

ATTACHMENT J

Visual Impact Assessment

Goose Prairie Solar Project Visual Impact Assessment

Prepared for:

OER WA Solar 1 LLC

Prepared by:



December 2020

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Acronyms and Abbreviations

AC	alternating current
Applicant	OER WA Solar 1, LLC
BESS	battery energy storage system
BLM	U.S. Bureau of Land Management
BPA	Bonneville Power Administration
CRP	Conservation Reserve Program
EFSEC	Washington Energy Facility Site Evaluation Council
Facility	Goose Prairie Solar Project
FHWA	Federal Highway Administration
KOP	key observation point
kV	kilovolt
PV	photovoltaic
SEPA	State Environmental Policy Act
SR	State Route
WAC	Washington Administrative Code
ZVI	Zone of Visual Influence

1.0 Overview

OER WA Solar 1, LLC (the Applicant) proposes to construct and operate Goose Prairie Solar Project (the Facility), an 80-megawatt (MW) alternating current (AC) solar photovoltaic (PV) project with an optional battery storage system capable of storing up to 80 MW of energy located in Yakima County, Washington. The Facility will utilize solar PV panels to convert energy from the sun into electric power, which is then delivered to the electric power grid. The Facility will interconnect with a new point of interconnection to Bonneville Power Administration's (BPA) Midway to Moxee 115-kilovolt (kV) transmission line, which bisects the Facility. BPA will build, own, and operate the structures that constitute the point of interconnection.

Tetra Tech, Inc. was retained by the Applicant to perform a Visual Impact Assessment for the Facility. This Visual Impact Assessment was prepared to identify and evaluate the potential visual and aesthetic impacts associated with construction and operation of this Facility.

2.0 Facility Location and Site History

2.1 Location

The Facility is an 80 MW AC solar PV project with an optional battery storage system capable of storing up to 80 MW of energy located in Yakima County, Washington. Honoring Supreme Court Justice William O. Douglas, the Facility takes its name from the Yakima native's summer home located in northwestern Yakima County.

The Facility will be located approximately 8 miles east of the city of Moxee in Township 12 North, Range 21 East (see Figures 1 and 2 for a context map and a preliminary site plan map; figures are located at the back of this report). The Facility is located just north of Washington State Route (SR) 24, also known as Hanford Road, between its intersections with Morris Lane and Desmaris Cutoff.

2.2 Site History

The Facility will be located across a portion of eight parcels that together constitute the "Facility Parcels"; the total acreage of the Facility Parcels is 1,568 acres. Three of the parcels are owned by Gordon Meacham and together are referred to herein as the "Meacham Property"; the Meacham Property consists of tax parcels 211218-11003, 211218-43004, and 211218-44003. The other five parcels are owned by S. Martinez Livestock, Inc. and together are referred to herein as the "Martinez Property"; the Martinez Property consists of tax parcels 211207-11001, 211207-21001, 211208-11001, 211208-32001, and 211217-21002. The Applicant has entered into long-term land leases with the landowners for adequate acreage to accommodate the Facility.

The Meacham Property parcels are currently in the Conservation Reserve Program (CRP), under a contract that is set to expire on September 30, 2022. The CRP area consists predominantly of non-native species such as crested wheat, Russian thistle, mustard species and others. There is no current agricultural use, though a portion of the area was previously used for row crops. There are no existing buildings on the Meacham Property. The property is adjacent to SR-24.

The Martinez Property has two distinct areas: four of the parcels may be used for solar facilities and one parcel (parcel number 211217-21002) may be utilized for an aerial easement for the interconnection tie-line depending on the final design of the interconnection with BPA. The portion of the Martinez Property that will be used for the transmission easement is herein known as the “Aerial Transmission Easement Area.” The interconnection design will be determined before the execution of an Interconnection Agreement; if the final design from BPA does not utilize this parcel, then the Aerial Transmission Easement Area will not be a part of the Facility.

The four parcels that may be utilized for solar facilities have a historic and current use of grazing and consist predominantly of native vegetation. There are two abandoned buildings previously used as residences on the property that are no longer in use. Outside of the Facility Area Extent (further described below), there is an agricultural building. The parcel which may be utilized for an aerial easement is currently planted with an orchard and has a residence. BPA’s Midway-to-Moxee 115-kV transmission line, which the Facility directly relies on, crosses the Martinez Property.

2.3 Facility Size

The Facility’s limit of disturbance will not exceed 625 acres (the Facility Area), located wholly within a broader micro-siting boundary of 789 acres (the Facility Area Extent) as shown on Figure 2.

The Facility Area Extent includes 517 acres of the Meacham Property and 272 acres of the Martinez Property. The 272 acres of the Martinez Property includes the Transmission Easement Area, which is approximately 17.0 acres.

The Applicant is requesting that the Site Certification Agreement allow the Applicant flexibility to micro-site the precise location of Facility infrastructure within the Facility Area Extent and provide a final site plan prior to construction to confirm that the Facility satisfies the County’s conditions of approval. This gives the Applicant the ability to refine the spacing of solar modules, associated access roads, collector lines, staging areas, and aboveground facilities within the Facility Area Extent as the design is finalized. The requested flexibility to micro-site the final Facility layout within the Facility Area Extent also allows the Applicant to minimize potential impacts and deliver the most effective and efficient Facility consistent with the landowners’ needs. The maximum footprint of the Facility Area will not exceed 625 acres, located wholly within the Facility Area Extent.

3.0 Detailed Project Description

3.1 Facilities and Design

3.1.1 Facility Infrastructure

The Facility will consist of PV panels, inverters, mounting infrastructure, an electrical collection system, operations and maintenance building, access roads, interior roads, security fencing, a new collector substation, and electrical interconnection infrastructure. The Applicant anticipates that the Facility will utilize a single-axis tracking system designed to optimize system output by slowly rotating the solar PV panels to follow the path of the sun. The Applicant proposes an optional

battery storage system that would support the solar generation by balancing the resource and injecting energy onto the power grid during lower solar resource conditions.

The Facility will interconnect to the electrical grid at BPA's Midway-to-Moxee 115-kV transmission line via a line tap and an interconnection tie line (gen-tie line) from the Facility's substation to the transmission line, estimated to be approximately 300 feet in length. The Midway-to-Moxee line bisects the Facility Area.

The Facility will be enclosed by a security fence up to 8 feet in height. The only infrastructure located outside of the perimeter fence will be the electrical infrastructure that will be constructed, owned, and operated by BPA. This infrastructure will include poles to support the overhead electrical transmission line from the substation to the line-tap and communications and interconnection infrastructure and the Facility road access. Energy from the Facility will be transmitted through the transmission system to the energy customer.

The Preliminary Site Plan is based upon technical studies completed to date and is subject to changes. The final locations of Facility infrastructure will depend upon results from outstanding technical studies (i.e., geotechnical investigation, interconnection studies), which may require changes to the Facility configuration to either minimize potential impacts to natural resources or to optimize Facility economics consistent with landowner needs. Changes to the Preliminary Site Plan are not expected to increase the visual impact from the Facility as described in this analysis.

