

NOTICE OF INTENT
TO APPLY FOR SITE CERTIFICATE
OBSIDIAN SOLAR CENTER AT FORT ROCK
LAKE COUNTY, OREGON

PREPARED FOR
OREGON ENERGY FACILITIES SITING COUNCIL

JANUARY 2018

PREPARED BY
OBSIDIAN SOLAR CENTER LLC

CONTENTS AND ATTACHMENTS

Contents	Page
Exhibit A – Facility Ownership OAR 345-0030-0001(1)(a)	1
Exhibit B – Facility Description OAR 345-020-0011(1)(b)	5
Exhibit C – Site Location OAR 345-020-0011(1)(c).....	14
Exhibit D – Supporting Facility OAR 345-0020-0011(1)(d).....	15
Exhibit E – Permits and Approvals OAR 345-020-0011(1)(e).....	16
Exhibit F – Property Ownership OAR 345-020-0011(1)(f).....	20
Exhibit G – Maps OAR 345-020-0011(1)(g).....	21
Exhibit H – Demonstration of Need OAR 345-002-0011(1)(h).....	23
Exhibit I – Land Use OAR 345-002-0011(1)(i).....	24
Exhibit J – Environmental Impacts OAR 345-002-0011(1)(j).....	25
Exhibit K – Public Services OAR 345-002-0011(1)(k).....	32
Exhibit L – Water Use OAR 345-002-0011(1)(l).....	36
Exhibit M – Emissions OAR 345-002-0011(1)(m).....	37
Exhibit N – Statutes, Rules, and Ordinances OAR 345-003-0011(n).....	38
Exhibit O – Application Schedule OAR 345-002-0011(1)(o).....	41
Exhibit P – Consultation with Legislative Commission on Indian Services OAR 345-002-0001(1)(p).....	42

Attachment A Articles of Organization
Attachment G Maps

TABLES

Table C-1	Site Location
Table E-1	Permits
Table F-1	Land Ownership within 500 Feet of Facility Site Boundary (attached)
Table J-1	Study Areas for Environmental Impacts
Table J-2	Protected Areas within the Study Area
Table N-1	Statutes, Rules and Ordinances

FIGURES

Figure B-1	Facility Layout (Option 1)	
Figure B-2	Facility Layout (Option 2)	
Figure G-1	Site Boundary/Facility Layout	Figure G-5 Scenic Areas
Figure G-2	Study Area and Topography	Figure G-6 NWI Areas
Figure G-3	Protected Areas	Figure G-7 NHC Areas
		Figure G-8 Nearby Generation tification Nos.

Exhibit A – Facility Ownership

OAR 345-0030-0001(1)(a)

(a) Information about the applicant and participating persons, including:

(A) The name and address of the applicant including all co-owners of the proposed facility, the name, mailing address, email address and telephone number of the contact person for the NOI, and if there is a contact person other than the applicant, the name, title, mailing address, email address and telephone number of that person;

Response

Name and mailing address of Applicant:

Obsidian Solar Center, LLC
c/o Obsidian Renewables, LLC
5 Centerpointe Drive, Suite 250
Lake Oswego, OR 97035

Applicant contact persons with mailing address, email address, and telephone number:

David W. Brown
Obsidian Solar Center, LLC
5 Centerpointe Drive, Suite 250
Lake Oswego, Oregon 97035
dbrown@obsidianrenewables.com
(503) 542-8866

Michelle Slater
Obsidian Solar Center, LLC
5 Centerpointe Drive, Suite 250
Lake Oswego, Oregon 97035
m Slater@obsidianrenewables.com
(503) 577-1446

Contact persons other than the Applicant:

Elaine Albrich
Davis Wright Tremaine LLP
1300 SW Fifth Avenue, Suite 2400
Portland, Oregon 97201
elainealbrich@dwt.com
(503) 778-5423

(B) The contact name, mailing addresses, email address and telephone number of all participating persons, other than individuals, including but not limited to any parent corporation of the applicant, persons upon whom the applicant will rely for third-party permits or approvals related to the facility, and, if known, other persons upon whom the applicant will rely for third party permits or approvals related to the facility, and persons upon whom the applicant will rely in meeting any facility standard adopted by the Council.

Response

Applicant is a wholly owned subsidiary of Obsidian Renewables, LLC:

Obsidian Renewables LLC
5 Centerpointe Drive, Suite 250
Lake Oswego, Oregon 97035

Contact Name, Mailing Address, Email Address and Telephone Number:

David W. Brown
Obsidian Renewables LLC
5 Centerpointe Drive, Suite 250
Lake Oswego, Oregon 97035
dbrown@obsidianrenewables.com
(503) 542-8866

Persons upon whom Applicant will rely for third-party permits and approvals:

Applicant will retain an environmental consultant to perform site and environmental studies, surveys and analyses and assist with obtaining permits throughout the pre-construction phase(s). Applicant will rely on an Engineering, Procurement and Construction (EPC) contractor to obtain third-party permits and approvals that relate to engineering and construction, including (potentially) air, water, construction, electrical, building, and waste removal permits.

Applicant's preferred EPC contractor is Swinerton Renewable Energy (SRE) a division of Swinerton Builders. Swinerton has been the general contractor for Obsidian Renewables. SRE is a large solar contractor that has built 10 projects for more than 85 MW in Oregon and more than 80 projects and 2 GWs across the country. SRE has an office in Bend, Oregon.

(C) If the applicant is a corporation, it shall give:

- (i) the full name, mailing address, email address and telephone number of the officer responsible for submitting the application;*
- (ii) the date and place of its incorporation*
- (iii) A copy of its articles of incorporation and its authorization for submitting the NOI; and*
- (iv) in the case of a corporation not incorporated in Oregon, the name and address of the resident attorney-in-fact in this state and proof of registration to do business in Oregon.*

Response

The Applicant is not a corporation so this rule is not applicable.

(D) If the applicant is a wholly-owned subsidiary of a company, corporation or other business entity, in addition to the information required by paragraph (C), it shall give the full name and business address of each of the applicant's full or partial owners;

Response

Obsidian Solar Center LLC is a wholly owned subsidiary of Obsidian Renewables LLC. The full name and business address are as follows:

Obsidian Renewables LLC
5 Centerpointe Drive, Suite 250
Lake Oswego, Oregon 97035

Obsidian Renewables is a limited liability company organized in Oregon.

(E) If the person submitting the NOI is an association of citizens, a joint venture or a partnership, it shall give:

- (i) The full name, official designation, mailing address, email address and telephone number of the person responsible for submitting the application;*
- (ii) The name, business address and telephone number of each person participating in the association, joint venture or partnership and the percentage interest held by each;*
- (iii) Proof of registration to do business in Oregon;*
- (iv) A copy of its articles of association, joint venture agreement or partnership agreement and a list of its members and their cities of residence; and*
- (v) If there are no articles of association, joint venture agreement or partnership agreement, the applicant shall state that fact over the signature of each member;*

Response

The Applicant is not an association of citizens, a joint venture, or a partnership. Therefore, this rule is not applicable.

(F) If the applicant is a public or governmental entity, it shall give:

- (i) The full name, official designation, mailing address, email address and telephone number of the person responsible for submitting the application; and*
- (ii) Written authorization from the entity's governing body to submit the application;*

Response

The Applicant is not a public or governmental entity. Therefore, this rule is not applicable.

(G) *If the applicant is an individual, the individual shall give his or her mailing address, email address and telephone number.*

Response

The Applicant is not an individual. Therefore, this rule is not applicable.

(H) *If the applicant is a limited liability company, it shall give:*

- (i) *The full name, official designation, mailing address, email address and telephone number of the officer responsible for submitting the application;*

Response

The following officer is responsible for submitting the Notice of Intent and the application for Site Certificate:

David W. Brown, Manager
Obsidian Solar Center LLC
5 Centerpointe Drive, Suite 250
Lake Oswego, OR 97035
dbrown@obsidianrenewables.com
(503) 542-8866

- (ii) *The date and place of its formation;*

Response

Obsidian Solar Center LLC was formed in the State of Oregon on June 23, 2016, as Ft. Rock Solar Center LLC, registry number 1226288-94. Its name was changed to Obsidian Solar Center LLC on September 1, 2017.

- (iii) *A copy of its articles of organization and its authorization for submitting the application; and*

Response

A copy of the articles of organization and authorization is provided in **Attachment A**.

(iv) *In the case of a limited liability company not registered in Oregon, the name and address of the resident attorney-in-fact in this state and proof of registration to do business in Oregon.*

Response

Obsidian Solar Center LLC is registered in Oregon so this rule is not applicable.

Exhibit B – Facility Description

OAR 345-020-0011(1)(b)

(b) *Information about the proposed facility, including:*

(A) *A description of the proposed energy facility, including as applicable:*

(i) *The nominal electric generating capacity and the average electrical generating capacity, as defined in ORS 469.300.*

Response

Overview of the Proposed Facility

Obsidian Solar Center LLC (Applicant) proposes a photovoltaic (pv) solar power generation facility and related or supporting facilities located in Lake County, Oregon (Obsidian Solar Center or the Facility).

Obsidian Solar Center will consist of up to 7,000 acres and provide a nominal generating capacity of up to 600 MW ac (up to 1,000 MW dc), and an average generating capacity of up to 300 MW ac (up to 500 MW dc). As described in more detail below, the Obsidian Solar Center will likely be comprised of two combinations of technology: (1) only pv solar power generation technology (a “Type A” project) and (2) pv solar power generation technology coupled with battery storage technology (a “Type B” project). The number and combination of Type A and Type B projects comprising the Facility will depend on customer preferences. For example, the Facility could consist of a single Type A project consisting of up to 400 MW ac capacity and a single Type B project consisting of up to 200 MW ac capacity, with each project relying on shared related or supporting facilities. Or another example, the Facility could consist of up to four Type A projects and up to four Type B projects or some combination thereof, but the Facility will not exceed 7,000 acres, 600 MW ac, or 1,000 MW dc. Overall, the Facility will be organizationally similar to one industrial park with separate facilities all located within that industrial park.

Applicant seeks the flexibility to develop the Obsidian Solar Center in phases and split the Facility into individual solar power generation facilities (represented by a Type A project or a Type B project) prior to completion or following completion of construction depending on the needs of its customers (who are yet to be determined). Depending on market demands, Applicant may end up owning and operating all Type A and Type B projects within the site boundary or alternatively, Applicant may sell and transfer one or more Type A and Type B projects to one or more customers and retain control over the remainder of the Facility. The preliminary application for site certificate will contain further detail describing this proposed concept and will address Energy Facility Siting Council (EFSC) jurisdiction and splitting the site

certificate. Overall, the Facility will be organizationally similar to one industrial park with separate facilities all located within that industrial park.

Applicant seeks to permit a range of technology in order to preserve permitting flexibility and will specify the precise details of generation and storage during pre-construction final design engineering. The preliminary application for site certificate is being developed with the goal of offering maximum efficiency in terms of use of space and available technology. Applicant has defined the site boundary and, based on the results of studies and consultations, may continue to refine the final design of the Facility. Consequently, the final design may utilize different land within the site boundary than currently depicted on the preliminary layout, transmission line routes may be added or relocated, and additional or fewer modules and battery components may be constructed. These considerations will be further addressed in the application.

Applicant intends to begin onsite construction by 2019, pending issuance of a site certificate from EFSC.

Below is an illustrative description of each type of project.

Type A Project

The Type A project is solar pv only. Obsidian Solar Center will include one or more Type A projects, all of which will be constructed within the site boundary. For permitting purposes, if the entire Obsidian Solar Center was comprised of a single or multiple Type A projects the total generating capacity would be 600 MW ac (about 820 MW dc) and would occupy about 5,250 acres.

Type B Project

The Type B project is solar pv plus battery storage. The Type B project has more dc watts of nameplate capacity per watt of Facility ac capacity and uses its batteries to store overproduction until it can be utilized. The dc/ac ratio for a typical Type A project is about 1.3 and the dc/ac ratio for a Type project is estimated at 1.7. Obsidian Solar Center will include one or more Type B projects, all of which will be constructed within the site boundary. For permitting purposes, if the entire Obsidian Solar Center was comprised of a single or multiple Type B projects the total generating capacity would be up to 600 MW ac (about 1,000 MW dc) and would occupy 7,000 acres.

In the application for site certificate, Applicant will present layout scenarios assuming full buildout of each type of facility to reflect the largest impact with respect to each resource analyzed. For any given impact and resource, the layout or combination of layouts that causes the greatest impact to the resource under consideration will be evaluated and presented in the respective application exhibit.

(ii) Major components, structures and systems, including a description of the size, type and configuration of equipment used to generate electricity and useful thermal energy.

Response

Major Components, Structures, and Systems

Obsidian Solar Center will include technologies associated with both the Type A and the Type B projects. The following are major components common to both the Type A and the Type B projects.

Solar Modules

The pv solar panels, or modules, will be installed to form module blocks consisting of the solar modules, trackers, racks, posts, cabling, inverters, and transformers. Current design has module blocks at 3.85 MW dc. Additional detail on each component is provided below. The likely solar panel specification used for the Facility will be a 72-cell, 335-watt polycrystalline module on a single-axis tracker. However, Applicant seeks flexibility to use any type of similar, more advanced technology available at the time of final design. The modules used will be recognized as “first tier” and will be manufactured by Hanwha or a comparable firm. At full tilt, the panels will be approximately 7 feet high. Preliminary plans reflect a ground coverage ratio (GCR) of approximately 26-30 percent, meaning that the area occupied by the panels (when tilted horizontally) will be 26-30 percent of the total area covered. Facility design improvements may affect the total GCR.

