

COMMISSIONERS: MARK WALLER (CHAIR) LONGINOS GONZALEZ, JR. (VICE-CHAIR) HOLLY WILLIAMS STAN VANDERWERF CAMI BREMER

## PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT CRAIG DOSSEY, EXECUTIVE DIRECTOR

TO: El Paso County Planning Commission

Brian Risley, Chair

FROM: Kari Parsons, Planner III

Daniel Torres, PE Engineer II
Craig Dossey, Executive Director

RE: Project File #: WSEO-20-001

Project Name: Front Range-Midway Solar Energy Project Amendment Parcel Nos.: 57200-00-003, 57200-00-010, 57210-01-019, 57170-07-004,

57170-07-005, 57170-07-006, 57170-07-052, 57170-07-047,

57170-07-019, and 51220-01-002

OWNER:	REPRESENTATIVE:
Front Range-Midway Solar Project, LLC Savion, LLC 422 Admiral Boulevard Kansas City, MO. 64106	Core Consultants 1950 Littleton Boulevard, Suite 109 Denver, CO 80120

#### **Commissioner District: 4**

Planning Commission Hearing Date:	10/15/2020
Board of County Commissioners Hearing Date	10/27/2020

#### **EXECUTIVE SUMMARY**

A request by Front Range-Midway Solar Project, LLC, and Savion, LLC, for approval of an overlay rezoning to amend the Front Range Midway Solar Energy Project pursuant to Section 4.3.5, Wind and/or Solar Energy Generation Plan Overlay District (WSE-O), of the El Paso County Land Development Code (2019). The approximately 939-acre overlay rezoning area includes multiple existing zoning designations, including the WSE-O (Wind and/or Solar Energy Generation Plan Overlay), RR-5 (Residential Rural), and



RR-2.5 (Residential Rural) zoning districts. The applicant is proposing to amend the existing overlay area (WSE-O-17-001) to allow for a 100.2 MW (Megawatt) solar energy generation facility and proposes to include a reduction in the overlay area from 1,170 aces to 939 acres of land. An increase in the maximum energy generation production is not proposed and will remain at 100.2 MW. The parcels are located north of Rancho Colorado Boulevard and the Waste Management Landfill, south of Boca Raton Heights, east of Fort Carson, and west of Interstate 25 and are located within Sections 17, 20 21, 22, 27, 28, 29, 32 and 33 Township 17 South, Range 65 West of the 6<sup>th</sup> P.M. The parcels are included within the South Central Comprehensive Plan (1988) area.

The applicant is proposing to amend the Wind and/or Solar Energy Generation Plan Overlay zoning plan on the subject properties to allow for solar arrays and appurtenant components, to include a substation. The 100.2 MW solar energy generation project's proposed substation is proposed to interconnect with either the Public Services Company (PSCo) or Western Area Power Administration (WAPA) supply system. If the proposed solar energy generation facility connects to the existing PSCo substation, then the connection will be via 115 kilovolt (kV) line. If the proposed project connects to the existing WAPA substation, then the connection will be via a 230 kV line.

The applicant has not secured a power purchase agreement (PPA) at this time. The PPA will be secured prior to submittal of the site development plan. If the PPA is not secured, the solar array project will not be constructed. A waiver was approved previously with the approval of the Front Range Midway Solar Energy Project (WSE-O-17-001) which deferred providing the (PPA) until submittal of the site development plan application and is requested to be retained.

The applicant is proposing one phase of development of the overall solar energy project to include a solar array site, associated equipment, energy storage, meteorological monitoring devices, electrical collection devices, six (6) lay down areas, a substation, and the electrical transmission corridor with a maximum generating capacity of 100.2 MW. The applicant has agreed to maintain El Hambra View, a private road easement, during construction and to allow it to remain open in order to provide additional access to the community after completion of site construction. Rancho Colorado Boulevard and La Questa Road are proposed to be utilized during construction, as depicted in the haul route map. The applicant will restore them to a drivable condition at completion of site construction (see Recommended Condition of Approval No. 14 below).

The applicant has secured a lease agreement with El Paso County for approximately 121 acres of the 939 acres proposed to be placed within the amended WSE-O overlay

zoning district to be utilized for the solar array project as depicted on the WSE-O map (attached).

#### A. REQUEST/MODIFICATIONS/AUTHORIZATION

Request: Approval of an overlay rezoning to amend the Front Range Midway Solar Energy Project pursuant to Section 4.3.5, Wind and/or Solar Energy Generation Plan Overlay District (WSE-O), of the El Paso County Land Development Code. The 10 parcels, totaling 939 acres, are zoned WSE-O (Wind and/or Solar Energy Generation Plan Overlay), RR-5 (Residential Rural), and RR-2.5 (Residential Rural). The applicant is proposing to amend the Wind and/or Solar Energy Generation Plan Overlay Zoning District to allow for solar arrays, a substation, energy storage, a transmission corridor, six (6) laydown yards and appurtenant components as allowed uses. The following two (2) waivers were previously approved by the Board of County Commissioners on April 24, 2018 with the Front Range-Midway Solar Energy Project (WSE-O- 17-001) and are requested to be retained:

#### Waiver:

Section 4.3.5.D.2 of the <u>Land Development Code</u> states that, "A development impact mitigation agreement shall be required with all wind and/or solar energy generation plan overlay district applications." Staff is not requiring or recommending impact mitigation with this application due to the minimal, if any, impacts anticipated with the project. Therefore, the applicant is requesting a waiver of this section be retained as it was previosuly approved by the Board, on April 24, 2018.

#### Waiver:

Section 4.3.5, Procedures Manual, P-AR-083-11, 1.5 *General Submittal List* of the <u>Land Development Code</u> identifies that a copy of the power purchase agreement shall be submitted with all wind and/or solar energy generation plan overlay district applications. A PPA has not been finalized to date due to ongoing negotiations between the applicant and the two (2) potential energy purchasers, PSCo and WAPA. No impacts are anticipated if the waiver is retained, as the solar array project will not be developed if the power purchase agreement is not finalized. Therefore, staff has no objection to the waiver request to defer the submittal of the power purchase agreement to submittal of the site development plan application be retained as it was previosuly approved by the Board, on April 24, 2018.

**Authorization to Sign:** WSE-O Plan and any other documents necessary to carry out the intent of the Board of County Commissioners.

#### **B. PLANNING COMMISSION SUMMARY**

**Request Heard:** 

Recommendation:

Waiver Recommendation:

Vote:

**Vote Rationale:** 

**Summary of Hearing:** 

**Legal Notice:** 

#### C. APPROVAL CRITERIA

The Planning Commission and BOCC shall determine that the following the criteria for approval outlined in Section 4.3.5.B of the El Paso County Land Development Code (2019) have been met to approve a WSE-O zoning district if the above waiver requests are retained. Compliance with the approval criteria in Section 4.3.5.G.1 is discussed, as follows:

- The application is in general conformance with the El Paso County Master Plan, including applicable Small Area Plans or there has been a substantial change in character of the neighborhood since the land was last zoned.
  Please see the discussions below in the Policy Plan, Small Area Plan Compliance, Water Master Plan and Other Master Plan Elements sections of this report for detailed evaluations of the conformance of the project with the applicable portions of the County master plan.
- The rezoning is in compliance with all applicable statutory provisions, including but not limited to C.R.S. § 30-28-111, § 30-28-113, and § 30-28-116.
   Staff recommends that the overlay rezoning (map amendment) request, which includes the use and dimensional standards within the proposed WSE-O Plan and supporting documentation, is in compliance with all applicable statutory provisions.
- The site is suitable for the intended use(s), including the ability to meet the
  general development standards of the Land Development Code, except as
  otherwise amended by the specific overlay zoning district.
   Please see the discussions below in the Zoning Compliance section of this report
  for detailed evaluations whether the site is suitable for the intended uses and if
  the proposal is able to meet the general development standards of the Land
  Development Code.

- The application is consistent with the specific development standards in the Land Development Code pertaining to wind and/or solar energy generation facilities.
   Please see the discussion below in the Zoning Compliance section of this report for a detailed evaluation of whether the application is consistent with the development standards for wind and/or solar energy generation facilities.
- The application meets the air, water, light, odor or noise standards established by County, State, or federal regulations.
  The applicant submitted an air quality management plan which indicates no air pollution is anticipated. The site does not propose to discharge water nor contaminates from the operation of the solar energy project. The daily operations of the solar project are not anticipated to generate any odor or noise.
- The proposed use(s) will not be detrimental to the health, safety, or welfare of the inhabitants of the area and the County.
   Staff has not identified any potential health, safety, or welfare concerns with the proposed solar array.
- The proposed use(s) will not cause undue burden on existing infrastructure. The applicant has agreed to maintain El Hambra View, a private road easement, during construction and to allow it to remain open in order to provide additional access to the community after completion of site construction. Rancho Colorado Boulevard and La Questa Road are proposed to be utilized during construction, as depicted in the haul route map. The applicant will be required to restore them to a drivable condition at completion of site construction. Staff recommends compliance with this criterion. See Recommended Condition of Approval No. 14.

#### A. LOCATION:

Abutting zoning and land use:

North:

RR-5 (Residential Rural) / Vacant

South:

RR-5 (Residential Rural) /Waste Management Landfill

East:

RR-5 (Residential Rural) / A-5 (Agricultural) / Gravel Pit / I-25

West:

RR-5 (Residential Rural/ Residential / Fort Carson Army Post Buffer

#### B. BACKGROUND

1. Wind and/or Solar Energy Generation Plan Overlay District Section 4.3.5, WSE-O (Wind and/or Solar Energy Generation Plan Overlay District), of the <u>El Paso County Land Development Code</u> was adopted by the Board of County Commissioners on August 11, 2011, in an effort to address interest in developing utility-scale wind and/or solar energy generation facilities within El Paso County. The purposes of the adopted regulations are:

- To regulate wind and/or solar energy generation facilities which are not subject to C.R.S. § 40-1-103 and C.R.S. §30-28-110 and Section 5.3.3. of this Code;
- To site wind and/or solar energy generation facilities where they are most appropriate, considering impacts to the environment, visual corridors, existing infrastructure, and the established development pattern;
- To ensure the preservation of public health, safety, and welfare;
- To provide a regulatory scheme that is designed to address certain standards regarding setbacks, height restrictions, and other requirements for wind and/or solar power energy generation facilities;
- To provide mitigation measures for impacts associated with large-scale wind and/or solar energy generation facilities; and
- To provide greater design flexibility and efficiency in siting wind and/or solar energy generation facilities.

## 2. Section 4.3.5.E Board of County Commissioner Approval of Major Amendments

A recommendation from the Planning Commission and a final action by the Board of County Commissioners are required for an amendment to the approved WSE-O plan that includes any of the following:

- The addition of any uses or structures not authorized by the approved WSE-O plan.
- Modification of any structure sitting envelope(s) resulting in noncompliance with the dimensional standards established by the approved WSE-O plan.
- Modification of the dimensional standards established by the approved WSE-O plan.
- Modification of the material terms of the associated impact mitigation development agreement, as defined by such agreement.

## 3. Relationship of Wind and/or Solar Energy Generation Plan Overlay District to Base (Underlying) Zone District

Section 4.3.5.A.3.a of the <u>Code</u> states that the, "WSE-O functions in combination with base zoning districts to both modify the existing standards associated with the base zoning districts and to impose additional requirements and standards on specific properties." This means that the rights and restrictions associated with the base zoning district (RR-5, and RR-2.5)

associated with the individual properties included in this request will only modified as indicated on the proposed WSE-O Plan, if approved.

# 4. Relationship between WSE-O and Appendix B: Guidelines and Regulations for Areas and Activities of State Interest (a.k.a. "1041 Regulations")

On June 6, 2013, the El Paso County Board of County Commissioners, pursuant to Section 24-65.1-101, et seq., C.R.S., adopted Appendix B of the El Paso County Land Development Code, which is titled "Guidelines and Regulations for Areas and Activities of State Interest", and as further amended by the Board of County Commissioners on August 6, 2013. Commonly referred to as "1041 Regulations", the Guidelines and Regulations serve to "facilitate identification, designation, and administration of matters of state interest," of which is included the designated activity of state interest for "Site Selection and Construction of Major Facilities of a Public Utility" within Chapter 5 of Appendix B. The proposed 100.2 MW capacity Front Range Midway Solar Array is subject to guidelines and regulations of Appendix B, specifically Chapter 5, pursuant to the definition of "power plant" within the regulations. The definition of "power plant" includes the following:

(b) Any solar or wind electrical energy generating facility or addition thereto with a generating capacity in excess of five hundred (500) kilowatts, and any appurtenant facilities.

## 5. Front Range Midway Solar Energy Project

The applicant, Front Range Midway Solar Energy Project, LLC initiated discussions with the County regarding the process for developing the solar energy project in August, 2014. An early assistance meeting was held by staff with the applicant on March 15, 2017. A formal WSE-O rezoning application was submitted on October 24, 2017. Staff attended a neighborhood meeting held by the applicant on January 31, 2018. No objections to the application were stated by the attendees of the meeting. A discussion regarding access to El Hambra View was had at the meeting between an adjacent property owner and the applicant. The applicant agreed to maintain El Hambra View, a private road easement, during construction and to allow it to remain open in order to provide additional access to the community after completion of site construction. Rancho Colorado Boulevard and La Questa Road are proposed to be utilized during construction, as depicted in the haul route map. The applicant agreed to restore them to a drivable condition at completion of site construction. The Wind and/or Solar Energy Generation Plan Overlay District

map amendment rezoning, for the Front Range Midway Solar Energy Project was approved by the Board of County Commissioners on April 24, 2018 (WSE-O-17-001). The approval included the following two (2) waivers:

#### Waiver:

Section 4.3.5.D.2 of the <u>Land Development Code</u> states that, "A development impact mitigation agreement shall be required with all wind and/or solar energy generation plan overlay district applications."

#### Waiver:

Section 4.3.5, Procedures Manual, P-AR-083-11, 1.5 *General Submittal List* of the Land Development Code identifies that a copy of the power purchase agreement shall be submitted with all wind and/or solar energy generation plan overlay district applications.

A second early assistance meeting was held by staff with the applicant, Front Range Midway Solar Energy Project, LLC and Savion, LLC, on November 12, 2019. A request to amend the WSE-O overlay zoning district application was submitted on June 25, 2020. No objections to the application have been received to date. The waivers above have been requested to be retained with this rezoning request. The amendments to the WSE-O overlay zoning district requested are as follows:

- Reduce the WSE-O Plan area from 1,170 acres to 939 acres,
- Altering the site envelopes as depicted on sheet 2 of 13 of the WSE-O plan (attached),
- An addition of an operation and maintenance building,
- An addition of an energy storage facility,
- An increase to the maximum height of the substation's energy related components from 35 feet to 70 feet, and
- An increase to the maximum height of the overhead transmission and collection line poles from 90 feet to 100 feet.

The applicant continues to agree to maintain El Hambra View, a private road easement, during construction and to allow it to remain open in order to provide additional access to the community after completion of site construction. Additionally, Rancho Colorado Boulevard and La Questa Road are again proposed to be utilized during construction, as depicted in the haul route map. The applicant will restore them to a drivable condition at completion of site construction (see Recommended Condition of Approval No. 14 below).

#### 1. ZONING COMPLIANCE

The WSE-O zoning can be applied for in any base zoning district. Section 4.3.5.B of the <u>Code</u> provides recommended use and dimensional standards for development within a WSE-O plan area. However, the same section also states that "the use, dimensional, and development standards for a WSE-O district shall be set forth in the approved WSE-O plan, and shall include: uses, maximum structure height(s), minimum setbacks, structure elevations, access, accessory structures, signage, lighting, project phasing, and other standards necessary to administer the plan." Below is a comparison between the recommended use and dimensional standards and the proposed standards within the Front Range Midway Solar Energy Project WSE-O:

#### A. USE STANDARDS

### **Principal Uses**

Section 4.3.5. Recommended Principal Uses for a Solar Project
The Code anticipates solar panels (arrays), transmission line(s), substations, energy storage, meteorological monitoring devices, and energy generation facility-related solar panels as allowed principal uses.