3.1.2 Facility Life and Site Restoration

The expected life of the Facility is assumed to be 35 years. However, depending on the commercial market for renewable energy, the Facility could be updated with more efficient infrastructure over time, which could extend its useful life.

Per Washington Administrative Code (WAC) 463-72-040, the Applicant will develop an Initial Site Restoration Plan and submit this plan to the Washington Energy Facility Site Evaluation Council (EFSEC) at least 90 days prior to the beginning of site preparation. The plan will identify, evaluate, and resolve all major environmental and public health and safety issues reasonably anticipated. The plan will describe the process used to evaluate the options and select measures that will be taken to restore or preserve the site or otherwise protect all segments of the public against risks or danger resulting from the site. The objective of the plan will be to restore the site to approximate pre-Facility condition or better at the end of its useful life. The plan will include provisions for removal of the solar panels and racking system, foundations, cables, and other facilities to a depth of 4 feet below grade, and restoration of any disturbed soils to the pre-construction condition.

3.1.3 Battery Energy Storage System

The Facility includes an optional battery energy storage system (BESS). The BESS portion of the Facility is currently designed utilizing lithium-ion battery technology to hold power in a series of modular, self-contained containers co-located with the solar generators.

3.2 Construction Access Routes and Laydown Areas

Construction vehicles would access the Facility Area by an existing approach from Washington State Route (SR)-24. The Facility will be secured with a fence up to 8 feet in height with access gates for authorized personnel. Internal gravel roads built to the applicable fire code will be used to maintain the Facility. During construction, a temporary lay-down area will be utilized for delivery of major equipment. This area will convert to parking during operations.

4.0 Visual Assessment Methodology

4.1 Visual Impact Criteria

4.1.1 Visual Impact Criteria

The purpose of preparing this Visual Impact Assessment for the Facility is to provide information to meet the EFSEC Application for Site Certification and State Environmental Policy Act (SEPA) Environmental Checklist requirements for aesthetics (visual) (WAC 197-11-960).

4.1.2 Visual Change Criteria

Visual impacts are generally defined in terms of a project's physical characteristics and potential visibility, as well as the extent to which the project's presence would change the perceived visual character and quality of the environment in which it would be located. Tetra Tech followed the contrast rating system used by the U.S. Bureau of Land Management (BLM) to objectively measure potential changes to the visual environment (BLM 1986). The BLM's contrast rating system is commonly used by federal agencies to assess potential visual resource impacts from proposed projects.

Potential visual impacts were characterized by determining the level of visual contrast introduced by the Facility based on comparing existing conditions and photo simulations. Visual contrast is a means to evaluate the level of modification to existing landscape features. Existing landscape is defined by the visual characteristics (form, line, color, and texture) associated with the landform (including water), vegetation, and existing development. The level of visual contrast introduced by a project can be measured by changes in the visual characteristics that would occur as a result of project implementation. The greater the difference between the character elements found within the existing landscape and with a proposed project, the more apparent the level of visual contrast. The following general criteria¹ were used when evaluating the degree of contrast:

- *None* – The contrast is not visible or perceived.
- *Weak* – The contrast can be seen but does not attract attention.

¹ These criteria are based on the BLM Visual Resource Management system, a process using the concept of "contrast" to objectively measure potential changes to the landscape features.

- *Moderate* – The element contrast begins to attract attention and begins to dominate the characteristic landscape.
- *Strong* – The element contrast demands attention, would not be overlooked, and is dominant in the landscape.

4.2 Key Observation Points/Viewshed

4.2.1 Key Observation Points Criteria

Key Observation Points (KOPs) were identified based on locations from which the Facility infrastructure would potentially be visible and noticeable to the casual observer. The “casual observer” is considered an observer who is not actively looking or searching for the Facility, but who is engaged in activities at locations with potential views of the Facility, such as hiking or driving along a scenic road. If the Facility infrastructure is not noticeable to the casual observer, visual impacts can be considered minor to negligible.

4.2.2 Viewshed

The viewshed is generally the area that is visible from an observer’s viewpoint and includes the screening effects of intervening vegetation and/or physical structures. An initial assessment of the geographic extent of potential Facility views was conducted through a viewshed analysis, which evaluated potential visibility of the solar photovoltaic modules at distances up to 10 miles from the Facility Area.

A viewshed analysis was conducted to identify potential Facility visibility within the visual study area or Zone of Visual Influence (ZVI). A viewshed analysis is a graphic representation of the seen and unseen areas adjacent to the Facility based on topography within the Facility ZVI. The viewshed analysis was conducted using Esri ArcGIS Geographic Information System software with the Spatial Analyst extension to process 10-meter Digital Elevation Models and the height of the solar arrays above ground surface (up to 13.5 feet with the panels of the solar array slightly tilted). The viewshed assumed “bare earth” conditions and was run from the Facility Area looking out to determine areas with potential visibility. The assumed “bare earth” conditions mean identification of areas with potential views of the Facility were based on topography only (Figure 3). As a result, the analysis is conservative as it does not account for screening by intervening structures, vegetation or other features. The ZVI was used to assist with the identification of potential KOPs.

4.2.3 Field Assessment

Based on the ZVI and the identification of publicly accessible routes and viewpoints, potential KOPs were identified and further assessed during the field assessment. During the field assessment, it was determined that, from distances greater than 1 mile, the Facility Area would be barely visible, if at all, from viewpoints easily accessible to the public due to intervening terrain and/or structures. The Facility Area would potentially be visible at higher elevations and greater distances from either Yakima Ridge or Rattlesnake Hills; however, no publicly accessible locations were identified for KOP section.

A field assessment was conducted at each of the KOPs that followed the protocols and methods for contrast rating evaluation (BLM 1986). The following information was collected at each of the KOPs:

- GPS location,
- Digital photographs for use for visual simulations,
- Data required for the BLM's Visual Contrast Rating Worksheet,
- Time of day and atmospheric conditions, and
- Existing structures and roads in the viewshed.

The visual resources at each KOP were documented in a Visual Contrast Rating Worksheet (Attachment 1).

4.2.4 Key Observation Points

Six KOPs were selected as representative vantage points in the landscape that offer motorists traveling on area roadways and local residents views of the proposed Facility Area (Figure 4). These KOPs provide views of each side of the Facility Area from publicly accessible areas.

Factors considered in the selection of KOPs included locations with sensitive viewers (e.g., local residences, motorists on Washington SR-24) and potential for the Facility Area to be visible (e.g., distance and view angle). The KOPs were selected to capture representative vantages from east- and west-bound Washington SR-24, local roadways, and residences.

Digital photographs were taken from the selected KOP locations to support the discussion on existing visual setting and the analysis of potential visual impacts associated with the proposed Facility (Figures 5 through 10). Photographs of existing conditions were taken on November 14, 2020 using a digital single-lens reflex Canon 5D Mark III camera.

