliates to market to you. Non-affiliates are companies not related by common ownership or control. They can be financial and non-financial companies.	No	We don't share

We may disclose your personal information to our affiliates or to non-affiliates as permitted by law. If you request a transaction with a non-affiliate, such as a third party insurance company, we will disclose your personal information to that non-affiliate. [We do not control their subsequent use of information, and suggest you refer to their privacy notices.]

SHARING PRACTICES

How often do the Stewart Title Companies notify me about their practices?	We must notify you about our sharing practices when you request a transaction.
How do the Stewart Title Companies protect my personal information?	To protect your personal information from unauthorized access and use, we use security measures that comply with federal law. These measures include computer, file, and building safeguards.
How do the Stewart Title Companies collect my personal information?	We collect your personal information, for example, when you <ul style="list-style-type: none"> ▪ request insurance-related services ▪ provide such information to us We also collect your personal information from others, such as the real estate agent or lender involved in your transaction, credit reporting agencies, affiliates or other companies.
What sharing can I limit?	Although federal and state law give you the right to limit sharing (e.g., opt out) in certain instances, we do not share your personal information in those instances.

Contact us: *If you have any questions about this privacy notice, please contact us at: Stewart Title Guaranty Company, 1360 Post Oak Blvd., Ste. 100, Privacy Officer, Houston, Texas 77056*

Privacy Notice for California Residents

Pursuant to the California Consumer Privacy Act of 2018 ("CCPA"), Stewart Information Services Corporation and its subsidiary companies (collectively, "Stewart") are providing this **Privacy Notice for California Residents** ("CCPA Notice"). This CCPA Notice supplements the information contained in Stewart's existing privacy notice and applies solely to all visitors, users and others who reside in the State of California or are considered California Residents ("consumers" or "you"). Terms used but not defined shall have the meaning ascribed to them in the CCPA.

Information Stewart Collects

Stewart collects information that identifies, relates to, describes, references, is capable of being associated with, or could reasonably be linked, directly or indirectly, with a particular consumer, household, or device. Most of the information that Stewart collects in the course of its regular business is already protected pursuant to the Gramm-Leach-Bliley Act (GLBA). Additionally, much of this information comes from government records or other information already in the public domain. Personal information under the CCPA does not include:

- Publicly available information from government records.
- Deidentified or aggregated consumer information.
- Certain personal information protected by other sector-specific federal or California laws, including but not limited to the Fair Credit Reporting Act (FCRA), GLBA and California Financial Information Privacy Act (FIPA).

Specifically, Stewart has collected the following categories of personal information from consumers within the last twelve (12) months:

Category	Examples	Collected?
A. Identifiers.	A real name, alias, postal address, unique personal identifier, online identifier, Internet Protocol address, email address, account name, Social Security number, driver's license number, passport number, or other similar identifiers.	YES
B. Personal information categories listed in the California Customer Records statute (Cal. Civ. Code § 1798.80(e)).	A name, signature, Social Security number, physical characteristics or description, address, telephone number, passport number, driver's license or state identification card number, insurance policy number, education, employment, employment history, bank account number, credit card number, debit card number, or any other financial information, medical information, or health insurance information. Some personal information included in this category may overlap with other categories.	YES
C. Protected classification characteristics under California or federal law.	Age (40 years or older), race, color, ancestry, national origin, citizenship, religion or creed, marital status, medical condition, physical or mental disability, sex (including gender, gender identity, gender expression, pregnancy or childbirth and related medical conditions), sexual orientation, veteran or military status, genetic information (including familial genetic information).	YES
D. Commercial information.	Records of personal property, products or services purchased, obtained, or considered, or other purchasing or consuming histories or tendencies.	YES
E. Biometric information.	Genetic, physiological, behavioral, and biological characteristics, or activity patterns used to extract a template or other identifier or identifying information, such as, fingerprints, faceprints, and voiceprints, iris or retina scans, keystroke, gait, or other physical patterns, and sleep, health, or exercise data.	YES
F. Internet or other similar network activity.	Browsing history, search history, information on a consumer's interaction with a website, application, or advertisement.	YES
G. Geolocation data.	Physical location or movements.	YES
H. Sensory data.	Audio, electronic, visual, thermal, olfactory, or similar information.	YES
I. Professional or employment-related information.	Current or past job history or performance evaluations.	YES
J. Non-public education information (per the Family Educational Rights and Privacy Act (20 U.S.C. Section 1232g, 34 C.F.R. Part 99)).	Education records directly related to a student maintained by an educational institution or party acting on its behalf, such as grades, transcripts, class lists, student schedules, student identification codes, student financial information, or student disciplinary records.	YES
K. Inferences drawn from other personal information.	Profile reflecting a person's preferences, characteristics, psychological trends, predispositions, behavior, attitudes, intelligence, abilities, and aptitudes.	YES

Stewart obtains the categories of personal information listed above from the following categories of sources:

- Directly and indirectly from customers, their designees or their agents (For example, realtors, lenders, attorneys, etc.)
- Directly and indirectly from activity on Stewart's website or other applications.
- From third-parties that interact with Stewart in connection with the services we provide.

Use of Personal Information

Stewart may use or disclose the personal information we collect for one or more of the following purposes:

- To fulfill or meet the reason for which the information is provided.
- To provide, support, personalize, and develop our website, products, and services.
- To create, maintain, customize, and secure your account with Stewart.
- To process your requests, purchases, transactions, and payments and prevent transactional fraud.
- To prevent and/or process claims.
- To assist third party vendors/service providers who complete transactions or perform services on Stewart's behalf.
- As necessary or appropriate to protect the rights, property or safety of Stewart, our customers or others.
- To provide you with support and to respond to your inquiries, including to investigate and address your concerns and monitor and improve our responses.
- To personalize your website experience and to deliver content and product and service offerings relevant to your interests, including targeted offers and ads through our website, third-party sites, and via email or text message (with your consent, where required by law).
- To help maintain the safety, security, and integrity of our website, products and services, databases and other technology assets, and business.
- To respond to law enforcement or regulator requests as required by applicable law, court order, or governmental regulations.
- Auditing for compliance with federal and state laws, rules and regulations.
- Performing services including maintaining or servicing accounts, providing customer service, processing or fulfilling orders and transactions, verifying customer information, processing payments, providing advertising or marketing services or other similar services.
- To evaluate or conduct a merger, divestiture, restructuring, reorganization, dissolution, or other sale or transfer of some or all of our assets, whether as a going concern or as part of bankruptcy, liquidation, or similar proceeding, in which personal information held by us is among the assets transferred.

Stewart will not collect additional categories of personal information or use the personal information we collected for materially different, unrelated, or incompatible purposes without providing you notice.

Disclosure of Personal Information to Affiliated Companies and Nonaffiliated Third Parties

Stewart does not sell your personal information to nonaffiliated third parties. Stewart may share your information with those you have designated as your agent in the course of your transaction (for example, a realtor or a lender). Stewart may disclose your personal information to a third party for a business purpose. Typically, when we disclose personal information for a business purpose, we enter a contract that describes the purpose and requires the recipient to both keep that personal information confidential and not use it for any purpose except performing the contract.

We share your personal information with the following categories of third parties:

- Service providers and vendors (For example, search companies, mobile notaries, and companies providing credit/debit card processing, billing, shipping, repair, customer service, auditing, marketing, etc.)
- Affiliated Companies
- Litigation parties and attorneys, as required by law.
- Financial rating organizations, rating bureaus and trade associations.
- Federal and State Regulators, law enforcement and other government entities

In the preceding twelve (12) months, Stewart has disclosed the following categories of personal information for a business purpose:

- Category A: Identifiers
- Category B: California Customer Records personal information categories
- Category C: Protected classification characteristics under California or federal law
- Category D: Commercial Information
- Category E: Biometric Information
- Category F: Internet or other similar network activity
- Category G: Geolocation data
- Category H: Sensory data
- Category I: Professional or employment-related information
- Category J: Non-public education information
- Category K: Inferences

Consumer Rights and Choices

The CCPA provides consumers (California residents) with specific rights regarding their personal information. This section describes your CCPA rights and explains how to exercise those rights.

Access to Specific Information and Data Portability Rights

You have the right to request that Stewart disclose certain information to you about our collection and use of your personal information over the past 12 months. Once we receive and confirm your verifiable consumer request, Stewart will disclose to you:

- The categories of personal information Stewart collected about you.
- The categories of sources for the personal information Stewart collected about you.
- Stewart's business or commercial purpose for collecting that personal information.
- The categories of third parties with whom Stewart shares that personal information.
- The specific pieces of personal information Stewart collected about you (also called a data portability request).
- If Stewart disclosed your personal data for a business purpose, a listing identifying the personal information categories that each category of recipient obtained.

Deletion Request Rights

You have the right to request that Stewart delete any of your personal information we collected from you and retained, subject to certain exceptions. Once we receive and confirm your verifiable consumer request, Stewart will delete (and direct our service providers to delete) your personal information from our records, unless an exception applies.

Stewart may deny your deletion request if retaining the information is necessary for us or our service providers to:

1. Complete the transaction for which we collected the personal information, provide a good or service that you requested, take actions reasonably anticipated within the context of our ongoing business relationship with you, or otherwise perform our contract with you
2. Detect security incidents, protect against malicious, deceptive, fraudulent, or illegal activity, or prosecute those responsible for such activities.
3. Debug products to identify and repair errors that impair existing intended functionality.
4. Exercise free speech, ensure the right of another consumer to exercise their free speech rights, or exercise another right provided for by law.
5. Comply with the California Electronic Communications Privacy Act (Cal. Penal Code § 1546 *seq.*).
6. Engage in public or peer-reviewed scientific, historical, or statistical research in the public interest that adheres to all other applicable ethics and privacy laws, when the information's deletion may likely render impossible or seriously impair the research's achievement, if you previously provided informed consent.
7. Enable solely internal uses that are reasonably aligned with consumer expectations based on your relationship with us.
8. Comply with a legal obligation.
9. Make other internal and lawful uses of that information that are compatible with the context in which you provided it.

Exercising Access, Data Portability, and Deletion Rights

To exercise the access, data portability, and deletion rights described above, please submit a verifiable consumer request to us either:

- Calling us Toll Free at 1-866-571-9270
- Emailing us at Privacyrequest@stewart.com
- Visiting <http://stewart.com/ccpa>

Only you, or someone legally authorized to act on your behalf, may make a verifiable consumer request related to your personal information. You may also make a verifiable consumer request on behalf of your minor child.

To designate an authorized agent, please contact Stewart through one of the methods mentioned above.

You may only make a verifiable consumer request for access or data portability twice within a 12-month period. The verifiable consumer request must:

- Provide sufficient information that allows us to reasonably verify you are the person about whom we collected personal information or an authorized representative.
- Describe your request with sufficient detail that allows us to properly understand, evaluate, and respond to it.

Stewart cannot respond to your request or provide you with personal information if we cannot verify your identity or authority to make the request and confirm the personal information relates to you.

Making a verifiable consumer request does not require you to create an account with Stewart.

Response Timing and Format

We endeavor to respond to a verifiable consumer request within forty-five (45) days of its receipt. If we require more time (up to an additional 45 days), we will inform you of the reason and extension period in writing.

A written response will be delivered by mail or electronically, at your option.

Any disclosures we provide will only cover the 12-month period preceding the verifiable consumer request's receipt. The response we provide will also explain the reasons we cannot comply with a request, if applicable. For data portability requests, we will select a format to provide your personal information that is readily useable and should allow you to transmit the information from one entity to another entity without hindrance.

Stewart does not charge a fee to process or respond to your verifiable consumer request unless it is excessive, repetitive, or manifestly unfounded. If we determine that the request warrants a fee, we will tell you why we made that decision and provide you with a cost estimate before completing your request.

Non-Discrimination

Stewart will not discriminate against you for exercising any of your CCPA rights. Unless permitted by the CCPA, we will not:

- Deny you goods or services.
- Charge you a different prices or rates for goods or services, including through granting discounts or other benefits, or imposing penalties.
- Provide you a different level or quality of goods or services.
- Suggest that you may receive a different price or rate for goods or services or a different level or quality of goods or services.

Changes to Our Privacy Notice

Stewart reserves the right to amend this privacy notice at our discretion and at any time. When we make changes to this privacy notice, we will post the updated notice on Stewart's website and update the notice's effective date. **Your continued use of Stewart's website following the posting of changes constitutes your acceptance of such changes.**

Contact Information

If you have questions or comments about this notice, the ways in which Stewart collects and uses your information described here, your choices and rights regarding such use, or wish to exercise your rights under California law, please do not hesitate to contact us at:

Phone: Toll Free at 1-866-571-9270

Website: <http://stewart.com/ccpa>

Email: Privacyrequest@stewart.com

Postal Address: Stewart Information Services Corporation
Attn: Mary Thomas, Deputy Chief Compliance Officer
1360 Post Oak Blvd., Ste. 100, MC #14-1
Houston, TX 77056



55 Madison Street, Suite 400
Denver, CO 80206

Date: October 10, 2023
File Number: 22000480730- Revision No. 1
Property: Sec's 5, 7 & 8 Twn 3N Range 55W, CO 80723
Sec 12 Twn 3N Range 56W, CO
Sec 32 T4N Range 55W, CO

Please direct all Closing inquiries to:

Carla Burchard
Phone:
Email Address:

SELLER:
Ruth Ann Odle

Please direct all Title inquiries to:

Chesney Horn
Phone:
Email Address:

BUYER:
Cedar Holdco LLC, a Delaware limited liability company
Contact: Nate Crain
Contact: Philip Zaranka

BUYER ATTORNEY:
Reed Smith
Contact: Stephane D. Nguyen
Email:

SETTLEMENT AGENT:
Stewart Title Commercial Services - San Diego
7676 Hazard Center Drive, Ste. 1400
San Diego, CA 92108
Contact: Carla Burchard
Email:
Contact: Loretta Johnson
Email:
Delivery Method: Emailed

THIS REVISION OF THE TITLE COMMITMENT INCLUDES THE FOLLOWING CHANGES:

Schedule A - Updated the effective date and added Search Fee to Statement of Charges.
Schedule B-I - None.
Schedule B-II - Deleted Exceptions 48 & 49 (Release of record 942454-2022)

We Appreciate Your Business and Look Forward to Serving You in the Future.



ALTA COMMITMENT FOR TITLE INSURANCE

ISSUED BY
STEWART TITLE GUARANTY COMPANY

NOTICE

IMPORTANT - READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACTIONAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY’S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I - Requirements; Schedule B, Part II - Exceptions; and the Commitment Conditions, STEWART TITLE GUARANTY COMPANY, a Texas corporation (the “Company”), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I - Requirements have not been met within six months after the Commitment Date, this Commitment terminates and the Company’s liability and obligation end.

Countersigned by:


Authorized Countersignature




Frederick H. Eppinger
President and CEO


David Hisey
Secretary

Stewart Title Guaranty Company
7676 Hazard Center Drive, Ste 1400
San Diego, CA 92108
(619) 692-1600
Agent ID: 06J050

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COMMITMENT CONDITIONS

1. DEFINITIONS

- (a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
- (b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
- (c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
- (d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
- (e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
- (f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
- (g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
- (h) "Title": The estate or interest described in Schedule A.

2. If all of the Schedule B, Part I - Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:

- (a) the Notice;
- (b) the Commitment to Issue Policy;
- (c) the Commitment Conditions;
- (d) Schedule A;
- (e) Schedule B, Part I - Requirements;
- (f) Schedule B, Part II - Exceptions; and
- (g) a countersignature by the Company or its issuing agent that may be in electronic form.

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

- (a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
 - (i) comply with the Schedule B, Part I - Requirements;
 - (ii) eliminate, with the Company's written consent, any Schedule B, Part II - Exceptions; or
 - (iii) acquire the Title or create the Mortgage covered by this Commitment.
- (b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
- (c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.

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- (d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
- (e) The Company shall not be liable for the content of the Transaction Identification Data, if any.
- (f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I - Requirements have been met to the satisfaction of the Company.
- (g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT

- (a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
- (b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
- (c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
- (d) The deletion or modification of any Schedule B, Part II - Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
- (e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
- (f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. ARBITRATION

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is \$2,000,000 or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at <<http://www.alta.org/arbitration>>.

STEWART TITLE GUARANTY COMPANY

All notices required to be given the Company and any statement in writing required to be furnished the Company shall be addressed to it at P.O. Box 2029, Houston, Texas 77252-2029.

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**ALTA COMMITMENT FOR TITLE INSURANCE
SCHEDULE A**

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Transaction Identification Data for reference only:

Issuing Agent: Stewart Title Guaranty Company
Issuing Office: 7676 Hazard Center Drive, Ste 1400, San Diego, CA 92108
Issuing Office's ALTA® Registry ID: 1027978
Loan ID Number: N/A
Commitment Number: 22000480730
Issuing Office File Number: 22000480730
Property Address: Sec's 5, 7 & 8 Twn 3N Range 55W, CO 80723
Sec 12 Twn 3N Range 56W, CO
Sec 32 T4N Range 55W, CO
Revision Number: 1

1. Commitment Date: October 04, 2023 at 5:30 P.M.

2. Policy to be issued:		Proposed Policy Amount
(a) ALTA Owner's Policy	Extended	\$11,250,000.00
Proposed Insured:	Cedar Holdco LLC, a Delaware limited liability company	
(b) ALTA Loan Policy	Extended	TBD
Proposed Insured:	To Be Determined	

3. The estate or interest in the Land described or referred to in this Commitment is:

Fee Simple

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

Ruth Ann Odle

5. The Land is described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

STEWART TITLE GUARANTY COMPANY

STATEMENT OF CHARGES

These charges are due and payable before a policy can be issued
See Attached Statement of Charges



Authorized Countersignature

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**ALTA COMMITMENT FOR TITLE INSURANCE
SCHEDULE A**

ISSUED BY
STEWART TITLE GUARANTY COMPANY

**EXHIBIT "A"
SCHEDULE A**

LEGAL DESCRIPTION

++++Preliminary Legal Description subject to Schedule B-I Requirements++++

Parcel I:

All of Section 5, Township 3 North, Range 55 West of the 6th P.M., EXCEPT that parcel deeded in [Book 438 at Page 261](#),
County of Morgan,
State of Colorado.

Parcel II:

All of Section 8, Township 3 North, Range 55 West of the 6th P.M.,
County of Morgan,
State of Colorado.

Parcel III:

The South 1/2 of the North 1/2 and the South 1/2 of Section 7, Township 3 North, Range 55 West of the 6th P.M.,
County of Morgan,
State of Colorado.

Parcel IV:

That part of the Southwest 1/4 of Section 32, Township 4, North, Range 55 West of the 6th P.M., lying South of the
Railroad,
County of Morgan,
State of Colorado.

Parcel V:

The Southeast 1/4 of the Northeast 1/4 and the East 1/2 of the Southeast 1/4 of Section 12, Township 3 North, Range 56
West of the 6th P.M., EXCEPT a strip of land 30 feet wide off the South side throughout the entire length of the Southeast
1/4 of said Section as conveyed to County of Morgan in Quit Claim Deed recorded May 29, 1896 in Book 8 at Page 235,
County of Morgan,
State of Colorado.

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File No. 22000480730

CO ALTA Commitment For Title Insurance Schedule 8-1-16 (4-2-18)

Page 2 of 3



**ALTA COMMITMENT FOR TITLE INSURANCE
SCHEDULE A**

ISSUED BY
STEWART TITLE GUARANTY COMPANY

STATEMENT OF CHARGES

Morgan Basic Rate	
2006 ALTA Owner's Policy:	\$19,254.00
Owner's Extended Coverage:	\$65.00
ALTA 39-06:	N/C
2006 ALTA Loan Policy:	\$175.00
Lender's Extended Coverage:	N/C
ALTA 39-06:	N/C
Search Fee:	\$650.00
Tax Certificates:	\$120.00
(Sch. # 123112000002	
Sch. # 123307000002	
Sch. # 123305000001	
Sch. # 123308000001):	

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ALTA COMMITMENT FOR TITLE INSURANCE SCHEDULE B PART I

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Requirements

File No.: 22000480730- Revision No. 1

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. Proper instrument(s) creating the estate or interest to be insured must be executed and duly filed for record:
 - a. Provide the Company with an ALTA/NSPS Land Title Survey creating the legal description of the Land to be conveyed and excluding those portions of Sections 5 and 8 that will be retained by seller.
 - b. Warranty Deed from Ruth Ann Odle, vesting fee simple title in Cedar Holdco LLC, a Delaware limited liability company.
NOTE: A [Real Property Transfer Declaration \(TD-1000\)](#) is required with each transfer in the State of Colorado.
NOTE: Deed must include a notation as to the legal address of the grantee.
 - c. Deed of Trust from Cedar Holdco LLC, a Delaware limited liability company, to the Public Trustee, for the benefit of Proposed Lender.
6. Receipt by the Company of [Commercial Lien Affidavit](#), executed by Ruth Ann Odle.
NOTE: If the property is currently under construction or new improvements have been made, this commitment is subject to additional requirements.
NOTE: Affiant must affirm that no lease contains any option to purchase, right of first offer, or right of first refusal.
7. Receipt by the Company of [Commercial Lien Affidavit](#), executed by Cedar Holdco LLC, a Delaware limited liability company.
NOTE: If the property is currently under construction or new improvements have been made, this commitment is subject to additional requirements.
8. Payment of taxes and assessments now due and payable.
9. Approval to issue this policy must be obtained from authorized Underwriting Personnel of Stewart Title Guaranty Company. This commitment and any policies to be issued are subject to additional limitations, requirements or exceptions made by Stewart Title Guaranty Company.
10. Receipt by the Company relating to Cedar Holdco LLC, a Delaware limited liability company, the Company requires for its review the following:
 - a.) Copy of the fully executed Operating Agreement of the limited liability company and any amendments thereof,
 - b.) Execution and recordation of Statement of Authority pursuant to the provisions of Section 38-30-172 C.R.S.

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ALTA Commitment For Title Insurance Schedule 8-1-16 (4-2-18)

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ALTA COMMITMENT FOR TITLE INSURANCE SCHEDULE B PART I

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Requirements

NOTE: The company reserves the right to make additional requirements upon its review of this document.

NOTE: If the sales price of the subject property exceeds \$100,000.00, the seller shall be required to comply with the Disclosure of Withholding Provisions of C.R.S. § 39-22-604.5, by completing [Colorado DR 1083](#) (Nonresident Withholding).

NOTE: Please be advised that our search did not disclose any open Deed of Trust of record. If you should have knowledge of any outstanding obligations, please contact the Title Department immediately for further review prior to closing.

NOTE: Please be advised that our search did not disclose any activity related to the cultivation, manufacture, distribution and/or sale of marijuana. If you should have knowledge of any of these activities, please contact the Title Department immediately for further review by senior underwriting prior to closing.

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ALTA COMMITMENT FOR TITLE INSURANCE

SCHEDULE B PART II

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Exceptions

File No.: 22000480730- Revision No. 1

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

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

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. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the title that would be disclosed by an accurate and complete land survey of the Land and not shown by the public records.
4. Any lien, or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the public records.
5. 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.
6. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) minerals of whatsoever kind, subsurface and surface substances, in, on, under and that may be produced from the Land, together with all rights, privileges, and immunities relating thereto, whether or not the matters excepted under (a), (b) or (c) are shown by the Public Records or listed in Schedule B.
7. Water rights, claims or title to water.
8. a. Taxes for the year **2023**, and subsequent years; special assessments or charges not certified to the County Treasurer.
(NOTE: This will appear on the Owner's Policy, upon proof of payment.)
b. Taxes for the year **2023**, a lien, but not yet due or payable.
(NOTE: This will appear on the Loan Policy, upon proof of payment.)
9. Conveyance of a 30 foot wide strip of land on the South side of the entire length of the Southeast Quarter of Section 12, Township 3 North, Range 55 West, to Morgan County in Quit Claim Deed recorded May 29, 1896 in [Book 8 at Page 235](#), as disclosed on Warranty Deeds recorded September 3, 1985 in Book 871 at [Pages 590-593](#) and in Warranty Deed recorded June 23, 1989 in [Book 913 at Page 786](#).
(Affects Parcel V)
10. Reservations contained in an unrecorded [Patent No. 248813](#), dated February 19, 1912, subject to any vested and

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ALTA COMMITMENT FOR TITLE INSURANCE

SCHEDULE B PART II

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Exceptions

accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcel V)

11. Reservations contained in an unrecorded [Patent No. 366307](#), dated November 21, 1913, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcel III)
12. Reservations contained in an unrecorded [Patent No. 427401](#), dated August 26, 1914, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcels I & II)
13. Reservations contained in an unrecorded [Patent No. 510913](#), dated January 31, 1916, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcel III)
14. Reservations contained in an unrecorded [Patent No. 632401](#), dated May 29, 1918, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcel II)
15. Reservations contained in an unrecorded [Patent No. 706662](#), dated September 15, 1919, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and

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ALTA COMMITMENT FOR TITLE INSURANCE

SCHEDULE B PART II

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Exceptions

reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcel II)

16. Reservations contained in an unrecorded [Patent No. 724245](#), dated December 15, 1919, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcel II)
17. Reservations contained in an unrecorded [Patent No. 755346](#), dated June 10, 1920, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts, and also subject to the right of the proprietor of a vein or lode to extract and remove his ore therefrom, should the same be found to penetrate or intersect the premises hereby granted as provided by law.
NOTE: 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.
(Affects Parcels I & II)
18. Reservations contained in an unrecorded [Patent No. 785387](#), dated December 8, 1920, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by the authority of the United States.
(Affects Parcel IV)
19. Reservations contained in an unrecorded [Patent No. 833066](#), dated November 18, 1921, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and reservation of a right of way for ditches and canals constructed by 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, grants, exceptions or reservations of interests that are not listed.
(Affects Parcel I)
20. Reservations of all the coal and other minerals, together with the right to prospect for, mine and remove the same, as reserved in the United States Patent recorded June 21, 1930 in [Book 295 at Page 103](#).
NOTE: 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.
(Affects Parcels I & II)

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ALTA COMMITMENT FOR TITLE INSURANCE

SCHEDULE B PART II

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Exceptions

21. Reservations contained in an unrecorded [Patent No. 1056654](#), dated August 17, 1932, subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs and in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts, and also subject to the right of the proprietor of a vein or lode to extract and remove his ore therefrom, should the same be found to penetrate or intersect the premises hereby granted as provided by law.
NOTE: 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.
(Affects Parcels I & II)
22. Oil and Gas Lease recorded August 17, 1950 in [Book 477 at Page 11](#).
NOTE: Partial Assignment of Oil and Gas Lease recorded May 26, 1958 in [Book 573 at Page 330](#).
NOTE: Mineral Deed recorded July 20, 1960 in [Book 633 at Page 116](#).
NOTE: Oil and Gas Lease recorded September 23, 1960 in [Book 635 at Page 117](#).
NOTE: Mineral Deed recorded October 28, 1960 in [Book 636 at Page 288](#).
NOTE: Mineral Deed recorded September 17, 1981 in [Book 820 at Page 1000](#).
NOTE: Mineral Deed recorded September 21, 1981 in [Book 821 at Page 41](#).
NOTE: Mineral Deed recorded September 21, 1981 in [Book 821 at Page 43](#).
NOTE: Mineral Deed recorded September 24, 1981 in [Book 821 at Page 165](#).
NOTE: Mineral Deed recorded September 28, 1981 in [Book 821 at Page 275](#).
NOTE: Mineral Deed recorded October 7, 1981 in [Book 821 at Page 629](#).
NOTE: Mineral Deed recorded December 28, 1981 in [Book 824 at Page 891](#).
NOTE: Mineral Deed recorded December 28, 1981 in [Book 824 at Page 893](#).
NOTE: 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.
(Affects Parcels I-IV)
23. Oil and Gas Lease recorded November 30, 1950 in [Book 480 at Page 276](#).
NOTE: 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.
(Affects Parcel I)
24. Oil and Gas Lease recorded February 27, 1951 in [Book 487 at Page 101](#).
NOTE: Notice of Transfer recorded February 27, 1951 in Book 487 at Page 119.
NOTE: 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.
(Affects Parcel V)
25. Oil and Gas Lease recorded March 16, 1951 in [Book 490 at Page 105](#).
NOTE: 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.
(Affects Parcel II)
26. Oil and Gas Lease recorded April 6, 1951 in [Book 490 at Page 183](#).
NOTE: 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.

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ALTA COMMITMENT FOR TITLE INSURANCE

SCHEDULE B PART II

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Exceptions

(Affects Parcel I)

27. Right Of Way granted to Goodall Pipe Line Company recorded September 30, 1953 in [Book 621 at Page 68](#).
28. Oil and Gas Lease recorded September 23, 1960 in [Book 635 at Page 123](#).
NOTE: 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.
(Affects Parcel II)
29. Oil and Gas Lease recorded September 23, 1960 in [Book 635 at Page 135](#).
NOTE: 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.
(Affects Parcel II)
30. Terms, provisions, conditions and reservations contained in Easement granted to Public Service Company of Colorado recorded February 28, 1961 in [Book 641 at Page 407](#).
(Affects Parcel I)
31. Easement granted to Public Service Company of Colorado recorded June 11, 1967 in [Book 674 at Page 83](#).
(Affects Parcel V)
32. Right-Of-Way Easement granted to Tri-State Generation and Transmission Association, Inc., recorded December 21, 1971 in [Book 726 at Page 873](#).
(Affects Parcel I)
33. Easement granted to Tri-State Generation & Transmission Association, Inc., recorded November 28, 1979 in [Book 798 at Page 782](#).
(Affects Parcel I)
34. Oil and Gas Lease recorded March 18, 1981 in [Book 813 at Page 218](#).
NOTE: 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.
(Affects Parcels II & III)
35. Oil and Gas Lease recorded March 23, 1981 in [Book 813 at Page 415](#).
NOTE: 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.
(Affects Parcel II)
36. Oil and Gas Lease recorded September 17, 1981 in [Book 814 at Page 722](#).
NOTE: 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.
(Affects Parcels II & III)
37. Easement granted to Public Service Company of Colorado recorded May 29, 1984 in [Book 856 at Pages 170, 172 and 174](#).

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ALTA COMMITMENT FOR TITLE INSURANCE

SCHEDULE B PART II

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Exceptions

(Affects Parcel I)

38. Oil and Gas Lease recorded June 5, 1986 in [Book 880 at Page 308](#).
NOTE: Oil and Gas Lease recorded June 5, 1986 in [Book 880 at Page 310](#).
NOTE: Oil and Gas Lease recorded June 5, 1986 in [Book 880 at Page 312](#).
NOTE: 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.
(Affects Parcels II & III)
39. Oil and Gas Lease recorded January 28, 1986 in [Book 880 at Page 298](#).
NOTE: Oil and Gas Lease recorded January June 5, 1986 in [Book 880 at Page 300](#).
NOTE: Oil and Gas Lease recorded January June 5, 1986 in [Book 880 at Page 302](#).
NOTE: Oil and Gas Lease recorded June 5, 1986 in [Book 880 at Page 304](#).
NOTE: 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.
(Affects Parcels I, II & III)
40. Oil and Gas Lease recorded June 5, 1986 in [Book 880 at Page 306](#).
NOTE: 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.
(Affects Parcel III)
41. Reservation of oil, gas and other minerals as contained in Warranty Deeds recorded October 27, 1988 in [Book 907 at Page 228](#) and in [Book 907 at Page 229](#) and in [Book 907 at Page 230](#) and [Book 907 at Page 231](#).
NOTE: 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.
(Affects Parcels I, II & IV)
42. Resolution 90 BCC 19 Road Vacation, vacating County Road Q East of Road 30, specifically between Sections 7 and 18, recorded April 27, 1990 in [Book 921 at Page 810](#).
43. Case No. 13282, An Order for the inclusion of the subject property into the Morgan County Quality Water District, Morgan County, Colorado, recorded July 25, 1991 in [Book 934 at Page 731](#).
(Affects Parcel III)
44. Case No. 13282, An Order for the inclusion of the subject property into the Morgan County Quality Water District, Morgan County, Colorado, recorded December 10, 1999 at [Reception No. 782123](#).
(Affects Parcel V)
45. Terms, conditions, provisions, obligations and agreements contained in Lease Granting Rights to Nonpotable Water recorded November 9, 2007 at [Reception No. 846215](#).
NOTE: First Amendment to Lease Granting Rights to Nonpotable Water recorded November 9, 2007 at [Reception No. 846218](#).
(Affects Parcels I, II and III)
46. Terms, conditions, provisions and obligations of Easement Deed by Court Order in Settlement of Landowner

This page is only a part of a 2016 ALTA® Commitment for Title Insurance. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I - Requirements; and Schedule B, Part II - Exceptions; and a countersignature by the Company or its issuing agent that may be in electronic form.

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File No. 22000480730

CO ALTA Commitment For Title Insurance Schedule 8-1-16 (4-2-18) COM

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ALTA COMMITMENT FOR TITLE INSURANCE SCHEDULE B PART II

ISSUED BY
STEWART TITLE GUARANTY COMPANY

Exceptions

Action granted to Qwest Communications Company, LLC, a Delaware limited liability company, et al; recorded March 13, 2013 at [Reception No. 880959](#).
(Affects Parcel IV)

47. Terms, provisions and reservations contained in Memorandum of Lease for Nontributary Ground Water recorded April 14, 2015 at [Reception No. 892842](#).

NOTE: Ratification of Nontributary Ground Water Lease recorded October 12, 2021 at [Reception No. 936002](#).
(Affects Parcels I-III)

48. **[Intentionally deleted.] (Memorandum of Water Pipeline Agreement recorded June 9, 2017 at [Reception No. 906050](#).
(Affects Parcels I-III))**

49. **[Intentionally deleted.] (Easement granted in Easement Purchase Agreement referenced in Memorandum of Water Pipeline Agreement recorded June 9, 2017 at [Reception No. 906051](#).
(Affects Parcel IV))**

50. Right of Way for County Road Q along the Southern boundary line of Section 12.
(Affects Parcel V)

51. Right of Way for Railroad as shown on Warranty Deed recorded May 27, 1925 in [Book 222 at Page 421](#).
(Affects Parcel IV)

52. Existing leases and tenancies.
NOTE: Upon receipt by the Company of the Commercial Lien Affidavit, this exception may be modified or deleted.

NOTE: Exceptions 1 and 4 may be deleted from the policies, provided the seller and buyer execute the Company's affidavits, as required herein, and the Company approves such deletions. Exceptions 2 and 3 may be deleted from the policies, provided the Company receives and approves the survey or survey affidavit required herein. Exception 5 will not appear on the policies, provided the Company, or its authorized agent, conducts the closing of the proposed transaction and is responsible for the recordation of the documents.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I - Requirements; and Schedule B, Part II - Exceptions; and a countersignature by the Company or its issuing agent that may be in electronic form.

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Carla Burchard

Stewart Title Guaranty Company -
Commercial Services
7676 Hazard Center Drive, Ste 1400
San Diego, CA 92108
(760) 602-4299 Phone
(619) 923-2921 Fax

MINERAL DISCLOSURE

To comply with the provisions of C.R.S. 10-11-123, the Company makes the following disclosure:

- a. That there is recorded evidence that a mineral estate has been severed, leased or otherwise conveyed from the surface estate and that there is a substantial likelihood that a third party holds some or all interest in oil, gas, other minerals, or geothermal energy in the property; and
- b. That such mineral estate may include the right to enter and use the property without the surface owner's permission.

NOTE: THIS DISCLOSURE APPLIED ONLY IF SCHEDULE B, SECTION 2 OF THE TITLE COMMITMENT HEREIN INCLUDES AN EXCEPTION FOR SEVERED MINERALS.

Stewart Title Guaranty Company - Commercial Services

FUNDS DISCLOSURE

The title company, Stewart Title Guaranty Company - Commercial Services in its capacity as escrow agent, has been authorized to receive funds and disburse them when all funds received are either: (a) available for immediate withdrawal as a matter of right from the financial institution in which the funds are deposited, or (b) are available for immediate withdrawal as a consequence of an agreement of a financial institution in which the funds are to be deposited or a financial institution upon which the funds are to be drawn.

The title company is disclosing to you that the financial institution may provide the title company with computer accounting or auditing services, or other bank services, either directly or through a separate entity which may or may not be affiliated with the title company. This separate entity may charge the financial institution reasonable and proper compensation for these services and retain any profits there from.

The title company may also receive benefits from the financial institution in the form of advantageous interest rates on loans, sometimes referred to as preferred rate loan programs, relating to loans the title company has with the financial institution. The title company shall not be liable for any interest or other charges on the earnest money and shall be under no duty to invest or reinvest funds held by it at any time. In the event that the parties to this transaction have agreed to have interest on earnest money deposit transferred to a fund established for the purpose of providing affordable housing to Colorado residents, then the earnest money shall remain in an account designated for such purpose, and the interest money shall be delivered to the title company at closing.

STG Privacy Notice Stewart Title Companies

WHAT DO THE STEWART TITLE COMPANIES DO WITH YOUR PERSONAL INFORMATION?

Federal and applicable state law and regulations give consumers the right to limit some but not all sharing. Federal and applicable state law regulations also require us to tell you how we collect, share, and protect your personal information. Please read this notice carefully to understand how we use your personal information. This privacy notice is distributed on behalf of the Stewart Title Guaranty Company and its title affiliates (the Stewart Title Companies), pursuant to Title V of the Gramm-Leach-Bliley Act (GLBA).

The types of personal information we collect and share depend on the product or service that you have sought through us. This information can include social security numbers and driver's license number.

All financial companies, such as the Stewart Title Companies, need to share customers' personal information to run their everyday business—to process transactions and maintain customer accounts. In the section below, we list the reasons that we can share customers' personal information; the reasons that we choose to share; and whether you can limit this sharing.

Reasons we can share your personal information.	Do we share	Can you limit this sharing?
For our everyday business purposes — to process your transactions and maintain your account. This may include running the business and managing customer accounts, such as processing transactions, mailing, and auditing services, and responding to court orders and legal investigations.	Yes	No
For our marketing purposes — to offer our products and services to you.	Yes	No
For joint marketing with other financial companies	No	We don't share
For our affiliates' everyday business purposes — information about your transactions and experiences. Affiliates are companies related by common ownership or control. They can be financial and non-financial companies. <i>Our affiliates may include companies with a Stewart name; financial companies, such as Stewart Title Company</i>	Yes	No
For our affiliates' everyday business purposes — information about your creditworthiness.	No	We don't share
For our affiliates to market to you — For your convenience, Stewart has developed a means for you to opt out from its affiliates marketing even though such mechanism is not legally required.	Yes	Yes, send your first and last name, the email address used in your transaction, your Stewart file number and the Stewart office location that is handling your transaction by email to optout@stewart.com or fax to 1-800-335-9591.
For non-affiliates to market to you. Non-affiliates are companies not related by common ownership or control. They can be financial and non-financial companies.	No	We don't share

We may disclose your personal information to our affiliates or to non-affiliates as permitted by law. If you request a transaction with a non-affiliate, such as a third party insurance company, we will disclose your personal information to that non-affiliate. [We do not control their subsequent use of information, and suggest you refer to their privacy notices.]

SHARING PRACTICES

How often do the Stewart Title Companies notify me about their practices?	We must notify you about our sharing practices when you request a transaction.
How do the Stewart Title Companies protect my personal information?	To protect your personal information from unauthorized access and use, we use security measures that comply with federal law. These measures include computer, file, and building safeguards.
How do the Stewart Title Companies collect my personal information?	We collect your personal information, for example, when you <ul style="list-style-type: none"> ▪ request insurance-related services ▪ provide such information to us We also collect your personal information from others, such as the real estate agent or lender involved in your transaction, credit reporting agencies, affiliates or other companies.
What sharing can I limit?	Although federal and state law give you the right to limit sharing (e.g., opt out) in certain instances, we do not share your personal information in those instances.

Contact us: *If you have any questions about this privacy notice, please contact us at: Stewart Title Guaranty Company, 1360 Post Oak Blvd., Ste. 100, Privacy Officer, Houston, Texas 77056*

Privacy Notice for California Residents

Pursuant to the California Consumer Privacy Act of 2018 ("CCPA"), Stewart Information Services Corporation and its subsidiary companies (collectively, "Stewart") are providing this **Privacy Notice for California Residents** ("CCPA Notice"). This CCPA Notice supplements the information contained in Stewart's existing privacy notice and applies solely to all visitors, users and others who reside in the State of California or are considered California Residents ("consumers" or "you"). Terms used but not defined shall have the meaning ascribed to them in the CCPA.

Information Stewart Collects

Stewart collects information that identifies, relates to, describes, references, is capable of being associated with, or could reasonably be linked, directly or indirectly, with a particular consumer, household, or device. Most of the information that Stewart collects in the course of its regular business is already protected pursuant to the Gramm-Leach-Bliley Act (GLBA). Additionally, much of this information comes from government records or other information already in the public domain. Personal information under the CCPA does not include:

- Publicly available information from government records.
- Deidentified or aggregated consumer information.
- Certain personal information protected by other sector-specific federal or California laws, including but not limited to the Fair Credit Reporting Act (FCRA), GLBA and California Financial Information Privacy Act (FIPA).

Specifically, Stewart has collected the following categories of personal information from consumers within the last twelve (12) months:

Category	Examples	Collected?
A. Identifiers.	A real name, alias, postal address, unique personal identifier, online identifier, Internet Protocol address, email address, account name, Social Security number, driver's license number, passport number, or other similar identifiers.	YES
B. Personal information categories listed in the California Customer Records statute (Cal. Civ. Code § 1798.80(e)).	A name, signature, Social Security number, physical characteristics or description, address, telephone number, passport number, driver's license or state identification card number, insurance policy number, education, employment, employment history, bank account number, credit card number, debit card number, or any other financial information, medical information, or health insurance information. Some personal information included in this category may overlap with other categories.	YES
C. Protected classification characteristics under California or federal law.	Age (40 years or older), race, color, ancestry, national origin, citizenship, religion or creed, marital status, medical condition, physical or mental disability, sex (including gender, gender identity, gender expression, pregnancy or childbirth and related medical conditions), sexual orientation, veteran or military status, genetic information (including familial genetic information).	YES
D. Commercial information.	Records of personal property, products or services purchased, obtained, or considered, or other purchasing or consuming histories or tendencies.	YES
E. Biometric information.	Genetic, physiological, behavioral, and biological characteristics, or activity patterns used to extract a template or other identifier or identifying information, such as, fingerprints, faceprints, and voiceprints, iris or retina scans, keystroke, gait, or other physical patterns, and sleep, health, or exercise data.	YES
F. Internet or other similar network activity.	Browsing history, search history, information on a consumer's interaction with a website, application, or advertisement.	YES
G. Geolocation data.	Physical location or movements.	YES
H. Sensory data.	Audio, electronic, visual, thermal, olfactory, or similar information.	YES
I. Professional or employment-related information.	Current or past job history or performance evaluations.	YES
J. Non-public education information (per the Family Educational Rights and Privacy Act (20 U.S.C. Section 1232g, 34 C.F.R. Part 99)).	Education records directly related to a student maintained by an educational institution or party acting on its behalf, such as grades, transcripts, class lists, student schedules, student identification codes, student financial information, or student disciplinary records.	YES
K. Inferences drawn from other personal information.	Profile reflecting a person's preferences, characteristics, psychological trends, predispositions, behavior, attitudes, intelligence, abilities, and aptitudes.	YES

Stewart obtains the categories of personal information listed above from the following categories of sources:

- Directly and indirectly from customers, their designees or their agents (For example, realtors, lenders, attorneys, etc.)
- Directly and indirectly from activity on Stewart's website or other applications.
- From third-parties that interact with Stewart in connection with the services we provide.

Use of Personal Information

Stewart may use or disclose the personal information we collect for one or more of the following purposes:

- To fulfill or meet the reason for which the information is provided.
- To provide, support, personalize, and develop our website, products, and services.
- To create, maintain, customize, and secure your account with Stewart.
- To process your requests, purchases, transactions, and payments and prevent transactional fraud.
- To prevent and/or process claims.
- To assist third party vendors/service providers who complete transactions or perform services on Stewart's behalf.
- As necessary or appropriate to protect the rights, property or safety of Stewart, our customers or others.
- To provide you with support and to respond to your inquiries, including to investigate and address your concerns and monitor and improve our responses.
- To personalize your website experience and to deliver content and product and service offerings relevant to your interests, including targeted offers and ads through our website, third-party sites, and via email or text message (with your consent, where required by law).
- To help maintain the safety, security, and integrity of our website, products and services, databases and other technology assets, and business.
- To respond to law enforcement or regulator requests as required by applicable law, court order, or governmental regulations.
- Auditing for compliance with federal and state laws, rules and regulations.
- Performing services including maintaining or servicing accounts, providing customer service, processing or fulfilling orders and transactions, verifying customer information, processing payments, providing advertising or marketing services or other similar services.
- To evaluate or conduct a merger, divestiture, restructuring, reorganization, dissolution, or other sale or transfer of some or all of our assets, whether as a going concern or as part of bankruptcy, liquidation, or similar proceeding, in which personal information held by us is among the assets transferred.

Stewart will not collect additional categories of personal information or use the personal information we collected for materially different, unrelated, or incompatible purposes without providing you notice.

Disclosure of Personal Information to Affiliated Companies and Nonaffiliated Third Parties

Stewart does not sell your personal information to nonaffiliated third parties. Stewart may share your information with those you have designated as your agent in the course of your transaction (for example, a realtor or a lender). Stewart may disclose your personal information to a third party for a business purpose. Typically, when we disclose personal information for a business purpose, we enter a contract that describes the purpose and requires the recipient to both keep that personal information confidential and not use it for any purpose except performing the contract.

We share your personal information with the following categories of third parties:

- Service providers and vendors (For example, search companies, mobile notaries, and companies providing credit/debit card processing, billing, shipping, repair, customer service, auditing, marketing, etc.)
- Affiliated Companies
- Litigation parties and attorneys, as required by law.
- Financial rating organizations, rating bureaus and trade associations.
- Federal and State Regulators, law enforcement and other government entities

In the preceding twelve (12) months, Stewart has disclosed the following categories of personal information for a business purpose:

- Category A: Identifiers
- Category B: California Customer Records personal information categories
- Category C: Protected classification characteristics under California or federal law
- Category D: Commercial Information
- Category E: Biometric Information
- Category F: Internet or other similar network activity
- Category G: Geolocation data
- Category H: Sensory data
- Category I: Professional or employment-related information
- Category J: Non-public education information
- Category K: Inferences

Consumer Rights and Choices

The CCPA provides consumers (California residents) with specific rights regarding their personal information. This section describes your CCPA rights and explains how to exercise those rights.

Access to Specific Information and Data Portability Rights

You have the right to request that Stewart disclose certain information to you about our collection and use of your personal information over the past 12 months. Once we receive and confirm your verifiable consumer request, Stewart will disclose to you:

- The categories of personal information Stewart collected about you.
- The categories of sources for the personal information Stewart collected about you.
- Stewart's business or commercial purpose for collecting that personal information.
- The categories of third parties with whom Stewart shares that personal information.
- The specific pieces of personal information Stewart collected about you (also called a data portability request).
- If Stewart disclosed your personal data for a business purpose, a listing identifying the personal information categories that each category of recipient obtained.

Deletion Request Rights

You have the right to request that Stewart delete any of your personal information we collected from you and retained, subject to certain exceptions. Once we receive and confirm your verifiable consumer request, Stewart will delete (and direct our service providers to delete) your personal information from our records, unless an exception applies.

Stewart may deny your deletion request if retaining the information is necessary for us or our service providers to:

1. Complete the transaction for which we collected the personal information, provide a good or service that you requested, take actions reasonably anticipated within the context of our ongoing business relationship with you, or otherwise perform our contract with you
2. Detect security incidents, protect against malicious, deceptive, fraudulent, or illegal activity, or prosecute those responsible for such activities.
3. Debug products to identify and repair errors that impair existing intended functionality.
4. Exercise free speech, ensure the right of another consumer to exercise their free speech rights, or exercise another right provided for by law.
5. Comply with the California Electronic Communications Privacy Act (Cal. Penal Code § 1546 *seq.*).
6. Engage in public or peer-reviewed scientific, historical, or statistical research in the public interest that adheres to all other applicable ethics and privacy laws, when the information's deletion may likely render impossible or seriously impair the research's achievement, if you previously provided informed consent.
7. Enable solely internal uses that are reasonably aligned with consumer expectations based on your relationship with us.
8. Comply with a legal obligation.
9. Make other internal and lawful uses of that information that are compatible with the context in which you provided it.

Exercising Access, Data Portability, and Deletion Rights

To exercise the access, data portability, and deletion rights described above, please submit a verifiable consumer request to us either:

- Calling us Toll Free at 1-866-571-9270
- Emailing us at Privacyrequest@stewart.com
- Visiting <http://stewart.com/ccpa>

Only you, or someone legally authorized to act on your behalf, may make a verifiable consumer request related to your personal information. You may also make a verifiable consumer request on behalf of your minor child.

To designate an authorized agent, please contact Stewart through one of the methods mentioned above.

You may only make a verifiable consumer request for access or data portability twice within a 12-month period. The verifiable consumer request must:

- Provide sufficient information that allows us to reasonably verify you are the person about whom we collected personal information or an authorized representative.
- Describe your request with sufficient detail that allows us to properly understand, evaluate, and respond to it.

Stewart cannot respond to your request or provide you with personal information if we cannot verify your identity or authority to make the request and confirm the personal information relates to you.

Making a verifiable consumer request does not require you to create an account with Stewart.

Response Timing and Format

We endeavor to respond to a verifiable consumer request within forty-five (45) days of its receipt. If we require more time (up to an additional 45 days), we will inform you of the reason and extension period in writing.

A written response will be delivered by mail or electronically, at your option.

Any disclosures we provide will only cover the 12-month period preceding the verifiable consumer request's receipt. The response we provide will also explain the reasons we cannot comply with a request, if applicable. For data portability requests, we will select a format to provide your personal information that is readily useable and should allow you to transmit the information from one entity to another entity without hindrance.

Stewart does not charge a fee to process or respond to your verifiable consumer request unless it is excessive, repetitive, or manifestly unfounded. If we determine that the request warrants a fee, we will tell you why we made that decision and provide you with a cost estimate before completing your request.

Non-Discrimination

Stewart will not discriminate against you for exercising any of your CCPA rights. Unless permitted by the CCPA, we will not:

- Deny you goods or services.
- Charge you a different prices or rates for goods or services, including through granting discounts or other benefits, or imposing penalties.
- Provide you a different level or quality of goods or services.
- Suggest that you may receive a different price or rate for goods or services or a different level or quality of goods or services.

Changes to Our Privacy Notice

Stewart reserves the right to amend this privacy notice at our discretion and at any time. When we make changes to this privacy notice, we will post the updated notice on Stewart's website and update the notice's effective date. **Your continued use of Stewart's website following the posting of changes constitutes your acceptance of such changes.**

Contact Information

If you have questions or comments about this notice, the ways in which Stewart collects and uses your information described here, your choices and rights regarding such use, or wish to exercise your rights under California law, please do not hesitate to contact us at:

Phone: Toll Free at 1-866-571-9270

Website: <http://stewart.com/ccpa>

Email: Privacyrequest@stewart.com

Postal Address: Stewart Information Services Corporation
Attn: Mary Thomas, Deputy Chief Compliance Officer
1360 Post Oak Blvd., Ste. 100, MC #14-1
Houston, TX 77056

APPENDIX C: LIABILITY INSURANCE



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

04/24/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER MARSH USA, LLC. 99 HIGH STREET BOSTON, MA 02110	CONTACT NAME:	FAX (A/C, No):
	PHONE (A/C, No, Ext):	
	E-MAIL ADDRESS:	
CN138338174-all-gau-23-24	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : Federal Insurance Company	20281
INSURED Aypa Power Holdings LP 11801 Domain Blvd Auston, TX 78758	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** NYC-011605098-03 **REVISION NUMBER:** 2

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:			36072627	03/31/2023	03/31/2024	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 10,000 MED EXP (Any one person) \$ 1,000,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input checked="" type="checkbox"/> OWNED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY			73625128	03/31/2023	03/31/2024	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$			7819-55-88	03/31/2023	03/31/2024	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A If yes, describe under DESCRIPTION OF OPERATIONS below						PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Ruth Ann Odie and Cedar Holdco are included as additional insured (except workers' compensation) where required by written contract.

CERTIFICATE HOLDER

CANCELLATION

Ruth Ann Odie 16218 State Highway 71 Brush, CO 80723	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE <i>Marsh USA LLC</i>

AGENCY CUSTOMER ID: CN138338174

LOC #: Boston



ADDITIONAL REMARKS SCHEDULE

Page 2 of 2

AGENCY MARSH USA, LLC.		NAMED INSURED Aypa Power Holdings LP 11801 Domain Blvd Auston, TX 78758	
POLICY NUMBER		EFFECTIVE DATE:	
CARRIER	NAIC CODE		

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: 25 FORM TITLE: Certificate of Liability Insurance

Carrier: Gotham Insurance Company
Policy: EX202300003294
Effective Date: 03/31/2023 - Expiration 03/31/2024
Limit: 5x10M

Carrier: James River Insurance Company
Policy: P0000000040
Effective Date: 03/31/2023 - 03/31/2024
Limit: 5x15M



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
01/19/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER MARSH USA, LLC. 99 HIGH STREET BOSTON, MA 02110 CN138338174-all-gau-23-24	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS:		FAX (A/C, No):
	INSURER(S) AFFORDING COVERAGE INSURER A : Federal Insurance Company		NAIC # 20281
INSURED Fortress Solar I LLC Fortress Solar II LLC, Fortress Solar III LLC, Cedar Holdco LLC 11801 Domain Blvd Auston, TX 78758	INSURER B :		
	INSURER C :		
	INSURER D :		
	INSURER E :		
	INSURER F :		

COVERAGES **CERTIFICATE NUMBER:** NYC-011605098-08 **REVISION NUMBER:** 4

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			36072627	03/31/2023	03/31/2024	EACH OCCURRENCE	\$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 10,000
							MED EXP (Any one person)	\$ 1,000,000
							PERSONAL & ADV INJURY	\$ 1,000,000
							GENERAL AGGREGATE	\$ 2,000,000
							PRODUCTS - COMP/OP AGG	\$ 2,000,000
								\$
	<input type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS ONLY			73625128	03/31/2023	03/31/2024	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
							BODILY INJURY (Per person)	\$
							BODILY INJURY (Per accident)	\$
							PROPERTY DAMAGE (Per accident)	\$
								\$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			7819-55-88	03/31/2023	03/31/2024	EACH OCCURRENCE	\$ 10,000,000
							AGGREGATE	\$ 10,000,000
								\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A				PER STATUTE	OTH-ER
							E.I. EACH ACCIDENT	\$
							E.I. DISEASE - EA EMPLOYEE	\$
							E.I. DISEASE - POLICY LIMIT	\$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Ruth Ann Odle and Cedar Holdco are included as additional insured (except workers' compensation) where required by written contract.

Additional Insureds:

1)Fortress Solar I LLC 2)Fortress Solar II LLC 3)Fortress Solar III LLC 4)Cedar Holdco LLC (Instead of just Cedar Holdco) 5)Shari Benotti

CERTIFICATE HOLDER

CANCELLATION

Ruth Ann Odle 16218 State Highway 71 Brush, CO 80723	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE <i>Mark USA LLC</i>
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AGENCY CUSTOMER ID: CN138338174

LOC #: Boston



ADDITIONAL REMARKS SCHEDULE

Page 2 of 2

AGENCY MARSH USA, LLC.		NAMED INSURED Fortress Solar I LLC Fortress Solar II LLC, Fortress Solar III LLC, Cedar Holdco LLC 11801 Domain Blvd Auston, TX 78758	
POLICY NUMBER		EFFECTIVE DATE:	
CARRIER	NAIC CODE		

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: 25 FORM TITLE: Certificate of Liability Insurance

Carrier: Gotham Insurance Company
Policy: EX202300003294
Effective Date: 03/31/2023 - Expiration 03/31/2024
Limit: 5x10M

Carrier: James River Insurance Company
Policy: P0000000040
Effective Date: 03/31/2023 - 03/31/2024
Limit: 5x15M

APPENDIX D: PROOF OF PAID TAXES

Morgan County Treasurer

Statement of Taxes Due

Account Number R003925
Assessed To

Parcel 123112000001
BENOTTI, SHARI A
2420 THORNDON PARK CT
LEAGUE CITY, TX 77573

Legal Description
S: 12 T: 3 R: 56 N1/2NE1/4

Situs Address

Year	Tax	Interest	Fees	Payments	Balance
Tax Charge					
2022	\$67.80	\$0.00	\$0.00	(\$67.80)	\$0.00
Total Tax Charge					\$0.00
Grand Total Due as of 08/02/2023					\$0.00

Tax Billed at 2022 Rates for Tax Area 217 - 217 - RE 2J

Authority	Mill Levy	Amount	Values	Actual	Assessed
COUNTY GENERAL FUND	19.4830000	\$14.62	GRAZING LAND	\$2,850	\$750
ROAD AND BRIDGE FUND	7.5000000	\$5.62	Total	\$2,850	\$750
SOCIAL SERVICES FUND	2.0000000	\$1.50			
BRUSH RURAL FIRE DIST	3.5130000	\$2.63			
E MORGAN COUNTY HOSPITAL	4.5000000	\$3.37			
E MORGAN COUNTY LIBRARY	3.5000000	\$2.62			
MORGAN CO QUALITY WATER	0.8240000	\$0.62			
RE 2-J BRUSH GENERAL FD	27.0400000	\$20.28			
RE 2-J BRUSH M/L OVRD	9.3120000	\$6.98			
RE 2-J BRUSH BOND RED	12.7470000	\$9.56			
Taxes Billed 2022	90.4190000	\$67.80			

*****TAX LIEN SALE REDEMPTIONS MUST BE PAID BY CASH OR CASHIER'S CHECK*****

Special taxing districts and the boundaries of such districts may be on file with the County Commissioners, County Clerk, or County Assessor. Unless specifically mentioned, this statement does not include land or improvements assessed under a separate account number, personal property taxes, transfer tax or miscellaneous tax collected on behalf of other entities, special or local improvement district assessments, or manufactured homes.

ROBERT A SAGEL, MORGAN COUNTY TREASURER
231 Ensign St, PO Box 593, Fort Morgan, CO 80701
Phone: 970-542-3518, Fax: 970-542-3520, Email: esale@co.morgan.co.us
Website: morgancounty.colorado.gov

Morgan County Treasurer

Statement of Taxes Due

Account Number R003918
Assessed To

Parcel 123112000002
ODLE, RUTH ANN
16218 HWY 71
BRUSH, CO 80723-9436

Legal Description

Situs Address

S: 12 T: 3 R: 56 SE1/4NE1/4 & E1/2SE1/4

Year	Tax	Interest	Fees	Payments	Balance
Tax Charge					
2022	\$102.16	\$0.00	\$0.00	(\$102.16)	\$0.00
Total Tax Charge					\$0.00
Grand Total Due as of 08/02/2023					\$0.00

Tax Billed at 2022 Rates for Tax Area 217 - 217 - RE 2J

Authority	Mill Levy	Amount	Values	Actual	Assessed
COUNTY GENERAL FUND	19.4830000	\$22.03	GRAZING LAND	\$4,230	\$1,120
ROAD AND BRIDGE FUND	7.5000000	\$8.47	FARM/RANCH	\$10	\$10
SOCIAL SERVICES FUND	2.0000000	\$2.26	WASTE LAND		
BRUSH RURAL FIRE DIST	3.5130000	\$3.97	Total	\$4,240	\$1,130
E MORGAN COUNTY HOSPITAL	4.5000000	\$5.08			
E MORGAN COUNTY LIBRARY	3.5000000	\$3.95			
MORGAN CO QUALITY WATER	0.8240000	\$0.93			
RE 2-J BRUSH GENERAL FD	27.0400000	\$30.55			
RE 2-J BRUSH M/L OVRD	9.3120000	\$10.52			
RE 2-J BRUSH BOND RED	12.7470000	\$14.40			
Taxes Billed 2022	90.4190000	\$102.16			

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Phone: 970-542-3518, Fax: 970-542-3520, Email: esale@co.morgan.co.us
Website: morgancounty.colorado.gov

Morgan County Treasurer

Statement of Taxes Due

Account Number R002835
Assessed To

Parcel 123303000003
ODLE, RUTH ANN
16218 HWY 71
BRUSH, CO 80723-9436

Legal Description

Situs Address

S: 03 T: 3 R: 55 S1/2 S OF RR & S1/2NW1/4 S OF HWY 34

Year	Tax	Interest	Fees	Payments	Balance
Tax Charge					
2022	\$308.20	\$0.00	\$0.00	(\$308.20)	\$0.00
Total Tax Charge					\$0.00
Grand Total Due as of 08/02/2023					\$0.00

Tax Billed at 2022 Rates for Tax Area 204 - 204 - RE 2J

Authority	Mill Levy	Amount	Values	Actual	Assessed
COUNTY GENERAL FUND	19.4830000	\$67.02	GRAZING LAND	\$13,020	\$3,440
ROAD AND BRIDGE FUND	7.5000000	\$25.80	Total	\$13,020	\$3,440
SOCIAL SERVICES FUND	2.0000000	\$6.88			
BRUSH RURAL FIRE DIST	3.5130000	\$12.08			
E MORGAN COUNTY HOSPITAL	4.5000000	\$15.48			
E MORGAN COUNTY LIBRARY	3.5000000	\$12.04			
RE 2-J BRUSH GENERAL FD	27.0400000	\$93.02			
RE 2-J BRUSH M/L OVRD	9.3120000	\$32.03			
RE 2-J BRUSH BOND RED	12.7470000	\$43.85			
Taxes Billed 2022	89.5950000	\$308.20			

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231 Ensign St, PO Box 593, Fort Morgan, CO 80701
Phone: 970-542-3518, Fax: 970-542-3520, Email: esale@co.morgan.co.us
Website: morgancounty.colorado.gov

Morgan County Treasurer

Statement of Taxes Due

Account Number R002841
Assessed To

Parcel 123304000002
ODLE, RUTH ANN
16218 HWY 71
BRUSH, CO 80723-9436

Legal Description

Situs Address

S: 04 T: 3 R: 55 ALL S OF RR (CORRECTION SECTION)

Year	Tax	Interest	Fees	Payments	Balance
Tax Charge					
2022	\$440.80	\$0.00	\$0.00	(\$440.80)	\$0.00
Total Tax Charge					\$0.00
Grand Total Due as of 08/02/2023					\$0.00

Tax Billed at 2022 Rates for Tax Area 204 - 204 - RE 2J

Authority	Mill Levy	Amount	Values	Actual	Assessed
COUNTY GENERAL FUND	19.4830000	\$95.87	GRAZING LAND	\$18,630	\$4,920
ROAD AND BRIDGE FUND	7.5000000	\$36.90	Total	\$18,630	\$4,920
SOCIAL SERVICES FUND	2.0000000	\$9.84			
BRUSH RURAL FIRE DIST	3.5130000	\$17.28			
E MORGAN COUNTY HOSPITAL	4.5000000	\$22.14			
E MORGAN COUNTY LIBRARY	3.5000000	\$17.22			
RE 2-J BRUSH GENERAL FD	27.0400000	\$133.03			
RE 2-J BRUSH M/L OVRD	9.3120000	\$45.81			
RE 2-J BRUSH BOND RED	12.7470000	\$62.71			
Taxes Billed 2022	89.5950000	\$440.80			

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Phone: 970-542-3518, Fax: 970-542-3520, Email: esale@co.morgan.co.us
Website: morgancounty.colorado.gov

Morgan County Treasurer

Statement of Taxes Due

Account Number R002837

Parcel 123305000001

Assessed To

ODLE, RUTH ANN
16218 HWY 71
BRUSH, CO 80723-9436

Legal Description

Situs Address

S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T: 4 R: 55 PARC
SW1/4 S OF RR

Year	Tax	Interest	Fees	Payments	Balance
Tax Charge					
2022	\$543.84	\$0.00	\$0.00	(\$543.84)	\$0.00
Total Tax Charge					\$0.00
Grand Total Due as of 08/02/2023					\$0.00

Tax Billed at 2022 Rates for Tax Area 204 - 204 - RE 2J

Authority	Mill Levy	Amount	Values	Actual	Assessed
COUNTY GENERAL FUND	19.4830000	\$118.29	GRAZING LAND	\$22,980	\$6,070
ROAD AND BRIDGE FUND	7.5000000	\$45.52	Total	\$22,980	\$6,070
SOCIAL SERVICES FUND	2.0000000	\$12.14			
BRUSH RURAL FIRE DIST	3.5130000	\$21.32			
E MORGAN COUNTY HOSPITAL	4.5000000	\$27.31			
E MORGAN COUNTY LIBRARY	3.5000000	\$21.24			
RE 2-J BRUSH GENERAL FD	27.0400000	\$164.13			
RE 2-J BRUSH M/L OVRD	9.3120000	\$56.52			
RE 2-J BRUSH BOND RED	12.7470000	\$77.37			
Taxes Billed 2022	89.5950000	\$543.84			

*****TAX LIEN SALE REDEMPTIONS MUST BE PAID BY CASH OR CASHIER'S CHECK*****

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Phone: 970-542-3518, Fax: 970-542-3520, Email: esale@co.morgan.co.us
Website: morgancounty.colorado.gov

Morgan County Treasurer

Statement of Taxes Due

Account Number R002949
Assessed To

Parcel 123306000002
BENOTTI, SHARI A
2420 THORNDON PARK CT
LEAGUE CITY, TX 77573

Legal Description

Situs Address

S: 06 T: 3 R: 55 S1/2S1/2 (CORRECTION SECTION)

Year	Tax	Interest	Fees	Payments	Balance
Tax Charge					
2022	\$137.96	\$0.00	\$0.00	(\$137.96)	\$0.00
Total Tax Charge					\$0.00
Grand Total Due as of 08/02/2023					\$0.00

Tax Billed at 2022 Rates for Tax Area 204 - 204 - RE 2J

Authority	Mill Levy	Amount	Values	Actual	Assessed
COUNTY GENERAL FUND	19.4830000	\$29.99	GRAZING LAND	\$5,820	\$1,540
ROAD AND BRIDGE FUND	7.5000000	\$11.55	Total	\$5,820	\$1,540
SOCIAL SERVICES FUND	2.0000000	\$3.08			
BRUSH RURAL FIRE DIST	3.5130000	\$5.41			
E MORGAN COUNTY HOSPITAL	4.5000000	\$6.93			
E MORGAN COUNTY LIBRARY	3.5000000	\$5.39			
RE 2-J BRUSH GENERAL FD	27.0400000	\$41.64			
RE 2-J BRUSH M/L OVRD	9.3120000	\$14.34			
RE 2-J BRUSH BOND RED	12.7470000	\$19.63			
Taxes Billed 2022	89.5950000	\$137.96			

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ROBERT A SAGEL, MORGAN COUNTY TREASURER
231 Ensign St, PO Box 593, Fort Morgan, CO 80701
Phone: 970-542-3518, Fax: 970-542-3520, Email: esale@co.morgan.co.us
Website: morgancounty.colorado.gov

Morgan County Treasurer

Statement of Taxes Due

Account Number R002950
Assessed To

Parcel 123307000001
BENOTTI, SHARI A
2420 THORNDON PARK CT
LEAGUE CITY, TX 77573

Legal Description

Situs Address

S: 07 T: 3 R: 55 N1/2N1/2 (CORRECTION SECTION)

Year	Tax	Interest	Fees	Payments	Balance
Tax Charge					
2022	\$137.08	\$0.00	\$0.00	(\$137.08)	\$0.00
Total Tax Charge					\$0.00
Grand Total Due as of 08/02/2023					\$0.00

Tax Billed at 2022 Rates for Tax Area 204 - 204 - RE 2J

Authority	Mill Levy	Amount	Values	Actual	Assessed
COUNTY GENERAL FUND	19.4830000	\$29.83	GRAZING LAND	\$5,800	\$1,530
ROAD AND BRIDGE FUND	7.5000000	\$11.47	Total	\$5,800	\$1,530
SOCIAL SERVICES FUND	2.0000000	\$3.06			
BRUSH RURAL FIRE DIST	3.5130000	\$5.37			
E MORGAN COUNTY HOSPITAL	4.5000000	\$6.88			
E MORGAN COUNTY LIBRARY	3.5000000	\$5.35			
RE 2-J BRUSH GENERAL FD	27.0400000	\$41.37			
RE 2-J BRUSH M/L OVRD	9.3120000	\$14.25			
RE 2-J BRUSH BOND RED	12.7470000	\$19.50			
Taxes Billed 2022	89.5950000	\$137.08			

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Phone: 970-542-3518, Fax: 970-542-3520, Email: esale@co.morgan.co.us
Website: morgancounty.colorado.gov

Morgan County Treasurer

Statement of Taxes Due

Account Number R002827
Assessed To

Parcel 123307000002
ODLE, RUTH ANN
16218 HWY 71
BRUSH, CO 80723-9436

Legal Description

Situs Address

S: 07 T: 3 R: 55 S1/2N1/2 & S1/2 (CORRECTION SECTION)

Year	Tax	Interest	Fees	Payments	Balance
Tax Charge					
2022	\$416.84	\$0.00	\$0.00	(\$416.84)	\$0.00
Total Tax Charge					\$0.00
Grand Total Due as of 08/02/2023					\$0.00

Tax Billed at 2022 Rates for Tax Area 217 - 217 - RE 2J

Authority	Mill Levy	Amount	Values	Actual	Assessed
COUNTY GENERAL FUND	19.4830000	\$89.80	GRAZING LAND	\$17,470	\$4,610
ROAD AND BRIDGE FUND	7.5000000	\$34.58	Total	\$17,470	\$4,610
SOCIAL SERVICES FUND	2.0000000	\$9.22			
BRUSH RURAL FIRE DIST	3.5130000	\$16.20			
E MORGAN COUNTY HOSPITAL	4.5000000	\$20.75			
E MORGAN COUNTY LIBRARY	3.5000000	\$16.14			
MORGAN CO QUALITY WATER	0.8240000	\$3.80			
RE 2-J BRUSH GENERAL FD	27.0400000	\$124.66			
RE 2-J BRUSH M/L OVRD	9.3120000	\$42.93			
RE 2-J BRUSH BOND RED	12.7470000	\$58.76			
Taxes Billed 2022	90.4190000	\$416.84			

*****TAX LIEN SALE REDEMPTIONS MUST BE PAID BY CASH OR CASHIER'S CHECK*****

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ROBERT A SAGEL, MORGAN COUNTY TREASURER
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Phone: 970-542-3518, Fax: 970-542-3520, Email: esale@co.morgan.co.us
Website: morgancounty.colorado.gov

Morgan County Treasurer

Statement of Taxes Due

Account Number R002838
Assessed To

Parcel 123308000001
ODLE, RUTH ANN
16218 HWY 71
BRUSH, CO 80723-9436

Legal Description
S: 08 T: 3 R: 55 ALL

Situs Address

Year	Tax	Interest	Fees	Payments	Balance
Tax Charge					
2022	\$538.48	\$0.00	\$0.00	(\$538.48)	\$0.00
Total Tax Charge					\$0.00
Grand Total Due as of 08/02/2023					\$0.00

Tax Billed at 2022 Rates for Tax Area 204 - 204 - RE 2J

Authority	Mill Levy	Amount	Values	Actual	Assessed
COUNTY GENERAL FUND	19.4830000	\$117.09	GRAZING LAND	\$22,770	\$6,010
ROAD AND BRIDGE FUND	7.5000000	\$45.08	Total	\$22,770	\$6,010
SOCIAL SERVICES FUND	2.0000000	\$12.02			
BRUSH RURAL FIRE DIST	3.5130000	\$21.11			
E MORGAN COUNTY HOSPITAL	4.5000000	\$27.05			
E MORGAN COUNTY LIBRARY	3.5000000	\$21.04			
RE 2-J BRUSH GENERAL FD	27.0400000	\$162.51			
RE 2-J BRUSH M/L OVRD	9.3120000	\$55.97			
RE 2-J BRUSH BOND RED	12.7470000	\$76.61			
Taxes Billed 2022	89.5950000	\$538.48			

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Phone: 970-542-3518, Fax: 970-542-3520, Email: esale@co.morgan.co.us
Website: morgancounty.colorado.gov

Morgan County Treasurer

Statement of Taxes Due

Account Number R002842
Assessed To

Parcel 123309000001
ODLE, RUTH ANN
16218 HWY 71
BRUSH, CO 80723-9436

Legal Description
S: 09 T: 3 R: 55 ALL

Situs Address

Year	Tax	Interest	Fees	Payments	Balance
Tax Charge					
2022	\$538.48	\$0.00	\$0.00	(\$538.48)	\$0.00
Total Tax Charge					\$0.00
Grand Total Due as of 08/02/2023					\$0.00

Tax Billed at 2022 Rates for Tax Area 204 - 204 - RE 2J

Authority	Mill Levy	Amount	Values	Actual	Assessed
COUNTY GENERAL FUND	19.4830000	\$117.09	GRAZING LAND	\$22,770	\$6,010
ROAD AND BRIDGE FUND	7.5000000	\$45.08	Total	\$22,770	\$6,010
SOCIAL SERVICES FUND	2.0000000	\$12.02			
BRUSH RURAL FIRE DIST	3.5130000	\$21.11			
E MORGAN COUNTY HOSPITAL	4.5000000	\$27.05			
E MORGAN COUNTY LIBRARY	3.5000000	\$21.04			
RE 2-J BRUSH GENERAL FD	27.0400000	\$162.51			
RE 2-J BRUSH M/L OVRD	9.3120000	\$55.97			
RE 2-J BRUSH BOND RED	12.7470000	\$76.61			
Taxes Billed 2022	89.5950000	\$538.48			

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Phone: 970-542-3518, Fax: 970-542-3520, Email: esale@co.morgan.co.us
Website: morgancounty.colorado.gov

Morgan County Treasurer

Statement of Taxes Due

Account Number R002839
Assessed To

Parcel 123310000001
ODLE, RUTH ANN
16218 HWY 71
BRUSH, CO 80723-9436

Legal Description
S: 10 T: 3 R: 55 ALL

Situs Address

Year	Tax	Interest	Fees	Payments	Balance
Tax Charge					
2022	\$538.48	\$0.00	\$0.00	(\$538.48)	\$0.00
Total Tax Charge					\$0.00
Grand Total Due as of 08/02/2023					\$0.00

Tax Billed at 2022 Rates for Tax Area 204 - 204 - RE 2J

Authority	Mill Levy	Amount	Values	Actual	Assessed
COUNTY GENERAL FUND	19.4830000	\$117.09	GRAZING LAND	\$22,770	\$6,010
ROAD AND BRIDGE FUND	7.5000000	\$45.08	Total	\$22,770	\$6,010
SOCIAL SERVICES FUND	2.0000000	\$12.02			
BRUSH RURAL FIRE DIST	3.5130000	\$21.11			
E MORGAN COUNTY HOSPITAL	4.5000000	\$27.05			
E MORGAN COUNTY LIBRARY	3.5000000	\$21.04			
RE 2-J BRUSH GENERAL FD	27.0400000	\$162.51			
RE 2-J BRUSH M/L OVRD	9.3120000	\$55.97			
RE 2-J BRUSH BOND RED	12.7470000	\$76.61			
Taxes Billed 2022	89.5950000	\$538.48			

*****TAX LIEN SALE REDEMPTIONS MUST BE PAID BY CASH OR CASHIER'S CHECK*****

Special taxing districts and the boundaries of such districts may be on file with the County Commissioners, County Clerk, or County Assessor. Unless specifically mentioned, this statement does not include land or improvements assessed under a separate account number, personal property taxes, transfer tax or miscellaneous tax collected on behalf of other entities, special or local improvement district assessments, or manufactured homes.

ROBERT A SAGEL, MORGAN COUNTY TREASURER
231 Ensign St, PO Box 593, Fort Morgan, CO 80701
Phone: 970-542-3518, Fax: 970-542-3520, Email: esale@co.morgan.co.us
Website: morgancounty.colorado.gov

APPENDIX E: LIST OF MINERAL RIGHTS HOLDERS FOR NOTIFICATION

Table 1. Benotti Property Mineral Rights Owners

Mineral Rights Owner	APN	Legal Description	Parcel Acres	Mineral Ownership Percentage
United States of America	1233-060-00-002	S/2 of S/2 of 6-3N-55W	163.44	100
United States of America	1233-070-00-001	N/2 of N/2 of 7-3N-55W	163.15	100
United States of America	1231-120-00-001	N/2 of NE/4 of 12-3N-56W	80	100

Table 2. Odle Property Mineral Rights Owners

Mineral Rights Owner	APN	Legal Description	Parcel Acres	Mineral Ownership Percentage
Ruth Ann Odle	1233-030-00-003	TRACT3: SW/4 NW/4, NW/4 SW/4, South of RR	71.50	100.00%
	1233-040-00-002	TRACT 1: NW/4 South of RR & SW/4 SW/4 & SE/4 SE/4	200.82	100.00%
	1233-040-00-002	TRACT 2: S/2 NE/4 South of RR & N/2 SE4 & E/2 SW/4	242.88	75.00%
	1233-090-00-001	TRACT 1: W/2 & SE/4 & S/2 NE/4 & NE/4 NE/4	600.00	100.00%
	1233-100-00-001	TRACT 1: S/2	320.00	100.00%
	1233-050-00-001	TRACT 1: Lot 3, S/2 NW/4, E/2 SW/4, SW/4 SW/4, SE/4 NE/4, E/2 SE/4	360.61	75.00%
	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.00	75.00%
	1233-080-00-001	TRACT 1: W/2, SW/4 of NE/4, N/2 of SE/4, SE/4 of SE/4	480.00	75.00%
	1231-120-00-002	TRACT 1: SE/4 NE/4 and the E/2 SE/4	119.00	100.00%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.00	75.00%
United States of America	1233-030-00-003	TRACT 2: SW/4 SE/4, E/2 SW/4, SW/4 SW/4, NW/4 SE/4, SE/4 NW/4	240.00	100.00%
	1233-040-00-002	TRACT 3: NW/4 SW/4 & SW/4 SE/4	80.00	100.00%
	1233-090-00-001	TRACT 2: NW/4 NE/4	40.00	100.00%
	1233-100-00-001	TRACT 2: N/2	320.00	100.00%
	1233-050-00-001	TRACT 2: Lots 1, 2, 4 and NW/4 SW/4, SW/4 NE/4, and W/2 SE/4	281.50	100.00%
	1233-080-00-001	TRACT 2: N/2 of NE/4, SE/4 of NE/4, SW/4 of SE/4	160.00	100.00%
Unocal Windy Hill Gas Storage, LLC	1233-050-00-001	TRACT 1: Lot 3, S/2 NW/4, E/2 SW/4, SW/4 SW/4, SE/4 NE/4, E/2 SE/4	360.61	25.00%
	1233-080-00-001	TRACT 1: W/2, SW/4 of NE/4, N/2 of SE/4, SE/4 of SE/4	480.00	25.00%
William A. Grant, Jr., as Trustee	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.00	6.25%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.00	6.25%
Bernice M Crosthwait Heirs of Myrtle Hans Peterson	1233-040-00-002	TRACT 2: S/2 NE/4 South of RR & N/2 SE4 & E/2 SW/4	242.88	8.33%
Edna Jean Swanson Heirs of Myrtle Hans Peterson	1233-040-00-002	TRACT 2: S/2 NE/4 South of RR & N/2 SE4 & E/2 SW/4	242.8800	8.33%
Gerald R Geisick Heir of T. H. Rediess	1233-030-00-003	TRACT 1: E/2 SE/4 South of RR	54.5000	33.33%
Diane J. Klepper	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	3.13%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	3.13%
Kay Bales	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	3.13%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	3.13%
John Eric Engstrom	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	1.56%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	1.56%
Theodore R. McGregor Heir of T. H. Rediess	1233-030-00-003	TRACT 1: E/2 SE/4 South of RR	54.5000	11.11%
Catherine A Leonardi Heir of T. H. Rediess	1233-030-00-003	TRACT 1: E/2 SE/4 South of RR	54.5000	11.11%
Bruce A McGregor Heir of T. H. Rediess	1233-030-00-003	TRACT 1: E/2 SE/4 South of RR	54.5000	11.11%
	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	1.04%

Trust I: William Carson Knorr Heir of Don Ross	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	1.04%
Trust I: Tom Johnson Knorr Jr. Heir of Don Ross	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	1.04%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	1.04%
Trust I: Katherine Treacy Knorr Cole Heir of Don Ross	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	1.04%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	1.04%
Mary Nancy Holmes Heir of Wendell S. Holmes	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	1.04%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	1.04%
Sally McPherson Heir of Wendell S. Holmes	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	1.04%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	1.04%
Ann Therest Zarezadegan Heirs of Myrtle Hans Peterson	1233-040-00-002	TRACT 2: S/2 NE/4 South of RR & N/2 SE4 & E/2 SW/4	242.8800	2.08%
Susan Swanson Heirs of Myrtle Hans Peterson	1233-040-00-002	TRACT 2: S/2 NE/4 South of RR & N/2 SE4 & E/2 SW/4	242.8800	2.08%
Laura Mendoza Heirs of Myrtle Hans Peterson	1233-040-00-002	TRACT 2: S/2 NE/4 South of RR & N/2 SE4 & E/2 SW/4	242.8800	2.08%
John Wessley Mansur Heir of T. H. Rediess	1233-030-00-003	TRACT 1: E/2 SE/4 South of RR	54.5000	8.33%
Paul Mansur Heir of T. H. Rediess	1233-030-00-003	TRACT 1: E/2 SE/4 South of RR	54.5000	8.33%
Joyce Edson Heir of T. H. Rediess	1233-030-00-003	TRACT 1: E/2 SE/4 South of RR	54.5000	8.33%
Janette Frohock Heir of T. H. Rediess	1233-030-00-003	TRACT 1: E/2 SE/4 South of RR	54.5000	8.33%
Trust II: Mary Marsha Meyers Heir of Don Ross	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	0.78%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	0.78%
Trust II: Martin Meyers Heir of Don Ross	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	0.78%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	0.78%
Trust II: Mark Marshall Meyers Heir of Don Ross	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	0.78%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	0.78%
Bradley Storey Heir of S.H. Ranson	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	0.65%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	0.65%
Jennifer Reumund Heir of S.H. Ranson	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	0.65%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	0.65%
Sean Eagan Heir of S.H. Ranson	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	0.65%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	0.65%
Robert William Eagan Heir of S.H. Ranson	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	0.65%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	0.65%
Kaitlen Paul Heirs of Myrtle Hans Peterson	1233-040-00-002	TRACT 2: S/2 NE/4 South of RR & N/2 SE4 & E/2 SW/4	242.8800	1.04%
Alicia Parkos Heirs of Myrtle Hans Peterson	1233-040-00-002	TRACT 2: S/2 NE/4 South of RR & N/2 SE4 & E/2 SW/4	242.8800	1.04%
Trust II: Virginia Arline Irish Heir of Don Ross	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	0.39%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	0.39%
Trust II: Melissa C Irish Heir of Don Ross	1233-070-00-002	TRACT 1: S/2 N/2 and S/2	491.0000	0.39%
	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad	30.0000	0.39%

Table 3. Tri-State Generation and Transmission Association, Inc. Property Mineral Rights Owners

Mineral Rights Owner	APN	Legal Description
Tri State Generation and Transmission Association, Inc. A Colorado Cooperative Corporation	1231-010-00-700	S: 01 T: 3 R: 56 PARC E1/2 B801 P134 **STATE ASSESSED**
	1233-060-00-001	S: 06 T:3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
	1231-010-00-002	S: 01 T: 3 R:56 E1/2E1/2 B908 P721 (CORRECTION SECTION)
Crossroads Morgan, LLC., A Colorado Limited Liability Corporation	1231-010-00-700	S: 01 T: 3 R: 56 PARC E1/2 B801 P134 **STATE ASSESSED**
	1233-060-00-001	S: 06 T:3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
	1231-010-00-002	S: 01 T: 3 R:56 E1/2E1/2 B908 P721 (CORRECTION SECTION)
Quentin Oil Associates, A Colorado Limited Partnership of which Quentin Mitchell, Jr., is the sole General Partner	1231-010-00-700	S: 01 T: 3 R: 56 PARC E1/2 B801 P134 **STATE ASSESSED**
	1233-060-00-001	S: 06 T:3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
	1231-010-00-002	S: 01 T: 3 R:56 E1/2E1/2 B908 P721 (CORRECTION SECTION)

APPENDIX F: TRI-STATE GENERATION TEMPORARY ACCESS AGREEMENT

TEMPORARY LICENSE AGREEMENT

THIS TEMPORARY LICENSE AGREEMENT (“**Agreement**”) is made this 17th day of October, 2023 (“**Effective Date**”), by and between Tri-State Generation and Transmission Association, Inc., a Colorado cooperative corporation (“**Tri-State**”), whose address is 1100 W. 116th Ave., Westminster, Colorado 80234, and Fortress Solar I LLC, a Delaware limited liability company (“**Licensee**”), whose address is 11801 Domain Blvd, Suite 450, Austin, Texas 78758.

RECITALS:

- A. Tri-State is the owner of certain real properties comprising of Morgan County assessor tax parcels 123306000001, 123101000002, 123101000003, 103531000005, and 123101000005, situated, respectively, in Section 1, Township 3 North, Range 56 West and Section 6, Township 3 North, Range 55 West, in the County of Morgan, State of Colorado, as depicted on the attached Exhibit A, (collectively, the “**Licensed Premises**”).
- B. Licensee requests a license for surveying and other activities upon the Licensed Premises as specified in this Agreement.
- C. Tri-State will grant a license, only for the purpose stated in this Agreement, to Licensee subject to the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of TEN AND NO/100 DOLLARS (\$10.00), the mutual promises contained in this Agreement, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Tri-State and Licensee agree as follows:

1. Grant of License. Tri-State grants to Licensee, its affiliates and its and their employees, agents, contractors, and subcontractors, a license (the “**License**”) to enter upon, over, and across the Licensed Premises solely for the purposes of land surveying, environmental surveying, soil investigations, design studies, and engineering studies for a privately owned Gen-Tie 230kV transmission line with up to three circuits with either monopoles or tower structure(s) and site access road for operation and maintenance purposes from County Road R6. The activities described above must be limited to the Licensed Premises and specifically are not to be performed upon the real property parcel upon which Story Substation is situated. Licensee will notify Dan Burke at 303-548-4895 or by email at dburke@tristategt.org each time before entering the Licensed Premises.
2. Term. The License commences on the Effective Date and terminates one (1) year after the Effective Date (said period referred to herein as the “**Term**”), unless terminated earlier in accordance with paragraph 8 below.

3. Retained Rights of Tri-State. Tri-State reserves the right of ownership, use and occupancy of the Licensed Premises to the fullest extent consistent with the rights granted to Licensee in this Agreement.

4. Damage to the Licensed Premises. Licensee will exercise its rights under this Agreement with reasonable care, and each failure of Licensee to exercise reasonable care will be a breach of this Agreement entitling Tri-State, in its sole discretion, to terminate the License. Licensee assumes any and all risks and obligations associated with the rights granted to Licensee in this Agreement and Licensee's activities on the Licensed Premises. In the event Licensee damages improvements, including landscaping, located on the Licensed Premises, or the slope or grade of the surface of the Licensed Premises, when undertaking the activities permitted hereunder, Licensee will promptly reimburse Tri-State for all costs to repair and restore the Licensed Premises to a substantially similar condition in which they existed before the damage, or with Tri-State's prior written consent, Licensee may undertake such repair and restoration activities itself and at its sole cost.

5. Insurance requirements. Licensee must, at all times during the Term, and at Licensee's sole cost, maintain the following insurance coverage, and must deliver to Tri-State proof of such insurance coverage prior to Licensee's initial entry upon the Licensed Premises and from time to time thereafter as Tri-State may reasonably request:

(a) Commercial general liability insurance in the amount of \$1,000,000 per occurrence for bodily injury and property damage and \$2,000,000 annual aggregate. Such insurance must cover liability arising from the activities and operations of Licensee and its employees, independent contractors, and agents on the Licensed Premises, with Tri-State named as an additional insured, as its interest may appear. In addition, such policy's additional insured endorsement benefiting Tri-State must cover acts of both the named insured and the additional insured; and

(b) Comprehensive automobile liability insurance with a minimum combined single limit of \$1,000,000 per occurrence for bodily injury and property damage, and covering owned, non-owned, and hired vehicles, trailers or semi-trailers designed for travel on public roads; and

(c) At any time during the Term that Licensee has one or more employees involved in any manner with operations upon the Licensed Premises, Licensee will maintain workers' compensation insurance with minimum statutory limits to cover obligations imposed by federal and state statutes applicable to such employees and employers' liability insurance for bodily injury by accident of \$1,000,000 each accident, bodily injury by disease of \$1,000,000 each employee and \$1,000,000 each accident. Tri-State reserves the right, from time to time in its discretion, to require Licensee to provide evidence or assurances to Tri-State that Licensee does not have any such employees, which may include, without limitation, execution of a sworn affidavit, indemnity, release or waiver.

6. Indemnification. Licensee shall indemnify, defend and hold Tri-State (and its members, directors, officers, employees, contractors, agents, representatives, subsidiaries and affiliates, collectively, the “**Tri-State Parties**”) harmless from and against all claims, actions, damages, liability, and expenses (including reasonable attorneys’ fees and actual costs) including the loss of life, personal or bodily injury, or damage to property, arising from, out of, or in connection with any act or omission of Licensee, its principals, employees, contractors, representatives, agents, or invitees in connection with this Agreement. In no event will Licensee be liable to the Tri-State Parties to the extent any claims, actions, damages, liability or expenses (a) relate to any condition on the Licensed Premises not caused by Licensee or (b) that arise from, out of, or in connection with the negligence or intentional misconduct of a Tri-State Party. Licensee’s obligations set forth in this paragraph will survive termination or expiration of this Agreement.

7. Modification. This Agreement, including its integrated exhibit, constitutes the entire and final agreement and understanding between the Parties with respect to the subject matter set forth herein, and supersedes, integrates, and replaces all prior agreements and understandings with respect to the subject matter hereof. This Agreement may be modified only by a writing signed by both Tri-State and Licensee.

8. Termination. Tri-State may, in its sole discretion, terminate the License prior to the end of the Term, without Licensee’s agreement or consent, by delivering written notice to Licensee, at least 30 days in advance, notifying Licensee of the early termination of the License. Tri-State’s express right to terminate the License as provided above is not intended to in any way limit other rights Tri-State may have under the law or equity to terminate or revoke the License.

9. Removal of Personal Property. Promptly upon termination of the License, Licensee must remove all its equipment, machinery, fixtures and other personal property from the Licensed Premises. If Licensee has failed to remove any of its personal property seven (7) days after termination of the License, then Tri-State may, in its sole discretion, remove and dispose of said personal property, and Licensee must reimburse Tri-State for all costs it incurs in removing and disposing of the personal property.

10. Limitation of Liability. LICENSEE HEREBY WAIVES ALL CONSEQUENTIAL, EXEMPLARY, PUNITIVE AND INCIDENTAL DAMAGE CLAIMS AGAINST TRI-STATE IN ANY MANNER ARISING OUT OF OR CONNECTED WITH THIS AGREEMENT, REGARDLESS OF WHETHER A CLAIM IS BASED UPON BREACH OF CONTRACT, TORT OR ANY OTHER THEORY. NOTWITHSTANDING ANY OTHER PROVISION TO THE CONTRARY, TRI-STATE’S AGGREGATE CUMULATIVE LIABILITY UNDER THIS AGREEMENT WHETHER BASED UPON BREACH OF CONTRACT, TORT OR ANY OTHER THEORY SHALL NOT EXCEED THE AMOUNT PAID BY LICENSEE TO TRI-STATE UNDER THIS AGREEMENT DURING THE PRIOR TWELVE MONTHS. LICENSEE WAIVES ITS RIGHT TO SUE TRI-STATE AT LAW OR IN EQUITY UNDER THIS AGREEMENT OR UNDER ANY CAUSE OF ACTION RELATING TO THE SUBJECT MATTER OF THE THIS AGREEMENT UNLESS LICENSEE COMMENCES THE SUIT WITHIN ONE YEAR FROM THE DATE ON WHICH

LICENSEE BECOMES AWARE OF THE LOSS OR DAMAGE WHICH IS THE SUBJECT OF THE SUIT.

11. Colorado Law. This Agreement shall be governed by and construed in accordance with Colorado law. The parties (on behalf of themselves and their respective successors and assigns) hereby consent to the jurisdiction and venue of all state and federal courts located in the State of Colorado with respect to all disputes and other matters arising under or in connection with this Agreement and waive any objection they might otherwise have to such jurisdiction and venue.

12. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument. Delivery may be effected by actual delivery or by electronic or by fax transmission of an executed counterpart copy to the other party.

13. No Recordation. Licensee agrees that it will not record this License Agreement with any clerk and recorder's office or other public office.

14. Survival. Licensee's obligations with respect to the repair and restoration of the Licensed Premises as set forth in paragraph 4 of this Agreement, and the respective rights and obligations of Tri-State and Licensee set forth in paragraphs 6, 9, 10, 11, and 13 of this Agreement, will survive termination of this License.

IN WITNESS WHEREOF, Tri-State and Licensee sign this Temporary License Agreement to be effective as of the Effective Date.

TRI-STATE:

TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC., a Colorado cooperative corporation

By: 
 Name: H. Steven Gray DocuSigned by: BF3F53863F7F454...
 Title: Senior Manager Land Rights and Permitting

LICENSEE:
 Fortress Solar I LLC, a Delaware limited liability company

Andrew Breyer

 [name] Andrew Breyer
 [title] Director Development

EXHIBIT A
DEPICTED LOCATION OF LICENSED PREMISES FOR LAND SURVEYING AND
INVESTIGATIVE PURPOSES

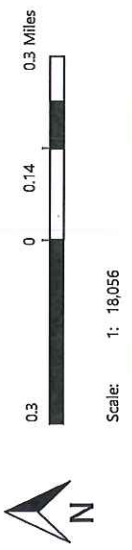
Tri-State Parcel Map - Fortress Solar Surveying



Notes

This map includes confidential information of Tri-State and third parties. The GIS data and maps may not be disclosed to any third party. The user agrees to keep this information confidential and not disclose it to third parties. If you have any questions regarding this, please contact the Tri-State legal department.

GIS data and maps available to Tri-State Generation and Transmission Association are provided as general information to aid Tri-State employees. No user of Tri-State's GIS data and maps may sell any portion of the information provided herein. Tri-State makes no warranty regarding accuracy or completeness of the data and maps. Users shall rely only upon proper field verification of Tri-State GIS data.








20230908 Temporary License Agreement Draft (from Tri-State) Aypa Power-Fortress Solar V1 (Clean) Exhibit

Final Audit Report

2023-10-17

Created:	2023-10-16
By:	Nate Crain
Status:	Signed
Transaction ID:	CBJCHBCAABAAT15Ub_2ZzoZGGB-nxFJBSoWqOvuTj3aq

"20230908 Temporary License Agreement Draft (from Tri-State) Aypa Power-Fortress Solar V1 (Clean) Exhibit" History

-  Document created by Nate Crain
2023-10-16 - 8:14:29 PM GMT- IP address: 170.103.74.198
-  Document emailed to Andrew Breyer for signature
2023-10-16 - 8:15:34 PM GMT
-  Email viewed by Andrew Breyer
2023-10-17 - 5:11:58 PM GMT- IP address: 104.47.75.190
-  Document e-signed by Andrew Breyer
Signature Date: 2023-10-17 - 5:12:58 PM GMT - Time Source: server- IP address: 174.84.163.181
-  Agreement completed.
2023-10-17 - 5:12:58 PM GMT

APPENDIX G: MORGAN COUNTY ROAD AND BRIDGE DEPARTMENT DRIVEWAY PERMIT APPLICATIONS



Application for Driveway Access Permit
Morgan County, Colorado

Instructions for Completing and Submitting Application

1. **Property Owner (Permittee):** Please provide the full name, mailing address, telephone number and email address (*if available*) of the legal property owner. The provided telephone number should be one where the Permittee can be reached during business hours Monday through Friday, 8:00 a.m. to 4:00 p.m. MDT.
2. **Agent of Permittee:** If the applicant (*person or company completing this application*) is different from the legal property owner (*Permittee*), provide entity name (*if applicable*), the full name of the person serving as the agent, mailing address, telephone number, and email address (*if available*). The provided telephone number should be one where the Agent can be reached during business hours Monday through Friday, 8:00 a.m. to 4:00 p.m. MDT. *Please provide documentation you are an agent of property owner.*
3. **Legal Description of property:** Provide the legal description to the full extent that applies for the property to be accessed by the requested driveway. Include the Assessor parcel number. This information is available through the County Assessor or Clerk and Records office or on your property deed(s).
4. **Road Access:** Complete the information on the County Road that will be accessed by this proposed driveway.
5. **New or Existing Driveway:** Complete the information for the driveway type.
New Driveways:
 - In determining location for the proposed driveway, take into account: line of site distances, relationship to road intersections, and relationship to crests of hills.
 - Please indicate the desired width of the new requested driveway.
 - If possible, provide a map showing the desired location of the proposed driveway.
 - ***The proposed area for the new driveway must be clearly marked with flagged stakes on each side of the proposed area. Please have the location marked as indicated prior to submitting application.***
6. Initial the bottom of page two (2) in the provided location indicating that you have read and understand the terms and conditions.
7. Signature Section must be signed and dated by the property owner or agent. *Applications will not be processed until they are fully completed, initialed, signed and submitted, along with any additional required documents.*
8. **Submittal of Application:** Please submit application and all corresponding paperwork to:
By mail or in person: Morgan County Road and Bridge Department
P.O. Box 516
17303 County Road S
Fort Morgan, CO 80701
By Email to: rbmorganc@co.morgan.co.us

Application for Driveway Access Permit
Morgan County, Colorado

Terms and Conditions

1. The granting of this permit application is for one (1) property access across the county right of way onto a county road. The access must not exceed the approved width defined on the approved permit. Additional accesses crossing the right of way must be applied for separately.
2. If this access is to be onto an access/travelling easement, then a copy of the easement, recorded plat or use agreement must accompany this application.
3. The granting of a driveway access permit by Morgan County is only for the purpose of crossing the right of way under the counties jurisdiction. It is the permittee's responsibility to identify and obtain permissions to cross any other easements, covenants, right of ways or private agreements that may exist.
4. If the access request is onto any Federal or State lands, you must provide the names and contact information for the relevant agencies and attach a copy of the authorization for the property use.
5. All property owners/agents are responsible for any damages that may occur to the county road or right of way during installation of said driveway.
6. The construction and all costs associated with the construction of the driveway are the responsibility of the property owner/agent. The construction cannot exceed the defined width and must include any specified culverts required as defined in the approved permit. Culverts may be purchased from anywhere, however they must be approved by the county prior to installation. Culverts may also be purchased from Morgan County Road and Bridge.
7. If a culvert is required, it is for use by Morgan County to protect the road and right of way. Morgan County retains the right to utilize the culvert in any way it deems necessary.
8. If a culvert is not required at the time of permit issuance, however, in the future a culvert is deemed necessary, the cost of said culvert may be at the property owner's expense.
9. Inside the county right of way, the driveway may only consist of the travelling surface to access the property. No other structures or appurtenances may be placed in the right of way (*examples: columns, walls, fencing, large rocks, etc.*). The only exception to this requirement is mailboxes.
10. During the construction of an approved driveway, it is the responsibility of the property owner/agent and/or their contractor to insure safety to the travelling public. This could include the use of signs, cones and/or traffic control as necessary.
11. All repairs, maintenance and costs associated with said driveway are the responsibility of the property owner/agent.
12. Morgan County is not responsible for any damages to the driveway caused by normal maintenance operations, including but not limited to mowing, grading, and snowplowing.
13. The property owner/agent agrees to hold harmless, indemnify, and defend Morgan County from any claim of any person arising from the installation, use, maintenance, or removal of the driveway in the county right of way.
14. The terms, conditions and requirements defined in this application and subsequent approved permit will remain valid through any future sales, transfer of ownership or assignments of the property defined in this driveway application.

SB

Please Initial that you have read and understand the terms and conditions outlined on this page.

Application for Driveway Access Permit
Morgan County, Colorado

1. **Property Owner (Permittee):**

Name: Shari A Benotti

Address: 2420 Thorndon Park Ct.

City/State/Zip Code: League City, TX 77573

Phone () _____ Email: _____

2. **Agent of Property Owner (If Applicable)**

Company/Individual Name Fortress Solar I LLC

Contact Name (If Applicable) Charles Ndhlovu

Address: 11801 Domain Blvd, Suite 450

City/State/Zip Code: Austin, TX 78758

Phone _____ Email: _____

3. **Legal Description:**

S: 12 T: 3 R: 56 N1/2NE1/4

Parcel Number: 1231-120-00-001

4. **Road Access:**

Access onto County Road Co. Rd. R (Circle Direction) North / South / East / West of County Road Co. Rd. R

5. **Driveway Type:** (Check One) **New Driveway Existing Driveway _____

Desired width of New Driveway 20 Feet.

**If this is a new driveway location, please place flagged stake marker on each side of the requested driveway location.

I have read the instructions, terms and conditions outlined in this Driveway Access Permit Application, and agree to all terms and conditions outlined therein, furthermore, I understand no liability is assumed by the County of Morgan, Colorado or its agents by issuance of a permit for this application and all costs, present and future, associated with the access provided by an Approved Driveway Access Permit are the responsibility of the property owner/agent and or any future assignees. The applicant declares the information provided are true and complete to the best of their knowledge.

Shari A. Benotti
Property Owner/Agent Signature

10-24-2023
Date

Submit Completed Application and All Supporting Documents to:

Morgan County Road and Bridge Department

P.O. Box 516

17303 County Road 5

Fort Morgan, CO 80701

Or by Email to: rbmorganc@co.morgan.co.us

Phone: (970) 542-3560 Fax: (970) 542-3569

For Office Use only below this line

Determination: _____ Approved _____ Denied (Reason for Denial): _____

GPS Coordinates, Centerline of Driveway in relation to road: Latitude: _____

Maximum Width of Driveway: _____ Feet Longitude: _____





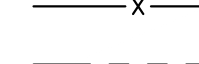
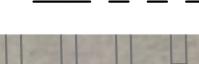
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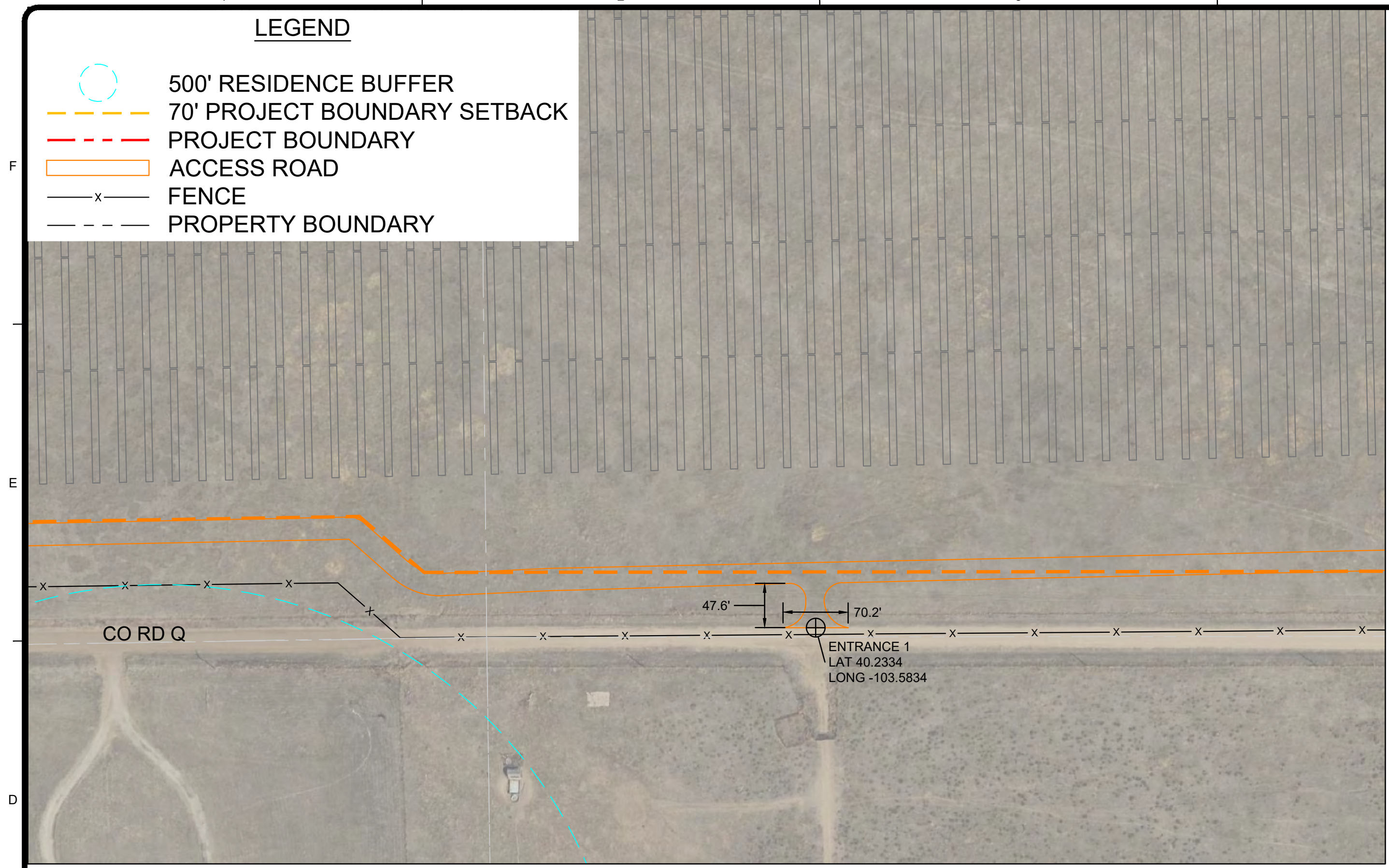
Closest Intersecting Road _____ Measurement from Closest Intersecting Road _____ Feet

Driveway Access Code: _____

Completed By: _____ Date: _____

LEGEND

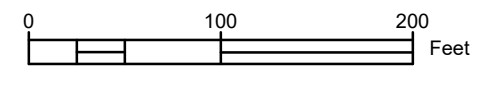
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-  70' PROJECT BOUNDARY SETBACK
-  PROJECT BOUNDARY
-  ACCESS ROAD
-  FENCE
-  PROPERTY BOUNDARY



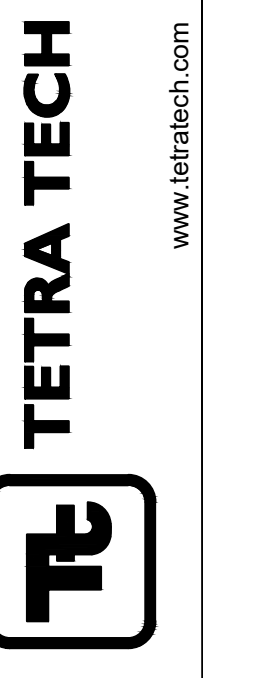
SITE ACCESS #1
PLAN
SCALE: 1" = 100'
2
C-200



SITE ACCESS #2
PLAN
SCALE: 1" = 100'
3
C-200



SITE ACCESS #3
PLAN
SCALE: 1" = 100'
4
C-200



MARK	DATE	DESCRIPTION	BY
A	08/24/23	SITE PLAN	CAN
B	10/03/23	SITE PLAN	AML

AYPA POWER
FORTRESS SOLAR PROJECT
MORGAN COUNTY, COLORADO
SITE ACCESS
LOCATIONS

PROJ:	194-1179-0010
DESN:	CAN
DRWN:	CAN
CHKD:	JPP

C-202

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Application for Driveway Access Permit
Morgan County, Colorado

Instructions for Completing and Submitting Application

1. **Property Owner (Permittee):** Please provide the full name, mailing address, telephone number and email address (*if available*) of the legal property owner. The provided telephone number should be one where the Permittee can be reached during business hours Monday through Friday, 8:00 a.m. to 4:00 p.m. MDT.
2. **Agent of Permittee:** If the applicant (*person or company completing this application*) is different from the legal property owner (*Permittee*), provide entity name (*if applicable*), the full name of the person serving as the agent, mailing address, telephone number, and email address (*if available*). The provided telephone number should be one where the Agent can be reached during business hours Monday through Friday, 8:00 a.m. to 4:00 p.m. MDT. *Please provide documentation you are an agent of property owner.*
3. **Legal Description of property:** Provide the legal description to the full extent that applies for the property to be accessed by the requested driveway. Include the Assessor parcel number. This information is available through the County Assessor or Clerk and Records office or on your property deed(s).
4. **Road Access:** Complete the information on the County Road that will be accessed by this proposed driveway.
5. **New or Existing Driveway:** Complete the information for the driveway type.
New Driveways:
 - In determining location for the proposed driveway, take into account: line of site distances, relationship to road intersections, and relationship to crests of hills.
 - Please indicate the desired width of the new requested driveway.
 - If possible, provide a map showing the desired location of the proposed driveway.
 - ***The proposed area for the new driveway must be clearly marked with flagged stakes on each side of the proposed area. Please have the location marked as indicated prior to submitting application.***
6. Initial the bottom of page two (2) in the provided location indicating that you have read and understand the terms and conditions.
7. Signature Section must be signed and dated by the property owner or agent. *Applications will not be processed until they are fully completed, initialed, signed and submitted, along with any additional required documents.*
8. **Submittal of Application:** Please submit application and all corresponding paperwork to:
By mail or in person: Morgan County Road and Bridge Department
P.O. Box 516
17303 County Road S
Fort Morgan, CO 80701
By Email to: rbmorganc@co.morgan.co.us

Application for Driveway Access Permit
Morgan County, Colorado

Terms and Conditions

1. The granting of this permit application is for one (1) property access across the county right of way onto a county road. The access must not exceed the approved width defined on the approved permit. Additional accesses crossing the right of way must be applied for separately.
2. If this access is to be onto an access/travelling easement, then a copy of the easement, recorded plat or use agreement must accompany this application.
3. The granting of a driveway access permit by Morgan County is only for the purpose of crossing the right of way under the counties jurisdiction. It is the permittee's responsibility to identify and obtain permissions to cross any other easements, covenants, right of ways or private agreements that may exist.
4. If the access request is onto any Federal or State lands, you must provide the names and contact information for the relevant agencies and attach a copy of the authorization for the property use.
5. All property owners/agents are responsible for any damages that may occur to the county road or right of way during installation of said driveway.
6. The construction and all costs associated with the construction of the driveway are the responsibility of the property owner/agent. The construction cannot exceed the defined width and must include any specified culverts required as defined in the approved permit. Culverts may be purchased from anywhere, however they must be approved by the county prior to installation. Culverts may also be purchased from Morgan County Road and Bridge.
7. If a culvert is required, it is for use by Morgan County to protect the road and right of way. Morgan County retains the right to utilize the culvert in any way it deems necessary.
8. If a culvert is not required at the time of permit issuance, however, in the future a culvert is deemed necessary, the cost of said culvert may be at the property owner's expense.
9. Inside the county right of way, the driveway may only consist of the travelling surface to access the property. No other structures or appurtenances may be placed in the right of way (*examples: columns, walls, fencing, large rocks, etc.*). The only exception to this requirement is mailboxes.
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12. Morgan County is not responsible for any damages to the driveway caused by normal maintenance operations, including but not limited to mowing, grading, and snowplowing.
13. The property owner/agent agrees to hold harmless, indemnify, and defend Morgan County from any claim of any person arising from the installation, use, maintenance, or removal of the driveway in the county right of way.
14. The terms, conditions and requirements defined in this application and subsequent approved permit will remain valid through any future sales, transfer of ownership or assignments of the property defined in this driveway application.

SAQ

Please Initial that you have read and understand the terms and conditions outlined on this page.

Application for Driveway Access Permit
Morgan County, Colorado

1. Property Owner (Permittee):

Name: Ruth Ann Odle
Address: 16218 Highway 71
City/State/Zip Code: Brush, CO 80723-9436
Phone () _____ Email: _____

2. Agent of Property Owner (If Applicable)

Company/Individual Name Fortress Solar I LLC
Contact Name (If Applicable) Charles Ndhlovu
Address: 11801 Domain Blvd, Suite 450
City/State/Zip Code: Austin, TX 78758
Phone _____ Email: _____

3. Legal Description:

S: 07 T: 3 R: 55 S1/2N1/2 & S1/2 (CORRECTION SECTION)

Parcel Number: 1233-070-00-002

4. Road Access:

Access onto County Road Co. Rd. Q (Circle Direction) North / South / East / West of County Road Co. Rd. Q

5. Driveway Type: (Check One) **New Driveway Existing Driveway _____

Desired width of New Driveway 20 Feet.

****If this is a new driveway location, please place flagged stake marker on each side of the requested driveway location.**

I have read the instructions, terms and conditions outlined in this Driveway Access Permit Application, and agree to all terms and conditions outlined therein, furthermore, I understand no liability is assumed by the County of Morgan, Colorado or its agents by issuance of a permit for this application and all costs, present and future, associated with the access provided by an Approved Driveway Access Permit are the responsibility of the property owner/agent and or any future assignees. The applicant declares the information provided are true and complete to the best of their knowledge.

Ruth Ann Odle
Property Owner/Agent Signature

10/25/23
Date

Submit Completed Application and All Supporting Documents to:

Morgan County Road and Bridge Department
P.O. Box 516
17303 County Road 5
Fort Morgan, CO 80701
Or by Email to: rbmorganc@co.morgan.co.us
Phone: (970) 542-3560 Fax: (970) 542-3569

For Office Use only below this line

Determination: _____ Approved _____ Denied (Reason for Denial): _____

GPS Coordinates, Centerline of Driveway in relation to road: Latitude: _____

Maximum Width of Driveway: _____ Feet Longitude: _____







Culvert Required: YES / NO If Yes, Size: _____

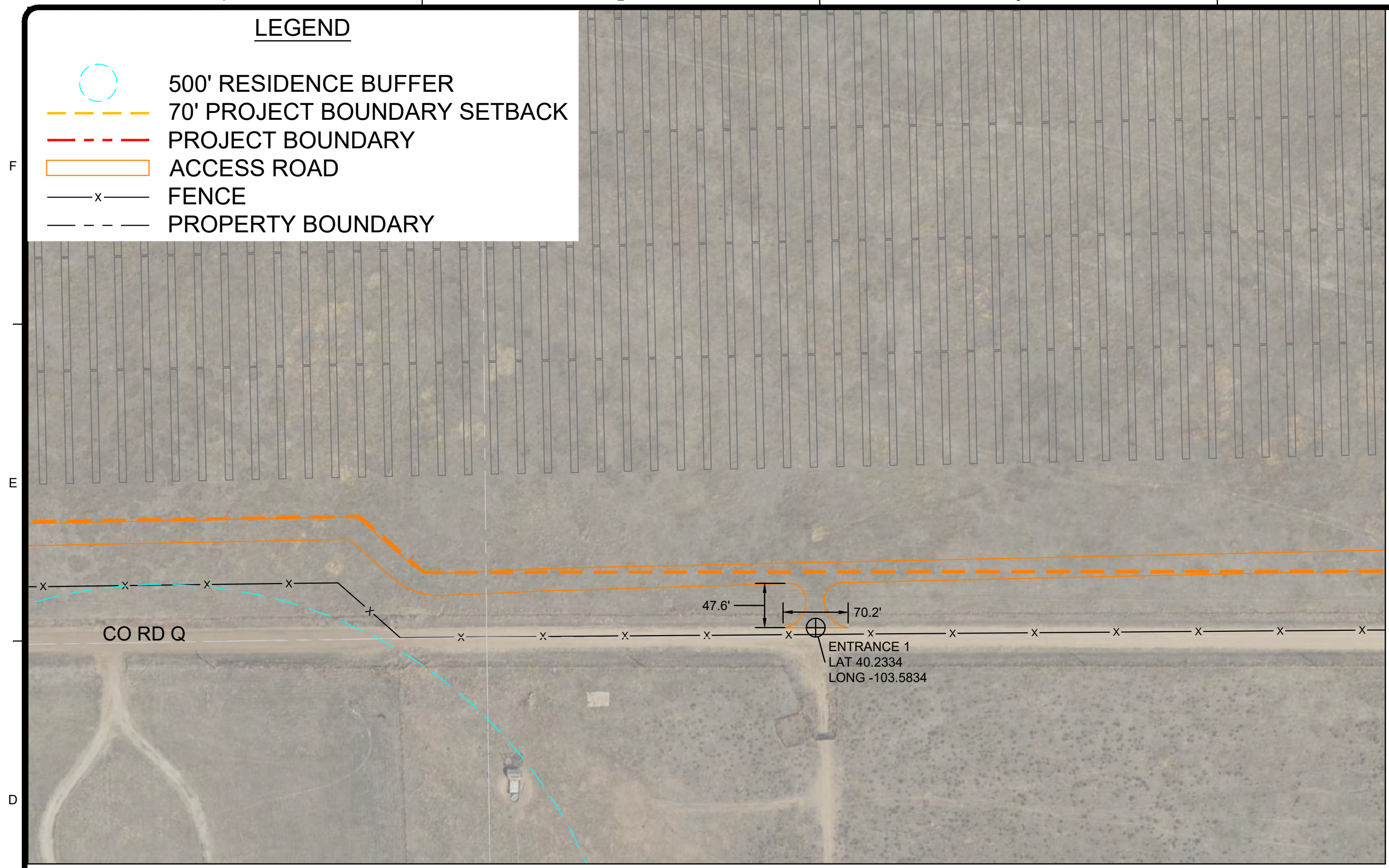
Closest Intersecting Road _____ Measurement from Closest Intersecting Road _____ Feet

Driveway Access Code: _____

Completed By: _____ Date: _____

LEGEND

-  500' RESIDENCE BUFFER
-  70' PROJECT BOUNDARY SETBACK
-  PROJECT BOUNDARY
-  ACCESS ROAD
-  FENCE
-  PROPERTY BOUNDARY



SITE ACCESS #1

PLAN

SCALE: 1" = 100'

2
C-200

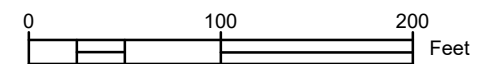


SITE ACCESS #2

PLAN

SCALE: 1" = 100'

3
C-200



SITE ACCESS #3

PLAN

SCALE: 1" = 100'

4
C-200



MARK	DATE	DESCRIPTION	BY
A	08/24/23	SITE PLAN	CAN
B	10/03/23	SITE PLAN	AML

AYPA POWER
FORTRESS SOLAR PROJECT
MORGAN COUNTY, COLORADO
SITE ACCESS
LOCATIONS

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CHKD:	JPP

C-202

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APPENDIX H: EMERGENCY OPERATIONS & FIRE MITIGATION PLAN

Fire Mitigation & Emergency Operations Plan

Fortress Solar Project Morgan County, Colorado

November 2023

Submitted to:

Morgan County Planning and Zoning
231 Ensign Street, PO Box 596
Fort Morgan, CO 80701



Prepared for

Fortress Solar I LLC
11801 Domain Blvd, Suite 450
Austin, TX 78758

Prepared by

 **TETRA TECH**
1560 Broadway, Suite 1400
Denver, CO 80202

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Acronyms and Abbreviations

Applicant	Fortress Solar I LLC; Fortress Solar II LLC; and Fortress Solar III LLC
Aypa	Aypa Power North American LLC
BESS	battery energy storage system
BMS	Battery Management System
ERT	Emergency Response Team
FSS	Fire Suppression System
LEL	lower explosive limit
MW	megawatt
MWh	megawatt hours
NFPA	National Fire Protection Agency
NOC	Network Operations Center
Plan	Emergency Response Plan
PPE	personal protective equipment
Project	Fortress Solar Project
Project Owner	Fortress Solar I LLC; Fortress Solar II LLC; and Fortress Solar III LLC
PV	photovoltaic
SCADA	Supervisory control and data acquisition
SCBA	Self-contained breathing apparatus
SME	subject matter expert

1.0 INTRODUCTION

This Fire Mitigation and Emergency Operation Plan (Plan) has been developed in support of a utility scale solar and battery energy storage system (BESS) project known as the Fortress Solar Project (the “Project”) in Morgan County, Colorado. Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC, (collectively the “Applicant”) which are indirect subsidiaries of Aypa Power North American LLC (“Aypa”), have prepared this Plan in furtherance of the development of the multi-phased Project. The Project is comprised of up to 600-megawatts (“MW”) of solar and 600 MW of energy storage. Each phase is planned for construction from 2025 through 2028 with three phases in total approximating 200 MW of solar and BESS each.

This Plan is intended to detail the proper emergency responses to potential events at the site located approximately 1.6 miles east of the City of Brush in unincorporated, Morgan County, Colorado. In total, the Project consists of an approximately 4,069-acre solar array, a 21-acre BESS, a 2-acre Project substation, and a 1.25-mile generation-tie line for interconnection at the existing Tri-State Generation and Transmission Association Story Substation located west of the Project.

The Project facilities are sited on existing private, open rangeland currently under purchase option by the Applicant. In total, the Project area fenced boundary encompasses approximately 4,259 acres.

The following items are considered in this document:

- Site Description
- Project Response Plan
- Facility Evacuation
- Emergency Contacts
- System Safety Considerations
- Battery Fire Protection System Information
- Battery Fire Protection Systems and Firefighting response considerations; and
- Additional Fire Mitigation Considerations

This document shall be activated at the start of site construction activities and be in effect during commissioning and normal operations and through the decommissioning of the facility.

All alarms from the facility will be under 24-hour central monitoring by the Applicant’s Network Operations Center (NOC). In any event, the NOC will coordinate all the response as it pertains to the Project facility. The NOC will directly contact local emergency responders, including the fire department as soon as an event requiring emergency response is reported.

The Applicant will periodically update this document with regards to input from stakeholders, federal, county, and local requirements, and facility updates. Appropriate parties will be notified of any revisions to this document.

2.0 DEFINITIONS

2.1 Battery Management System (BMS)

A system that monitors, controls, and optimizes performance of an individual or multiple battery modules in an energy storage system and has the ability to control the disconnection of the module(s) from the system in the event of abnormal conditions. Each string of modules has a dedicated BMS at the rack level.

2.2 Local Controller

The local controller is used for the communication integration of different equipment in the energy storage system, faults and alarms management, parallel control of two or more energy storage inverters, the design offers one universal communication interface of the system.

The local controller collects and uploads the real-time information of PCSs, battery system and other equipment in the energy storage system through an ethernet connection. At the same time, the Energy Management System (EMS) can control the storage system through the local controller. Within the control scope of the local controller, it processes the startup and shutdown procedure, protections, and alarms.

2.3 Cell

The basic functional electrochemical unit contains an assembly of electrodes, electrolyte, separators, container, and terminals. It is a source of electrical energy by direct conversion of chemical energy.

2.4 Module

A subassembly which is a component of a BESS that consists of a group of cells or electrochemical capacitors connected together either in a series and/or parallel configuration with or without protective devices and monitoring circuitry. There are sixty-nine cells in each module.

2.5 Battery Rack

A battery rack is comprised of twenty-four modules. Modules are connected in series to produce the required usable voltage/potential.

2.6 BESS Container

The BESS houses eight battery racks each with six modules. The voltage output of the container is 1,324.8 VDC. The BMS exists at the string level within racks and provides autonomous oversight to disconnect strings or the container for conditions outside of the defined operating parameters. This is achieved through the BMS contactor and a dedicated disconnect switch has been provided that allows the container to be electrically isolated from the facility. The container has been outfitted with a liquid cooled thermal management system, fire detection, gas detection, and NFPA 69 ventilation system that is activated upon 10% lower explosive limit (LEL) for explosion control. E-Stops have been provided on the terminal ends of each container to facility an emergency shutdown if necessary.

2.7 Medium Voltage Skid (MV Skid)

An MV Skid is provided for each group of up to ten BESS containers. Battery containers supply the inverter at 1,324.8 VDC. The inverter transforms DC from batteries to AC when discharging, and it turns AC from the grid to DC while charging. Power then passes through the step-up transformer where voltage is raised to 34,500V. Each MV Skid has an E-Stop, dedicated breaker with a disconnect switch and a ground.

2.8 E-Stop

Emergency Stop's or E-Stops are located locally on the terminal ends of each BESS container and there is one site level E-Stop as required by NFPA 855 that is capable of shutting down the entire facility. The site level E-Stop is located in the control enclosure or can be initiated remotely. The operation of an E-Stop will stop the charging and discharging of batteries within the system. However, the operation of an E-Stop will not dissipate the electrical potential remaining within the battery cells referred to as stranded energy. The operation of a BESS Container e-stop will open the PCS Inverter breaker which will island the BESS Container. The MV Skid has also been provided with an E-Stop button located 50 inches above grade.

2.9 Cell Venting

In this initial stage of failure, a flammable electrolyte vents from the module in gaseous state. Based upon UL9540a testing the critical temperature where sustained venting begins is 147 C/297 F. Gas venting is often a precursor of thermal runaway.

2.10 Thermal Runaway

The incident when an electrochemical cell's temperature increases at an accelerating rate in an uncontrollable fashion sufficient to result in damage to the cell. The thermal runaway progresses when the cell's generation of heat is at a higher rate than the heat it can dissipate. Based on UL9540a Testing Thermal Runaway begins at 150°C/302°F.

2.11 Stranded Energy

During an emergency at a BESS facility E-Stops may be operated to stop charging and discharging of modules. However, the E-Stop feature does not discharge the electrical potential remaining in the cells/modules which is known as Stranded Energy.

2.12 Critical Temperatures

Temperature plays a significant role in the health of batteries. Manufacturers provide thermal operating guidelines and UL9540a testing serves to inform on Critical Temperature thresholds that result in cell venting and thermal runaway.

2.13 Explosion Control

Explosion Protection by Deflagration Venting (NFPA68): This standard applies to the design, location, installation, maintenance, and use of devices and systems that vent the combustion gases and

pressures resulting from a deflagration within an enclosure so that structural and mechanical damage is minimized.

Explosion Prevention Systems (NFPA 69): This standard provides requirements for installing systems for the prevention and control of explosions in enclosures that contain flammable concentrations of flammable gases, vapors, mists, dusts, or hybrid mixtures.

2.14 Alternating Current (AC) / Direct Current (DC)

Energy produced by the Modules can be categorized as DC. During electrical emergencies, the fire services traditionally use non-contact voltage testers to identify energized equipment. It should be noted that non-contact voltage detectors cannot detect the presence of Direct Current (DC) and should never be used.

2.15 BESS – Subject Matter Expert

The code requires the facility owner/operator to designate and train staff to respond 24/7 within a timely manner to investigate all battery energy storage system incidents. They will serve as the site subject matter expert (SME) and work closely with the fire services to investigate and mitigate conditions while ensuring the safety of fire service members operating at the scene.

2.16 Site Operator

At the direction of the BESS SME the Site Operator will conduct or coordinate field switching to isolate equipment not automatically isolated by the BMS. Switching may involve the operation of breakers, disconnects and the application of grounds to facilitate suppression, and inspection.

3.0 SITE DESCRIPTION

The Project is a utility scale hybrid solar and BESS facility. The Project will include a module blend of 1,944,180 Vertex bifacial glass solar PV panels, 231 Sunny Central solar inverters, 1,064 BYD-MC Cube battery enclosures, and 133 Sungrow SC5000UD-MV BESS inverters.

Access would be provided to the Project site via existing graveled County roadways. Three new 20' wide gravel access roads would be constructed to access the Project from County Road Q, County Road R, and County Road R.5. Internal 20' wide gravel access roads would be constructed within the facility to access the solar arrays, Project substation, operations and maintenance (O&M) building, and BESS area. The Applicant will maintain the Project access roads as all-weather, compacted gravel beds to provide a sufficient turning radius for emergency vehicles.

Table 1 below details the proposed site access locations, entry gate coordinates, and designated use. County Road R.5 is the primary emergency access proposed. Gated entries would be equipped with Knox boxes and keys to assure emergency personnel access.

Table 1. Site Access

Access	County Road	Designated Use-Construction/Decommissioning	Designated Use-Operations	Entry Gate GPS Coordinates
1	County Road Q	Heavy Truck Traffic	Employee Traffic/Property Owner Access	(40.2334, -103.5834)
2	County Road R	Employee Traffic/Property Owner Access	Employee Traffic/Property Owner Access	(40.2483, -103.5924)
3	County Road R.5	Primary Emergency	Primary Emergency	(40.2597, -103.5944)

Each battery enclosure will be pre-integrated with battery modules and include a thermal management system, monitoring equipment and safety equipment such as gas and heat detectors, and a fire suppression system.

The facility also incorporates a Supervisory Control and Data Acquisition (SCADA) system that communicates all necessary operations data to the Applicant. The BESS can also be operated remotely by the NOC via SCADA. The installed system is always connected in stand-by mode except when charging, discharging, or offline for maintenance. The facility will be operated by 36 full-time on-site staff members however it may be controlled/operated remotely from the Applicant’s NOC.

4.0 PROJECT RESPONSE PLAN

4.1 Organizational Structure

The Fortress Solar Project Emergency Response Team (ERT) shall manage and control the facilities by monitoring and operating the solar, BESS, and interconnection equipment, including all emergency alarms. A full ERT contact list for the Project is provided in Section 5.1, Table 2.

4.1.1 Notifications

Figure 5-1. Notification Flow

Alarm Generated in BESS NOTIFIES	Control Center NOTIFIES	BESS SME NOTIFIES
AYPA Control Center	BESS Response SME	911
	Remote SME (xxx) xxx-xxxx	Site Operator (Field Switching)
		Decommissioning Vendor

4.1.2 Unified Command

4.1.2.1 Subject Matter Expert

The BESS SME will play a critical role guiding members of the fire services through the response posture associated with a BESS emergency. The SME will fall under the Unified Command structure where they will collaborate with members of the fire services to bring the incident under control. The SME will be responsible for coordinating the following:

- Review FACP
- Review and interpret BMS data, such as gas alarms, module isolation and cell temperature
- Operation of E-Stops and Disconnect switches
- Coordinate field switching
- Coordination isolation of auxiliary power supply
- If and when BESS container doors should be opened
- Post-incident operations
- Administration of Decommissioning Plan

Low frequency / high hazard incidents such as a BESS emergency will not be managed by one individual incident commander. The command structure will include all stakeholders necessary to mitigate risk and ensure the safety of first responders.

Figure 5-2. Unified Command Structure

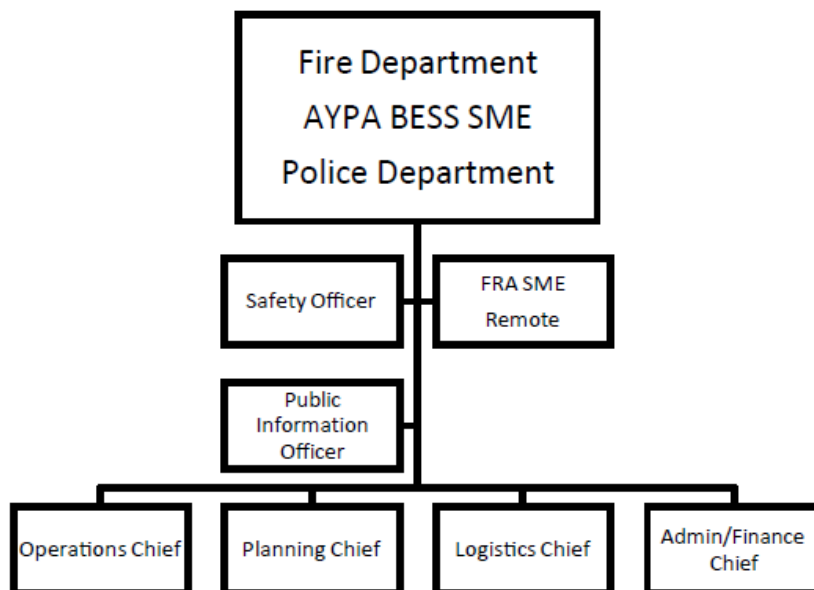
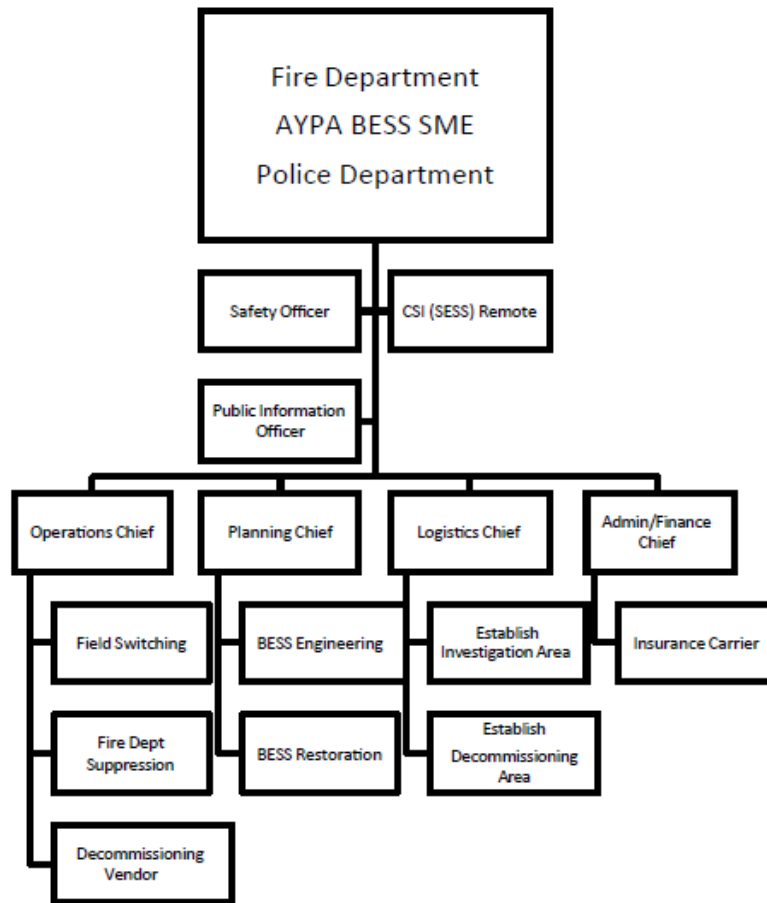


Figure 5-3. Incident Command Structure



4.2 Emergency Response

In the event of an emergency at the BESS facility, the response will be spearheaded by the Project ERT. The ERT is staffed by the NOC. All relevant contact information for the Fortress Solar Project is listed in Section 5.1.

The following responses to events are considered:

- General facility emergency shutdown;
- Lightning storm;
- Tornado;
- Medical emergency;
- Chemical spill; and
- Unauthorized individual.
- Fire or thermal event;

4.2.1 General Facility Emergency Shutdown

In the event of a power system failure within the Project, on the power grid, or at the direction of the power grid operators, the NOC will:

- Log the status of the facility equipment.
- Obtain communication with power grid operators and report facility conditions. Obtain permission to reestablish connection.
- Prepare facility equipment for restart while awaiting reconnection or permission to reconnect.
- Restart facility equipment and ready BESS and solar equipment for synchronization/operation.
- Operate the Solar and BESS equipment in accordance with power grid operations.

Specific details pertaining to the Solar and BESS operations, including equipment isolation procedure in a shut-down, will be provided in the Facility Operations and Maintenance Procedures. It should be noted that there is no expected impact to the grid during an emergency shutdown. The NOC will work in a coordinated effort with the grid operators to ensure that the system will shut down in a controlled manner and grid stability will not be affected.

4.2.2 Lightning Storm

In the event a lightning storm is within 10-30 miles and approaching the site, the following procedures shall apply:

- Notify the NOC, ERT, Site Manager and all on-site employees.
- If lightning approaches to 5 miles, stop work, get in and stay in company or personal vehicles that have rubber tires.
- Remain in vehicles for at least 30 minutes depending on passing storm severity and wait for an “OK” from the Site Manager in charge of monitoring the storm.

Lightning can be a source of fire both within the Project Area and the area surrounding. Monitor areas of lightning strike for signs of ignition.

4.2.3 Tornado

Upon the issuance of a tornado warning, site personnel will evacuate the site and report to the pre-designated shelter area. In the event site personnel are outside and unable to evacuate to the shelter, the following procedures will be followed:

- Lie flat in a nearby ditch or depression, covering the head with the hands. Be aware of the potential for flooding.
- It is safest to leave a vehicle for safe shelter.
- Be aware of flying debris.

Following tornado or high wind events, facility equipment will be evaluated by the Site manager for damage. All repairs will be performed under standard operational procedures. The Site Manager shall notify the NOC and the Project Owner when it is safe to do so.

4.2.4 Medical Emergency

In the event of a medical emergency within the Project facility, the NOC should be notified. Depending on the severity, local emergency responders will be requested. See Section 5.1, Table 2, for contact information of medical emergency responders.

4.2.5 Chemical Spill

Chemical spills can potentially come from three major sources: battery electrolyte, transformer oil, or heating, ventilation, and air conditioning condensate. Spills are highly unlikely, and remote monitoring and periodic facility inspections during routine maintenance of the Project facility are adequate to recognize them in a timely manner. Once identified, spills will be cleaned up by the designated maintenance contractor for the Project under the direction of the designated Project Manager/Site Manager. Any required risk mitigating actions have been taken by Project personnel in the design of the facility. It should be noted that all electrical insulating oil used at the site is free of polychlorinated biphenyls (PCBs).

4.2.6 Unauthorized Access

Personnel visiting the Project facility will only do so with the express consent of the NOC, and the Applicant will be notified to their expected presence at the facility in advance of arrival.

The NOC will monitor the facility through remote surveillance and appropriate action will be taken if the presence of unauthorized individuals is suspected. Trespassing individuals will be asked to leave the facility, and local law enforcement will be asked for assistance as required. The Project site will be equipped with cameras and 24-hour monitoring.

4.2.7 Fire or Thermal Event

The Fortress Solar Project will provide training for local emergency responders pertaining to emergencies with the BESS. This training will be administered in collaboration with the battery supplier and coordinated directly with the local emergency teams. Refreshers will be offered periodically as needed and revisions to this document will be highlighted. The following topics will be covered in the training program:

- System Overview
 - Equipment and Definitions
 - Battery Types, Chemistry, and Geometry
- Battery Management System
- Detection & Suppression
- Emergency System Shutdown

- Hazards
 - Chemical
 - Electrical
 - Explosion
- Suppression Agents
 - Product/Pattern/Pressure
 - Safe Standoff Distances
 - Agents & Fires
 - Exposure Control
- Response Tactics
 - Module Venting/Fire
 - PCS Inverter Failure/Fire
 - Step-Up Transformer Fire
 - Breaker Failure
- Post-Fire Operations
 - Lock-Out Tag-Out
 - Stray Voltage Testing
 - Thermal Assessment
 - Air Monitoring

In the event of a fire or thermal event in the battery boxes, inverter, or other electrical equipment, the SCADA or site controller will notify the NOC, the ERT, and the grid operator. The ERT will lead the response and notify all other relevant responding agencies.

IN NO SITUATION SHOULD THE BESS CABINETS BE OPENED BY ANY UNAUTHORIZED PERSONS OR EMERGENCY RESPONDERS; ALL RESPONSE IS TO BE COORDINATED BY FORTRESS SOLAR PROJECT PERSONNEL AND ITS SUBVENDORS. DO NOT APPLY WATER TO A BURNING UNIT. THE FIRE DEPARTMENT IS ADVISED TO PROTECT OUTSIDE OF THE FENCED AREA ONLY.

See below for specific responses for battery boxes and transformers/other electrical equipment.

4.2.7.1 Battery Boxes

The battery boxes are intended to be left alone and will respond to any thermal event automatically. It is essential to maintain the integrity of the battery box until a Fortress Solar Project representative is on-site. A representative shall be on-site in response to an event within 1 hour of notification.

DO NOT OPEN THE BATTERY BOX DOORS.

The battery boxes are designed with an integrated fire detection and suppression system, including a fire suppression clean agent to prevent the spread of fire. A single smoke alarm in a battery box alerts the NOC. A second smoke/heat alarm assumes that there is a fire and triggers Stat-X aerosol fire suppression agent release. In a case that the FSS signal indicates that the system has released the fire suppression agent, the ERT will contact the fire department to respond to the event. Specific firefighting considerations are provided in Sections seven and eight. If the alarms are determined to be due to a fault, the fault will be investigated, and repairs will be scheduled.

Local emergency responders shall be directed to standby on-site only to prevent the spread of fire outside the battery box **IF NECESSARY**. No one shall attempt to extinguish the battery fire on or within the battery boxes. Please refer to Section seven and eight for more detailed battery fire considerations for firefighters.

4.2.7.2 Inverters and Other Electrical Equipment

The standard response to fires in a substation should be followed when responding. They are summarized below:

- The NOC will open the breaker to isolate and deenergize the affected equipment.
- Any personnel present should be staged uphill/upwind until the arrival of emergency responders.
- The ERT shall ensure that isolation exists on both the line and load side of the inverter through the operations of breaker and disconnect switches.
- Local emergency responders should perform the following actions:
 - i. Do not engage the burning equipment; it may still be energized.
 - ii. Isolate the surrounding area and keep unauthorized individuals away.
 - iii. A smaller fire can be suppressed using carbon dioxide, which has a class C rating to 100,000 volts.
 - iv. Dry chemical is not recommended as it offers no cooling.
 - v. For a larger fire, a 25-foot standoff distance is required; agents should be applied using a combo nozzle (bubble cup) employing a 30-degree fog pattern, no straight streams.

5.0 CONTACT INFORMATION

5.1 Site Contact List

Table 2 represents the parties who should be contacted in the event of an emergency. Contact information for the ERT will be included per the final plan.

Table 2. Project Contact List

Position/Agency	Contact Name	Contact Number
Site Manager	TBD	TBD
Alternate Site Manager	TBD	TBD
NOC and ERT	TBD	TBD
Alternate NOC and ERT	TBD	TBD
BESS Subject Matter Expert	TBD	TBD
Project HSE Manager	TBD	TBD
Grid Operator Control Room	TBD	TBD
Recycling/Disposal of Damaged Equipment- TBD	TBD	TBD
Fire – Brush Volunteer Fire Department	Tad Anderson – Fire Chief	Department: 970-842-5150 Mobile: 970-768-4412
Fire – Brush Volunteer Fire Department	Ray Uhrick – Assistant Fire Chief	Department: 970-842-5150 Mobile: 970-768-4412
Fire – Brush Rural Fire Protection District	NA	970-842-2264
Fire- Hillrose - Snyder Volunteer Fire Protection District	NA	970-847-3028
Police- Morgan County Sheriff's Office	David Martin – Sheriff	Emergency: 911 Non-emergency: 970-542-3445 Non-emergency after hours: 970-867-2461

Position/Agency	Contact Name	Contact Number
Police – Brush Police Department	Brandon Flecksteiner – Interim Chief of Police	Emergency: 911 Non-emergency: 970-842-5074
Ambulance – Morgan County Ambulance Service	Travis Freeman – Director	970-542-3570
Ambulance – Morgan County Ambulance Service	John Collins – Ambulance Physician Advisor Director	970-221-5878
Emergency Dispatch Center- Morgan County Communications Center	Danette Martin – Director	Emergency: 911 Non-emergency: 970-867-8531
Hospital – East Morgan County Hospital	N/A	970-842-6200
Other – Morgan County Emergency Management Department	Roger Doll – Director	970-867-8506

6.0 ENERGY STORAGE SYSTEM OVERVIEW

6.1 Energy Storage System Concept

Energy Storage Systems are charged from renewable energy such as wind, solar, or to grid ties. These systems can be charged at night when the cost to produce power is lower and discharged at peak loading times during the day for grid sustainability.