## <u>Proposed Front Range Midway Solar Energy Project WSE-O Principal</u> Uses

The proposed WSE-O Plan is proposing meteorological monitoring devices, energy generation facility-related solar panels, energy storage, substation, transformer, stand, inverter, power poles and a single 115kV or 230kV line as principal uses. The applicant has depicted the locations of each of the proposed principal uses on Sheets 4, 5, 7 & 8 of 13 of the proposed WSE-O rezoning plan (see attached).

## **Accessory Uses**

<u>Section 4.3.5 Recommended Accessory Uses for a Solar Project</u>

The Code anticipates collection lines, maintenance facilities, laydown areas and other accessory uses necessary to carry out the intent of the overlay zoning as allowed accessory uses.

## <u>Proposed Front Range Midway Solar Energy Project WSE-O Accessory</u> Uses

The proposed WSE-O Plan does include site specific accessory uses. Laydown areas for construction proposes, an energy storage area, a maintenance building, and collection lines from the solar arrays to the

project substation are proposed as accessory uses with this WSE-O request.

#### **B. DIMENSIONAL STANDARDS**

## **Maximum Structure Heights**

## Section 4.3.5.B.2.a Maximum Structure Heights

The <u>Code</u> states that the height restrictions for solar panels are established by the specific WSE-O zoning and plan. All other structures (e.g., inverters and transformers) shall comply with the height restrictions of the base (underlying) zoning district unless otherwise established by the specific WSE-O zoning and plan.

## Section 4.3.5.B.2.b Structure Setbacks

The <u>Code</u> states that all structures within a WSE-O Plan, except wind turbines and transmission lines, shall "meet the setbacks of the underlying zoning district unless otherwise established by the specific wind/solar energy generation overlay district zoning and development plan."

Section 4.3.5.B.2.b.iv of the <u>Code</u> states that, "there shall be no setback requirement for the transmission lines."

The density and dimensional standards established within the RR-2.5 zoning district as identified in Chapter 5, Table 5-4 of the <u>Code</u> are as follows:

- Setbacks 25 feet front and rear, 15 feet side
- Maximum building height 30 feet
- Maximum lot coverage none

The density and dimensional standards established within the RR-5 zoning district as identified in Chapter 5, Table 5-4 of the <u>Code</u> are as follows:

- Setbacks 25 feet front, rear and side
- Maximum building height 30 feet
- Maximum lot coverage 25 percent

## Existing Front Range Midway Solar Energy Project WSE-O Maximum Structure Heights (WSE-O-17-001)

The current WSE-O Plan identifies the following as the maximum heights for each anticipated structure type:

Solar Panels – 14 feet tall as measured from finished grade to the top of the solar module in the vertical position.

*Inverter and Transformer* – 14 feet tall as measured from finished grade.

Meteorological Monitoring Poles – 14 feet tall as measured from finished grade.

Power Poles – 90 feet tall as measured from finished grade.

Substation – 35 feet tall as measured from finished grade

## Proposed Front Range Midway Solar Energy Project WSE-O Maximum Structure Heights

The proposed WSE-O Plan identifies the following as the maximum heights for each anticipated structure type:

Solar Panels – 14 feet tall as measured from finished grade to the top of the solar module in the vertical position.

Inverter and Transformer – 14 feet tall as measured from finished grade

Meteorological Monitoring Poles – 14 feet tall as measured from finished grade.

Power Poles – 100 feet tall as measured from finished grade.

Substation - 70 feet tall as measured from finished grade

Operation and Maintenance Building – 20 feet tall as measured from finished grade

Energy Storage Facilities – 20 feet tall as measured from finished grade

Proposed Front Range Midway Solar Array WSE-O Structure Setbacks
The proposed structure setbacks with this WSE-O Plan are proposed to
be a minimum of 25 linear feet.

#### 2. POLICY PLAN COMPLIANCE

The El Paso County Policy Plan (1998) has a dual purpose; it serves as a guiding document concerning broader land use planning issues and provides a framework to tie together the more detailed sub-area elements of the County master plan. See the applicant's narrative in the letter of intent for a discussion regarding how the project conforms to the applicable goals and policies. Staff's review of the relevant policies is as follows:

#### SECTION 6 - Growth and Land Use

**Policy 6.1.3-** Encourage new development which is contiguous and compatible with previously developed areas in terms of factors such as density, land use and access.

**Policy 6.1.7-** Encourage infill development which complements existing uses, is consistent with Small Area and other adopted plans.

**Policy 6.1.8-** Encourage incorporating buffers or transitions between areas of varying use or density where possible.

**Policy 6.1.9-** Viable residential properties should be reasonably protected from the adverse impacts of major roadways or potentially incompatible land uses.

The proposed solar array will provide solar-generated electricity to the grid via interconnection with one of the existing PSCo or WAPA transmission lines at a point along the west end of the site. Staff recommends that the industrial character of the proposed solar array is compatible with the landfill to the south, the gravel pit to the northeast, the interstate to the east, the existing transmission lines running through the site, and the two (2) existing substations and natural gas power plant. The topography will mitigate the view of the facilities from nearby residents. Residential development to the west is not anticipated as a result of the buffer located at the eastern edge of the Fort Carson Army Base boundary. For the above reasons, staff recommends compliance with the above policies.

**Policy 6.1.10-** Ensure that new development will not create a disproportionately high demand on public services and facilities by virtue of its location, design or timing.

Following a detailed review of the proposed project, including a review of the potential for project-related impacts to existing infrastructure in the area, staff recommends that the impacts, if any, that are caused by the project will be negligible. For that reason, staff recommends compliance with this policy.

**Policy 6.1.11-** Plan and implement land development so that it will be functionally and aesthetically integrated within the context of adjoining properties and uses.

**Policy 6.1.14-** Support development which complements the unique environmental conditions and established land use character of each subarea of the County.

The proposed solar arrays should be largely concealed from view due to the interior siting of the arrays on the 939-acre facility. The rolling terrain should adequately screen the solar arrays from adjacent properties. (See attached visual analysis). For that reason, staff recommends that the project will functionally and aesthetically be integrated into the area and will preserve as much of the existing vegetation on the site as possible.

**Policy 6.1.15-** Recognize the need for new development and redevelopment to respond to changes in demographic, market and technological conditions.

**Policy 6.1.16-** Allow for new and innovative concepts in land use design and planning if it can be demonstrated that off-site impacts will not be increased and the health, safety and welfare of property owners and residents will be protected.

The growing solar energy industry and the increasing demand by utility providers for solar generated energy in El Paso County lead staff to recommend this application as a response to a change in State mandates for renewable energy sources, market, and technological conditions. Development of the proposed site for any other use could be challenging given the strict Federal regulations limiting access to the public and other non-utility industries on an energy generation site. For that reason, staff recommends that the proposed solar arrays and appurtenant components are a reasonable use for the site and are not anticipated to cause off-site impacts or negatively affect the health, safety, and welfare of residents in the area.

#### SECTION 7 - Special and Unique Land Uses

**Policy 7.1.2-** Consider the future combined impact of potential additional land use requests when considering individual applications for special or unique land uses.

**Policy 7.5.1-** Encourage the multiple use of utility sites and corridors where feasible and appropriate.

The solar array site is within an area that has existing transmission lines and substations which will reduce the number of improvements that would otherwise need to be constructed to facilitate delivery of solar-generated energy. The new substation and proposed small section of electrical transmission line will connect directly into either the existing PSCo or WAPA line, which will interconnect at either the PSCo or WAPA substation.

#### SECTION 12- Other Services and Utilities

**Policy 12.4.1-** Ensure that electric, natural gas, petroleum and other facilities (generation, distribution, pipelines and storage) are located in a manner which is safe, environmentally sensitive and which does not unreasonably burden particular property owners with adverse impacts.

As mentioned above, the future development of residential properties on a portion of the project area and west towards Fort Carson is discouraged via the buffer area along the Fort Carson Army Base boundary. Ongoing operations at Fort Carson will not be unreasonably burdened by the proposed project. Fort Carson was sent a referral by Planning and Community Development to comment on the project and no response was received. The applicant also contacted Fort Carson directly, no concerns were noted. There are no environmentally sensitive areas within the proposed overlay area; therefore, staff does not anticipate adverse impacts from the proposed solar energy generation facility on adjacent properties.

**Policy 12.4.5-** Encourage the use of existing easements for utility installation in order to reduce negative impacts in other areas.

The overall area of the WSE-O plan is requested to be reduced.

Additionally, the transmission corridor from the solar arrays will connect into the existing overhead lines which will eliminate the need for additional powerlines, thereby reducing the potential for additional visual impacts.

**Policy 12.4.7-** Allow for the effective use of renewable energy resources especially where it minimizes the local impacts on neighboring properties and non-renewable energy use.

This policy applies due to the "renewable" nature of the proposed solar energy generation facility. A general assessment of this policy as it applies to the proposed WSE-O rezoning has been provided in detail throughout this report.

### 3. Small Area Plan Compliance

The project is located within the <u>South Central Comprehensive Plan</u> (1988) area. The plan identifies the land as being within the "West Area Planning District" and acknowledges the noise constraints (artillery range) due to the proximity to the Fort Carson Army Base. The <u>Plan</u> acknowledges that access to the area is difficult due to the terrain and further identifies that the roads, on occasion, are impassible. The <u>Plan</u> generally discourages residential development in this area. The proposed solar array site is not anticipated to have significant negative impacts to the roads in this area. Due to the age of the <u>Plan</u> it does not identify or discuss any potential uses similar to the proposed WSE-O, however, staff finds that the request is generally consistent with the applicable policies pertaining to land use recommendations.

#### 4. Water Master Plan Analysis

The El Paso County Water Master Plan (2018) has three main purposes; better understand present conditions of water supply and demand; identify efficiencies that can be achieved; and encourage best practices for water demand management through the comprehensive planning and development review processes. Relevant policies are as follows:

Goal 1.2 - Integrate water and land use planning.

**Goal 3.1** – Promote cooperation among water providers to achieve increased efficiencies on infrastructure.

**Policy 6.1.3.2** – Provide developers with clear landscape guidance that results in attractive landscaping and reduced water requirements.

**Policy 6.1.3.3** – Encourage sustainable landscaping that is tailored to the variations of climate zones across the County.

The subject property is located within Region 7, Fountain Area, which is expected to have the largest growth demand in the County by 2060. Specifically, the Plan states:

"Region 7 could experience the largest demand growth in the County by 2060. Areas projected to develop by 2040 are located south of Fountain on

the north and south sides of Link Road. Areas northwest of Fountain along the east and west sides of Marksheffel Road are also expected to grow by then, as well as the area south of Fountain on the west side of I-25. Directly west of Fountain, areas north and south of Squirrel Creek Road are expected to grow by 2060. One large development is expected south of Fountain by 2060, along the west side of I-25. Another is expected in the northeast corner of Region 7, along both sides of Bradley Road. See Figure 5.6 for the Region 7 growth map."

The proposed development is located west of I-25, south of the City of Fountain, and southwest of the Pikes Peak International Raceway. A 2040 growth area is identified to the west of the Pikes Peak International Raceway and is outside of the Wigwam Mutual Water Company service area. The land proposed to be included in the WSE-O area is not identified as a growth area in the Plan. Nonindustrial development in this area of the County is unlikely due to a lack of centralized services and due to other existing industrial land uses in the area. The Wigwam Mutual Water Company has provided a water commitment letter to serve the development. The applicants will install a water tap to the existing Wigwam Mutual Water Company line in the area to fill a water truck anticipated to be used to wash the solar panels. It is anticipated that the solar panels will require washing twice a year, requiring approximately 22,000 gallons (0.07 acre-feet) per year with no annual increase. In comparison, the presumptive use value for a single-family dwelling unit is 0.26 acre-feet of water annually which is significantly higher than the anticipated water demand for the solar energy generation facility. Staff is not requesting landscape to be utilized for a visual buffer, due to the arid climate in this area of the County which is intended to meet the Policies in the Plan.

#### 5. OTHER MASTER PLAN ELEMENTS

The Master Plan for Mineral Extraction (1996) identifies potential valley fill deposits (Mesa Gravel and Valley Fill deposits by water in a stream valley) in this area. The applicant provided an affidavit certifying that mineral rights for the property were researched and found and such rights are owned by multiple interests. The mineral rights owners were notified of the original application (WSEO-17-001) December 15, 2017 via certified mail. No responses have been received. State Statute requires notice to mineral rights owners prior to the initial public hearing on an application for development. If more than one application for development is filed for the same surface development, the applicant is only required to provide mineral rights notice for the initial public hearing scheduled for the first application for development. Therefore,

because the applicant noticed mineral estate holders in 2017 after submitting the original WSEO application, a second notice is not required with the WSE-O amendment.

## C. PHYSICAL SITE CHARACTERISTICS

#### 1. HAZARDS

The applicant provided a document titled "Preliminary Geotechnical Engineering Report", which was prepared by Terracon Engineering, Inc., dated August 24, 2015. The document does not identify any significant areas of geologic concern that would preclude development of the solar energy generation facility.

The property included within the proposed WSE-O Plan is not identified as being within a high wildfire hazard area. With that being said, it should be noted that a fire, known as the Carson-Midway fire, did occur in the same area as the proposed solar energy generation facility in March 2018. The fire resulted in the destruction of multiple dwellings and accessory structures. The Hanover Fire Protection District provides emergency services in this area of the County. Hanover Fire Protection District has provided comments within their commiment letter to provide emergency services to the project area (see attached).

#### 2. WILDLIFE

Potential impacts to wildlife are generally low as depicted in the <u>El Paso</u> <u>County Wildlife Descriptors Map</u> (1996). Colorado Parks and Wildlife was sent a referral to comment; however, no comments have been received to date.

#### 3. FLOODPLAIN

The subject property is not located within a defined floodplain as determined by the FEMA Flood Insurance Rate Map (FIRM) panel numbers 08041C1170G, 08041C1165G, 08041C1160G, and 08041C1155G dated December 7, 2018.

#### 4. DRAINAGE AND EROSION

The subject property lies within the Sand Creek (FOFO0600) and Midway Ranch (FOFO0800) Drainage Basins. A preliminary drainage report was submitted with the previously approved WSE-O-17-001 application and an amendment to that preliminary drainage report was submitted with this application to document the proposed changes. There will be minimal grading with this project and a minimal net increase in imperviousness, with multiple

extended detention basins proposed to mitigate developed flows and provide permanent water quality treatment for the site. Final platting (subdivision) is not proposed or required, therefore drainage fees will not apply.

This project has very limited potential to cause short-term drainage, erosion, and sedimentation impacts to downstream properties. The applicant will be required to mitigate construction impacts with Best Management Practices (BMPs) as outlined in the Drainage Criteria Manual, Volume II.

#### 5. TRANSPORTATION

Access to the site for heavy and large trucks will be limited to southbound Interstate 25 exit 119, Rancho Colorado Boulevard. Light passenger vehicle traffic, such as that associated with the travel of construction workers, will not be restricted. Direct access from Rancho Colorado Boulevard to El Hambra View will be utilized as well as the unimproved southerly section of La Questa Drive.

Construction traffic is anticipated to occur for up to ten (10) months with a maximum of 500 trips per day. A breakdown of the anticipated traffic types has been provided in the Revised Transportation Memorandum which was submitted with this WSE-O application. A haul route plan with the proposed haul route roads has also been submitted with this application. As indicated in the Revised Transportation Memorandum, the existing road conditions along the haul route will be analyzed per the specifications from the El Paso County Department of Public Works (DPW) prior to the start of construction.

#### D. SERVICES

#### 1. WATER

A finding of water sufficiency is not required with map amendment (rezoning) requests. Wigwam Mutual Water Company has committed to providing potable water to the solar array facility for dust control during construction, and post-construction maintenance purposes.