4.2.5 Visual Simulations

Three-dimensional visual simulations from two representative KOPs were rendered to approximate the visual conditions resulting with Facility implementation. Using the photographs acquired at KOP 1 and KOP 6, a three-dimensional physical massing model was created that incorporated the PV scale model, placed in array configurations as shown in Figure 2. The model was then georeferenced and placed on global positioning system (GPS)-controlled site-specific photographs to create simulations that demonstrate visual changes from the Facility. Figures 11 and 12 present simulated views of Facility features.

5.0 Environmental Setting

5.1 Regional Character

The Facility Area is located in the Columbia Plateau geographic region. Covering portions of Washington, Oregon, Idaho, and British Columbia, the Columbia Plateau is the main geographic feature of the interior Columbia River Basin. The area is named for the massive basalt flows that underlie much of central and eastern Oregon, as well as southeastern Washington. In Washington, the Columbia Plateau covers roughly the southeastern one-third of the state, including all of Yakima County.

The Columbia Plateau includes various physiographic features, including an alluvial plain along the Columbia River, basalt plateaus, and a transitional, dissected upland area. The Facility Area is in the Moxee Valley, situated between the east-west trending Yakima Ridge to the north and the Rattlesnake Hills to the south. Yakima Ridge and the Rattlesnake Hills are upfolded anticline basalt ridges (Lenfesty and Reedy 1985).

The Facility Area is in an unincorporated area of Yakima County, approximately 8 miles east of the city of Moxee on parcels located just north of SR-24, between its intersections with Morris Lane and Desmarais Cutoff. Land use in the area is mostly agricultural interspersed with rural residential development.

SR-24 is the only major transportation route near the site. SR-24 runs east to west connecting the city of Yakima and Interstate 82/U.S. Route 12 with SR-241 and SR-240.

5.2 Local Setting

The Facility Parcels are zoned as Agricultural use but contain mixed uses. Three of the parcels are currently in the CRP and include a mix of sagebrush-steppe and grassland vegetation. The other parcels are currently used for grazing. The southern portion of the Facility Parcels comprises a relatively flat fallow field while the northern portion consists of rolling hills with ephemeral creeks. Surrounding land uses include grazing to the north (with the Yakima Training Center beyond neighboring agricultural land approximately 2.5 miles north of the Facility) and active agricultural fields in all other directions, including an orchard to the east. The nearest rural residences are located approximately 0.06 mile to the south, 0.31 mile to the west, and 0.27 mile east of the nearest Facility fence. Other than SR-24, most roadways in the immediate Facility Area vicinity are unimproved or paved without curb or sidewalk improvements.

5.3 Visual Resources

The Yakima County Comprehensive Plan Horizon 2040 describes the ridges and basins as forming the visual perspective of Yakima County and provide community definition. In addition, agricultural and forest lands make up a large share of the County's open space (Yakima County 2017).

The State of Washington contains two All-American Roads and five National Scenic Byways (FHWA 2020). The closest of these scenic drives to the Facility Area is the Mountains to Sound Greenway – I-90 National Scenic Byway. This Scenic Byway is the portion of Interstate 90 that runs from Seattle

for 100 miles to the east. At its eastern terminus, it is approximately 35 miles to the northwest of the Facility Area. Due to the distance and the intervening terrain, the Facility Area would not be visible from this Scenic Byway.

The State of Washington also contains 21 State Scenic Byways (WSDOT 2020). The closest of these scenic drives to the Facility Area is the Yakama Scenic Byway. This Scenic Byway is the portion of Interstate 97 that runs south from the city of Yakima to where the highway meets SR-24. At its northern terminus, it is approximately 11 miles to the west of the Facility Area. Due to the distance and the intervening terrain, the Facility Area would not be visible from this Scenic Byway.

5.4 Existing Visual Character

Six KOPs were selected to assess the level of visual change resulting, based on the BLM's contrast rating system (Section 4.1.2), from the construction of the Facility as described in Section 3 on the existing environment. The location of the six KOPs and site photograph locations are presented in Figure 4. The KOPs were selected to capture representative vantages from Washington State Route 24, local residences and streets around the Facility Area. Photographs from each KOP are presented in Figures 5 through 10.

5.4.1 Key Observation Point 1

KOP 1 is located at the southwest corner of SR-24 and Desmaris Road. The southern end of the Facility Area is located approximately 300 feet northwest of this viewpoint at a slightly lower elevation to KOP 1.

As shown on Figure 5, the existing visual setting of this location is characterized by generally flat terrain with berms adjacent to paved SR-24, highway signage, fencing, agricultural fields, and fields of grass are visible in the foreground, with small clusters of trees and approximately 30-foot-high overhead utility distribution lines in the middle-ground. The Facility Area, currently consisting of CRP land and agricultural fields, is visible in the foreground and middle-ground. Yakima Ridge is visible in the background.

Dominant colors for the landscape are tan and green while the structures (e.g., highway, fencing, sign) are gray, brown, and yellow. The distant hills are brown and white. The grasses have varying textures of fine and coarse and are continuous with irregular clumps. The linear and horizontal lines associated with the structural features of the highway, fencing, and highway sign are prominent from this viewpoint.

This KOP provides a typical view for drivers traveling west on SR-24, likely traveling at a high rate of speed based on the posted speed limit. Considering the short duration of viewing, viewers would have a low viewer sensitivity to the visual changes in the area. This KOP also provides a typical view for the occupants of the residences at the southwest corner of SR-24 and Desmaris Road. Considering the frequent viewing by local residents, viewers would have a moderate sensitivity to the visual changes in the area.

5.4.2 Key Observation Point 2

KOP 2 is located south of the Facility Area, about halfway between the intersection of Desmarais Cutoff and Desmarais Road and the intersection of Desmarais Road and SR-24. The existing visual setting of this location is characterized by generally flat terrain, agricultural-related structures, agricultural fields, and approximately 30-foot-high overhead utility distribution lines. The southern end of the Facility Area is located approximately 0.19 mile north of this viewpoint at a slightly higher elevation to KOP 2.

As shown on Figure 6, the existing visual setting of this location is characterized by generally flat terrain, agricultural fields, agricultural equipment, approximately 15- to 20-foot-high hop trellises, fencing, and approximately 30-foot-high overhead utility distribution lines in the foreground. The Facility Area, currently consisting of CRP land and agricultural fields, is visible in the foreground and middleground as it rises in elevation to the north. Yakima Ridge is visible in the background.

Dominant colors for the landscape are tan, brown and green while the structures (e.g., fencing, agricultural equipment, hop trellises) are gray and brown. The distant hills are tan, brown, and white. The grasses have varying textures of fine and coarse and are continuous with irregular clumps. The linear and horizontal lines associated with the agricultural fields with structural features of agricultural equipment, approximately 15- to 20-foot-high hop trellises, fencing, and approximately 30-foot high overhead utility distribution lines are prominent from this viewpoint.

This KOP provides a typical view for drivers traveling east or west on Desmarais Road. Considering the short duration of viewing, drivers would have a low viewer sensitivity to the visual changes in the area. This KOP also provides a typical view for the occupants of the residences along Desmaris Road. Considering the frequent viewing by local residents, viewers would have a moderate sensitivity to the visual changes in the area.