6.2 Battery Management System

The BMS has a wide-reaching oversight to control charging, discharging fault detection and equipment isolation. The BMS has design parameters that evaluate the state of charge and state of health for batteries along with critical temperature thresholds that generate alarms accordingly. The BMS is designed to monitor, relay, and balance battery cell voltages, currents, and temperatures. The BMS is integrated into the BESS and will disconnect electrical equipment or place it in a safe operating condition if potentially hazardous temperatures or other conditions, such as short circuits, over-voltages, over-currents, etc., are detected. The system plays a key role in the timely response to system emergencies such as cell venting and thermal runaway. The BMS shall have the ability to isolate trouble modules or strings as necessary to mitigate emergencies and communicate directly with the NOC. The BMS exists at a rack level and system level for layered control.

In order to make informed decisions during system emergencies, the BMS should be reviewed with an emphasis on the state of charge for cells/modules on the trouble string. A full state of charge will increase the duration of the emergency. In addition, the temperature of cells will be an indication of fire propagation within the trouble module or adjacent modules.

6.3 Battery Information

The BESS is comprised of 1,064 battery boxes. Groupings of eight battery boxes are connected to inverters, for a total of 133 inverters. All units have been designed with protections and a safety approach to energy storage. Each component configuration and system conform to industry standards and certification requirements. The battery specification sheet will be provided as Appendix A in the final plan.

7.0 SYSTEM SAFETY CONSIDERATIONS

The proposed BESS safety features and Battery Management Systems (BMS) work together to help protect against common industrial battery failure modes due to abuse, damage, or other external factors. The BESS is designed with a number of safety features such as UL9540A tested lithium iron phosphate (LFP) batteries, a 60-minute enclosure wall fire rating, fire detection and a selection of fire suppression methods, plus pressure relief panels on the roof. The BESS is designed to meet international safety standards and National Fire Protection Agency (NFPA) standards.

The Lithium-ion batteries are sourced from Tier-1 suppliers with products that have a track record of utilizing technology and components that renders the likelihood of a safety event low. Such an event could be isolated by the module cabinets, rack assemblies, and steel shell of the storage unit. However, the system design requires at least 10 feet of separation from the adjacent cabinets and intentional setback from native fuels to provide a buffer for minimizing the likelihood of engaging materials beyond the site boundaries. A key aspect in battery safety is adhering to the recommended operating practices. If safe operating limits are exceeded, the BMS is designed to isolate the affected batteries and racks from the system. The BMS continues to monitor operating conditions and will return the battery to service when conditions warrant availability.

Potential hazard sources are identified and discussed as follows.

7.1 Electrical

7.1.1 Shock & Electrocution

These terms are often misunderstood. Shock is an injury that can either be minor or major which results from inadvertent contact with an electrically energized object. Whereas electrocution results in death from contact with an energized conductor. The difference between shock and electrocution is defined by several factors such as how well the victim was grounded which facilitates current flow through the body, the path the current flows such as across the heart or head, and duration of contact with the energized object.

7.1.2 Non-Contact Voltage Tester

These devices are commonly used in the fire services to identify energized equipment/objects. However, the devices are only capable of identifying equipment/objects energized by Alternating Current (AC). To assess a surface for the presence of Direct Current (DC) a traditional meter will be required along with a ground reference. Note: Do not use a non-contact voltage detector at a BESS facility without guidance from a BESS subject matter expert.

7.1.3 Energized Equipment

Electrical equipment within the BESS Cabinet such as modules and cables can be energized. However, these components are shielded or insulated in a manner that there is no chance of shock or electrocution from casual contact.

7.1.4 NOT Normally Energized Equipment

In a post fire scenario, protective shielding or insulation may be damaged resulting in equipment/objects that are not normally energized to become energized. Examples may be the metal container, battery racks and modules.

7.1.5 Stranded Energy

Electrical components such as transformers, breakers and cables can be made safe once the connection to an energized electrical source has been interrupted. However, in the case of energy storage, the operation of process safety stops will interrupt the charging and discharging of batteries but will NOT discharge the electrical potential left in the cells referred to as stranded energy.

7.2 Voltage

The NFPA standard 70E on electrical safety in the workplace establishes a limited approach boundary for unqualified workers at 3.3 feet. This boundary is observed in the system design to prevent those who are unable to avoid hazards from coming within arm's reach of the exposed electrical conductors. It should be noted that non-contact electrical detectors cannot be used to determine which equipment may be energized. Also, operating any E-stops and disconnects in an emergency may not discharge the BESS; emergency responders should assume electrical conductors remain hazardous.

7.3 Arc-Flash

High-string voltage affects both the potential for shock and the potential for arc flash/blast, which results from components of an electric arc (e.g., vaporized copper) and depends greatly on the equipment and environment involved in the arc. Industry accepted controls to prevent injury from arc flash include increasing separation between positive and negative conductors, regular maintenance to prevent equipment failure, and providing arc-rated personal protective equipment (PPE) for electrical workers.

7.4 Thermal Runaway

Thermal runaway is a process where self-heating in a battery cell can exceed the rate of cooling, thereby causing internal temperatures to increase beyond normal operating limits. Under these conditions, battery cells may experience melting, off-gassing/venting, and, in extreme cases, fire. Thermal runaway events can occur due to mechanical or electrical abuse as well as manufacturing defects or metallic dendrites that form an internal short over time. The BESS is designed and supplied with various devices and/or mechanisms to prevent, detect, and minimize the impact of thermal runaway. For instance, 24/7 system monitoring, along with automatic detection and isolation at the cell level, are included to prevent a thermal runaway event from taking place. In addition, the system is designed with barriers and controls in place, such that thermal runaway cannot propagate from one stack to adjacent stacks.

7.5 Fire

Lithium-ion batteries contain flammable liquid electrolyte that may vent, ignite, and produce sparks when subjected to high temperatures (greater than 150 degrees Celsius [302 degrees Fahrenheit]), when damaged, or abused (e.g., mechanical damage or electrical overcharging). Materials within a BESS, including plastics, electrolyte, wire insulation, thermal insulation, and others, may be flammable and act as a potential fuel source during a fire. Without proper ventilation, a combination of gasses can build up in an enclosed space and spread the fire. The BESS has been designed with integral exhaust ventilation in addition to smoke and automatic fire detection systems to help mitigate and contain potential fires. All material components of the system are also appropriately rated, sized, and protected to prevent overheating or mechanical damage that could lead to a fire hazard.

7.6 Chemical

This section will outline the predominate chemical hazards along with the recommended personal protective equipment.

Any contact by personnel with battery electrolyte or battery emissions may be irritating to skin, eyes, and mucous membranes. In the event of a battery fire, irritating, corrosive, and/or toxic gases, such as toxic hydrogen fluoride gas, could be produced which may cause dizziness or suffocation to personnel close by.

7.6.1 Lithium-ion Phosphate

Toxicity: Gasses are evaluated during the UL9540a Large Scale Fire Testing to identify the production of IDLH conditions. Carbon Monoxide was the only target IDLH gas identified. The risk from Carbon Monoxide under this situation does not pose a health hazard since the ESS container cannot be occupied. In addition, Carbon Monoxide is managed through administrative controls such as staging upwind and engineering controls in the form of a SCBA to manage the respiratory hazard. There is no dermal hazard posed by Carbon Monoxide.

UL9540a Data: Cells are outfitted with a vent that ejects flammable electrolyte during elevated thermal conditions. This safety feature serves to manage the risk of internal pressurization resulting in

a catastrophic failure. Lithium-Ion Phosphate (LFP) batteries are more stable than other battery chemistries and are less likely to undergo thermal runaway and are not susceptible to violent failures of the outer shell. Test data indicates that cell failure will not propagate beyond the module level. There was no indication of flying debris, explosive discharge of gas or sparks and electrical arcing.

Hazards of Vented Electrolyte: Cell vent gas composition will depend upon a number of factors, including cell composition, cell state of charge, and the cause of cell venting. Vent gases may include volatile organic compounds (VOCs) such as alkyl-carbonates, methane, ethylene, and ethane; hydrogen gas; carbon dioxide; carbon monoxide; soot; and particulates containing oxides of nickel, aluminum, lithium, copper, and cobalt. Additionally, phosphorus pentafluoride, POF₃, and HF vapors may form. Vented gases may irritate the eyes, skin, and throat. Cell vent gases are typically hot; upon exit from a cell, vent gas temperatures can exceed 600°C/1,110°F. Contact with hot gases can cause thermal burns. Vented electrolyte is flammable and may ignite on contact with a competent ignition source such as an open flame, flame, spark, or a sufficiently heated surface. Vented electrolyte may also ignite on contact with cells undergoing a thermal runaway reaction.

Hazards of Leaked Electrolyte: Leaked electrolyte solution is flammable and corrosive / irritating to the eyes and skin. If a liquid is observed that is suspected electrolyte, ventilate the area and avoid contact with the liquid until a positive identification can be made and sufficient protective equipment can be obtained (eye, skin, and respiratory protection). Chemical classifier strips can be used to identify the spilled liquid (electrolyte will contain petroleum/organic solvent and fluoride compounds).

7.6.2 Hydrogen

When the temperature of a cell reaches the venting stage, the primary hazard is the production of hydrogen gas. The gas is odorless & colorless which requires internal sensors or external meters for detection. It is an extremely flammable gas which is lighter than air. Any hydrogen gas accumulation within the Container will be found in the upper one-third of the unit.

7.6.3 Carbon Monoxide

Carbon monoxide (CO) is an odorless, colorless flammable gas formed by the incomplete combustion of fuels. The failure and subsequent arcing /burning of electrical components and cables can readily produce Carbon Monoxide. Sampling for CO should begin at the upper one-third in a sealed enclosure as the gas tends to stratify based on its vapor density.

7.6.4 Recommended PPE

All chemicals associated with the failure of BESS equipment and ancillary electrical components present dermal and respiratory hazards. The failure of the BESS or electrical components can produce smoke and liquid runoff. The use of is recommended for emergency response personnel whenever responding to battery system fires. The recommended PPE for the aforementioned hazards is NFPA 1971 structural firefighting gear and the use of a positive pressure breathing apparatus and self-contained breathing apparatus (SCBA) gear. Note: The PPE recommendations are for emergency

response operations/ life safety. PPE recommendations for the post-fire removal of damaged modules will be defined by conditions found at the time of decommissioning.

7.7 Explosion

Explosion is a very rare but potential risk with battery systems. However, the battery cabinets have built-in deflagration control using a ventilation system located on the sides of the cabinets, powered by an independent power source, and an activation mechanism located away from the cabinets. This explosion venting design helps to maintain flammable gas emissions in the battery cabinets below 25 percent lower flammable limit and prevent potential explosions due to cabinet pressure buildup of battery emissions. During cell venting, the prevalent flammable gas is hydrogen. Hydrogen gas is detected at 10% of the LEL or 0.4% / 4,000 PPM, at which time an alarm is generated. Purge venting is activated at 10% of the LEL to maintain the concentration of hydrogen gas under the LEL of 4% or 40,000PPM.

8.0 BATTERY FIRE PROTECTION SYSTEMS

8.1 Fire Alarm Panel (FACP)

The site is provided with a traditional FACP that monitors the local fire alarm panels within the BESS enclosures. In this design these alarms can be seen from the FACP in the control enclosure or the graphic annunciator at the main entrance. This system is monitored by a central station and reports to the site SCADA system.

8.2 Fire Alarm Annunciator

A fire alarm graphic annunciator is provided at the gate entrance where the fire department will enter the facility. The annunciator will provide the fire alarm system status as indicate any zones that are in alarm or trouble. Fire Detection System

8.2.1 Inspections and Testing

Each battery container is equipped with an intelligent fire detection, alarm, and notification system. System alarms, interlocks, and controls shall be inspected and tested on a routine basis to assure proper functioning in the case of an emergency. Preventative and corrective maintenance will be provided as recommended per the equipment's manufacturer manual specifications.

8.2.2 Smoke & Heat Detection

BESS containers have been outfitted with smoke and heat detection. A carbon monoxide programmed gas detector shall be installed to detect smoke before temperature rise significantly. Each battery cabinet is designed with two detection zones: battery compartment and electrical compartment. Each zone is equipped with smoke detectors.

The generation of smoke or heat within a container will generate a fire alarm. This will initiate the containers E-Stop interrupting the charging and discharging of cells/modules in the container, alert the fire department, and activate notification appliances.

8.2.3 Horn/Strobe

A horn strobe is included in the fire detection system to provide audible and visual notification of a potential fire incident in the battery cabinets.

8.2.1 Hydrogen Gas Detection

When hydrogen gas is detected, an alarm is generated, purge venting is activated to maintain the concentration of hydrogen gas under the LEL of 4% or 40,000 PPM. Once purge venting begins, all equipment within the container is remotely isolated through the BMS.

8.2.2 Combustible Gas Level 1

Detection of combustible gas concentrations above 10% LEL will trigger a Level 1 alarm, sounding the audible alarm bell on the BESS container and stopping battery charging or discharging. The ventilation system controller will receive the signal and activate the exhaust ventilation system, reducing concentrations of flammable gas within the BESS enclosure. An alarm indication is sent through the BMS system notifying the control room and UI of the operator.

8.2.3 Combustible Gas Level 2

Detection of combustible gas concentrations above 20% LEL will trigger a Level 2 alarm, sounding the audible and visual notification device (horn strobe) on the BESS system. A control signal is sent to isolate the BESS by opening all BMS contactors and turning off the auxiliary power. The ventilation system controller will receive the signal and activate the exhaust ventilation system, reducing concentrations of flammable gas within the BESS enclosure. An alarm indication is sent through the BMS system notifying the control room and UI of the operator.

8.2.4 UPS Supply for NFPA 69 System

As required by code, upon the interruption of auxiliary power supplying the NFPA 69 system a UPS back shall be provided with adequate capacity to operate the system for two hours.

8.3 Fire Suppression System

In the event of a battery fire, the following response will occur:

- The first smoke detector in the affected zone triggers an alarm, and a second triggers the FSS.
- The affected battery block is shut down automatically.
- The Stat-X aerosol agent will be automatically dispersed to contain fire.
- The battery temperature, alarms, smoke detector, and FSS discharge are actively monitored by the BMS.
- The BMS also works to pinpoint the exact origin of the fire and determine if external sprinkler zones should be activated.
- The NOC will coordinate with emergency first responders to contain fire safely and adequately.

9.0 RESPONSE TACTICS

9.1 Facility Evacuation

Once an alarm is received, all personnel shall exit the facility and proceed to the main entrance or predesignated rally point to conduct an accountability rollcall as required by OSHA 29 CFR 1910.38 or local regulations. The fire department will be alerted to provide support with evacuations and firefighting. Upon arrival of the fire services, the primary concern is life safety.

Note: Personnel should not re-enter the site until the arrival of the fire department.

9.2 Staging

Site Personnel: Personnel should not encroach within 100 feet of the Container that is in alarm mode when within the site walls.

Fire Department: Upon arrival, fire department units should stage all apparatus until the scene size-up has been completed. Staging should be upwind at a minimum of 100 feet from the doors on the trouble container.

Consideration should be given to assigning a Staging Officer within the Incident Command Structure to manage parking. Impeding roadway traffic can have significant consequences if an injury were to occur and an ambulance could not access or leave the site.

9.3 Personal Protective Equipment (PPE)

Electrical Switching: OSHA requires a hazard assessment under 29 CFR 1910.269 to identify FR clothing and insulated PPE required to conduct switching operations.

Fire Operations: Fire services personnel engaged in operations that can expose members to heat, flame, flammable gas and chemical hazards shall use NFPA 1971 structural firefighting equipment along with an SCBA for respiratory protection.

9.4 Exposure Control

UL9540a Large Scale Fire Testing suggests that cell failure will not propagate beyond the module. In the remote event that a container becomes fully involved in fire, consideration may be given to providing exposure protection to adjacent BESS containers or MV Skids as required. During the application of water streams for exposure protection, the potential exists to contact energized electrical components in the trouble container.

9.5 Size-Up

Status Briefing: Upon arrival, the fire officer will look for the BESS SME to obtain a status briefing which should provide a snapshot of existing conditions and at a minimum should cover the following:

- **Accountability:** Locate and evacuate all non-essential site personnel.
- **Exclusion Zone:** Establish an exclusion zone of 100 feet around the trouble container to manage the safety of members if an explosion should occur. Containers have been outfitted with an explosion control measure however, we must assume if this system was to fail the doors on the containers can become projectiles.

- **Exposures:** Conduct a visual assessment to identify fire impingement on surrounding equipment, similar should be done with a thermal imaging gun and record temperatures. Reading should be taken every 15 minutes until readings begin to decrease. Utilize the BMS system to identify any rise in temperature of surrounding equipment that would require exposure control. Tank water from the apparatus may be applied in intermittent burst and should follow the guidance provided in Table 8.
- **Electrical Hazards:** BESS/SME shall ensure the troubled equipment has been electrically isolated through SCADA or field switching.
- **Chemical Hazards:** Stage all department members and apparatus upwind of the incident and remain cognizant of changing wind conditions and manage accordingly. A fully involved container can result in the failure of the thermal management system which will introduce freon into the fire scenario and discharge plume.
- **Battery Management System:** BMS shall be reviewed to determine trending rise in temperature of cells/modules surrounding the trouble module. Temperature should be recorded and evaluated every 15 minutes to determine if propagation into adjacent modules has occurred.

9.6 Firefighting Considerations

In the event of an emergency, the ERT should be immediately notified see Section 5.1, Table 1.

IN NO SITUATION SHOULD THE BESS CABINETS BE OPENED BY ANY UNAUTHORIZED PERSONS OR EMERGENCY RESPONDERS; ALL RESPONSE IS TO BE COORDINATED BY FORTRESS SOLAR PROJECT PERSONNEL AND ITS SUBVENDORS. DO NOT APPLY WATER TO A BURNING UNIT. THE FIRE DEPARTMENT IS ADVISED TO PROTECT OUTSIDE OF THE FENCED AREA ONLY.

9.6.1 Small Battery Fire Response

A small battery fire shall be defined as an event whereby the FSS signal indicates that the fire suppression agent has been released and/or there are visible signs of fire, including smoke and heat. However, smoke and/or fumes are contained within one battery cabinet.

The Fortress Solar Project recommends adherence to NFPA's BESS Emergencies Quick Reference Guide (copy provided as Appendix B). During incidents involving a BESS, responders should follow the steps: IDENTIFY, SHUTDOWN, WATCH OUT!

Identify - Once a fire is identified, it should be reported to the Applicant and other emergency response units. The Applicant, with the aid of the NOC and the BMS, will locate the affected unit configurations and components. A remote shutdown will then be employed accordingly.

Shutdown - The BESS should be shut down physically by emergency responders if safely possible. The BESS can be shutdown automatically by the Emergency Stop System. Emergency responders should locate the E-stop, which will be marked as such.

Watch Out - Emergency responders should be on the lookout for high voltage, exposed wires, moving parts, and other hazards. The site should also be monitored for potential reignition and toxic fumes in

the air. The use of a positive pressure breathing apparatus is recommended for emergency response personnel whenever responding to battery system fires.

Every fire emergency is unique and requires a customized approach, but a typical battery incident may include the following response:

- a. A firefighter would arrive on scene and identify the situation;
- b. Calls for support would be made as necessary; and
- c. The NOC should be contacted for assistance in evaluating system status.

9.6.2 Larger Battery Fire Response

A larger battery fire shall be defined as an event whereby the FSS signal indicates that the fire suppression agent has been released and/or there are visible signs of fire, including smoke and heat. However, the smoke or fumes have spread to two or more battery cabinets and/or the surrounding BESS facility area.

Assuming a larger battery fire that has breached the battery cabinet and risks spreading, the following sequence of response should occur:

- a. The heat or smoke detectors in the storage unit could detect a fire and initiate de-energization.
- b. The Stat-X aerosol fire suppression system is activated to contain the fire until firefighters arrive.
- c. The affected storage unit and associated inverter unit would be automatically de-energized by the control system. As a precaution and depending on the severity of the incident, adjacent storage units (up to the entire system) may be de-energized as a precaution.
- d. Non-essential personnel should evacuate the affected area.
- e. The BESS should be shut down physically by emergency responders if safely possible. The BESS can be shut down automatically by the Emergency Stop System. Emergency responders should locate the E-stop, which will be marked as such.
- f. Any area surrounding the BESS facility (outside of the BESS perimeter) that has been affected by a battery fire could be cooled by blanketing with low-velocity water stream or water fog.
- g. The site shall be periodically monitored for reignition for 24 hours.
- h. Cabinet doors should not be opened by any emergency response personnel, including the fire department, until a thorough analysis has been done by the Project Owner or their sub-vendor and there is no indication of raising temperatures inside the container.
- i. Due to the composition of gases vented during a Lithium-ion battery fire, the air in the surrounding area of the facility should be considered potentially corrosive, toxic, and/or flammable.

- j. Batteries that are exposed to excessive heat beyond their recommended temperature range are at risk for explosion. During thermal decomposition from a fire, chlorine, hydrogen chloride, and sulfur dioxide can be formed. Thus, it is of utmost importance that responders do not enter the BESS perimeter during a fire.
- k. It is recommended that full PPE, including SCBA gear, should be worn by any fire department personnel responding to a fire event at the BESS facility.

9.7 Post Incident Operations

9.7.1 Personal Protective Equipment

While operating near trouble equipment, the fire services personnel should remain in NFPA 1971 structural firefighting gear with respiratory protection and facility personnel should don the appropriate PPE for arc flash hazards associated with potential stranded energy conditions and an SCBA until a Post-Fire Assessment has been completed.

9.7.2 Lock Out / Tag Out

Once emergency conditions have concluded, prior to accessing the trouble container or removing any modules. E-Stops and disconnect switches shall be locked or tagged out as required by OSHA 29 CFR 1910.147 or local regulations.

9.7.3 Stray Voltage

DC/AC Stray Voltage: Prior to removing modules, the container enclosure, racks, and modules should be assessed for stray voltage. If stray voltage is identified; standard response tactics would focus on isolating the source potential. However, stranded energy may be the source of the stray voltage. In response, rubberized PPE outlined under 29 CFR 1910.269 or local electrical safety standards should be used until the source of the stray voltage has been eliminated.

Stray Voltage Testing: To accurately assess this condition, a multimeter must be used along with a ground reference.

9.7.4 Thermal Exposure Assessment

Initial Thermal Scan: Scan and record with a thermal imaging camera module temperature in each rack. The BMS will serve as an excellent guide in terms of evaluating thermal impact on cells/modules within the trouble container. If this system is not viable use a thermal imaging camera.

Thermal Trending: Rescan and record every 15 minutes over the course of 1 hour to identify any rise in temperature above 20 F. Module(s) that have greater than a 20 F rise in temperature may have cells beginning to vent causing the increased temperature. If this condition is observed, leave the area and stage upwind maintaining a 50-foot standoff distance. Let modules stand for 1-hour and rescan temperature.

End of Useful Life: Although Cells/Modules may not have reached a Venting or Thermal Runaway temperature we must evaluate Modules that were operating outside their normal range. Modules that

are beyond their useful life must be identified so that are not re-energized during the repair / restorations process. Cells/Modules with temperatures above 40C/104F should be removed for disposal.

9.7.1 Disposal of Damaged Equipment

In the event BESS equipment is damaged in a fire or other emergency event, the Applicant will immediately contact a qualified recycling/disposal vendor to safely remove the damaged BESS equipment from the facility. The vendor shall transport the battery modules and damaged equipment for proper disposal in accordance with Federal, State, and local law.

9.7.2 Air Sampling

Air sampling will serve as an excellent indicator to determine if there is still active venting of cells within the BESS. The prevalent off gases observed during 9540a Testing are hydrogen, carbon monoxide and carbon dioxide. The absence of those gases within the BESS container or the downward trending of gas concentrations would be an indicator that the situation may be placed under control thus releasing the fire services and entering the decommissioning phase.

9.8 Fire Mitigation Considerations

9.8.1 Education and Awareness

The ERT will pay close attention to weather and drought conditions which may affect the flammability of vegetation. During periods of high fire danger, potential sources of fire ignition (vehicle exhaust systems, cigarettes, matches, propane torches, sparks from hot work operations, etc.) must be used with extra precaution.

9.8.2 Vegetation Management

The Applicant will manage vegetation on site to provide defensible space for fire protection throughout construction and operation of the facility. Ongoing maintenance would be provided to ensure removal of grass, weeds, and other flammable materials from defensible space areas. Any vegetation control at the site will use materials and methods that ensure protection of the groundwater.

9.8.3 Water Source for Fire Suppression

The Applicant will maintain an emergency supply of water on site to be used in the event of a fire for suppression purposes. Water would be stored on site in above ground tanks and/or cisterns near the entrance to the facility from County Road R.5. The water tanks and/or cisterns will be located and installed per compliance with NFPA Standards to ensure maximum safety and effectiveness in the event of a fire emergency. An exhibit detailing the water tank considered by the Applicant is included as Appendix C.

9.8.4 Fire Risk Evaluation

Prior to the start of construction and prior to commencement of operations, the Applicant will schedule a site evaluation with local fire officials to assure potential fire risks have been evaluated and sufficiently mitigated.

APPENDIX A: BATTERY SPECIFICATION SHEET

BYD - MC Cube

MC10C-B5365-U-R4M01



System Features

High Energy Density

- Compact mechanical design, minimized footprint

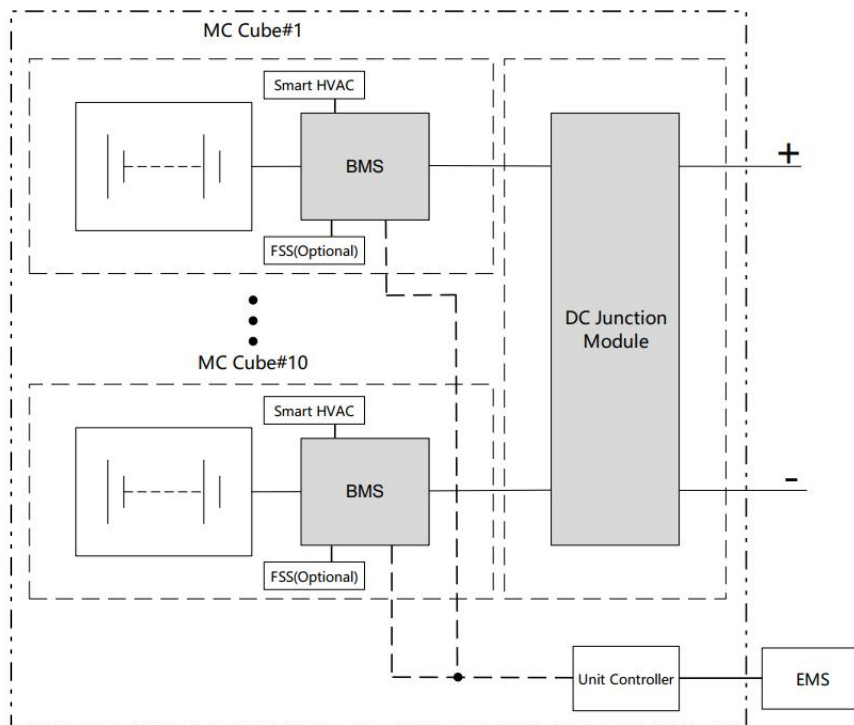
Safe & Long Lifecycle

- High efficient system with safe and long lifecycle LFP battery

Highly Integrated

- Highly integrated system to allow flexible transportation and on-site installation
- ALL IN ONE design, integrated local controller, HVAC and FSS to ensure system safety

Circuit Diagram



System Parameter

System Type	MC10C-B5365-U-R4M01
Cell type	LFP
Pack type	1P416S
System configuration	10 × 1P416S
Battery capacity (BOL)	5365kWh
DC usable energy (BOL)@FAT	5099kWh
DC usable energy (BOL)@SAT (90 days after FAT)	4946kWh
Battery voltage range	1081.6 ~ 1497.6
Nominal power	1236kW
Dimensions (W×D×H)	6058×2438×2896mm
Weight	~41035kg
IP rating	IP55
Ambient operating temperature range	-30℃ ~ +55℃ 【1】
Relative humidity	5% ~ 100%
Max. working altitude	< 2000m 【2】
Cooling concept	Smart air cooling
Noise	≤75dBA
Fire suppression system	With fire alarm system
Auxiliary power interface	AC480V/60Hz, 3P4W
Auxiliary system peak power requirement @45℃, PF0.8	39kVA
Communication interfaces	Ethernet
Communication protocols	Modbus TCP/IP
Standard color	RAL 9003
Compliance	UL1973, NFPA69, NFPA72, NFPA855, CFC UN3536, UL9540A, UL9540

Note:

【1】 Power derating is performed when the ambient temperature is below -15℃ or above +45℃.

【2】 Power derating is performed when the altitude is between 2000-3000m.

APPENDIX B: NFPA'S BESS EMERGENCIES QUICK REFERENCE GUIDE




BATTERY ENERGY STORAGE SYSTEMS (BESS) EMERGENCIES

QUICK REFERENCE GUIDE

Initial Response Actions:

Conduct an Initial Scene Assessment as well as:

1. **IDENTIFY** the location and type of system
2. **SHUTDOWN** the BESS if necessary
3. **WATCHOUT** for high voltage & other hazard

IDENTIFY	SHUTDOWN	WATCH OUT
<p>LABELS:</p> <p>Battery Disconnect Emergency Stop (ESTOP) Battery Room</p>  <p>COMPONENTS:</p> <p>Battery racks or cabinets Gas detection equipment SDS's</p>	<p>If system is on fire or other life safety/property hazard exists</p>  <p>Locate emergency stop, disconnect or circuit breaker</p> <p>Shutdown the BESS</p>	<p>Stay away from open bus bars (shock hazards)</p> <p>Monitor for re-ignition with thermal imaging camera (TIC)</p>  <p>Look for electrolyte spills</p> <p>Monitor air for toxic/flammable gases</p> <p>Ventilate as required</p>

BATTERY ENERGY STORAGE SYSTEMS (BESS) EMERGENCIES

QUICK REFERENCE GUIDE

General Warning and Cautions

In the event of damage or fire involving battery energy storage systems (BESS):

- Always assume the batteries and associated components are energized and fully charged.
- Safety Data Sheets (SDS) can provide important information regarding battery chemistry
- Exposed electrical components, wires, and batteries present potential shock hazards.
- **During incidents involving a BESS, responders should follow the steps: IDENTIFY, SHUTDOWN, WATCH OUT**
- Wear all PPE and look away when operating disconnects to protect against arc flash injuries.
- Locate building personnel responsible for the system and/or locate emergency contact numbers.
- Be prepared to control HVAC systems to prevent spread of smoke and toxic/flammable gases

ALARM ACTIVATIONS		FIRES	
Overheated Batteries/Gas Sensor Activation	Electrolyte Spill	Small Fires	Large Fires
<ul style="list-style-type: none"> • Shutdown of system may not be required, especially if critical systems will be disabled • Monitor battery for potential ignition with thermal imaging camera (TIC) • Check for deformities or bulging of batteries • Check for electrolyte spills • Monitor for toxic/flammable gas release, ventilate the area as necessary • Turn over incident to a qualified, responsible party for additional monitoring 	<ul style="list-style-type: none"> • Spill may not be visible if batteries are mounted inside a cabinet • Ventilate battery room as necessary • Check safety data sheet for specific hazards and mitigation information • Wearing PPE with SCBA, contain the spill (ensure compatibility with spilled product) • Neutralize & absorb corrosive liquids (only by qualified personnel) • Decontaminate PPE • Turn over incident to a qualified, responsible party for additional monitoring 	<ul style="list-style-type: none"> • SHUTDOWN\ESTOP entire system • Control ventilation of smoke and toxic gases • If applicable, use a dry chemical extinguisher to extinguish the fire • Do not overhaul electrical components • Check for electrolyte spills • Monitor battery for re-ignition • Turn over incident to a qualified, responsible party for additional monitoring 	<ul style="list-style-type: none"> • SHUTDOWN\ESTOP entire system • Control ventilation of smoke and toxic gases • Secure an adequate water supply • Extinguish the fire using a fog pattern from a sufficiently sized hose line (Except Sodium Sulfur BESS) • Do not overhaul electrical components • Check for electrolyte spills • Monitor battery for re-ignition • Turn over incident to a qualified, responsible party for additional monitoring

APPENDIX C: WATER TANK EXHIBIT



GALLON PROTECTION WATER TANKS

30,000-Gallon Water Storage Tanks for Fire Protection



11
Shares

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Pioneer Water Tanks Model XL 23/03

Nominal Capacity: 29,093-Gallons

Tank Diameter: 26' 4"

Tank Wall Height: 7' 2"

Get Your Best Price, Fill Out the Contact Form Or Call Now

CALL (877) 223-7784

Name (required)

Email (required)

Phone Number (required)

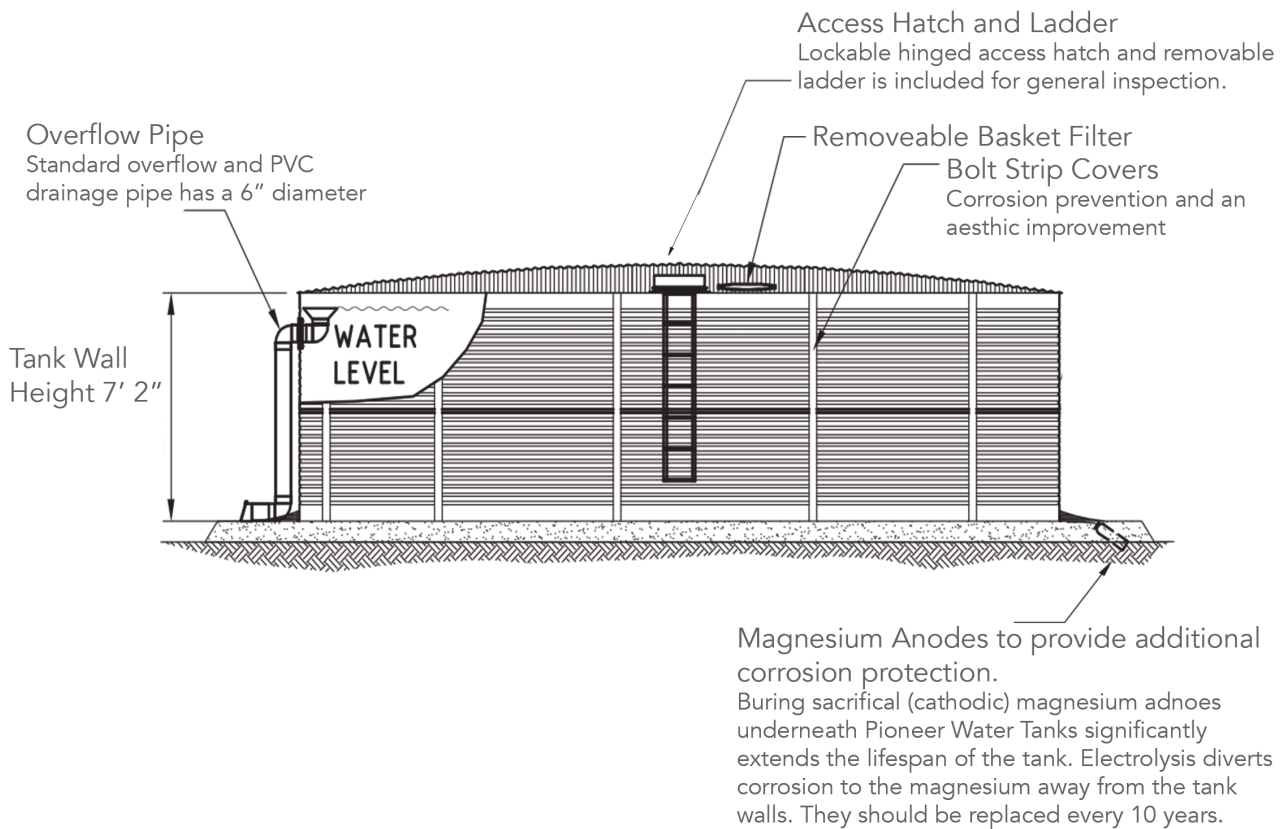
Location

Model of Pioneer Water Tank

<input type="checkbox"/> I'm not a robot	reCAPTCHA Privacy - Terms
------------------------------------------	--------------------------------------------------------------

SEND

General Arrangement of Tank Below Shows Standard Inclusions, Drawing Does Not Include Firefighting Adapters or Nozzels



30,000-Gallon Fire Protection Water Tank Features:

1. Engineered to NFPA 22 Private Fire Protection Tank Standards
2. Firefighting Nozzle and Adapter Options that Comply with Local Fire Requirements, as well as additional outlets, inlets, and valve options.
3. Efficient installation without heavy machinery with onsite delivery
4. Zinalume® Steel tank body that is tested and proven to outlast galvanized steel by 200% longer.
5. Vast commercial accessory options including level indicators, access hatches, external and internal ladder options
6. Static and commercial vent options that comply with NFPA
7. Includes our 20-year warranty on the tank and tank liner.
8. Our BPA-Free, Antimicrobial, NSF-61 Certified AQUALINER® Fresh Tank Liner that keeps water fresh and clean, for longer, so that your tank can double as drinking water storage.
9. Pioneer Water Tanks manufacturing has been producing top of the line tanks for 30-Years with exceptional service.
10. Pioneer Water Tanks used for fire protection are used worldwide during fire emergencies as well as for commercial applications with proven results.

FIRE PROTECTION WATER SOLUTIONS

Pioneer Water Tanks are engineered to NFPA standards for water storage for fire protection.

The tank body and roof are made of Zincolume® Steel, which is proven to withstand fire immersion. The tank's firefighting adapters and nozzles are compatible with fire hoses in America.

REQUIREMENTS

Permit Ready Tank Solutions

We can provide our optional engineering packages for Pioneer Water Tanks to make the permit process easier.

Pioneer Water Tanks are used as fire protection and more applications across North America with verified Engineer wet-stamped projects available at request.

FIRE TANK PERMITS

Also Can Provide Drinking Water Storage

Pioneer Water Tanks include our exclusive BPA-Free, Antimicrobial, NSF-61 Certified AQUALINER® Fresh tank liner unless requested otherwise.

Keep your water fresh and clean for longer within the AQUALINER® Fresh.

DRINKING WATER STORAGE

Choose the Capacity Size of Fire Protection Tank That You Need

APPENDIX I: WATER & WIND EROSION CONTROL PLAN

Water and Wind Erosion Control Plan

Fortress Solar Project Morgan County, Colorado

November 2023

Submitted to:

Morgan County Planning and Zoning
231 Ensign Street, PO Box 596
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Prepared for

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11801 Domain Blvd, Suite 450
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Prepared by



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Appendix A: Control Measure Template

Appendix B: Stormwater Management Plan Content Checklist

Acronyms and Abbreviations

Applicant	Fortress Solar I LLC; Fortress Solar II LLC; and Fortress Solar III LLC
Aypa	Aypa Power North American LLC
BESS	battery energy storage system
BMP	best management practice
CDPHE	Colorado Department of Public Health and Environment
EPA	U.S. Environmental Protection Agency
MW	megawatt
Plan	Water and Wind Erosion Control Plan
Project	Fortress Solar Project
PV	photovoltaic
SWMP	Stormwater Management Plan

1.0 INTRODUCTION

This Water and Wind Erosion Control Plan (Plan) has been developed in support of a utility scale solar and battery energy storage system (BESS) project known as the Fortress Solar Project (the “Project”) in Morgan County, Colorado. Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC, (collectively the “Applicant”) which are indirect subsidiaries of Aypa Power North American LLC (“Aypa”), have prepared this Plan in furtherance of the development of the multi-phased Project. The Project is comprised of up to 600-megawatts (“MW”) of solar and 600 MW of energy storage. Each phase is planned for construction from 2025 through 2028 with three phases in total approximating 200 MW of solar and BESS each. This Plan has been prepared in accordance with Morgan County Zoning Regulations Section 4-820 (I), which states:

The applicant will provide a plan showing existing and proposed grading for the solar collector site. The drainage and erosion control plan shall be accompanied by a description of practices that will be utilized to prevent erosion and run-off during construction. If there are any modifications to this plan, the applicant will provide a final drainage and erosion control plan prior to commencement of construction.

This Plan is intended to detail erosion control measures and construction stormwater runoff management for the Project. The Applicant will periodically update this Plan with input from stakeholders, county, state, and federal regulations, as well as with facility updates. Appropriate parties will be notified of any revisions to this Plan.

The Project site is located approximately 1.6 miles east of the City of Brush in unincorporated Morgan County, Colorado. The Project is a hybrid solar photovoltaic (PV) and BESS facility that is planned to generate up to approximately 600 megawatts (MW), 2,400 MW hours (MWh) of electricity. The proposed BESS has a capacity of up to 600 MW, 2,400 MWh of electricity. The Project is expected to be constructed in three phases of approximately 200 MW, 800 MWh each. The Project consists of approximately 4,259 acres, which accounts for the solar arrays, BESS, and project substation. A 1.25-mile generation-tie line will be constructed for interconnection at the existing Tri-State Generation and Transmission Association Story Substation located 1.25 miles west of the Project.

The Project facilities are sited on existing private, open rangeland. In total, the Project area fenced boundary encompasses approximately 4,259 acres.

2.0 CONTROL MEASURES

Erosion control and stormwater runoff during construction will be managed in accordance with applicable county, state, and federal regulations. The Project will utilize standard construction best management practices (BMPs) for mitigating stormwater runoff, soil erosion, and sedimentation impacts. Sites that disturb more than one acre require a SWMP and erosion control and stormwater drainage design. Therefore, a Stormwater Management Plan (SWMP) will be developed and implemented to comply with the Construction Stormwater Discharge Permit (COR400000) issued by the Colorado Department of Public Health and Environment (CDPHE) prior to construction of the Project.

This Plan has been developed in accordance with the CDPHE *Guidance Document for the Colorado Discharge Permit System General Permit COR400000* (CDPHE 2023). Control measures include BMPs and other methods such as the minimization of impacts during installation, operation, and continued maintenance of structural controls and/or treatment devices. The following control measure descriptions have been referenced from the U.S. Environmental Protection Agency's (EPA) *National Menu of Best Management Practices (BMPs) for Stormwater* (EPA 2023). The Project's SWMP will utilize the CDPHE Control Measure Template (Appendix A). The SWMP will be developed in accordance with the CDPHE Stormwater Management Plan Content Checklist (Appendix B) during detailed design of the site.

The BMP examples and references included below are not intended to be comprehensive. Additional BMPs may be added or utilized on the site based upon site-specific needs as deemed appropriate by qualified personnel.

2.1 Structural Control Measures

Structural control measures are physical devices that prevent or minimize water quality impacts. Examples of these are provided in the following subsections.

2.1.1 Compost Filter Socks

A compost filter sock is a type of contained compost filter berm. The filter sock is typically a mesh tube filled with composted material that is placed perpendicular to the direction of sheet flow to control erosion and retain sediment in disturbed areas. A compost filter sock has an oval or round cross-section and provides a three-dimensional filter to retain sediment and other pollutants (e.g., suspended solids, nutrients, metals and motor oil) and allow clean water to flow through. The filter sock can replace a traditional erosion and sediment control practice, such as a silt fence or straw bale barrier, and is often more effective.

2.1.2 Construction Track-Out Controls (Formerly Construction Entrances)

Construction track-out controls minimize the amount of sediment leaving or being tracked out from the construction site as dirt, mud or other sediment attached to vehicles. Stabilization measures, vehicle wash stations and sediment collection devices are all common track-out controls. Installing a pad of gravel over filter cloth where construction traffic leaves a site can help stabilize sediment at a construction entrance/exit. As a vehicle drives over the pad, the pad removes mud and sediment from the wheels and reduces soil transport off the site. The filter cloth separates the gravel from the soil below. It also reduces rutting by vehicle tires. In addition to using a gravel pad, construction staff can install a vehicle washing station at the site entrance/exit. Using washing stations routinely can remove a lot of sediment from vehicles before they leave the site.

2.1.3 Fiber Rolls

Fiber rolls (also called fiber logs or straw wattles) are tube-shaped erosion control devices filled with straw, flax, rice, coconut fiber material, or composted material. Manufacturers wrap each roll with either ultraviolet light-degradable polypropylene netting for longevity or 100 percent biodegradable

materials like burlap, jute, or coir. Fiber rolls reduce the erosive potential of stormwater on long or steep slopes by helping to slow, filter and spread overland flows. This helps minimize rill and gully development, prevent erosion, and reduce sediment loads to receiving waters by filtering stormwater and capturing sediment.

2.1.4 Geotextiles, Matting and Netting

Geotextiles—also known as filter fabrics, synthetic fabrics, construction fabrics or fabrics—are porous fabrics used for erosion and sediment control purposes. Manufacturers create woven geotextiles by weaving fibers together and non-woven geotextiles by bonding fibers together.

Matting typically consists of jute, coir, or other wood fibers that manufacturers have formed into sheets. Matting serves similar purposes as traditional loose mulch but is more stable. Netting typically consists of jute, wood fiber, plastic, paper, or cotton and can hold mulching and matting to the ground. Netting alone can also stabilize soils and help establish vegetation.

2.1.5 Sediment Basins and Rock Dams

Sediment basins in large drainage areas can capture sediment from stormwater before it leaves a construction site. A sediment basin allows a pool to form in an excavated or natural depression, where sediment can settle. The embankment of a sediment basin can either be compacted soil or a rock dam. When using an earthen embankment, the sediment basin dewateres the pool through a single riser and drainage hole that leads to a suitable outlet on the downstream side of the embankment. Rock dams use rock and gravel as an embankment instead of compacted soil. They gradually release water from the settling pool through the spaces between the rocks. A sediment basin slows the release of stormwater leaving a construction site and reduces the amount of sediment it carries.

2.1.6 Sediment Traps

Sediment traps are small, temporary ponding basins that treat stormwater by allowing sediment particles to settle out of the water. Typically lying in a drainageway or other point of discharge from a construction site, they capture stormwater before it flows into the surrounding area.

2.1.7 Silt Fence

A silt fence is a temporary sediment barrier made of porous fabric. It is held up by wooden or metal posts driven into the ground, and thus is inexpensive and relatively easy to remove. The fabric ponds sediment-laden stormwater, causing sediment to be retained by the settling processes. A single 100-foot run of silt fence may hold 50 tons of sediment in place. Most construction sites today do have silt fences. The purpose of a silt fence is to retain the soil on disturbed land such as a construction site, until the activities disturbing the land are sufficiently completed to allow revegetation and permanent soil stabilization to begin.

2.1.1 Wind Fences

Wind fences (also called sand fences) are barriers made of permeable fabric or small, evenly spaced wooden slats. Construction staff erect wind fences to reduce wind velocity and to trap blowing sand.

Wind fences can also serve as perimeter controls around open construction sites to keep the wind from blowing sediments off-site. In doing so, they prevent off-site damage to roads, streams and adjacent properties. The spaces between the fence slats allow wind to pass through but reduce its speed, causing sediment to deposit along the fence.

2.2 Non-Structural Control Measures

Non-structural control measures involve the implementation of the following types of methods, practices, and procedures to minimize water quality impacts.

2.2.1 Construction Phasing

The phasing of construction minimizes areas of soil disturbance by confining work to specific areas and times thus limiting the amount of disturbance at any given time or place.

2.2.2 Dust Control

Dust control practices reduce the potential for construction activities to generate dust from disturbed soil surfaces. Dust control measures may include water sprinkling or irrigation, vegetative cover, mulch, wind breaks, tillage, gravel or stone, and use of chemical soil stabilization. The Project will develop a Dust Control Plan prior to construction.

2.2.3 Mulching

Mulching is an erosion control practice that uses materials such as grass, hay, wood chips, wood fibers, straw or gravel to stabilize exposed or recently planted soil surfaces. Mulching is advisable and most effective when sites use it with seeding or vegetation. In addition to stabilizing soils, mulching can reduce stormwater velocity and improve infiltration. Mulching can also aid plant growth by holding seeds, fertilizers and topsoil in place; preventing birds from eating seeds; retaining moisture; and insulating plant roots against extreme temperatures.

2.2.4 Permanent Seeding

Seeding establishes perennial vegetative cover, which helps control soil erosion on disturbed areas. It reduces erosion and sediment loss by protecting bare soil surfaces from displacement by raindrop impacts, reducing stormwater flow rates and volumes, and providing permanent stabilization. This practice is economical, is adaptable to different site conditions, and allows selection of a variety of plant materials.

2.2.5 Temporary Seeding

Temporary seeding establishes vegetative cover, which helps control soil erosion on disturbed areas that are in a dormant phase. Temporary seeding may be utilized on topsoil segregated stock piles or in areas that will remain dormant for more than a 14-day period.

2.2.6 Vegetated Buffers

Vegetated buffers are areas of natural existing or established vegetation that protect the water quality of neighboring areas and waterbodies during construction. Buffer zones provide an area where stormwater can permeate the soil and replenish the groundwater. They also slow the flow of stormwater, which helps to filter sediment, decrease soil erosion, and prevent streambank collapse.

3.0 REFERENCES

CDPHE (Colorado Department of Public Health and Environment). 2023. *Guidance Document for the Colorado Discharge Permit System General Permit COR400000*. Available online at:

<https://cdphe.colorado.gov/wq-construction-compliance-assistance-and-guidance>

(accessed: September 2023).

EPA (U.S. Environmental Protection Agency). 2023. *National Menu of Best Management Practices*

(BMPs) for Stormwater. Available online at: <https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater-construction> (accessed: September 2023).

APPENDIX A: CONTROL MEASURE TEMPLATE

Description

Describe the control measure and what pollutant sources it will provide effective treatment for (part I.C.2.a.iv of the permit). Include the mechanism used for treatment of the pollutant source.

Implementation

Describe how the control measure will be implemented in accordance with good engineering, hydrologic and pollution control practices. Include the phase(s) of construction the control measure will be implemented for.

Installation Procedures

Describe the process required to install the control measure and have it adequately treat the intended pollutant source. Include specific depths, lengths, materials, and any other applicable information necessary to properly install the control measure.

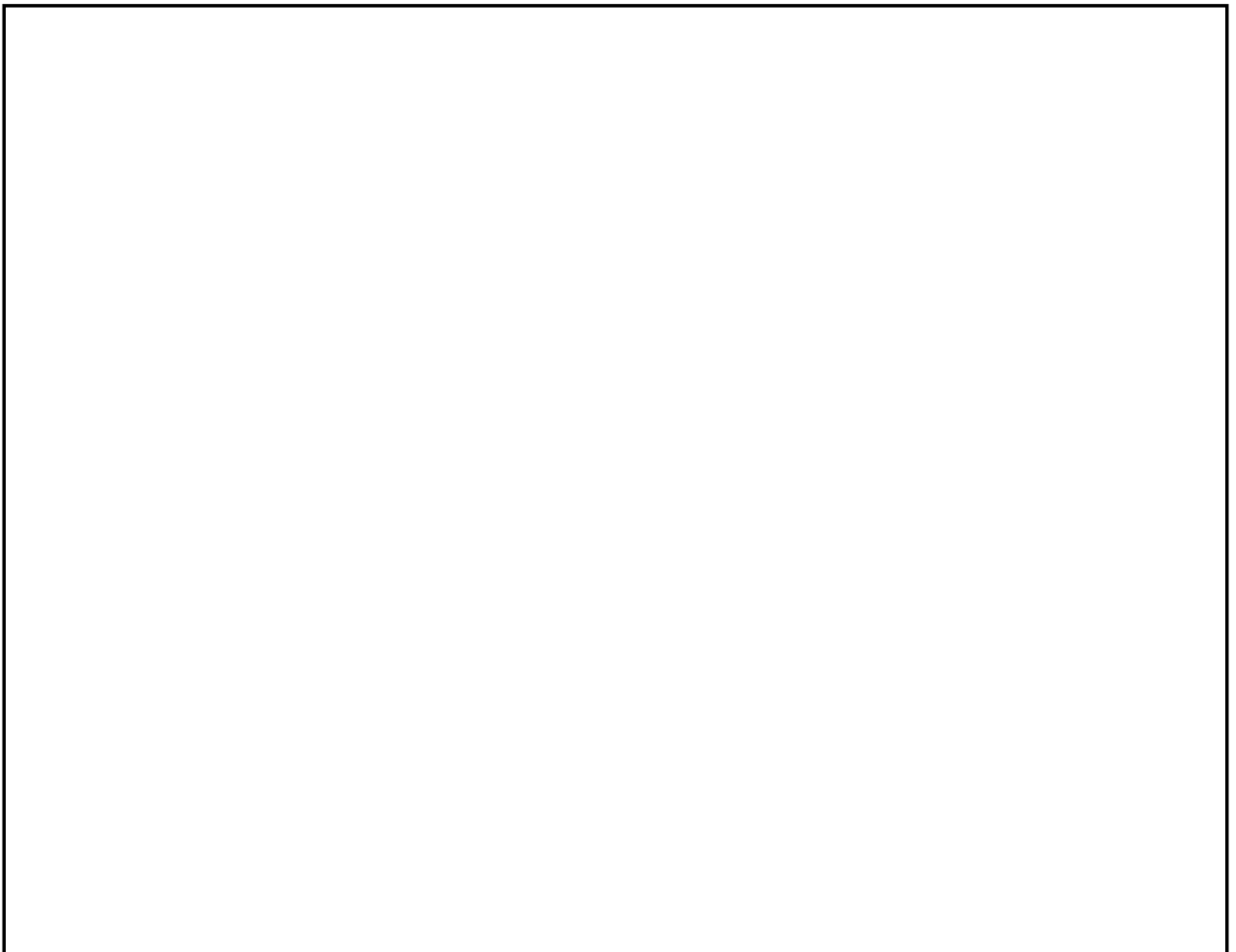
Inspection Expectations

Describe how often the control measure will be inspected and what key features should be checked during each inspection (is the silt fence tail entrenched, are the straw wattles staked ever 4 feet, etc.)

Maintenance Requirements

Describe maintenance requirements, such as how to repair damaged sections, what qualifies as a failed control measure and when it needs to be replaced. Also include criteria that would trigger maintenance (i.e. 50% capacity of the control measure has been reached).

Control Measure Diagram



APPENDIX B: STORMWATER MANAGEMENT PLAN CONTENT CHECKLIST

Stormwater Management Plan Content Checklist

	Yes	No
i) Qualified Stormwater Manager - Does the SWMP list individual(s) by title and name who are designated as the site's qualified stormwater manager(s) responsible for implementing the SWMP in its entirety?		
ii) Spill Prevention and Response Plan - Does the SWMP have a spill prevention and response plan?		
iii) Materials Handling - Does the SWMP describe and locate all control measures implemented at the site to minimize impacts from handling significant materials that could contribute pollutants to runoff		
iv) Potential Sources of Pollution - Does the SWMP list all potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges associated with construction activity from the site. This shall include, but is not limited to, the following pollutant sources:		
a) disturbed and stored soils		
b) vehicle tracking of sediments		
c) management of contaminated soils		
d) loading and unloading operations		
e) outdoor storage activities (erodible building materials, fertilizers, chemicals, etc.)		
f) vehicle and equipment maintenance and fueling		
g) significant dust or particulate generating processes (e.g., saw cutting material, including dust)		
h) routine maintenance activities involving fertilizers, pesticides, herbicides, detergents, fuels, solvents, oils, etc.		
i) on-site waste management practices (waste piles, liquid wastes, dumpsters)		
j) concrete truck/equipment washing, including washing of the concrete truck chute and associated fixtures and equipment		
k) dedicated asphalt, concrete batch plants and masonry mixing stations		
l) non-industrial waste sources such as worker trash and portable toilets		
vi) Implementation of Control Measures - Does the SWMP include design specifications that contain information on the implementation of the control measure in accordance with good engineering hydrologic and pollution control practices; including as applicable drawings, dimensions, installation information, materials, implementation processes, control measure-specific inspection expectations, and maintenance requirements.		
Notes:		

	Yes	No
vi) Site Description - Does the SWMP include a site description which includes, at a minimum, the following:		
a) the nature of the construction activity at the site		
b) the proposed schedule for the sequence for major construction activities and the planned implementation of control measures for each phase. (e.g.: clearing, grading, utilities, vertical, etc.)		
c) estimates of the total acreage of the site, and the acreage expected to be disturbed by clearing, excavation, grading, or any other construction activities		
d) a summary of any existing data and sources used in the development of the construction site plans or SWMP that describe the soil types found in the permitted area and the erodibility of the identified soil types		
e) a description of the percent cover of native vegetation on the site if the site is undisturbed, or the percent cover of native vegetation in a similar, local undisturbed area or adequate reference area if the site is disturbed. Include the source or methodology for determining the percentage. If a percent cover is not appropriate for the site location (i.e. arid), describe the technique and justification for the identified cover of native vegetation		
f) a description of any allowable non-stormwater discharges at the site, including those being discharged under a division low risk discharge guidance policy		
g) a description of the drainage patterns from the site. Including a description of the immediate source receiving the discharge. If the stormwater discharge is to a municipal separate storm sewer system, the name of the entity owning that system, the location of the storm sewer discharge, and the ultimate receiving water(s)		
h) a description of all stream crossings located within the construction site boundary		
Notes:		

	Yes	No
vii) Site Map - Does the SWMP include a site map which includes, at a minimum, the following:		
a) construction site boundaries		
b) flow arrows that depict stormwater flow directions on-site and runoff direction		
c) all areas of ground disturbance including areas of borrow and fill		
d) areas used for storage of soil		
e) locations of all waste accumulation areas, including areas for liquid, concrete, masonry, and asphalt		
f) locations of dedicated asphalt, concrete batch plants and masonry mixing stations		
g) locations of all structural control measures		
h) locations of all non-structural control measures		
i) locations of springs, streams, wetlands and other state waters, including areas that require pre-existing vegetation be maintained within 50 feet of a receiving water, where determined feasible in accordance with Part I.B.1.a.i.(e)		
j) locations of all stream crossings located within the construction site boundary		
k) Locations where alternative temporary stabilization schedules apply		
viii) Temporary Stabilization, Final Stabilization and Long Term Stormwater Management -		
a) does the plan document the constraints necessitating an alternative temporary stabilization schedule, as referenced in Part I.B.1.a.iii(a), and provide an alternate stabilization schedule		
b) does the plan describe the practices used to achieve final stabilization of all disturbed areas at the site		
c) does the plan describe the measures used to establish final stabilization through vegetative cover or alternative stabilization method, as referenced in Part I.B.1.a.iii(c), and describe and locate any temporary control measures in place during the process of final stabilization		
d) does the plan describe and locate any planned permanent control measures to control pollutants in stormwater discharges that will occur after construction operations are completed, including but not limited to, detention/retention ponds, rain gardens, stormwater vaults, etc.		
Notes:		
	Yes	No

ix) Inspection Reports - Does the SWMP include documented inspection reports in accordance with Part I.D. of the permit?		
a) Is the inspector a qualified stormwater manager?		
b) Do the inspection records meet the minimum required inspection frequency identified on the inspection reports? <ul style="list-style-type: none"> • What minimum inspection frequency is being implemented at the site? • Is a reduced inspection frequency being implemented? 		
c) Were the following areas inspected for evidence of, or the potential for, pollutants leaving the construction site boundaries, entering the stormwater drainage system, or discharging to state waters:		
1) Construction site perimeter		
2) All disturbed areas		
3) Locations of installed control measures		
4) Designated haul routes		
5) Material and waste storage areas exposed to precipitation		
6) Locations where stormwater has the potential to discharge offsite		
7) Locations where vehicles exit the site		
d) Do the inspection records include the following requirements:		
1) Visually verify whether all implemented control measures are in effective operational condition and are working as designed in their specifications to minimize pollutant discharges		
2) Determine if there are new potential sources of pollutants		
3) Assess the adequacy of control measures at the site to identify areas requiring new or modified control measures to minimize pollutant discharges		
4) Identify all areas of non-compliance with the permit requirements and, if necessary, implement corrective action as described below		
e) Do the inspection reports include, at a minimum, the following items:		
1) The inspection date		
2) Name(s) and title(s) of personnel conducting the inspection		
3) Weather conditions at the time of inspection		
4) Phase of construction at the time of inspection		
5) Estimated acreage of disturbance at the time of inspection		
6) Location(s) of discharges of sediment or other pollutants from the site		
7) Location(s) of control measures requiring routine maintenance		
8) Location(s) and identification of inadequate control measures		
9) Location(s) and identification of additional control measures needed that were not in place at the time of inspection		
10) Description of corrective action(s) for items 7, 8, 9, above and dates corrective actions were completed, including the requisite changes in the plan		
11) Description of the minimum inspection frequency and any deviations from the minimum inspection schedule		
12) After adequate corrective action(s) have been taken, or where a report does not identify any incidents requiring corrective action, the report shall contain the following statement: "I verify that, to the best of my knowledge and belief, all corrective action items identified during the inspection are complete, and the site is currently in compliance with the permit."		

Notes:

APPENDIX J: WILDLIFE HABITAT ASSESSMENT

Wildlife Habitat Assessment

Fortress Solar Project

May 2023

Prepared for:

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TETRA TECH

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1.0 INTRODUCTION

Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC (Fortress Solar), indirect subsidiaries of Aypa Power, is proposing to develop the Fortress Solar Project (Project), which would be situated on approximately 4,400 acres of private land (Project Area) located east of U.S. Highway 71 and south of U.S. Highway 34 just east of the city of Brush in unincorporated Morgan County, Colorado (Figure 1). At the request of Fortress Solar, Tetra Tech, Inc. (Tetra Tech) has prepared a wildlife habitat assessment report for the Project consisting of a desktop review and field survey to document existing habitat and biological resources, including special status species and raptor nests that may be impacted by Project development.

2.0 REGULATORY FRAMEWORK

This section outlines the applicable federal, state regulations, polices, and related permits and approvals relative to biological resources that may be required for development of the Project.

2.1 FEDERAL REGULATIONS

2.1.1 Endangered Species Act

The Endangered Species Act (ESA) directs the U.S. Fish and Wildlife Service (USFWS) to identify and protect endangered and threatened species and their critical habitat and to provide a means to conserve their ecosystems. Among its other provisions, the ESA requires the USFWS to assess civil and criminal penalties for violations of the Act or its regulations. Section 9 of the ESA makes it unlawful to knowingly violate the “take” provisions of the ESA. “Take” is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct” 16 United States Code (U.S.C.) 1532. Significant modification or degradation of listed species’ habitats in which the modification kills or injures wildlife by significantly impairing essential behavioral patterns is considered “harm” under ESA regulations. Projects involving federal lands, funding, or authorizations require consultation between the federal agency and the USFWS pursuant to Section 7 of the ESA. Projects without a federal nexus work directly with USFWS to avoid adversely impacting listed species and their critical habitats.

2.1.2 Bald and Golden Eagle Protection Act

Bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) are afforded legal protection under authority of the Bald and Golden Eagle Protection Act (BGEPA; 16 U.S.C. 668–668d). The BGEPA prohibits the take, sale, purchase, offer of sale, purchase or barter, transport, export or import, at any time or in any manner of any bald or golden eagle, alive or dead, or any part, nest, or egg thereof, 16 U.S.C. 668. The BGEPA also defines take to include “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb” (16 U.S.C. 668c) and includes criminal and civil penalties for violating the statute (16 U.S.C. 668). The term “disturb” is defined as agitating or bothering an eagle to a degree that causes, or is likely to cause, injury to an eagle, or either a decrease in productivity or nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior (50 Code of Federal Regulations [CFR] Part 22.3).

2.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements the United States' obligations under four international treaties for the protection of migratory birds—more than 1,000 species (Federal Register; 50 CFR Parts 10 and 21), including the bald eagle and golden eagle. The MBTA is administered by the USFWS and prohibits “take” of migratory birds—their parts, eggs, or nests “at any time, by any means.” “Take” is defined by the MBTA as “to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities.” There has been varying guidance on the prohibition of incidental take under the MBTA. A rulemaking on October 4, 2021, reestablished incidental take as prohibited under the MBTA. This regulation took effect on December 3, 2021.

2.2 STATE REGULATIONS

2.2.1 Colorado Parks and Wildlife Consultation

Colorado Parks and Wildlife (CPW), a branch of the Colorado Department of Natural Resources, has the statutory charge for managing and conserving wildlife resources within state borders for hunted, fished, and non-game wildlife, including state-listed threatened and endangered (T&E) species (Colorado Revised Statutes [CRS] Section 33-1-101). Agency consultation and continued correspondence with CPW will identify potential impacts to state-listed T&E species as well as habitat. Permits such as the Areas and Activities of State and Local Interest (1041) permits, U.S. Army Corp of Engineers Section 404, and State Listed Threatened and Endangered Species.

CPW is required to establish and maintain a list of species of wildlife indigenous to the state of Colorado that have been determined to be endangered or threatened within Colorado (CRS Sections 33-1-101; CRS 33-60-114). It is unlawful for any person to take, possess, transport, export, process, sell or offer for sale, or ship and for any common or contract carrier to knowingly transport or receive for shipment any species or subspecies of wildlife appearing on the list of wildlife indigenous to this state determined to be endangered within Colorado.

3.0 METHODS

3.1 DESKTOP ANALYSIS

Tetra Tech conducted a desktop analysis to identify potential federally and state-listed T&E species and their associated habitats that have the potential to occur within the Project Area. Tetra Tech reviewed the following publicly available data:

- USFWS Information for Planning and Consultation (IPaC) online tool (USFWS 2023a)
- CPW State Species List
- CPW Species Activity Mapping data (CPW 2023a)
- Google Earth Aerial Imagery
- USFWS Critical Habitat Portal (USFWS 2023b)
- U.S. Geological Survey National Land Cover Database (USGS 2019)

- Environmental Protection Agency (EPA) Ecoregions of Colorado (Chapman et al. 2006)
- U.S. Department of Agriculture Farm Service National Agricultural Imagery Program aerial imagery

CPW Species Activity Mapping data were reviewed for potentially occurring species that are federally and/or state protected.

3.2 FIELD SURVEY METHODS

Tetra Tech conducted a field survey on April 25 and 26, 2023, to assess wildlife habitat within the Project Area. The wildlife habitat assessment was conducted by qualified biologists by driving along public roads adjacent to the Project Area and on foot within the Project Area. The biologists documented vegetation, assessed the area for potentially suitable habitat for federally and state-listed T&E species and mapped observed species occurrences with a handheld GPS unit. All wildlife and plant species observed during the field survey were identified to the extent possible and documented.

Tetra Tech identified raptor nests within a 0.5-mile buffer of the Project Area (Raptor Nest Survey Area). Surveys were conducted by foot where access had been granted and by vehicle using existing public roads within the 0.5-mile buffer of the Project Area. The biologists scanned trees and other tall structures using binoculars for raptor nests while walking and driving and made frequent stops to scan suitable habitat for distant nests located within 0.5 mile of the Project Area. Suitable burrowing owl (*Athene cunicularia*) habitat and prairie dog (*Cynomys ludovicianus*) colonies were also documented if present. If nests or suitable burrowing owl habitat were observed, the biologist mapped the nest or suitable habitat location in detail using a handheld GPS.

4.0 DESKTOP RESULTS

4.1 ECOREGION

The Project Area is located in the EPA's High Plains Level III Ecoregion. The High Plains Ecoregion includes four Level IV ecoregions. The Project lies within the Rolling Sand Plains (25b) Level IV ecoregion (Chapman et al. 2006). Sandy soils formed from eolian deposits support a sand-sage prairie natural vegetation type that is different from the shortgrass and midgrass prairie of other neighboring Level IV ecoregions in the High Plains. Sand sagebrush (*Artemisia filifolia*), rabbitbrush (*Ericameria nauseosa*), sand bluestem (*Andropogon hallii*), prairie sandreed (*Calamovilfa longifolia*), and Indian ricegrass (*Eriocoma hymenoides*) were typical plants. Land use is primarily rangeland, although a few scattered areas have been developed for irrigated cropland using deep wells.

4.2 VEGETATION

According to the National Land Cover Database (USGS 2019), the dominant land cover in the Project Area is grassland/herbaceous—4,161.6 acres or 93.62 percent (Table 1; Figure 2). Observations of the Project Area land cover made during the site visit on April 25 and 26, 2023, corroborated these data. The Project Area was dominated by sand sagebrush (*Artemisia filifolia*), needle and thread grass (*Hesperostipa comata*), blue gramma (*Bouteloua gracilis*), and smooth brome (*Bromus inermis*).

Table 1. Land Use and Land Cover Present within the Project Area

Land Cover Type	Acres	Percent of Project Area
Developed, Open Space	8.7	0.20
Developed, Low Intensity	3.1	0.07
Shrub/Scrub	271.8	6.11
Grassland/Herbaceous	4,161.6	93.62
Cultivated Crops	0.01	0.00
TOTAL	4,445.2	100%

^{1/} 2019 National Land Cover Database (USGS 2019)

^{2/} Acreage is approximate based on the kmz file provided by Fortress Solar for GIS desktop data and not an official land survey or tax assessor parcel boundary

4.2.1 Vegetation and Land Use Observed during Field Visit

The Project Area is exclusively rangeland used for cattle grazing operations. It is dominated by shortgrass and shrub/scrub prairie land. Existing two-track roads are located throughout the Project Area, as are transmission and distribution lines. A railroad line is located along the entire northern boundary of the Project Area. Topography is relatively flat, and a few rolling hills are located throughout the northern half of the Project Area. Vegetation observed during the field visit varied slightly throughout the Project Area. The western portion of the Project Area was composed primarily of shortgrass prairie species, which included needle-and-thread grass, Russian thistle (*Kali tragus*), smooth brome, creeping thistle (*Cirsium arvense*), Kentucky bluegrass (*Poa pratensis*), blue grama, big bluestem (*Andropogon gerardi*), and prickly pear (*Opuntia polyacantha*). The eastern portion of the Project Area was composed of vegetation more typical of shrub/scrub communities which were dominated by sand sagebrush, big sagebrush (*Artemisia tridentata*), prickly poppy (*Roemeria argemone*), blue grama, creeping thistle, sagebrush violet (*Violaceae Viola trinervata*) interspersed with bare ground (approximately 10 percent). The area surrounding the Project Area is predominately rangeland utilized for cattle grazing operations as well as rural housing development directly west and a cattle feed lot to the north.

4.3 WILDLIFE

General wildlife observations within the Project Area were typical for the area and the shortgrass shrub/scrub prairie. The following species were identified during the field visit were the following: mourning dove (*Zenaida macroura*), coyote (*Canis latrans*), black-tailed prairie dog (*Cynomys ludovicianus*), European starling (*Sturnus vulgaris*), rock dove (*Columba livia*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), horned lark (*Eremophila alpestris*), and the western meadowlark (*Sturnella neglecta*). Unidentified small mammal burrows were also observed.

4.4 SPECIAL-STATUS SPECIES

The USFWS IPaC online tool (Appendix A) and CPW online databases were used to identify federally and state-listed species and other special status species (e.g., species protected by the BGEPA) that may occur within or near the vicinity of the Project Area (Figure 3; Table 2). No USFWS-designated critical habitat is present within the Project Area (Appendix A). The federally and state-listed species that have a likelihood of occurrence within the Project Area are discussed further in the sections below.

Table 2. Federally and State Special Status Species with a Likelihood of Occurrence Within the Project

Common Name	Scientific Name	Status	Habitat Associations	Likelihood of Occurrence
Mammals				
Gray wolf	<i>Canis lupus</i>	FE; SE	Found in temperate forests, mountains, tundra, taiga, grasslands, and deserts. Morgan County is outside the current range of this species.	Unlikely—N/A. This species only needs to be considered for projects that include predatory management.
Bird				
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA	Typically found near large bodies of water that support fish populations and waterfowl. Will perch and nest in tall deciduous or coniferous trees near water.	Unlikely—Breeding Unlikely—Wintering Low—Foraging
Golden eagle	<i>Aquila chrysaetos</i>	BGEPA	Partly open country with native grassland vegetation. Nests on cliffs and in trees.	Unlikely—Breeding Unlikely—Wintering Low—Foraging
Burrowing owl	<i>Athene cunicularia</i>	ST	Typically found in prairie dog colonies in open areas with short grass and where suitable ground squirrel and badger burrows can be found, such as golf courses, cemeteries, airports, vacant lots, and pastures.	High to Moderate—Breeding Unlikely—Wintering
Piping Plover	<i>Charadrius melodus</i>	FT; ST	Occurs in reservoirs, lakes, and rivers with sand and gravel areas and sparse vegetation.	Unlikely
Whooping crane	<i>Grus americana</i>	FE; SE	Occurs in freshwater marshes, wet prairies, shallow lakes, and lagoons.	Unlikely
Fish				
Pallid sturgeon	<i>Scaphirhynchus albus</i>	FE	Found in large river systems with firm sandy bottoms (e.g., the Missouri River). No streams are within the Project Area.	Unlikely
Flowering Plants				
Ute ladies'-tresses orchid	<i>Spiranthes diluvialis</i>	FT	Found in moist meadows associated with perennial stream terraces, floodplains, and oxbows at elevations below 6,500 feet.	Unlikely
Western prairie fringed orchid	<i>Platanthera praeclara</i>	FT	Found in unplowed, calcareous prairies and sedge meadows.	Unlikely
Insect				
Monarch butterfly	<i>Danaus plexippus</i>	FC	Found throughout the United States in open fields and meadows with	Unlikely

Common Name	Scientific Name	Status	Habitat Associations	Likelihood of Occurrence
			milkweed (primarily <i>Asclepias</i> spp.). Milkweed is an obligate host plant for monarch larvae. Several milkweed species occur in Colorado in a variety of habitats such as grasslands, disturbed areas, wetlands, and irrigation ditches. Adults feed on milkweed and other flowering plants.	

BGEPA = Bald and Golden Eagle Protection Act; FT = Federally Listed Threatened; FC = Candidate for Federal Listing (not a statutory category); ST = State Threatened; SE = State Endangered

Based on the desktop analysis of land cover data, aerial imagery, range maps, and observations during the field survey, the following special status species may occur within the Project Area: bald eagle (foraging), burrowing owl (breeding) and golden eagle (foraging). All other special status species listed in Table 2 are unlikely to occur in the Project Area due to the absence of suitable habitat.

4.4.1 Bald Eagle

Bald eagles typically nest near large bodies of open water with adequate prey and tall trees for nesting and roosting, such as lakes, marshes, seacoasts, and rivers (Buehler 2022). Bald eagles are opportunistic foragers that prey primarily on fish but also feed on other aquatic and terrestrial vertebrates and carrion (Buehler 2022). Wintering locations are also typically associated with aquatic areas that contain open water for foraging on fish; wintering bald eagles roost up to 20 miles from foraging sites depending on the abundance of prey.

The Project Area contains potentially suitable foraging habitat for the species, and riparian habitat along Beaver Creek located approximately 0.66 mile west of the Project Area may provide suitable nesting habitat. The nearest known bald eagle nest is located approximately 4.25 miles northeast of the Project Area (CPW 2023a).

No bald eagles or potential bald eagle nests were observed within 0.5 mile of the Project Area during the field survey. Based on lack of potentially suitable habitat, bald eagles are unlikely to nest within the Project Area; however, the potential for the species to forage in the Project Area is possible based on the presence of small mammal burrows and the area's proximity to Beaver Creek. Potentially suitable nesting occurs along the Beaver Creek, although the species is more likely to nest along larger water bodies in the region.

4.4.2 Golden Eagle

Golden eagles are common in western North America, and small populations also present in the eastern portions of Canada and the United States (Katzner et al. 2020). Golden eagle populations in the western United States may be migratory or resident year-round (Katzner et al. 2020). They are year-round residents in eastern Colorado (Sibley 2014) and they are commonly associated with open and semi-open habitats such as shrublands, grasslands, woodland-brushlands, and coniferous forests as well as in farmland and riparian habitats (Katzner et al. 2020). Golden eagles nest on cliff faces or in large trees and breeding areas vary by region, but they are generally associated with mountainous canyon land, rimrock terrain of open desert, grassland areas, riparian habitats, and occasionally in forested areas (Katzner et al. 2020). Wintering habitat includes open areas with native vegetation such as sagebrush communities,

riparian areas, grasslands, and rolling oak savanna (Katzner et al. 2020). The wintering or non-nesting period is from approximately October to March (Katzner et al. 2020). The species feeds upon a wide variety of prey species but tends to hunt small- to medium-sized mammals such as hares, rabbits, ground squirrels, and prairie dogs depending upon local availability (Katzner et al. 2020). Golden eagles are also known to opportunistically forage on carrion (Katzner et al. 2020).

The Project Area could provide potentially suitable foraging habitat for the species based on the presence of small mammal burrows observed during the field visit. Golden eagles are unlikely to nest in the Project Area based on a lack of trees or cliff features, although cottonwood (*Populus* spp.) trees are located adjacent along Beaver Creek could provide potentially suitable nesting habitat. Ongoing human activity in the area from the livestock grazing, is likely to prevent the species from nesting in the immediate vicinity of the Project Area.

4.4.3 Burrowing Owl

Burrowing owls occur in open areas with low-growing and/or sparse vegetation, usually on gently sloping terrain. The species is found in well-drained grasslands, steppes, deserts, prairies, and agricultural lands, often associated with high densities of burrowing mammals (CPW 2023b) such as prairie dog (*Cynomys* spp.) colonies, and ground squirrel (*Ictidomys* spp.) burrows. The species nests in an abandoned burrow, and the breeding pair occupies the area until young have fledged.

The Project Area is within the breeding range for the species and is within an area of low and moderate potential colony occurrence for black-tailed prairie dogs (*Cynomys ludovicianus*). One small prairie dog colony was observed and mapped within the Project Area (Figure 4); however, the burrows showed no signs of whitewash or recent activity, and no burrowing owls were observed within this colony. One burrow was observed and mapped within the Project Area. It showed signs of recent whitewash, and one pellet was observed at the entrance (Figure 4). However, no burrowing owl was observed during the site visit.

4.5 RAPTORS

Suitable nesting substrate was limited within the Project; however, suitable nesting substrate was observed within the rural residential community located direct west of the Project Area. Tetra Tech observed no raptor nests within 0.5 mile of the Project Area.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The Project Area is composed of shortgrass prairie and shrub/scrub land that is utilized for cattle grazing operations. Cattle were observed in the adjacent properties, and signs of recent cattle use were present within the Project Area. Agricultural infrastructure (e.g., above ground watering tanks, livestock corral) as well as transmission lines and distribution lines are located through the Project Area. Very few trees or nesting substrate for raptors are located within the Project Area. In addition, there are no sources of water (e.g., wetlands, streams) located within the Project Area, with the exception of the aboveground water tanks for the cattle. The lack of a water source has presumably limited the biological diversity of the Project Area. However, potentially suitable habitat for three special status species, including bald eagle, golden eagle, and burrowing owl, was evaluated during the field visit.

Suitable habitat for a state listed species (burrowing owl) was mapped within the Project Area and signs of recent whitewash and a pellet were observed at a burrow located within the Project Area (Figure 4). If construction is planned between March 15 and October 31, Tetra Tech recommends conducting a CPW-

protocol burrowing owl survey (CPW 2021) prior to construction activities to determine whether burrowing owls are present within 0.25 mile of the Project. CPW recommends no permitted, authorized, or human encroachment activities within 0.25 mile (320 feet, 400 meters) of the nest site for large industrial disturbances during the nesting season, March 15 through August 31.

A potential for suitable foraging habitat was identified for bald eagle and golden eagles within the Project Area. However, no water source is present within the Project Area and therefore a low potential for suitable foraging habitat for bald and golden eagles is present within the Project Area.

All three of the special status species are protected by BGEPA and/or MBTA. To comply with the BGEPA and MBTA, Tetra Tech recommends a follow-up raptor nest survey be conducted during the breeding season (generally from February 15 to July 31 for most species), to determine species and nest status prior to construction activities so that all raptor nests within 0.5 mile of the Project Area can be mapped and avoided. If raptor nests are active, Tetra Tech recommends implementing the species-specific nest avoidance buffers in CPW's Recommended Buffer Zones and Seasonal Restriction for Colorado Raptors (CPW 2020), of which the largest buffer is 0.5 mile for bald and golden eagles (CPW 2020). CPW will likely recommend clearance surveys prior to construction and will recommend buffers around active nests for all avian species during construction.

Tetra Tech recommends initiating coordination with CPW to determine possible recommended best management practices and/or avoidance measures for construction activities.

6.0 REFERENCES

- Buehler, D.A. 2022. Bald Eagle (*Haliaeetus leucocephalus*), version 2.0. In Birds of the World (P.G. Rodewald and S.G. Mlodinow, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. Available online at: <https://doi.org/10.2173/bow.baleag.02>. Accessed May 2023.
- Chapman, S.S., Griffith, G.E., Omernik, J.M., Price, A.B., Freeouf, J., and Schrupp, D.L. 2006. Ecoregions of Colorado. Available online at: https://gaftp.epa.gov/EPADDataCommons/ORD/Ecoregions/co/co_front.pdf. Accessed May 2023.
- CPW (Colorado Parks and Wildlife). 2020. Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors. Available online at: <https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/Raptor-Buffer-Guidelines.pdf>. Accessed May 2023.
- CPW. 2021. Recommended Survey Protocol And Actions To Protect Nesting Burrowing Owls. Available online at: <https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/Recommended-Survey-Protocol-Burrowing-Owls.pdf#:~:text=Although%20nesting%20most%20commonly%20occurs%20March%2015th%20through,of%20burrows%20between%20March%2015th%20and%20October%2031st>. Accessed May 2023.
- CPW. 2023a. All Species Activity Mapping Data. Available online at: <https://hub.arcgis.com/content/190573c5aba643a0bc058e6f7f0510b7/about>. Accessed May 2023.
- CPW. 2023b. Colorado Parks and Wildlife Species Profiles. Available online at: <https://cpw.state.co.us/learn/Pages/SpeciesProfiles.aspx>. Accessed May 2023.

Katzner, T.E., M.N. Kochert, K. Steenhof, C.L. McIntyre, E.H. Craig, and T.A. Miller. 2020. "Golden Eagle (*Aquila chrysaetos*)," version 2.0. In *Birds of the World* (P.G. Rodewald and B.K. Keeney, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA.

Sibley, 2014. Sibley Guide to Birds of North America.

USFWS. 2023a. Information for Planning and Consultation System. Available online at: <https://www.fws.gov/ipac/>. Accessed May 2023.

USFWS. 2023b. USFWS Threatened & Endangered Species Active Critical Habitat Report. Available online at: <https://ecos.fws.gov/ecp/report/table/critical-habitat.html>. Accessed May 2023.

USGS (U.S. Geological Survey). 2019. National Land Cover Database. Multi-Resolution Land Characteristics Consortium. Available online at: <https://www.mrlc.gov/viewer/>. Accessed May 2023.

FIGURES

Fortress Solar I LLC
Fortress Solar Project


Figure 1
Project Location

Morgan County, CO

Project Features


 Project Area

Transportation


 Interstate Highway

 US Highway

 State Highway

 Railroad

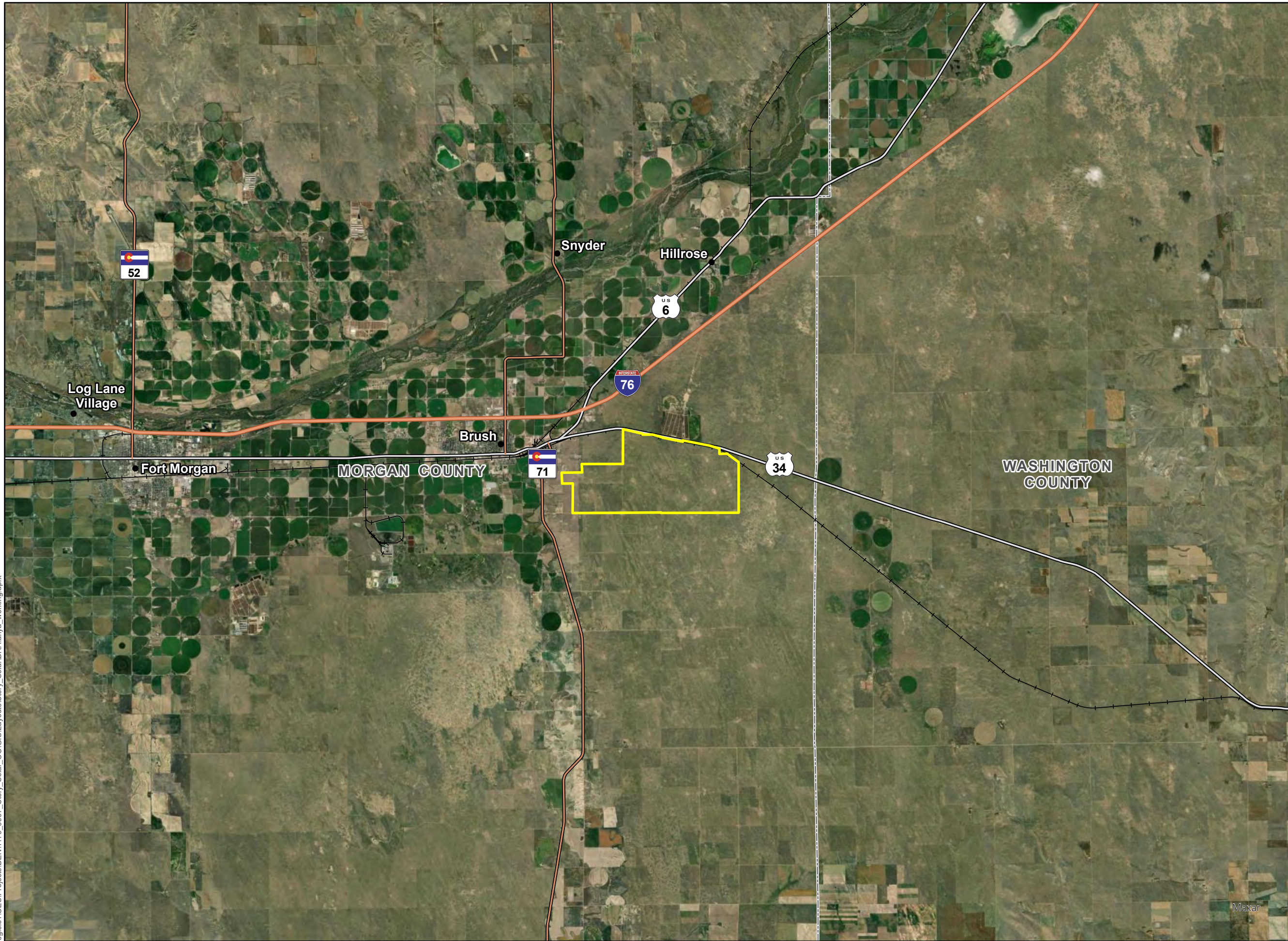
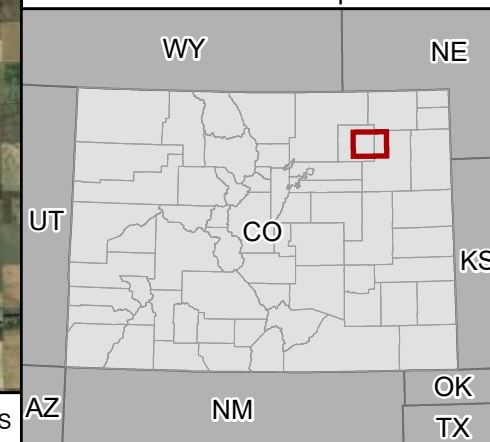
Boundaries

 County Boundary



NOT FOR CONSTRUCTION

Reference Map



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1:150,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet

0 0.5 1 2 Miles

Source: ESRI, USDA NAIP, US CENSUS, BTS

Fortress Solar I LLC
Fortress Solar Project

Figure 2
Land Cover

Morgan County, CO

Project Features

Project Area

Transportation

- Interstate Highway
- US Highway
- State Highway
- Local Road
- Railroad

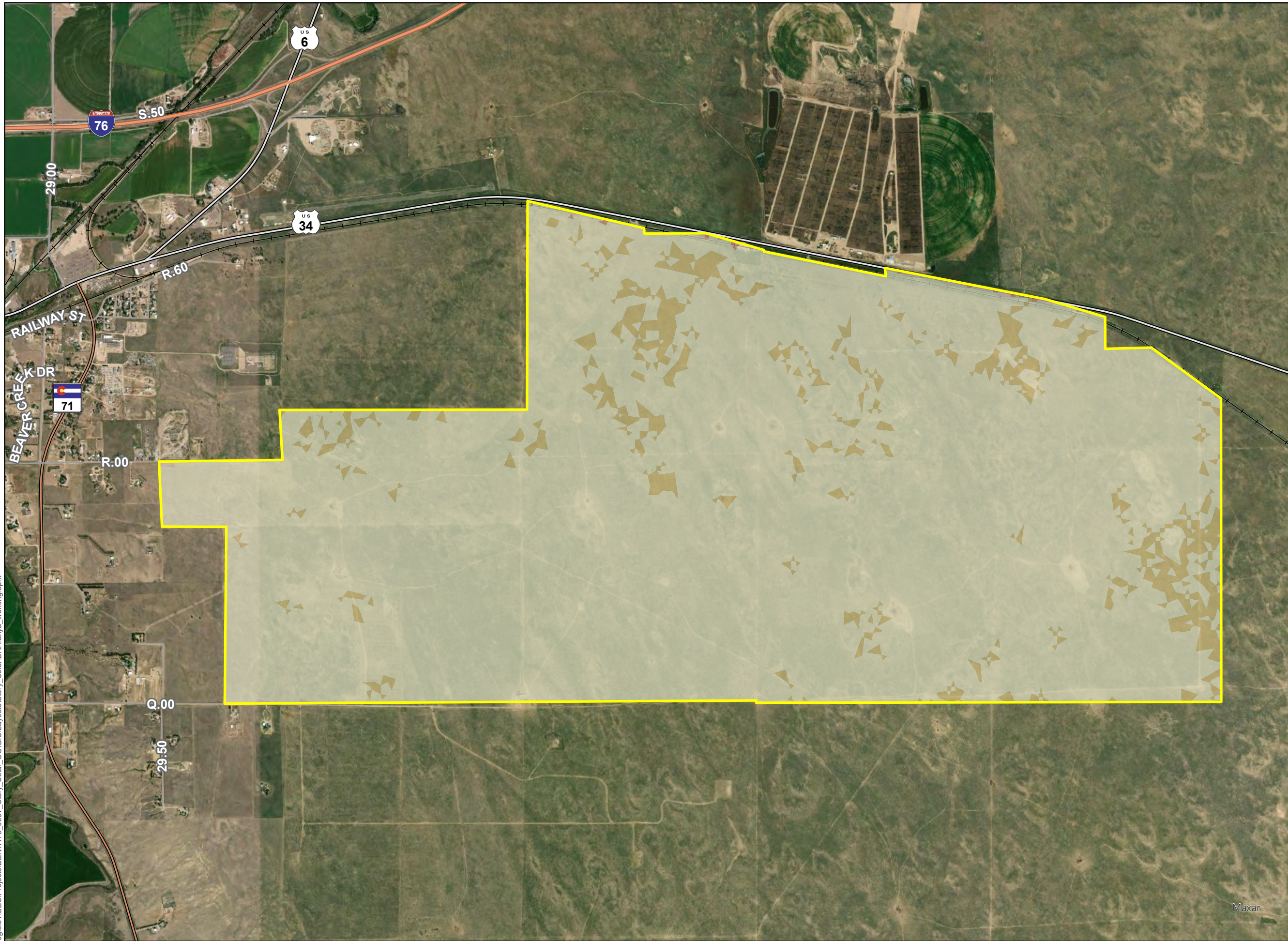
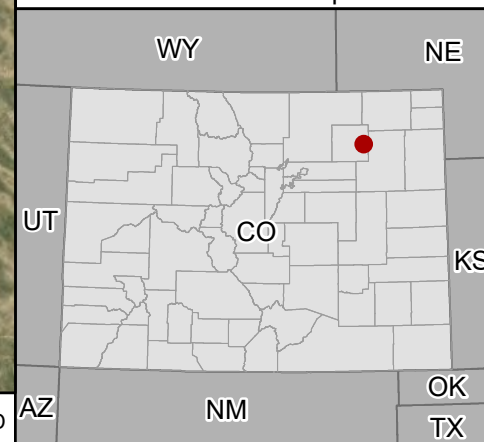
NLCD Land Cover Type

- Developed, Open Space
- Developed, Low Intensity
- Shrub/Scrub
- Grassland/Herbaceous
- Cultivated Crops



NOT FOR CONSTRUCTION

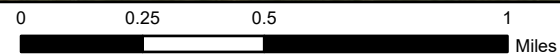
Reference Map



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1:25,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet



Source: ESRI, USDA NAIP, US CENSUS, BTS, NLCD

**Fortress Solar I LCC
Fortress Solar Project**






**Figure 3 Wetlands
and Water
Resources**

Morgan County, CO




Project Features

 Project Area

Transportation

-  Interstate Highway
-  US Highway
-  State Highway
-  Local Road
-  Railroad


National Hydrography Dataset

-  Intermittent Stream/River
-  Perennial Stream/River
-  Intermittent Lake/Pond

National Wetland Inventory

 Wetland

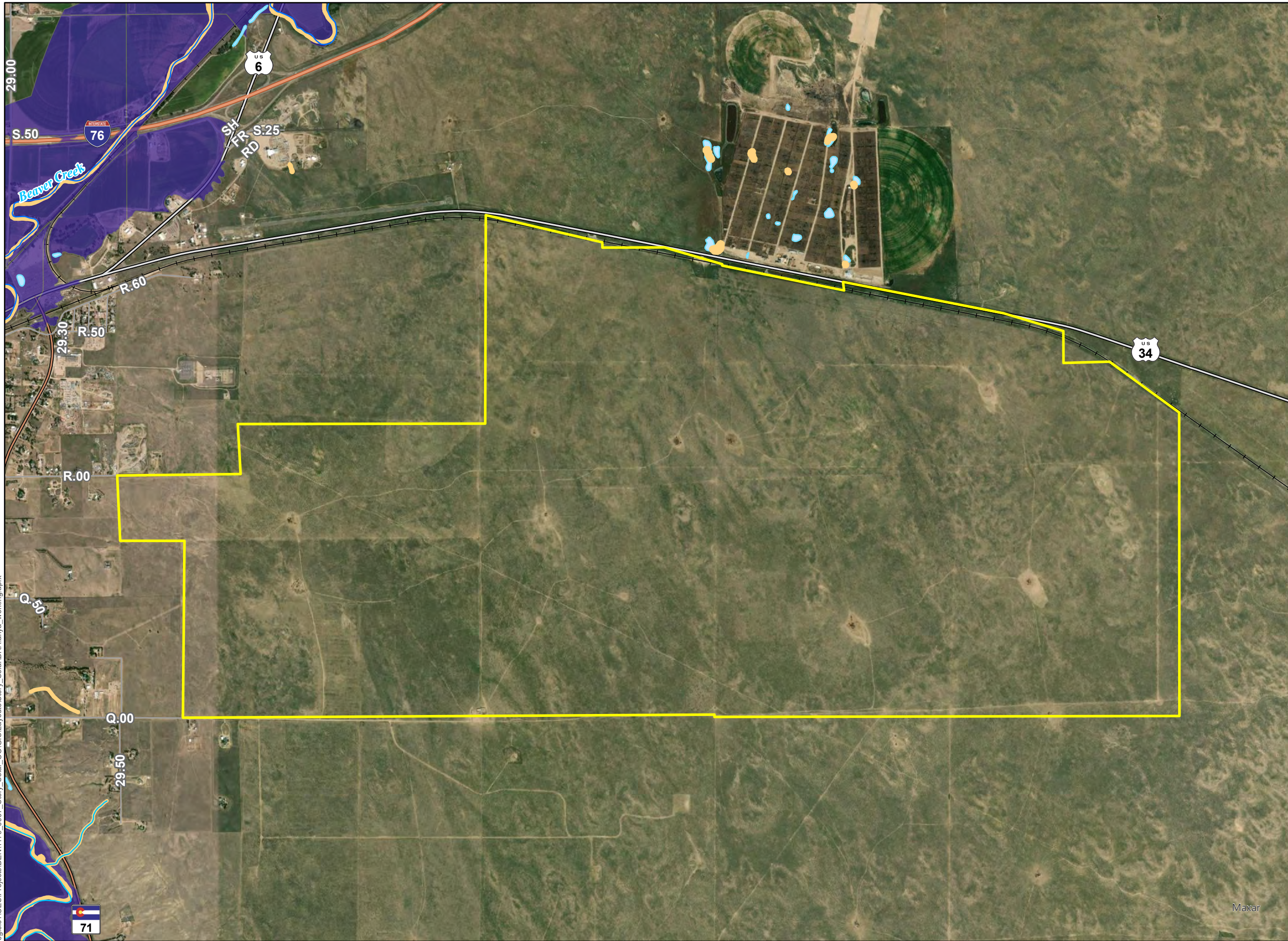
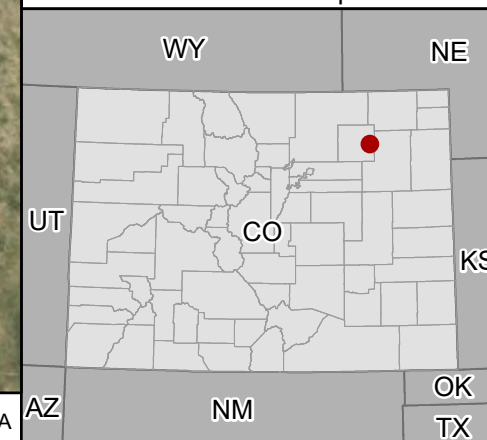
FEMA Flood Zone

 Zone A: 100-year Floodplain



NOT FOR CONSTRUCTION

Reference Map



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Fortress Solar I LLC
Fortress Solar Project

Figure 4
NRCS Soil Survey

Morgan County, CO

Project Features

Project Area

Transportation

- Interstate Highway
- US Highway
- State Highway
- Local Road
- Railroad

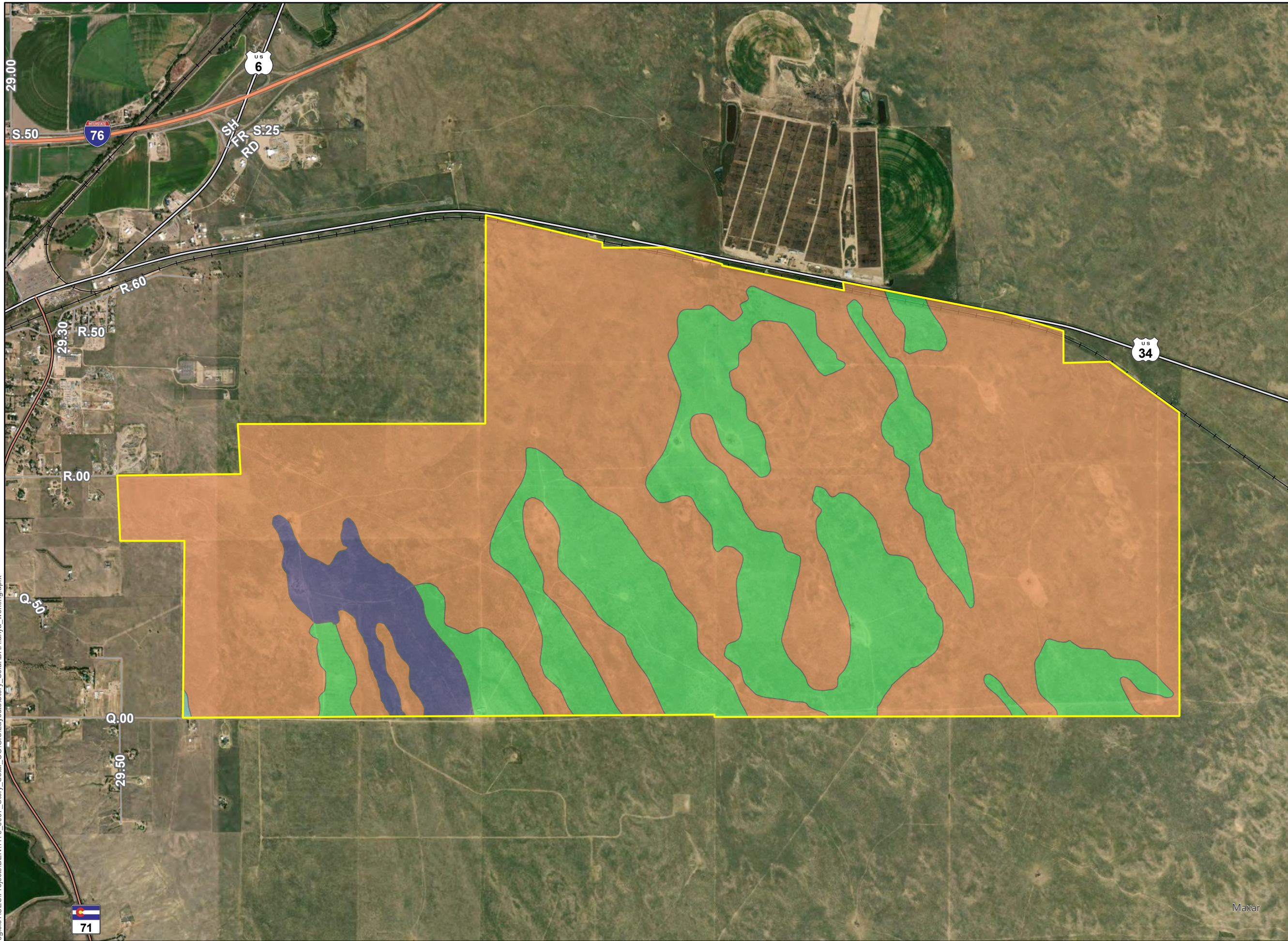
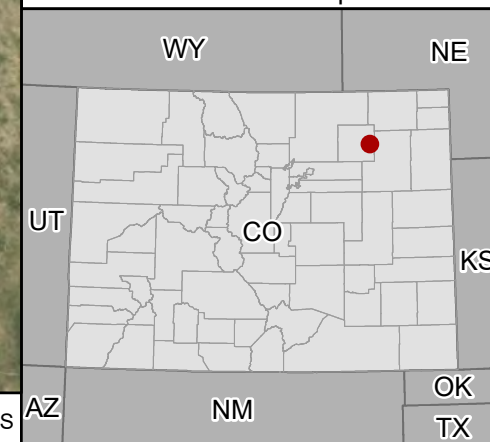
NRCS Soil Types

- Truckton loamy sand, 0-3% slopes
- Valent sand, 0-3% slopes
- Valent sand, 3-9% slopes
- Valent-Vona loamy sands, 3-9% slopes



NOT FOR CONSTRUCTION

Reference Map



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**Fortress Solar I LLC
Fortress Solar Project**





**Figure 5
CPW SAM Occurrences**

Morgan County, CO

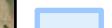


Project Features

 Project Area

Transportation

-  Interstate Highway
-  US Highway
-  State Highway
-  Railroad

CPW SAM Occurrences*

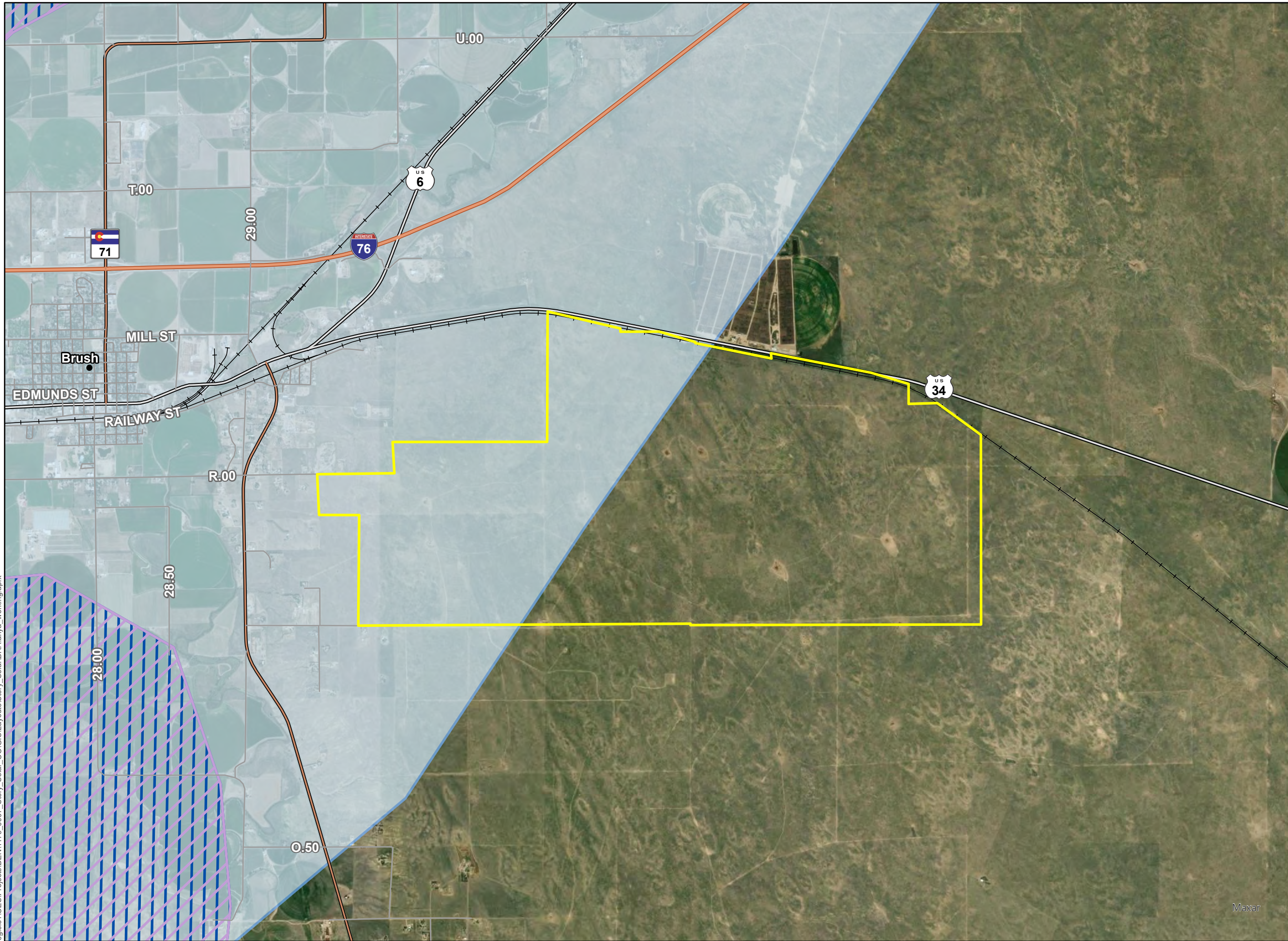
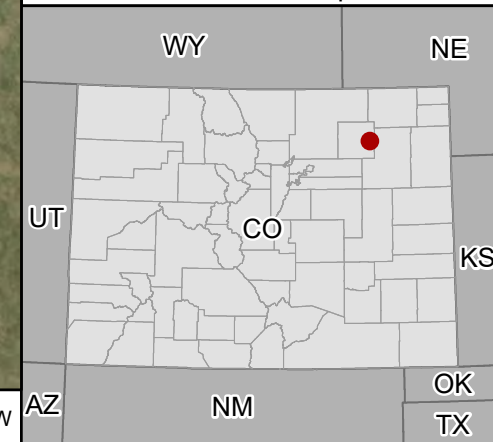
-  Bald Eagle Winter Range
-  Bald Eagle Winter Forage
-  Bald Eagle Winter Concentration

*Note: Golden Eagle Breeding Range covers map extent



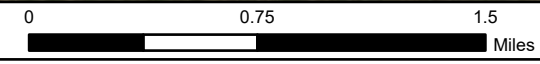
NOT FOR CONSTRUCTION

Reference Map



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 **1:40,000** NAD 1983 StatePlane Colorado Central FIPS 0502 Feet



Source: ESRI, USDA NAIP, US CENSUS, BTS, CPW

Fortress Solar I LLC
Fortress Solar Project





Figure 6
Biological Resources

Morgan County, CO


Project Features

 Project Area

Transportation

-  Interstate Highway
-  US Highway
-  State Highway
-  Railroad

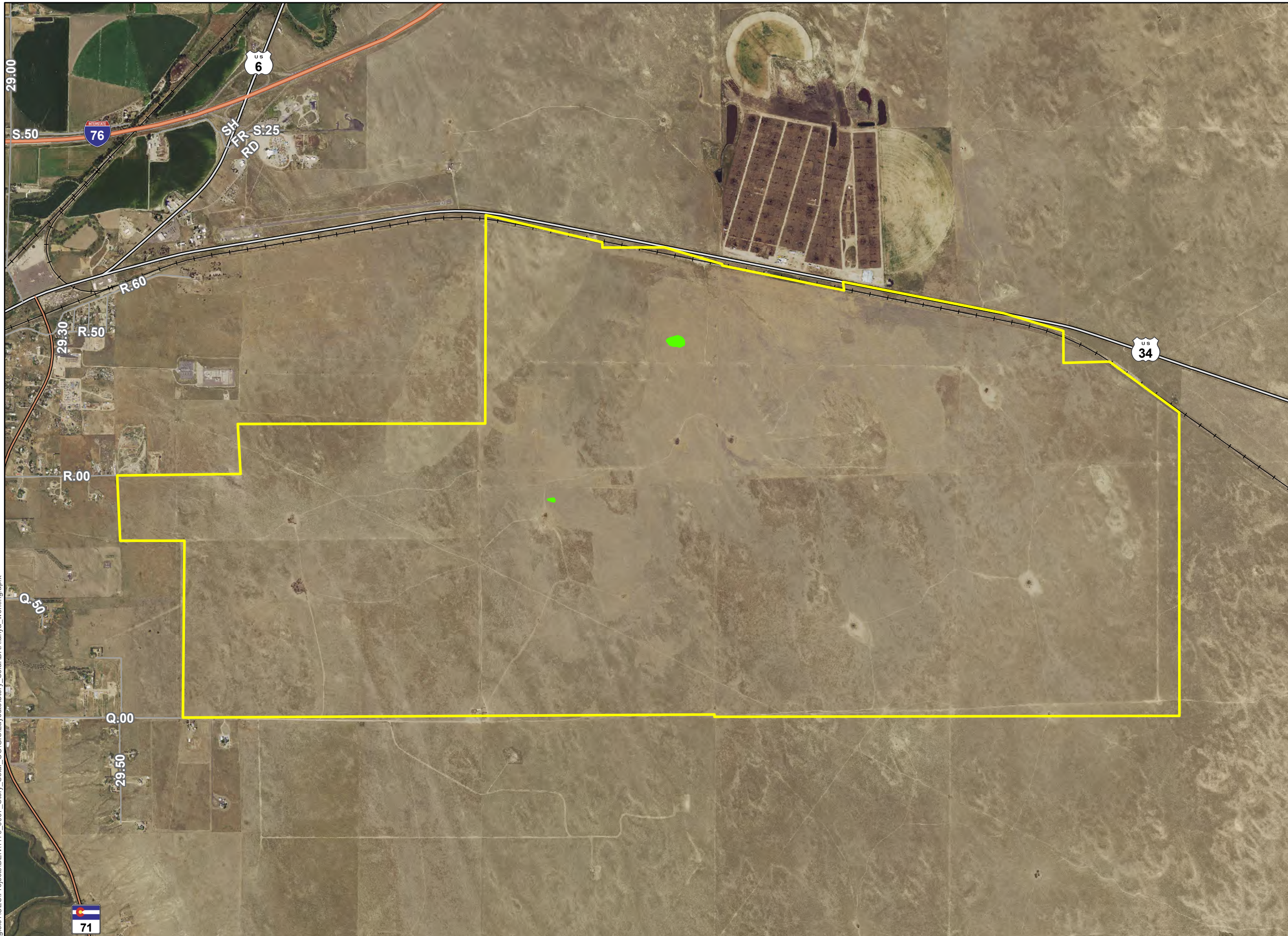
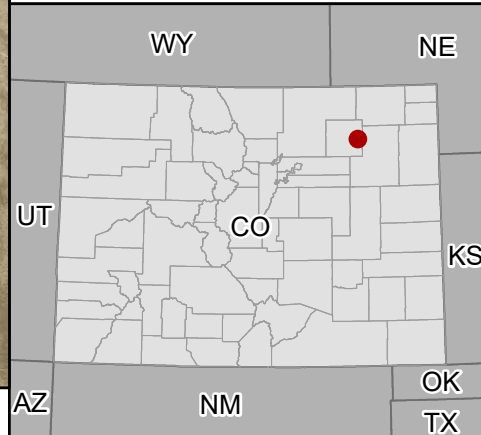
Field Survey Results

 Suitable Burrowing Owl Habitat



NOT FOR CONSTRUCTION

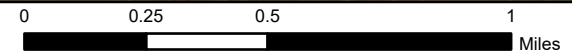
Reference Map



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Source: ESRI, USDA NAIP, US CENSUS, BTS, TETRA TECH

APPENDIX A
USFWS IPAC

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Morgan County, Colorado



Local office

Colorado Ecological Services Field Office

☎ (303) 236-4773

📅 (303) 236-4005

MAILING ADDRESS

Denver Federal Center
P.O. Box 25486
Denver, CO 80225-0486

PHYSICAL ADDRESS

134 Union Boulevard, Suite 670
Lakewood, CO 80228-1807

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
<p>Gray Wolf <i>Canis lupus</i></p> <p>This species only needs to be considered if the following condition applies:</p> <ul style="list-style-type: none">Lone, dispersing gray wolves may be present throughout the state of Colorado. If your activity includes a predator management program, please consider this species in your environmental review. <p>There is final critical habitat for this species. https://ecos.fws.gov/ecp/species/4488</p>	Endangered

Birds

NAME	STATUS
<p>Piping Plover <i>Charadrius melodus</i></p> <p>This species only needs to be considered if the following condition applies:</p> <ul style="list-style-type: none">Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska. <p>There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6039</p>	Threatened
<p>Whooping Crane <i>Grus americana</i></p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/758</p>	Endangered

Fishes

NAME	STATUS
------	--------

Pallid Sturgeon *Scaphirhynchus albus* Endangered

Wherever found

This species only needs to be considered if the following condition applies:

- Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska.

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/7162>

Insects

NAME

STATUS

Monarch Butterfly *Danaus plexippus* Candidate

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/9743>

Flowering Plants

NAME

STATUS

Ute Ladies'-tresses *Spiranthes diluvialis* Threatened

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/2159>

Western Prairie Fringed Orchid *Platanthera praeclara* Threatened

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/1669>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON

<p>Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p>	Breeds Oct 15 to Jul 31
<p>Chestnut-collared Longspur <i>Calcarius ornatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 1 to Aug 10
<p>Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Mar 15 to Aug 25
<p>Ferruginous Hawk <i>Buteo regalis</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/6038</p>	Breeds Mar 15 to Aug 15
<p>Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680</p>	Breeds Dec 1 to Aug 31
<p>Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679</p>	Breeds elsewhere
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 10 to Sep 10

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

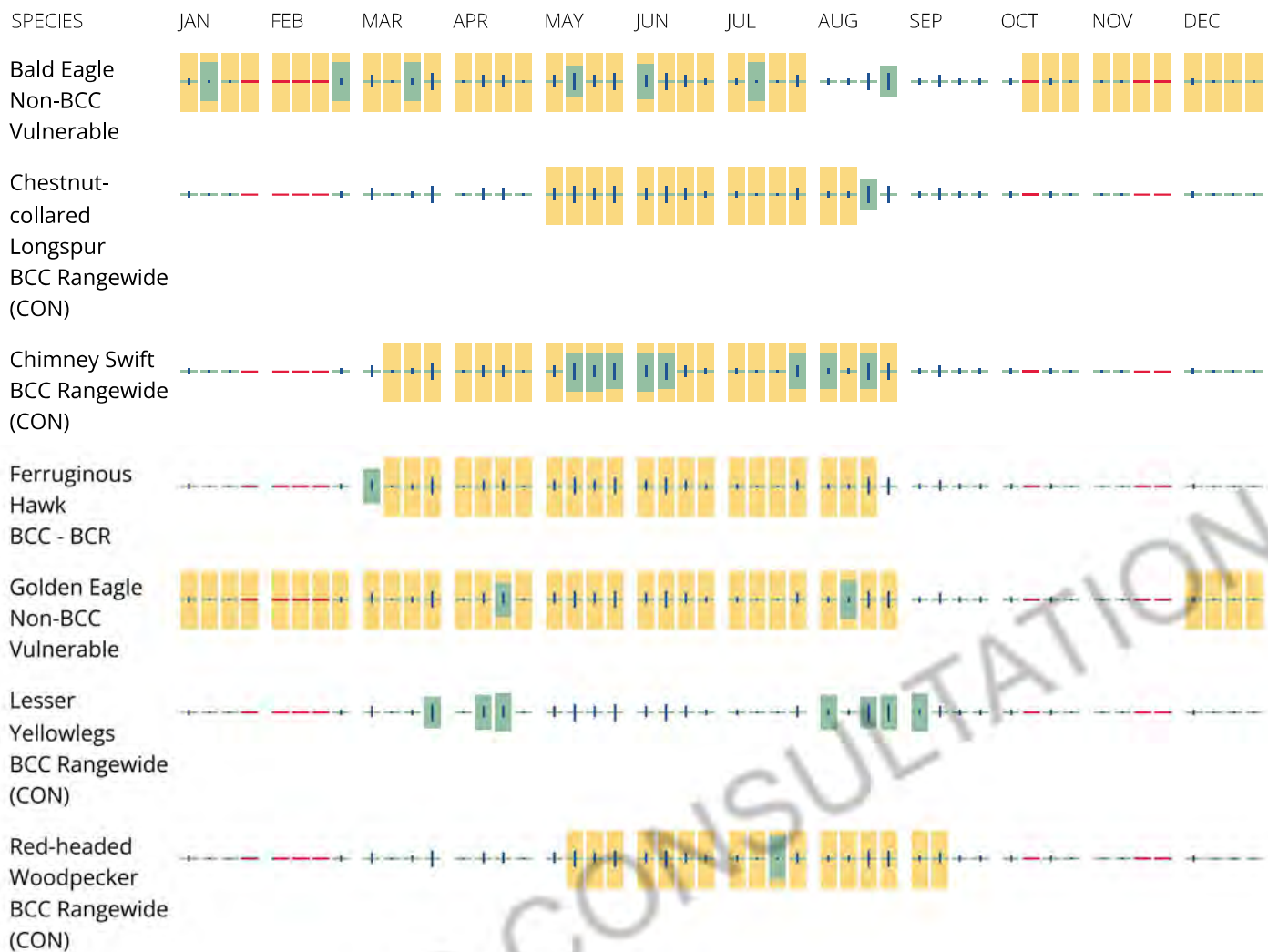
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid

cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to

you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#), and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also

been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

**APPENDIX B
PHOTO LOG**



Photo 1: Representative photo of shortgrass prairie located in the western portion of the Project Area. View is looking south.



Photo 2: Active prairie dog colony and suitable burrowing owl habitat. No signs of burrowing owl use. View is looking northwest.



Photo 3: Cattle feeding area within the Project Area. View is looking south



Photo 4: Representative photograph of shortgrass prairie rangeland within the Project Area. View is looking west.



Photo 5: Representative photograph of an aboveground cattle watering tank within the Project Area. View is looking northwest.



Photo 6: Coyote den observed within the Project Area. View is looking east.



Photo 7: Small mammal burrows observed within the Project Area. View is looking north.



Photo 8: Existing two-track road with distribution line located within the Project Area. View is looking south.



Photo 9: Suitable burrowing owl burrow with recent signs of use (whitewash and pellet) by a burrowing owl.

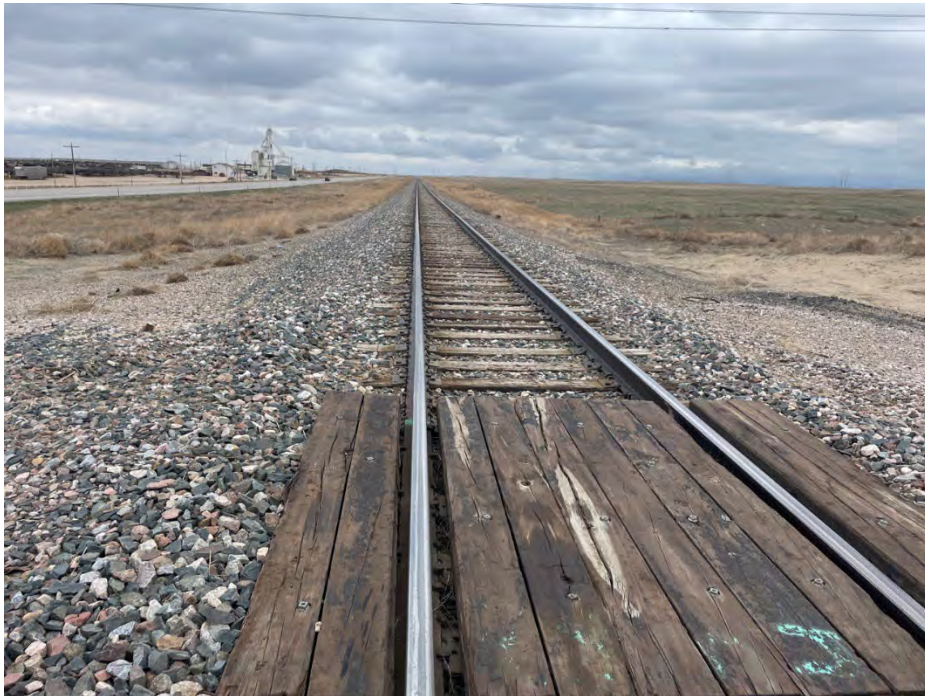


Photo 10: Existing railroad located along the northern portion of the Project Area. View is looking east.



Photo 11 Existing shed for meteorologic tower that is located within the Project Area. The shed was occupied by rock doves and appeared to be abandoned. View is looking southwest.



Photo 12: Rural residential property located west of the Project Area. View is looking southeast.



Photo 13: Representative photo of the eastern portion of the Project Area that is shrub/scrub rangeland dominated by sage. View is looking east.



Photo 14: Existing transmission line located within the Project Area. View is looking southeast.



Photo 15: Existing agricultural infrastructure (livestock corral) located within the Project Area. View is looking north.



Photo 16: Feedlot located north of the Project Area. View is looking north.

APPENDIX K: WETLAND DELINEATION REPORT

Wetland Delineation Report

Fortress Solar Project

Morgan County, Colorado

May 2023

Revision 0



Prepared for

Fortress Solar I LLC

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1.0 Project Description

Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC (Fortress Solar) indirect subsidiaries of Aypa Power, contracted Tetra Tech, Inc. (Tetra Tech) to conduct a wetlands and other waters of the United States (WOTUS) assessment within the Fortress Solar Project (Project) located in Morgan County, Colorado (Figure 1). This document summarizes the results of the desktop analysis, details the wetlands and other WOTUS survey methods used and their results, and provides a discussion of WOTUS observations.

Fortress Solar’s proposed Project consists of approximately 4,400 acres (Project Area) located in Morgan County, Colorado, east of U.S. Highway 71 and south of U.S. Highway 34, just east of the city of Brush (Figure 1). The Project Area consists of eleven parcels located in unincorporated Morgan County in the Agricultural zoning district. The closest large body of water is the South Platte River, which is located approximately 1.38 miles north of the Project Area.

1.1 Ecoregion

The Project Area is located in the U.S. Environmental Protection Agency’s (EPA) High Plains Level III Ecoregion. The High Plains Ecoregion includes four Level IV ecoregions. The Project lies within the Rolling Sand Plains (25b) Level IV ecoregion (Chapman et al. 2006). Sandy soils formed from eolian deposits support a sand-sage prairie natural vegetation type that is different from the shortgrass and midgrass prairie of other neighboring level IV ecoregions in the High Plains. Sand sagebrush (*Artemisia filifolia*), rabbitbrush (*Ericameria nauseosa*), sand bluestem (*Andropogon hallii*), prairie sandreed (*Calamovilfa longifolia*), and Indian ricegrass (*Eriocoma hymenoides*) are typical plants. Land use is primarily rangeland, although a few scattered areas have been developed for irrigated cropland using deep wells.

The site visit conducted on April 25 and 26, 2023, confirmed the presence of common vegetative species associated with this ecoregion. The Project Area is located in a predominately arid rangeland comprised of shrubland and grassland. No irrigated activities were observed within the Project Area.

1.2 Land Use and Land Cover

According to the National Land Cover Database (USGS 2019), the dominant land cover in the Project Area is grassland/herbaceous—4,161.6 acres or 93.62 percent (Table 1; Figure 2). Observations of the Project Area land cover made during the site visit on April 25 and 26, 2023, substantiated these data. The Project Area was dominated by sand sandbrush, needle and thread grass (*Hesperostipa comata*), blue gramma (*Bouteloua gracilis*), and smooth brome (*Bromus inermis*).

Table 1. Land Use and Land Cover Present within the Project Area

Land Use/Land Cover ¹	Acres ²	Percent of Project Area
Developed, Open Space	8.7	0.20
Developed, Low Intensity	3.1	0.07
Scrub/Shrub	271.8	6.11
Grassland/Herbaceous	4,161.6	93.62
Cultivated Crops	0.01	0.00

Land Use/Land Cover ¹	Acres ²	Percent of Project Area
Total	4,445.2	100.0

^{1/} 2019 National Land Cover Database (USGS 2019)

^{2/} Acreage is approximate based on kmz files provided by Fortress Solar for GIS desktop data and not an official land survey or tax assessor parcel boundary.

The land within the Project Area is exclusively used as rangeland for cattle grazing. In addition, existing overhead electrical transmission lines and overhead distribution lines bisect the Project Area. Adjacent land use to the Project Area consists of rural residential development and rangeland. A commercial feedlot is located directly north of the Project Area and a railroad track that runs east-west along the northern Project boundary.

2.0 Regulatory Framework

This section outlines the applicable federal, state, and local regulations, polices, and related permits and approvals relative to biological resources that may be required for development of the Project.

2.1 Federal Regulations

Section 404 of the Clean Water Act

The principal federal laws affecting wetlands and streams are Section 404 of the Clean Water Act (CWA) of 1977 as amended and Section 10 of the Rivers and Harbors Act of 1899. However, all water features in the Project Area would be subject to the CWA rather than the Rivers and Harbors Act because no navigable water features are present in the Project Area. Therefore, this section focuses on Section 404 of the CWA.

Section 404 of the CWA is administered jointly by the U.S. Army Corp of Engineers (USACE) and the EPA and authorizes USACE to regulate the discharge of dredge/fill materials into WOTUS, including wetlands and streams. According to 33 Code of Federal Regulations (CFR) 328.3(c)(4), the term wetlands is defined as those areas that “are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (USACE 1987). Wetlands generally include swamps, marshes, bogs, and similar areas (33 CFR 328.3(b); USACE 1987).

In January 2023, the EPA and USACE published the final “Revised Definition of ‘Waters of the United States’” rule (2023 Rule) in the Federal Register to finalize a revised definition of WOTUS under the CWA. The rule became effective on March 20, 2023 (EPA 2023). Colorado is operating under this new definition and regulatory guidelines.

Under the 2023 Rule, potential non-wetland WOTUS include ephemeral, intermittent and perennial streams and applies two standards to determine if WOTUS features, including wetlands, are jurisdictional and therefore regulated under the CWA. Certain types of waters are jurisdictional under the final rule if they meet either the relatively permanent standard or significant nexus standard (EPA 2022). Non-wetland WOTUS are delineated based on the ordinary high water mark (OHWM) for non-tidal waters. Wetlands adjacent to, but not directly abutting, relatively permanent non-navigable

tributaries that do not typically flow year-round or have continuous flow at least seasonally (i.e., ephemeral streams) are assessed as federally jurisdictional features on a case-by-case basis.

If the Project impacts WOTUS, a general (e.g., Nationwide Permit [NWP]) or Individual Permit will need to be obtained from the USACE Denver Regulatory Office, Omaha District. The type of permit depends on the activity proposed by a project and the size of the affected area. However, given the conditions in the Project Area, and the proposed use, the most likely type of permit for the Project, if required, would be an NWP.

General permits (e.g., NWPs) are often issued by USACE for categories of activities that are similar in nature and would have only minimal individual or cumulative adverse environmental effects. NWP authorization is intended to be more streamlined than Individual Permits and is issued within 45 days of receipt of a complete Pre-Construction Notification (PCN), which is required if impacts exceed the NWP disturbance threshold. The timelines can shift based on impacts and consultations with agencies. On January 13, 2021, USACE published a Final Rule that reissued 12 NWPs and issued 4 new NWPs (86 Federal Register 2744). The reissued and modified NWPs in this rule replace prior versions of the 2017 NWPs (USACE 2021).

If the Project activity requiring USACE authorization is a utility line, then the newly issued NWP 57, Electric Utility and Telecommunications Activities, could be used. Renewable energy facilities may also use NWP 51, Land Based Renewable Energy Facilities, or NWP 14, Linear Transportation Projects, if the activity requiring authorization involves road creation or enhancement. All three NWPs have similar disturbance thresholds of no more than 0.5 acre of loss.

A PCN would likely be required if impacts from the Project exceed thresholds identified within the NWP or if the general and regional conditions are not met. If a NWP is required, the most appropriate NWP will be determined by coordination from a wetland specialist and USACE. USACE will determine whether the activity qualifies under one or more NWPs or whether an Individual Permit is required.

Section 401 of the Clean Water Act

An application for a federal permit (such as a CWA Section 404 permit), including the construction or operation of facilities that may result in any discharge into navigable waters, requires water quality certification (WQC) under Section 401 of the CWA. WQC under Section 401 of the CWA falls under the delegated purview of the Colorado Department of Public Health and Environment. A Joint Application is required for the Section 404 and Section 401 permits only if USACE issues an Individual Permit. If USACE issues an NWP, the state automatically issues a WQC under Section 401 of the CWA.

2.2 State Regulations

Colorado Department of Public Health and Environment, Water Quality Control Division Permits

Construction activity that disturbs 5 acres or more of land will require the National Pollutant Discharge Elimination System (NPDES) General Permit under Section 402 of the CWA. Administration of the NPDES stormwater program in Colorado has been delegated to the Colorado Department of Public Health and Environment. For all Large Construction Sites disturbing 5 acres or more (or Small

Construction Sites disturbing 1 acre to less than 5 acres), the owner or operator must apply for coverage under a Stormwater Construction Permit at least 10 days prior to the start of construction activities. An application, which includes guidance on developing a Stormwater Management Plan (SWMP), is available from the Water Quality Control Division. The SWMP must be completed prior to application submittal but does not need to be submitted. The SWMP must include best management practices. The permit certification must be inactivated once the site has been finally stabilized so that permit coverage and billing can be completed. An inactivation form is supplied with the permit certification.

If USACE issues a project an Individual Permit under CWA Section 404, a WQC, under Section 401 of the CWA, would be required. A Joint Application is then required, and the applicant must send the finalized USACE application and associated materials to the state prior to the USACE public comment periods.

3.0 Methods

3.1 Desktop Analysis

Wetland habitats play a major role in the survival of birds, insects, amphibians, reptiles, mammals, and plants. Wetlands generally include swamps, marshes, bogs, and similar areas (33 CFR 328.3 [b]; USACE 2012a). Wetlands are defined by the predominance of hydrophytic vegetation, hydric soil, and wetland hydrology. In addition to wetlands, WOTUS include rivers, lakes, streams, playas, wet meadows, or sloughs that are or may be used as navigable waters.

Tetra Tech conducted a desktop analysis of the Project Area to identify potential jurisdictional wetlands and other WOTUS that may be present. The desktop analysis was based on the following sources of information:

- Federal Emergency Management Agency (FEMA) floodplain dataset (FEMA 2023)
- Natural Resources Conservation Service Web Soil Survey (USDA 2019)
- U.S. Department of Agriculture aerial imagery (USDA 2018)
- U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) dataset (USFWS 2023)
- U.S. Geological Survey Topographic Maps (USGS 1997)
- USGS National Hydrography Dataset (NHD; USGS 2023)

3.2 Wetland Delineation

Tetra Tech conducted a site visit on April 25 and 26, 2023, to perform a wetland delineation and preliminary WOTUS investigation/determination within the Project Area.

Wetland delineations followed the methods described in the Corps of Engineers Wetland Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0) (USACE 2010). The delineation method was used to document dominant vegetation, soils, and hydrology in areas of interest (i.e., areas with potential intersections between the Project Area and potential wetland ecosystems). For a site to be considered a wetland, there must be a dominance of hydrophytic vegetation, hydric soils, and characteristic

wetland hydrology. In normal conditions, if a sample plot lacks any one of these three criteria, it is considered upland. To determine these three variables, the qualified wetland scientist designated paired sample plots placed at discrete (typically less than 25 feet) distances from one another—one to represent wetland conditions and the other to represent uplands. Each sample plot featured a hand-dug soil pit averaging 20 inches in depth.

Hydrophytic Vegetation

The dominant vegetation at each sample plot was keyed to species level and assigned each species a wetland indicator status using the National Wetland Plant List (USACE 2020). Hydrophytic vegetation, or plants that are indicators of wetlands, include those species designated obligate (OBL), facultative wetland (FACW), or facultative (FAC). As a general rule, hydrophytes dominate a sample plot when greater than 50 percent of the evaluated species are OBL, FACW, or FAC. Upland plants include those listed with facultative upland (FACU) or upland (UPL) status. Table 2 provides descriptions of these indicators.

Table 2. Wetland Indicator Status

Indicator Status	Occurrence in Wetlands
Obligate (OBL)	Almost always occur in wetlands under natural conditions (estimated probability >99%).
Facultative Wetland (FACW)	Usually occur in wetlands (estimated probability 67%–99%), but occasionally found in non-wetlands (estimated probability 1%–33%).
Facultative (FAC)	Equally likely to occur in wetlands or non-wetlands (estimated probability 34%–66%).
Facultative Upland (FACU)	Usually occur in non-wetlands (estimated probability 67%–99%), but occasionally found in wetlands (estimated probability 1%–33%).
Upland (UPL)	Usually occur in non-wetlands but occasionally found in wetlands (estimated probability 1%–33%).

Source: USACE 2012b

Wetland Soils

Soil from each soil pit was evaluated for hue, value, and chroma in each observable horizon using Munsell Soil Color Charts (Munsell Soil Color 2009). Each soil horizon was also checked for texture and for the presence of redoximorphic features, depleted matrix, saturation, and other specific criteria used to document hydric conditions.

Wetland Hydrology

Hydrology was analyzed for primary and secondary wetland indicators, including saturation, algal mat, geomorphic position, oxidized root channels associated with living roots, water-stained leaves, and soil cracks. Once dug, the soil pits were left open for a length of time sufficient to allow the apparent high-water table, if present, to stabilize.

Other WOTUS Delineation Methods

Non-wetland potential WOTUS are also regulated under the CWA for dredge or fill activities that may be caused by construction of the Project. For this Project, the wetland scientist assessed and mapped five ponds within the Project Area by following the OHWM. USACE defines the OHWM as the following (33 CFR 328.3(e); USACE 2012a):

...that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Wetland and WOTUS Delineation

Once vegetation, soils, and hydrology had been assessed, a delineation was conducted to identify the zone of transition between the WOTUS feature and upland conditions. The wetland scientist accomplished the delineation by walking the outer limit of the visibly identifiable WOTUS feature with a handheld GPS unit. The limit of the WOTUS feature was defined in the field by a change in vegetation, soil characteristics, and hydrologic indicators (i.e., OHWM, surface water, and soil texture).

4.0 Results

4.1 Desktop Analysis

The NWI dataset identifies wetlands using high-altitude imagery in conjunction with other data sources and field surveys (USFWS 2023). The data are inherently inaccurate and are therefore used only as a guide for the location of likely wetlands. The NWI dataset identified no potential wetland features within the Project Area.

The NHD dataset identifies surface water and surface water flow locations as mapped at a 1:24,000 scale (USGS 2023). Similar to the NWI data, these data are inherently inaccurate because of the small scale, and they are therefore used only as a guide for the location of other WOTUS. The results of the desktop analysis of the NHD dataset identified no surface waters within the Project Area.

The FEMA Flood Insurance Rate Map (FIRM) numbered 0800090045B (effective April 20, 1999; FEMA 2023) does not show FEMA-mapped floodplains located within the Project Area.

The Project Area is composed of four soil units (Table 3; Figure 4). The dominant soil unit is Valent sand, 3 to 9 percent slopes (3,144.6 acres and 70.7 percent of the Project Area). Valent sand is not rated as a hydric soil. The Project Area does not contain any prime farmland (USDA 2019).

Table 3. USDA Web Soil Units within the Project Area

Soil Unit Name	Abbreviation	Area (acres)	% of Project Area
Truckton loamy sand, 0 to 3 percent slopes	TuB	176.1	4.0
Valent sand, 0 to 3 percent slopes	Va	1,123.1	25.3
Valent sand, 3 to 9 percent slopes	VcD	3,144.6	70.7
Valent sand, 3 to 9 percent slopes	VwD	1.7	0.0
TOTAL		4445.5	100

Source: USDA 2019

4.2 Wetland and WOTUS Delineation Results

Based on the preliminary desktop analysis, no wetland or WOTUS features were anticipated to occur within the Project Area. Tetra Tech wetland scientists confirmed the desktop analysis results during the site visit that occurred on April 25 and 26, 2023. No wetland or WOTUS features were observed or

mapped within the Project Area. These results were not unusual as the Project is situated in an arid upland area with sandy soils that are well to excessively drained.

5.0 Discussion

Field delineation has verified that no jurisdictional wetlands or waterbodies exist within the Project Area. Under the current Project Area, coordination with USACE is not required and the Project will not be subject to regulation under section 404 of the CWA. Should the Project Area change, please coordinate with Tetra Tech to determine if additional effort is needed.

6.0 References

- Chapman, S.S., Griffith, G.E., Omernik, J.M., Price, A.B., Freeouf, J., and Schrupp, D.L., 2006. Ecoregions of Colorado. Available online at: https://gaftp.epa.gov/EPADataCommons/ORD/Ecoregions/co/co_front.pdf. Accessed May 2023.
- EPA (U.S. Environmental Protection Agency). 2022. Final Rule: Revised Definition of “Waters of the United States” Fact Sheet. Available online at: <https://www.epa.gov/system/files/documents/2022-12/Public%20Fact%20Sheet.pdf>. Accessed May 2023.
- EPA. 2023. Definition of "Waters of the United States": Rule Status and Litigation Update. Available online at: <https://www.usace.army.mil/Media/Announcements/Article/3371994/21-april-2023-definition-of-waters-of-the-united-states-rule-status-and-litigat/>. Accessed May 2023.
- FEMA (Federal Emergency Management Agency). 2023. FEMA Flood Map Service Center: Search by Address. Available online at: <https://msc.fema.gov/portal/search#searchresultsanchor>. Accessed May 2023.
- Munsell Soil Color. 2009. Munsell® Soil Color Charts. Grand Rapids, Michigan.
- USACE (U.S. Army Corp of Engineers). 1987. Corps of Engineers Wetland Delineation Manual. Environmental Laboratory. U.S. Army Corps of Engineers Waterways Experiment Station. Technical Report Y-87-1. January.
- USACE. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0), ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- USACE. 2012a. Definition of Waters of the United States. 33 CFR 328.3(e). Available online at: <https://www.law.cornell.edu/cfr/text/33/328.3>. Accessed May 2023.
- USACE. 2012b. National Wetland Plant List Indicator Rating Definitions. R.W. Lichvar, N.C. Melvin, M.L. Butterwick, and W.N. Kirchner. ERDC/CRREL TN-12-1. Washington D.C. U.S. Army Engineer Research and Development Center. Available online at: <https://www.fws.gov/wetlands/documents/national-wetland-plant-list-indicator-rating-definitions.pdf>. Accessed May 2023.
- USACE. 2020. National Wetland Plant List, Version 3.5. Available online at: https://cwbi-app.sec.usace.army.mil/nwpl_static/v34/home/home.html. Accessed May 2023.
- USACE. 2021. Corps of Engineers Revised and Renews Nationwide Permits. Available online at: <https://www.swt.usace.army.mil/Missions/Regulatory/Nationwide-Permit-Program/>. Accessed May 2023.
- USDA (U.S. Department of Agriculture). 2018. National Agriculture Imagery Program (NAIP). Published December 31, 2018. Available online at: <https://gis.apfo.usda.gov/arcgis/rest/services/NAIP>. Accessed May 2023.
- USDA. 2019. National Resources Conservation Service Web Soil Survey. Last Modified July 31, 2019. Available online at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Accessed May 2023.

USFWS (U.S. Fish and Wildlife Service). 2023. National Wetlands Inventory. Available online at: <https://www.fws.gov/wetlands/index.html>. Accessed May 2023.

USGS (U.S. Geological Survey). 1997. U.S. Geological Survey 7.5-Minute Topographic Maps. Available online at: <https://www.usgs.gov/core-science-systems/national-geospatial-program/topographic-maps>. Accessed May 2023.

USGS. 2019. National Land Cover Database. Multi-Resolution Land Characteristics (MRLC) Consortium. Available online at: <https://www.mrlc.gov/viewer/>. Accessed May 2023.

USGS. 2023. National Hydrography Dataset, Texas. Available online at: <http://nhd.usgs.gov/data.html>. Accessed May 2023.