#### 2. SANITATION

The proposed use as a solar array does not require wastewater service. Temporary on-site facilities are anticipated to be utilized at the time the facility is under construction.

#### 3. EMERGENCY SERVICES

The subject parcels are located within the service area of Hanover Fire Protection District. Hanover Fire Protection District has provided comments

within their commiment letter to provide emergency services to the project area (see attached). Staff recommends Condition of Approval No. 1.j below which requires the applicant to work with the El Paso County Office of Emergency Management to develop an acceptable emergency response plan, which will be required as part of the site development plan application.

#### 4. UTILITIES

The State of Colorado mandate described in Colorado Revised Statute §40-2-124 requires 30 percent of retail energy sales to be deliverable from renewable energy generation for investor owned utilities and 10 percent for large municipal utilities by year end 2020. Although construction of this facility will occur after the States mandate, it is anticipated that renewable energy will continue increase to meet the growing demands of the region. These solar arrays will provide power to either the PSCo or WAPA substation where it will be integrated into the electrical grid and distributed to Front Range customers.

#### 5. PARKS/TRAILS

The El Paso County Parks Master Plan (2013) does not depict a park or trail corridor in this area. No fees are due with this request.

#### 6. SCHOOLS

Staff provided Hanover School District No. 28 with an electronic referral packet and an opportunity to comment on the project. No comments were received in response.

#### E. APPLICABLE RESOLUTIONS:

Approval Resolution: Page 27 Disapproval Resolution: P28

#### F. STATUS OF MAJOR ISSUES

There are no remaining issues

## G. RECOMMENDED CONDITIONS AND NOTATIONS

Should the Planning Commission and the Board of County Commissioners find that the request meets the criteria for approval outlined in Section 4.3.5, staff recommends the following conditions and notations:

#### **CONDITIONS**

1. Prior to excavation or construction, approval of a site development plan by El Paso County for the solar array facility is required. Site development plan applications shall include, but are not limited to the following information:

- a. Site development plan drawings;
- b. Final drainage report;
- c. Stormwater Management Plan and Report (SWMPR)
- d. Any permits required by the Colorado Department of Public Health and Environment, if needed
- e. Detailed reseeding plan;
- f. Lighting plans and detailed specifications, including plans and specifications for temporary lighting, as applicable;
- g. Sign plans, if signage is proposed;
- h. Elevations of any above ground structures;
- i. Emergency response plan, to be prepared in coordination with and acceptable to the El Paso County Office of Emergency Management;
- j. Noxious weed management plan, to be prepared in coordination with and acceptable to El Paso County Environmental Services; and
- k. Colorado Department of Health and Environment (CDPHE)-accepted surface and groundwater quality monitoring plans, if required.
- 2. The applicant shall provide copies of all required State and County air quality permits prior to approval of a site development plan application.
- 3. The applicant shall comply with all applicable local, State, and Federal laws and regulations regarding the use, disposal, storage, and transportation of solid and/or hazardous materials on and off site.
- 4. A County Erosion and Stormwater Quality Control Permit (ESQCP) shall be obtained prior to construction. All disturbed areas shall be promptly stabilized and re-vegetated in accordance with Best Management Practices (BMPs) as outlined in the Drainage Criteria Manual, Volume II.
- 5. The Board of County Commissioners, at a public hearing, shall have the authority to require the shutdown, removal, and/or relocation of any glare-causing component or components if the Board finds that any such component or components is/are creating a health and/or safety risk. Such shutdown, removal, and/or relocation requirement by the Board shall be based upon documented inspection of the facility by a County official at the applicant's expense.
- 6. The hours of operation during the construction and long-term maintenance of the project shall be limited to seasonal day time hours unless otherwise authorized by the Planning and Community Development Department Director

prior to the proposed construction and/or maintenance. Requests to conduct nighttime construction activities shall be submitted to the Planning and Community Development Department Director at least two business days prior to the time of the proposed construction. Any failure to respond to the requests by the Planning and Community Development Department Director within two business days shall be interpreted as an approval of the request.

- 7. Site lighting, including temporary lighting, will be limited to that characterized in the Project Lighting Memo and Lighting Plan. The Detailed specifications shall be provided at the site development plan stage. All light fixtures shall be directional and positioned so that the light sources are concealed and fully shielded from adjacent properties and roadways, unless otherwise specifically authorized under the regulations of the Occupational Safety and Health Administration (OSHA) of the United States Environmental Protection Agency.
- 8. The Board of County Commissioners may elect at an open and public hearing, following full published notice, to approve a rezoning of the properties included within the WSE-O boundary for the purpose of removing the overlay zoning if the applicant has not begun construction within two (2) years of the date of Board of County Commissioners approval.
- 9. Any approval of the WSE-O rezoning request is only valid with the additional approval of the concurrently reviewed 1041 permit. Failure to receive approval of the 1041 permit shall render approval of the WSE-O rezoning null and void.
- 10. At least six (6) months prior to the initiation of decommissioning activities, Developer shall prepare a Project Decommissioning and Site Restoration Plan (PDSRP) prepared in sufficient detail to identify, evaluate, and resolve all major deconstruction, environmental, hauling, and public health and safety issues reasonably anticipated by the developer on the date thereof and submit the same to the County for review and approval. The PDSRP shall describe the process that will be used to evaluate the options and select the measures that will be taken to restore, reclaim, or preserve the project site and to otherwise ensure the protection of the public against risks or dangers resulting from the project decommissioning. The PDSRP shall address provision for funding or bonding arrangements to meet the project site restoration or management costs and it shall include an estimate of market value of the equipment and salvage value of all other equipment and materials that do not have value at resale.

- 11. Developer shall provide notice to the Planning and Community Development Department of the date of initial delivery of power to the existing utility distribution system within 30 days following such date.
- 12. Developer, its successors or assigns, as the case may be, shall provide financial assurances sufficient for decommissioning costs in the form of a performance bond, guaranty or letter of credit, or cash to ensure the availability of funds for such costs to El Paso County no later than the beginning of year twenty (20) following the date of initial delivery of power. An updated engineering estimate of the amount of the decommissioning costs shall be provided by the developer to the County at least sixty (60) days and no sooner than ninety days prior to providing financial assurances to the County. If decommissioning should occur prior to year 20, an updated engineering estimate of the amount of the decommissioning costs shall be provided by the developer to the County at least 60 days and no sooner than 90 days prior to the start of decommissioning activities.
- 13. Any expansion, enlargement, or modification of the WSE-O Plan shall be subject to the provisions of Sections 4.3.5.E and F, as amended, of the <u>El</u> Paso County Land Development Code.
- 14. In recognition of past and current public use of EI Hambra View, a private road easement, the applicant has voluntarily committed to the surrounding community to allow EI Hambra View to remain open to the public during and after site construction. Rancho Colorado Boulevard and La Questa Road may be utilized during construction, as depicted in the haul route map. The applicant shall restore both roads to a drivable condition, as determined by the PCD Director in consultation with the County Engineer, at completion of site construction.
- 15. The approval is limited to the WSE-O plan as depicted. An amendment to the WSE-O Plan shall be required prior to development of any additional phases.
- 16. Development of the project shall be conducted in accordance with the regulations of El Paso County, conditions of approval and notations of the Board of County Commissioners and the accompanying documents/reports in the Planning and Community Development Department file for the rezoning application (WSEO-20-001).

#### **NOTATIONS**

- 1. If a zone or rezone petition has been disapproved by the Board of County Commissioners, resubmittal of the previously denied petition will not be accepted for a period of one (1) year if it pertains to the same parcel of land and is a petition for a change to the same zone that was previously denied. However, if evidence is presented showing that there has been a substantial change in physical conditions or circumstances, the Planning Commission may reconsider said petition. The time limitation of one (1) year shall be computed from the date of final determination by the Board of County Commissioners or, in the event of court litigation, from the date of the entry of final judgment of any court of record.
- 2. Rezoning requests not forwarded to the Board of County Commissioners for consideration within 180 days of Planning Commission action will be deemed withdrawn and will have to be resubmitted in their entirety.

#### H. PUBLIC COMMENT AND NOTICE

The Development Services Department notified 36 adjoining property owners on September 24,2020 for the Planning and Commission and Board of County Commissioners' hearing. No responses have been received.

#### I. ATTACHMENTS

Vicinity Map Letter of Intent Midway Front Range Solar Energy Project WSE-O Plan Fire Commitment Letter Visual Analysis

## El Paso County Parcel Information

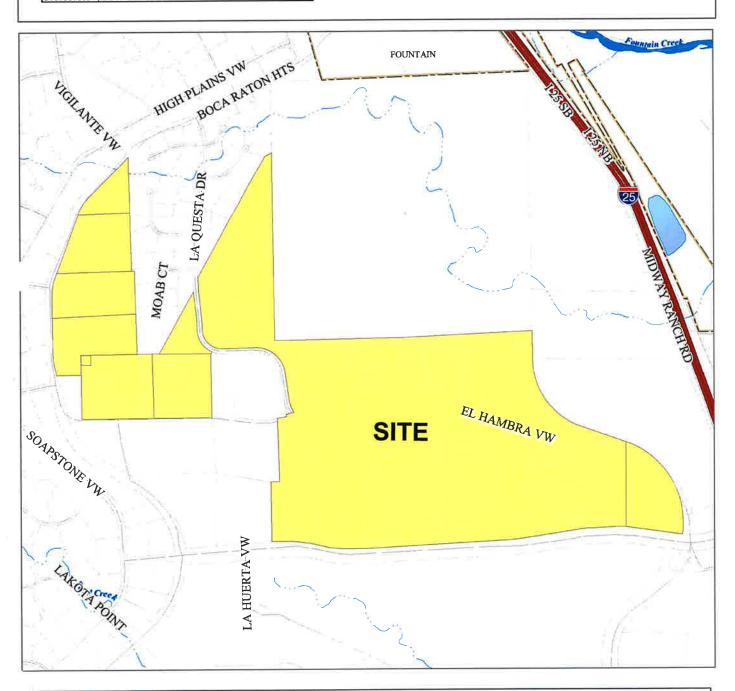
PARCEL	NAME
5717007052	FRONT RANGE-MIDWAY
5717007006	EL PASO COUNTY
5717007004	EL PASO COUNTY
5717007005	EL PASO COUNTY
5721001019	FRONT RANGE-MIDWAY SOLAR PROJECT
5722001002	MIDWAY DEVELOPMENT COMPANY INC
5720000003	PUBLIC SERVICE CO OF COLORADO
5720000010	UNITED STATES RECLAMATION SERV
5720000009	WARD TIMOTHY T
5717007019	EL PASO COUNTY

File Name:

WSEO-20-001

Zone Map No.

Date: September 24, 2020





#### Front Range-Midway Solar Project, LLC

422 Admiral Boulevard Kansas City, Missouri 64106 savionenergy.com

September 21, 2020

Ms. Kari Parsons
El Paso County Planning and Community Development Department
2880 International Circle
Colorado Springs, CO 80910

RE: Letter of Intent – Major Amendment to the Wind and/or Solar Energy Generation Plan Overlay (WSE-O) District (WSEO-20-I)

Dear Ms. Parsons,

Front Range-Midway Solar Project, LLC (Applicant), a wholly owned subsidiary of Savion, LLC, is seeking a Major Amendment to the Wind/Solar Energy Generation Plan Overlay (WSE-O) District approved by El Paso County, Colorado Board of County Commissioners (BoCC) on April 24, 2018 (WSEO-17-001) to allow for modifications to the Front Range-Midway Solar Project (FRMW Project or Project). Per Section 4.3.5.E of the Land Development Code of El Paso County, Colorado (LDC), approval of a Major Amendment (to the WSE-O) includes any of the following and requires a recommendation from the Planning Commission and a final action by the BoCC:

- The addition of any uses or structures not authorized by the approved WSE-O plan
- Modification of any structure siting envelope(s) resulting in noncompliance with the dimensional standards established by the approved WSE-O plan
- Modification of the dimensional standards established by the approved WSE-O plan
- Modification of the material terms of the associated impact mitigation development agreement, as defined by such agreement

Since the WSEO-17-001 approval in 2018, the FRMW WSE-O amended plan area (WSEO-20-1) has been reduced from 1,170 acres to 939 acres. Recent advances to solar panel technology have resulted in increased panel efficiency (i.e. higher wattage [power] per panel). In addition, previous easements in the WSE-O Plan area have been released and no longer need to be avoided, allowing for a more efficient site layout within the smaller WSE-O Plan area. Given the advances in technology and the former easement area that no longer needs to be avoided; the FRMW Project design was optimized and the full 100.2 megawatt alternating capacity (MW AC) photovoltaic (PV) solar energy generation facility previously sited on 1,170 acres is now proposed to be located within 939 acres.

Project design updates include shifts in the solar panel array, details of an operation and maintenance (O&M) building, and details of an energy storage facility (battery storage). The updated design will require an increase to the maximum height of FRMW Project substation facilities from 35 feet to 70 feet to accommodate lightning arrestors/grounding pole structures and an increase to the maximum height of overhead transmission and collection line poles from 90 feet to 100 feet to accommodate minimum clearance requirements over existing transmission infrastructure.

The above changes were discussed with El Paso County Planning & Community Development (PCD) and at the agency's direction, the Applicant is requesting a Major Amendment to the WSE-O District for the FRMW Project (WSEO-20-I) to allow the following changes:

- WSE-O Plan area change from 1,170 acres to 939 acres
- Inclusion of O&M building details
- Inclusion of energy storage facility details
- Increase to the maximum height of Project substation facilities from 35 feet to 70 feet
- Increase to the maximum height of overhead transmission and collection line poles from 90 feet to 100 feet

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#### Introduction

The Applicant has completed the Type D Application Form (I-2C) for the Major Amendment for the FRMW Project (Attachment I: Type D Application Form). Many of the FRMW Project details remain the same as those included in WSEO-17-001, including the Applicant's intent to construct, operate, and maintain a 100.2-megawatt (MW) photovoltaic solar energy generation facility. However, the amended FRMW WSE-O Plan area (WSEO-20-1) has changed from 1,170 acres to 939 acres and no longer includes parcels 5720007001, 5720007002, 5720007003, 5720007004, and 5720000007. The Project design has been optimized, and updates include an O&M building and an energy storage facility located adjacent to the Project substation. In addition, design updates will require an increase to the maximum height of Project substation facilities from 35 feet to 70 feet; and an increase in maximum height of transmission line poles from 90 feet to 100.

As approved, the facilities included the proposed solar panel array, a project substation, and meteorological monitoring devices (METs). Project accessory uses included 34.5 kV collection lines (including an overhead 115 kV transmission line and underground or overhead collection power lines), maintenance facilities, and any other uses necessary to carry out the intent of the overlay zoning, including but not limited to direct current (DC) to AC inverters associated with the solar array, medium voltage transformers, circuit breakers and disconnect switches, and a communications system that would interconnect from the new project substation to one of the adjacent substations (Western Area Power Administration [WAPA] or Public Service Company of Colorado [PSCo]).

The amended FRMW Project includes additional details for an O&M building. This O&M building consists of two storage containers (similar to trucking containers) placed side by side for storing equipment. The containers include electricity and HVAC systems for O&M staff. This building may require potable water and sewer for which it would utilize a potable water tank or waterline tap which has already been procured from the Wigwam Mutual Water Company and a septic tank to serve O&M staff.