Prior to filing its preliminary and final applications for site certificate, Applicant may improve upon the specific facility design, component selection, and layout. The following descriptions reflect the general Facility design and current technology.

Trackers and Racks

Each set of racked modules will be oriented north to south and mounted a few feet off the ground on a single-axis tracker that rotates approximately 60 degrees to the east and west. The Facility will use a tracker manufactured by NetTracker or a comparable firm. The trackers will likely be made of nonspecular galvanized steel.

Posts

Each tracker will be supported by galvanized steel posts approximately 4 and one-half feet above ground height; post depth will vary depending on soil conditions and final design engineering. Where soil conditions require, concrete foundations will be used. Post locations will be determined during final engineering and design. The approximate number of posts is up to 750 per MW dc capacity.

Cabling

Solar module technology uses direct current (dc). Within each module block, several dc electrical cables will aggregate or “string” together into a combiner box. Combiner boxes will be located throughout each module block. A larger dc cable will run from each combiner box to the module block inverter. The cables will usually be located underground in excavated trenches

approximately 3 feet deep. Where necessary due to ground conditions or sensitive areas, the collector cable will be above ground in trays mounted on the racking below the panels. Applicant seeks flexibility to locate the collector cables underground or above ground depending on the ground conditions or sensitive areas. Wherever practical, Applicant will locate the collectors underground.

Inverters

In order to be sent to the electrical grid, the dc current must be converted into alternating current (ac) power, and inverters serve this function. The inverter specification will fully comply with the applicable requirements of the National Electrical Code and Institute of Electrical and Electronics Engineers standards and will meet all requirements of interconnecting utility authorities. The Obsidian Solar Center Type A project will use Power Electronics FS3000M or similar inverters to convert current from dc to ac. The Type B project will also use Power Electronics FS3000M or similar inverter, but to accommodate the charge and discharge of batteries, a converter will be used to convert the voltage of the dc current in and out of the battery.

Transformers

The inverter ac output voltage will be stepped up to a higher-voltage (34.5 kV) by pad-mounted transformers designed to integrate with the selected inverter. These medium voltage step-up transformers will be co-located with the inverters. Additionally, for Type B projects, the output voltage will be stepped up and stepped down to enable the power to enter and leave the batteries.

(iii) Methods for waste management and waste disposal, including, to the extent known, the amount of wastewater the applicant anticipates, the applicant's plans for disposal of wastewater and storm water, and the location for disposal.

Response

The major types of solid waste and wastewater likely to be generated by the Oregon Solar Center are nonhazardous construction debris, construction and operation-related wastewater and small quantities of office waste generated by the operation and maintenance (O&M) activities. The following sections provide additional details of the major types of waste generated.

Construction Waste

Nonhazardous construction waste will be generated. Primary sources of waste include general construction debris such as corrugated containers, wood pallets, banding strips, scrap steel, and other similar items. Other materials such as associated electrical wire and erosion control material (e.g., silt fencing and straw wattles) will also be generated during construction. Waste and debris will also be generated by construction workers, including empty cups, wrappers, small bags and similar material. Trash that accumulates in the perimeter fence will be collected.

The nonhazardous waste produced during construction will be accumulated into various bins placed around the site and accommodated by a local solid waste hauler. Wastewater will be generated from portable toilets during construction. Portable toilets will be managed by a local contractor and wastewater will be disposed of in accordance with state law and any local requirements. Concrete needed during construction will most likely be acquired from a local or regional supplier, who will also be responsible for any related concrete waste.

Waste from Operations

During operations, Applicant anticipates very little waste to be generated. The primary waste generated will be office waste from operations and maintenance functions. Office waste will be paper, packaging, cups and food scraps. Disposal of materials used for routine maintenance and housekeeping, such as lubrication oils and cleaning supplies, will be managed according to pertinent regulations.

Washwater generated from periodic panel washing will be managed under an Oregon Department of Environmental Quality (DEQ) General Water Pollution Control Facilities (WPCF) 1700-B Permit and will evaporate and seep into the ground. No other waste water is anticipated during operations. Sanitary wastewater that is generated onsite will likely be disposed of and treated using an onsite septic system, subject to county approval and permitting to be handled by the EPC contractor.

Applicant, through its EPC contractor, will work with DEQ to obtain necessary permits for its construction stormwater discharge and sediment and erosion control plan.

(iv) For thermal power plants:

- (i) A discussion of the source, quantity and availability of all fuels proposed to be used in the facility to generate electricity or useful thermal energy.*
- (ii) Methods for disposal of waste heat.*

Response

The Facility is not a thermal power plant so this rule is not applicable.

(v) For transmission lines, approximate transmission line voltage, load carrying capacity and type of current.

Response

The Facility does not have a transmission line that, by itself, is an energy facility under the definition in ORS 469.300. Therefore, this rule is not applicable.

(vi) For pipelines, approximate operating pressure and delivery capacity in thousand cubic feet per day.

Response

Obsidian Solar Center will not have a pipeline so this rule is not applicable.

(vii) For surface facilities related to underground gas storage, estimated daily injection and withdrawal rates, horsepower compression required to operate at design injection or withdrawal rates, operating pressure range and fuel type of compressors

Response

The Facility does not involve underground gas storage. Therefore, this rule is not applicable.

(viii) For facilities to store liquefied natural gas, the approximate volumes, maximum pressure, liquefaction and gasification capacity in thousand cubic feet per hour.

Response

The Facility does not propose the storage of liquefied natural gas. Therefore this rule is not applicable.

(B) A description of major components, structures and systems of each related or supporting facility.

Response

The Type A project and Type B project will share related and supporting facilities. In addition, the Type B project will have supporting facilities not shared with the Type A project.

Related or Supporting Facilities

Related or supporting facilities consist of a collection system, 34.5-kV to 115-kV step-up transformers and substations, 115-kV transmission lines(s), 115-Kv to 500-kV step-up transformers and substations, point of interconnection (POI) breaker bus substations, control house(s), O&M building(s), private main access roads, private service roads and gates, and temporary staging areas.

Figure B-1 and **Figure B-2** show two alternative layouts of related or supporting facilities within the site boundary. As the Facility design and layout change in response to cultural and environmental studies, improvements in technology or otherwise, related and/or supporting facilities may change as well. The Obsidian Solar Center is being developed with the goal of offering maximum efficiency in terms of use of space and available technology. Applicant has defined the site boundary and will continue to refine the final design of the Facility. Consequently, the final Facility layout presented in the application may be different than as presented in this NOI.

34.5-kV Electrical Collection System

Obsidian Solar Center's collection system carries power generated by the Facility at 34.5 kV. Power will be initially generated by the pv panels at 1500 volts, move through the collection system to the inverters, then step up to 34.5 kV through transformers at each inverter. Underground cables at 34.5 kV run from each transformer to a collector substation.

Collector Substations

The Facility may have up to four collector substations, occupying approximately 3 acres each, within the site boundary. Each collector substation includes equipment, foundations, poles, and anchoring systems. The substations will be placed strategically within the site boundary to aggregate the power being collected by the 34.5-kV collector lines from the Type A and Type B projects.

115-kV Transmission Line

At each collector substation, power will be increased to 115 kV through pad-mounted transformers. The power will then run from the collector substation via an overhead 115-kV transmission line to the substation near the power line. Depending on final design, the Facility may include one to three transmission 115 kV overhead transmission lines of approximately 2 miles each. Each would be a dual circuit 115-kV transmission line (with an individual carrying capacity of up to 200 MW). **Figure B-1** reflects three such transmission lines, each approximately 2 miles long, to illustrate this feature. Final length and location of transmission lines will depend upon the final design for the Facility.

500-kV Transformer

Just before the point of interconnection to the 500-Kv transmission line, the power will step up from 115-kV to 500-kV inside a substation that will occupy approximately 3 acres.

O&M Building

The Facility will have a storage building (or two) within the site boundary to be used primarily to store extra equipment and supplies. The O&M building will be located on approximately 0.5 acres (with parking) and will consist of a building approximately 50 feet by 50 feet in size. The O&M building will consist of a warehouse-like storage area, a bathroom, a sink, and a table or desk-work area.

Temporary Staging Area(s)

During construction, Applicant will clear up to three staging areas within the site boundary to facilitate the delivery and assembly of material and equipment. The staging areas will be fenced and controlled for dust. Additional information on the temporary staging areas, including the specific location, size, and other specifics, will be included in the final site certificate application.

Perimeter Fence

The Facility will be fully fenced-in and secure, with an 8-foot perimeter fence (7 feet of fence material and one foot of three-strand barbed wire).

For a Type B project, there will be the following additional related or supporting facilities:

Batteries and Related Components

In addition to the related and supporting facilities described above, the Type B project will have batteries and their related components. Applicant anticipates using long-duration flow batteries developed for utility-scale projects. Applicant does not seek the flexibility to install and operate lithium batteries at this time.

Cell Stack

Flow batteries consist of a cell stack with the balance of plant (BOP) on either side. The cell stack contains membranes, electrodes, and bipolar plates. The cell stack is where the battery charge and discharge occurs.

Balance of Plant

The BOP consists of large polymer storage tanks on each side of the cell stack, pumps, piping (pvc), thermal controls, and power conversion hardware (single stage, bidirectional inverters). The storage tanks that contain the water-based electrolyte used in the system have primary and secondary spill containment devices to avoid inadvertent mixing of the aqueous electrolytes contained in the tanks with local groundwater. The electrolyte fluid is non-toxic, non-flammable, and thermally stable. The thermal system control in the BOP is a combination of HVAC air-to-air and glycol-to-air (non-toxic) heat exchanger, keeping the batteries thermally stable over a wide operating range.

Storage Enclosures

The batteries will be maintained in steel-frame enclosures to protect against moisture and dust. Flow batteries may be configured and sized within the storage unit in a wide variety of ways depending on desired MW/MWh output. For example, system containing five, 250kW energy storage units (ESUs), which would provide 1.25 MW/12 MWh could be located in a structure measuring approximately 50 feet wide by 67 feet long by 30 feet high (0.08 acres).

One hundred battery storage enclosures would occupy about 10 acres of a 2,500 acre Type B project. If the entire Facility were developed with Type B projects, there could be up to three hundred battery storage enclosures occupying approximately 30 acres of the 7,000 acre site.

(C) The approximate dimensions of major facility structures and visible features.

Response

The Facility will occupy approximately 7,000 acres with visible features (major Facility structures and related or supporting facilities) that include pv modular blocks, O&M building(s), substations, transmission lines, and battery storage enclosures.

Approximate Dimensions of Major Facility Structures and Supporting Facilities

PV Panel Dimensions

The pv panels for the Facility, if all Type A, would be built into approximately 200 module blocks. If all Type B, there would be approximately 265 module blocks.. Each module block occupies approximately 22 acres. At maximum rotation, the panels are approximately 7 feet tall.

O&M Building Dimensions

An O&M building will be located on approximately 0.5 acres (with parking) and will consist of a building approximately 50 feet by 50 feet in size and 14 feet in height. Applicant seeks approval for up to three O&M buildings within the site boundary.

Collector Substation Dimensions

The Facility will include up to four collector substations, each approximately 2-3 acres in size and 10 feet in height.

Transmission Line Dimensions

The 115 kV overhead transmission lines will run from the collector substation to the new 500 kV substation and will be approximately 2 miles in length. The height of the line will be determined in engineering. The overhead transmission line(s) will either be supported by single steel monopole structures, which will be set on foundations, or by double wooden poles. Either system may have directional anchoring system structures. The Facility may include up to four transmission lines.

Battery Storage Enclosures

Batteries will be maintained in steel-frame enclosures to protect against moisture and dust. A battery storage enclosure would be approximately 50 feet wide by 67 feet long by 30 feet high and have a footprint of approximately 0.08 acres. Applicant expects one battery enclosure every 22 acres.

Exhibit C – Site Location

OAR 345-020-0011(1)(c)

(c) A description of the location of the proposed energy facility site and the proposed site of each related or supporting facility and all areas that might be temporarily disrupted during construction of the facility, including the approximate land area of each.

Response

The Facility and all related components will be located outside the hamlet of Fort Rock, an unincorporated community in Lake County, Oregon. Applicant has negotiated or is in the final stages of negotiating leases or options with the relevant landowners. Easements will also be negotiated with adjacent landowners where necessary along the transmission corridor(s). At the time of this NOI, the Facility will be located in the townships, ranges, and sections identified in **Table C-1** and shown in **Figure F-1**.

Table C-1

Township and Range	Sections
T26S R15E	13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 34, 35, 36
T26S R16E	4, 5, 8, 9, 15, 16, 17, 18, 19, 20, 21, 22

Following completion of the cultural and environmental studies, Applicant may refine the Facility site boundary presented in the final application for site certificate. As described in Exhibit B, Applicant seeks the flexibility to locate the Facility components within the site boundary to maximize efficiency, respond to customer needs, and minimize, as much as possible, impacts to sensitive resources.

Exhibit D – Supporting Facility OAR 345-0020-0011(1)(d)

(d) If the proposed energy facility is a pipeline or a transmission line or has, as a related or supporting facility, a transmission line or pipeline, that, by itself, is an energy facility under ORS 469.300, identification of at least two proposed corridors, as defined in OAR 345-001-0010, or identification of a single proposed corridor with an explanation of why alternate corridors are unlikely to better meet the applicant's need and satisfy the Council's standards.

Response

The Facility does not have a pipeline or a transmission line that, by itself, is an energy facility under the definition in ORS 469.300. Therefore, this rule is not applicable.