5.4.3 Key Observation Point 3

KOP 3 is located west of the Facility Area, on the southside of SR-24, approximately 0.5 mile west of Desmarais Cutoff. The southern end of the Facility Area is located approximately 0.28 mile east of this viewpoint at a slightly higher elevation than KOP 3.

As shown on Figure 7, views of approximately 15- to 20-foot-high hop trellises, agricultural fields, paved SR-24, and approximately 30-foot-high local electrical distribution lines are visible in the foreground. The Facility Area CRP land and the white fencing for the adjacent field is somewhat visible in the foreground and middle-ground. Yakima Ridge is barely visible in the background.

Dominant colors for the landscape are tan while the structures (e.g., hop trellises, paved SR-24, fencing, and local electrical distribution lines) are gray, tan, and brown. The distant hills are tan and brown. The grasses have varying textures of fine and coarse with irregular clumps. The linear and horizontal lines associated with the agricultural fields with structural features of hop trellises and fencing, SR-24, and overhead utility distribution lines are prominent from this viewpoint.

This KOP provides a typical view for drivers traveling east on SR-24, likely traveling at a high rate of speed based on the posted speed limit. Considering the short duration of viewing, viewers would have a low viewer sensitivity to the visual changes in the area.

5.4.4 Key Observation Point 4

KOP 4 is located northwest of the Facility Area, approximately 0.8 mile north of SR-24. The northwest corner of the Facility Area is located approximately 0.28 mile south of this viewpoint at a lower elevation than KOP 4.

As shown on Figure 8, views of a dirt road, fencing, agricultural fields, and local electrical distribution lines are visible in the foreground. The Facility Area, currently consisting of CRP land and agricultural fields, is visible in the foreground and middle-ground. The Rattlesnake Hills are visible in the background.

Dominant colors for the landscape are tan and green while the structures (e.g., dirt road, fencing, and transmission lines) are tan and gray. The Rattlesnake Hills in the background are brown. The grasses have varying textures of fine, medium, and coarse.

This KOP provides a typical view for the occupants of the residence located by this KOP. Considering the frequent viewing by local residents, viewers would have a moderate sensitivity to the visual changes in the area.

5.4.5 Key Observation Point 5

KOP 5 is located east of the Facility Area, on the southside of SR-24, approximately 0.4 mile east of Morris Lane. The southern end of the Facility Area is located approximately 0.43 mile west of this viewpoint at a slightly lower elevation than KOP 5.

As shown on Figure 9, views of agricultural fields, paved SR-24, and local electrical distribution lines are visible in the foreground. The Facility Area CRP land is visible in the foreground and middle-ground. The Rattlesnake Hills are visible in the background.

Dominant colors for the landscape are tan and green while the structures (e.g., highway, hop trellises, transmission line, and fencing) are tan, brown, and gray. The grasses have varying textures of fine, medium, and coarse.

This KOP provides a typical view for drivers traveling west on SR-24, likely traveling at a high rate of speed based on the posted speed limit. Considering the short duration of viewing, viewers would have a low viewer sensitivity to the visual changes in the area.

5.4.6 Key Observation Point 6

KOP 6 is located south of the Facility Area, approximately 0.9 mile south of SR-24, at the intersection of Morris Lane and Newkirk Drive. The southern end of Facility Area is located approximately 1 mile north of this viewpoint at slightly lower elevation than KOP 6.

As shown on Figure 10, views of Morris Lane, approximately 15- to 20-foot-high hop trellises, and agricultural structures, are visible in the foreground. The Facility Area, currently consisting of CRP land and agricultural fields, is visible in the foreground and middle-ground. Yakima Ridge is visible in the background.

Dominant colors for the landscape are tan and green while the structures (e.g., hop trellises, roadway, agricultural structures) are tan and gray. Yakima Ridge is brown and white (from snow). The grasses have varying textures of fine, medium, and coarse.

This KOP provides a typical view for drivers traveling north on Morris Lane. Considering the short duration of viewing, viewers would have a low viewer sensitivity to the visual changes in the area. This KOP also provides a typical view for the occupants of the residences located by this KOP. Considering the frequent viewing by local residents, viewers would have a moderate sensitivity to the visual changes in the area.

6.0 Regulatory Setting

6.1 Federal

6.1.1 National Scenic Byways Program

The National Scenic Byways Program, a part of the Federal Highway Administration (FHWA), recognizes, preserves, and enhances selected roads throughout the United States as All-American Roads or National Scenic Byways based on one or more archaeological, cultural, historic, natural, recreational, and scenic qualities. According to the FHWA's America's Byways website, there are no officially designated National Scenic Byways in the vicinity of the Facility Area (FHWA 2020).

6.2 State

6.2.1 Washington State Scenic Byways Program

Washington State was one of the first states in the country to establish a system of scenic highways. Scenic highways pass through the varied terrain of Washington reflecting the depth of its scenic, cultural and historic landscapes. According to the Washington State Department of Transportation Scenic Byways website, there are no officially designated State Scenic Byways in the vicinity of the Facility Area (WSDOT 2020).

6.3 Local

6.3.1 Yakima County

Relevant policies from the Yakima County Comprehensive Plan Horizon 2040 are summarized below by element/section (Yakima County 2017).

Parks and Open Space Element

Goal POS 1 Encourage the retention of open space and development of recreational opportunities.

Policy POS 1.1 Include hazardous critical areas, ecological critical areas, long-term commercially significant resource lands, lands which shape urban form, aesthetic value lands, selected cultural resources (archaeological sites, historic landscapes, and traditional cultural properties) and urban reserve lands in the County's definition of open space lands.

7.0 Impact Analysis

7.1 Potential Visual Effects

During construction and operation, where visible and noticeable, the Facility may introduce visual contrast and have the potential to create visual effects within the surrounding areas. The potential visual effects anticipated as a result of construction and operation of the Facility are discussed below.

If the Facility infrastructure is not visible or perceived, no visual impact would occur. If the Facility infrastructure introduces contrast to the view but do not attract the attention of casual observer, the contrast is considered weak and the visual impacts could be considered minor to negligible. If the visual contrast introduced by the Facility begins to attract attention and begins to dominate the view, the contrast is considered moderate and the impact could be considered moderate. If the Facility infrastructure introduces contrast that demands attention, would not be overlooked, and is dominant in the view, the contrast is considered strong and the impact could be considered significant.

Construction activities will involve the clearing and grubbing of existing vegetation and grading of access roads. A temporary lay-down area will be established for storage of major equipment and materials. Construction of the Facility is expected take place over approximately 9 to 12 months. These visual changes would be transient and short-term in nature.

Completion of the Facility will introduce many new visual elements onto the Facility Area. These will include solar panels, tracking system and posts, substation, operations and maintenance building, BESS, access and service roads, fencing, gates, and security lighting.