The amended FRMW Project also includes details for an energy storage facility that will be coupled to the solar facility through an AC electrical bus system. The energy storage will utilize battery technology to store the energy generated by the FRMW Project for later use. The system will be comprised of multiple, specially designed cabinets that will be arranged on the FRMW Project site to house the batteries, inverters, and transformers. These cabinets include a number of safety features including temperature control equipment installed on each cabinet. Additional safety features of these energy storage cabinets include one or more of the following (I) integrated fire protection system (2) UL 9540 certifications, or (3) National Fire Protection Association-qualified equipment. The energy storage facility will be located within the FRMW Project structure siting envelope for energy storage. The Applicant discussed the addition of energy storage to the FRMW Project with El Paso County PCD during an Early Assistance meeting on November 12, 2019. During that meeting and in subsequent electronic mail correspondence dated December 2, 2019, El Paso County PCD concurred that energy storage is considered an accessory to the WSEO-17-001 and that it does not require an amendment. In addition, the Applicant has discussed the addition of energy storage with Hanover Fire District and a Commitment Letter from the fire district has been provided. Although no amendment is required for the energy storage facility, the Applicant is providing additional details on these accessory components through this process.

The FRMW Project transmission line will remain entirely within the FRMW WSE-O Plan structure siting envelope with a new route that would extend a short distance from the proposed FRMW Project substation to an existing bay within either the adjacent WAPA substation or the PSCo substation; the length of the transmission line would be determined upon execution of a Power Purchase Agreement (PPA), which in turn would determine the interconnection substation location (WAPA or PSCo). As a result of advanced engineering that has occurred since the WSEO-17-001 approval, Applicant has determined that at least three of the transmission line poles will need to be a maximum of 100-feet tall (versus the 90 feet previously approved in WSEO-17-001) wood or steel poles with guyed supports and

anchors on turning structures to cross over the existing transmission line. The height of the power poles above ground level may vary based on ground conditions at each pole location.

The amended Dimensional and Density Standards for the FRMW Project are provided in Table I. The setback from exterior lot lines will remain at 25 feet per the approved WSEO-17-001. An application to vacate the interior lot lines was submitted, approved, and recorded with the county for all parcels owned by the Applicant. Leased parcels will have above-ground solar facilities set back along interior lines per the lease agreements with the landowners.

Per the approved WSEO-17-001, up to 50 sets of transformers and inverters would be located adjacent to panels and would be at a maximum height of 14 feet. Three to five meteorological stations would be located across the Project and would be a maximum height of 14 feet.

Since approval of WSEO-17-001, engineering details for the FRMW Project substation have changed. The FRMW Project substation will be located within the underlying RR-5 zone. The Project substation would now include approximately 60-foot tall dead-end structures where the terminus of the transmission line is supported with the surge arrester and post insulators. Poles with lightning mast and finial would be up to 70-feet tall, connecting the static wire to the dead-end structure. Therefore, the maximum height requirement for the FRMW Project substation infrastructure would need to be 70-feet (versus the 35-foot tall maximum identified in the approved WSEO-17-001).

The maximum heights for substation structures within a WSE-O district is as established in the WSE-O Plan pursuant to LDC Sec. 4.3.5(B)(2)(a) and the maximum height for certain other structures not listed is per the underlying zoning district unless otherwise established by the WSE-O Plan. The Applicant notes that the maximum height for structures in the underlying RR-5 and RR-2.5 zoning districts (other than those exempted) is 30 feet. This Major Amendment seeks approval for an increase in the maximum height of Project substation facilities from 35 feet to 70 feet to accommodate grounding pole structures; and an increase in the maximum height of overhead transmission and collection line poles from 90 feet to 100 feet to accommodate minimum clearance requirements over existing transmission infrastructure.

Maximum heights for the O&M facility and energy storage have been added to Table I, although these facilities will not exceed maximum heights for the underlying zoning districts. Of note, the FRMW Project is located adjacent to existing utility infrastructure, which already exceeds the maximum height restrictions for the underlying zoning districts.

Construction access would remain unchanged from the approved WSEO-17-001 with use of existing routes from Interstate-25 from southbound Exit 119, following existing public roadway Rancho Colorado Boulevard and El Hambra View (private road) and La Questa Drive (county right-of-way). Internal Project access roads would be constructed between solar arrays to allow maintenance technicians access to individual arrays during routine maintenance.

It is anticipated that FRMW Project construction will begin in the fourth quarter of 2021 and commercial operation will begin by the end of year 2022.

Table I. Amended Dimensional and Density Standards for the FRMW Project WSEO-20-I

Underlying Zoning District	Minimum Setbacks for structures! (ft.) Underlying (Principal and Accessory Uses) District	Maximum Height of Solar Panels	Maximum Height of Transmission and Collection	Maximum Height of MET Stations	Maximum Height of Inverter- Transformer	Maximum Height of Project Substation Facilities	Maximum Height of Project O&M Building	Maximum Height of Energy Storage Facilities (ft.)²	
	Perimeter of WSE-O Boundary	(ft.)	Line Poles (ft.)	(ft.)	Pairs (ft.)	(ft.) <sup>2,3</sup>	(ft.)²	,	
RR-5	25	4	001	14	14	70	20	20	
RR-2.5	25	14	001	14	14	70	20	20	_
-	10 - 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Handa and	months and the standard of the standard lace than four feet in height notes lines rabbes transmission lines or other	nining walle loce	than four feet in h	point pole lines	s rables transmis	sion lines or other	

Setbacks are not applicable to fences or walls seven feet in height or less, retaining walls less than four feet in height, poles, lines, cables, transmission lines or other transmission or distribution facilities. All setbacks shall be measured from the WSE-O District boundary, except meteorological towers, which shall be setback as

provided by the El Paso County LDC as of the date of application for this WSE-O District.

2 FRMW Project substation, O&M building, and energy storage are currently sited in RR-5 parcels, however, due to design changes, may be relocated within the

<sup>&</sup>lt;sup>3</sup> The primary substation facilities will be a maximum of 35 feet with the exception of the grounding pole structures with lightning protection which could be up to a structure siting envelope.

In accordance with El Paso County requirements as described in the LDC Site Specific Development Plan, this LOI includes the following information:

- 1) Owner/applicant and consultant, including addresses and telephone numbers
- 2) Site location, size, and zoning
- 3) Request and justification
- 4) Existing and proposed facilities, structures, roads, etc.
- 5) Deferral and waiver requests (if applicable) and justification
- 6) The purpose and need for the change in zone classification
- 7) The total number of acres in the requested area
- 8) The total number of residential units and densities for each dwelling unit type
- 9) The number of industrial or commercial sites proposed
- 10) Approximate floor area ratio of industrial and/or commercial uses
- 11) The number of mobile home units and densities
- 12) Typical lot sizes: length and width
- 13) Type of proposed recreational facilities
- 14) If phased construction is proposed, how will it be phased
- 15) Anticipated schedule of development
- 16) How water and sewer will be provided
- 17) Proposed uses, relationship between uses and densities
- 18) Areas of required landscaping
- (9) Proposed access locations
- 20) Approximate acres and percent of land to be set aside as open space, not to include parking, drive, and access roads

Additionally, a Wind and/or Solar Energy Generation Overlay Plan Amendment for the FRMW Project has been prepared in accordance with the El Paso County Development Services Department (DSD) requirements (Attachment 2).

Since approval of WSEO-17-001, some of the adjacent land has changed ownership. The Applicant attempted to reach all new adjacent landowners to inquire if I) they were aware of the FRMW Project, 2) if they had any issues with the FRMW Project and 3) to inform them of upcoming communications directly from the county and from the FRMW Project. To date the Applicant has had discussions with six of the thirteen new landowners, some of which were aware of the FRMW Project. None of these new landowners expressed any issues with the FRMW Project nor did they express opposition to the FRMW Project or this Major Amendment. The Applicant also left messages for four of these new owners. As of this submittal the Applicant has not heard back from these owners. Finally, the Applicant was unable to find active phone numbers to reach three of the new adjacent landowners. In order to ensure some form of communication, each adjacent landowner was sent a letter to update them on the status of the FRMW Project. The letters were mailed on August 14, 2020 and a copy of the letter with delivery receipts is included in Attachment 5.

The Applicant has been in discussion with Tami West of the Pioneer Village Roads Public Improvement District and Tim McNerney, Interim Superintendent of the Hanover School District to discuss the Amended FRMW Project. Both entities have expressed their continued support for the Project. Support letters are anticipated and will be provided to the county upon receipt. Chief Tatum provided an updated fire commitment letter which is included in the application.

## 1. Project Owner/Applicant and Preparer/Consultant

Owner/Applicant	Preparer/Consultant:
Front Range-Midway Solar Project, LLC	CORE Consultants, Inc
Courtney Timmons, Development Director	1950 W Littleton Blvd, Suite 109
422 Admiral Boulevard	Littleton, CO 80120
Kansas City, Missouri 64106	Phone: 303.703.4444
Phone: 906.458.4350	
Project Owner:	
Front Range-Midway Solar Project, LLC	
9070 and 9310 Rancho Colorado Boulevard	
Fountain, CO 81008	

#### 2. Site Location, Size, and Zoning

Site Location

The amended WSEO-20-I is located in Sections 17, 20, 21 and 22, Township 17 South, and Range 65 West in El Paso County, Colorado. The amended WSEO-20-I is located west of Interstate-25 (I-25) approximately 20 miles south of downtown Colorado Springs on private and El Paso County-owned lands secured by the Applicant through direct ownership and/or lease agreements. The amended FRMW WSE-O-20-I is bounded by county lands on the west, an existing gas plant and by dispersed residential development, by rangeland to the north, by a gravel pit to the east, and by the Midway Waste Management Landfill to the south (Attachment 2). Specifically, the amended FRMW WSE-O Plan consists of the parcels listed in Table 2.

Table 2. Parcels located within the Amended FRMW WSEO-20-I Plan Area

Parcel ID	Zoning	Landowner	
5717007004	RR-5	El Paso County	
5717007005	RR-5	El Paso County	
5717007006	RR-5	El Paso County	
5717007019	RR-5	El Paso County	
5717007047	RR-2.5	Powell Homes LLC	
5717007052	RR-2.5	Front Range-Midway Solar Project LLC	
5721001019	RR-2.5	Front Range-Midway Solar Project LLC	
5722001002	RR-2.5	Midway Development Company, Inc.	
5720000010	RR-5	U.S. Reclamation Service, U.S. Dept. of Interior, BOR	
5720000003	RR-5	Public Service Co. of Colorado c/o Property and Local Taxes	

Size

The amended FRMW WSE-O Plan area has been reduced from 1,170 acres to 939 acres and the Project design optimized to accommodate the full 100.2 MW AC PV solar energy generation facility within the smaller 939 acres. Therefore, the amended WSEO-20-1 is more efficient and less overall impact than the previously approved WSEO-17-001.

The FRMW Project structure siting envelope includes any area where FRMW Project facilities can be sited. The design shown within the siting envelope is preliminary, therefore locations of facilities within the siting envelopes may shift without an amendment.

#### Zoning

The FRMW WSE-O Plan area is zoned Residential Rural (RR)-2.5 and RR-5 (Attachments I and 2).

#### 3. Request and Justification

As was approved for WSEO-17-001, the purpose of the FRMW Project remains the same; to construct, operate, and maintain a 100.2-MW photovoltaic solar power generation facility to provide clean, cost effective, renewable energy to one or more public utility companies with connections to this area of the county. The need for the FRMW Project was established by multiple factors including local and state statutes including Colorado's Renewable Energy Standard (Section 40-2-124, C.R.S) which requires 30% of retail energy sales to be derived from renewable generation for investor owned utilities and 10% for large municipal utilities by the year 2020. Other statutes and policy directives that require or encourage the production of renewable energy include the Colorado Governor's Climate Action Plan, and local initiatives of Colorado rural cooperatives, municipal utilities, and generation and transmission associations.

Conformance to the El Paso County Master Plan

The activities associated with the FRMW Project are compatible with the current El Paso County Master Plan (Master Plan) which consists of the County Policy Plan (CPP), small area plans (SAPs), the Parks Master Plan, the Master Plan for Mineral Extraction, drainage basin planning studies and the major transportation corridors plan. The Master Plan guides land use in El Paso County. The Master Plan has been reviewed as part of this process and specific component plans under the Master Plan have been identified and reviewed further as they are impacted by the location and nature of the Project, including the CPP and the applicable SAP (South Central Comprehensive Plan). The original WSEO-17-001 LOI (Attachment 3) includes a summary of key elements of the CPP, and the South Central Comprehensive Plan (SCCP) with a detailed discussion of those elements of both plans that are relevant to the FRMW Project and describe how the FRMW Project would conform to those components.

Conformance to the El Paso County Water Master Plan

The activities associated with the FRMW Project are compatible with the current El Paso County Water Master Plan (El Paso County February 2019) which outlines the water planning, demand, and supply analysis for the county water supply. The FRMW Project requires water usage limited to dust control during construction and minimal water usage during operations. Water required during construction will be supplied by the Wigwam Mutual Water Company located in Region 7 of the El Paso County providers. A water commitment letter has been included with the application (Attachment 44). A water line within the Wigwam Water District traverses the FRMW Project; the Applicant procured a tap for use during construction and operations. It is anticipated that the solar panels will require washing twice a year, requiring approximately 22,000 gallons (0.07 acre-feet) per year with no annual increase. Water required for O&M staff for drinking and sanitary uses will be minimal during operations, procured and stored in tanks associated with the O&M facility. The minimal water usage required for the FRMW Project therefore meets the goals and policies identified in the Water Master Plan.

#### 4. Existing and proposed facilities, structures, roads, etc.

**Existing Uses** 

At present, existing transmission lines, a natural gas-fueled electric generation unit, the WAPA and PSCo substations, and country roads are located within the extent of the WSEO-20-1 boundary (Attachment 2).

#### Proposed Uses

The FRMW Project would generate 100.2 MW AC, the same as approved, and include facilities located within the structure siting envelope identified in Attachment 2. Project facilities include solar panels, a substation, and METs. The WSE-O Plan (Attachment 2) shows the location of these facilities as well as the accessory uses which include collection lines (including an overhead transmission line and underground or overhead collection power lines), an operations and maintenance building and energy storage facility, and any other uses necessary to carry out the intent of the overlay zoning, including but not limited to DC to AC inverters associated with the solar array, medium voltage transformers, circuit breakers and disconnect switches, and a communications system that would interconnect from the new Project substation to the WAPA or PSCo substations. The collection lines lead to the FRMW Project substation and the FRMW Project substation is connected to the existing substation with an overhead transmission line as shown in the WSE-O Plan (Attachment 2). Internal access roads would be constructed between solar arrays and contained within the FRMW WSE-O Plan area.

The energy storage facility would be coupled to the solar facility through an AC electrical bus system. The energy storage will utilize battery technology to store the energy for later use. The system will be comprised of multiple, specially designed, cabinets that will be arranged on the site to house the batteries, inverters, and transformers. The energy storage facility will be located within the siting envelope.

Up to six laydown areas will be placed within the siting envelope identified in the WSE-O Plan. These laydown areas will be used during construction to place equipment and supplies as needed starting from grading until the final solar panels and overhead lines are completed. Laydown areas are located in areas where project infrastructure will be placed. Laydown areas will be restored and reseeded at the completion of construction.

## 5. Deferral and waiver requests (if applicable) and justification

This Amendment for the FRMW Project does not request any modifications to the deferral and waiver requests from the approved WSEO-17-001. The WSEO-17-001 approval included the approval of two waivers: a waiver for the development impact mitigation agreement required in Section 4.3.5.D.2 of the LDC, and a waiver for the PPA required in Section 4.3.5 Procedures Manual, P-AR-083-11, 1.5 General Submittal List of the LDC. Text from the BoCC staff report for the April 24, 2018 BoCC hearing is included in Attachment 4: Waivers. BoCC staff did not require impact mitigation with the WSEO-17-001 due to the minimal, if any, impacts anticipated with the Project. A PPA for the FRMW Project is currently being negotiated. BoCC staff had no objection to the waiver request to defer the submittal of the PPA to the submittal of the Site Development Plan application.