Exhibit E – Permits and Approvals

OAR 345-020-0011(1)(e)

(e) Identification of all federal, state and local government permits related to the siting of the proposed facility, a legal citation of the statute, rule or ordinance governing each permit, and the name, mailing address, email address and telephone number of the agency or office responsible for each permit. For each permit, the applicant shall provide a preliminary analysis of whether the permit should or should not be included in and governed by the site certificate.

Response

Table E-1 identifies and describes the federal, state, and local permits required for construction and operation of the Facility. Lightly shaded boxes are those permits which Applicant has identified as not likely to be required.

Table E-1. Permits or other Approvals Required for Construction and Operation of the Facility

Permit Name	Agency	Authority/Description
Eagle Take Permit	U.S. Fish and Wildlife Service (USFWS) Attention:	Bald and Golden Eagle Protection Act; 50 CFR §§ 13, 22 Eagle Permits; Take Necessary to Protect Interests in Particular Localities; Final Rules FR 46836 September 11, 2009 Description: Consultation with USFWS will occur to determine if any permits are necessary
Record of Decision/ National Environmental Policy	Bonneville Power Administration	NEPA, §102 (42 USC 4332); 40 CFR 1500 Description: If the Facility interconnects with BPA's transmission network this permit may be required

Permit Name	Agency	Authority/Description
Supplemental Notice of Actual Construction or Alteration (Form 7460-1)	Federal Aviation Administration Attention:	Federal Aviation Act of 1958 (14 U.S.C. Section 44718);14 CFR Section 77 Description: Required for construction of any object over 200 feet above ground level at the location of the proposed action, and for construction of structures within specified distances of runways or helipads.
Clean Water Act, §404	US Army Corp of Engineers, Portland District	Clean Water Act, §404 (33 USC §1344); 33 CFR 320, 323, 325-328 and 330 Description: A §404 Permit will be required if dredge or fill occurs in waters of the United States.
State Permits		
Energy Facility Site Certificate	Oregon Department of Energy and Energy Facility Siting Council Attention: Todd Cornett 550 Capitol Street N.E. Salem, OR 97301 (503) 378-8328 todd.cornett@oregon.gov	ORS 469.300 et seq.; OAR Chapter 345, Divisions 1, 15, 21- 24, 26-27 Description: The Facility will be subject to EFSC jurisdiction and require a site certificate.
Onsite Sewage Disposal Construction-Installation Permit	Oregon Department of Environmental Quality, Water Quality Onsite Program, Eastern Region 800 SE Emigrant #330 Pendleton, OR 97801 Bob Marshall Marshall.Bob@DEQ.state.or.us (541) 276-4063	ORS 454 and 468B; OAR Chapter 340, Division 71 Description: The will have a daily sewage flow of fewer than 2,500 gallons and the Applicant's third-party contractor will obtain from the Oregon Department of Environmental Quality (DEQ) a Construction- Installation Permit for the operations and maintenance (O&M) facility. This third-party permit is included or governed by the site certificate.
General Water Pollution Control Facilities Permit, WPCF-1700-B, Washwater Discharge from Equipment Cleaning	Oregon Department of Environmental Quality	ORS 468B; OAR Chapter 340, Division 45 Description: The WPCF-1700-B permit covers equipment-cleaning activities that discharge washwater by means of evaporation, seepage, or irrigation.

		Applicant's third-party contractor who will conduct the washing activities will seek coverage under the WPCF-1700-B permit from DEQ following completion of construction and before initiating any washing activities. Therefore, this permit should not be included in and governed by the site certificate.
Permit Name	Agency	Authority/Description
Water Right Permit or Water Use Authorization	Oregon Water Resources Department	ORS 537; OAR 690, Divisions 310, 340, 410 and 507 Description: If water for construction is not available from permitted sources, Applicant will seek temporary authorization for water.
Oversize Load Movement Permit/Load Registration	Oregon Department of Transportation Motor Carriers Transportation Division 550 Capitol Street NE Salem, OR 97301	ORS Chapter 818.030; OAR Chapter 734, Divisions 51, 82 Description: Facility access will be by state highways and county roads. If large/overweight equipment needs to be moved across state roads, a permit and load registration will be required. Applicant's third-party contractor will obtain this from ODOT before transporting large or overweight equipment. Therefore, this third-party permit should be included in or governed by the site certificate.
Removal/Fill Permit	Oregon Department of State Lands	ORS 196; OAR Chapter 141, Division 85 Description: A removal-fill permit is required if 50 cubic yards or more of material is removed, filled, or altered within a jurisdictional water of the State. Applicant will seek a removal/fill permit and include it in the application for site certificate.
Archaeological Excavation Permit	Oregon Parks and Recreation Department, State Historic Preservation Office	ORS Chapters 97, 358, and 390; OAR Chapter 736, Division 51 Description: Ground-disturbing activity that may affect known or unknown archaeological resource on public or

		private lands requires a permit issued by the Oregon Department of Parks and Recreation. Applicant does not anticipate that an additional permit will be required and therefore does not anticipate seeking a permit through the application for site certificate. However, if an additional SHPO permit is required during construction, Applicant will obtain it from SHPO.
Permit Name	Agency	Authority/Description
National Pollution Discharge Elimination System (NPDES) Permit, 1200-C Construction Stormwater NPDES Permit	Oregon Department of Environmental Quality – Water Quality Division Attention: Jackie Ray Eastern Region 800 SE Emigrant Avenue, Suite 330 Pendleton, OR 97801 ray.jackie@deq.state.or.us (541) 278-4605	Clean Water Act, Section 402 (33 U.S.C. § 1342); 40 CFR § 122; ORS 468 and 468B; OAR Chapter 340, Division 45 Description: NPDES permit is required for construction activities that will disturb one or more acres of land.
Local Permits		
Conditional Use Permit and Zoning Permit	Lake County Planning Department Darwin Johnson Jr. Planning Director djohnson@co.lake.or.us 513 Center Street Lakeview, Oregon 97630 (541)947-6036	Lake County Comprehensive Plan Description: Under ORS 469.401(3), following issuance of the site certificate, the County, upon Applicant’s submission of the proper application and fee, shall issue the permits addressed in the site certificate, subject only to the conditions set forth in the site certificate and without hearings or other proceedings.
Installation of Utilities on County and Public Roads Permit and Construction of Road Approaches and Private Road Crossings Permit	Lake County Planning Department Darwin Johnson Jr. Planning Director djohnson@co.lake.or.us 513 Center Street Lakeview, Oregon 97630 (541)947-6036	ORS 374.305 to 374.325 Description: A Utility Crossing permit is required any time a utility is constructed within or across a public right-of-way; an Access Permit may be required if the Facility access roads intersect with public roads, or if necessary upgrades to existing access roads affect a public road.

Exhibit F – Property Ownership

OAR 345-020-0011(1)(f)

(f) A list of names and mailing addresses of all owners of record, as shown on the most recent tax assessment roll, of property located within or adjacent to the site boundary as defined in OAR 345-001-0010. In addition to incorporation the list in the NOI, the applicant shall submit the list to the Department of Energy in electronic format acceptable to the Department for the production of mailing labels. Property adjacent to the site boundary means property that is:

(A) within 100 feet of the site boundary where the site, corridor, or micro siting corridor is within an urban growth boundary;

(B) within 250 feet of the site boundary where the site, corridor or micro siting corridor is outside an urban growth boundary and not within a farm or forest zone; and

(C) within 500 feet of the site boundary where the site, the corridor or micro siting corridor is within a farm or forest zone.

Response

In accordance with OAR 345-020-0011(1)(f)(C), **Table F-1** contains a list of names and mailing addresses of all owners of record in Lake County located within 500 feet of the proposed site boundary for Obsidian Solar Center. Property ownership records were obtained from Lake County on January 11, 2018. **Figure F-1** displays the Lake County property tax lots in relation to the site boundary. An electronic list of property ownership will also be provided to ODOE in a format suitable to produce mailing labels, as requested. As discussed above in Exhibit C, the location of the Facility site boundary will be defined in the preliminary application for site certificate.

Exhibit G – Maps

OAR 345-020-0011(1)(g)

(g) A map or maps showing:

Response

Attachment G contains seven maps that show the required information, as follows:

(A) The proposed locations of the energy facility site, all related or supporting facility sites and all areas that might be temporarily disturbed during construction of the facility in relation to major roads, water bodies, cities and towns, important landmarks and topographic features.

Response

Figure G-1 shows the location of the Facility site boundary and illustrative locations of a Type A and Type B projects within the site boundary in relation to major roads, waterbodies, cities and towns, important landmarks, and topographic features.

(B) The proposed locations of the corridors the applicant has identified under subsection (d) in relation to major roads, water bodies, cities and towns, important landmarks and topographic features.

Response

Applicant has not identified any corridors under subsection (d) so this rule is not applicable. As noted above, the Facility includes neither a pipeline nor transmission line that, by themselves, would be considered an energy facility under ORS 469.300(11)(a)(C).

(C) The study area(s) for the proposed facility as defined in OAR 345-001-0010.

(D) The topography of the study area(s) including streams, rivers, lakes, major roads and contour lines.

Response

Figure G-2 shows the boundaries and topography of Applicant's proposed study areas. Applicant proposes the study areas as defined by OAR 345-0001-0010(59) for land use (0.5 miles), fish and wildlife habitat (0.5 miles), recreational opportunities (5 miles), threatened and endangered species (5 miles), scenic resources (10 miles) and public services (10 miles), as well for protected areas (20 miles), as described in OAR 345-022-0040. See also **Table J-1** below. Based on Applicant's preliminary investigation, Applicant maintains that expansion of these study areas is not needed to adequately address and analyze potential impacts.

(E) All protected areas in the study area as defined in OAR 345-001-0010 for impacts to protected areas.

Response

Figure G-3 displays and labels protected areas in the study area as defined by OAR 345-0001-0010(59). **Figure G-4** shows recreational and historic areas, and **Figure G-5** shows scenic areas. These areas are based on Applicant's preliminary investigation and will be further evaluated during the preparation of the application for site certificate.

(F) The location of any potential waters of the state or waters of the United States that are on or adjacent to the site.

Response

Figure G-6 and **Figure G-7**, showing NWI and NHD features respectively, display potential waters of the State or potential waters of the United States within the vicinity of the Facility. All required water and wetlands surveys will be conducted and detailed information regarding the location of and impact to any waters of the State or of the United States will be provided in the site certificate application.

(G) For energy generation facilities, the approximate locations of any other energy generation facilities that are known to the applicant to be permitted at the state or local level within the study are as defined in OAR 345-001-0010 for impacts to public services.

Response

Figure G-8 shows approximate locations of proposed and existing facilities known to Applicant within 10 miles of the site boundary in accordance with OAR 345-002-0010(59) for impacts to public services.

Exhibit H – Demonstration of Need

OAR 345-002-0011(1)(h)

(h) If the proposed facility is a non-generating energy facility for which the applicant must demonstrate need under OAR 345-023-0005, identification of the rule in division 23 of this chapter under which the applicant intends to demonstrate need and a summary statement of the need and justification for the proposed facility.

Response

The proposed facility does not include a non-generating energy facility for which the Applicant must demonstrate need under OAR 345-023-0005. Therefore, this rule is not applicable.

Exhibit I – Land Use

OAR 345-002-0011(1)(i)

(i) A statement indicating whether the applicant intends to satisfy the Council's land use standard, OAR 345-022-0030, by obtaining local land use approval under ORS 469.504(1)(a) or by seeking a Council determination under ORS 469.504(1)(b).

Response

Applicant intends to satisfy EFSC's land use standard, OAR 345-022-0030, by seeking an EFSC determination under ORS 469.504(1)(b).

Exhibit J – Environmental Impacts

OAR 345-002-0011(1)(j)

(j) Identification of significant potential environmental impacts of construction and operation of the proposed facility on the study areas, including those impacts affecting air quality, surface and ground water quality and availability, wildlife and wildlife habitat, threatened and endangered plant and animal species, historic, cultural and archaeological resources, scenic and aesthetic areas, recreation, and land use.

Response

Exhibit J is based on Applicant’s preliminary investigations and presents potential impact from the proposed Facility’s construction and operation on air quality; surface and groundwater quality and availability (including wetlands and waters of the State or of the United States); wildlife and wildlife habitat; threatened and endangered plant and animal species; historic, cultural, and archaeological resources; scenic and aesthetic areas (including protected areas); recreation; and land use. The discussions contained in Exhibit J based on the study area for each resource, as defined in OAR 345-001-0010(59), are shown in **Table J-1**.

Table J-1. Study Areas for Environmental Impacts

Resource	Study Area	Regulatory Requirement
Air Quality	Site Boundary	Not applicable
Surface and Groundwater Quality and Availability (includes Wetlands and Waters of the United States)	Site Boundary	Not applicable
Wildlife and Wildlife Habitat	0.5 miles from Site Boundary	OAR 345-001-0010(57)(c)
Threatened and Endangered Plant and Animal Species	5 miles from the Site Boundary	OAR 345-001-0010(57)(a)
Historic, cultural, and archeological resources	Site Boundary	Not applicable
Scenic and Aesthetic Areas	10 miles from Site Boundary	OAR 345-001-0010(57)(b)
Recreation	5 miles from Site Boundary	OAR 345-001-0010(57)(d)
Protected Areas	20 miles from Site Boundary	OAR 345-001-0010(57)(e)
Land Use	0.5 miles from Site Boundary	OAR 345-001-0010(57)(c)

Air Quality

Air quality has the potential to be affected during construction, primarily due to vehicle emissions and dust. Air quality will not be adversely affected by operation of the Facility. The solar modules, inverters, collector lines, substation(s), transmission lines, and associated facilities would not generate emissions of air contaminants, so they would consequently not have a negative impact on air quality. Because it is not a potential emitter of air contaminants, the Facility would not require air quality permits.