7.1.1 KOP 1

KOP 1 represents a view of the proposed Facility from the southwest corner of SR-24 and Desmarais Road, oriented northwest. This KOP reflects the views of drivers traveling west on SR-24 and occupants of the residences at this location.

The photograph was taken from a berm on the southside of SR-24. The Facility fence line and nearest solar panels would be located approximately 300 feet northwest of this viewpoint. With the Facility at a slightly lower elevation than KOP 1, Facility infrastructure would not block views of

Yakima Ridge visible in the existing viewshed. Views of the Facility are obscured by the berm on the northside of SR-24. Where the Facility is visible, it would attract attention to the casual observer and would co-dominate the landscape with the adjacent highway and agricultural land. See Figure 11.

The Facility would introduce dark blue and gray colors, geometric shapes, and horizontal lines into the Facility Area. The colors, regular geometric forms and horizontal lines associated with the solar arrays and associated infrastructure would result in a visual contrast with the irregular, organic forms and colors of the existing landform and vegetation. However, other structures in the vicinity, the existing highway, fencing, residential structures, agricultural-related structures, and approximately 30-foot-high overhead utility distribution lines, also possess horizontal and vertical lines.

Contrast and visual impact are anticipated to be moderate. These impacts would be short term for travelers because they would only be approaching and parallel to the Facility for a limited time and their focus would be on the road ahead. In addition, the Facility would be obscured for some of the time by the roadside berm. For views from residences, while appearing as new and highly visible features, the Facility infrastructure would be consistent with other horizontal and vertical lines and geometric shapes visible throughout the landscape.

7.1.2 KOP 2

KOP 2 represents a view of the proposed Facility from south of the Facility Area, about halfway between the intersection of Desmarais Cutoff and Desmarais Road and the intersection of Desmarais Road and SR-24. This KOP reflects the views of drivers traveling east or west on Desmarais Road and occupants of the residences at this location.

The photograph was taken from the northside of Desmarais Road. The Facility fence line and nearest solar panels would be located approximately 1,100 feet north of this viewpoint. While KOP 2 is at a slightly lower elevation to the southern end of the Facility, with the Facility rising in elevation to the north, Facility infrastructure would not block views of Yakima Ridge visible in the existing viewshed. The Facility would attract attention to the casual observer but the portion of the Facility that would be visible would be a subordinate feature and would not dominate the landscape.

The Facility would introduce dark blue and gray colors, geometric shapes, and horizontal lines into the Facility Area. The colors of the Facility would visually contrast with the existing browns, tans, and greens. However, horizontal lines associated with the agricultural fields, dominate the foreground, and other structures in the vicinity, the existing highway, fencing, residential structures, agricultural related structures, and approximately 30-foot-high overhead utility distribution lines, also possess horizontal and vertical lines.

As the contrast is anticipated to be weak, the visual impacts are considered minor. These impacts would be short term for travelers because they would only be parallel to the Facility for a limited time and their focus would be on the road ahead. For views from residences, while appearing as new and highly visible features, the Facility infrastructure would be consistent with other horizontal and vertical lines and geometric shapes visible throughout the landscape.

7.1.3 KOP 3

KOP 3 represents a view of the proposed Facility from the southside of SR-24, approximately 0.5 miles west of Desmarais Cutoff. This KOP reflects the views of drivers traveling east on SR-24.

The photograph was taken from the southside of SR-24 looking northeast. The Facility fence line and nearest solar panels would be located approximately 1,500 feet northeast of this viewpoint. While KOP 3 is at a slightly lower elevation than the Facility, Facility infrastructure would not block uninterrupted views of Yakima Ridge where currently visible in the existing viewshed.

Views toward the Facility Area from this viewpoint would be partially screened by the approximately 15- to 20-foot-high hop trellises between the viewer and the Facility's perimeter fence. The Facility would attract attention to the casual observer but the portion of the Facility Area that would be visible would be a subordinate feature and would not dominate the landscape. During the growing season, it is expected that the approximately 15- to 20-foot-high hop vines and trellises would fully obscure the views of the Facility Area.

The Facility would introduce dark blue and gray colors, geometric shapes, and horizontal lines into the Facility Area. However, gray color associated with SR-24 and horizontal lines associated with the highway, hop trellises, fencing and overhead utility distribution lines are dominate the foreground. Other structures in the vicinity, residential and agricultural-related structures, also possess horizontal and vertical lines and geometric shapes.

As the contrast is anticipated to be weak, the visual impacts are considered minor. These impacts would be short term for travelers because they would only be parallel to the Facility for a limited time and their focus would be on the road ahead. For views from residences, while appearing as new and highly visible features during the seasons between harvest and the next growing season, the Facility infrastructure would be consistent with other horizontal and vertical lines and geometric shapes visible throughout the landscape.

7.1.4 KOP 4

KOP 4 represents a view of the proposed Facility from northwest of the Facility Area, approximately 0.8 mile north of SR-24. This KOP provides typical views of drivers traveling south on this private roadway and views for the occupants of the residence located by this KOP.

The photograph was oriented southeast toward the Facility Area, approximately 1,500 feet northwest of the proposed Facility fence line and nearest solar panels. With KOP 4 at a higher elevation than the Facility, Facility infrastructure would not block views of the Rattlesnake Hills visible in the existing viewshed. The Facility would attract attention to the casual observer and the Facility would co-dominate the landscape with the agricultural fields.

The Facility would introduce dark blue and gray colors, geometric shapes, and horizontal lines into the Facility Area. However, gray color associated with roadway and horizontal lines associated with the highway, agricultural fields, fencing and overhead utility distribution lines are dominate the foreground. Other structures in the vicinity, residential and agricultural-related structures, also possess horizontal and vertical lines and geometric shapes

Contrast and visual impact are anticipated to be moderate. These impacts would be short term for travelers because they would only be approaching and parallel to the Facility for a limited time and their focus would be on the road ahead. For views from residences, while appearing as new and highly visible features, the Facility infrastructure would be consistent with other horizontal and vertical lines and geometric shapes visible throughout the landscape.

7.1.5 KOP 5

KOP 5 represents a view of the proposed Facility from the southside of SR-24 approximately 0.4 miles east of Morris Lane. This KOP reflects the views of drivers traveling west on SR-24 and views from the residence at this location.

The photograph was taken from the southside of SR-24. The Facility fence line and nearest solar panels would be located approximately 2,300 feet northwest of this viewpoint. With KOP 5 at a slightly higher elevation than the Facility, Facility infrastructure would not block views of the Rattlesnake Hills visible in the existing viewshed. The Facility would attract attention to the casual observer and the Facility would co-dominate the landscape with the adjacent highway and agricultural land.

The Facility would introduce dark blue and gray colors, geometric shapes, and horizontal lines into the Facility Area. However, gray color associated with SR-24 and horizontal lines associated with the highway, hop trellises, fencing, and overhead utility distribution lines dominate the foreground. Other structures in the vicinity, residential and agricultural-related structures, also possess horizontal and vertical lines and geometric shapes.