FIGURES

**Fortress Solar I LLC
Fortress Solar Project**


**Figure 1
Project Location**

Morgan County, CO

Project Features


 Project Area

Transportation


 Interstate Highway

 US Highway

 State Highway

 Railroad

Boundaries

 County Boundary



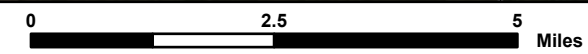
NOT FOR CONSTRUCTION

Reference Map



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1:125,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet



Source: ESRI, USDA NAIP, US CENSUS, BTS

**Fortress Solar I LLC
Fortress Solar Project**

**Figure 2
Land Cover**

Morgan County, CO






Project Features

 Project Area

Transportation

-  Interstate Highway
-  US Highway
-  State Highway
-  Local Road
-  Railroad

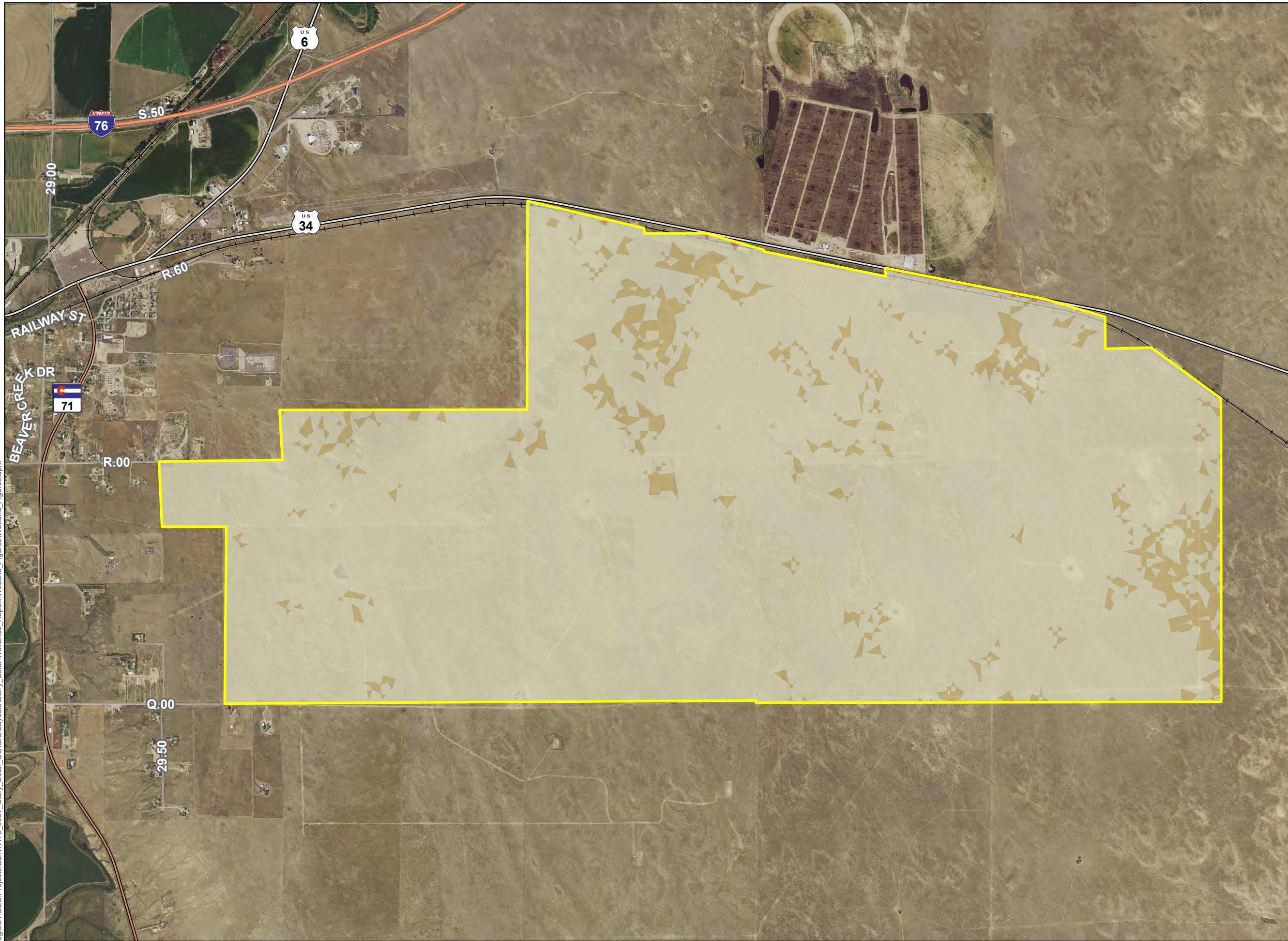
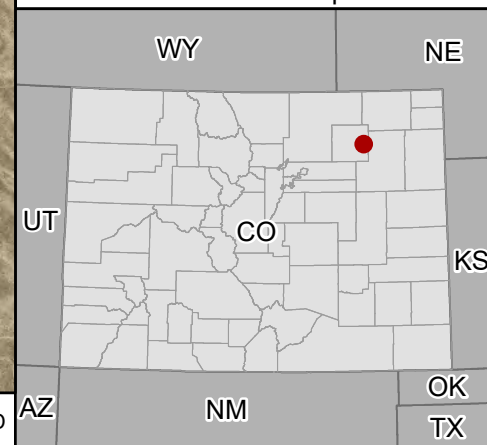
NLCD Land Cover Type

-  Developed, Open Space
-  Developed, Low Intensity
-  Shrub/Scrub
-  Grassland/Herbaceous
-  Cultivated Crops



NOT FOR CONSTRUCTION

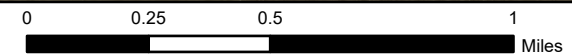
Reference Map



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1:25,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet



Source: ESRI, USDA NAIP, US CENSUS, BTS, NLCD

**Fortress Solar I LCC
Fortress Solar Project**



**Figure 3 Wetlands
and Water
Resources**

Morgan County, CO




Project Features

 Project Area

Transportation

-  Interstate Highway
-  US Highway
-  State Highway
-  Local Road
-  Railroad


National Hydrography Dataset

-  Intermittent Stream/River
-  Perennial Stream/River
-  Intermittent Lake/Pond

National Wetland Inventory

 Wetland

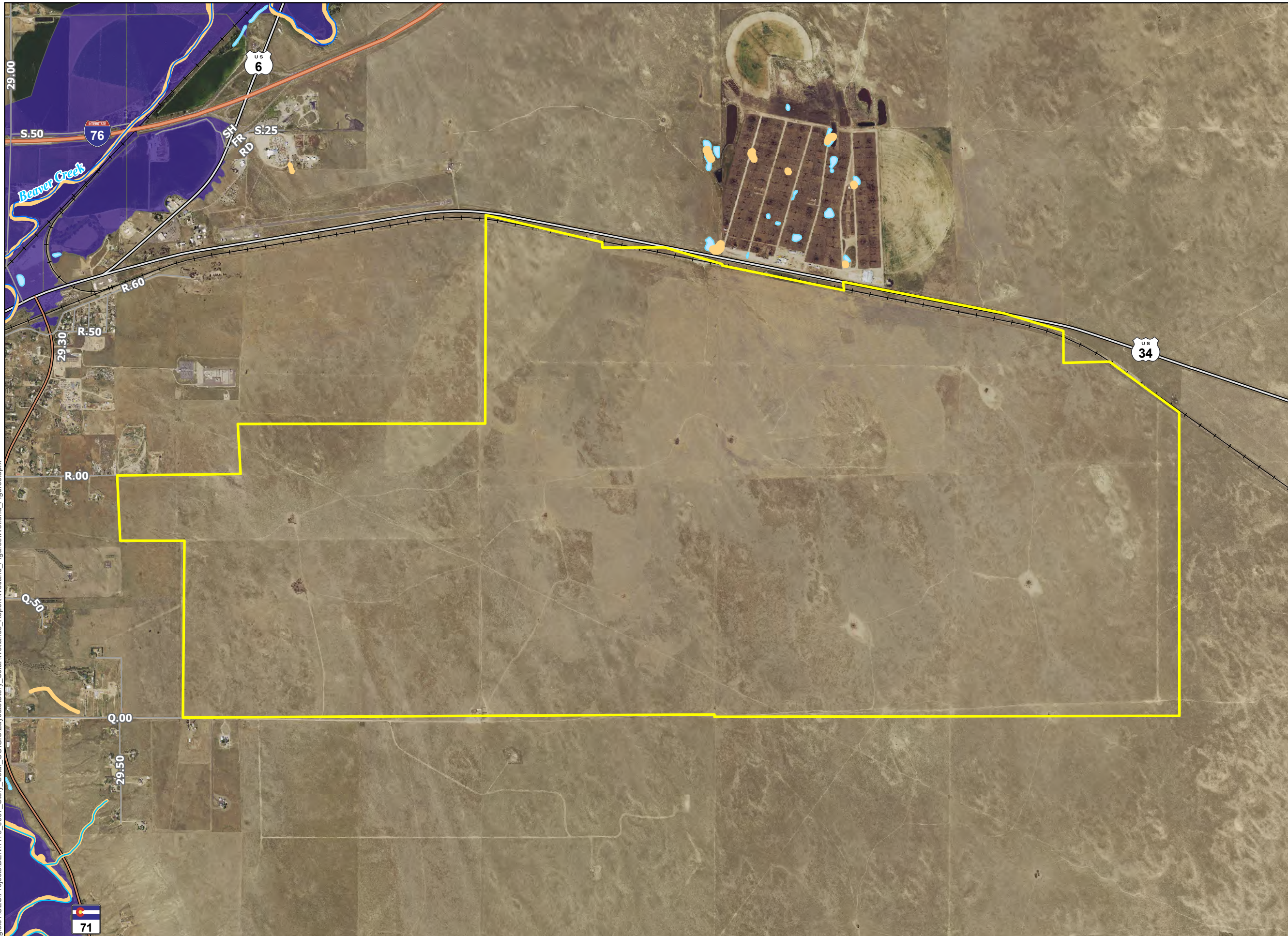
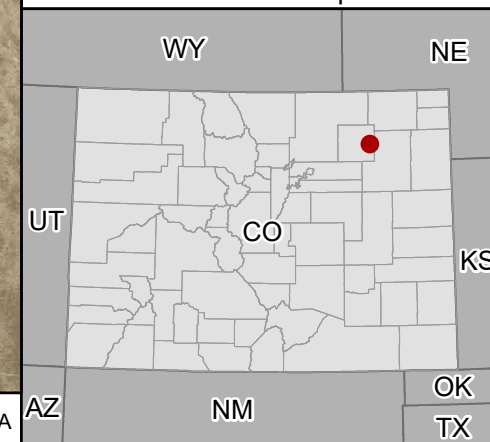
FEMA Flood Zone

 Zone A: 100-year Floodplain



NOT FOR CONSTRUCTION

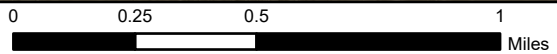
Reference Map



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1:25,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet



Source: ESRI, USDA NAIP, US CENSUS, BTS, NHD, NWI, FEMA



Fortress Solar I LLC
Fortress Solar Project


Figure 4
NRCS Soil Survey

Morgan County, CO

Project Features


 Project Area


Transportation

 Interstate Highway


 US Highway


 State Highway

 Local Road


 Railroad

NRCS Soil Type

 Truckton loamy sand,
0-3% slopes

 Valent sand, 0-3% slopes

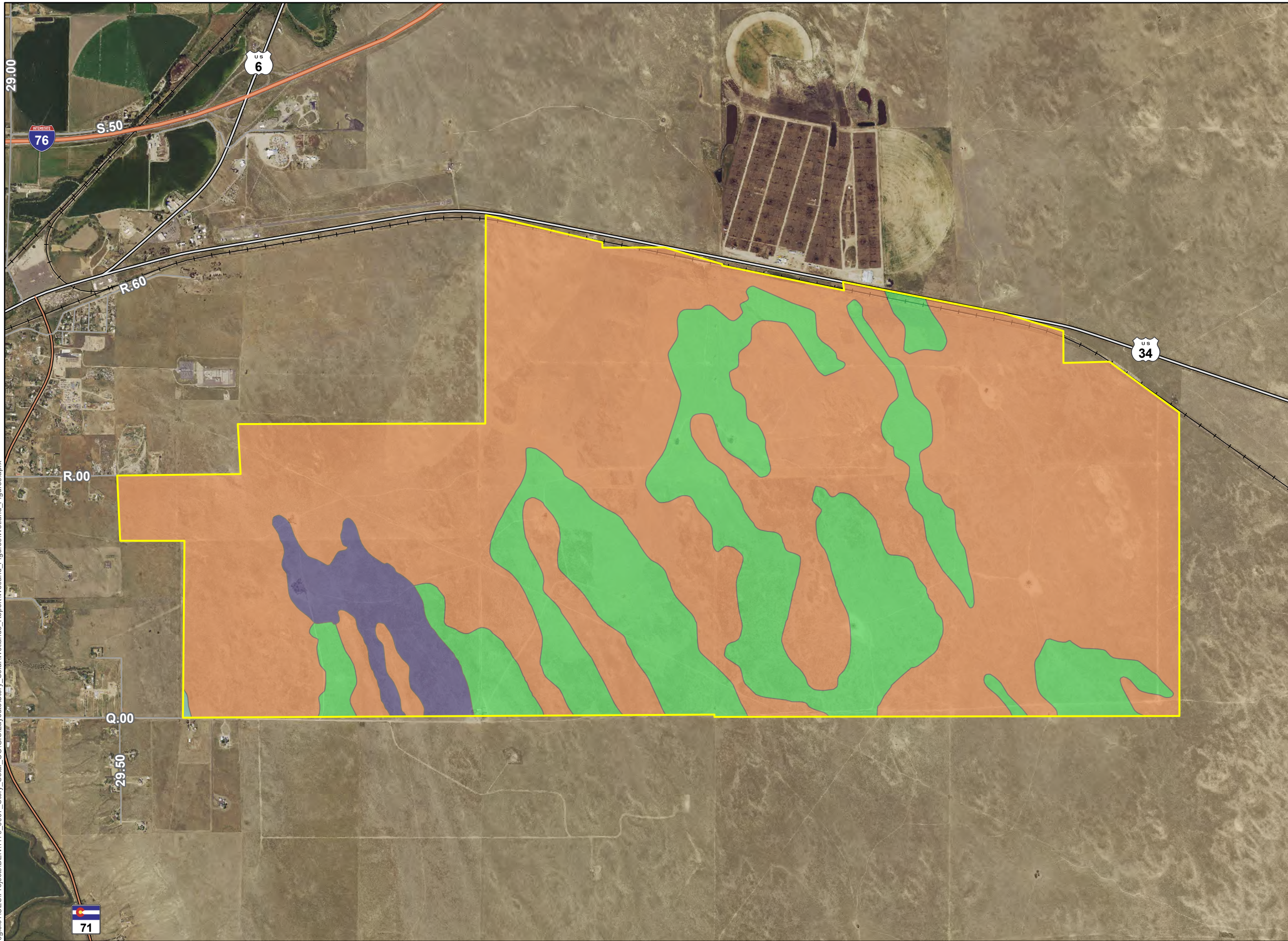
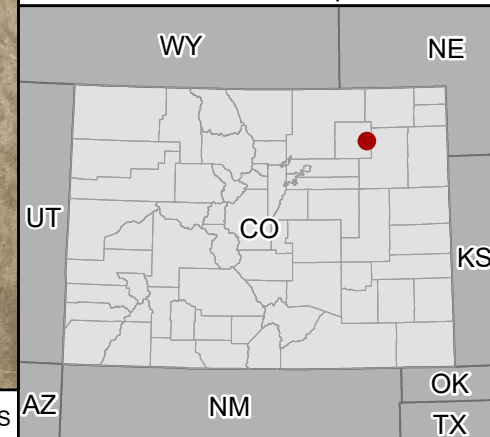
 Valent sand, 3-9% slopes

 Valent-Vona loamy sands,
3-9% slopes



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Reference Map



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Fortress Solar I LLC
Fortress Solar Project

Figure 5
Field Delineated Waterbodies

Morgan County, CO

Project Features

Project Area

Transportation

- Interstate Highway
- US Highway
- State Highway
- Railroad

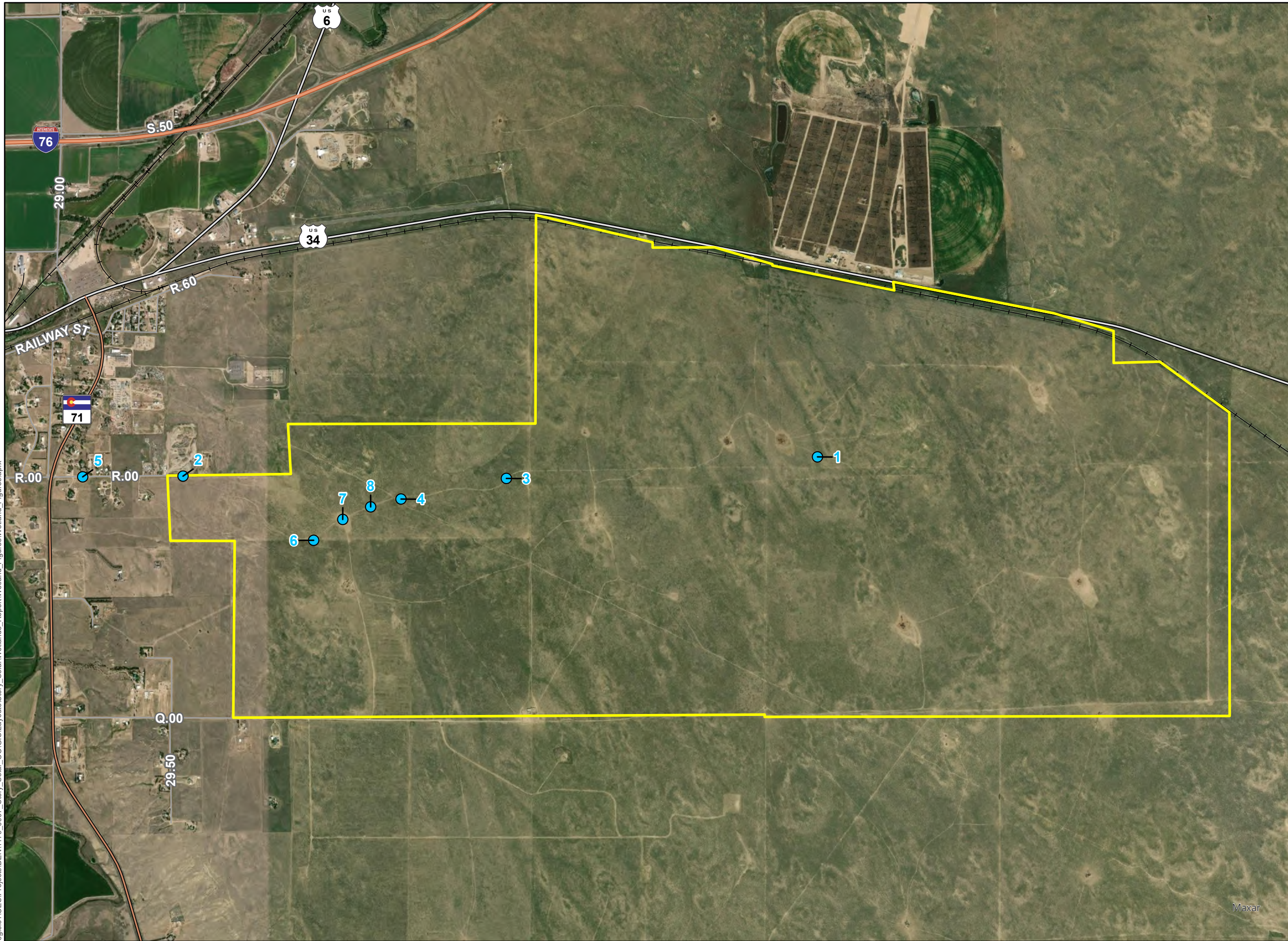
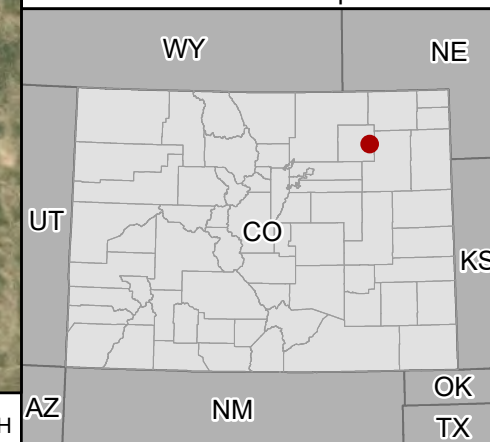
Field Survey Results

Photo Point



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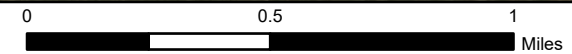
Reference Map



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1:25,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet



Source: ESRI, USDA NAIP, US CENSUS, BTS, TETRA TECH

Appendix A: Representative Photos



Photo 1: Center of the Project Area looking west.



Photo 2: Western boundary of the Project Area looking south.



Photo 3: Southern portion of the Project Area. View is looking south.



Photo 4: Existing transmission line that bisects the Project Area. View is looking southeast.



Photo 5: Residences located west of the western boundary of the Project Area. View is looking east.



Photo 6: Typical shortgrass prairie rangeland associated with the Project Area. View is looking west.



Photo 7: Typical aboveground water storage tank for cattle. View is looking north.



Photo 8: Typical sage dominated rangeland associated within the Project Area. View is looking east.

APPENDIX L: DRAINAGE STUDY

Hydrologic and Hydraulic Report

Fortress Solar
City of Brush
Morgan County, Colorado



October 2023

Hydrologic and Hydraulic Report

October 26, 2023

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Restriction on Disclosure and Use of Data

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APPENDICES

Appendix A: Native Format Study Files

ACRONYMS/ABBREVIATIONS

Acronyms/Abbreviations	Definition
AHJ	Authority Having Jurisdiction
AMC	Antecedent Moisture Condition
BESS	Battery Energy Storage System
BFE	Base Flood Elevation
BMP	Best Management Practice
CDPHE	Colorado Department of Public Health and Environment
CDSS	Colorado Decision Support System
CN	Runoff Curve Number
CSU	Colorado State University
DEM	Digital Elevation Model
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map (FEMA)
GCR	Ground Cover Ratio
GIS	Geographic Information System
HEC-HMS	Hydrologic Engineering Center – Hydrologic Modeling System (USACE)
HEC-RAS	Hydrologic Engineering Center – River Analysis System (USACE)
HUC	Hydrologic Unit Code
HSG	Hydrologic Soil Group
LiDAR	Light Detection and Ranging
LPC	LiDAR Point Cloud
LU	Land Use
MS4	Municipal Separate Storm Sewer System
NAD	North American Datum
NAVD	North American Vertical Datum
NFHL	National Flood Hazard Layer (FEMA)
NLCD	National Land Cover Database
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System

Acronyms/Abbreviations	Definition
NRCS	Natural Resources Conservation Service (previously SCS)
PCSM	Post-Construction Stormwater Management
PE	Professional Engineer
PV	Photovoltaic
SCS	Soil Conservation Service
SFHA	Special Flood Hazard Area (FEMA)
SSURGO	Soil Survey Geographic Database
TMDL	Total Maximum Daily Load
TR-55	Technical Release 55 (NRCS)
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USGS	United States Geological Survey
UNT	Unnamed Tributary
UTM	Universal Transverse Mercator
WQC	Water Quality Control

1.0 INTRODUCTION

1.1 PURPOSE

The purpose of this report is to provide a preliminary analysis of hydrologic and hydraulic conditions for the development of Fortress Solar located in Morgan County, Colorado. The hydraulic modeling results described herein were used to evaluate the 10-, 50-, and 100-year flood inundation limits and flow depths at the site, estimate local scour at the solar panel piles, and provide recommendations for the array design, grading, and stormwater management.

The project area is primarily grasslands with two-track roads providing access to interior portions of the property and an approximately 1.25-mile transmission line easement. Once the solar arrays are installed, the areas around and underneath them will be permanently seeded with low-maintenance grass. Little or no change in the runoff potential for the existing agricultural portions of the site is anticipated upon implementation of a Post-Construction Stormwater Management (PCSM) Program at the site. Refer to Section 4.1 for additional discussion regarding the regulatory environment understood to be present in Colorado.

The recommendations presented in this study are proposed to be incorporated into the final design of the solar facility.

1.2 PROJECT OVERVIEW

The project limits are located in Morgan County, Colorado roughly 2.6 miles southeast of the City of Brush. The project limits are fragmented across eleven (11) parcels totaling approximately 4,259 acres according to publicly available geographic information system (GIS) data obtained from Morgan County. The project area is generally bounded to the south by County Road Q, to the west by Heartland Expressway (SR 71), to the north by US Highway 34, and to the east by a railroad. Exclusion areas consist of a 500-ft setback to inhabited buildings and a 70-ft setback to aboveground utilities, existing roads, highways, railroads, and property lines.

The site is located on land containing numerous gently rolling hills and depressions throughout the project area. Existing land use at the site is composed of rangeland utilized for livestock grazing. An aerial imagery map presenting the project limits is included as Figure 1-2: Ortho Imagery Project Location Map, below. The site is split over two (2) United States Geological Survey (USGS) 7.5' composite quadrangle (quad) maps: the Brush East Quadrangle and the Morgan Ranch Quadrangle.

The typical solar facility installation consists of ground-mounted racks which hold the photovoltaic (PV) panels; the panels are elevated off the ground with the underlying surface covered by vegetation. These racks and panels allow rainfall to reach the ground close to where the rain naturally falls, thereby distributing the rainfall evenly across the project site. Consequently, the racks and panels are not considered impervious from a hydrologic standpoint. Other site improvements include installing power inverters, transformers, interior gravel/aggregate maintenance roads, erosion control features, stormwater management features, public road entrances, a project substation, a battery energy storage system (BESS) facility, and perimeter fencing.

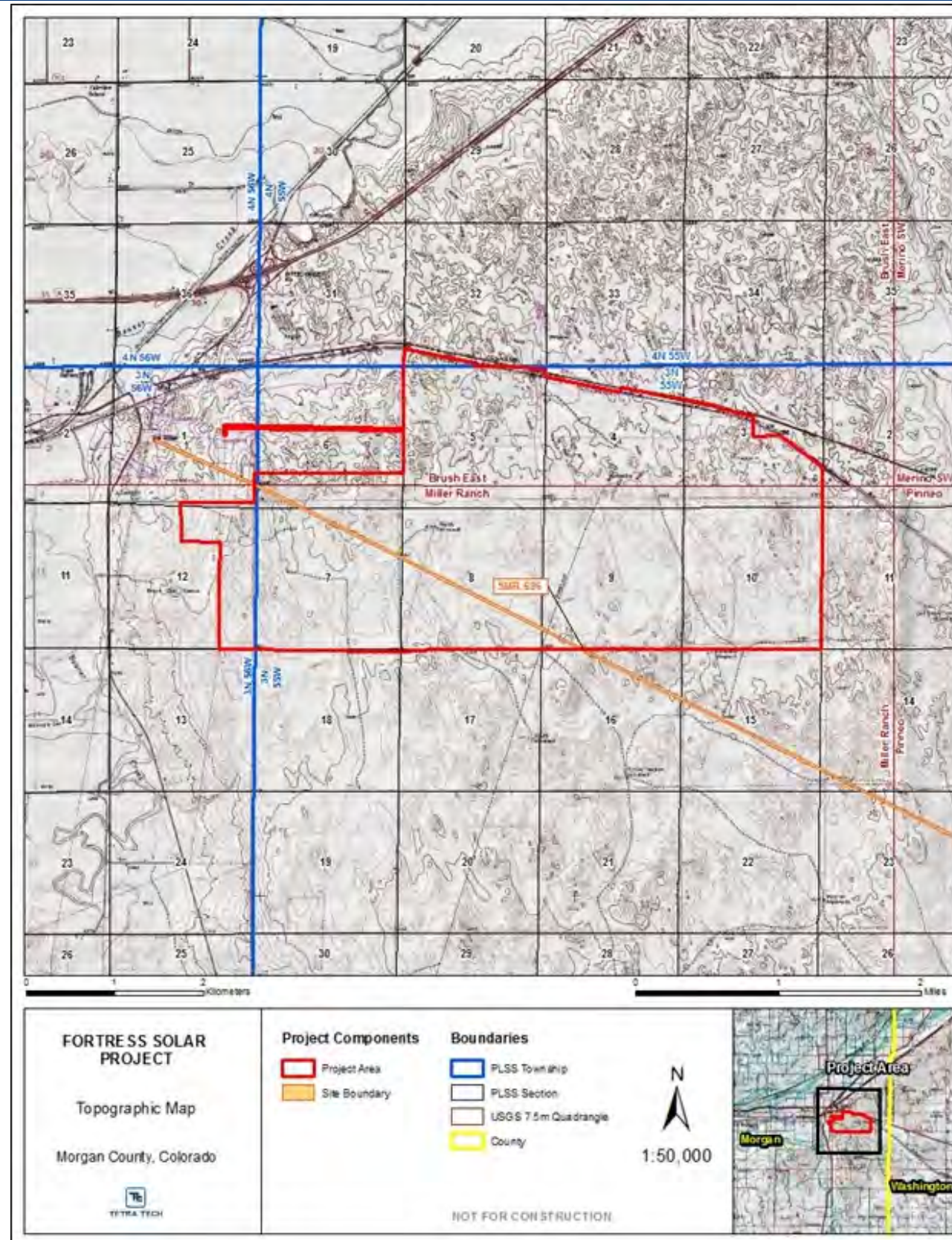
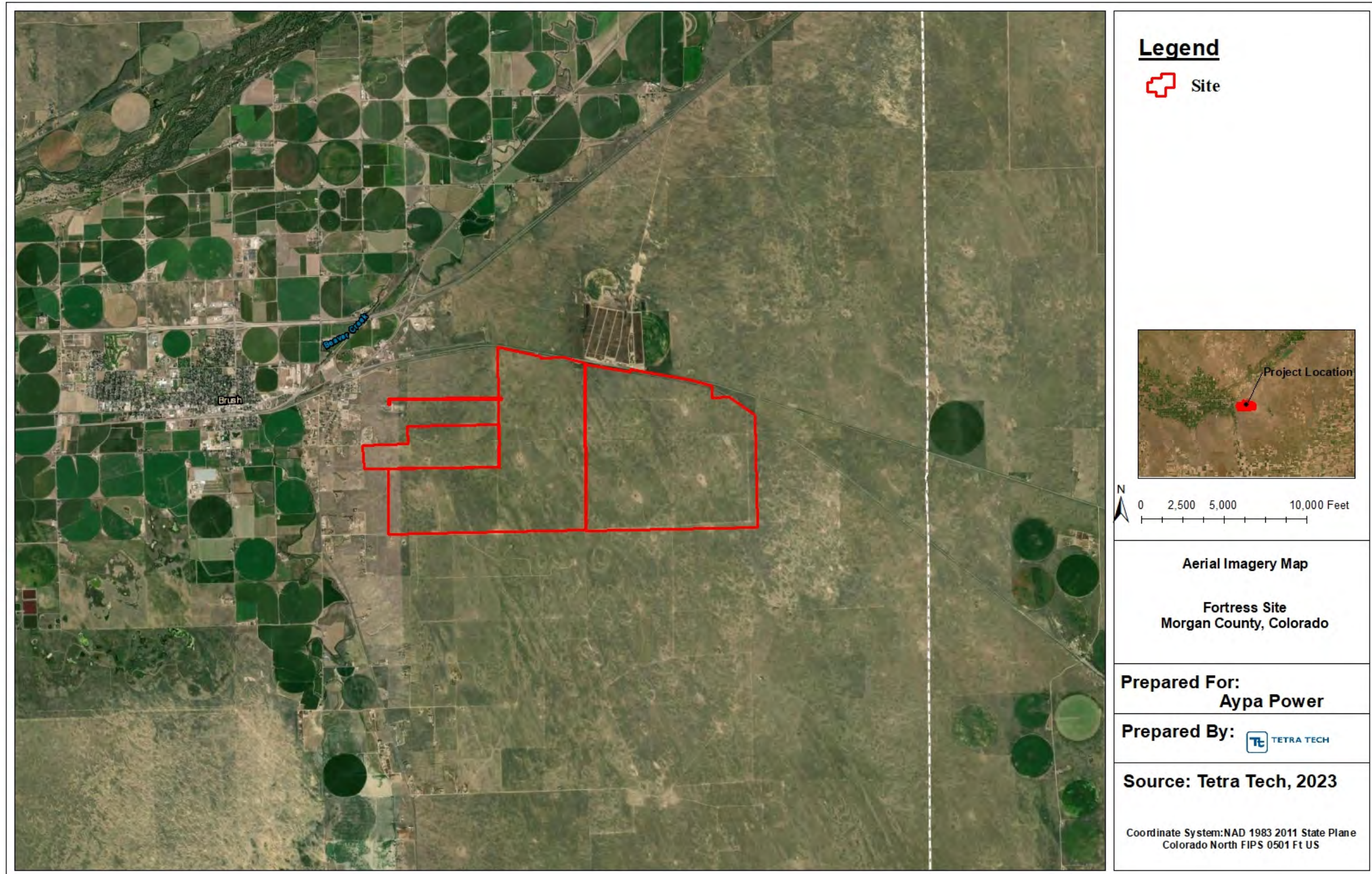


Figure 1-1: USGS Topographic Project Location Map



Document Path: C:\Users\elnazir.hejazi\Desktop\Projects\Story\Fortress_Flow_2D_Model\GIS\Fortress_AERIAL_IMAGERY_Map.mxd

Figure 1-2: Ortho Imagery Project Location Map

2.0 SITE OVERVIEW

2.1 EXISTING CONDITIONS

2.1.1 Land Uses

Morgan County is situated in northern Colorado, northeast of Denver, and is generally characterized by level plains and rolling hills formed by glacial deposits and incised by stormwater. The existing land uses across Morgan County are primarily agricultural, undeveloped forest and wetlands, and developed towns and cities. Most development within Morgan County is single family housing and local businesses. Within the project extents, land uses mainly consist of agricultural rangeland. There are several small portions within the project extents which are shrub/scrub areas according to aerial imagery and the National Land Cover Database (NLCD). Several adjacent parcels are cropland and rangeland with scattered rural homesteads, and an existing cattle feedlot to the adjacent north of the subject property. Existing land uses at the project site are shown in Figure 2-1: National Land Cover Database Map, below.

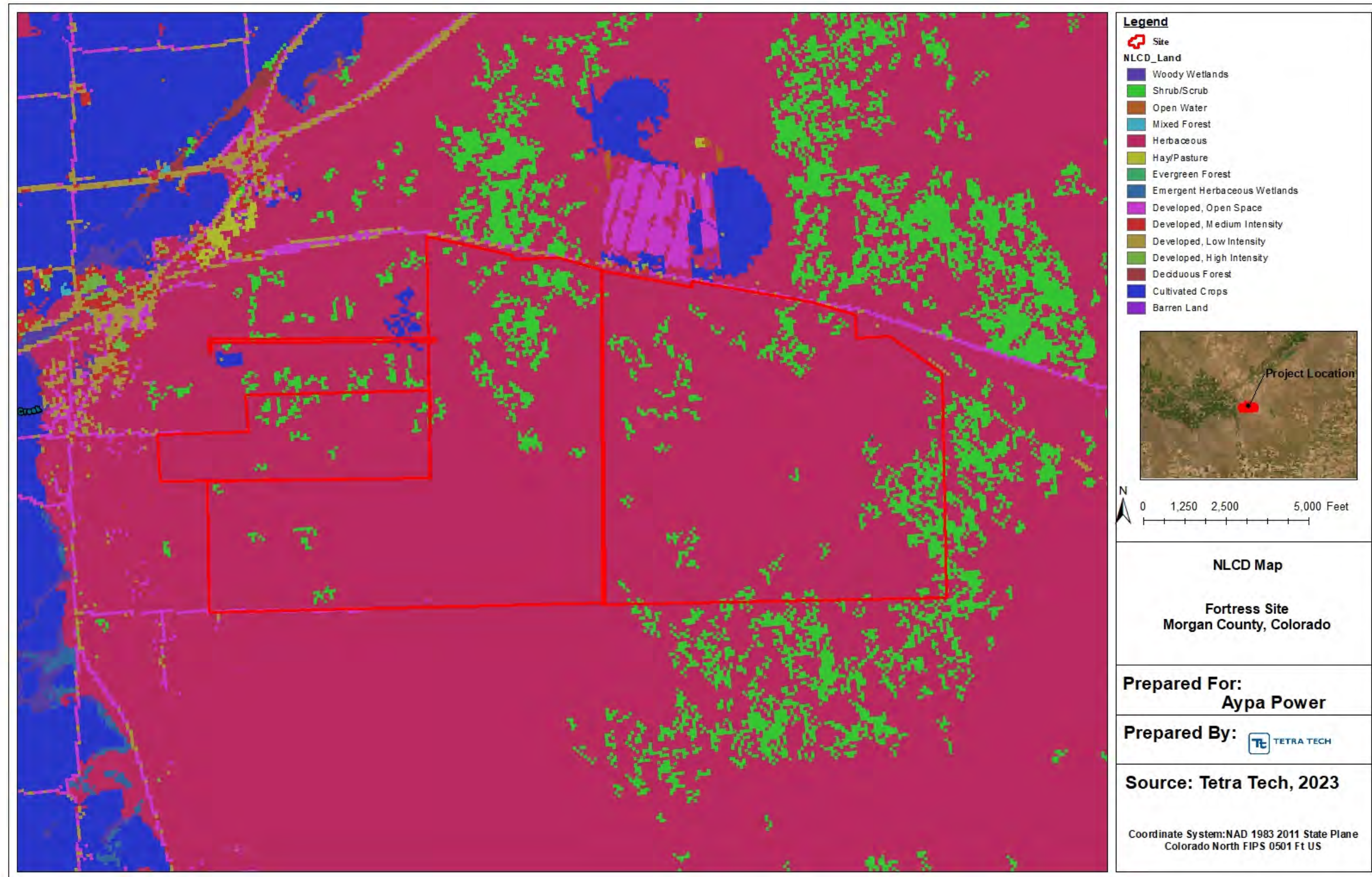


Figure 2-1: National Land Cover Database Map

2.1.2 Climate

The project site’s location in northern Colorado has a climate which is characterized by cold winters and warm-to-hot summers. Morgan County has a mean high temperature varying between 89°F in July to 39°F in January with mean low temperatures between 58°F (July) to 10°F (January). Figure 2-2: Average Monthly High/Low Temperatures in Morgan County, Colorado, below, shows the average climatic data for Morgan County according to the National Oceanic and Atmospheric Administration’s (NOAA) Climate Data Online tool.

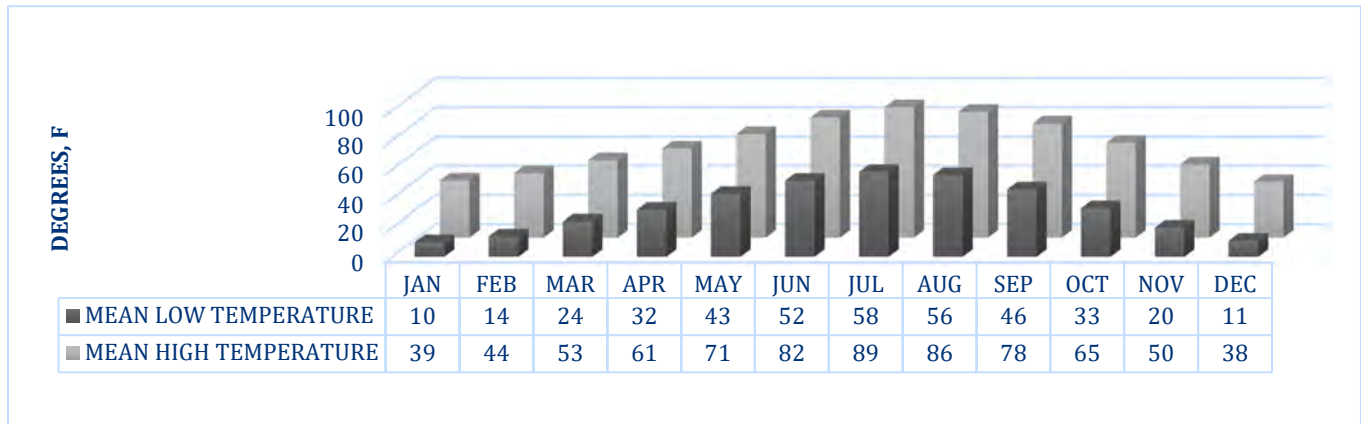


Figure 2-2: Average Monthly High/Low Temperatures in Morgan County, Colorado

Precipitation in Morgan County varies seasonally, with the maximum typically occurring in late winter and early spring, and the minimum typically occurring during the fall. Mean monthly precipitation in Morgan County between 2013 and 2023 varied from 2.2 inches in April to 1.2 inches in September, with an annual average of 18.5 inches. Figure 2-3: Average Monthly Rainfall in Morgan County, , below shows mean monthly precipitation in Morgan County according to NOAA’s Climate Data Online tool.

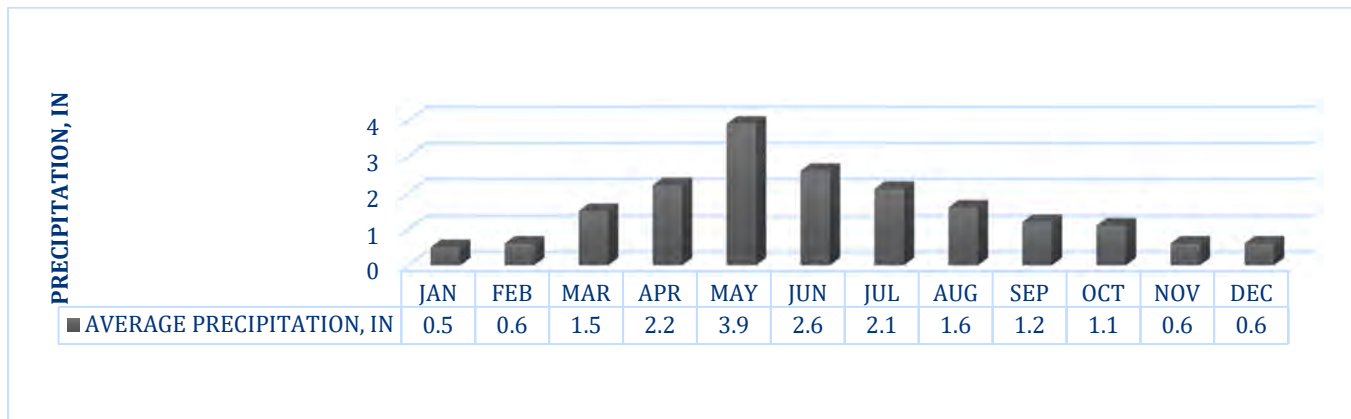


Figure 2-3: Average Monthly Rainfall in Morgan County, Colorado

2.1.3 Site Hydrology and Hydraulics

The project site spans two (2) Hydrologic Unit Code (HUC) 12-digit watersheds: 12-101900130409 Outlet Beaver Creek, 12-101900120603 Outlet Camp Creek. The majority of the site area is within the Outlet Beaver Creek and Outlet Camp Creek watershed, which drains to the north via unnamed tributaries to the South Platte River which is approximately seven (7) miles north of the northern edge of the Project Area.

2.1.4 Soils

To evaluate the runoff potential of soils throughout the United States, the Natural Resources Conservation Service (NRCS) classifies them into four (4) Hydrologic Soil Groups (HSG). According to Urban Hydrology for Small Watersheds (TR-55), Group A soils are characterized by a high infiltration rate and corresponding low runoff potential. These soils include sands and gravels with a high rate of water transmission (greater than 0.30 inches per hour). Group B soils have moderate infiltration rates when wetted (0.15 to 0.30 inches per hour) and include mixtures of loam, silt, and clay.

Group C soils have low infiltration rates when wetted (0.05 to 0.15 inches per hour) and typically include mixtures of silt and clay. Group D soils consist of silt, clay, hardpan, and soils with a high likelihood of swelling. These soils have a very low rate of water transmission (less than 0.05 inches per hour). According to the NRCS, some soils have more than one classification (i.e. C/D). These soils have different infiltration rates depending on whether drained or undrained. A Group C/D soil for instance has a low rate of water transmission (HSG C) when drained, and a very low rate (HSG D) when undrained.

Soils at the Fortress Solar facility are generally excessively drained and consist of sand (HSG Group A). Figure 2-4: NRCS HSG Soils Classification, below, from the NRCS Soil Survey Geographic Database (SSURGO) soils database, shows hydrologic soil groups at the project site. Based on guidance from the NRCS, the Antecedent Moisture Condition (AMC) is considered “2” for this project.



Figure 2-4: NRCS HSG Soils Classification

2.2 PROPOSED CONDITIONS

A preliminary solar facility General Arrangement was available before this report's preparation. Tetra Tech understands this proposed layout, prepared by AYP A, was designed without preliminary flood inundation and preliminary stormwater management as a design parameter. Tetra Tech prepared a preliminary site plan which accounts for stormwater management features and associated grading of the array. Final engineering design of the facility is likely to result in changes to the overall layout during the design and construction process. Tetra Tech recommends performing a hydrologic and hydraulic study of the final proposed conditions of the facility when final design details become available. Such a study, though not a regulatory requirement, would serve to confirm the assumption that the existing hydrologic and hydraulic conditions present on site (discussed in Sections 0 and 4.0) will not be materially altered after construction of the proposed facility.

2.2.1 Site Hydrology and Hydraulics

The proposed project is a PV solar electric generation and BESS facility, with solar panels mounted on racks with the panels elevated above the existing ground surface. The ground surface underneath the panels will be open, with surface runoff sheet flowing underneath the solar arrays. The areas around and underneath the panels will be seeded with low-maintenance grass that will maintain and, in some areas, enhance the hydrologic characteristics of the site. Rainfall landing on the panels will drip off the bottom edge and travel overland as sheet flow and shallow concentrated flow to the site's natural depressions and proposed perimeter stormwater management facilities. Upon completion, gravel roads, equipment pads, and other impervious surfaces will cover less than 5% of the site, with the remainder of the site grassed.

In Colorado, solar panels for this project are not anticipated to be considered impervious in nature. The Colorado Department of Public Health and Environment (CDPHE) has published guidance materials which apply directly to solar development, which should be carefully consulted during the final design of the facility. Additionally, consultation with Morgan County and the City of Brush regarding additional requirements for stormwater management design should be considered prior-to and during the final engineering design production.

3.0 HYDROLOGIC AND HYDRAULIC MODEL DEVELOPMENT

3.1 MODELING METHODOLOGIES

Hydraulic modeling of stormwater runoff generated by excess precipitation is a well-described engineering discipline governed by proven scientific methods and closed-form equations. In Colorado, excess precipitation is rainfall, as snowmelt-generated runoff is typically negligible for hydraulic analysis (snowmelt flows are less than rainfall flows within the state). Numerous hydraulic modeling techniques are considered acceptable to describe the movement of rainfall-runoff across the project site; however, each hydraulic modeling methodology is wholly dependent on its respective base data: the hydrologic schema used to develop inputs into the hydraulic model.

The envelope of industry-standard and acceptable hydrologic modeling techniques is much broader than its hydraulic modeling counterpart. Numerous methods could be acceptable to describe the rainfall-runoff generated at the project site, and each method potentially yields sharply different results comparatively. To this end, and to conservatively describe the range of potential flood hazards present at the project site, two (2) distinct hydrologic and hydraulic models were developed by Tetra Tech as described below in the sections below.

3.1.1 SCS Unit Hydrograph and HEC-RAS (2D)

Because of the wide variations of flooding depths, extents, velocities, and scours produced using the modeling methodologies described in Section 3.4, a second model was developed by Tetra Tech to define an expected range of potential flood conditions present at the project site: the use of SCS Unit Hydrograph hydrology to determine excess precipitation, and a two-dimensional (2D) HEC-RAS model for analysis of its associated hydraulic activity with respect to the project site. The remainder of discussion in this Section details the base data employed in model development (Section 3.2), HEC-HMS model development (Section 3.3), and HEC-RAS model development (Section 3.44).

3.2 BASE DATA

Input data for the hydrologic and hydraulic models were obtained from a variety of sources. This information is summarized in Table 3-1: Data Sources, below.

Data	Purpose	Source	Format
Elevation	Development of HEC-HMS and HEC-RAS models	USGS National Map 3DEP Downloadable Data Collection, using the LPC Dataset	Raster
Land use	Estimating precipitation losses (infiltration)	National Land Cover Database	Raster
Soil Types	Estimating precipitation losses (infiltration)	NRCS SSURGO Database	Raster
Precipitation	100-year precipitation depth	NOAA Atlas 14, Vol. 2, Version 3 for Morgan County, Colorado	pdf
HUC-12 Drainage Boundaries	Hor. limits of HEC-HMS and HEC-RAS models	National Hydrography Database	shapefile
Project Boundary	Hor. limits of HEC-HMS and HEC-RAS models	ArcGIS polygon exported to shapefile	shapefile
FEMA Flood Zones	Hor. limits of 100-year flood	National Flood Hazard Layer (NFHL) Data-Morgan County	shapefile

Table 3-1: Data Sources

3.2.1 Digital Terrain Model

Elevation data (Light Detection and Ranging or LiDAR) for the study area was obtained from the USGS National Map 3DEP Downloadable Data Collection (United States Geological Survey, 2020), using Lidar Point Cloud (LPC) data sets, and supplemented with Aypa-provided site-specific topographic data. A Digital Elevation Model (DEM) for the study area was developed from this data. All GIS data are in the North American Datum (NAD) 1983 Universal Transverse Mercator (UTM) Zone 13N projection. Using the US Army Corps of Engineers' (USACE) RAS Mapper software, the DEM was then imported into HEC-RAS. Unless noted otherwise, all elevation data in this report is based on the NAVD88 datum.

3.2.2 FEMA Study

The Morgan County Planning and Zoning Department is the local Authority Having Jurisdiction (AHJ) regulating development within Federal Emergency Management Agency (FEMA) Special Flood Hazard Areas (SFHA). These requirements detail the need for any development proposing construction within a floodplain to perform detailed hydrologic and hydraulic modeling in compliance with FEMA standards. The site study area as currently understood by Tetra Tech does not encroach upon FEMA-mapped hazards, and as such, local floodplain requirements are not anticipated to impact the proposed project. Should the final design of the proposed facility encroach upon FEMA-mapped floodplains or floodways, detailed hydrologic and hydraulic modeling of these impacts should be undertaken in accordance with FEMA and County requirements.

The project limits fall entirely within an unshaded FEMA SFHA Zone X, indicating areas of minimal flooding hazards, per FEMA Flood Insurance Rate Map (FIRM) panel 08087C0675D, effective April 4, 2018 (FEMA 2022). No portion of the Project Area is located within an identified Zone A flood zone, susceptible to a 100-year flood event. The closest FEMA SFHA Zones A to the project are located due west, along the Highway 76 and Route 71. Zone A represents an area subject to inundation by the 1 percent annual chance flood event (also known as the 100-year flood event) but where detailed hydraulic analyses have (Zone AE) or have not (Zone A) been performed. SFHA Zone AEs have established Base Flood Elevation (BFE), while SFHA Zone As do not.

Tetra Tech notes the effective date of the FEMA study, approximately 2018, to be moderately outdated as compared to neighboring and adjacent counties. However, any future update to the existing study is unlikely to increase the existing SFHA Zone A currently present to the extent that impact would occur to the project site. Delineation of new flooding hazards, not currently present on the effective FEMA FIRM, is possible but considered unlikely based on the results of the detailed hydrologic and hydraulic modeling results presented in Section 4.0. Impacts to any FEMA SFHAs should be carefully considered and appropriately permitted during final design of the facility if such hazards are delineated in the future by FEMA.

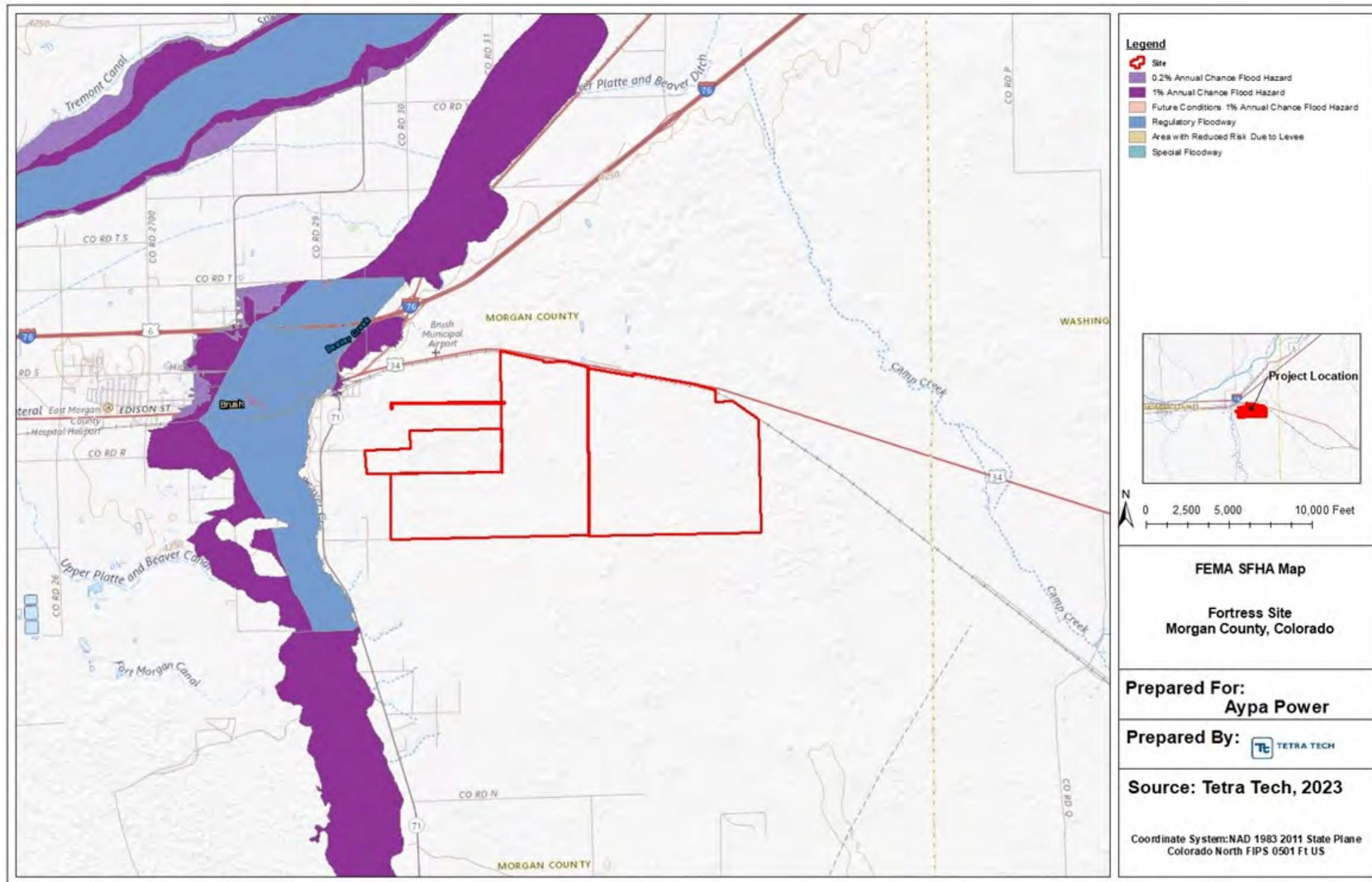


Figure 3-1: FEMA Special Flood Hazard Areas

3.3 HEC-HMS MODELING

To estimate peak discharges and runoff volumes for the 10-, 50-, and 100-year rainfall events, the USACE HEC-HMS Hydrologic Modeling System, Version 4.50 was used. Because the project site is located entirely within one (1) watershed (as identified in Section 2.1.3), one (1) HEC-HMS model was created. Using Geo-HEC-HMS, subbasin and river reach was created for the model. Hydrologic characteristics including drainage area, drainage area slope, and longest flow path were then determined for each subbasin. The schematic representation of the one (1) HEC-HMS Model (area) is shown below as Figure 3-1: HEC-HMS Schematic and in Figure 3-2: Site , below via DEM.



Figure 3-1: HEC-HMS Schematic

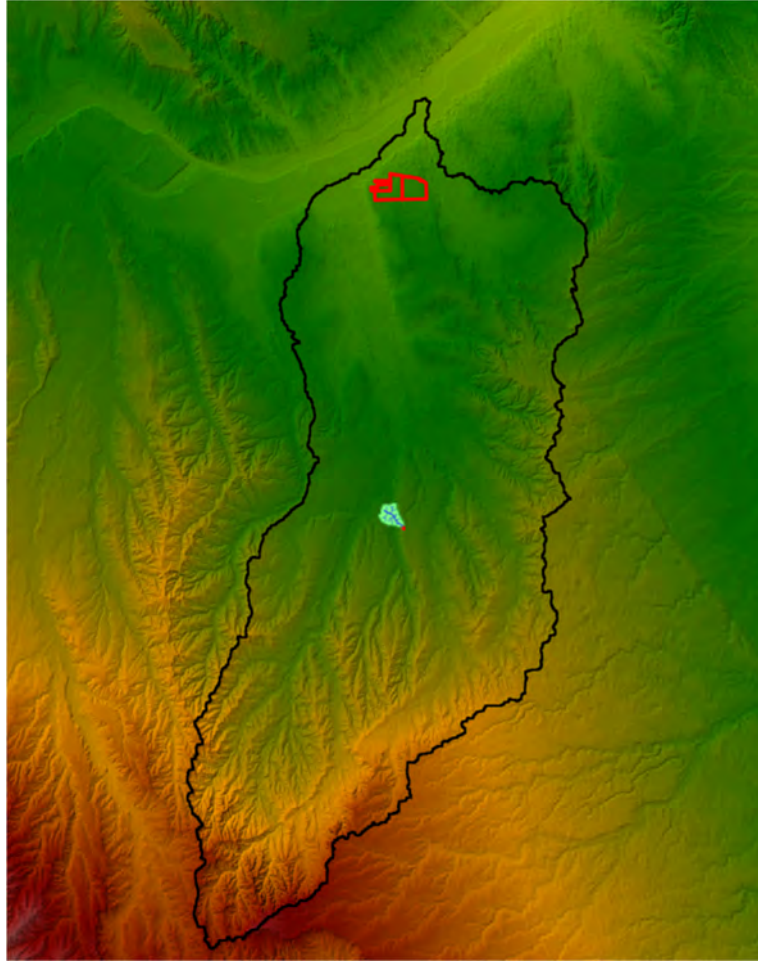


Figure 3-2: Site Topography

Each HEC-HMS run includes one (1) basin model with hydrologic characteristics of the subbasins and reaches, one (1) meteorologic model with the rainfall hyetographs, and one (1) set of control specifications to specify the time window and computational time step. Table 3.2, presented below, summarizes the model runs and components used to simulate the rainfall-runoff process for each watershed.

Table 3-2: HEC-HMS Modeling Description

Drainage Area	Flow path, feet	Average drainage area slope, percent	Drainage area, acres	Area, sq. mile	CN	Impervious area, acres	Impervious percent	Lag time, hours	Lag time, minutes	Excess precipitation (10-Year), inches	Excess precipitation (100-Year), inches
1B	509,062	0.00321	811,811	1,268	64.4	178,598	0.22%	55	3,299.41	0.42	1.41

3.3.1 Precipitation

For the HEC-HMS models, a 24-hour rainfall event with a 5-minute time interval and NRCS Type 2 temporal distribution was used for the 10-, 50-, and 100-year event. The NRCS Type 2 distribution was selected based on Figure B-2 in TR-55 (United States Department of Agriculture, NRCS, 1996). This distribution is widely used in the Eastern, Central, and other areas of the United States unaffected by tropical storms or coastal weather systems. Type 2 storms are characterized by low intensity rainfall at the beginning of the event, with only 20% of the precipitation occurring during the first 10½ hours. This is followed by 3 hours of heavy rainfall (approximately 60% of the total), with the remaining precipitation occurring over the next 10½ hours. For all simulations the precipitation is assumed to fall uniformly throughout the watersheds at any given time step.

According to NOAA Rainfall Atlas 14, the 10-, 50-, and 100-year, 24-hour rainfall depth within the watershed’s tributary to conveyances adjacent to the project site are 2.85 inches, 4.08 inches and 4.68 inches respectively. The below figures show hyetographs for total precipitation and precipitation excess (i.e., runoff) for the 10-, 50-, and 100-year rainfall events.

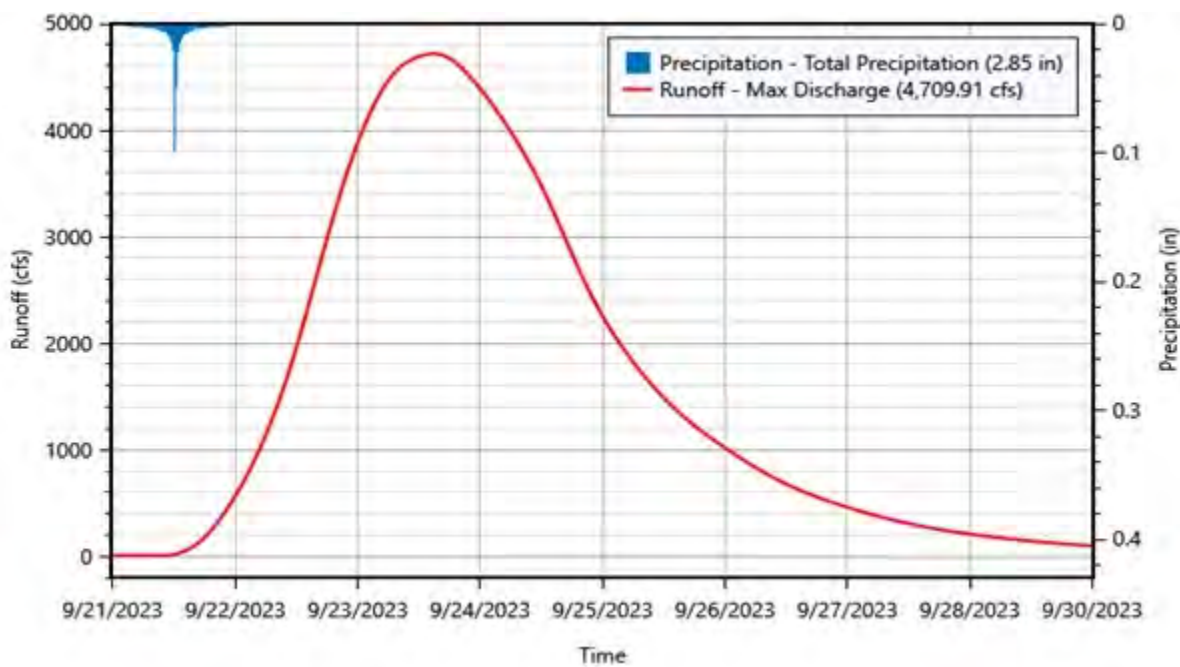


Figure 3-4: 10-Year Rainfall Hyetograph

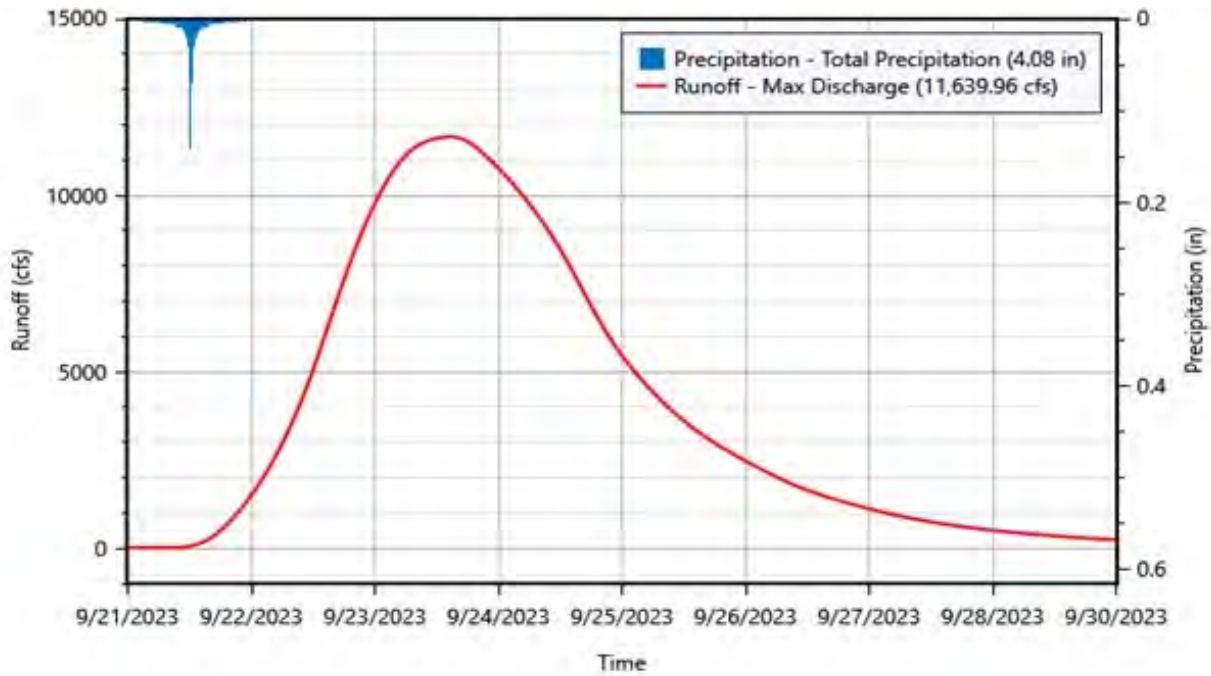


Figure 3-3 : 50-Year Rainfall Hyetograph

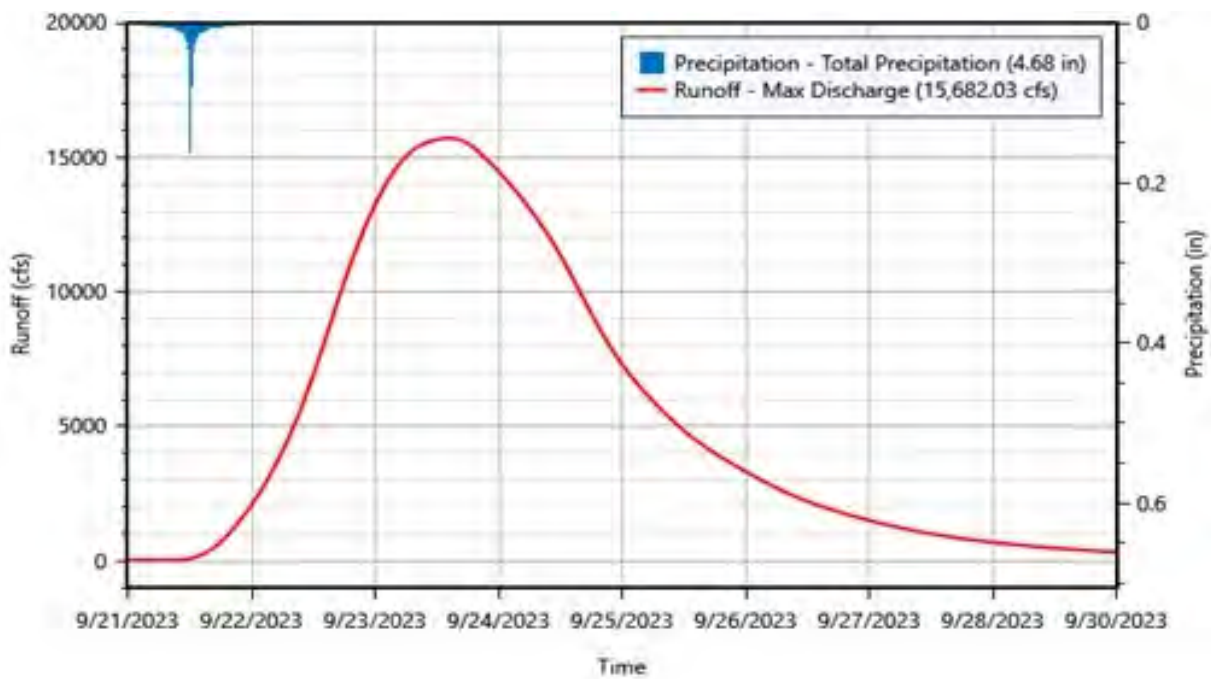


Figure 3-4 : 100-Year Rainfall Hyetograph

3.3.2 Loss Method

To estimate surface runoff at the site, equations developed by the United States Department of Agriculture, NRCS (formerly Soil Conservation Service (SCS)) were used. The NRCS Curve Number methodology estimates infiltration losses (abstractions) based on land use and soil characteristics. The NRCS runoff equation is:

$$Q = \frac{(P - I_a)^2}{(P - I_a) + S}$$

where:

- Q = runoff (in)
- P = precipitation (in)
- I_a = initial abstraction (in)
- S = potential maximum retention after runoff begins (in)

The initial abstraction (I_a) is defined as follows (United States Department of Agriculture, NRCS, 1996):

Initial abstraction (I_a) is all losses before runoff begins. It includes water retained in surface depressions, water intercepted by vegetation, evaporation, and infiltration. I_a is highly variable but generally is correlated with soil and cover parameters.

Based on their studies of numerous small watersheds, the NRCS typically approximates the initial abstraction as 20% of the potential maximum retention, using the following equation:

$$I_a = 0.2 \cdot S$$

which in turn yields the following equation:

$$Q = \frac{(P - 0.2S)^2}{(P + 0.8S)}$$

To correlate the potential maximum retention S to the land use and soil conditions at the site, TR-55 uses a runoff curve number (CN). CN has a range of 0 to 50 and is related to the potential maximum retention S by the following equation:

$$S = \frac{1,000}{CN} - 10$$

Using the procedures in TR-55 and the tools in GIS software, a composite runoff curve number was estimated for each subbasin based on land use and hydrologic soil group. Library curve number data used to create the composite runoff numbers are summarized in Table 3-3: Summary of Land Uses and Curve Numbers for HEC-HMS Models, below (applicable to each subbasin):

DESCRIPTION	LU Value	Curve Number for Hydrologic Soil Group			
		A	B	C	D
Open Water	11	50	50	50	50
Developed, Open Space	21	39	61	74	80
Developed, Low Intensity	22	46	65	77	82
Developed, Medium Intensity	23	54	70	80	85
Developed, High Intensity	24	61	75	83	87
Bare Earth	31	74	83	88	90
Deciduous Forest	41	36	60	73	79
Evergreen Forest	42	30	55	70	77
Mixed Forest	43	33	57	71	78
Shrub/ Scrub	52	35	56	70	77
Herbaceous	71	30	71	81	89
Hay/ Pasture	81	39	61	74	80
Cultivated Crops	82	51	67	76	80
Woody Wetlands	90	57	73	82	96
Emergent Herbaceous Wetlands	95	65	80	87	93

Table 3-3: Summary of Land Uses and Curve Numbers for HEC-HMS Models

3.3.3 Subbasin Lag Times

The lag time is the elapsed time from the center of mass of the rainfall hyetograph to the peak discharge. For the HEC-HMS models, lag times for the individual subbasins were estimated using the SCS Curve Number lag method. This method was developed by the SCS (now the NRCS) in the 1960s to estimate times of concentration and lag times in small-to-medium-sized watersheds. It is particularly well suited to GIS software because 2 of the 3 input parameters are calculated by the program.

For this method, lag times are estimated using the following equation:

$$T_c = \frac{50L_H \left[\frac{1,000}{CN} - 9 \right]^{0.7}}{1,900S^{0.5}}$$

where:

- T_c = subbasin time of concentration (travel time from hydraulically most remote point) in minutes
- L_H = hydraulic length (length of the longest flow path) in feet
- S = average ground slope in subbasin (%)

The lag is then approximated using the following equation:

$$T_{Lag} = T_c \cdot 0.6$$

To generate hydrographs for the abovementioned subbasins, the NRCS Dimensionless Unit Hydrograph methodology was used. This method expresses hydrograph ordinates as the ratio of discharge to peak discharge, with the corresponding time values expressed as the ratio of time to the time to peak discharge.

3.3.4 Reach Routings

Reach routings were performed using the Muskingum Method. According to Chow et al (Chow, Maidment, & Mays, 1988), this method estimates the storage in a river reach as the sum of the volumes of a prism and a wedge. The prism is on the bottom with a level surface, while the wedge is on the top, with a water surface that varies depending on the inflow and outflow. If the inflow exceeds the outflow, the water surface slopes in the downstream direction; if outflow exceeds inflow, the tall end of the wedge is at the downstream end. The storage in the river reach is estimated using the following equation (Chow, Maidment, & Mays, 1988):

$$S = K[XI + (1 - X)Q]$$

where:

- S = storage (cfs)
- K = travel time through the reach (hrs)
- X = weighting factor between 0 and 0.5
- I = inflow (cfs)
- Q = outflow (cfs)

For the HEC-HMS models, K values for the reaches vary from approximately 0.02 hours to 1.12 hours depending on the length. For all reaches an X value of 0.2 (typical for channels) was used.

3.3.5 Existing Hydraulic Structures

Based upon a thorough desktop review of available information, no hydraulic structures within the study area extents were determined to meaningfully impact the preparation and analyses contained herein .

3.4 HEC-RAS MODELING

To estimate the 10-, 50-, and 100-year water surface elevations at the site, the USACE HEC-RAS River Analysis System, Version 6.4.1 was used. HEC-RAS is the successor to the HEC-2 program developed by the Corps of Engineers in the 1960's to calculate water surface profiles. Originally developed in the 1990's and updated over the years, HEC-RAS can model steady or unsteady flow under subcritical, supercritical, or mixed-flow regimes.

Until recently, HEC-RAS was limited to one-dimensional flow in rivers, ditches, canals, and other waterways, and required the use of cross-sections to create a model. Recent HEC-RAS versions allow the creation of two-dimensional hydraulic models. These models utilize a user-defined computational mesh superimposed on a DEM to calculate water surface elevations, flow velocities, and arrival times for the maximum values.

Table 3-4, below, summarized the plan components used in the HEC-RAS model inputs.

Description	Geometry	Unsteady Flow	Plan
100-Year	c-mountain.g01	c-mountain.u01	c-mountain.p01

Table 3-4: Summary of HEC-RAS Inputs

Tetra Tech notes the modeling included in Appendix B includes other geometries, unsteady flow configuration files, and execution plans. These plans represent other return period events and Tetra Tech’s work to ensure a stable modeling environment; the results presented below are based on the operating parameters identified in Table 3-4.

3.4.1 Model Geometry

The HEC-RAS model used for the Fortress Solar site incorporates one (1) HEC-HMS basin model, one (1) 2D flow area, and one (1) downstream boundary condition for the outflow. For the HEC-RAS 2D area, a 200- by 200-ft computational mesh was selected based on the resolution of the DEM, the land uses (primarily agricultural), and the steepness of the terrain. To ensure consistency between the alignment of the individual cells comprising the mesh and the terrain being modeled, breaklines were added at all major roads, all streams, and other locations as appropriate.

Using GIS data from the NLCD, and Manning’s n values developed by the NRCS for various land uses, the HEC-RAS “Manning’s n by Land Cover” feature was used to define an “n” value for each land use. These values are summarized in Table 3-5: Summary of Land Uses and Manning’s “n” Values for HEC-RAS Model, below.

Description	LU Value	"n"
Open Water	11	0.040
Developed, Open Space	21	0.040
Developed, Low Intensity	22	0.50
Developed, Medium Intensity	23	0.125
Developed, High Intensity	24	0.150
Bare Earth	31	0.025
Deciduous Forest	41	0.160
Evergreen Forest	42	0.160
Mixed Forest	43	0.160
Shrub/ Scrub	52	0.50
Herbaceous	71	0.035
Hay/ Pasture	81	0.030
Cultivated Crops	82	0.035
Woody Wetlands	90	0.120
Emergent Herbaceous Wetlands	95	0.070

Table 3-5: Summary of Land Uses and Manning's "n" Values for HEC-RAS Model

3.4.2 Boundary Conditions

HEC-RAS 6.4.1 provides numerous options for the upstream boundary condition at a 2-dimensional flow area. Among these is the "Precipitation" option which allows the user to input a precipitation depth which is applied evenly over the 2D area. Because the 2D computations do not account for losses due to interception, infiltration, or other processes, all such losses must be determined outside the HEC-RAS program. To that end, field infiltration tests are highly recommended to determine more realistic inundation depths of the site's topographic depressions. Accordingly, for the 24-hour, 10-, 50-, and 100-year rainfall events, the precipitation excess in inches computed by HEC-HMS was input directly into the HEC-RAS model.

4.0 SUMMARY OF FINDINGS

4.1 STORMWATER MANAGEMENT

The Morgan County Planning and Zoning Department determines stormwater management requirements specifically related to utility-scale solar development. During construction, coverage under the Construction Stormwater Discharge Permit (COR400000) issued by the Colorado Department of Public Health and Environment (CDPHE) will be required to permit ground disturbance. The post-development site will be designed following Sections 3-705 and 4-825 of the Morgan County Zoning Regulations. Detention facilities were initially designed to detain onsite flow and to account for volumetric differences between pre- and post-development calculations. Basin footprints were sized to release the retained water at a rate of a 5-year storm falling on the pre-developed site. The substation area and BESS facility includes basin footprints as well due to the anticipated impervious areas. Once more detailed engineering design is executed, the final volumes and basin footprints will be incorporated in the final design.

Tetra Tech recommends considering perpetuating any such sediment basins constructed for erosion control during construction as quantity attenuation measures when determined to be required during final design of the facility. Such quantity attenuation could preclude risk exposure to the project from adjacent property owners. The analysis and results contained in this report should be monitored and, if required, revised to reflect current regulatory requirements applicable during the facility's final design.

4.2 HEC-HMS ANALYSIS

For the 10-, 50-, and 100-year, 24-hour rainfall events, HEC-HMS indicates peak discharges and volumes as summarized below in Table 4-1: Summary of Peak Discharges and Lag Times. Due to variations in soils throughout the site, excess precipitation varied somewhat throughout the project limits. The project was developed for one (1) basin, excess precipitation was considered separately for each subbasin in use of developing estimates for flooding depths. Please refer to Section 4.3 for additional detail.

Rainfall Event	Discharge, cfs	Volume, ac-ft
10-Year, 24-Hour	4,710	192,805
50-Year, 24-Hour	11,640	276,015
100-Year, 24-Hour	15,682	316,606

Table 4-1: Summary of Peak Discharges and Lag Times

4.3 HEC-RAS ANALYSIS

After numerous simulations it was found that a time window of 24 hours was sufficient to ensure that the peak stage had occurred throughout the 2D modeling area. In general, a longer computational time step resulted in shorter run times. However, the results tended to be erratic, with some computation cells indicating a 1-to 2-ft depth at one time step, followed by zero depth at the next, and a 1-to-2-ft depth at the next. Although a shorter time step increased model run times, the resulting depth hydrographs for the individual cells rose, leveled off, and subsided in a smooth curve.

Eventually a 30-second time step with a 5-minute interval for the mapping and hydrograph output was found to yield satisfactory results, with a Courant Number ($V\Delta T/\Delta X$) of 1.0 for a velocity V of 4.0 ft/sec, $\Delta T = 10$ sec, and $\Delta X = 200$ ft for a 200- by 200-ft cell size. Insofar as the Hydrologic Engineering Center recommends a Courant Number of 5.0 or less when using the Diffusion Wave Equation, and a Courant Number of 3.0 or less when using the Full Momentum Equation (used for this investigation), the 10-second time step is acceptable for all velocities equal to or less than 12.0 ft/sec.

Results of the 2D HEC-RAS analysis are presented in Section 4.4 where the 100-year event is graphically depicted for maximum estimated expected inundation and velocity.

4.4 SHEAR STRESS AND SCOUR ANALYSIS

Scour potential varies with the depth of flow, the steepness of the surface, and the erodibility of the underlying soil. As the depth increases, the shear stress due to the flowing water increases, with a corresponding increase in scour potential. The equation for shear stress is:

$$\tau = \gamma ds$$

where:

- τ = shear stress (psf)
- γ = unit weight of water (62.4 lb/ft³)
- d = depth of flow (ft)
- s = slope of the Energy Grade Line (approximately equal to ground slope)

Permissible shear stresses for bare soil and various channel linings are summarized in Table 4-2: Permissible Shear Stresses for Bare Soil and Stone Linings, below.

Lining Category	Lining Type	Permissible Shear Stress (psf)
Bare Soil, Cohesive (PI = 10)	Clayey sands	0.037-0.095
	Inorganic silts	0.027-0.11
	Silty sands	0.024-0.096
Bare Soil, Cohesive (PI ≥ 20)	Clayey sands	0.094
	Inorganic silts	0.083
	Silty sands	0.096
	Inorganic clays	0.14
Bare Soil, Non-cohesive (PI < 10)	Finer than coarse sand D 75 < 0.05	0.02
	Fine gravel D75 = 0.3 in	0.12
	Gravel D75 = 0.6 in	0.24
Gravel Mulch	Coarse gravel D50 = 1 in	0.4
	Very coarse gravel D 50 = 2 in	0.8
Rock Riprap	D50 = 0.5 ft	2.4
	D50 = 1.0 ft	4.8

Table 4-2: Permissible Shear Stresses for Bare Soil and Stone Linings

These values are based on the following:

- Values for cohesive soil assume soil void ratio of 0.5
- Reference: Design of Roadside Channels with Flexible Linings HEC-15, FHWA, Sept. 2005

Permissible shear stresses for grass linings vary widely, depending on the type of grass (retardance class), density, and height. Maximum shear stresses at the site vary across the project site and depend on the return period event analyzed.

Overall scour potential at the project site should be evaluated based on the final configuration of the PV facility in coordination with the estimated event shear stress and associated permissible shear stress during final engineering design. Because the array and pier configuration were not available at the time of this report, preliminary scour analyses for the entirety of the project area were performed using the following assumptions paired with industry guidance contained in USACE HEC-18, *Evaluating Scour at Bridge Piers*, Fifth Edition. Tetra Tech notes this analysis is notional and directional and provides only general estimates of potential scour depths if, and only if, the below assumptions are affected during final project engineering design.

The HEC-18 pier scour equation, based on the Colorado State University (CSU) scour empirical methodology is:

$$\frac{y_s}{a} = 2.0 K_1 K_2 K_3 \left(\frac{y_1}{a} \right)^{0.65} Fr_1^{0.43}$$

where:

- y_s = Scour depth, ft
- y_1 = Flow depth directly upstream of the pier, ft
- K_1 = Correction factor for pier nose shape
- K_2 = Correction factor for angle of attack of flow
- K_3 = Correction factor for bed condition
- a = Pier width, ft
- Fr_1 = Froude Number directly upstream of the pier

The flow depth and Froude Number for each of the 10-, 50-, and 100-year events are calculated using HEC-RAS on a grid-cell basis. The following assumptions are made for these analyses:

- $a = 8'$ (assumes a W8x10 pier); exposed pier height (L) = 6'. $L/a = 9$.
- Angle of attack = 90°
- $K_1 = 1.1$ (square nose pier shape)
- $K_2 = 3.9$ (angle of attack correction per Table 7.2 of HEC-18)
- $K_3 = 1.1$ (clear-water scour conditions)

With these assumptions, the HEC-18 pier scour equation can be directly solved on a raster basis utilizing the study grid-cell size. Results of this analysis are included in native file format in Appendix A.

4.5 10-, 50-, AND 100-YEAR FLOOD EVENT GRAPHICAL RESULTS

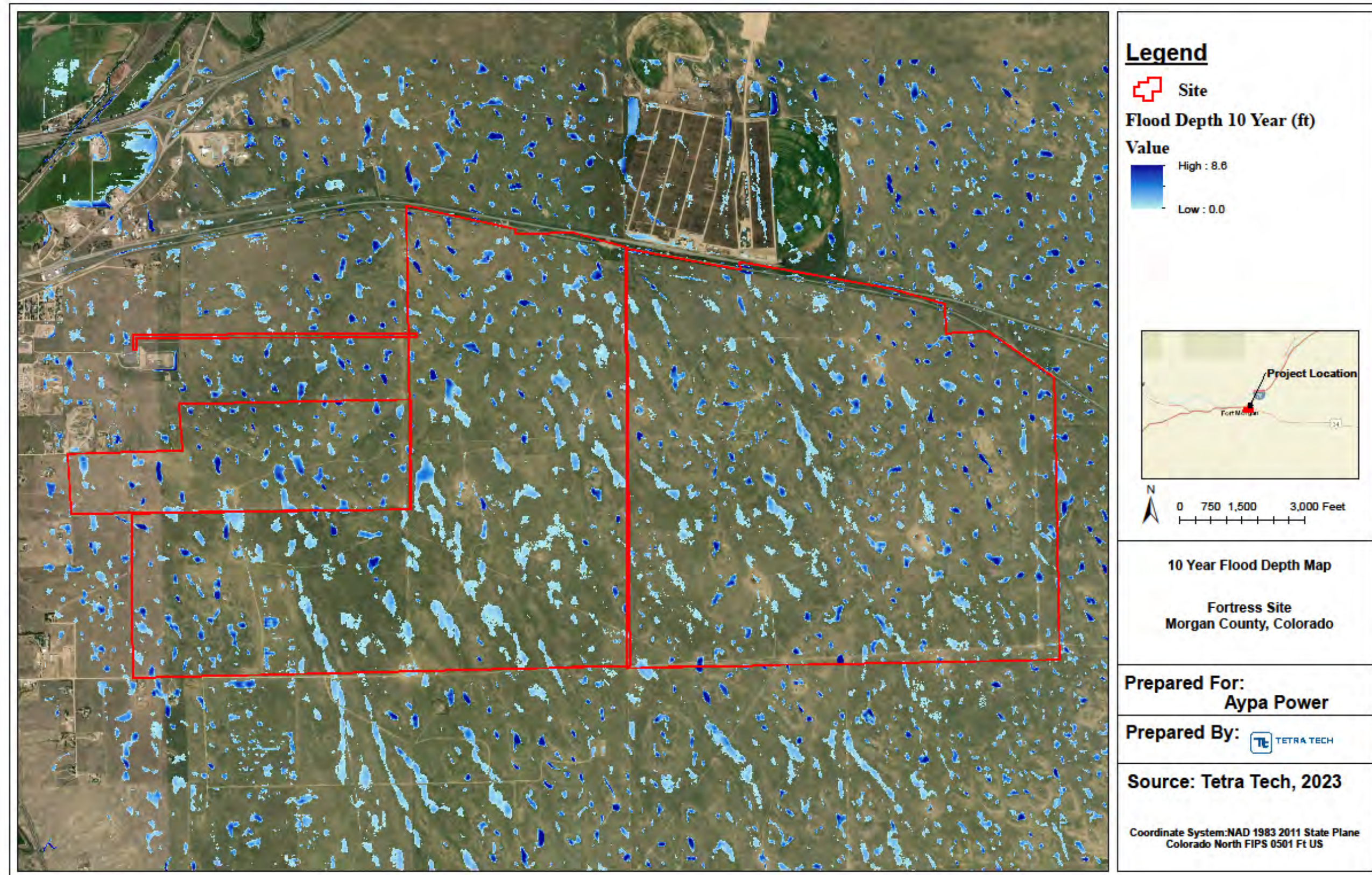
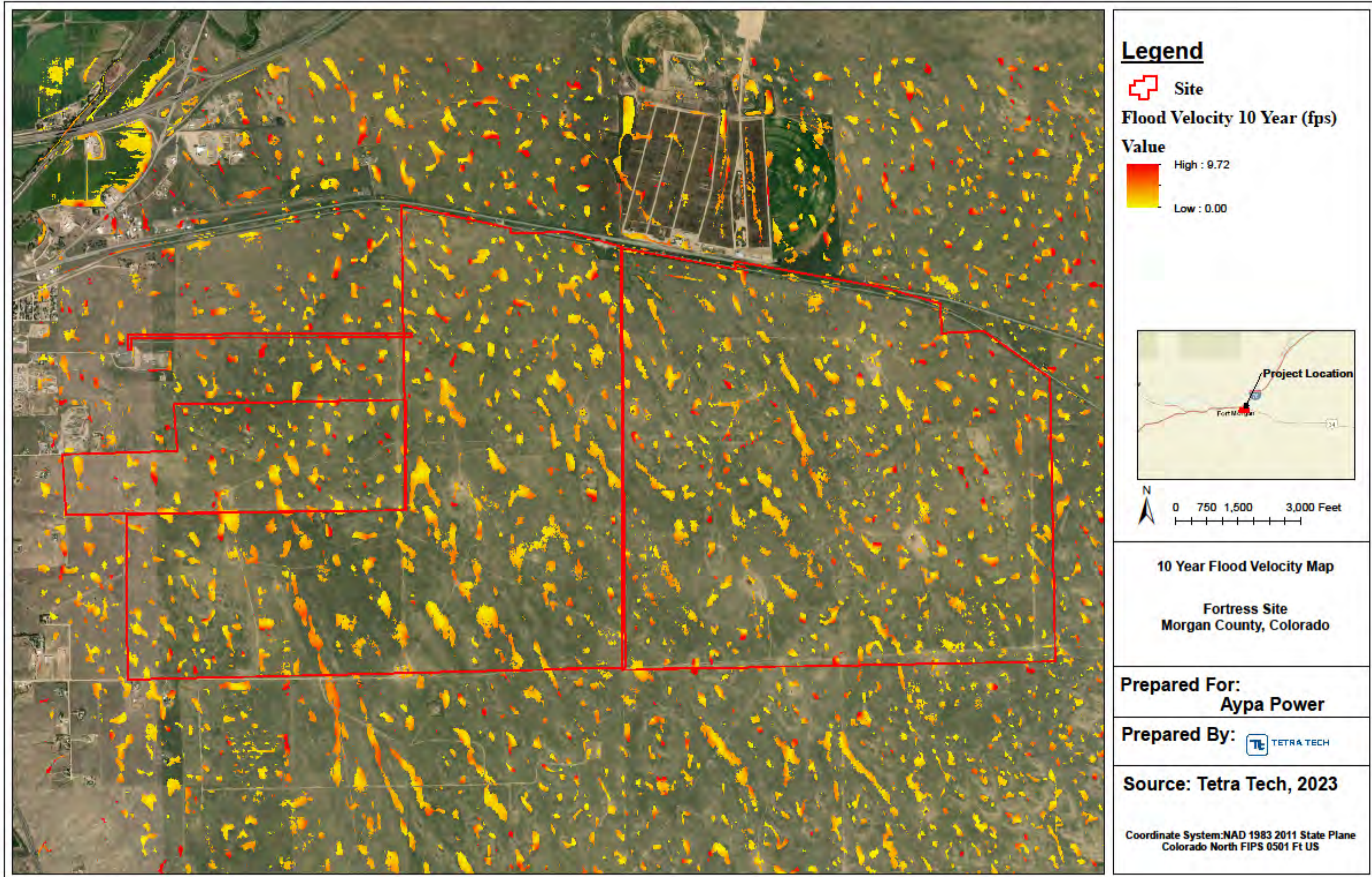


Figure 4-1: 10-Year Depth Map (HEC-RAS 2D)



Document Path: C:\Users\Inazir.Hejazi\Desktop\Projects\Story\Fortress_Flow_2D_Model\GIS\Fortress_Velocity_10_Year.mxd

Figure 4-2: 10-Year Velocity Map (HEC-RAS 2D)

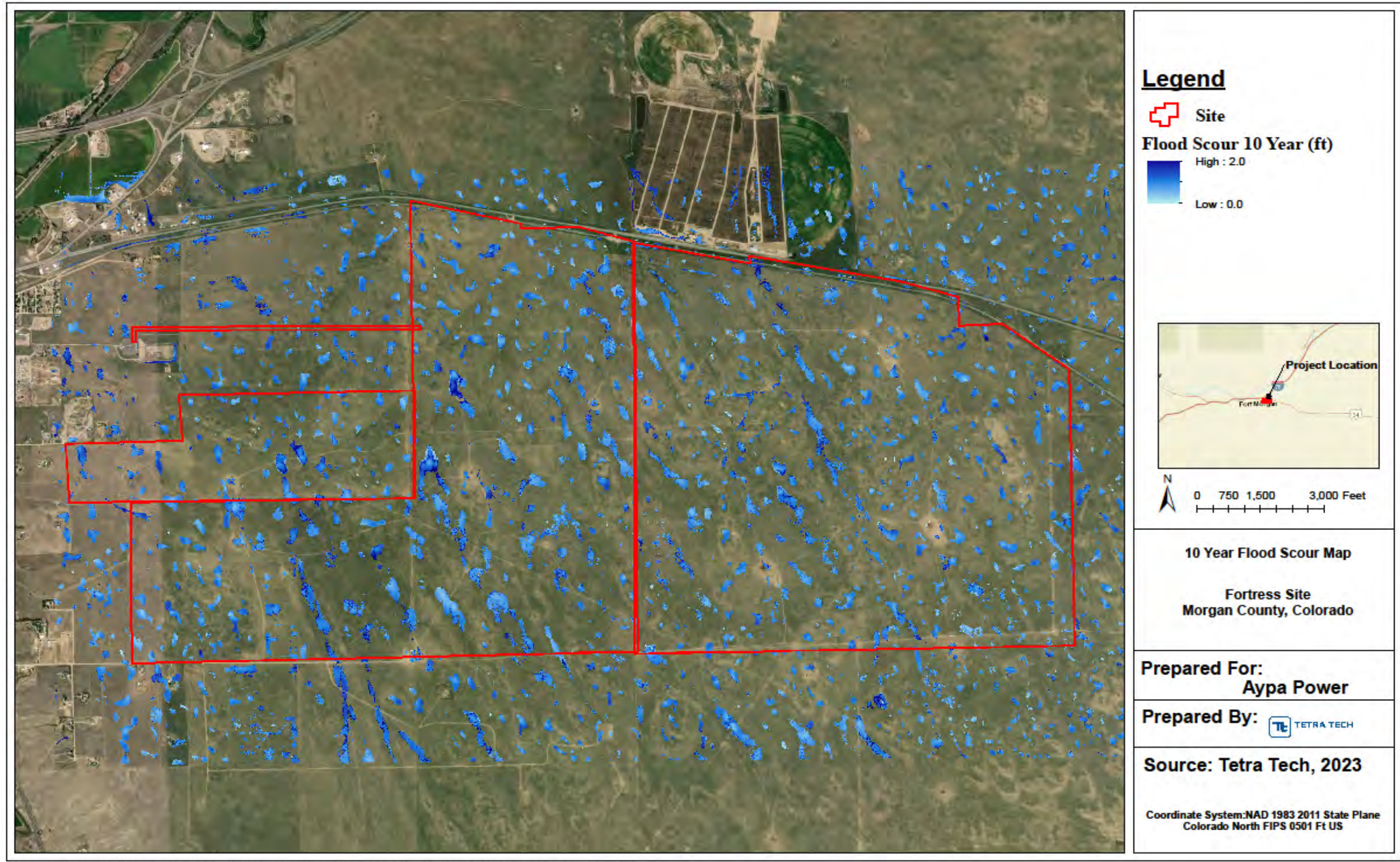


Figure 4-3: 10-Year Scour Map (HEC-RAS 2D)

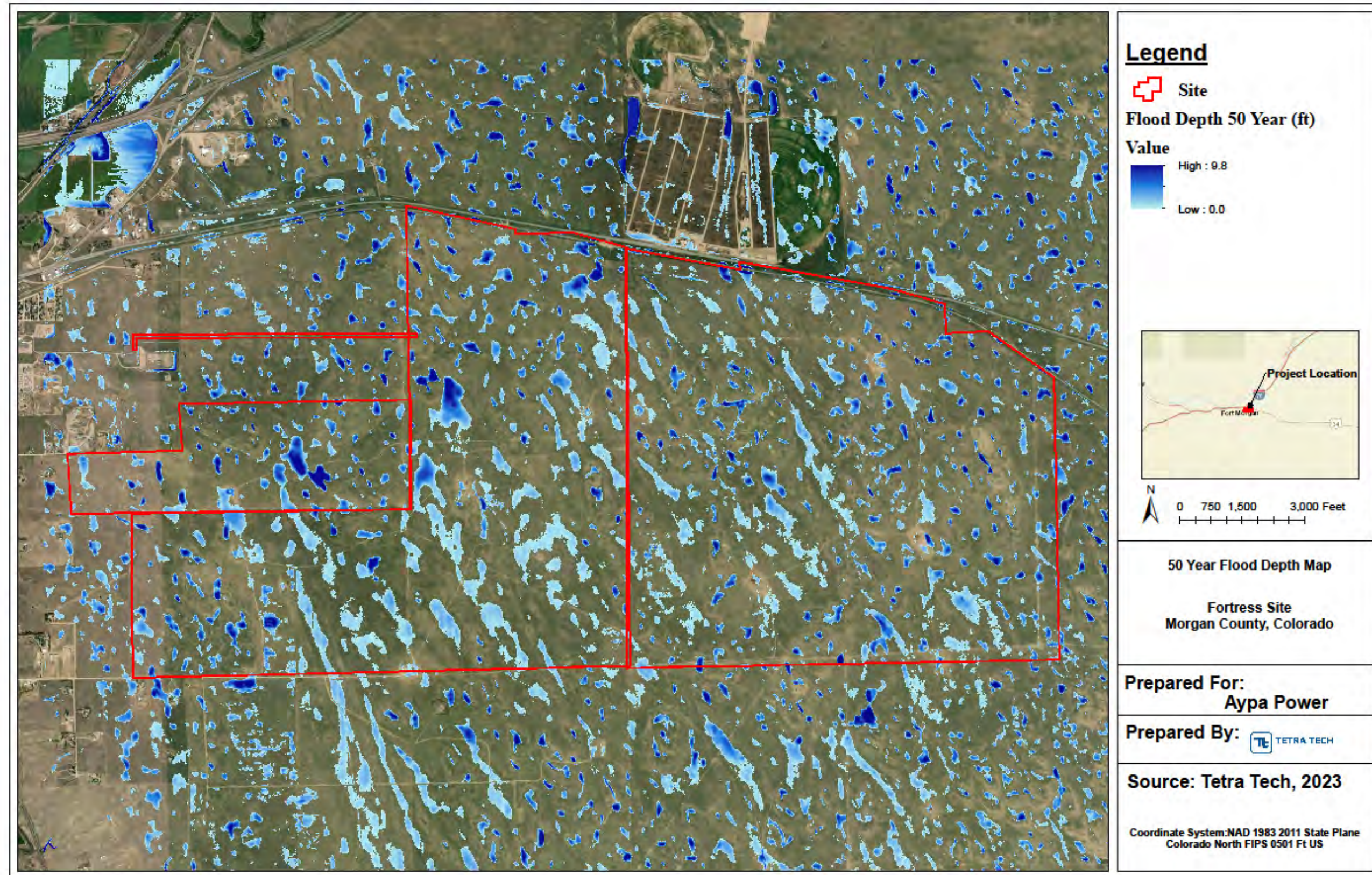
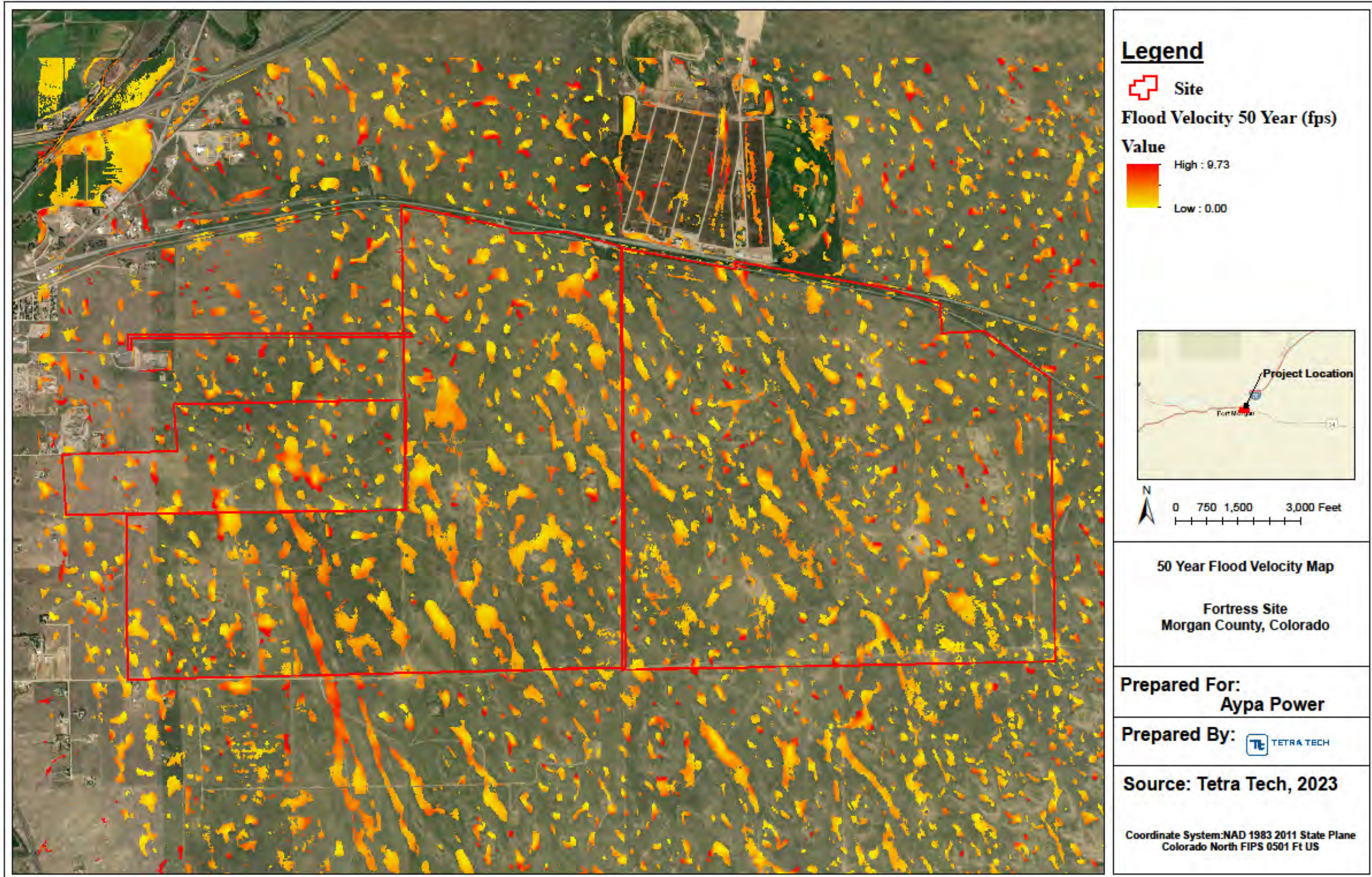


Figure 4-4: 50-Year Depth Map (HEC-RAS 2D)



Document Path: C:\Users\insazr\hgszr\Desktop\Projects\Story\Fortress_Flow_2D_Model\GIS\Fortress_Velocity_50_Year.mxd

Figure 4-5: 50-Year Velocity Map (HEC-RAS 2D)

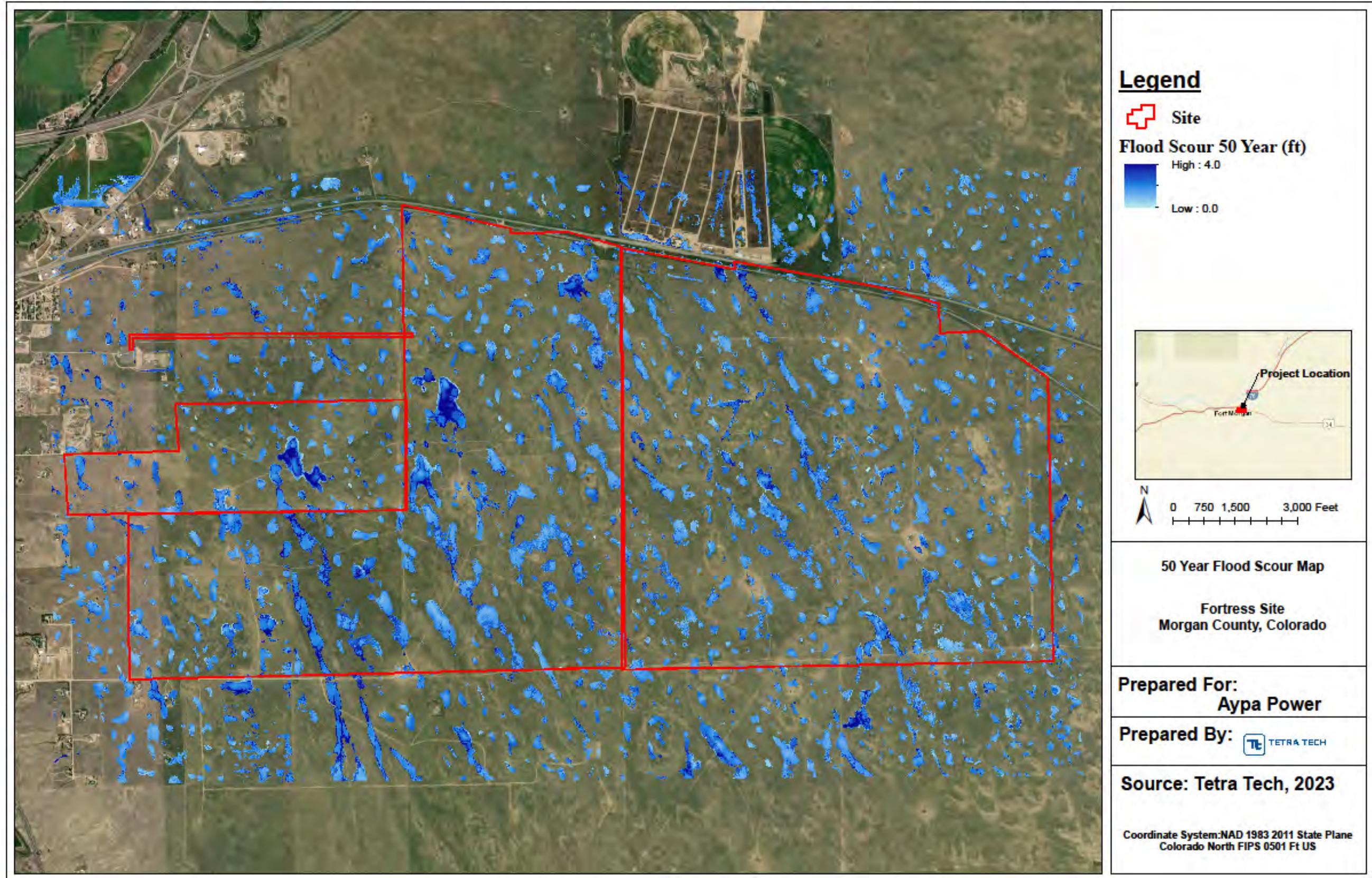


Figure 4-6: 50-Year Scour Map (HEC-RAS 2D)

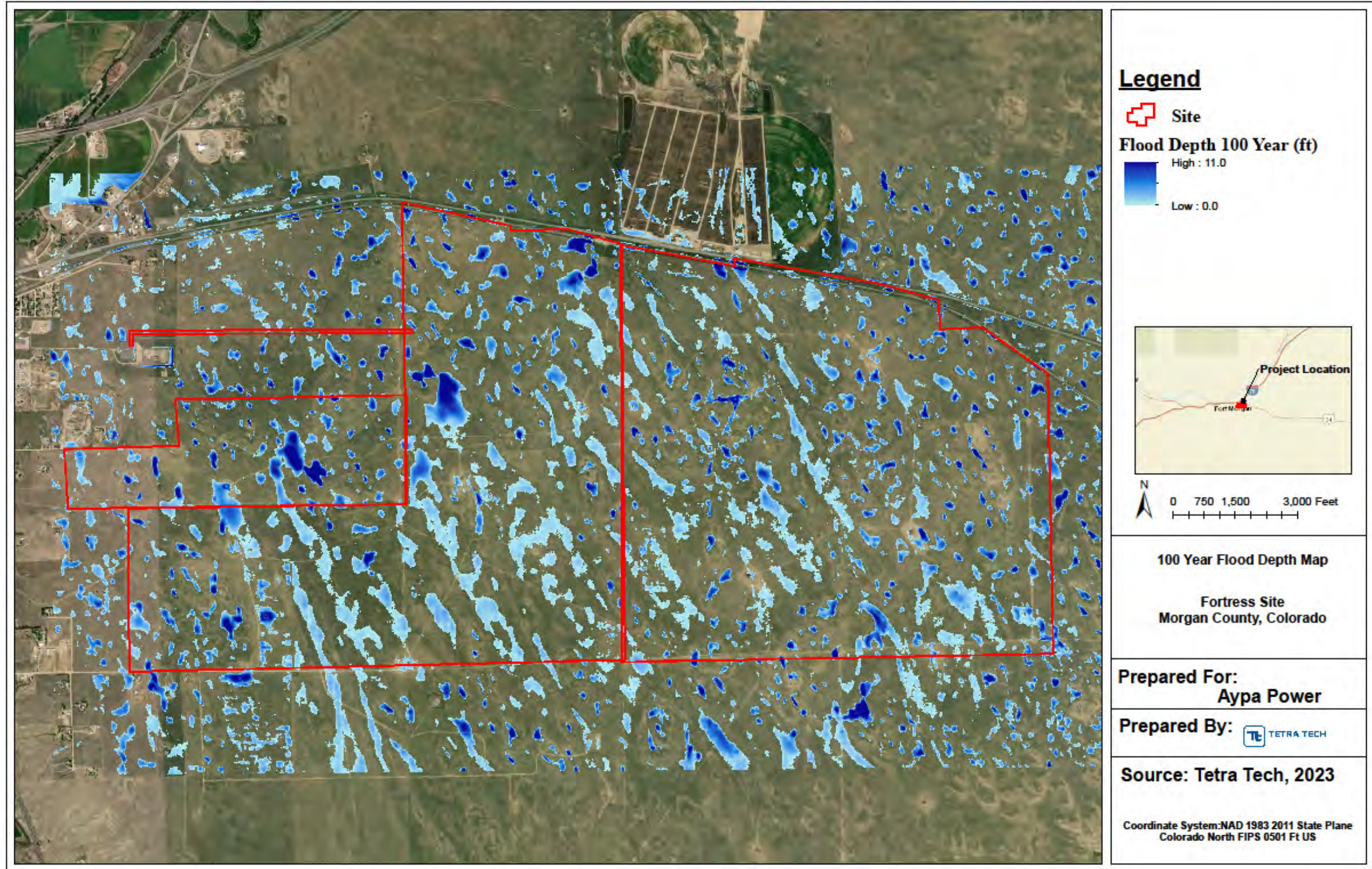


Figure 4-7: 100-Year Depth Map (HEC-RAS 2D)

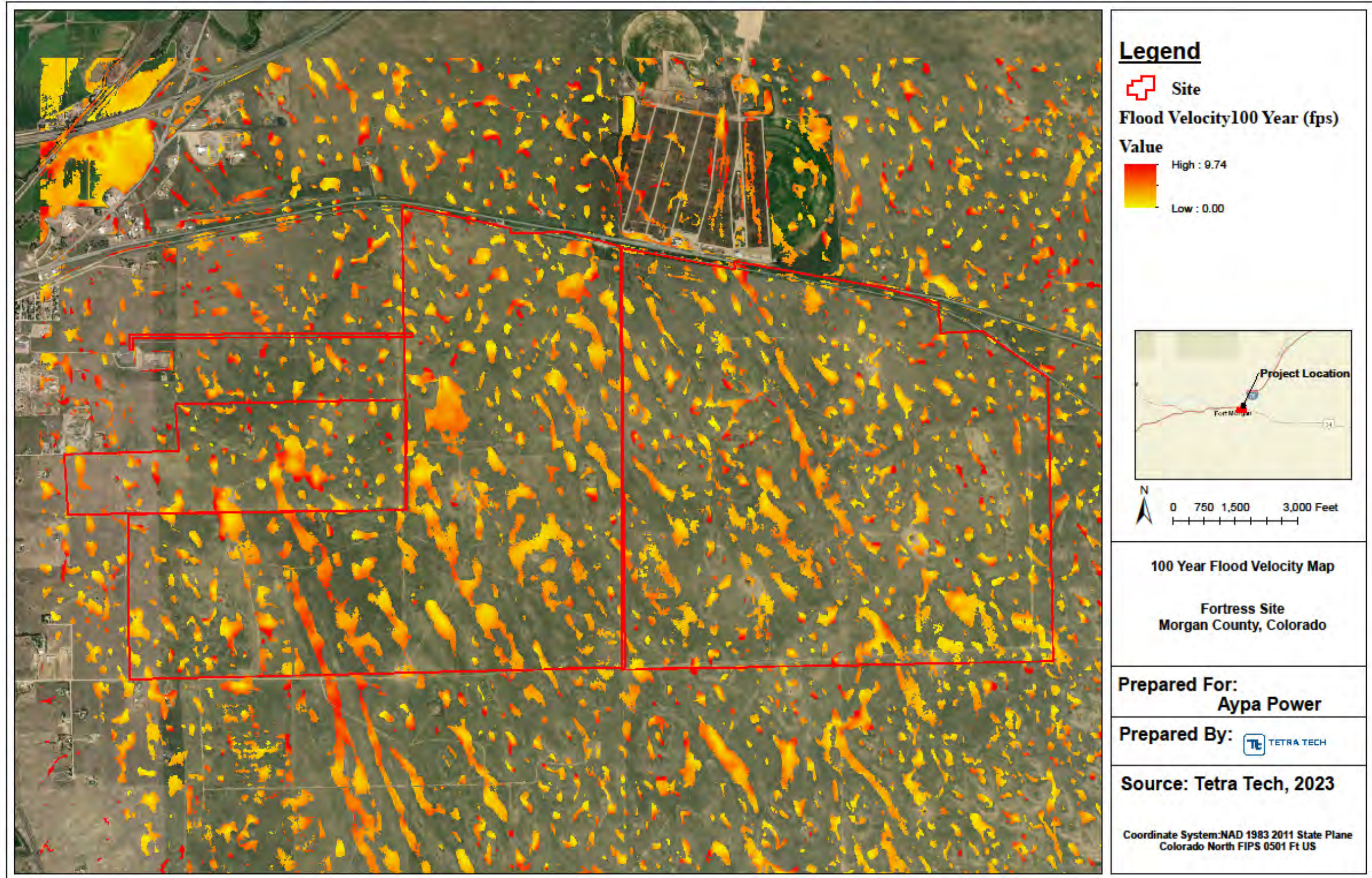


Figure 4-8: 100-Year Velocity Map (HEC-RAS 2D)

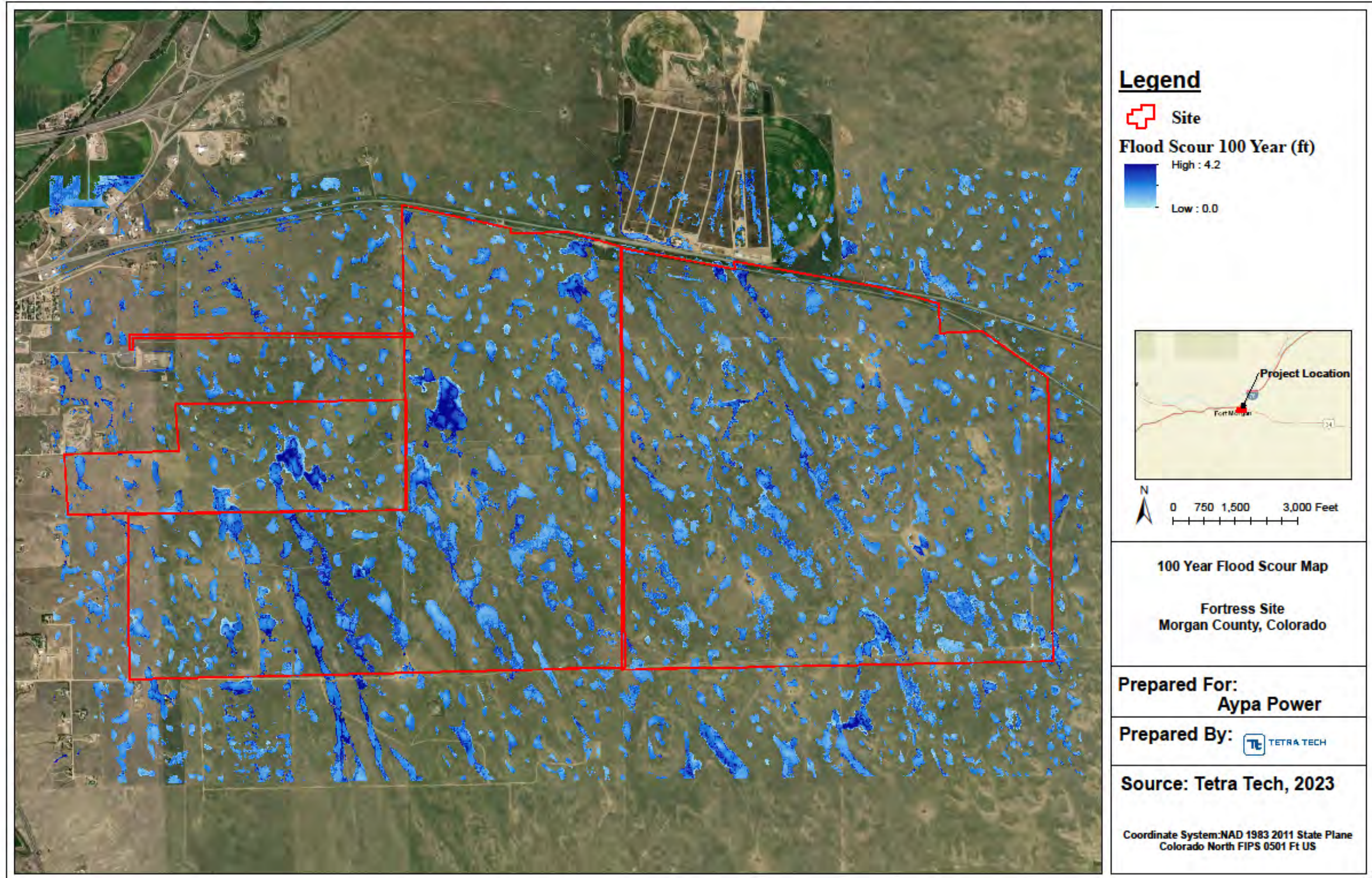


Figure 4-9: 100-Year Scour Map (HEC-RAS 2D)

4.6 CONCLUSIONS AND RECOMMENDATIONS

Stormwater discharging off the site onto adjacent property will be controlled by stormwater management basins in the post-developed condition. Stormwater that will not be discharging off site but instead kept within the existing depressions will inundate a certain depth and infiltrate into the ground. While the flood modeling completed in this report estimates these inundation depths, field infiltration tests and geotechnical review are highly recommended to determine more realistic inundation depths within the site's topographic depressions. These infiltration tests should be incorporated into the model and re-run again to help determine tolerable depths to the array and its appurtenances. Tolerable depths within the array are typically 1' or less for the 100-year storm, given the edge of panel clearance is typically held at 2' total, with 1' of freeboard from the 100-year water surface elevation. The depressions on site will act as collection points and intolerable inundation depths will inform the layout as no-build areas. The grading and flooding model will need to coincide in the General Arrangement of the solar plant and BESS layout to achieve a balance of MW production, civil earthwork, and construction feasibility.

5.0 REFERENCES

- CDPHE (Colorado Department of Public Health and Environment). 2023. *Guidance Document for the Colorado Discharge Permit System General Permit COR400000*. Available online at: <https://cdphe.colorado.gov/wq-construction-compliance-assistance-and-guidance> (accessed: September 2023).
- CDPHE (Colorado Department of Public Health and Environment). 2023. *Guidance Document for MS4 Information: WQ Municipal MS4 Individual Permits | Department of Public Health & Environment (colorado.gov)*.
- Chow, V. T., Maidment, D. R., & Mays, L. W. (1988). *Applied Hydrology*. New York: McGraw-Hill Book Company.
- Morgan County. 2021. Morgan County Zoning Regulations, Zones Described. Available online at: <https://morgancounty.colorado.gov/planning-and-zoning/permits/planning-services>. Accessed September 2023.
- Morgan County. 2022. Morgan County Zoning Regulations, Battery Energy Storage Systems Regulations. Available online at: <https://morgancounty.colorado.gov/planning-and-zoning/permits/planning-services>. Accessed September 2023.
- United States Department of Agriculture, NRCS. (1996). *Urban Hydrology for Small Watersheds Technical Release 55*.
- United States Department of Transportation, F. H. (2005). *Hydraulic Engineering Circular 15, 3rd Ed. Design of Roadside Channels with Flexible Linings*. Arlington, VA.
- United States Geological Survey. (2020). *The National Map - Data Delivery*. Retrieved 04/27/2023 from <https://www.usgs.gov/core-science-systems/ngp/tnm-delivery>.
- Weather WX. (2023). *Morgan County Monthly Climate Averages*. Retrieved 10/10/2023 from <https://www.weatherwx.com/climate-averages/co/morgan+county.html>.

APPENDIX A: NATIVE FORMAT STUDY FILES

APPENDIX M: CULTURAL RESOURCES REPORT

A Cultural Resources Survey

Fortress Solar Project Morgan County, Colorado

September 2023



Prepared for:



11801 Domain Boulevard, Suite 450
Austin, TX 78758

Prepared by:



390 Union Boulevard
Suite 400
Lakewood, CO 80228

A Cultural Resources Survey

Fortress Solar Project

Morgan County, Colorado

Prepared for



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Colorado State Permit: 80897

September 2023

For official use only: Disclosure of site locations prohibited (43 CFR 7.18)
Information contained in this report is confidential and access to this information is restricted by the National Historic Preservation Act of 1966 (as amended), the Archaeological Resources Protection Act of 1979 (as amended), and Colorado Revised Statutes 24-72-203(1) and 24-80-405(2).

EXECUTIVE SUMMARY

Tetra Tech, Inc. conducted cultural resources assessments in support of the proposed Fortress Solar Project (Project) proposed by Aypa in Morgan County, Colorado. The Project is located approximately 3.75 miles southeast of Brush, Colorado, 0.75 mile west of State Highway 71 between U.S. Highway 34 and County Road Q. The Project is located on approximately 4,400 acres of private land (Project Area). This report documents the visit to a previously recorded historic Western Area Power Association transmission line that runs through the Project Area, site 5MR.696.

Summarized below are the results of archival research that included a records search, review of previously conducted survey reports, and review of historic maps as well as the re-recording of site 5MR.696. The resource is recommended not eligible for listing on the National Register of Historic Places. The Project is unlikely to have an adverse effect on archaeological historic properties.

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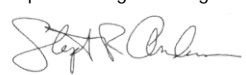
FORMS

Tables 1-1 and 1-2 are the required survey and inventory forms that are required by the Colorado OAHF.

Table 1-1: Cultural Resource Survey Corridor Colorado Office of Archaeology and Historic Preservation—Cultural Resource Survey Management Information

Please complete this form and attach a copy behind the Table of Contents of each survey report.										
Acres of Potential Effect/project: ~ 4,447						Acres Surveyed: ~ 50				
Legal Location of project (add additional pages if necessary)										
Principal Meridian: 6 th					Quad. Map date(s): 1951, 1965					
Quad Map(s) Names: Brush East, Miller Ranch										
Township:	3 North	Range:	55 West	Sec.:	7	1/4s			SW	NE
Township:	3 North	Range:	55 West	Sec.:	8	1/4s			NW	NW
Township:	3 North	Range:	55 West	Sec.:	8	1/4s			NE	SW
Township:	3 North	Range:	55 West	Sec.:	8	1/4s			NW	SE
Township:	3 North	Range:	55 West	Sec.:	8	1/4s			NW	SE
Township:	3 North	Range:	55 West	Sec.:	8	1/4s		SW	NE	SE
Township:	3 North	Range:	55 West	Sec.:	8	1/4s			SNE	SE
Township:	3 North	Range:	55 West	Sec.:	9	1/4s			SW	SW

Table 1-2: Recorded Cultural Resource Information

Smithsonian Number	Resource Type				Eligibility				Recommendation				
	Prehistoric	Historic	Paleontological	Multi component	Eligible	Not Eligible	Need Data	Contributes to National Register District	No Further Action	Avoid	Monitor	Test	Excavate
5ML.696		X				X			X				
Total Resources	0	1	0	0	0	1	0	0	1		0	0	0
The project area = ~4,447 acres Areas surveyed = ~50 acres Principal Meridian, Township, Range, Sections—6th, T3N, R55W, Sects 7, 8, 9 Quad. Name and date(s) Brush East (1951), Miller Ranch (1965)													
Principal Investigator Name: Stephen R. Anderson, RPA													
Principal Investigator's Signature:													
													

Acronyms and Abbreviations

A.D.	Anno Domini
APE	Area of Potential Effect
B.P.	Before Present
CFR	Code of Federal Regulations
Compass	Society/Office of Archaeology and Historic Preservation Cultural Records Online Database
CRS	Colorado Revised Statute
IF	Isolated Find
NRHP	National Register of Historic Places
Project/Project Area	Fortress Solar Project
Region	Greater Platte River Basin
Tetra Tech	Tetra Tech, Inc.

1.0 INTRODUCTION

Tetra Tech, Inc. (Tetra Tech) prepared this report for the Fortress Solar Project (Project), which is being proposed by Aypa. The Project is located on approximately 4,400 acres of privately owned land in Morgan County, Colorado (Project Area; Figures 1-1 and 1-2).

In May 2023, Tetra Tech conducted a site visit in support of the Project. This survey report documents the results of archival research including a records search, review of previously conducted survey reports, and review of historic maps as well as the re-recording of site 5MR.696, which runs through the Project Area.

1.1 Objectives of the Cultural Resources Survey and Report

The purpose of this cultural resources investigation is to re-record the previously recorded site that is located within the Project Area and to determine the Project's potential to affect the recorded historic property within the Project Area. The goals of the site visit and report are to:

- Re-record and assess the previously recorded Western Area Power Association (WAPA) transmission line (5MR.696) in the Project Area;
- Provide a cultural context for the Project Area; and
- Develop recommendations to mitigate the possible significant impacts on cultural resources.

1.2 Project Background

The Project is situated in Morgan County, Colorado, west of State Highway 71 between U.S. Highway 34 and County Road Q. The Project Area consists of mostly flat prairie with an elevation ranging from 4,360 feet to 4,385 feet above sea level.

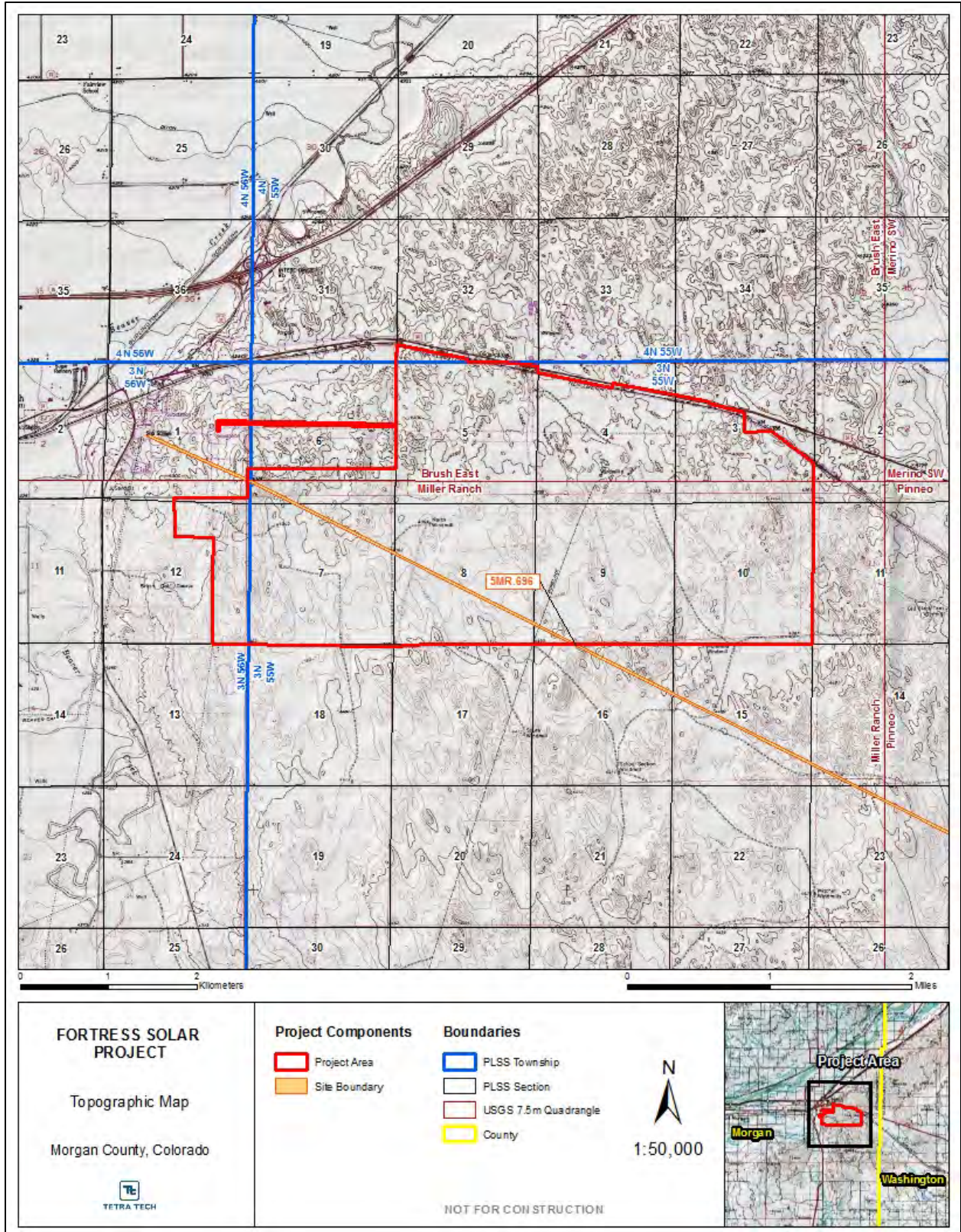


Figure 1-1: Project Overview Map—Topographic Map

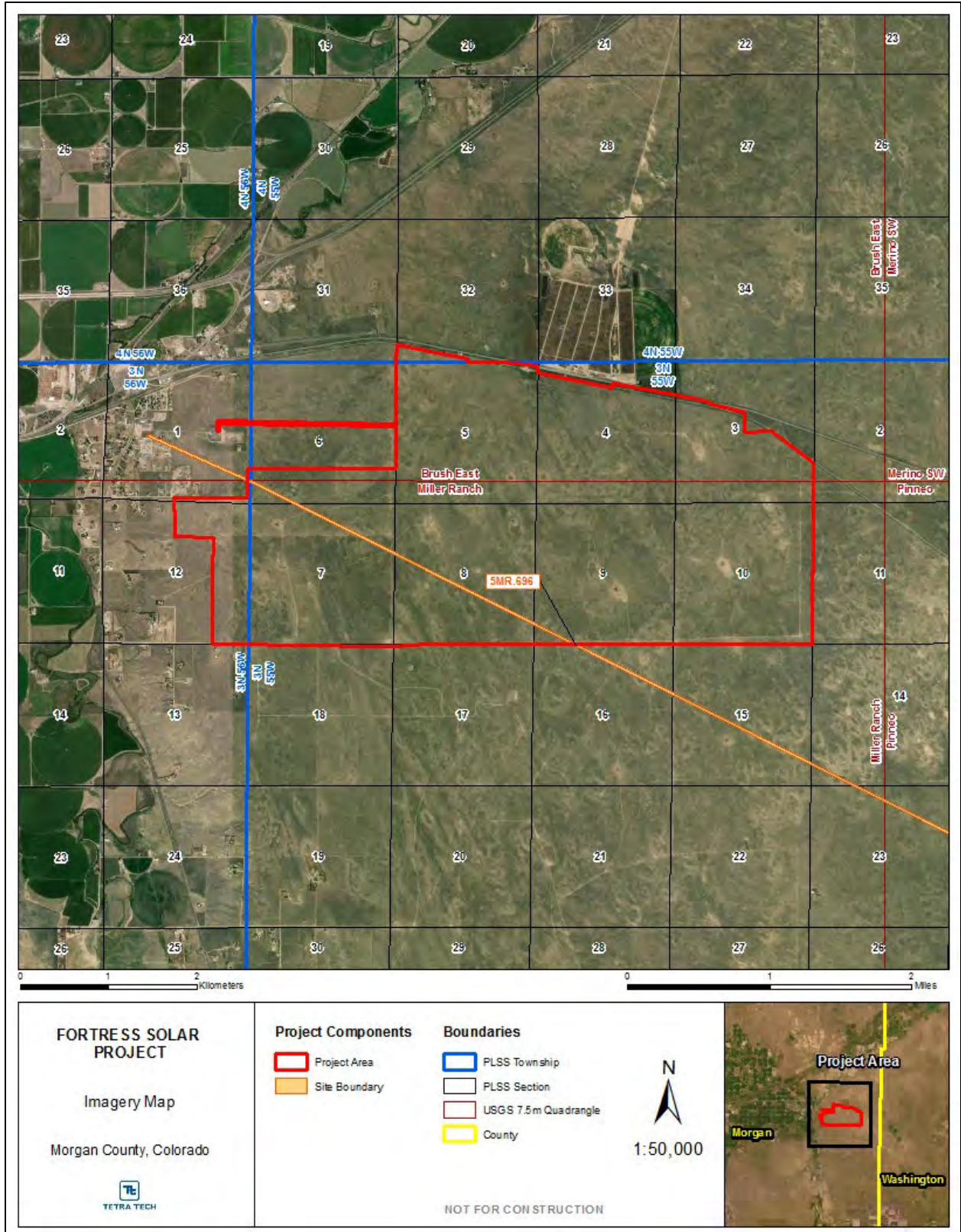


Figure 1-2: Project Overview Map—Aerial Image Map

2.0 ENVIRONMENTAL, CULTURAL, AND ARCHAEOLOGICAL CONTEXTS

2.1 Physiography and Hydrology

The Project is located east of the base of the foothills and west of the eastern plains of Colorado, within the Colorado Piedmont section of the Great Plains Physiographic Province (Osterkamp and Gustavson 1987). The Colorado Piedmont is an area adjacent to the Front Range of the Rocky Mountains, which extends 50 to 100 miles eastward from the foothills. The topography within this area is characterized by level plains and rolling hills incised by drainages. The greatest changes in elevation within the Colorado Piedmont occur where the Platte River and its larger tributary have cut through the deposits that form the Colorado Piedmont. The principal drainage within the Colorado Piedmont is the South Platte River, which is located approximately 7 miles north of the northern edge of the Project Area. The other major drainages in proximity to the Project are Badger, Sand Arroyo, and Bijou creeks.

2.2 Climate

The climate of the Project Area, as is typical of Colorado's eastern plains, is relatively uniform: low humidity, infrequent precipitation, moderate to high winds, and large daily and seasonal temperature fluctuations. Summers are generally hot and winters cold. Precipitation is generally low; much of the area experiences frequent droughts. However, summer thunderstorms can be intense, with as much as 4 inches of rain occurring in just a few hours (Doesken 2003). At Brush, Colorado, approximately 3.75 miles northwest of the central portion of the Project, an average of 17.5 inches of precipitation is received annually. Violent thunderstorms occur periodically throughout the warmer months of the year. The yearly precipitation is concentrated from April to September, with the minimum levels occurring in October through March. Temperatures range from an average high in July of 89 degrees Fahrenheit to an average low in January of 34 degrees Fahrenheit (Weatherbase 2023).

2.3 Geology and Geomorphology

The major geologic features in the Project Area are the Front Range Uplift to the west and the Denver-Julesburg Basin to the east. The Denver-Julesburg Basin encompasses 60,000 square miles in northeastern Colorado, southeastern Wyoming, and western Nebraska (Volk 1972). This asymmetric basin contains 13,000 feet of sedimentary rocks along its axis, which trends from Denver to Torrington, Wyoming. The sedimentary deposits within the Denver-Julesburg Basin range in age from Paleozoic to recent.

The Project overlies bedrock formations of Upper Cretaceous and Tertiary age, including the Pierre shale and Laramie formations. These formations consist of sedimentary rocks composed of sandstone, shale, and coal. The towns of Erie, Marshall, Dacono, and Superior, as well as the cities of Lafayette and Louisville, owe their origin to the mining of these formation's coal deposits (Murphy 2007).

2.4 Biotic Setting

2.4.1 Flora

The native vegetation communities in the Project Area include short- and mid-grass prairie as well as riparian/wetland zones. The short- and mid-grass prairies form the original vegetation communities throughout most of the Project Area (Mutel and Emerick 1992). According to Mutel and Emerick (1992), the dominant grass species in these short- and -mid grass prairies generally consist of western wheatgrass (*Pascopyrum smithii*), crested wheatgrass (*Agropyron cristatum*), buffalograss (*Bouteloua dactyloides*), Kentucky bluegrass (*Poa pratensis*), blue grama grass (*Bouteloua gracilis*), switchgrass (*Panicum virgatum*), sixweeks fescue (*Vulpia octoflora*), needle-and-thread grass (*Hesperostipa comata*), squirreltail (*Hordeum jubatum*), and red three-awn (*Aristida longiseta*). Cheatgrass, (*Bromus tectorum*) a non-native species, is also common. The prevailing forbs are prairie clover (*Dalea* spp.) and salsify (*Tragopogon* spp). Other forbs in the surrounding areas include common sunflower (*Helianthus annuus*), purple spiderwort (*Tradescantia rosea*), spotted bee balm (*Monarda punctata*), scarlet globemallow (*Sphaeralcea coccinea*), Indian blanket (*Gaillardia pulchella*), tansy mustard (*Descurainia pinnata brachycarpa*), wine cup (*Callirhoe involucrata*), greenthread (*Thelesperma* spp.), and western ragweed (*Ambrosia psilostachya*). Prickly pear cactus (*Opuntia* spp.) and pincushion cactus (*Mammillaria* spp. or *Coryphantha* spp.), as well as yucca (*Yucca* spp.), are also present (Mutel and Emerick 1992).

In the riparian areas associated with the South Platte River tributaries, the dominant species is the plains cottonwood (*Populus deltoids occidentalis*), with lesser occurrences of peach-leaved willow (*Salix amygdaloides*). In association with these trees are shrubs of hawthorn (*Crataegus* spp.), American plum (*Prunus americana*), currant (*Ribes* spp.), snowberry (*Symphoricarpos* spp.), wild rose (*Rosa* spp.), and willows (*Salix* spp.). Grass species include saltgrass (*Distichlis spicata*) and sand dropseed (*Sporobolus cryptandrus*). In some areas, riparian communities have expanded because of introduced species that now include box elder (*Acer negundo*), American elm (*Ulmus americana*), Russian olive (*Elaeagnus angustifolia*), green ash (*Fraxinus pennsylvanica*), and tamarisk (*Tamarix* spp.) (Mutel and Emerick 1992).

2.4.2 Fauna

According to Brown (1989a), wildlife species that may be present within the Project Area are typical of those found in the short- and mid-grass prairies and riparian zones of the Colorado plains. Big game species in this region include pronghorn antelope (*Antilocapra americana*), mule deer (*Odocoileus hemionus*), and white-tailed deer (*Odocoileus virginianus*). Pronghorn antelope inhabit grasslands and shrublands in flat to rolling topography, forage on shrubby plants, and band together in large herds during the winter months (Wood 1967). Abundant mule deer are also found in this region, but tend to reside among the shrublands along rough, broken terrain where forage and protective cover are plentiful. White-tailed deer tend to occupy riparian zones and nearby croplands where they feed on forbs, grasses, and cultivated crops (Fitzgerald et al. 1994). Small mammal species include desert cottontail (*Sylvilagus audubonii*), black-tailed jack rabbit (*Lepus californicus*), white-tailed jack rabbit (*Lepus townsendii*), black-tailed prairie dog (*Cynomys ludovicianus*), thirteen-lined ground squirrel (*Ictidomys tridecemlineatus*), plains pocket gopher (*Geomys bursarius*), plains pocket mouse (*Perognathus flavescens*), Preble's meadow jumping mouse (*Zapus hudsonius preblei*), beaver (*Castor*

spp.), spotted skunk (*Spilogale putorius*), striped skunk (*Mephitis* sp.), porcupine (*Erethizontidae* spp.), raccoon (*Procyon lotor*), badger (*Arctonyx* spp.), coyote (*Canis latrans*), red fox (*Vulpes vulpes*), swift fox (*Vulpes velox*), and black-footed ferret (*Mustela nigripes*) (Burt and Grossenheider 1976). Bison (*Bison bison*) were once abundant in this region, but they were exterminated in the late 19th century (Gilbert 1980:150).

Waterfowl species commonly inhabit and/or use the lakes, ponds, and creeks in this region. These waterfowl species consist of northern shoveler (*Anas clypeata*), northern pintail (*Anas acuta*), green-winged teal (*Anas carolinensis*), mallard (*Anas platyrhynchos*), and Canada goose (*Branta canadensis*). Potential migrants and winter residents include ruddy duck (*Oxyura jamaicensis*), American widgeon (*Anas americana*), bufflehead (*Bucephala albeola*), and gadwall (*Anas strepera*). Upland game birds include the lesser prairie chicken (*Tympanuchus pallidicinctus*), sharp-tailed grouse (*Tympanuchus phasianellus*), scaled quail (*Callipepla squamata*), mourning dove (*Zenaida macroura*), ring-necked pheasant (*Phasianus colchicus*), northern bobwhite (*Colinus virginianus*), and Rio Grande turkey (*Meleagris gallopavo intermedia*) (Peterson 1990).

Non-game birds in the region include raptors, wading and shore birds, and passerines. Raptors potentially occurring in the Project Area consist of bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), red-tailed hawk (*Buteo jamaicensis*), Swainson's hawk (*Buteo swainsoni*), ferruginous hawk (*Buteo regalis*), American kestrel (*Falco sparverius*), prairie falcon (*Falco mexicanus*), northern harrier (*Circus cyaneus*), and turkey vulture (*Cathartes aura*). Several species of owl, including burrowing owl (*Athene cunicularia*), barn owl (*Tyto alba*), great-horned owl (*Bubo virginianus*), and short-eared owl (*Asio flammeus*), are also prevalent in the region (Peterson 1990). Wading and shore birds are present along the major drainages and water bodies and consist of black-crowned night heron (*Nycticorax* sp.), great blue heron (*Ardea herodias*), killdeer (*Charadrius vociferus*), whooping crane (*Grus americana*), western snowy plover (*Charadrius nivosus*), piping plover (*Charadrius melodus*), mountain plover (*Charadrius montanus*), long-billed curlew (*Numenius americanus*), and least tern (*Sternula antillarum*). Significant passerine species include horned lark (*Eremophila alpestris*), lark bunting (*Calamospiza melanocorys*), meadowlark (*Sturnella* sp.), and various sparrows (*Passer* spp.) (Andrews and Righter 1992; Brown 1989a).

Common amphibian and reptile species in the region include tiger salamander (*Ambystoma tigrinum*), Woodhouse's toad (*Bufo woodhousii*), northern leopard frog (*Rana pipiens*), northern cricket frog (*Acris crepitans*), painted turtle (*Chrysemys picta*), ornate box turtle (*Terrapene ornata ornata*), yellow mud turtle (*Kinosternon flavescens*), short-horned lizard (*Phrynosoma hernandesi*), prairie lizard (*Sceloporus undulatus*), bullsnake (*Pituophis catenifer sayi*), red racer (*Coluber flagellum piceus*), plains garter snake (*Thamnophis radix*), and western rattlesnake (*Crotalus viridis*) (Brown 1989b; Hammerson 1999; Shaw and Campbell 1974).

3.0 CULTURAL-HISTORICAL CONTEXT

3.1 Prehistoric Narrative

The following section is a brief introduction to the prehistory and history of the Project Area in context of the greater Platte River Basin (Region). The most recent and comprehensive prehistoric context for the Region that encompasses the Project Area is *Colorado Prehistory: A Context for the Platte River Basin* (Gilmore et al. 1999).

The Region, which includes more than 25 percent of the northeastern portion of the state of Colorado, is bordered by the Continental Divide to the west; the Colorado-Wyoming-Nebraska border to the north; the Colorado-Nebraska-Kansas border to the east; and the Palmer Divide, which separates the Platte River Basin from the Arkansas River Basin, to the south (Gilmore et al. 1999:1). Prehistoric cultures are known to have inhabited the Platte River Basin for as many as 13,000 years. The cultural periods have been divided into several temporal units based on variability in observed technological and subsistence attributes. These temporal units are described individually below.