During construction, air quality impacts would be associated with gasoline and diesel engine exhaust from construction equipment and maintenance vehicles, fugitive dust resulting from vehicles driving on dirt and gravel roads, land clearing, and other construction-related activities. Post-construction impacts on air quality would be limited to vehicle exhaust emissions and from dust emissions associated with vehicular traffic on dirt and gravel roads. Vehicle trips during operations would be limited to up to approximately 15 permanent Facility personnel and occasional deliveries. Applicant will implement dust control measures during construction, which will be detailed in the application for site certificate.

Surface Groundwater

Surface and Groundwater Quality

The Facility will not discharge pollutants to surface water or groundwater. Temporary impacts due to construction stormwater runoff will be controlled in compliance with a NPDES 1200-C permit to be issued by DEQ, which will include an Erosion and Sediment Control Plan. During Facility operations, each O&M facility will discharge domestic wastewater, which will likely be disposed of and treated using an onsite septic system, subject to county approval and permitting to be handled by the EPC contractor.

Surface and Groundwater Availability

During Facility construction, water will be required primarily for dust suppression and road and earthwork compaction. Applicant will confirm the estimated amount of water and will provide additional detail on water use in the application for site certificate. Based on Applicant's preliminary investigations, Applicant does not expect water use during construction is not expected to injure any existing water rights or exceed the amount of water available for beneficial use within the watersheds in which the Facility is located.

During Facility construction, water will be obtained from one or more private licensed water sources with valid water rights and trucked to the site. In the application for site certificate Applicant will confirm both the anticipated amount of water required for construction and that the available private sources are sufficient to meet the Facility requirements during construction.

If sufficient water is not available from these sources, Applicant may install a new, exempt groundwater well. The construction contractor will identify potential water sources and obtain relevant permits for water use.

Only minimal water will be used during Facility operations, primarily at the O&M building(s), at the level of a standard commercial office employing fewer than 20 people. This water use would be associated with restrooms, sinks, and an outside hose for miscellaneous use. If a new well is required, it would be located near the O&M building to provide for O&M building use. If there are two O&M buildings not sufficiently close to each other to share a well, then a separate well would be located near each building.

Wetlands and Waters of the United States

A preliminary desktop analysis of the Facility site boundary was performed to identify potential impacts from Facility construction and operation on potentially jurisdictional wetlands and waters of the State or of the United States. Desktop tools included NWI and NHC data sets. Preliminary review of NWI wetland locations and NHC stream flowlines suggest that wetlands within the site boundary are associated with freshwater ponds and lakes. NWI and NHD locations and feature types are shown in Figures G-6 and G-7 respectively.

An on-site wetland delineation and assessment of potentially jurisdictional wetlands and waters will be conducted within the site boundary. These field studies will identify potential impacts from construction and operation of the Facility on potentially jurisdictional wetlands and waters. The delineation and assessment will be conducted to meet the Oregon Removal/Fill Law and Section 404 of the Clean Water Act. These field studies will commence in the spring of 2018.

The application for site certificate will contain a detailed discussion of the potential impacts to potentially jurisdictional wetlands and waters, including required mitigation (if any), and will identify necessary permits. Where impacts may occur, they will be mitigated in accordance with state and federal law.

Wildlife and Wildlife Habitat; Sensitive, Threatened and Endangered Species

Applicant's preliminary investigation shows that the majority of the land within the site boundary is dominated by sage brush scrub/shrub, surrounded by cultivated croplands to the extent water is available to those landowners. The application for site certificate will contain a detailed analysis of habitat types, plant communities, and dominant vegetation will be developed for the designated study area to identify key habitat features that may attract federal and state special-status species. Given the observable vegetation cover types, the site may provide habitat for a variety of raptors and predatory mammals and their prey. No significant impact on raptors is expected given that raptors are able to hunt within solar farms.

Based on preliminary review of the Oregon Department of Fish and Wildlife (ODFW) big game range maps, the Facility is outside of the winter range for mule deer and pronghorn, but entirely within the area mapped as elk winter range. Applicant will be working with ODFW and ODOE to develop a mitigation plan for impact to elk winter range caused by installing a fence around the site boundary.

Historic, Cultural and Archeological Resources

Based on Applicant's preliminary investigation, there are two sites within the applicable study area that are listed on the National Register of Historic Places. Applicant does not expect the construction or operation of the Facility to have any impact on either site.

Fort Rock Cave/Fort Rock State Park: Fort Rock Cave, listed on the National Register of Historical Places. Fort Rock Cave was the site of the earliest evidence of human habitation in the US state of Oregon before the excavation of Paisley Caves. Fort Rock Cave featured numerous well-preserved sagebrush sandals, ranging from 9,000 to 13,000 years old.

Eskelin, Ed. Ranch Complex: The Ed Eskelin Ranch Complex was listed on the National Register of Historic Places in 1991. The Ranch Complex is located approximately 1 mile south of the southern edge of the site boundary.

Applicant is aware that within and/or adjacent to the site boundary is site 35LK1525, recorded in 1982 by the BLM Lakeview District archaeologist. The site is described as being on a large sand ridge that runs north-south across sections 4, 9, and 16 of T26SR16E (See Figure F-2). As recorded, the site might conflict with the northernmost section of the Facility site boundary as currently outlined. Applicant is not aware of any previous work completed with respect to site 35LK1525 that would establish the site boundaries. In addition, a preliminary review of the SHPO database indicates there have been no previous surveys of the Facility site.

The north and northeast portion of the Facility site appears to follow the ancient shoreline of pluvial Fort Rock Lake. There are likely both cultural and archeological items in this area, some of which may prove to be significant, but many of which will not.

Applicant will conduct a comprehensive cultural resource analysis to determine if any significant archaeological or historic resources will be disturbed by the Facility. Applicant will work closely with interested tribes and state agencies identify and appropriate handle significant historic, cultural and archeological resources identified.

Scenic and Aesthetic Areas

The study area for scenic and aesthetic resources consists of the area within the site boundary plus a 10-mile buffer area around the site boundary (Figure G-5), in accordance with OAR 345-001-0010(59)(b). Pursuant to OAR 345-021-0010(1)(r) and 345-022-0080(1), scenic resources to be considered are those "identified as significant or important in local land use plans, tribal land management plans and federal land management plans for any lands located within the analysis area..."

Applicant will review local land use plans and tribal management plans, if any, for any lands located within the analysis area to identify any significant or important scenic resources. Destinations of interest within the study area to be considered may include Crack-in-the-Ground and Hole-in-the-Ground.

Crack-in-the-Ground is an ancient volcanic fissure over 2 miles long and up to 70 feet deep. Normally, fissures like this one are filled with soil and rock by the processes of erosion and sedimentation. However, because it is located in such an arid region, very little filling has occurred and Crack-in-the-Ground exists today nearly as it did shortly after its formation thousands of years ago. An established 2 mile trail along the fissure's bottom offers a unique hike, where the temperature can be as much as twenty degrees cooler than at the surface.¹

Hole-in-the-Ground is a volcanic explosion crater or maar located on the west edge of the Fort Rock basin. The floor of the crater is at an elevation of 4340 feet and the surrounding area has an elevation of about 4650 feet. The crater is approximately 1370 m (4500 ft) east-west by 1675 m (5500 ft) north-south. The crater was probably formed in a few days or weeks by a series of explosions due to rising basaltic magma coming into contact with abundant ground water at depth. The magma may have been rising along the fault that is exposed in the crater walls. After the initial explosion, repeated slumping and subsidence along a ring fault led to intermittent closures of the vent, changes in the supply of ground water, and repeated pressure buildup. The layering visible in the rim records the pulsing of the eruption.²

Recreation

The study area for recreational opportunities consists of the site boundary plus a surrounding 5-mile buffer area (Figure G-4), in accordance with OAR 345-001-0010(59)(d). In general, recreational activities in the study area consist of hiking, camping, photography, game and bird hunting, and sightseeing. These activities take place in numerous locations outside the study area, and therefore the recreational opportunities within the study area do not rise to the level of uniqueness or irreplaceability that is required by OAR 345-022-0100(1).

One specific recreational opportunity with the study area includes the Fort Rock State Natural Area and Fort Rock Caves.

Exhibit T of the application for site certificate will include more detailed analysis of potential impacts to recreational resources.

Protected Areas

The study area for protected areas is the site boundary plus a surrounding 20-mile buffer (Figure G-3), in accordance with OAR 345-001-0010(59)(e). Protected areas are defined and listed in OAR 345-022-0040. **Table J-2** lists the protected areas within the study area that Applicant's preliminary investigation identified and which are shown on **Figure G-3**. Applicant will continue to research and identify any protected areas and provide a complete analysis and updated **Table J-2** in the application for site certification. It appears that no protected areas are located within the site boundary, and none identified so far would be directly impacted by the construction or operation of the Facility.

¹ <https://www.blm.gov/visit-us/search-details/262730/1>

²

<https://web.archive.org/web/20100123094236/http://www.fs.fed.us/r6/centraloregon/geology/info/volcanoes/holeground.shtml>

Table J-2. Protected Areas within the Study Area

Type	Area Name	Distance to Site Boundary (Miles)	Direction from Facility
(a) National Parks	None		
(b) National Monuments	None		
(c) Wilderness Areas	Sand Dunes Wilderness Study Area Four Craters Lava Bed Wilderness Study Area Squaw Ridge Lava Bed Wilderness Study Area Devils Garden Lava Bed Wilderness Study Area	19 miles 8 miles 9 miles 7 miles	North/Northeast North/Northeast North North
(d) National and State Wildlife Refuges			
(e) National Coordination Area			
(f) Fish Hatcheries	None		
(g) National Recreation and Scenic Areas			
(h) State Parks and Waysides	Fort Rock State Park	6.5 miles	Northwest
(i) State Natural Heritage Sites	None		
(j) State Estuarine Sanctuaries	None		
(k) Scenic Waterways / Wild and Scenic Rivers	None		
(l) Experimental Areas (Rangeland Resources Programs)			
(m) Agricultural Experimental Stations			
(n) Research Forests	None		
(o) BLM Areas of Critical Environmental Concern (ACEC)	Black Hills ACEC Devils Garden Lava Beds ACEC Connley Hills ACEC/RNA	12 miles 7 miles 3.5 miles	Southeast North Southwest
(o) BLM Research Natural Areas and Outstanding Natural Areas	Connley Hills ACEC/RNA Silver Lake Exclosure	3.5 miles 15 miles	Southwest Southwest
(p) State Wildlife Areas and Management Areas (per OAR 635, Div. 8)	Summer Lake Wildlife Area	18	South

Land Use

The study area for land use consists of the area within the site boundary plus a surrounding 0.5-mile buffer, in accordance with OAR 345-001-0010(59)(c). All land within the study area is zoned A-2, agricultural use, by Lake County.

Exhibit K – Public Services

OAR 345-002-0011(1)(k)

(k) Information about significant potential adverse impacts of construction and operation of the proposed facility on the ability of communities in the study area to provide the services listed in OAR 345-022-0110.

Response

OAR 345-001-0010(57)(b) requires the study area for impacts to public services listed in OAR 345-022-0110 include the site boundary plus a surrounding 10-mile buffer. Public services that will be evaluated for potential impacts from the construction and operation of the Facility are listed in OAR 345-020-0011(1)(k) and outlined below:

- Sewers and sewage treatment;
- Water;
- Storm water drainage;
- Solid waste management;
- Housing;
- Traffic safety;
- Police and fire protection;
- Health care; and
- Schools.

Sewers and Sewage Treatment

There are no sewers in the vicinity of the Facility. Significant adverse impacts to community sewer systems are not anticipated. Applicant does not anticipate connecting to sewers or sewage treatment facilities. Therefore, significant adverse impacts to community sewer systems are not anticipated.

Water

There are no public water systems in the vicinity of the Facility. Public water systems will not be adversely affected by construction or operation of the Facility. Facility construction will require water for construction-related activities such as concrete mixing and/or dust control on roads. Water use during operation will be limited to small amounts used for O&M activities for sanitation and human consumption.

In the application for site certificate Applicant will (a) confirm the anticipated amount of water needed for construction and operation, (b) confirm that the identified private water sources can meet the Facility's water requirements during construction, and (c) include an analysis of water

use requirements. If a single water source is found to be insufficient, alternative sources will be identified.

During construction and operation, water will only be obtained from permitted sources with adequate water rights and water availability. Therefore, public water systems will not be adversely affected by the Facility's construction or operation.

Stormwater Drainage

During construction, stormwater will be managed on-site in accordance with a Sediment and Erosion Control Plan. No impact on stormwater is expected. Stormwater management infrastructure put in place during construction will be left in place as needed to continue functioning throughout the life of the facilities.

Solid Waste Management

Solid waste disposal for the Facility during construction and operations will be provided through a private contract with a local commercial hauler (or haulers), and is not anticipated to cause adverse impacts to services already being provided in Lake County.

Housing

Construction

Construction workers will include a combination of locally hired workers for road and general construction and specialized workers for certain types of specialized construction. It is expected that the development of the Facility will require approximately 300 electricians. Many workers are expected to come from outside the study area and will require temporary housing. The percentage of the workforce that is hired locally will depend on the availability of workers with appropriate skills.

Some workers will likely commute daily from nearby communities, which would lessen the impacts to housing associated with the in-migration of outside workers. Workers from outside the area will benefit the surrounding communities and businesses by renting rooms, eating at local restaurants, and purchasing goods and services from local stores.