## 6. The purpose and need for the change in zone classification

No underlying zoning change is needed. The FRMW Project purpose remains the same: to construct a solar energy project to generate 100.2 MW to satisfy multiple local, state, and federal statutes including Colorado's RES statute (Section 40-2-124, C.R.S.) which requires 30% of retail energy sales to be derived from renewable generation by 2020 and thereafter from investor owned utilities and 10% for large municipal utilities.

#### 7. The total number of acres in the requested area

The amended WSE-O Plan area has been reduced from 1,170 acres to 939 acres as a result of removing five parcels totaling 231 acres from the Project (5720007001, 5720007002, 5720007003, 5720007004, and 5720000007). As a result, the FRMW Project WSE-O Plan area and structure siting envelope have changed.

## 8. The total number of residential units and densities for each dwelling unit type

No residential units are included in this Major Amendment for the FRMW Project.

## 9. The number of industrial or commercial sites proposed

The Applicant is proposing one solar energy generation facility including the principal and accessory uses listed herein to be located within the amended FRMW WSE-O Plan area (WSEO-20-1; Attachment 2).

## 10. Approximate floor area ratio of industrial and/or commercial uses

The Siting Envelope encompasses all usable land within the amended FRMW WSE-O Plan area (WSEO-20-I), approximately 905 acres, and excludes land within 25 feet of exterior property lines; non-jurisdictional water features, and two cultural areas (5EP7625 and 5EP7632). FRMW Project design optimization has resulted in a shift in the PV solar panel array location and an overall reduction in the solar panel area (approximately 546 acres reduced to 477 acres). However, the layout of the Project facilities is preliminary and may shift within the siting envelope shown on the WSE-O Plan without an amendment to the WSE-O.

Design updates include an O&M building and an energy storage facility near the Project substation. The proposed O&M building will include two construction storage containers retrofitted with electricity and HVAC units for O&M staff. The containers will be up to 40 feet long by 8 feet wide and 8 feet in height. The O&M building is the only portion of the FRMW Project that would be occupied.

The energy storage facility area is approximately 365 feet by 175 feet, with room for multiple energy storage containers. The number of containers will depend on the model chosen. Typical size for the proposed model is approximately 24 feet long by 5 feet wide and 10 feet in height.

## II. The number of mobile home units and densities

There are no mobile home units included in this WSEO-20-1 Major Amendment for the FRMW Project application.

### 12. Typical lot sizes: length and width

A lot line vacation application was recorded with the county clerk on August 11, 2020, reducing the number of lots located within the WSEO-20-1 from 28 to 10 lots. However, as of the date of this submittal, the county has not assigned a new Parcel ID for the lots combined in the lot line vacation. No further changes to lot sizes are planned to the existing lots within the amended FRMW Project WSE-O Plan area associated with this application.

## 13. Type of proposed recreational facilities

There are no proposed recreational facilities included in this FRMW Project WSEO-20-1 amendment application.

## 14. If phased construction is proposed, how will it be phased

Construction is not phased, and construction of the FRMW Project would occur in one phase until complete.

#### 15. Anticipated schedule of development

The FRWM Project construction schedule would be determined upon execution of a PPA. It is anticipated that construction would begin sometime in the fourth quarter of 2021 with a commercial operation date in late 2022.

## 16. How water and sewer will be provided

Water would be required for dust mitigation during construction, and for washing panels during operations twice per year. A water line within the Wigwam Water District traverses the FRMW WSE-O Plan area. Water for the FRMW Project will be obtained from a water tap that the Applicant procured from the district. No new sewer utility line extensions would be required to be established for FRMW

Project construction or operations. Portable sewer facilities would be utilized during construction. The O&M building would not require connecting to water or sewer utilities, as the building will not be heavily used, therefore a water tank will be sufficient for potable water use and a septic tank will be installed for wastewater.

## 17) Proposed uses, relationship between uses and densities

The approved WSEO-17-001 allowed principal uses include solar panels, substations, and meteorological monitoring devices. FRMW Project accessory uses include collection lines (including an overhead transmission line and underground or overhead collection power lines), maintenance facilities, and any other uses necessary to carry out the intent of the overlay zoning, including but not limited to DC to AC inverters, medium voltage transformers, circuit breakers and disconnect switches, and a communications system that would interconnect from the new FRMW Project substation to the WAPA or PSCo substation.

The amended FRMW Project (WSEO-20-1) includes the addition of an energy storage facility to balance out the power supply needs during times when the solar panels are not generating power. The energy storage facility is an accessory use to fulfill the intent of the WSE-O district.

An amendment is requested to the Dimensional Standards in the approved WSEO-17-001 district to increase the maximum height of the transmission pole, substation pole, and account for the additional structures, including the O&M building and energy storage facility.

## 18. Areas of required landscaping

Formal landscaping is not required for the FRMW Project. Noxious weeds will be treated prior to construction and reseeding of native vegetation would occur where feasible following construction. Revegetation methods will likely include broadcast seeding and/or drill seeding a mix of native grasses. It is anticipated that weed stubble will secure seed in the topsoil following noxious weed treatment and mowing of the site. The exact method of revegetation is dependent upon the time of year at which construction begins. As such, specific revegetation methods will be detailed during the Site Development Plan phase. Operations would require regular mowing to prevent shading of the solar panels.

#### 19) Proposed access locations

Access to the site would occur from Rancho Colorado Boulevard, El Hambra View, and La Questa Drive. Permanent access roads within the FRMW WSE-O Plan area would be constructed to provide emergency access pursuant to LDC Section 4.3.5(B)(3) and movement through the site for regularly scheduled maintenance. Maintenance vehicles would park at the FRMW Project O&M facility or FRMW Project substation, if required, during maintenance activities. Otherwise, maintenance vehicles would park on private FRMW Project access roads, within the fence-line, to reach specific areas of the site. The Applicant will not permanently close El Hambra View.

## 20) Approximate acres and percent of land to be set aside as open space, not to include parking, drive, and access roads

No areas within the FRMW WSE-O Plan area would be set aside as open space. Project facilities may shift within the siting envelope, therefore no areas are designated as open space, as non-developable areas have been omitted from the siting envelope.

Attachments referenced above are listed below in Table 3 by numbers 1 through 4. Additional attachments 5 through 46 are requested by El Paso County as listed in EDARP. Revision notes for each attachment identifies if it has been updated for the Major Amendment application since approval of WSEO-17-01.

Revised Attachments	Revision Note
WSE-O Application Form (Type D)	Updated for new contact information
2. WSE-O Plan Amendment (WSEO-20-1) for the Front	WSE-O Plan area reduced: Plan updated for
Range-Midway Solar Project	FRMW Project details
Letter of Intent from WSEO-17-001 Application, dated	
February 23, 2018	No changes made to original submittal
4. Waivers approved April 24, 2018	Request that original approval applies to WSEO-20-1
6. Adjacent Property Owner Notification	Sent notices to updated adjacent landowner list August 2020
. Authority to Represent	No revisions provided.
	Provided an amendment letter for new
. Drainage Report	preliminary site layout with new calculations
3. Soils and Geology Report	No revisions provided
. Legal Description (MS Word version)	Revised for FRMW WSE-O Plan area
Lighting Plan	Revised for new site layout and O&M facility
Maintenance Plan (MS Word version)	Updated for energy storage and O&M facility
1. Plantenance Fian (115 VVoid Version)	Updated mineral owner list; no changes to
2. Mineral Rights Certification	owners
	Prepared noise study (not previously
13. Noise Study	requested)
14. Noxious Weed Management Plan	No revisions provided
4. Noxious vveed Planagement Plan	This Attachment is not needed as there is
5. Phasing Plan	only one phase of-construction
	Updated for new ownership and leases within
16. Title Commitment	the FRMW WSE-O Plan area
	Revised for increased construction traffic du
17. Revised Transportation Memorandum	to energy storage and O&M building
	Provided revised KOPs 6 and 7
Visual Impact Analysis     Wetlands Analysis Report/Wildlife Report/Natural	Trovided revised ROTS of and 7
Landforms, Vegetation, Riparian Analysis ("Wetlands, Waterbodies, and TES Report")	No revisions provided
20. Wildland Fire and Hazard Mitigation Plan	Updated for energy storage and O&M facility
21. Hanover Fire District Commitment Letter	Updated letter provided addressing amended FRMW Project.
22. Site Map (Proposed Use)	Revised for amended FRMW Project
23. Easements	Revised for amended FRMW Project
24. Applicant Comment Response Letter	Responses provided for Submittal #I comments
<ol> <li>Tower/Structure Removal Agreement ("Decommissioning Plan")</li> </ol>	Updated for energy storage and O&M facility
26. Lease Agreements	Updated for FRMW WSE-O Plan area parce
	Provided new Key Observation Points 6 and
27. Photo Simulations	for amended site plan
28. WSE-O Overlay Map	Revised for amended FRMW Project
29. Operations Plan	Updated for energy storage and O&M facility
30. Power Purchase Agreement	Waiver requested as PPA is in negotiations
	No revision provided
31. Interconnect Agreement	No permit required
32. Floodplain Development Permit	Revised for new contact info
33. Proof of Liability Insurance	No revision provided
34. State Air Quality Permit	140 Levision provided

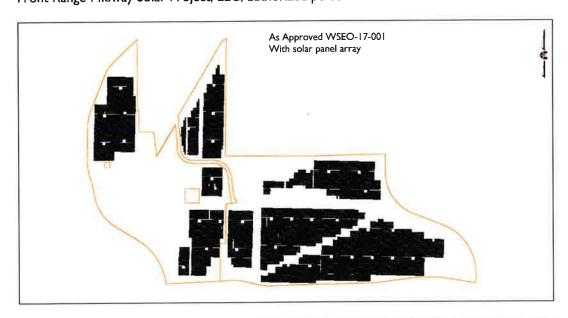
Revised Attachments	Revision Note
DE LIGA C. (E.: ) Demois	Provided letter identifying all water bodies are
35. US Army Corps of Engineer's Permit	non-jurisdictional; No permit required
36. Electromagnetic Interference Report	Report prepared (not previously requested)
37. Clearance Letter - USFWS	No revision provided
38. Clearance Letter - CPW	No revision provided
39. Determination of No Hazard from FAA	No revision provided
40. Haui Route Plan	No revision provided
41. Road Condition Survey	No revision provided
42. Physical Constraints Map	Revised for FRMW Project
43. Site Plan with Easements	Updated for FRMW Project Amendment
44. Water Company Commitment Letter	No revision provided
	Revised for new contact info and new parcel
45. Application Form and Affected Boundaries Map	ownership
46. Letter of Support Provided in 2017	Provided previous letters written in 2017

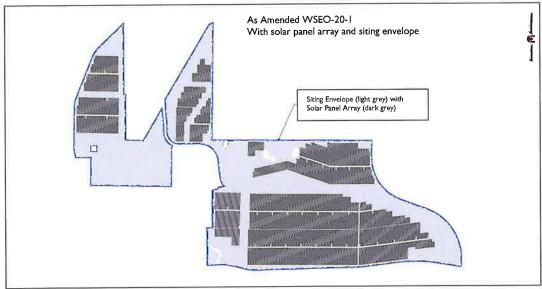
We appreciate your review of these Project details and look forward to hearing from you.