Contrast and visual impact are anticipated to be moderate. These impacts would be short term for travelers because they would only be approaching and parallel to the Facility for a limited time and their focus would be on the road ahead. For views where available from residence, while appearing as new and highly visible features, the Facility infrastructure would be consistent with other horizontal and vertical lines and geometric shapes visible throughout the landscape.

7.1.6 KOP 6

KOP 6 represents a view of the proposed Facility from south of the Facility Area, approximately 0.9 mile south of SR-24, at the intersection of Morris Lane and Newkirk Drive. This KOP reflects the views of drivers traveling north on Morris Lane and occupants of the residences at this location.

The photograph was taken from the eastside of Morris Lane. The Facility fence line and nearest solar panels would be located approximately 5,200 feet north of this viewpoint. With KOP 6 at a slightly higher elevation than the southern end of the Facility, with the Facility rising in elevation to the north, Facility infrastructure would not block views of Yakima Ridge visible in the existing viewshed. The Facility would attract the attention of the casual observer but the portion of the Facility that would be visible would be a subordinate feature and would not dominate the landscape. See Figure 12.

The Facility would introduce dark blue and gray colors, geometric shapes, and horizontal lines into the Facility Area. However, gray color associated with Morris Lane and horizontal lines associated

with the highway and hop trellises dominate the foreground. Other structures in the vicinity, residential and agricultural related structures, also possess horizontal and vertical lines and geometric shapes.

Contrast and visual impact are anticipated to be moderate. These impacts would be short term for travelers because they would only be parallel to the Facility for a limited time and their focus would be on the road ahead. For views from residences, while appearing as new and highly visible features, the Facility infrastructure would be consistent with other horizontal and vertical lines and geometric shapes visible throughout the landscape.

8.0 References

- BLM (Bureau of Land Management). 1986. Visual Resource Inventory. *BLM Manual Handbook H-8410-1*.
- FHWA (Federal Highway Administration). 2020. America's Byways, California, Central Valley Section Map, <https://www.fhwa.dot.gov/byways/states/WA>. Accessed November 5, 2020.
- Lenfesty, Charles D and Thomas E. Reedy. 1985 *Soil Survey of Yakima County Area, Washington*. United States Department of Agriculture, Soil Conservation Service, in Cooperation with the Washington Agricultural Experiment Station. Electronic document, https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/washington/WA677/0/wa677_t_ext.pdf, accessed May 16, 2019.
- Yakima County. 2017. Yakima County Comprehensive Plan Horizon 2040. Yakima County Public Services Planning Division. Adopted June 27, 2017.
- WSDOT (Washington State Department of Transportation). 2020. Scenic Byways. <https://wsdot.wa.gov/travel/highways-bridges/scenic-byways>. Accessed November 5, 2020.

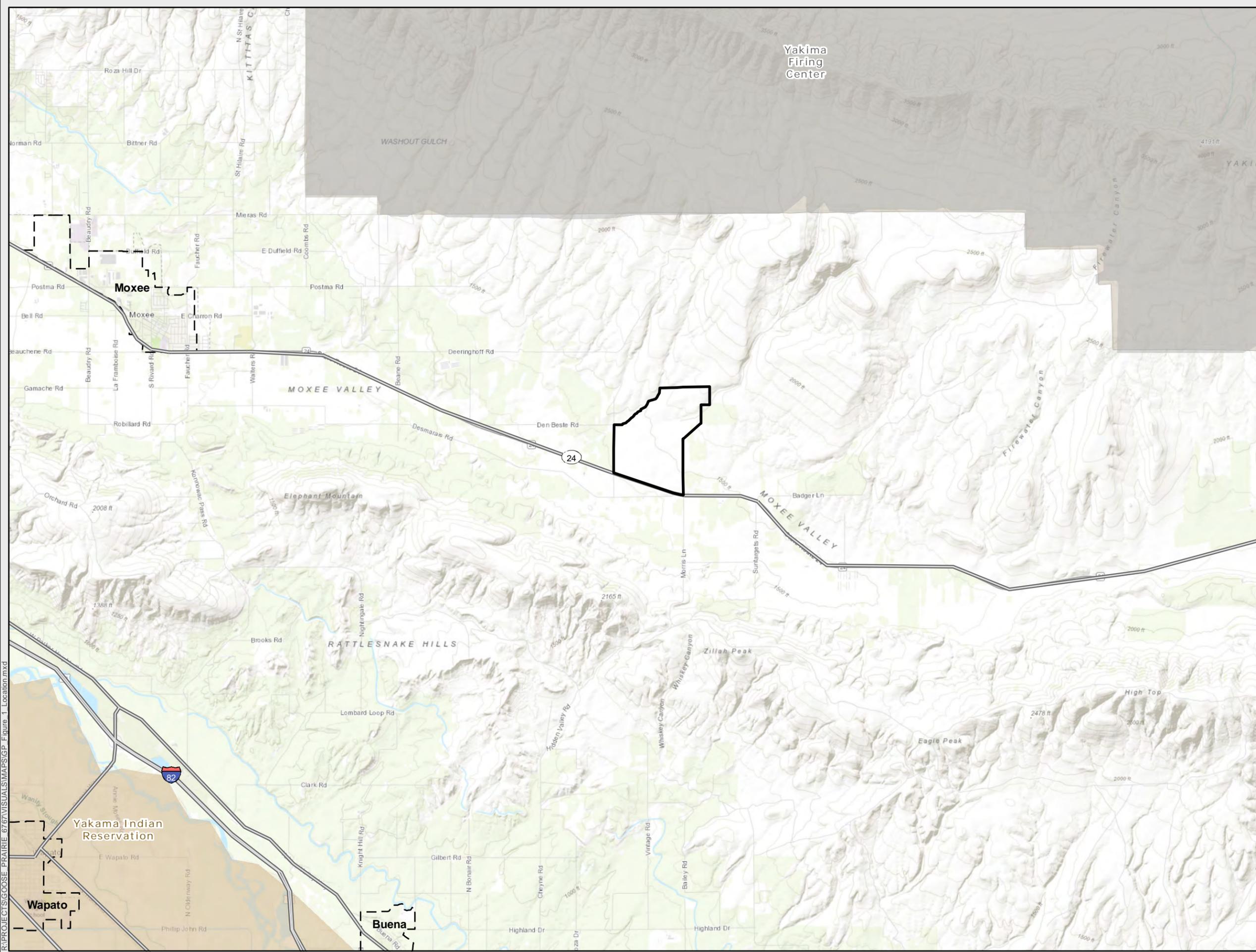
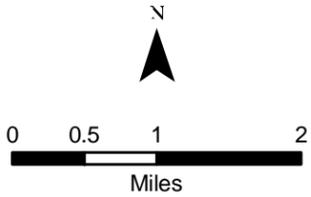
Figures

Goose Prairie Solar Project

Figure 1
Project Vicinity

Yakima County, Washington

-  Project Area
-  Populated Place
-  Military Installation
-  Tribal Land



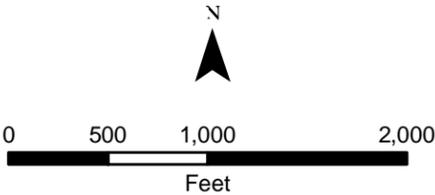
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Goose Prairie Solar Project