Operations

An estimated 15 operational personnel, including contract workers, will be permanently employed at the Facility once fully developed. Where possible, O&M staff will be hired locally. Outside contractors will be required from time to time for specialized maintenance tasks. The Facility will be operational for more than 30 years. No significant adverse impacts to housing in the area are anticipated due to housing operational personnel.

Traffic Safety

Primary transportation corridors are assumed to carry most construction related heavy-duty and light-duty delivery vehicles, as well as some workforce traffic. These corridors include the

Fremont Highway (OR 31/US 395), U.S. Highway 97, and Klamath Falls – Lakeview Highway 20. Access to the Site will be via developed and undeveloped county and private roads. During construction, many trucks may be accessing the site on these transportation corridors. Construction-related traffics impacts are not expected to result in any significant adverse impacts to traffic safety given the existing low-level of road use in this area.

The construction of the proposed Facility will result in a temporary increase in local traffic, including large trucks and construction equipment as well as construction workers' vehicles. County roads that will likely convey significant amounts of construction traffic include: Oil Dri Road, Thomas Road, Connelly Road, Fort Rock Road, County Road No. 5-10C, and Derricks Cave Road (County Rd 5-12). Additional private roads will be developed within the site if necessary. If required, a traffic management plan will be developed in cooperation with Lake County to minimize impacts to traffic safety. In addition, Applicant will enter into an agreement with Lake County to ensure that public roads impacted by construction will be left in "as good or better" condition that which existed prior to the start of construction.

Police and Fire Protection

The Facility is not expected to place significant new demands on law enforcement agencies in the area. The Lake County Sheriff's Office is the primary criminal law enforcement agency for Lake County, working with other law enforcement agencies based in Lake County including the Oregon State Police, Lakeview Police, Bureau of Land Management Rangers, and Forest Service Law Enforcement. Full law enforcement services are provided by the Sheriff's Office.

Applicant will work with local fire protection districts to determine which entity or entities will provide fire protection within the site boundary and to address any potential needs for a construction phase fire prevention and management plan. Applicant will also develop first aid and emergency response procedures for the construction and operation phases of the Facility. Development of these plans will involve consultation with local emergency response agencies. Applicant will notify the fire protection districts of construction plans, identify the location of and access to project structures, and assist (if able) in the case of fire in or around the project. The Facility will comply with the Oregon Fire Code.

Health Care

Hospitals within the vicinity of the Facility include the Lake District Hospital in Lakeview, Oregon, St. Charles Medical Center in Bend, Oregon, Sky Lakes Medical Center in Klamath Lake, Oregon, and Harney District Hospital in Burns, Oregon. As per the Occupational Safety and Health Administration's regulations for sites with greater than 100 workers on-site, Applicant anticipates the need to have a safety manager on-site for the Facility. Applicant will look to the EPC contractor to fulfill this requirement. The number of new temporary and permanent residents is not expected to place significant new demands on routine health care services. However, impacts on health care could occur if project construction activities were to result in an increase in the use of emergency health care services exceeding the capacity of local providers. Impacts on local health care services during both construction and operation will be minimized

by careful management of site health and safety risks. Applicant will ensure that the EPC contractor selected for this project has an excellent safety record.

Schools

The site boundary falls within North Lake School District 14, which serves approximately 225 students from the towns of Silver Lake, Christmas Valley, and Fort Rock. The district consists of a single K-12 building that opened in 1991. No significant impact to this school is anticipated during construction or operation of the Facility. Peak construction periods will fall during summer months when school is not in session. The experience from construction projects of this nature is that only a small percentage of workers hired from outside the area bring their families and school-age children for short-term relocation, so the number of additional students should be minimal.

Property Taxes

The Facility, when fully built out to 600 MW ac is expected to pay approximately \$4.2 million per year in property taxes. That is expected to total over \$140 million over the life of the Facility. Property taxes will more than pay for all local services expected to be required for the Facility.

Exhibit L – Water Use

OAR 345-002-0011(1)(I)

(I) Information about anticipated water use during construction and operation of the proposed facility, including:

(A) A description of each source of water and the applicant's estimate of the amount of water the facility will need from each source.

Response

Construction

During construction, the Facility will require water for construction-related activities, primarily dust control. Water is expected to be obtained from nearby private sources.

Operation

During operation, the Facility will require a small amount of water for O&M activities, primarily panel washing cleaning, and sanitation. The Facility will require far fewer than 5,000 gallons per day and will not require a new water right to be obtained under ORS 537.545. Water will be trucked in or taken from an on-site except groundwater well located near the O&M building. If transported, water for sinks, toilets, and equipment wash down will be stored in aboveground water tanks. Drinking water will be brought in separately. Alternatively, a new, exempt groundwater well may be installed next to each O&M building. When the Facility is retired and restored, this well could continue to be used by the property owner for other purposes or be decommissioned.

(B) If a new water right is required, the approximate location of the points of diversion and the estimated quantity of water to be taken at each point.

Response

At this time, it is not anticipated that the Facility will require a new water right.

(C) For operation, the source of cooling water and the estimated consumptive use of cooling water, based on annual average conditions.

Response

The Facility will not require water for cooling so this rule is inapplicable.

Exhibit M – Emissions

OAR 345-002-0011(1)(m)

(m) If the proposed facility would emit carbon dioxide, an estimate of the gross rate of carbon dioxide emissions, a table listing all the factors that form the basis for calculating the estimate, and a statement of the means by which the applicant intends to comply with the applicable carbon dioxide emissions standard under OAR 345-024-560, 345-024-600, or 345-024-630.

Response

The Facility will not emit carbon dioxide so this rule is not applicable.

Exhibit N – Statutes, Rules, and Ordinances

OAR 345-003-0011(n)

OAR 345-002-00011(n). *Identification, by legal citation, of all state statutes and administrative rules and local government ordinances containing standards or criteria that the proposed facility must meet for the Council to issue a site certificate, other than statutes, rules and ordinances identified in Exhibit E, and identification of the agencies administering those statutes, administrative rules and ordinances. The applicant shall analyze and describe any problems the applicant foresees in satisfying the requirements of any such statute, rule or ordinance.*

Response:

Table N-1 identifies state statutes, administrative rules, and local government ordinances containing standards or criteria that the Applicant must meet for EFSC to issue a site certificate, beyond the statutes, rules and ordinances identified in Exhibit E. Applicant does not anticipate difficulty in meeting specific requirements.

Department	Legal Citation	Agency
Oregon Department of Agriculture	Plan Conservation Biology Program – ORS s564; OAR Chapter 603, Division 73	Oregon Department of Agriculture 635 Capitol Street, N.E. Sale, OR 97301-2532 (503) 986-4550
ODEQ – Water Quality	ORS 468 and 468B; OAR Chapter 340, Divisions 14, 41, 53 and 55	Oregon Department of Environmental Quality 475 NE Bellevue Dr. , Ste 110 Bend, OR 97701 (541) 388-6146
ODEQ – Noise	ORS 467; OAR Chapter 340, Division 35	Oregon Department of Environmental Quality 811 SW Sixth Avenue Portland, OR 97204-1390 (503) 229-5696
ODEQ – Hazardous Waste Management	ORS 465 and 466; OAR Chapter 340, Divisions 100-113	Oregon Department of Environmental Quality 811 SW Sixth Avenue Portland, OR 97204-1390 (503) 229-5696

Department	Legal Citation	Agency
ODEQ – Solid Waste	ORS 459; OAR Chapter 340, Division 93	Oregon Department of Environmental Quality 811 SW Sixth Avenue Portland, OR 97204-1390 (503) 229-5696
ODFW – Habitat Conservation Division	ORS 496 and 506; OAR Chapter 635, Divisions 100 and 415	Oregon Department of Fish and Wildlife 3406 Cherry Avenue N.E. Salem, OR 97303-4924 (503) 947-6000
ORBIC	ORS 564.105; OAR 604-73-070 and 345-022-0070	Oregon Biodiversity Information Center Oregon State University Institute for Natural Resources University Center Building, Suite 335 527 Hall Street Portland, OR 97201
Oregon Department of Geology and Mineral Industries	OAR Chapter 632	Oregon Department of Geology and Mineral Industries 800 NE Oregon Street Suite 965 Portland, OR 97232 (971) 673-1555
Oregon Parks and Recreation Department; SHPO – Archeological	Native American Graves and Protected Objects – ORS 97.740-97.760; Archeological Objects and Sites – ORS 358.90-358.955 Permit and Conditions for Excavation or Removal of Archaeological or Historical Materials on Private Lands (OAR 736-051-0090)	State Historic Preservation Office 725 Summer St., NE, Suite C Salem, OR 97301 (503) 986-0671

Department	Legal Citation	Agency
Oregon Office of State Fire Marshal – Emergency Planning and Community Right to Know Act	ORS 453; OAR Chapter 837, Divisions 85 and 95	Oregon Office of State Fire Marshal 4760 Portland Rd NE Salem, OR 97305-1760 (503) 378-3473
Lake County Department of Land Use Planning – Land Use ³	Lake County Development Code	Lake County Planning Department 513 Center Street Lakeview, Oregon 97630 (541) 947-6036
Oregon Department of State Lands	Department of State Lands – OAR Chapter 141	Oregon Department of State Lands 1645 NE Forbes Road Suite 112 Bend, OR 97701 (541) 388-6112
Department of Land Conservation and Development	Comprehensive Land Use Planning Coordination – ORS Chapter 197, ORS 215.274; OAR Chapter 660	Department of Land Conservation and Development 635 Capitol Street NE Ste 150 Salem, OR 97301 (503) 373-0050

³ As stated in Exhibit I: The Applicant intends to satisfy EFSC’s land use standard, OAR 345-022-0030, by seeking an EFSC determination under ORS 469.504(1)(b).

Exhibit O – Application Schedule

OAR 345-002-0011(1)(o)

(o) A schedule stating when the applicant expects to submit a preliminary application for a site certificate.

Response

Applicant intends to submit a preliminary application for site certificate on or about July 19, 2018.

Exhibit P – Consultation with Legislative Commission on Indian Services OAR 345-002-0001(1)(p)

(p) Evidence of consultation with the Legislative Commission on Indian Services to identify each appropriate tribe to consult with regarding the proposed facility's possible effects on Indian historic and cultural resources.

Response

Applicant met with the Legislative Commission on Indian Services regarding the proposed Facility on January 10, 2018, and has identified the following tribes as potentially interested parties: Klamath, Warm Springs, Burns Paiute

In addition, Applicant has retained Thorn Run Partners to manage outreach and coordination aspects of the development. Thorn Run Partners is a government relations firm with experience assisting clients in navigating projects that require government relations expertise at local, state and federal levels simultaneously.

**WRITTEN CONSENT OF SOLE MEMBER AND MANAGER
OF
FT. ROCK SOLAR LLC**

The undersigned, being the sole member and the sole manager of Ft. Rock Solar LLC, an Oregon limited liability company (the "Company"), hereby adopts the following resolutions effective August 29, 2017:

Amendment to Articles of Organization

WHEREAS, the member has determined that it is in the best interest of the Company to file Articles of Amendment with the Oregon Secretary of State to change the Company's name to Obsidian Solar Center LLC;

RESOLVED, that the member hereby approves Articles of Amendment (the "Articles of Amendment") substantially in the form of *Exhibit A* attached hereto, to amend Article 1 of the Company's Articles to state as follows:

"Article 1. The Company's name is Obsidian Solar Center LLC."

FURTHER RESOLVED, that the acts of Obsidian Renewables, LLC in its capacity as member, and the acts of David W. Brown in his capacity as manager of the Company in negotiating, preparing, executing and delivering the Articles of Amendment, and all related documents in the name and on behalf of the Company are hereby ratified and approved.

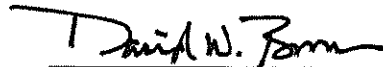
MEMBER:

OBSIDIAN RENEWABLES, LLC, an Oregon limited liability company



By: David W. Brown, Manager

MANAGER:



David W. Brown

EXHIBIT A

Attached.



Articles of Amendment/Dissolution - Limited Liability Company

Secretary of State - Corporation Division - 255 Capitol St. NE, Suite 151 - Salem, OR 97310-1327 - http://www.FilingInOregon.com - Phone: (503) 986-2200

ARTICLES OF AMENDMENT (Complete only 1, 2, 3, 6)

ARTICLES OF DISSOLUTION (Complete 4, 5, 6)

REGISTRY NUMBER: 1226288-94

In accordance with Oregon Revised Statute 192.410-192.490, the information on this application is public record. We must release this information to all parties upon request and it will be posted on our website.

For office use only

Please Type or Print Legibly in Black Ink. Attach Additional Sheet if Necessary.

ARTICLES OF AMENDMENT ONLY

1. ENTITY NAME: Ft. Rock Solar LLC

2. THE FOLLOWING AMENDMENT(S) TO THE ARTICLES OF ORGANIZATION IS MADE HEREBY: (State the article number(s) and set forth the article(s) as it is amended to read.)

ARTICLE 1

The Company's name is Obsidian Solar Center LLC.

3. PLEASE CHECK THE APPROPRIATE STATEMENT:

This amendment was adopted by the manager(s) without member action. Member action was not required.

Date of adoption of each amendment: _____

This amendment(s) was approved by the members. 100% percent of the members approved the amendment(s).

Date of adoption of each amendment: 8/29/2017

ARTICLES OF DISSOLUTION ONLY

4. NAME OF LIMITED LIABILITY COMPANY: _____

5. DATE OF DISSOLUTION: _____

6. EXECUTION: By my signature, I declare as an authorized signer, that this filing has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete. Making false statements in this document is against the law and may be penalized by fines, imprisonment or both.