Sincerely,

Scott Beinetz

Scott Zeimetz Front Range-Midway Solar Project, LLC, authorized person





WIND/SOLAR ENERGY GENERATION OVERLAY (WSE-O) PLAN AMENDMEN I (WSEO-20-1) FOR THE FRONT RANGE-MIDWAY SOLAR PROJECT PORTIONS OF SECTIONS 17, 20, 21, & 22, TOWNSHIP 17 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO	APPLICANT:   County
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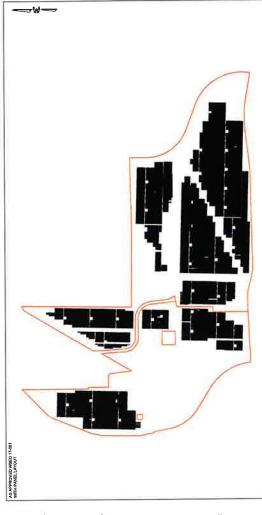
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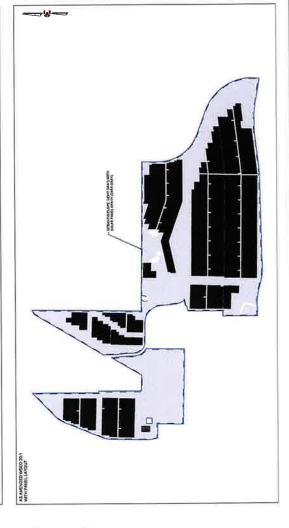
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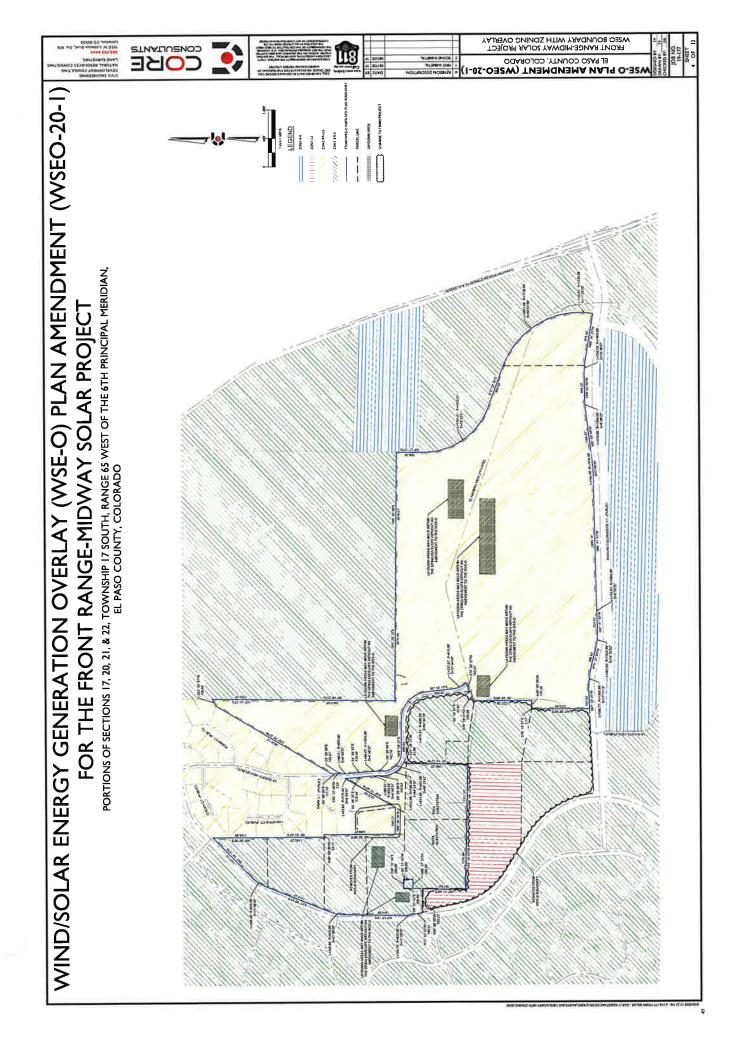
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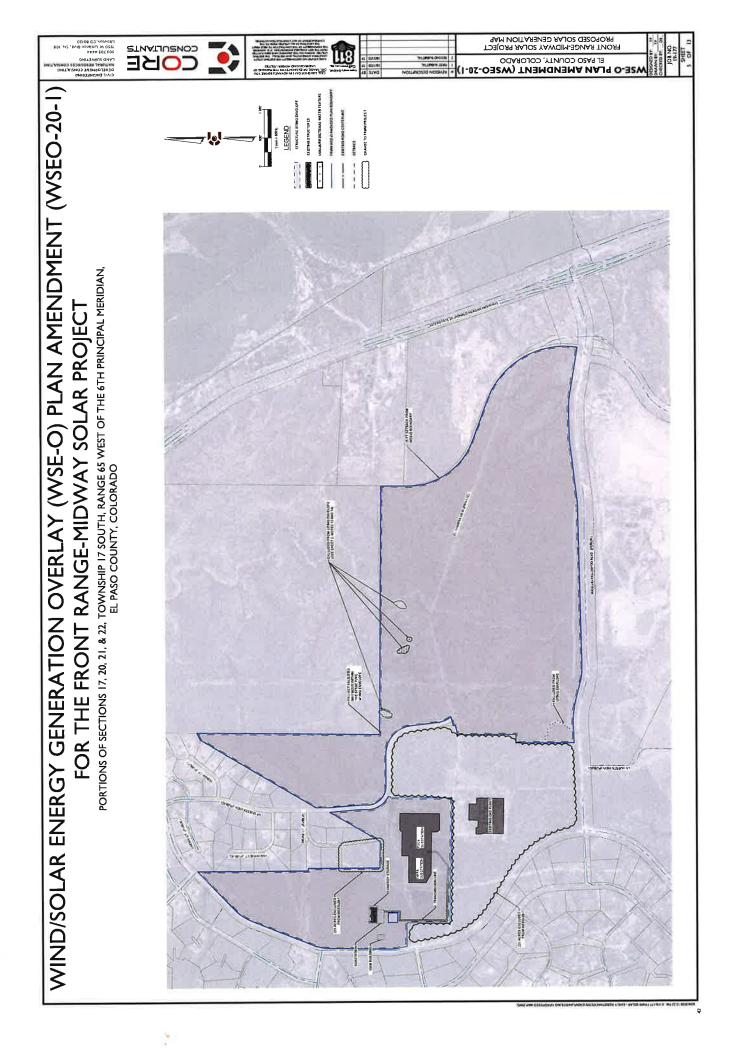
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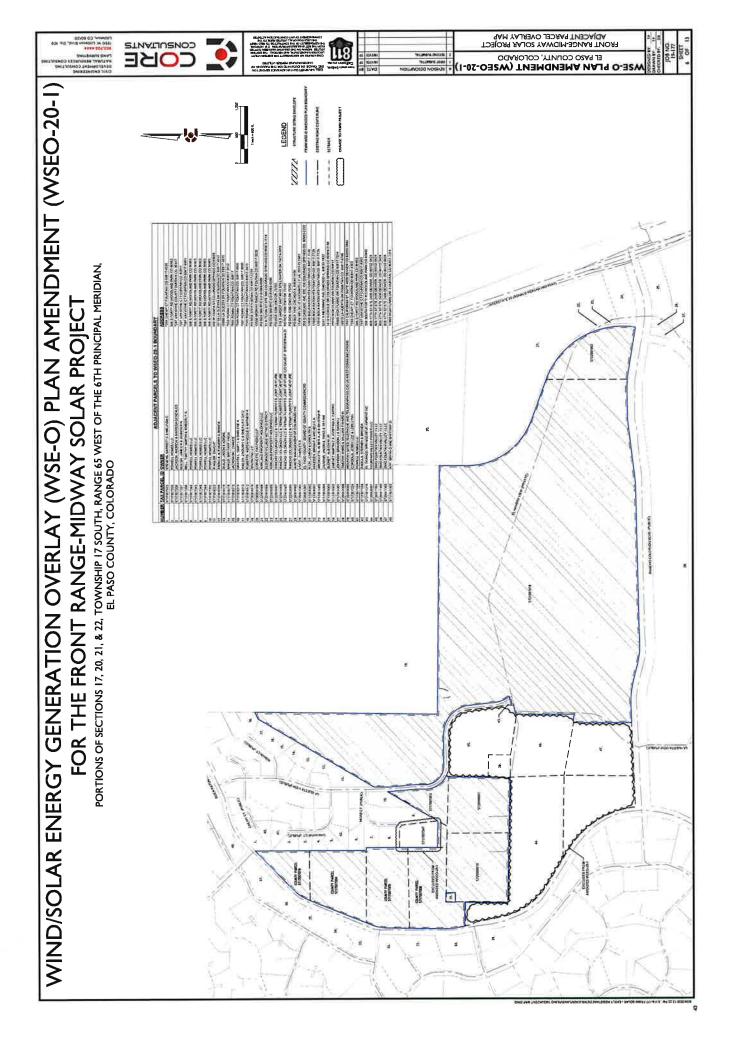
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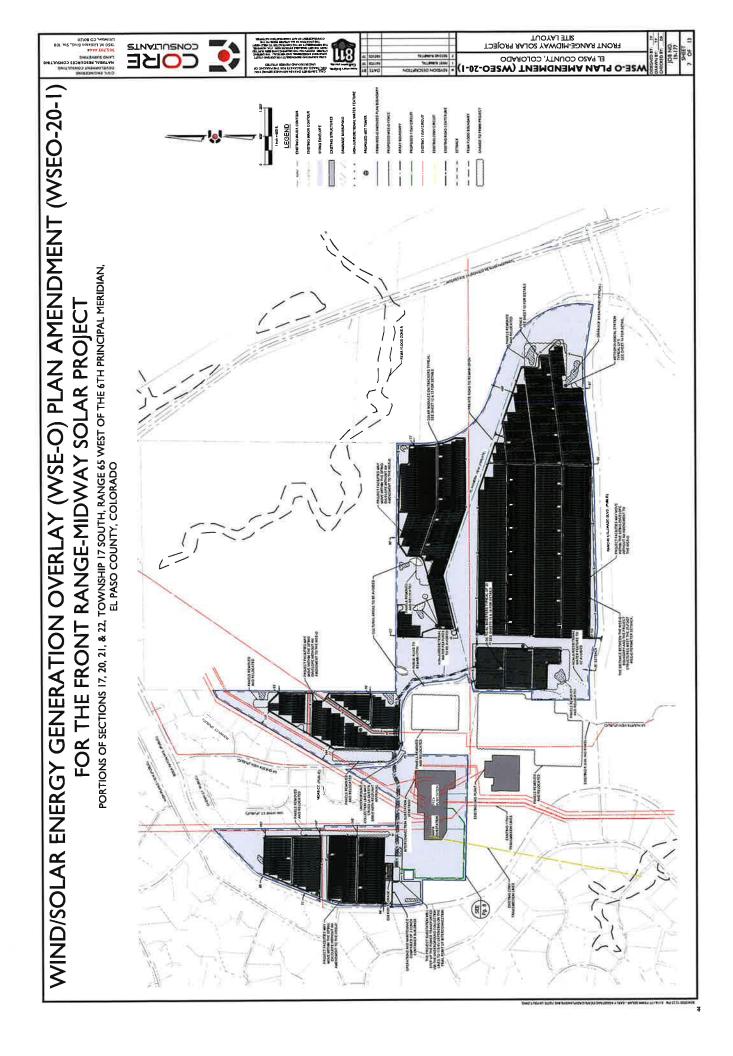
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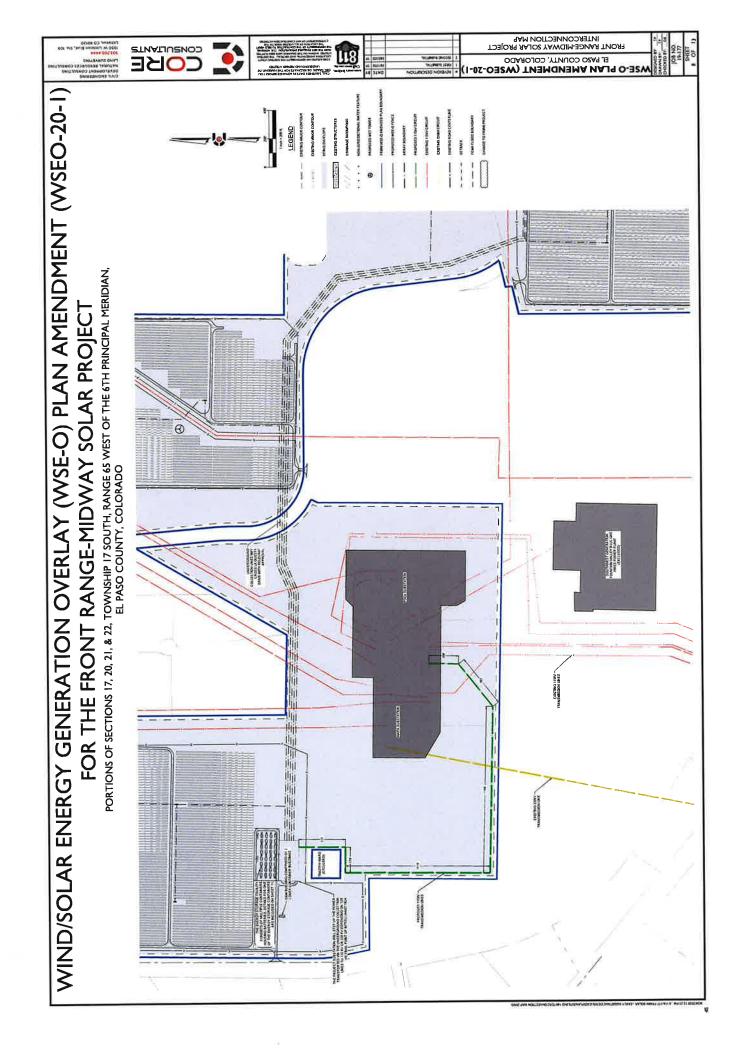
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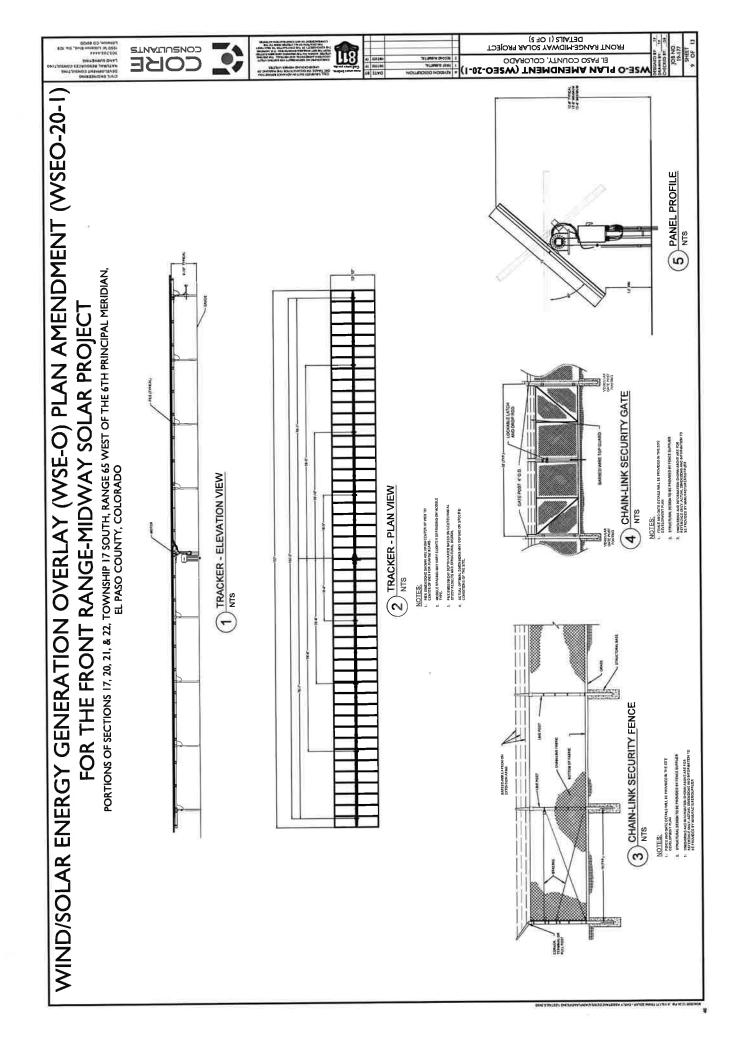






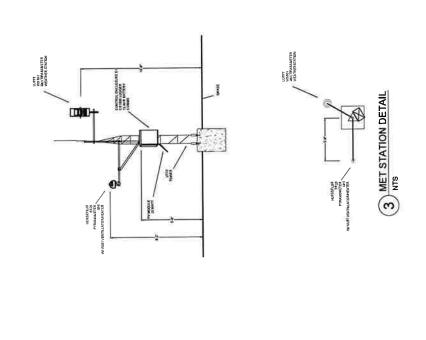


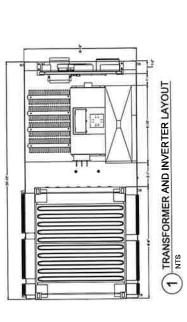


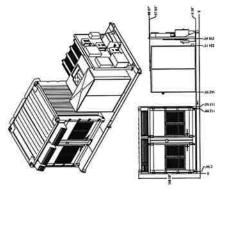


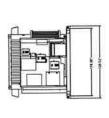
# WIND/SOLAR ENERGY GENERATION OVERLAY (WSE-O) PLAN AMENDMENT (WSEO-20-1) FOR THE FRONT RANGE-MIDWAY SOLAR PROJECT

PORTIONS OF SECTIONS 17, 20, 21, & 22, TOWNSHIP 17 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO





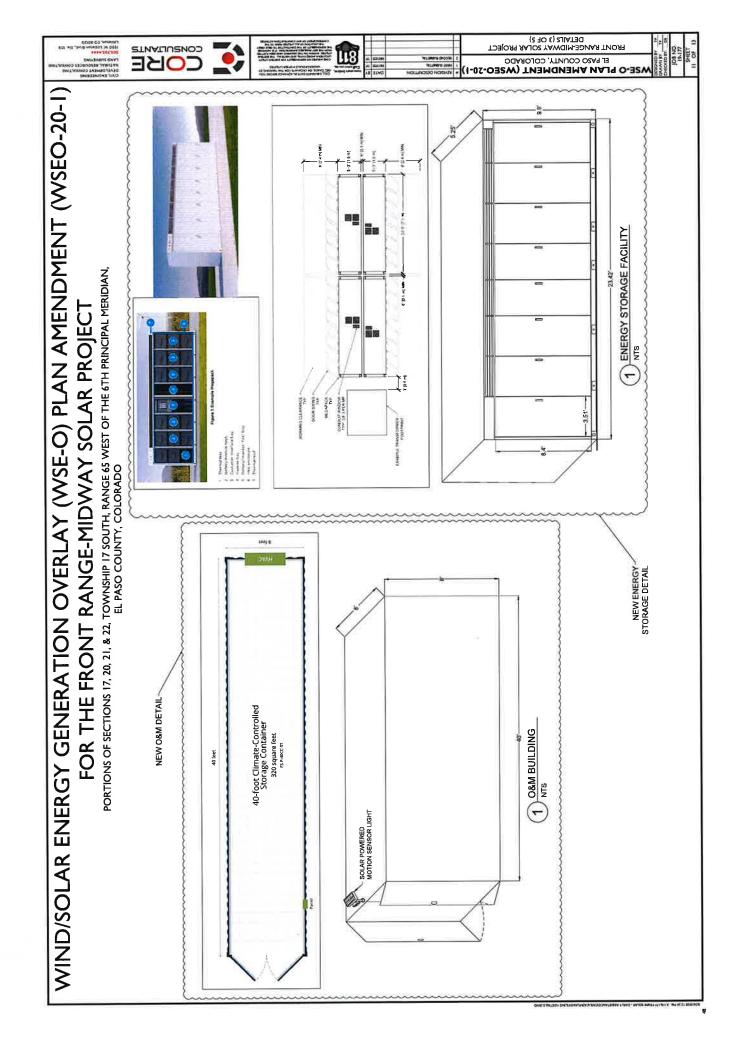


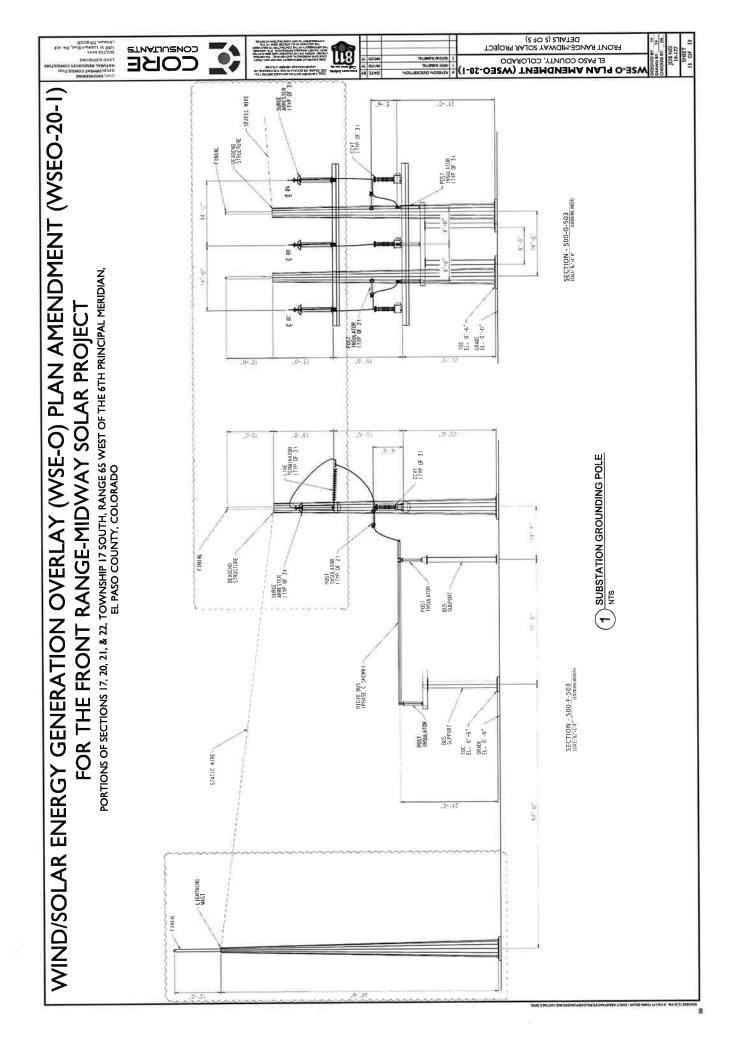














#### Hanover Fire Protection District 13325 Old Pueblo Road Fountain, CO 80817 (719) 382-1900



July 16, 2020

To: Front Range-Midway Solar Project (FRMW) From: Chief Tatum, Hanover Fire Protection District