3.1.1 Paleoindian Stage

The Paleoindian Stage in Colorado dates from 12,000 to 7500 before present (B.P.) and is typically associated with the hunting of megafauna that became extinct during the terminal phase of the late Pleistocene or in the early Holocene (Gilmore et al. 1999:3). These animals consisted of proboscideans (*Mammuthus* spp.), certain species of now extinct bison (*Bison antiquus*), and other large game species that included camel (*Camelops* spp.), horse (*Equus* spp.), mountain sheep (*Ovis* spp.), elk (*Cervus* spp.), and deer (*Odocoileus* spp.) (Gilmore et al. 1999:5).

Paleoindian bands were highly mobile hunter and gatherers, and their food economy was based on the availability of big game that ranged across the landscape (Simms 2008:133). The archaeological evidence for the Paleoindian period is closely tied to the associated hunting tools utilized throughout the tradition, namely the distinctive fluted spear point variations. In Colorado, the Paleoindian Stage is subdivided based on changes in distinctive spear point technology and associated with direct or relative dating of sites. Much of the information about the Paleoindian Stage in the Region comes from data collected during excavation at kill sites and game processing sites.

The Paleoindian Stage in the Region is divided into three traditions, or sub-periods: These sub-periods include the Clovis (12,000–11,000 B.P.), Folsom (11,000–10,000 B.P.), and the Plano (10,000–7500 B.P.) periods (Gilmore et al. 1999:51).

Clovis Sub-period

The Clovis sub-period dates from 12,000 to 11,000 B.P., during which time the climate was wetter and cooler than it is today (Gilmore et al. 1999:51–57). Clovis inhabitants of the Region existed in small mobile bands and hunted mammoth, other now-extinct Pleistocene fauna, and many smaller species, utilizing riverine and lacustrine environments. The archaeological hallmark of the Clovis sub-period is the Clovis projectile point: a large, lanceolate, basally fluted projectile point (Justice 2002:67; Gilmore et al. 1999:51; Zier and Kalasz 1999:69). Clovis points vary from 3 to 6 inches in length, typically

contain basal grinding, are basally concave, have parallel or slightly convex edges, are leaf shaped, and are partially fluted at the hafting element of the base (Gilmore et al. 1999:57).

Folsom Sub-period

The Folsom sub-period dates from 11,000 to 10,000 B.P. when the climatic shifts that began in the Clovis sub-period continued, resulting in overall warming but also increased seasonality featuring warmer summers and, perhaps, colder winters (Gilmore et al. 1999:64). Conditions, in general, were cooler than those of the present day but began to approach modern levels by the end of the sub-period. A process of Pleistocene megafaunal extinction that began in Clovis times was largely complete by the end of the Folsom sub-period and, while overall mammal species diversity was reduced, the ranges of certain grassland-adapted species such as bison, elk, moose, deer, and antelope, increased significantly (Yohe and Woods 2002; Simms 2008; Zier and Kalasz 1999:87). Folsom-age demographics were like those of the Clovis period: small bands of hunter-gatherers exploiting well-watered areas in an increasingly arid environment. Folsom sites are often associated with small-scale kills (up to 25 animals) of a now extinct form of bison, but an array of smaller mammal forms was exploited as well. Folsom projectile points are smaller than Clovis, but they exhibit fluting along nearly the entire length of the blade on both faces (Gilmore et al. 1999:51). Folsom toolkits are highly diverse and display a range of both formal and expedient forms and, like Clovis, show a preference for high-quality lithic materials from widely distributed sources.

Plano Sub-period

The Foothill-Mountain period dates from 11,500 to 7450 B.P. and occupied the more rugged, higher-elevation regions of Colorado. The Foothill-Mountain people procured deer, bighorn sheep, and pronghorn and intensely exploited the available wild plants. The Foothill-Mountain tradition projectile points are represented by unfluted, lanceolate points typically containing restricted stems and indented bases constructed of local quartzite. Frison (1992) suggests that the artifact assemblages associated with Foothill-Mountain tradition sites display a greater regional variability than those of their counterparts on the open Plains, indicating more localized specialization.

3.1.2 Archaic Stage

The Archaic Stage (approximately 7500 to 2000 B.P.) is broadly associated with the Altithermal climatic event (Bently 1983), an approximately 4,000-year-long period of relatively hot and arid conditions over the Western United States that necessitated a change in hunting and gathering patterns (Gilmore et al. 1999:91). Subsistence practices shifted to foraging for plant resources and small game hunting (Gilmore et al. 1999:5).

The Archaic Stage dates from 7500 to 2000 B.P. and is subdivided into the Early, Middle, and Late Archaic. It is differentiated from the Paleoindian in terms of technology and subsistence practices. Projectile point forms in the Archaic Stage changed substantially from the larger Paleoindian forms as flake tool technology began shifting towards stemmed and notched projectile point styles (Gilmore et al. 1999:94).

Early Archaic Period

The Early Archaic dates from 7800 to 5000 B.P. and marks the transition from the Plano to Archaic technology, with substantial changes in subsistence and material culture (Gilmore et al. 1999). The climate during the Middle Holocene experienced more extreme variability between cooler and warmer periods than present day, as well as possible torrential storms during the summer months. The Early Archaic is characterized by the manufacturing of lanceolate and large, corner-notched projectile points developed for use with the atlatl (Gilmore et al. 1999:94).

Gilmore et al. (1999:102–103) indicates that few known Early Archaic sites exist in the Region. Most sites have been found along hogbacks and foothills at higher elevations, suggesting a migration to cooler areas during the Altithermal climatic event.

Middle Archaic Period

The Middle Archaic dates from 5000 to 3000 B.P., when climatic conditions during the early Neoglacial episode are believed to have been more mesic, i.e., with wetter and cooler conditions prevailing. Conditions were similar to those of the present day and modern flora and fauna were present in the area as evidenced by assemblages from archaeological sites. The climate does not appear to have been static, however. Geomorphic evidence indicates that episodes of sand dune activation and dormancy occurred throughout the Middle Archaic and well into the Late Archaic, suggesting that fluctuations in effective moisture occurred (Gilmore et al. 1999).

The Middle Archaic is characterized by increased variability in projectile point styles that include lanceolate and stemmed-indentated projectile points as well as side- and corner-notched points most likely used for hunting bison and other ungulates (Gilmore et al. 1999:5; Zier and Kalasz 1999). In addition to varying projectile point types, Middle Archaic sites often contain groundstone implements, suggesting a reliance on more plant-based foods. The Middle Archaic is represented in the Region along the mountains, foothills, and plains landscapes, suggesting that groups traveled between the mountains and plains. Middle Archaic peoples appear to have hunted and foraged in the mountains during the summer and fall months and returned to base camps in the hogbacks, foothills, and eastern plains during the winter months (Gilmore et al. 1999:118). Several Middle Archaic sites have been recorded on the plains, but site density appears lower in the mountainous regions (Gilmore et al. 1999:118, 134).

Late Archaic Period

The Late Archaic dates from 3000 to 1800 B.P. and is characterized by changes in material culture that include the introduction of the bow and arrow and ceramics. Late Archaic sites in the South Platte River drainage area are similar to those of the Middle Archaic but occur more frequently and are apparently more widely distributed based on both absolute dating and the presence of diagnostic artifacts (Gilmore et al. 1999:134).

The climate during the latter half of the Neoglacial episode experienced a return to Pleistocene-like conditions except with modern flora and fauna. The winter months were wetter, and the summers were cooler (Simms 2008). The presence of groundstone and a variety of stone tools persisted into the Late Archaic, while projectile point morphology tended towards large, side- and corner-notched

points, many of which had serrated edges (Gilmore et al. 1999:95). Hunting was still the primary means of subsistence, but strategies changed to incorporate buffalo jumps, game drives, and a heavier reliance on smaller game and fish to support the needs of increasing populations.

3.1.3 Late Prehistoric Stage

The Late Prehistoric Stage (1800 B.P. to Anno Domini [A.D.] 1540) is characterized by the increased production of bow and arrow type projectile points, bulk food procurement, expansive material trade, and continued ceramic development. The climate during the Medieval Warm Period consisted of a slow warming period until A.D. 900. This was followed by a rapid warming period with summer rainfall. By A.D. 1000, the climate experienced decades of severe drought followed by abundant precipitation (Simms 2008:77). Lithic technology progressed from the production of dart-style points made from quarried materials to arrow-style points and other flake tools made from locally available raw material. Plant processing became more abundant and spread across a wider area.

The Late Prehistoric Stage in the Region is divided into two periods: the Early Ceramic period and the Middle Ceramic period (Gilmore et al. 1999:3). New technologies flourished in the Late Prehistoric, including the continuing development of pottery and the bow and arrow. Small side- and corner-notched points are used to differentiate the Late Prehistoric from other periods and are more common in artifact assemblages in the Region than are ceramics (Gilmore et al. 1999:175).

Early Ceramic Period

The Early Ceramic period (A.D. 150 to 1150) features cord-marked pottery and corner-notched projectile points (Gilmore et al. 1999:5). Campsites were more common during the Early Ceramic period and, based on evidence found at sites, seem to have been occupied for longer amounts of time than in preceding periods. They may have been repeatedly occupied (Gilmore et al. 1999:179). There are considerably more Early Ceramic sites in the Region than sites of any previous period, with many these sites having absolute dates (Gilmore et al. 1999:179).

Middle Ceramic Period

The Middle Ceramic period (A.D. 1150 to 1540) is characterized by smoothed cord-marked pottery and triangular projectile points (Gilmore et al. 1999:5). Many Middle Ceramic sites also have Early Ceramic components (Gilmore et al. 1999:245).

3.1.4 Protohistoric Stage

The Protohistoric period dates from approximately A.D. 1540 until Euro-American occupation and settlement in the area and subsequent relocation of Native Americans onto reservations in the late 1800s (Gilmore et al. 1999:5, 309). The Protohistoric period is characterized by a major shift in Native American technology and subsistence practices as well as dramatic changes in demographics. The arrival of Europeans on the North American continent changed many aspects of Native American life. Subsistence technologies shifted as firearms became available and metal and glass implements were introduced for food gathering, storage, and cooking (West 1998). A shift in environmental conditions also occurred during this time. A long drought ended and climate conditions on the high plains became more hospitable and similar to those of today (Gilmore et al. 1999:309). Perhaps the greatest

changes observed in Native American populations during the Protohistoric period involved a dramatic reduction in their numbers caused by the introduction of European diseases and increased competition for resources between Native American groups and new Euro-American settlers (West 1998).

Several tribes inhabited the Region during this time including the Cheyenne, Arapaho, Shoshoni, Comanche, Kiowas, Apache, and Ute (Gilmore et al. 1999:310). When the Platte River Basin context was described by Gilmore in 1999, more than 130 Protohistoric sites had been identified in the Region (Gilmore et al. 1999:310–311). Protohistoric sites are predominantly open camps and lithic scatters, but other site types include peeled trees, architectural sites, sheltered camps, sheltered lithic scatters, rock art, battle locations, and trails. Apache sites were common during the Protohistoric (especially on the eastern plains), and diagnostic features and artifacts include shallow pithouses, bison scapula hoes, snub-nosed end scrapers, and distinctive ceramics (Gilmore et al. 1999:311–313). In the mountains, the Ute were the predominant tribe. Ute sites are often identified by the presence of Uncompahgre Brown-ware ceramics, Cottonwood Triangular projectile points, Desert Side-notched points, and features such as wickiups and peeled trees (Gilmore et al. 1999:323).

During the Protohistoric period, the acquisition of the horse changed subsistence patterns from localized pedestrian hunting and gathering to long-distance hunting on horseback. Bison hunting and some horticulture were the primary means of subsistence (Gilmore et al. 1999:313; Zier and Kalasz 1999:257).

3.2 Historic Narrative

3.2.1 Early Exploration and Conquest

The first non-Native visitors to the Region consisted of French and Spanish trappers and traders who arrived in the area as early as the late 17th century. Although the Spanish had made incursions into the Kansas plains as early as the 1540s, it was more than 150 years before the European presence on the plains became commonplace. The French began exploring North America's interior from both the north and south via the Mississippi and Missouri river drainages beginning in the early years of the 18th century (Creigh 1977:21). French influence began to decline after the signing of the Treaty of Paris in 1763, and the French, by the time of the Louisiana Purchase in 1803, had all but disappeared from the plains.

The focus of western exploration and commerce during the early 1800s began with the Lewis and Clark Expedition of 1803–1806 as the explorers made their way west along the Missouri River. Soon after, French trappers arrived to trap beaver along the western rivers and tributaries. By the early 1820s, trappers working for the Rocky Mountain Fur Company traveled along the Sweetwater and Platte rivers in Wyoming and Nebraska along what was soon to become the Oregon Trail (Hafen and Young 1938:21). Shortly thereafter, a military expedition led by Major Stephen H. Long traversed the South Platte River to the Rocky Mountains (Gregg 1954). Trading posts and military outposts were established in the vicinity to facilitate the fur trade. These forts included Fort William in southeastern Wyoming, Fort Robinson and Fort Sidney in western Nebraska, and Fort Morgan, Fort Vasquez, and Fort Sedgewick in northeastern Colorado. All of these frontier outposts were located along major drainages and established transportation routes. From 1820 until the early 1840s, the military

conducted routine patrols in the area to manage ongoing encounters with Native American tribes that were beginning to make a stand against the encroaching Euro-Americans.

3.2.2 Trails and Transportation

By the late 1840s, Euro-American emigration began to increase throughout the Region and adjacent areas as thousands of settlers used wagons to traverse the Platte River valley as a means to reach Utah, California, and Oregon. Eventually more than 500,000 would-be settlers traveled over the Oregon, Overland, and Mormon trails to western states, accompanied by more than 1.5 million animals (Madsen 1980:27; Creigh 1977:33). A large group of these settlers came west to seek California gold during 1848 and 1849, religious freedom (beginning in 1847) in Utah, or permanent settlements in Oregon while electing to merely pass through the Plains and settle elsewhere. Denver was founded in 1858 and quickly became the regional economic hub. It was not until the 1860s and 1870s that the area encompassing the greater portion of the present Project Area was actively settled by Euro-Americans.

Other significant historic routes in the Region include the course of the Spanish Villasur Expedition (ca. 1720); the route used by Long's 1820 exploration party; the Platte River Trail (ca. 1840s to 1900); and the Overland Trail and Stage Route, which was established in the 1850s (Mehls 1984). The Overland Stage Line Company established a series of stage stations or ranches bordering the south bank of the South Platte River between Old Julesburg and Denver (Scott and Shwayder 1993).

The development of the Transcontinental Railroad across the Great Plains eventually superseded the need for the emigrant and freight trails. The transcontinental railroad crossed the Great Plains through Nebraska and Wyoming in 1868 and was completed the following year as the Central Pacific Railroad and Union Pacific Railroad companies met at Promontory Point, Utah, north of the Great Salt Lake (Ambrose 2000). Within a few years additional connecting lines were constructed to Denver and other communities in northeastern Colorado.

3.2.3 Homesteading and Agricultural Settlement

By the early 1860s homesteading, farming, and ranching took over as the principal economic themes of the Region (Gregg 1954). Agricultural settlement in the Region began to escalate by the mid-to-late 1860s. Carrillo (1990; see also Carrillo et al. 1989) has identified three phases of historic agricultural settlement for the Region: the Early Settlement phase (1867–1890), the Middle Settlement phase (1891–1915), and the Late Settlement phase (1916–1930). Carrillo's phases coincide chronologically with the U.S. Homesteading Acts.

The Early Settlement phase (1867–1890) consists of a vast number of settlers moving into the area, generally in response to the Homestead Act of 1862, under which 160-acre plots of land could be acquired and patented if specified improvements were made within an allotted time. Many of the settlers in the Region were Euro-Americans migrating from the eastern and southern states, as were Europeans from various countries.

During the 1880s and 1890s, dryland farming techniques were implemented across the region to combat an extended drought. Large-scale cattle ranchers exploited the vast grasslands, running herds across the open plains prior to the end of the open range period around 1895 (Mehls 1984).

The Middle Settlement phase (1891–1915) witnessed the failure of many of the homesteads from the preceding phase and resulted in the consolidation and redistribution of land holdings. During this phase, the development of agricultural ditches and large irrigation canals in the South Platte River Valley was paramount to maintaining the land allotments.

Changes in the beef and sheep industries occurred around 1900, resulting in the fencing of pastureland, development of feed lots, and an increase in rail transport.

The Late Settlement phase (1916–1930) consists of an influx of settlers in response to the Enlarged Homestead Act of 1909 and the Stock Raising Homestead Act of 1916, both of which permitted claims on parcels of up to 640 acres. During the 1920s, the Late Settlement phase witnessed the devastating results of a massive drought and the effects of the Dust Bowl. The Great Depression followed the drought and Dust Bowl during the early 1930s, compounding the economic difficulties in the region. The vast majority of those who had homesteaded in the region during the Late Settlement phase failed sometime in the early 1930s as a result of these conditions. Many of the homesteaded parcels reverted to government ownership, while others were bought out by more successful neighbors.

Agriculture continues to be the economic mainstay of the Region and includes rearing livestock and raising crops. Other economic development in the Region includes gas and oil exploration, grain storage and transport, meat processing, and fertilizer production and distribution. However, the Project Area includes both agricultural and developed urban areas that are highly influenced by other economic sectors.

4.0 RESEARCH DESIGN

The objective of this site visit is to re-record the previously recorded site that is located within the Project Area. Initial research efforts involve archival research to determine whether cultural resources have been previously recorded within 1 mile of the Project Area and which past land uses may have impacted the Area of Potential Effect (APE) or left archaeological remains. During the site visit, the resource was inspected and verified. No subsurface testing was performed.

5.0 METHODOLOGY

Identification efforts for the Project included review of existing site records, previously conducted surveys in the area, and historic maps. The search included the Project Area and a 1-mile buffer (Research Area). No consultations with or inquiries of Native American individuals or tribes have been conducted at this time.

5.1 Records Search and Archival Research

A records search was conducted through the Colorado Historic Society/Office of Archaeology and Historic Preservation Cultural Records online database (Compass). The Compass database includes records of all archaeological investigations. Additionally, the search included a review of the following publications and lists: the National Register of Historic Places (NRHP), the Colorado Register of Historic Places, ethnographic information, historical literature, historical maps and plats, and local historic resource inventories.

5.1.1 Previously Conducted Surveys

The desktop research revealed that 12 prior investigations have been undertaken within the Research Area (Table 5-1). The previous investigations primarily consist of intensive surveys for transmission lines, road projects, substations, and private lands. None of the surveys intersect the Project Area.

Table 5-1: Previously Conducted Surveys within the Research Area.

Date	Report Number	Author(s)	Report Title
1998	MC.CH.R79	O.D. Hand	An Intensive Cultural Resource Survey of U.S. Highway 34 Between Brush and Akron, Morgan and Washington Counties, Colorado.
2005	MC.E.R80	Bradford Andrews and Jonathon C. Horn	Class III Cultural Resource Inventory of the Beaver Creek-Hoyt-Wiggins-Erie Transmission Line Rebuild Project In Morgan Aand Weld Counties, Colorado and Addendum To Class III Cultural Resource Inventory of the Beaver Creek-Hoyt-Wiggins-Erie Transmission Line Rebuild Project In Morgan And Weld Counties.
2008	MR.CH.NR14	Benjamin John Burger	Paleontological Technical Report: Interstate 76 Improvements Between the Towns of Fort Morgan And Brush, Morgan County, Colorado.
1988	MR.CH.R1	Monica N. Bargielski and Susan T. Baugh	Archaeological Survey Along State Highway 34 from Brush to Akron, Morgan County, Colorado.
2001	MR.CH.R4	O.D. Hand and Dan Jepson	An Intensive Archaeological Resource Inventory of Interstate 76 Between Fort Morgan & Brush, Morgan County, Colorado Sta 076-174.
2010	MR.CH.R7	David Sabata, John Hoffecker, and Robert Autobee	Cultural Resource Inventories on I-76 From County Road 29 to US 6 Interchange (Interstate 76-Phase IV).
1994	MR.E.NR6	Mary Barger	A Cultural Resources Inventory of the Beaver Creek Substation, Morgan County, Brush, Colorado.
2009	MR.E.R12	Sean Doyle, Vanesa Zietz, and Norma Crumbley	A Class I And Class III Cultural Resource Inventory of the Story Transmission Line Project, Morgan County, Colorado.
2015	MR.E.R13	Melanie Medeiros	Literature Review And Cultural Resource Inventory for the Kinder Morgan Jackson Lake Meter Station, Morgan County, Colorado.
1979	MR.PA.NR1	Elizabeth Ann Morris	Archaeological Survey of the Beaver Creek-Sterling 230 kV Project, Morgan County, Colorado.
2003	MR.R.NR17	Janes Brechtel	Intensive Cultural Resource Survey of Proposed Stone Ncwcd Inclusion, Morgan Co.

Table 5-1: Previously Conducted Surveys within the Research Area.

Date	Report Number	Author(s)	Report Title
2009	MR.SC.NR93	Gary Barkey	Morgan Limited-Results Cultural Resources Survey Report on Private Lands for Robert L Wardell.

5.1.2 Previously Recorded Cultural Resources

The Compass database identified 18 previously recorded cultural resources (structures, archaeological sites, and isolated finds [IFs]) within the Research Area (Table 5-2). These resources include two segments of the Beaver Creek to Big Sandy transmission line, three segments of the Beaver Creek to Deering Lake transmission line, a segment of the Beaver Creek to Hoyt Transmission line, a segment of the Beaver Creek to Sterling transmission line, one prehistoric IF, three historic IFs, two agricultural complexes, an agricultural equipment dump, a trash dump, and a trash scatter. One site (5MR.698) is listed as recommended eligible for listing in the NRHP, although the site form states that the site is recommended not eligible. One segment of the Beaver Creek to Deering Lake transmission line (5MR.696) is the only resource within in the Project Area and has been determined not eligible for listing in the NRHP.

Table 5-2: Previously Recorded Sites Identified by the Project Records Search

Site Number	Time Period	Site Type	Eligibility
5MR.477	Prehistoric	IF- Lithic Tools	Recommended Not Eligible
5MR.695	Historic	Beaver Creek to Big Sandy Transmission Line	Determined Not Eligible
5MR.695.2	Historic	Beaver Creek to Big Sandy Transmission Line	Determined Not Eligible
5MR.696*	Historic	Beaver Creek to Deering Transmission Line	Determined Not Eligible
5MR.696.1	Historic	Beaver Creek to Deering Transmission Line	Recommended Not Eligible
5MR.696.2	Historic	Beaver Creek to Deering Transmission Line	Recommended Not Eligible
5MR.698	Historic	Beaver Creek to Hoyt Transmission Line	Recommended Eligible
5MR.699	Historic	Beaver Creek to Sterling Transmission Line	Determined Not Eligible
5MR.703	Historic	Beaver Creek Substation	Determined Not Eligible
5MR.817	Historic	Agricultural Complex	Recommended Not Eligible
5MR.828	Historic	Agricultural Equipment Dump	Determined Not Eligible
5MR.842	Historic	Beaver Creek Vista Site- Rasmus Larson Homestead	Determined Not Eligible
5MR.848	Historic	The Dump Site trash dump	Determined Not Eligible
5MR.849	Historic	IF- Can and License Plate	Recommended Not Eligible
5MR.853	Historic	Trash Scatter	Determined Not Eligible
5MR.854	Historic	Agricultural Complex	Determined Not Eligible
5MR.855	Historic	IF- Ceramics	Recommended Not Eligible
5MR.856	Historic	IF- Tool	Recommended Not Eligible

*Located within the Project Area

5.1.3 Historic Map Review

Tetra Tech also conducted a review of the General Land Office plat maps for Township 4 North, Range 55 West (1871); Township 3 North, Range 55 West (1873); Township 3 North, Range 56 West (1873); the National Park Service's National Historic Trails Map; and historic U.S. Geological Survey quadrangle

maps for Brush East (1951) and Miller Ranch (1965). One resource, the Chicago, Burlington, and Quincy Railroad, is the only potential resource identified on the Brush East quadrangle. The railroad does not intersect the Project Area.

5.2 Site Visit

The site visit was conducted by Tetra Tech Archaeologists Jessica DeMaso and Mary Connell on June 27, 2023. Stephen Anderson was the Principal Investigator for the Project. Only the one site located within the Project Area (5MR.696) was visited. The site was mapped, photographed, and described. Colorado Archaeological Site Forms were finalized in a business office.

5.2.1 Site 5MR.696 Description

Site 5MR.696 is a segment of Western Area Power Association's Beaver Creek to Deering Lake Transmission line (Figure 5-1). The line was originally built as part of the Colorado-Big Thompson Project and was constructed in 1950 (Schweigert 1998). This segment of the site retains the original support structure type (wooden H-frame) and conductor type and has not been moved from its original alignment.



Figure 5-1: 5MR.696, View to the southeast.

6.0 DISCUSSION AND INTERPRETATIONS

Archival research identified one site within the Project Area. The preliminary recommendation of NRHP eligibility is provided here for this resource. The recommendation is based solely on the site's structures and cursory research. Site evaluation criteria for NRHP eligibility are provided in Section 6.1. Detailed eligibility recommendation arguments and management recommendations for newly recorded sites are provided in Section 6.2. An NRHP-eligibility analysis for the site is provided in Section 6.2

6.1 Site Evaluation Criteria

Preliminary recommendations for eligibility are based on the following criteria codified in Title 36 Code of Federal Regulations (CFR) Part 60.4 and specified below:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or*
- B. that are associated with the lives of persons significant in the past; or*
- C. that embody the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possess high artistic value, or that represent a significant or distinguishable entity whose components may lack individual distinction; or*
- D. that have yielded, or are likely to yield, information important in prehistory or history.*

Ordinarily, cemeteries, birthplaces, or graves of historical figures; property owned by religious institutions or used for religious purposes; structures that have been removed from their original location; reconstructed historic buildings; properties that are primarily commemorative in nature; and properties that have achieved significance within the last 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria, or if they fall within the following categories:

- a religious property deriving primary significance from architectural or artistic distinction or historical importance; or*
- a building or structure removed from its original location, but which is significant primarily for its architecture, or which is the surviving structure most importantly associated with an historic person or event; or*
- a birthplace or grave of an historical figure of outstanding importance if there is no other appropriate site or building directly associated with his or her productive life; or*

- *a cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or*
- *a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan and when no building or structure with the same association has survived; or*
- *a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance; or*
- *a property achieving significance within the past 50 years if it is of exceptional importance.*

Eligible sites are those that meet one or more of the criteria for eligibility. In addition, sites evaluated as eligible must retain physical integrity. Eroded or otherwise heavily disturbed sites are generally not considered eligible. Sites evaluated as needing data are those sites that may conform to the eligibility criteria but require further work to determine NRHP status. In most cases, these sites are precontact or historic sites with suspected buried materials or historic sites where additional research is necessary to determine historical importance. Sites that are evaluated as not eligible do not meet any of the eligibility criteria and/or have lost physical integrity.

6.2 Site 5MR.696 Evaluation

The Beaver Creek to Deering Lake transmission line was built as part of the Colorado-Big Thompson Project. This Bureau of Reclamation Project was constructed between 1938 and 1959 to improve irrigation to northeastern Colorado by diverting water from the Western Slopes. While the project was initially planned to support irrigation, it also helped satisfy power needs by producing hydro-electric power. The Beaver Creek to Deering Lake transmission line is part of the over 700 miles of transmission line built for this project (Schweigert 1998; Silkensen 2016).

The initial recording in 1998 recommended the site as not eligible for the NRHP:

This line is associated with the Colorado-Big Thompson Project, but evidence has not been found that the line was particularly historically distinctive within the project or otherwise. This line is recommended to be not eligible for the National Register of Historic Places.

Since this recordation of the line, the State Historic Preservation Office has determined that the site is not eligible for listing in the NRHP. Tetra Tech agrees with this assessment of the site and recommends that the site is not eligible for listing in the NRHP.

7.0 MANAGEMENT CONSIDERATIONS

Several factors have been considered in evaluating the impact of the proposed Project on the transmission line, as well as the appropriate mitigation measures to lessen or prevent those impacts. These factors are summarized in this section.

7.1 Impact Significance Criteria

The Project is currently proposed on private land. Section 800.5(2) of 36 CFR 800 has been used as a guide to evaluate the impact of the Project on the recorded resource. Examples of adverse effects include physical destruction of or damage to all or part of the property; change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance; and introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features. Impacts on cultural resources are normally considered permanent as these resources are finite and disturbance of them, particularly archeological sites, cannot be reversed. However, impacts on historic landscapes or the viewsheds of historic or other significant areas can be temporary if projects do not permanently impact associated resources and are removed at a future date.

Direct effects from a project could result from grading of access roads; excavation and modification of the project site; trenching for pipelines, electrical transmission lines, and drainage diversions; and any earth-moving activity that disturbs historical resources or historic properties, previously undisturbed cultural resources, or cultural resources unevaluated for NRHP eligibility.

7.2 Identified Project Impacts

The Project is unlikely to have an adverse effect on cultural resources. Site 5MR.696 has been determined as not eligible for the NRHP; therefore, construction-related disturbance of, or visual impacts to, this resource would not be considered an adverse effect. No further management considerations are recommended for 5MR.696. Given the low site density and relatively low archaeological sensitivity of the Project Area, the potential to encounter additional resources within the subsurface of the APE is also considered low.

7.3 Recommended Management and Mitigation Measures

It is recommended that an Unanticipated and Inadvertent Discovery Plan be implemented prior to and during construction to reduce potential impacts on cultural resources.

Unanticipated and Inadvertent Discoveries—If construction staff or others observe previously unidentified archaeological resources during construction, they will halt work in the vicinity of the find(s) and immediately notify the Project Archaeologist so that the resource value may be assessed as soon as possible, and appropriate next steps may be determined in coordination with the landowner. Such finds will be formally recorded and evaluated for NRHP eligibility as appropriate. The resource will be protected from further disturbance or looting, pending evaluation and agreement from the State Historic Preservation Office regarding the resource's eligibility status.

As per Colorado Revised Statute (CRS) Title 24-Article 80 Section 13 (CRS 24-80-1301 to CRS 24-80-1305), if human remains are inadvertently discovered during construction activities, all work in the vicinity of the find will cease and the appropriate law enforcement office will be contacted immediately.

8.0 REFERENCES

Ambrose, Stephen E.

- 2000 *Nothing Like It in the World: The Men Who Built the Transcontinental Railroad 1863–1869*. Simon and Shuster, New York.

Andrews, R., and R. Righter

- 1992 *Colorado Birds: A Reference to Their Distribution and Habitat*. Denver Museum of Natural History, Denver.

Bently, E.B.

- 1983 *Geomorphology and Human Land Use*. Unpublished Manuscript on file, Bureau of Land Management, Boise.

Brown, L.

- 1989a Grasslands. In *The Audubon Society Nature Guides (2nd Printing)*. Alfred A. Knopf, Inc., Chanticleer Press, Inc., New York.
- 1989b *Grasslands: A Comprehensive Field Guide, Fully Illustrated with Color Photographs, to Birds, Wildflowers, Trees, Grasses, Insects, and Other Natural Wonders of North America's Prairies, Fields, and Meadows*. Alfred A. Knopf, Inc., New York.

Burt, William H., and Richard P. Grossenheider

- 1976 *A Field Guide to the Mammals of America North of Mexico*. Houghton Mifflin Company, Boston.

Carrillo, Richard F.

- 1990 *Historical Archaeology Research Design. In An Introduction to the Archaeology of Pinon Canyon, Southeastern Colorado* (6 volumes), edited by W. Andrefsky, Jr. Report submitted to National Park Service-Rocky Mountain Regional Office by Larson-Tibesar Associates, Inc., Laramie, Wyoming, and Centennial Archaeology, Inc., Fort Collins, Colorado.

Carrillo, Richard F., Diane Adams, and Dorothy Larson

- 1989 Relative Dating of Historic Homesteads: A Test Employing Cartridges and Bottle Glass. In *Temporal Assessment of Diagnostic Materials from the Pinon Canyon Maneuver Site: Towards the Development of a Cultural Chronology for Southeastern Colorado*, edited by C. Lintz and J. L. Anderson. *Memoirs of the Colorado Archaeological Society* No. 4.

Creigh, Dorothy Weyer

- 1977 *Nebraska: A Bicentennial History*. W. W. Norton and Company, Inc., New York.

Doesken, Nolan J., Roger A. Pielke, Sr., and Odilia A. P. Bliss

- 2003 *Climate of Colorado: Climatography of the United States*, No. 60. Colorado Climate Center, Colorado State University, Fort Collins.

Fitzgerald, James P, Carron A. Meaney, and David M. Armstrong

- 1994 *Mammals of Colorado*. Denver Museum of Natural History and University Press of Colorado, Niwot.

Frison, George C.

- 1992 The foothills, mountains, and the open plains: A dichotomy in Paleoindian subsistence strategies between two ecosystems. In: *Ice Age Hunters of the Rockies*, eds. D. J. Stanford and J. S. Day, pp. 323–342. Boulder: University Press of Colorado.

Gilbert, B. Miles

- 1980 *Mammalian Osteology*. Modern Printing Company, Laramie.

Gilmore, Kevin. P., Marcia Tate, Mark L. Chenault, Bonnie Clark, Terri McBride, and Margaret Wood

- 1999 *Colorado Prehistory: A Context for the Platte River Basin*. Colorado Council of Professional Archaeologists, Denver.

Gregg, Josiah

- 1954 *Commerce of the Prairies*, edited by M. L. Moorhead. University of Oklahoma Press, Norman.

Hafen, LeRoy R., and Francis Marion Young

- 1938 *Fort Laramie and the Pageant of the West, 1834-1890*. A. H. Clark, Glendale.

Hammerson, Geoffrey A.

- 1999 *Amphibians and Reptiles in Colorado*. University Press of Colorado and Colorado Division of Wildlife, Denver.

Justice, Noel D.

- 2002 *Stone Age Spear and Arrow Points of California and the Great Basin*. Indiana University Press, Bloomington.

Madsen, David.B.

- 1980 *Fremont/Sevier Subsistence*. In *Fremont Perspective*, edited by David B. Madsen, pp. 25-34. Antiquities Section Selected Papers No. 16. Utah State Historical Society, Salt Lake City.

Mehls, Steven F.

- 1984 *Colorado Plains Historic Context*. Office of Archaeology and Historic Preservation, Colorado Historical Society, Denver.

Murphy, Sheila

- 2007 *Mineral Resources in the Boulder Area. Excerpted from Boulder, A Sight to Behold: Guidebook, Runnells, Donald D. 1976*. Electronic document, <http://bcn.boulder.co.us/basin/watershed/geology/minerals.html>, accessed May 28, 2023.

Mutel, Cornelia F., and John C. Emerick

- 1992 *From Grassland to Glacier: The Natural History of Colorado and the Surrounding Region (Second Edition)*. Johnson Books, Boulder.

Osterkamp, Waite. R. and Thomas C. Gustavson

- 1987 Chapter 6, Great Plains: Introduction. In *Geomorphic Systems of North America*, edited by W. L. Graf. Centennial Special Volume, No. 2. Geological Society of America, Boulder.

Peterson, Roger Tory

- 1990 *Field Guide to Western Birds*. Houghton Mifflin Company, New York.

Scott, Glen R. and Carol Rein Shwayder

1993 *Historic Trail Map of the Greeley 1° x 2° Quadrangle, Colorado and Wyoming*. Geological Survey, Department of the Interior, Geologic Investigations Series I-2626, Denver.

Shaw, Charles E., and Sheldon Campbell

1974 *Snakes of the American West*. Alfred A. Knopf, New York.

Schweigert, Kurt P.

1998 *Historical Evaluation Western Area Power Administration Facilities Colorado, Wyoming, Nebraska, Utah*. Cultural Resources Consultant. On file, Western Area Power Administration, Loveland, Colorado.

Silkensen, Gregg

2016 *Colorado-Big Thompson Project*. Electronic document, <https://coloradoencyclopedia.org/article/colorado%E2%80%93big-thompson-project>, accessed May 28, 2023.

Simms, Steven R.

2008 *Ancient Peoples of the Great Basin and Colorado Plateau*. Left Coast Press, Walnut Creek.

Volk, R. W.

1972 The Denver Basin and Las Animas Arch. In *Geologic Atlas of the Rocky Mountain Region, United States of America*, edited by W. W. Mallory. Rocky Mountain Association of Geologists, Denver.

Weatherbase

2023 Monthly Weather Averages, Brush, Colorado. Electronic database, <https://weatherbase.com/weather/weather.php?s=31057&cityname=Brush-Colorado-United-States-of-America>, accessed July 3, 2023.

West, E.

1998 *The Contested Plains: Indians, Goldseekers, and the Rush to Colorado*. University of Kansas Press, Lawrence.

Wood, John J.

1967 *Archaeological Investigation in Northeastern Colorado Parts 1 and 2*. Doctoral Dissertation, University of Colorado-Boulder.

Yohe, R.M., II, and J.C. Woods

2002 *The First Idahoans: A Paleoindian Context for Idaho*. Idaho State Historical Society, Boise.

Zier, Christian J. and Stephen M. Kalasz

1999 *Colorado Prehistory: A Context for the Arkansas River Basin* (with contributions by Mary W. Painter, Mark Mitchell, Amy Holmes, and Michael McFaul). Colorado Council of Professional Archaeologists, Denver.

APPENDIX N: GLINT & GLARE ANALYSIS

To: Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

From: Ali Flake and Drew Timmis, Tetra Tech, Inc.

Date: August 23, 2023

Subject: Glint and Glare Analysis of the Fortress Solar Project in Morgan County, Colorado

At the request of Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC (collectively “Fortress Solar”) indirect subsidiaries of Aypa Power North American LLC (Aypa), Tetra Tech, Inc. (Tetra Tech) conducted a glint and glare analysis of the proposed Fortress Solar Project (Project) located in Morgan County, Colorado. The Project site occupies an approximately 4,259-acre area of privately-owned parcels (the “Target Property”). The Project site consists of undeveloped land and is bounded by US Route 34 followed by undeveloped land and a feed lot to the north; undeveloped land to the east; undeveloped land, County Road Q, and residential properties to the south; and undeveloped land, residential properties, and a substation to the west.

Topography throughout the Project site varies, ranging from approximately 4310 feet above mean sea level (amsl) in the northern portion of the Project site to approximately 4400 feet amsl in the southeastern portion of the Project site. The Brush Municipal Airport (7V5), located approximately one quarter mile northwest of the Project, is the closest airport to the Project.

This memorandum provides a description of the glint and glare anticipated from use of the Project site as a solar energy generating facility. Included are the Sandia glare analysis reports (Attachment A), and the Federal Aviation Administration (FAA) Notice Criteria Tool Report (Attachment B).

GLARE ANALYSIS METHOD

With growing numbers of solar energy systems being proposed and installed throughout the United States, the potential impact of glint (a momentary flash of bright light) and glare (a continuous source of bright light) from solar photovoltaic modules has come under scrutiny by aviation authorities. The FAA issued an Interim Policy (78 FR 63276) on October 23, 2013, describing methods for obtaining FAA review and approval of proposed solar arrays on airport property. These methods involved the use of the Sandia Laboratories Solar Glare Hazard Analysis Tool (SGHAT), a modeling/compliance analysis tool now licensed for public use within the ForgeSolar GlareGauge cloud software application. The SGHAT is considered to be an industry best practice for analysis of glare and glint related to solar energy generating facilities and is required by the FAA under 78 FR 63276 to measure ocular impacts for solar projects located on federally obligated airports and is recommended for projects located off federally obligated airports.

Sandia developed SGHAT v. 3.0, a web-based tool and methodology to evaluate potential glint/glare associated with solar energy installations. The validated tool provides a quantified assessment of when and where glare will occur, as well as information about potential ocular impacts. The calculations and methods are based on analyses, test data, a database of different photovoltaic module surfaces (e.g. anti-reflective

coating, texturing), and models developed over several years at Sandia. The results are presented in a simple easy-to-interpret plot that specifies when glare will occur throughout the year, with color indicating the potential ocular hazard (Sandia Laboratories, 2016).

Based on this background, Tetra Tech has utilized the SGHAT tool as licensed for use in ForgeSolar GlareGauge cloud software application for modeling and analysis. ForgeSolar GlareGauge with SGHAT modeling provides a quantified assessment of when and where glare will occur, as well as information about potential ocular impacts.

The SGHAT was utilized to evaluate the potential for glint and glare when driving along 1) proximal segments of County Road K/46, County Road N, County Road O, County Road Q, Heartland Expressway, Interstate 76, and US Route 34; and 2) 15 nearby locations selected to represent observer views at neighboring properties; and 3) the final approach paths for the Brush Municipal Airport (7V5). The analysis reports are included as Attachment A.

The FAA Notice Criteria Tool allows the user to determine if a proposed structure would require a formal submission to the FAA under CFR Title 14 Part 77.9 (Safe, Efficient Use, and Preservation of the Navigable Airspace). This online tool was utilized to determine if the proposed Project would require formal filing to the FAA. Based on the results of the FAA Notice Criteria Tool, the Project exceeds notice criteria; therefore, it is required for the Project to be formally filed with the FAA Obstruction Evaluation Group. The FAA Notice Criteria Tool Report is included as Attachment B.

The panels to be used on the proposed Project are smooth glass surface material with an anti-reflection coating (ARC), which is noted in the glare analysis. One of the selected suppliers of the proposed solar panels is Trina Solar. Trina Solar employs advanced technology, including an anti-reflective coating, to enhance the efficiency of their solar panels. The anti-reflective coating consists of intricate multi-layered materials designed to mitigate light reflection and glare on the panel’s surface. The anti-reflective coating serves as a pivotal element in augmenting the efficiency and performance of solar panels, while simultaneously resolving glare-related issues. The Project’s suppliers’ anti-reflective coatings are purposefully engineered to curtail light reflection, permitting a larger portion of sunlight to permeate the panel and reach the photovoltaic cells. Through the reduction of glare, these specialized coatings not only enhance visual comfort for individuals in proximity but also avert potential safety risks. Furthermore, the heightened light absorption culminates in amplified electricity generation, consequently elevating the efficiency and economic viability of large-scale solar facilities (Trina Solar 2023).

Three analyses were performed to simulate single axis tracking panels with a 55° maximum tracking angle, 10° resting angle, and 0.35 ground cover ratio (GCR). The analyses were conducted for a panel height of six feet above ground surface (centroid height) with applicable panel specifications. The panel orientation, location, and some specifications used in the analysis were based on the Project design as provided by Aypa. The input features used in the analyses are summarized in Table 1 and Table 2.

Table 1. Glare Analyses Input Features

Analysis No.	Racking Type	Module Orientation ¹	Tracking Maximum ² (degrees)	Resting Angle ³ (degrees)	Module Height ⁴ (feet)	OP Height ⁵ (feet)	Route Height ⁶ (feet)	ATCT	Flight Paths
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1	Tracking	East-facing	±55	10	6	6	5	-	-
2	Tracking	East-facing	±55	10	6	16	9	-	-
3	Tracking	East-facing	±55	10	6	-	-	-	2

1. PV Array Areas modeled as single axis tracking modules from east-facing in the morning hours to west-facing in the evening hours.
2. The module tilt varies through the day as they track the sun, the maximum tracking angle tilt is ±55 degrees east/west.
3. Angle of rotation of panels when sun is outside tracking range. Used to model backtracking. Panels will revert to the position described by this rotation angle at all times when the sun is outside the rotation range defined by the tracking maximum.
4. Average module centroid height above ground surface.
5. Height of observation point receptor: 6 feet represents an average first floor residential/commercial point of view and 16 feet represents an average second floor residential/commercial point of view.
6. Height of vehicular route receptor: 5 feet represents typical commuter car height and 9 feet represents typical semi-tractor-trailer truck views.

Table 2: Analysis 3 Federal Aviation Administration Input Features

Flight Path Name	Associated Airport	True Direction (degrees)	Threshold Crossing Height (feet)	Glide Path ¹ (degrees)	Height Above Ground (feet)
7V5-7	Brush Municipal Airport	83	50	3.0	-
7V5-25	Brush Municipal Airport	263	50	3.0	-

1. Angle of descent along final approach flight path.

The GlareGauge model does not consider obstacles (either man-made or natural) between the defined photovoltaic (PV) arrays and the receptors. ForgeSolar is updating their glare analysis tool and has provided a tool to model obstructions. The “Obstruction” component simulates obstacles and blocking geometries that may mitigate PV glare. These obstructions are modeled as multi-line paths as parallelograms with vertical sides that extend upward from ground elevation. These obstructions are assumed to be opaque, with incoming sunlight and emanating glare reflections completely mitigated if they intersect with the obstruction face. No obstructions were used for the three analyses.

GLARE ANALYSIS RESULTS

Analyses 1 – 1st Fortress Receptors

Analysis 1 analyzed PV Array 1 through PV Array 19 for 15 first-Fortress receptors (OP-1 through OP-15) and seven proximal route receptors along segments of County Road K/46, County Road N, County Road O, County Road Q, Heartland Expressway, Interstate 76, and US Route 34 from the height of a standard commuter vehicle. The SGHAT GlareGauge modeled the results for the Project. No glare was predicted.

Analyses 2 – 2nd Fortress Receptors

Analysis 2 analyzed PV Array 1 through PV Array 19 for four second-Fortress receptors (OP-12 through OP-15) and seven proximal route receptors along segments of County Road K/46, County Road N, County Road O, County Road Q, Heartland Expressway, Interstate 76, and US Route 34 from the height of a typical tractor trailer. Only four second Fortress OPs were analyzed because of the limited number of second-Fortress structures in the area. The SGHAT GlareGauge modeled the results for the Project. No glare was predicted.

Analysis 3 – FAA 2-Mile Flight Paths

The SGHAT GlareGauge modeled the flight path results for the Project. For the flight path analyses, a typical 30-degree maximum downward viewing angle and 50-degree maximum azimuthal viewing angle from the aircraft cockpit were included where exact values could not be confirmed based on public information. No glare was predicted.

SUMMARY

The Project Site layout was modeled on SGHAT GlareGauge in order to evaluate the potential extent of any glint and glare the proposed Project may have upon nearby points of observation, vehicle routes, and airports. Three analyses were performed: the analyses represented a single-axis tracking with 55° maximum tracking angle, 10° resting angle, 0.35 GCR, and panel specifications of smooth glass with ARC. No glare was predicted for Analysis 1, Analysis 2, or Analysis 3.

The GlareGauge model does not account for varying ambient conditions (i.e., cloudy days, precipitation), atmospheric attenuation, screening due to existing topography not located within the defined array layouts. As such, the predicted results are considered to be conservative. Lastly, based on the results of the FAA Notice Criteria Tool, the Project exceeds notice criteria; therefore, it is required for the Project to be formally filed with the FAA Obstruction Evaluation Group at least 45 days prior to construction.

REFERENCES

Federal Aviation Administration. 2010. CFR Title 14 Part 77.9 Notice of Proposed Construction or Alteration Requiring Notice.

Federal Aviation Administration. 2010. Technical Guidance for Evaluating Selected Solar Technologies on Airports.

Interim Policy, FAA Review of Solar Energy System Projects on Federally Obligated Airports. 2013. 78 FR 63276.

Sandia Solar Glare Hazard Analysis Tool, GlareGauge hosted by ForgeSolar. 2023. Accessed August 2023 online at <https://www.forgesolar.com/>.

Trina Solar. 2023. Accessed August 2023 online at <https://www.trinasolar.com/>.

Attachment A
Glare Analysis Reports

FORGESOLAR GLARE ANALYSIS

Project: **Story Solar**

Site configuration: **Analysis 1 - 1st Story**

Client: Aypa Power

Created 22 Aug, 2023

Updated 23 Aug, 2023

Time-step 1 minute

Timezone offset UTC-7

Minimum sun altitude 0.0 deg

DNI peaks at 1,000.0 W/m²

Category 5 MW to 10 MW

Site ID 98403.17068

Ocular transmission coefficient 0.5

Pupil diameter 0.002 m

Eye focal length 0.017 m

Sun subtended angle 9.3 mrad

PV analysis methodology V2



Summary of Results No glare predicted

PV Array	Tilt °	Orient °	Annual Green Glare		Annual Yellow Glare		Energy kWh
			min	hr	min	hr	
PV array 1	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 10	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 11	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 12	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 13	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 14	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 15	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 16	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 17	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 18	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 19	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 2	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 3	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 4	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 5	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 6	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 7	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 8	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 9	SA tracking	SA tracking	0	0.0	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

Component Data

PV Arrays

Name: PV array 1
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0°
Max tracking angle: 55.0°
Resting angle: 10.0°
Ground Coverage Ratio: 0.35
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.263586	-103.564678	4295.91	6.00	4301.91
2	40.258422	-103.564714	4321.92	6.00	4327.92
3	40.258403	-103.561206	4336.84	6.00	4342.84
4	40.258403	-103.561206	4336.84	6.00	4342.84
5	40.258403	-103.561206	4336.84	6.00	4342.84
6	40.258403	-103.561206	4328.10	6.00	4334.10
7	40.255619	-103.561208	4340.67	6.00	4346.67
8	40.255611	-103.547783	4341.10	6.00	4347.10
9	40.255283	-103.547747	4340.48	6.00	4346.48
10	40.255281	-103.547089	4342.95	6.00	4348.95
11	40.255975	-103.546978	4339.71	6.00	4345.71
12	40.255975	-103.546978	4339.71	6.00	4345.71
13	40.255975	-103.546978	4339.71	6.00	4345.71
14	40.260786	-103.546986	4330.14	6.00	4336.14
15	40.262555	-103.557790	4329.16	6.00	4335.16

Name: PV array 10
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0°
Max tracking angle: 55.0°
Resting angle: 10.0°
Ground Coverage Ratio: 0.35
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.254589	-103.523625	4362.52	6.00	4368.52
2	40.243188	-103.523465	4376.40	6.00	4382.40
3	40.250761	-103.515578	4376.96	6.00	4382.96
4	40.253267	-103.514442	4365.67	6.00	4371.67
5	40.253936	-103.514228	4361.43	6.00	4367.43
6	40.254261	-103.514231	4357.35	6.00	4363.35
7	40.254619	-103.514683	4364.35	6.00	4370.35

Name: PV array 11
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0°
Max tracking angle: 55.0°
Resting angle: 10.0°
Ground Coverage Ratio: 0.35
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.240711	-103.525269	4380.68	6.00	4386.68
2	40.234531	-103.531753	4396.68	6.00	4402.68
3	40.234189	-103.531739	4393.54	6.00	4399.54
4	40.234214	-103.521819	4391.74	6.00	4397.74
5	40.234517	-103.521833	4391.92	6.00	4397.92
6	40.234525	-103.511483	4390.35	6.00	4396.35
7	40.240692	-103.511450	4388.48	6.00	4394.48

Name: PV array 12

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

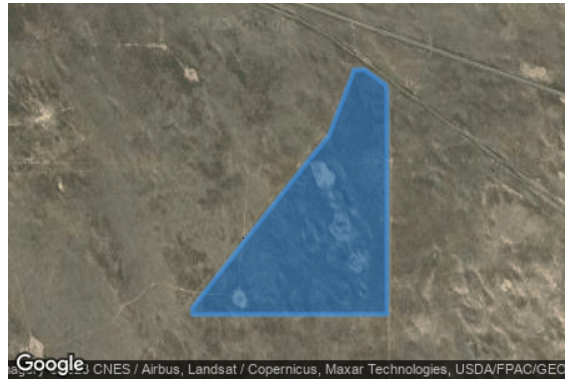
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.253600	-103.513664	4364.74	6.00	4370.74
2	40.253139	-103.513869	4366.29	6.00	4372.29
3	40.250128	-103.515403	4378.62	6.00	4384.62
4	40.248989	-103.516647	4376.03	6.00	4382.03
5	40.244853	-103.520961	4381.81	6.00	4387.81
6	40.241153	-103.524761	4374.50	6.00	4380.50
7	40.240814	-103.524747	4374.65	6.00	4380.65
8	40.240822	-103.511372	4386.61	6.00	4392.61
9	40.252461	-103.511378	4353.37	6.00	4359.37
10	40.252806	-103.511461	4354.60	6.00	4360.60
11	40.253617	-103.512922	4357.86	6.00	4363.86

Name: PV array 13

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.252117	-103.510794	4348.59	6.00	4354.59
2	40.233861	-103.510803	4377.86	6.00	4383.86
3	40.233864	-103.509739	4363.21	6.00	4369.21
4	40.251442	-103.509494	4354.44	6.00	4360.44
5	40.251800	-103.509742	4354.81	6.00	4360.81
6	40.252114	-103.510361	4351.64	6.00	4357.64

Name: PV array 14

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

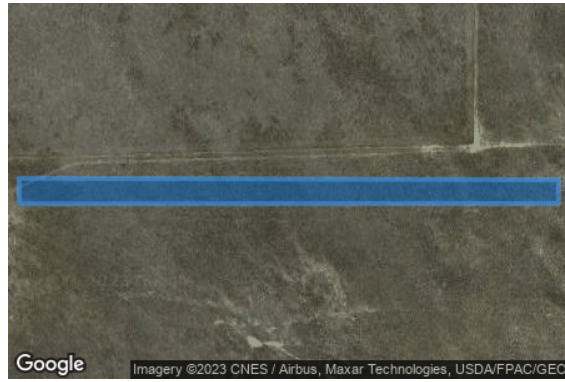
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.233850	-103.519011	4390.45	6.00	4396.45
2	40.233514	-103.519003	4389.85	6.00	4395.85
3	40.233519	-103.509747	4392.73	6.00	4398.73
4	40.233829	-103.509737	4391.13	6.00	4397.13

Name: PV array 15

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

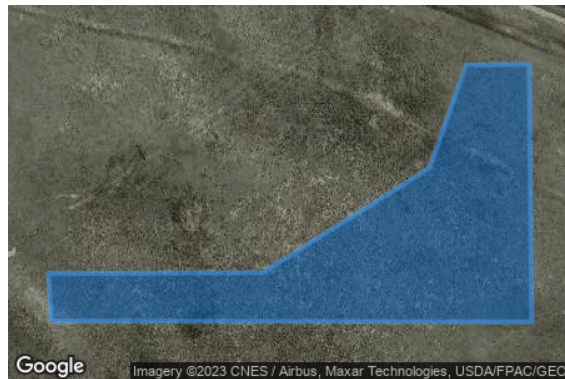
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.254919	-103.522908	4377.94	6.00	4383.94
2	40.254609	-103.522882	4369.76	6.00	4375.76
3	40.254603	-103.518753	4353.11	6.00	4359.11
4	40.256286	-103.518775	4351.67	6.00	4357.67
5	40.256281	-103.519317	4354.66	6.00	4360.66
6	40.255608	-103.519633	4368.49	6.00	4374.49
7	40.255608	-103.519633	4368.49	6.00	4374.49
8	40.255608	-103.519633	4368.49	6.00	4374.49
9	40.255608	-103.519633	4368.49	6.00	4374.49
10	40.254925	-103.521064	4378.42	6.00	4384.42

Name: PV array 16

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

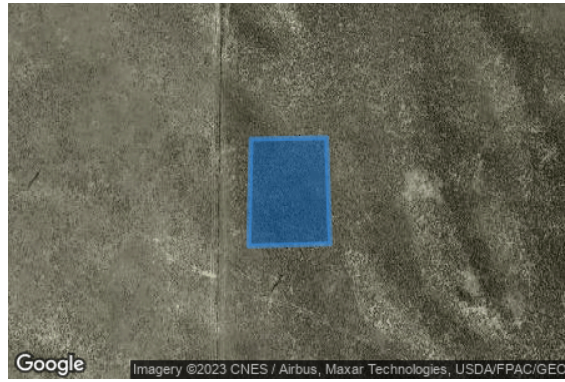
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.251122	-103.584508	4347.45	6.00	4353.45
2	40.250422	-103.584528	4346.94	6.00	4352.94
3	40.250436	-103.583828	4364.95	6.00	4370.95
4	40.251131	-103.583858	4361.54	6.00	4367.54

Name: PV array 17

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

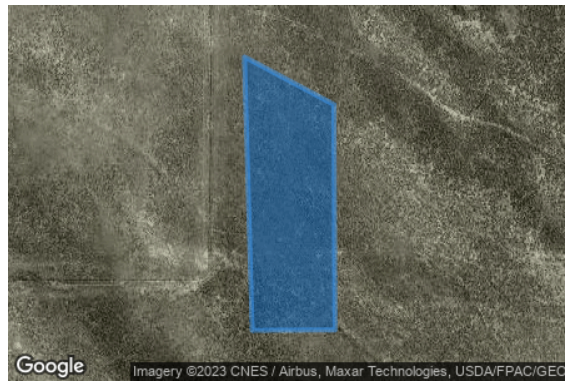
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



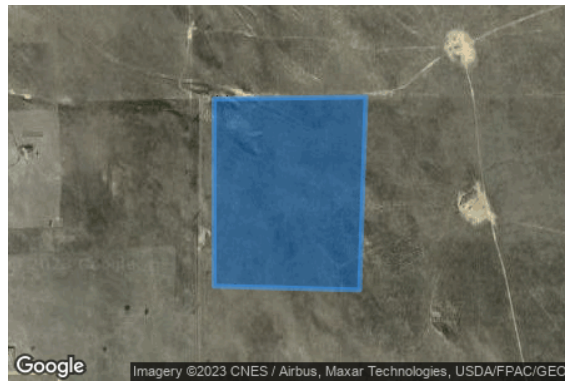
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.249783	-103.584511	4313.33	6.00	4319.33
2	40.247997	-103.584444	4307.90	6.00	4313.90
3	40.248000	-103.583733	4333.54	6.00	4339.54
4	40.249472	-103.583742	4336.20	6.00	4342.20

Name: PV array 18
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0°
Max tracking angle: 55.0°
Resting angle: 10.0°
Ground Coverage Ratio: 0.35
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.239411	-103.589034	4365.75	6.00	4371.75
2	40.233842	-103.589013	4361.50	6.00	4367.50
3	40.233875	-103.584228	4365.04	6.00	4371.04
4	40.239330	-103.584056	4360.44	6.00	4366.44

Name: PV array 19
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0°
Max tracking angle: 55.0°
Resting angle: 10.0°
Ground Coverage Ratio: 0.35
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.244309	-103.589034	4345.52	6.00	4351.52
2	40.239411	-103.589034	4365.75	6.00	4371.75
3	40.239313	-103.584035	4360.61	6.00	4366.61
4	40.244358	-103.583820	4352.30	6.00	4358.30

Name: PV array 2

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

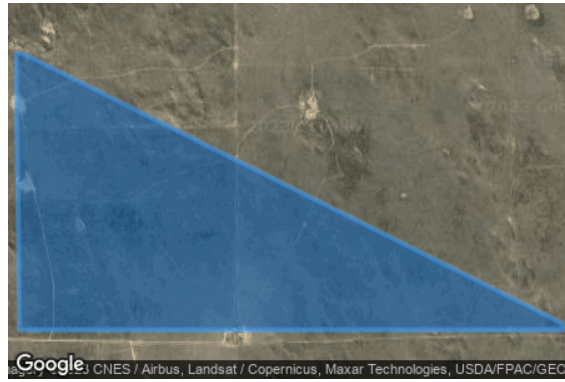
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.248311	-103.580731	4346.27	6.00	4352.27
2	40.233859	-103.580490	4370.99	6.00	4376.99
3	40.233858	-103.543189	4396.06	6.00	4402.06
4	40.234200	-103.543197	4397.73	6.00	4403.73
5	40.248328	-103.580339	4350.14	6.00	4356.14

Name: PV array 3

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

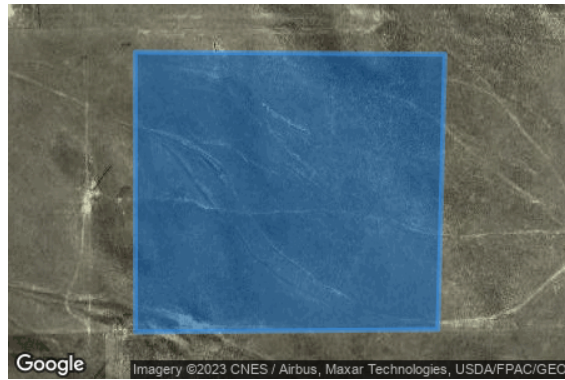
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.247991	-103.589029	4313.69	6.00	4319.69
2	40.247962	-103.583708	4363.20	6.00	4369.20
3	40.244355	-103.583826	4352.23	6.00	4358.23
4	40.244322	-103.589024	4345.30	6.00	4351.30

Name: PV array 4

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.260744	-103.546039	4321.20	6.00	4327.20
2	40.260394	-103.546353	4325.78	6.00	4331.78
3	40.255267	-103.546417	4342.64	6.00	4348.64
4	40.255281	-103.527317	4369.27	6.00	4375.27
5	40.254947	-103.527311	4355.34	6.00	4361.34
6	40.254944	-103.524003	4356.80	6.00	4362.80
7	40.256303	-103.521300	4358.31	6.00	4364.31
8	40.256964	-103.521325	4354.36	6.00	4360.36
9	40.257303	-103.522967	4350.69	6.00	4356.69
10	40.258772	-103.533336	4344.82	6.00	4350.82
11	40.259447	-103.536642	4335.64	6.00	4341.64
12	40.260769	-103.545031	4328.21	6.00	4334.21

Name: PV array 5

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.246308	-103.583741	4366.12	6.00	4372.12
2	40.233873	-103.584200	4365.26	6.00	4371.26
3	40.233858	-103.580508	4371.03	6.00	4377.03
4	40.246283	-103.580711	4350.77	6.00	4356.77

Name: PV array 6

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

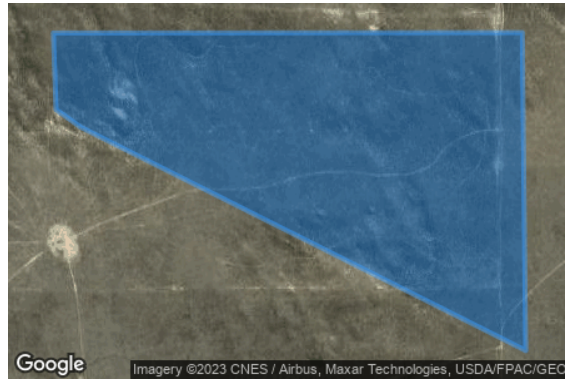
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.251122	-103.580914	4327.01	6.00	4333.01
2	40.249119	-103.580819	4341.09	6.00	4347.09
3	40.248661	-103.579978	4350.34	6.00	4356.34
4	40.242822	-103.564681	4354.83	6.00	4360.83
5	40.251131	-103.564797	4349.99	6.00	4355.99

Name: PV array 7

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.253939	-103.564797	4329.66	6.00	4335.66
2	40.242810	-103.564653	4362.61	6.00	4368.61
3	40.235872	-103.546400	4390.73	6.00	4396.73
4	40.253608	-103.546636	4346.92	6.00	4352.92
5	40.253606	-103.549569	4348.48	6.00	4354.48
6	40.253942	-103.549553	4346.05	6.00	4352.05

Name: PV array 8

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.254606	-103.546408	4344.42	6.00	4350.42
2	40.253928	-103.546625	4345.18	6.00	4351.18
3	40.235862	-103.546374	4391.61	6.00	4397.61
4	40.233828	-103.541075	4402.07	6.00	4408.07
5	40.233869	-103.535900	4398.11	6.00	4404.11
6	40.234192	-103.535900	4396.68	6.00	4402.68
7	40.234194	-103.532817	4402.62	6.00	4408.62
8	40.254603	-103.531386	4362.47	6.00	4368.47

Name: PV array 9

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.254267	-103.531378	4363.46	6.00	4369.46
2	40.234190	-103.532791	4402.38	6.00	4408.38
3	40.243156	-103.523494	4376.53	6.00	4382.53
4	40.254269	-103.523647	4361.10	6.00	4367.10

Route Receptors

Name: County Road K and 46

Path type: Two-way

Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.146844	-103.529135	4470.90	5.00	4475.90
2	40.146745	-103.494073	4517.64	5.00	4522.64
3	40.146909	-103.445279	4504.48	5.00	4509.48
4	40.147106	-103.415968	4441.16	5.00	4446.16

Name: County Road N

Path type: Two-way

Observer view angle: 50.0°



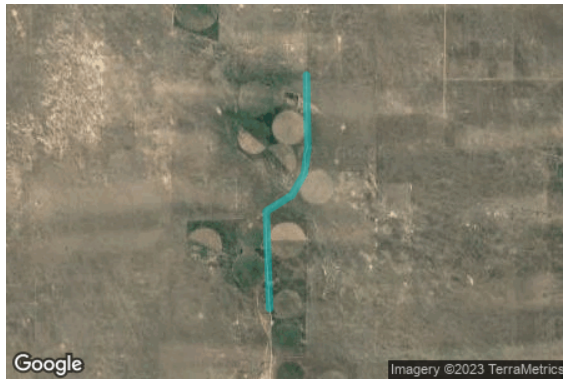
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.190049	-103.585639	4311.45	5.00	4316.45
2	40.190442	-103.539119	4458.78	5.00	4463.78

Name: County Road O
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.233505	-103.603901	4258.53	5.00	4263.53
2	40.233177	-103.572702	4382.26	5.00	4387.26

Name: County Road Q
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.235160	-103.435546	4402.20	5.00	4407.20
2	40.219630	-103.435202	4361.67	5.00	4366.67
3	40.214517	-103.436146	4360.21	5.00	4365.21
4	40.209929	-103.439580	4364.36	5.00	4369.36
5	40.206586	-103.446618	4359.31	5.00	4364.31
6	40.186205	-103.445674	4399.22	5.00	4404.22

Name: Heartland Expy
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.258096	-103.600456	4228.00	5.00	4233.00
2	40.256900	-103.599898	4248.92	5.00	4253.92
3	40.255525	-103.599791	4263.70	5.00	4268.70
4	40.254280	-103.600199	4266.88	5.00	4271.88
5	40.249498	-103.603503	4279.59	5.00	4284.59
6	40.247800	-103.604064	4275.24	5.00	4280.24
7	40.231656	-103.603893	4252.70	5.00	4257.70
8	40.230411	-103.603528	4256.10	5.00	4261.10
9	40.225693	-103.599751	4272.12	5.00	4277.12

Name: Interstate 76
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.304430	-103.521993	4221.97	5.00	4226.97
2	40.276475	-103.570015	4266.15	5.00	4271.15
3	40.271367	-103.584220	4238.92	5.00	4243.92
4	40.268927	-103.598210	4229.10	5.00	4234.10
5	40.268420	-103.652927	4242.65	5.00	4247.65

Name: US Route 34
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.262005	-103.589205	4271.19	5.00	4276.19
2	40.264404	-103.570118	4299.77	5.00	4304.77
3	40.264568	-103.566964	4309.39	5.00	4314.39
4	40.264406	-103.564003	4314.42	5.00	4319.42
5	40.257365	-103.518642	4352.48	5.00	4357.48
6	40.247048	-103.479546	4330.03	5.00	4335.03

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
OP 1	1	40.233018	-103.588563	4369.94	6.00
OP 2	2	40.242115	-103.605415	4264.12	6.00
OP 3	3	40.246792	-103.598704	4292.87	6.00
OP 4	4	40.240030	-103.450457	4340.24	6.00
OP 5	5	40.227447	-103.436637	4368.44	6.00
OP 6	6	40.198925	-103.447405	4371.93	6.00
OP 7	7	40.174935	-103.444369	4404.78	6.00
OP 8	8	40.146529	-103.479584	4529.56	6.00
OP 9	9	40.190669	-103.535684	4464.16	6.00
OP 10	10	40.208124	-103.509476	4429.66	6.00
OP 11	11	40.207988	-103.579660	4428.93	6.00
OP 12	12	40.261598	-103.542672	4328.89	6.00
OP 13	13	40.269179	-103.591715	4225.71	6.00
OP 14	14	40.257441	-103.600873	4238.74	6.00
OP 15	15	40.222583	-103.623255	4261.05	6.00

Glare Analysis Results

Summary of Results No glare predicted

PV Array	Tilt °	Orient °	Annual Green Glare		Annual Yellow Glare		Energy kWh
			min	hr	min	hr	
PV array 1	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 10	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 11	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 12	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 13	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 14	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 15	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 16	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 17	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 18	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 19	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 2	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 3	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 4	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 5	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 6	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 7	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 8	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 9	SA tracking	SA tracking	0	0.0	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

County Road K and 46	0	0.0	0	0.0
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Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV: PV array 1 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 1 and Route: County Road K and 46

No glare found

PV array 1 and Route: County Road N

No glare found

PV array 1 and Route: County Road O

No glare found

PV array 1 and Route: County Road Q

No glare found

PV array 1 and Route: Heartland Expy

No glare found

PV array 1 and Route: Interstate 76

No glare found

PV array 1 and Route: US Route 34

No glare found

PV array 1 and OP 1

No glare found

PV array 1 and OP 2

No glare found

PV array 1 and OP 3

No glare found

PV array 1 and OP 4

No glare found

PV array 1 and OP 5

No glare found

PV array 1 and OP 6

No glare found

PV array 1 and OP 7

No glare found

PV array 1 and OP 8

No glare found

PV array 1 and OP 9

No glare found

PV array 1 and OP 10

No glare found

PV array 1 and OP 11

No glare found

PV array 1 and OP 12

No glare found

PV array 1 and OP 13

No glare found

PV array 1 and OP 14

No glare found

PV array 1 and OP 15

No glare found

PV: PV array 10 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 10 and Route: County Road K and 46

No glare found

PV array 10 and Route: County Road N

No glare found

PV array 10 and Route: County Road O

No glare found

PV array 10 and Route: County Road Q

No glare found

PV array 10 and Route: Heartland Expy

No glare found

PV array 10 and Route: Interstate 76

No glare found

PV array 10 and Route: US Route 34

No glare found

PV array 10 and OP 1

No glare found

PV array 10 and OP 2

No glare found

PV array 10 and OP 3

No glare found

PV array 10 and OP 4

No glare found

PV array 10 and OP 5

No glare found

PV array 10 and OP 6

No glare found

PV array 10 and OP 7

No glare found

PV array 10 and OP 8

No glare found

PV array 10 and OP 9

No glare found

PV array 10 and OP 10

No glare found

PV array 10 and OP 11

No glare found

PV array 10 and OP 12

No glare found

PV array 10 and OP 13

No glare found

PV array 10 and OP 14

No glare found

PV array 10 and OP 15

No glare found

PV: PV array 11 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 11 and Route: County Road K and 46

No glare found

PV array 11 and Route: County Road N

No glare found

PV array 11 and Route: County Road O

No glare found

PV array 11 and Route: County Road Q

No glare found

PV array 11 and Route: Heartland Expy

No glare found

PV array 11 and Route: Interstate 76

No glare found

PV array 11 and Route: US Route 34

No glare found

PV array 11 and OP 1

No glare found

PV array 11 and OP 2

No glare found

PV array 11 and OP 3

No glare found

PV array 11 and OP 4

No glare found

PV array 11 and OP 5

No glare found

PV array 11 and OP 6

No glare found

PV array 11 and OP 7

No glare found

PV array 11 and OP 8

No glare found

PV array 11 and OP 9

No glare found

PV array 11 and OP 10

No glare found

PV array 11 and OP 11

No glare found

PV array 11 and OP 12

No glare found

PV array 11 and OP 13

No glare found

PV array 11 and OP 14

No glare found

PV array 11 and OP 15

No glare found

PV: PV array 12 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 12 and Route: County Road K and 46

No glare found

PV array 12 and Route: County Road N

No glare found

PV array 12 and Route: County Road O

No glare found

PV array 12 and Route: County Road Q

No glare found

PV array 12 and Route: Heartland Expy

No glare found

PV array 12 and Route: Interstate 76

No glare found

PV array 12 and Route: US Route 34

No glare found

PV array 12 and OP 1

No glare found

PV array 12 and OP 2

No glare found

PV array 12 and OP 3

No glare found

PV array 12 and OP 4

No glare found

PV array 12 and OP 5

No glare found

PV array 12 and OP 6

No glare found

PV array 12 and OP 7

No glare found

PV array 12 and OP 8

No glare found

PV array 12 and OP 9

No glare found

PV array 12 and OP 10

No glare found

PV array 12 and OP 11

No glare found

PV array 12 and OP 12

No glare found

PV array 12 and OP 13

No glare found

PV array 12 and OP 14

No glare found

PV array 12 and OP 15

No glare found

PV: PV array 13 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 13 and Route: County Road K and 46

No glare found

PV array 13 and Route: County Road N

No glare found

PV array 13 and Route: County Road O

No glare found

PV array 13 and Route: County Road Q

No glare found

PV array 13 and Route: Heartland Expy

No glare found

PV array 13 and Route: Interstate 76

No glare found

PV array 13 and Route: US Route 34

No glare found

PV array 13 and OP 1

No glare found

PV array 13 and OP 2

No glare found

PV array 13 and OP 3

No glare found

PV array 13 and OP 4

No glare found

PV array 13 and OP 5

No glare found

PV array 13 and OP 6

No glare found

PV array 13 and OP 7

No glare found

PV array 13 and OP 8

No glare found

PV array 13 and OP 9

No glare found

PV array 13 and OP 10

No glare found

PV array 13 and OP 11

No glare found

PV array 13 and OP 12

No glare found

PV array 13 and OP 13

No glare found

PV array 13 and OP 14

No glare found

PV array 13 and OP 15

No glare found

PV: PV array 14 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 14 and Route: County Road K and 46

No glare found

PV array 14 and Route: County Road N

No glare found

PV array 14 and Route: County Road O

No glare found

PV array 14 and Route: County Road Q

No glare found

PV array 14 and Route: Heartland Expy

No glare found

PV array 14 and Route: Interstate 76

No glare found

PV array 14 and Route: US Route 34

No glare found

PV array 14 and OP 1

No glare found

PV array 14 and OP 2

No glare found

PV array 14 and OP 3

No glare found

PV array 14 and OP 4

No glare found

PV array 14 and OP 5

No glare found

PV array 14 and OP 6

No glare found

PV array 14 and OP 7

No glare found

PV array 14 and OP 8

No glare found

PV array 14 and OP 9

No glare found

PV array 14 and OP 10

No glare found

PV array 14 and OP 11

No glare found

PV array 14 and OP 12

No glare found

PV array 14 and OP 13

No glare found

PV array 14 and OP 14

No glare found

PV array 14 and OP 15

No glare found

PV: PV array 15 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 15 and Route: County Road K and 46

No glare found

PV array 15 and Route: County Road N

No glare found

PV array 15 and Route: County Road O

No glare found

PV array 15 and Route: County Road Q

No glare found

PV array 15 and Route: Heartland Expy

No glare found

PV array 15 and Route: Interstate 76

No glare found

PV array 15 and Route: US Route 34

No glare found

PV array 15 and OP 1

No glare found

PV array 15 and OP 2

No glare found

PV array 15 and OP 3

No glare found

PV array 15 and OP 4

No glare found

PV array 15 and OP 5

No glare found

PV array 15 and OP 6

No glare found

PV array 15 and OP 7

No glare found

PV array 15 and OP 8

No glare found

PV array 15 and OP 9

No glare found

PV array 15 and OP 10

No glare found

PV array 15 and OP 11

No glare found

PV array 15 and OP 12

No glare found

PV array 15 and OP 13

No glare found

PV array 15 and OP 14

No glare found

PV array 15 and OP 15

No glare found

PV: PV array 16 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 16 and Route: County Road K and 46

No glare found

PV array 16 and Route: County Road N

No glare found

PV array 16 and Route: County Road O

No glare found

PV array 16 and Route: County Road Q

No glare found

PV array 16 and Route: Heartland Expy

No glare found

PV array 16 and Route: Interstate 76

No glare found

PV array 16 and Route: US Route 34

No glare found

PV array 16 and OP 1

No glare found

PV array 16 and OP 2

No glare found

PV array 16 and OP 3

No glare found

PV array 16 and OP 4

No glare found

PV array 16 and OP 5

No glare found

PV array 16 and OP 6

No glare found

PV array 16 and OP 7

No glare found

PV array 16 and OP 8

No glare found

PV array 16 and OP 9

No glare found

PV array 16 and OP 10

No glare found

PV array 16 and OP 11

No glare found

PV array 16 and OP 12

No glare found

PV array 16 and OP 13

No glare found

PV array 16 and OP 14

No glare found

PV array 16 and OP 15

No glare found

PV: PV array 17 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 17 and Route: County Road K and 46

No glare found

PV array 17 and Route: County Road N

No glare found

PV array 17 and Route: County Road O

No glare found

PV array 17 and Route: County Road Q

No glare found

PV array 17 and Route: Heartland Expy

No glare found

PV array 17 and Route: Interstate 76

No glare found

PV array 17 and Route: US Route 34

No glare found

PV array 17 and OP 1

No glare found

PV array 17 and OP 2

No glare found

PV array 17 and OP 3

No glare found

PV array 17 and OP 4

No glare found

PV array 17 and OP 5

No glare found

PV array 17 and OP 6

No glare found

PV array 17 and OP 7

No glare found

PV array 17 and OP 8

No glare found

PV array 17 and OP 9

No glare found

PV array 17 and OP 10

No glare found

PV array 17 and OP 11

No glare found

PV array 17 and OP 12

No glare found

PV array 17 and OP 13

No glare found

PV array 17 and OP 14

No glare found

PV array 17 and OP 15

No glare found

PV: PV array 18 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 18 and Route: County Road K and 46

No glare found

PV array 18 and Route: County Road N

No glare found

PV array 18 and Route: County Road O

No glare found

PV array 18 and Route: County Road Q

No glare found

PV array 18 and Route: Heartland Expy

No glare found

PV array 18 and Route: Interstate 76

No glare found

PV array 18 and Route: US Route 34

No glare found

PV array 18 and OP 1

No glare found

PV array 18 and OP 2

No glare found

PV array 18 and OP 3

No glare found

PV array 18 and OP 4

No glare found

PV array 18 and OP 5

No glare found

PV array 18 and OP 6

No glare found

PV array 18 and OP 7

No glare found

PV array 18 and OP 8

No glare found

PV array 18 and OP 9

No glare found

PV array 18 and OP 10

No glare found

PV array 18 and OP 11

No glare found

PV array 18 and OP 12

No glare found

PV array 18 and OP 13

No glare found

PV array 18 and OP 14

No glare found

PV array 18 and OP 15

No glare found

PV: PV array 19 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 19 and Route: County Road K and 46

No glare found

PV array 19 and Route: County Road N

No glare found

PV array 19 and Route: County Road O

No glare found

PV array 19 and Route: County Road Q

No glare found

PV array 19 and Route: Heartland Expy

No glare found

PV array 19 and Route: Interstate 76

No glare found

PV array 19 and Route: US Route 34

No glare found

PV array 19 and OP 1

No glare found

PV array 19 and OP 2

No glare found

PV array 19 and OP 3

No glare found

PV array 19 and OP 4

No glare found

PV array 19 and OP 5

No glare found

PV array 19 and OP 6

No glare found

PV array 19 and OP 7

No glare found

PV array 19 and OP 8

No glare found

PV array 19 and OP 9

No glare found

PV array 19 and OP 10

No glare found

PV array 19 and OP 11

No glare found

PV array 19 and OP 12

No glare found

PV array 19 and OP 13

No glare found

PV array 19 and OP 14

No glare found

PV array 19 and OP 15

No glare found

PV: PV array 2 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 2 and Route: County Road K and 46

No glare found

PV array 2 and Route: County Road N

No glare found

PV array 2 and Route: County Road O

No glare found

PV array 2 and Route: County Road Q

No glare found

PV array 2 and Route: Heartland Expy

No glare found

PV array 2 and Route: Interstate 76

No glare found

PV array 2 and Route: US Route 34

No glare found

PV array 2 and OP 1

No glare found

PV array 2 and OP 2

No glare found

PV array 2 and OP 3

No glare found

PV array 2 and OP 4

No glare found

PV array 2 and OP 5

No glare found

PV array 2 and OP 6

No glare found

PV array 2 and OP 7

No glare found

PV array 2 and OP 8

No glare found

PV array 2 and OP 9

No glare found

PV array 2 and OP 10

No glare found

PV array 2 and OP 11

No glare found

PV array 2 and OP 12

No glare found

PV array 2 and OP 13

No glare found

PV array 2 and OP 14

No glare found

PV array 2 and OP 15

No glare found

PV: PV array 3 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 3 and Route: County Road K and 46

No glare found

PV array 3 and Route: County Road N

No glare found

PV array 3 and Route: County Road O

No glare found

PV array 3 and Route: County Road Q

No glare found

PV array 3 and Route: Heartland Expy

No glare found

PV array 3 and Route: Interstate 76

No glare found

PV array 3 and Route: US Route 34

No glare found

PV array 3 and OP 1

No glare found

PV array 3 and OP 2

No glare found

PV array 3 and OP 3

No glare found

PV array 3 and OP 4

No glare found

PV array 3 and OP 5

No glare found

PV array 3 and OP 6

No glare found

PV array 3 and OP 7

No glare found

PV array 3 and OP 8

No glare found

PV array 3 and OP 9

No glare found

PV array 3 and OP 10

No glare found

PV array 3 and OP 11

No glare found

PV array 3 and OP 12

No glare found

PV array 3 and OP 13

No glare found

PV array 3 and OP 14

No glare found

PV array 3 and OP 15

No glare found

PV: PV array 4 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 4 and Route: County Road K and 46

No glare found

PV array 4 and Route: County Road N

No glare found

PV array 4 and Route: County Road O

No glare found

PV array 4 and Route: County Road Q

No glare found

PV array 4 and Route: Heartland Expy

No glare found

PV array 4 and Route: Interstate 76

No glare found

PV array 4 and Route: US Route 34

No glare found

PV array 4 and OP 1

No glare found

PV array 4 and OP 2

No glare found

PV array 4 and OP 3

No glare found

PV array 4 and OP 4

No glare found

PV array 4 and OP 5

No glare found

PV array 4 and OP 6

No glare found

PV array 4 and OP 7

No glare found

PV array 4 and OP 8

No glare found

PV array 4 and OP 9

No glare found

PV array 4 and OP 10

No glare found

PV array 4 and OP 11

No glare found

PV array 4 and OP 12

No glare found

PV array 4 and OP 13

No glare found

PV array 4 and OP 14

No glare found

PV array 4 and OP 15

No glare found

PV: PV array 5 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 5 and Route: County Road K and 46

No glare found

PV array 5 and Route: County Road N

No glare found

PV array 5 and Route: County Road O

No glare found

PV array 5 and Route: County Road Q

No glare found

PV array 5 and Route: Heartland Expy

No glare found

PV array 5 and Route: Interstate 76

No glare found

PV array 5 and Route: US Route 34

No glare found

PV array 5 and OP 1

No glare found

PV array 5 and OP 2

No glare found

PV array 5 and OP 3

No glare found

PV array 5 and OP 4

No glare found

PV array 5 and OP 5

No glare found

PV array 5 and OP 6

No glare found

PV array 5 and OP 7

No glare found

PV array 5 and OP 8

No glare found

PV array 5 and OP 9

No glare found

PV array 5 and OP 10

No glare found

PV array 5 and OP 11

No glare found

PV array 5 and OP 12

No glare found

PV array 5 and OP 13

No glare found

PV array 5 and OP 14

No glare found

PV array 5 and OP 15

No glare found

PV: PV array 6 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 6 and Route: County Road K and 46

No glare found

PV array 6 and Route: County Road N

No glare found

PV array 6 and Route: County Road O

No glare found

PV array 6 and Route: County Road Q

No glare found

PV array 6 and Route: Heartland Expy

No glare found

PV array 6 and Route: Interstate 76

No glare found

PV array 6 and Route: US Route 34

No glare found

PV array 6 and OP 1

No glare found

PV array 6 and OP 2

No glare found

PV array 6 and OP 3

No glare found

PV array 6 and OP 4

No glare found

PV array 6 and OP 5

No glare found

PV array 6 and OP 6

No glare found

PV array 6 and OP 7

No glare found

PV array 6 and OP 8

No glare found

PV array 6 and OP 9

No glare found

PV array 6 and OP 10

No glare found

PV array 6 and OP 11

No glare found

PV array 6 and OP 12

No glare found

PV array 6 and OP 13

No glare found

PV array 6 and OP 14

No glare found

PV array 6 and OP 15

No glare found

PV: PV array 7 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 7 and Route: County Road K and 46

No glare found

PV array 7 and Route: County Road N

No glare found

PV array 7 and Route: County Road O

No glare found

PV array 7 and Route: County Road Q

No glare found

PV array 7 and Route: Heartland Expy

No glare found

PV array 7 and Route: Interstate 76

No glare found

PV array 7 and Route: US Route 34

No glare found

PV array 7 and OP 1

No glare found

PV array 7 and OP 2

No glare found

PV array 7 and OP 3

No glare found

PV array 7 and OP 4

No glare found

PV array 7 and OP 5

No glare found

PV array 7 and OP 6

No glare found

PV array 7 and OP 7

No glare found

PV array 7 and OP 8

No glare found

PV array 7 and OP 9

No glare found

PV array 7 and OP 10

No glare found

PV array 7 and OP 11

No glare found

PV array 7 and OP 12

No glare found

PV array 7 and OP 13

No glare found

PV array 7 and OP 14

No glare found

PV array 7 and OP 15

No glare found

PV: PV array 8 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 8 and Route: County Road K and 46

No glare found

PV array 8 and Route: County Road N

No glare found

PV array 8 and Route: County Road O

No glare found

PV array 8 and Route: County Road Q

No glare found

PV array 8 and Route: Heartland Expy

No glare found

PV array 8 and Route: Interstate 76

No glare found

PV array 8 and Route: US Route 34

No glare found

PV array 8 and OP 1

No glare found

PV array 8 and OP 2

No glare found

PV array 8 and OP 3

No glare found

PV array 8 and OP 4

No glare found

PV array 8 and OP 5

No glare found

PV array 8 and OP 6

No glare found

PV array 8 and OP 7

No glare found

PV array 8 and OP 8

No glare found

PV array 8 and OP 9

No glare found

PV array 8 and OP 10

No glare found

PV array 8 and OP 11

No glare found

PV array 8 and OP 12

No glare found

PV array 8 and OP 13

No glare found

PV array 8 and OP 14

No glare found

PV array 8 and OP 15

No glare found

PV: PV array 9 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 9 and Route: County Road K and 46

No glare found

PV array 9 and Route: County Road N

No glare found

PV array 9 and Route: County Road O

No glare found

PV array 9 and Route: County Road Q

No glare found

PV array 9 and Route: Heartland Expy

No glare found

PV array 9 and Route: Interstate 76

No glare found

PV array 9 and Route: US Route 34

No glare found

PV array 9 and OP 1

No glare found

PV array 9 and OP 2

No glare found

PV array 9 and OP 3

No glare found

PV array 9 and OP 4

No glare found

PV array 9 and OP 5

No glare found

PV array 9 and OP 6

No glare found

PV array 9 and OP 7

No glare found

PV array 9 and OP 8

No glare found

PV array 9 and OP 9

No glare found

PV array 9 and OP 10

No glare found

PV array 9 and OP 11

No glare found

PV array 9 and OP 12

No glare found

PV array 9 and OP 13

No glare found

PV array 9 and OP 14

No glare found

PV array 9 and OP 15

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.

"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.

Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.

The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.

Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.

Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.

The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.

The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)

The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.

The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.

The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.

Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.

Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.

Refer to the Help page at www.forgesolar.com/help/ for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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FORGESOLAR GLARE ANALYSIS

Project: **Story Solar**

Site configuration: **Analysis 2 - 2nd Story**

Client: Aypa Power

Created 22 Aug, 2023

Updated 22 Aug, 2023

Time-step 1 minute

Timezone offset UTC-7

Minimum sun altitude 0.0 deg

DNI peaks at 1,000.0 W/m²

Category 5 MW to 10 MW

Site ID 98404.17068

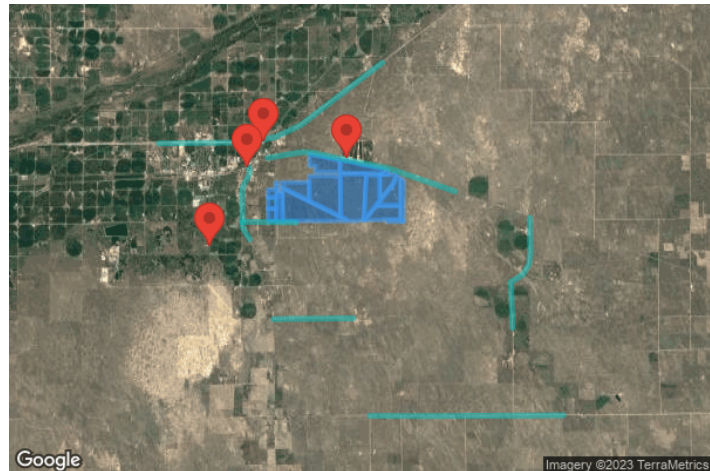
Ocular transmission coefficient 0.5

Pupil diameter 0.002 m

Eye focal length 0.017 m

Sun subtended angle 9.3 mrad

PV analysis methodology V2



Summary of Results No glare predicted

PV Array	Tilt °	Orient °	Annual Green Glare		Annual Yellow Glare		Energy kWh
			min	hr	min	hr	
PV array 1	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 10	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 11	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 12	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 13	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 14	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 15	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 16	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 17	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 18	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 19	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 2	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 3	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 4	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 5	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 6	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 7	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 8	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 9	SA tracking	SA tracking	0	0.0	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

Component Data

PV Arrays

Name: PV array 1
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0°
Max tracking angle: 55.0°
Resting angle: 10.0°
Ground Coverage Ratio: 0.35
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.263586	-103.564678	4295.90	6.00	4301.90
2	40.258422	-103.564714	4321.90	6.00	4327.90
3	40.258403	-103.561206	4336.80	6.00	4342.80
4	40.258403	-103.561206	4336.80	6.00	4342.80
5	40.258403	-103.561206	4336.80	6.00	4342.80
6	40.258403	-103.561206	4328.10	6.00	4334.10
7	40.255619	-103.561208	4340.70	6.00	4346.70
8	40.255611	-103.547783	4341.10	6.00	4347.10
9	40.255283	-103.547747	4340.50	6.00	4346.50
10	40.255281	-103.547089	4343.00	6.00	4349.00
11	40.255975	-103.546978	4339.70	6.00	4345.70
12	40.255975	-103.546978	4339.70	6.00	4345.70
13	40.255975	-103.546978	4339.70	6.00	4345.70
14	40.260786	-103.546986	4330.10	6.00	4336.10
15	40.262555	-103.557790	4329.20	6.00	4335.20

Name: PV array 10
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0°
Max tracking angle: 55.0°
Resting angle: 10.0°
Ground Coverage Ratio: 0.35
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.254589	-103.523625	4362.50	6.00	4368.50
2	40.243188	-103.523465	4376.40	6.00	4382.40
3	40.250761	-103.515578	4377.00	6.00	4383.00
4	40.253267	-103.514442	4365.70	6.00	4371.70
5	40.253936	-103.514228	4361.40	6.00	4367.40
6	40.254261	-103.514231	4357.40	6.00	4363.40
7	40.254619	-103.514683	4364.40	6.00	4370.40

Name: PV array 11
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0°
Max tracking angle: 55.0°
Resting angle: 10.0°
Ground Coverage Ratio: 0.35
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.240711	-103.525269	4380.70	6.00	4386.70
2	40.234531	-103.531753	4396.70	6.00	4402.70
3	40.234189	-103.531739	4393.50	6.00	4399.50
4	40.234214	-103.521819	4391.70	6.00	4397.70
5	40.234517	-103.521833	4391.90	6.00	4397.90
6	40.234525	-103.511483	4390.40	6.00	4396.40
7	40.240692	-103.511450	4388.50	6.00	4394.50

Name: PV array 12

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

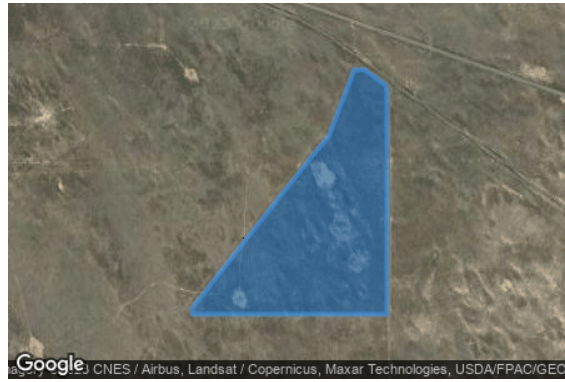
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.253600	-103.513664	4364.70	6.00	4370.70
2	40.253139	-103.513869	4366.30	6.00	4372.30
3	40.250128	-103.515403	4378.60	6.00	4384.60
4	40.248989	-103.516647	4376.00	6.00	4382.00
5	40.244853	-103.520961	4381.80	6.00	4387.80
6	40.241153	-103.524761	4374.50	6.00	4380.50
7	40.240814	-103.524747	4374.70	6.00	4380.70
8	40.240822	-103.511372	4386.60	6.00	4392.60
9	40.252461	-103.511378	4353.40	6.00	4359.40
10	40.252806	-103.511461	4354.60	6.00	4360.60
11	40.253617	-103.512922	4357.90	6.00	4363.90

Name: PV array 13

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

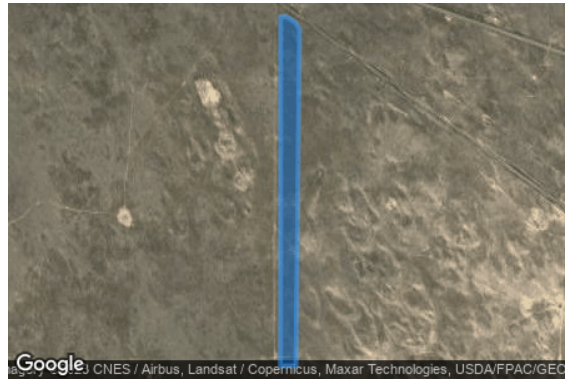
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.252117	-103.510794	4348.60	6.00	4354.60
2	40.233861	-103.510803	4377.90	6.00	4383.90
3	40.233864	-103.509739	4363.20	6.00	4369.20
4	40.251442	-103.509494	4354.40	6.00	4360.40
5	40.251800	-103.509742	4354.80	6.00	4360.80
6	40.252114	-103.510361	4351.60	6.00	4357.60

Name: PV array 14

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

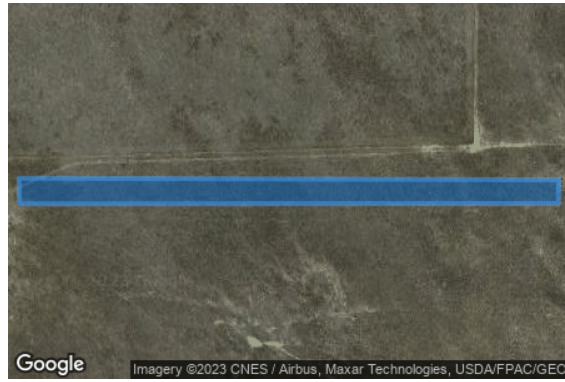
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.233850	-103.519011	4390.50	6.00	4396.50
2	40.233514	-103.519003	4389.80	6.00	4395.80
3	40.233519	-103.509747	4392.70	6.00	4398.70
4	40.233829	-103.509737	4391.10	6.00	4397.10

Name: PV array 15

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

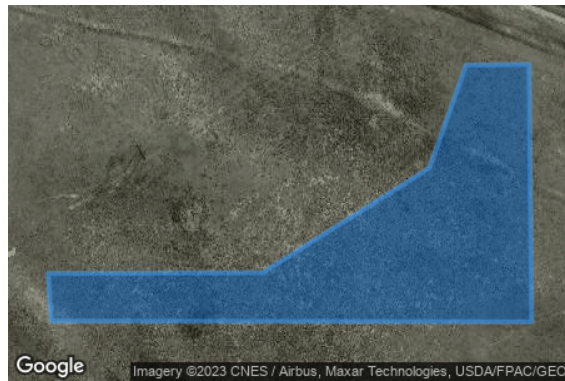
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.254919	-103.522908	4377.90	6.00	4383.90
2	40.254609	-103.522882	4369.80	6.00	4375.80
3	40.254603	-103.518753	4353.10	6.00	4359.10
4	40.256286	-103.518775	4351.70	6.00	4357.70
5	40.256281	-103.519317	4354.70	6.00	4360.70
6	40.255608	-103.519633	4368.50	6.00	4374.50
7	40.255608	-103.519633	4368.50	6.00	4374.50
8	40.255608	-103.519633	4368.50	6.00	4374.50
9	40.255608	-103.519633	4368.50	6.00	4374.50
10	40.254925	-103.521064	4378.40	6.00	4384.40

Name: PV array 16

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

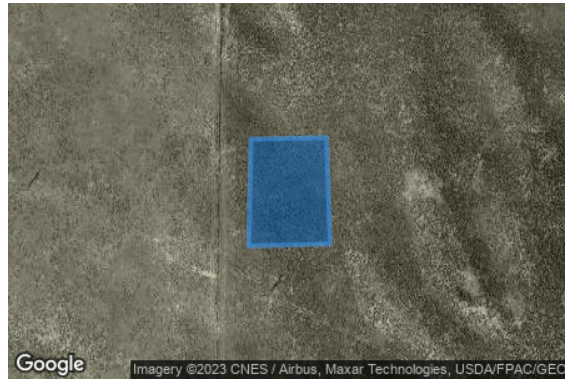
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.251122	-103.584508	4347.50	6.00	4353.50
2	40.250422	-103.584528	4346.90	6.00	4352.90
3	40.250436	-103.583828	4364.90	6.00	4370.90
4	40.251131	-103.583858	4361.50	6.00	4367.50

Name: PV array 17

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

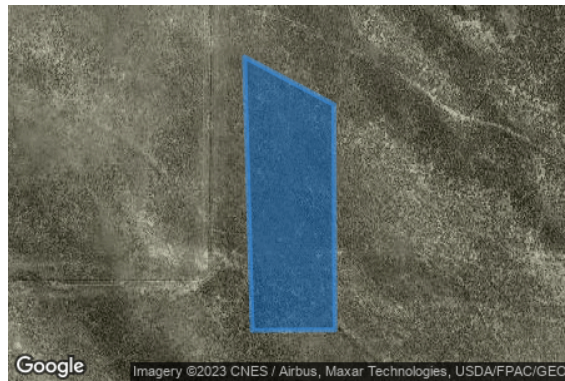
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



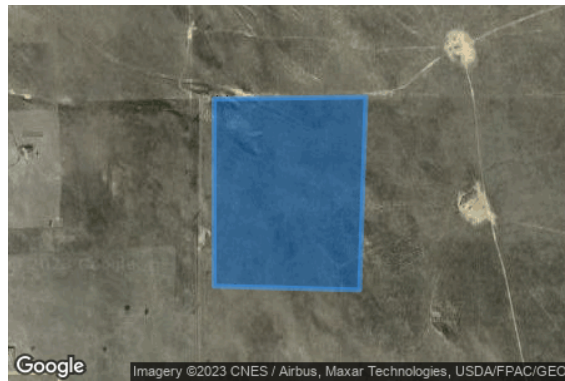
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.249783	-103.584511	4313.30	6.00	4319.30
2	40.247997	-103.584444	4307.90	6.00	4313.90
3	40.248000	-103.583733	4333.50	6.00	4339.50
4	40.249472	-103.583742	4336.20	6.00	4342.20

Name: PV array 18
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0°
Max tracking angle: 55.0°
Resting angle: 10.0°
Ground Coverage Ratio: 0.35
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.239411	-103.589034	4365.80	6.00	4371.80
2	40.233842	-103.589013	4361.50	6.00	4367.50
3	40.233875	-103.584228	4365.00	6.00	4371.00
4	40.239330	-103.584056	4360.40	6.00	4366.40

Name: PV array 19
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0°
Max tracking angle: 55.0°
Resting angle: 10.0°
Ground Coverage Ratio: 0.35
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.244309	-103.589034	4345.50	6.00	4351.50
2	40.239411	-103.589034	4365.80	6.00	4371.80
3	40.239313	-103.584035	4360.60	6.00	4366.60
4	40.244358	-103.583820	4352.30	6.00	4358.30

Name: PV array 2

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

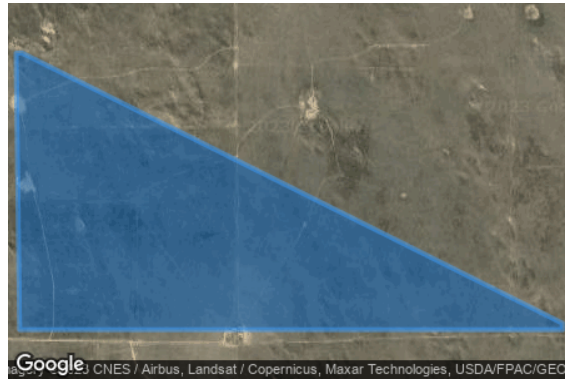
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.248311	-103.580731	4346.30	6.00	4352.30
2	40.233859	-103.580490	4371.00	6.00	4377.00
3	40.233858	-103.543189	4396.10	6.00	4402.10
4	40.234200	-103.543197	4397.70	6.00	4403.70
5	40.248328	-103.580339	4350.10	6.00	4356.10

Name: PV array 3

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

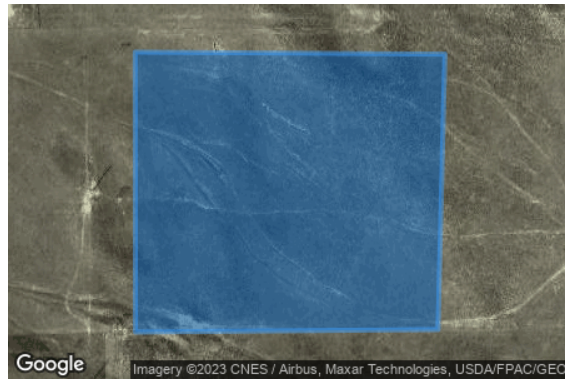
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.247991	-103.589029	4313.70	6.00	4319.70
2	40.247962	-103.583708	4363.20	6.00	4369.20
3	40.244355	-103.583826	4352.20	6.00	4358.20
4	40.244322	-103.589024	4345.30	6.00	4351.30

Name: PV array 4

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.260744	-103.546039	4321.20	6.00	4327.20
2	40.260394	-103.546353	4325.80	6.00	4331.80
3	40.255267	-103.546417	4342.60	6.00	4348.60
4	40.255281	-103.527317	4369.30	6.00	4375.30
5	40.254947	-103.527311	4355.30	6.00	4361.30
6	40.254944	-103.524003	4356.80	6.00	4362.80
7	40.256303	-103.521300	4358.30	6.00	4364.30
8	40.256964	-103.521325	4354.40	6.00	4360.40
9	40.257303	-103.522967	4350.70	6.00	4356.70
10	40.258772	-103.533336	4344.80	6.00	4350.80
11	40.259447	-103.536642	4335.60	6.00	4341.60
12	40.260769	-103.545031	4328.20	6.00	4334.20

Name: PV array 5

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.246308	-103.583741	4366.10	6.00	4372.10
2	40.233873	-103.584200	4365.30	6.00	4371.30
3	40.233858	-103.580508	4371.00	6.00	4377.00
4	40.246283	-103.580711	4350.80	6.00	4356.80

Name: PV array 6

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

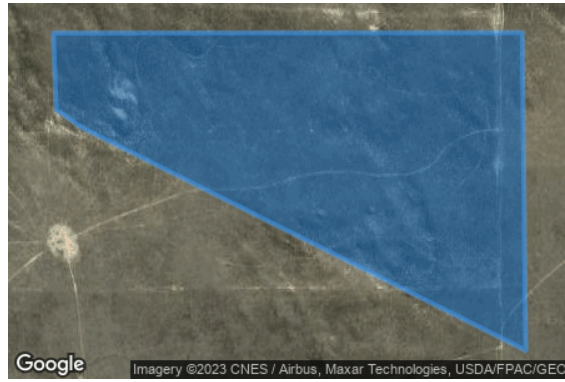
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.251122	-103.580914	4327.00	6.00	4333.00
2	40.249119	-103.580819	4341.10	6.00	4347.10
3	40.248661	-103.579978	4350.30	6.00	4356.30
4	40.242822	-103.564681	4354.80	6.00	4360.80
5	40.251131	-103.564797	4350.00	6.00	4356.00

Name: PV array 7

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.253939	-103.564797	4329.70	6.00	4335.70
2	40.242810	-103.564653	4362.60	6.00	4368.60
3	40.235872	-103.546400	4390.70	6.00	4396.70
4	40.253608	-103.546636	4346.90	6.00	4352.90
5	40.253606	-103.549569	4348.50	6.00	4354.50
6	40.253942	-103.549553	4346.10	6.00	4352.10

Name: PV array 8

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.254606	-103.546408	4344.40	6.00	4350.40
2	40.253928	-103.546625	4345.20	6.00	4351.20
3	40.235862	-103.546374	4391.60	6.00	4397.60
4	40.233828	-103.541075	4402.10	6.00	4408.10
5	40.233869	-103.535900	4398.10	6.00	4404.10
6	40.234192	-103.535900	4396.70	6.00	4402.70
7	40.234194	-103.532817	4402.60	6.00	4408.60
8	40.254603	-103.531386	4362.50	6.00	4368.50

Name: PV array 9

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



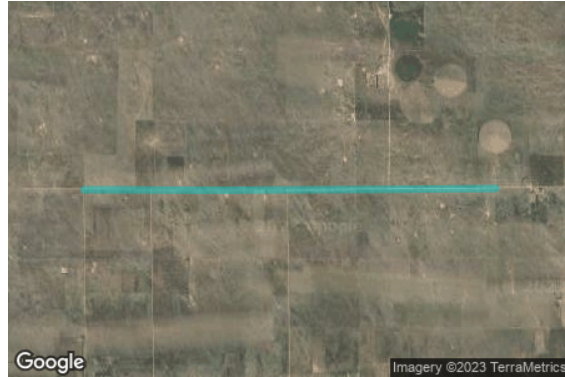
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.254267	-103.531378	4363.50	6.00	4369.50
2	40.234190	-103.532791	4402.40	6.00	4408.40
3	40.243156	-103.523494	4376.50	6.00	4382.50
4	40.254269	-103.523647	4361.10	6.00	4367.10

Route Receptors

Name: County Road K and 46

Path type: Two-way

Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.146844	-103.529135	4470.90	9.00	4479.90
2	40.146745	-103.494073	4517.60	9.00	4526.60
3	40.146909	-103.445279	4504.50	9.00	4513.50
4	40.147106	-103.415968	4441.20	9.00	4450.20

Name: County Road N

Path type: Two-way

Observer view angle: 50.0°



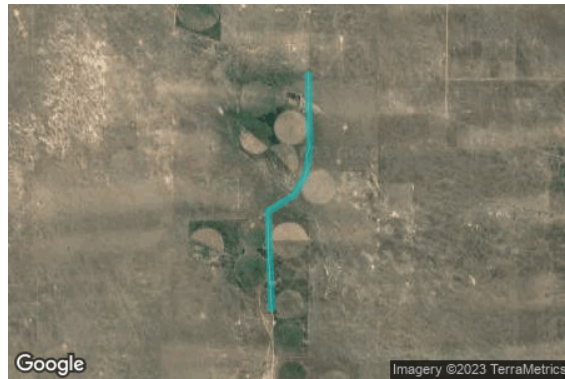
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.190049	-103.585639	4311.50	9.00	4320.50
2	40.190442	-103.539119	4458.80	9.00	4467.80

Name: County Road O
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.233505	-103.603901	4258.50	9.00	4267.50
2	40.233177	-103.572702	4382.30	9.00	4391.30

Name: County Road Q
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.235160	-103.435546	4402.20	9.00	4411.20
2	40.219630	-103.435202	4361.70	9.00	4370.70
3	40.214517	-103.436146	4360.20	9.00	4369.20
4	40.209929	-103.439580	4364.40	9.00	4373.40
5	40.206586	-103.446618	4359.30	9.00	4368.30
6	40.186205	-103.445674	4399.20	9.00	4408.20

Name: Heartland Expy
Path type: Two-way
Observer view angle: 50.0°



Google | CNES / Airbus, Landsat / Copernicus, Maxar Technologies, USDA/FPAC/GEO

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.258096	-103.600456	4228.00	9.00	4237.00
2	40.256900	-103.599898	4248.90	9.00	4257.90
3	40.255525	-103.599791	4263.70	9.00	4272.70
4	40.254280	-103.600199	4266.90	9.00	4275.90
5	40.249498	-103.603503	4279.60	9.00	4288.60
6	40.247800	-103.604064	4275.20	9.00	4284.20
7	40.231656	-103.603893	4252.70	9.00	4261.70
8	40.230411	-103.603528	4256.10	9.00	4265.10
9	40.225693	-103.599751	4272.10	9.00	4281.10

Name: Interstate 76
Path type: Two-way
Observer view angle: 50.0°



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Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.304430	-103.521993	4222.00	9.00	4231.00
2	40.276475	-103.570015	4266.10	9.00	4275.10
3	40.271367	-103.584220	4238.90	9.00	4247.90
4	40.268927	-103.598210	4229.10	9.00	4238.10
5	40.268420	-103.652927	4242.70	9.00	4251.70

Name: US Route 34
Path type: Two-way
Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.262005	-103.589205	4271.20	9.00	4280.20
2	40.264404	-103.570118	4299.80	9.00	4308.80
3	40.264568	-103.566964	4309.40	9.00	4318.40
4	40.264406	-103.564003	4314.40	9.00	4323.40
5	40.257365	-103.518642	4352.50	9.00	4361.50
6	40.247048	-103.479546	4330.00	9.00	4339.00

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
OP 12	12	40.261598	-103.542672	4328.90	16.00
OP 13	13	40.269179	-103.591715	4225.70	16.00
OP 14	14	40.257441	-103.600873	4238.70	16.00
OP 15	15	40.222583	-103.623255	4261.10	16.00

Glare Analysis Results

Summary of Results No glare predicted

PV Array	Tilt °	Orient °	Annual Green Glare		Annual Yellow Glare		Energy kWh
			min	hr	min	hr	
PV array 1	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 10	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 11	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 12	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 13	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 14	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 15	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 16	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 17	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 18	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 19	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 2	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 3	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 4	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 5	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 6	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 7	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 8	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 9	SA tracking	SA tracking	0	0.0	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

County Road K and 46	0	0.0	0	0.0
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Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV: PV array 1 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 1 and Route: County Road K and 46

No glare found

PV array 1 and Route: County Road N

No glare found

PV array 1 and Route: County Road O

No glare found

PV array 1 and Route: County Road Q

No glare found

PV array 1 and Route: Heartland Expy

No glare found

PV array 1 and Route: Interstate 76

No glare found

PV array 1 and Route: US Route 34

No glare found

PV array 1 and OP 12

No glare found

PV array 1 and OP 13

No glare found

PV array 1 and OP 14

No glare found

PV array 1 and OP 15

No glare found

PV: PV array 10 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 10 and Route: County Road K and 46

No glare found

PV array 10 and Route: County Road N

No glare found

PV array 10 and Route: County Road O

No glare found

PV array 10 and Route: County Road Q

No glare found

PV array 10 and Route: Heartland Expy

No glare found

PV array 10 and Route: Interstate 76

No glare found

PV array 10 and Route: US Route 34

No glare found

PV array 10 and OP 12

No glare found

PV array 10 and OP 13

No glare found

PV array 10 and OP 14

No glare found

PV array 10 and OP 15

No glare found

PV: PV array 11 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 11 and Route: County Road K and 46

No glare found

PV array 11 and Route: County Road N

No glare found

PV array 11 and Route: County Road O

No glare found

PV array 11 and Route: County Road Q

No glare found

PV array 11 and Route: Heartland Expy

No glare found

PV array 11 and Route: Interstate 76

No glare found

PV array 11 and Route: US Route 34

No glare found

PV array 11 and OP 12

No glare found

PV array 11 and OP 13

No glare found

PV array 11 and OP 14

No glare found

PV array 11 and OP 15

No glare found

PV: PV array 12 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 12 and Route: County Road K and 46

No glare found

PV array 12 and Route: County Road N

No glare found

PV array 12 and Route: County Road O

No glare found

PV array 12 and Route: County Road Q

No glare found

PV array 12 and Route: Heartland Expy

No glare found

PV array 12 and Route: Interstate 76

No glare found

PV array 12 and Route: US Route 34

No glare found

PV array 12 and OP 12

No glare found

PV array 12 and OP 13

No glare found

PV array 12 and OP 14

No glare found

PV array 12 and OP 15

No glare found

PV: PV array 13 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 13 and Route: County Road K and 46

No glare found

PV array 13 and Route: County Road N

No glare found

PV array 13 and Route: County Road O

No glare found

PV array 13 and Route: County Road Q

No glare found

PV array 13 and Route: Heartland Expy

No glare found

PV array 13 and Route: Interstate 76

No glare found

PV array 13 and Route: US Route 34

No glare found

PV array 13 and OP 12

No glare found

PV array 13 and OP 13

No glare found

PV array 13 and OP 14

No glare found

PV array 13 and OP 15

No glare found

PV: PV array 14 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 14 and Route: County Road K and 46

No glare found

PV array 14 and Route: County Road N

No glare found

PV array 14 and Route: County Road O

No glare found

PV array 14 and Route: County Road Q

No glare found

PV array 14 and Route: Heartland Expy

No glare found

PV array 14 and Route: Interstate 76

No glare found

PV array 14 and Route: US Route 34

No glare found

PV array 14 and OP 12

No glare found

PV array 14 and OP 13

No glare found

PV array 14 and OP 14

No glare found

PV array 14 and OP 15

No glare found

PV: PV array 15 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 15 and Route: County Road K and 46

No glare found

PV array 15 and Route: County Road N

No glare found

PV array 15 and Route: County Road O

No glare found

PV array 15 and Route: County Road Q

No glare found

PV array 15 and Route: Heartland Expy

No glare found

PV array 15 and Route: Interstate 76

No glare found

PV array 15 and Route: US Route 34

No glare found

PV array 15 and OP 12

No glare found

PV array 15 and OP 13

No glare found

PV array 15 and OP 14

No glare found

PV array 15 and OP 15

No glare found

PV: PV array 16 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 16 and Route: County Road K and 46

No glare found

PV array 16 and Route: County Road N

No glare found

PV array 16 and Route: County Road O

No glare found

PV array 16 and Route: County Road Q

No glare found

PV array 16 and Route: Heartland Expy

No glare found

PV array 16 and Route: Interstate 76

No glare found

PV array 16 and Route: US Route 34

No glare found

PV array 16 and OP 12

No glare found

PV array 16 and OP 13

No glare found

PV array 16 and OP 14

No glare found

PV array 16 and OP 15

No glare found

PV: PV array 17 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 17 and Route: County Road K and 46

No glare found

PV array 17 and Route: County Road N

No glare found

PV array 17 and Route: County Road O

No glare found

PV array 17 and Route: County Road Q

No glare found

PV array 17 and Route: Heartland Expy

No glare found

PV array 17 and Route: Interstate 76

No glare found

PV array 17 and Route: US Route 34

No glare found

PV array 17 and OP 12

No glare found

PV array 17 and OP 13

No glare found

PV array 17 and OP 14

No glare found

PV array 17 and OP 15

No glare found

PV: PV array 18 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 18 and Route: County Road K and 46

No glare found

PV array 18 and Route: County Road N

No glare found

PV array 18 and Route: County Road O

No glare found

PV array 18 and Route: County Road Q

No glare found

PV array 18 and Route: Heartland Expy

No glare found

PV array 18 and Route: Interstate 76

No glare found

PV array 18 and Route: US Route 34

No glare found

PV array 18 and OP 12

No glare found

PV array 18 and OP 13

No glare found

PV array 18 and OP 14

No glare found

PV array 18 and OP 15

No glare found

PV: PV array 19 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 19 and Route: County Road K and 46

No glare found

PV array 19 and Route: County Road N

No glare found

PV array 19 and Route: County Road O

No glare found

PV array 19 and Route: County Road Q

No glare found

PV array 19 and Route: Heartland Expy

No glare found

PV array 19 and Route: Interstate 76

No glare found

PV array 19 and Route: US Route 34

No glare found

PV array 19 and OP 12

No glare found

PV array 19 and OP 13

No glare found

PV array 19 and OP 14

No glare found

PV array 19 and OP 15

No glare found

PV: PV array 2 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 2 and Route: County Road K and 46

No glare found

PV array 2 and Route: County Road N

No glare found

PV array 2 and Route: County Road O

No glare found

PV array 2 and Route: County Road Q

No glare found

PV array 2 and Route: Heartland Expy

No glare found

PV array 2 and Route: Interstate 76

No glare found

PV array 2 and Route: US Route 34

No glare found

PV array 2 and OP 12

No glare found

PV array 2 and OP 13

No glare found

PV array 2 and OP 14

No glare found

PV array 2 and OP 15

No glare found

PV: PV array 3 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 3 and Route: County Road K and 46

No glare found

PV array 3 and Route: County Road N

No glare found

PV array 3 and Route: County Road O

No glare found

PV array 3 and Route: County Road Q

No glare found

PV array 3 and Route: Heartland Expy

No glare found

PV array 3 and Route: Interstate 76

No glare found

PV array 3 and Route: US Route 34

No glare found

PV array 3 and OP 12

No glare found

PV array 3 and OP 13

No glare found

PV array 3 and OP 14

No glare found

PV array 3 and OP 15

No glare found

PV: PV array 4 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 4 and Route: County Road K and 46

No glare found

PV array 4 and Route: County Road N

No glare found

PV array 4 and Route: County Road O

No glare found

PV array 4 and Route: County Road Q

No glare found

PV array 4 and Route: Heartland Expy

No glare found

PV array 4 and Route: Interstate 76

No glare found

PV array 4 and Route: US Route 34

No glare found

PV array 4 and OP 12

No glare found

PV array 4 and OP 13

No glare found

PV array 4 and OP 14

No glare found

PV array 4 and OP 15

No glare found

PV: PV array 5 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 5 and Route: County Road K and 46

No glare found

PV array 5 and Route: County Road N

No glare found

PV array 5 and Route: County Road O

No glare found

PV array 5 and Route: County Road Q

No glare found

PV array 5 and Route: Heartland Expy

No glare found

PV array 5 and Route: Interstate 76

No glare found

PV array 5 and Route: US Route 34

No glare found

PV array 5 and OP 12

No glare found

PV array 5 and OP 13

No glare found

PV array 5 and OP 14

No glare found

PV array 5 and OP 15

No glare found

PV: PV array 6 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 6 and Route: County Road K and 46

No glare found

PV array 6 and Route: County Road N

No glare found

PV array 6 and Route: County Road O

No glare found

PV array 6 and Route: County Road Q

No glare found

PV array 6 and Route: Heartland Expy

No glare found

PV array 6 and Route: Interstate 76

No glare found

PV array 6 and Route: US Route 34

No glare found

PV array 6 and OP 12

No glare found

PV array 6 and OP 13

No glare found

PV array 6 and OP 14

No glare found

PV array 6 and OP 15

No glare found

PV: PV array 7 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 7 and Route: County Road K and 46

No glare found

PV array 7 and Route: County Road N

No glare found

PV array 7 and Route: County Road O

No glare found

PV array 7 and Route: County Road Q

No glare found

PV array 7 and Route: Heartland Expy

No glare found

PV array 7 and Route: Interstate 76

No glare found

PV array 7 and Route: US Route 34

No glare found

PV array 7 and OP 12

No glare found

PV array 7 and OP 13

No glare found

PV array 7 and OP 14

No glare found

PV array 7 and OP 15

No glare found

PV: PV array 8 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 8 and Route: County Road K and 46

No glare found

PV array 8 and Route: County Road N

No glare found

PV array 8 and Route: County Road O

No glare found

PV array 8 and Route: County Road Q

No glare found

PV array 8 and Route: Heartland Expy

No glare found

PV array 8 and Route: Interstate 76

No glare found

PV array 8 and Route: US Route 34

No glare found

PV array 8 and OP 12

No glare found

PV array 8 and OP 13

No glare found

PV array 8 and OP 14

No glare found

PV array 8 and OP 15

No glare found

PV: PV array 9 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
County Road K and 46	0	0.0	0	0.0
County Road N	0	0.0	0	0.0
County Road O	0	0.0	0	0.0
County Road Q	0	0.0	0	0.0
Heartland Expy	0	0.0	0	0.0
Interstate 76	0	0.0	0	0.0
US Route 34	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0

PV array 9 and Route: County Road K and 46

No glare found

PV array 9 and Route: County Road N

No glare found

PV array 9 and Route: County Road O

No glare found

PV array 9 and Route: County Road Q

No glare found

PV array 9 and Route: Heartland Expy

No glare found

PV array 9 and Route: Interstate 76

No glare found

PV array 9 and Route: US Route 34

No glare found

PV array 9 and OP 12

No glare found

PV array 9 and OP 13

No glare found

PV array 9 and OP 14

No glare found

PV array 9 and OP 15

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.

"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.

Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.

The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.

Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.

Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.

The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.

The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)

The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.

The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.

The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.

Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.

Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.

Refer to the Help page at www.forgesolar.com/help/ for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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FORGESOLAR GLARE ANALYSIS

Project: **Story Solar**

Site configuration: **Analysis 3 - FAA**

Client: Aypa Power

Created 22 Aug, 2023

Updated 22 Aug, 2023

Time-step 1 minute

Timezone offset UTC-7

Minimum sun altitude 0.0 deg

DNI peaks at 1,000.0 W/m²

Category 5 MW to 10 MW

Site ID 98405.17068

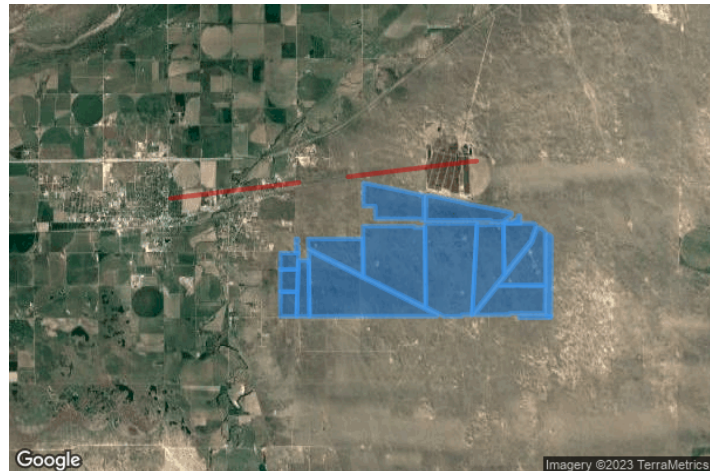
Ocular transmission coefficient 0.5

Pupil diameter 0.002 m

Eye focal length 0.017 m

Sun subtended angle 9.3 mrad

PV analysis methodology V2



Summary of Results No glare predicted

PV Array	Tilt °	Orient °	Annual Green Glare		Annual Yellow Glare		Energy kWh
			min	hr	min	hr	
PV array 1	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 10	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 11	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 12	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 13	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 14	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 15	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 16	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 17	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 18	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 19	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 2	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 3	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 4	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 5	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 6	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 7	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 8	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 9	SA tracking	SA tracking	0	0.0	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 7	0	0.0	0	0.0

Component Data

PV Arrays

Name: PV array 1
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0°
Max tracking angle: 55.0°
Resting angle: 10.0°
Ground Coverage Ratio: 0.35
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.263586	-103.564678	4295.90	6.00	4301.90
2	40.258422	-103.564714	4321.90	6.00	4327.90
3	40.258403	-103.561206	4336.80	6.00	4342.80
4	40.258403	-103.561206	4336.80	6.00	4342.80
5	40.258403	-103.561206	4336.80	6.00	4342.80
6	40.258403	-103.561206	4328.10	6.00	4334.10
7	40.255619	-103.561208	4340.70	6.00	4346.70
8	40.255611	-103.547783	4341.10	6.00	4347.10
9	40.255283	-103.547747	4340.50	6.00	4346.50
10	40.255281	-103.547089	4343.00	6.00	4349.00
11	40.255975	-103.546978	4339.70	6.00	4345.70
12	40.255975	-103.546978	4339.70	6.00	4345.70
13	40.255975	-103.546978	4339.70	6.00	4345.70
14	40.260786	-103.546986	4330.10	6.00	4336.10
15	40.262555	-103.557790	4329.20	6.00	4335.20

Name: PV array 10
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0°
Max tracking angle: 55.0°
Resting angle: 10.0°
Ground Coverage Ratio: 0.35
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.254589	-103.523625	4362.50	6.00	4368.50
2	40.243188	-103.523465	4376.40	6.00	4382.40
3	40.250761	-103.515578	4377.00	6.00	4383.00
4	40.253267	-103.514442	4365.70	6.00	4371.70
5	40.253936	-103.514228	4361.40	6.00	4367.40
6	40.254261	-103.514231	4357.40	6.00	4363.40
7	40.254619	-103.514683	4364.40	6.00	4370.40

Name: PV array 11
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0°
Max tracking angle: 55.0°
Resting angle: 10.0°
Ground Coverage Ratio: 0.35
Rated power: -
Panel material: Smooth glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.240711	-103.525269	4380.70	6.00	4386.70
2	40.234531	-103.531753	4396.70	6.00	4402.70
3	40.234189	-103.531739	4393.50	6.00	4399.50
4	40.234214	-103.521819	4391.70	6.00	4397.70
5	40.234517	-103.521833	4391.90	6.00	4397.90
6	40.234525	-103.511483	4390.40	6.00	4396.40
7	40.240692	-103.511450	4388.50	6.00	4394.50

Name: PV array 12

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

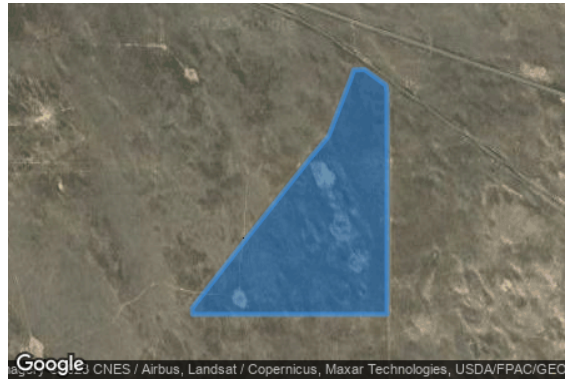
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.253600	-103.513664	4364.70	6.00	4370.70
2	40.253139	-103.513869	4366.30	6.00	4372.30
3	40.250128	-103.515403	4378.60	6.00	4384.60
4	40.248989	-103.516647	4376.00	6.00	4382.00
5	40.244853	-103.520961	4381.80	6.00	4387.80
6	40.241153	-103.524761	4374.50	6.00	4380.50
7	40.240814	-103.524747	4374.70	6.00	4380.70
8	40.240822	-103.511372	4386.60	6.00	4392.60
9	40.252461	-103.511378	4353.40	6.00	4359.40
10	40.252806	-103.511461	4354.60	6.00	4360.60
11	40.253617	-103.512922	4357.90	6.00	4363.90

Name: PV array 13

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.252117	-103.510794	4348.60	6.00	4354.60
2	40.233861	-103.510803	4377.90	6.00	4383.90
3	40.233864	-103.509739	4363.20	6.00	4369.20
4	40.251442	-103.509494	4354.40	6.00	4360.40
5	40.251800	-103.509742	4354.80	6.00	4360.80
6	40.252114	-103.510361	4351.60	6.00	4357.60

Name: PV array 14

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

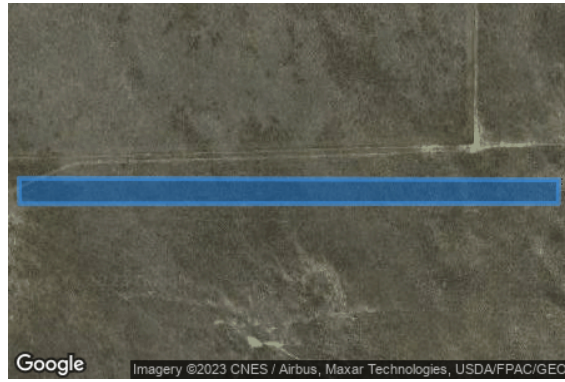
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.233850	-103.519011	4390.50	6.00	4396.50
2	40.233514	-103.519003	4389.80	6.00	4395.80
3	40.233519	-103.509747	4392.70	6.00	4398.70
4	40.233829	-103.509737	4391.10	6.00	4397.10

Name: PV array 15

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

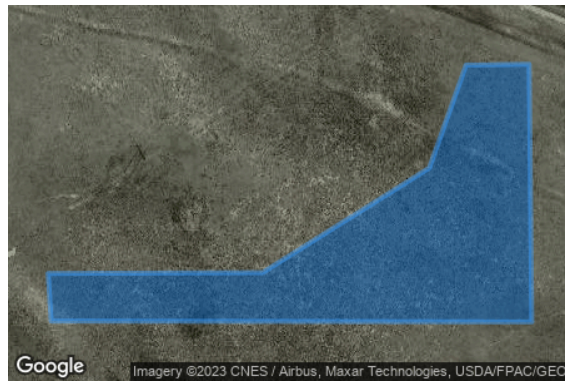
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.254919	-103.522908	4377.90	6.00	4383.90
2	40.254609	-103.522882	4369.80	6.00	4375.80
3	40.254603	-103.518753	4353.10	6.00	4359.10
4	40.256286	-103.518775	4351.70	6.00	4357.70
5	40.256281	-103.519317	4354.70	6.00	4360.70
6	40.255608	-103.519633	4368.50	6.00	4374.50
7	40.255608	-103.519633	4368.50	6.00	4374.50
8	40.255608	-103.519633	4368.50	6.00	4374.50
9	40.255608	-103.519633	4368.50	6.00	4374.50
10	40.254925	-103.521064	4378.40	6.00	4384.40

Name: PV array 16

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

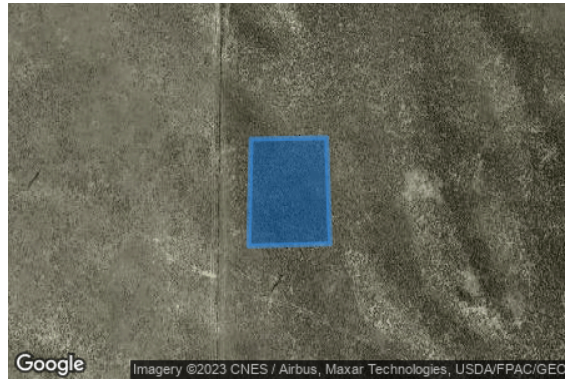
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.251122	-103.584508	4347.50	6.00	4353.50
2	40.250422	-103.584528	4346.90	6.00	4352.90
3	40.250436	-103.583828	4364.90	6.00	4370.90
4	40.251131	-103.583858	4361.50	6.00	4367.50

Name: PV array 17

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

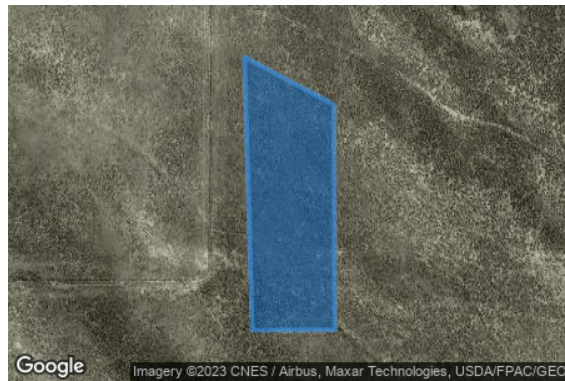
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.249783	-103.584511	4313.30	6.00	4319.30
2	40.247997	-103.584444	4307.90	6.00	4313.90
3	40.248000	-103.583733	4333.50	6.00	4339.50
4	40.249472	-103.583742	4336.20	6.00	4342.20

Name: PV array 18

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.239411	-103.589034	4365.80	6.00	4371.80
2	40.233842	-103.589013	4361.50	6.00	4367.50
3	40.233875	-103.584228	4365.00	6.00	4371.00
4	40.239330	-103.584056	4360.40	6.00	4366.40

Name: PV array 19

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

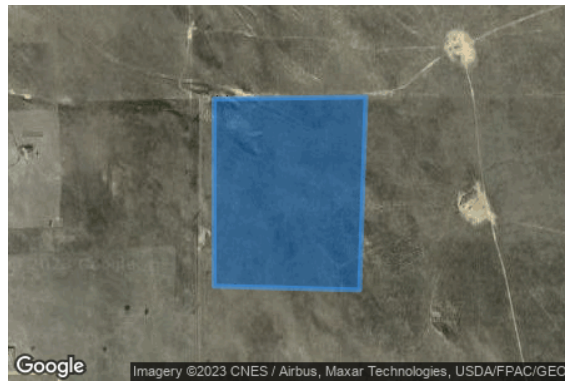
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.244309	-103.589034	4345.50	6.00	4351.50
2	40.239411	-103.589034	4365.80	6.00	4371.80
3	40.239313	-103.584035	4360.60	6.00	4366.60
4	40.244358	-103.583820	4352.30	6.00	4358.30

Name: PV array 2

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

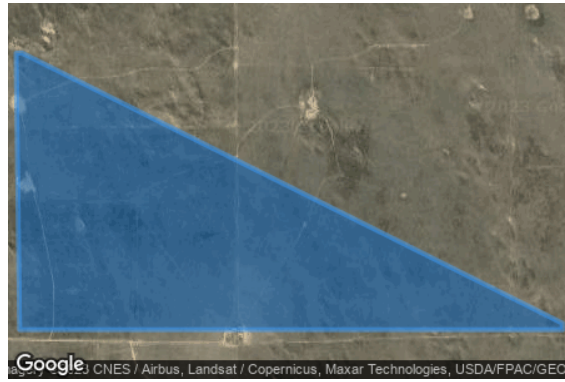
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.248311	-103.580731	4346.30	6.00	4352.30
2	40.233859	-103.580490	4371.00	6.00	4377.00
3	40.233858	-103.543189	4396.10	6.00	4402.10
4	40.234200	-103.543197	4397.70	6.00	4403.70
5	40.248328	-103.580339	4350.10	6.00	4356.10

Name: PV array 3

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

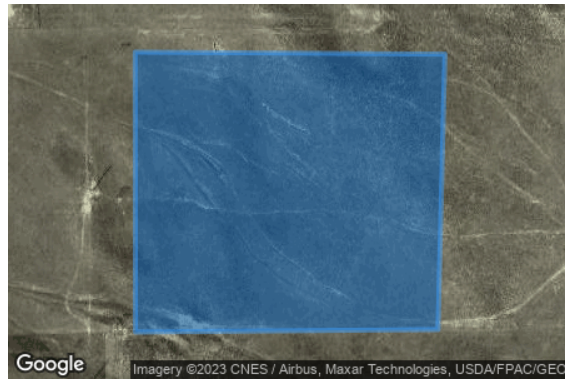
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.247991	-103.589029	4313.70	6.00	4319.70
2	40.247962	-103.583708	4363.20	6.00	4369.20
3	40.244355	-103.583826	4352.20	6.00	4358.20
4	40.244322	-103.589024	4345.30	6.00	4351.30

Name: PV array 4

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.260744	-103.546039	4321.20	6.00	4327.20
2	40.260394	-103.546353	4325.80	6.00	4331.80
3	40.255267	-103.546417	4342.60	6.00	4348.60
4	40.255281	-103.527317	4369.30	6.00	4375.30
5	40.254947	-103.527311	4355.30	6.00	4361.30
6	40.254944	-103.524003	4356.80	6.00	4362.80
7	40.256303	-103.521300	4358.30	6.00	4364.30
8	40.256964	-103.521325	4354.40	6.00	4360.40
9	40.257303	-103.522967	4350.70	6.00	4356.70
10	40.258772	-103.533336	4344.80	6.00	4350.80
11	40.259447	-103.536642	4335.60	6.00	4341.60
12	40.260769	-103.545031	4328.20	6.00	4334.20

Name: PV array 5

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.246308	-103.583741	4366.10	6.00	4372.10
2	40.233873	-103.584200	4365.30	6.00	4371.30
3	40.233858	-103.580508	4371.00	6.00	4377.00
4	40.246283	-103.580711	4350.80	6.00	4356.80

Name: PV array 6

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

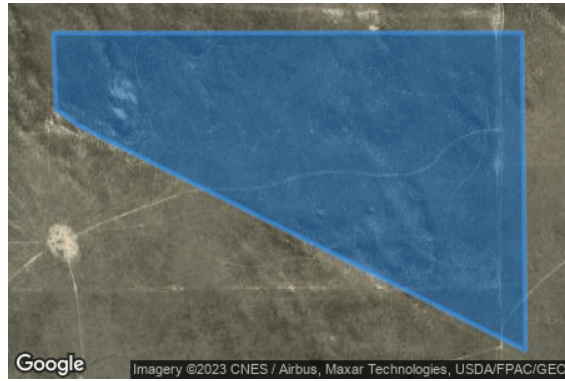
Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.251122	-103.580914	4327.00	6.00	4333.00
2	40.249119	-103.580819	4341.10	6.00	4347.10
3	40.248661	-103.579978	4350.30	6.00	4356.30
4	40.242822	-103.564681	4354.80	6.00	4360.80
5	40.251131	-103.564797	4350.00	6.00	4356.00

Name: PV array 7

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.253939	-103.564797	4329.70	6.00	4335.70
2	40.242810	-103.564653	4362.60	6.00	4368.60
3	40.235872	-103.546400	4390.70	6.00	4396.70
4	40.253608	-103.546636	4346.90	6.00	4352.90
5	40.253606	-103.549569	4348.50	6.00	4354.50
6	40.253942	-103.549553	4346.10	6.00	4352.10

Name: PV array 8

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.254606	-103.546408	4344.40	6.00	4350.40
2	40.253928	-103.546625	4345.20	6.00	4351.20
3	40.235862	-103.546374	4391.60	6.00	4397.60
4	40.233828	-103.541075	4402.10	6.00	4408.10
5	40.233869	-103.535900	4398.10	6.00	4404.10
6	40.234192	-103.535900	4396.70	6.00	4402.70
7	40.234194	-103.532817	4402.60	6.00	4408.60
8	40.254603	-103.531386	4362.50	6.00	4368.50

Name: PV array 9

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0°

Max tracking angle: 55.0°

Resting angle: 10.0°

Ground Coverage Ratio: 0.35

Rated power: -

Panel material: Smooth glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	40.254267	-103.531378	4363.50	6.00	4369.50
2	40.234190	-103.532791	4402.40	6.00	4408.40
3	40.243156	-103.523494	4376.50	6.00	4382.50
4	40.254269	-103.523647	4361.10	6.00	4367.10

Flight Path Receptors

Name: Runway 25
Description: None
Threshold height: 50 ft
Direction: 263.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	40.264973	-103.569173	4301.40	50.00	4351.40
Two-mile	40.268496	-103.531521	4330.50	574.30	4904.80

Name: Runway 7
Description: None
Threshold height: 50 ft
Direction: 83.0°
Glide slope: 3.0°
Pilot view restricted? Yes
Vertical view: 30.0°
Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	40.263671	-103.583584	4269.30	50.00	4319.30
Two-mile	40.260147	-103.621236	4231.60	641.10	4872.70

Glare Analysis Results

Summary of Results No glare predicted

PV Array	Tilt °	Orient °	Annual Green Glare		Annual Yellow Glare		Energy kWh
			min	hr	min	hr	
PV array 1	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 10	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 11	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 12	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 13	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 14	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 15	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 16	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 17	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 18	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 19	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 2	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 3	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 4	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 5	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 6	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 7	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 8	SA tracking	SA tracking	0	0.0	0	0.0	-
PV array 9	SA tracking	SA tracking	0	0.0	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV: PV array 1 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 1 and FP: Runway 25

No glare found

PV array 1 and FP: Runway 7

No glare found

PV: PV array 10 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 10 and FP: Runway 25

No glare found

PV array 10 and FP: Runway 7

No glare found

PV: PV array 11 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 11 and FP: Runway 25

No glare found

PV array 11 and FP: Runway 7

No glare found

PV: PV array 12 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 12 and FP: Runway 25

No glare found

PV array 12 and FP: Runway 7

No glare found

PV: PV array 13 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 13 and FP: Runway 25

No glare found

PV array 13 and FP: Runway 7

No glare found

PV: PV array 14 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 14 and FP: Runway 25

No glare found

PV array 14 and FP: Runway 7

No glare found

PV: PV array 15 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 15 and FP: Runway 25

No glare found

PV array 15 and FP: Runway 7

No glare found

PV: PV array 16 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 16 and FP: Runway 25

No glare found

PV array 16 and FP: Runway 7

No glare found

PV: PV array 17 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 17 and FP: Runway 25

No glare found

PV array 17 and FP: Runway 7

No glare found

PV: PV array 18 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 18 and FP: Runway 25

No glare found

PV array 18 and FP: Runway 7

No glare found

PV: PV array 19 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 19 and FP: Runway 25

No glare found

PV array 19 and FP: Runway 7

No glare found

PV: PV array 2 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 2 and FP: Runway 25

No glare found

PV array 2 and FP: Runway 7

No glare found

PV: PV array 3 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 3 and FP: Runway 25

No glare found

PV array 3 and FP: Runway 7

No glare found

PV: PV array 4 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 4 and FP: Runway 25

No glare found

PV array 4 and FP: Runway 7

No glare found

PV: PV array 5 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 5 and FP: Runway 25

No glare found

PV array 5 and FP: Runway 7

No glare found

PV: PV array 6 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 6 and FP: Runway 25

No glare found

PV array 6 and FP: Runway 7

No glare found

PV: PV array 7 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 7 and FP: Runway 25

No glare found

PV array 7 and FP: Runway 7

No glare found

PV: PV array 8 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 8 and FP: Runway 25

No glare found

PV array 8 and FP: Runway 7

No glare found

PV: PV array 9 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Runway 25	0	0.0	0	0.0
Runway 7	0	0.0	0	0.0

PV array 9 and FP: Runway 25

No glare found

PV array 9 and FP: Runway 7

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.

"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.

Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.

The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.

Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.

Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.

The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.

The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)

The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.

The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.

The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.

Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.

Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.

Refer to the Help page at www.forgesolar.com/help/ for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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Attachment B
FAA Notice Criteria Tool



Notice Criteria Tool

[Notice Criteria Tool - Desk Reference Guide V_2018.2.0](#)

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference [CFR Title 14 Part 77.9](#).