Figure 2
Site Map

Yakima County, Washington

 Project Area



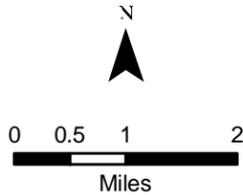
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Goose Prairie Solar Project

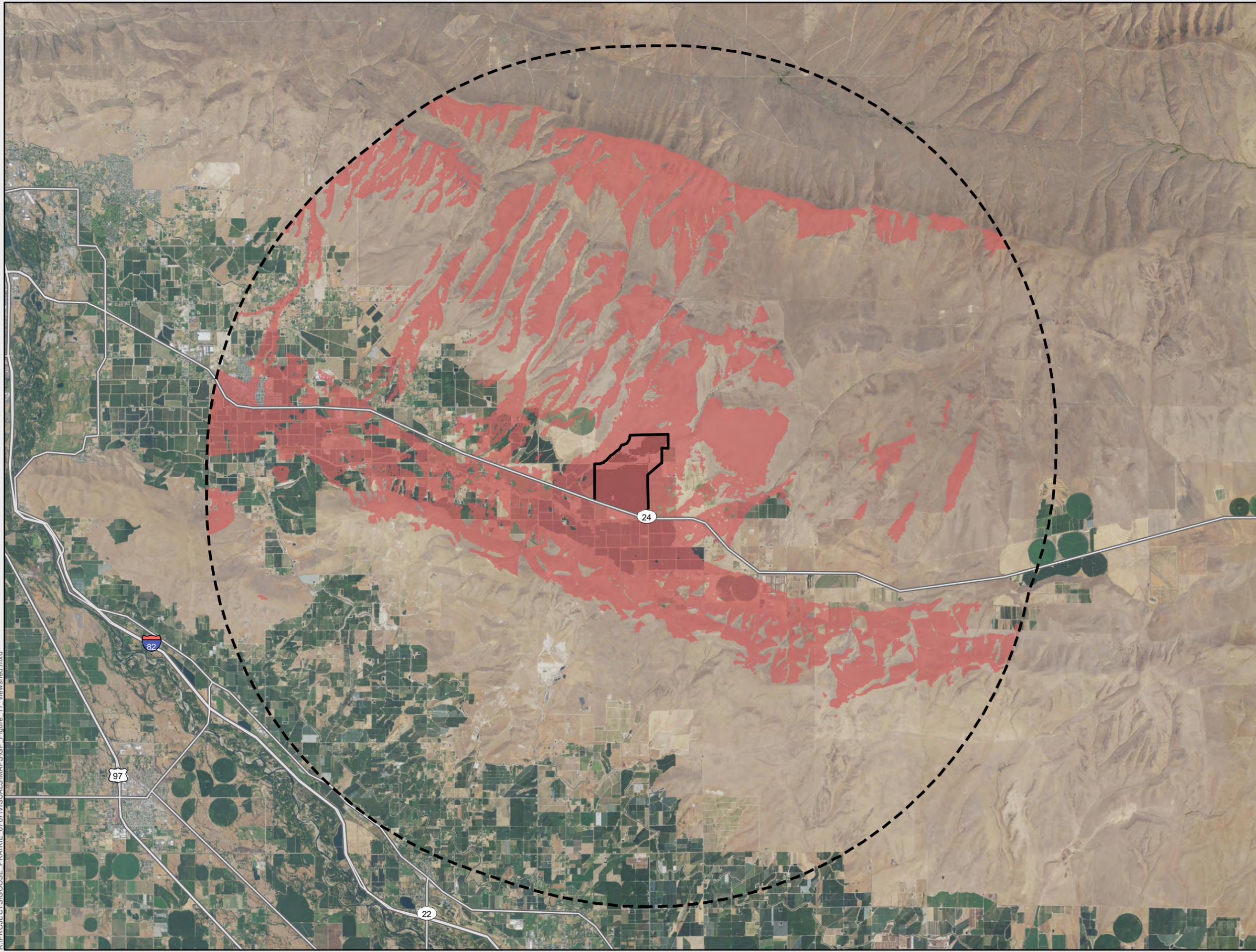
Figure 3
Zone of Visual Influence

Yakima County, Washington

-  Project Area
-  7-mile Buffer
-  Panel Potential Visibility



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Goose Prairie Solar Project

Figure 4
KOP Locations

Yakima County, Washington

-  Project Area
-  KOP Location and Photo Direction

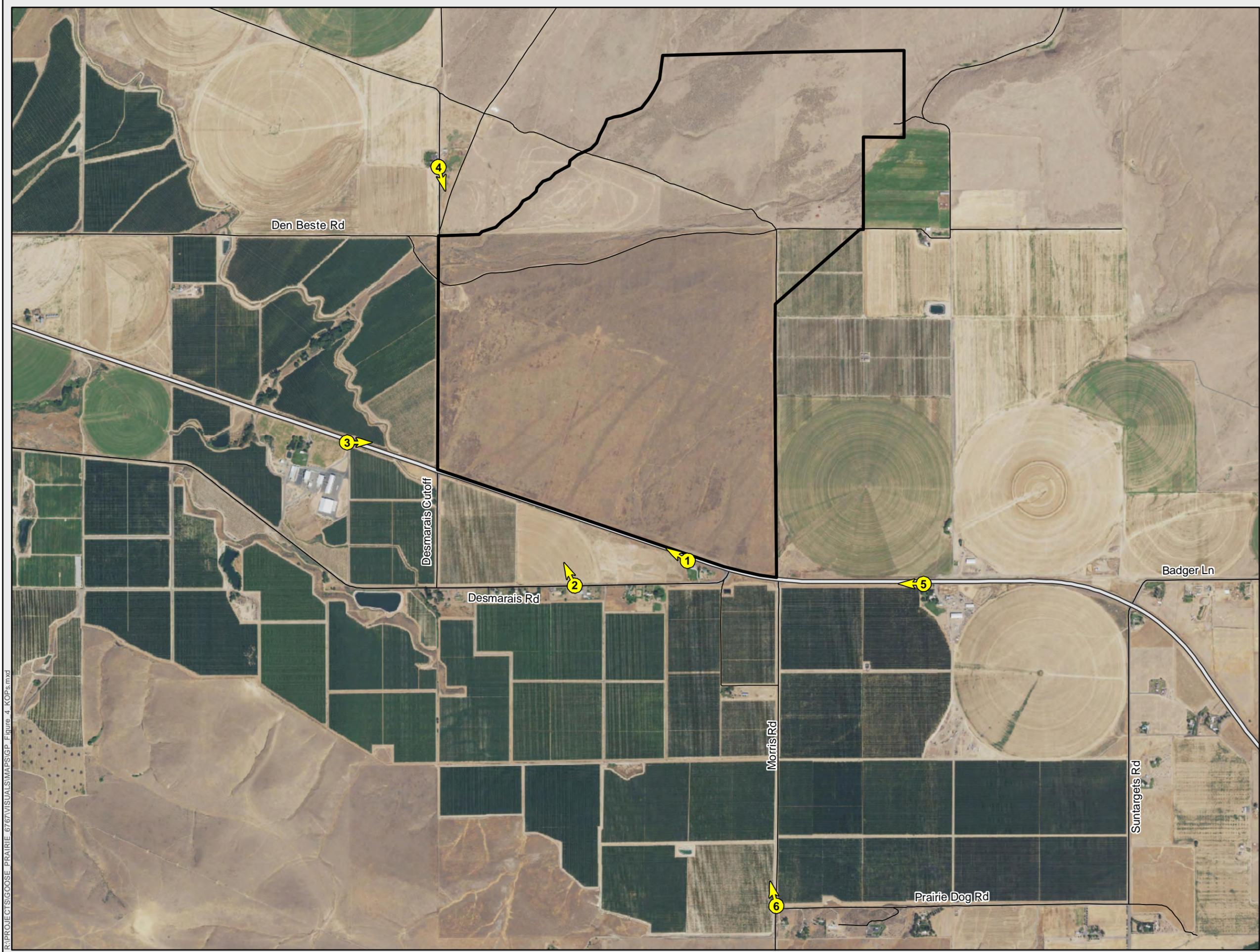
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Goose Prairie Solar Project