Signature:

Printed Name:

Title:

David W. Brown

David W. Brown

Manager

CONTACT NAME: (To resolve questions with this filing)

Laura Lindberg

PHONE NUMBER: (Include area code)

503-802-2128

FEES

Required Processing Fee \$100

Processing Fees are nonrefundable. Please make check payable to "Corporation Division".

Free copies are available at FilingInOregon.com using the Business Name Search program.

Submit the original
and one true copy
\$100.00

SECRETARY OF STATE
Corporation Division - Business Registry
255 Capitol Street, N.E., Suite 151
Salem, OR 97310-1327
(503) 986-2200; Facsimile (503) 378-4381

1/9842 \$100
FILED

JUN 23 2016

OREGON
SECRETARY OF STATE

Registry Number:

1226288-94

ARTICLES OF ORGANIZATION

FT. ROCK SOLAR LLC

ARTICLE 1

The Company's name is Ft. Rock Solar LLC.

ARTICLE 2

The Company's duration will be perpetual.

ARTICLE 3

The Company's initial registered agent is TT Administrative Services, LLC and the address of the Company's initial registered office is 1600 Pioneer Tower, 888 SW Fifth Avenue, Portland, Oregon 97204-2099.

ARTICLE 4

The name and address of the Company's organizer is:

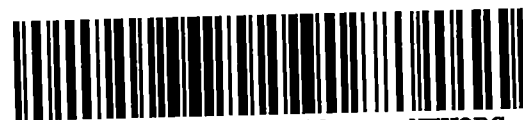
Claire E. Brown
1600 Pioneer Tower
888 SW Fifth Avenue
Portland, Oregon 97204-2099

ARTICLE 5

The mailing address to which notices required under the Oregon Limited Liability Company Act may be mailed until the Company designates an address in its annual report, is:

Claire E. Brown
1600 Pioneer Tower
888 SW Fifth Avenue
Portland, Oregon 97204-2099

FT. ROCK SOLAR LLC



122628894-17103812

NEWORG

1226288-74

ARTICLE 6


The Company will be managed by a manager or managers.

ARTICLE 7

A. The Company will indemnify to the fullest extent permitted by law any person who is made or threatened to be made a party to, witness in, or otherwise involved in, any action, suit or proceeding (any "Claim"), whether civil, criminal, administrative, investigative or otherwise (including an action, suit or proceeding by or in the right of the Company), by reason of the fact that the person (an "Indemnified Person") is or was a member or manager of the Company, or a fiduciary within the meaning of the Employee Retirement Income Security Act of 1974 with respect to any employee benefit plan of the Company, or serves or served at the request of the Company as a director, manager, officer, employee or agent or as a fiduciary of an employee benefit plan, of another limited liability company, corporation, partnership, joint venture, trust or other enterprise. The Company will advance to or pay on behalf of an Indemnified Person expenses (including attorney fees and disbursements) incurred or to be incurred by the Indemnified Person in defending a Claim to the fullest extent permitted by law; provided, however, (i) the obligation to advance or pay an Indemnified Person's expenses excludes expenses incurred in connection with a Claim made by or on behalf of the Company and (ii) the Company may recover from an Indemnified Person any advance or payment if it is subsequently determined by a court decision from which no appeal may be taken that the Indemnified Person was not entitled to be indemnified with respect to the Claim. Any indemnification provided pursuant to this Article 7 shall not be exclusive of any rights to which the Indemnified Person may otherwise be entitled under any provision of these Articles of Organization, or under any operating agreement, other agreement, statute, policy of insurance, vote of members or managers, or otherwise.

B. To the fullest extent permitted by law, no Indemnified Person will be personally liable to the Company or its members for damages by reason of any act or omission performed or omitted which the Indemnified Person believed to be in the interests of the Company.

C. If Oregon statutes are amended after these Articles of Organization are filed with the Secretary of State (i) expanding the conditions under which the Company may indemnify an Indemnified Person or (ii) authorizing action further eliminating or limiting the personal liability of any Indemnified Persons, the statutes, as amended, will apply to the obligations of the Company and the rights of the Indemnified Persons under this Article 7. No (iii) amendment or repeal of this Article 7 by the Company; or (iv) amendment of these Articles of Organization inconsistent with this Article 7; or (v) change in Oregon statutes, will diminish the obligations of the Company or the rights of the Indemnified Persons under this Article 7 with respect to a Claim which arose in whole or in part before the effective date of the amendment or repeal of this Article 7 or these Articles of Organization or the change in Oregon statutes.



Claire E. Brown, Organizer

Person to contact about this filing: Claire E. Brown, (503) 802-5731

Table F-1. Property Owners within 500 feet of the Proposed Facility Site Boundary (Data Obtained January 11, 2018)

Map and Tax Lot	Owner Name	Owner Address	City	State	ZIP
26S15E000000100	U S A	TOM VIBBER, ND #D05.32 700 W MINERAL AVENUE	LITTLETON	CO	80120
26S15E000000200	COIT FAMILY TRUST	2578 S LYON AVE	MENDOTA	CA	93640
26S15E000000201	U S A	TOM VIBBER, ND #D05.32 700 W MINERAL AVENUE	LITTLETON	CO	80120
26S15E000000202	U S A	TOM VIBBER, ND #D05.32 700 W MINERAL AVENUE	LITTLETON	CO	80120
26S15E000000300	ARCHAEOLOGICAL CONSERVANCY TH	1717 GIRARD BLVD. NE	ALBUQUERQUE	NM	87106
26S15E000000400	COIT FAMILY TRUST	2578 S LYON AVE	MENDOTA	CA	93640
26S15E000000500	U S A	TOM VIBBER, ND #D05.32 700 W MINERAL AVENUE	LITTLETON	CO	80120
26S15E000000501	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000000502	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000000503	U S A	TOM VIBBER, ND #D05.32 700 W MINERAL AVENUE	LITTLETON	CO	80120
26S15E000000600	FINE HAROLD L & JUDITH E	83391 CONNLEY LN	SILVER LAKE	OR	97638
26S15E000000700	FINE TROY & ROBERTA KAYE	83394 CONNELLY LN	SILVER LAKE	OR	97638
26S15E000000800	TOBIASSON SCOTT W & JOSE L	P O BOX 93	FORT ROCK	OR	97735
26S15E000000900	TOBIASSON SCOTT W & JOSE L	P O BOX 93	FORT ROCK	OR	97735
26S15E000001000	KITTREDGE DORIS	GEN DEL	FORT ROCK	OR	97735
26S15E000001000	KITTREDGE JACK & DORIS	GEN DEL	FORT ROCK	OR	97735
26S15E000001100	KRUSE FAMILY DEVELOPMENT COMPANY	PO BOX 1682	REDMOND	OR	97756
26S15E000001200	KRUSE RANCH LLC	PO BOX 10	FORT ROCK	OR	97735
26S15E000001201	KRUSE RANCH LLC	PO BOX 10	FORT ROCK	OR	97735
26S15E000001300	KRUSE FAMILY DEVELOPMENT COMPANY	PO BOX 10	FORT ROCK	OR	97735
26S15E000001400	WIDENOJA RICHARD N - LIVING TRUST	63438 FORT ROCK RD	SILVER LAKE	OR	97638-9635
26S15E000001400	WIDENOJA ROGER & PATRICIA D	85955 RAVEN RIDGE LANE	SILVER LAKE	OR	97638
26S15E000001500	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000001600	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000001600	DINSDALE SAMUEL C	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000001700	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000001701	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000001800	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000001900	LA FRANCHI RON	580 N CENTRAL	COQUILLE	OR	97423
26S15E000001900	TIAHRT THEODORE R & JOYCE M	C/O - RON LAFRANCHI 580 NORTH CENTRAL	COQUILLE	OR	97423
26S15E000001901	LA FRANCHI RON	580 N CENTRAL	COQUILLE	OR	97423
26S15E000001902	LA FRANCHI RON	580 N CENTRAL	COQUILLE	OR	97423
26S15E000001902	LAFRANCHI KELLY RENI	PO BOX 395	MYRTLE POINT	OR	97458
26S15E000002000	MOREHOUSE RICHARD & VIRGINIA	80429 CONNLEY LN	SILVER LAKE	OR	97638
26S15E000002001	MOREHOUSE RICHARD & VIRGINIA	80429 CONNLEY LN	SILVER LAKE	OR	97638
26S15E000002100	STATE OF OREGON(LEASE)DEPT OF STATE LAND	BOX 150	FORT ROCK	OR	97735
26S15E000002200	KITTREDGE PROPERTIES, LLC	PO BOX 149	FORT ROCK	OR	97735
26S15E000002300	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000002400	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000002400	DINSDALE SAMUEL C	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000002500	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000002500	DINSDALE SAM	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000002500	DINSDALE SAM & JANIS	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000002500	WAHL VIOLA A	C/O DINSDALE, SAM 57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000002600	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638

Table F-1. Property Owners within 500 feet of the Proposed Facility Site Boundary (Data Obtained January 11, 2018)

Map and Tax Lot	Owner Name	Owner Address	City	State	ZIP
26S15E000002700	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000002800	LAFRANCHI RON	580 N CENTRAL	COQUILLE	OR	97423
26S15E000002900	LA FRANCHI RON	580 NORTH CENTRAL	COQUILLE	OR	97423
26S15E000003000	LA FRANCHI RON	580 N CENTRAL	COQUILLE	OR	97423
26S15E000003100	POPLARS RANCH INC	59234 FORT ROCK RD	SILVER LAKE	OR	97638
26S15E000003101	LA FRANCHI RON	580 NORTH CENTRAL	COQUILLE	OR	97423
26S15E000003200	FINE TROY D & ROBERTA K	83394 CONNLEY LANE	SILVER LAKE	OR	97638
26S15E000004100	LA FRANCHI RON	580 N CENTRAL	COQUILLE	OR	97423
26S15E000004101	LA FRANCHI RON	580 N CENTRAL	COQUILLE	OR	97423
26S15E000004200	LA FRANCHI RON	580 N CENTRAL	COQUILLE	OR	97423
26S15E000004300	MORRISON FAMILY REVOCABLE LIV TRUST	PO BOX 97	FORT ROCK	OR	97735
26S15E000004400	THE POPLARS RANCH INC	59234 FORT ROCK RD	SILVER LAKE	OR	97638
26S15E000004400	ASH GLORIA JEAN	59325 PLAINVIEW ROAD	SILVER LAKE	OR	97638
26S15E000004401	POPLARS RANCH INC	59234 FORT ROCK RD	SILVER LAKE	OR	97638
26S15E000004402	POPLARS RANCH INC	59234 FORT ROCK RD	SILVER LAKE	OR	97638
26S15E000004403	POPLARS RANCH INC. THE	59234 FORT ROCK RD	SILVER LAKE	OR	97638
26S15E000004404	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000004900	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000005000	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000005100	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000005200	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000005300	BELL A LAND & CATTLE CO	BOX 97	LA PINE	OR	97739
26S15E000005400	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000005401	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000005402	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S15E000005500	POPLARS RANCH INC	59234 FORT ROCK RD	SILVER LAKE	OR	97638
26S15E000005600	POPLARS RANCH INC. THE	59234 FORT ROCK RD	SILVER LAKE	OR	97638
26S15E000005601	POPLARS RANCH INC	59234 FORT ROCK RD	SILVER LAKE	OR	97638
26S15E000005700	POPLARS RANCH INC	59234 FORT ROCK RD	SILVER LAKE	OR	97638
26S15E000005800	STATE OF OREGON DEPT OF STATE LANDS	775 SUMMER ST NE STE 100	SALEM	OR	97301
26S15E25AA00100	POPLARS RANCH INC	59234 FORT ROCK RD	SILVER LAKE	OR	97638
26S15E25AA00200	DEARDORFF BRUCE V	2635 NW GARRY ANA DR - APT 4	CORVALLIS	OR	97330
26S15E25AA00300	SWEET THINGS INVESTMENT'S INC	13900 NE 64TH CIRCLE	VANCOUVER	WA	98682
26S15E25AA00400	HAYES CHRISTEN C	946 N RIPON RD	RIPON	CA	95366-9215
26S15E25AA00500	RAEL STEPHEN S & FRANCES K TR	1068 SYCAMORE DRIVE	MILLBRAE	CA	94030
26S15E28CB00100	PARKS ALAN & LAURA L	59234 FORT ROCK RD	SILVER LAKE	OR	97638
26S15E28CB00200	PARKS ALAN & LAURA L	59234 FORT ROCK RD	SILVER LAKE	OR	97638
26S16E000000100	U S A	TOM VIBBER, ND #D05.32 700 W MINERAL AVENUE	LITTLETON	CO	80120
26S16E000000200	JRS PROPERTIES III LP	PO BOX 27	BOISE	ID	83707
26S16E000000300	BEASLEY JESSE L	2422 LARA CT.	MEDFORD	OR	97504
26S16E000000400	WILLIAMSON CHARLES W	PO BOX 7236	SALINAS	CA	93962
26S16E000000500	BEASLEY JESSE L	2422 LARA CT.	MEDFORD	OR	97504
26S16E000000600	WOITH RICKY J	3 VALLEY HIGH DR	PENKIN	IL	61554
26S16E000000700	RUNELS SCOTT L & MARGIE B	PO BOX 39	FORT ROCK	OR	97735
26S16E000000800	RUNELS SCOTT L & MARGIE B	PO BOX 39	FORT ROCK	OR	97735

Table F-1. Property Owners within 500 feet of the Proposed Facility Site Boundary (Data Obtained January 11, 2018)