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the [FAA Co-location Policy](#)
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the [Air Traffic Areas of Responsibility map](#) for Off Airport construction, or contact the [FAA Airports Region / District Office](#) for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

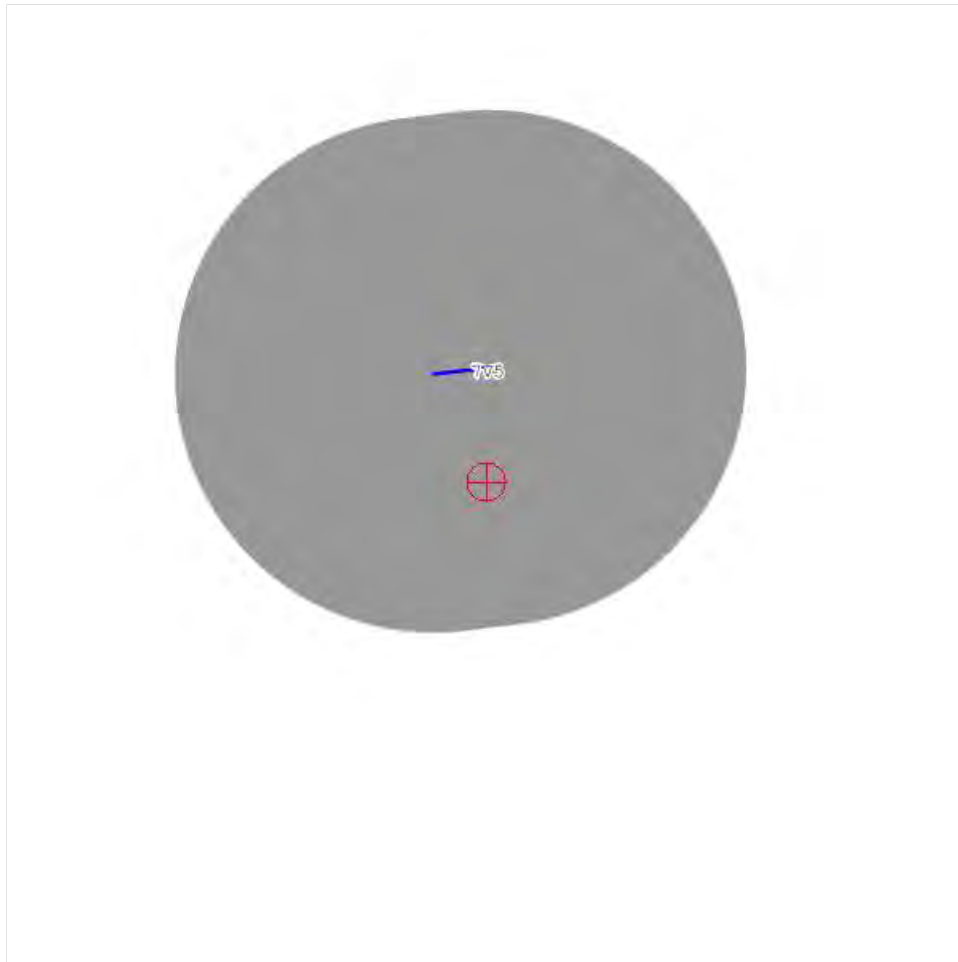
* Structure Type:	SOLAR Solar Panel ▼			
	Please select structure type and complete location point information.			
Latitude:	40	Deg	14	M 25.83 S N ▼
Longitude:	103	Deg	34	M 6.96 S W ▼
Horizontal Datum:	NAD83 ▼			
Site Elevation (SE):	4381	(nearest foot)		
Structure Height :	12	(nearest foot)		
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes			

Results

You exceed the following Notice Criteria:

77.9(b) by 8 ft. The nearest airport is 7V5, and the nearest runway is 07/25.

The FAA requests that you file





Notice Criteria Tool

[Notice Criteria Tool - Desk Reference Guide V_2018.2.0](#)

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference [CFR Title 14 Part 77.9](#).

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the [FAA Co-location Policy](#)
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the [Air Traffic Areas of Responsibility map](#) for Off Airport construction, or contact the [FAA Airports Region / District Office](#) for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

*** Structure Type:** POWER LINE | Transmission Line Tower ▼
 Please select structure type and complete location point information.

Latitude: Deg M S N ▼

Longitude: Deg M S W ▼

Horizontal Datum: NAD83 ▼

Site Elevation (SE): (nearest foot)

Structure Height : (nearest foot)

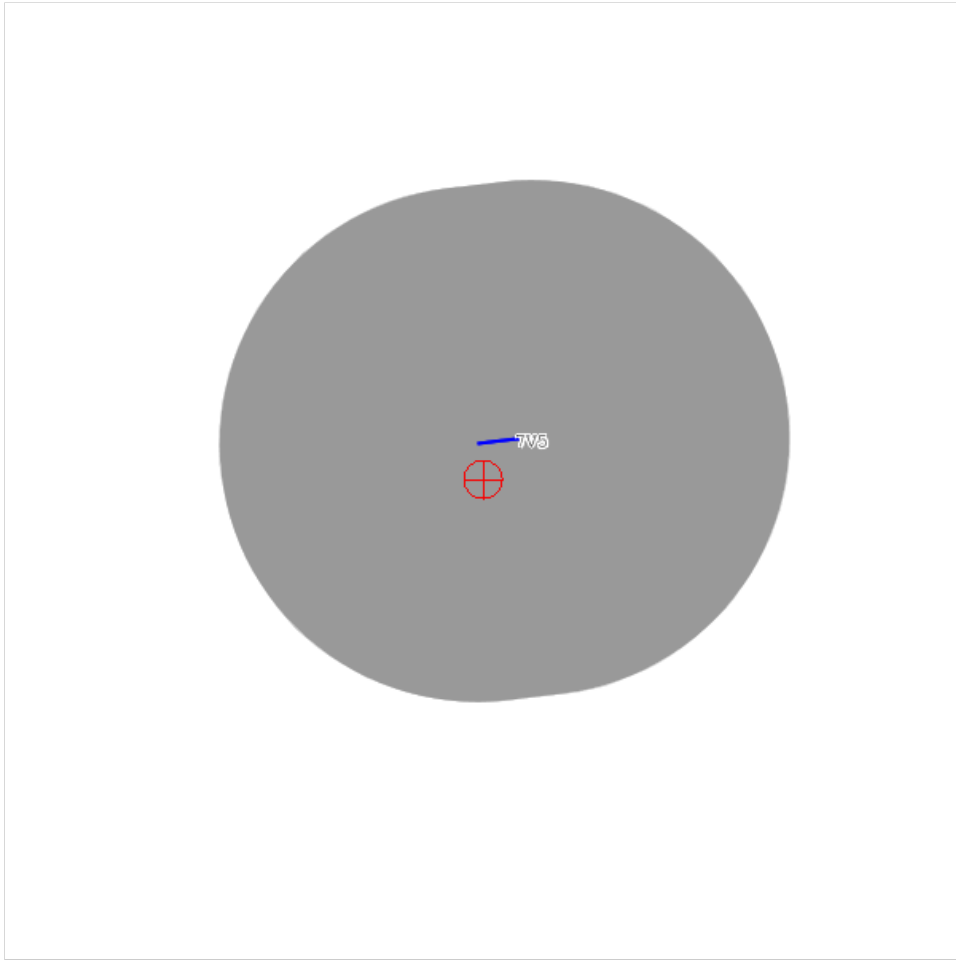
Is structure on airport: No Yes

Results

You exceed the following Notice Criteria:

77.9(b) by 118 ft. The nearest airport is 7V5, and the nearest runway is 07/25.

The FAA requests that you file



APPENDIX O: DECOMMISSIONING PLAN

Decommissioning Plan and Reclamation Cost Estimate for the Fortress Solar Plus Storage Project Morgan County, Colorado

October 2023

PRESENTED TO

Fortress Solar I LLC
11801 Domain Blvd, Suite 450
Austin, TX 78758

PRESENTED BY

Tetra Tech, Inc.
1560 Broadway
Suite 1400
Denver, CO 80202



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ATTACHMENTS

ATTACHMENT A. RECLAMATION COST ESTIMATE SUMMARY

ATTACHMENT B. DETAILED RECLAMATION COST ESTIMATE

1.0 INTRODUCTION

Tetra Tech, Inc. (Tetra Tech) was retained by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC (collectively “Applicant”), indirect subsidiaries of Aypa Power North America LLC (Aypa), to prepare a decommissioning plan and cost estimate (DCP) as part of an application for the proposed Fortress Solar plus Storage Project (Project). The scope of this DCP is to review the Project details and develop a decommissioning plan and associated cost estimate for retiring the Project facilities at the end of its useful life of 30 years. The Applicant may—at their option—upgrade components on the Project to extend the operational life of the Project.

2.0 PROJECT DESCRIPTION

The Project is anticipated to generate 600 megawatts (MW) of solar power and store electrical power using a battery energy storage system (BESS) with the capacity to store 600 MW of power. The Project is located on approximately 4,259 acres of undeveloped rangeland in Morgan County approximately 1.6 miles southeast of the city of Brush, CO. The Project is expected to be comprised of bifacial solar photovoltaic (PV) panels, mounted on a single axis tracking system, collection cables, inverters, medium voltage (MV) transformers, circuit breakers and disconnect switches, a substation, BESS, and other balance of plant (BOP) equipment. The Project will interconnect to the proposed substation which will be built to connect to the existing 230-kV Tri-State Generation Story Substation. These Project facilities are described in more detail herein.

2.1 PHOTOVOLTAIC SOLAR PANELS AND TRACKING

The preliminary design—based on information¹ provided by the Applicant—assumes the Project will use a module blend of Vertex bifacial due glass solar PV panels—assumed to be TSM-DEG21.C.20, 435W—however, the exact model and quantity of solar panels will be finalized during the detailed engineering phase.

The solar panels are arranged in arrays that run from east to west and are grouped in blocks. Panels are clustered into modules and fixed to the ground on a racking system which includes steel pile foundations. A motor is affixed to a central pile that provides power so the panels can track the movement of the sun.

The PV panels are assumed to be supported on single axis tracking and racking structure. Approximately 45,447 tracker rows are assumed to be used; however, the exact configuration will be determined during detailed engineering.

2.2 INVERTERS AND TRANSFORMERS

Approximately 241 solar inverters—assumed to be SMA Sunny Central 4000UP-US²—may be used; however, the exact model will be determined during detailed engineering. These inverters are bi-directional and are connected to the solar arrays via a common connection to the substation medium voltage bus. Each integrated inverter/transformer is expected to have a footprint that measures approximately 9 feet by 5 feet and will not exceed 8 feet in height.

Approximately 133 BESS inverters, assumed to be Sungrow SC5000-UD-MV³—may be used; however, the exact model will be determined during detailed engineering. These inverters are bi-directional and are connected to

¹ DT_M_A_Datasheet_VertexS_DE09R.08_2022_A_web.pdf

² Sunny Central 4000 UP-US/ 4200 UP-US/4400 UP-US/4600 UP-US- The new Sunny Central: more power per cubic meter.pdf

³ DS_20220222_SC5000UD-MV_Datasheet_V14_EN.pdf

groupings of nine battery boxes via a common connection to the substation medium voltage bus. Each integrated inverter/transformer is expected to have a footprint that measures approximately 20 feet by 8 feet and will not exceed 10 feet in height.

Inverters will be supported on driven steel piles. Inverters, control systems, and other electronic equipment will either be reused, returned to original equipment manufacturers for reuse as refurbished or spare parts, or recycled.

Collection cables from the inverters typically converge at the corners of each of the array blocks and lead underground to the proposed Project substation. Feeder cables typically enter the substation via conduit and route to the feeder breakers. The substation usually then requires power transformers, overhead buses, feeder breakers with revenue-grade meters, and miscellaneous supporting equipment. High accuracy metering is proposed to be installed in overhead medium voltage buses upstream of all breakers.

Metering and control equipment plans will be installed in the substation control house, and underground fiber optic communication cables to run between the control house and the inverters. Project data and control signals shall be transmitted over the internet to the Renewable Operations Control Center (ROCC), where the Project shall be remotely monitored and controlled 24/7. The controls will include the BESS charge and dispatch for the following 24 hours, together with emergency conditions.

2.3 OPERATIONS AND MAINTENANCE BUILDING

40 feet by 60 feet, 2,400 sf Operations and Maintenance (O&M) building is proposed north of the BESS area.

2.4 BESS

The BESS will occupy approximately 21 acres of the Project area and is expected to produce approximately a net of 600 MW to the Story substation. Up to 1,330 containers will house the batteries—assumed to be BYD MY Cube MC10C-B5365_U_R4M01—however, the exact model will be selected during detailed engineering.

3.0 ANTICIPATED LIFE OF PROJECT

Typical solar PV modules have a useful life of approximately 30 years. The Project is developed in such a way that components may be upgraded—up to and including full repowering—with minor service interruptions. At this early phase of the Project, the anticipated life is 30 years.

4.0 DECOMMISSIONING PROCESS DESCRIPTION

All decommissioning and restoration activities will adhere to the requirements of appropriate governing authorities, and will be in accordance with all applicable federal, state, and local permits. The decommissioning and restoration process includes removal of all above-ground structures; removal of below-ground structures to 2 feet or the minimum depth agreed to in landowner agreements; and re-grading and re-seeding disturbed areas.

It is assumed that the Project will incur costs for removal and disposal of the PV arrays, BESS, and other Project facilities, and costs for the restoration of the Project area as required by the land lease. Above-grade steel, aluminum, and copper materials typically have significant scrap value to a salvage contractor. All recyclable materials are assumed to be recycled to the extent possible, while all other non-recyclable waste materials will be disposed of in accordance with state and federal law. Recycling facilities are currently limited to the US but are expected to grow to accommodate the demand of recycling in the future.

The process of removing structures involves evaluating and categorizing all components and materials into categories of recondition and reuse, salvage, recycle, or disposal. In the interest of increasing efficiency and reducing transportation costs/duration, components and material may be stored on-site in a pre-approved location

until the bulk of similar components or materials are ready for transport. The components and material are assumed to be transported to the appropriate facilities for reconditioning (if possible), salvage, recycling, or disposal.

4.1 PV ARRAY REMOVALS

The PV solar panels, tracking/racking system and buried underground MV cables will be removed. The demolition debris and removed components will be dismantled into pieces that can be safely lifted or carried with the on-site equipment being used. It is assumed that glass and steel will be processed for transportation and delivered to an off-site recycling center. All above-grade steel, aluminum, and copper will be sent to an approved salvage contractor. PV panels will be disposed of in an approved landfill near the Project.

4.2 RACKING AND FENCING

All racking and fencing material will be broken down into manageable units, removed from the Project area and sent to an approved recycler or salvage contractor. The quantity of fencing assumed in this DCP, and cost estimate is 67,751 linear feet of 8-foot-tall chain link. All racking piles driven into the ground will be assumed to be removed in their entirety.

4.3 PROJECT SUBSTATION

The prefabricated control enclosure and electronic components of the substation equipment will be electrically disconnected and made safe for removal. The control enclosure will then be disassembled and removed from the site. The transformers, breakers, bus work, and metal dead-end structures will also be disassembled and removed. The main power transformer's insulating oil will be drained and transferred to a licensed disposal facility.

Concrete foundations and containment curbs for the transformers may be removed in their entirety or up to an assumed typical minimum depth of two feet if more cost effective and broken into pieces. All debris and aggregate rock from the assumed footprint will either be removed from the site or crushed into gravel and used on-site in coordination with the State Land Board's requirements. The area will be thoroughly cleaned, and debris removed.

4.4 BESS

Foundation materials will be broken into pieces and removed or recycled depending upon the materials used. Clean concrete will be crushed and disposed of off-site and/or recycled and reused. The old batteries will be transported to facilities for refurbishment, recycling, or disposal according to industry best management practices and infrastructure available at the time of decommissioning. The HVAC system refrigerant in the BESS container is considered as greenhouse gas and is required to be removed by the Environmental Protection Association (EPA) by licensed contractors before scrapping.

4.5 ACCESS ROADS

Access and on-site roads will remain in place during decommissioning and will be one of the last Project components to be removed. During decommissioning, the assumed 251,933 linear feet of processed stone access roads will be stripped exposing the geotextile beneath (if applicable). The geotextile will then be removed and disposed to reveal the original soil surface. Asphalt portions of access routes will be removed and disposed. The compacted soil beneath the road fill may require ripping with a subsoiler plow to loosen it before it can be revegetated. It is assumed all access roads will be removed for the purposes of decommissioning and the property shall be restored to the condition prior to development or as explicitly agreed to in writing by the County Planning Department and Landowner.

4.6 OVERHEAD TRANSMISSION LINES

If the overhead transmission gen-tie line is no longer required at the time of Project decommissioning, the gen-tie line is assumed to be removed. Decommissioning typically consist of removal of all structures associated with the construction of the transmission gen-tie line which may include electrical cable and wiring, overhead conductors, and support poles. For the purposes of cost estimation of the removal of overhead transmission lines, this was estimated by units of cubic yards per structure. All above-grade steel is assumed to be salvaged, and the foundations will be removed to an assumed depth of at least two feet below the ground surface. Aluminum from overhead conductors is assumed to be salvaged.

5.0 SITE RESTORATION PROCESS DESCRIPTION

Once Project owner personal property and existing structures of the Project and ancillary facilities have been removed, site restoration activities will take place. The goal of site restoration is to restore the natural topography, vegetative cover, and hydrologic function of the site to a condition as close as possible to that of the site prior to the installation of the Project.

5.1 SITE RECONTOURING

Prior to removal of structures, topsoil will be removed from all work areas (to the furthest extent possible) and stockpiled, clearly designated, and separated from other excavated material. Prior to topsoil replacement, all rocks four inches or greater will be removed from the surface of the subsoil. The topsoil will be de-compacted to match the density and consistency of the immediate surrounding area. The topsoil will be replaced to original depth, and original surface contours reestablished, where possible. All rocks four inches or larger will be removed from the surface of the topsoil. Any topsoil deficiency and trench settling will be mitigated with additional topsoil (purchased and transported to site or borrowed from elsewhere on site) consistent with the quality of the affected site.

Re-contouring of the site will be conducted using standard grading equipment to return the site to a condition as close as possible to that of the site prior to the installation of the Project. Grading activities will be limited to disturbed areas that require re-contouring. Fills will be compacted to approximately 85% relative compaction by wheel or track rolling to avoid over-compaction of the soils. Best management practices will be implemented to provide erosion and sediment control until revegetation efforts have sufficiently stabilized the soil.

5.2 DRAINAGE RESTORATION

Stormwater detention ponds installed for the Project will be decommissioned as part of the restoration effort. Berms will be assumed to be re-graded and recontoured to fill the detention ponds to ensure pre-construction drainage patterns and release rates can be maintained. This assumption will need to be verified during detail design and therefore, was not included in the cost estimate during this phase of the project.

5.3 REVEGETATION

All disturbed soil surfaces will be seeded with a seed mix agreed upon with the State Land Board's district manager and/or applicable local, state, or federal agencies such as the Natural Resources Conservation Service, located in Morgan County, Colorado State University Extension Office, or U.S. Department of Agriculture. These areas will be restored to a condition and forage density similar to the original condition prior to the installation of the Project. In all areas, restoration will include, as reasonably required, leveling, terracing, mulching, and other necessary steps to prevent soil erosion, to ensure establishment of suitable grasses and forbs, and to control noxious weeds. Reseeding shall continue until the damaged native grass area has been fully reseeded and reclaimed. Project owner's obligation to continue reseeded shall expire five years from the date of complete or partial removal of physical material pertaining to the Project's facilities from the Project site.

Project owner will cooperate with other existing or future lessees or permittees to control and eradicate noxious weeds associated with the Project site and decommissioning, including cost sharing in weed control and eradication for up to one year after the Project Lease is terminated. Said cost sharing will be at the sole discretion of the State Land Board.

6.0 PROJECT DECOMMISSIONING COSTS AND BONDING

At the end of the Project's useful life, assumed to be 30 years, the above-grade steel structures, above and buried electrical wiring, and other components are assumed to have significant scrap value which may offset a portion of the cost to remove these items. Following the removal of salvageable equipment and disposal of other items, the Project owner typically also incurs costs for removal and disposal of the PV panels, foundations, and other non-recyclable Project facilities. These activities will impact the cost of the restoration of the site.

The decommissioning cost estimate provided herein includes the costs to return the site to a condition compatible with the surrounding land and similar to the conditions that existed before development of the Project, to the extent feasible. Included in the estimate are the costs to decommission the power generating equipment and retire the Project facilities, including removing all equipment and structures. These costs are offset by the estimated revenue credit that will be received for scrap value of steel, aluminum, and copper materials; resale of the Project facilities for reuse is not considered. Credit for recycling of the PV modules has not been included, given that the market value of recycled PV modules is currently unknown and subject to fluctuation over the useful life of the Project.

The estimated decommissioning costs for the Project were prepared using information from a variety of credible industry sources. As summarized in Appendix A, the estimated cost of decommissioning the Project in 2023 US dollars is \$25,704,681.14. As noted, this cost estimate includes scrap credit and excludes recycling credit.

6.1 FINANCIAL ASSURANCE

The Project is required by Morgan County to execute a bond or letter of credit in the amount of the decommissioning cost minus the salvage value of the system, foundation, and associated equipment and facilities facility equipment at 50% before construction commences and the remaining 50% prior to the 12th anniversary of the commencement of construction of the facility. The amount shall be made by cash, surety bond, or irrevocable letter of credit.

6.2 RECLAMATION COST ESTIMATE ASSUMPTIONS

Decommissioning of the Project was broken into individual tasks that were each estimated separately. Each task includes labor requirements, equipment needs, and duration. Production rates were established using professional experience and published standards that include RS Means (www.rsmeans.com). Labor rates prevalent to the geographic area of the Project were obtained by referencing US Department of Labor wage determinations. Typical average markups that are industry standard were applied for contingency, overhead, and fee. Detailed cost estimates are provided in Appendix B.

Estimating methods and assumptions specific to this cost estimate are as follows:

- Labor costs are developed by reviewing US Department of Labor wage determinations and rates published by RS Means. An average rate is developed that includes base wage, fringe, and payroll tax liability. The final rate used in the estimate is an average of 40 hours standard time and 10 hours overtime per week, assuming a 50-hour work week for the duration of decommissioning.
- Equipment (commonly referred to as yellow iron) rates used in the estimate are developed by reviewing rates published by RS Means and historical vendor quotes. Rates include fuel, maintenance, wear and tear of ground engaging components. Rates assume the use of rented equipment.

- Mobilization and demobilization costs are estimated to be approximately 3% of the overall contractor's costs. These reflect the actual costs to mobilize equipment, facilities, and crew to the Project site. This amount does not include the front loading of cost from other tasks.
- Work was estimated on a unit cost basis and priced by task, following the progression of work from start to finish. Unit costs were developed by including the labor, equipment, and production rate required for each individual task. RS Means and estimator's experience were used to establish the crew, equipment, and production for each individual task.
- Roads will be restored so that they become a part of the natural surroundings and are no longer recognizable to the furthest extent possible. Road gravel will be used to backfill foundation locations to within six inches of final grade. It is expected that the remaining road gravel will be accepted by local receivers with no additional disposal cost. Roads that existed on private land prior to installation of the Project, if any, will be restored at the request of the current landowner.
- All concrete foundations will be fully removed or to a depth of two feet below grade. Gravel from road removal will be used as backfill to bring the top of grade to within six inches of final grade and then completed with an additional six inches of topsoil.
- Concrete foundation removal will be accomplished using excavators with concrete breakers.
- Processed concrete will be transported off site under the same assumptions as road gravel.
- Underground electrical collection system cabling will be removed to a depth of two feet.
- Oil from transformers will be drained prior to removal, and the oil disposed of following state and federal regulations. Oil disposal cost was assumed to be \$4 per gallon.
- Transmission gen-tie line was assumed to include two towers and cables. Towers are assumed to be steel and will be processed on site and shipped as scrap.
- Final restoration will include the placement of six inches of topsoil on all disturbed areas, with a final seeding utilizing a mix of grasses as agreed to and described in Section 5.3. It is assumed that 50% of the topsoil required for restoration is available on site as a result of the original installation.
- The BESS units contain a refrigerant that is considered a greenhouse gas and must be removed and properly disposed during BESS decommissioning.
- The costs for temporary facilities were included in the restoration cost. These include one office trailer, two Conex storage units, portable toilets, first aid supplies, and all necessary utilities.
- Field management during construction activities was added to the estimate. These costs include one superintendent, one health and safety representative, and two field engineers. These positions are critical to the safe and successful execution of work.
- The contractor's home office, project management, overhead, and fee can vary widely by contractor. As such, averages were developed for the estimate and added as a percentage of total cost. These include 5% for home office and project management and 13% for overhead and fee.
- Contractor contingency costs are not included.
- Other miscellaneous costs were approximated, including permits, engineering, signage, fencing, traffic control, utility disconnects, etc. In the context of the overall estimate, these are incidental costs that are covered in the estimate markups.

APPENDIX A. RECLAMATION COST ESTIMATE

Estimate Summary

TETRA TECH EC, INC.

Job Code: Fortress Solar

Description: Decommissioning Estimate

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1	1.00 Each	FORTRESS SOLAR RETIREMENT	0.00	Detail	U.S. Dollar	25,704,681.14	25,704,681.14
1.1	1.00 Lump Sum	Mob / Demob	0.20	Detail	U.S. Dollar	204,563.23	204,563.23
1.1.1	1.00 Lump Sum	Equipment Mob	0.00	Detail	U.S. Dollar	101,500.00	101,500.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
UERNTRLG	Rental Equip Transp-Large		10.00 Each	U.S. Dollar	10,000.00	100,000.00	
UERNTRSM	Rental Equip Transp-Small		10.00 Each	U.S. Dollar	150.00	1,500.00	
1.1.2	1.00 Lump Sum	Site Facilities	0.00	Detail	U.S. Dollar	2,200.00	2,200.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
UOCONMOB	Connex Box Mob		2.00 Each	U.S. Dollar	300.00	600.00	
UOTRLTRN	Trailer Trnsp/Setup/Trdwn		2.00 Each	U.S. Dollar	800.00	1,600.00	
1.1.3	3.00 Day	Crew Mob & Site Setup	1.00	Detail	U.S. Dollar	20,172.65	60,517.94
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	600.00	20.00 Each (hourly)	U.S. Dollar	56.45	33,870.81	
L010101	OPERATOR	300.00	10.00 Each (hourly)	U.S. Dollar	63.76	19,128.12	
L080940	TEAMSTER	120.00	4.00 Each (hourly)	U.S. Dollar	62.66	7,519.01	
1.1.4	2.00 Day	Crew Demob & Site Cleanup	1.00	Detail	U.S. Dollar	20,172.65	40,345.29
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	400.00	20.00 Each (hourly)	U.S. Dollar	56.45	22,580.54	
L010101	OPERATOR	200.00	10.00 Each (hourly)	U.S. Dollar	63.76	12,752.08	
L080940	TEAMSTER	80.00	4.00 Each (hourly)	U.S. Dollar	62.66	5,012.67	
1.2	10.00 Month	Site Facilities	0.00	Detail	U.S. Dollar	2,155.00	21,550.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
URCONNEX	Connex Box		20.00 Month	U.S. Dollar	150.00	3,000.00	
UROFFTRL	Office Trailer -12x60		10.00 Month	U.S. Dollar	500.00	5,000.00	
UO1STAIID	1st Aid Supplies		10.00 Month	U.S. Dollar	300.00	3,000.00	
UOOFFPHN	Monthly Office Phone		10.00 Month	U.S. Dollar	500.00	5,000.00	
UOOFFSUP	Office Supplies(\$/prs/mo)		10.00 Month	U.S. Dollar	55.00	550.00	
UINT	Internet		10.00 Month	U.S. Dollar	200.00	2,000.00	
URPRTAJH	Port-a-John Unit(s) (4)		10.00 Month	U.S. Dollar	300.00	3,000.00	
1.3	40.00 Week	Field Management	0.17	Detail	U.S. Dollar	11,967.95	478,718.16
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L90FX02	Field - Proj Superintendent	2,400.00	1.00 Each (hourly)	U.S. Dollar	83.18	199,636.80	
RPUTRK05	F-250 4X4 3/4 TON PICKUP	4,800.00	2.00 Each (hourly)	U.S. Dollar	13.51	64,848.00	
L90FX03	Field - SHSO	2,400.00	1.00 Each (hourly)	U.S. Dollar	89.26	214,233.36	
1.4	1.00 Lump Sum	Substation Retirement	0.03	Detail	U.S. Dollar	305,913.23	305,913.23
1.4.1	1.00 Day	Fence Removal	1.00	Detail	U.S. Dollar	1,595.52	1,595.52
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L010101	OPERATOR	10.00	1.00 Each (hourly)	U.S. Dollar	63.76	637.60	
L060100	GENERAL LABORER	10.00	1.00 Each (hourly)	U.S. Dollar	56.45	564.51	
RBACKH09	Deere 710J BACKHOE, 1.62CY	10.00	1.00 Each (hourly)	U.S. Dollar	39.34	393.40	
1.4.2	2.00 Each	Transformer Removal	0.17	Detail	U.S. Dollar	98,724.34	197,448.67

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.4.2.1	2.00 Each	Oil Removal & Disposal	1.00	Detail	U.S. Dollar	58,504.03	117,008.05
1.4.2.1.1	2.00 Each	Oil Removal	1.00	Detail	U.S. Dollar	1,129.03	2,258.05
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	40.00	2.00 Each (hourly)	U.S. Dollar	56.45	2,258.05	
1.4.2.1.2	28,000.00 Gallon	Oil Disposal	0.00	Detail	U.S. Dollar	4.00	112,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USDISPOSAL	Disposal Fee's		112,000.00 Each	U.S. Dollar	1.00	112,000.00	
1.4.2.1.3	2.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	2,750.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USTRUCKING	Trucking Sub		2,750.00 Each	U.S. Dollar	1.00	2,750.00	
1.4.2.2	2.00 Each	Dismantle & Loadout Transformer	0.20	Detail	U.S. Dollar	40,220.31	80,440.62
1.4.2.2.1	2.00 Each	Dismantle, Cut & Size	0.20	Detail	U.S. Dollar	34,720.31	69,440.62
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	400.00	4.00 Each (hourly)	U.S. Dollar	56.45	22,580.54	
L010101	OPERATOR	200.00	2.00 Each (hourly)	U.S. Dollar	63.76	12,752.08	
*REXCAV06A	Excav 100K w/ Bucket & Grapple	100.00	1.00 Each (hourly)	U.S. Dollar	140.06	14,006.00	
*REXCAV06E	Excav 100K w/ Shear	100.00	1.00 Each (hourly)	U.S. Dollar	201.02	20,102.00	
1.4.2.2.2	8.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	11,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USTRUCKING	Trucking Sub		11,000.00 Each	U.S. Dollar	1.00	11,000.00	
1.4.3	1.00 Each	Remove Control Building	2.00	Detail	U.S. Dollar	2,676.36	2,676.36
1.4.3.1	1.00 Each	Demo	2.00	Detail	U.S. Dollar	1,301.36	1,301.36
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	5.00	1.00 Each (hourly)	U.S. Dollar	56.45	282.26	
L010101	OPERATOR	5.00	1.00 Each (hourly)	U.S. Dollar	63.76	318.80	
*REXCAV06A	Excav 100K w/ Bucket & Grapple	5.00	1.00 Each (hourly)	U.S. Dollar	140.06	700.30	
1.4.3.2	1.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USTRUCKING	Trucking Sub		1,375.00 Each	U.S. Dollar	1.00	1,375.00	
1.4.4	2.00 Day	UG Utility & Ground Removal	1.00	Detail	U.S. Dollar	1,595.52	3,191.04
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L010101	OPERATOR	20.00	1.00 Each (hourly)	U.S. Dollar	63.76	1,275.21	
L060100	GENERAL LABORER	20.00	1.00 Each (hourly)	U.S. Dollar	56.45	1,129.03	
RBACKH09	Deere 710J BACKHOE, 1.62CY	20.00	1.00 Each (hourly)	U.S. Dollar	39.34	786.80	
1.4.5	500.00 Cubic Yard	Remove Foundations To Subgrade	73.68	Detail	U.S. Dollar	32.30	16,148.32
1.4.5.1	500.00 Cubic Yard	Excavate / Remove Foundation - Various Depth	280.00	Detail	U.S. Dollar	17.88	8,937.90
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	17.86	1.00 Each (hourly)	U.S. Dollar	56.45	1,008.06	
L010101	OPERATOR	35.71	2.00 Each (hourly)	U.S. Dollar	63.76	2,277.16	

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
*REXCAV06C	Excav 100K w/ Hammer	17.86	1.00 Each (hourly)	U.S. Dollar		176.49	3,151.61
*REXCAV06A	Excav 100K w/ Bucket & Grapple	17.86	1.00 Each (hourly)	U.S. Dollar		140.06	2,501.07
1.4.5.2	500.00 Cubic Yard	Concrete Transport Offsite	100.00	Detail	U.S. Dollar	14.42	7,210.42
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	50.00	1.00 Each (hourly)	U.S. Dollar		81.55	4,077.50
L080940	TEAMSTER	50.00	1.00 Each (hourly)	U.S. Dollar		62.66	3,132.92
1.4.6	1.00 Lump Sum	Misc. Material Disposal	0.00	Detail	U.S. Dollar	1,975.00	1,975.00
1.4.6.1	1.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,375.00 Each	U.S. Dollar		1.00	1,375.00
1.4.6.2	10.00 Ton	Disposal Cost	0.00	Detail	U.S. Dollar	60.00	600.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		600.00 Each	U.S. Dollar		1.00	600.00
1.4.7	1.00 Lump Sum	Restore Yard	0.13	Detail	U.S. Dollar	82,878.33	82,878.33
1.4.7.1	2.00 Acre	Backfill / Regrade	2.00	Detail	U.S. Dollar	1,968.14	3,936.27
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	20.00	2.00 Each (hourly)	U.S. Dollar		56.45	1,129.03
L010101	OPERATOR	20.00	2.00 Each (hourly)	U.S. Dollar		63.76	1,275.21
REXCAV06B	Gradall - Excavator	10.00	1.00 Each (hourly)	U.S. Dollar		87.41	874.14
*RDOZER08	CAT D6 LGP Dozer	10.00	1.00 Each (hourly)	U.S. Dollar		65.79	657.90
1.4.7.2	2,000.00 Cubic Yard	Vegetative Cover	300.00	Detail	U.S. Dollar	38.71	77,412.05
1.4.7.2.1	2,000.00 Cubic Yard	Topsoil, Delivered	0.00	Detail	U.S. Dollar	30.00	60,000.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
IMSOIL	Topsoil		2,000.00 Cubic Yard	U.S. Dollar		30.00	60,000.00
1.4.7.2.2	2,000.00 Cubic Yard	Placement	300.00	Detail	U.S. Dollar	8.71	17,412.05
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L010101	OPERATOR	133.33	2.00 Each (hourly)	U.S. Dollar		63.76	8,501.39
RDOZER08	CAT D6N XL	133.33	2.00 Each (hourly)	U.S. Dollar		66.83	8,910.67
1.4.7.3	2.00 Acre	Re-Seed With Native Vegetation	0.00	Detail	U.S. Dollar	765.00	1,530.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		2.00 Acre	U.S. Dollar		765.00	1,530.00
1.5	1.00 Lump Sum	Transmission Line Retirement	0.04	Detail	U.S. Dollar	147,687.01	147,687.01
1.5.1	1.25 Mile	Conductor Removal	0.17	Detail	U.S. Dollar	46,700.53	58,375.67
1.5.1.1	1.25 Mile	Cut / Lower Cable, Size & Loadout	0.17	Detail	U.S. Dollar	39,825.53	49,781.92
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	450.00	6.00 Each (hourly)	U.S. Dollar		56.45	25,403.11
L010101	OPERATOR	150.00	2.00 Each (hourly)	U.S. Dollar		63.76	9,564.06
*RXMISC14	MAN LIFT GAS 125ft	75.00	1.00 Each (hourly)	U.S. Dollar		57.60	4,320.00
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	75.00	1.00 Each (hourly)	U.S. Dollar		25.59	1,919.25
*RXMISC19	Material Handler	75.00	1.00 Each (hourly)	U.S. Dollar		114.34	8,575.50
1.5.1.2	6.25 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	8,593.75

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USTRUCKING	Trucking Sub		8,593.75 Each	U.S. Dollar	1.00	8,593.75	
1.5.2	8.00 Each	Structure Removal	1.00	Detail	U.S. Dollar	5,517.27	44,138.17
1.5.2.1	8.00 Each	Cut / Lower Structure	2.00	Detail	U.S. Dollar	2,276.63	18,213.03
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	160.00	4.00 Each (hourly)	U.S. Dollar	56.45	9,032.22	
L010101	OPERATOR	40.00	1.00 Each (hourly)	U.S. Dollar	63.76	2,550.42	
*RXMISC14	MAN LIFT GAS 125ft	40.00	1.00 Each (hourly)	U.S. Dollar	57.60	2,304.00	
*RXMISC23	GROVE RT 200 TON	40.00	1.00 Each (hourly)	U.S. Dollar	108.16	4,326.40	
1.5.2.2	8.00 Each	Cut / Size Structure & Loadout	2.00	Detail	U.S. Dollar	2,553.14	20,425.14
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	240.00	6.00 Each (hourly)	U.S. Dollar	56.45	13,548.32	
L010101	OPERATOR	40.00	1.00 Each (hourly)	U.S. Dollar	63.76	2,550.42	
*RXMISC23	GROVE RT 200 TON	40.00	1.00 Each (hourly)	U.S. Dollar	108.16	4,326.40	
1.5.2.3	4.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	5,500.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USTRUCKING	Trucking Sub		5,500.00 Each	U.S. Dollar	1.00	5,500.00	
1.5.3	8.00 Each	Remove Foundations To Subgrade	0.95	Detail	U.S. Dollar	5,646.65	45,173.17
1.5.3.1	8.00 Each	Excavate / Remove Foundation - Various Depth	1.00	Detail	U.S. Dollar	5,569.74	44,557.88
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	160.00	2.00 Each (hourly)	U.S. Dollar	56.45	9,032.22	
L010101	OPERATOR	160.00	2.00 Each (hourly)	U.S. Dollar	63.76	10,201.66	
*REXCAV06C	Excav 100K w/ Hammer	80.00	1.00 Each (hourly)	U.S. Dollar	176.49	14,119.20	
*REXCAV06A	Excav 100K w/ Bucket & Grapple	80.00	1.00 Each (hourly)	U.S. Dollar	140.06	11,204.80	
1.5.3.2	32.00 Cubic Yard	Concrete Transport Offsite	75.00	Detail	U.S. Dollar	19.23	615.29
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
RDUTRK06	CAT D350D, 18CY-24CY	4.27	1.00 Each (hourly)	U.S. Dollar	81.55	347.95	
L080940	TEAMSTER	4.27	1.00 Each (hourly)	U.S. Dollar	62.66	267.34	
1.6	600.00 MW	Energy Storage System Retirement	0.43	Detail	U.S. Dollar	7,287.58	4,372,549.03
1.6.1	600.00 MW	Battery Removal & Disposal	2.33	Detail	U.S. Dollar	2,295.54	1,377,322.93
1.6.1.1	258.00 Day	Remove Batteries, Load For Transport	1.00	Detail	U.S. Dollar	2,513.95	648,600.13
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	10,320.00	4.00 Each (hourly)	U.S. Dollar	56.45	582,577.93	
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	2,580.00	1.00 Each (hourly)	U.S. Dollar	25.59	66,022.20	
1.6.1.2	138.00 Each	Transport Batteries	0.00	Detail	U.S. Dollar	1,480.60	204,322.80
1.6.1.2.1	138.00 Each	Roll Off Liners	0.00	Detail	U.S. Dollar	105.60	14,572.80
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
UODCLINER	Rolloff Liner		138.00 Each	U.S. Dollar	105.60	14,572.80	
1.6.1.2.2	138.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	189,750.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USTRUCKING	Trucking Sub		189,750.00 Each	U.S. Dollar	1.00	189,750.00	

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.6.1.3	2,622.00 Ton	Disposal Fee's	0.00	Detail	U.S. Dollar	200.00	524,400.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USDISPOSAL	Disposal Fee's		524,400.00 Each	U.S. Dollar	1.00	524,400.00	
1.6.2	600.00 MW	Structure & Components Removal	5.56	Detail	U.S. Dollar	1,192.08	715,246.47
1.6.2.1	48.00 Day	Refrigerant Recovery	1.00	Detail	U.S. Dollar	1,597.35	76,672.75
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L010110	ELECTRCIAN	960.00	2.00 Each (hourly)	U.S. Dollar	79.87	76,672.75	
1.6.2.2	52,500.00 Gallon	Glycol Recovery & Disposal	0.00	Detail	U.S. Dollar	1.00	52,500.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USLIQUID	Liquids T&D		52,500.00 Each	U.S. Dollar	1.00	52,500.00	
1.6.2.3	2,598.00 Ton	Structure Demo	43.33	Detail	U.S. Dollar	134.19	348,633.71
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
*REXCAV06A	Excav 100K w/ Bucket & Grapple	599.54	1.00 Each (hourly)	U.S. Dollar	140.06	83,971.36	
*REXCAV06E	Excav 100K w/ Shear	599.54	1.00 Each (hourly)	U.S. Dollar	201.02	120,519.22	
L010101	OPERATOR	1,199.08	2.00 Each (hourly)	U.S. Dollar	63.76	76,453.62	
L060100	GENERAL LABORER	1,199.08	2.00 Each (hourly)	U.S. Dollar	56.45	67,689.51	
1.6.2.4	116.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	159,500.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USTRUCKING	Trucking Sub		159,500.00 Each	U.S. Dollar	1.00	159,500.00	
1.6.2.5	1,299.00 Ton	Disposal Cost	0.00	Detail	U.S. Dollar	60.00	77,940.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USDISPOSAL	Disposal Fee's		77,940.00 Each	U.S. Dollar	1.00	77,940.00	
1.6.3	133.00 Each	BESS Inverter / Transformer Removal	0.67	Detail	U.S. Dollar	4,719.37	627,675.81
1.6.3.1	133.00 Each	Disconnect Electrical	1.00	Detail	U.S. Dollar	1,498.29	199,272.30
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L010110	ELECTRCIAN	1,330.00	1.00 Each (hourly)	U.S. Dollar	79.87	106,223.71	
L060100	GENERAL LABORER	1,330.00	1.00 Each (hourly)	U.S. Dollar	56.45	75,080.30	
RPUTRK05	F-250 4X4 3/4 TON PICKUP	1,330.00	1.00 Each (hourly)	U.S. Dollar	13.51	17,968.30	
1.6.3.2	133.00 Each	Loadout Inverter & Transformer	2.00	Detail	U.S. Dollar	1,846.08	245,528.51
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	2,660.00	4.00 Each (hourly)	U.S. Dollar	56.45	150,160.59	
L010101	OPERATOR	665.00	1.00 Each (hourly)	U.S. Dollar	63.76	42,400.67	
RHYDCR06	GROVE RT880 73 TON	665.00	1.00 Each (hourly)	U.S. Dollar	79.65	52,967.25	
1.6.3.3	133.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	182,875.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
USTRUCKING	Trucking Sub		182,875.00 Each	U.S. Dollar	1.00	182,875.00	
1.6.4	11,035.50 Cubic Yard	Concrete Breaking & Excavation	86.67	Detail	U.S. Dollar	57.85	638,450.58
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost	
*REXCAV06C	Excav 100K w/ Hammer	1,273.33	1.00 Each (hourly)	U.S. Dollar	176.49	224,729.47	
*RFELWH08C	CAT 980 LOADER	1,273.33	1.00 Each (hourly)	U.S. Dollar	84.49	107,583.39	
L010101	OPERATOR	2,546.65	2.00 Each (hourly)	U.S. Dollar	63.76	162,375.67	
L060100	GENERAL LABORER	2,546.65	2.00 Each (hourly)	U.S. Dollar	56.45	143,762.05	
1.6.5	11,035.50 Cubic Yard	Concrete Transport Offsite	17.33	Detail	U.S. Dollar	83.20	918,122.19

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	6,366.63	1.00 Each (hourly)	U.S. Dollar		81.55	519,199.05
L080940	TEAMSTER	6,366.63	1.00 Each (hourly)	U.S. Dollar		62.66	398,923.14
1.6.6	60.00 Day	UG Utility Removal	1.00	Detail	U.S. Dollar	1,595.52	95,731.05
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L010101	OPERATOR	600.00	1.00 Each (hourly)	U.S. Dollar		63.76	38,256.24
L060100	GENERAL LABORER	600.00	1.00 Each (hourly)	U.S. Dollar		56.45	33,870.81
RBACKH09	Deere 710J BACKHOE, 1.62CY	600.00	1.00 Each (hourly)	U.S. Dollar		39.34	23,604.00
1.7	133.00 Each	Solar Inverter / Transformer Removal	0.50	Detail	U.S. Dollar	6,565.45	873,204.32
1.7.1	133.00 Each	Disconnect Electrical	1.00	Detail	U.S. Dollar	1,498.29	199,272.30
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L010110	ELECTRCIAN	1,330.00	1.00 Each (hourly)	U.S. Dollar		79.87	106,223.71
L060100	GENERAL LABORER	1,330.00	1.00 Each (hourly)	U.S. Dollar		56.45	75,080.30
RPUTRK05	F-250 4X4 3/4 TON PICKUP	1,330.00	1.00 Each (hourly)	U.S. Dollar		13.51	17,968.30
1.7.2	133.00 Each	Loadout Inverter & Transformer	1.00	Detail	U.S. Dollar	3,692.16	491,057.01
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	5,320.00	4.00 Each (hourly)	U.S. Dollar		56.45	300,321.18
L010101	OPERATOR	1,330.00	1.00 Each (hourly)	U.S. Dollar		63.76	84,801.33
RHYDCR06	GROVE RT880 73 TON	1,330.00	1.00 Each (hourly)	U.S. Dollar		79.65	105,934.50
1.7.3	133.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	182,875.00
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		182,875.00 Each	U.S. Dollar		1.00	182,875.00
1.8	133.00 Each	Remove Solar Inverter Foundations To Subgrade	4.91	Detail	U.S. Dollar	484.45	64,431.78
Notes: ***** Assumption: 10.5 x37x1 concrete pad per inverter/ transformer *****							
1.8.1	1,995.00 Cubic Yard	Excavate / Remove Foundation	280.00	Detail	U.S. Dollar	17.88	35,662.20
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	71.25	1.00 Each (hourly)	U.S. Dollar		56.45	4,022.16
L010101	OPERATOR	142.50	2.00 Each (hourly)	U.S. Dollar		63.76	9,085.86
*REXCAV06C	Excav 100K w/ Hammer	71.25	1.00 Each (hourly)	U.S. Dollar		176.49	12,574.91
*REXCAV06A	Excav 100K w/ Bucket & Grapple	71.25	1.00 Each (hourly)	U.S. Dollar		140.06	9,979.28
1.8.2	1,995.00 Cubic Yard	Concrete Transport Offsite	100.00	Detail	U.S. Dollar	14.42	28,769.58
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	199.50	1.00 Each (hourly)	U.S. Dollar		81.55	16,269.23
L080940	TEAMSTER	199.50	1.00 Each (hourly)	U.S. Dollar		62.66	12,500.35
1.9	1.00 Lump Sum	Solar Array Retirement	0.00	Detail	U.S. Dollar	18,820,519.79	18,820,519.79
1.9.1	70,009.00 Linear Feet	Fence Removal	5,124.80	Detail	U.S. Dollar	1.52	106,398.42
1.9.1.1	70,009.00 Linear Feet	Fence Removal	5,124.80	Detail	U.S. Dollar	1.26	88,523.42
Resource Code	Description	Hours	Quantity UM	Currency		Unit Cost	Total Cost
L010101	OPERATOR	409.82	3.00 Each (hourly)	U.S. Dollar		63.76	26,130.59
L060100	GENERAL LABORER	819.65	6.00 Each (hourly)	U.S. Dollar		56.45	46,270.32
RBACKH09	Deere 710J BACKHOE, 1.62CY	409.82	3.00 Each (hourly)	U.S. Dollar		39.34	16,122.51

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.9.1.2	13.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	17,875.00

Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		17,875.00 Each	U.S. Dollar	1.00	17,875.00

1.9.2	902,256.00 Each	Solar Panel Removal & Disposal	4,800.00	Detail	U.S. Dollar	8.84	7,976,445.14
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1.9.2.1	902,256.00 Each	Solar Panel Removal	4,800.00	Detail	U.S. Dollar	3.94	3,554,390.14
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	11,278.20	6.00 Each (hourly)	U.S. Dollar	25.59	288,609.14
L010101	OPERATOR	11,278.20	6.00 Each (hourly)	U.S. Dollar	63.76	719,102.54
L060100	GENERAL LABORER	45,112.80	24.00 Each (hourly)	U.S. Dollar	56.45	2,546,678.46

Notes: *****
 Assumed production: 20 panels per laborer per hour,
 Includes packaging and preparing for shipment offsite.

1.9.2.2	1,693.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	2,327,875.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		2,327,875.00 Each	U.S. Dollar	1.00	2,327,875.00

Notes: *****
 Assumption: 45,000 lbs per load

1.9.2.3	38,076.00 Ton	Disposal Cost	0.00	Detail	U.S. Dollar	55.00	2,094,180.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		2,094,180.00 Each	U.S. Dollar	1.00	2,094,180.00

Notes: *****
 Assumption: 902,256 modules x 84.4 lbs each

1.9.3	33,417.00 Each	Solar Rack (Trackers) & Post Removal	100.00	Detail	U.S. Dollar	321.32	10,737,676.23
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1.9.3.1	33,417.00 Each	Solar Rack (Trackers) & Post Removal	100.00	Detail	U.S. Dollar	290.75	9,716,051.23
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	33,417.00	10.00 Each (hourly)	U.S. Dollar	63.76	2,130,681.29
L060100	GENERAL LABORER	33,417.00	10.00 Each (hourly)	U.S. Dollar	56.45	1,886,434.76
*REXCAV06A	Excav 100K w/ Bucket & Grapple	16,708.50	5.00 Each (hourly)	U.S. Dollar	140.06	2,340,192.51
*REXCAV06E	Excav 100K w/ Shear	16,708.50	5.00 Each (hourly)	U.S. Dollar	201.02	3,358,742.67

Notes: *****
 Crew to include
 1 excavator w/shear, 1 excavator w/grapple, 2 operators and 2
 laborers. Includes post removal and sizing of steel for sale as scrap,
 and loadout to haul trucks.

1.9.3.2	743.00 Each	Trucking - Per Load	0.00	Detail	U.S. Dollar	1,375.00	1,021,625.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,021,625.00 Each	U.S. Dollar	1.00	1,021,625.00

Notes: *****
 Assumption: 45,000 lbs per load

1.10	1.00 Lump Sum	Site Restoration	0.00	Detail	U.S. Dollar	2,810,954.40	2,810,954.40
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1.10.1	112,072.00 Cubic Yard	Access Road Removal	1,000.00	Detail	U.S. Dollar	10.15	1,137,351.99
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	3,362.16	3.00 Each (hourly)	U.S. Dollar	63.76	214,372.67
L060100	GENERAL LABORER	3,362.16	3.00 Each (hourly)	U.S. Dollar	56.45	189,798.47

Cost Item							
CBS Position Code	Quantity UM	Description	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
L080940	TEAMSTER		3,362.16	3.00 Each (hourly)	U.S. Dollar	62.66	210,667.57
RDUTRK06	CAT D350D, 18CY-24CY		3,362.16	3.00 Each (hourly)	U.S. Dollar	81.55	274,184.15
RFELWH09	CAT 966F LOADER, 4.25CY		3,362.16	3.00 Each (hourly)	U.S. Dollar	73.86	248,329.14

Notes: *****
275,085' x 22' x .5'

1.10.2	1,537.00 Acre	Spot Grade Disturbed Areas	8.00	Detail	U.S. Dollar	323.88	497,797.41
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
*RDOZER08	CAT D6 LGP Dozer	3,842.50	2.00 Each (hourly)	U.S. Dollar	65.79	252,798.08
L010101	OPERATOR	3,842.50	2.00 Each (hourly)	U.S. Dollar	63.76	244,999.34

Notes: *****
Assumption: 4,390 acres total property area.
Assume that 35% of the area disturbed by construction will be regraded.

1.10.3	1,537.00 Acre	Re-Seed With Native Vegetation - Roads & Areas Disturbed By Construction	0.00	Detail	U.S. Dollar	765.00	1,175,805.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		1,537.00 Acre	U.S. Dollar	765.00	1,175,805.00

Notes: *****
Assumption: 4,390 acres total property area.
Assume that 35% of the area disturbed by construction will be re-seeded.

1.11	1.00 Lump Sum	Contractor Markups	0.00	Detail	U.S. Dollar	4,040,390.20	4,040,390.20
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1.11.1	1.00 Lump Sum	Home Office, Project Management (5% Of Cost)	0.00	Detail	U.S. Dollar	1,083,214.55	1,083,214.55
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USMARKUP5	5% Markup		21,664,291.00 Each	U.S. Dollar	0.05	1,083,214.55

1.11.2	1.00 Lump Sum	Contractor OH & Fee (13% Of Cost)	0.00	Detail	U.S. Dollar	2,957,175.65	2,957,175.65
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USMARKUP	13% Markup		22,747,505.00 Each	U.S. Dollar	0.13	2,957,175.65

1.12	1.00 Lump Sum	Scrap Metal Credit	0.00	Detail	U.S. Dollar	(6,435,800.00)	(6,435,800.00)
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1.12.1	150.00 Ton	Scrap Credit - Substation	0.00	Detail	U.S. Dollar	(260.00)	(39,000.00)
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
UODCFERROUS	Ferrous Metal Scrap		150.00 Ton	U.S. Dollar	(260.00)	(39,000.00)

1.12.2	72.00 Ton	Scrap Credit - T Line	0.00	Detail	U.S. Dollar	(260.00)	(18,720.00)
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
UODCFERROUS	Ferrous Metal Scrap		72.00 Ton	U.S. Dollar	(260.00)	(18,720.00)

Notes: *****
Assume 9 ton per steel structure and cable span

1.12.3	280.00 Ton	Scrap Credit - Fence	0.00	Detail	U.S. Dollar	(260.00)	(72,800.00)
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
UODCFERROUS	Ferrous Metal Scrap		280.00 Ton	U.S. Dollar	(260.00)	(72,800.00)

Notes: *****
Assume 8 lbs per ft fence & posts

1.12.4	16,709.00 Ton	Scrap Credit - Module Rack	0.00	Detail	U.S. Dollar	(260.00)	(4,344,340.00)
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Cost Item								
CBS Position Code	Quantity UM	Description	Hours	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
Resource Code	Description		Hours	Quantity UM	Currency		Unit Cost	Total Cost
UODCFERROUS	Ferrous Metal Scrap			16,709.00 Ton	U.S. Dollar		(260.00)	(4,344,340.00)
Notes: ***** Assume 1000 Lbs per string w/ piles *****								
1.12.5	2,660.00 Ton	Scrap Credit - Solar Inverter & Transformer		0.00	Detail	U.S. Dollar	(260.00)	(691,600.00)
Resource Code	Description		Hours	Quantity UM	Currency		Unit Cost	Total Cost
UODCFERROUS	Ferrous Metal Scrap			2,660.00 Ton	U.S. Dollar		(260.00)	(691,600.00)
Notes: ***** Assume 20 ton per inverter / transformer *****								
1.12.6	2,660.00 Ton	Scrap Credit - BESS Inverter / Transformer		0.00	Detail	U.S. Dollar	(260.00)	(691,600.00)
Resource Code	Description		Hours	Quantity UM	Currency		Unit Cost	Total Cost
UODCFERROUS	Ferrous Metal Scrap			2,660.00 Ton	U.S. Dollar		(260.00)	(691,600.00)
Notes: ***** Assume 20 ton per inverter/transformer *****								
1.12.7	1,299.00 Ton	BESS Containers		0.00	Detail	U.S. Dollar	(260.00)	(337,740.00)
Resource Code	Description		Hours	Quantity UM	Currency		Unit Cost	Total Cost
UODCFERROUS	Ferrous Metal Scrap			1,299.00 Ton	U.S. Dollar		(260.00)	(337,740.00)
1.12.8	100.00 Ton	Scrap Credit - Cable		0.00	Detail	U.S. Dollar	(2,400.00)	(240,000.00)
Resource Code	Description		Hours	Quantity UM	Currency		Unit Cost	Total Cost
UODCCOP	Copper Scrap			200,000.00 Pound	U.S. Dollar		(1.20)	(240,000.00)
Notes: ***** Assume .10 lbs per lf cable on rack Ballance misc cable from BESS and substation *****								
Report Total:								25,704,681.14

Category	Total
Labor	11,417,622.88
Rented Equipment	8,341,721.52
Supplies	18,122.80
Materials	60,000.00
Subcontract	12,241,313.95
Travel-Risk-Adj	52,500.00
ODCs	9,200.00
Other Costs	(6,435,800.00)

APPENDIX P: MAINTENANCE STATEMENT

Operations and Maintenance Plan – Solar and BESS

This operations and maintenance plan applies to both the Solar and BESS infrastructure associated with the Project. Aypa will draw on its four years of experience managing operational battery energy storage systems to optimize the operations and maintenance of the project under the agreement. The site will be monitored 24/7 by a dedicated NERC GOP certified Remote Operations Center (ROC) centralized operations team, and field services personnel with a contractually guaranteed mean time to repair on site. This will ensure guaranteed availability on Balance of Plant at the site for the substation, including but not limited to, preventive and corrective maintenance activities.

The BESS would be unmanned, remotely controlled, containers and would periodically be inspected for maintenance purposes. The LTSA's with the OEM of major equipment providers shall ensure a high degree of performance and reliability of the operational assets.

Monitoring and Reporting

Aypa, in conjunction with their provider, will offer 24/7/365 remote monitoring and conduct automated data analysis to review system performance and identify potential issues. There will be extensive monitoring of operational data including all system components, batteries (from the array to the cell level), PCSs, and HVAC systems. Warnings will be generated if any parameters (e.g., voltage, current, temperature) are detected outside normal operating ranges, and the integrator will respond in real-time. Periodic reviews will summarize battery usage, system health, outages, and maintenance events. In addition, there will be annual on-site review of project performance to quantify important parameters including system efficiency and degradation. The results of the annual review, taken into consideration with usage, will inform corrective and preventative maintenance and augmentation decisions.

Augmentation

To maintain the BESS Capacity over the lifespan of the Project, the project will be augmented to account for battery degradation. Aypa will work with the Integrator or independent service provider to develop an augmentation plan that minimizes the impact to the utility infrastructure while ensuring the energy capacity of the system is reliability maintained. One of the greatest benefits of modular BESS solutions is its scalability. The modular architecture readily supports augmentation using a standard forklift or telehandler. Battery arrays can simply be expanded by installing additional battery units. The need for augmentation will be considered during the final engineering and design phase. Certain battery arrays will be earmarked for expansion, and space will be set aside for the installation of additional battery units.

Some of the O&M responsibilities for the PV & BESS would typically include:

- Asset management including technical, commercial and compliance aspects
- Planned Preventive Maintenance (PPM)
- Corrective Maintenance
- Condition based maintenance
- Spare parts management
- Field services management
- Facilities management
- Vegetation management (as applicable)
- Warranty administration and claims management
- Management of network, controls, and SCADA equipment

- 24/7/365 remote monitoring
- Communication and coordination with project partners and vendors including but not limited to QSE, EMS, field personnel, local authorities, etc.
- Periodic and event-based reporting
- Support for performance engineering, troubleshooting and diagnostics towards maintaining guaranteed availability of the site
- Maintain guaranteed response time and communicative responsiveness
- NERC compliance for GO & GOP through internal and external partners

Aypa will leverage the respective manufacturer's manual for maintenance guidelines tailored to specific equipment. The detailed information on maintenance schedules, recommended cleaning methods, safety precautions, and troubleshooting tips will be based on the manufacturer's manual specification.

Typical Solar manufacturer manual specification

- Trina Vertex maintenance manual

Typical BESS manufacturer maintenance manual specification

- MC Cube ESS maintenance manual

Trinasolar



TRINA SOLAR USER MANUAL

VERTEX SERIES MODULES

APPLICABLE MODULE TYPE

Module type	Module code
Single glass products	DE09
	DE09.05
	DE09.08
	DE09C.05
	DE09C.07
	DE09R
	DE09R.05
	DE09R.08
	DE18M(II)
	DE18M.08(II)
	DE19
	DE19R
	DE20
	DE21
	NE09RC.05
	NE19R
	DE09.05W
	DE09.08W
	DE09R.W
	DE09R.05W
	DE09R.08W
	DE18M.W(II)
	DE18M.08W(II)
	DE19.W
	DE19R.W
	DE20.W
	DE21.W

Module type	Module code
Dual glass products	DEG9R.20
	DEG9R.28
	DEG9RC.27
	DEG18M.20(II)
	DEG18M.28(II)
	DEG18MC.20(II)
	DEG19C.20
	DEG19RC.20
	DEG20C.20
	DEG21C.20
	NEG9.20
	NEG9.28
	NEG9C.27
	NEG9R.20
	NEG9R.28
	NEG9RC.27
	NEG19C.20
	NEG19RC.20
	NEG20C.20
	NEG21C.20
	DEG9R.20W
	DEG9R.28W
	DEG9RC.27W
	DEG18MC.20W(II)
	DEG19C.20W
	DEG19RC.20W
	DEG20C.20W
	DEG21C.20W

Contents of this document are subject to change without notice.
For the latest document please refer to Trina Solar official website: www.trinasolar.com.

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1 INTRODUCTION

First, thank you for choosing our products. This manual shall only apply to the installation, maintenance and use of the 210 Vertex series solar modules manufactured by Trina Solar Co., Ltd. (hereinafter referred to as "Trina Solar"). Failure to follow these safety instructions may result in personal injury or property damage.

The installation and operation of solar modules requires specialized skills and should only be performed by professionals. Please read the "Safety and Installation Instructions" carefully before using and operating the modules. The installer must inform the end customers (or consumers) of the above matters accordingly.

The term "Module" or "PV Module" in this manual refers to one or more 210 Vertex series solar modules. Please retain this manual for future reference.

DISCLAIMER

Trina Solar reserves the rights to change this User Manual without noticing in advance. This User Manual is not a warranty document and does not have any warranty meaning. Failure of the customers to follow the requirements outlined in this User Manual during the handling (including without limitation to packing/unpacking, loading/unloading, transportation, storage, installation, use, operation or maintenance, etc.) of the products will result in the invalidity of product's limited warranty. Trina Solar is not responsible for any damages of any kind, including but not limited to any product damages, personal injury or any other property losses, as resulting from any improper operations or faults by the customers during the handling of the products as failure to follow the instructions in this User Manual.



Warning

Otherwise, the product may be damaged or the user's personal safety may be endangered.



Prohibition

Otherwise, the product may be damaged or the user's personal safety may be endangered.

2 SAFETY PRECAUTIONS

GENERAL SAFETY

Before attempting to install, wire, operate and maintain the modules, please read and understand all safety instructions. The module's solar cell will generate direct current (DC) when it is exposed to direct sunlight or other light sources, and direct contact with electricity live parts of the module, such as terminals, can result in injury or death, irrespective of whether or not the module and the other electrical equipment are connected.

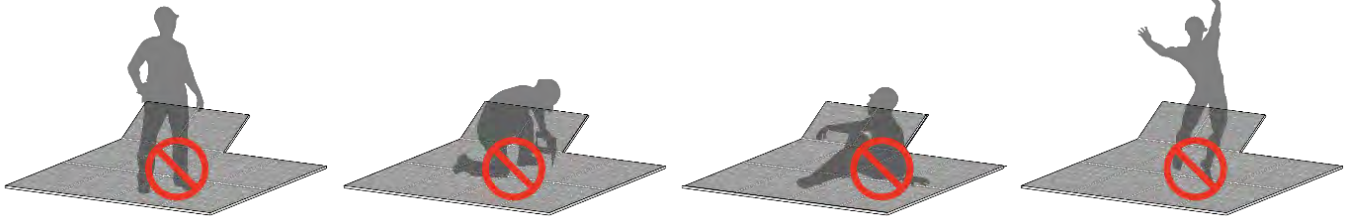
Regardless of whether the PV module is connected to the system or not, when conducting such as installation, grounding, wiring, or cleaning work, appropriate protective equipment such as insulation tools, hard hats, insulated gloves, safety belts and safety insulated shoes should always be used to avoid direct contact with the modules, reduce the risk of electric shock and protect your hands from sharp edges.



Under normal conditions, a solar photovoltaic module is likely to experience conditions that produce more current and/or voltage than reported at standard test conditions. The requirement of National Electric Code (NEC) in Article 690 shall be following to address these increased outputs. In installation not under the requirement of the NEC, the values of I_{sc} and V_{oc} marked on this module should be multiplied by a factor of 1.25 when determining component voltage ratings, conductor current ratings, fuse sizes and size of controls connected to the PV output.



Do not stand, sit, walk, or jump directly on the module package or the module itself.



The PV module does not contain any serviceable parts. Do not disassemble or move any part of the module.

Do not damage or scratch the front- or backside surfaces of the module, as scratches may directly affect the product safety. If you detect any scratches or cuts on the module front- or backside, please do not use the module at all.

Do not put heavy objects or sharp objects on modules.

Do not pull, scratch or bend the output cables with force. Otherwise, the insulation part of the output cables will be damaged, leading to current leakage or electric shock.

Do not insert any conductive material into the connectors attached to the module.

Do not connect or disconnect the module when there is a current flow, or connected with any powered system.

Do not use water to extinguish fires when the module is connected to any powered system.

Do not artificially concentrate sunlight on the module.

Do not drop PV modules or allow objects to hit or fall directly on the modules.

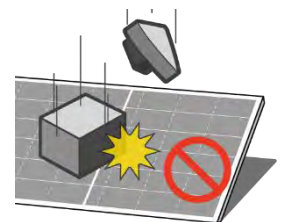
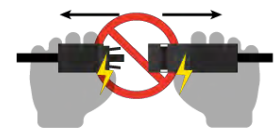
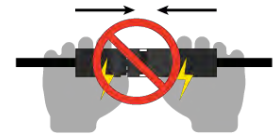
Do not carry modules on your head.

Do not carry modules with ropes.

Do not carry modules on your back.

During the normal operation of modules, they should not be blocked by buildings, trees, chimneys, etc. at any time of the day.

Keep the junction box cover closed at all times.



FIRE SAFETY

When install modules on the rooftop, please refer to local laws and regulations before installation and abide by the requirements on building fire protection. The roof should be covered with a layer of fireproof materials with suitable fire protection rating and make sure that the backsheet and the mounting surface are fully ventilated. Different roof structures and installation methods will affect fireproof performance of buildings. Improper installation may lead to the risk of fire. Please use proper module accessories such as fuse, circuit breaker and grounding connector according to local regulations.



Do not install or use modules near open flames or flammable and explosive materials.

3 SITE SELECTION AND ANGLE

INSTALLATION ENVIRONMENT SELECTION

Trina Solar recommends that the module should be installed in a working environment with an ambient temperature of -20°C to 50°C , but not exceed the temperature limit of -40°C to 85°C .

The modules shall be installed in shadow-free areas throughout the year. Do not install the PV modules at a place where water damage may occur.

When installing solar modules on the rooftop, a safe working area must be left between the roof edge and the outer edge of the PV array.

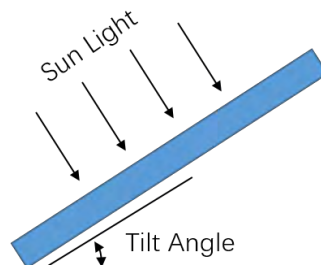
When stacking module on the rooftop, the rooftop should be tested for such loading and the installation plan must be developed in accordance with the specification requirements.

When using the modules in areas with high wind load and snow load, the supporting structure design should be carried out in strict accordance with the local design specifications, to ensure that the external load does not exceed the mechanical strength limit that the modules can withstand.

Salt spray corrosion tests conducted in accordance with IEC 61701 have shown that Trina Solar's PV modules can be installed near offshore or in the corrosive environment. However, the modules shall not be immersed in water or in a permanently wet environment (e.g., fountains, spindrift, etc.). There is a risk of corrosion if the module is placed in a salt spray (i.e., a marine environment) or in an environment containing sulfur (e.g., volcanoes, etc.).

In the place, 50~500 m away from the sea, stainless steel or aluminum materials need to be used in where contacting PV modules, and the installation position must be processed with anti-corrosion treatment. For detailed installation requirements, please refer to the *Trina Solar Coastal Application White Paper*, available from <https://www.trinasolar.com/en-glb/resources/downloads>.

INCLINATION SELECTION



The tilt angle of the PV module refers to the angle between the module and the horizontal ground. The tilt angle shall be selected according to the local conditions for different projects. Trina Solar recommends that the mounting tilt angle should not be less than 10° . For specific tilt angles, it shall be chosen in accordance with the local design procedures, specifications and regulations, or following the recommendations of the experienced PV module installers.

The PV modules is highly recommended facing south in the northern hemisphere and north in the southern hemisphere to get the best performance.

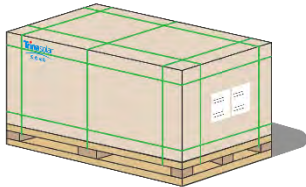
Following the local regulations, if PV modules are installed in North America and any other country or region comply to UL standard. A minimum of 155 mm (6.10 inch, recommended value) clearance shall be left between the PV module (backside) and the wall or roof surface. If other installation methods are used, the PV module's UL certification or fire class rating may get affected.

4 UNLOAD/TRANSPORTATION/STORAGE

In any circumstances, for vertical landscape packages, it shall not be stacked more than two layers; for vertical portrait packages, stacking is not allowed.

The working ground needs to ensure that the packaging box can be placed horizontally and steadily to avoid tipping.

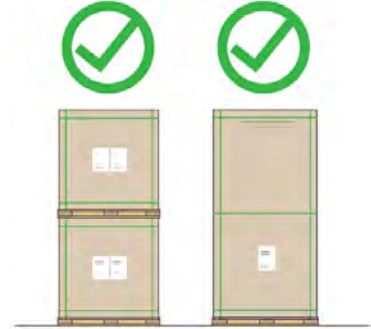
Example for vertical landscape package and vertical portrait package is shown as follows:



Vertical landscape package
(short-side vertically placed)



Vertical portrait package
(long-side vertically placed)



UNLOADING

Upon arrival of the modules, please check the packaging box is in good condition, and check whether the module type and quantity on the outer packaging are consistent with the delivery order, if anything is wrong, please contact Trina Solar logistics and sales staff immediately.

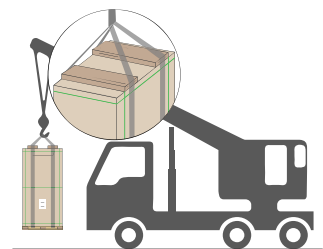
1. Unloading with a crane

When crane is used to unload the modules, please choose and use specialized tooling according to the weight and size of the module. Please adjust the position of the sling to keep the modules steady. To ensure the safety of the module, wooden sticks, boards or other fixtures of the same width as the outer packing cases should be used on the upper part of the box to prevent the sling from squeezing the pallet and damaging the modules. When placing the modules, do not lower the packing box too quickly and put it on a flat ground.



For vertical landscape packages, do not lift up more than FOUR pallets of modules at once; for vertical portrait packages, do not lift up more than TWO pallets of modules at once.

Do not unload modules under the weather conditions of wind more than 6 class (in Beaufort scale), heavy rain or heavy snow.



2. Unloading with a forklift

The loading dock should be as the same height as the underside of the carrier.

Please keep sufficient safety space between forklift and personnel when the forklift is operating, prohibit people stand or walk around the forklift.

The forklift should be driven at a controlled driving speed of $\leq 5\text{km/h}$ in straight and $\leq 3\text{km/h}$ for turning, so as to avoid sudden stops and rapid starts to prevent modules from tipping to cause personnel injury.

Since the packing box will block the sight of the forklift driver, it is recommended to drive backwards during the forklifting, and arrange for special supervision and command to prevent bumping into people or items causing personal injury or damage to the modules.

Please choose a flat and solid ground to place the module package after transportation to the installation site.

Forklift operation in warehouse

When using a forklift to unload the modules, please choose a forklift with suitable tonnage according to module weight. The forks should go into the pallet at least 3/4 of the pallet depth during unloading (the forks length $L \geq 3/4$ of pallet length).

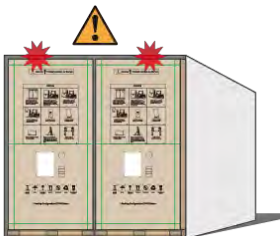
In order to ensure better stability during forklift transport, the forks distance (W) should be adjusted to the maximum position without any interference.

Please drive slowly and do not allow forks to hit the cartons or pallets. Please place buffer protection material (in yellow, preferably silicone, rubber, EPE) in advance to prevent the inside modules being damaged due to the external force.

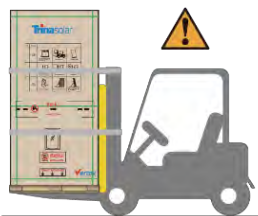
It is recommended to extend the height or width of the forklift backrest to prevent directing touch with the module glass.



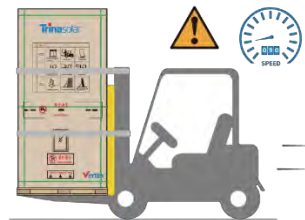
Please also pay attention to the following precautions when unloading (taking vertical portrait packages as an example).



Prevent collision on the top when unloading from the container.



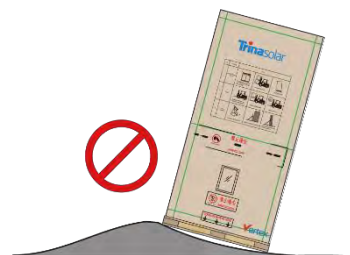
Recommend to secure the module package to the forklift with a safety rope, transport horizontally with no person standing on either side.



Control the speed to prevent tipping.



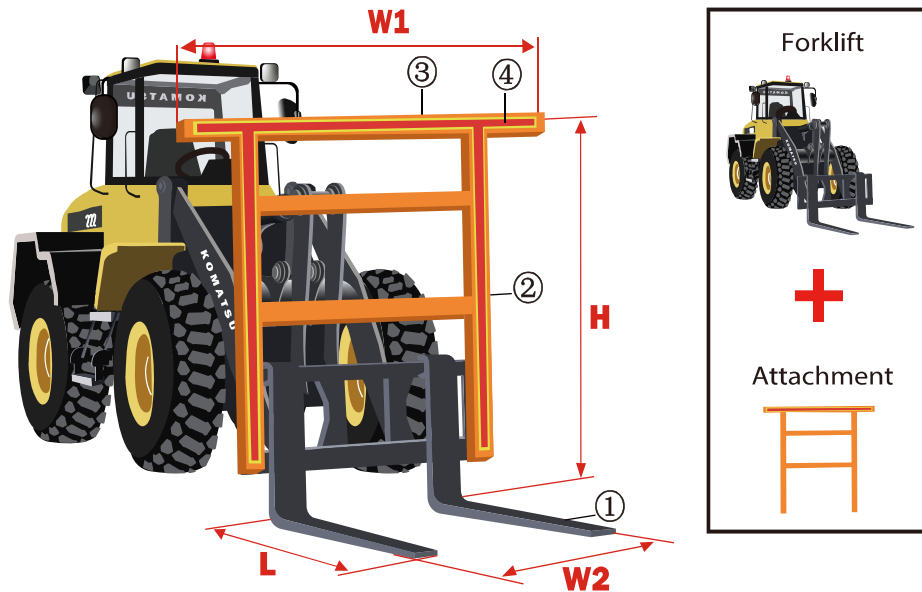
No collision on the module glass.



No tilting storage.

Forklift operation at project site

The forklift operation at project site refers to the transportation of modules between the storage site and the installation site after they arrived at the project storage site.



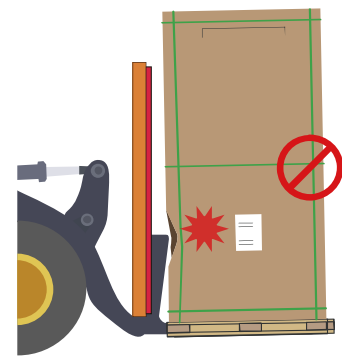
Forklift requirements:

Vertical portrait package

Please use forklifts with a rated lifting capacity of ≥ 3.5 tons to load and transport the modules.



Do not allow the convex part of the fork to directly contact with the carton or modules to prevent damage to the modules.



① Forks

The fork length (L) should ≥ 1.0 m.

The forks distance (W2) should be adjusted to the maximum position without any interference to the pallet.

② Backrest

The backrest length (H) should ≥ 1.7 m; the backrest width (W1) should ≥ 1.5 m.

The backrest shall perpendicular to the fork, and the structure must be firm (withstand pressure ≥ 15 kN). When the entire module package leans on the backrest, the backrest shall not be deformed due to pressure.

③ Beam

④ Buffer material

The contact position between the top beam and the module package should be fixed with a buffer material (preferably silicone, rubber, EPE) to prevent the forklift from damaging the modules.



Vertical landscape package

① Forks

The fork length (L) should ≥ 1.0 m.

The forks distance (W2) should be adjusted to the maximum position without any interference to the pallet.

② Backrest

The backrest length (H) should ≥ 1.5 m or the backrest width (W1) should ≥ 2.5 m.

The backrest shall perpendicular to the fork, and the structure must be firm (withstand pressure ≥ 15 kN). When the entire module package leans on the backrest, the backrest shall not be deformed due to pressure.



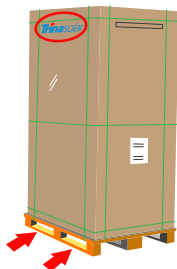
③ Beam

④ Buffer material

The contact position between the top beam and the module package should be fixed with a buffer material (preferably silicone, rubber, EPE) to prevent the forklift from damaging the modules.

**Forklift specifications and operating practices include, but are not limited to, the above-mentioned matters.*

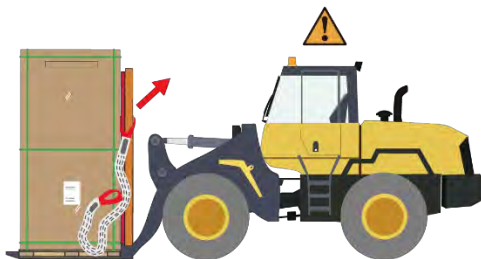
Please also pay attention to the following precautions:



The forklift must be operated from the long side of the pallet (forks enter slowly into the pallet from the long side). Do not collide with the module. Both sides of the beam shall contact with the package at the same time.



The module package shall lean on the backrest, the package must be fixed using a safety rope with a tensile strength of ≥ 2000 kgf, and control the speed to prevent tip-off.



Place the module package smoothly on the ground, untie the safety rope after the confirmation of no risk of tilting.



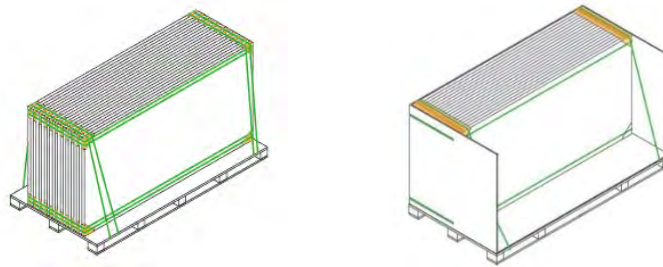
Exit the forklift slowly.

SECONDARY TRANSPORTATION

The packaged modules can be transported by land, sea or air. During transportation, make sure that the package is fixed with packing belts securely on the shipping platform without any movement.

If the unpacked modules need to be transported to other places, it is recommended to pack the single module together in a package to the maximum number allowed, and fixed with inner packing belts (2100N force recommended). Finally, cover it with the packaging carton box and fix it with the same number of packing belts as before.

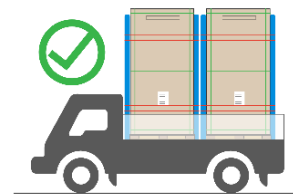
If the number of modules need to be packed is less than the maximum number allowed in a package, the modules need to be fixed and secured to the center of the pallet for utility packaging (the following figure to the left) or on the side for distribution packaging (the following figure to the right), and fixed with inner packing belts (2100N force recommended). Finally, cover it with the packaging carton box and fix it with the same number of packing belts as before. Do not put the unfulfilled package on the lower layer when transported.



Please use appropriate means of transport to transport the modules. Do not use pedicab to transport or handle the modules.

Secondary transport is not allowed for the monofacial modules that are packaged horizontally.

There is no stacking of pallets allowed (for both vertical landscape and vertical portrait packages), when transporting with small trucks. Please fix the package to the vehicle using e.g. safety ropes and control the driving speed according to the road conditions. Please put paper corner support or other buffer material between safety rope and carbon box to protect modules from damage.



When using box trucker and flatbed trucker transport the modules, the module packages should be placed close to each other without any gap. The empty space needs to be filled to prevent the package moving backwards to the rear of the truck. Additionally, every package needs to be fixed using e.g. ropes to the vehicle when transporting with the flatbed trucker.

Do not allow pallets to exceed the loading area of the transport vehicle.

STORAGE

Modules should be stored in a dry and ventilated environment on a flat ground (for vertically portrait package, the inclination of ground need to be less than 8°), to avoid damage or dumping of the modules due to ground deformation or collapse.

Storage requirements: relative humidity < 85% and temperature range of -40°C to 50°C.



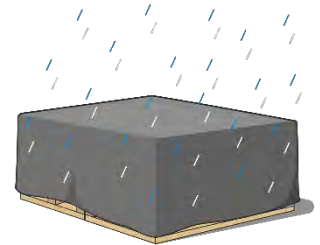
Do not remove the original package and keep the wrapping film and carton box in a good condition, if the modules require long-distance transport or long-term storage.

For long-term storage, it is recommended to store the modules in a standard warehouse with regular inspection, and under confirming of your personal safety, reinforce the package in a timely manner if any anomalies are found.

The warehouse shelves should have sufficient carrying capacity and storage space, regular inspection is required to ensure the storage safety.

If you need to store the modules in the project site, do not choose soft ground and the ground that is easy to collapse, should choose a hard ground or a higher ground with flat surface to ensure the module packages not collapsing and tilting for long-term storage.

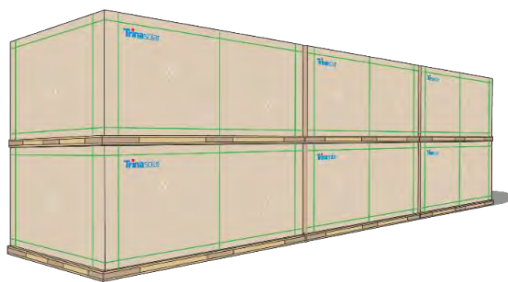
In rainy weather, please fully cover the modules and pallets with a rain protection and take moisture-proof measures on pallets and cartons to prevent collapse and moisture ingress. Under sun or wind, remove the rain cloth to allow the package to dry as soon as possible, prevent package collapse caused by the rain.



Do not allow the pallets to soak in water. The ground drainage measures should be done previously for the storage site to prevent a large amount of water accumulation on the ground after rain, causing the ground to soften, sink, etc.

Do not allow unauthorized persons to access the module storage area.

The modules should be centrally stored.



5 UNPACKING INTRODUCTION

5.1 UNPACKING SAFETY

Before unpacking, please check the product type, power bins, serial number and relevant suggestions on the A4 paper of the packaging box, and read the unpacking instructions carefully. Custom unpacking methods are prohibited.

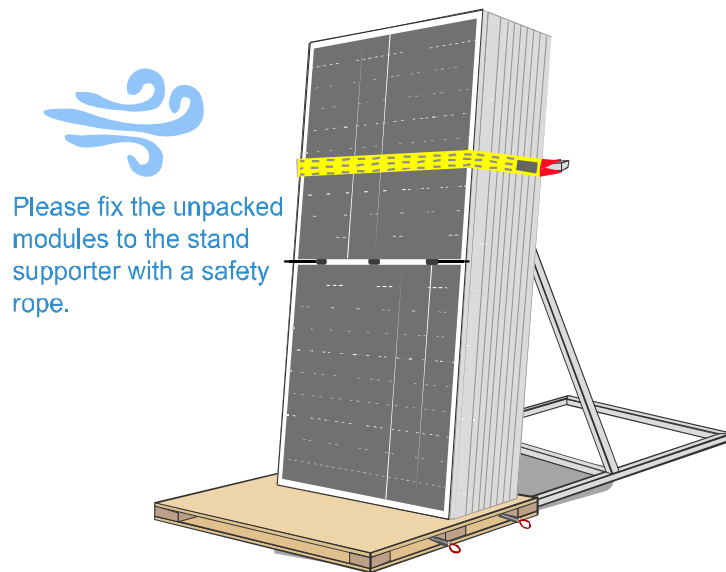
Before unpacking, please make sure that the packaging box is in good condition, it is recommended to use art knife to remove the packing belt and wrapping film. Violent removal is prohibited to avoid scratching the modules in the box.

Please check that the number of modules in the box and the barcode information on the module frame are consistent with the information on the A4 paper on the packaging box.

Please follow the recommended unpacking steps to unpack the modules. When unpacking, it must be operated by two or more people at the same time. Always wear insulating gloves when handling the modules.

If all the modules are not taken out after unpacking, the remaining modules shall be placed horizontally and repackaged to prevent them from tipping. When packaging, please note that the glass side of the bottom module should face up, the glass side of the middle modules should face down, and the glass side of the top module should face up. Stacks of modules should contain no more than 16 modules, and the frames should be aligned.

If the unpacked modules are not installed immediately, they should be fixed to the stand supporter with a safety rope under weather of 6 class wind (the modules should be less than 12 pieces).



For matters regarding the unpacking stand supporter, please contact Trina Solar sales.

In windy weather, it is recommended not to carry the modules, and the unpacked modules should be properly secured.

Do not unpack the modules outside under rain and snow conditions.

Do not carry the module by one person to prevent the module from slipping and hitting other modules, causing scratches, cracks, or deformation on the modules.

Do not lift modules by their cables or junction box.

Before removing the inner packing belts, please take measures to protect the modules from dumping.

If unpacking the vertical landscape packages on non-horizontal ground, anti-tilting measures should be taken.

The vertical portrait packages have a high center of gravity and are prohibited to unpack on non-horizontal or soft grounds to avoid personal injury or even death.

When unpacking vertical portrait package, do not stand on the back of the stand supporter, please operate in strict accordance with the requirements of the unpacking instructions.

When removing the packing belts in vertical portrait package, take care not to hurt yourself (face, eyes, etc.).

Do not stand on the pallet during unpacking, please carry the modules from sides of the pallet.

Do not move the stand supporter during unpacking to prevent the modules being tilted.

Do not lean the module on any instable objects, such as poles or mounting columns.

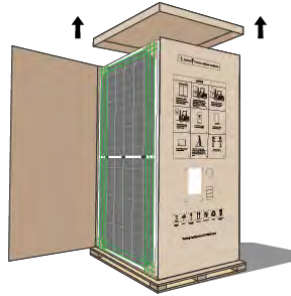
Do not support the back of the modules directly with materials such as wooden strips.

5.2 UNPACKING STEPS

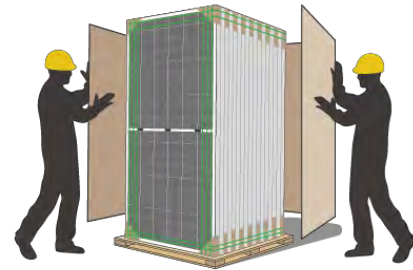
Method A: Unpacking for DE20 / DE21 / DEG21C.20 / NEG21C.20/ DE20.W/ DE21.W/ DEG21C.20W etc. series modules with vertical portrait package.



1) Remove the wrapping film and packing belts.



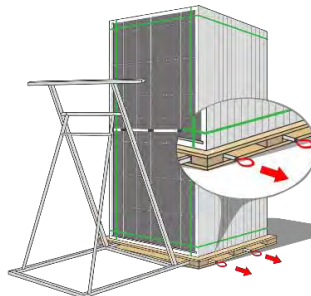
2) Remove the top cover and sealing tape.



3) Remove the carton box.



4) Place the stand supporter from the glass or backsheet side.



5) Pull out the 4 levers from both sides of the pallet.



6) Cut off all the horizontal packing belts.



7) When there are 1-2 vertical packing belts remaining, push the module gently to tilt toward the stand supporter.

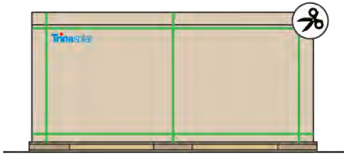


8) Cut off the remaining packing belts so that the modules rest on the stand supporter.



9) Take out the modules in order.

Method B: Unpacking for vertical landscape package: DE18M(II) / DE18M.08(II) / DEG18MC.20(II) / DEG18M.20(II) / DEG18M.28(II) / DE19 / DEG19C.20 / DE19R / DEG19RC.20 / NE19R / NEG19C.20 / NEG19RC.20 / DE18M.W(II) / DE18M.08W(II) / DEG18MC.20W(II) / DE19.W / DEG19C.20W / DE19R.W / DEG19RC.20W etc. series modules; and DE20 / DEG20C.20 / DE21 / DEG21C.20 / NEG20C.20 / DE20.W / DEG20C.20W / DE21.W / DEG21C.20W only for China



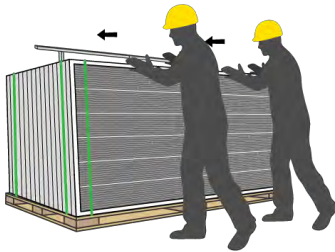
1) Remove the wrapping film and packing belts.



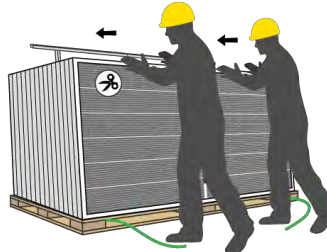
2) Remove the top cover and the cartons.



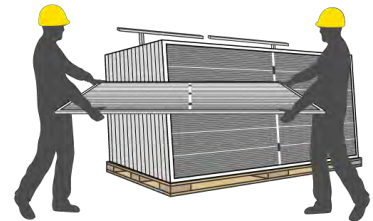
3) Place the stand supporter that is higher or wider than the module in order to avoid hitting and damaging the glass.



4) Cut off all the horizontal packing belts; when there are 1 or 2 vertical packing belts remaining, push the module gently to tilt toward the stand supporter.

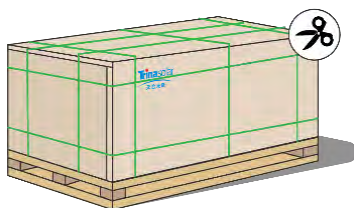


5) Cut off the remaining packing belts.

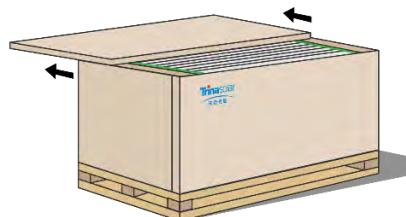


6) Take out the modules in order.

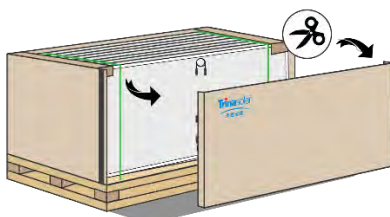
Method C: Unpacking from one side for DE09 / DE09.05 / DE09.08 / DE09R / DE09R.05 / DE09R.08 / DE09C.05 / DE09C.07 / DEG9R.20 / DEG9R.28 / DEG9RC.27 / NE09RC.05 / NEG9.20 / NEG9.28 / NEG9C.27 / NEG9R.20 / NEG9R.28 / NEG9RC.27 / DE09.05W / DE09.08W / DE09R.W / DE09R.05W / DE09R.08W / DEG9R.20W / DEG9R.28W / DEG9RC.27W etc. series modules with vertical landscape package.



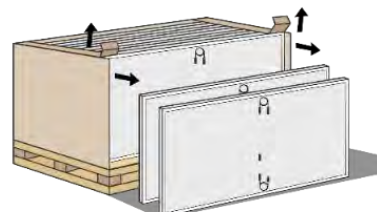
1) Cut all the packing belts and take out the wrapping film.



2) Remove the top cover.



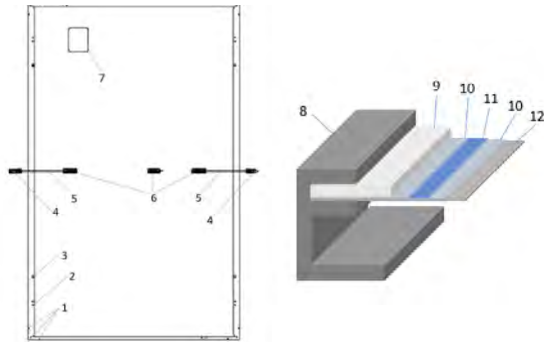
3) Remove the side cover.



4) Take out the modules from one side.

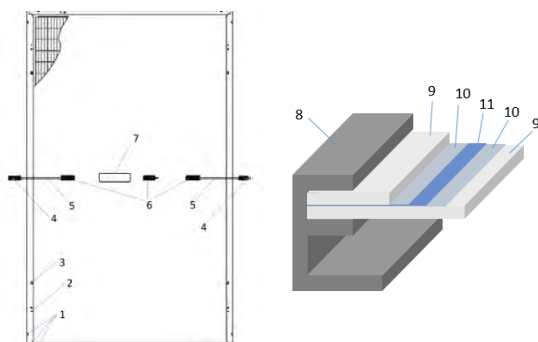
6 INSTALLATION

Mechanical drawing for monofacial modules



- 1 Drain hole
- 2 Grounding hole
- 3 Installation hole
- 4 Connector
- 5 Cable
- 6 Junction box
- 7 Nameplate

Mechanical drawing for bifacial modules



- 8 Frame
- 9 Glass
- 10 Encapsulate material
- 11 Solar cell
- 12 Backsheet

6.1 INSTALLATION SAFETY

Trina Solar recommends that PV module installation should only be conducted by specialized persons with experience in PV system installation. All installation work must be in full compliance with the local regulations and the relevant international electrical standards.

The fire rating of Trina Solar modules complies with relevant standards or local laws and regulations.

Before installation, please carefully check the modules for abnormalities such as glass bursts, cell cracks, backsheet scratches, deformation of installation holes, broken junction boxes or missing covers, nameplates falling off or missing, and broken cables or connectors, etc. If any of such situation is found, please contact Trina Solar customer service in time.

Before installation, please keep modules' electrical components clean and dry. Connectors can corrode if they are in connected under wet conditions or with water inside the conductive parts. Any corroded components shall not be used.

The cable length of junction box shall be selected according to the installation mode. When wiring, the ties for fixing the cables coils shall be removed. The cable shall be fixed on the installation system (frame or bracket, guide rail) with UV resistant cable ties, in cable conduits or wire cards to avoid direct sunlight or immersion in water and mechanical damage of the cable; otherwise, it may cause accelerated aging of the cable or even leakage and fire. Bifacial PV modules should also avoid blocking the solar cells on the back of the module. The open area should minimize arc coil, which can reduce the risk of induced lightning impact on PV module.



Do not install modules under rain, snow or windy conditions.

If installing or operate modules after rain or in the morning dew, appropriate protective measures need to be taken to prevent water vapor from penetrating into the connector.



Do not allow unauthorized persons to access the installation area.

When installing with scaffolding, make sure that the scaffolding is in a stable position or with anti-dumping measures, and that the installer should wear a safety belt in accordance with local building codes.

It is recommended not to stand on the bottom side of the inclined surface of the module during installation, to prevent the module from slipping and causing casualty.

Please keep the PV module packed in the carton until installation and install them immediately after unpacking.

Do not wear metallic jewelry which can cause electric shock during installation.

During installation and wiring of PV modules, please use opaque material to cover the PV module surface completely.

Installation work must be carried out by at least two persons.

Do not stand on the module glass while working. There is a risk of injury or electric shock if the glass is broken.

Do not loosen or unscrew the screws/clamps/rails of and around the PV module, which may lead to a reduction of the module's load rating and even fall off.

Do not drop any tools or other objects on the module front- or backside which could cause damage (visible or non-visible) to the module.

Do not install or use damaged modules. If the surface glass is damaged or worn, direct contact with the surface of the module may cause electric shock.

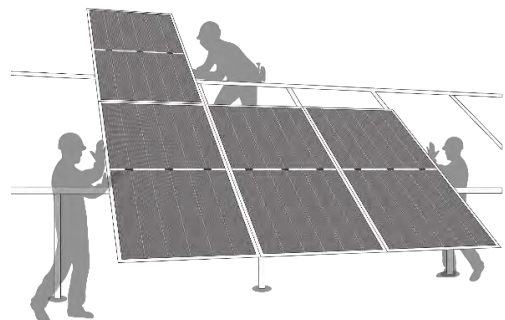
Do not damage the backsheet or glass of modules when fastening the modules to the bracket with bolts.

Do not drill additional holes on any part of the module. Doing so will void the warranty.

The drain holes on the module frame must not be blocked in any situation during the installation and operation.

Do not unplug the connector if the system circuit is connected to a load.

Modules with different colors should be avoided to install on the same rooftop or in the same array.



6.2 INSTALLATION METHOD

The PV modules must be installed in accordance with the installation instructions specified in this user manual to comply with the IEC certification. Before installing, please read this section carefully to familiarize yourself with the complete installation processes.

The modules and racking system can be connected through the mounting holes, clamps, or an embedded system. Installation of modules must be carried out in accordance with the installation requirements. If you wish to use a different installation method, please consult Trina Solar customer service or technical support team. If in such case that an alternative mounting method is used but not approved by Trina Solar, the module may get damaged and the warranty will be invalidated.

The mechanical loads described in this manual are the test loads. For calculating the equivalent maximum design loads, a safety factor of 1.5 (Mechanical loads=Design loads×1.5 security coefficient) needs to be considered in compliance with the requirements of the local laws and regulations. The design loads are strongly related to the construction, applied standards, location and local climate conditions; therefore, have to be determined by the racking suppliers and/or the professional engineers. For detailed information, please follow local structural code or contact your professional structural engineer.

The minimum distance between two modules is 5 mm (0.2 inch). If using special trackers, the minimum distance should be selected according to the technical requirements of the tracker suppliers.

Trina Solar is not responsible in any way for module installation failures caused by clamps, trackers, etc..

6.2.1 SCREW INSTALLATION

The frame of each module has 4- $\phi 9 \times 14$ mm mounting holes, that are ideally placed to optimize the loading capacity to secure the modules on the supporting structure.

To maximize mounting longevity, Trina Solar strongly recommends the use of corrosion proof (stainless steel) fixings.

Secure the module in each fixing location with one M8 bolt, two flat washers, one spring washer and one nut (see Figure 1) and tighten them to a torque of 10-14 N.m (90-125 lbf.in.). The yield strength of bolt and nut should not be less than 450 MPa.

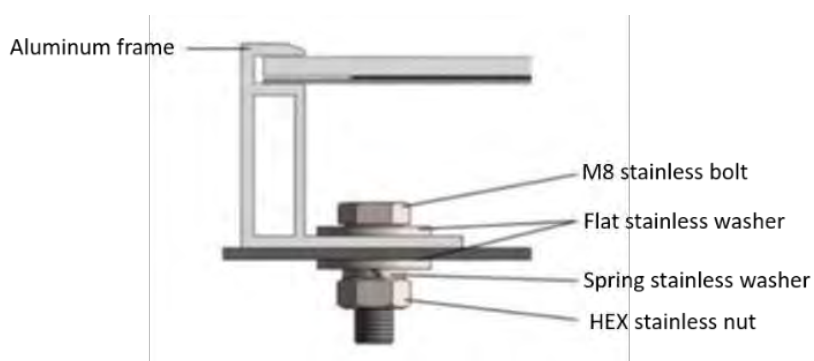
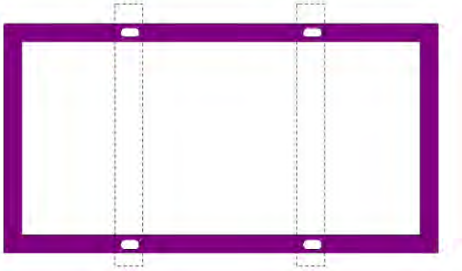
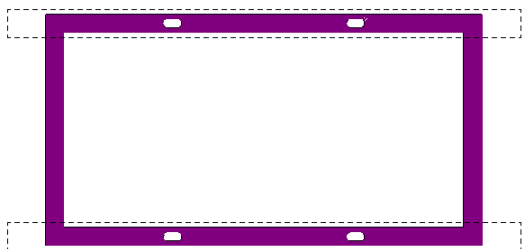


Figure 1. PV module installed with bolt fitting method.

Product code	Requirement
DE09 / DE09.05 / DE09.08 / DE09C.05 / DE09C.07 / DE18M(II) / DE18M.08(II) / DEG18MC.20(II) / DE19 / DE19R / DEG19C.20 / DEG19RC.20 / DE20 / DEG20C.20 / DE21 / DEG21C.20 / NE19R / NEG9R.20 / NEG9R.28 / NEG9RC.27 / NEG19C.20 / NEG19RC.20 / NEG20C.20 / NEG21C.20 / DE09.05W / DE09.08W / DE18M.W(II) / DE18M.08W(II) / DEG18MC.20W(II) / DE19.W / DE19R.W / DEG19C.20W / DEG19RC.20W / DE20.W / DEG20C.20W / DE21.W / DEG21C.20W	All parts in contact with the frame should use flat stainless-steel washers of a minimum of 1.5 mm (0.06 inch) thickness with an outer diameter of 16-18 mm (0.63-0.71 inch).
DE09R / DE09R.05 / DE09R.08 / DEG9R.20 / DEG9R.28 / DEG9RC.27 / DEG18M.20(II) / DEG18M.28(II) / NE09RC.05 / NEG9.20 / NEG9.28 / NEG9C.27 / DE09R.W / DE09R.05W / DE09R.08W / DEG9R.20W / DEG9R.28W / DEG9RC.27W	All parts in contact with the frame should use flat stainless-steel washers of a minimum of 1.5 mm (0.06 inch) thickness with an outer diameter of 19-20 mm (0.75-0.79 inch).

The screw should be fixed at the following locations for different installation methods and mechanical loads.

Module type	Mechanical loads	Module type	Mechanical loads
 <p>Mounting rails run parallel to the short side frame. Distance between mounting holes is 1400 mm. Distance between mounting holes is 1100 mm (for DE09 series/DE09C series/DE09R series/DEG9R series/DEG9RC series/NEG9 series/ NEG9C series).</p>		 <p>Mounting rails run parallel to the long side frame. Distance between mounting holes is 1400 mm.</p>	
DE09 DE09.05 DE09.08 DE09R DE09R.05 DE09R.08 DE09C.05 DE09C.07 NE09RC.05 DE09.05W DE09.08W DE09R.W DE09R.05W DE09R.08W	Uplift load \leq 4000 Pa Downforce load \leq 6000 Pa	DEG18MC.20(II) DEG19C.20 DEG19RC.20 DEG20C.20 DEG21C.20 NEG19C.20 NEG19RC.20 NEG20C.20 NEG21C.20 DEG18MC.20W(II) DEG19C.20W DEG19RC.20W DEG20C.20W DEG21C.20W	Uplift load \leq 2400 Pa Downforce load \leq 3600Pa
DEG9R.20 DEG9R.28 DEG9RC.27 NEG9.20 NEG9.28 NEG9C.27 NEG9R.20 NEG9R.28 NEG9RC.27 DEG9R.20W DEG9R.28W DEG9RC.27W	Uplift load \leq 4000 Pa Downforce load \leq 5400 Pa		

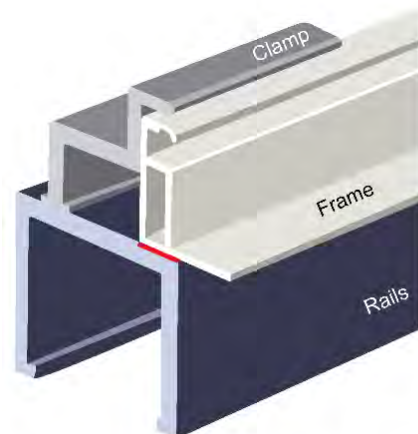
DE18M(II) DEG18M.20(II) DEG18M.28(II) DEG18MC.20(II) DE19 DE19R DEG19C.20 DEG19RC.20 DE20 DEG20C.20 DE21 DEG21C.20 NEG19C.20 NEG19RC.20 NEG20C.20 NEG21C.20 DE18M.W(II) DEG18MC.20W(II) DE19.W DE19R.W DEG19C.20W DEG19RC.20W DE20.W DEG20C.20W DE21.W DEG21C.20W	Uplift load \leq 2400 Pa Downforce load \leq 5400 Pa	/	/
DE18M.08(II) DE18M.08W(II)	Uplift load \leq 2400 Pa Downforce load \leq 6000 Pa		

6.2.2 CLAMP INSTALLATION

Trina Solar has tested its modules with a number of clamps from different manufacturers, it is recommended to use fixing bolt of at least M8. The clamp shall not be malfunctioned due to deformation or corrosion during the loading process. It is recommended to use a clamp with length of ≥ 50 mm (1.97 inch) and thickness of ≥ 4 mm (0.16 inch), aluminum alloy 6005-T6, Rp0.2 ≥ 225 MPa, Rm ≥ 265 MPa. (The clamp shall be selected to guaranty the module installation reliability, recommended torque range is for reference only).

The clamp must overlap the A surface of module frame by at least 8 mm (0.32 inch) but not more than 12 mm (0.47 inch).

For installation where mounting rails run parallel to the frame, the frame must overlap the rails completely or the overlapping distance must ≥ 20 mm.



— The frame overlap the rails the overlapping distance must ≥ 20 mm.

Since the spec of clamps is not uniform in the market and the clamps have a large impact on the wind load resistance in system side, it is recommended to follow the recommendation of Trina Solar to choose clamps. You can also customize the clamps by yourselves, but please make sure that the modules do not detach from the brackets and rails.

Modules clamps should not come into contact with the front glass and must not be deformed.

Please make sure to avoid shading effects from the module clamps.

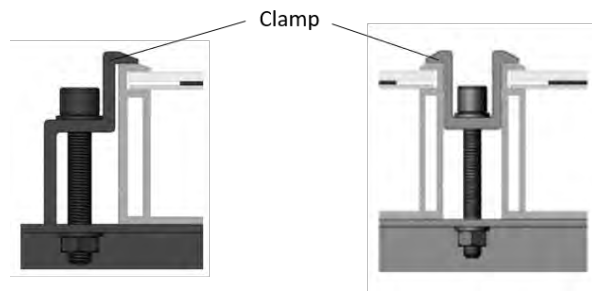
The module frame shall not to be modified under any circumstances.

The clamps shall not to be out the edge of the module under any circumstances.

When choosing clamp installation method, use at least four clamps on each module. Depending on local wind and snow loads, additional clamps may be required to ensure that modules can bear the extra load.

Applied torque should refer to mechanical design standard according to the bolt customer is using, for example: M8: 10-14 N.m (90-125 lbf.in)

The installation method of clamps is shown in Figure 2.



End clamp installation Middle clamp installation.

Figure 2. PV module installed with clamp fitting method

The "A surface Matching Clamp" has a bent hook structure where contacts with the frame to increase the friction, so it is recommended for customers to use this kind of clamps who have high requirements for mechanical loading. The specific dimensions of the clamp are shown in the figure below.

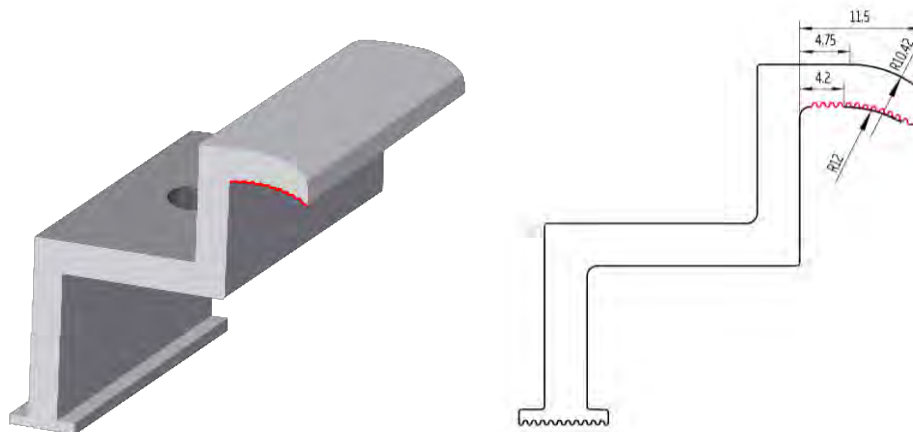
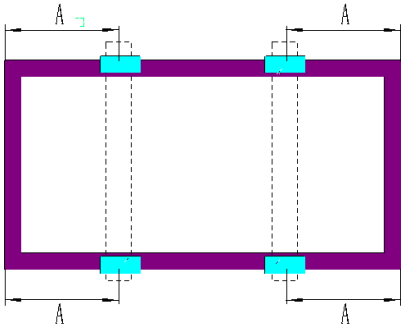
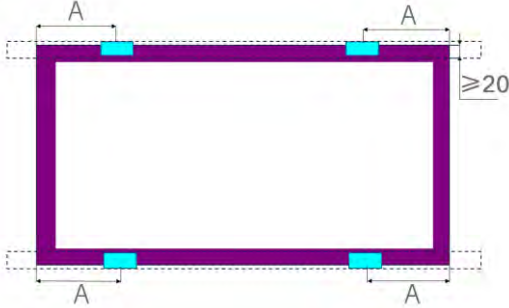


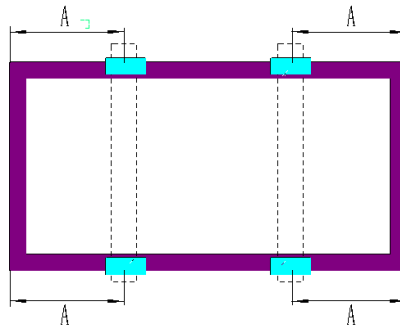
Figure 3. A surface matching clamp

Clamp positions are of crucial importance for the reliability of the installation. The clamp centerlines must only be positioned within the ranges indicated in table below, depending on the configurations and loads.

Module type	Mechanical loads	Module type	Mechanical loads
 <p>Use 4 clamps on the long side. Mounting rails run perpendicular to the long side frame.</p>		 <p>Use 4 clamps on the long side. Mounting rails run parallel to the long side frame. Overlapping length(perpendicular to the long side direction) of mounting rails and long side of module no less than 20 mm</p>	
DEG18MC.20(II) DEG18MC.20W(II)	A = (350 - 450) mm Uplift load ≤ 2400 Pa Downforce load ≤ 5400 Pa	DEG18MC.20(II) DEG18MC.20W(II)	A = (350 - 450) mm Uplift load ≤ 2400 Pa Downforce load ≤ 3600 Pa
DEG18M.20(II) DEG18M.28(II)	A = (360 - 450) mm Uplift load ≤ 2400 Pa Downforce load ≤ 5400 Pa	DEG19C.20 DEG19RC.20 NEG19C.20 NEG19RC.20 DEG19C.20W DEG19RC.20W	A = (440 - 540) mm Uplift load ≤ 2400 Pa Downforce load ≤ 3600 Pa
DEG19C.20 DEG21C.20 NEG19C.20 NEG21C.20 DEG19C.20W DEG21C.20W	A = (440 - 540) mm Uplift load ≤ 2400 Pa Downforce load ≤ 5400 Pa	DEG20C.20 NEG20C.20 DEG20C.20W	A = (360 - 430) mm Uplift load ≤ 2400 Pa Downforce load ≤ 3600 Pa
DEG19RC.20 NEG19RC.20	A = (420 - 520) mm Uplift load ≤ 2400 Pa Downforce load ≤ 5400 Pa	DEG21C.20 NEG21C.20 DEG21C.20W	A = (440 - 540) mm Uplift load ≤ 2400 Pa Downforce load ≤ 3600 Pa
DEG19RC.20W	A = (400 - 440) mm Uplift load ≤ 2400 Pa Downforce load ≤ 5400 Pa	/	/
DEG20C.20 NEG20C.20 DEG20C.20W	A = (360 - 430) mm Uplift load ≤ 2400 Pa Downforce load ≤ 5400 Pa	/	/

The following mounting method is recommended to use A surface matching clamp:

Module type	Mechanical loads	Module type	Mechanical loads
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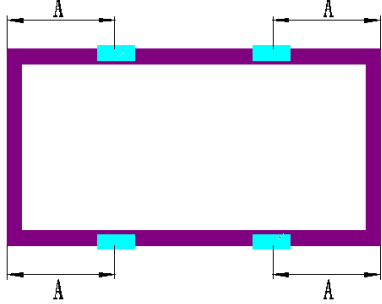
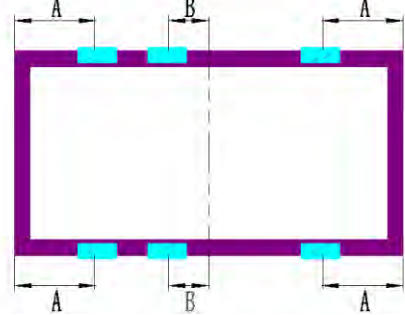



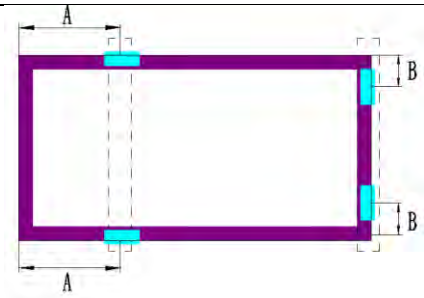
Use 4 clamps on the long side.

Mounting rails run perpendicular to the long side frame.



DE09 DE09.05 DE09.08 DE09C.05 DE09C.07 DE09.05W DE09.08W	A = (250 - 350) mm Uplift load ≤ 4000 Pa Downforce load ≤ 6000 Pa	NEG9R.20 NEG9R.28 NEG9RC.27	A = (300 - 350) mm Uplift load ≤ 4000 Pa Downforce load ≤ 5400 Pa
DE09R DE09R.05 DE09R.08 NE09RC.05 DE09R.W DE09R.05W DE09R.08W	A = (250 - 330) mm Uplift load ≤ 4000 Pa Downforce load ≤ 6000 Pa	DEG9R.20 DEG9R.28 DEG9RC.27 NEG9.20 NEG9.28 NEG9C.27 DEG9R.20W DEG9R.28W DEG9RC.27W	A = (290 - 370) mm Uplift load ≤ 4000 Pa Downforce load ≤ 5400 Pa
DE18M(II) DE18M.W(II)	A = (350 - 450) mm Uplift load ≤ 2400 Pa Downforce load ≤ 5400 Pa	DE18M.08(II) DE18M.08W(II)	A = (350 - 450) mm Uplift load ≤ 2400 Pa Downforce load ≤ 6000 Pa
DE21 DE19.W DE19R.W DE21.W	A = (440 - 540) mm Uplift load ≤ 2400 Pa Downforce load ≤ 5400 Pa	DE19 DE19R NE19R	A = (420 - 520) mm Uplift load ≤ 2400 Pa Downforce load ≤ 5400 Pa
DE20 DE20.W	A = (360 - 430) mm Uplift load ≤ 2400 Pa Downforce load ≤ 5400 Pa	/	/

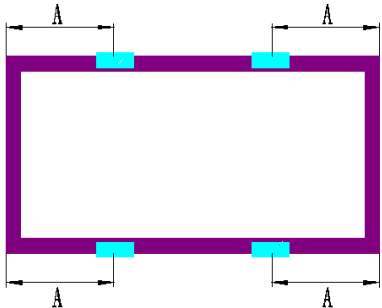
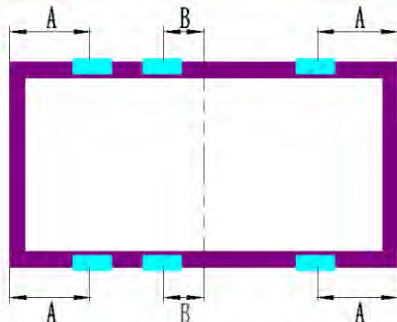
The following installation methods and mechanical loads have been verified by the Trina Solar's National Key Laboratory for PV Science and Technology.

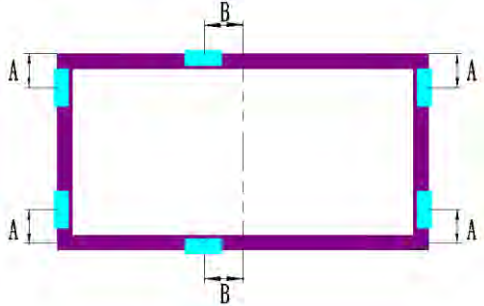
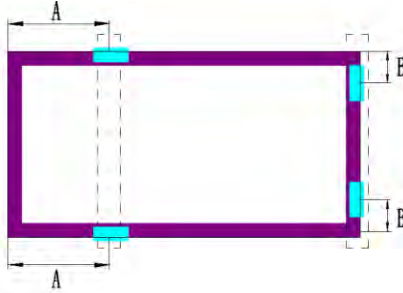
Module type	Mechanical loads	Module type	Mechanical loads
 <p>Use 4 clamps on the short side. Mounting rails run perpendicular to the long side frame. Overlapping length(perpendicular to the short side direction) of mounting rails and short side of module no less than 20 mm</p>	 <p>Use 4 clamps on the short side.</p>	<p>DEG18MC.20(II) DEG18MC.20W(II)</p> <p>A = (0 - 200) mm Uplift load ≤ 1000 Pa Downforce load ≤ 1300 Pa</p>	<p>DEG18M.20(II) DEG18M.28(II) DEG18MC.20(II) DEG18MC.20W(II)</p> <p>A = (0 - 200) mm Uplift load ≤ 1000 Pa Downforce load ≤ 1300 Pa</p>
 <p>Use 4 clamps on the long side.</p>	 <p>Use 6 clamps on the long side.</p>	<p>DEG18M.20(II) DEG18M.28(II) DEG18MC.20(II) DEG18MC.20W(II)</p> <p>A = (200 - 600) mm Uplift load ≤ 1700 Pa Downforce load ≤ 1700 Pa</p>	<p>DEG18M.20(II) DEG18M.28(II)</p> <p>A = (0 - 200) mm B = (0 - 200) mm Uplift load ≤ 1800 Pa Downforce load ≤ 2400 Pa</p>
<p>DEG19RC.20 NEG19RC.20</p> <p>A = (450 - 650) mm Uplift load ≤ 2200 Pa Downforce load ≤ 2400 Pa</p>	/	/	/

 <p>Slide-in rails on the short side.</p>	 <p>Use 2 clamps on the short side and 2 clamps on the long side. Mounting rails run perpendicular to the long side frame.</p>		
<p>DEG18MC.20(II) DEG18MC.20W(II)</p>	<p>Uplift load ≤ 1000 Pa Downforce load ≤ 1000 Pa</p>	<p>DEG18MC.20(II) DEG18MC.20W(II)</p>	<p>A = (250 - 450) mm B = (100 - 250) mm Uplift load ≤ 1000 Pa Downforce load ≤ 1300 Pa</p>

The following mounting method is recommended to use A surface matching clamp:

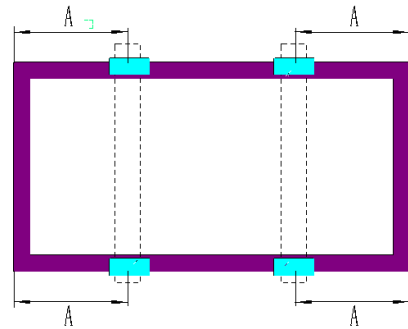
 <p>Use 4 clamps on the short side. Mounting rails run perpendicular to the long side frame. Overlapping length(perpendicular to the short side direction) of mounting rails and short side of module no less than 20 mm</p>	 <p>Use 4 clamps on the short side.</p>		
<p>DE09 DE09.05 DE09.08 DE09C.05 DE09C.07 DE09.05W DE09.08W</p>	<p>A = (0 - 200) mm Uplift load ≤ 2000 Pa Downforce load ≤ 2400 Pa</p>	<p>DE09 DE09.05 DE09.08 DE09C.05 DE09C.07 DE09.05W DE09.08W</p>	<p>A = (0 - 200) mm Uplift load ≤ 1800 Pa Downforce load ≤ 2400 Pa</p>
<p>NEG9.20 NEG9.28 NEG9C.27</p>	<p>A = (0 - 200) mm Uplift load ≤ 1600 Pa Downforce load ≤ 2100 Pa</p>	<p>DEG9R.20 DEG9R.28 DEG9RC.27 NEG9.20 NEG9.28 NEG9C.27 NEG9R.20 NEG9R.28 NEG9RC.27 DEG9R.20W DEG9R.28W DEG9RC.27W</p>	<p>A = (0 - 100) mm Uplift load ≤ 1600 Pa Downforce load ≤ 2200 Pa</p>

<p>DE18M(II) DE18M.08(II) DE18M.W(II) DE18M.08W(II)</p>	<p>A = (0 - 200) mm Uplift load ≤ 1000 Pa Downforce load ≤ 1300 Pa</p>	<p>DE09R DE09R.05 DE09R.08 NE09RC.05 DE09R.W DE09R.05W DE09R.08W</p>	<p>A = (0 - 100) mm Uplift load ≤ 1800 Pa Downforce load ≤ 2400 Pa</p>
<p>/</p>	<p>/</p>	<p>DE18M(II) DE18M.08(II) DE18M.W(II) DE18M.08W(II)</p>	<p>A = (0 - 200) mm Uplift load ≤ 1000 Pa Downforce load ≤ 1300 Pa</p>
 <p>Use 4 clamps on the long side.</p>		 <p>Use 6 clamps on the long side.</p>	
<p>DE09 DE09.05 DE09.08 DE09C.05 DE09C.07 DE09.05W DE09.08W</p>	<p>A = (200 - 400) mm Uplift load ≤ 3000 Pa Downforce load ≤ 3600 Pa</p> <hr/> <p>A = (100 - 200 or 400 - 500) mm Uplift load ≤ 2000 Pa Downforce load ≤ 2400 Pa</p>	<p>DE09 DE09.05 DE09.08 DE09C.05 DE09C.07 DE09.05W DE09.08W DE09R.W DE09R.05W DE09R.08W NE09RC.05</p>	<p>A = (0 - 200) mm B = (0 - 200) mm Uplift load ≤ 2400 Pa Downforce load ≤ 3600 Pa</p>
<p>DE09R DE09R.05 DE09R.08 NE09RC.05 DE09R.W DE09R.05W DE09R.08W</p>	<p>A = (200 - 330) mm Uplift load ≤ 3000 Pa Downforce load ≤ 3600 Pa</p>		
<p>DEG9R.20 DEG9R.28 DEG9RC.27 NEG9R.20 NEG9R.28 NEG9RC.27 DEG9R.20W DEG9R.28W DEG9RC.27W</p>	<p>A = (290 - 370) mm Uplift load ≤ 2400 Pa Downforce load ≤ 3000 Pa</p>		

DE18M(II) DE18M.08(II) DE18M.W(II) DE18M.08W(II)	A = (200 - 600) mm Uplift load \leq 1700 Pa Downforce load \leq 1700 Pa	DE18M(II) DE18M.08(II) DE18M.W(II) DE18M.08W(II)	A = (0 - 200) mm B = (0 - 200) mm Uplift load \leq 1800 Pa Downforce load \leq 2400 Pa
DE19R	A = (450 - 750) mm Uplift load \leq 1800 Pa Downforce load \leq 1100 Pa	/	/
 <p>Use 4 clamps on the short side and 2 clamps on the long side.</p>		 <p>Use 2 clamps on the short side and 2 clamps on the long side. Mounting rails run perpendicular to the long side frame.</p>	
DE09 DE09.05 DE09.08 DE09C.05 DE09C.07 DE09R DE09R.05 DE09R.08 DEG9R.20 DEG9R.28 DEG9RC.27 NE09RC.05 DE09.05W DE09.08W DE09R.W DE09R.05W DE09R.08W	A = (0 - 200) mm B = (0 - 200) mm Uplift load \leq 2400 Pa Downforce load \leq 3000 Pa	DE09 DE09.05 DE09.08 DE09C.05 DE09C.07 DEG9R.20 DEG9R.28 DEG9RC.27 DE09.05W DE09.08W	A = (250 - 450) mm B = (100 - 250) mm Uplift load \leq 1800 Pa Downforce load \leq 2400 Pa
DE18M(II) DE18M.08(II) DE18M.W(II) DE18M.08W(II)	A = (0 - 200) mm B = (0 - 200) mm Uplift load \leq 1800 Pa Downforce load \leq 1800 Pa	DE18M(II) DE18M.08(II) DE18M.W(II) DE18M.08W(II)	A = (250 - 450) mm B = (100 - 250) mm Uplift load \leq 1000 Pa Downforce load \leq 1200 Pa

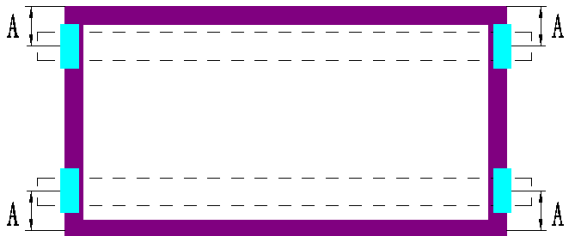


Slide-in rails on the short side.

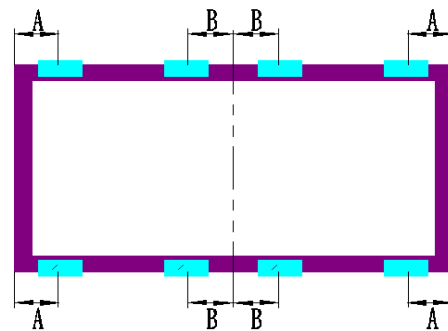


Use 4 clamps on the long side.
Mounting rails run perpendicular to the long side frame.

DE09 DE09.05 DE09.08 DE09C.05 DE09C.07 DE09.05W DE09.08W	Uplift load \leq 2000 Pa Downforce load \leq 2400 Pa	DE09 DE09.05 DE09.08 DE09C.05 DE09C.07 DE09.05W DE09.08W	A = (200 - 250 or 350 - 400) mm Uplift load \leq 3000 Pa Downforce load \leq 3600 Pa
NEG9R.20 NEG9R.28 NEG9RC.27	Uplift load \leq 1600 Pa Downforce load \leq 2200 Pa		A = (100 - 200 or 400 - 500) mm Uplift load \leq 2000 Pa Downforce load \leq 2400 Pa
DE18M(II) DE18M.08(II) DE18M.W(II) DE18M.08W(II)	Uplift load \leq 1000 Pa Downforce load \leq 1000 Pa	/	/

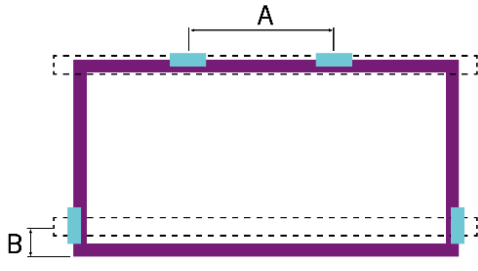


Use 4 clamps on the short side.
Mounting rails run parallel to the long side frame.



Use 8 clamps on the long side.

DE09 DE09.05 DE09.08 DE09C.05 DE09C.07 DE09.05W DE09.08W	A = (150 - 250) mm Uplift load \leq 2400 Pa Downforce load \leq 2400 Pa	DE09 DE09.05 DE09.08 DE09C.05 DE09C.07 DE09.05W DE09.08W	A = (0 - 200) mm B = (200 - 300) mm Uplift load \leq 2400 Pa Downforce load \leq 3600 Pa
DE18M(II) DE18M.08(II) DE18M.W(II) DE18M.08W(II)	A = (150 - 250) mm Uplift load \leq 1000 Pa Downforce load \leq 1600 Pa	DE18M(II) DE18M.08(II) DE18M.W(II) DE18M.08W(II)	A = (0 - 200) mm B = (250 - 350) mm Uplift load \leq 1800 Pa Downforce load \leq 2400 Pa
DE20 DE20.W	A = (45 - 485) mm Uplift load \leq 1000 Pa Downforce load \leq 3600 Pa	/	/

 <p>Use 2 clamps on the short side and 2 clamps on the long side.</p>		/	/
DE20 DE20.W	<p>A = (1300 - 1450) mm B = (45 - 485) mm</p> <p>Uplift load ≤ 1000 Pa Downforce load ≤ 2400 Pa</p>		

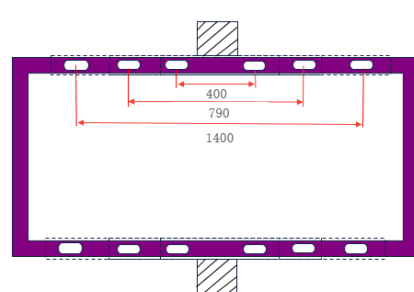
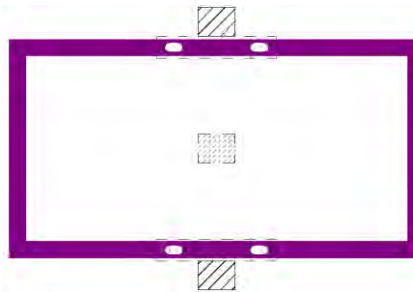
6.2.3 SINGLE-AXIS INSTALLATION

The bolts used in this section is to secure the module in each fixing location with an M6/M8 bolt, two flat washers, a spring washer and a nut, and tighten them to a torque of 10-14 N.m, it is recommended to take regular inspection of the tightening to meet the torque range.

For all products covered in this section, all parts in contact with the frame should use flat stainless steel washers of minimum 1.5 mm (0.06 inch) thickness with an outer diameter of 16-18 mm (0.63-0.71 inch).

When using reinforced attachment I*, all accessories should be mounted together onto the torque and the accessory bolts should be tightened using wrench tools, the attachment I* should be installed in the center of the module. it shall be installed as closer as possible to the center junction box if there is a junction box in the center of the module, do not contact the junction box to avoid stress.

The module has to be installed on the purlins.

Module type	Mechanical loads	Module type	Mechanical loads
 <p>Mounting rails run perpendicular to the long side frame. Distance between mounting holes is 400 mm/790mm/1400mm.</p>		 <p>This installation method is for the tracker with reinforced attachment I* only. Mounting rails run perpendicular to the long side frame. Distance between mounting holes is 400 mm.</p>	
DEG18MC.20(II) DEG18MC.20W(II)	<p>Distance between mounting holes is 400mm Uplift load ≤ 2400 Pa Downforce load ≤ 2400 Pa</p>	DEG19C.20 DEG19RC.20 NEG19C.20 NEG19RC.20 DEG19C.20W DEG19RC.20W	<p>Uplift load ≤ 2400 Pa Downforce load ≤ 2400 Pa</p>

DEG20C.20 DEG21C.20 NEG20C.20 NEG21C.20 DEG20C.20W DEG21C.20W	Distance between mounting holes is 400mm Uplift load \leq 2200 Pa Downforce load \leq 2200 Pa	/	/
DEG20C.20 DEG21C.20 NEG20C.20 NEG21C.20 DEG20C.20W DEG21C.20W	Distance between mounting holes is 790mm Uplift load \leq 2500 Pa Downforce load \leq 2800 Pa	/	/
DEG19C.20 DEG19RC.20 NEG19C.20 NEG19RC.20 DEG19C.20W DEG19RC.20W	Distance between mounting holes is 790mm Uplift load \leq 2600 Pa Downforce load \leq 3000 Pa	/	/
DEG20C.20 DEG21C.20 NEG20C.20 NEG21C.20 DEG20C.20W DEG21C.20W	Distance between mounting holes is 1400mm Uplift load \leq 2600 Pa Downforce load \leq 3000 Pa	/	/

*Reinforced attachment I: bumper

All the mechanical loads above have been approved by PVST. Please consult Trina Solar customer service for compatibility of tracker system with Trina products.

6.3 GROUNDING

All module frames and mounting racks must be properly grounded in accordance with the electrical design and construction specifications, procedures, regulations and other special grounding requirements applicable to the installation sites.

Proper grounding can be achieved by connecting the module frame(s) and all metallic structural components together by using a suitable grounding conductor. The grounding conductors or wires may be copper, alloy, or any other materials that are in accordance with the local electrical design and construction specifications, procedures, and regulations. The ground conductor must be reliably grounded by a suitable ground electrode.

General grounding hardware comes in a package that includes the grounding screw, flat washer, star washer and wire and other relevant hardware should be made of stainless steel.

Do not drill any extra ground holes for convenience, this will void the modules warranty.

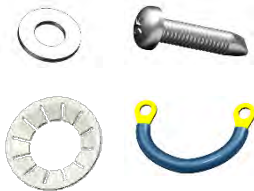
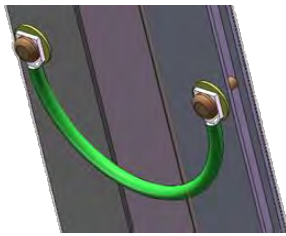
Trina Solar does not provide grounding devices or materials. Any third-party grounding device that meets the requirements of the installation electrical equipment specifications can be used for grounding of Trina Solar's modules. The grounding device should be installed in accordance with the operating manual prescribed by the manufacturer.

Trina Solar recommends using grounding wires with resistances that are less than 1Ω.

The electrical contact is made by penetrating the anodized coating of the aluminum frame, and tightening the mounting screw (together with the star washer) to the proper torque of 3-7 N.m.

Grounding connections should be installed by a qualified electrician. Connect module frames together using adequate grounding cables: Grounding wire size (4-16 mm²/12-6 AWG solid bare copper) should be selected and installed underneath the wire binding bolt. Holes provided for this purpose are identified with a grounding symbol (IEC61730-1). All conductive connection junctions must be firmly fixed.

To avoid lightning strikes and ensure electrical safety, the module frames must be reliably grounded. Grounding between modules can be done using a 4 mm² (12 AWG) solid bare copper that connects adjacent ground holes on the module frame (unused installation holes on the frame can also be used for grounding).

Components	View	Connection
		<p>Star washer, flat washer, grounding wire are placed in turn, then screwed into the grounding hole to bond the adjacent modules</p>

Trina Solar recommends using the following two methods for grounding installation, as shown in Figure 4.

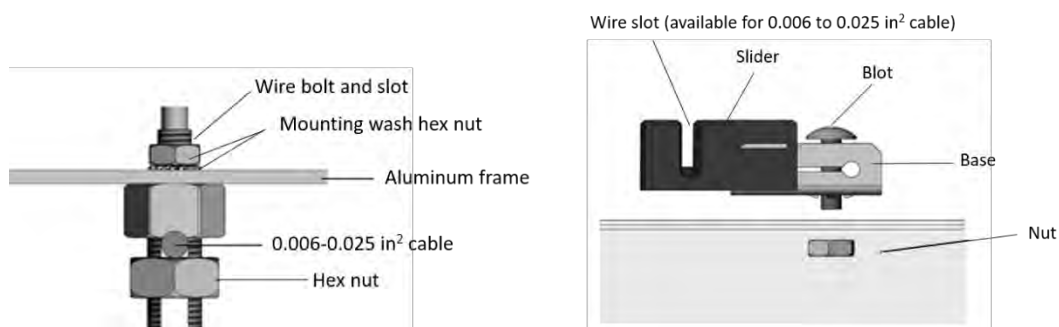


Figure 4. PV module grounding methods (IEC standard).

6.4 ELECTRICAL INSTALLATION

6.4.1 SAFETY INSTRUCTION

All wiring installation should be carried out by qualified installers in accordance with local electrical construction codes, procedures, and regulations.

Modules can be connected in series to increase the operating voltage by connecting the positive terminal of one module into the negative terminal of the next one. Before connecting, always ensure that the contacts are corrosion-free, clean, and dry.

The product can be irreparably damaged if an array string is connected in reverse polarity to another. Always verify the voltage and polarity of each string before making a parallel connection. If a reversed polarity or a difference of more than 10V between strings was detected, check the string configuration before connection.

The standard copper cables applied in Trina Solar modules are UV resistant and with a cross-sectional area of $\geq 4 \text{ mm}^2$ (12 AWG). All other cables applied to connect the DC system should be provided with a similar or larger wire cross section. Trina Solar recommends that all cables are routed in appropriate conduits or rails where water does not accumulate.

The string voltage must not be higher than the maximum system voltage, as well as the maximum input voltage of the inverter and the other electrical devices installed in the system. In order to ensure this, the open circuit voltage of an array needs to be calculated at the lowest expected local ambient temperature, which can be determined using the following formula:

$$\text{Max System Voltage} \geq N \times V_{oc} \times [1 + TC_{VOC} \times (T_{min} - 25)]$$

where

N Number of modules in series

V_{oc}	Open circuit voltage (refer to product label or data sheet)
TC_{VOC}	Temperature coefficient of open circuit voltage (refer to data sheet)
T_{min}	The minimum ambient temperature

The number of modules that can be connected shall be determined by a qualified institution or person in accordance with the design specifications of the photovoltaic system and the local electrical design specifications. The calculation formula recommended by Trina Solar shall be for reference only.

Every module is provided with two standard output cables, and each terminated with a plug-and-play connector. All wiring and electrical connections must be installed in accordance with the electrical design and construction specifications, procedures and regulations at the place of installation.

The minimum and maximum outer diameters of the cable are 5 to 7 mm (0.20 to 0.28 in).

For wiring connections, please use standard PV copper wires with a cross-section area of at least 4 mm² (12 AWG), and should be light-resistant and temperature-resistant at a minimum of 90 °C .



Do not bend the cables less than 43 mm (1.69 inch) radius. PV cables will be damaged if bending radius less than 43 mm.



Figure 5. The correct routing and minimum bending radius of cables.

6.4.2 WIRING

In order to ensure the normal operation of the system, when connecting the module or loads (such as inverters, batteries, etc.), observe to ensure that the polarity of the cable is connected correctly. If modules are not connected correctly, the bypass diode could be damaged. PV modules can be connected in series to increase the voltage and connected in parallel to increase the current, as shown in Figure 6.

Before connecting the module, please make sure using the connector approved by Trina. Otherwise, Trina does not responsible for any potential problem.

When conducting electrical connection of the modules, please use diagonal pliers to cut the cable tie. When cutting the tie, be careful not to scratch the cable and backsheet. According to the electrical requirements. The positive and negative connectors should be connected in turn, and confirm that you hear a "click" to indicate that the connection is successful. Otherwise, during the operation of the modules, this could lead to electric arc due to poor connections and can burn the connectors.



Field-assembled Trina connectors have to be subject to the terms and requirements of Connector Installation Manual PS-M-0779 and Warranty PS-M-0611.

Before the commissioning and operation of the power station, please check the electrical connection of modules and strings, making sure all connection polarity is correct and the open circuit voltage meets the requirements of the acceptance criteria.

The number of modules in series and in parallel shall be designed reasonably according to the system configuration.

All the above instructions must be followed to meet Trina Solar's warranty conditions.

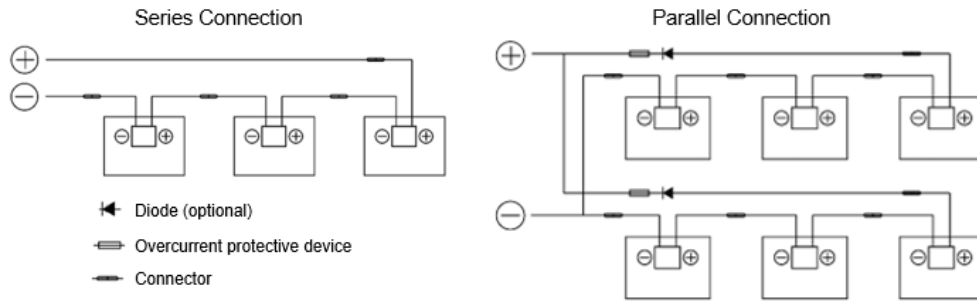
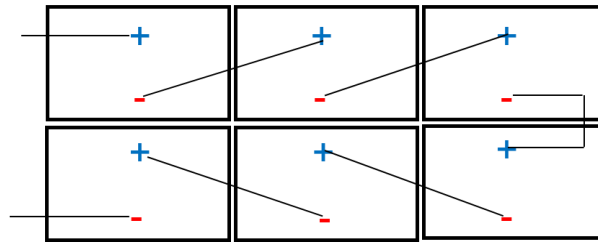


Figure 6. Series and parallel connection circuit diagram.

Trina Solar recommends the following two wiring methods for portrait and landscape installations with short and long cable lengths, respectively. For specific standard cable lengths, please refer to the datasheets of the products.

Recommended Wiring Methods	Graphical View
Portrait installation: Standard short cable length	<p>(C-type Wiring)</p> <p>(Note: One end of the single row needs to be extended)</p>
Portrait installation: Standard short cable length	<p>(Linear Wiring)</p> <p>(Note: One end of the single row needs to be extended)</p>

Landscape installation:
Standard long cable length or
customized length



6.4.3 FUSING

The correction factor of a fuse shall be determined by an authorized professional electrical engineer in accordance with the relevant design regulations and system simulation results. Trina Solar does not responsible for determining the minimum rating of fuse.

The fuse rated current should be chosen depending on different standards, as follows:

$$\frac{1.5}{K_f} \cdot I_{SC} \leq I_n \leq \text{Max Series Fuse Rating (IEC standard)}$$

$$\frac{1.56}{K_f} \cdot I_{SC} \leq I_n \leq \text{Max Series Fuse Rating (NEC standard)}$$

where

- I_n Fuse rated current [A]
- I_{SC} Short circuit current of the module [A]
- K_f Temperature correction factor [-]

A correction factor (K_f) should be applied for determining the fuse rated current working at different temperatures. Please confirm the final fuse selection with the qualified design institutes and fuse manufacturer. The maximum series fuse rating value on the products' datasheet provided by Trina Solar should be used for reference only.

7 PV MODULE MAINTENANCE

7.1 VISUAL INSPECTION AND REPLACEMENT

The modules must be inspected and maintained regularly, which is the responsibility of the users. The circuit breaker should be disconnected before the inspection. If the modules are damaged, such as broken glass, broken cables, and damaged junction boxes, it may cause functional and safety failures. If the module is damaged, replace the damaged module with a new module of the same type. Do not touch the live part of the cable or connector.

It is recommended to perform a preventive inspection every six months, and do not replace components of modules without authorization. If electrical or mechanical performance inspection or maintenance is required, it is recommended that qualified professionals should perform the operation to avoid electric shock or personal injury.

The vegetation should be cut regularly to avoid shading and thus affecting the module's performance.

Check if the mounting hardware is tightened correctly in place.

Check whether all string fuses in each non-grounded pole are working properly.

Please cover the front surface of modules with an opaque material during repairing. Modules exposed to sunlight can generate high voltage, which is extremely dangerous.

Trina Solar PV modules are equipped with bypass diodes in the junction box to minimize module heating and current losses.



Before cleaning, make sure to wear PPE, such as insulated protective gloves, protective glasses, hard hats, safety insulated shoes, etc.

When using scaffolding, make sure that the scaffolding is in a stable position or with anti-dumping measures, and that the installer should wear a safety belt in accordance with local building codes.

Do not stand on the modules or trackers for cleaning work.

Do not try to open the junction box to change the diodes even if they fail.

If the module is damaged (broken glass or scratches on the back sheet), it needs to be replaced.

It is necessary to wear cut-resistant gloves and other personal protective equipment for special installations.

Make sure to isolate the impacted array string to prevent the current generation before attempting to remove the module.

Use the relevant disconnect tool provided by the supplier to disconnect the connector of the affected module.

Check the open circuit voltage of the array string and verify that the open circuit voltage of other strings connected in parallel are within a range of 10V difference.

Turn the circuit breaker on again after checking.

Please also pay attention to other safety precautions listed at the beginning of this manual.

7.2 CONNECTOR AND CABLE INSPECTION

Inspect all cables to verify that they are firmly connected, avoid direct sunlight, and keep them away from water areas.

It is recommended to check the connectors, torque of bolts, and the general condition of wiring at least once a year. Also, check that mounting hardware is fastened in place. Loose connections will result in damage to the array.