Re: Commitment Letter

Dear FRMW:

Based upon prior discussions with Mr. ladarola in 2017 regarding the original Front Range-Midway Solar Project (FRMW) site plan, continuing communication with the project in 2019 and 2020, and the information exchanged about the revised Front Range-Midway Solar Project site plan, the Hanover Fire Department (HFD) is providing a commitment letter to provide Fire and EMS service for this project. This commitment letter to provide service is conditioned on a final project proposal submission to El Paso County Land Development services.

Hanover Fire Department still reserves the right to review and provide feedback on the submitted project design and fire mitigation plan with the Site Development Plan permit application. HFD will be interested in how this project will design roads on the interior and exterior of the project area. HFD expects all interior roads to be at least 16' wide along the fence to accommodate HFD's trucks and road design will allow all season access onsite. We expect an 8' fire break on the exterior of the fence that will be planted in low growing native vegetation. Prior to construction, HFD will review what roads may be closed or have restricted access to the area during the construction phase of the project.

The Hanover Fire Department is aware this project may include energy storage using lithium ion batteries onsite. Due to this, HFD requests the ability to review and understand the site design associated with the energy storage facility. Additionally, HFD requests the project provide a plan for HFD to address emergency response to the energy storage facility. This plan will include the steps needed to safety respond to a fire event at the energy storage facility and any handling of hazardous materials, if any, by HFD.

Based on previous conversations with project representatives, HFD is committed to provide service to FRMW. HFD requests Knox boxes be located at all main gates to each solar farm area for fire department access. During the project construction, HFD requests classroom training for firefighter and EMS workers on hazards they may come across and onsite training once the construction is complete. HFD will review and comment on the projects weed control plans on the outside and inside of the fence area. Finally, HFD will review and comment on the projects plans emergency service plans for the battery storage facility.

If you have any questions, please give me a call.

Chief Carl Tatum

Hanover Fire Department 13325 Old Pueblo Rd Fountain CO 80817 Office 719-382-1900 Cell 719-492-2729

#### Front Range-Midway Solar Project Fire Protection Plan

This Fire Protection Plan identifies the Front Range-Midway Solar Project's (Project) adherence to the El Paso County Land Development Code Section 6.3.3 Fire Protection and Wildfire Mitigation Standards. Project design and access was reviewed in consideration of the wildfire risks and need to provide adequate fire protection in order to:

- Regulate development, buildings and structures so as to minimize the hazard to public health, safety, and welfare;
- Ensure that adequate fire protection is available for new development;
- Implement wildfire hazard reduction in new development;
- Encourage voluntary efforts to reduce wildfire hazards; and
- Reduce the demands from the public for relief and protection of structures and facilities.

The Project was assessed for the risk of wildfire based on the Wildfire Hazards Based on Colorado Vegetation Classification Project – El Paso County, Colorado as referenced in Section 6.3.3(A)(6). The Project is in a low hazard – non forested area of the county (see attached). As such, wildfire hazard mitigation would not be required since wildfire hazard is minimal on the Project. Nonetheless, the Project will conform to the additional fire-related standards under Section 6.3.3 as requested by the county and described below.

The Front Range-Midway Solar Project (Project) will receive services from the Hanover Fire Protection District (HFPD) through a mutual aid agreement with Hanover Fire Department. The HFPD provides fire and emergency services from three stations located at 17550 S. Peyton Way, 12225 Old Pueblo Rd. and 7930 Indian Village Heights. Services provided by Hanover Fire include wildland, structure, and vehicle fires; medical emergencies; rescues; and hazardous materials responses at a limited capacity for operational response. El Paso County will provide assistance on hazardous materials calls as needed. High angle rescue and heavy rescue would be provided by Ft Carson or Colorado Springs on a mutual aid agreement.

HFPD is equipped to handle first alarm fires and personnel include two medical squads. The department's equipment includes three engine pump trucks, three tender pump trucks, three brush trucks, a heavy brush pump truck, and two ambulances to respond to emergencies. Water will be pulled from one or more of the three Wigwam Water District Taps procured for the Project and located within the proposed WSE-O boundary. El Paso County has a hazardous material decontamination trailer, if needed. Their longest ladder is 25 feet. If a longer ladder is needed the Security Fire Department responds with their 75-foot ladder truck on all structure fires. The department's goal response time for 2017 is 10 minutes for first department vehicle on scene. In 2016 the HFPD averaged a 12 minute response time.

The Project has received a Fire Commitment Letter (see attached) from the HFPD and has agreed to the following requests to ensure adequate site access and safety for HFPD during incident response:

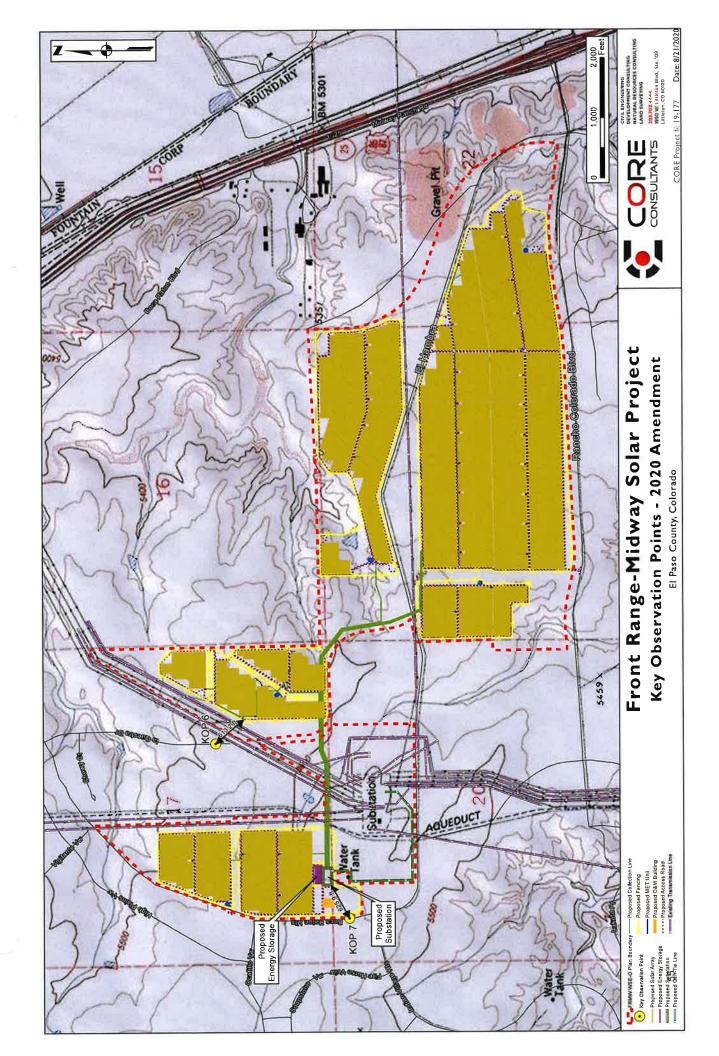
- Roads should be brought up to all season access during Project construction.
- Knox boxes will be located at all main gates along the perimeter of the solar facility.
- The Project will support classroom training during construction for firefighter and EMS workers on potential hazards during construction of the Project.

- The Project will support sight training for firefighter and EMS workers once construction is complete.
- The Project will control weeds on the Project to remove fuels.
- Fire breaks along the perimeter fences will be kept clear of vegetation to reduce the risk of grassland wildfire spreading into the Project.
- Gravel areas will surround the energy storage facility and kept clear of vegetation.
- Welding operations will not occur on red flag days or during ay fire restrictions. Welding operations will have a fire watch and water trucks on site for support.
- Any onsite smoking area during construction will be clearly marked and cleared of all vegetation in a 20-foot radius equipped with appropriate disposal cans and extinguishers.
- Energy storage facility will be equipped with temperature control systems and either UL certification for fire events or a fire suppression system within the containers.
- The Project will provide a detailed fire event response plan for the energy storage facility.

#### **Attachment 18 Visual Impact Analysis**

#### Front Range-Midway Solar Project Major Amendment to WSE-O Plan

For this Major Amendment for the Front Range-Midway Solar Project WSEO-20-1, two key observation points (KOP) were added to the photo simulations to account for the new site layout. KOP 6 and KOP 7 were selected to also account for recent construction of houses adjacent to the north side of the Project and the substation location on the west side of the Project, respectively. The new photo simulations for the amended FRMW Project are provided first, with the photo simulations from 2017 provided second.



## 9 Point Observation Key Project Solar Range-Midway Front

## **Existing View**



KOP 6

Nате

La Questa Dr

38.568036/-104,687371

Direction/Distance

Northwest /613 ft

Vicinity Map



**Proposed View** 

Project #19-177 Date 08/18/2020

CONSULTANTS

## Point Observation Kev Project Solar Range-Midway Front

## **Existing View**



Boca Raton Dr

KOP 7

Name

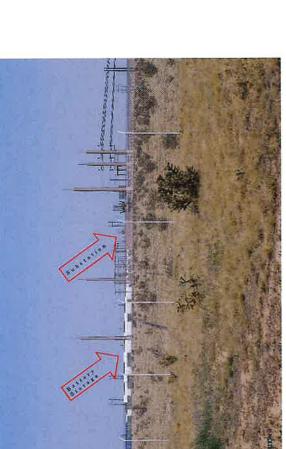
38.562061/-104.697592

Latitude/Longitude

Southwest / 625 ft

**Proposed View** 







## Point Observation Key Project Solar Range-Midway Front

## **Existing View**



**Proposed View** 



KOP 1

Name

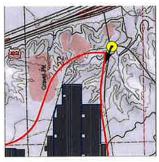
me Boca Raton Heights & Rancho Colorado Blvd

Latitude/Longitude

38.5508/-104.6507

Directlon/Distance

East / 2,000 ft





## Point Observation Key Project Solar Range-Midway Front

## **Existing View**



KOP 2

Name

Latitude/Longitude

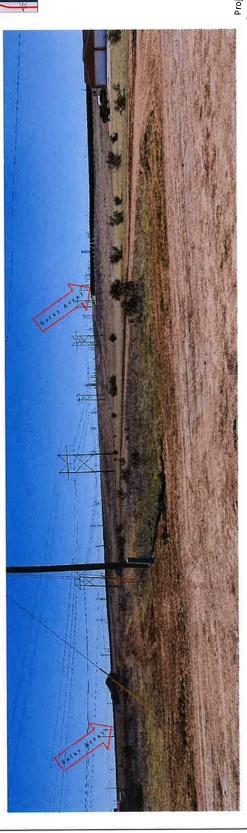
High Plains View

38.5739/-104.6918

Direction/Distance

North / 1,700 ft

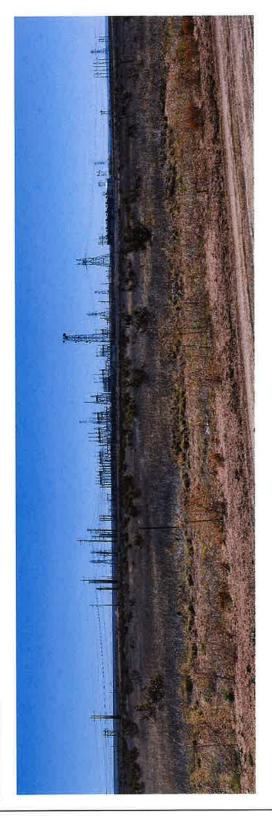






### oint ۵ Observation K e y Project Solar Range-Midway Front

## **Existing View**



**Proposed View** 



KOP 3

m

Boca Raton Heights Mailboxes Latitude/Longitude

38,5620/-104,6974

Direction/Distance

West / 250 ft





## Point Observation K e v Project Solar Range-Midway Front

## **Existing View**



**Proposed View** 



KOP 4

4

Name

Latitude/Longitude

High Plains View

38.5665/-104,7001

Direction/Distance

West / 800 ft



## Point Observation Key Project Solar Range-Midway Front

Ŋ

## **Existing View**



Chewy Ct & La Questa Dr

KOP 5

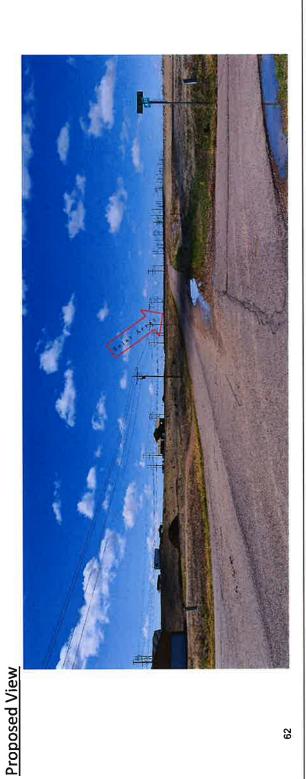
Name

Latitude/Longitude

38.5723/-104.6845

Direction/Distance

North/% Mile





#### Solar Glare Hazard Analysis Report

Generated Aug. 18, 2017, 11:20 a.m.