Map and Tax Lot	Owner Name	Owner Address	City	State	ZIP
26S16E000000900	RUNELS SCOTT L & MARGIE B	PO BOX 39	FORT ROCK	OR	97735
26S16E000001000	RUNELS SCOTT L & MARGIE B	PO BOX 39	FORT ROCK	OR	97735
26S16E000001100	RUNELS SCOTT L & MARGIE B	PO BOX 39	FORT ROCK	OR	97735
26S16E000001200	RUNELS SCOTT L & MARGIE B	PO BOX 39	FORT ROCK	OR	97735
26S16E000001300	RUNELS SCOTT L & MARGIE B	PO BOX 39	FORT ROCK	OR	97735
26S16E000001400	RUNELS SCOTT L & MARGIE B	PO BOX 39	FORT ROCK	OR	97735
26S16E000001500	RUNELS SCOTT L & MARGIE B	PO BOX 39	FORT ROCK	OR	97735
26S16E000001600	RUNELS SCOTT L & MARGIE B	PO BOX 39	FORT ROCK	OR	97735
26S16E000001700	KITTREDGE DORIS	GENERAL DELIVERY	FORT ROCK	OR	97735
26S16E000001800	KITTREDGE DORIS H	GENERAL DELIVERY	FORT ROCK	OR	97735
26S16E000001801	STEVENSON JOHN B & JOYCE	P O BOX 437	CHRISTMAS VALLE	OR	97641
26S16E000001900	FINE HAROLD L & JUDY E	83391 CONNLEY LN	SILVER LAKE	OR	97638
26S16E000002000	TACHERRA WILLIAM J	PO BOX 2	BOLINAS	CA	94924
26S16E000002100	TACHERRA WILLIAM J & JAN P	PO BOX 2	BOLINAS	CA	94924
26S16E000002200	MOORE HALLY L	6762 SW DALY LN	CULVER	OR	97734
26S16E000002201	MARTINEZ S P & LILLIAN TR	PO BOX 821	HAYDEN	ID	83835
26S16E000002299	BORROR AARON J & REBECCA T	PO BOX 38	FORT ROCK	OR	97735
26S16E000002300	U S A	TOM VIBBER, ND #DO5.32 700 W MINERAL AVENUE	LITTLETON	CO	80120
26S16E000002400	FINE HAROLD L & JUDY E	83391 CONNLEY LN.	SILVER LAKE	OR	97638
26S16E000002500	O'LEARY JOHN K	PO BOX 7232	BEND	OR	97708
26S16E000002600	BANSEN DAN K & JUDY C	5801 SE BANSEN LANE	DAYTON	OR	97114
26S16E000002700	COIT FAMILY TRUST	2578 S LYON AVE	MENDOTA	CA	93640
26S16E000002701	HORTON LEE ROY & NANCY B	PO BOX 784	CHRISTMAS VALLE	OR	97641
26S16E000002702	MOREHOUSE RICHARD & VIRGINIA	80429 CONNLEY LN	SILVER LAKE	OR	97638
26S16E000002703	CORNELL BROS INC.	PO BOX 533	CHRISTMAS VALLE	OR	97641
26S16E000002704	HORTON RANDY L	69020 GOODRICH RD	SISTERS	OR	97559
26S16E000002705	HORTON TRUST	PO BOX 784	CHRISTMAS VALLE	OR	97641
26S16E000002706	HORTON TRUST	PO BOX 784	CHRISTMAS VALLE	OR	97641
26S16E000002707	RUNELS SCOTT L & MARGIE B	PO BOX 39	FORT ROCK	OR	97735
26S16E000002708	MOREHOUSE RICHARD & VIRGINIA	80429 CONNLEY LN	SILVER LAKE	OR	97638
26S16E000002800	U S A	TOM VIBBER, ND #DO5.32 700 W MINERAL AVENUE	LITTLETON	CO	80120
26S16E000002900	BARKER PATRICK H & TAMMIE M	GENERAL DELIVERY	SILVER LAKE	OR	97638-9999
26S16E000002901	SILVEUS JAMES A	PO BOX 236	CHRISTMAS VALLE	OR	97641
26S16E000002902	SIMMONS JERALD N & VERLINDA J	PO BOX 88	CHRISTMAS VALLE	OR	97641-0088
26S16E000003000	NOFZIGER CHARLES D	PO BOX 36	CHRISTMAS VALLE	OR	97641
26S16E000003100	BINNS ONA MAE & GILL GARY MICHAEL	373 NORTH LOOP DRIVE	CAMARILLO	CA	93010
26S16E000003200	RUNELS SCOTT L & MARGIE B	PO BOX 39	FORT ROCK	OR	97735
26S16E000003300	RUNELS SCOTT L & MARGIE B	PO BOX 39	FORT ROCK	OR	97735
26S16E000003400	MAUNEY DENNIS & PAMELA	PO BOX 1031	FERNDALE	CA	95536
26S16E000003500	MAUNEY DENNIS R	PO BOX 1031	FERNDALE	CA	95536
26S16E000003600	MAUNEY DENNIS	PO BOX 1031	FERNDALE	CA	95536
26S16E000003800	BEASLEY JESSE LEE	2422 LARA CT.	MEDFORD	OR	97504
26S16E000003900	POTTER RANDOLPH K	171 E MIDWAY LN	SHELTON	WA	98584
26S16E000003901	THOMPSON WILFARD C	GENERAL DELIVERY	CHRISTMAS VALLE	OR	97641
26S16E000003902	DUTCHER DARREN A	171 E MIDWAY LN	SHELTON	WA	98584

Table F-1. Property Owners within 500 feet of the Proposed Facility Site Boundary (Data Obtained January 11, 2018)

Map and Tax Lot	Owner Name	Owner Address	City	State	ZIP
26S16E000003903	THOMPSON WILFARD C	GENERAL DELIVERY	CHRISTMAS VALLE	OR	97641
26S16E000003904	BEAVERS LUCAS	PO BOX 5772	HELENA	MT	59604
26S16E000003905	ELIA MICAH L & WARNER GINGER L	PO BOX 3307	LA PINE	OR	97739
26S16E000004000	TURNBOW LARRY G & TERRY L	86150 CHRISTMAS VALLEY HWY	SILVER LAKE	OR	97638
26S16E000004100	TURNBOW LARRY G & TERRY L	86150 CHRISTMAS VALLEY HWY	SILVER LAKE	OR	97638
26S16E000004200	HOGAN DAVID L & RITA F	2614 1ST STR	TILLAMOOK	OR	97141
26S16E000004400	HOGAN DAVID L & RITA F	2614 1ST STR	TILLAMOOK	OR	97141
26S16E000004400	KRABILL LUCAS ALAN & KATHERINE ELIZABETH	PO BOX 792	CHRISTMAS VALLE	OR	97641
26S16E000004401	MCCLAIN KEVIN & WYNETTA	PO BOX 793	CHRISTMAS VALLE	OR	97641
26S16E000004500	HOGAN DAVID L & RITA F	2614 1ST STR	TILLAMOOK	OR	97141
26S16E000004600	STATE OF OREGON DEPT OF STATE LANDS	775 SUMMER ST NE STE 100	SALEM	OR	97301
26S16E000004700	FINE HAROLD L & JUDY E	83391 CONNLEY LN	SILVER LAKE	OR	97638
26S16E000004800	FINE HAROLD L & JUDY	83391 CONNLEY LN	SILVER LAKE	OR	97638
26S16E000004900	FINE HAROLD L & JUDY E	83391 CONNLEY LN	SILVER LAKE	OR	97638
26S16E000005000	FINE HAROLD L & JUDY	83391 CONNLEY LN	SILVER LAKE	OR	97638
26S16E000005100	FINE HAROLD L & JUDY	83391 CONNLEY LN	SILVER LAKE	OR	97638
26S16E000005200	FINE HAROLD & JUDY	83391 CONNLEY LN	SILVER LAKE	OR	97638
26S16E000005300	FINE HAROLD L & JUDY	83391 CONNLEY LN	SILVER LAKE	OR	97638
26S16E000005400	FINE HAROLD L & JUDY E	83391 CONNLEY LN	SILVER LAKE	OR	97638
26S16E000005500	FORMAN SHANE & JACEY	83136 CONNLEY LANE	SILVER LAKE	OR	97638
26S16E000005500	FORMAN SHANE LOUIS	83136 CONNLEY LANE	SILVER LAKE	OR	97638
26S16E000005600	FORMAN SHANE & JACEY	83136 CONNLEY LANE	SILVER LAKE	OR	97638
26S16E000005601	FORMAN SHANE & JACEY	83136 CONNLEY LANE	SILVER LAKE	OR	97638
26S16E000005700	FINE TROY D & ROBERTA K	83394 CONNLEY LANE	SILVER LAKE	OR	97638
26S16E000005701	FORMAN FAMILY TRUST	83386 CONNLEY LN	SILVER LAKE	OR	97638
26S16E000005800	HANSON GERALD R & JOYCE J	PO BOX 69	FORT ROCK	OR	97735
26S16E000005900	FORMAN SHANE & JACEY	83136 CONNLEY LANE	SILVER LAKE	OR	97638
26S16E000006000	HORTON FAMILY TRUST 1/25/2002	PO BOX 784	CHRISTMAS VALLE	OR	97641
26S16E000006100	HORTON LEE ROY & NANCY B	PO BOX 784	CHRISTMAS VALLE	OR	97641
26S16E000006200	HOGAN DAVID L & RITA F	2614 FIRST STREET	TILLAMOOK	OR	97141
26S16E000006300	HOGAN DAVID L & RITA F	2614 FIRST STREET	TILLAMOOK	OR	97141
26S16E000006400	HOGAN DAVID L & RITA F	2614 FIRST STREET	TILLAMOOK	OR	97141
26S16E000006500	HOGAN DAVID L & RITA F	2614 FIRST STREET	TILLAMOOK	OR	97141
26S16E000006600U02	STUTZMAN RON & IRIS	30367 BUCKMASTER	LEBANON	OR	97355
26S16E000006700	WALDRON ALLEN K ET AL	20680 MIAMI FOLEY ROAD	BAY CITY	OR	97107
26S16E000006700	OVERHOLSER JEANNETTE M	18525 OAKDALE RD.	DALLAS	OR	97338
26S16E000006701	OVERHOLSER JEANNETTE M	18525 OAKDALE RD.	DALLAS	OR	97338
26S16E000006800	U S A	TOM VIBBER, ND #D05.32 700 W MINERAL AVENUE	LITTLETON	CO	80120
26S16E000006900	HOGAN DAVID L & RITA F	2614 1ST STR	TILLAMOOK	OR	97141
26S16E000007000	HOGAN DAVID L & RITA F	2614 1ST STR	TILLAMOOK	OR	97141
26S16E000007100	HOGAN DAVID L & RITA F	2614 1ST STR	TILLAMOOK	OR	97141
26S16E000007200	HOGAN DAVID L & RITA F	2614 1ST STR	TILLAMOOK	OR	97141
26S16E000007300	HOGAN DAVID & RITA	2614 1ST ST	TILLAMOOK	OR	97141
26S16E000007400	HANSON GERALD R & JOYCE J	PO BOX 69	FORT ROCK	OR	97735
26S16E000007500	CORNELL BROS. INC.	PO BOX 533	CHRISTMAS VALLE	OR	97641

Table F-1. Property Owners within 500 feet of the Proposed Facility Site Boundary (Data Obtained January 11, 2018)