7.3 CLEANING

This manual covers the requirements for the cleaning procedures of Trina Solar PV modules. Professional installers should read these guidelines carefully and strictly follow these instructions. Failure to follow these instructions may result in death, injury, or property damage. Damages induced by inappropriate cleaning procedures will void Trina Solar warranty.

The amount of electricity generated by a solar module is proportional to the amount of light captured. A module with shaded cells generate less energy, and therefore, it is essential to keep PV modules clean. The dirt such as bird droppings, leaves, dust is usually need to be cleaned.

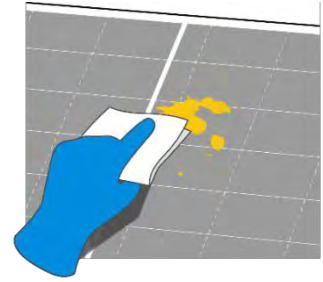
When cleaning the modules, make sure that the temperature difference between the water and the module is in the range of -5°C to 10°C .

Use a dry or wet, soft and clean cloth, sponge, or soft bristled brush to wipe the photovoltaic module. Please make sure that the cleaning tools do not wear out glass, EPDM, silicon, aluminum alloys or steel.

If there is greasy dirt or other substances which are difficult to clean, conventional household glass cleaning agents can be used. Pay attention not to use alkaline and strong acidic solvents, including hydrofluoric acid, alkali, acetone.

For modules that are installed horizontally (0° tilt angle), they should be cleaned more frequently, as they do not have "self-cleaning" function as those installed at 10° or larger tilt angles.

The back surface of the monofacial module usually does not need to be cleaned. When cleaning the back of the bifacial module, avoid any sharp objects that may cause damage or penetrate the base material. The other cleaning requirements are the same as the front-side.



Take care to prevent foreign objects such as lawn mowers and rolled up stones from hitting the surface of modules that would cause the damage of glass or modules.

Cleaning activities create risk of damaging the modules and array components, as well as increasing the potential electric shock hazard.

Do not clean the modules during the hottest time of the day to avoid thermal stress on the modules.

Cracked or broken modules represent an electric shock hazard due to leakage currents, and the risk of shock is increased when modules are wet. Before cleaning, thoroughly inspect modules for cracks, damage, and loose connections.

During the daylight, the voltage and current present in the array are sufficient to cause a fatal electric shock.

Please make sure that the array has been disconnected from other active components before starting the cleaning.

Wear suitable protective clothing (clothes, insulating gloves, etc.) when cleaning the modules.

Do not immerse the module, partially or totally, in water or any other cleaning solutions.

Do not use such as lubricants and organic solvents to clean the connectors.

Do not clean modules under the weather conditions of wind more than 4 class (in Beaufort scale), heavy rain or heavy snow.

When cleaning the modules, it is forbidden to step on the modules, forbidden the injection of water to the backside of the modules or cables. Please ensure that the connectors are clean and dry to prevent electric shock and fire hazards.

Do not use steam cleaner.

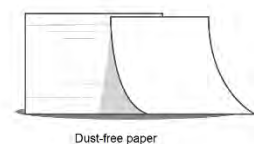
For detailed requirements regarding cleaning, please refer to *White Paper for PV Modules Operation and Maintenance*, available from <https://www.trinasolar.com/en-glb/resources/downloads>.

CLEANING METHODS

Method A: Compressed water

Requirement for water quality:

- PH: 6~8;
- Water hardness-Calcium carbonate concentration : ≤600 mg/L
- Recommend to use soft water to wash.



- The recommended maximum water pressure is 4 MPa (40 bar)

Method B: Compressed Air

Trina Solar recommends using this method to clean the soft dirt (like dust) on modules. This technique can be applied as long as the method is efficient enough to clean the modules considering the on-site conditions.

Method C: Wet cleaning

If excessive soiling is present on the module surface, a non-conductive brush, sponge, or other mild agitating method may be used with caution.

Please make sure that any brushes or agitating tools are constructed with non-conductive materials to minimize risk of electric shock and that they are not abrasive to the glass or the aluminum frame.

If grease is present, an environmentally friendly cleaning agent may be used with caution.

Method D: Cleaning robot

If a cleaning robot is used for dry cleaning, the brush material is required to be soft plastic material, and the glass surface and aluminum alloy frame of the module will not be scratched during the cleaning process and after cleaning. The weight of the cleaning robot should not be too large. If the cleaning robot is improperly used, and the resulting module damage and power attenuation are not covered by Trina Solar's warranty.

TROUBLE SHOOTING

If your PV system does not work normally after installation, please inform your installer immediately. It is recommended to perform preventive inspections every six months, and do not change the components of the modules without authorization. If electrical or mechanical performance inspection or maintenance is required, they should be operated by qualified professionals to avoid any electric shock or personal injury.

8 REPORTING TECHNICAL ISSUES AND CLAIMS

- Contact your installer.
- Contact Trina Solar after sales service team at <http://customerservice.trinasolar.com/>.
- Submit the Customer Feedback Form at: <http://customerservice.trinasolar.com/> and one of our technical service representatives will contact you within 5 business days. A username and password is required to send feedback from the customer service link.
- For module specifications or datasheets, please download from: <http://www.trinasolar.com/>.

AMENDED EDITIONS AND DATES

- Document No. UM-M-0002, Version A, released in April 2021.
- Document No. UM-M-0002, Version B, released in June 2021.
- Document No. UM-M-0002, Version C, released in August 2021.
- Document No. UM-M-0002, Version D, released in December 2021.
- Document No. UM-M-0002, Version E, released in March 2022.
- Document No. UM-M-0002, Version F, released in April 2022.
- Document No. UM-M-0002, Version G, released in October 2022.
- Document No. UM-M-0002, Version H, released in December 2022.
- Document No. UM-M-0002, Version I, released in Jun 2023.



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MC Cube ESS Maintenance Manual (DC1500 V)

February 03rd, 2023

Electric Power Research Institute

MC10C-B5365-U-R4M01



This manual is verified to be accurate at the date of publication identified within Section 1.4. BYD reserves the right to make product and documentation modifications at any time to achieve the goal of “Technological innovations for a better life”.

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<http://asms.byd.com/asapp/login> ; EPRIsupport_America@fdbatt.com for further information or to report inaccuracies or omissions in this manual.

Made in China

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1. Preface

1.1. Document Purpose and Scope

The purpose of this manual is to outline the process and steps required for the maintenance of MC Cube energy storage system (ESS). Through this manual, users can fully understand and master the relevant requirements and methods of maintenance of key components of BYD MC Cube energy storage system. In addition, this manual also provides some main troubleshooting information and safety precautions.

This manual should be properly stored and kept, so that the on-site staff can consult the maintenance information of MC Cube ESS.

For more support, please contact BYD Company. Contact information is as follows:

- By After Sales Management System at <http://asms.byd.com/asapp/login>
- By email at EPRIsupport_America@fdbatt.com

1.2. Applicable Models

This manual covers the following models only:

- MC10C-B5365-U-R4M01

1.3. Reference Documents

The MC Cube ESS Maintenance Manual exists as part of library of product specific documents. Please consult the following documents to ensure a comprehensive understanding of MC Cube ESS attributes.

- *MC Cube ESS Installation Manual*
- *MC Cube ESS User Manual*
- *MC Cube ESS Safety Manual*
- ***MC Cube ESS Maintenance Manual***

1.4. Version control

This is the initial release of the MC Cube ESS Manual. As part of BYD’s continuous improvement process, BYD reserves the right to make technology and document changes. Please contact BYD support to verify this manual reflects the most recent release or to report omissions or inaccuracies.

Version	Describe	First edition date
MC Cube ESS_Maintenance Manual_draft v0.1		09-11-2022
MC Cube ESS_Maintenance Manual_draft v0.2		22-11-2022
MC Cube ESS_Maintenance Manual_draft v0.3		12-23-2022

1.5. Document Safety Notices

Throughout this manual the below indicated Danger, Warning, and Caution labels are used to convey hazards associated with specific tasks and procedures. These safety notices do not represent all hazards present when completing a given task. Operator and maintenance personnel of the MC Cube ESS should adhere to industry safety best practices; site specific Environmental, Health and safety plans; and local safety requirements and regulations. **Only properly trained and qualified personnel should be permitted to complete the maintenance procedures identified in this manual.**



“DANGER” indicates a hazardous situation which, if not avoided, will result in death or serious injury. The signal word "DANGER" is limited to the most extreme situations. DANGER indicators are not used for property damage hazards unless personal injury risk appropriate to these levels is also involved.



“WARNING” indicates a hazardous situation which, if not avoided, could result in death or serious injury. WARNING indicators are not used for property damage hazards unless personal injury risk appropriate to this level is also involved.



“CAUTION” indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. CAUTION indicators without a safety alert symbol may be used to alert against unsafe practices that can result in property damage only.



1.6. Product Certification and Compliance

The MC Cube ESS is compliant with the standards, regulations, and requirements identified in Table 1.

Table 1: MC Cube ESS Standards Compliance

Standard	
System	NFPA 70® – National Electrical Code® IEC 60529 – Degrees of protection provided by enclosure UL 508 – Standard for Industrial Control Equipment UL 991 – Standard for Tests for Safety-Related Controls Employing Solid-State Devices. UL 1998 – Standard for Software in Programmable Components IEEE C84.1 – Standard Preferred Voltage Ratings for Alternating-Current Electrical Systems IEEE 693 – Recommended Practice for Seismic Design of Substations IEEE 1584-2018 – Guide for Performing Arc-Flash Hazard Calculations UL1973-Batteries for Stationary, Vehicle Auxiliary Power and Rail (LER) applications UL 9540A – Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems. UL9540- Energy Storage Systems and Equipment
Fire Protection and Safety	CEC – California Electric Code CFC – California Fire Code (2019, Section 1206) NFPA 1 – Fire Code NFPA 855 – Installation of Energy Storage Systems NFPA 70E® – Standard for Electrical Safety in the Workplace®



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3. Abbreviations

AC – Alternating Current
AHJ – Authority Having Jurisdiction
BMS – Battery Management System
BOL – Beginning of Life
BOP – Balance of Product
DMC – Distribution Management Cabinet
DC – Direct Current
EMCU – Energy Management Control Unit
EMS – Energy Management System
ERP – Emergency Response Plan
ESS – Energy Storage System
FAT – Factory Acceptance Test
HMI – Human Computer Interaction
HVAC – Heating Ventilation Air Conditioner
LFP – Lithium Iron Phosphate
LOTO – Lock-Out-Tag-Out
NFPA – National Fire Protection Association
OCPD – Over Current Protect Devices
OEM – Original Equipment Manufacturer
PCS – Power Conversion System
PPE – Personnel Protective Equipment
SAT – Site Acceptance Test
SOP – Standard Operation Process
SPD – Surge Protection Device
UPS – Uninterruptible Power Supply

4. Introduction

4.1. Acknowledgement

Thank you for purchasing the MC Cube ESS supplied by BYD Auto Industry Company Limited. The MC Cube ESS is an advanced modular battery energy storage system incorporating industry leading capabilities enabled by cutting-edge technologies and innovative design. High energy density battery and power electronics, extended service life, and advanced safety features are just a few of the attributes that set the MC Cube ESS apart from other ESS products.

The MC Cube ESS is fully factory integrated and tested at BYD's facility, arriving on site with battery racks populated and sub systems installed. This high level of pre-integration results in rapid installation, reduced EPC CapEx, and improved system performance and reliability.

4.2. System Overview

The MC Cube ESS System integrates all power electronics, controls, and safety features required to support the DC side of a battery energy storage system. An overview of the MC Cube ESS layout and key features is shown in Figure 1 and further described in Table 2.

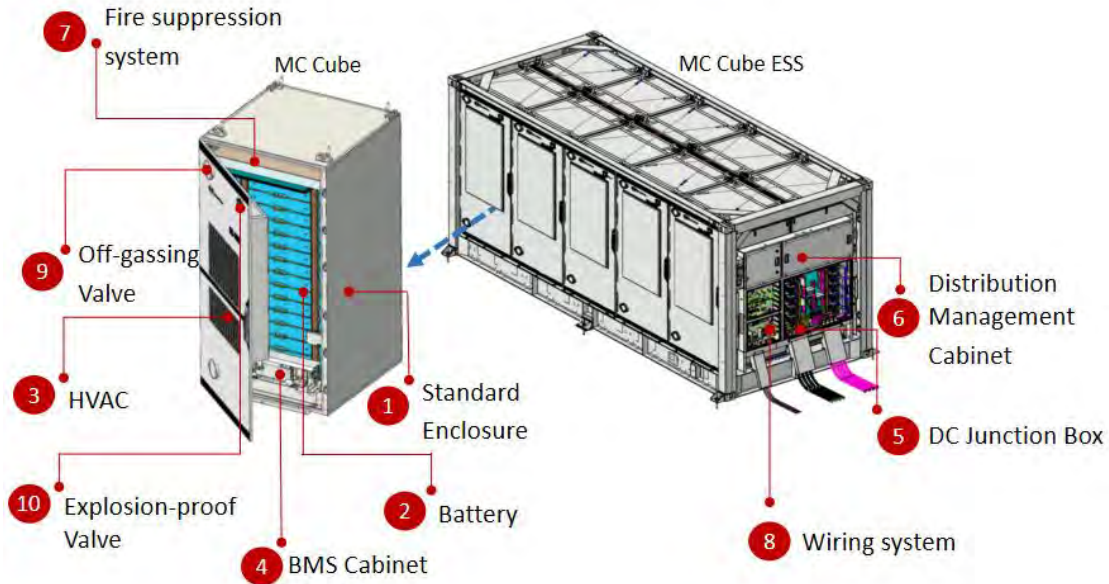


Figure 1: Layout and features of the MC Cube ESS



Table 2: Key System Features

No.	Name	Remarks	
①	Standard Enclosure	All models of the MC Cube utilize a standard IP-55 rated container and battery modular design.	
②	1P416S Battery	The MC Cube ESS contains 4160 Lithium Iron Phosphate (LFP) batteries. This battery greatly improves overall system energy density via the reduction of peripheral battery integration cabling and buswork.	
③	HVAC	Install one HVAC per MC Cube to adjust the internal temperature of battery cabinet automatically. During charge and discharge, cell temperature is maintained between 20°C - 35°C.	
④	Battery Management System	The MC Cube ESS houses 10 Battery Management Systems (BMS) (one for each MC Cube). BMS integrates battery management and safety management.	
⑤		DC Junction Box	The MC Cube ESS's DC Junction box contains all primary DC buswork and disconnect required to safely exchanged power between the MC Cube ESS and plant Power Conversion System (PCS).
⑥	MCC Cube	Distribution Management Cabinet	The Distribution Management Cabinet (DMC) houses all aux power distribution equipment including backup UPS; system communication, control, and monitoring hardware including network switch, and Energy Management Control Unit (EMCU); and all required customer communication, signal, and aux power interfaces.
⑦	Fire Suppression system	The MC Cube incorporates heat and smoke detection along with fire suppression systems.	
⑧	Wiring System	The MC Cube ESS arrives on site with all power, communication, and signal wiring internal to the MC Cube ESS fully installed. Note: Some terminations have been removed to facilitate safe transport.	
⑨	Off-gassing Valve	MC Cube has a flammable gas detection function, and two off-gassing valves are set on the front.	
⑩	Explosion-proof Valve	MC Cube has a explosion-proof valve is set on the front.	

4.3 System Specifications

The MC Cube ESS system Specifications are shown in Table 3 and Table 4 below. This manual applies only to those models listed in Section 1.2.



Table 3: MC Cube ESS Specifications.

System Model Number	MC10C-B5365-U-R4M01
Discharge Duration	4-hour
Charge/Discharge C-rate	0.25C
BOL Cell Energy (kWh)	5365
Usable Energy(FAT) (kWh)	5099
Voltage Range (VDC)	1081.6 - 1497.6
Recommended Maximum Discharge Power (kW)	1275
# of LFP Battery	416×10
# of BMS	10

Table 4: Additional Specifications

CHARACTERISTIC	MC10C-B5365-U-R4M01
Cell Type	LFP, 3.2V/403Ah
# of Battery Cell in Series	416
# of Battery String/BMS	10
Energy Capacity (BOL) (kWh)	5365
DC Capacity-SAT (kWh)	4946(3 Month after FAT)
Nominal Voltage Range (V)	1081.6~1497.6
Max. Current (A)	1414
Max. DC Voltage(V)	1500
Protection Function	Over-temperature, over-voltage, over-current protection
Peak Power of Auxiliary Distribution (45°C) (kW)	39
Ambient Temperature (°C)	-30~55 (Power derating below -15°C or above 45°C)
Communication Mode	Ethernet: Modbus TCP/IP
Enclosure Ingress Protection Rating	IP55
Maximum Operating Altitude	2000m

5. Requirement

5.1. Tools and equipment

The key equipment and materials that may be needed when replace or maintain the MC Cube ESS and integrating with other ESS devices on the project site are outlined below. The items shown in Table 5, Table 6 and Table 7 are not included in MC Cube ESS and its supporting installation parts, and need to be purchased or acquired separately. See Section 5.5 for details of



equipment and materials.

Note that following Table is for planning purposes only, and does not reflect all tools, equipment and building goods required for complete maintenance. Please always refer to industry best practices and specific project design documents for specific details of MC Cube ESS's integration with other ESS devices, as well as specific project e&s plans for required PPE.

Table 5: Basic maintenance tools

NO.	Tool Name	Requirement	Quantity	Remark
1	Multi-meter	digital	1pcs	
2	Screw driver	Flat head and phillips	1pcs each	
3	Socket set		1set	
4	Torque Wrench	Metric standard	1pcs	
5	Electric Tape		1pcs	
6	Soft brush		1pcs	
7	Vacuum		1pcs	
8	Mark pen	Red	1pcs	
9	Electric Tape		1pcs	
10	Cloth		1pcs	

Table 6: Basic PPE

Item	Remarks
Hard hat	Protection from impacts from falling objects and other hazards
Safety gloves	Protection from cuts, abrasion, and other hazards
Safety glasses	To protect eyes from contact with foreign objects and airborne debris
Safety toe boots	To protect feet from heavy objects and equipment
Hearing protection	Protection from loud noises generated by machinery and other tools
High visibility vest	To ensure all personnel are seen by equipment operators
Specialty PPE	Arc flash PPE, fall prevention harnesses, and other hazard specific PPE as required by the MC Cube ESS safety signs, the site conditions and the site EH&S manager or local laws and regulations
First-aid Kit	Basic first-aid kit. To include eye wash station.

Table 7: Battery hoisting and maintenance equipment

Item	Remarks
Crane	Crane (and support personnel) meeting capacity and requirements as identified in the project specific lifting plan
Forklift	Forklift (and support personnel) appropriately sized for the



	movement of equipment and materials
Rotto hammer	Used for drilling anchor bolt holes in foundations
Wire crimpers	To include appropriate die for all lugs used and recent calibration.
Ladder or Man-lift	Used to access the roof of the MC Cube ESS. Minimum reach should be 5M (16.4ft). Ladder shall meet OSHA and EH&S plan requirements
Miscellaneous tools	Basic power tools and hand tools required for safe and code compliant mechanical and electrical installation procedures.

5.2. Safety requirements

This section contains safety info that must be observed at all times during operation, repairing, maintenance and other activities in the ESS field. To prevent personal injury and property damage and to ensure long-term operation of the product, read the following carefully and observe all safety information at all times.



Danger to life from the electric shock due to live voltage

High voltage are present in the live components of the product. Touching live components results in death or serious injury due to electric shock.

Wear suitable personal protective equipment for all work on the product.

Do not touch any live components.

Observe all warning messages on the product and in the documentation.

Open all the main and auxiliary power breaker while maintenance or repair the product.



Danger to life due to battery leak.

Battery leaking can lead to hazardous situation that result in death or serious injuries due to electric shock.

Stop the ESS immediately and open DC and AC breaker and auxiliary power.

Disconnect the jumper cable of leaking battery pack.

Keep good ventilation in the leaking area and fire and sparks are forbidden.

Use gauze (common medical gauze) or other liquid-absorbent solid clean the electrolyte leak.

Avoid direct contact with electrolyte and keep it away from skin.

Skin contact: please wash with plenty of water.

Eye contact: please immediately clean with a large number of 2%~ 4% boric acid solutions and go to hospital at once

Wear suitable personal protective equipment for all work on the product.



Danger to life from the electric shock due to ground fault

If a ground fault has occurred, parts of the ESS plant that are supposedly grounded may in fact be live. Touching incorrectly grounded parts of the ESS plant results in death or serious injuries from electric shock.

Before working on the ESS plant, ensure that no ground fault is present.

Wear suitable personal protective equipment for all work on the device.



Danger to life from the electric shock due to damaged product

Operating a damaged product can lead to hazardous situation that result in death or serious injuries due to electric shock. Before working on the ESS plant, ensure that no ground fault is present.

Only operate the product when it is in a flawless technical condition and safe to operate.

Check the product regularly for visible damage.

Make sure that all external safety equipment is freely accessible at all times.

Make sure that all safety equipment is in good working order.

Wear suitable personal protective equipment for all work on the product.



Danger to life due to fire risk

If the ESS gets fire, it may result in serious personnel injuries or property damage.

Do not block the escape route.

Check and test the fire extinguishing system regularly.

Once ESS gets fire, press down the emergency button immediately, cut off the main power, close the door and call the local fire department.



Danger to life from electric shock if the product is not locked

If the product is not locked, unauthorized persons will have access to live components carrying lethal voltages. Touching live components can result in death or serious injury due to electric shock.

Always close and lock the product.

Remove the keys.

Store the keys in a safe place.

Ensure that no unauthorized persons have access to the closed electrical operating area.



Danger to life due to blocked escape routes

In hazardous situations, blocked escape routes can lead to death or serious injury. It is imperative that the escape route is freely accessible at all times.

An escape route must be available at all times. Make sure the minimum passage width of the escape route meets local standards.

Do not place any objects in the escape route area.

Remove all the tripping hazards from escape routes.

Check the door on the escape routes regularly. Make sure all the doors can be easily pushed opened.



Risk of burn due to hot components

Some components of the product can get very hot during operation. Touching these components can cause burns.

Observe the warnings on all components.

After ESS is stopped, wait until any hot components have cooled down sufficiently.
Wear suitable personal protective equipment for all work on the product.



Wrong operation may cause component failure or shorten the device service life.
Frequent operation of the emergency-stop button may cause damage and shorten the device service life.

Only operate the emergency-stop button in an emergency situation.
Strictly follow the instruction of user manual during operation or maintenance.



Get injured due to slipping, falling over or scuffing.
Slipping, falling over or scuffing injury might occur when doing maintenance on ESS.

Strictly follow the instructions when doing any activity on ESS.
Wear suitable personal protective equipment for all work on the product.

5.3. Qualification Requirements

The operator must be local qualified electrician and competent to undertake work on the system.

The operating personnel must be authorized and trained with electric operation skills. Otherwise operator must not operate the system in case of severe injury by operating equipment improperly.

The operator should be fully familiar with the structure and working principle of the whole storage system.

The operator should be fully familiar with the manual.

The operator should be fully familiar with relevant standards of the project host country.

The personnel commissioned with performing the work are able to evaluate their assigned tasks and recognize possible risks.

Only authorized and trained electricians can carry out the maintenance work, and change settings and connections on the device.



6. Maintenance Schedule

6.1 Periodic Replacement

Table 8: Periodic Replacement List

NO.	Replacement Items	Replacement Period	Remarks
1	UPS battery	Every 3 year	

Note: For any component replacement over 5 years, please contact BYD for further instruction (refer to Annex 1 “Contact information”, Page 28).

6.2 Periodic Maintenance

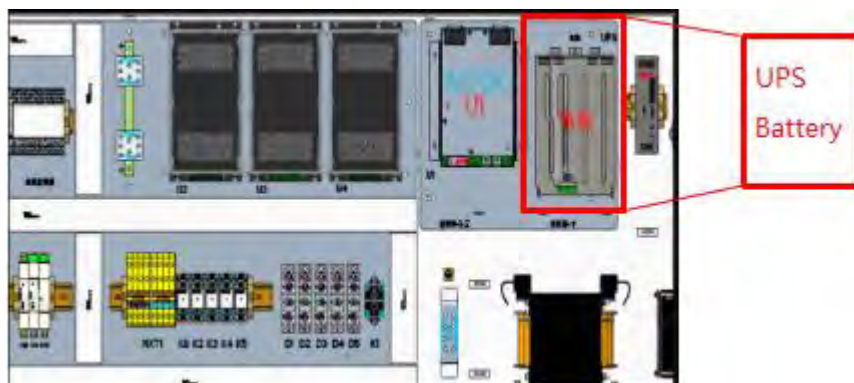
Table 9: Periodic Maintenance List

No.	Maintainable Items	Maintenance Period	Remarks
1	Battery Cabinet Maintenance	Annually	
2	Distribution and Control Cabinet Maintenance	Annually	
3	DC Junction Box Maintenance	Annually	
4	Fire Detection and Suppression System Maintenance	Annually	
5	HVAC System Maintenance	Semiannually	
6	Auxiliary System Maintenance	Annually	
7	Capacity Test	Annually	

Notes: Location and ambient conditions influence the maintenance intervals. Cleaning and corrosion protection may be required more frequently depending on the conditions of the installation site.

7. Replacement Work

7.1 UPS Battery Replacement (power-off)



Turn off the auxiliary power supply at the MC Cube input end, and "turn off" the UPS power supply switch;

Disconnect the wire between UPS battery module and control module;

Remove the three fixing screws and remove the UPS battery;

Install new battery pack and plug in the power connector;

Notes:

- ❖ Before maintenance and replacement, disconnect the power supply in the power distribution management cabinet, MCB2, and then MCB1 and QF0 in sequence;
- ❖ *Recycle the old UPS battery module at the authorized organization.*

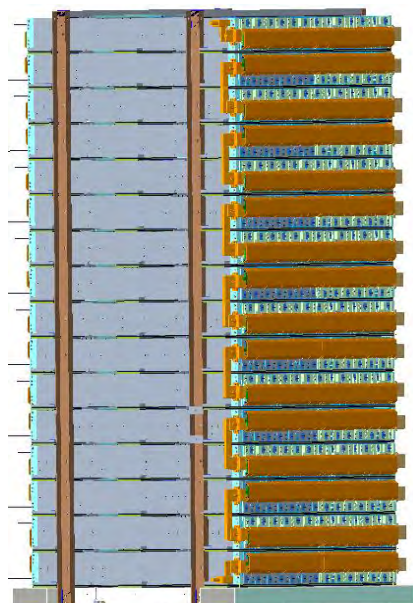
8. Maintenance work

8.1. Battery Cabinet Maintenance

/* Record the battery System Maintenance check results in Table 1 Annex 3 */

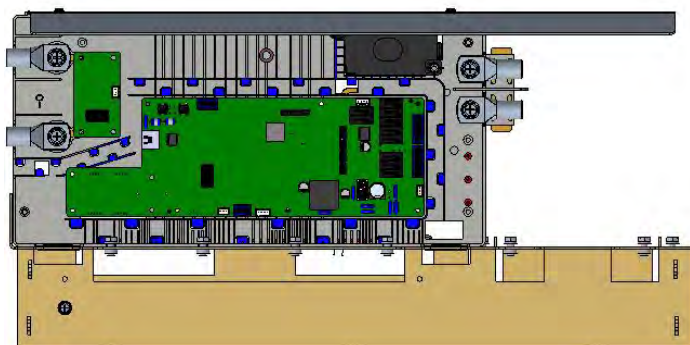
Note: Before maintenance, turn off the power supplies of MCB2, MCB1, and QF0 in the power distribution management cabinet one by one. Then turn off the isolation switch of each MC Cube. Finally, remove the positive and negative battery power cables or connect the copper bar;

8.1.1 Battery Rack Visual Check (power-off)



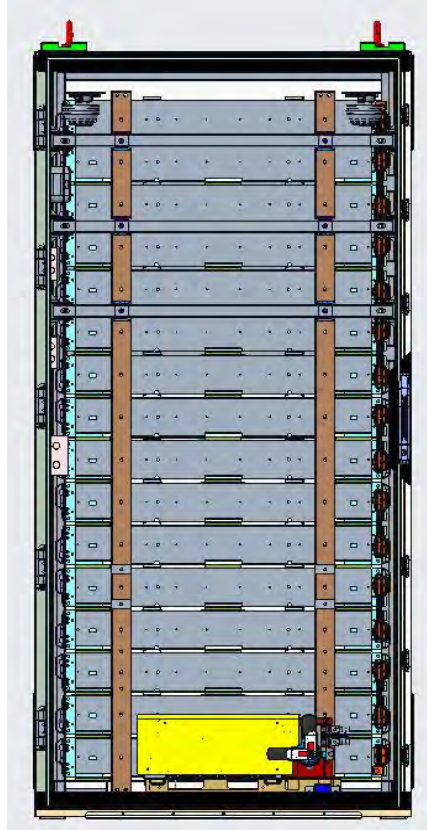
- Check whether battery rack is distorted or bent;
- Check whether the welding of battery rack is damaged or loose;
- Check whether the mounted bolts on the battery rack is loose or missing;
- Check whether the battery rack is well grounded;

8.1.2 BMS Control Box Visual Check (power-off)



- Check the BMS control box for visual defects such as dirt, distortion, damages and scratches on the enclosure;
- Check whether BMS control box is mounted firmly;
- Check whether DC power cable and signal wiring is firmly connected;
- Visually check the terminal or control panel for obvious failure, such as yellow and black spot;
- Visually check whether BMS control box is well grounded;

8.1.3 Battery Module Visual Check (power-off)



- Open the cabinet door of the unit to find irritating odor or burnt smell;
- Check whether the battery pack is firmly fixed;
- Check the battery pack for expansion;
- Visually check the surface of the battery pack for obvious electrolyte leakage;
- Visually check the positive and negative poles of the battery pack for yellow and black spot;
- Visually check whether the battery pack cable is loose; damaged or burnt.
- Visually check whether the communication cable connector of the battery pack is firmly connected;

8.1.4 Battery Cabinet Test (powered on)

8.1.4.1. Battery Status Check (power-on)

- When the auxiliary power supply is powered on, check whether the light status of the battery management system (BMS) control board;
- Check and refresh all battery voltage and temperature information until they are displayed correctly;
- Check the battery management system (BMS) for any alarm or failure;
- Check the alarm or fault information that frequently occurs on the history of battery management system (BMS);

8.1.4.2 Battery running test (powered on)

Check whether the 10 battery strings can normally start and charging and discharging under the rated power condition;

Check whether the battery string is derating in the charging and discharging capacity test;

Check whether the battery voltage consistency is good in the charging and discharging capacity test;

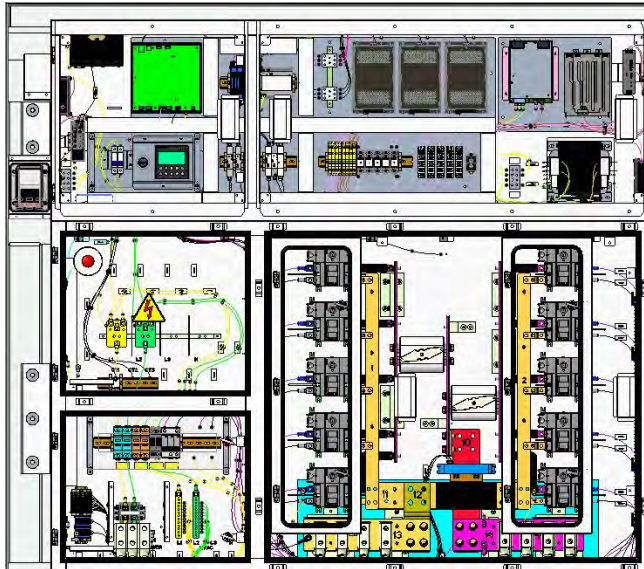
Check whether the battery temperature is higher than other batteries in the charge-discharge capacity test;

Note: These tests can be tested together in the capacity test.

8.2. Maintenance of Distribution Management Cabinet

/* Record the DMC Maintenance check results in Table 3 Annex 3 */

Note: Before maintenance and replacement, disconnect the power supply in the power distribution management cabinet, MCB2, and then MCB1 and QF0 in sequence; Then turn off the isolation switch of each Cube.



8.2.1 Visual Inspection of Power Distribution Management Cabinet (power-off)

Visually check whether the distribution management cabinet is installed firmly;

Visually inspect the surface and terminals of the distribution management cabinet;

Visually check whether the indicator window of surge protector is green;

Visually inspect the circuit breaker for obvious discoloration or scorching marks;

8.2.2 Wiring Check (power-off)

Check whether the auxiliary power cable is firmly fixed;

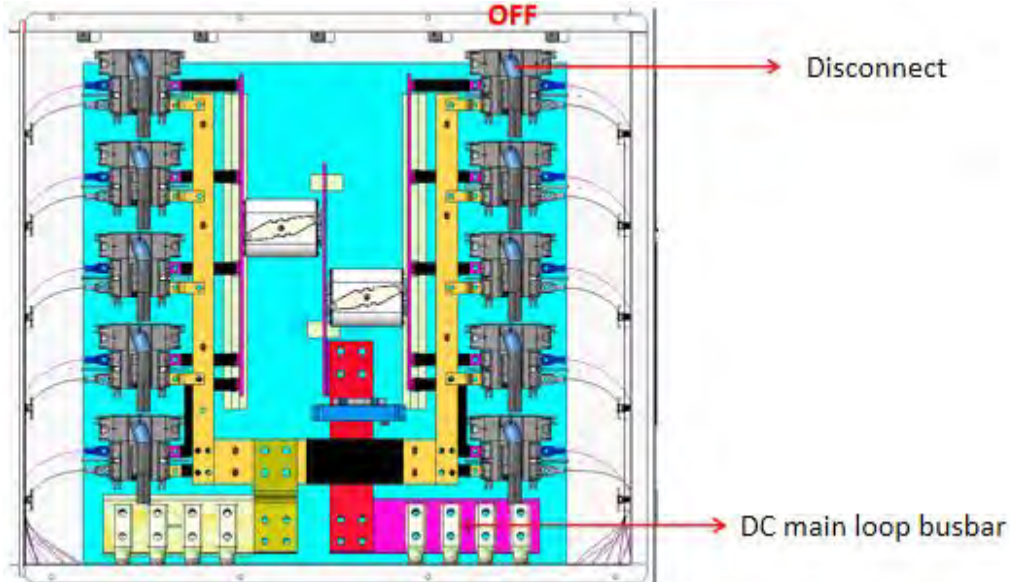
- Check whether the signal cable is firmly connected;
- Check whether the Ethernet cable is firmly connected;
- Check whether the grounding cable is firmly connected;

8.2.3 Distribution Management Cabinet Components Test (power-on)

- Check and record the auxiliary power interface voltage. Phase to phase voltage should be within $480V \pm 10\%$ and single phase voltage should be $240v \pm 10\%$;
- Check whether DC power meter is powered on and whether sampling data value shows correctly;

8.3. DC Junction Box Maintenance

/* Record the DC Junction Box Maintenance check results in Table 4 Annex 3 */



8.3.1. DC Junction Box Visual Check (power-off)

- Check whether there is any visual defects such as dirt, distortion, damages and scratches .
- Check whether the components inside the box are mounted tightly and no damage;
- Visually check whether the DC circuit fuse is in good condition;
- Visually inspect the copper bars and circuit breaker terminals for obvious discoloration;

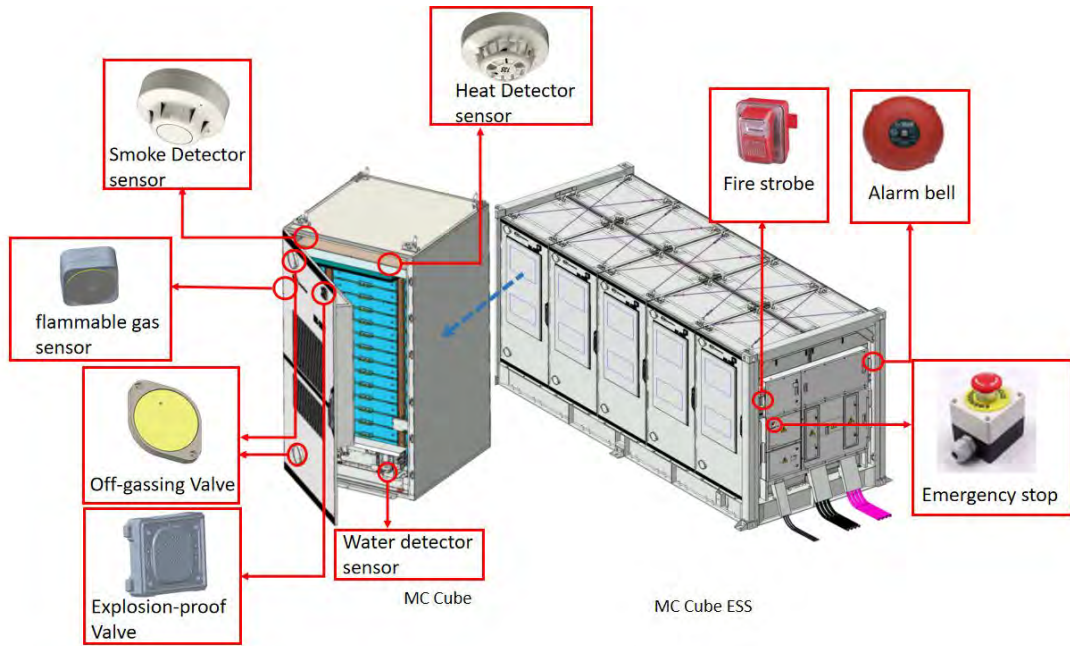
8.3.2. DC Junction Box Wiring and Torque Check (power-off)

- Check whether there is any loose on the torque stamp of DC power circuit;
- If any, referring to the Annex 2 for the prescribed requirement, test and tighten the bolts or nuts with torque wrench and mark it;

- Check whether the power signal cable is loose or damaged;
- Check whether the grounding cable is loose or damaged;
- Visually check whether the fixed bronze insulator is loose or broken;

8.4. Maintenance of Fire Alarm System

MC Cube ESS Integrated temperature detection, smoke detection and combustible gas detection. The schematic diagram of system detection components and system operation is shown in the following;



Layout of fire protection system components

Schematic diagram of the operation of the fire alarm system

event	Fire fighting system action	Alarm program	Fire flash program
Detector detect combustible gas	Trigger level 1 alarm,alarm bell ring	The alarm bell keeps alarming.	Alarming
Two sensors (temperature and smoke) are detected.	Trigger level 2 alarm,strobe alarm ring	The strobe alarm bell keeps alarming.	Flash

8.4.1 Fire Alarm System Components Check (power-off)

/* Record the Fire Alarm system components check results in Table 5 Annex 3 */

- Check whether the temperature sensor, smoke sensor and combustible gas detector are mounted firmly;



Check whether there are stuffs around the temperature sensor, smoke sensor and combustible gas detector;

Check whether the indicators of temperature sensor, smoke sensor and combustible gas detector blinking periodically while powered on;

8.4.2 Fire Alarm System Function Test (power-on)

8.4.2.1. Level 1 Fire Alarm (Combustible gas alarm)

Using gas to trigger the combustible gas detector, the system will trigger a secondary fire alarm, the audible and light alarm will sound, the system will stop, and the exhaust valve will open automatically upon receiving the instruction.

8.4.2.2. Level 2 Fire Alarm (Temperature alarm and Smoke alarm)




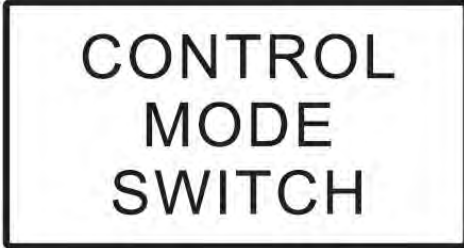

By activating any temperature sensor and any smoke sensor at the same time, The system shall trigger the second level fire alarm, the audible and light alarm will sound, the system will stop, and the exhaust valve will open automatically after receiving the instruction.

8.5. Auxiliary System Maintenance



/* Record the Auxiliary System Maintenance check results in Table 6 Annex 3 */

8.5.1. Safety Label Check (power-off)

Safety Signs	Location	Quantity
	<p>Located on the front door of each MC Cube and Junction Box</p>	<p>11</p>
	<p>Located on the front door of each Cube</p>	<p>1</p>
	<p>Located on the front door of each Cube and Junction Box</p>	<p>11</p>

 	<p>Located on the front door of each MC Cube and Junction Box</p>	<p>11</p>
	<p>Located adjacent to E-stop button</p>	<p>1</p>
	<p>Located adjacent to the keyed control switch on the exterior side of the MC Cube ESS</p>	<p>1</p>
	<p>Located on the MC Cube primary field-ground point</p>	<p>2</p>

Battery Energy Storage System	
Model No.	MC10C-B5365-U-R4M01
Battery Composition	LiFePO4
Voltage Range	1081.6 ~ 1497.6Vdc
Maximum Current	1414 A
Maximum Power	1275 kW
Maximum Capacity	5365 kWh
Auxiliary Voltage	480 Vac 3P4W
Auxiliary Current	47 A Max
Auxiliary Frequency	60 Hz
Maximum Short Circuit Current	60.3 kA@ 0.1 ms
Operating Temperature Range	-30~55°C
Ingress Rating (Battery Room)	IP55
Seismic	0.5g IEE693
Noise Level@1m	75dBA
Weight	41035 kg
Dimensions(W*D*H)	6058*2438* 2896 mm
Serial No.	


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Located on the front of the MC Cube ESS

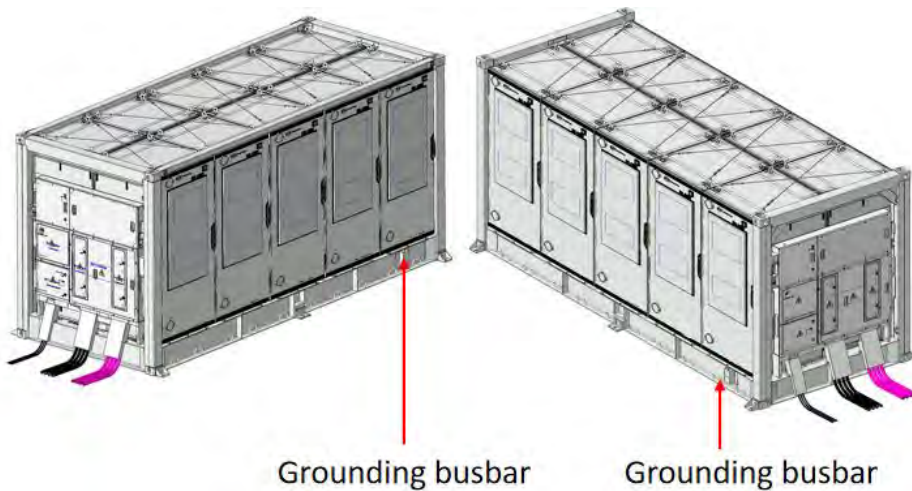
1

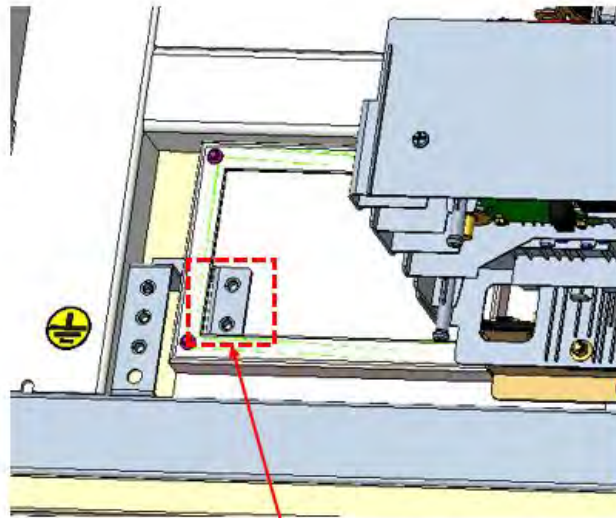
Check whether safety labels on enclosure is damaged, fallen or aging;
 Check whether nameplate is loose or fallen;

8.5.2. Enclosure Check (power-off)

Check whether there is any flammable object or anything that could endanger operational safety inside or around the enclosure;
 Check whether enclosure is rusting or deformed and whether painting is fallen;
 Check whether enclosure door can be opened and closed easily;
 Check whether the sealing joint strip of enclosure door is fallen or aging;
 Check whether the tightness of MC Cube ESS terminal (located below DC junction box) is good;

8.5.3. Grounding check (power-off)





The grounding point

- Check whether the grounding cable is loose or damaged;
- Check whether the grounding copper bar is rusted, corroded or oxidized;
- Check whether each Cube is well grounded;

8.5.4. Clean cabinet (Power Outage)

- Use soft brush and vacuum cleaner to clean and dust the air inlet and exhaust holes and fresh air system of each MC Cube;
- Clean and dust the inside of each MC Cube with a soft brush and a vacuum cleaner;

8.5.5. Auxiliary system component Test (power on)

8.5.5.1. Status check (power on)

- Check and record all alarm and fault information;
- Check whether the data connection is good and whether the data is refreshed;
- Record the software version of each controller;

8.5.5.2 Control switch function test (power on)

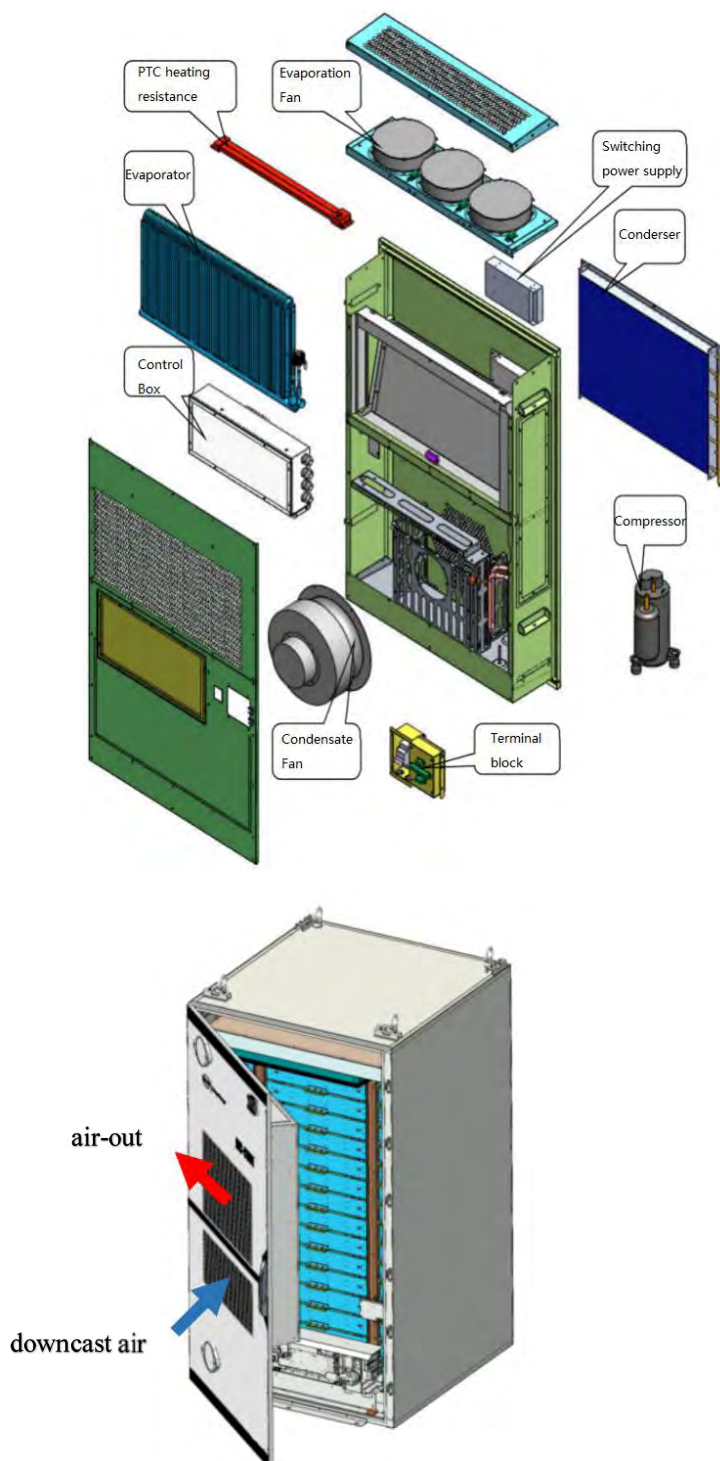
Start MC Cube ESS. And then turn the control switch on the side of MC Cube ESS enclosure to “Stop”. MC Cube ESS shall stop immediately. Turn the control switch to “Start” after the test.

8.5.5.3 Emergency stop switch function test (power on)

Start MC Cube ESS. And then press the Emergency-stop button on the power distribution cabinet. MC Cube ESS shall stop immediately. Release the emergency-stop button after the test. After the test, turn the emergency stop switch to the right;

8.6. Maintenance of HVAC

/* Record the HVAC maintenance check results in Table 7 Annex 3 */



8.6.1. Electric control system check (power-off)

Check whether there are loose wires, damaged parts or burnt out in the circuit junction box;



Check whether the power supply and communication connectors are installed firmly;

8.6.2. Refrigeration system inspection (power-off)

Check whether the air inlet, air outlet and water outlet are blocked, if so, clean them up with a brush;

Check whether HVAC suspension is firmly installed;

Check the condenser coil for blockage or dirt;

Check the surface of the inlet and outlet of the compressor for refrigerant leakage;

8.6.3. Test of HVAC components (powered on)

Check whether the electric control system run normally;

Check whether there is noise when the air conditioning system is running;

Connect the display screen of the air conditioning system to query and record the current and historical alarm records;

8.7. System capacity Test

/* Record the System capacity test results in Table 8 Annex 3 */

Check whether the remote data cable connector is firmly connected;

The MC Cube ESS is discharged to the voltage with rated power of 1275KW. Record the current total charging capacity as E1;

Pause the system until the battery temperature is $25\pm 2^{\circ}\text{C}$, Then charge the battery to the cut-off voltage until the system stops charging. Record the current total charge energy as E2 and current total discharge energy as E3;

Rest the system for 1 hour and discharge the battery to the cut-off voltage at the rated power of 1275KW. Record the current total discharge energy as E4;

Charge the MC Cube ESS until it meets the requirements of battery state of charge;

Check the operation data and calculate the current system capacity;

The charge capacity is E2-E1 and the discharge capacity is E4-E3.

9. Annex 1: Contact Information

For assistance, please contact BYD:

Electric Power Research Institute

BYD Auto Industry Company Limited

No.3009, BYD Road, Pingshan, Shenzhen 518118, P.R. China

Email: EPRIsupport_America@fdbatt.com



10. Annex 2: Torque requirements

Torque

(The required tolerance for the torque is $\pm 10\%$)

Torque requirements for copper bolts	
M4	---
M5	---
M6	10N.M
M8	15N.M
M10	30N.M
M12	50N.M
M14	70N.M
M16	110N.M



11. Annex 3: Maintenance Record Sheet

Table 1. Maintenance record of battery cabinet			
subsystem	Maintenance items and methods	result	remarks
Battery Rack Visual Check	Check whether battery rack is distorted or bent;		cut off power
	Check whether the welding of battery rack is damaged or loose;		
	Check whether the mounted bolts on the battery rack is loose or missing;		
	Check whether the battery rack is well grounded;		
Visual inspection of battery management system (BMS) control cabinet	Visually inspect the battery management system (BMS) control box for serious dust accumulation, dislocation, deformation, damage or scratch, etc.		
	Visually check whether the battery management system (BMS) control box is firmly installed;		
	Visually check whether the power line and signal line at DC input and output end are firmly connected;		
	Visually inspect the handle of DC disconnect and BMS control rocker switch for damage;		
	Visually inspect the terminals and control board plug-ins for obvious abnormalities, such as abnormal yellowing and blackening;		
	Visually, BMS control box is well grounded;		
Battery visual inspection	Open the cabinet door of the unit to confirm whether there is obvious pungent smell or burnt smell;		
	Check whether the battery pack is firmly installed;		
	Check whether the battery pack has obvious expansion;		
	Check whether there is electrolyte or electrolyte crystal on the surface of the battery pack;		
	Check whether there is obvious burning yellow, burning black or peculiar smell around the battery pack;		
	Check whether the battery pack cable and maintenance switch are loose, damaged or burnt out;		



	Check whether the communication cable connector of the battery pack is firmly connected;		
Battery status check	Check whether the auxiliary power indicator lights up when the auxiliary power is powered on;		electrify
	Check and refresh all battery voltage and temperature information until they are displayed correctly;		
	Check the battery management system (BMS) for any alarm or failure;		
	Check the alarm or fault information that frequently appears in the history of battery management system (BMS);		

Table 2. Maintenance record of battery cabinet

Battery Running Test	Check whether the 10 battery strings can normally start and run charging and discharging under the rated power condition;		electrify
	Check whether the battery string degrades in the charging and discharging capacity test;		
	Check whether the cell voltage consistency of the battery is good in the charging and discharging capacity test;		
	Check whether the temperature of any battery cell is obviously higher than that of other batteries in the charge-discharge capacity test;		

Table 3. Maintenance record of power Distribution Management Cabinet

subsystem	Maintenance method	result	remarks
visual check	Check whether the distribution management cabinet are mounted tightly;		cut off power
	Check whether the surface and terminals of the distribution management cabinet are damaged;		
	Check whether the indicator window of surge protector is green;		
	Check whether the circuit breaker has obvious discoloration or scorching marks;		
Cable connection check	Check whether the auxiliary power cable is firmly connected;		
	Check whether the signal cable is firmly connected;		
	Check whether the Ethernet cable is firmly connected;		



	Check whether the grounding cable is firmly connected;																		
Component testing	Check and record the auxiliary power interface voltage. Phase to phase voltage should be within 480V±10% and single phase voltage should be within 240V±10%;	<table border="1"> <thead> <tr> <th>Item</th> <th>Voltage</th> <th>Item</th> <th>voltage</th> </tr> </thead> <tbody> <tr> <td>L1 and L2</td> <td></td> <td>L1 and N</td> <td></td> </tr> <tr> <td>L1 and L3</td> <td></td> <td>L2 and N</td> <td></td> </tr> <tr> <td>L2 and L3</td> <td></td> <td>L3 and N</td> <td></td> </tr> </tbody> </table>		Item	Voltage	Item	voltage	L1 and L2		L1 and N		L1 and L3		L2 and N		L2 and L3		L3 and N	
	Item			Voltage	Item	voltage													
	L1 and L2				L1 and N														
	L1 and L3				L2 and N														
	L2 and L3		L3 and N																
	Check whether DC power meter is powered on and whether sampling data value shows correctly;																		

Table 4. Maintenance record of direct current (DC) junction box			
subsystem	Maintenance method	result	remarks
visual check	Visually inspect the DC junction box for damage; structural deformation; damage or scratch.		cut off power
	Visually check whether the internal wiring of the junction box is firm and damaged;		
	Check whether the DC fuse is in good condition;		
	Visually inspect the copper bars and circuit breaker terminals for obvious discoloration or charring abnormalities;		
cable torque inspection.	Check whether the wiring screw of DC power meter circuit is loose;		cut off power
	Check whether the power signal cable is loose or damaged;		
	Check whether the grounding cable is loose or damaged;		
	Check whether the fixed copper insulator is loose or broken;		

Table 5. Maintenance record of fire detection and extinguishing system			
subsystem	Maintenance method	result	remarks
Component inspection	Check whether the temperature sensor, smoke detector and combustible gas detector are installed firmly;		cut off power



	Check whether there are stuffs around the temperature sensor and smoke detector;		
	After power-on, check whether the temperature sensor and smoke sensor indicator light regularly flashes;		
Level 1 Fire Alarm (Combustible gas alarm)	Using gas to trigger the combustible gas detector, the system will trigger a secondary fire alarm, the audible and light alarm will sound, the system will stop, and the exhaust valve will open automatically upon receiving the instruction.		electrify
Level 2 Fire Alarm (Temperature alarm and Smoke alarm)	By activating any temperature sensor and any smoke sensor at the same time, The system shall trigger the second level fire alarm, the audible and light alarm will sound, the system will stop, and the exhaust valve will open automatically after receiving the instruction.		

Table 6. Auxiliary system maintenance record sheet

subsystem	Maintenance method	result	remarks
Security label check	Check whether the safety label is damaged; detached or aged.		cut off power
	Check whether the nameplate installation is loose or falls off;		
Box inspection	Check whether there are flammable items or any items that endanger the safety of system operation inside and outside the box;		
	Check the box body for rust, deformation or paint peeling;		
	Check whether the box or cabinet door can be opened and closed normally;		
	Check whether the lifting ring at the top of each MC Cube cabinet is rusted or oxidized;		
Grounding inspection	Check whether the tightness of MC Cube terminal (located below DC junction box) is complete;		
	Check whether the grounding cable on the box is loose or damaged;		
	Check whether the grounding copper bar of the box is rusted, corroded or oxidized;		
Cabinet cleaning	Check whether each MC Cube ESS is grounded properly.		
	Use soft brush and vacuum cleaner to clean and dust the inside of each MC Cube system.		



	Use soft brush and vacuum cleaner to clean and dust the air inlet and exhaust holes and fresh air system of each MC Cube air conditioner;		
Status check record	Check and record all alarm and fault information:		

Software version record	Record the software version of each controller:						electrify
	controller	version number	controller	version number	controller		
Auxiliary system maintenance record sheet							
Control switch function test	Start the MC Cube system, and then rotate the MC Cube control handle to the "Stop" position, and the system will stop immediately. After the test, turn the control handle to the "start" position.						
Emergency stop switch function test	The emergency stop switch function test starts the MC Cube system, and then presses the emergency stop switch set on DMC. The MC Cube system will stop immediately. After the test, turn the emergency stop switch to the right.						



Table 7. Maintenance record of HVAC system			
subsystem	Maintenance method	result	remarks
Electronic control system inspection	Check whether there are loose lines, damaged parts or burnt out in the circuit junction box;		cut off power
	Check whether the power supply and communication connectors are installed firmly;		
Refrigeration system inspection	Check whether the air inlet and air outlet are blocked, and in case of blockage, clean them up with a brush or other tools;		
	Check whether there is abnormal noise when the air conditioner is running;		
	Check whether HVAC suspension is firmly installed;		
	Check the condenser coil for blockage or dirt;		
	Check the surface of the inlet and outlet of the compressor for refrigerant leakage;		
	Check the fault and historical alarm records on the display screen of the air conditioning system;		



Table 8. Battery capacity test record sheet

subsystem	test method	remarks														
<p>volume test</p>	<p>Check whether the remote data cable connector is firmly connected;</p> <p>The MC Cube ESS is discharged to the cut-off voltage with rated power of 1275KW. Record the current total charging capacity as E1;</p> <p>Pause the system until the battery temperature is $25\pm 2^{\circ}\text{C}$, then charge the system battery until the system stops charging and reaches the cut-off voltage. Recording the current total charge capacity as E2 and the current total discharge energy as E3;</p> <p>Suspend the system for 1 hour, and discharge the battery to the cut-off voltage with rated power of 1275KW; Record the current total discharge energy as E4;</p> <p>Charge the MC Cube ESS until it meets the requirements of battery state of charge.</p> <p>Check the operation data and calculate the current system capacity;</p> <p>The charging capacity is calculated by E2-E1, and the discharging energy is calculated by E4-E3.</p> <table border="1"> <thead> <tr> <th>Project</th> <th>Numerical value (kWh)</th> </tr> </thead> <tbody> <tr> <td>E1</td> <td></td> </tr> <tr> <td>E2</td> <td></td> </tr> <tr> <td>E3</td> <td></td> </tr> <tr> <td>E4</td> <td></td> </tr> <tr> <td>Charge energy E2-E1</td> <td></td> </tr> <tr> <td>Discharge energy E4-E3</td> <td></td> </tr> </tbody> </table>	Project	Numerical value (kWh)	E1		E2		E3		E4		Charge energy E2-E1		Discharge energy E4-E3		<p>electrify</p>
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E1																
E2																
E3																
E4																
Charge energy E2-E1																
Discharge energy E4-E3																

APPENDIX Q-1: ENVIRONMENTAL JUSTICE ANALYSIS

Fortress Solar Project

Environmental Justice Analysis



March 1, 2023



Fortress Solar Project Environmental Justice Analysis

March 1, 2023

PRESENTED TO

Fortress Solar I LLC

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1.0 INTRODUCTION

Tetra Tech, Inc. (Tetra Tech), prepared this Environmental Justice Analysis for Fortress Solar I LCC, Fortress Solar II LLC, and Fortress Solar III LLC (collectively “Fortress Solar”), indirect subsidiaries of Aypa Power North American LLC. Fortress Solar is proposing to construct, operate, maintain, and decommission the Fortress Solar Project (Project), a solar and battery energy storage system project in Morgan County, Colorado. The purpose of this report is to analyze potential environmental justice impacts associated with the proposed Project and determine whether the Project would result in significant adverse impacts to disproportionately impacted communities.

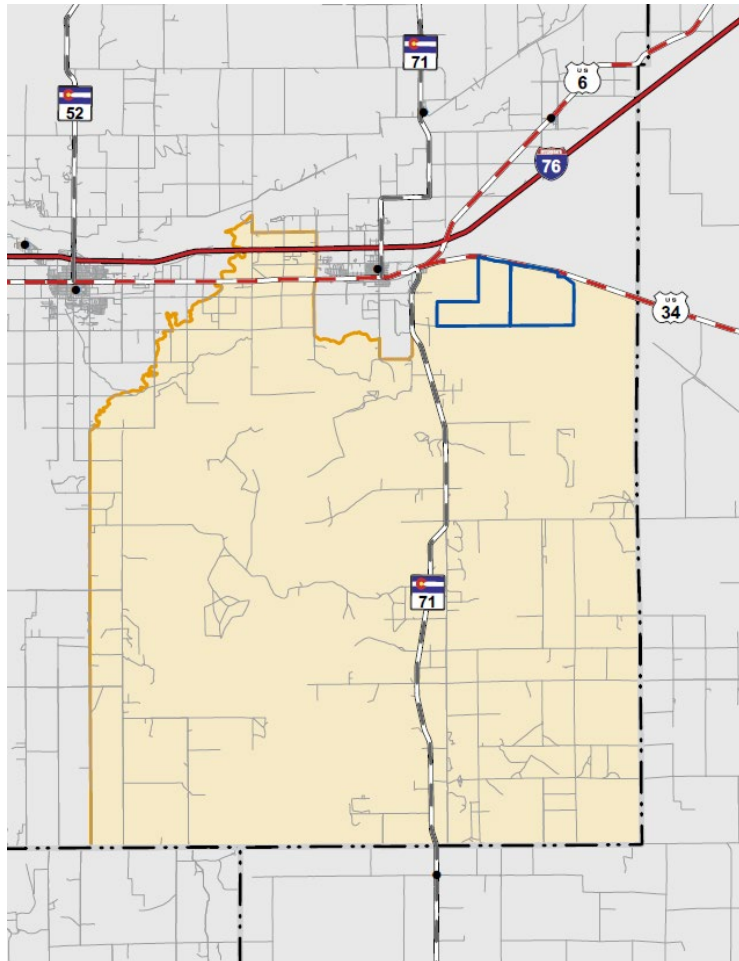


Figure 1. Project Site in Census Tract 8, Block Group 1

2.0 ENVIRONMENTAL JUSTICE OVERVIEW

The State of Colorado defines “environmental justice” as:

“Environmental justice recognizes that all people have a right to breathe clean air, drink clean water, participate freely in decisions that affect their environment, live free of dangerous levels of toxic pollution, experience equal protection of environmental policies, and share the benefits of a prosperous and vibrant pollution-free economy.”¹

This report analyzes demographic characteristics of communities near the proposed Project to identify potentially vulnerable populations, reviews ongoing tribal engagement activities, and discusses potential impacts to vulnerable communities resulting from proposed Project construction and operation.

3.0 METHODOLOGY

3.1 DEFINITIONS

Block groups are subdivisions of a census tract, averaging about 600 to 3,000 people.

Census tracts are subdivisions of a county, averaging about 4,000 people. Tracts are designed to be relatively homogenous in terms of population characteristics, economic status, and living conditions at the time they are established.

Low income is defined as having an income less than 200% of the Federal Poverty Limit.

Disproportionately impacted communities are a geographic area where vulnerable populations face combined, multiple environmental harms and health impacts or risks due to exposure to environmental pollutants, demographics, socioeconomic stressors, and lack of public participation.²

Significant impact is defined by a project’s proximity to residential neighborhoods, business areas, or a disproportionately impacted community and at least one other criterion. Criteria include a project having unusually high equipment maintenance (general and control), unusually high operational sensitivity, unique or untested control equipment, operational variability of the source impacting the control equipment, and/or emissions from the source affecting public health or a disproportionately impacted community.³

Vulnerable communities typically refer to communities of color, low-income communities, overburdened communities, or other communities potentially impacted by environmental justice concerns.

3.2 STUDY AREA

The Study Area for the report is defined as all areas within 5 miles of the proposed Project lease area boundary, as this captures the populations most likely to be impacted by construction and operation of the Fortress Solar Project. The Project site is located in unincorporated Morgan County, approximately 1.5 miles southeast of Brush, Colorado. The Project is located on approximately 4,259 acres of private lands comprised of up to eleven contiguous parcels.

¹ Colorado General Assembly. “HB21-1266 Environmental Justice Disproportionate Impacted Community.” https://leg.colorado.gov/sites/default/files/2021a_1266_signed.pdf. Visited February 16, 2023.

² Colorado Department of Public Health and Environment. “Environmental Justice.” <https://cdphe.colorado.gov/environmental-justice>. Visited February 16, 2023.

³ Colorado General Assembly. “House Bill 21-1266.” https://leg.colorado.gov/sites/default/files/2021a_1266_signed.pdf. Visited February 27, 2023.

The Project site is located in census tract 8 and block group 1. The setting of the Project and surrounding area is flat agricultural rangeland with dirt roads throughout. The Project site is surrounded by the following land uses in each direction:

- East: Undeveloped agricultural land.
- West: On the west side of Highway 71, is developed agricultural cropland, residences, and the town of Brush
- North: A large feedlot is located on the north side of Highway 34
- South: County Road Q and some residential and commercial properties.

The Project area also includes existing infrastructure such as overhead transmission lines, an oil and gas well, a communication tower, and railroad.

3.3 TECHNICAL APPROACH

3.3.1 Demographic Analysis and Environmental Justice Approach

Data on community demographic characteristics and potential environmental justice concerns was gathered from the U.S. Census Bureau's American Community Survey⁴ (ACS) and Decennial Census⁵, the U.S. Environmental Protection Agency's (EPA's) EJScreen tool⁶ (EJScreen), and Colorado EnviroScreen⁷. Data was gathered at the block group, census tract, county, and state levels. State level data is provided solely for additional context.

Block group data gathered from the ACS was analyzed to determine the presence of communities of color, low-income populations, or other overburdened communities as defined by the State of Colorado. This data was subsequently compared to census tract and county-level data. The block group qualifies as being a community of color, a low-income community, or an overburdened/disproportionately impacted community if the percentage of communities of color, low-income populations, or other overburdened communities was higher at the block group level than at the census tract or county level.

Block group data was also gathered from EJScreen and Colorado EnviroScreen and analyzed to determine the presence of environmentally hazardous sites and health disparities within populations due to proximate environmental contamination. Potential environmental justice concerns were identified at the block group level if there were more environmental hazards and health disparities within the block group than the census tract or county level.

Data on limited English proficiency, educational attainment, age, and internet access at home was also gathered to build a complete demographic profile of the surrounding communities and help inform future public engagement activities.

⁴ U.S. Census Bureau. "American Community Survey Data." <https://www.census.gov/programs-surveys/acs/data.html>. Visited February 27, 2023.

⁵ U.S. Census Bureau. "2020 Census Results." <https://www.census.gov/programs-surveys/decennial-census/decade/2020/2020-census-results.html>. Visited February 27, 2023.

⁶ U.S. Environmental Protection Agency. "EJ Screen." <https://ejscreen.epa.gov/mapper/>. Visited February 27, 2023.

⁷ Colorado Department of Public Health and Environment. "Colorado EnviroScreen." <https://cdphe.colorado.gov/enviroscreen>. Visited February 27, 2023.

3.3.2 Proposed Project Impact Evaluation Approach

Potentially disproportionate impacts to overburdened communities resulting from the Project were evaluated using the conclusions drawn by resource analyses produced in support of the Critical Issues Analysis prepared for the project by Tetra Tech in October 2022. These resource analyses examined potentially significant impacts to specific resources resulting from construction, operations, and maintenance of the Project, and a No Action Alternative.

The potentially significant adverse impacts identified per the resource analyses were reviewed to determine whether the resource impact also disproportionately affected communities of color, low-income communities, and overburdened communities. Environmental justice concerns arise when a significant adverse resource impact simultaneously represents a significant adverse impact to a vulnerable community.

4.0 ANALYSIS AND RESULTS

4.1 OVERVIEW

This section reviews population demographics and potential environmental justice concerns within the proposed Project’s Study Area. This section also reviews potential impacts of the proposed Project on communities of color, low-income communities, and disproportionately impacted communities.

4.2 PROJECT DEMOGRAPHIC ANALYSIS

4.2.1 Communities of Color

Table 1. details race and ethnicity data compiled from ACS data available for block group 1, census tract 8, Morgan County, and the State of Colorado.

Table 1. Percent People of Color in Study Area and Reference Areas⁸

	Total Population	Total White Alone	Total Not White- Alone	Total Percentage People of Color
Block Group 1	986	819	167	17%
Census Tract 8	1,836	1,564	272	15%
Morgan County	29,111	19,184	9,927	34%
Colorado	5,773,714	4,082,927	1,690,787	29%

⁸ U.S. Census Bureau. “American Census Survey. P1 = Race.” [https://data.census.gov/table?q=white&g=0400000US08_0500000US08087_1400000US08087000800,08087000800\\$1500000_1500000US080870008001,080870008002](https://data.census.gov/table?q=white&g=0400000US08_0500000US08087_1400000US08087000800,08087000800$1500000_1500000US080870008001,080870008002). Visited February 21, 2023.

Approximately 17% of the population in block group 1 are people of color. As compared to Morgan County (34%), block group 1 is not identified as a community of color. However, compared to census tract 8 (15%), it is comparable in terms of being considered a community of color.

4.2.2 Low-Income Populations

Table 2. details income data compiled from Decennial Census data available for block group 1, census tract 8, Morgan County, and the State of Colorado.

Table 2. Percent Low Income Households in Study Area and Reference Areas⁹

	Total Population	Low Income Households (Under 2x Federal Poverty Limit)
Block Group 1	985	159 (16%)
Census Tract 8	1,579	337 (21%)
Morgan County	27,796	10,149 (37%)
Colorado	5,409,817	1,435,234 (27%)

Approximately 16% of the population in block group 1 has a low income, compared to 21% in census tract 8, and 37% in Morgan County. As compared to census tract 8 and Morgan County, block group 1 is not identified as a low-income community.

4.2.3 Disproportionately Impacted Communities

The State of Colorado recommends using Colorado EnviroScreen to identify potentially disproportionately impacted communities. The Colorado EnviroScreen assigns each census block group in the State of Colorado a value between 0 and 100. A census block is considered a disproportionately impacted community when the assigned value is higher on average when compared to other communities in the state. The higher the score, the higher the likelihood that it is an overburdened community.

Block group 1 has an assigned value of 26, indicating that, on average, it is not an overburdened community. Approximately 74% of other communities in Colorado are more disproportionately impacted.

Notwithstanding, there are several environmental health disparity metrics on which block group 1 is rated 80 or above, including one rated at 100%; these are outlined in Table 3.

⁹ U.S. Census Bureau. "Decennial Census - C17002 Ratio of Income to Poverty Level in the Past 12 Months." https://data.census.gov/table?q=C17002:+RATIO+OF+INCOME+TO+POVERTY+LEVEL+IN+THE+PAST+12+MONTHS&g=0400000US08_0500000US08087_1400000US08087000800_1500000US080870008001. Visited February 16, 2023.

Table 3. Environmental Health Disparity Ratings in Census Block Group 1¹⁰

Environmental Health Disparity Metric	Percentile Ranking
Other Air Pollutants	100
Heart Disease	98
Proximity to Oil and Gas	97
Linguistic Isolation	93
Sensitive Populations	83
Proximity to Mining Locations	83

While it is not a disproportionately impacted community on average, available data indicates that block group 1 is exposed to a significant amount of air pollutants and is located near oil, gas, and mining operations.

4.2.4 Environmental Hazards and Health Disparities

The EPA recommends using the EJScreen tool to help identify potential areas of environmental justice concern, including proximity to sources of pollution and related health disparities, which may warrant additional consideration or analysis.

Table 4. Pollution and Sources in Study Area and Reference Areas¹¹

	Block group 1	Census tract 8	Morgan County	Colorado
Particulate Matter 2.5 (ug/m3)	28	25	58	39
Ozone (ppb)	3	3	7	94
Diesel Particulate Matter (ug/m3)	24	22	52	29
Air Toxics Cancer Risk (lifetime risk per million)	40	36	64	49

¹⁰ Colorado Department of Public Health and Environment. "Colorado EnviroScreen." https://teeo-cdphe.shinyapps.io/COEnviroScreen_English/#map. Visited February 16, 2023.

¹¹ U.S. Environmental Protection Agency. "EJScreen." <https://ejscreen.epa.gov/mapper/>. Visited February 16, 2023.

	Block group 1	Census tract 8	Morgan County	Colorado
Air Toxics Respiratory HI	34	30	64	37
Traffic Proximity (daily traffic count/distance to road)	18	16	50	6
Lead Paint (% Pre-1960 Housing)	64	62	82	47
Superfund Proximity (site count/km distance)	2	2	7	81
RMP Facility Proximity (site count/km distance)	54	43	82	60
Hazardous Waste Proximity (facility count/km distance)	12	11	21	32
Underground Storage Tanks (count/km ²)	0	0	73	24
Wastewater Discharge (toxicity-weighted concentration/m distance)	45	48	80	15

In every category, except traffic proximity and wastewater discharge, block group 1 has lower levels than Morgan County and the State of Colorado. Block group 1 ranks similar as census tract 8 except for being closer in proximity to facilities that adhere to EPA’s Risk Management Program Rule due to the use of hazardous substances.

4.2.5 Tribes

There are six federally recognized tribes with historic ties to or interest in Morgan County including:

- Apache Tribe of Oklahoma
- Arapaho Tribe of the Wind River Reservation, Wyoming

- Cheyenne and Arapaho Tribes of Oklahoma
- Comanche Nation, Oklahoma
- Fort Belknap Indian Community of the Fort Belknap Reservation of Montana
- Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana.¹²

The U.S. Department of the Interior lists Southern Ute Indian Tribe of the Southern Ute Reservation, Colorado and Ute Mountain Ute Tribes as the two federally recognized tribes currently in Colorado.¹³ Neither tribe has a presence in Morgan County.

Colorado EnviroScreen does not evaluate for potential environmental justice impacts on tribal lands, but will do so should they opt in.

Fortress Solar has developed a Communications Plan, and as part of that Plan, tribal outreach will occur. The overarching goal will be not only to communicate with indigenous people and communities but to engage these stakeholders in a manner that ensures they feel that the project’s action plan reflects their reactions and concerns and addresses their specific needs as separate and distinct from other stakeholder groups. Outreach and engagement will include members of federally recognized Native American Indian tribes, who have been removed or displaced from their aboriginal lands and currently reside elsewhere.

4.3 PROJECT CONSTRUCTION, OPERATION, AND MAINTENANCE IMPACT ANALYSIS

Significant adverse impacts, and their potential to disproportionately impact vulnerable communities, including block group 1, were evaluated across the resource areas identified in Table 5.

Table 5. Significant Adverse Resource Impacts by Resource Area

Resource Area	Significant Impact(s)?
Noise	No
Air Quality	No
Vegetation and Wildlife	No
Wetlands and Water Resources	No
Geologic and Flood Hazards	No
Cultural Resources	No
Aesthetics, Light, and Glare	No

¹² U.S. Department of Housing and Urban Development. “Tribal Directory Assessment Tool (TDAT).” <https://egis.hud.gov/TDAT/>. Visited February 17, 2023.

¹³ U.S. Department of Interior Bureau of Indian Affairs. “Search Federally Recognized Tribes.” <https://www.bia.gov/service/tribal-leaders-directory/federally-recognized-tribes>. Visited February 17, 2023.

Resource Area	Significant Impact(s)?
Public Safety and Environmental Health	No
Roads and Transportation	No
Recreation and Housing	No
Land Use	No
Public Service and Utilities	No

Based on a review of resource analyses, the probable significant adverse impacts to vulnerable populations from construction, operation, or maintenance of the proposed Project were determined to be de minimis.

4.3.1 Construction Impacts

Impacts associated with construction of the Project were determined to be de minimis. Accordingly, the proposed Project construction is not associated with disproportionate impacts to vulnerable communities, as the surrounding community was not identified as a disproportionately impacted community.

While the Study Area is mostly rural, several agricultural residences are located within the vicinity of the Project. The closest residence is approximately 100 feet south of the Project lease area. Individuals residing near the Project may experience temporary impacts common to construction, including increased traffic and associated impacts to travel times, as well as noise, dust, or vibrations associated with use of heavy equipment and machinery, and activities like pile-driving. The communications plan includes outreach to potentially impacted residences and businesses.

4.3.2 Direct Impacts

Direct impacts associated with the proposed Project construction were determined to be de minimis. Direct impacts are not anticipated to disproportionately affect vulnerable communities, as at large, the surrounding community was not identified as a community of color, low income, or disproportionately impacted.

4.3.3 Indirect Impacts

Indirect impacts associated with the proposed Project construction were determined to be de minimis. Indirect impacts are not anticipated to disproportionately affect vulnerable communities as large, the surrounding community was not identified as a community of color, low income, or disproportionately impacted.

4.3.4 Operation and Maintenance Impacts

Impacts associated with operations and maintenance of the Project were determined to be de minimis. Accordingly, the proposed Project operation and maintenance is not associated with disproportionate impacts to vulnerable communities, as at large, the surrounding community was not identified as a community of color, low income, or disproportionately impacted.

Individuals residing near the Project lease area may experience minimal impacts associated with the ongoing operation and maintenance of the facility, including occasional vehicular traffic as staff travel to

and from the site, and noise, dust, and vibrations, as necessary maintenance activities are completed. The communications plan includes outreach to potentially impacted residences and businesses.

4.3.4.1 Direct Impacts

No direct significant adverse impacts associated with proposed Project operation and maintenance are identified. Direct impacts are not anticipated to disproportionately impact vulnerable communities, as at large, the surrounding community was not identified as a community of color, low income, or disproportionately impacted.

4.3.4.2 Indirect Impacts

No indirect significant adverse impacts associated with proposed Project operation and maintenance are identified. Indirect impacts are not anticipated to disproportionately impact vulnerable communities, as at large, the surrounding community was not identified as a community of color, low income, or disproportionately impacted.

4.3.4.3 Proposed Mitigation Measures

Impacts resulting from the construction, operation, and maintenance of the proposed Project were determined to be de minimis. No probable significant adverse impacts to vulnerable populations from construction, operation, or maintenance of the proposed Project are identified. As such, no mitigation measures are required.

4.4 NO ACTION ALTERNATIVE

Under the No Action Alternative, the proposed Project would not be constructed. As a result, no impacts would be expected generally, and no probable significant adverse impacts for vulnerable communities would be expected specifically.

5.0 PUBLIC ENGAGEMENT RECOMMENDATIONS

Public engagement recommendations for the Study Area are derived from demographic and environmental justice analyses. Recommendations are intended to guide development of public-facing communications materials accessible by and useful to stakeholders in the Study Area.

5.1 AGE

Identifying the age groups within a community will help inform the most appropriate methodologies to utilize when communicating with stakeholders. Communities with significant populations of stakeholders over the age of 65 may benefit more from traditional communications methodologies, whereas communities with a greater proportion of younger stakeholders may benefit from the addition of digital communications methodologies. Table 6. details the population age within the Study Area.

Table 6. Age of Population in Study Area and Reference Areas¹⁴

	Total Population	Under 5	5 to 19	20 to 64	65-79	80+
Block Group 1 ¹⁵	985	83	105	626	134	37
Census Tract 8	1,586	111	178	997	240	60
Morgan County	28,257	2,072	6,049	15,816	3,054	1,266
Colorado	5,531,141	335,199	1,069,363	3,385,941	577,622	163,016

Compared to census tract 8 (19% of stakeholders aged 65 or older) and Morgan County (15% of stakeholders aged 65 or older), block group 1 (17% of stakeholders 65 or older) is generally the same age, on average. Block group 1 does not have a significant population of stakeholders over the age of 65 and would benefit from outreach using digital communications methodologies including a website, social media outreach, and email updates in addition to traditional methods.

5.2 COMPUTER AND INTERNET ACCESS

In conjunction with age groups, data on access to a computer and internet at home can help inform the viability of digital communications methodologies. Communities with access to a computer and internet at home benefit from digital communications, whereas communities with low levels of access cannot.

Table 7. Access to Computers, Internet in Study Area and Reference Areas¹⁶

	Total Households	Has a Computer	Has a Computer but No Internet Subscription	Doesn't Have a Computer
Block Group 1	399	358	71	41
Census Tract 8	689	628	85	61

¹⁴ U.S. Census Bureau. "American Community Survey – S0101 Age and Sex." https://data.census.gov/table?q=S0101&q=0400000US08_0500000US08087_1400000US08087000800_1500000US080870008001. Visited February 16, 2023.

¹⁵ U.S. Census Bureau. "American Community Survey - B01001 Sex by Age." https://data.census.gov/table?q=B01001&q=0400000US08_0500000US08087_1400000US08087000800_1500000US080870008001. Visited February 16, 2023.

¹⁶ U.S. Census Bureau. "American Community Survey - B28003 Presence of a Computer and Type of Internet Subscription in Household." https://data.census.gov/table?q=B28003&q=0400000US08_0500000US08087_1400000US08087000800_1500000US080870008001. Visited February 16, 2023.

	Total Households	Has a Computer	Has a Computer but No Internet Subscription	Doesn't Have a Computer
Morgan County	10,785	9,176	658	1,609
Colorado	2,113,387	1,962,259	149,451	151,128

Block group 1 has similar levels of computer ownership (90% of households) compared to census tract 8 (91% of households) and higher levels than Morgan County (85% of households). Though block group 1 has high levels of computer ownership, 18% of households that own a computer do not have access to internet. This highlights the potential limitations associated with exclusive use of digital communications methodologies. Though when cooccurring with a traditional print-based communications and outreach strategy, digital communications are an important component that can reinforce key messages to connected households.

5.3 LEVEL OF EDUCATIONAL ATTAINMENT

Data on level of educational attainment can help inform the appropriate level of linguistic complexity for communications materials. Communities with higher levels of educational attainment may benefit from highly detailed and technically specific materials that preempt complicated questions, whereas communities with lower levels of educational attainment will require communications materials produced using plain language.

Table 8. Level of Educational Attainment in Study Area and Reference Areas¹⁷

	Population 25 or Older	No H.S. Diploma	H.S. Diploma + Equivalent	Some College	Associates	Bachelors	Professional, Masters, Doctorate
Block Group 1	755	81	177	156	132	164	26
Census Tract 8	1,215	125	335	292	172	216	30
Morgan County	18,355	3,657	5,709	4,107	1,651	2,053	317
Colorado	3,748,592	322,718	803,431	803,337	314,214	944,470	150,636

¹⁷ U.S. Census Bureau. "American Community Survey - B15003 Educational Attainment for the Population 25 Years and Over." https://data.census.gov/table?q=Educational+Attainment&q=0400000US08_0500000US08087_1400000US08087000800_1500000US08087008001&tid=ACSDT5Y2018.B15003. Visited February 16, 2023.

Compared to census tract 8 (10% of stakeholders have no high school diploma), and Morgan County (20% of stakeholders have no high school diploma), block group 1 (11% of stakeholders have no high school diploma) has similar or higher levels of educational attainment.

5.4 LIMITED ENGLISH PROFICIENCY

Data on English proficiency can help determine whether communications materials need to be provided in languages in addition to English. Communities with significant stakeholder populations that speak limited English would benefit from the provision of bilingual materials; conversely, communities with small populations speaking limited English do not require bilingual materials.

Table 9. Limited English Proficiency in Study Area and Reference Areas¹⁸

	Total Households	Speaks English	Speaks Spanish	Speaks Spanish + Limited English	Other Lang. + Limited English
Block Group 1	399	334	52	4	0
Census Tract 8	689	591	80	10	0
Morgan County	10,785	7,798	2,516	643	217
Colorado	2,113,387	1,733,643	245,529	39,187	21,022

Compared to census tract 8 and Morgan County (1% and 6% of stakeholders speak Spanish and limited English, respectively), block group 1 has the same or smaller proportion of stakeholders that speak Spanish and limited English at 1%.

The population of stakeholders who speak Spanish and limited English totals four households. While translation and language access services should be available when and where required, translation of all communications materials is not likely necessary.

6.0 CONCLUSION

The proposed Project and Study Area as established in this report are located within block group 1, census tract 8, in Morgan County, Colorado. As compared to nearby communities, block group 1 was not identified as a community of color or a low-income community. Although block group 1 is located near environmental hazards, including major sources of pollution, overall, the community is ranked in a lower percentile for being disproportionately impacted. Direct and indirect impacts resulting from the construction, operation, and maintenance of the Project were determined to be de minimis, therefore no significant adverse impacts are anticipated to disproportionately impact vulnerable communities. Stakeholders residing in block group 1 are

¹⁸ U.S. Census Bureau. "American Community Survey - C16002 Household Language by Household Limited English Speaking Status." https://data.census.gov/table?q=C16002:+HOUSEHOLD+LANGUAGE+BY+HOUSEHOLD+LIMITED+ENGLISH+SPEAKING+STATUS&q=0400000US08_0500000US08087_1400000US08087000800_1500000US080870008001. Visited February 16, 2023.

generally younger and have similar levels of educational attainment as surrounding communities, suggesting a predominantly digital communications strategy would be most appropriate for the community. While steps need to be taken to adequately communicate with the community of color and low-income community in block group 1 (see section 4.2), generally, no environmental justice concerns exist within the proposed Project Study Area.

APPENDIX Q-2: COMMUNICATIONS PLAN

To: Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC
From: Tetra Tech, Inc.
Date: March 1, 2023
Subject: Recommended Communications Plan for Fortress Solar Project

1.0 PROJECT OVERVIEW

1.1 Introduction, Need, and Benefit

Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC, (collectively “Fortress Solar”) indirect subsidiaries of Aypa Power North America LLC, is proposing to construct, operate, maintain, and decommission the Fortress Solar Project (Project), a utility scale solar facility and battery energy storage system (BESS) near the City of Brush in Morgan County, Colorado. The Fortress Solar Project is a multi-phased up to 600-megawatt (MW), 2,400 MW hour (MWh) solar facility and BESS project. Each phase is planned to be constructed from 2025 through 2028 with three phases in total approximating 200 MW each.

The Project Communications Plan (Plan) outlines the recommended approach for communicating with stakeholders before, during, and after Project construction. The Plan focuses on those near-term phases as the need for ongoing communication decreases during operation and maintenance. Proactive communications will help mitigate risk to the Project and Fortress Solar’s brand reputation while also minimizing the likelihood of stakeholder feedback and complaints escalating to a jurisdictional level.

1.2 Study Area

The Study Area for the report is defined as all areas within 5 miles of the proposed Project lease area boundary, as this captures the populations most likely to be impacted by construction and operation of the Fortress Solar and BESS facility. The Project site is in unincorporated Morgan County, approximately 1.5 miles southeast of Brush, Colorado. The Project is located on approximately 4,259 acres of private lands comprised of eleven contiguous parcels. The setting of the Project and surrounding area is flat agricultural rangeland with dirt roads throughout. The surrounding community is primarily agricultural.

1.3 Area Overview and Demographics

The Project is in Block group 1. This block group is in census tract 8 in Morgan County, Colorado. Block group 1 has a population of about 985 residents while census tract 8 has 1,836 residents. Figure 1 below shows the location of the Project within block group 1 relative to other communities in the surrounding area.

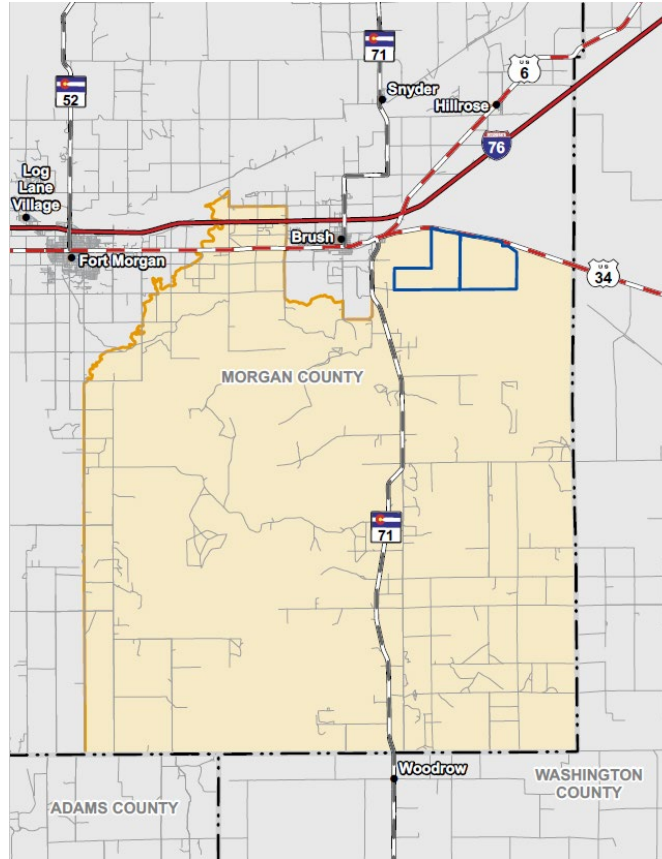


Figure 1. Project Site in Census Tract 8, Block Group 1

U.S. Census Bureau data for block group 1 is provided where possible. When data for the block group is not available, information for census tract 8 is presented.

The following demographic information has been used to inform the recommended communications and outreach strategy.

Age and Commuting Patterns

The U.S. Census Bureau’s American Community Survey (ACS) estimates that within block group 1, of whom 19% are 19 or younger, 64% are between the ages of 20 and 64, and 17% are 65 or older.¹

Approximately 875 individuals residing in census tract 8 are workers over the age of 16. Of these workers, 95% drive to work in a personal vehicle (78% of those drove alone, with the remaining 22% driving in a carpool), with an average commute of 22 minutes.²

¹ U.S. Census Bureau. “American Community Survey – S0101 Age and Sex.” https://data.census.gov/table?q=S0101&g=04000000US08_05000000US08087_14000000US08087000800_15000000US080870008001. Visited February 16, 2023.

² Commuting pattern data was not provided at the block group level for Morgan County.

Commuting patterns indicate that there is a substantial portion of the population in census tract 8 that is either school- or working-aged. This group will be traveling through the census tract during morning and evening rush hours, leading to increased congestion when coupled with construction work area impacts.

Languages

Of the 399 households in the block group 1, 84% are monolingual English and 13% are monolingual Spanish. Only four households in block group 1 speak Spanish and limited English. Linguistic demographics indicate that there may be a need to translate materials into Spanish when and where required to ensure that communications are equitably accessible and have the broadest possible reach and impact within the community.

Computer and Internet Access

There are 399 households in block group 1. Of these households, 90% of residents have access to a computer and 72% have access to an internet subscription.³

At the census tract level, 663 households (96%) have access to a computing device (79% have access to a desktop or laptop, 86% have access to a smartphone, and 62% had access to a tablet), and 86% of residents have access to internet at home in census tract 8.⁴

Typically, access to internet at home has a close, positive correlation to household income. However, 8% of households in census tract 8 with income less than \$20,000 annually did not have internet access at home, compared to 24% of households with incomes between \$20,000 and \$74,999, and 6% of households with incomes over \$75,000. The high percentage of internet subscriptions in census tract 8 suggests that digital communications are an important means of receiving information and should be the centerpiece of the strategy.⁵

Environmental Justice

As per the environmental justice analysis Tetra Tech conducted of the Study Area in February 2023, there are generally no environmental justice concerns affiliated with this project or its community. However, it is strongly encouraged to engage with the federally recognized Native American tribes that have cultural ties or interest in Morgan County to better understand what the land means to them as a first step toward implementing the Plan.

³ U.S. Census Bureau. "American Community Survey - B28003 Presence of a Computer and Type of Internet Subscription in Household." https://data.census.gov/table?q=B28003&g=0400000US08_0500000US08087_1400000US08087000800_1500000US080870008001. Visited February 16, 2023.

⁴ U.S. Census Bureau. "American Community Survey - S2801 Types of Computers and Internet Subscriptions." <https://data.census.gov/table?q=S2801:+TYPES+OF+COMPUTERS+AND+INTERNET+SUBSCRIPTIONS&g=1400000US08087000800>. Visited February 22, 2023.

⁵ ACS does not provide block group data on type of computing device or income bands correlated with internet subscriptions.

2.0 GOALS AND OBJECTIVES

2.1 Goals

- Offsetting potential risks to Fortress Solar brand reputation and Project progress associated with negative stakeholder experiences before, during, and after construction.
- Raising awareness of the Project using accurate, timely, and multifaceted communications to inform stakeholders.
- Engaging organizational partners to disseminate information about the Project to the community at-large.
- Providing opportunities for stakeholders to have an ongoing dialogue with the Project team using dedicated channels of communication, and monitoring and engaging these channels, as well as traditional and social media channels, as appropriate.

2.2 Objectives

Table 1 outlines the measurable objectives and approaches needed to achieve the Project communications and outreach goals explained above.

Table 1: Measurable Objectives Outlined in the Plan

Objective	Approach	Timeline
Establish and maintain Project communication channels	Establish and maintain Project channels of communication: <ul style="list-style-type: none"> • Email • Website • Information line 	Project duration
Engage key stakeholders	Conduct outreach to key stakeholders and stakeholder groups identified in this Plan.	Project duration
Deliver Project notifications	Develop, print and deliver Project notifications such as postcards, flyers, and/or letters.	Project duration
Engage jurisdictional and organizational communication staff	Coordinate with local Public Information Officers (PIOs) to distribute information via jurisdictional channels including web, email, and social media.	Project duration

3.0 COMMUNICATIONS RISKS

Tetra Tech has analyzed and evaluated the Project and has identified communications risks as outlined in Table 2, with appropriate accompanying mitigating mechanisms.

Table 2: Identified Communications Risks and Proposed Mitigation Strategies

Risk Level	Risk Description	Mitigating Mechanism
Low	Stakeholder dissatisfaction expressed on social media.	Provide advance notification of Project construction to stakeholders. Monitor social media and traditional media channels and coordinate with local communications staff to monitor their internal channels.
	Poor media coverage related to the Project.	Prepare and provide messaging to Fortress Solar’s relevant internal departments to ensure consistent information is provided to external inquirers.
Medium	Concerted efforts of a community organizing against the Project.	Coordinate with City of Brush and Morgan County before, during, and after construction.
High	Escalated complaints reaching jurisdictions and agencies and impeding Project progress.	Advise key jurisdictional staff of incoming complaints from stakeholders that have the potential to escalate, and the actionable steps being taken to address concerns.

4.0 KEY STAKEHOLDERS

Key stakeholder audiences that will be considered in the distribution of Project communications include:

- Elected and appointed officials
- PIOs
- Emergency services
- Jurisdiction and agency staff
- Local businesses
- Places of worship, schools, and community centers
- Tribes with historic ties or interest in the area.

5.0 DELIVERABLES AND ACTIVITIES

Block group and census tract demographics strongly suggest that a communications and outreach strategy that is digital based will be effective for the Project. In addition to digital methods such as a website, email, and information line, Tetra Tech recommends the following communications and outreach approach to Fortress Solar.

Table 3: Expected Deliverables and Activities

Deliverable/Activity	Description	Timeline
Key messages	High-level document outlining language and key messaging to be used in development of Project communications.	Prior to construction

Deliverable/Activity	Description	Timeline
Key stakeholder list	List of key stakeholders, separated by categories, who are critical to keep informed about the Project and construction progress.	Prior to construction
Open house	Opportunity to establish a presence and reaffirm commitment to being a good steward in the community. An open house will allow stakeholders, landowners, residents, and businesses the opportunity to learn more about a project, ask questions, and provide feedback directly to the project team. Promote the open house two weeks prior on the Project website, through direct mailings to neighboring properties and key stakeholders, announcement in the newspaper, newsletters and via social media posts. Send reminders the week prior, day before and day of the open house using a combination of the original method of announcing the open house.	Prior to construction
Channels of communication	<ul style="list-style-type: none"> • Website: Project website including a Project overview, schedule, safety information, and contact information. • Email: Project email inbox accessible 24/7 to receive feedback from stakeholders. • Information Line: Project-specific information line accessible 24/7 to receive feedback from stakeholders. <p>The website and information line message will be updated regularly to provide up-to-date Project information to stakeholders who contact the Project team.</p>	Project duration
Agency outreach	Inform City of Brush and Morgan County of Project construction by providing a start of construction and end of construction email update, tracking and responding to inquiries received in a timely manner, and providing construction update emails as appropriate.	Project duration
Tribal consultations	Six Native American tribes identified in the key stakeholders section have historical ties or interest in the area. Each should be consulted to be made aware of the Project and to start a discussion on ties to the land.	Project duration

6.0 MEASUREMENTS

Fortress Solar will measure and evaluate the efficacy of the Plan as summarized in Table 4.

Table 4: Measurement of Success of Project Objectives

Objective	Approach and Measurement of Success
Establish and maintain Project communication channels	<p>Maintenance: Update communication channels biweekly/weekly during construction.</p> <p>Analytics: Collect monthly and Project overall analytics to determine number of callers, emailers, and website visitors and gauge sentiment.</p>
Engage key stakeholders	<p>Response: Respond to all stakeholder inquiries within two business days.</p> <p>Two-way Dialogue: Maintain relationships with stakeholders by regularly communicating with them and addressing their inquiries/comments.</p>
Deliver Project notifications	<p>Current Information: Ensure materials on the Project website are the most recent versions.</p> <p>Distribution: Proactively distribute notifications to arrive prior to start of construction, upcoming construction impact, or milestone event.</p>
Engage jurisdictional and organizational communication staff	<p>Provide updates to Morgan County and the Town of Brush at least biweekly during construction and milestones.</p>

7.0 CONFLICT RESOLUTION METHODOLOGY

Proactive and ongoing communications will help mitigate most conflicts. However, depending on the nature of the conflict, there may be times when a more comprehensive approach to addressing conflict will be necessary. A general guideline is as follows:

- Identify the conflict and source of the conflict. Make sure to understand what is causing the conflict—
 - Did it originate from misinformation?
 - Do multiple people/groups feel the same way?
 - Is it related to the Project itself?
 - Does the conflict go beyond the Project?
- Discuss the conflict with the stakeholder, ideally in a neutral location such as a meeting space at a library or community center. Actively listen to the stakeholder’s concerns and be respectful. Be attentive, show empathy, ask open-ended questions, and summarize what you hear.
- Work with the stakeholder to establish a common goal and what—ideally—each side is willing to do to reach that goal. Be prepared that the stakeholder may or may not be willing to establish a goal.
 - Identify and implement solutions if a common goal is established.
 - Reconvene at a later date to continue discussions.
 - Consider mediation if there is an impasse.

8.0 PROPOSED SCHEDULE

Should the Project be selected, construction will be expected to begin August 2025 and continue through June 2027. The anticipated schedule is as follows:

- **Stakeholder Outreach:** (August 2023-Q2 2025)
- **Construction Start:** (Q2 2025)
- **Construction Complete:** (Q3 2028)
- **Restoration:** (Q3 2028)

APPENDIX Q-3: PUBLIC OUTREACH SUMMARY

Public Outreach Summary

Fortress Solar Project

Morgan County, CO

October 2023

Submitted to:

Morgan County Planning and Zoning
231 Ensign Street, PO Box 596
Fort Morgan, CO 80701



Prepared for

Fortress Solar I LLC

11801 Domain Blvd, Suite 450
Austin, TX 78758

Prepared by



1560 Broadway, Ste 1400
Denver, CO 80202

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- Appendix C-1. Direct Mail Flyer to Property Owners within 500 feet
- Appendix C-2. List of Property Owners within 500 feet
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1.0 INTRODUCTION

Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC (collectively “Fortress Solar”), indirect subsidiaries of Aypa Power North America LLC (Aypa), a Blackstone portfolio company, is planning to construct and operate the Fortress Solar Project (Project), a utility scale solar facility and battery energy storage system (BESS) near the City of Brush in Morgan County, Colorado (Figure 1).

The Fortress Solar Project is a multi-phased up to 600-megawatt (MW), 2,400 MW hour (MWh) solar facility and BESS project. Each phase is planned to be constructed from 2025 through 2028 with three phases in total approximating 200 MW each. The Project site is located on privately owned land and its proximity to a substation facilitates efficient energy transmission, reducing transmission losses and enhancing overall Project performance.

Project representatives voluntarily held a public outreach and information session in Brush Colorado on Wednesday September 6th, 2023, from 4:00 p.m. to 6:00 p.m. The public outreach and information session aimed to engage with the community and share valuable insights into the Solar and BESS Project planned for Morgan County. The session was held as an open-house meeting that included large format display boards that covered various aspects of the Project. Attendees had the opportunity to gain a deeper understanding of how this initiative could positively impact the local environment, energy sustainability, and overall quality of life, and provide comments or concerns about the Project.

This public outreach summary describes the public outreach approach and the materials used leading up to and during the event.

2.0 PUBLIC OUTREACH

Outreach efforts are designed to provide general Project information as well as to create opportunities for the local community and residents to ask questions and provide feedback. Initial outreach activities for the Project took place in August and September 2023. Figure 1 details the Fortress Solar Project boundary and generation tie line.

Figure 1. Project Boundary & Generation Tie Line



2.1 Project Communication Channels

A Project website is available to provide community members with general information about the Project, updates on the progress, and a comment form. Communication channels were launched in August 2023 (Table 1) and will continue to be monitored through Project completion.

Community inquiries received via the comment form on the Project website are forwarded to the Project Manager and copied or transcribed into a Correspondence Tracking Log. The Log is updated regularly to include responses sent to community members and any other follow-up. In addition, the Project Manager, Charles Ndhlovu's email address and phone number have been provided on public outreach materials for community inquiries.

Table 1. Project Communication Channels

Channel	Description
Website	Fortress-Solar.com The website provides an interactive web map of the Project Area, detailed information about the Project, a section about public participation, and a contact form. Contact form submittals are monitored daily and are generally responded to within one to three business days. The website was established on August 30, 2023, and has had 183 unique visitors and 386 total visits through October 19th, 2023.
Email Address	The Project Manager, Charles Ndhlovu's email address was included on public outreach materials for community inquiries. The Project Manager monitors emails received daily and are generally responded to within one to three business days.
Telephone Line	(888) 287-9058 Office (304) 685-8669 Mobile The Project Manager, Charles Ndhlovu, is available by phone to answer inquiries regarding the Project. Charles' mobile phone number or Aypa's office number has been included on public outreach materials for community inquiries.

2.2 Public Outreach & Information Session Notifications

Fortress Solar I LLC utilized several communication methods to notice the community and surrounding property owners about the public outreach and information session. Notifications included a Project overview, map, community meeting information, and Project contact information. The methodologies used are summarized in Table 2.

Table 2. Public Outreach and Information Session Notifications

Communication	Description	Appendix
Communication Channels	A Project website hosted at www.Fortress-Solar.com was established on August 30, 2023 and serves as a central location to provide the public, stakeholders, and other interested parties with Project information, public participation information, and opportunity to contact the Project and provide comments. The website address was included in one of the two newspaper advertisements and public meeting materials. The Project website was updated following the public outreach	A-1 & A-2

	<p>and information session on September 6, 2023, to include copies of the materials presented. Prior to the Morgan County Public hearing of the Project Special Use Permit applications, the Project website will be updated with hearing information. Screenshots of the Project website and updates are included within Appendix A-1 and A-2.</p> <p>Google Analytics (through October 19, 2023):</p> <ul style="list-style-type: none"> • 183 unique users have accessed the site • 386 total number of views • 8 seconds average engagement time 	
Direct Mail	<p>A flyer was mailed to approximately 62 landowners located within 0.5 mile of the Project Area (Appendix B-1). The mailing list is included as Appendix B-2. An additional flyer was mailed to two landowners located within 500 feet of the Project Area. The flyer is included as Appendix C-1, and the mailing list is included as Appendix C-2. Both flyers were mailed on August 25, 2023.</p> <p>Both mailings provided a Project description and location map and included methods of contact such as the Project manager's email address, and telephone number. The mailings also provided information on how to attend the in-person public outreach and information session. The mailings to property owners within 500 feet of the Project Area included a visual simulation of the Project.</p>	B-1, B-2, C-1, C-2
Personal Correspondence	<p>The informational flyer (Appendix B-1) was provided to both Morgan County's Community Development Director, Nicole Hay and the City of Brush Community Development Director, Tyler Purvis, to distribute to community stakeholders.</p>	B-1
Newspaper Advertisements	<p>Fortress Solar LLC published two informational advertisements in the Fort Morgan Times in advance of the Public Outreach and Information Session on September 6th, 2023. The advertisement was published two weeks prior to the event on August 26th, 2023, and September 2nd, 2023. A copy of both publications are included as Appendix D-1 and D-2.</p>	D-1 & D-2
Social Media	<p>Additionally, Fortress Solar LLC was notified that a flyer received by a recipient property owner was posted to the Morgan County Colorado Community Bulletin Board Facebook Group prior to the Public Outreach and Information Session.</p>	-

3.0 PUBLIC OUTREACH & INFORMATION SESSION

The public outreach and information session was held on September 6th, 2023, in the event room at The Course at Petteys Park in Brush, Colorado, from 4:00 p.m. to 6:00 p.m.

The session provided an in-person platform for landowners, residents, and stakeholders to learn about the Project. The public outreach and information session was held as an open house format, allowing attendees to attend at their leisure, review Project information, provide feedback and comments, and have questions answered by Project subject matter experts on an individual basis.

Project team members from various disciplines attended the public outreach and information session to provide subject matter expertise that would best address community concerns. Project team members and their areas of expertise are described in Table 3.

Table 3. Project Team Members in Attendance

Representative	Company	Area of Expertise
Charles Ndhlovu	Aypa Power / Fortress Solar I LLC	Project Management
Andrew Breyer	Aypa Power / Fortress Solar I LLC	Project Development
Philip Zaranka	Aypa Power / Fortress Solar I LLC	Land Acquisition
Lani Rieger	Aypa Power / Fortress Solar I LLC	Health, Safety, Environment & Quality
Justin Miner	Tetra Tech	Environmental Project Management
Maya Lewis	Tetra Tech	Environmental & Land Use Planner

The public outreach and information session included seven informational display boards which were presented throughout the meeting room. The outreach and information session materials were made available on the website following the event for stakeholders who were unable to attend in person. The informational display boards are described in Table 4 and are included as Appendix E-1.

Table 4. Public Outreach and Information Session Materials

Materials	Description	Appendix
Informational Display Boards	<p>Seven informational display boards printed on foam core were displayed on easels around the event space. Informational display boards included:</p> <ul style="list-style-type: none"> • About Aypa Power • Project location and overview • Preliminary site plan • Project benefits summary • Typical BESS unit photos and information • Frequently asked questions • Anticipated Project milestone schedule 	E-1

Key Highlights of the Information Session:

1. **Project Overview:** Fortress Solar provided an overview of the Solar and BESS Project, detailing its scope, objectives, and potential benefits for Morgan County.
2. **Environmental Impact:** The session highlighted the Project's commitment to clean energy and its potential to reduce carbon emissions and promote sustainability within the local community.
3. **Energy Reliability:** Fortress Solar discussed how the BESS component of the Project could enhance the reliability of the local energy grid, especially during peak demand periods and adverse weather conditions.
4. **Economic Opportunities:** The session touched upon the economic benefits, including job creation and potential revenue streams for Morgan County.
5. **Community Engagement:** Attendees were encouraged to ask questions and provide feedback, fostering open communication between Project representatives and the community.

Comment forms and a sign-in sheet were available at the entrance to the event. Attendees were asked to sign in before being directed to the informational display boards or the Project team member best suited to answer their questions. Approximately 20-25 stakeholders attended the public outreach and information session. Eighteen stakeholders logged their attendance per the sign-in sheets; their information is included in Appendix E-2. Two written comments were received during the session. These comments are included in the Comment Log, Table 6. Images of the public outreach and information session are available in Appendix E-3.

Fortress Solar is committed to transparency and community involvement throughout the Project's development. Fortress Solar wants to express a willingness to address any concerns, answer questions, and actively engage with Morgan County residents as the Project progresses. The following concerns outlined in Table 5 were brought up and noted during the event and will be mitigated and addressed accordingly through Project design and permitting.

Table 5. Public Outreach and Information Session Topics of Concern

Concern	Action
The Company phone number, (888) 287-9058 is not reachable	The Project Manager is Charles Ndhlovu, who can be contacted at
Access roads during construction and operations	Four Project access roads were detailed per the preliminary site plan display board presented during the public outreach and information session. The site access displayed during the public meeting from Highway 34 has since been removed. The designated use of each proposed access road will be detailed per the Special Use Permit (SUP) application. The primary access designated for heavy vehicle traffic during construction will be from County Road Q.
Dust mitigation	Fugitive dust mitigation will be addressed per the SUP application. Fortress Solar will implement dust mitigation measures throughout the course of construction to minimize sources of fugitive dust and impacts on surrounding property owners. Access roads will consist of compacted gravel and the substation and BESS areas will be covered with gravel or crushed stone to reduce potential fugitive dust impacts.

Soil/vegetation management plan	Disturbed areas will be revegetated with a native seed mix following construction to stabilize soils and prevent the establishment of noxious weeds. Fortress Solar will provide ongoing maintenance to ensure removal of weeds and maintenance of desirable vegetation within the Project area. Vegetation control at the site will use materials and methods that ensure protection of groundwater and adjacent properties.
Fire safety as it relates to preemptive design for BESS/substation area and vegetation management	Defensible space will be provided immediately surrounding the facility to reduce fire danger. Fortress Solar will provide ongoing maintenance to ensure removal of vegetation and other flammable materials from the defensible space area.
Decommissioning plan	A Decommissioning Plan is included as part of the SUP application. The Decommissioning Plan details the removal process for facilities and equipment from the site and reclamation processes to return the site to pre-project conditions. A cost estimate is provided detailing all costs associated with the dismantlement, recycling, and disposal of facility components. As required per Morgan County, Fortress Solar will provide a decommissioning bond or letter of credit in the amount of the decommissioning cost minus the salvage value of facility equipment to the County prior to the twelfth anniversary of the commencement of construction of the facility.
Noise	The construction and operation of the Project will adhere to the decibel limits established for industrial settings per the Morgan County Code. Operational noise from the solar panel tracking system, the BESS, and Project substation will be mitigated by the spatial layout of the Project.
Water wells	There are several existing deep-water wells located on the subject property. Further studies will be performed by Fortress Solar to determine the feasibility of utilizing the existing deep-water wells for various Project needs. These studies will encompass a comprehensive analysis of water quality, assessing parameters such as pH, dissolved minerals, and contaminants. Additionally, an assessment of well yield will be conducted to ascertain the sustainable pumping rate and availability of water resources. By conducting rigorous studies in these areas, Fortress Solar aims to ensure that the Project's water requirements align with the capacity and quality of the available deep-water wells, thus contributing to the overall success and sustainability of the Project.
Sandy soils	A geotechnical report will be completed for the Project during the detailed engineering phase to determine site soil characteristics to aid structural engineers in the design of foundations for Project facilities. Fugitive dust mitigation is addressed in the SUP application.
Disruption of avian migration and potential "lake effect"	The lake effect refers to when a collection of solar panel arrays creates glare that can be mistaken as a body of water by birds in flight. Injury or death may occur if birds attempt to land on the solar panel array. Mitigation measures include the use of glare reducing coatings on proposed solar panel arrays. A Glint and Glare Analysis has been conducted for the Project and is included with the SUP submittal. The panels to be used on the proposed Project are smooth glass surface material with an anti-reflection coating. The Glint and Glare analysis modeled the flight path results for the Project to determine glint and glare impacts from aircraft above and no glare was predicted.

Wildlife Impacts	Fortress Solar has completed a biological resource assessment for the Project and has provided results of the study to Colorado Parks and Wildlife for comment. Fortress Solar intends to implement recommended mitigation measures per the final Project design.
Fire Department Response	A Fire Mitigation and Emergency Operations Plan will be included per the SUP application submittal. The plan will detail proper emergency responses to fire and thermal events at the site, the BESS unit's cooling, fire detection, and suppression features, emergency access, and the nearest water supply. Fortress Solar has provided a copy of the plan to local fire department officials for review and comment. Furthermore, Fortress Solar intends to provide training for local emergency responders pertaining to emergencies with the BESS. This training will be administered in collaboration with the battery supplier and coordinated directly with the local emergency teams. Refreshers will be offered periodically as needed and revisions to this document will be highlighted.
Monitoring Frequency of Site	The Project facility and all alarms will be under 24-hour central monitoring by Fortress Solar's Network Operations Center (NOC). The Project site will be equipped with cameras and the NOC will monitor the facility through remote surveillance. In any event, the NOC will coordinate the response as it pertains to the Project facility. The NOC will directly contact local emergency responders, including the fire department as soon as an event requiring emergency response is reported.
Lightning Hazards that Spark Fires	The Fire Mitigation and Emergency Operations Plan will detail the proper emergency responses to potential fire events at the site. The NOC will monitor areas of lightning strikes for signs of ignition.
Construction Worker Housing	Approximately 261 temporary construction labor jobs are anticipated during the peak of construction. The design and construction scopes of work are typically bid out to a range of consultants and contractors. Depending on the availability, experience, and qualifications of available local firms, it is the Applicant's preference to utilize local labor as much as is practicable. Motel rooms, RV spaces, short-term apartment, and house rentals will be needed to house temporary, non-local, construction labor.
Project Operator	The Project will be constructed, owned, and operated by Fortress Solar I LLC, a subsidiary of Aypa Power. Aypa Power is a Blackstone portfolio company.

4.0 PUBLIC COMMENTS RECEIVED

Comments received from the Project's initial outreach through the date of October 19, 2023, including responses when applicable, are included in Table 6 below. Public comments were received via the Project's website, telephone, email, and written comments from the in-person informational session. The Applicant provided additional information to the public as requested.

Table 6. Comments Received

Received Through	Comment	Response and/or Notes
Public Outreach & Information Session Written Comment	Please email a copy of the boards displayed at the meeting.	A copy of the display boards presented at the public outreach and information session were emailed to (redacted) on September 12, 2023.
Public Outreach & Information Session Written Comment	Concerned about fire hazard from dry vegetation between panels. Was told that western most area may not be developed. I would like more information as that is closest to our property.	Fortress Solar will communicate site plan information and will properly notice the public hearing for the SUP.
Email	Received notification about BESS project in Brush CO. I live on Road R just east of Hwy 71. Where is the project to be located near me? What roads will it be near? Thank you.	Thank you for taking the time to contact us. The BESS and Project substation is proposed to be located approximately 1.2 miles east of the existing PSCO substation. The distance from the intersection of Road R and Hwy 71 is approximately 2.2 miles northeast. We welcome you to visit the Project website which includes an interactive map at www.fortress-solar.com . We would also like to take this opportunity to welcome you to meet with the Project team at the upcoming Public Outreach and Information Session which will be held Wednesday, September 6, 2023, 4:00 P.M. – 6:00 P.M. at The Course at Pettey's Park, 2301 West Mill Street, Brush, CO 80724.

5.0 AGENCY AND LOCAL OFFICIAL BRIEFINGS

Throughout the Project's planning and permitting process, the Applicant has contacted and coordinated with various agencies and local officials including the Morgan County Planning & Building Department, Morgan County Road and Bridge Department, Morgan County Economic Development Committee, City of Brush, Colorado Department of Wildlife, Colorado State Historic Preservation Office, Brush Volunteer Fire Department, Brush Rural Fire Protection District, Morgan County Sheriff's Office and Brush Police Department. In general, the purpose of these coordination efforts was to provide information on the Project, request feedback, and answer questions. The Applicant recently became a new member of the Morgan County Economic Development Committee, as detailed per Appendix F

6.0 SPECIAL USE PERMIT PUBLIC HEARING

6.1 Public Hearing

Fortress Solar will submit SUP applications for the solar and BESS Project to Morgan County for consideration by the Morgan County Planning and Zoning Commission and Board of County Commissioners. The application will be reviewed by the Planning and Zoning Commission and Board of County Commissioners at duly noticed public hearings at which community members will be given opportunity to provide public comment.

6.2 Public Notice Sign Postings

Fortress Solar will post notice of the Morgan County public hearings on the Project property. One site posting will be posted fronting each public right of way adjacent to the Project. Site postings will be installed in accordance with Morgan County Code Section 2-390 at least ten days prior to the Morgan County public hearing of the SUP applications. Site posting locations will be finalized and confirmed by the County once the Once the SUP application is certified complete.

6.3 Mailed Notices

Morgan County will mail notice of the public hearing to all property owners located within 1,320 feet (.25 mile) of the Project boundary. Fortress Solar included a list of all property owners within 1,320 feet (.25 mile) of the Project boundary to Morgan County as part of the SUP application submittal. In addition, Aypa Power will mail notice to individual mineral rights holders within the project site no less than 30-days prior to the initial public hearing in accordance with County and statutory notification requirements.

APPENDIX A-1: PRE-PUBLIC OUTREACH AND INFORMATION SESSION WEBSITE INFORMATION



Fortress Solar and Battery Energy Storage System Project

Project Overview

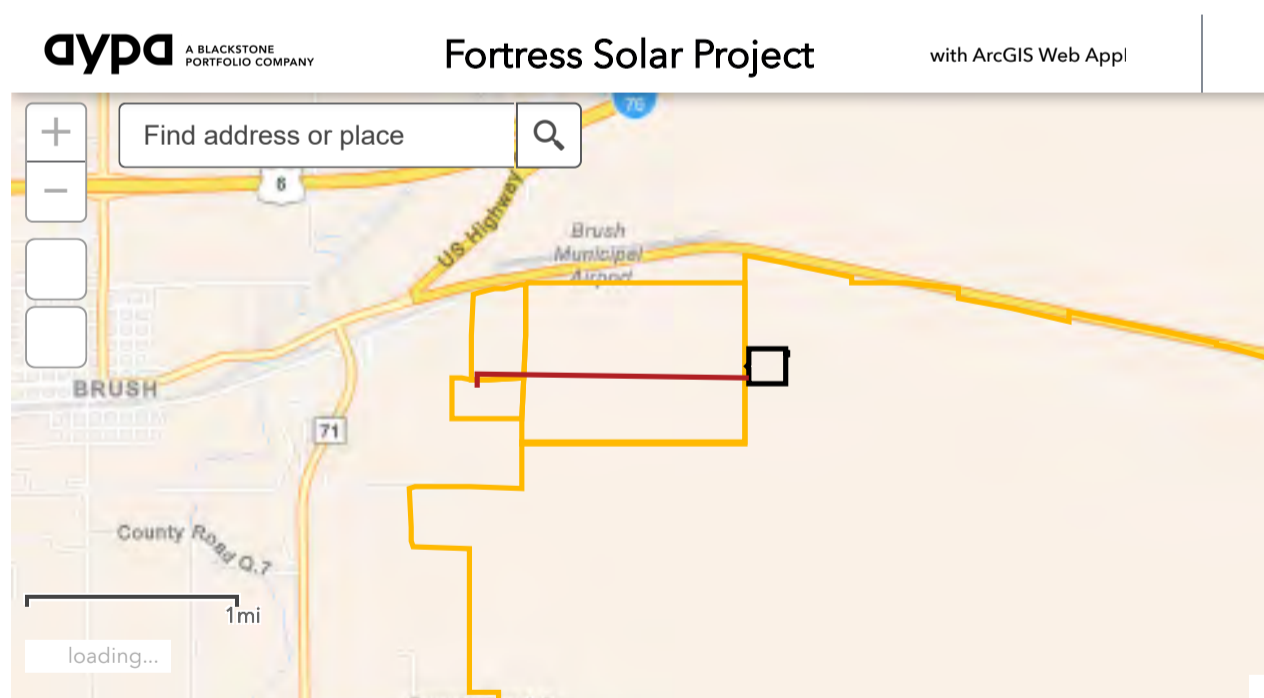
Fortress Solar I LLC, a subsidiary of Aypa Power (“Aypa”) is developing and proposes to construct, own and operate an up to 600-megawatt (“MW”) solar facility and battery energy storage system (“BESS”) project outside the city limits of Brush in Morgan County, Colorado ((see [Project Map](#)). The Project is expected to be constructed in phases of approximately 200 MW each from 2025 through 2028. The Project is located on privately owned land abutting a major electrical substation to which it is proposed to connect to bring clean, renewable energy to Colorado’s consumers. The Project will support Colorado’s utilities in their goal to provide customers with 90% carbon-free electricity by 2050.

Jump To:

- [Project Overview](#)
- [Project Map](#)
- [Public Participation](#)
- [Contact Us](#)

Aypa is applying for a Special Use Permit from Morgan County to construct and operate the Project, with the intent to receive permit approval in January 2024.

Project Map



Public Participation

We invite you to join members of Aypa’s project development team for a public outreach and information session to learn more about the Project.

Wednesday, Sept. 6, 2023, 4:00 P.M. – 6:00 P.M.

The Course at Pettey’s Park

2301 West Mill Street, Brush, CO 80723

Can't make it? Contact us for digital copies of the public outreach and information session materials. We'll also make materials available on this website after the event.

Have questions or comments? Please contact us using the comment form below.

Contact Us

Your Name *(Required)*

Email *(Required)*

Phone

Address

Street Address

Address Line 2

City

State

ZIP Code

Comment

Please contact me about my comment *(Required)*

Yes

No

Submit

[Contact Us](#) | [Aypa.com](#) | [Privacy Policy](#)

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APPENDIX A-2: POST-PUBLIC OUTREACH AND INFORMATION SESSION WEBSITE UPDATE



Fortress Solar and Battery Energy Storage System Project

Project Overview

Fortress Solar I LLC, a subsidiary of Aypa Power (“Aypa”) is developing and proposes to construct, own and operate an up to 600-megawatt (“MW”) solar facility and battery energy storage system (“BESS”) project outside the city limits of Brush in Morgan County, Colorado (see [Project Map](#)). The Project is expected to be constructed in phases of approximately 200 MW each from 2025 through 2028. The Project is located on privately owned land abutting a major electrical substation to which it is proposed to connect to bring clean, renewable energy to Colorado’s consumers. The Project will support Colorado’s utilities in their goal to provide customers with 90% carbon-free electricity by 2050.

Jump To:

[Project Overview](#)

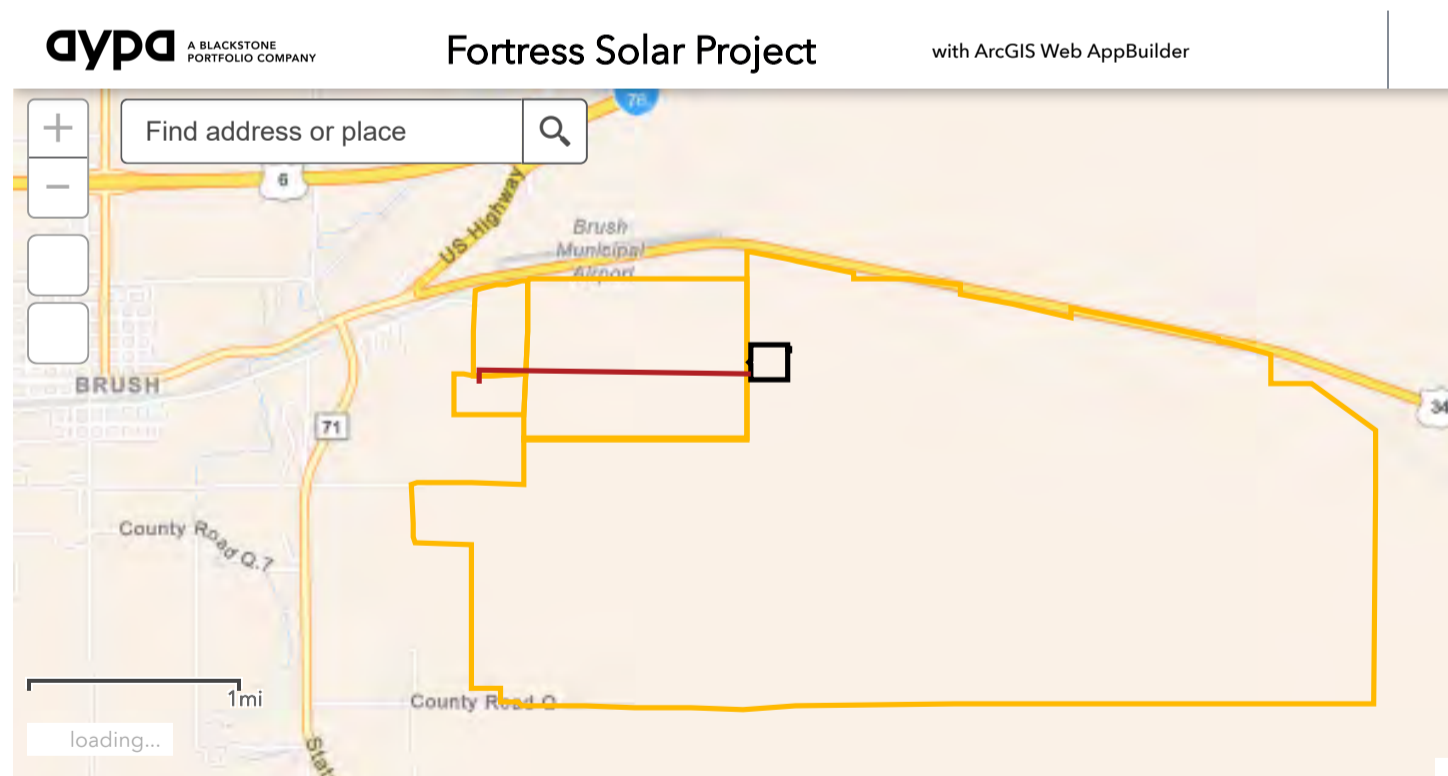
[Project Map](#)

[Public Participation](#)

[Contact Us](#)

Aypa is applying for a Special Use Permit from Morgan County to construct and operate the Project, with the intent to receive permit approval in January 2024.

Project Map



Public Participation

Thank you to everyone who was able to join members of Aypa’s project development team for a public outreach and information session on **Wednesday, Sept. 6, 2023** at **The Course at Pettey’s Park** in **Brush**.

If you were unable to make it, we invite you to review [digital copies of the presentation materials](#).

Have questions or comments? Please contact us using the comment form below.

Contact Us

Your Name *(Required)*

Email *(Required)*

Phone

Address

Street Address

Address Line 2

City

State

ZIP Code

Comment

Please contact me about my comment *(Required)*

Yes

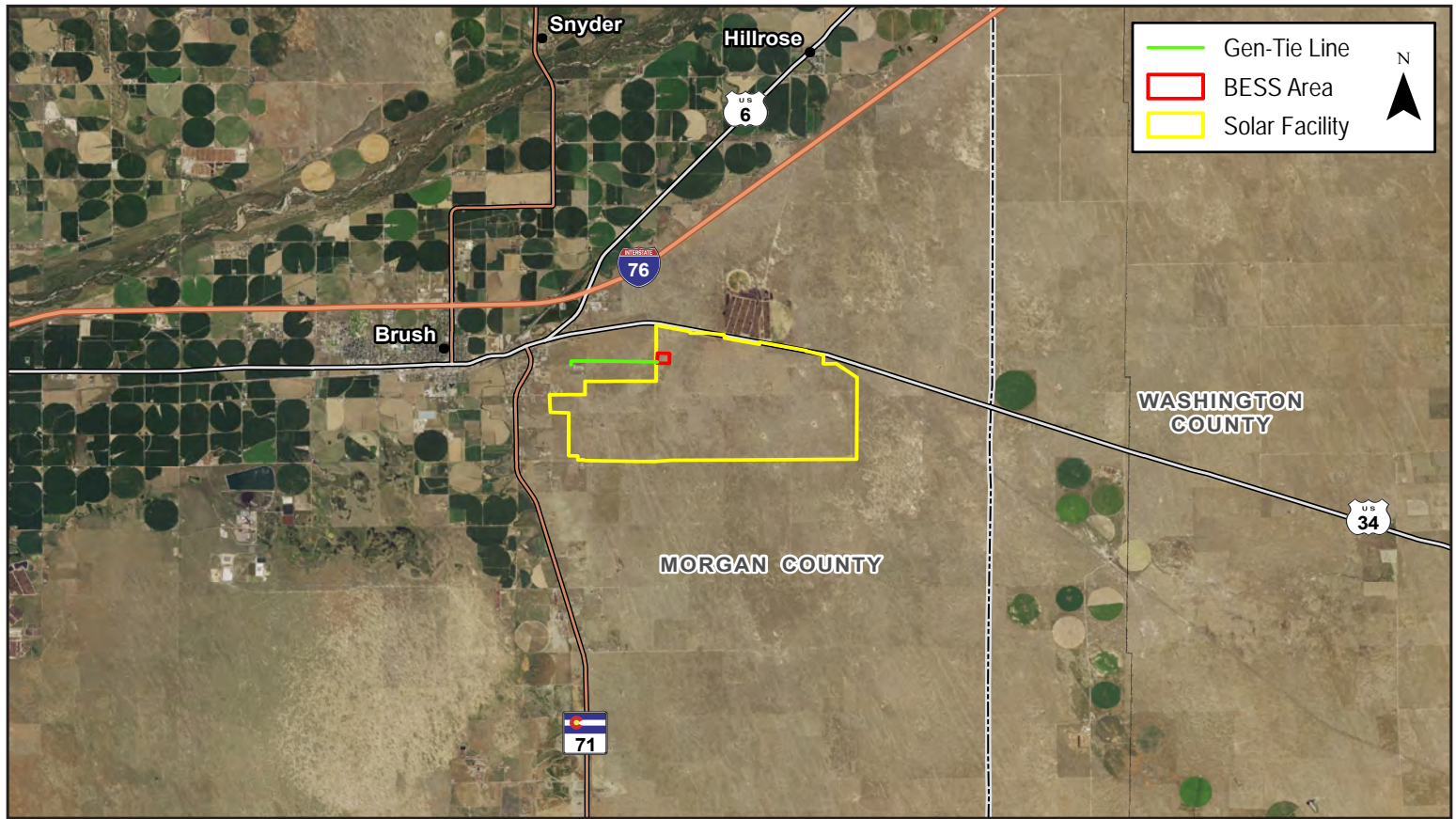
No

[Contact Us](#) | [Aypa.com](#) | [Privacy Policy](#)

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APPENDIX B-1: DIRECT MAIL FLYER TO PROPERTY OWNERS WITHIN .5 MILE

Public Outreach and Information Session



Proposed Solar and Battery Energy Storage System in Morgan County, CO

Fortress Solar I LLC, a subsidiary of Aypa Power (“Aypa”), is proposing to develop a multi-phased up to 600-megawatt (“MW”) solar facility and battery energy storage system (“BESS”) project outside the city limits of Brush in Morgan County, Colorado. Each phase is planned on being constructed from 2025 through 2028 with three phases in total approximating 200 MW each. The Project site is located on privately owned land and its proximity to a substation facilitates efficient energy transmission, reducing transmission losses and enhancing overall performance.

The Project is being considered by multiple purchasers of power to add dispatchable energy capacity to the region. The planned point of interconnection is the existing Story Substation, which is owned by Tri-State Generation and Transmission and located west of the Project site. Aypa is applying for a Special Use Permit from

Morgan County to develop and construct the Project, with the intent to receive permit approval in January 2024.

Public Outreach and Information Session

Please join us for a Public Outreach and Information Session to learn more about the Project.

Wednesday, Sept. 6, 2023
4:00 P.M. - 6:00 P.M.
The Course at Petty's Park
2301 West Mill Street
Brush, CO 80723

Questions about the Project or this notice? Contact us!

Charles Ndhlovu | Project Development Manager

11801 Domain Blvd., Suite 450, Austin, TX 78758

APPENDIX B-2: LIST OF PROPERTY OWNERS WITHIN .5 MILE OF PROJECT SITE

NAME	CAREOF	ADDRESS1	ADDRESS2	CITY	STATE	ZIPCODE
FLYING BEE RANCH LLC			29382 CO RD R	BRUSH	CO	80723
DAVIS, DARBY			16520 HWY 71	BRUSH	CO	80723
BENOTTI, SHARI A			2420 THORNDON PARK CT	LEAGUE CITY	TX	77573
KEMBEL, JAMES S & JOYCE E			16750 HWY 71	BRUSH	CO	80723
WILLIAM, RODNEY D & KATHRYN L			29076 CO RD R	BRUSH	CO	80723
LAMBERT, CHAD & JILL			P O BOX 212	BRUSH	CO	80723
QUEEN, DOUG			P O BOX 731	BRUSH	CO	80723
IVIE, TRAVIS J & KENDRA J			P O BOX 711	BRUSH	CO	80723
MULLEN, GREGORY B & RONDA L			29464 CO RD Q	BRUSH	CO	80723
TRI-STATE GENERATION & TRANSMISSION ASSOCIATION	PROPERTY TAX DEPT - MARY JO HOWARD		P O BOX 33695	DENVER	CO	80233
BEAMAN, CINTHIA LYNN BRACK			15127 CAROLINE AVE	FORT LUPTON	CO	80621-4056
BELL, KEVIN R & STACY			415 ENSIGN ST	FORT MORGAN	CO	80701
PUBLIC SERVICE COMPANY OF COLORADO			P O BOX 1979	DENVER	CO	80201-1979
PETRINO, RICHARD G & JACQUIE E TRUSTS			5408 BARTOLOMEO ST	SARASOTA	FL	34238
CLIFT, BERT GARY & PENNY MAY & MASSEY, JEADIE WILLIAM JR & BETTY		HERNANDEZ, FREESIA JOY	17774 CO RD 29.6	BRUSH	CO	80723
BECK, WESLEY A			17746 CO RD 29.6	BRUSH	CO	80723
BECK, HELEN R & NLR LLC		BECK MASSEY, DEBORA L	17688 CO RD 29.6	BRUSH	CO	80723
HOLMES, PAUL RANDOLPH			17660 CO RD 29.6	BRUSH	CO	80723
GERTGE, BENNIE JO			385 ROAD WEST 90	OGALLALA	NE	69153
SERRANO, JOSE E & SCIANCALEPORE, MARGO LYNN			17717 CO RD 29.6	BRUSH	CO	80723
WILSON, DARBY J			17140 HWY 71	BRUSH	CO	80723
STANDING ROCK SANITATION SERVICE INC		TREVIZO-CASTRO, MARYBELL	17328 HWY 71	BRUSH	CO	80723
FIERRO-FRANCO, OMAR			P O BOX 643	BRUSH	CO	80723
MASSEY, BROOKS L			29501 CO RD R	BRUSH	CO	80723
ESKEW, ED & LAROYCE			P O BOX 170	MCLAUGHLIN	SD	57642
BELLIS, PEGGY ELIZABETH			17332 HWY 71	BRUSH	CO	80723
WILLIAM, RYAN & ERICA			17426 HWY 71	BRUSH	CO	80723
MCDONALD BROTHERS LLC			29171 CO RD R	BRUSH	CO	80723
ATWOOD, LOUIS G			P O BOX 352	BRUSH	CO	80723
SCHWINDT, SAM JR & DEANNA			29491 CO RD R	BRUSH	CO	80723
MASSEY, KYLER B & JANESEA M			17342 HWY 71	BRUSH	CO	80723
ESKEW, DENNIS J & ANNISHIA M & CITY OF BRUSH		ESKEW, EDDIE DEAN & LA ROYCE P	17384 HWY 71	BRUSH	CO	80723
IT3 LAND & INVESTMENT LLC			29093 CO RD R	BRUSH	CO	80723
3D RANCH INC			P O BOX 363	BRUSH	CO	80723
BAUGHMAN, KATHRYN A TRUST			P O BOX 408	BRUSH	CO	80723
DILLEY, VERNON & GWEN			12001 HWY 34	AKRON	CO	80720
ODLE, JAMES LEE & RUTH ANN			4855 W COUGAR ROCK TRAIL	PRESMONT	AZ	86305
DILLEY, LYNN R			P O BOX 125	BRUSH	CO	80723-2308
KRAL, JOSEPH F III & JENNIFER L			16218 HWY 71	BRUSH	CO	80723-9436
DESLAURIERS, ROY			P O BOX 803	BRUSH	CO	80723
MELENDEZ, JAIME			67 PRESERVE DR	FORT MORGAN	CO	80701
DEMMING, JUDD & CLARK, MONTE SHAWN & JIMI JEAN			29248 CO RD R	BRUSH	CO	80723
STUTZMAN, TIMOTHY J & LANA J			29250 CO RD R	BRUSH	CO	80723
TRI-STATE GENERATION AND TRANSMISSION ASSN INC			29246 CO RD R	BRUSH	CO	80723
BOOTH LAND & LIVESTOCK LLC			29460 CO RD Q	BRUSH	CO	80723
STATE OF COLORADO		BOARD OF LAND COMMISSIONERS	19798 CO RD 23	FORT MORGAN	CO	80701
BASS, BRUCE B FAMILY LLLP			1100 W 116TH AVE	WESTMINSTER	CO	80234
BECK, MALLORY & MCLANE			P O BOX 72	LUCERNE	CO	80646
SHAVER, WILLIAM P & LESLIE E			1313 SHERMAN ST - RM 620	DENVER	CO	80203
5R INVESTMENTS LLC			P O BOX 685	BRUSH	CO	807230685
BOLINGER, AUSTIN MICHAEL			315 LINCOLN ST	BRUSH	CO	80723
STONE, JAMES L & JUDY L			15949 CO RD 29.5	BRUSH	CO	80723
CHRISTENSEN, CLAIRE A			29458 CO RD Q	BRUSH	CO	80723
ARTEAGA, URBANO & JUAN B & IMELDA G			12001 US HWY 34	AKRON	CO	80720
MCINTOSH, SCOT C			P O BOX 351	BRUSH	CO	80723
GAYLE, ROBERT D & WENDY E			P O BOX 994	BRUSH	CO	80723
DICK, RON			20125 CO RD 17	FORT MORGAN	CO	80701
			412 DESSA ST	BRUSH	CO	80723
			29994 CO RD Q	BRUSH	CO	80723
			29874 CO RD Q	BRUSH	CO	80723

APPENDIX C-1: DIRECT MAIL FLYER TO PROPERTY OWNERS WITHIN 500 FEET



August 24, 2023

Subject: Public Outreach for Proposed Solar and Battery Energy Storage System in Morgan County, CO

Dear Neighbor:

Fortress Solar I LLC, a subsidiary of Aypa Power, is proposing to develop a multi-phased up to 600-megawatt (“MW”) solar facility and battery energy storage system (BESS) project outside the city limits of Brush in Morgan County, Colorado (see – Project Map). Each phase is planned on being constructed from 2025 through 2028 with three phases in total approximating 200 MW each. The Project site is located on privately owned land and its proximity to a substation facilitates efficient energy transmission, reducing transmission losses and enhancing overall project performance.

The Project is being considered by multiple purchasers of power to add dispatchable energy capacity in the region. The planned point of interconnection is the existing Story Substation which is owned by Tri-State Generation and Transmission and located west of the Project site. Aypa is applying for a Special Use Permit from Morgan County to develop and construct the Project, with the intent to receive permit approval in January 2024.

A Public Outreach and Information session is scheduled for September 6, 2023, and is open to the public.

Wednesday, September 6, 2023

4:00 – 6:00 P.M.