#### No glare found





#### Inputs

Analysis name	FrontRange
PV array axis tracking	single
Tilt of tracking axis (deg)	0.0
Orientation of tracking axis (deg)	180.0
Offset angle of module (deg)	0.0
Limit rotation angle?	True
Maximum tracking angle (deg)	45.0

Rated power (kW)	5000.0	
Vary reflectivity	True	
PV surface material	Smooth glass without ARC	
Timezone offset		-7.0
Subtended angle of sun (mrad)		9.3
Peak DNI (W/m^2)		1000.0
Ocular transmission coefficient		0.5
Pupil diameter (m)		0.002
Eye focal length (m)		0.017
Time interval (min)		1
Correlate slope error with material		False
Slope error (mrad)		10.0

#### PV array vertices

id	Latitude (deg)	Longitude (deg)	Ground Elevation (ft)	Height of panels above ground (ft)	Total elevation (ft)
1	38.5716559845	-104.693312645	5471.92	7.0	5478.92
2	38.570179661	-104.694943428	5496.34	7.0	5503.34
3	38.5685019839	-104.695887566	5515.5	7.0	5522.5
4	38.5651465122	-104.696745872	5513.98	7.0	5520.98
5	38.5625291354	-104.696745872	5519.27	7.0	5526.27
6	38.5626633622	-104.692025185	5505.4	7.0	5512.4
7	38.5625962489	-104.68644619	5489.12	7.0	5496.12
8	38.5558845972	-104.686102867	5470.32	7.0	5477.32

id	Latitude (deg)	Longitude (deg)	Ground Elevation (ft)	Height of panels above ground (ft)	Total elevation (ft)
9	38.5558174775	-104.690136909	5496.67	7.0	5503.67
10	38.5518573054	-104.689793587	5476.13	7.0	5483.13
11	38.5524614135	-104.675374031	5456.85	7.0	5463.85
12	38.5526627818	-104.658293724	5341.78	7.0	5348.78
13	38.5526627818	-104.654688835	5341.59	7.0	5348.59
14	38.555683238	-104.655461311	5358.58	7.0	5365.58
15	38.5576968049	-104.658722878	5375.59	7.0	5382.59
16	38.558300864	-104.660868645	5379.33	7.0	5386.33
17	38.5593076178	-104.663443565	5388.72	7.0	5395.72
18	38.5625962489	-104.663786888	5363.87	7.0	5370.87
19	38.5625291354	-104.67151165	5427.96	7.0	5434.96
20	38.5610526245	-104.674086571	5441.48	7.0	5448.48
21	38.5599116634	-104.68018055	5483.89	7.0	5490.89
22	38.5599787793	-104.682154655	5492.73	7.0	5499.73
23	38.5713875643	-104.681982994	5451.43	7.0	5458.43
24	38.5713875643	-104.684729576	5464.65	7.0	5471.65
25	38.564206952	-104.687905312	5499.01	7.0	5506.01
26	38.564206952	-104.691252708	5495.96	7.0	5502.96
27	38.5723270305	-104.691510201	5459.83	7.0	5466.83

#### **Observation Points**

Latitude (deg) Longitude (deg) Ground Elevation (ft) Eye-level height above ground (ft)

38.5858137277

-104.668786526

5331.29

5.5

#### No glare found.

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#### Solar Glare Hazard Analysis Report

Generated Aug. 18, 2017, 11:20 a.m.

#### No glare found





#### Inputs

Analysis name	FrontRange
PV array axis tracking	single
Tilt of tracking axis (deg)	0.0
Orientation of tracking axis (deg)	180.0
Offset angle of module (deg)	0.0
Limit rotation angle?	True
Maximum tracking angle (deg)	45.0

Rated power (kW)	5000.0	
Vary reflectivity	True	
PV surface material	Smooth glass without ARC	
Timezone offset		-7.0
Subtended angle of sun (mrad)		9.3
Peak DNI (W/m^2)		1000.0
Ocular transmission coefficient		0.5
Pupil diameter (m)		0.002
Eye focal length (m)		0.017
Time interval (min)		1
Correlate slope error with material		False
Slope error (mrad)		10.0

#### PV array vertices

id	Latitude (deg)	Longitude (deg)	Ground Elevation (ft)	Height of panels above ground (ft)	Total elevation (ft)
1	38.5716559845	-104.693312645	5471.92	7.0	5478.92
2	38.570179661	-104.694943428	5496.34	7.0	5503.34
3	38.5685019839	-104.695887566	5515.5	7.0	5522.5
4	38.5651465122	-104.696745872	5513.98	7.0	5520.98
5	38.5625291354	-104.696745872	5519.27	7.0	5526.27
6	38.5626633622	-104.692025185	5505.4	7.0	5512.4
7	38.5625962489	-104.68644619	5489.12	7.0	5496.12
8	38.5558845972	-104.686102867	5470.32	7.0	5477.32

id	Latitude (deg)	Longitude (deg)	Ground Elevation (ft)	Height of panels above ground (ft)	Total elevation (ft)
9	38.5558174775	-104.690136909	5496.67	7.0	5503.67
10	38.5518573054	-104.689793587	5476.13	7.0	5483.13
11	38.5524614135	-104.675374031	5456.85	7.0	5463.85
12	38.5526627818	-104.658293724	5341.78	7.0	5348.78
13	38.5526627818	-104.654688835	5341.59	7.0	5348.59
14	38.555683238	-104.655461311	5358.58	7.0	5365.58
15	38.5576968049	-104.658722878	5375.59	7.0	5382.59
16	38.558300864	-104.660868645	5379.33	7.0	5386.33
17	38.5593076178	-104.663443565	5388.72	7.0	5395.72
18	38.5625962489	-104.663786888	5363.87	7.0	5370.87
19	38.5625291354	-104.67151165	5427.96	7.0	5434.96
20	38.5610526245	-104.674086571	5441.48	7.0	5448.48
21	38.5599116634	-104.68018055	5483.89	7.0	5490.89
22	38.5599787793	-104.682154655	5492.73	7.0	5499.73
23	38.5713875643	-104.681982994	5451.43	7.0	5458.43
24	38.5713875643	-104.684729576	5464.65	7.0	5471.65
25	38.564206952	-104.687905312	5499.01	7.0	5506.01
26	38.564206952	-104.691252708	5495.96	7.0	5502.96
27	38.5723270305	-104.691510201	5459.83	7.0	5466.83

#### **Observation Points**

Latitude (deg) Longitude (deg) Ground Elevation (ft) Eye-level height above ground (ft)

2 38.55105182

-104.646942616

5272.08

5.5

#### No glare found.

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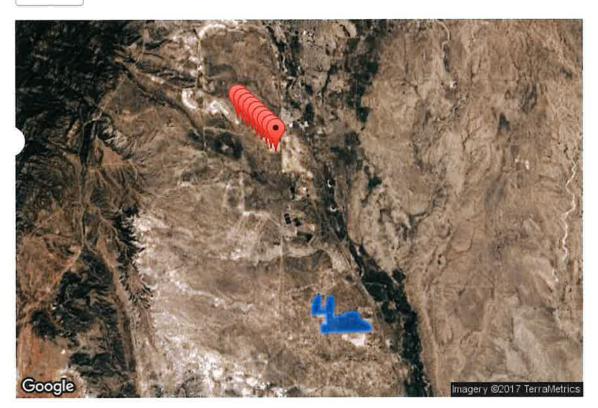
#### Solar Glare Hazard Analysis Flight Path Report

Generated Aug. 18, 2017, 11:21 a.m.

Flight path: 1

#### No glare found





#### Analysis & PV array parameters

Analysis name	FrontRange	
PV array axis tracking	single	
Tilt of tracking axis (deg)	0.0	
Orientation of tracking axis (deg)	180.0	
Offset angle of module (deg)	0.0	
Limit rotation angle?	True	
Maximum tracking angle (deg)	45.0	
Rated power (kW)	5000.0	
Vary reflectivity	True	
PV surface material	Smooth glass without ARC	
Timezone offset		-7.0
Timezone offset Subtended angle of sun (mrad)		-7.0 9.3
Subtended angle of sun (mrad)		9.3
Subtended angle of sun (mrad) Peak DNI (W/m^2)		9.3 1000.0
Subtended angle of sun (mrad)  Peak DNI (W/m^2)  Ocular transmission coefficient		9.3 1000.0 0.5
Subtended angle of sun (mrad)  Peak DNI (W/m^2)  Ocular transmission coefficient  Pupil diameter (m)		9.3 1000.0 0.5 0.002
Subtended angle of sun (mrad)  Peak DNI (W/m^2)  Ocular transmission coefficient  Pupil diameter (m)  Eye focal length (m)		9.3 1000.0 0.5 0.002 0.017

#### Flight path parameters

Direction (deg)	312.81
Glide slope (deg)	3.0
Consider pilot visibility from cockpit	False

#### >V array vertices

id	Latitude (deg)	Longitude (deg)	Ground Elevation (ft)	Height of panels above ground (ft)	Total elevation (ft)
1	38.5716559845	-104.693312645	5471.92	7.0	5478.92
2	38.570179661	-104.694943428	5496.34	7.0	5503.34
3	38.5685019839	-104.695887566	5515.5	7.0	5522.5
4	38.5651465122	-104.696745872	5513.98	7.0	5520.98
5	38.5625291354	-104.696745872	5519.27	7.0	5526.27
6	38.5626633622	-104.692025185	5505.4	7.0	5512.4
7	38.5625962489	-104.68644619	5489.12	7.0	5496.12
8	38.5558845972	-104.686102867	5470.32	7.0	5477.32
9	38.5558174775	-104.690136909	5496.67	7.0	5503.67
10	38.5518573054	-104.689793587	5476.13	7.0	5483.13
11	38.5524614135	-104.675374031	5456.85	7.0	5463.85
12	38.5526627818	-104.658293724	5341.78	7.0	5348.78
13	38.5526627818	-104.654688835	5341.59	7.0	5348.59
14	38.555683238	-104.655461311	5358.58	7.0	5365.58
15	38.5576968049	-104.658722878	5375.59	7.0	5382.59
16	38.558300864	-104.660868645	5379.33	7.0	5386.33
17	38.5593076178	-104.663443565	5388.72	7.0	5395.72
18	38.5625962489	-104.663786888	5363.87	7.0	5370.87
19	38.5625291354	-104.67151165	5427.96	7.0	5434.96
20	38.5610526245	-104.674086571	5441.48	7.0	5448.48
21	38.5599116634	-104.68018055	5483.89	7.0	5490.89

id	Latitude (deg)	Longitude (deg)	Ground Elevation (ft)	Height of panels above ground (ft)	Total elevation (ft)
22	38.5599787793	-104.682154655	5492.73	7.0	5499.73
23	38.5713875643	-104.681982994	5451.43	7.0	5458.43
24	38.5713875643	-104.684729576	5464.65	7.0	5471.65
25	38.564206952	-104.687905312	5499.01	7.0	5506.01
26	38.564206952	-104.691252708	5495.96	7.0	5502.96
27	38.5723270305	-104.691510201	5459.83	7.0	5466.83

#### Flight Path Observation Points

	Latitude (deg)	Longitude (deg)	Ground Elevation (ft)	Eye-level height above ground (ft)	Glare?
Threshold	38.6733820132	-104.750390053	5788.11	50.0	No
1/4 mi	38.6709262238	-104.746990394	5770.49	136.8	No
1/2 mi	38.6684704344	-104.743590736	5754.69	221.79	No
3/4 mi	38.6660146451	-104.740191077	5728.09	317.55	No
1 mi	38.6635588557	-104.736791418	5724.7	390.12	No
1 1/4 mi	38.6611030663	-104.73339176	5692.08	491.93	No
1 1/2 mi	38.658647277	-104.729992101	5700.45	552.73	No
1 3/4 mi	38.6561914876	-104.726592443	5655.73	666.64	No
2 mi	38.6537356982	-104.723192784	5678.93	712.61	No

No glare found.

#### Solar Glare Hazard Analysis Flight Path Report

Generated Aug. 18, 2017, 11:21 a.m.

Flight path: 2

#### No glare found

🖶 Print



#### Analysis & PV array parameters

Analysis name	FrontRange	
PV array axis tracking	single	
Tilt of tracking axis (deg)	0.0	
Orientation of tracking axis (deg)	180.0	
Offset angle of module (deg)	0.0	
Limit rotation angle?	True	
Maximum tracking angle (deg)	45.0	
Rated power (kW)	5000.0	
Vary reflectivity	True	
PV surface material	Smooth glass without ARC	
Timezone offset		-7.0
Timezone offset Subtended angle of sun (mrad)		-7.0 9.3
Subtended angle of sun (mrad)		9.3
Subtended angle of sun (mrad) Peak DNI (W/m^2)		9.3 1000.0
Subtended angle of sun (mrad)  Peak DNI (W/m^2)  Ocular transmission coefficient		9.3 1000.0 0.5
Subtended angle of sun (mrad)  Peak DNI (W/m^2)  Ocular transmission coefficient  Pupil diameter (m)		9.3 1000.0 0.5 0.002
Subtended angle of sun (mrad)  Peak DNI (W/m^2)  Ocular transmission coefficient  Pupil diameter (m)  Eye focal length (m)		9.3 1000.0 0.5 0.002 0.017

#### Flight path parameters

Direction (deg) 159.94

Glide slope (deg) 3.0

Consider pilot visibility from cockpit False

#### <sup>¬</sup>V array vertices

id	Latitude (deg)	Longitude (deg)	Ground Elevation (ft)	Height of panels above ground (ft)	Total elevation (ft)
1	38.5716559845	-104.693312645	5471.92	7.0	5478.92
2	38.570179661	-104.694943428	5496.34	7.0	5503.34
3	38.5685019839	-104.695887566	5515.5	7.0	5522.5
4	38.5651465122	-104.696745872	5513.98	7.0	5520.98
5	38.5625291354	-104.696745872	5519.27	7.0	5526.27
6	38.5626633622	-104.692025185	5505.4	7.0	5512.4
7	38.5625962489	-104.68644619	5489.12	7.0	5496.12
8	38.5558845972	-104.686102867	5470.32	7.0	5477.32
9	38.5558174775	-104.690136909	5496.67	7.0	5503.67
10	38.5518573054	-104.689793587	5476.13	7.0	5483.13
11	38.5524614135	-104.675374031	5456.85	7.0	5463.85
12	38.5526627818	-104.658293724	5341.78	7.0	5348.78
13	38.5526627818	-104.654688835	5341.59	7.0	5348.59
14	38.555683238	-104.655461311	5358.58	7.0	5365.58
15	38.5576968049	-104.658722878	5375.59	7.0	5382.59
16	38.558300864	-104.660868645	5379.33	7.0	5386.33
17	38.5593076178	-104.663443565	5388.72	7.0	5395.72
18	38.5625962489	-104.663786888	5363.87	7.0	5370.87
19	38.5625291354	-104.67151165	5427.96	7.0	5434.96
20	38.5610526245	-104.674086571	5441.48	7.0	5448.48
21	38.5599116634	-104.68018055	5483.89	7.0	5490.89

id	Latitude (deg)	Longitude (deg)	Ground Elevation (ft)	Height of panels above ground (ft)	Total elevation (ft)
22	38.5599787793	-104.682154655	5492.73	7.0	5499.73
23	38.5713875643	-104.681982994	5451.43	7.0	5458.43
24	38.5713875643	-104.684729576	5464.65	7.0	5471.65
25	38.564206952	-104.687905312	5499.01	7.0	5506.01
26	38.564206952	-104.691252708	5495.96	7.0	5502.96
27	38.5723270305	-104.691510201	5459.83	7.0	5466.83

#### Flight Path Observation Points

	Latitude (deg)	Longitude (deg)	Ground Elevation (ft)	Eye-level height above ground (ft)	Glare?
Threshold	38.5433321269	-104.504957199	5147.91	50.0	No
1/4 mi	38.5467266389	-104.50654385	5157.94	109.15	No
1/2 mi	38.5501211509	-104.508130501	5166.84	169.44	No
3/4 mi	38.5535156628	-104.509717151	5177.21	228.24	No
1 mi	38.5569101748	-104.511303802	5167.8	306.82	No
1 1/4 mi	38.5603046868	-104.512890453	5189.91	353.9	No
1 1/2 mi	38.5636991988	-104.514477104	5204.66	408.32	No
1 3/4 mi	38.5670937107	-104.516063754	5215.57	466.6	No
2 mi	38.5704882227	-104.517650405	5223.75	527.59	No

No glare found.