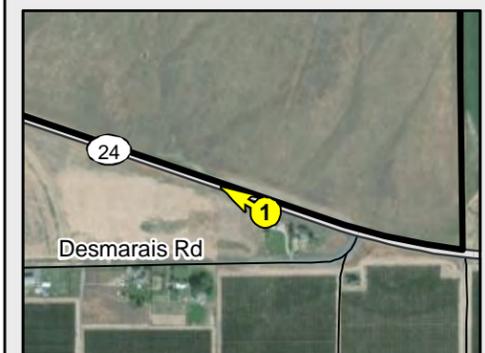
Figure 5
KOP 1: Existing Conditions

Yakima County, Washington

-  Project Area
-  KOP Location and Photo Direction



View of the proposed Facility Area from the southwest corner of Washington State Highway 24 and Desmaris Road.





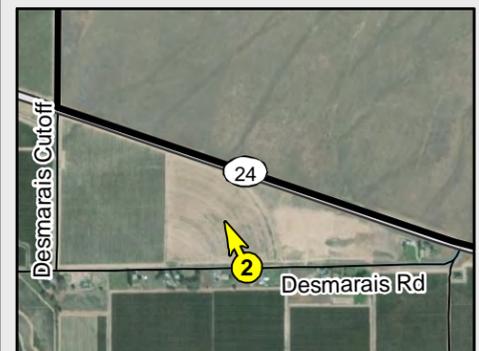
View of the proposed Facility Area, south of the Facility Area, about halfway between the intersection of Desmaris Cutoff and Desmaris Road and the intersection of Desmaris Road and Washington State Highway 24.

Goose Prairie Solar Project

**Figure 6
KOP 2: Existing Conditions**

Yakima County, Washington

-  Project Area
-  KOP Location and Photo Direction



Goose Prairie Solar Project

Figure 7
KOP 3: Existing Conditions

Yakima County, Washington



-  Project Area
-  KOP Location and Photo Direction



View of the proposed Facility Area from the southside of Washington State Highway 24, approximately 0.5 miles west of Desmarais Cutoff.

Goose Prairie Solar Project

Figure 8
KOP 4: Existing Conditions

Yakima County, Washington



-  Project Area
-  KOP Location and Photo Direction



View of the proposed Facility Area approximately 0.8 miles north of Washington State Highway 24.

Goose Prairie Solar Project

Figure 9
KOP 5: Existing Conditions

Yakima County, Washington



-  Project Area
-  KOP Location and Photo Direction



View of the proposed Facility Area from the southside of Washington State Highway 24 approximately 0.5 miles east of Morris Lane.

Goose Prairie Solar Project

Figure 10
KOP 6: Existing Conditions

Yakima County, Washington

-  Project Area
-  KOP Location and Photo Direction



View of the proposed Facility Area, approximately 1 mile south of Washington State Highway 24, at the intersection of Morris Lane and Newkirk Drive.





Existing Conditions



Simulation

Goose Prairie Solar Project

**Figure 11
KOP 1: Existing Conditions
and Simulation**

Yakima County, Washington

-  Project Area
-  KOP Location and Photo Direction

This sheet should be printed at 11x17 inches; full size with no scaling; and viewed at 9.9 inches from the eye. If viewed on a computer monitor, the document should be scaled at 100% and viewed at 9.9 inches from the eye.



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Existing Conditions



Simulation

Goose Prairie Solar Project

**Figure 12
KOP 6: Existing Conditions
and Simulation**

Yakima County, Washington

 Project Area

 KOP Location and Photo Direction

This sheet should be printed at 11x17 inches; full size with no scaling; and viewed at 9.9 inches from the eye. If viewed on a computer monitor, the document should be scaled at 100% and viewed at 9.9 inches from the eye.



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Attachment 1: Visual Contrast Rating Worksheets

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date _____

District _____

Resource Area _____

Activity (program) _____

SECTION A. PROJECT INFORMATION

1. Project Name	4. Location Township _____ Range _____ Section _____	5. Location Sketch
2. Key Observation Point		
3. VRM Class		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM			
LINE			
COLOR			
TEXTURE			

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM			
LINE			
COLOR			
TEXTURE			

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

1. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)
ELEMENTS	Form												Evaluator's Names _____ Date _____
	Line												
	Color												
	Texture												

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date _____

District _____

Resource Area _____

Activity (program) _____

SECTION A. PROJECT INFORMATION

1. Project Name	4. Location Township _____ Range _____ Section _____	5. Location Sketch
2. Key Observation Point		
3. VRM Class		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM			
LINE			
COLOR			
TEXTURE			

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM			
LINE			
COLOR			
TEXTURE			

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

1. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)	3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None		
Form													Evaluator's Names _____	Date _____
Line														
Color														
Texture														

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date _____

District _____

Resource Area _____

Activity (program) _____

SECTION A. PROJECT INFORMATION

1. Project Name	4. Location Township _____ Range _____ Section _____	5. Location Sketch
2. Key Observation Point		
3. VRM Class		

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	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM			
LINE			
COLOR			
TEX-TURE			

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM			
LINE			
COLOR			
TEX-TURE			

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

1. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	
													3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)
Evaluator's Names _____ Date _____													
ELEMENTS	Form												
	Line												
	Color												
	Texture												

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date _____

District _____

Resource Area _____

Activity (program) _____

SECTION A. PROJECT INFORMATION

1. Project Name	4. Location Township _____ Range _____ Section _____	5. Location Sketch
2. Key Observation Point		
3. VRM Class		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM			
LINE			
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FORM			
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TEXTURE			

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	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None		
Form													Evaluator's Names _____	Date _____
Line														
Color														
Texture														