The Course at Petteys Park

2301 West Mill Street

Brush, CO 80723

Please join us for a Public Outreach and Information Session to learn more about Aypa and the Project. If you have any questions regarding the Project or this notice, please feel free to contact me at (888) 287-9058 or by email at

Respectfully,

Charles Ndhlovu
Project Development Manager
Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758

Figure 1 – Project Map

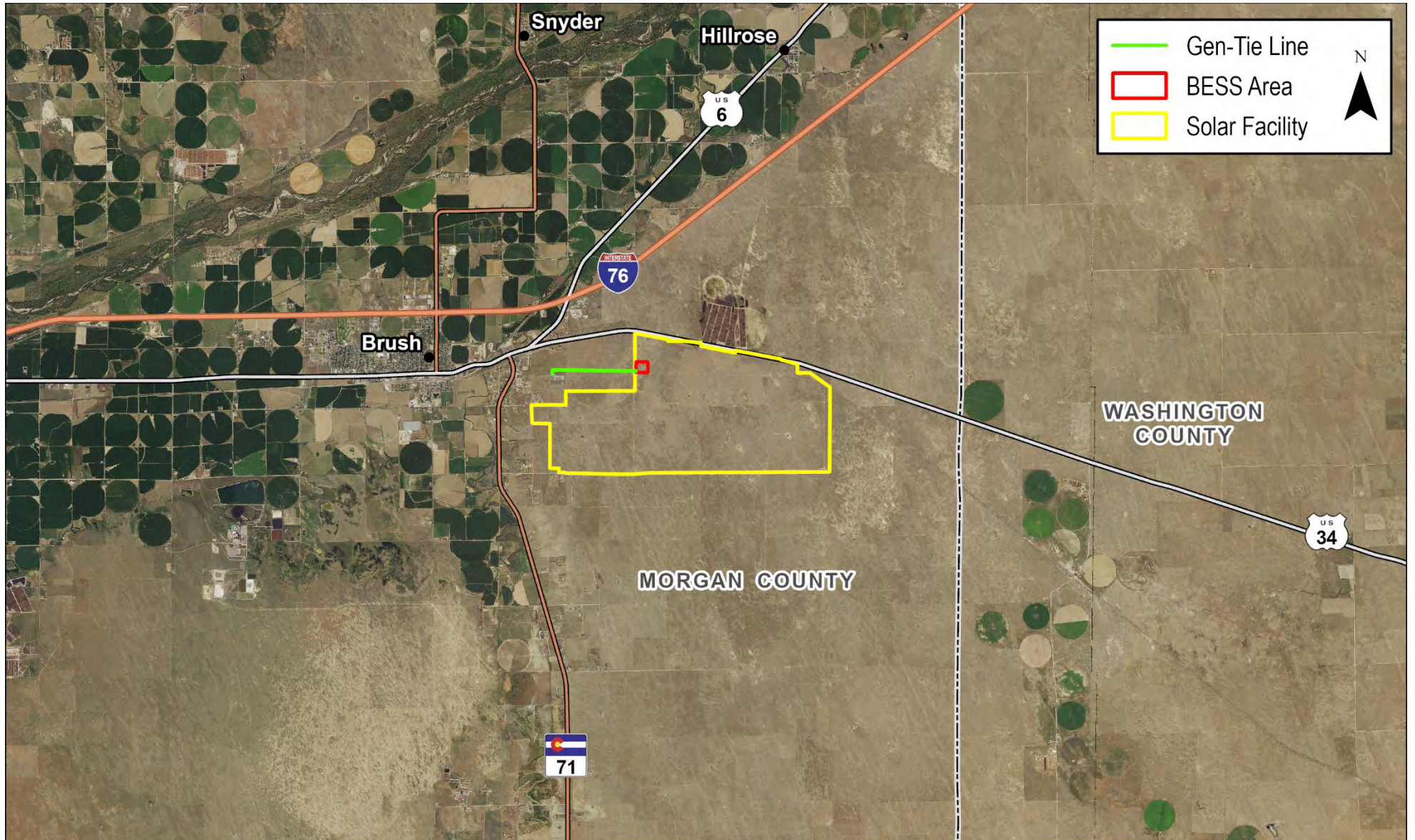


Photo 1 – Street-View Rendering, Existing



Photo 2 – Street-View Rendering, Proposed





August 24, 2023

Subject: Public Outreach for Proposed Solar and Battery Energy Storage System in Morgan County, CO

Dear Neighbor:

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Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758

Figure 1 – Project Map

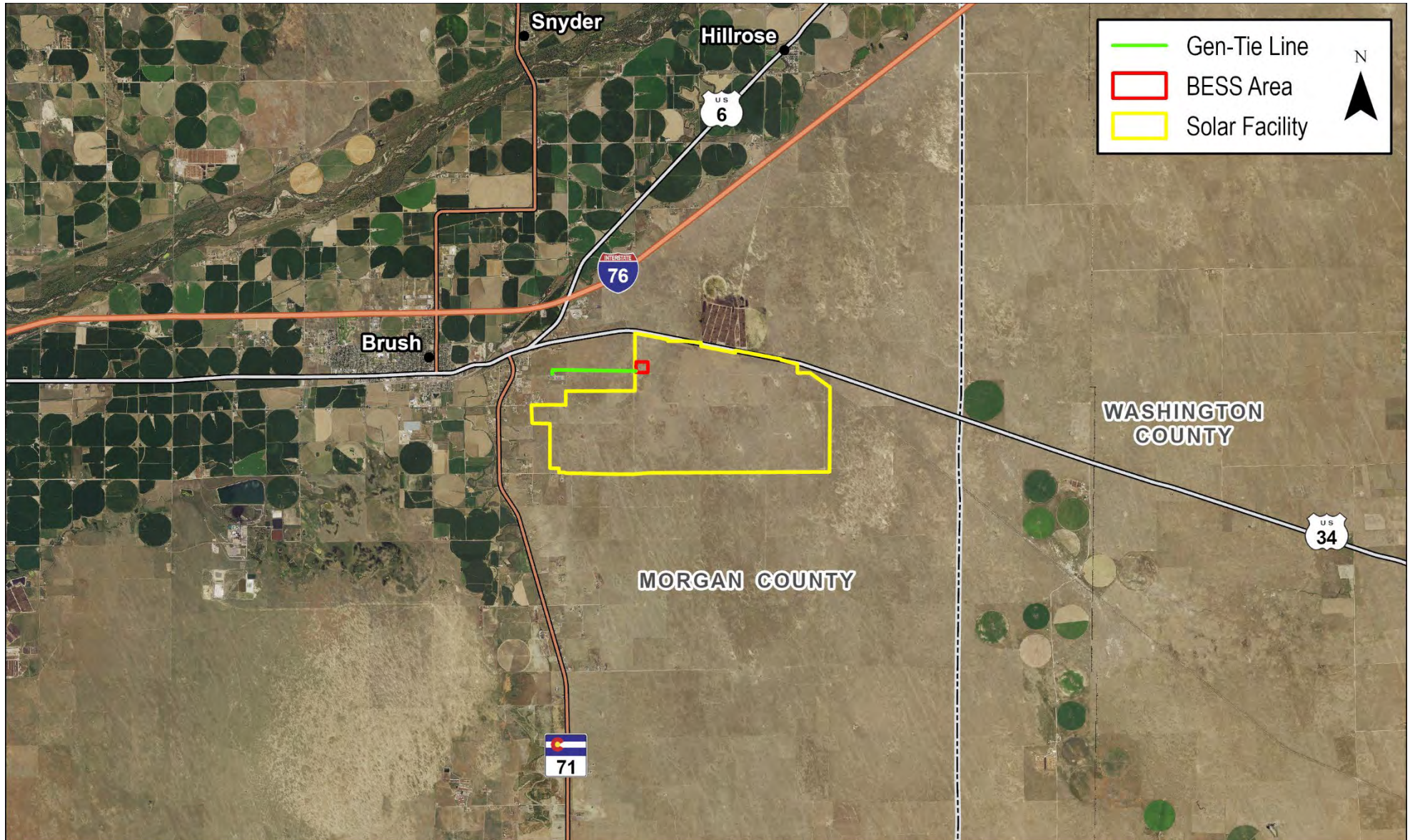


Photo 1 – Street-View Rendering, Existing



Photo 2 – Street-View Rendering, Proposed



APPENDIX C-2: LIST OF PROPERTY OWNERS WITHIN 500 FEET

NAME	ADDRESS1	CITY	STATE	ZIPCODE
GAYLE, ROBERT D & WENDY E	29994 COUNTY ROAD Q	BRUSH	CO	80723
STONE, JAMES L & JUDY L	PO BOX 351	BRUSH	CO	80723

APPENDIX D-1: 8.26.23 FORT MORGAN TIMES NEWSPAPER ADVERTISEMENT PUBLICATION

PREP SPORTS

Morgan County high school sports scoreboard

By Zant Reyez
reyez@prairiemountainmedia.com

Schools across Morgan County are back in session and that means fall high school sports are back in action.

vorite school. Here are the scores for Morgan County high schools.

Fort Morgan
Volleyball - On Tuesday, the Mustangs lost 3-0 in their season opener against Sterling.

a 3-1 win over Weld Central. Fort Morgan faces rival Brush on Tuesday evening.

Boys' soccer - Like volleyball, the FMHS boys' soccer team lost its season opener 3-1 against Liberty Common on Tuesday.

a 9-3 win over Valley. The Mustangs host Sterling on Tuesday.

Brush
Softball - The Beet-diggers opened their season last Saturday going 1-1 on the day.

16-0 against The Academy. On Tuesday, BHS beat Peak to Peak 13-9.

Volleyball - The season started in a great way for BHS volleyball with a 3-2 match victory over Silver Creek last Friday.

Wiggins
Volleyball - After sweeping at the Kit Carson Tournament last Saturday, WHS kept its undefeated start to the season going with a 3-0 victory over Byers on Tuesday.

WHS hosts Dayspring Christian Academy on Tuesday.

DENVER BRONCOS

With injury to Jerry Jeudy, Broncos painfully short of playmakers to help Russell Wilson rediscover his mojo

At a salary of nearly \$13 million, is Jeudy more valuable player than Colts running back Jonathan Taylor?

By Mark Kiszla

Although Broncos coach Sean Payton is too much of a prickly cactus to believe a snake would ever dare bite him, there's a big, old anaconda slowly squeezing the hope out of his football team before this NFL season even begins.

No. 1 receiver Jerry Jeudy went down Thursday with a hamstring injury, and when he will be back, nobody knows for sure.

"I don't believe in being snake-bitten," Payton said. Payton is all about building a culture where there's

no excuse for losing.

But know what's even more important to winning football games than culture?

Playmakers. And I'm afraid the Broncos might not have enough to give them a real shot at ending their seven-year playoff drought.

With receiver Tim Patrick already lost for the second straight year, this time to an Achilles tear, and running back Javonte Williams rounding into shape following knee surgery, who's going to take the burden off quarterback Russell Wilson as he tries to restore his reputation?

No team in the league was dinged worse by injury than Denver was last season, when the Broncos finished last in the AFC West.

My bigger concern? Years of poor drafting by former general manager John Elway, compounded by the expenditure of more draft capital to acquire Wilson and Payton, make it hard to look at the back end of the team's 53-man roster and not wonder if there's enough talent to survive the physical rigors of a 17-game schedule.

While it's too early to declare Jeudy, selected No. 15 overall in the 2020 draft, a bust, it's about time to start worrying if he can be a cornerstone of the winning culture Payton is determined to build.

One summer day before Jeudy came up lame while running an end-around in team drills and had to be carted to the locker room, he stood out for dropping passes in a joint practice with the Los Angeles Rams notable for the fact the Broncos looked as if they would rather be anywhere except hard at work.

There's no doubting Jeudy's ability to create separation with route-running that's sharp and precise as a scalpel. There's also no debate that three receivers taken after him in the first round in the draft three years ago - CeeDee Lamb, Justin Jefferson and Brandon Aiyuk - have been more productive pros.

When the Broncos picked up the fifth-year option on Jeudy's contract for a hefty sum of nearly \$13 million only hours before the deadline in May, it was an investment based largely on a small body of outstanding work late last season. To have any realistic shot at making the playoffs, Denver probably needs a 3-1 start in 2023.

Asked to assess the training camp of Wilson, new offensive coordinator Joe Lombardi said: "There is a lot to like. The thing I ap-



ANDY CROSS — THE DENVER POST

Broncos head coach Sean Payton, center, before scrimmage against the Los Angeles Rams at the Centura Health Training Center August 23, 2023.

preciate the most about Russ is just his consistency. He shows up every day positive. He has incredible stamina for just working. Loves football, has a strong desire to win and obviously is very talented.

While being positive is all well and good, let's also keep it real. An offense that ranked dead last in points scored a year ago now has more unanswered questions than rock-solid reliability at quarterback, running back and wide receiver. That's a big stinking mess of ifs.

Running back Jonathan Taylor, who has rushed for nearly 4,000 yards since be-

ing taken in the same draft class as Jeudy, is embroiled in a contract dispute with Indianapolis and has been granted permission by the Colts to seek a trade.

I know the NFL now treats running backs like disposable parts. And finding a trade for Taylor that makes sense for Denver seems like a long shot.

But if your goal is to build a winning culture, I'm also certain about this: I would rather allocate \$13 million in salary for Taylor than Jeudy.

Want more sports news? Sign up for the Sports Omlette to get all our analysis on Denver's teams.

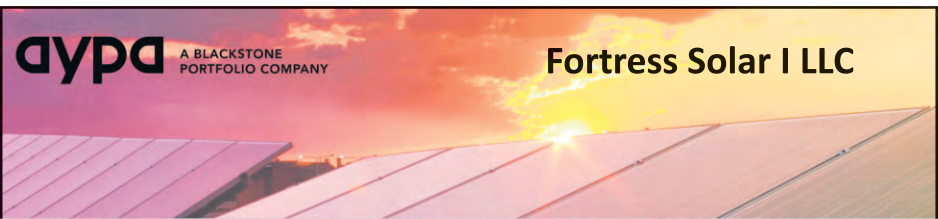
Prime-time television

SATURDAY EVENING AUGUST 26, 2023

Table with columns for time slots (7:00, 7:30, 8:00, 8:30, 9:00, 9:30, 10:00, 10:30, 11:00, 11:30) and rows for various TV channels (ABC, CBS, NBC, FOX, ION, etc.) listing their respective programs.

SATURDAY EVENING AUGUST 26, 2023

Table with columns for time slots (7:00, 7:30, 8:00, 8:30, 9:00, 9:30, 10:00, 10:30, 11:00, 11:30) and rows for various TV channels (ABC, CBS, NBC, FOX, ION, etc.) listing their respective programs.



aypa A BLACKSTONE PORTFOLIO COMPANY

Fortress Solar I LLC

MEETING NOTICE

Fortress Solar I LLC, a subsidiary of Aypa Power, is proposing to develop a multi-phased up to 600-megawatt solar facility and battery energy storage system project outside of Brush in Morgan County, Colorado.

WHAT: Fortress Solar Project - Public Outreach and Information Session

WHEN: Wednesday, September 6, 2023 4:00 p.m. to 6:00 p.m.

WHERE: The Course at Petteys Park 2301 West Mill Street Brush, CO 80723

Questions about the Project or this notice? Contact us! Charles Ndhlovu Project Development Manager



APPENDIX D-2: 9.23.23 FORT MORGAN TIMES NEWSPAPER ADVERTISEMENT PUBLICATION

MOVIES

Helen Mirren shines as Israeli prime minister during trying time in "Golda"

Biopic interested almost exclusively on Meir during Yom Kippur War By Mark Meszoros

By Mark Meszoros mmeszoros@news-herald.com

It's wonderful to see Helen Mirren taking on a meaty role into which she can sink her highly talented teeth.

In recent years, the acclaimed English actor has been spending some of her on-screen time bringing a little bit of class to movies in the "Fast and Furious" franchise. And last year she showed up in borderline-unwatchable DC Extended Universe affair "Shazam! Fury of the Gods."

Now, though, Mirren, who earned an Academy Award for her portrayal of Queen Elizabeth II in 2006's "The Queen," portrays another significant figure in the last several decades of world history.

"Golda" — a sturdy if not quite-stellar drama already in theaters in select markets and going wider this week — sees Mirren as Israeli Prime Minister Golda Meir, the only woman to hold the position.

With the help of excellent work from costume designer Sinéad Kidao ("Small Axe") and hair and makeup supervisor Karen Hartley Thomas ("The Courier"), Mirren all but disappears into the role. Her physical but delicate performance is the strongest element of this film from director Guy Nattiv and writer Nicholas Martin ("Florence Foster Jenkins").

Not a traditional biopic, "Golda" focuses on Meir



PHOTOS BY COURTESY OF BLEECKER STREET — SHIVHANS PICTURES Helen Mirren portrays a frequently smoking Golda Meir, Israel's only woman prime minister, in "Golda."



Camille Cottin, left, and Helen Mirren appear in a scene from "Golda."

during the roughly three weeks surrounding the Yom Kippur War in October 1973, when the combined forces of Egypt, Syria and Jordan attacked her country during its holiest day.

However, we are introduced to the film's Golda in 1974, as she is being driven to give testimony before the Agranat Commission, which is looking into the failure of Israel Defense Forces in the time leading up to the war. In what will be a common sight in the narrative to come, Gold works on a cigarette, putting it out in a full ashtray as she exits the vehicle.

"Golda" then takes us back to those hours before the attack, as intelligence suggests such an attack may be coming but some of her advisers aren't so sure.

As the story progresses, Golda will come to rely less on Minister of Defense Moshe Dayan (Rami Heuberger, "Schindler's List") and more on General David "Dado" Elazar (Lior Ashkenazi, "Big Bad Wolves"), chief of staff of the Israel Defense Forces. She is with the latter on more than one occasion as she absorbs often heartbreaking radio transmissions from the battlefield. We don't really see



Dvir Benedek, left, Lior Ashkenazi, Helen Mirren and Rami Heuberger appear in a scene from "Golda."



Helen Mirren, as Israeli Prime Minister Golda Meir, and Liev Schreiber, as U.S. Secretary of State Henry Kissinger, share a scene in "Golda."

any fighting in "Golda," but the titular character, in the hands of Mirren, is effective enough in reminding us about the horrors of war.

Behind the scenes, Golda relies on an assistant, Lou Kadar (Camille Cottin, "Call My Agent!"), as the leader fights the lymphoma that in 1978 will take her life. Kadar not only works to ensure she eats and helps her bathe, but she also forces Golda to leave her bed on a very important day when her pain is getting the best of her.

With apologies to Kadar, Heuberger and Ashkenazi, though, Mirren's strongest

scene partner in "Golda" is Liev Schreiber ("Ray Donovan," "Spotlight"), who portrays U.S. Secretary of State Henry Kissinger and who, like Mirren, virtually vanishes into the character. The small handful of exchanges between Golda and Henry, coming mostly over the phone but once face to face as Kissinger flies into Israel, are "Golda" as its most crackling. It's engrossing stuff as Golda works — at times more gently than at others — to get more support from her ally, who insists he is largely hamstrung by President Richard M. Nixon being consumed

'GOLDA' Where: Theaters. When: Sept. 1. Rated: PG-13 for thematic material and pervasive smoking. Runtime: 1 hour, 40 minutes. Stars (of four): 3.

with the Watergate scandal. Nattiv, whose directorial credits include "The Flood" (2002) and "Skin" (2018) and who was a 3-month-old in Tel Aviv on the night of the attack, brings a steady hand to "Golda. His is a less-is-more approach, which generally works, but considering the film is billed as a "ticking-clock thriller," you wouldn't mind a few more moments of the highly charged variety.

He seems to be more interested in a meditation on the fog of war, aided metaphorically by the regularly present visual of the cigarette smoke Golda generates. He is assisted in this endeavor by admirable work by director of photography Jasper Wolf ("Bodies Bodies Bodies") and production designer Arad Sawat ("Absentia"), who help achieve the film's stark look.

All of those cigarettes, as unhealthy as they are, bring a certain charm to Golda and "Golda." She even puffs away on a medical examination table, having been ushered secretly into a hospital by Lou and a few others, the doctor telling her that her condition has not worsened.

"But the cigarettes and the back coffee — you're making my job much harder," the doctor gently scolds her.

"And you mine," she responds.

When all that smoke clears, "Golda" stands as a worthwhile, if narrowly focused, portrait of the "Iron Lady of Israel."

Prime-time television

SATURDAY EVENING SEPTEMBER 2, 2023

Table with columns for time slots (7:00, 7:30, 8:00, 8:30, 9:00, 9:30, 10:00, 10:30, 11:00, 11:30) and rows for various TV channels (ABC, CBS, NBC, FOX, ION, A&E, AMC, ANIMAL, BET, BRAVO, CARTOON, CNN, COMEDY, DISCOVERY, ESPN, ESPN2, FOOD, FREEFORM, FX, HGTV, HISTORY, LIFETIME, MTV, NEWSNAT, NICK, PARMIT, SYFY, TBS, TCM, TLC, TNT, TRAVEL, TV LAND, USA, HBO, MAX, SHOW).

SUNDAY EVENING SEPTEMBER 3, 2023

Table with columns for time slots (7:00, 7:30, 8:00, 8:30, 9:00, 9:30, 10:00, 10:30, 11:00, 11:30) and rows for various TV channels (ABC, CBS, NBC, FOX, ION, A&E, AMC, ANIMAL, BET, BRAVO, CARTOON, CNN, COMEDY, DISCOVERY, ESPN, ESPN2, FOOD, FREEFORM, FX, HGTV, HISTORY, LIFETIME, MTV, NEWSNAT, NICK, PARMIT, SYFY, TBS, TCM, TLC, TNT, TRAVEL, TV LAND, USA, HBO, MAX, SHOW).

Advertisement for Fortress Solar I LLC, a subsidiary of Aypa Power. It features a large 'MEETING NOTICE' heading and text describing a multi-phased solar and battery energy storage project. Contact information for Charles Ndhlovu, Project Development Manager, is provided.

APPENDIX E-1: PUBLIC OUTREACH & INFORMATION SESSION DISPLAY BOARDS

Fortress Solar I LLC

Public Outreach and Information Session



The Course At Pettey's Park

2301 West Mill St, Brush

Morgan County, CO

September 6, 2023

4:00 – 6:00 P.M.

Fortress Solar I LLC is a subsidiary of Aypa Power (“Aypa”). Aypa is a Blackstone portfolio company



Development Pipeline:

70+ projects



Under Construction:

2 projects



Operating Fleet:

30 projects

Aypa has a proven track record of developing, financing, constructing, owning, and operating utility-scale renewable energy projects. Aypa Power’s existing portfolio and qualified development pipeline spans the continental United States and Ontario, Canada, including +15,000 MWs of projects in various stages of development

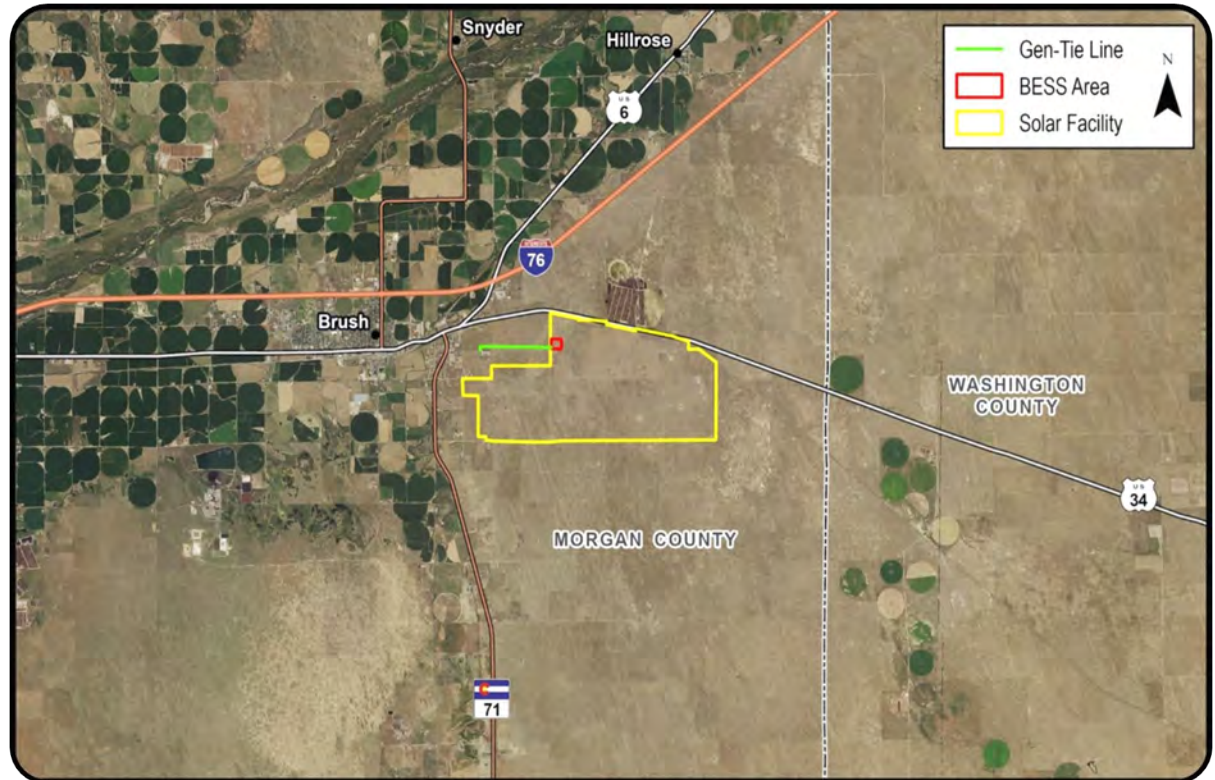


Project Location & Overview

The Fortress Solar Project's location is outside the city limits of Brush, in Morgan County, Colorado

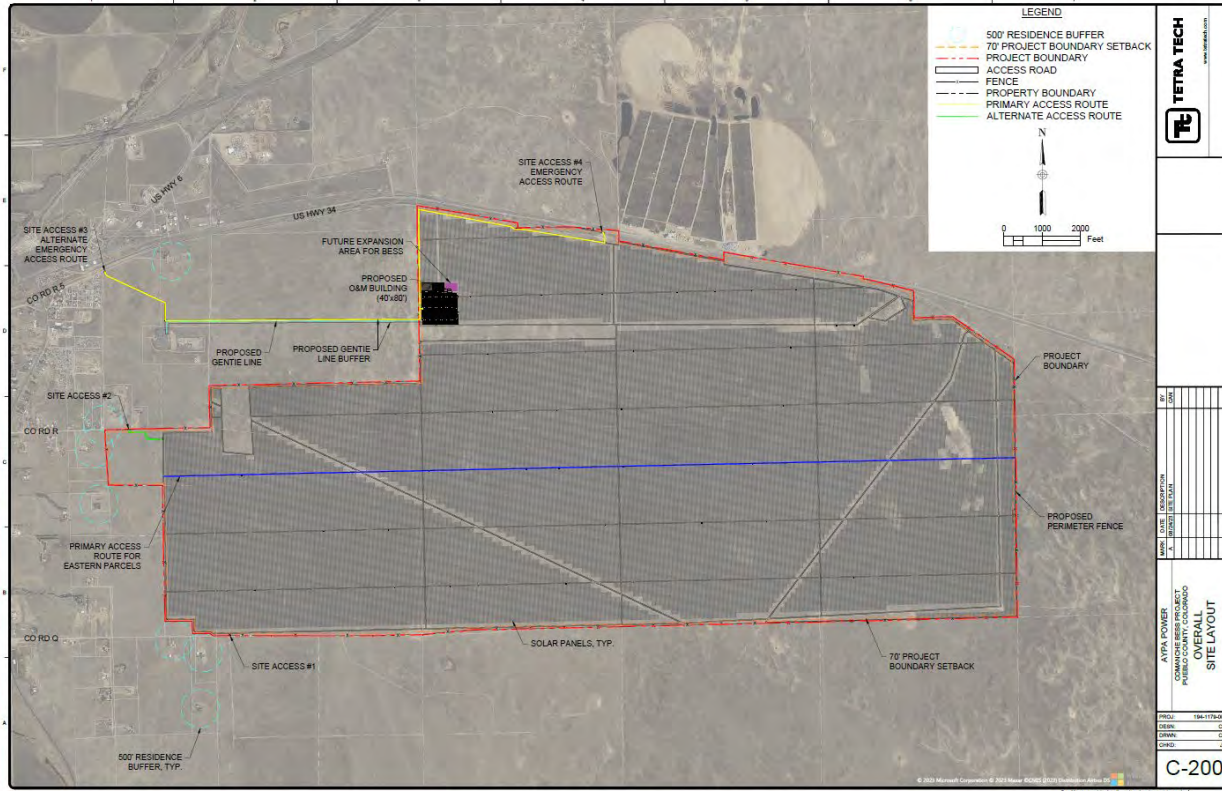
Location Highlights

- The designated zoning on the project footprint is rural agricultural/grazing
- Current land use is for livestock grazing
- Utility-scale solar and BESS are permitted with separate Special Use Permits (SUP)
- Proposed solar footprint is on ~4,000 acres of privately owned land
- There are no existing buildings within solar footprint
- Ideally located directly adjacent to utility-owned land hosting an electric substation and transmission infrastructure owned by three regional utilities



Preliminary Site Plan

Fortress Solar is an up to 600-megawatt solar and battery energy storage system project expected to be constructed in three phases of approximately 200 MW each



Site Plan Highlights

- Developing up to 600 MW solar over three, ca. 200 MW phases, each planned to be constructed from 2025 through 2028
- Total solar array area approximately ~4,000 acres of private land secured by the Project (includes solar arrays, inverters, roads, and ancillary facilities)
- Battery storage and substation facilities are located near area close to Tri State substation
- Gen-tie length ~1.3 miles over utility-owned land
- Primary access from US-HWY 34
- Project distance buffers and setbacks in accordance with Morgan County zoning ordinance

Landowners & Communities

- Renewable energy projects play a unique and crucial role in creating a cleaner, modern, and more dependable energy grid. They are needed to generate and store energy from carbon-free sources, help the grid operate more reliably, and provide extra grid capacity when the demand for energy is high, like hot summer days and cold winter nights
- Taxes paid on a state and local level stimulate economic growth and boost tax revenues
- Additional regional economic benefits, federal and state incentives, also benefit the Morgan County community. The project is estimated to create ~20 fulltime jobs over the project life



Federal, Regional, & Local Renewable Energy Goals & Objectives

Inflation Reduction Act of 2022
(potential federal tax credits)

Federal support for local climate change-related infrastructure

State of Colorado Goal of supplying 90% of its power from Clean Energy (carbon-free) by 2050

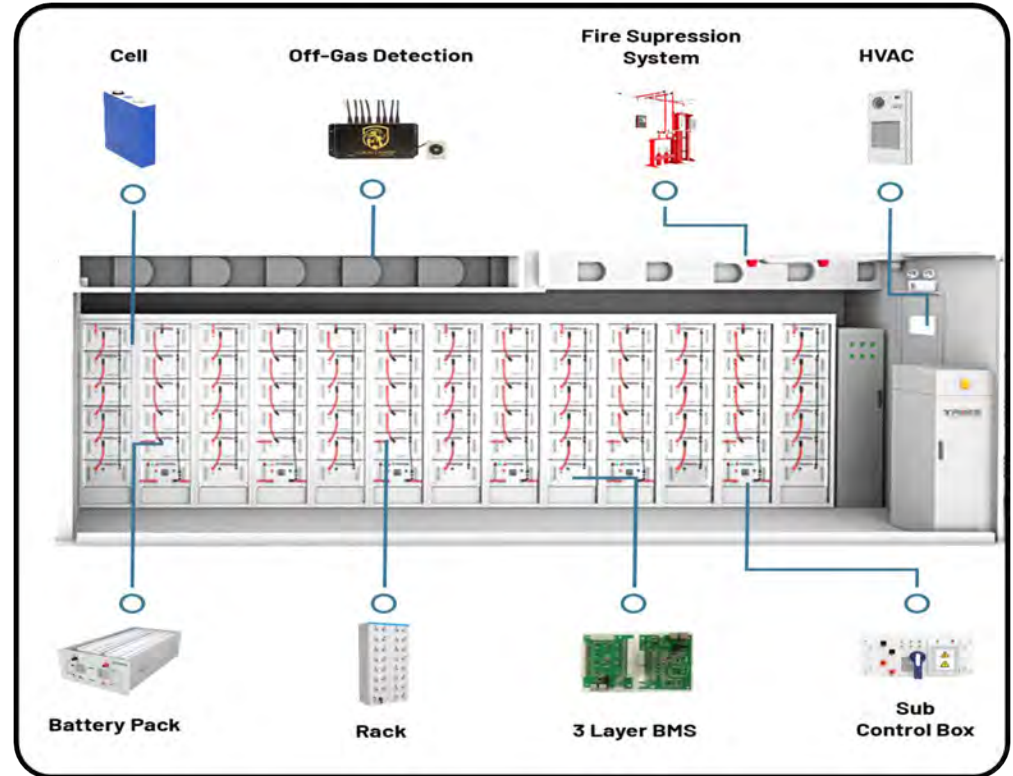
County has specific land use categorization for solar projects specifying the ability for projects to be sited accordingly

Typical BESS Containerized Units

BESS containers are a cost-effective, modular way to store energy, making it available when the consumer needs it

BESS Highlights

- Fire suppression system
- Thermal management
- Fault detection and isolation
- Emergency shut-off
- Industry leading safety certifications
- Encapsulation and containment
- Designed for transportation



Components Schematic – Safety, Protection, Fire Suppression, and Control

Project Lifecycle – Construction, Operations and Decommissioning

What is the estimated construction schedule?

Construction is expected to begin in Fall of 2025, with a duration of 22 months. Construction inconveniences such as dust generation, traffic and roads impacts will be mitigated to be as minimal

Will the project make noise?

Battery systems typically produce up to 85dB of noise from a 0 ft setback. This level is similar to dishwashers or indoor air-conditioning units and is only during periods of high charge / discharge during high temperature events. Given the buffer distance of the project from adjacent areas, it is very unlikely any noise will be audible

What are typical operation activities?

Regular operations include routine maintenance activities such, cleaning panels, checking connections, and replacing faulty components.

Will there be glare from the panels?

No. The Project was modeled on SGHAT Glare Gauge to evaluate the potential extent of any glare, and the results from 3 separate analyses did not show any major impacts upon nearby points of observation, vehicle routes, and airports

What is the decommissioning plan?

There will be periodic upgrades, replacements, and decommissioning and recycling of components at the end of their useful life. Aypa is responsible for removing and decommissioning the Project

Battery Energy Storage System (BESS) and Solar PV

What are solar racks and pile depths?

Solar racks are framework structures that hold solar panels in place and are designed to optimize panel angle for maximum sunlight exposure. The racks are attached to pile foundations inserted 6 to 10 feet into the ground

What are solar panels made of?

Panels are made of 99% polysilicon (similar to sand) and other metals. Faulty or broken panels would be replaced and recycled appropriately offsite

What type of batteries are you installing?

Our BESS systems are composed of lithium-ion batteries, like those used in consumer electronics, phones and electric vehicles

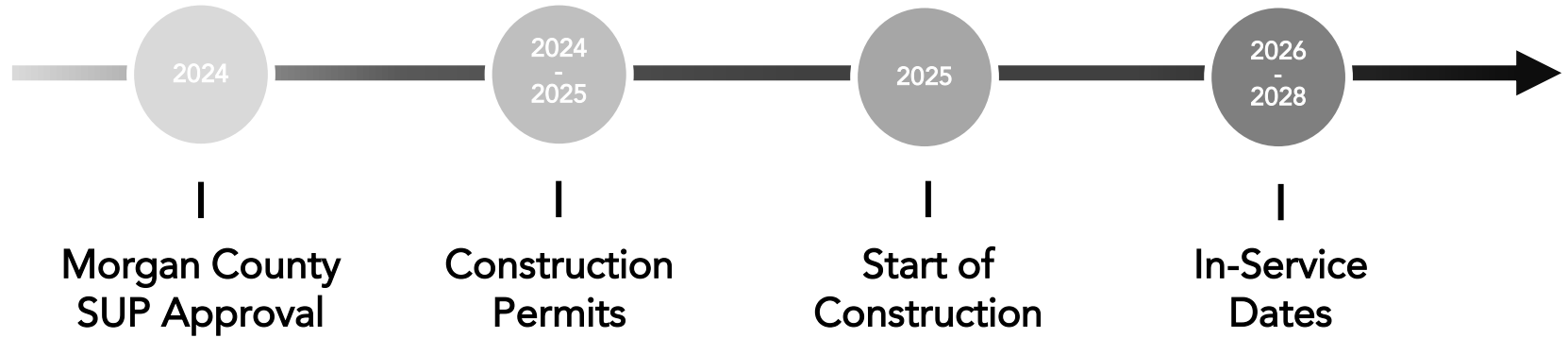
What do these systems look like, and how big are they?

Utility-scale BESS systems are housed in modular, metal containers that look like shipping containers. As a guideline, a 100 MW system can be hosted on 3 acres

Are there any fire risks?

The risk of fire is extremely low and further mitigated by the battery's design. All of our installations incorporate stringent safety features and meet the most current fire safety standards, such as NFPA 855, and UL9540

Anticipated Milestone Schedule



APPENDIX E-2: PUBLIC OUTREACH & INFORMATION SESSION SIGN IN SHEET

Name	Address	City, State, ZIP	Phone Number	Email Address
Tim Stutzman	19798 CR23	Ft. Morgan, CO		
Jim & Ruth Ann Odle	16218 Hwy 71	Brush, Co		
Carol Livengood	324 Howell Ave	Brush Co		
James Hastings		Brush, CO		
Devin Hase		Brush		
Stacie Smith	6971 CR 16 Fort Morgan	Ft Morgan		
John Prouty	133 Park St. Ft. Morgan, CO	Ft. Morgan		
Kristin Basil	1736 Eaton St	Brush, CO 80725		
Scott & Joyce Kembel	16750 Hwy 71	Brush, CO 80723		
Alison Gorrell	1 Princeton Ct	Brush, CO 80723		

Fortress Solar I Project

Public Outreach and Information Session

Wednesday, Sept. 6, 2023, 4:00 P.M. – 6:00 P.M.

The Course at Pettey's Park, 2301 West Mill Street, Brush, CO 80724

Page ____ of ____

Name	Address	City, State, ZIP	Phone Number	Email Address
Jim Stone	29798 42 nd Q	BRUSH		
Debra Beck Massey	17660 CL 29.6	Brush		
Helen Beck	1100 Linda St	# Morgan		
Jay & Betty Massey	17746 CL 29.6	Brush		
Tyler Purvis	600 Edison St	BRUSH!		

APPENDIX E-3: PUBLIC OUTREACH & INFORMATION SESSION PHOTOS

aypa

Preliminary Site

aypa

Site Plan Highlights

- Developing up to 600 MW solar over three phases of approximately 4,000 acres of private land secured by the Project (includes solar arrays, inverters, roads, and ancillary facilities).
- Total solar array area of approximately 4,000 acres of private land secured by the Project (includes solar arrays, inverters, roads, and ancillary facilities).
- Battery storage and substation facilities are located near area close to Tri State substation.
- Clear length - 1.3 miles over utility-owned land.
- Primary access from US HWY 34.
- Project distance buffers and setbacks in accordance with Morgan County Zoning ordinance.

aypa

Typical BESS Containerized Units

aypa

BESS containers are a cost-effective, modular way to store energy, making it available when the consumer needs it.

BESS Highlights

- Fire suppression system
- Thermal management
- Fault detection and isolation
- Emergency shut-off
- Industry leading safety certifications
- Encapsulation and containment
- Designed for transportation

Components Schematic: Safety, Protection, Fire Suppression, and Control

aypa

Project Benefits

Federal, Regional, & Local Renewable Energy Goals & Objectives

Landowners and Communities

- Renewable energy projects play a unique and crucial role in creating a cleaner, modern, and more resilient energy grid. They are needed to generate and store energy from carbon-free sources, help the grid operate more reliably, and provide extra grid capacity when the demand for energy is high, like hot summer days and cold winter nights.
- Have paid in a state and local level climate economy growth and local tax revenues.
- Additional regional economic benefits, federal and state incentives, also benefit the Morgan County community. The project is estimated to create ~20 full-time jobs over its life.

IRS
Inflation Reduction Act of 2022 (substantial federal tax credit)

Colorado
Federal support for local climate change-related infrastructure

Colorado
State of Colorado Goal of supplying 80% of its power from Clean Energy (carbon-free) by 2050

Morgan County
County has specific land use categorization for solar projects specifying the ability for projects to be sited accordingly

aypa

Frequently Asked Questions

Project Lifecycle - Construction, Operations and Decommissioning

Battery Energy Storage System

What is the estimated construction schedule?
Construction is expected to begin in Fall of 2025, with a duration of 22 months. Construction inconveniences such as dust generation, traffic and road impacts will be mitigated to be as minimal as possible.

Will the project make noise?
Battery systems typically produce up to 85dB of noise from a 0 ft setback. This level is similar to dishwashers or indoor air-conditioning units and is only during periods of high charge/discharge during high temperature events. Given the buffer distance of the project from adjacent areas, it is very unlikely any noise will be audible.

What are typical operations like?
Regular operations include routine maintenance activities such as cleaning panels, checking connections, and replacing faulty components.

Will there be glare from the panels?
No. The Project was modeled on SGHAT Glare Gauge to evaluate the potential extent of any glare, and the results from 3 separate analyses did not show any major impacts upon nearby points of observation, vehicle routes, and airports.

What is the decommissioning plan?
There will be periodic upgrades, replacements, and decommissioning and recycling of components at the end of their useful life. Ayapa is responsible for removing and decommissioning the Project.

What are solar racks and pile depths?
Solar racks are framework structures that are designed to optimize panel angle and exposure. The racks are attached to piles that are driven into the ground.

What are solar panels made of?
Panels are made of 99% polysilicon (silicon). Faulty or broken panels would be appropriately off-site.

What type of batteries are you installing?
Our BESS systems are composed of lithium-ion used in consumer electronics, phones, and laptops.

What do these systems look like, and how are they housed?
Utility-scale BESS systems are housed in containers that look like shipping containers. As a result, they can be hosted on 3 acres.

Are there any fire risks?
The risk of fire is extremely low and fully mitigated through design. All of our installations incorporate fire safety features and meet the most current fire codes (NFPA 855, and UL9540).

Anticipated M

Morgan County SUP Approval

Construct Permits



About Aypa Power
Aypa Power LLC is a subsidiary of Aypa Power ("Aypa"), Aypa is a subsidiary of Aypa Power LLC.
Development Objectives
Aypa Power LLC is a subsidiary of Aypa Power ("Aypa"), Aypa is a subsidiary of Aypa Power LLC.
Aypa Power LLC is a subsidiary of Aypa Power ("Aypa"), Aypa is a subsidiary of Aypa Power LLC.
Aypa Power LLC is a subsidiary of Aypa Power ("Aypa"), Aypa is a subsidiary of Aypa Power LLC.
Aypa Power LLC is a subsidiary of Aypa Power ("Aypa"), Aypa is a subsidiary of Aypa Power LLC.

Mission & Overview
Aypa Power LLC is a subsidiary of Aypa Power ("Aypa"), Aypa is a subsidiary of Aypa Power LLC.
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Preliminary Site Plan
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Anticipated Milestone Schedule
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Aypa Power LLC is a subsidiary of Aypa Power ("Aypa"), Aypa is a subsidiary of Aypa Power LLC.

Project Location & Overview aypa

The Fortessa Solar Project's location is outside the city limits of Brush, in Morgan County, Colorado. The Fortessa Solar is an up to 400-megawatt solar storage system project expected to be constructed in three phases of approximately 133, 133, and 134 MW. Construction is planned to start in 2023 and completed by 2025.

Location Highlights

- The proposed solar project is located on approximately 4,000 acres of agricultural land in Morgan County, Colorado.
- The project is located approximately 10 miles north of the city of Brush, Colorado.
- The project is located on approximately 10 miles north of the city of Brush, Colorado.

Preliminary Site Plan aypa

Site Plan Highlights

- Developing up to 400 MW solar storage system project expected to be constructed in three phases of approximately 133, 133, and 134 MW.
- Construction is planned to start in 2023 and completed by 2025.
- The project is located on approximately 4,000 acres of agricultural land in Morgan County, Colorado.
- The project is located approximately 10 miles north of the city of Brush, Colorado.

Typical BESS Containerized Units aypa

BESS containers are a cost-effective, modular way to store energy, making it available when the consumer needs it.

BESS Highlights

- Fire suppression system
- Thermal management
- Fast detection and isolation
- Emergency shut-off
- Industry leading safety certifications
- Transportation and containment
- Designed for transportation

Components: Battery Pack, Inverter, Control System, Safety, Protection, Fire Suppression, and Control

Project Benefits aypa

Federal, Regional, & Local Renewable Energy Goals & Objectives

IRS
Inflation Reduction Act of 2022 (potential federal tax credits)
Federal support for local climate change-related infrastructure

COLOrado
State of Colorado Goal of supplying 90% of its power from Clean Energy (carbon-free) by 2050

MORGAN
County has specific land use categorization for solar projects allowing the ability for projects to be sited accordingly

Frequently Asked Questions

Project Lifecycle - Construction

What is the estimated construction timeline?
Construction is expected to begin in Fall 2023 and is expected to be completed in 22 months. Construction inconveniences such as traffic and road impacts will be mitigated to the extent possible.

Will the project make noise?
Battery systems typically produce up to 85dB of sound. This level is similar to dishwashers or industrial fans and is only during periods of high charge/discharge events. Given the buffer distance of the adjacent areas, it is very unlikely any noise will be audible.

What are typical operations like?
Regular operations include routine maintenance activities such as cleaning panels, checking connections, and replacing failed components.

Will there be glare from the panels?
No. The Project was modeled on SGHAT Glare Gauge to evaluate the potential extent of any glare, and the results from 3 separate analyses did not show any major impacts upon nearby points of observation, vehicle routes, and airports.

What is the decommissioning plan?
There will be periodic upgrades, replacements, and decommissioning and recycling of components at the end of their useful life. Aypa is responsible for removing and decommissioning the Project.



About Aypa Power
Aypa Power is a subsidiary of Aypa Power ("Aypa"), a Delaware corporation.
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Project Plan
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Anticipated Milestone Schedule
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APPENDIX F: MORGAN COUNTY ECONOMIC DEVELOPMENT COMMITTEE NEWSLETTER



New Investors!

BIG SHOUTOUT TO OUR AMAZING NEW INVESTORS!
YOUR SUPPORT MEANS THE WORLD TO US!



&



Together, we're driving growth, innovation, and a prosperous future for our community.

Thank you for believing in our mission!

APPENDIX R: MAILING LIST OF LANDOWNERS WITHIN 1,320 FEET

NAME	CAREOF	ADDRESS1	ADDRESS2	CITY	STATE	ZIPCODE
FLYING BEE RANCH LLC			29382 CO RD R	BRUSH	CO	80723
DAVIS, DARBY			16520 HWY 71	BRUSH	CO	80723
BENOTTI, SHARI A			2420 THORNDON PARK CT	LEAGUE CITY	TX	77573
KEMBEL, JAMES S & JOYCE E			16750 HWY 71	BRUSH	CO	80723
WILLIAM, RODNEY D & KATHRYN L			29076 CO RD R	BRUSH	CO	80723
LAMBERT, CHAD & JILL			P O BOX 212	BRUSH	CO	80723
QUEEN, DOUG			P O BOX 731	BRUSH	CO	80723
IVIE, TRAVIS J & KENDRA J			P O BOX 711	BRUSH	CO	80723
MULLEN, GREGORY B & RONDA L			29464 CO RD Q	BRUSH	CO	80723
TRI-STATE GENERATION & TRANSMISSION ASSOCIATION	PROPERTY TAX DEPT - MARY JO HOWARD		P O BOX 33695	DENVER	CO	80233
BEAMAN, CINTHIA LYNN BRACK			15127 CAROLINE AVE	FORT LUPTON	CO	80621-4056
BELL, KEVIN R & STACY			415 ENSIGN ST	FORT MORGAN	CO	80701
PUBLIC SERVICE COMPANY OF COLORADO			P O BOX 1979	DENVER	CO	80201-1979
PETRINO, RICHARD G & JACQUIE E TRUSTS			5408 BARTOLOMEO ST	SARASOTA	FL	34238
CLIFT, BERT GARY & PENNY MAY & MASSEY, JEADIE WILLIAM JR & BETTY		HERNANDEZ, FREESIA JOY	17774 CO RD 29.6	BRUSH	CO	80723
BECK, WESLEY A			17746 CO RD 29.6	BRUSH	CO	80723
BECK, HELEN R & NLR LLC		BECK MASSEY, DEBORA L	17688 CO RD 29.6	BRUSH	CO	80723
HOLMES, PAUL RANDOLPH			17660 CO RD 29.6	BRUSH	CO	80723
GERTGE, BENNIE JO			385 ROAD WEST 90	OGALLALA	NE	69153
SERRANO, JOSE E & SCIANCALEPORE, MARGO LYNN			17717 CO RD 29.6	BRUSH	CO	80723
WILSON, DARBY J			17140 HWY 71	BRUSH	CO	80723
STANDING ROCK SANITATION SERVICE INC		TREVIZO-CASTRO, MARYBELL	17328 HWY 71	BRUSH	CO	80723
FIERRO-FRANCO, OMAR			P O BOX 643	BRUSH	CO	80723
MASSEY, BROOKS L			29501 CO RD R	BRUSH	CO	80723
ESKEW, ED & LAROYCE			P O BOX 170	MCLAUGHLIN	SD	57642
BELLIS, PEGGY ELIZABETH			17332 HWY 71	BRUSH	CO	80723
WILLIAM, RYAN & ERICA			17426 HWY 71	BRUSH	CO	80723
MCDONALD BROTHERS LLC			29171 CO RD R	BRUSH	CO	80723
ATWOOD, LOUIS G			29213 CO RD R	BRUSH	CO	80723
SCHWINDT, SAM JR & DEANNA			17342 HWY 71	BRUSH	CO	80723
MASSEY, KYLER B & JANESEA M			17384 HWY 71	BRUSH	CO	80723
ESKEW, DENNIS J & ANNISHIA M & CITY OF BRUSH		ESKEW, EDDIE DEAN & LA ROYCE P	29093 CO RD R	BRUSH	CO	80723
IT3 LAND & INVESTMENT LLC			P O BOX 363	BRUSH	CO	80723
3D RANCH INC			P O BOX 408	BRUSH	CO	80723
BAUGHMAN, KATHRYN A TRUST			12001 HWY 34	AKRON	CO	80720
DILLEY, VERNON & GWEN			4855 W COUGAR ROCK TRAIL	PRESCOTT	AZ	86305
ODLE, JAMES LEE & RUTH ANN			P O BOX 125	BRUSH	CO	80723-2308
DILLEY, LYNN R			16218 HWY 71	BRUSH	CO	80723-9436
KRAL, JOSEPH F III & JENNIFER L			P O BOX 803	BRUSH	CO	80723
DESLAURIERS, ROY			67 PRESERVE DR	FORT MORGAN	CO	80701
MELENDEZ, JAIME			29248 CO RD R	BRUSH	CO	80723
DEMMING, JUDD & CLARK, MONTE SHAWN & JIMI JEAN		MONTZ, LYNNE A	29250 CO RD R	BRUSH	CO	80723
STUTZMAN, TIMOTHY J & LANA J			29246 CO RD R	BRUSH	CO	80723
TRI-STATE GENERATION AND TRANSMISSION ASSN INC			29460 CO RD Q	BRUSH	CO	80723
BOOTH LAND & LIVESTOCK LLC			19798 CO RD 23	FORT MORGAN	CO	80701
STATE OF COLORADO		BOARD OF LAND COMMISSIONERS	1100 W 116TH AVE	WESTMINSTER	CO	80234
BASS, BRUCE B FAMILY LLLP			P O BOX 72	LUCERNE	CO	80646
BECK, MALLORY & MCLANE			1313 SHERMAN ST - RM 620	DENVER	CO	80203
SHAVER, WILLIAM P & LESLIE E			P O BOX 685	BRUSH	CO	807230685
SR INVESTMENTS LLC			315 LINCOLN ST	BRUSH	CO	80723
BOLINGER, AUSTIN MICHAEL			15949 CO RD 29.5	BRUSH	CO	80723
STONE, JAMES L & JUDY L			29458 CO RD Q	BRUSH	CO	80723
CHRISTENSEN, CLAIRE A			12001 US HWY 34	AKRON	CO	80720
ARTEAGA, URBANO & JUAN B & IMELDA G			P O BOX 351	BRUSH	CO	80723
MCINTOSH, SCOT C			P O BOX 994	BRUSH	CO	80723
GAYLE, ROBERT D & WENDY E			20125 CO RD 17	FORT MORGAN	CO	80701
DICK, RON			412 DESSA ST	BRUSH	CO	80723
			29994 CO RD Q	BRUSH	CO	80723
			29874 CO RD Q	BRUSH	CO	80723

| BOARD OF COUNTY COMMISSIONERS 9:00 A.M. | MARCH 12, 2024 |
FORTRESS SOLAR & BESS I, II, & III

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MORGAN COUNTY PLANNING AND BUILDING DEPARTMENT

February 14, 2024

Fortress Solar II, LLC
11801 Domain Blvd, Suite 450
Austin, TX 78758
Sent via email:

Dear Applicant:

Your Application for a Special Use Permit will go to review and decision by the Board of County Commissioners. The hearing for the Board of Commissioners will be held on **March 12th, 2024 at 9:00 A.M.**

As per Section 2-390(B), notification sign postings need to occur no later than 10 days prior to each hearing and photographs accompanied by an affidavit to our office no later than 5 days prior to each hearing. One sign facing each public right-of-way adjacent to the property is required. The county will provide three signs, it is up to you to post them. When you come to pick up the signs we will go over placement.

Board of County Commissioners sign notice dates: **Posted by March 1st, 2024**
Pictures and Affidavit by March 7th, 2024

We will have the sign ready to be picked up in our office on **February 23rd, 2024.**

It is necessary that you be present at the hearing to answer any questions the Board of County Commissioners may have. Do not hesitate to contact us at any time if you have questions.

Sincerely,

Nicole Hay

Nicole Hay
Planning Administrator

FILE SUMMARY



**MORGAN COUNTY
PLANNING AND ZONING DEPARTMENT**

**MORGAN COUNTY BOARD OF COUNTY COMMISSIONERS
FILE SUMMARY**

March 8, 2024

Hearing date – March 12, 2024

**APPLICANTS: Fortress Solar I, LLC, Fortress Solar II, LLC and Fortress Solar III, LLC
OWNERS: Ruth Ann Odle and Shari A. Benotti**

These applications are for Special Use Permits for the activities described below. The applicants are requesting six special use permits, representing the three phases of the entire build out of project. Each phase will consist of one solar collector facility and one battery energy storage system (BESS). Due to the relationship between the six applications and overlapping evaluation of site conditions which are common between applications, the Board of County Commissioners will conduct one public hearing for six applications, but each application must be evaluated separately under the applicable criteria and will require separate action by motion by the Board.

Fortress Solar I Energy Collector Facility

The applicant, Fortress Solar I, LLC, proposes a solar collector facility within a 1,305-acre project area. The facility will consist of photovoltaic (PV) panels, inverters and associated transformers, underground electric collection lines and/or above ground cabling, access roads, a project substation, security fencing, exterior lighting, an operations and maintenance building, and an approximate 1-1/4 mile generation tie (gen-tie) line connecting the solar collector facility to the point of interconnection. The applicant has also requested waivers of the setback requirements for several interior property lines and several rights-of-way along section lines.

This facility will have a maximum power output of 200 MWac. The project area is located in a part of Sections 5, 6, 7, and 8, Township 3 North, Range 55 West, and a part of Sections 1 and 12, Township 3 North, Range 56 West of the 6th PM, Morgan County, Colorado. The project area is zoned Agriculture Production and is located in the Brush Fire District.

Fortress Solar I Battery Energy Storage System (BESS)

The applicant, Fortress Solar I, LLC, proposes a BESS within an approximate 7 acre project area. The BESS will be sited on a concrete pad. Vegetation within the BESS site will be removed and weed management plans will be prepared prior to the start of construction and following construction. The perimeter will be surrounded by security fence.

This facility will have a capacity of up to 800 MWhrs (a maximum power output of 200 MWac). The project area is located in a part of Section 5, Township 3 North, Range 55 West of the 6th PM, Morgan

County, Colorado. The project area is zoned Agriculture Production and is located in the Brush Fire District.

Fortress Solar II Energy Collector Facility

The applicant, Fortress Solar II, LLC, proposes a solar collector facility within a 1,439-acre project area. The facility will consist of photovoltaic (PV) panels, inverters and associated transformers, underground electric collection lines and/or above ground cabling, access roads, a project substation, security fencing, exterior lighting, an operations and maintenance building, and a generation tie (gen-tie) line connecting the solar collector facility to the point of interconnection. The applicant has also requested waivers of the setback requirements for several interior property lines and several rights-of-way along section lines.

This facility will have a maximum power output of 200 MWac. The project area is located in a part of Sections 3, 4, 5, and 8, Township 3 North, Range 55 West and a part of Section 32, Township 4 North, Range 55 West of the 6th PM, Morgan County, Colorado. The project area is zoned Agriculture Production and is located in the Brush Fire District.

Fortress Solar II Battery Energy Storage System (BESS)

The applicant, Fortress Solar II, LLC, proposes a BESS within an approximate 7 acre project area. The BESS will be sited on a concrete pad. Vegetation within the BESS site will be removed and weed management plans will be prepared prior to the start of construction and following construction. The perimeter will be surrounded by security fence.

The facility will have a capacity of up to 800 MWhrs (a maximum power output of 200 MWac). The project area is located in a part of Section 5, Township 3 North, Range 55 West of the 6th PM, Morgan County, Colorado. The project area is zoned Agriculture Production and is located in the Brush Fire District.

Fortress Solar III Energy Collector Facility

The applicant, Fortress Solar III, LLC, proposes a solar collector facility within a 1,325-acre project area. The facility will consist of photovoltaic (PV) panels, inverters and associated transformers, underground electric collection lines and/or above ground cabling, access roads, a project substation, security fencing, exterior lighting, an operations and maintenance building, and a generation tie (gen-tie) line connecting the solar collector facility to the point of interconnection. The applicant has also requested waivers of the setback requirements for several interior property lines and several rights-of-way along section lines.

The facility will have a maximum power output of 200 MWac. The project area is located in a part of Sections 3, 9, and 10, Township 3 North, Range 55 West of the 6th PM, Morgan County, Colorado. The project area is zoned Agriculture Production and is located in the Brush Fire District.

Fortress Solar III Battery Energy Storage System (BESS)

The applicant, Fortress Solar III, LLC, proposes a BESS within an approximate 7 acre project area. The BESS will be sited on a concrete pad. Vegetation within the BESS site will be removed and weed management plans will be prepared prior to the start of construction and following construction. The perimeter will be surrounded by security fence.

The facility will have a capacity of up to 800 MWhrs (a maximum power output of 200 MWac). The project area is located in a part of Section 5, Township 3 North, Range 55 West of the 6th PM, Morgan County, Colorado. The project area is zoned Agriculture Production and is located in the Brush Fire District.

Referral Responses

In addition to the permit applications, packets include responses from CDOT, BNSF Railway, City of Brush, Xcel Energy, WAPA, Division of Water Resources, Colorado Parks and Wildlife, and Morgan County Road & Bridge Department.

Property Interests and Easements

The applicants have no direct rights to use the properties for the purposes requested through the applications. The applicants' parent subsidiary entity has options to obtain the necessary property rights to the properties. To address this issue, staff is recommending a condition that the applicants must demonstrate requisite ownership or possession of the property prior to commencement of construction.

A utility easement is intended to be established for the proposed gen-tie line to interconnect to the Tri-State Story Substation west of the project and will be located over Tri-State property.

Brush Airport

The Brush Municipal Airport is less than a mile from the project area. The FAA Obstruction Evaluation Notice Criteria Tool (FAA 2022b) was used for 4 locations in the project area. Due to the proximity to the Brush Municipal airport, it was determined the project exceeds the notice criteria and a notice will be filed with the FAA at least 45 days prior to the start of construction. Once the FAA has completed an aeronautical study, a determination is issued regarding the impact to air navigation.

Drainage Plans

Matt Harris with Harris Engineering Consultants, Inc., the County's consulting engineer, reviewed the preliminary Hydrologic and Hydraulic Report, preliminary Water and Wind Erosion Control Plan, and associated preliminary site plan. He recommends the applicants submit additional information regarding the location and magnitude of offsite discharges as part of the final drainage plans submitted prior to construction. While the applicants represent that natural depressions on the property will be used to collect stormwater runoff, this method may result in significant ponding. To further refine site inundation depths and define potential "no-build" areas on the site plan, field infiltration tests are recommended as per Section 3.4.2 of the drainage study.

Haul Routes

Although all six applications reference County Road R.5 as a requested route, the applicant has confirmed it should be County Road R.6. The haul route map (figure 3) shows the correct location of County Road R.6, but is labeled incorrectly.

The applicants propose that the primary haul route and route for construction deliveries will be provided via County Road Q and will build a new 20 foot wide gravel road beyond the eastern terminus of County Road Q. The primary access for operations and construction commuter vehicles will be provided from County Road R.6 and the applicants will build a 20 foot wide gravel road beyond the eastern terminus of County Road R.6. This access will also be designated as the primary emergency vehicle access. A third access point for operations and construction commuter vehicles will be provided via County Road R and the applicants will build a 20 foot wide gravel road beyond the eastern terminus of County Road R. See Figure 3. A tire washout station will be installed at the entrance from County Road Q to reduce track out. See Appendix A-8.

The applicants have provided a detailed summary of haul routes and anticipate traffic numbers. See Memo from Tetra Tech to Morgan County Road & Bridge Department, dated December 11, 2023.

Planning Commission Meeting

A Planning Commission hearing was held on February 12, 2024, where the Commissioners heard from the Applicant's representative and the public.

The Planning Commission recommended approval to the County Commissioners of the Fortress Solar I Energy Collector Facility with the recommended conditions on a vote of 5 in favor and 1 opposed.

The Planning Commission recommended approval to the County Commissioners of the Fortress Solar I Battery Energy Storage System with the recommended conditions on a vote of 5 in favor and 1 opposed.

The Planning Commission recommended approval to the County Commissioners of the Fortress Solar II Energy Collector Facility with the recommended conditions on a vote of 5 in favor and 1 opposed.

The Planning Commission recommended approval to the County Commissioners of the Fortress Solar II Battery Energy Storage System with the recommended conditions on a vote of 5 in favor and 1 opposed.

The Planning Commission recommended approval to the County Commissioners of the Fortress Solar III Energy Collector Facility with the recommended conditions on a vote of 5 in favor and 1 opposed.

The Planning Commission recommended approval to the County Commissioners of the Fortress Solar III Battery Energy Storage System with the recommended conditions on a vote of 5 in favor and 1 opposed.

Updated Haul Route Information and Review by HDR

The County's third party consultant, HDR Engineering, made a site visit to review the conditions of the 3 county roads (Q, R and R.6). A memo from HDR with recommendations is included in the packet.

Three proposed options for road improvements are listed in HDR's memo. Morgan County Road & Bridge Department favors option 3 which includes the paving of County Road Q and upgrading County Road R to granular surface. If the Board of County Commissioners decide to require one of the options, condition number i for the solar applications will need to be updated.

Reducing the site access to 2 routes is recommended, utilizing County Road R for emergency and commuter traffic, and County Road Q for construction purposes. Access via County Road R.6 would be eliminated. The Planning Department has reached out to the Morgan County Ambulance Service, Morgan County Sheriff's Office, the Office of Emergency Management, the City of Brush and both the Brush Fire Chief and Assistant Chief regarding the use of County Road R. 6 and R for emergency access to the site. The Brush Fire Assistant Chief prefers the use of County Road R over using R.6 for emergency use and the other agencies/departments concur. If the Board of County Commissioners want to eliminate R.6, an additional condition will need to be added to any approval.

Additional Referrals and Information Received After Planning Commission Hearing

Additional referral responses were received from Tri-State Generation and Transmission Association, Inc. and Morgan County Conservation District.

The Applicant also provided an update on Community Contributions and ongoing initiatives.

Criteria for Evaluation

In reviewing these applications, the Planning Commission and Board of County Commissioners are required to make a finding that the criteria for granting a Use by Special Review in Section 2-395 of the Morgan County Zoning Regulations have been satisfied. In addition, the County shall consider whether each application for a solar collector facility complies with the requirements of the Solar Collector Regulations and each BESS complies with the requirements of the BESS Regulations in Zoning Regulations.

Section 2-395 Special Use Permit Criteria:

- A. The use and its location as proposed are in conformance with the Morgan County Comprehensive Plan. The property is located in the southeast planning area.

Chapter 2 – Plan Summary

2.II.A - Economic Development

Goal – Diversify the economy in Morgan County to broaden business employment opportunities for residents and to further economic growth.

All six projects would provide economic benefit to Morgan County through increased revenues to the county and school district tax bases through the taxation of the projects. To the extent possible the operator will seek to hire local contractors throughout construction and the life of the project.

Chapter 4 – Economic Development

Goal – Encourage the location of new industry and the expansion of existing businesses that will provide employment opportunities and increase the tax base to strengthen the economy of Morgan County.

Policy 10. Contribute to the Colorado New Energy Economy; work to attract and maintain renewable energy projects to capture this.

Chapter 5 - Environment

IX-Environmental Resources and Hazards Plan

Goal - To preserve the manmade and natural environment in order to enhance the quality of life in Morgan County.

All six projects will not impact wetlands or floodplains and will avoid adverse impacts on plant and wildlife species. These projects will encourage the use of renewable resources and production of electric power.

- B. The application documents are complete and present a clear picture of how uses are to be arranged on the site or within Morgan County.
- C. The Site Plan conforms to the district design standards of Section 2-420 and Section 4-820 of the Morgan County Zoning Regulations.
- D. All on and off-site impacts have been satisfactorily mitigated either through agreement, public improvements, site plan requirements or other mitigation measures.

The applications will both have short-term impacts to off-site areas during construction and long-term impacts to off-site areas during the life of the project related to the use of County Roads. The level of impacts during construction and after construction is completed are likely differ in degree.

The off-site impacts during construction and the life of the property will need to be addressed by the Applicants. The execution of Road Use Agreement, as required by the Morgan County Zoning Regulations, is a proposed condition for approval. In addition, after receiving HDR's memo, Morgan County Road & Bridge agrees with the elimination of County Road R.6 as an access road and favors option 3 which includes the paving of County Road Q and upgrading County Road R to granular surface. Any necessary improvements to the access roads shall be constructed by the applicant and shall be governed by a public improvement agreement executed by the appropriate applicant(s). This issue is addressed in the recommended conditions in this staff report.

Once construction is completed, the glare report indicates no glare will impact neighboring properties.

Best management practices (BMP) will be implemented to protect newly established vegetation for Storm Water Management and Erosion Control.

- E. The special use proposed has been made compatible with the surrounding uses and adequately buffered as determined by the County.

The closest residence to the project area will meet the required setback of 500 feet. The residence is near the southwest corner of Fortress Solar I. The parcels adjacent to the facility are zoned Agricultural Production District and are pastureland.

- F. The special use poses only the minimum amount of risk to the public health, safety and welfare as set by either federal, state or county regulation, whichever is strictest.

Granting the Special Use Permits will not increase risk to public health, safety, or welfare.

- G. The special use proposed is not planned to be developed on a non-conforming parcel.

All six projects are located on conforming parcels.

- H. The applicant has adequately documented a public need for the project, all pertinent technical information, adequate financial resources to implement it, and has paid all fees and review costs levied by the County for application processing and review.

The general purpose of all phases is to maximize energy production from available solar resources to deliver renewable electricity to the bulk power transmission system to serve the needs of electric utilities and their customers.

- I. For any special use requiring a supply of water for human consumption that the applicant has demonstrated a source of water which is adequate for the proposed use in terms of quantity, quality, and reliability. For any special use which does not require a supply of water for human consumption, an adequate source of water for the proposed use in terms of quantity and reliability must be obtained prior to commencement of the use.

All six phases are expected to require a supply of water both during construction and operation phases. Water for the project will be sourced from wells located on the property. If offsite water is required, water will be transported by truck to be stored in an onsite water tank and/or cisterns. DWR has provided a referral response and the wells on the property may not be permitted for the uses contemplated by the applicants. The applicants will be required pursuant to the criteria above in the Morgan County Zoning Regulations to obtain an appropriate supply of water prior to construction.

The following conditions are recommended for the special use permits:

1. Fortress Solar I Collector Facility Conditions

- a. Fortress Solar I, LLC must demonstrate ownership or possession of the property prior to commencement of construction. Fortress Solar I, LLC can demonstrate satisfaction with this condition through vested title in its name, or a lease or other agreement directly with the property owner allowing the permitted use to be conducted on the property.
- b. All necessary land use, environmental, and construction permits, approvals and authorizations will be obtained prior to the start of and during construction as required and may include, but are not limited to, land use permits, right-of-way (ROW) permits, road use agreements, access permits, oversize/overweight permits, grading permits, stormwater permits, and a FAA air navigation impact determination.
- c. All necessary plans, reports, permits, and certificates will be submitted prior to issuance of any building permit associated with the solar collector facility and may include, but are not limited to, interconnection/crossing agreements, final drainage & erosion control plan, signed and sealed geotechnical report, decommissioning plan, operations and maintenance plan, Liability Insurance Certificate, final locations for any laydown yard, a copy of the APEN issued by the Colorado Department of Public Health and Environment, Unanticipated Discovery plan, and an adequate supply of water.
- d. Fortress Solar I, LLC will comply with the proposed decommissioning plan, any modifications/deviations from the proposed plan must be approved by the County. The County must be notified in writing when Fortress Solar I, LLC commences decommissioning.
- e. Any building greater than 120 sq. ft. will require a building permit.
- f. No poles shall exceed a height of 100 feet. Any poles that exceed this height will require prior approval from the County, upon a showing by Fortress Solar I, LLC that such height is necessary. Such additional height may be approved by the County Planning Administrator upon application and request from Fortress Solar I, LLC. The County Planning Administrator may request any additional information necessary to determine whether approval should be granted.
- g. The substation and solar collector facility shall be enclosed by a security fence and be secured at all times. Emergency services must have access at all times.
- h. Prior the commencement of construction, Fortress Solar I, LLC will enter into a road use agreement for the use of any public road during construction. The agreement shall include the following:
 - i. A designated haul route or routes, subject to approval by the Morgan County Road & Bridge Department. A map showing the designated haul route to be used during construction.
 - ii. A pre-construction baseline inventory of County roads on the designated haul route or routes to be used during construction to document their pre-construction condition, obtained by and paid for by the applicant.

- iii. A mitigation plan to address traffic congestion, control, and potential impacts to County roads on the designated haul route. The mitigation plan shall also include any dust mitigation activities.
- iv. A requirement that the applicant is to return any County roads to their pre-construction baseline condition.
- v. A requirement to post financial security in an amount not less than one hundred fifteen percent (115%) of the estimated cost to complete all road restoration, in the form of an irrevocable letter of credit or cash escrow. Cost estimates shall be provided by a licensed Colorado engineer. Upon preliminary acceptance of the restored public road, the County shall release all but fifteen percent (15%) of total actual costs of restoration of the public roads, so long as Fortress Solar I, LLC are not in default of any provision of the road use agreement. The County shall inspect the restored roads and Fortress Solar I, LLC shall pay to the County the cost incurred by the County in conducting such inspections. These costs shall be due and payable upon demand of the County. Fortress Solar I, LLC shall be responsible for correcting or properly completing the restoration.
- vi. The residual fifteen percent (15%) retained by the County shall act as security for Fortress Solar I, LLC's guarantee that the restoration remains free of defect during a two-year warranty period. Fortress Solar I, LLC may at any time during the preliminary acceptance or warranty period offer to provide a substitute or supplemental form of financial security to that security as originally posted with and/or retained by the County. The County may accept substitute or supplemental forms of security in its sole discretion.
- i. Fortress Solar I, LLC shall make all necessary improvements to the access roads prior to commencement of construction. Fortress Solar I, LLC shall be required to submit road specifications as required by the County Road & Bridge Department detailing the improvements. Such specifications will be reviewed and approved by the County and its consultants as necessary. Once such specifications are approved by the County, Fortress Solar I, LLC shall be required to enter into a public improvement agreement, which at a minimum will require the posting of adequate security to ensure the improvements are completed in conformity with the approved specifications and a warranty period from preliminary acceptance for all improvements. Such public improvement agreement may be combined with the required road use agreement.
- j. Prior to the commencement of construction, Fortress Solar I, LLC must obtain all proper permissions from landowners to use private roads or develop access roads on any private property. No private access roads, new or currently in use, shall become public rights of way unless approved and accepted by the Board of County Commissioners.
- k. The County will require written notice for all staging or laydown areas, or other temporary areas for construction or repair activities ("Temporary Areas") utilized after final construction is completed. Fortress Solar I, LLC must provide a map showing the Temporary Area by size (acreage and perimeter), a list of materials and equipment to be stored on the Temporary Areas, activities within the area (e.g., grading, storage, etc.), the length of time the temporary construction or staging or laydown areas will be in use and must notify the County at least thirty (30) days prior to the use of the temporary area. It shall be a condition that all equipment and materials must be removed from the Temporary Areas and the area returned to a condition similar to its condition prior to construction. No permanent structures may remain in the Temporary Areas unless approved by the County pursuant to the applicable Morgan County Zoning Regulations.

- l. The project area shall be reclaimed and/or reseeded as soon as practicable but no later than six months after Fortress Solar I, LLC has completed construction, unless the County Planning Administrator grants an extension for demonstrated good cause.
- m. Construction occurring within ¼ quarter mile of any residence shall not commence earlier than 7 a.m.
- n. Fortress Solar I, LLC shall prevent the existence of any nuisances by way of its construction activities. All trash, litter, construction waste and any potentially hazardous materials shall be disposed of properly off-site. If the County determines that a nuisance exists and the nuisance is not abated or an abatement plan is not submitted to the satisfaction of the County, the County may, upon thirty (30) days' notice, undertake such abatement and lien the property for the costs of the abatement. Such abatement shall not be deemed to limit any other enforcement rights of the County.
- o. Fortress Solar I, LLC shall comply with all applicable law and regulations related to safety and emergency management during construction and on-going operations.
- p. Fortress Solar I, LLC shall be responsible for the payment of all costs and fees incurred by the County associated with this Permit. The County shall invoice Fortress Solar I, LLC for costs and fees and payment will be due by Fortress Solar I, LLC within thirty (30) days of the date of the invoice. Failure to pay may result in enforcement actions by the County.

2. Fortress Solar I BESS Facility Conditions

- a. Fortress Solar I, LLC must demonstrate ownership or possession of the property prior to commencement of construction. Fortress Solar I, LLC can demonstrate satisfaction with this condition through vested title in its name, or a lease or other agreement directly with the property owner allowing the permitted use to be conducted on the property.
- b. All necessary land use, environmental, and construction permits, approvals and authorizations will be obtained prior to the start of and during construction as required and may include, but are not limited to, land use permits, right-of-way (ROW) permits, road use agreements, access permits, oversize/overweight permits, grading permits, stormwater permits, and a FAA air navigation impact determination.
- c. All necessary plans, reports, permits, and certificates will be submitted prior to issuance of any building permit associated with the BESS facility and may include, but are not limited to, Electrical Diagram, final equipment specification sheet, contact information, maintenance plan, final drainage plan, decommissioning plan, emergency operation plan, and Liability Insurance Certificate, and an adequate supply of water.
- d. Fortress Solar I, LLC will comply with the proposed decommissioning plan, any modifications/deviations from the proposed plan must be approved by the County. The County must be notified in writing when the Applicant commences decommissioning.
- e. Any building greater than 120 sq. ft. will require a building permit.
- f. The BESS shall be enclosed by a security fence and be secured at all times. Emergency services must have access at all times.

- g. Prior to the commencement of construction, Fortress Solar I, LLC must obtain all proper permissions from landowners to use private roads or develop access roads on any private property. No private access roads, new or currently in use, shall become public rights of way unless approved and accepted by the Board of County Commissioners.
- h. The County may require that the road use agreement for the associated solar collector facility in Phase I govern any road impacts related to the construction of the BESS or require a separate road use agreement. In addition, for any public improvements to roads required for Phase 1 of the project for the associated solar collector facility, the County may require that the public improvement agreement govern public improvements for the construction of the BESS or require a separate public improvement agreement.
- i. The County will require written notice for all staging or laydown areas, or other temporary areas for construction or repair activities (“Temporary Areas”) utilized after final construction is completed. Fortress Solar I, LLC must provide a map showing the Temporary Area by size (acreage and perimeter), a list of materials and equipment to be stored on the Temporary Areas, activities within the area (e.g., grading, storage, etc.), the length of time the temporary construction or staging or laydown areas will be in use and must notify the County at least thirty (30) days prior to the use of the temporary area. It shall be a condition that all equipment and materials must be removed from the Temporary Areas and the area returned to a condition similar to its condition prior to construction. No permanent structures may remain in the Temporary Areas unless approved by the County pursuant to the applicable Morgan County Zoning Regulations.
- j. The project area shall be reclaimed and/or reseeded as soon as practicable but no later than six months after Fortress Solar I, LLC has completed construction, unless the County Planning Administrator grants an extension for demonstrated good cause.
- k. Construction occurring within ¼ quarter mile of any residence shall not commence earlier than 7 a.m.
- l. Fortress Solar I, LLC shall prevent the existence of any nuisances by way of its construction activities. All trash, litter, construction waste and any potentially hazardous materials shall be disposed of properly off-site. If the County determines that a nuisance exists and the nuisance is not abated or an abatement plan is not submitted to the satisfaction of the County, the County may, upon thirty (30) days' notice, undertake such abatement and lien the property for the costs of the abatement. Such abatement shall not be deemed to limit any other enforcement rights of the County.
- m. Fortress Solar I, LLC shall comply with all applicable law and regulations related to safety and emergency management during construction and on-going operations.
- n. Fortress Solar I, LLC shall be responsible for the payment of all costs and fees incurred by the County associated with this Permit. The County shall invoice Fortress Solar I, LLC for costs and fees and payment will be due by Fortress Solar I, LLC within thirty (30) days of the date of the invoice. Failure to pay may result in enforcement actions by the County.

3. Fortress Solar II Collector Facility Conditions

- a. Fortress Solar II, LLC must demonstrate ownership or possession of the property prior to commencement of construction. Fortress Solar II, LLC can demonstrate satisfaction with this condition through vested title in its name, or a lease or other agreement directly with the property owner allowing the permitted use to be conducted on the property.
- b. All necessary land use, environmental, and construction permits, approvals and authorizations will be obtained prior to the start of and during construction as required and may include, but are not limited to, land use permits, right-of-way (ROW) permits, road use agreements, access permits, oversize/overweight permits, grading permits, stormwater permits, and a FAA air navigation impact determination.
- c. All necessary plans, reports, permits, and certificates will be submitted prior to issuance of any building permit associated with the solar collector facility and may include, but are not limited to, interconnection/crossing agreements, final drainage & erosion control plan, signed and sealed geotechnical report, decommissioning plan, operations and maintenance plan, Liability Insurance Certificate, final locations for any laydown yard, a copy of the APEN issued by the Colorado Department of Public Health and Environment, Unanticipated Discovery plan, and an adequate supply of water.
- d. Fortress Solar II, LLC will comply with the proposed decommissioning plan, any modifications/deviations from the proposed plan must be approved by the County. The County must be notified in writing when Fortress Solar II, LLC commences decommissioning.
- e. Any building greater than 120 sq. ft. will require a building permit.
- f. No poles shall exceed a height of 100 feet. Any poles that exceed this height will require prior approval from the County, upon a showing by Fortress Solar II, LLC that such height is necessary. Such additional height may be approved by the County Planning Administrator upon application and request from Fortress Solar II, LLC. The County Planning Administrator may request any additional information necessary to determine whether approval should be granted.
- g. The substation and solar collector facility shall be enclosed by a security fence and be secured at all times. Emergency services must have access at all times.
- h. Prior the commencement of construction, Fortress Solar II, LLC will enter into a road use agreement for the use of any public road during construction. The agreement shall include the following:
 - i. A designated haul route or routes, subject to approval by the Morgan County Road & Bridge Department. A map showing the designated haul route to be used during construction.
 - ii. A pre-construction baseline inventory of County roads on the designated haul route or routes to be used during construction to document their pre-construction condition, obtained by and paid for by the applicant.
 - iii. A mitigation plan to address traffic congestion, control, and potential impacts to County roads on the designated haul route. The mitigation plan shall also include any dust mitigation activities.

- iv. A requirement that the applicant is to return any County roads to their pre-construction baseline condition.
- v. A requirement to post financial security in an amount not less than one hundred fifteen percent (115%) of the estimated cost to complete all road restoration, in the form of an irrevocable letter of credit or cash escrow. Cost estimates shall be provided by a licensed Colorado engineer. Upon preliminary acceptance of the restored public road, the County shall release all but fifteen percent (15%) of total actual costs of restoration of the public roads, so long as Fortress Solar II, LLC are not in default of any provision of the road use agreement. The County shall inspect the restored roads and Fortress Solar II, LLC shall pay to the County the cost incurred by the County in conducting such inspections. These costs shall be due and payable upon demand of the County. Fortress Solar II, LLC shall be responsible for correcting or properly completing the restoration.
- vi. The residual fifteen percent (15%) retained by the County shall act as security for Fortress Solar II, LLC's guarantee that the restoration remains free of defect during a two-year warranty period. Fortress Solar II, LLC may at any time during the preliminary acceptance or warranty period offer to provide a substitute or supplemental form of financial security to that security as originally posted with and/or retained by the County. The County may accept substitute or supplemental forms of security in its sole discretion.
- i. Fortress Solar II, LLC shall make all necessary improvements to the access roads prior to commencement of construction. Fortress Solar II, LLC shall be required to submit road specifications as required by the County Road & Bridge Department detailing the improvements. Such specifications will be reviewed and approved by the County and its consultants as necessary. Once such specifications are approved by the County, Fortress Solar II, LLC shall be required to enter into a public improvement agreement, which at a minimum will require the posting of adequate security to ensure the improvements are completed in conformity with the approved specifications and a warranty period from preliminary acceptance for all improvements. Such public improvement agreement may be combined with the required road use agreement.
- j. Prior to the commencement of construction, Fortress Solar II, LLC must obtain all proper permissions from landowners to use private roads or develop access roads on any private property. No private access roads, new or currently in use, shall become public rights of way unless approved and accepted by the Board of County Commissioners.
- k. The County will require written notice for all staging or laydown areas, or other temporary areas for construction or repair activities ("Temporary Areas") utilized after final construction is completed. Fortress Solar II, LLC must provide a map showing the Temporary Area by size (acreage and perimeter), a list of materials and equipment to be stored on the Temporary Areas, activities within the area (e.g., grading, storage, etc.), the length of time the temporary construction or staging or laydown areas will be in use and must notify the County at least thirty (30) days prior to the use of the temporary area. It shall be a condition that all equipment and materials must be removed from the Temporary Areas and the area returned to a condition similar to its condition prior to construction. No permanent structures may remain in the Temporary Areas unless approved by the County pursuant to the applicable Morgan County Zoning Regulations.

- l. The project area shall be reclaimed and/or reseeded as soon as practicable but no later than six months after Fortress Solar II, LLC has completed construction, unless the County Planning Administrator grants an extension for demonstrated good cause.
- m. Construction occurring within ¼ quarter mile of any residence shall not commence earlier than 7 a.m.
- n. Fortress Solar II, LLC shall prevent the existence of any nuisances by way of its construction activities. All trash, litter, construction waste and any potentially hazardous materials shall be disposed of properly off-site. If the County determines that a nuisance exists and the nuisance is not abated or an abatement plan is not submitted to the satisfaction of the County, the County may, upon thirty (30) days' notice, undertake such abatement and lien the property for the costs of the abatement. Such abatement shall not be deemed to limit any other enforcement rights of the County.
- o. Fortress Solar II, LLC shall comply with all applicable law and regulations related to safety and emergency management during construction and on-going operations.
- p. Fortress Solar II, LLC shall be responsible for the payment of all costs and fees incurred by the County associated with this Permit. The County shall invoice Fortress Solar II, LLC for costs and fees and payment will be due by Fortress Solar II, LLC within thirty (30) days of the date of the invoice. Failure to pay may result in enforcement actions by the County.

4. Fortress Solar II BESS Facility Conditions

- a. Fortress Solar II, LLC must demonstrate ownership or possession of the property prior to commencement of construction. The applicant can demonstrate satisfaction with this condition through vested title in its name, or a lease or other agreement directly with the property owner allowing the permitted use to be conducted on the property.
- b. All necessary land use, environmental, and construction permits, approvals and authorizations will be obtained prior to the start of and during construction as required and may include, but are not limited to, land use permits, right-of-way (ROW) permits, road use agreements, access permits, oversize/overweight permits, grading permits, stormwater permits, and a FAA air navigation impact determination.
- c. All necessary plans, reports, permits, and certificates will be submitted prior to issuance of any building permit associated with the BESS facility and may include, but are not limited to, Electrical Diagram, final equipment specification sheet, contact information, maintenance plan, final drainage plan, decommissioning plan, emergency operation plan, and Liability Insurance Certificate, and an adequate supply of water.
- d. Fortress Solar II, LLC will comply with the proposed decommissioning plan, any modifications/deviations from the proposed plan must be approved by the County. The County must be notified in writing when Fortress Solar II, LLC commences decommissioning.
- e. Any building greater than 120 sq. ft. will require a building permit.
- f. The BESS shall be enclosed by a security fence and be secured at all times. Emergency services must have access at all times.

- g. Prior to the commencement of construction, Fortress Solar II, LLC must obtain all proper permissions from landowners to use private roads or develop access roads on any private property. No private access roads, new or currently in use, shall become public rights of way unless approved and accepted by the Board of County Commissioners.
- h. The County may require that the road use agreement for the associated solar collector facility in Phase II govern any road impacts related to the construction of the BESS or require a separate road use agreement. In addition, for any public improvements to roads required for Phase 1 of the project for the associated solar collector facility, the County may require that the public improvement agreement govern public improvements for the construction of the BESS or require a separate public improvement agreement.
- i. The County will require written notice for all staging or laydown areas, or other temporary areas for construction or repair activities (“Temporary Areas”) utilized after final construction is completed. Fortress Solar II, LLC must provide a map showing the Temporary Area by size (acreage and perimeter), a list of materials and equipment to be stored on the Temporary Areas, activities within the area (e.g., grading, storage, etc.), the length of time the temporary construction or staging or laydown areas will be in use and must notify the County at least thirty (30) days prior to the use of the temporary area. It shall be a condition that all equipment and materials must be removed from the Temporary Areas and the area returned to a condition similar to its condition prior to construction. No permanent structures may remain in the Temporary Areas unless approved by the County pursuant to the applicable Morgan County Zoning Regulations.
- j. The project area shall be reclaimed and/or reseeded as soon as practicable but no later than six months after Fortress Solar II, LLC has completed construction, unless the County Planning Administrator grants an extension for demonstrated good cause.
- k. Construction occurring within ¼ quarter mile of any residence shall not commence earlier than 7 a.m.
- l. Fortress Solar II, LLC shall prevent the existence of any nuisances by way of its construction activities. All trash, litter, construction waste and any potentially hazardous materials shall be disposed of properly off-site. If the County determines that a nuisance exists and the nuisance is not abated or an abatement plan is not submitted to the satisfaction of the County, the County may, upon thirty (30) days' notice, undertake such abatement and lien the property for the costs of the abatement. Such abatement shall not be deemed to limit any other enforcement rights of the County.
- m. Fortress Solar II, LLC shall comply with all applicable law and regulations related to safety and emergency management during construction and on-going operations.
- n. Fortress Solar II, LLC shall be responsible for the payment of all costs and fees incurred by the County associated with this Permit. The County shall invoice Fortress Solar II, LLC for costs and fees and payment will be due by Fortress Solar II, LLC within thirty (30) days of the date of the invoice. Failure to pay may result in enforcement actions by the County.

5. Fortress Solar III Collector Facility Conditions

- a. Fortress Solar III, LLC must demonstrate ownership or possession of the property prior to commencement of construction. Fortress Solar III, LLC can demonstrate satisfaction with this

condition through vested title in its name, or a lease or other agreement directly with the property owner allowing the permitted use to be conducted on the property.

- b. All necessary land use, environmental, and construction permits, approvals and authorizations will be obtained prior to the start of and during construction as required and may include, but are not limited to, land use permits, right-of-way (ROW) permits, road use agreements, access permits, oversize/overweight permits, grading permits, stormwater permits, and a FAA air navigation impact determination.
- c. All necessary plans, reports, permits, and certificates will be submitted prior to issuance of any building permit associated with the solar collector facility and may include, but are not limited to, interconnection/crossing agreements, final drainage & erosion control plan, signed and sealed geotechnical report, decommissioning plan, operations and maintenance plan, Liability Insurance Certificate, final locations for any laydown yard, a copy of the APEN issued by the Colorado Department of Public Health and Environment, Unanticipated Discovery plan, and an adequate supply of water.
- d. Fortress Solar III, LLC will comply with the proposed decommissioning plan, any modifications/deviations from the proposed plan must be approved by the County. The County must be notified in writing when the Applicant commences decommissioning.
- e. Any building greater than 120 sq. ft. will require a building permit.
- f. No poles shall exceed a height of 100 feet. Any poles that exceed this height will require prior approval from the County, upon a showing by Fortress Solar III, LLC that such height is necessary. Such additional height may be approved by the County Planning Administrator upon application and request from Fortress Solar III, LLC. The County Planning Administrator may request any additional information necessary to determine whether approval should be granted.
- g. The substation and solar collector facility shall be enclosed by a security fence and be secured at all times. Emergency services must have access at all times.
- h. Prior the commencement of construction, Fortress Solar III, LLC will enter into a road use agreement for the use of any public road during construction. The agreement shall include the following:
 - i. A designated haul route or routes, subject to approval by the Morgan County Road & Bridge Department. A map showing the designated haul route to be used during construction.
 - ii. A pre-construction baseline inventory of County roads on the designated haul route or routes to be used during construction to document their pre-construction condition, obtained by and paid for by the applicant.
 - iii. A mitigation plan to address traffic congestion, control, and potential impacts to County roads on the designated haul route. The mitigation plan shall also include any dust mitigation activities.
 - iv. A requirement that the applicant is to return any County roads to their pre-construction baseline condition.

- v. A requirement to post financial security in an amount not less than one hundred fifteen percent (115%) of the estimated cost to complete all road restoration, in the form of an irrevocable letter of credit or cash escrow. Cost estimates shall be provided by a licensed Colorado engineer. Upon preliminary acceptance of the restored public road, the County shall release all but fifteen percent (15%) of total actual costs of restoration of the public roads, so long as Fortress Solar III, LLC are not in default of any provision of the road use agreement. The County shall inspect the restored roads and Fortress Solar III, LLC shall pay to the County the cost incurred by the County in conducting such inspections. These costs shall be due and payable upon demand of the County. Fortress Solar III, LLC shall be responsible for correcting or properly completing the restoration.
- vi. The residual fifteen percent (15%) retained by the County shall act as security for Fortress Solar III, LLC's guarantee that the restoration remains free of defect during a two-year warranty period. Fortress Solar III, LLC may at any time during the preliminary acceptance or warranty period offer to provide a substitute or supplemental form of financial security to that security as originally posted with and/or retained by the County. The County may accept substitute or supplemental forms of security in its sole discretion.
- i. Fortress Solar III, LLC shall make all necessary improvements to the access roads prior to commencement of construction. Fortress Solar III, LLC shall be required to submit road specifications as required by the County Road & Bridge Department detailing the improvements. Such specifications will be reviewed and approved by the County and its consultants as necessary. Once such specifications are approved by the County, Fortress Solar III, LLC shall be required to enter into a public improvement agreement, which at a minimum will require the posting of adequate security to ensure the improvements are completed in conformity with the approved specifications and a warranty period from preliminary acceptance for all improvements. Such public improvement agreement may be combined with the required road use agreement.
- j. Prior to the commencement of construction, Fortress Solar III, LLC must obtain all proper permissions from landowners to use private roads or develop access roads on any private property. No private access roads, new or currently in use, shall become public rights of way unless approved and accepted by the Board of County Commissioners.
- k. The County will require written notice for all staging or laydown areas, or other temporary areas for construction or repair activities ("Temporary Areas") utilized after final construction is completed. Fortress Solar III, LLC must provide a map showing the Temporary Area by size (acreage and perimeter), a list of materials and equipment to be stored on the Temporary Areas, activities within the area (e.g., grading, storage, etc.), the length of time the temporary construction or staging or laydown areas will be in use and must notify the County at least thirty (30) days prior to the use of the temporary area. It shall be a condition that all equipment and materials must be removed from the Temporary Areas and the area returned to a condition similar to its condition prior to construction. No permanent structures may remain in the Temporary Areas unless approved by the County pursuant to the applicable Morgan County Zoning Regulations.
- l. The project area shall be reclaimed and/or reseeded as soon as practicable but no later than six months after Fortress Solar III, LLC has completed construction, unless the County Planning Administrator grants an extension for demonstrated good cause.
- m. Construction occurring within ¼ quarter mile of any residence shall not commence earlier than 7 a.m.

- n. Fortress Solar III, LLC shall prevent the existence of any nuisances by way of its construction activities. All trash, litter, construction waste and any potentially hazardous materials shall be disposed of properly off-site. If the County determines that a nuisance exists and the nuisance is not abated or an abatement plan is not submitted to the satisfaction of the County, the County may, upon thirty (30) days' notice, undertake such abatement and lien the property for the costs of the abatement. Such abatement shall not be deemed to limit any other enforcement rights of the County.
- o. Fortress Solar III, LLC shall comply with all applicable law and regulations related to safety and emergency management during construction and on-going operations.
- p. Fortress Solar III, LLC shall be responsible for the payment of all costs and fees incurred by the County associated with this Permit. The County shall invoice Fortress Solar III, LLC for costs and fees and payment will be due by Fortress Solar III, LLC within thirty (30) days of the date of the invoice. Failure to pay may result in enforcement actions by the County.

6. Fortress Solar III BESS Facility Conditions

- a. Fortress Solar III, LLC must demonstrate ownership or possession of the property prior to commencement of construction. Fortress Solar III, LLC can demonstrate satisfaction with this condition through vested title in its name, or a lease or other agreement directly with the property owner allowing the permitted use to be conducted on the property.
- b. All necessary land use, environmental, and construction permits, approvals and authorizations will be obtained prior to the start of and during construction as required and may include, but are not limited to, land use permits, right-of-way (ROW) permits, road use agreements, access permits, oversize/overweight permits, grading permits, stormwater permits, and a FAA air navigation impact determination.
- c. All necessary plans, reports, permits, and certificates will be submitted prior to issuance of any building permit associated with the BESS facility and may include, but are not limited to, Electrical Diagram, final equipment specification sheet, contact information, maintenance plan, final drainage plan, decommissioning plan, emergency operation plan, and Liability Insurance Certificate, and an adequate supply of water.
- d. Fortress Solar III, LLC will comply with the proposed decommissioning plan, any modifications/deviations from the proposed plan must be approved by the County. The County must be notified in writing when the Applicant commences decommissioning.
- e. Any building greater than 120 sq. ft. will require a building permit.
- f. The BESS shall be enclosed by a security fence and be secured at all times. Emergency services must have access at all times.
- g. Prior to the commencement of construction, Fortress Solar III, LLC must obtain all proper permissions from landowners to use private roads or develop access roads on any private property. No private access roads, new or currently in use, shall become public rights of way unless approved and accepted by the Board of County Commissioners.
- h. The County may require that the road use agreement for the associated solar collector facility in Phase III govern any road impacts related to the construction of the BESS or require a

separate road use agreement. In addition, for any public improvements to roads required for Phase 1 of the project for the associated solar collector facility, the County may require that the public improvement agreement govern public improvements for the construction of the BESS or require a separate public improvement agreement.

- i. The County will require written notice for all staging or laydown areas, or other temporary areas for construction or repair activities (“Temporary Areas”) utilized after final construction is completed. Fortress Solar III, LLC must provide a map showing the Temporary Area by size (acreage and perimeter), a list of materials and equipment to be stored on the Temporary Areas, activities within the area (e.g., grading, storage, etc.), the length of time the temporary construction or staging or laydown areas will be in use and must notify the County at least thirty (30) days prior to the use of the temporary area. It shall be a condition that all equipment and materials must be removed from the Temporary Areas and the area returned to a condition similar to its condition prior to construction. No permanent structures may remain in the Temporary Areas unless approved by the County pursuant to the applicable Morgan County Zoning Regulations.
- j. The project area shall be reclaimed and/or reseeded as soon as practicable but no later than six months after Fortress Solar III, LLC has completed construction, unless the County Planning Administrator grants an extension for demonstrated good cause.
- k. Construction occurring within ¼ quarter mile of any residence shall not commence earlier than 7 a.m.
- l. Fortress Solar III, LLC shall prevent the existence of any nuisances by way of its construction activities. All trash, litter, construction waste and any potentially hazardous materials shall be disposed of properly off-site. If the County determines that a nuisance exists and the nuisance is not abated or an abatement plan is not submitted to the satisfaction of the County, the County may, upon thirty (30) days' notice, undertake such abatement and lien the property for the costs of the abatement. Such abatement shall not be deemed to limit any other enforcement rights of the County.
- m. Fortress Solar III, LLC shall comply with all applicable law and regulations related to safety and emergency management during construction and on-going operations.
- n. Fortress Solar III, LLC shall be responsible for the payment of all costs and fees incurred by the County associated with this Permit. The County shall invoice Fortress Solar III, LLC for costs and fees and payment will be due by Fortress Solar III, LLC within thirty (30) days of the date of the invoice. Failure to pay may result in enforcement actions by the County.

As per Sections 4-845 and 4-880 of the Morgan County Zoning Regulations, Fortress Solar I, LLC, Fortress Solar II, LLC, and Fortress Solar III, LLC are also requesting approval of the three year renewals for all six applications. The extension to a total of 6 years is being requested to accommodate the long lead time required to move through the interconnection processes and complete construction on a utility-scale project.

Nicole Hay,
Morgan County Planning Administrator

CONSULTANTS

Harris Engineering Consultants, Inc.

HDR, Inc.

February 05, 2024

Ms. Nicole Hay
Morgan County Planning & Zoning Department
231 Ensign Street
Fort Morgan, CO 80701

Re: Hydrologic and Hydraulic Analyses
Fortress Solar

I have reviewed the documentation that you provided for the proposed Fortress Solar site located southeast of Brush, including the *Hydrologic and Hydraulic Report* [drainage study], *Water and Wind Erosion Control Plan*, *Special Use Permit Application* [SUPA] and associated preliminary site plans.

First off, I would echo the comment provided in the BNSF's review, namely, a concern arising from the vague statement provided in Section 4.6 of the drainage study declaring that stormwater management basins will be used to control stormwater discharging offsite onto adjacent property. I would be curious to know where and at what magnitude these offsite discharges are. However, it is understood that the preliminary drainage study was meant to inform future detailed design of the site and that the stormwater control structures referenced will no doubt be defined as the engineering and site design progresses. I would recommend that the County require the applicant to submit these details as they become available so that they may be reviewed.

It is understood that natural depressions will be preserved to collect stormwater runoff and allow it to infiltrate onsite. Per Figure 4-7 in the drainage study, some of these depressions are sizable and may result in significant ponding (the figure seems to indicate up to 11 feet in depth for the 100-year event). I would be curious whether the applicant intends to pursue any field infiltration tests, recommended in Section 3.4.2 of the drainage study, to further refine site inundation depths and define potential 'no-build' areas on the site plan.

Please feel free to contact me with any questions or concerns, or if I may provide further assistance.

Sincerely,



Matthew C. Harris, PE
CO PE #49409



02/05/24



March 8, 2024

Nicole Hay, Planning Administrator
Morgan County Planning and Zoning Development Department
231 Ensign Street
Fort Morgan, CO 80701

RE: Recommendations for Next Steps Regarding Fortress Solar and Battery Energy Storage System

Nicole – Please see below for our recommended steps regarding impacts to your roads potentially serving as access points to the Fortress Solar and Battery Energy Storage System.

Introduction and Background:

Morgan County was recently approached by Fortress Solar to seek various access routes for the Fortress Solar and Battery Energy Storage System (BESS) Project. This includes three potential access points: County Roads Q, County Road R, and County Road R.6. Fortress Solar has requested two of the three driveway access permits (for County Roads R and Q), while Tri State has applied for one of the three driveway access permits (for County Road R.6).

It is important to note that initially, there was a misunderstanding between the use of County Road R.6, versus County Road R.5, and its access to the proposed Fortress Solar and BESS Project site. Fortress Solar originally noted County Road R.5 as the proposed access route, when in fact it is County Road R.6 that would be the proposed access route, to the north side of residential subdivision, as opposed to the actual County Road R.5, which is to the south of the residential subdivision. This has since been resolved and this memo confirms that Fortress Solar is proposing actual County Road R.6 as an access route, not County Road R.5.

Further, as part of the County's application requirements, Tetra Tech performed a traffic study on the estimated traffic information for the three proposed driveway access locations. Further, it should be noted that another development project is planned for south of County Road Q, known as Windy Hill, and Windy Hill recently completed an updated traffic impact and road condition study for County Road Q.

Based on these traffic studies, it was still unclear what impact construction might have to the condition and structural integrity of these county roads as well as if continuing to maintain these roads as dirt roads was appropriate. As such, the County sought HDR's guidance to better understand proposed impacts and provide recommendations the County should take to avoid any adverse effects to its county roads. This memo summarizes HDR's recommended options, key considerations, and next steps for the County.



Reduction to Two Access Routes:

Reducing the site access routes to two is recommended, utilizing County Road R for emergency and commuter traffic, and County Road Q for construction purposes. The excess of three routes appears unnecessary, as it spreads impacts over a larger area. Moreover, eliminating access via County Road R.6 would mitigate impacts on the residential neighborhood during peak hours. Although Tetra Tech notes a minimal difference in length between access from County Road R.6 and County Road R, less than a mile, particularly for emergency services, this point remains subjective and warrants further discussion with emergency services for a final recommendation.

Proposed Options Forward:

Assuming route access is reduced to two access points, County Road R and County Road Q, the County should then consider various options to improve the current state of these two roads to properly handle construction and post-construction traffic to the Fortress Solar and BESS Project site. These options assumes County Road R.6 would not be an access point for this project and that County Road R would be approved, by emergency services, for the primary emergency access point.

Option 1 – Pavement County Road R and Monitor County Road Q Throughout

Construction:

Option 1 proposes paving County Road R while monitoring County Road Q throughout the construction process. Paving County Road R would offer enhanced durability, as it currently serves as maintenance access for the City of Brush. This upgrade would also address expected drainage issues due to increase of construction and commuter traffic. Meanwhile, monitoring County Road Q, although it will require constant oversight due to its dirt surface, aligns with Fortress Solar's commitment to regular maintenance during construction, as outlined by the Tetra Tech's report.

Option 2 – Pavement County Road Q and Monitor County Road R Throughout

Construction:

Option 2 suggests upgrading County Road Q to pavement and monitoring County Road R during construction. Upgrading County Road Q to pavement would provide a durable surface for main construction and site access post-construction, supported by Tetra Tech's Pavement Design Report for County Road Q, and address access issues for the proposed Windy Hill project. This upgrade would also correct drainage issues due to increase of construction and commuter traffic. Meanwhile, monitoring County Road R during construction ensures timely adjustments and aligns with Fortress Solar's maintenance commitments, as outlined by the Tetra Tech's report.

Option 3 – Pavement County Road Q and Upgrade County Road R to Granular Surface:

Option 3 proposes a comprehensive approach by upgrading County Road Q to pavement while upgrading County Road R to gravel. Paving County Road Q provides a durable surface for construction traffic and addresses drainage issues, supported by Tetra Tech's Pavement Design Report for County Road Q. This upgrade also caters to the access requirements of the proposed Windy Hill project.



Meanwhile, upgrading County Road R to a granular surface enhances its durability and maintenance accessibility, requiring less maintenance commitment from Fortress Solar and addressing drainage issues due to the proposed increase of construction and commuter traffic.

All options would require at least some additional treatment improvements, with the need for a geotechnical report similar to the Windy Hill Pavement Design Report, if County Road R is to be paved. Further, revisiting and updating the 2016 report would be necessary for paving County Road Q. Survey and design would also be required to address drainage issues, especially if roads are to be paved.

Additionally, there is a do-nothing option the County could consider, leaving the roads as they are. However, this may not be an appealing option for the County despite Fortress Solar's commitment to regular maintenance, as noted in the December 11 Tetra Tech report, due to the expected increase of both commuter and construction traffic.

Key Considerations

To ensure effective road access planning for the Fortress Solar and BESS Project, the County should consider the following steps:

Actions the County should take to help the County decide their best course of action:

- Conduct an evaluation to assess emergency access viability between County Roads R.6 and R, determining if County Road R alone would suffice.
- Evaluate the status of other development projects like Windy Hill, which may influence decisions regarding road paving, particularly County Road Q.
- Consider the traffic dynamics during construction versus post-construction/operation, especially in relation to regular commuter traffic to the Fortress Solar and BESS Project site, potentially leading to the paving of specific roads.
- Consider conducting an independent traffic count for comparison with Tetra Tech's findings, ensuring a comprehensive understanding of traffic implications.

Actions the County should take, once the County's preferred course of action is determined:

- Address potential mitigation efforts if roads remain unpaved or non-granular, including drainage implications and maintenance coverage by Fortress Solar.
- Conduct a drainage survey and mitigation plan to any roads not being converted to pavement.
- Conduct pre-construction and post-construction surveys, including detailed geolocated photos of the access routes both before and after construction, to accurately assess condition changes. This should include surveying the access roads in their current state (as dirt roads), once any pre-construction treatments are applied (e.g., if any roads are paved), and post-construction.



Next Steps:

Moving forward, it's important to determine the most suitable option for the County and conduct the necessary evaluations to confirm this decision. This includes confirming the emergency access point and assessing which option aligns best with County priorities, considering factors such as the Windy Hill project, the City of Brush's utilization of County Road R, and post-construction operational requirements for the Fortress and BESS Project.

Additionally, HDR is available for further discussions with the County to explore available options and provide recommendations. We're here to offer clarification and address any additional concerns the County may have, so please feel free to reach out to us with any questions or inquiries regarding these comments.

Respectfully,

Chris Senesi and Jason Reichart

March 8, 2024

Attn: Nicole Hay, Planning Director
Cheryl Brindisi, Planning Technician
Morgan County Planning and Zoning

CC: Chris Senesi and Jason Reichart
HDR

**Re: Special Use Application- Fortress Solar and BESS – Advancement with Option 3 for Access Routes:
Response to HDR's Recommendations and Stakeholder Engagements**

Following the HDR memo dated March 5, 2024, and in preparation for the Board of County Commissioners (BOCC) hearing on March 12, 2024, we are aligning our strategies to optimize the Fortress Solar and BESS Project access routes. We acknowledge the complexities of the Special Use Permit (SUP) process and the necessity of a decisive plan that respects both project goals and community interests.

Key Points of Our Proposal:

- HDR's Recommendations: We have evaluated HDR's advice on narrowing down access points and road improvement options, favoring Option 3 for its balanced approach to durability, safety, and minimized residential impact.

Community and Emergency Services Engagement

- Our recent community meeting on March 7, 2024, at Sands Theatre, evidenced by the attached sign-in sheet, alongside consultations with the Police Department, confirmed a broad support for Option 3. The preference from the community and the endorsement from the Police Department's Commander highlight the option's viability and alignment with public safety priorities.

Technical and Strategic Justification for Option 3:

- Minimized Residential Disruption: Choosing R for emergency and commuter traffic over R.6, with improvements on both County Road Q and R, aligns with stakeholder preferences.
- Infrastructure Upgrade: Paving County Road Q and enhancing County Road R to a granular surface will support the anticipated traffic flow, ensuring long-term road usability and safety.

We aim for a resolution that not only addresses the immediate requirements of our project but also serves the community's best interests. Our commitment to a collaborative approach with Morgan County, HDR, and all stakeholders remains unwavering as we approach the BOCC hearing.

Best regards,

Charles Ndhlovu
Manager Development | cndhlovu@aypa.com | (304) 685-8669

Name	Address	City, State, ZIP	Phone Number	Email Address
Debra Beck-Massing Helen Beck	17660 CR 29.6 Ex	Brush		
Jim & Ruth Ann Odle	16218 Hwy 71	Brush		
Kim Palost	24585 CR 35.5	Hillrose		
Don & Carol Keen	430 Howell av.	Brush		
Bernie Gertz	17140 Hwy 71	Brush		
Duan Fuchant	30405 CR u	Brush		
Clay Miller	22250 CR 25	Fort Morgan, CO 80701		
Scott Knutson	10184 QUANN Hill Pl.	PARKER, CO 80134		
Rob PARANOWSKI	PO BOX 738 FORT	FORT MORGAN, CO 80701		
Kortni Blake	29318 CR Q BRUSH, CO 807	BRUSH, CO 80723		

Name	Address	City, State, ZIP	Phone Number	Email Address
Jamis Ledbetter	336 Howell Ave	Brush CO 80723		
Amy + Parby Davis	16520 Hwy 71	Brush Co. 80723		
Greg Thomasen	Denver			
Stacie Smith	201 Ensign St.	Ft Morgan		
Jeanette Corbin	16200 Cty Rd 28.5	Brush		
Ron Dick	29874 Ro Q	Brush		
Craigs Gordon	514 Hospital Rd	Brush		
Brian Downing	720 Cameron St	Brush		

ADDITIONAL APPLICATION INFORMATION

Morgan County Road & Bridge

FAA Notice Overview

Tire Washout Additional Information

Mineral Notification & Certified Receipts

To: Kenneth Nelson, Morgan County Road & Bridge Department
CC: John Goodman, Bruce Bass, James Rehn, Jenny Straight
From: Justin Miner & Maya Lewis, Tetra Tech, Inc.
Date: December 11, 2023
Subject: Re: Driveway Permit Applications

Fortress Solar I LLC (Applicant) has requested two driveway access permits from Morgan County for the proposed access roads to be constructed from County Roads R and Q for the Fortress Solar & Battery Energy Storage System (BESS) Project (Project). For the third driveway access permit, the Applicant has entered into a Temporary License Agreement with Tri State and is in coordination with Tri State regarding the proposed access road from County Road R.5. Tri State will apply for and obtain the driveway access permit on behalf of the Applicant for the access road proposed to be constructed from County Road R.5.

As requested, please find the estimated traffic information below for the three proposed driveway access locations. The traffic estimates for the construction phase at the proposed driveway access locations are anticipated to reflect the flow of vehicles associated with the development activities, including personnel transportation, delivery trucks, and construction vehicles. During the operational phase, traffic is expected to be significantly less, comprising primarily of maintenance and administrative vehicles. Traffic estimates are provided for both the construction and operational phases, counts show both the flow of traffic coming and going.

1.0 Access, Transportation, & Traffic

In developing the traffic management plan for the Fortress Solar project, we have incorporated several key considerations to ensure minimal disruption to Morgan County's existing road infrastructure. A primary focus has been on reducing congestion; by designating specific routes for different types of traffic, we aim to distribute the traffic load evenly and maintain a smooth flow on both primary and secondary roads. Safety is also a paramount concern in our planning process. We have carefully selected routes that provide clear and direct access for emergency services, ensuring that they can reach the site swiftly and safely in case of any emergencies. Additionally, we have taken into account the potential impact on local traffic. Our route selection is guided by a commitment to minimize any inconvenience to the residents of Morgan County, demonstrating our respect for the community and our dedication to being a responsible corporate neighbor.

1.1 Access Roads

Primary haul route and construction deliveries to the Fortress Solar & BESS Project will be provided via one new 20-foot-wide gravel access road constructed off County Road Q. The primary commuter access for lightweight vehicles and trucks during construction and operations will be provided via a new 20-foot-wide gravel access road constructed off County Road R.5. Secondary commuter access will be provided via a new 20-foot-wide

gravel access road constructed off County Road R. The proposed site access roads and entry points are depicted on Figure 1 (*Figure 1 provided at end of memo*).

1.2 Owner & Employee Commuter Routes

The access routes to be utilized by construction crew members, operational employees, and the landowner are detailed per Figure 2 and are as follows:

Primary Route (Emergency): I-76 to County Road R.5. From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately .2 mile and will then head east on County Road R.5 until reaching the site entrance. The total Commuter Route length from I-76 is approximately 2.4 miles. This access route has been chosen for its directness and ease of navigation, ensuring rapid access for emergency services.

The Applicant has entered into a Temporary License Agreement with Tri State and is in coordination with Tri State regarding the proposed access road from County Road R.5. Tri State will apply for and obtain the driveway access permit on behalf of the Applicant for the access road proposed to be constructed from County Road R.5.

Secondary Route (Commuter): I-76 to County Road R. From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately .8 mile and will then head east on County Road R until reaching the site entrance. The total Commuter Route length from I-76 is approximately 3.1 miles. This route helps distribute traffic flow, reducing congestion on the primary route and providing an alternative access point for the workforce and other regular site visitors.

1.3 Construction Haul Route

The haul route to be utilized by heavy vehicle truck traffic throughout construction is detailed per Figure 2 (*Figure 2 provided at end of memo*) and is as follows:

Tertiary Route (Minimal Use Haul): Interstate 76 (I-76) to County Road Q. From I-76, vehicles will take exit 92 and will head southwest on US-6 for 1.4 miles toward the Town of Brush to reach CO-71 South. Vehicles will head south on CO-71 for approximately 1.9 miles and will then head east on County Road Q until reaching the site entrance. The total Haul Route length from I-76 is approximately 4.5 miles. This longer route has been chosen to accommodate the unique needs and constraints of heavy haulage, ensuring safe and efficient transport of large construction materials.

The Applicant will install a tire washout station at the entrance to the Project site off County Road Q to reduce track out.

1.4 Construction Transportation and Traffic

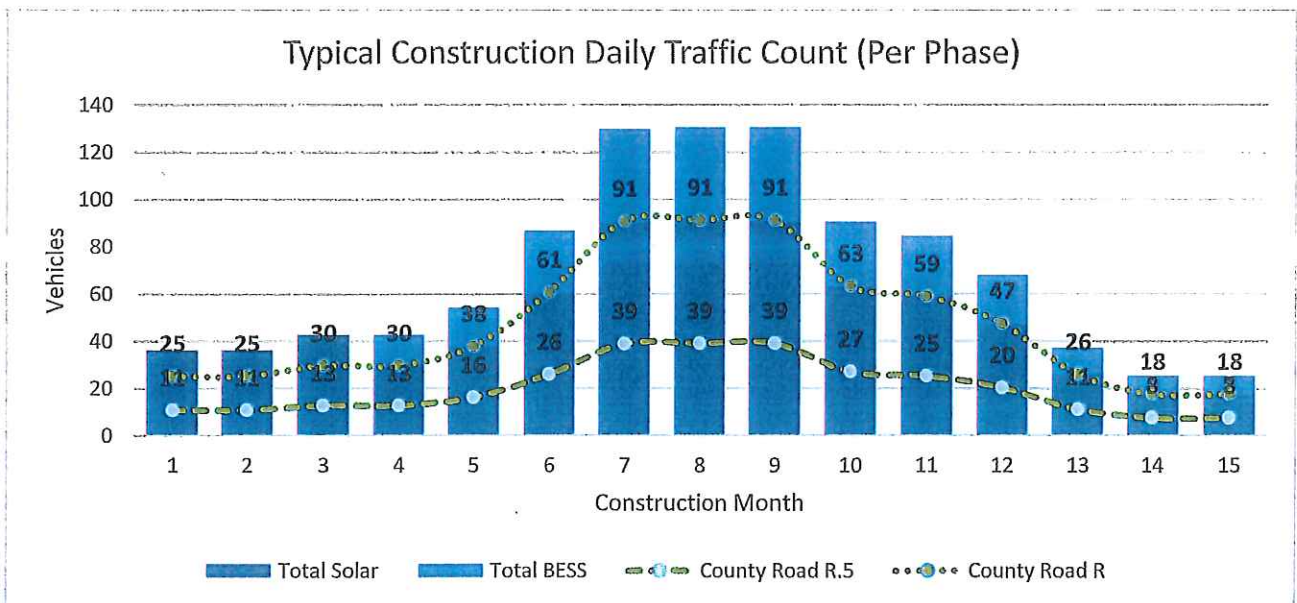
The Fortress Solar & BESS Projects will be developed in three phases, with each phase containing 200-Megawatts of Solar development and 200 Megawatts of BESS development.

The construction process for each phase is estimated to take up to 15 months to complete, during which time there would be some variability in the number of workers each day. Project initiation and site preparation would occur over the first 5 months and will require fewer workers and fewer materials delivery truck trips. After the site is prepared for installation, the Project site would experience an increase to a higher maximum number

of workers and material delivery truck trips. The peak of construction period for each phase is anticipated to occur over a 3-month period. Upon the completion of construction, testing of the installed equipment for operational reliability and safety will occur over the last 4 months of the construction period. This phase will not require the use of any heavy machinery and will involve a minimal number of workers.

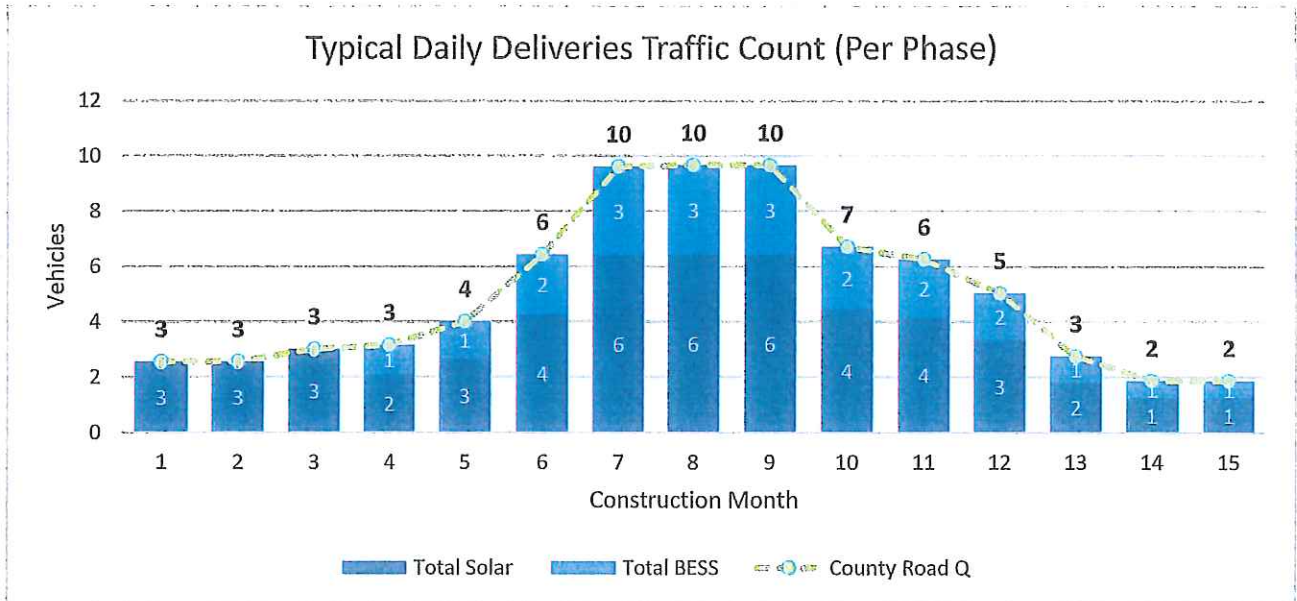
During the peak commuting hours each morning and evening at the peak of construction for each phase of the Project, there would be an average of approximately 130 lightweight commuter vehicles or trucks arriving at or departing from the Project via County Roads R and R.5, with most of the commuter traffic utilizing County Road R.5. The average daily construction traffic count for each month in each phase of the Project is detailed per Figure 1-1 below.

Figure 1-1. Typical Daily Construction Traffic Count (Per Phase)



During peak construction, there would be an average range of 10 material delivery truck trips per day. Heavy trucks would access the site via County Road Q for these deliveries. Material delivery trucks are not expected to coincide with the peak hour, rather they would arrive at the Project site throughout the day (Figure 1-2).

Figure 1-2. Typical Daily Delivery Traffic Count (Per Phase)



It was estimated that 1,048 deliveries would be made over the course of each phase of construction. This amount includes 600 trucks delivering solar panel modules, 48 trucks delivering photovoltaic inverters, 200 trucks delivering panel pile/racking systems, 100 trucks delivering BESS components, and 100 trucks delivering battery inverter/transformer components.

The Colorado Department of Transportation (CDOT) Traffic Data Explorer was accessed to obtain Annual Average Daily Traffic (AADT) counts along the Project haul routes. The AADT counts represent the average number of vehicles traveling on a road segment for a typical day of the year. The AADT data available for the count stations along the Project access routes, the anticipated number of daily trips, and maximum percentage increase in AADT per phase is detailed per Table 1 below.

Table 1. Existing and Anticipated Increase in AADT

Access Route	Existing AADT Counts ¹	Average Estimated Daily Trips	Maximum Percent Increase in AADT (%)
Primary Commuter, Secondary Commuter & Haul Route	Interstate 76, Station 103412: 12,000	140 (130 commuter & 10 delivery)	1.2%
	U.S. Highway 34, Station 101481: 3,800		3.7%
	State Highway 71, Station 103254: 2,700		5.2%
	State Highway 71, Station 000213: 1,800		7.8%

Source: CDOT 2023

1.5 Oversized / Overweight Loads

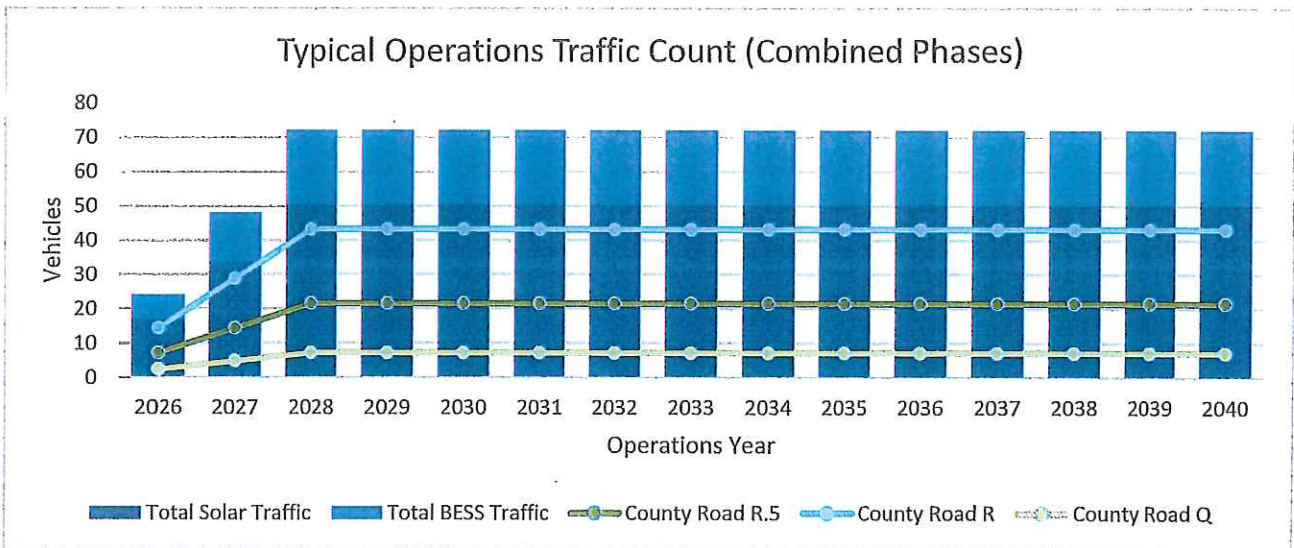
There are expected to be up to approximately 105 oversized/overweight load deliveries per phase associated with the Project for the transport of high voltage substation equipment, solar inverters, and transformers. These deliveries would occur along County Road Q. The remaining heavy vehicle traffic would be standard size

five-axle tractor trailers—some of these would be enclosed, and some would be in the form of flatbed trucks or smaller vehicles. Smaller heavy vehicles are likely to include water trucks, concrete trucks, and aggregate trucks. The Applicant or its contractor would obtain the necessary oversize/overweight permit from CDOT prior to delivery of these oversize/overweight loads.

1.6 Operations Transportation and Traffic

During operations once all three phases are complete, the Applicant anticipates 36 full-time operations and maintenance employees would commute daily to the facility. A total of up to 72 trips per day would occur along County Roads R.5 and R (Figure 1-3). Therefore, the transportation and traffic impacts associated with the Project operation are anticipated to be minimal. The operational phase of the Project is expected to be 30 years but may be extended if facility components are upgraded or replaced. The typical daily traffic count for each operational year of the Project is detailed per Figure 1-3 below.

Figure 1-3. Typical Operations Traffic Count



1.7 Impact Minimization Strategies:

- **Traffic Management:** To avoid peak hours and reduce impact on local commuters, heavy vehicles will adhere to a scheduled timetable, avoiding rush hours.
- **Maintenance and Upgrades:** We commit to regular maintenance of the roads used, particularly County Roads R.5, R, and Q.
- **Tire Washout Station:** A tire washout station will be installed at the entrance off County Road Q. This is to ensure that construction vehicles do not track debris onto public roads, maintaining cleanliness and safety.

Our team is committed to monitoring the traffic situation throughout the project duration and making necessary adjustments in coordination with the Morgan County Road & Bridge Department. We believe that this well-thought-out plan aligns with the community’s interests and the successful execution of the Fortress Solar project.

FIGURES

**Fortress I Solar LLC
Fortress Solar and
BESS Project**

**Figure 1
Site Access Locations**

Morgan County, CO

Project Features

- S Site Access Location
- Access Road
- Gen-Tie Line
- Project Boundary
- Transportation**
- Interstate Highway
- US Highway
- State Highway
- Local Road
- Railroad



NOT FOR CONSTRUCTION
Reference Map







Source: ESRI, USDA NAIP, US CENSUS, BTS, CDOT
1:24,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet
0 0.5 1 Miles

**Fortress I Solar LLC
Fortress Solar and
BESS Project**

**Figure 2
Haul and Access Routes**

Morgan County, CO




Project Features

-  Site Access Location
-  Access Road
-  Gen-Tie Line
-  Project Boundary

Transportation

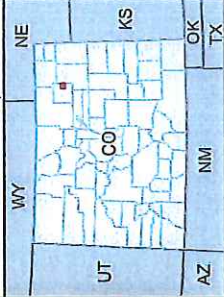
-  Interstate Highway
-  US Highway
-  State Highway
-  Local Road
-  Railroad

Haul and Access Routes

-  Primary Haul Route During Construction and Decommissioning
-  Secondary Access Route for Commuters
-  Primary Access Route for Emergency Services and Commuters



NOT FOR CONSTRUCTION
Reference Map



Source: ESRI, USDA NAIP, US CENSUS, BTS, CDOT
1:25,000 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet
0 0.5 1 Miles



Nicole Hay

Fortress Solar

2 messages

Bruce Bass <bbass@co.morgan.co.us>

Wed, Jan 31, 2024 at 9:28 AM

To: Nicole Hay

, "Goodman, John" <jgoodman@co.morgan.co.us>

Nicole,

To date, Morgan County Road and Bridge has received two applications for access for the Fortress Solar Project. One off of County Road R East of Highway 71 and one off of County Road Q east of Highway 71. We have inspected the sites and have provided them with the attached letters. We are aware that they are also going to be requesting an access off of County Road R.5, however we have not received an application for that location. We anticipate a substantial amount of traffic, both truck and vehicle do to the size of this project. It is our opinion that none of these roads will hold up to the traffic volume. We believe that substantial improvements and mitigation of nuisance conditions will have to be addressed in the Road Use Agreement for the use of these county roads.


Thank You

Bruce Bass

*Public Works Director
Morgan County Government
970-542-3560*

John Goodman

*Road Manager
Morgan County Government
970-542-3560*

 **Fortress Solar.pdf**
631K



Road & Bridge Department

Date 1-9-2024

Fortress Solar I LLC
Charles Ndhlovu
11801 Domain Blvd, Suite 450
Austin, TX. 78758

To whom it may concern:

Morgan County Road and Bridge Department has reviewed the Application for Driveway Access submitted by Fortress Solar I LLC for a Special Use Permit and has determined that access from Morgan County Road Q onto property describe as South ½ of the North and South ½ South of Section 7, Township :3, Range 55. Parcel # 1233-070-00-002 is possible, however Morgan County Road and Bridge will not issue the actual Driveway Access Permit until such time as that Fortress Solar I LLC receives an approved Special Use Permit for the project from the Planning and Zoning Department and the Board of Morgan County Commissioners.

Best Regards

A handwritten signature in black ink that reads "Bruce Bass". The signature is written in a cursive, flowing style.

Bruce Bass
Public Works Director
Morgan County Government



Road & Bridge Department

Date 1-10-2024

Fortress Solar I LLC
Charles Ndhlovu
11801 Domain Blvd, Suite 450
Austin, TX. 78758

To whom it may concern:

Morgan County Road and Bridge Department has reviewed the Application for Driveway Access submitted by Fortress Solar I LLC for a Special Use Permit and has determined that access from Morgan County Road R onto property describe as North $\frac{1}{2}$ of the North East $\frac{1}{4}$ of Section 12, Township :3, Range 56. Parcel # 1231-120-00-001 is possible, however Morgan County Road and Bridge will not issue the actual Driveway Access Permit until such time as that Fortress Solar I LLC receives an approved Special Use Permit for the project from the Planning and Zoning Department and the Board of Morgan County Commissioners.

Best Regards

A handwritten signature in black ink, appearing to read "Bruce Bass", written in a cursive style.

Bruce Bass
Public Works Director
Morgan County Government



Nicole Hay

FAA Notice Overview

Lewis, Maya

Tue, Feb 6, 2024 at 3:58 PM

To: Nicole Hay

Cc: "Miner, Justin"

, Charles Ndhlovu <

>

Hi Nicole,

To follow up on our phone call from yesterday, Aypa is required to file a [notice of construction](#) form with the FAA for the Fortress Solar & BESS Projects due to the proximity to the Brush Municipal airport. The FAA recommends filing notices of construction at least 45 days prior to the start of construction. Upon filing, we should receive an acceptance of notice as official documentation of the FAA's receipt which we can provide to the County.

Once the FAA has completed an aeronautical study, a determination is issued regarding the impact to air navigation. One of three responses is typically issued:

- Determination of No Hazard - The subject construction did not exceed obstruction standards and marking/lighting is not required.
- Determination of No Hazard with Conditions - The proposed construction/alteration would be acceptable contingent upon implementing mitigating measures such as the marking and lighting of the structure.
- Determination of Hazard - The proposed construction/alteration is determined to be a hazard to air navigation.

Aypa anticipates receipt of a determination of no hazard and will provide a copy of the determination once received.

Please see an overview of the process as detailed per the [FAA FAQ](#) page below.

16. What happens after I submit the notice and associated attachments?

For those studies located off airport property or for those located on a military airfield, an aeronautical study will be conducted by the FAA Air Traffic Organization, Obstruction Evaluation Group (OEG). The OEG technician will verify that the information submitted is accurate and complete. If the information is inaccurate or incomplete the technician will request additional information. If no additional information is required the technician will verify the study which will change the status in your account to "Work in Progress." When the status is changed to "Work in Progress" your information is made available to other FAA offices and military representatives that need to review the proposal. Those offices will provide comments to the OEG and after all comments have been received, the OEG technician or specialist will issue the appropriate letter; when it's been issued the status in your account will change to "Determined." After the letter has been issued it will be available on the website. Select "Search Archives" and enter the ASN for a link to the study.

Let us know if you have any other questions!

Maya Lewis | Environmental Planner

Pronouns: she, her, hers

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|

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Tire washout
2 messages

Nicole Hay Tue, Jan 16, 2024 at 11:03 AM
To: "Lewis, Maya" Charles Ndhlovu, "Miner, Justin"
, Cheryl Brindisi <cbrindisi@co.morgan.co.us>, Jenafer Santos <jsantos@co.morgan.co.us>

Can you give us some more specifics with the tire washout?

- Is it only during construction and it will be removed?
- Is it on a platform of some sort with a drain?
- Where is it draining?
- Will you for sure be building it?

We are trying to get a better understanding.

Thanks

--
Nicole F. Hay
Planning Administrator
Planning/Zoning Department
[231 Ensign St.](#)
[Fort Morgan, CO 80701](#)
970-542-3526

Lucas, Maya Tue, Jan 16, 2024 at 11:41 AM
To: Nicole Hay Charles Ndhlovu "Miner, Justin"
Cheryl Brindisi <cbrindisi@co.morgan.co.us>, Jenafer Santos <jsantos@co.morgan.co.us>
Cc: Andrew Breyer

Hi Nicole,

Please see the Applicant's response below,

- The Applicant will enter into a Road Use Agreement with Morgan County prior to the start of construction
- Details of the tire wash including type, location, will be based on the recommendation of the Road Use Agreement with Road and Bridge
- The mostly likely outcomes from the Road Use Agreement will be:
 - The tire washout station will be used during the construction phases to minimize track out of dirt and debris onto county roads
 - They are typically constructed on a platform with a drainage system. The drainage is designed to prevent runoff into local waterways, runoff water will be directed to a sedimentation area, since its only sediment
 - This station is temporary and will be removed after the construction phase
 - Yes, the construction plan includes building this washout station as part of the commitment to minimize environmental impact during construction

Please let us know if you have any additional questions.

Maya Lewis | Environmental Planner

Personal pronouns: she, her, hers
Contact

| Mobile

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<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53

Postmark Here

Quentin Oil Associates
 Quentin Mitchell Jr.
 1099 18th St Ste 2600
 Denver CO 80202-1937

See Reverse for Instructions

9589 0710 5270 1337 7369 28

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OFFICIAL USE

Certified Mail Fee	\$ 4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53

Postmark Here

Tri-State Generation and Transmission
 PO Box 33695
 Denver CO 80233-0695

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9589 0710 5270 1337 7365 53

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Certified Mail Fee	\$ 4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53

Postmark Here

United States Of America
 C/O Bureau Of Land Management
 2850 Youngfield St
 Lakewood CO 80215-7210

PS Form 3800, January 2023 PSN 7530-02-003-9047 See Reverse for Instructions

9589 0710 5270 1337 7368 98

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Certified Mail Fee	\$ 4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53

Postmark Here

Alicia Parkos Heirs Of Myrtle Hans Pe
 3135 W 17th St
 Greeley CO 80634-6811

See Reverse for Instructions

9589 0710 5270 1337 7368 05

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Certified Mail Fee	\$ 4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	.63
Total Postage and Fees	\$ 8.53



Ann Therest Zarezadegan Heirs Of Myrt
1718 33rd Ave
Greeley CO 80634-6837

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1337 7368 29

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Certified Mail Fee	\$ 4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	.63
Total Postage and Fees	\$ 8.53

Postmark Here

Sally McPherson Heir Of Wendell S. Ho
621 Laurel Lake Dr Apt B302
Columbus NC 28722-7438

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1337 7368 12

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Certified Mail Fee	\$ 4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	.63
Total Postage and Fees	\$ 8.53

Postmark Here

Mary Nancy Holmes Heir Of Wendell S.
188 Glengarnock Rd
Tryon NC 28782-3523

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1337 7366 90

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Certified Mail Fee	\$ 4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	.63
Total Postage and Fees	\$ 8.53



Trust I: Katherine Treacy Knorr Cole
1517 Ridgeview Dr
Louisville CO 80027-1605

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9589 0710 5270 1337 7366 76

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Certified Mail Fee	\$ 4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	.63
Total Postage and Fees	\$ 8.53

Postmark Here

Trust I: Tom Johnson Knorr Jr. Heir O
11678 N 59th St
Longmont CO 80503-9158

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1337 7366 69

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OFFICIAL USE

Certified Mail Fee	\$ 4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	.63
Total Postage and Fees	\$ 8.53

Postmark Here

Trust I: William Carson Knorr Heir Of
2406 Briarwood Dr
Boulder CO 80305-6802

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1337 73 51

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Certified Mail Fee	4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	.63
Total Postage and Fees	8.53



Sent To
 Joyce Edson Heir Of T. H. Rediess
 14460 County Road 16
 Fort Morgan CO 80701-8604

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1337 7367 44

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Certified Mail Fee	4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	.63
Total Postage and Fees	8.53

Postmark Here

Sent To
 Janette Frohock Heir Of T. H. Rediess
 1115 Live Oak St
 New Smyrna Beach FL 32168-7418

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1337 7367 66

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Certified Mail Fee	4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	.63
Total Postage and Fees	8.53



Sent To
 Paul Mansur Heir Of T. H. Rediess
 203 Gunnison Ave
 Grand Junction CO 81501-2311

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1337 7367 75

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Certified Mail Fee	4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	.63
Total Postage and Fees	8.53

Postmark Here

Sent To
 John Wesley Mansur Heir Of T. H. Red
 4365 Field Rd NW
 Palm Bay FL 32907-6312

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Certified Mail Fee	4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	.63
Total Postage and Fees	8.53

Postmark Here

Sent To
 Laura Mendoza Heirs Of Myrtle Hans Pe
 3135 W 17th St
 Greeley CO 80634-6811

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Certified Mail Fee	4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	.63
Total Postage and Fees	8.53

Postmark Here

Sent To
 Susan Swanson Heirs Of Myrtle Hans Pe
 35293 County Road 83
 Briggsdale CO 80611-7702

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Certified Mail Fee	\$ 4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53



Sent To
Diane J. Klepper
C/O Don Bales Klepper
2617 N Broadway #17
Wichita KS 67219-4

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Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53



Sent To
Diane J. Klepper
C/O Don Bales Klepper Corner Stores
6517 Meadow Hills St NE
Albuquerque NM 87111-6544

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Certified Mail Fee	\$ 4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53



Sent To
Bradley Storey Heir Of S.H. Ranson
1859 SW Urish Rd
Topeka KS 66615-1307

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9589 0710 5270 1337 7367 37

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Certified Mail Fee	\$ 4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53



Sent To
Trust li: Mary Marsha Meyers Heir Of
4J Fulham Rd
Clifton Park NY 12065-6324

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Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53



Sent To
Trust li: Martin Meyers Heir Of Don R
1866 Troutman St Apt 2
Ridgewood NY 11385-1061

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<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53



Sent To
Trust li: Mark Marshall Meyers Heir O
18C Pointe West Dr
Halfmoon NY 12065-4600

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9589 0710 5270 1337 7365 77

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Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53

JAN 12 2024
Postmark Here

Edna Jean Swanson Heirs Of Myrtle Han
920 Krista Kort
Brush CO 80723-1305

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9589 0710 5270 1337 7365 60

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<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53

JAN 12 2024
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Gerald R Geisick Heir Of T.H. Rediess
1422 Canal Dr
Windsor CO 80550-5811

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Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53

JAN 12 2024
Postmark Here

Unocal Windy Hill Gas Storage, LLC
14141 Southwest Fwy
Sugar Land TX 77478-3493

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9589 0710 5270 1337 7365 91

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Certified Mail Fee	\$ 4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53

JAN 12 2024
Postmark Here

William A. Grant, Jr., As Trustee
7236 S Gary Ave
Tulsa OK 74136-5900

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9589 0710 5270 1337 7365 84

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Certified Mail Fee	\$ 4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53

JAN 12 2024
Postmark Here

Bernice M Crosthwait Heirs Of Myrtle
32446 County Road V
Brush CO 80723-9509

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9589 0710 5270 1337 7365 46

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Certified Mail Fee	\$ 4.35
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 3.55
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$.63
Total Postage and Fees	\$ 8.53

JAN 12 2024
Postmark Here

Ruth Ann Odle
16218 State Highway 71
Brush CO 80723-9436

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions



January 12, 2024

Tri-State Generation and Transmission Association, Inc
PO Box 33695
Denver, CO 80233

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

Dear Mineral Interest Owner or Lessee,

You are receiving this notice because you have been identified as a mineral estate owner as reflected in the records of the Morgan County Assessor or a request for notification of surface development with the Morgan County Clerk and Recorder, with respect to property that is the subject of the referenced applications.

As required by Colorado State Statute 24-65.5-103, you are hereby notified that six Special Use Permit (SUP) applications have been submitted to the Morgan County Community Development Department for the Fortress Solar Project, Phases I, II, and III, and the Fortress BESS Project, Phases I, II, and III, a 600-megawatt (MW) solar photovoltaic array facility and 600 MW / 2,400 MW-hour Battery Energy Storage System on property described per the subject legal descriptions detailed in Table 1 below.

Table 1. Subsurface Mineral Rights Parcel Information for Project Area

ID#	Tax Map #	Legal Description
1-3N-56W	1231-010-00-700	S: 01 T: 3 R: 56 PARC E1/2 B801 P134 **STATE ASSESSED**
6-3N-55W	1233-060-00-001	S: 06 T:3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
1-3N-56W	1231-010-00-002	S: 01 T: 3 R:56 E1/2E1/2 B908 P721 (CORRECTION SECTION)

The Project will be developed in three phases, each phase containing one phase of the Fortress Solar Project and one phase of the Fortress BESS Project. Three separate solar collector facility SUP applications and three separate BESS facility SUP applications, one for each phase, have been submitted to Morgan County and have been scheduled for review by the Planning & Zoning Commission.

The initial public hearing for these applications will be held before the Morgan County Planning & Zoning Commission on **February 12, 2024, at 6:00 P.M.** in the **Morgan County Administrative Building Assembly Room at 231 Ensign Street Fort Morgan, CO 80701.**

Final approval or disapproval of the applications will be considered by the Morgan County Commissioners at a date and time to be determined following the outcome and recommendations of the Planning and Zoning Commission.

Respectfully,

Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 12, 2024

Crossroads Morgan LLC
745 N. Gilpin Street
Denver, CO 80218

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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6-3N-55W	1233-060-00-001	S: 06 T:3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
1-3N-56W	1231-010-00-002	S: 01 T: 3 R:56 E1/2E1/2 B908 P721 (CORRECTION SECTION)

The Project will be developed in three phases, each phase containing one phase of the Fortress Solar Project and one phase of the Fortress BESS Project. Three separate solar collector facility SUP applications and three separate BESS facility SUP applications, one for each phase, have been submitted to Morgan County and have been scheduled for review by the Planning & Zoning Commission.

The initial public hearing for these applications will be held before the Morgan County Planning & Zoning Commission on **February 12, 2024, at 6:00 P.M.** in the **Morgan County Administrative Building Assembly Room at 231 Ensign Street Fort Morgan, CO 80701.**

Final approval or disapproval of the applications will be considered by the Morgan County Commissioners at a date and time to be determined following the outcome and recommendations of the Planning and Zoning Commission.

Respectfully,

Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 12, 2024

Quentin Oil Associates
1099 18th Street, Suite 2600
Denver, CO 80202

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

Dear Mineral Interest Owner or Lessee,

You are receiving this notice because you have been identified as a mineral estate owner as reflected in the records of the Morgan County Assessor or a request for notification of surface development with the Morgan County Clerk and Recorder, with respect to property that is the subject of the referenced applications.

As required by Colorado State Statute 24-65.5-103, you are hereby notified that six Special Use Permit (SUP) applications have been submitted to the Morgan County Community Development Department for the Fortress Solar Project, Phases I, II, and III, and the Fortress BESS Project, Phases I, II, and III, a 600-megawatt (MW) solar photovoltaic array facility and 600 MW / 2,400 MW-hour Battery Energy Storage System on property described per the subject legal descriptions detailed in Table 1 below.

Table 1. Subsurface Mineral Rights Parcel Information for Project Area

ID#	Tax Map #	Legal Description
1-3N-56W	1231-010-00-700	S: 01 T: 3 R: 56 PARC E1/2 B801 P134 **STATE ASSESSED**
6-3N-55W	1233-060-00-001	S: 06 T:3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
1-3N-56W	1231-010-00-002	S: 01 T: 3 R:56 E1/2E1/2 B908 P721 (CORRECTION SECTION)

The Project will be developed in three phases, each phase containing one phase of the Fortress Solar Project and one phase of the Fortress BESS Project. Three separate solar collector facility SUP applications and three separate BESS facility SUP applications, one for each phase, have been submitted to Morgan County and have been scheduled for review by the Planning & Zoning Commission.

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Respectfully,

Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Ruth Ann Odle
 16218 Hwy 71
 Brush, CO 80723

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Table 1. Subsurface Mineral Rights Parcel Information for Project Area

ID#	Tax Map #	Legal Description
3-3N-55W	1233-030-00-003	TRACT3: SW/4 NW/4, NW/4 SW/4, South of RR
4-3N-55W	1233-040-00-002	TRACT 1: NW/4 South of RR & SW/4 SW/4 & SE/4 SE/4
4-3N-55W	1233-040-00-002	TRACT 2: S/2 NE/4 South of RR & N/2 SE4 & E/2 SW/4
9-3N-55W	1233-090-00-001	TRACT 1: W/2 & SE/4 & S/2 NE/4 & NE/4 NE/4
10-3N-55W	1233-100-00-001	TRACT 1: S/2
5-3N-55W	1233-050-00-001	TRACT 1: Lot 3, S/2 NW/4, E/2 SW/4, SW/4 SW/4, SE/4 NE/4, E/2 SE/4
7-3N-55W	1233-070-00-002	TRACT 1: S/2 N/2 and S/2
8-3N-55W	1233-080-00-001	TRACT 1: W/2, SW/4 of NE/4, N/2 of SE/4, SE/4 of SE/4
12- 3N-56W	1231-120-00-002	TRACT 1: SE/4 NE/4 and the E/2 SE/4
32-4N-55W	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad

The Project will be developed in three phases, each phase containing one phase of the Fortress Solar Project and one phase of the Fortress BESS Project. Three separate solar collector facility SUP applications and three separate BESS facility SUP applications, one for each phase, have been submitted to Morgan County and have been scheduled for review by the Planning & Zoning Commission.

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Final approval or disapproval of the applications will be considered by the Morgan County Commissioners at a date and time to be determined following the outcome and recommendations of the Planning and Zoning Commission.

Respectfully,

A handwritten signature in black ink, appearing to read "C. Ndhlovu", with a long horizontal flourish extending to the right.

Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

United States of America
 c/o Bureau of Land Management
 2850 Youngfield St.
 Lakewood, CO 80215

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

Dear Mineral Interest Owner or Lessee,

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Table 1. Subsurface Mineral Rights Parcel Information for Project Area

ID#	Tax Map #	Legal Description
3-3N-55W	1233-030-00-003	TRACT 2: SW/4 SE/4, E/2 SW/4, SW/4 SW/4, NW/4 SE/4, SE/4 NW/4
4-3N-55W	1233-040-00-002	TRACT 3: NW/4 SW/4 & SW/4 SE/4
9-3N-55W	1233-090-00-001	TRACT 2: NW/4 NE/4
10-3N-55W	1233-100-00-001	TRACT 2: N/2
5-3N-55W	1233-050-00-001	TRACT 2: Lots 1, 2, 4 and NW/4 SW/4, SW/4 NE/4, and W/2 SE/4
8-3N-55W	1233-080-00-001	TRACT 2: N/2 of NE/4, SE/4 of NE/4, SW/4 of SE/4
6-3N-55W	1233-060-00-002	S/2 of S/2
7-3N-55W	1233-070-00-001	N/2 of N/2
12-3N-56W	1231-120-00-001	N/2 of NE/4

The Project will be developed in three phases, each phase containing one phase of the Fortress Solar Project and one phase of the Fortress BESS Project. Three separate solar collector facility SUP applications and three separate BESS facility SUP applications, one for each phase, have been submitted to Morgan County and have been scheduled for review by the Planning & Zoning Commission.

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Respectfully,

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Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758

January 10, 2024

Unocal Windy Hill Gas Storage, LLC
14141 Southwest Freeway
Sugar Land, TX 77478

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Table 1. Subsurface Mineral Rights Parcel Information for Project Area

ID#	Tax Map #	Legal Description
5-3N-55W	1233-050-00-001	TRACT 1: Lot 3, S/2 NW/4, E/2 SW/4, SW/4 SW/4, SE/4 NE/4, E/2 SE/4
8-3N-55W	1233-080-00-001	TRACT 1: W/2, SW/4 of NE/4, N/2 of SE/4, SE/4 of SE/4

The Project will be developed in three phases, each phase containing one phase of the Fortress Solar Project and one phase of the Fortress BESS Project. Three separate solar collector facility SUP applications and three separate BESS facility SUP applications, one for each phase, have been submitted to Morgan County and have been scheduled for review by the Planning & Zoning Commission.

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Respectfully,



Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

William A. Grant, Jr., as Trustee
7236 So. Gary Ave.
Tulsa, OK 74136

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

Dear Mineral Interest Owner or Lessee,

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ID#	Tax Map #	Legal Description
7-3N-55W	1233-070-00-002	TRACT 1: S/2 N/2 and S/2
32-4N-55W	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad

The Project will be developed in three phases, each phase containing one phase of the Fortress Solar Project and one phase of the Fortress BESS Project. Three separate solar collector facility SUP applications and three separate BESS facility SUP applications, one for each phase, have been submitted to Morgan County and have been scheduled for review by the Planning & Zoning Commission.

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Respectfully,

Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Bernice M Crosthwait Heirs of Myrtle Hans Peterson
32446 County Road V
Brush, CO 80723

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Table 1. Subsurface Mineral Rights Parcel Information for Project Area

ID#	Tax Map #	Legal Description
4-3N-55W	1233-040-00-002	TRACT 2: S/2 NE/4 South of RR & N/2 SE4 & E/2 SW/4

The Project will be developed in three phases, each phase containing one phase of the Fortress Solar Project and one phase of the Fortress BESS Project. Three separate solar collector facility SUP applications and three separate BESS facility SUP applications, one for each phase, have been submitted to Morgan County and have been scheduled for review by the Planning & Zoning Commission.

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Respectfully,

Charles Ndhlovu, Project Manager

Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Edna Jean Swanson Heirs of Myrtle Hans Peterson
920 Krista Kort
Brush, CO 80723

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Charles Ndhlovu, Project Manager

Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758

January 10, 2024

Gerald R Geisick Heir of T.H. Rediess
1422 Canal Dr.
Windsor, CO 80550

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Respectfully,



Charles Ndhlovu, Project Manager

Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Diane J. Klepper
C/o Don Bales
Klepper Corner Stores
2617 N. Broadway
Wichita, KS 67219

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Diane J. Klepper
C/o Don Bales
Klepper Corner Stores
6517 Meadow Hills St. NE
Albuquerque, NM 87111

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Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Kay Bales
C/o Don Bales
Klepper Corner Stores
2617 N. Broadway
Wichita, KS 67219

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Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758

January 10, 2024

Kay Bales
C/o Don Bales
Klepper Corner Stores
2 N Saint James Pl.
Wichita, KS 67206

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The initial public hearing for these applications will be held before the Morgan County Planning & Zoning Commission on **February 12, 2024, at 6:00 P.M.** in the **Morgan County Administrative Building Assembly Room** at **231 Ensign Street Fort Morgan, CO 80701.**

Final approval or disapproval of the applications will be considered by the Morgan County Commissioners at a date and time to be determined following the outcome and recommendations of the Planning and Zoning Commission.

Respectfully,



Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

John Eric Engstrom
901 N. Wiley St.
Wichita, KS 67203

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

Dear Mineral Interest Owner or Lessee,

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Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758

January 10, 2024

Theodore R. McGregor Heir of T.H. Rediess
3380 Cambridge Rd.
Shingle Springs, CA 95682

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Charles Ndhlovu, Project Manager

Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758

January 10, 2024

Catherine A Leonardi Heir of T.H. Rediess
738 Flower St.
Grand Junction, CO 81506

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Charles Ndhlovu, Project Manager

Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC

c/o Aypa Power

11801 Domain Blvd. Suite 450

Austin, TX 78758

January 10, 2024

Bruce A McGregor Heir of T.H. Rediess
13445 Bristlecone Cir.
Orlando, FL 32828

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Respectfully,



Charles Ndhlovu, Project Manager

Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Trust I: William Carson Knorr Heir of Don Ross
2406 Briarwood Dr.
Boulder, CO 80305

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Respectfully,

Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Trust I: Tom Johnson Knorr Jr. Heir of Don Ross
11678 N 59th St.
Longmont, CO 80503

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Respectfully,

Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Trust I: Katherine Treacy Knorr Cole Heir of Don Ross
1517 Ridgeview Dr.
Louisville, CO 80027

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Mary Nancy Holmes Heir of Wendell S. Holmes
188 Glengarnock Rd.
Tryon, NC 28782

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Sally McPherson Heir of Wendell S. Holmes
621 Laurel Lake Dr. Apt B302
Columbus, NC 28722

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Ann Therest Zerezadegan Heirs of Myrtle Hans Peterson
1718 33rd Ave
Greeley, CO 80634

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Charles Ndhlovu, Project Manager

Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Susan Swanson Heirs of Myrtle Hans Peterson
35293 County Road 83
Briggsdale, CO 80611

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Charles Ndhlovu, Project Manager

Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC

c/o Aypa Power

11801 Domain Blvd. Suite 450

Austin, TX 78758

January 10, 2024

Laura Mendoza Heirs of Myrtle Hans Peterson
3135 W 17th St.
Greeley, CO 80634

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Charles Ndhlovu, Project Manager

Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC

c/o Aypa Power

11801 Domain Blvd. Suite 450

Austin, TX 78758

January 10, 2024

John Wessley Mansur Heir of T.H. Rediess
4365 Hield Rd. NW
Palm Bay, FL 32907

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Charles Ndhlovu, Project Manager

Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Paul Mansur Heir of T.H. Rediess
203 Gunnison Ave
Grand Junction, CO 81501

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

Dear Mineral Interest Owner or Lessee,

You are receiving this notice because you have been identified as a mineral estate owner as reflected in the records of the Morgan County Assessor or a request for notification of surface development with the Morgan County Clerk and Recorder, with respect to property that is the subject of the referenced applications.

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Table 1. Subsurface Mineral Rights Parcel Information for Project Area

ID#	Tax Map #	Legal Description
3-3N-55W	1233-030-00-003	TRACT 1: E/2 SE/4 South of RR

The Project will be developed in three phases, each phase containing one phase of the Fortress Solar Project and one phase of the Fortress BESS Project. Three separate solar collector facility SUP applications and three separate BESS facility SUP applications, one for each phase, have been submitted to Morgan County and have been scheduled for review by the Planning & Zoning Commission.

The initial public hearing for these applications will be held before the Morgan County Planning & Zoning Commission on **February 12, 2024, at 6:00 P.M.** in the **Morgan County Administrative Building Assembly Room at 231 Ensign Street Fort Morgan, CO 80701.**

Final approval or disapproval of the applications will be considered by the Morgan County Commissioners at a date and time to be determined following the outcome and recommendations of the Planning and Zoning Commission.

Respectfully,

Charles Ndhlovu, Project Manager

Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Joyce Edson Heir of T.H. Rediess
14460 County Road 16
Fort Morgan, CO 80701

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Respectfully,

Charles Ndhlovu, Project Manager

Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC

c/o Aypa Power

11801 Domain Blvd. Suite 450

Austin, TX 78758

January 10, 2024

Janette Frohock Heir of T.H. Rediess
1115 Live Oak St.
New Smyrna Beach, FL 32168

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Respectfully,



Charles Ndhlovu, Project Manager

Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Trust II Mary Marsha Meyers Heir of Don Ross
4J Fulham Rd.
Clifton Park, NY 12065

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Respectfully,

Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Trust II: Martin Meyers Heir of Don Ross
1866 Troutman St. Apt 2
Ridgewood, NY 11385

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Respectfully,

Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



A BLACKSTONE
PORTFOLIO COMPANY

January 10, 2024

Trust II: Mark Marshall Meyers Heir of Don Ross
18C Pointe West Dr.
Clifton Park, NY 12065

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Respectfully,

Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758

January 10, 2024

Bradley Storey Heir of S.H. Ranson
1859 SW Urish Rd.
Topeka, KS 66615

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Respectfully,



Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Jennifer Reumund Heir of S.H. Ranson
5281 Hideaway Dr.
Perry, KS 66073

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Respectfully,

Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Sean Eagan Heir of S.H. Ranson
417 W 10th St.
Newton, KS 67114

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Robert William Eagan Heir of S.H. Ranson
707 Battleground Rd.
Lincolnton, NC 28092

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Kaitlen Paul Heirs of Myrtle Hans Peterson
6031 W 26th St.
Greeley, CO 80634

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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ID#	Tax Map #	Legal Description
4-3N-55W	1233-040-00-002	TRACT 2: S/2 NE/4 South of RR & N/2 SE4 & E/2 SW/4

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Charles Ndhlovu, Project Manager

Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758

January 10, 2024

Alicia Parkos Heirs of Myrtle Hans Peterson
3135 W 17th St.
Greeley, CO 80634

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Charles Ndhlovu, Project Manager

Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758



January 10, 2024

Trust II: Virginia Arline Irish Heir of Don Ross
17002 33rd Ave S
Seattle, WA 98188

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758

January 10, 2024

Trust II: Melissa C Irish Heir of Don Ross
8229 Bagley Ave N
Seattle, WA 98103

RE: Notice of Public Hearing before the Morgan County Planning & Zoning Commission for six Special Use Permit Applications submitted for the Fortress Solar & Fortress BESS Projects filed by Fortress Solar I LLC, Fortress Solar II LLC, and Fortress Solar III LLC

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Table 1. Subsurface Mineral Rights Parcel Information for Project Area

ID#	Tax Map #	Legal Description
7-3N-55W	1233-070-00-002	TRACT 1: S/2 N/2 and S/2
32-4N-55W	1233-050-00-001	TRACT 1: Part of the SW/4 lying South of the Railroad

The Project will be developed in three phases, each phase containing one phase of the Fortress Solar Project and one phase of the Fortress BESS Project. Three separate solar collector facility SUP applications and three separate BESS facility SUP applications, one for each phase, have been submitted to Morgan County and have been scheduled for review by the Planning & Zoning Commission.

The initial public hearing for these applications will be held before the Morgan County Planning & Zoning Commission on **February 12, 2024, at 6:00 P.M.** in the **Morgan County Administrative Building Assembly Room at 231 Ensign Street Fort Morgan, CO 80701.**

Final approval or disapproval of the applications will be considered by the Morgan County Commissioners at a date and time to be determined following the outcome and recommendations of the Planning and Zoning Commission.

Respectfully,



Charles Ndhlovu, Project Manager
Fortress Solar I LLC, Fortress Solar II LLC, & Fortress Solar III LLC
c/o Aypa Power
11801 Domain Blvd. Suite 450
Austin, TX 78758

Mineral rights owner-Concern

9 messages

Cheryl Brindisi <cbrindisi@co.morgan.co.us>

Thu, Jan 18, 2024 at 10:01 AM


To: Charles Ndhlovu, "Miner, Justin", Andrew Breyer

Cc: Nicole Hay <nhay@co.morgan.co.us>, Jenafer Santos <jsantos@co.morgan.co.us>

Hello and Good Day!

Our office has received several phone calls from a gentleman by the name of "Bob" Robert Eagan. He was identified in Aypa's Mineral Interest search as an heir of a mineral rights owner S.H. Ranson, who is deceased. He had several questions and concerns that he would like to have addressed by someone through Fortress Solar or Aypa. Can you please contact him?

I have attached to this email the original letter that was sent by Aypa for your reference.

Thank you**Cheryl Brindisi, Planning and Zoning Administrative Assistant****Morgan County Planning and Zoning****231 Ensign St.****PO Box 596****Fort Morgan, CO 80701****970-542-3526**CBrindisi@co.morgan.co.us **Mineral Interest Letter-Concerned Owner.pdf**
280K

Cheryl Brindisi <cbrindisi@co.morgan.co.us>

Thu, Jan 18, 2024 at 10:06 AM

Charles Ndhlovu, "Miner, Justin"

Andrew Breyer <abreyer@aypa.com>

Cc: Nicole Hay, Jenafer Santos <jsantos@co.morgan.co.us>

His number was written on the attached document but here it is as well.

Thank you**Cheryl Brindisi, Planning and Zoning Administrative Assistant****Morgan County Planning and Zoning****231 Ensign St.****PO Box 596****Fort Morgan, CO 80701****970-542-3526**CBrindisi@co.morgan.co.us

Charles Ndhlovu

Thu, Jan 18, 2024 at 11:05 AM

To: Cheryl Brindisi <cbrindisi@co.morgan.co.us>, Andrew Breyer

, "Miner, Justin"

Cc: Nicole Hay, Jenafer Santos <jsantos@co.morgan.co.us>

Thanks Cheryl,

I called Mr. Robert William Eagan, on 10:30 a.m. MDT (1/18/2024). He is requesting further information regarding his mineral interests, which are on Odle Option 1.

Our mineral search indicated that his "Total Combined Net acres" is approximately 3.3945.

We will respond to his request via email at

Regards,

Charles

LANDOWNER LETTERS, REFERRALS, & RESPONSES

Landowner Letter sent & Responses received

Referrals sent & Responses received

Notification

Sign Posting Pictures & Affidavit



**MORGAN COUNTY
PLANNING AND ZONING DEPARTMENT**

February 16, 2024

Re: Fortress Solar I, LLC, Fortress Solar II, LLC, and Fortress Solar III, LLC (collectively "Fortress Solar")

Dear Neighboring Landowners:

Fortress Solar, LLC as applicant and Tri-State Generation and Transmission Association Inc., Shari A. Benotti and Ruth Ann Odle as landowners have submitted an application to our office for a Use by Special Review Permit.

Fortress Solar, LLC, Solar Energy Facility; Phases I, II and III.

Legal Description: A part of Sections 3, 4, 5, 6, 7, 8, 9 and 10, Township 3 North, Range 55 West, a part of Sections 1 and 12, Township 3 North, Range 56 West, and a part of Section 32, Township 4 North, Range 55 of the 6th PM, Morgan County, Colorado.

Fortress Solar, LLC, BESS; Phases I, II and III.

Legal Description: A part of Section 5, Township 3 North, Range 55 West of the 6th PM, Morgan County, Colorado.

Request: Fortress Solar, LLC has submitted a Special Use Permit Application to construct and operate an up to 600 MW Solar Photovoltaic Panel (PV) project in conjunction with a 2,400 MWh Battery Energy Storage System (BESS). Construction will take place in three phases. See attached site map.

This application is scheduled to be heard by the Board of County Commissioners at a **Special public hearing on Tuesday, March 12th, 2024 at 9:00 A.M.** in the Assembly Room of the Morgan County Administration Building, 231 Ensign St., (Basement Level, elevator entrance) Fort Morgan, Colorado. Landowners within ¼ mile of the subject property are notified of the application and hearing date.

Documents pertaining to the above identified matters are on file in the Planning Administrator's Office located at 231 Ensign St., Fort Morgan, Colorado. If you have any questions pertaining to this application or if you would like to review the file, please contact us at (970) 542-3526 or stop by our office. You may attend the public hearing and provide comments on the application, or alternatively, if you are not able to attend you may submit written comments to our office no later than **March 1st, 2024.**

Sincerely,

Nicole Hay

Nicole Hay,
Planning Administrator

For special assistance for the mentioned hearing, please notify us at least 48 hours before the scheduled agenda item. Please call (970) 542-3526 to request any ADA accommodations.

Fortress I Solar LLC

Fortress Solar and BESS Project

Appendix A-1 Vicinity Map - Overview

Morgan County, CO

Project Features

- Site Access Location
- Access Road
- Gen-Tie Line
- BESS - Phase I
- BESS - Phase II
- BESS - Phase III
- BESS Area
- Switchyard & Substation
- PV Array - Phase 1
- PV Array - Phase 2
- PV Array - Phase 3
- Project Boundary

Transportation

- Interstate Highway
- US Highway
- State Highway
- Local Road

Boundaries

- Morgan County Parcel
- Morgan County Subdivision
- PLSS Section
- PLSS Township

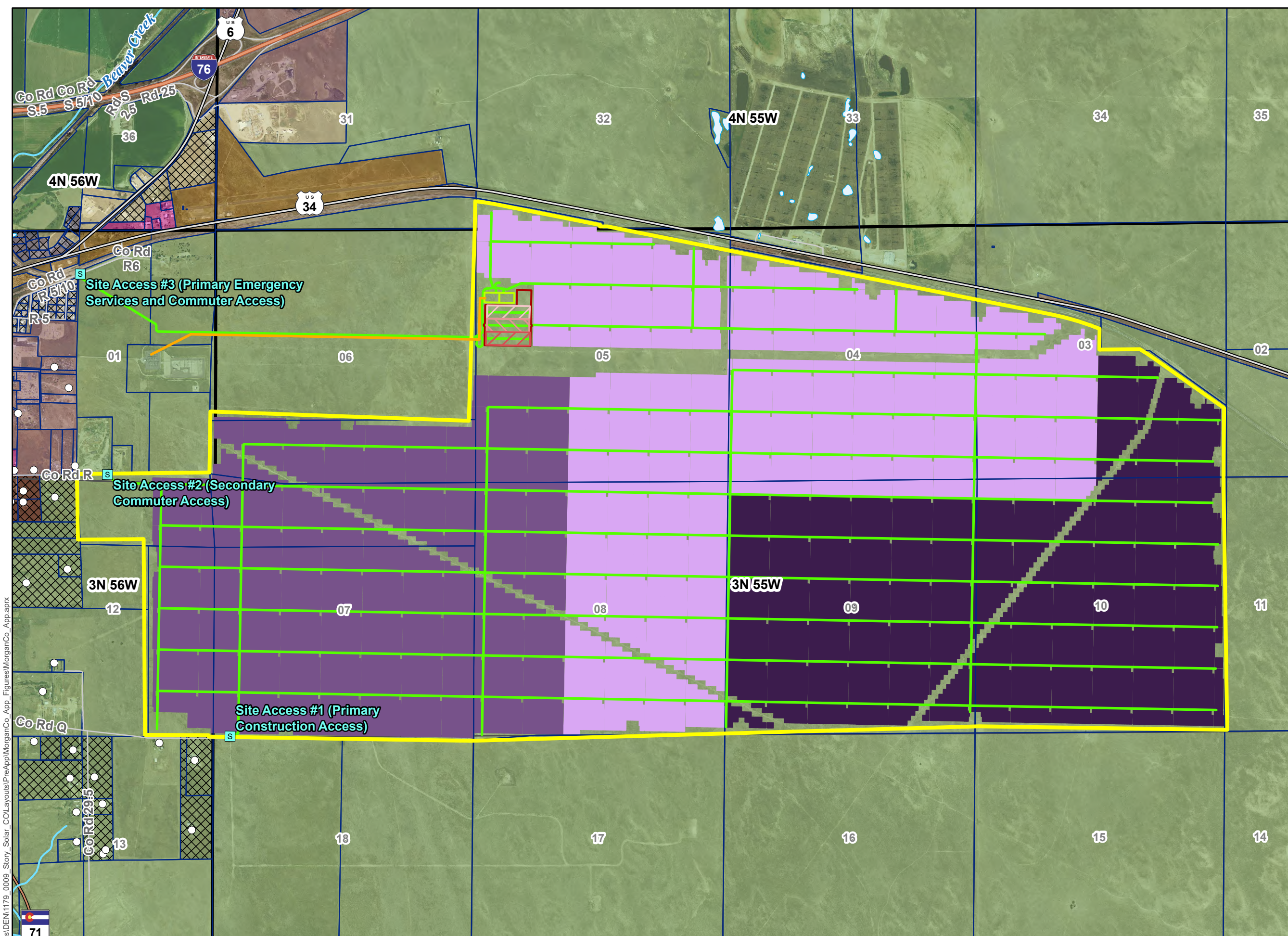
Morgan Counting Zoning Districts

- Existing Residence
- Agriculture Production District
- Agriculture/Agri-Business District
- Commercial District
- Estate Residential District
- Light Industrial District
- Mobile Home District
- Planned Development - Rural Residential District
- Rural Residential District



NOT FOR CONSTRUCTION

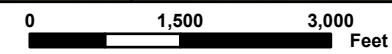
Reference Map



Z:\Projects\DEM1179_0009_Story_Solar_CO\Layouts\PreApp\MorganCo_App_Figures\MorganCo_App.aprx



1:22,976 NAD 1983 StatePlane Colorado Central FIPS 0502 Feet



Source: ESRI, USDA NAIP, US CENSUS, BTS, MORGAN COUNTY, CDOT

Fortress Solar & BESS Landowners within 1320' MC Mapper GIS

- 1) MASSEY, KYLER B & JANESSA M
17384 HWY 71
BRUSH, CO 80723

- 2) BEAMAN, CINTHIA LYNN BRACK
23279 AL HWY 71
FLAT ROCK, AL 35966

- 3) SCHWINDT, SAM JR & DEANNA
17342 HWY 71
BRUSH, CO 80723

- 4) TRI-STATE GENERATION AND TRANSMISSION ASSN INC
1100 W 116TH AVE
WESTMINSTER, CO 80234

- 5) STANDING ROCK SANITATION SERVICE INC
P O BOX 170
MCLAUGHLIN, SD 57642

- 6) BECK, HELEN R &
BECK-MASSEY, DEBORA L
17660 CO RD 29.6
BRUSH, CO 80723

- 7) BECK, WESLEY A
17688 CO RD 29.6
BRUSH, CO 80723

- 8) PUBLIC SERVICE COMPANY OF COLORADO
P O BOX 1979
DENVER, CO 802011979

- 9) CITY OF BRUSH
P O BOX 363
BRUSH, CO 80723

- 10) SIMON, TODD
P O BOX 523
BRUSH, CO 80723

- 11) MEYER, LARRY & KATHRYN
1619 EATON ST
BRUSH, CO 80723

- 12) WASHBURN, MELVIN R & BETTY L
29749 HWY 34
BRUSH, CO 80723

- 13) WASHBURN, JOSHUA
29747 HWY 34
BRUSH, CO 80723

- 14) SCHREINER, MICHAEL EDWARD & BONNIE D
29741 HWY 34
BRUSH, CO 80723

- 15) THOMAS, TRAVIS & DAWN
29523 HWY 6
BRUSH, CO 80723

- 16) TETER & SON OILFIELD SERVICE INC
P O BOX 37
BRUSH, CO 80723
- 17) WESTERN EQUIPMENT & TRUCK INC
2055 1ST AVE
GREELEY, CO 80631
- 18) PEACOCK FARNAM INVESTMENT BUILDERS BRUSH LLC
P O BOX 1818
LAFAYETTE, CA 94549
- 19) TRI-STATE GENERATION & TRANSMISSION ASSOCIATION
P O BOX 33695
DENVER, CO 80233
- 20) MCINTOSH, SCOT C
412 DESSA ST
BRUSH, CO 80723
- 21) FEDERAL ASSOCIATION ADMINISTRATION
Mailing Address Not Available
- 22) 3D RANCH INC
12001 HWY 34
AKRON, CO 80720
- 23) FEDERAL ASSOCIATION ADMINISTRATION
Mailing Address Not Available

24) T3 LAND & INVESTMENT LLC

P O BOX 408

BRUSH, CO 80723

25) ARTEAGA FAMILY 2022 REVOCABLE LIVING TRUST

1007 VICKIE ST

FORT MORGAN, CO 80701

26) ODLE, RUTH ANN

16218 HWY 71

BRUSH, CO 807239436

27) BENOTTI, SHARI A

2420 THORNDON PARK CT

LEAGUE CITY, TX 77573

28) WINKLER, JEFFERY L

611 CURTIS ST

BRUSH, CO 80723

29) QUIJADA-VIDES, NOE &

GARCIA, CRISTINA GARCIA

29727 HWY 34

BRUSH, CO 80723

30) GROSSHANS, STEVEN L & JANICE R

703 DESSA ST

BRUSH, CO 80723

31) BLAKE, DANNY J & RANDI M

29582 HWY 6

BRUSH, CO 80723

32) BLAKE, STANLEY

29850 HWY 6

BRUSH, CO 80723

33) KB1229 LLC

4855 W COUGAR ROCK TRAIL

PRESCOTT, AZ 86305

34) BASS, BRUCE B FAMILY LLLP

P O BOX 685

BRUSH, CO 807230685

35) STONE, JAMES L & JUDY L

P O BOX 351

BRUSH, CO 80723

36) GAYLE, ROBERT D & WENDY E

29994 CO RD Q

BRUSH, CO 80723

37) DICK, RON

29874 CO RD Q

BRUSH, CO 80723

38) STUTZMAN, TIMOTHY J & LANA J

19798 CO RD 23

FORT MORGAN, CO 80701

39) STATE OF COLORADO

BOARD OF LAND COMMISSIONERS

1313 SHERMAN ST - RM 620

DENVER, CO 80203

40) BOOTH LAND & LIVESTOCK LLC

P O BOX 72

LUCERNE, CO 80646

41) BOLINGER, AUSTIN MICHAEL

12001 US HWY 34

AKRON, CO 80720

42) ATWOOD, LOUIS G

29491 CO RD R

BRUSH, CO 80723

43) MARTIN, JOHN & MARIA

29251 CO RD R

BRUSH, CO 80723

44) MCDONALD BROTHERS LLC

P O BOX 352

BRUSH, CO 80723

45) MASSEY, BROOKS L

17426 HWY 71

BRUSH, CO 80723

46) SERRANO, JOSE E &

TREVIZO-CASTRO, MARYBELL

17328 HWY 71

BRUSH, CO 80723

47) SCIANCALEPORE, MARGO LYNN

P O BOX 643

BRUSH, CO 80723

48) QUEEN, DOUG

P O BOX 731

BRUSH, CO 80723

49) DILLEY, VERNON & GWEN

P O BOX 125

BRUSH, CO 80723-2308

50) WILSON, DARBY J

29501 CO RD R

BRUSH, CO 80723

51) KRAL, JOSEPH F III & JENNIFER L

67 PRESERVE DR

FORT MORGAN, CO 80701

52) DESLAURIERS, ROY
29248 CO RD R
BRUSH, CO 80723

53) MELENDEZ, JAIME & IVY KRISTEN
29250 CO RD R
BRUSH, CO 80723

54) DEMMING, JUDD &
MONTZ, LYNNE A
29246 CO RD R
BRUSH, CO 80723

55) FLYING BEE ENTERPRISES LLC
29382 CO RD R
BRUSH, CO 80723

56) KEMBEL, JAMES S & JOYCE E
16750 HWY 71
BRUSH, CO 80723

57) LAMBERT, CHAD & JILL
P O BOX 212
BRUSH, CO 80723



MORGAN COUNTY PLANNING AND ZONING DEPARTMENT

TO REFERRAL AGENCIES:

Bureau of Reclamation	Kinder Morgan, Inc.
BNSF Railway	Morgan County Assessor
Brush Fire Department	Morgan County Communications Center
Brush Municipal Airport (7V5)	Morgan County Emergency Management
CDOT	Morgan County Quality Water
Century Link	Morgan County Road & Bridge
Central CO Water Conservancy District	Morgan County Rural Electric Assoc.
Cheyenne Plains Gas Pipeline Company	Morgan County Sheriff
City of Brush	Morgan Soil Conservation District
City of Fort Morgan	Morgan Weed & Pest Advisory Committee
Colo. Dept. of Natural Resources	Northeast Colorado Health Department
Colo. Oil & Gas Conservation Commission	Town of Wiggins
CDPHE	Tri-State Generation & Transmission Assoc.
Colo. State Land Board	USDA Farm Service Agency
Division of Wildlife	Washington County
Fort Morgan Fire Department	Western Area Power Administration
Hillrose/Snyder Fire Department	Wiggins Fire Department
	Xcel Energy

FROM: Cheryl Brindisi, Morgan County Planning & Zoning Administrative Assistant
231 Ensign St, PO Box 596, Fort Morgan, CO 80701
970-542-3526 / 970-542-3509 fax / cbrindisi@co.morgan.co.us

DATE: January 17th, 2024

RE: Land Use Application- Special Use Permit

The Special Use Permit application is submitted to you for review and comments. The application will be heard by the Planning Commission and the Board of County Commissioners. **You are encouraged to provide comments to this application by February 5th, 2024.** Failure to comment will be viewed as a favorable review. Please contact the Planning and Zoning Department if you would like to attend the public meeting.

Applicants: Fortress Solar I, LLC, Fortress Solar II, LLC, and Fortress Solar III, LLC
(collectively "Fortress Solar")

Landowners: Tri-State Generation and Transmission Association Inc., Shari A. Benotti and Ruth Ann Odle.

Fortress Solar, LLC, Solar Energy Facility; Phases I, II and III.

Legal Description: A part of Sections 3, 4, 5, 6, 7, 8, 9 and 10, Township 3 North, Range 55 West, a part of Sections 1 and 12, Township 3 North, Range 56 West, and a part of Section 32, Township 4 North, Range 55 West of the 6th PM, Morgan County, Colorado.

Fortress Solar, LLC, BESS; Phases I, II and III.

Legal Description: A part of Section 5, Township 3 North, Range 55 West of the 6th PM, Morgan County, Colorado.

Request: Fortress Solar, LLC has submitted a Special Use Permit Application to construct and operate a an up to 600 MW Solar Photovoltaic Panel (PV) project in conjunction with a 2,400 MWh Battery Energy Storage System (BESS). Construction will take place in three phases.

Sincerely,

Cheryl Brindisi,

Cheryl Brindisi, Morgan County Planning and Zoning Administrative Assistant

REFERRAL AGENCIES	RESPONSES RECEIVED
Bureau of Reclamation	
BNSF Railway	<p><u>Response from BNSF received via email on January 19, 2024</u></p> <p>Cheryl, Please have the applicant address these BNSF comments. We may need the applicant to enter into a preliminary engineering agreement to reimburse us for our third party engineering costs if the hydraulics don't show clear capacity across BNSF property.</p> <ul style="list-style-type: none"> • Apply for private crossing application for DOT# 057273E on the north boundary of the property, otherwise if it is no longer needed it will be closed. <ul style="list-style-type: none"> ◦ Remove gate from plans if crossing is closed. • Civil plans don't show the retention detention ponds described in the H&H report. Please transmit drainage sheets including existing and proposed flow (Q), show capacity of BNSF assets for proposed Q with hydraulic grade lines. • Hydrology Report doesn't name the tributaries that the runoff is estimated to also flow into. (2.1.3 of report) • Section 4.6 of the hydrology report they mention, "Stormwater discharging off the site onto adjacent property will be controlled by stormwater management basins in the post-developed condition." These ARE shown on their plans as ellipses but nothing specific about depth or where the intended runoff is going to go for these basins so it does not effect BNSF track and drainage. • Erosion control for where these Basins are being implemented not shown or mentioned as it is near BNSF ROW? <p>Thanks, Rafer Nichols, PE Manager Public Projects II (AZ, CO & NM) BNSF Railway</p> <p><u>Response from Applicant received via email on January 25, 2024</u></p> <p>Hello Cheryl/Nicole/Jenafer,</p> <p>We would like to clarify our approach and response to the BNSF Railway comments received. I have left you a voicemail but thought it best to follow-up with an email. The second, fourth and fifth bulleted comments from BNSF pertain to the stormwater design of the site. The civil plans for the project have conservatively accounted for anticipated locations and size of detention basins. The design details and calculations for these stormwater control features, to determine size and capacity, would be completed as part of the project's Construction Stormwater Discharge Permit in accordance with CDPHE requirements. The BNSF comments would be incorporated, reviewed, and addressed through site design and stormwater calculations at that time. This permit would be secured prior to any ground disturbance.</p> <p>We would like to confirm that our approach and response to the comments regarding stormwater concerns would be adequate as we state our commitment to address these concerns through detailed stormwater design and calculations in support of the Construction Stormwater Discharge Permit.</p> <p>Thank you, Justin L. Miner, PWS Southwest Operations Manager</p>

BNSF Railway	<p><u>Response from BNSF to Applicant received on February 7, 2024</u> Thanks Cheryl, this addresses our concerns with the special use application. Please have applicant reach out to me to enter into a contract to reimburse bnsf for review of the forthcoming hydraulic and hydrologic design.</p> <p>Rafer Nichols Manager Public Projects II BNSF Railway </p>
Brush Fire Department	<p><u>Response received via email on March 4, 2024</u> R.5 is not an option for emergency traffic. Emergency traffic needs to utilize Road R and Q.</p> <p>Ray Uhrick Assistant Chief Brush Vol. Fire Department</p>
Brush Municipal Airport (7V5)	
CDOT	<p><u>Response received via email on January 18, 2024</u> Good afternoon Cheryl, Thank you for the referral for the Special Use Application- Fortress Solar. After reviewing this CDOT does not have any comments on this project. If you have any questions please let me know. Again thank you for sending this to us.</p> <p>Mike Shepherd</p> <p>Assistant Access Manager / Utility Permits</p>
Century Link	
Central CO Water Conservancy District	
Cheyenne Plains Gas Pipeline Company	
City of Brush	<p><u>Response received via email on January 30, 2024</u> Hey Nicole Thanks for reaching out. I don't think we have had any conservations with the applicant (at this point, they are all starting to run together). We only have two comments:</p> <ol style="list-style-type: none"> 1. Given their proximity to the airport, they will need to submit the project to the FAA if they meet certain criteria that can be found at the link below. https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm 2. One of the proposed access points is off of County Road R, and that road is in pretty rough shape as it is, so any increased traffic to the site would only make conditions worse; so the impact on that road should be considered. <p>Tyler Purvis City of Brush! Community Development Director / Assistant City Administrator</p>
City of Fort Morgan	

Colo. Dept. of Natural Resources	<u>See included letter February 5, 2024</u> <u>See included response letter from Applicant February 12, 2024</u>
Colo. Oil & Gas Conservation Commission	
CDPHE	
Colo. State Land Board	
Division of Wildlife	<u>See included letter February 2, 2024</u>
Fort Morgan Fire Department	
Hillrose/Snyder Fire Department	
Kinder Morgan, Inc.	
Morgan County Assessor	
Morgan County Communications Center	
Morgan County Emergency Management	
Morgan County Quality Water	
Morgan County Road & Bridge	
Morgan County Rural Electric Assoc.	
Morgan County Sheriff	
Morgan Conservation District	<u>See included letter</u>
Morgan Weed & Pest Advisory Committee	
Northeast Colorado Health Department	
Town of Wiggins	
Tri-State Generation & Transmission Assoc.	<u>See included letter from February 28, 2024</u> <u>See included response letter from Applicant February 29, 2024</u> <u>Response to applicant received via email February 29, 2024</u> I had not. Thanks for forwarding. I appreciate their willingness to accommodate future lines. I don't have any concerns beyond that. Steve
USDA Farm Service Agency	
Washington County	
Western Area Power Administration	<u>Response received via email on February 6, 2024</u> Hello, Western Area Power Administration has conflict with this project. I will need the applicant to contact me as soon as possible. Thanks for reaching out to us! Respectfully,

Western Area Power Administration

Tracy Rogers | Realty Technician
Wyandotte Services on contract to
Western Area Power Administration | Rocky Mountain Region | Loveland, CO

Response from Applicant received via email on February 9, 2024

Attn: Tracy Rogers, Realty Technician
Western Area Power Administration
Wyandotte Services

Re: Special Use Application- Fortress Solar and BESS – Response to WAPA-Conflict

We acknowledge receipt of a letter dated February 6, 2024, from Wyandotte Services on contract to the Western Area Power Administration, notifying Morgan County that there is a conflict with our proposed Fortress Solar and BESS projects and that the Applicant contact Tracy Rogers.

Thank you for giving me a call today. As mentioned on the call, we are aware of the existence and locations of WAPA's easements and infrastructure in the area around the proposed project sites and understand and respect the importance of WAPA's right-of-way and easements. We wish to clarify that the plans submitted with our application for a Special Use Permit (SUP) are preliminary. Detailed construction and building plans will be developed for subsequent permit phases, and we will ensure these plans consider all WAPA easements and infrastructure to avoid any conflicts.

At this stage, we have requested that WAPA does not advocate for a delay in processing our SUP based on these preliminary plans. We agree that a License Agreement with WAPA may be necessary to cross WAPA's existing easements and infrastructure and intend to engage in this process during final site design, permitting, and before the construction phase. However, we believe that negotiations for such an agreement are not a prerequisite for the processing of our current SUP application.

We are committed to full compliance with all necessary safety standards and operational requirements. We will contact Colorado 811 for utility locates and ensure that any future development respects and protects WAPA's infrastructure. We look forward to working closely with WAPA's right-of-way department to finalize a License Agreement when we reach the detailed design stage of our project.

Should you have any future concerns or require additional information at this juncture, please feel free to contact me.

Regards,

Charles Ndhlovu
Manager Development | cndhlovu@aypa.com | (304) 685-8669
Aypa Power A BLACKSTONE PORTFOLIO COMPANY

Response received via email from WAPA on February 9, 2024

Cheryl,

Charles Ndhlovu with AYPa Power has reached out to discuss this project. We will continue to work with them on this project and have no problem with the preliminary plans.

Have a great day!

Wiggins Fire Department

Xcel Energy	<p><u>See included letter January 22, 2024</u></p> <p><u>See included response letter from Applicant to Xcel Energy February 1, 2024</u></p> <p><u>Response via email on February 2, 2024 from Xcel Energy to Applicant referencing the included letter from the Applicant included in the packet dated February 1, 2024</u></p> <p>Cheryl,</p> <p>Thank you for sending this. Just to clarify, the previously sent letter should not prevent the project from moving forward at this point since this is a preliminary stage.</p> <p>Let me know if you need an amended letter.</p> <p>Violeta Ciocanu [Chokanu] Xcel Energy You. Us. Together Public Service Company of Colorado, PSCo Right of Way and Permits Department</p>
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February 1, 2024

Attn: Rafer Nichols, PE
BNSF Railway
Manager Public Project II

CC: Nicole Hay, Planning Director
Cheryl Brindisi, Planning Technician
Morgan County Planning and Zoning

Re: Special Use Application- Fortress Solar and BESS – Response to BNSF Railway Comments Received

We acknowledge receipt of an email dated January 19, 2024, from BNSF Railway, notifying Morgan County that they perceive potential conflict between BNSF's existing right-of-way and infrastructure and our proposed Fortress Solar and BESS project.

We understand and respect the importance of BNSF's right-of-way, track, and drainage infrastructure. We wish to clarify that the plans submitted with our application for a Special Use Permit are preliminary. Detailed construction and building plans will be developed for subsequent permit phases, and we will ensure these plans and the supporting hydrologic study consider all BNSF infrastructure and show clear capacity across BSNF property to avoid any conflicts.

Through communication with BNSF, it is Aypa's understanding that the requests received from BNSF will be processed as part of the conditions of approval for the Project. Aypa is committed to addressing the comments from BNSF through detailed stormwater design and calculations in support of the Construction Stormwater Discharge Permit.

The second, fourth and fifth bulleted comments from BNSF pertain to the stormwater design of the site. The civil plans for the project have conservatively accounted for anticipated locations and size of detention basins. The design details and calculations for these stormwater control features, to determine size and capacity, would be completed as part of the project's Construction Stormwater Discharge Permit in accordance with CDPHE requirements. The BNSF comments would be incorporated, reviewed, and addressed through site design and stormwater calculations at that time. This permit would be secured prior to any ground disturbance. Copies of the project's Construction Stormwater Discharge Permit applications will be provided to Morgan County, along with a copy of the permit once secured.

Should you have any future concerns or require additional information at this juncture, please feel free to contact me.

Regards,

Charles Ndhlovu
Manager Development | cndhlovu@aypa.com | (304) 685-8669



COLORADO
Division of Water Resources
Department of Natural Resources

February 5, 2024

Cheryl Brindisi
Morgan County Planning and Zoning
Transmission via email: CBrindisi@co.morgan.co.us

Re: Fortress Solar Project
Pt. of Sections 3, 4, 5, 6,7,8,9,10, T3N, R55W, 6th P.M.
and Sections 1 and 2, T4N, R55W, 6th P.M.
Water Division 1, Water District 1

Dear Ms. Brindisi:

We have reviewed the above referenced application for a Special Use Permit for a Solar Energy Facility. The submitted material does not qualify as a "subdivision" as defined in section 30-28-101(10)(a) of the Colorado Revised Statutes ("C.R.S."). Therefore, pursuant to the State Engineer's March 4, 2005 and March 11, 2011 memorandums to county planning directors, this office will only perform a cursory review of the referral information and provide informal comments regarding the proposed water supply. The comments do not state an opinion on the adequacy of the water supply plan for this project or the ability of the water supply plan to satisfy any County regulations or requirements, and cannot be used to guarantee the physical availability of water.

The application seeks to construct and operate an up to 600 MW Solar Photovoltaic Panel project in conjunction with a 2,400 MWh Battery Energy Storage System located east of Brush, Colorado. The project will cover approximately 4,259 acres. The site has historically been used for rangeland.

The application documents indicate that during approximately 15 months of construction activities, the anticipated water demand will be 470 acre-feet. Water needs during construction include industrial uses such as dust control, hydration and compaction, backfill, cement stabilization, and equipment cooling. Once the site is operational, the applicant estimates 30.6 acre-feet/year will be needed for industrial uses such as washing of the solar panels and cooling equipment, and supporting establishment of vegetation around the site.

During construction and operation, sanitary needs will be met with portable restrooms and handwashing units. The applicant indicates that they intend to use existing wells on the property for the anticipated industrial needs. A review of our records found that several wells may exist on the property. The following wells are permitted for stock watering use: well permit nos. 475-WCB, 546-WCB, 547-WCB, 31855, 40280, 40533, 111641-A (replacement for permit 111641), and 132567-A. Well permit no. 154645 was permitted for ordinary household purposes inside one single family dwelling, fire protection, the watering of poultry, domestic animals, and livestock on farms and ranches, and the irrigation of not over one acre of home gardens and lawns. The following wells were later re-permitted or replaced on adjacent properties: well permit nos. 17246-MH (re-permitted as



10539-RR), 10330-F (replaced by 10330-FR), 10538-R (replaced by 10538-RR), and 41351-F (replaced by 33746-FR). Well permit no. 31672 was canceled.

As currently permitted, these wells cannot be used to supply water for industrial uses, irrigation uses, or for drinking and sanitary uses associated with the commercial operations on the property.

In order to obtain a non-exempt well permit for industrial use or irrigation use, the well would first need to be included in a plan for augmentation decreed by the water court or a substitute water supply plan approved by the state engineer.

The application states that water may be brought in from an external source. Any water must be obtained from a source permitted or decreed for such uses, such as a water hauling company or bulk municipal tap.

The application materials indicate that several perimeter storm water detention structures will be constructed as a part of this project. The applicant should be aware that unless the structure can meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), C.R.S., the structure may be subject to administration by this office. The applicant should review *DWR's Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado*, attached, to ensure that the notification, construction and operation of the proposed structure meets statutory and administrative requirements. The applicant is encouraged to use Colorado Stormwater Detention and Infiltration Facility Notification Portal to meet the notification requirements, located at <https://maperture.digitaldataservices.com/gvh/?viewer=cswdif>.

Should you or the applicant have any questions regarding any of the above information, please contact Kate Fuller of this office at _____ or _____

Sincerely,



Kate Fuller, P.E.
Water Resources Engineer

Cc: Referral file no.

February 12, 2024

**Attn: Kate Fuller, Water Resources Engineer
Colorado Department of Natural Resources
Division of Water Resources**

**CC: Nicole Hay, Planning Director
Cheryl Brindisi, Planning Technician
Morgan County Planning and Zoning**

Re: Special Use Application- Fortress Solar and BESS – DWR- Water Referral Response Referral File No. 31185

We acknowledge receipt of a letter dated February 5, 2024, from the Colorado Division of Water Resources, Referral file no. 31185.

We understand the current limitations on the existing wells on the property and are actively exploring legal avenues to amend the permits to accommodate our project's needs. This includes repermitting wells or securing water from sources with the appropriate permits or decrees for industrial or irrigation uses and for drinking and sanitary purposes associated with commercial operations.

Concurrently, we are investigating secure, sustainable external water sources that comply with state regulations for our construction and operational needs. We are currently exploring options for nearby legally permissible external sources, both from municipal water providers and water hauling companies.

In response to the comments from the Division of Water Resources (DWR), we intend to address their feedback as part of the Project's approval conditions. During the detailed site and stormwater design, we will refine our stormwater management plans with detailed designs and calculations to support our application for the Construction Stormwater Discharge Permit.

Thank you for your attention to our application, and we look forward to your guidance and support as we proceed.

Regards,

Charles Ndhlovu

Manager Development | cndhlovu@aypa.com | (304) 685-8669



COLORADO

Parks and Wildlife

Department of Natural Resources

Northeast Region

6060 Broadway

Denver, CO 80216

P 303.291.7227

February 2, 2024

Morgan County - Planning and Zoning Department

Attn: Cheryl Brindisi

231 Ensign Street, P.O. Box 596

Fort Morgan, CO 80701

970-542-3526

cbrindisi@co.morgan.co.us

Dear Cheryl Brindisi,

Thank you for the opportunity for Colorado Parks and Wildlife (CPW) to submit formal comments on Fortress Solar, LLC, 's proposed Story Solar 600 megawatt (MW) photovoltaic solar facility, in conjunction with a 2,400 MWh Battery Energy Storage System (BESS) that will be constructed in three phases, located on 4,400 acres of private land. The Story Solar Facility is located east of U.S. Highway 71 and south of U.S. Highway 34 just east of the city of Brush in unincorporated Morgan County, Colorado (3N 55W Sections 3 - 10, 3N 56W Section 1 & 12 and 4N 55W Section 32), on existing rangeland and agricultural lands. It is our understanding that construction will begin around mid-2025 with an end date of 2027.

The mission of CPW is to perpetuate the wildlife resources of the state, to provide a quality state parks system, and to provide enjoyable and sustainable outdoor recreation opportunities that educate and inspire current and future generations to serve as active stewards of Colorado's natural resources. CPW has a statutory responsibility to manage all wildlife species in Colorado and to promote a variety of recreational opportunities throughout Colorado. One way we achieve this goal is by responding to referral comment requests.

CPW appreciates this formal consultation from Fortress Solar and Morgan County. Early consultation is our preferred time to discuss any concerns or questions about the proposed Solar Projects. CPW also appreciates that this solar project does not intersect High Priority Habitats (HPHs), and the local District Wildlife Manager has no additional wildlife concerns.

Jeff Davis, Director, Colorado Parks and Wildlife

Parks and Wildlife Commission: Dallas May, Chair · Richard Reading, Vice-Chair · Karen Bailey, Secretary · Jessica Beaulieu
Marie Haskett · Jack Murphy · Gabriel Otero · Duke Phillips, IV · Gary T. Skiba · James Jay Tutchton · Eden Vardy



CPW appreciates that the developer has agreed to and encourages the following recommendations for this solar project based on CPW's Solar BMPs:

- Fortress Solar has agreed verbally during the consultation call on October 13, 2023, to conduct spring surveys for Greater Prairie Chicken this upcoming spring. After surveys are completed, CPW requests AYPower to share their findings and consult with CPW further to discuss if species-specific BMPs are needed or not.
- CPW recommends site planning to include big game corridors at least 250 feet wide with no visual pinch points. This will prevent deer and pronghorn from becoming trapped in snow drifts and will encourage pronghorn to use the corridors.
- CPW recommends that any installed fencing should be eight feet in height, have round-capped posts (e.g., so wildlife isn't impaled), and smooth top wire (e.g., no top barbed wire; or if two top strands are needed, ensure they are at least six inches apart). The bottom wire can be barbed but should be four inches or less from the ground.
- CPW recommends that other non-security fencing is kept to a minimum. Where such fencing is required, please use wildlife-friendly fencing specifications as described in CPW's document entitled "Fencing with Wildlife in Mind."
- CPW recommends that the solar facility is checked weekly (or escape structures are installed inside the fenced area) to allow deer to escape if one becomes trapped within the facility. Please immediately report mortalities, trapped or injured wildlife, or other reportable incidents to the local District Wildlife Manager (Robert Emanuel 970-466-0501). Please document and report these findings to CPW annually.
- We recommend avoiding starting construction during the bird nesting season (April 1-August 31).
- For the eventual consultation regarding transmission lines to this Solar Project, CPW recommends they are installed according to Avian Power Line Interaction Committee (APLIC) standards and outside the raptor nesting season. Also, please install bird diverters within 1/4-mile of any lake, drainage, or riparian area and within the raptor nesting buffer for occupied nests.

CPW appreciates the opportunity from Morgan County to comment on this project, as we strive for responsible energy development while protecting sensitive species and their habitats. This collaboration should benefit the residents, visitors, economy, wildlife species, and habitats in Colorado.

If you have any additional questions regarding wildlife concerns for this property, please contact Robert Emanuel, District Wildlife Manager at Robert.Emanuel@state.co.us or by phone at 970-466-0501.

Respectfully,



Mark Leslie, Northeast Regional Manager

Cc: Robert Emmanuel, District Wildlife Manager - Robert.emmanuel@state.co.us
Lexi Hamous, NE Land Use Coordinator - lexi.hamous-miller@state.co.us
Maya Lewis, Environmental Planner Tetra Tech - MAYA.LEWIS@tetratech.com
Charles Ndhlovu, AYPAs Power - cndhlovu@aypa.com
Andrew Breyer, AYPAs Power - abreyer@aypa.com



Morgan Conservation District Est. 1955

200 West Railroad Avenue, Fort Morgan, CO 80701
970-427-3362 • morganconservationdistrict@gmail.com
www.morganconservationdistrict.com

Morgan County Planning & Building Department
231 Ensign Street
Fort Morgan, CO 80701

To Whom in May Concern:

The Morgan Conservation District has reviewed the Fortress Solar Special Use Permit.

The District would like to make the recommendation of the implementation of a tree windbreak, vegetation plan, and wildlife habitat to prevent and reduce any potential erosion, habitat damage, or ground cover damage. The District can assist with windbreak recommendations, as well as vegetation planning and wildlife plantings if needed.

Please let us know if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'Madeline Hagan', is written over a light blue horizontal line.

Madeline Hagan
District Manager



TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.

1100 W. 116TH AVENUE • P.O. BOX 33695 • DENVER, COLORADO 80233 • 303-452-6111

February 28, 2024

Ms. Nicole Hay
Morgan County Planning Administrator
231 Ensign Street
PO Box 596
Fort Morgan, CO 80701

Re: Fortress Solar LLC Special Use Permit Application

Dear Ms. Hay,

Thank you for the opportunity to comment on the above-referenced planning case. Your notification letter identifies Tri-State Generation and Transmission Association, Inc. as having participated in the submission of the application. That is not the case. Tri-State has given Fortress Solar I LLC temporary permission to access Tri-State's property for purposes of route analysis for a potential transmission line. Tri-State has not granted any permanent or long-term property rights and is not a co-applicant or affiliated with the above project. Tri-State is not opposed to the project but wants to make clear that it is also not associated with the applicant.

Tri-State owns and operates the Story 230kV Substation adjacent to the northwest corner of the project site. Tri-State is concerned about the lack of space for future transmission connections into the substation. The site plan appears to show the solar farm occupying all areas between the transmission corridor extending east of the substation and the transmission corridor extending south of the substation. With I-76 to the north and higher density residential and commercial uses to the west, the best routes to connect with the substation will come from the south and east. Tri-State therefore requests that the proposed development, if approved, leave a corridor 200 feet in width on the east and south sides of the existing easements associated with the east and south transmission line corridors, respectively.

I am available at your convenience to answer any questions you have. You can reach me by telephone at _____ or by email at _____

Sincerely,

H. Steven Gray
Senior Manager, Land Rights and Permitting

February 29, 2024

Attn: Steven Gray, Senior Manager
Land Rights and Permitting
Tri-State Generation and Transmission
Association, Inc.

CC: Nicole Hay, Planning Director
Cheryl Brindisi, Planning Technician
Morgan County Planning and Zoning

Re: Special Use Application- Fortress Solar and BESS – Response to Tri-State Generation and Transmission Association, Inc. ("TSGT")

We acknowledge receipt of a letter dated February 28, 2024, from TSGT , notifying Morgan County that there is a conflict with our proposed Fortress Solar and BESS projects

Thank you for your clarification on Tri-State Generation and Transmission Association, Inc.'s (TSGT) role concerning the Fortress Solar I LLC project. We acknowledge TSGT's temporary access grant and your concerns about future transmission connections at the Story 230kV Substation.

We are addressing TSGT's request for a 200-foot wide corridor for future development, alongside Colorado Parks and Wildlife's (CPW) recommendation for big game corridors. These adjustments will be incorporated into our detailed site planning to prevent any conflicts with TSGT's existing infrastructure.

Our application for a Special Use Permit (SUP) contains preliminary plans. We understand a License Agreement with TSGT is needed for crossing existing easements and infrastructure, which we intend to pursue during final site design and before construction. This process, we believe, should not delay our current SUP application.

We value our relationship with TSGT and aim for a collaborative approach throughout this project's development, ensuring benefits for all stakeholders, including the local wildlife and community. We will also ensure that Dan Burke is notified as per the temporary agreement each time before entering the Licensed Premises for any of the permitted activities.

Should you have any future concerns or require additional information at this juncture, please feel free to contact me.

Regards,

Charles Ndhlovu
Manager Development | cndhlovu@aypa.com | (304) 685-8669



Right of Way & Permits

1123 West 3rd Avenue
Denver, Colorado 80223
Telephone: 303.285.6612

January 22, 2024

Morgan County Planning and Building Department
231 Ensign / PO Box 596
Fort Morgan, CO 80701

Attn: Nicole Hay and Cheryl Brindisi

Re: Fortress Solar and BESS

Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has determined **there is a potential conflict** with the above captioned project. Public Service Company has existing electric transmission lines and associated land rights as shown within this property. Any activity including grading, proposed landscaping, erosion control or similar activities involving our existing right-of-way will require Public Service Company approval. Encroachments across Public Service Company's easements must be reviewed for safety standards, operational and maintenance clearances, liability issues, and acknowledged with a Public Service Company License Agreement to be executed with the property owner. PSCo is requesting that, prior to any final approval of the development plan/plat, it is the responsibility of the property owner/developer/contractor to have this project assigned to a Land Rights Agent for development plan review and execution of a License Agreement (via either website www.xcelenergy.com/rightofway or email coloradorightofway@xcelenergy.com).

Please be aware that PSCo also has existing overhead electric distribution facilities in the proximity of County Road Q.

The property owner/developer/contractor must complete the application process for any new electric service, or modification to existing facilities via xcelenergy.com/InstallAndConnect. It is then the responsibility of the developer to contact the Designer assigned to the project for approval of design details.

Additional easements may need to be acquired by separate document for new facilities – be sure to contact the Designer and request that they connect with a Right-of-Way and Permits Agent in this event.

As a safety precaution, PSCo would like to remind the developer to contact Colorado 811 for utility locates prior to construction.

Violeta Ciocanu (Chokanu)
Right of Way and Permits

Public Service Company of Colorado dba Xcel Energy
Office: 303-285-6612 – Email:

February 1, 2024

Attn: Violeta Ciocanu (Chokanu)
PSCO dba Xcel Energy
Right of Way and Permits

CC: Nicole Hay, Planning Director
Cheryl Brindisi, Planning Technician
Morgan County Planning and Zoning

Re: **Special Use Application- Fortress Solar and BESS – Response to Xcel Energy Comments Received**

We acknowledge receipt of a letter dated January 22, 2024, from Xcel Energy (Xcel), notifying Morgan County that they perceive a potential conflict between PSCO's existing easements and infrastructure and our proposed Fortress Solar and BESS projects. We are aware of the existence and locations of Xcel's easements and infrastructure in the area around the proposed project sites and understand and respect the importance of PSCO's right-of-way and easements.

We wish to clarify that the plans submitted with our application for a Special Use Permit (SUP) are preliminary. Detailed construction and building plans will be developed for subsequent permit phases, and we will ensure these plans consider all PSCO easements and infrastructure to avoid any conflicts.

At this stage, we have requested that PSCO does not advocate for a delay in processing our SUP based on these preliminary plans. We agree that a License Agreement with PSCO will be necessary to cross PSCO's existing easements and infrastructure and intend to engage in this process during final site design, permitting, and before the construction phase. However, we believe that negotiations for such an agreement are not a prerequisite for the processing of our current SUP application.

We are committed to full compliance with all necessary safety standards and operational requirements. We will contact Colorado 811 for utility locates and ensure that any future development respects and protects PSCO's infrastructure.

We look forward to working closely with PSCO's right-of-way department to finalize a License Agreement when we reach the detailed design stage of our project.

Should you have any future concerns or require additional information at this juncture, please feel free to contact me.

Regards,

Charles Ndhlovu
Manager Development | cndhlovu@aypa.com | (304) 685-8669

**NOTICE OF SPECIAL PUBLIC HEARING
MORGAN COUNTY BOARD OF COUNTY COMMISSIONERS
MARCH 12, 2024 AT 9:00 A.M.
VIRTUAL AND IN PERSON IN THE ASSEMBLY ROOM, MORGAN COUNTY
ADMINISTRATIVE BUILDING, 231 ENSIGN, FORT MORGAN, COLORADO**

Notice is hereby given that on the date and time above (or as soon as possible following the scheduled time) and at the location above, or at such time and place as this hearing may be adjourned, the Morgan County Board of Commissioners will conduct public hearings on the following proposed **Land Use Applications:**

- 1.) **Applicant:** Fortress Solar, LLC, Fortress Solar II, LLC, and Fortress Solar III, LLC (collectively "Fortress Solar")
Landowners: Tri-State Generation and Transmission Association Inc., Shari A. Benotti and Ruth Ann Odle.
Fortress Solar, LLC, Solar Energy Facility; Phases I, II and III.
Legal Description: A part of Sections 3, 4, 5, 6, 7, 8, 9 and 10, Township 3 North, Range 55 West, a part of Sections 1 and 12, Township 3 North, Range 56 West, and a part of Section 32, Township 4 North, Range 55 of the 6th PM, Morgan County, Colorado.
Fortress Solar, LLC, BESS; Phases I, II and III.
Legal Description: A part of Section 5, Township 3 North, Range 55 West of the 6th PM, Morgan County, Colorado.

Request: Fortress Solar, LLC has submitted a Special Use Permit Application to construct and operate an up to 600 MW Solar Photovoltaic Panel (PV) project in conjunction with a 2,400 MWh Battery Energy Storage System (BESS). Construction will take place in three phases.

Date of Application: December 8, 2023.

THE COUNTY WILL CONTINUE TO OFFER THE OPTION TO ATTEND MEETINGS REMOTELY. IF YOU HAVE ANY QUESTIONS REGARDING ATTENDING THE MEETING, PLEASE CONTACT THE PLANNING OFFICE AT 970-542-3526.

To participate remotely you may connect via Zoom at:

<https://us02web.zoom.us/j/84648770345>

Or Telephone:

Dial:

+1 719 359 4580 US

Webinar ID: 846 4877 0345

Documents pertaining to the above identified matters are on file in the Planning Administrator's Office, 231 Ensign St., Fort Morgan, Colorado. Documents will also be available on the Morgan County Website <https://morgancounty.colorado.gov>

At time of the meeting an opportunity will be given for presentation of evidence in support of or in opposition to the application.

Nicole Hay

Nicole Hay

Morgan County Planning Administrator

Published: March 2, 2024

The above sign was posted on (date) 2/29/24, pursuant to the
Morgan County Zoning Resolution by (name of applicant) Fortress solar 1 LLC

Project name and number: SU2023-0020+ SU2023-0021

Signature of Applicant/Representative: Maya Lewis

STATE OF COLORADO)
 denver) ss.
COUNTY OF ~~MORGAN~~)

Signed before me this date: 3-1-24

My Commission expires: 09-12-2027

NOTARIZED BY: Tyler Lewis

TYLER JOSEPH LEWIS
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20234034949
MY COMMISSION EXPIRES 09/12/2027

The above sign was posted on (date) 2/29/24, pursuant to the
Morgan County Zoning Resolution by (name of applicant) Fortress solar II LLC.

Project name and number: SU2023-0022 + SU2023-0023

Signature of Applicant/Representative: *Maaya Lewis*

STATE OF COLORADO)
 Denver) ss.
COUNTY OF MORGAN)

Signed before me this date: 3-1-24

My Commission expires: 09-12-2027

NOTARIZED BY: *Tyler Lewis*

TYLER JOSEPH LEWIS
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20234034949
MY COMMISSION EXPIRES 09/12/2027

The above sign was posted on (date) 2/29/24, pursuant to the
Morgan County Zoning Resolution by (name of applicant) Fortress Solar II LLC.

Project name and number: SU2023-0024 + SU2023-0025

Signature of Applicant/Representative: Maya Lewis

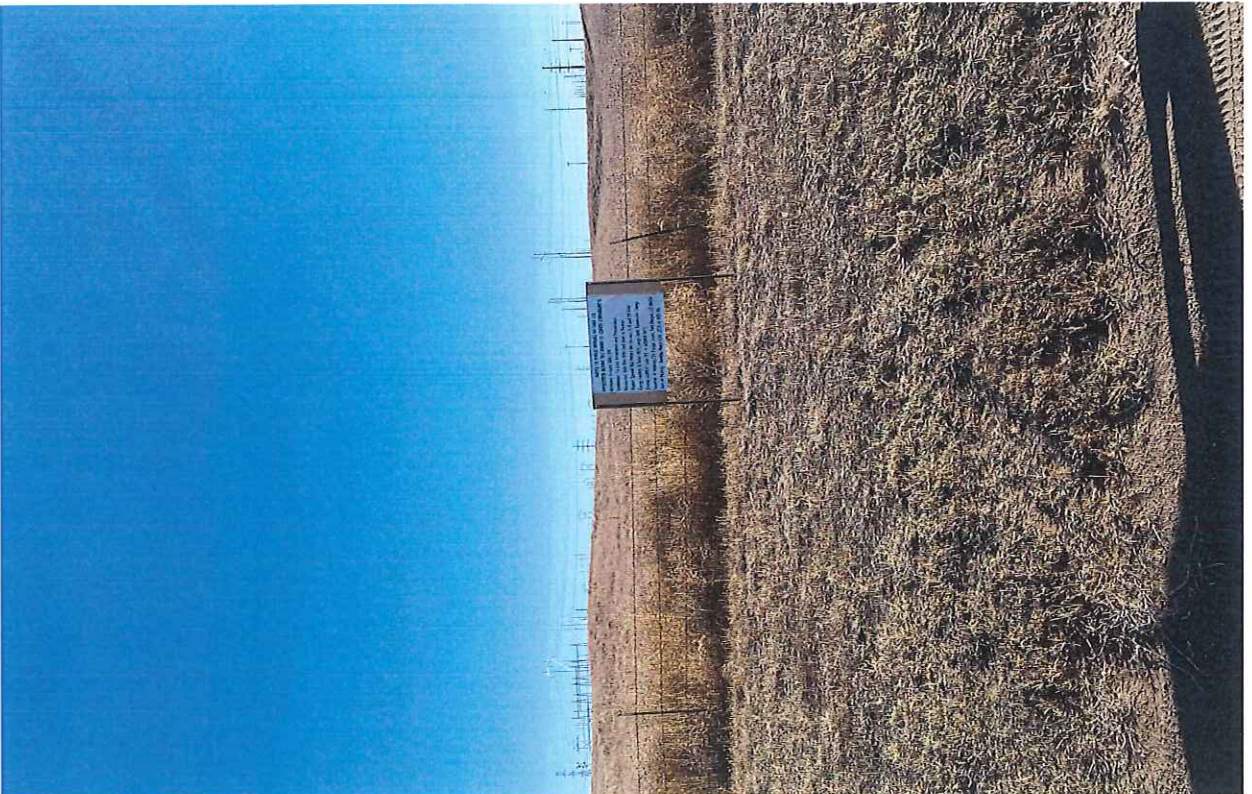
STATE OF COLORADO)
 Denver) ss.
COUNTY OF ~~MORGAN~~

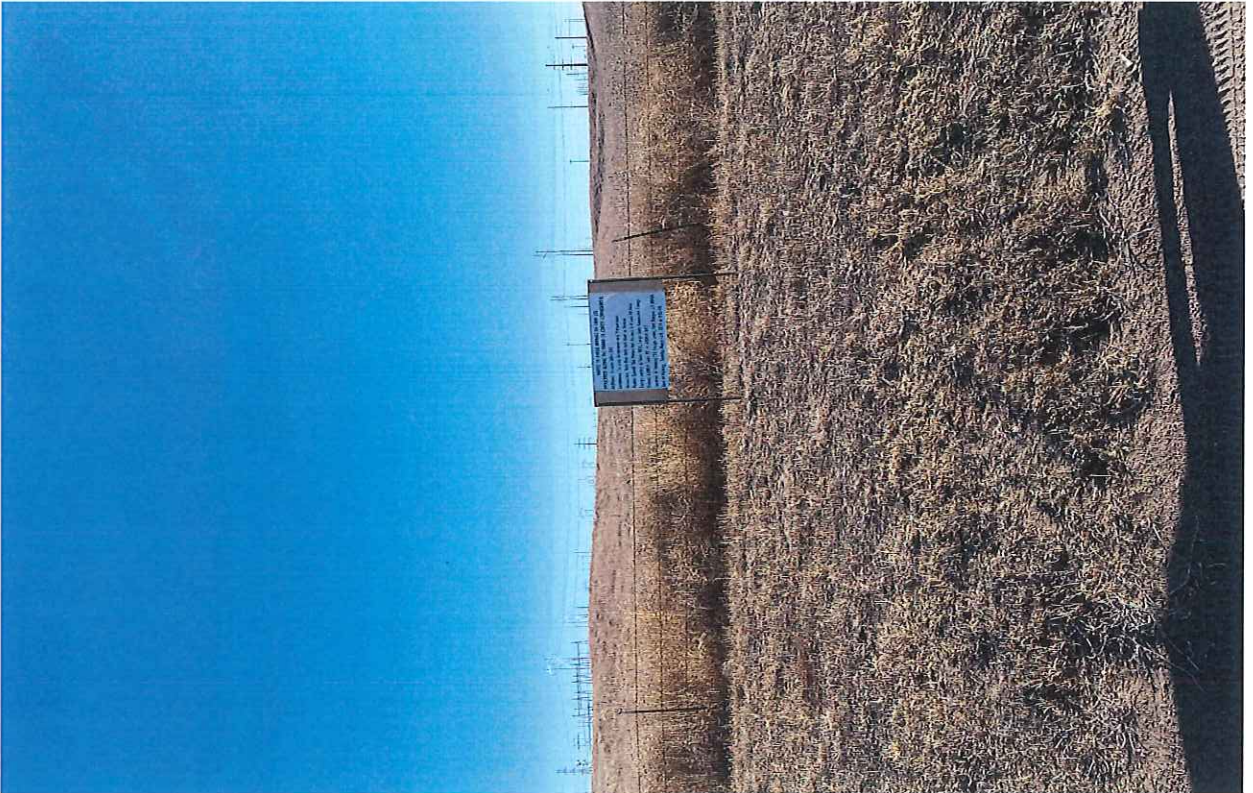
Signed before me this date: 3-1-24

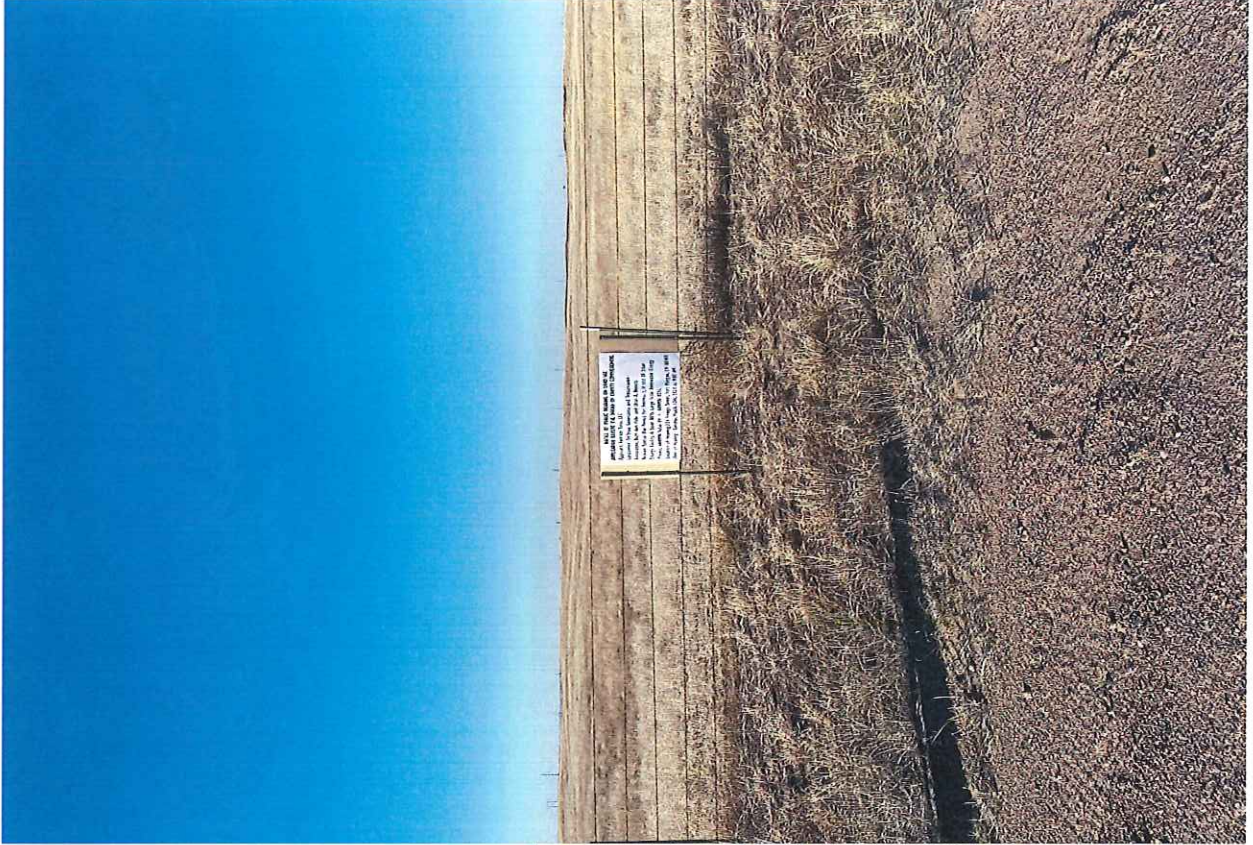
My Commission expires: 09-12-2027

NOTARIZED BY: Tyler Lewis

TYLER JOSEPH LEWIS
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20234034949
MY COMMISSION EXPIRES 09/12/2027









ADDITIONAL INFORMATION

Update on Community Contributions



Jenafer Santos <jsantos@co.morgan.co.us>

Update on Our Community Contributions

+ messages

Charles Ndhlovu

Fri, Mar 1, 2024 at 9:51 AM

To: Jenafer Santos <jsantos@co.morgan.co.us>, Nicole Hay

, Cheryl Brindisi <cbrindisi@co.morgan.co.us>

Cc: "Ternet, Bryce"

, "Lewis, Maya"

Dear Nicole, Jenafer, and Cheryl,

I am writing to share with you an update on Aypa Power's recent contributions to our local community in Morgan County. We have compiled a detailed overview of our initiatives and donations aimed at supporting vital local organizations and enhancing the well-being of our community members.

Please find attached a PDF document that outlines financial contributions, which include our engagement with the Brush Chamber of Commerce, Brush FFA, Kids At Their Best, and the Brush Rural Fire Protection District. These efforts are part of our ongoing commitment to being an active and responsible member of the community, supporting its growth and sustainability. *Checks may have been received already or on their way to the intended recipient.*

We believe it is important to maintain transparency in our actions and to keep our stakeholders informed of our endeavors that go beyond our primary business activities. This communication is a testament to our apolitical stance and dedication solely to contributing positively to the community's welfare.

Charles Ndhlovu

Manager Development | cndhlovu@aypa.com | (304) 685-8669

Aypa Power A BLACKSTONE PORTFOLIO COMPANY



March 1, 2024

Nicole Hay, Planning Director
Cheryl Brindisi, Planning Technician
Morgan County Planning and Zoning

Re: Update on Community Contributions and Ongoing Initiatives

As part of our commitment to transparency and fostering positive community relations, I would like to provide an update on recent contributions made by Aypa Power towards supporting local organizations and initiatives within the Morgan County community. It is important to us to maintain an apolitical stance, focusing solely on the welfare and development of the community we are privileged to be a part of.

1. Brush Chamber of Commerce: We have invested in an Annual Corporate Membership with a contribution of \$1,100. This membership not only supports the Chamber's invaluable work in fostering a thriving business community but also sponsors the upcoming Community Information Session Lunch on March 7, 2024. This event is a key opportunity for dialogue and engagement with local businesses and community members.
2. Brush FFA (Future Farmers of America): Aypa Power is proud to support the Brush FFA with a donation of \$2,000. This contribution will support the Oyster Fry & Community Service Auction, an event for raising funds that enable the FFA to continue their excellent work in agricultural education and community service.
3. Kids At Their Best: We have donated \$1,000 towards this remarkable organization, specifically earmarked for training programs for young leaders. This investment supports the development of leadership skills among the youth of our community, empowering them to make positive changes and lead with confidence.
4. Brush Rural Fire Protection District: Recognizing the critical role of emergency services in ensuring the safety and well-being of our community, Aypa Power has contributed \$8,000 towards the purchase of essential equipment for the Brush Rural Fire Protection District. This equipment will aid in enhancing the operational capabilities of our firefighters and ensuring they are well-equipped to handle emergencies.

These contributions reflect our ongoing dedication to supporting the community's growth, safety, and well-being. As we continue to develop our projects in Morgan County, we are committed to being a proactive and supportive partner, contributing to a stronger, more resilient, and diversified local economy.

We welcome any questions or discussions on how we can further support our community and look forward to continuing our collaborative efforts with all stakeholders.

Regards,

Charles Ndhlovu
Manager Development | cndhlovu@aypa.com | (304) 685-8669

RENEWAL APPLICATIONS

Fortress Solar I LLC [Solar]

Fortress Solar II LLC [Solar]

Fortress Solar III LLC [Solar]

Fortress Solar I LLC [BESS]

Fortress Solar II LLC [BESS]

Fortress Solar III LLC [BESS]

Solar and BESS Renewal Permit Applications

request for

Three Year Renewals

to accompany the submitted

Special Use Permits

for the

Fortress Solar Project



For Submittal to:



MORGAN COUNTY PLANNING
ZONING & BUILDING DEPT.
231 Ensign, P.O. Box 596
Fort Morgan, Colorado 80701
PHONE (970)542-3526
FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

February 2024

Prepared for:

Fortress Solar I LLC,
Fortress Solar II LLC,
Fortress Solar III LLC.
11801 Domain Blvd, Suite 450
Austin, TX 78758

Prepared by:



1560 Broadway, Ste 1400
Denver, CO 80202



MORGAN COUNTY PLANNING
ZONING & BUILDING DEPT.
231 Ensign, P.O. Box 596
Fort Morgan, Colorado 80701
PHONE (970)542-3526
FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

PERMIT # SU2024 - 0001

Date Received	<u>2 / 21 / 24</u>	Received By	<u>JB</u>
App Fee	<u>\$5000</u>	CK/CC #:	<u>091094136</u>
		Paid	<u>2 / 27 / 24</u>
BOCC Date:	<u>3 / 12 / 24</u>		
100 Year Floodplain?	<u>Y/N</u>	Taxes Current?	<u>Y/N</u>
Original SUP #	<u>SU2023-0020</u>	Resolution #	_____
Original Approval Date:	____ / ____ / ____		

SOLAR, WIND, AND BESS RENEWAL PERMIT APPLICATION

APPLICANT

Name Fortress Solar I LLC
Address 11801 Domain Blvd, Suite 450
Austin, TX 78758
Phone (304) 685-8669
Email CNdhlovu@aypa.com

LANDOWNER

Name See attached table
Address _____
Phone () _____
Email _____

BRIEF DESCRIPTION OF APPLICATION INCLUDING ACRES USED & MEGAWATTS

Proposed 200 MW utility scale solar facility. Phase I of the Fortress Solar Project.

PROPERTY LEGAL DESCRIPTION

Address (if available):
See attached parcel information table.

S: ___ T: ___ R: ___ ___ 1/2 ___ 1/4 ___ 1/4 Property Size _____ (sq. ft. or acres)
Parcel #: _____ - _____ Zone District: A
Subdivision: _____ Lot #(s): _____

SEE REQUIRED ATTACHMENT LIST ON BACK OF THIS PAGE.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED OR PROCESSED.

SOLAR, WIND, AND BESS RENEWAL PERMIT REQUIRED ATTACHMENT LIST

Fee:

Non-Refundable Application Fee

**Additional fees and charges may be required pursuant to Section 2-160 of Morgan County Zoning Regulations*

One Year Renewal – 33% of the application fee for original permit application

Two Year Renewal – 66% of the application fee for original permit application

Three Year Renewal – 100% of the application fee for original permit application

Project Narrative: **Narrative Including the following:**

Describe the reasoning for a renewal

APPLICANT STATEMENT

I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge

CHARLES NDHLOVU

Charles Ndlovu

02/21/2024

APPLICANT NAME (PRINTED)

APPLICANT SIGNATURE

DATE

Participating Landowners Contact Information

Name	Address	Phone	Email
Shari Benotti	2420 Thorndon Park League City, TX 77573	Available upon request	Available upon request
Ruth Ann Odle	16218 Hwy 71 Brush, CO 80723-9436	Available upon request	Available upon request
Tri State Generation	1100 W 116 Ave, Westminster, CO 80234	Available upon request	Available upon request

Aypa Power Story Solar Participating Landowner Parcel Information

APN	Account Number	Property Owner	Legal Description
1233-060-00-001	R002875	Tri-State Generation and Transmission Association Inc.	S: 06 T: 3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
123101000002	R004487	Tri-State Generation and Transmission Association Inc.	S: 01 T: 3 R: 56 E1/2E1/2 B908 P721 (CORRECTION SECTION)
123101000700	R700033	Tri-State Generation and Transmission Association Inc	S: 01 T: 3 R: 56 PARC E1/2 B801 P134 **STATE ASSESSED**
1233-060-00-002	R002949	Shari A Benotti	S: 06 T: 3 R: 55 S1/2S1/2 (CORRECTION SECTION)
1233-070-00-001	R002950	Shari A Benotti	S: 07 T: 3 R: 55 N1/2N1/2 (CORRECTION SECTION)
1231-120-00-001	R003925	Shari A Benotti	S: 12 T: 3 R: 56 N1/2NE1/4
1231-120-00-002	R003918	Ruth Ann Odle	S: 12 T: 3 R: 56 SE1/4NE1/4 & E1/2SE1/4
1233-070-00-002	R002827	Ruth Ann Odle	S: 07 T: 3 R: 55 S1/2N1/2 & S1/2 (CORRECTION SECTION)
1233-050-00-001	R002837	Ruth Ann Odle	S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T:

			4 R: 55 PARC SW1/4 S OF RR
1233-080-00- 001	R002838	Ruth Ann Odle	S: 08 T: 3 R: 55 ALL
1233-040-00- 002	R002841	Ruth Ann Odle	S: 04 T: 3 R: 55 ALL S OF RR (CORRECTION SECTION)
1233-090-00- 001	R002842	Ruth Ann Odle	S: 09 T: 3 R: 55 ALL
1233-030-00- 003	R002835	Ruth Ann Odle	S: 03 T: 3 R: 55 S1/2 S OF RR & S1/2NW1/4 S OF HWY 34
1233-100-00- 001	R002839	Ruth Ann Odle	S: 10 T: 3 R: 55 ALL

To: Nicole Hay, Morgan County Community Development Director
CC: Jenafer Santos, Cheryl Brindisi
From: Charles Ndhlovu, **Fortress Solar I LLC**; Justin Miner, Bryce Ternet & Maya Lewis, Tetra Tech
Date: February 21, 2024
Subject: Re: **Fortress Solar I** Renewal Application Narrative

This request is made pursuant to **Section 4-845** of the Morgan County Zoning Regulations, which allows for the renewal of use permits for principal ground-mounted solar collector facilities.

The Fortress Solar Project is envisioned as a multi-phased, ground-mounted solar facility, which upon completion will significantly contribute to the renewable energy infrastructure within Morgan County. The construction of **Phase I** is anticipated to be completed within **15 months** from the issuance of the necessary building permit. However, given the comprehensive nature of this project and its phased development approach, we believe that a three-year renewal term for our SUPs is both appropriate and necessary.

The development schedule and phase timing for the Fortress Solar Project have been meticulously planned to ensure a streamlined and efficient build-out. The requested extension accommodates the multi-year nature of this initiative, recognizing that the construction of such a large-scale renewable energy project cannot be confined to a shorter timeframe without risking undue haste and potential compromise on quality and safety standards.

It is important to note that this application encompasses both the maximum and minimum cases of individual and simultaneous phasing. This inclusive approach ensures that all associated phasing quantum, including scenarios where multiple phases are constructed concurrently, are duly considered and addressed within the application. By accounting for the full spectrum of development possibilities, we aim to maintain flexibility in project execution while adhering to the highest standards of planning and construction.

Furthermore, we must acknowledge the presence of external factors that could influence the project timeline. These factors, which may include but are not limited to supply chain disruptions, regulatory changes, and unforeseen environmental considerations, have the potential to cause delays in construction. A three-year renewal period provides the project with a buffer against such uncertainties, allowing us to manage and mitigate risks more effectively.

All associated phasing quantum included in the application should be summed together in such cases in which multiple phases are constructed at the same time. This application is inclusive of maximum and minimum cases of individual and simultaneous phasing. As noted above, this renewal application is for **Phase I** of the Solar Project.

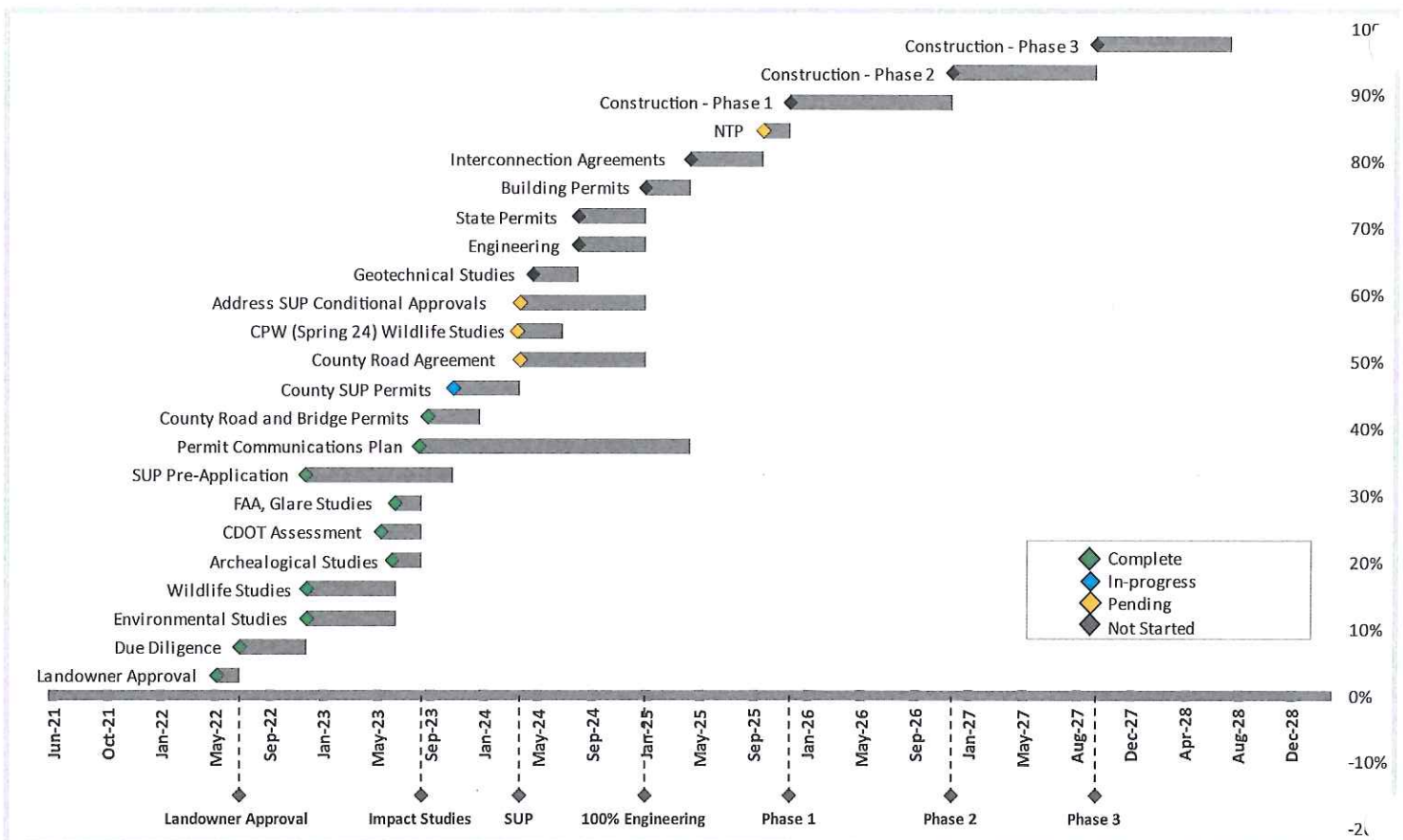
The proposed phasing is detailed per Table 1 below.

Table 1. Project Construction Phasing

Phase	APNs	Solar MW	BESS MWh	Start Construction	End Construction	Commercial Operation Date
1	1231-120-00-001, 1231-120-00-002, 1233-060-00-002, 1233-070-00-001, 1233-070-00-002	200	800	Q2 2025	Q1 2026	Q2 2026
2	1233-050-00-001, 1233-080-00-001, 1233-040-00-002, 1233-030-00-003	200	800	Q1 2026	Q2 2027	Q3 2027
3	1233-090-00-001, 1233-100-00-001, 1233-030-00-003	200	800	Q1 2027	Q2 2028	Q3 2028

The overall development schedule for the Fortress Solar Project and Fortress BESS Project are detailed on Figure 1.

Figure 1. Fortress Solar I LLC - Anticipated Schedule (Solar & BESS)



RECEIPT

Morgan County

31 Ensign, Fort Morgan, CO 80701

(970) 542-3526



SUR2024-0001 | Solar, Wind & BESS Renewal

Receipt Number: 544763

Payment Amount: \$5,000.00

March 1, 2024

<i>Transaction Method</i>	<i>Payer</i>	<i>Cashier</i>	<i>Reference Number</i>
Check	Fortress Solar	Jenafer Santos	091094136

Comments

Assessed Fee Items

Fee items being paid by this payment

<i>Assessed On</i>	<i>Fee Item</i>	<i>Account Code</i>	<i>Assessed</i>	<i>Amount Paid</i>	<i>Balance Due</i>
3/01/24	Solar, Wind, & BESS Renewal Fee		\$5,000.00	\$5,000.00	\$0.00
Totals:			\$5,000.00	\$5,000.00	
				Previous Payments	\$0.00
				Remaining Balance Due	\$0.00

Application Info

Property Address	Property Owner	Property Owner Address	Valuation
Multiple Brush, CO 80723	Multiple	Brush, CO 80723	

Description of Work

Renewal application for phase I of the proposed 200 MW utility sale solar facility.



MORGAN COUNTY PLANNING
 ZONING & BUILDING DEPT.
 231 Ensign, P.O. Box 596
 Fort Morgan, Colorado 80701
 PHONE (970)542-3526
 FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

PERMIT # SUR2024 - 0002

Date Received	<u>2 / 21 / 24</u>	Received By	<u>JS</u>
App Fee	<u>\$5000</u>	Ck/CC #:	<u>09109412</u>
		Paid	<u>2 / 27 / 24</u>
BOCC Date:	<u>3 / 12 / 24</u>		
100 Year Floodplain?	<u>Y/N</u>	Taxes Current?	<u>Y/N</u>
Original SUP #	<u>SUR2023-0021</u>	Resolution #	_____
Original Approval Date:	____ / ____ / ____		

SOLAR, WIND, AND BESS RENEWAL PERMIT APPLICATION

APPLICANT

Name Fortress Solar I LLC
 Address 11801 Domain Blvd, Suite 450
Austin, TX 78758
 Phone (304) 685-8669
 Email CNdhlovu@aypa.com

LANDOWNER

Name Ruth Ann Odle
 Address 16218 Hwy 71 Brush
Brush, CO 80723-9436
 Phone (____) _____
 Email _____

BRIEF DESCRIPTION OF APPLICATION INCLUDING ACRES USED & MEGAWATTS

Proposed 200 MW Battery Energy Storage System. Phase I of the Fortress Solar BESS Project.

PROPERTY LEGAL DESCRIPTION

Address (if available):

See attached parcel information table.

S: 5 T: 3 R: 55 _____ $\frac{1}{2}$ _____ $\frac{1}{4}$ _____ $\frac{1}{4}$

Parcel #: 1233 - 050 - 00 001

Subdivision: _____

Property Size 645.85 (sq. ft. or acres)

Zone District: A

Lot #(s): _____

SEE REQUIRED ATTACHMENT LIST ON BACK OF THIS PAGE.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED OR PROCESSED.

SOLAR, WIND, AND BESS RENEWAL PERMIT REQUIRED ATTACHMENT LIST

Fee:

Non-Refundable Application Fee

**Additional fees and charges may be required pursuant to Section 2-160 of Morgan County Zoning Regulations*

One Year Renewal – 33% of the application fee for original permit application

Two Year Renewal – 66% of the application fee for original permit application

Three Year Renewal – 100% of the application fee for original permit application

Project Narrative: **Narrative Including the following:**

Describe the reasoning for a renewal

APPLICANT STATEMENT

I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge

CHARLES NDHLOVU

Charles Ndhlovu

02/21/2024

APPLICANT NAME (PRINTED)

APPLICANT SIGNATURE

DATE

To: Nicole Hay, Morgan County Community Development Director
CC: Jenafer Santos, Cheryl Brindisi
From: Charles Ndhlovu, **Fortress Solar I LLC**; Justin Miner, Bryce Ternet & Maya Lewis, Tetra Tech
Date: February 21, 2024
Subject: Re: **Fortress BESS I** Renewal Application Narrative

This request is made pursuant to **Section 4-880** of the Morgan County Zoning Regulations, which allows for the renewal of use permits for BESS facilities.

The Fortress Solar Project's BESS facility is envisioned as a multi-phased, single fenced facility, to house self-contained metal enclosure BESS units. The construction of **Phase I** is anticipated to be completed within **12 months** from the issuance of the necessary building permit. However, given the comprehensive nature of this project and its phased development approach, we believe that a three-year renewal term for our SUPs is both appropriate and necessary.

The development schedule and phase timing for the Fortress Solar Project have been meticulously planned to ensure a streamlined and efficient build-out. The requested extension accommodates the multi-year nature of this initiative, recognizing that the construction of such a large-scale renewable energy project cannot be confined to a shorter timeframe without risking undue haste and potential compromise on quality and safety standards.

It is important to note that this application encompasses both the maximum and minimum cases of individual and simultaneous phasing. This inclusive approach ensures that all associated phasing quantum, including scenarios where multiple phases are constructed concurrently, are duly considered and addressed within the application. By accounting for the full spectrum of development possibilities, we aim to maintain flexibility in project execution while adhering to the highest standards of planning and construction.

Furthermore, we must acknowledge the presence of external factors that could influence the project timeline. These factors, which may include but are not limited to supply chain disruptions, regulatory changes, and unforeseen environmental considerations, have the potential to cause delays in construction. A three-year renewal period provides the project with a buffer against such uncertainties, allowing us to manage and mitigate risks more effectively.

All associated phasing quantum included in the application should be summed together in such cases in which multiple phases are constructed at the same time. This application is inclusive of maximum and minimum cases of individual and simultaneous phasing. As noted above, this renewal application is for **Phase I** of the BESS Project.

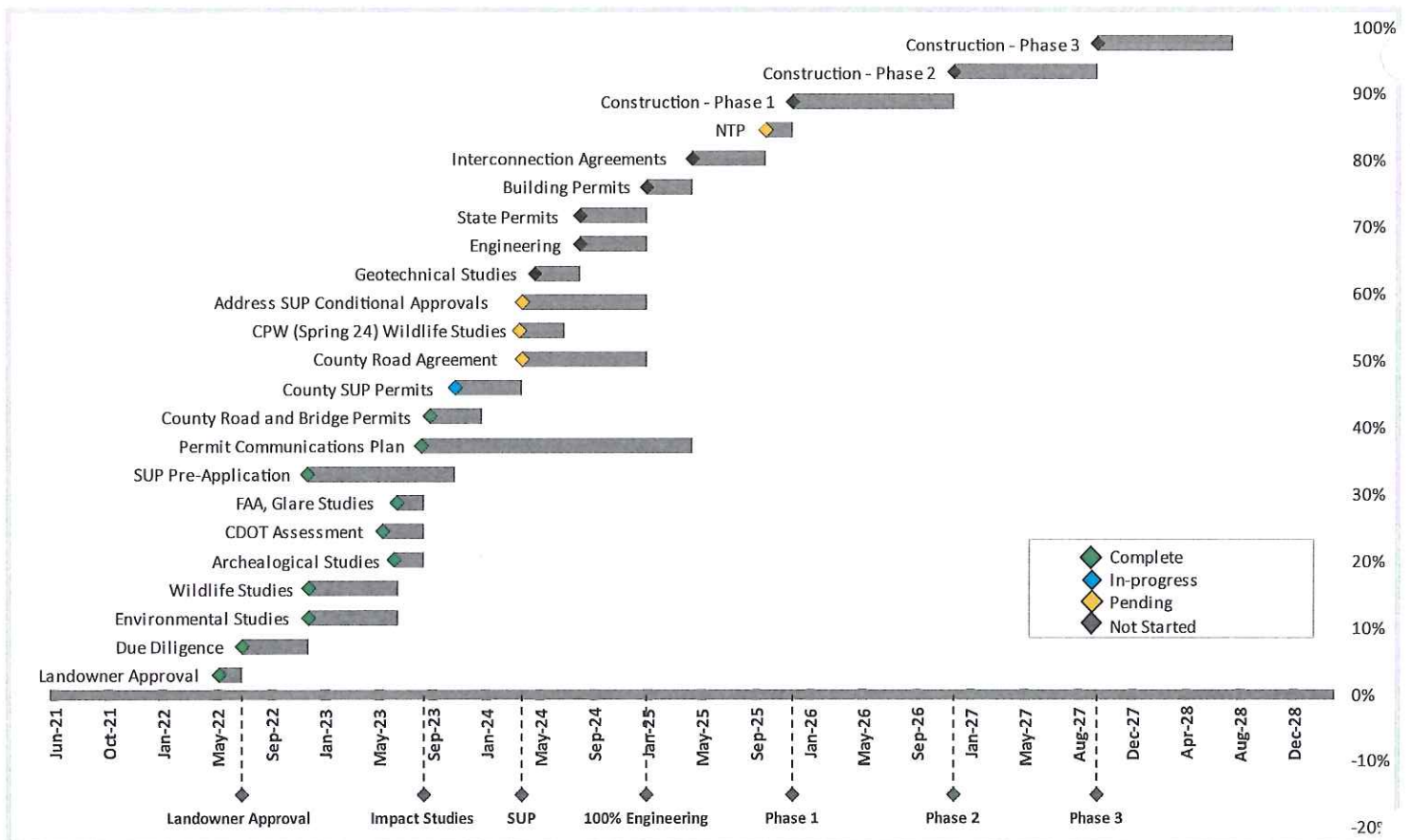
The proposed phasing is detailed per Table 1 below.

Table 1. Project Construction Phasing

Phase	APNs	Solar MW	BESS MWh	Start Construction	End Construction	Commercial Operation Date
1	1231-120-00-001, 1231-120-00-002, 1233-060-00-002, 1233-070-00-001, 1233-070-00-002	200	800	Q2 2025	Q1 2026	Q2 2026
2	1233-050-00-001, 1233-080-00-001, 1233-040-00-002, 1233-030-00-003	200	800	Q1 2026	Q2 2027	Q3 2027
3	1233-090-00-001, 1233-100-00-001, 1233-030-00-003	200	800	Q1 2027	Q2 2028	Q3 2028

The overall development schedule for the Fortress Solar Project and Fortress BESS Project are detailed on Figure 1.

Figure 1. Fortress Solar I LLC - Anticipated Schedule (Solar & BESS)



RECEIPT

Morgan County

231 Ensign, Fort Morgan, CO 80701
(970) 542-3526



SUR2024-0002 | Solar, Wind & BESS Renewal

Receipt Number: 544765

Payment Amount: \$5,000.00

March 1, 2024

<i>Transaction Method</i>	<i>Payer</i>	<i>Cashier</i>	<i>Reference Number</i>
Check	Fortress Solar	Jenafer Santos	091094136

Comments

Assessed Fee Items

Fee items being paid by this payment

<i>Assessed On</i>	<i>Fee Item</i>	<i>Account Code</i>	<i>Assessed</i>	<i>Amount Paid</i>	<i>Balance Due</i>
3/01/24	Solar, Wind, & BESS Renewal Fee		\$5,000.00	\$5,000.00	\$0.00
Totals:			\$5,000.00	\$5,000.00	
				Previous Payments	\$0.00
				Remaining Balance Due	\$0.00

Application Info

Property Address	Property Owner	Property Owner Address	Valuation
Vacant Brush, CO 80723	Ruth Ann Odle	16218 HWY 71 Brush, CO 80723	

Description of Work

Renewal application for phase I of the proposed 200 MW battery energy storage system.



MORGAN COUNTY PLANNING
 ZONING & BUILDING DEPT.
 231 Ensign, P.O. Box 596
 Fort Morgan, Colorado 80701
 PHONE (970)542-3526
 FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

PERMIT # SUR2024 - 0003

Date Received <u>2 / 24 / 24</u>	Received By <u>JS</u>
App Fee \$ <u>5000</u>	Ck/CC #: <u>091094130</u> Paid <u>2 / 27 / 24</u>
BOCC Date: <u>3 / 12 / 23</u>	
100 Year Floodplain? <u>Y/N</u>	Taxes Current? <u>Y/N</u>
Original SUP # <u>SU 2023-0022</u>	Resolution # _____
Original Approval Date: _____ / _____ / _____	

SOLAR, WIND, AND BESS RENEWAL PERMIT APPLICATION

APPLICANT

Name Fortress Solar II LLC
 Address 11801 Domain Blvd, Suite 450
Austin, TX 78758
 Phone (304) 685-8669
 Email CNdhlovu@aypa.com

LANDOWNER

Name See attached table
 Address _____

 Phone (_____) _____
 Email _____

BRIEF DESCRIPTION OF APPLICATION INCLUDING ACRES USED & MEGAWATTS

Proposed 200 MW utility scale solar facility. Phase II of the Fortress Solar Project.

PROPERTY LEGAL DESCRIPTION

Address (if available):

See attached parcel information table.

S: _____ T: _____ R: _____ $\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{4}$

Property Size _____ (sq. ft. or acres)

Parcel #: _____ - _____

Zone District: A

Subdivision: _____

Lot #(s): _____

SEE REQUIRED ATTACHMENT LIST ON BACK OF THIS PAGE.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED OR PROCESSED.

SOLAR, WIND, AND BESS RENEWAL PERMIT REQUIRED ATTACHMENT LIST

Fee:

Non-Refundable Application Fee

**Additional fees and charges may be required pursuant to Section 2-160 of Morgan County Zoning Regulations*

One Year Renewal – 33% of the application fee for original permit application

Two Year Renewal – 66% of the application fee for original permit application

Three Year Renewal – 100% of the application fee for original permit application

Project Narrative: **Narrative Including the following:**

Describe the reasoning for a renewal

APPLICANT STATEMENT

I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge

CHARLES NDHLOVU

Charles Ndhlovu

02/21/2024

APPLICANT NAME (PRINTED)

APPLICANT SIGNATURE

DATE

Participating Landowners Contact Information

Name	Address	Phone	Email
Shari Benotti	2420 Thorndon Park League City, TX 77573	Available upon request	Available upon request
Ruth Ann Odle	16218 Hwy 71 Brush, CO 80723-9436	Available upon request	Available upon request
Tri State Generation	1100 W 116 Ave, Westminster, CO 80234	Available upon request	Available upon request

Aypa Power Story Solar Participating Landowner Parcel Information

APN	Account Number	Property Owner	Legal Description
1233-060-00-001	R002875	Tri-State Generation and Transmission Association Inc.	S: 06 T: 3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
123101000002	R004487	Tri-State Generation and Transmission Association Inc.	S: 01 T: 3 R: 56 E1/2E1/2 B908 P721 (CORRECTION SECTION)
123101000700	R700033	Tri-State Generation and Transmission Association Inc	S: 01 T: 3 R: 56 PARC E1/2 B801 P134 **STATE ASSESSED**
1233-060-00-002	R002949	Shari A Benotti	S: 06 T: 3 R: 55 S1/2S1/2 (CORRECTION SECTION)
1233-070-00-001	R002950	Shari A Benotti	S: 07 T: 3 R: 55 N1/2N1/2 (CORRECTION SECTION)
1231-120-00-001	R003925	Shari A Benotti	S: 12 T: 3 R: 56 N1/2NE1/4
1231-120-00-002	R003918	Ruth Ann Odle	S: 12 T: 3 R: 56 SE1/4NE1/4 & E1/2SE1/4
1233-070-00-002	R002827	Ruth Ann Odle	S: 07 T: 3 R: 55 S1/2N1/2 & S1/2 (CORRECTION SECTION)
1233-050-00-001	R002837	Ruth Ann Odle	S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T:

			4 R: 55 PARC SW1/4 S OF RR
1233-080-00- 001	R002838	Ruth Ann Odle	S: 08 T: 3 R: 55 ALL
1233-040-00- 002	R002841	Ruth Ann Odle	S: 04 T: 3 R: 55 ALL S OF RR (CORRECTION SECTION)
1233-090-00- 001	R002842	Ruth Ann Odle	S: 09 T: 3 R: 55 ALL
1233-030-00- 003	R002835	Ruth Ann Odle	S: 03 T: 3 R: 55 S1/2 S OF RR & S1/2NW1/4 S OF HWY 34
1233-100-00- 001	R002839	Ruth Ann Odle	S: 10 T: 3 R: 55 ALL

To: Nicole Hay, Morgan County Community Development Director
CC: Jenafer Santos, Cheryl Brindisi
From: Charles Ndhlovu, **Fortress Solar II LLC**; Justin Miner, Bryce Ternet & Maya Lewis, Tetra Tech
Date: February 21, 2024
Subject: Re: **Fortress Solar II** Renewal Application Narrative

This request is made pursuant to **Section 4-845** of the Morgan County Zoning Regulations, which allows for the renewal of use permits for principal ground-mounted solar collector facilities.

The Fortress Solar Project is envisioned as a multi-phased, ground-mounted solar facility, which upon completion will significantly contribute to the renewable energy infrastructure within Morgan County. The construction of **Phase II** is anticipated to be completed within **15 months** from the issuance of the necessary building permit. However, given the comprehensive nature of this project and its phased development approach, we believe that a three-year renewal term for our SUPs is both appropriate and necessary.

The development schedule and phase timing for the Fortress Solar Project have been meticulously planned to ensure a streamlined and efficient build-out. The requested extension accommodates the multi-year nature of this initiative, recognizing that the construction of such a large-scale renewable energy project cannot be confined to a shorter timeframe without risking undue haste and potential compromise on quality and safety standards.

It is important to note that this application encompasses both the maximum and minimum cases of individual and simultaneous phasing. This inclusive approach ensures that all associated phasing quantum, including scenarios where multiple phases are constructed concurrently, are duly considered and addressed within the application. By accounting for the full spectrum of development possibilities, we aim to maintain flexibility in project execution while adhering to the highest standards of planning and construction.

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All associated phasing quantum included in the application should be summed together in such cases in which multiple phases are constructed at the same time. This application is inclusive of maximum and minimum cases of individual and simultaneous phasing. As noted above, this renewal application is for **Phase II** of the Solar Project.

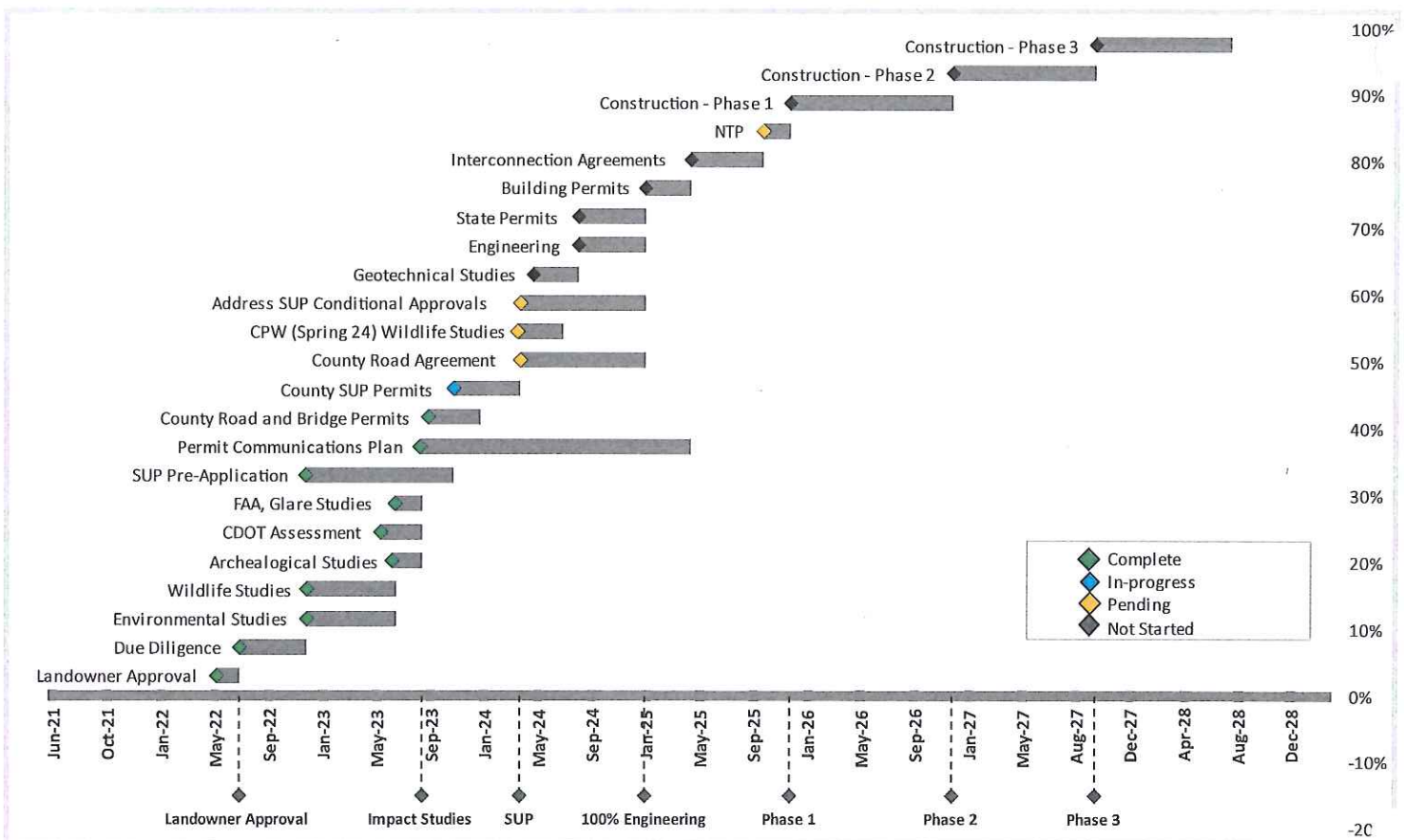
The proposed phasing is detailed per Table 1 below.

Table 1. Project Construction Phasing

Phase	APNs	Solar MW	BESS MWh	Start Construction	End Construction	Commercial Operation Date
1	1231-120-00-001, 1231-120-00-002, 1233-060-00-002, 1233-070-00-001, 1233-070-00-002	200	800	Q2 2025	Q1 2026	Q2 2026
2	1233-050-00-001, 1233-080-00-001, 1233-040-00-002, 1233-030-00-003	200	800	Q1 2026	Q2 2027	Q3 2027
3	1233-090-00-001, 1233-100-00-001, 1233-030-00-003	200	800	Q1 2027	Q2 2028	Q3 2028

The overall development schedule for the Fortress Solar Project and Fortress BESS Project are detailed on Figure 1.

Figure 1. Fortress Solar II LLC - Anticipated Schedule (Solar & BESS)



RECEIPT

Morgan County

231 Ensign, Fort Morgan, CO 80701
(970) 542-3526



SUR2024-0003 | Solar, Wind & BESS Renewal

Receipt Number: 544767

Payment Amount: **\$5,000.00**

March 1, 2024

<i>Transaction Method</i>	<i>Payer</i>	<i>Cashier</i>	<i>Reference Number</i>
Check	Fortress Solar	Jenafer Santos	091094136

Comments

Assessed Fee Items

Fee items being paid by this payment

<i>Assessed On</i>	<i>Fee Item</i>	<i>Account Code</i>	<i>Assessed</i>	<i>Amount Paid</i>	<i>Balance Due</i>
3/01/24	Solar, Wind, & BESS Renewal Fee		\$5,000.00	\$5,000.00	\$0.00
Totals:			\$5,000.00	\$5,000.00	
				Previous Payments	\$0.00
				Remaining Balance Due	\$0.00

Application Info

Property Address	Property Owner	Property Owner Address	Valuation
Multiple Brush, CO 80723	Multiple		

Description of Work

Renewal application for phase II of the proposed 200 MW utility sale solar facility.



MORGAN COUNTY PLANNING
 ZONING & BUILDING DEPT.
 231 Ensign, P.O. Box 596
 Fort Morgan, Colorado 80701
 PHONE (970)542-3526
 FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

PERMIT # SUR2024 - 0004

Date Received	<u>2 / 21 / 24</u>	Received By	<u>JS</u>
App Fee	<u>\$5006</u>	Ck/CC #:	<u>091094136</u>
BOCC Date:	<u>3 / 12 / 24</u>	Paid	<u>2 / 27 / 24</u>
100 Year Floodplain?	<u>Y/N</u>	Taxes Current?	<u>Y/N</u>
Original SUP #	<u>SUR2023-0023</u>	Resolution #	_____
Original Approval Date:	____ / ____ / ____		

SOLAR, WIND, AND BESS RENEWAL PERMIT APPLICATION

APPLICANT

Name Fortress Solar II LLC
 Address 11801 Domain Blvd, Suite 450
Austin, TX 78758
 Phone (304) 685-8669
 Email CNdhlovu@aypa.com

LANDOWNER

Name Ruth Ann Odle
 Address 16218 Hwy 71 Brush
Brush, CO 80723-9436
 Phone () _____
 Email _____

BRIEF DESCRIPTION OF APPLICATION INCLUDING ACRES USED & MEGAWATTS

Proposed 200 MW Battery Energy Storage System. Phase II of the Fortress Solar BESS Project.

PROPERTY LEGAL DESCRIPTION

Address (if available):

See attached parcel information table.

S: 5 T: 3 R: 55 _____ $\frac{1}{2}$ _____ $\frac{1}{4}$ _____ $\frac{1}{4}$ Property Size 645.85 (sq. ft. or acres)
 Parcel #: 1233 - 050 - 00 001 Zone District: A
 Subdivision: _____ Lot #(s): _____

SEE REQUIRED ATTACHMENT LIST ON BACK OF THIS PAGE.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED OR PROCESSED.

SOLAR, WIND, AND BESS RENEWAL PERMIT REQUIRED ATTACHMENT LIST

Fee:

Non-Refundable Application Fee

**Additional fees and charges may be required pursuant to Section 2-160 of Morgan County Zoning Regulations*

One Year Renewal – 33% of the application fee for original permit application

Two Year Renewal – 66% of the application fee for original permit application

Three Year Renewal – 100% of the application fee for original permit application

Project Narrative: **Narrative Including the following:**

Describe the reasoning for a renewal

APPLICANT STATEMENT

I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge

CHARLES NDHLOVU

Charles Ndhlovu

02/21/2024

APPLICANT NAME (PRINTED)

APPLICANT SIGNATURE

DATE

To: Nicole Hay, Morgan County Community Development Director
CC: Jenafer Santos, Cheryl Brindisi
From: Charles Ndhlovu, **Fortress Solar II LLC**; Justin Miner, Bryce Ternet & Maya Lewis, Tetra Tech
Date: February 21, 2024
Subject: Re: **Fortress BESS II** Renewal Application Narrative

This request is made pursuant to **Section 4-880** of the Morgan County Zoning Regulations, which allows for the renewal of use permits for BESS facilities.

The Fortress Solar Project's BESS facility is envisioned as a multi-phased, single fenced facility, to house self-contained metal enclosure BESS units. The construction of **Phase II** is anticipated to be completed within **12 months** from the issuance of the necessary building permit. However, given the comprehensive nature of this project and its phased development approach, we believe that a three-year renewal term for our SUPs is both appropriate and necessary.

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All associated phasing quantum included in the application should be summed together in such cases in which multiple phases are constructed at the same time. This application is inclusive of maximum and minimum cases of individual and simultaneous phasing. As noted above, this renewal application is for **Phase II** of the BESS Project.

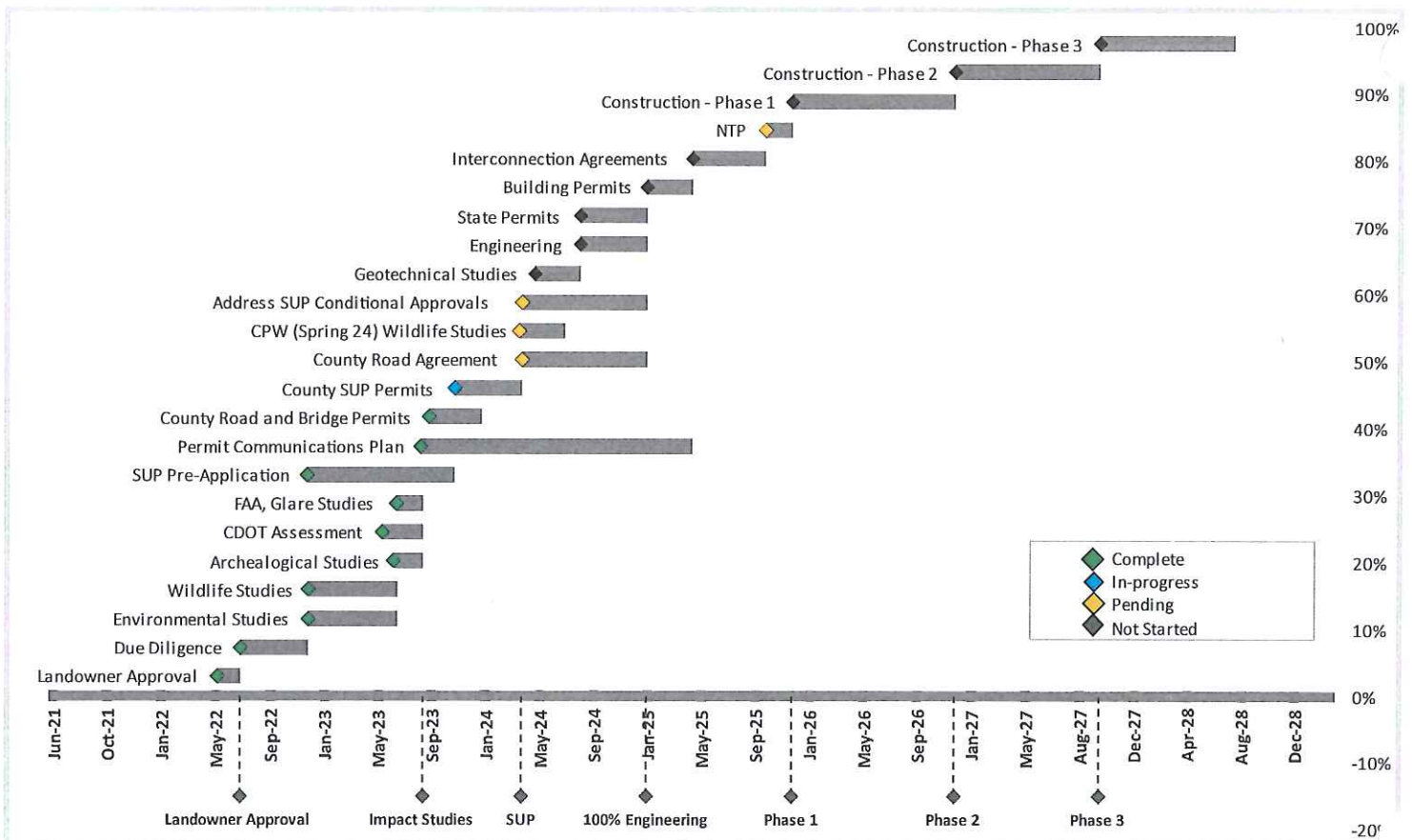
The proposed phasing is detailed per Table 1 below.

Table 1. Project Construction Phasing

Phase	APNs	Solar MW	BESS MWh	Start Construction	End Construction	Commercial Operation Date
1	1231-120-00-001, 1231-120-00-002, 1233-060-00-002, 1233-070-00-001, 1233-070-00-002	200	800	Q2 2025	Q1 2026	Q2 2026
2	1233-050-00-001, 1233-080-00-001, 1233-040-00-002, 1233-030-00-003	200	800	Q1 2026	Q2 2027	Q3 2027
3	1233-090-00-001, 1233-100-00-001, 1233-030-00-003	200	800	Q1 2027	Q2 2028	Q3 2028

The overall development schedule for the Fortress Solar Project and Fortress BESS Project are detailed on Figure 1.

Figure 1. Fortress Solar II LLC - Anticipated Schedule (Solar & BESS)



RECEIPT

Morgan County

731 Ensign, Fort Morgan, CO 80701
(970) 542-3526



SUR2024-0004 | Solar, Wind & BESS Renewal

Receipt Number: 544770

Payment Amount: \$5,000.00

March 1, 2024

Transaction Method	Payer	Cashier	Reference Number
Check	Fortress Solar	Jenafer Santos	091094136

Comments

Assessed Fee Items

Fee items being paid by this payment

Assessed On	Fee Item	Account Code	Assessed	Amount Paid	Balance Due
3/01/24	Solar, Wind, & BESS Renewal Fee		\$5,000.00	\$5,000.00	\$0.00
Totals:			\$5,000.00	\$5,000.00	
				Previous Payments	\$0.00
				Remaining Balance Due	\$0.00

Application Info

Property Address	Property Owner	Property Owner Address	Valuation
Vacant Brush, CO 80723	Ruth Ann Odle	16218 HWY 71 Brush, CO 80723	

Description of Work

Renewal application for phase II of the proposed 200 MW battery energy storage system.



MORGAN COUNTY PLANNING
 ZONING & BUILDING DEPT.
 231 Ensign, P.O. Box 596
 Fort Morgan, Colorado 80701
 PHONE (970)542-3526
 FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

PERMIT # SM2024 - 0005

Date Received	<u>2 / 21 / 24</u>	Received By	<u>B</u>
App Fee	<u>\$5000</u>	Ck/CC #	<u>091094186</u>
		Paid	<u>2 / 27 / 24</u>
BOCC Date:	<u>3 / 12 / 24</u>		
100 Year Floodplain?	<u>Y/N</u>	Taxes Current?	<u>Y/N</u>
Original SUP #	<u>SM2023-0024</u>	Resolution #	_____
Original Approval Date:	____ / ____ / ____		

SOLAR, WIND, AND BESS RENEWAL PERMIT APPLICATION

APPLICANT

Name Fortress Solar III LLC
 Address 11801 Domain Blvd, Suite 450
Austin, TX 78758
 Phone (304) 685-8669
 Email CNdhlovu@aypa.com

LANDOWNER

Name See attached table
 Address _____

 Phone () _____
 Email _____

BRIEF DESCRIPTION OF APPLICATION INCLUDING ACRES USED & MEGAWATTS

Proposed 200 MW utility scale solar facility. Phase III of the Fortress Solar Project.

PROPERTY LEGAL DESCRIPTION

Address (if available):
See attached parcel information table.

S: ___ T: ___ R: ___ _____ 1/2 _____ 1/4 _____ 1/4 Property Size _____ (sq. ft. or acres)
 Parcel #: _____ - _____ Zone District: A
 Subdivision: _____ Lot #(s): _____

SEE REQUIRED ATTACHMENT LIST ON BACK OF THIS PAGE.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED OR PROCESSED.

SOLAR, WIND, AND BESS RENEWAL PERMIT REQUIRED ATTACHMENT LIST

Fee:

Non-Refundable Application Fee

**Additional fees and charges may be required pursuant to Section 2-160 of Morgan County Zoning Regulations*

One Year Renewal – 33% of the application fee for original permit application

Two Year Renewal – 66% of the application fee for original permit application

Three Year Renewal – 100% of the application fee for original permit application

Project Narrative: **Narrative Including the following:**

Describe the reasoning for a renewal

APPLICANT STATEMENT

I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge

CHARLES NDHLOVU

Charles Ndlovu

02/21/2024

APPLICANT NAME (PRINTED)

APPLICANT SIGNATURE

DATE

Participating Landowners Contact Information

Name	Address	Phone	Email
Shari Benotti	2420 Thorndon Park League City, TX 77573	Available upon request	Available upon request
Ruth Ann Odle	16218 Hwy 71 Brush, CO 80723-9436	Available upon request	Available upon request
Tri State Generation	1100 W 116 Ave, Westminster, CO 80234	Available upon request	Available upon request

Aypa Power Story Solar Participating Landowner Parcel Information

APN	Account Number	Property Owner	Legal Description
1233-060-00-001	R002875	Tri-State Generation and Transmission Association Inc.	S: 06 T: 3 R: 55 N1/2 & N1/2S1/2 (CORRECTION SECTION)
123101000002	R004487	Tri-State Generation and Transmission Association Inc.	S: 01 T: 3 R: 56 E1/2E1/2 B908 P721 (CORRECTION SECTION)
123101000700	R700033	Tri-State Generation and Transmission Association Inc	S: 01 T: 3 R: 56 PARC E1/2 B801 P134 **STATE ASSESSED**
1233-060-00-002	R002949	Shari A Benotti	S: 06 T: 3 R: 55 S1/2S1/2 (CORRECTION SECTION)
1233-070-00-001	R002950	Shari A Benotti	S: 07 T: 3 R: 55 N1/2N1/2 (CORRECTION SECTION)
1231-120-00-001	R003925	Shari A Benotti	S: 12 T: 3 R: 56 N1/2NE1/4
1231-120-00-002	R003918	Ruth Ann Odle	S: 12 T: 3 R: 56 SE1/4NE1/4 & E1/2SE1/4
1233-070-00-002	R002827	Ruth Ann Odle	S: 07 T: 3 R: 55 S1/2N1/2 & S1/2 (CORRECTION SECTION)
1233-050-00-001	R002837	Ruth Ann Odle	S: 05 T: 3 R: 55 ALL (CORRECTION SECTION) EX B438 P261 TO HWY S: 32 T:

			4 R: 55 PARC SW1/4 S OF RR
1233-080-00- 001	R002838	Ruth Ann Odle	S: 08 T: 3 R: 55 ALL
1233-040-00- 002	R002841	Ruth Ann Odle	S: 04 T: 3 R: 55 ALL S OF RR (CORRECTION SECTION)
1233-090-00- 001	R002842	Ruth Ann Odle	S: 09 T: 3 R: 55 ALL
1233-030-00- 003	R002835	Ruth Ann Odle	S: 03 T: 3 R: 55 S1/2 S OF RR & S1/2NW1/4 S OF HWY 34
1233-100-00- 001	R002839	Ruth Ann Odle	S: 10 T: 3 R: 55 ALL

To: Nicole Hay, Morgan County Community Development Director
CC: Jenafer Santos, Cheryl Brindisi
From: Charles Ndhlovu, **Fortress Solar III LLC**; Justin Miner, Bryce Ternet & Maya Lewis, Tetra Tech
Date: February 21, 2024
Subject: Re: **Fortress Solar III** Renewal Application Narrative

This request is made pursuant to **Section 4-845** of the Morgan County Zoning Regulations, which allows for the renewal of use permits for principal ground-mounted solar collector facilities.

The Fortress Solar Project is envisioned as a multi-phased, ground-mounted solar facility, which upon completion will significantly contribute to the renewable energy infrastructure within Morgan County. The construction of **Phase III** is anticipated to be completed within **15 months** from the issuance of the necessary building permit. However, given the comprehensive nature of this project and its phased development approach, we believe that a three-year renewal term for our SUPs is both appropriate and necessary.

The development schedule and phase timing for the Fortress Solar Project have been meticulously planned to ensure a streamlined and efficient build-out. The requested extension accommodates the multi-year nature of this initiative, recognizing that the construction of such a large-scale renewable energy project cannot be confined to a shorter timeframe without risking undue haste and potential compromise on quality and safety standards.

It is important to note that this application encompasses both the maximum and minimum cases of individual and simultaneous phasing. This inclusive approach ensures that all associated phasing quantum, including scenarios where multiple phases are constructed concurrently, are duly considered and addressed within the application. By accounting for the full spectrum of development possibilities, we aim to maintain flexibility in project execution while adhering to the highest standards of planning and construction.

Furthermore, we must acknowledge the presence of external factors that could influence the project timeline. These factors, which may include but are not limited to supply chain disruptions, regulatory changes, and unforeseen environmental considerations, have the potential to cause delays in construction. A three-year renewal period provides the project with a buffer against such uncertainties, allowing us to manage and mitigate risks more effectively.

All associated phasing quantum included in the application should be summed together in such cases in which multiple phases are constructed at the same time. This application is inclusive of maximum and minimum cases of individual and simultaneous phasing. As noted above, this renewal application is for **Phase III** of the Solar Project.

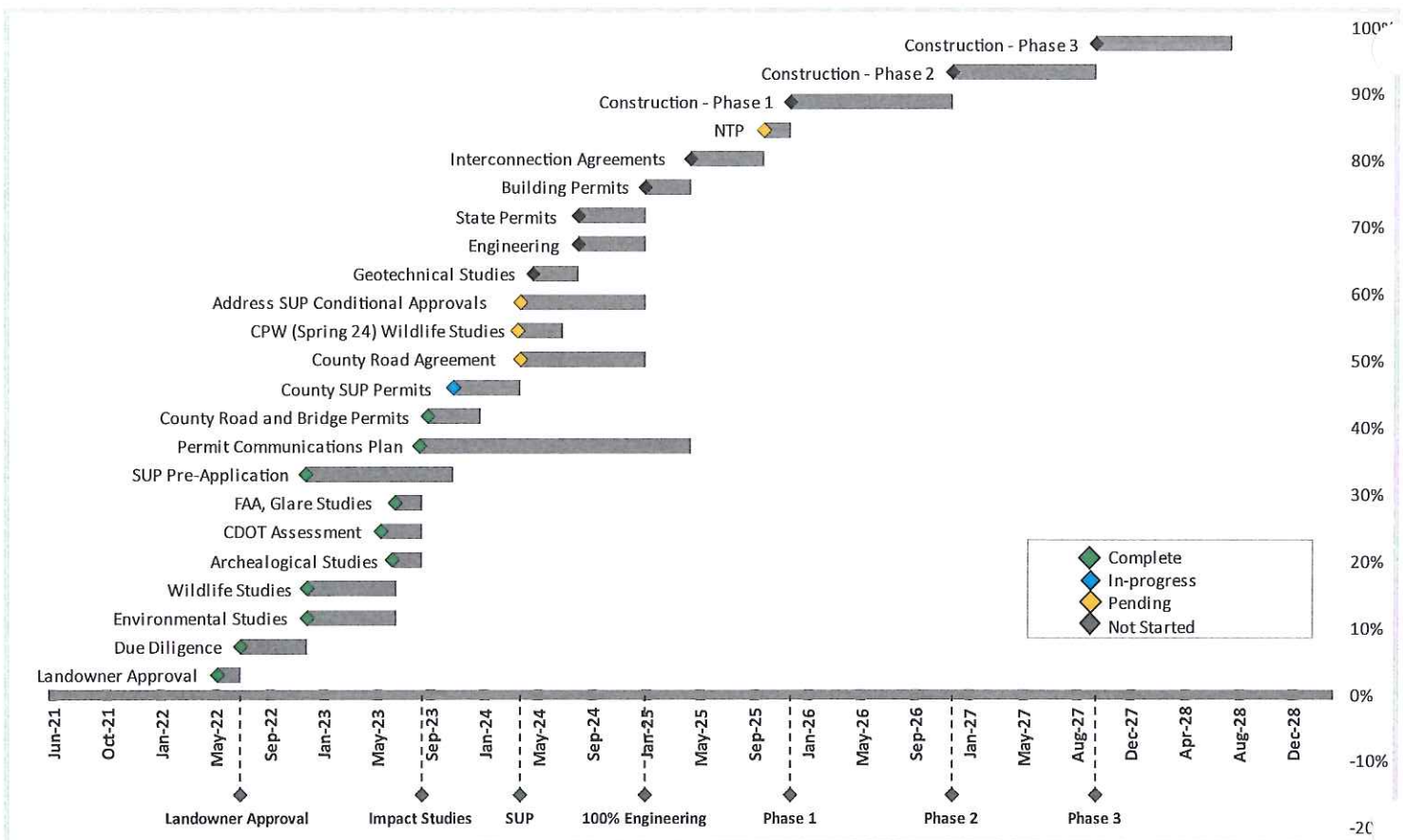
The proposed phasing is detailed per Table 1 below.

Table 1. Project Construction Phasing

Phase	APNs	Solar MW	BESS MWh	Start Construction	End Construction	Commercial Operation Date
1	1231-120-00-001, 1231-120-00-002, 1233-060-00-002, 1233-070-00-001, 1233-070-00-002	200	800	Q2 2025	Q1 2026	Q2 2026
2	1233-050-00-001, 1233-080-00-001, 1233-040-00-002, 1233-030-00-003	200	800	Q1 2026	Q2 2027	Q3 2027
3	1233-090-00-001, 1233-100-00-001, 1233-030-00-003	200	800	Q1 2027	Q2 2028	Q3 2028

The overall development schedule for the Fortress Solar Project and Fortress BESS Project are detailed on Figure 1.

Figure 1. Fortress Solar III LLC - Anticipated Schedule (Solar & BESS)



RECEIPT

Morgan County

31 Ensign, Fort Morgan, CO 80701

(970) 542-3526



SUR2024-0005 | Solar, Wind & BESS Renewal

Receipt Number: 544772

Payment Amount: **\$5,000.00**

March 1, 2024

<i>Transaction Method</i>	<i>Payer</i>	<i>Cashier</i>	<i>Reference Number</i>
Check	Fortress Solar	Jenafer Santos	091094136

Comments

Assessed Fee Items

Fee items being paid by this payment

<i>Assessed On</i>	<i>Fee Item</i>	<i>Account Code</i>	<i>Assessed</i>	<i>Amount Paid</i>	<i>Balance Due</i>
3/01/24	Solar, Wind, & BESS Renewal Fee		\$5,000.00	\$5,000.00	\$0.00
Totals:			\$5,000.00	\$5,000.00	
				Previous Payments	\$0.00
				Remaining Balance Due	\$0.00

Application Info

Property Address	Property Owner	Property Owner Address	Valuation
Multiple Brush, CO 80723	Multiple		

Description of Work

Renewal application for phase III of the proposed 200 MW utility sale solar facility.



MORGAN COUNTY PLANNING
ZONING & BUILDING DEPT.
231 Ensign, P.O. Box 596
Fort Morgan, Colorado 80701
PHONE (970)542-3526
FAX (970)542-3509

EMAIL: permits_licensing@co.morgan.us

PERMIT # SU2024 - 0006

Date Received	<u>2 / 21 / 24</u>	Received By	<u>JS</u>
App Fee	<u>\$5000</u>	Ck/CC #:	<u>09109413</u>
BOCC Date:	<u>3 / 12 / 24</u>	Paid	<u>2 / 27 / 24</u>
100 Year Floodplain?	<u>Y/N</u>	Taxes Current?	<u>DN</u>
Original SUP #	<u>SU2023-0025</u>	Resolution #	_____
Original Approval Date:	____ / ____ / ____		

SOLAR, WIND, AND BESS RENEWAL PERMIT APPLICATION

APPLICANT

Name Fortress Solar III LLC
Address 11801 Domain Blvd, Suite 450
Austin, TX 78758
Phone (304) 685-8669
Email CNdhlovu@aypa.com

LANDOWNER

Name Ruth Ann Odle
Address 16218 Hwy 71 Brush
Brush, CO 80723-9436
Phone (____) _____
Email _____

BRIEF DESCRIPTION OF APPLICATION INCLUDING ACRES USED & MEGAWATTS

Proposed 200 MW Battery Energy Storage System. Phase III of the Fortress Solar BESS Project.

PROPERTY LEGAL DESCRIPTION

Address (if available):

See attached parcel information table.

S: 5 T: 3 R: 55 _____ 1/2 _____ 1/4 _____ 1/4

Parcel #: 1233 - 050 - 00 001

Subdivision: _____

Property Size 645.85 (sq. ft. or acres)

Zone District: A

Lot #(s): _____

SEE REQUIRED ATTACHMENT LIST ON BACK OF THIS PAGE.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED OR PROCESSED.

SOLAR, WIND, AND BESS RENEWAL PERMIT REQUIRED ATTACHMENT LIST

Fee:

Non-Refundable Application Fee

**Additional fees and charges may be required pursuant to Section 2-160 of Morgan County Zoning Regulations*

- One Year Renewal** – 33% of the application fee for original permit application
- Two Year Renewal** – 66% of the application fee for original permit application
- Three Year Renewal** – 100% of the application fee for original permit application

Project Narrative: **Narrative Including the following:**

- Describe the reasoning for a renewal

APPLICANT STATEMENT

I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge

CHARLES NDHLOVU

Charles Ndlovu

02/21/2024

APPLICANT NAME (PRINTED)

APPLICANT SIGNATURE

DATE

To: Nicole Hay, Morgan County Community Development Director
CC: Jenafer Santos, Cheryl Brindisi
From: Charles Ndhlovu, **Fortress Solar III LLC**; Justin Miner, Bryce Ternet & Maya Lewis, Tetra Tech
Date: February 21, 2024
Subject: Re: **Fortress BESS III** Renewal Application Narrative

This request is made pursuant to **Section 4-880** of the Morgan County Zoning Regulations, which allows for the renewal of use permits for BESS facilities.

The Fortress Solar Project's BESS facility is envisioned as a multi-phased, single fenced facility, to house self-contained metal enclosure BESS units. The construction of **Phase III** is anticipated to be completed within **12 months** from the issuance of the necessary building permit. However, given the comprehensive nature of this project and its phased development approach, we believe that a three-year renewal term for our SUPs is both appropriate and necessary.

The development schedule and phase timing for the Fortress Solar Project have been meticulously planned to ensure a streamlined and efficient build-out. The requested extension accommodates the multi-year nature of this initiative, recognizing that the construction of such a large-scale renewable energy project cannot be confined to a shorter timeframe without risking undue haste and potential compromise on quality and safety standards.

It is important to note that this application encompasses both the maximum and minimum cases of individual and simultaneous phasing. This inclusive approach ensures that all associated phasing quantum, including scenarios where multiple phases are constructed concurrently, are duly considered and addressed within the application. By accounting for the full spectrum of development possibilities, we aim to maintain flexibility in project execution while adhering to the highest standards of planning and construction.

Furthermore, we must acknowledge the presence of external factors that could influence the project timeline. These factors, which may include but are not limited to supply chain disruptions, regulatory changes, and unforeseen environmental considerations, have the potential to cause delays in construction. A three-year renewal period provides the project with a buffer against such uncertainties, allowing us to manage and mitigate risks more effectively.

All associated phasing quantum included in the application should be summed together in such cases in which multiple phases are constructed at the same time. This application is inclusive of maximum and minimum cases of individual and simultaneous phasing. As noted above, this renewal application is for **Phase III** of the BESS Project.

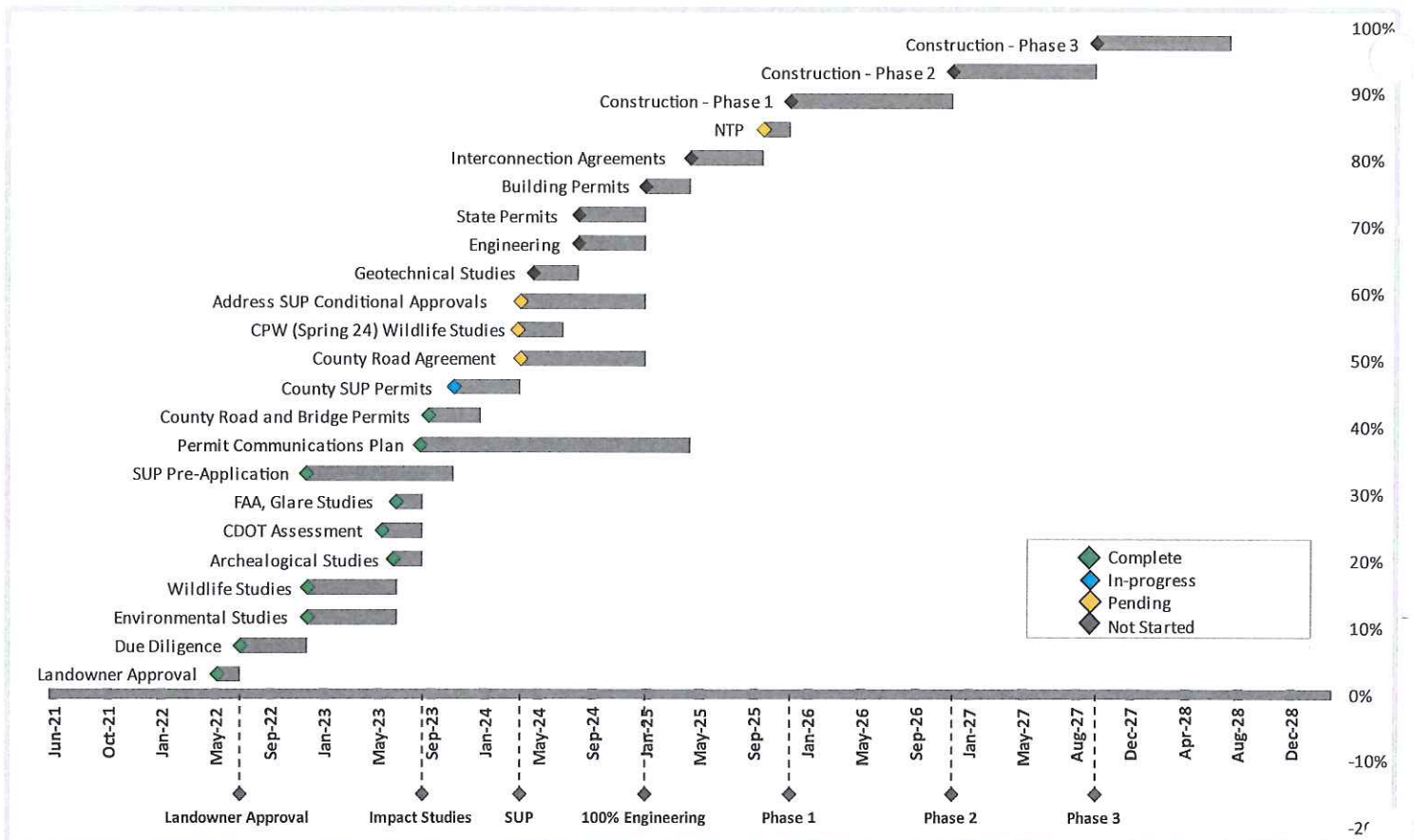
The proposed phasing is detailed per Table 1 below.

Table 1. Project Construction Phasing

Phase	APNs	Solar MW	BESS MWh	Start Construction	End Construction	Commercial Operation Date
1	1231-120-00-001, 1231-120-00-002, 1233-060-00-002, 1233-070-00-001, 1233-070-00-002	200	800	Q2 2025	Q1 2026	Q2 2026
2	1233-050-00-001, 1233-080-00-001, 1233-040-00-002, 1233-030-00-003	200	800	Q1 2026	Q2 2027	Q3 2027
3	1233-090-00-001, 1233-100-00-001, 1233-030-00-003	200	800	Q1 2027	Q2 2028	Q3 2028

The overall development schedule for the Fortress Solar Project and Fortress BESS Project are detailed on Figure 1.

Figure 1. Fortress Solar III LLC - Anticipated Schedule (Solar & BESS)



RECEIPT

Morgan County

231 Ensign, Fort Morgan, CO 80701

(970) 542-3526



SUR2024-0006 | Solar, Wind & BESS Renewal

Receipt Number: 544774

Payment Amount: \$5,000.00

March 1, 2024

<i>Transaction Method</i>	<i>Payer</i>	<i>Cashier</i>	<i>Reference Number</i>
Check	Fortress Solar	Jenafer Santos	091094136

Comments

Assessed Fee Items

Fee items being paid by this payment

<i>Assessed On</i>	<i>Fee Item</i>	<i>Account Code</i>	<i>Assessed</i>	<i>Amount Paid</i>	<i>Balance Due</i>
03/01/24	Solar, Wind, & BESS Renewal Fee		\$5,000.00	\$5,000.00	\$0.00
Totals:			\$5,000.00	\$5,000.00	
				Previous Payments	\$0.00
				Remaining Balance Due	\$0.00

Application Info

Property Address	Property Owner	Property Owner Address	Valuation
Vacant Brush, CO 80723	Ruth Ann Odle	16218 HWY 71 Brush, CO 80723	

Description of Work

Renewal application for phase III of the proposed 200 MW battery energy storage system.