Map and Tax Lot	Owner Name	Owner Address	City	State	ZIP
26S16E000007600	HANSON GERALD R & JOYCE J	PO BOX 69	FORT ROCK	OR	97735
26S16E000007601	KERNS SHARON R	40757 DEERHORN ROAD	SPRINGFIELD	OR	97478
26S16E000007602	HANSON GERALD R	PO BOX 69	FORT ROCK	OR	97735
26S16E000007700	HAROLD M MILLER TRUST	PO BOX 989	JEFFERSON	OR	97352
26S16E000007800	U S A	TOM VIBBER, ND #DO5.32 700 W MINERAL AVENUE	LITTLETON	CO	80120
26S16E000007900	EIDE PHILIP J & PAMELA R	PO BOX 254	CHRISTMAS VALLE	OR	97641
26S16E000007900	WILSON DELL RENEE	PO BOX 11	CHRISTMAS VALLE	OR	97641
26S16E000008000	STATE OF OREGON DEPT OF STATE LANDS	775 SUMMER ST NE STE 100	SALEM	OR	97301
26S16E240000100	U S A	TOM VIBBER, ND #DO5.32 700 W MINERAL AVENUE	LITTLETON	CO	80120
26S16E240000200	MORSE MARVIN & DENA	PO BOX 152	CHRISTMAS VALLE	OR	97641
26S16E240000300	MCCOLLUM KREG D	5340 SE GOBLE	PRINEVILLE	OR	97754
26S16E240000400	MCCOLLUM KREG D	5340 SE GOBLE	PRINEVILLE	OR	97754
26S16E240000500	SUNNES BRADLEY N & STEFANIE D 1/2	4465 S W RIVER RD	HILLSBORO	OR	97123
26S16E240000600	KLAUS K A & LYNDA O KUEHN REV. TRUST	3404 BEVERLY DR	SAN BERNARDINO	CA	92405
26S16E240000601	MORSE MARVIN	PO BOX 887	CHRISTMAS VALLE	OR	97641
26S16E240000602	ARAGON NORBERTO	C/O - PATRICIA K CARPENTER 2223 URANUS AVE	LAS CRUCES	NM	88012
26S16E240000700	MORSE MARVIN & DENA	PO BOX 152	CHRISTMAS VALLE	OR	97641
26S16E240000800	MORSE MARVIN	PO BOX 887	CHRISTMAS VALLE	OR	97641
26S16E240000900	IGLOO INDUSTRIES LLC	301 THELMA DR #153	CASPER	WY	82609
26S16E240001000	BURGIO ANTHONY & IDA	832 N LIMA STREET	BURBANK	CA	91505
26S16E240001100	GHIGLIA DENNIS C	258 RED RIM DRIVE	GRAND JUNCTION	CO	81507
26S16E240001200	BAKER KELLIE C	PO BOX 6324	CRESTLINE	CA	92325
26S16E240001300	PETTIT ROBERT THOMAS TRUSTEE	6045 WINFIELD AVE	LA MESA	CA	91942
26S16E240001400	PETTIT ROBERT THOMAS TRUSTEE	6045 WINFIELD AVE	LA MESA	CA	91942
26S16E300000100	HANSON GERALD R & JOYCE J	PO BOX 69	FORT ROCK	OR	97735
26S16E300000200	SING JOE W & CONNIE R	17826 ORIOLE CT.	PENN VALLEY	CA	95946
26S16E300000201	FEATHERSTON MITCHELL ANDREW	17826 ORIOLE CT.	PENN VALLEY	CA	95946
26S16E300000202	SING JOE W & CONNIE R	17826 ORIOLE CT.	PENN VALLEY	CA	95946
26S16E300000203	FEATHERSTONE DARRELL	17826 ORIOLE CT	PENN VALLEY	CA	95946
26S16E300000204	SING JOE W & CONNIE R	17826 ORIOLE CT.	PENN VALLEY	CA	95946
26S16E300000205	SING JOE W & CONNIE R	17826 ORIOLE CT.	PENN VALLEY	CA	95946
26S16E300000206	FEATHERSTONE DARRELL	17826 ORIOLE CT.	PENN VALLEY	CA	95946
26S16E300000207	FEATHERSTON MITCHELL ANDREW	17826 ORIOLE CT.	PENN VALLEY	CA	95946
26S16E300000300	HANSON GERALD R & JOYCE J	PO BOX 69	FORT ROCK	OR	97735
26S16E300000400	HANSON GERALD R & JOYCE J	PO BOX 69	FORT ROCK	OR	97735
26S16E300000500	HANSON GERALD R & JOYCE J	PO BOX 69	FORT ROCK	OR	97735
26S16E300000600	HANSON GERALD R & JOYCE J	PO BOX 69	FORT ROCK	OR	97735
26S16E300000700	HANSON GERALD R & JOYCE J	PO BOX 69	FORT ROCK	OR	97735
26S16E300000800	RHINEHART BOB & JUDY ANN	1043 DREXEL WAY	SAN JOSE	CA	95124
26S16E300000900	HANSON GERALD R & JOYCE J	PO BOX 69	FORT ROCK	OR	97735
26S16E300001000	MCDIVITT R.L. & M.L. ET UX	4463 S SMITH RIVER ROAD	REEDSPORT	OR	97467
26S16E300001100	HANSON GERALD R & JOYCE J	PO BOX 69	FORT ROCK	OR	97735
26S16E310000100	MARTIN WAYNE & REBEKAH	1475 NE LOCKSLEY DR	BEND	OR	97701
26S16E310000200	SAM YAUWAH B & WAIMING C	880 SE 25TH COURT	HILLSBORO	OR	97123
26S16E310000300	HANSON GERALD R & JOYCE J	PO BOX 69	FORT ROCK	OR	97735

Table F-1. Property Owners within 500 feet of the Proposed Facility Site Boundary (Data Obtained January 11, 2018)

Map and Tax Lot	Owner Name	Owner Address	City	State	ZIP
26S16E310000400	HANSON GERALD R & JOYCE J	PO BOX 69	FORT ROCK	OR	97735
26S16E310000500	WALDECKER JACQLYN ANNETTE & JESSICA ANN	10420 10TH ST #2	PHOENIX	AZ	85020
26S16E310000600	GROSSBERG WILLIAM M TRUSTEE	7216 S KAISER DR	MOHAVE VALLEY	AZ	86440
26S16E310000700	MCDIVITT RONALD L & MARY L	4463 S SMITH RIVER ROAD	REEDSPORT	OR	97467
26S16E310000800	SHIRLEE L MUNSON LIVING TRUST	PO BOX 13289	NEWPORT BEACH	CA	92658
26S16E310000900	HANSON MICHAEL ROY	P O BOX 130	FORT ROCK	OR	97735
26S16E310001000	HANSON MICHAEL ROY	P O BOX 130	FORT ROCK	OR	97735
26S16E310001100	HANSON MICHAEL	P O BOX 130	FORT ROCK	OR	97735
26S16E310001200	BRENNAN JOHN C	PO BOX 1070	CRESCENT LAKE	OR	97733
26S16E310001300	DALE STEPHEN F	10146 SAINT PAUL STREET	DENVER	CO	80229
26S16E310001400	HANSON GERALD & JOYCE	PO BOX 69	FORT ROCK	OR	97735
26S16E310001500	HANSON GERALD & JOYCE	PO BOX 69	FORT ROCK	OR	97735
26S16E310001600	BYRD STEPHEN C & JUDY	8301 TIETON DR #76	YAKIMA	WA	98908
26S16E310001700	WIEGAND MARK DAVID	144 BARRY ROAD	IRON RIVER	MI	49935
26S16E310001800	WIEGAND MARK DAVID	144 BARRY ROAD	IRON RIVER	MI	49935
26S16E310001900	DOYLE CHIRS & ANGELA	52277 LECHNER LN	LA PINE	OR	97739
26S16E310002000	DOYLE CHIRS & ANGELA	52277 LECHNER LN	LA PINE	OR	97739
26S16E310002100	BEAVER JODIE J 1/2	388 STANDING BEAR	CATHERDRAL CITY	CA	92234
26S16E310002200	HANSON MICHAEL ROY	P O BOX 130	FORT ROCK	OR	97735
26S16E310002300	HANSON MICHAEL ROY	P O BOX 130	FORT ROCK	OR	97735
26S16E310002400	STRAND JASON M & SHANNON A	2192 NE 38TH DR	GRESHAM	OR	97030-2127
26S16E310002500	ROOD STEPHENIE	509 LOCKHART	NORTH BEND	OR	97459
26S16E310002600	ROOD STEPHENIE	509 LOCKHART	NORTH BEND	OR	97459
26S16E310002700	BOULEY ROBERT E & LAURILEE A	90558 LINK ROAD	EUGENE	OR	97402
26S16E310002800	BOULEY ROBERT E & LAURILEE A	90558 LINK ROAD	EUGENE	OR	97402
26S16E310002900	HANSON GERALD & JOYCE	PO BOX 69	FORT ROCK	OR	97735
26S16E310003000	HANSON GERALD & JOYCE	PO BOX 69	FORT ROCK	OR	97735
26S16E310003100	HOOVER DENA L	2228 QUAIL HAVEN ROAD	WRIGHTWOOD	CA	92397
26S16E310003200	T & K SARTIN DBA NORTHWEST BUILDERS	PO BOX 457	DRAIN	OR	97435
26S16E310003300	HANSON GERALD & JOYCE	PO BOX 69	FORT ROCK	OR	97735
26S16E310003400	HICKMAN PAUL S	10259 STAFFORD ST	RANCHO CUCAMO	CA	91730
26S16E310003500	CORNELL PATRICK	83075 SALT FLAT LANE	SILVER LAKE	OR	97638
26S16E310003600	DINSDALE SAMUEL C & ALICE J 1/2	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S16E310003600	SELBY CAROLINE R	PHILLIPS, DON 57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S16E310003700	GRAHAM JAMES MATTHEW & CORNELIUS RONALD	1150 NEBRASKA CT NE	SALEM	OR	97301
26S16E310003800	THRALL A L & PAULINE P	1574 COBURG RD PMB 570	EUGENE	OR	97401
26S16E310003900	ANDERSON KELLY J	12642 NW BARNES ROAD #12	PORTLAND	OR	97229
26S16E310004000	WRIGHT ROBERT H & EDITH H	5678 PASEO FAMOSA	HEMET	CA	92545
26S16E310004100	BULLARD MARTIN L & ADA L	83314 LORANE HWY	EUGENE	OR	97405
26S16E310004200	SEELKE JOHN E & KEVIN W	31459 S HIGHWAY 213	MOLALLA	OR	97038-9597
26S16E310004300	BUSBY SCOTT	PO BOX 1007	MARTINEZ	CA	94553
26S16E310004400	MINOR REBECCA	16231 STEPH CT	OREGON CITY	OR	97045
26S16E310004500	BORTNER BARRY	892 WILLOW WALK	CALABASH	NC	28467
26S16E310004600	BORTNER BARRY	892 WILLOW WALK	CALABASH	NC	28467
26S16E310004700	CHRISTENSEN JANELLE A	2915 WALNUT ST	BELLINGHAM	WA	98225

Table F-1. Property Owners within 500 feet of the Proposed Facility Site Boundary (Data Obtained January 11, 2018)

Map and Tax Lot	Owner Name	Owner Address	City	State	ZIP
26S16E310004800	YATES DOROTHY E	PO BOX 794	CHRISTMAS VALLE	OR	97641
26S16E310004900	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S16E310005000	GORTON KENNETH P & PATRICIA	3524 E AVE R #210	PALMDALE	CA	93550
26S16E310005100	ROZELLE JAMES & MARGUERITE	PO BOX 1267	ALBANY	OR	97321
26S16E310005200	BROWN ROBERT D & ALLISON J	PO BOX 2695	OREGON CITY	OR	97045
26S16E310005300	BROWN ROBERT D & ALLISON J	PO BOX 2695	OREGON CITY	OR	97045
26S16E310005400	MICHALAK FREDA	18485 GRANITE	RIVERSIDE	CA	92508
26S16E310005500	BARR THOMAS W & JENNIFER L	159 BARN RD	POLLOCK	ID	83547-5013
26S16E310005600	BEARDEN A E & DOROTHY A	603 WHITE ASH TRL	MOORESVILLE	IN	46158
26S16E310005700	VINCENT J KILBRIDE 2015 REV TRUST	2465 IDYLLWILD AVE	RIALTO	CA	92376
26S16E310005800	VINCENT J KILBRIDE 2015 REV TRUST	2465 IDYLLWILD AVE	RIALTO	CA	92376
26S16E310005900	TUTER CORNEL & GENELL	726 NE JACKSON ST	ROSEBURG	OR	97470
26S16E310006000	DEAN KYLE & CAROL	1090 W 17TH AVE	JUNCTION CITY	OR	97448
26S16E310006100	DINSDALE SAMUEL C & ALICE J	57673 FORT ROCK ROAD	SILVER LAKE	OR	97638
26S16E310006200	GREEN D TERESA	667 18TH ST	SAN PEDRO	CA	90731
26S16E310006300	BAER ARNOLD A	1795 N LANDEN STREET	CAMARILLO	CA	93010
26S16E310006400	PROLETARIAT PROPERTIES LLC	26943 189TH AVE SE	COVINGTON	WA	98042
26S16E320000100	JOSHUA TREE ASSOCIATES LLC	301 THELMA #153	CASPER	WY	82609
26S16E320000101	SKINNER JOHN	2177 SOUTH PACIFIC HWY	MEDFORD	OR	97501
26S16E320000200	FELSENTHAL MARGA-REV LIVING TRUST	5314 BATAVIA ROAD	SOUTH GATE	CA	90280
26S16E320000300	DOLAN MICHAEL W	PO BOX 367	SAINT PAUL	OR	97137
26S16E320000400	CORNELL BROS INC.	PO BOX 533	CHRISTMAS VALLE	OR	97641
26S16E320000500	HOLLOWAY DONALD W	8825 WEST AVENUE L	LANCASTER	CA	93536
26S16E320000501	MONTANYE JANET E	43973 EL LUCERO PLACE	TEMECULA	CA	92592
26S16E320000600	HANSON GERALD R & JOYCE J	PO BOX 69	FORT ROCK	OR	97735
26S16E320000700	ROTTENKOLBER WILLIAM M	PO BOX 399	INDEPENDENCE	OR	97351
26S16E320000800	BRINKLEY JENNIFER	3132 EAGLE LAKE COURT	CHICO	CA	95926
26S16E320000900	HYATT GRAHAM	100 EVANSVIEW GARDENS NW	CALGARY	AB	T3P0L2
26S16E320000901	KENT JAMES L	95477 NORATON ROAD	JUNCTION CITY	OR	97448
26S16E320001000	MCDIVITT RONALD L & MARY L	4463 S SMITH RIVER RD.	REEDSPORT	OR	97467
26S16E33A000100	MALONE JERRY & LOUELLA	N7567 EDGEWOOD DRIVE	SPRINGBROOK	WI	54875
26S16E33A000200	KANESTER T A & WINNIEFRED	4466 SUMMER DR	OCEANSIDE	CA	92056
26S16E33A000300	GOMEZ FRANCISCO	P O BOX 800	TECATE	CA	91980
26S16E33A000400	YARBROUGH JOSEPH R	5325 ELKHORN BLVD #267	SACRAMENTO	CA	95842
26S16E33A000401	ALL FINANCE LLC	20272 WEST VALLEY BLVD	TEHACHAPI	CA	93561
26S16E33A000402	EDMONSON PATRICIA	567 PATMORE RD	COUPEVILLE	WA	98239
26S16E33A000500	WALLACE JARED Q	PO BOX 1512	ZILLAH	WA	98953
26S16E33A000600	U S A	TOM VIBBER, ND #DO5.32 700 W MINERAL AVENUE	LITTLETON	CO	80120
26S16E33A000700	CRAVEN GARY K	61451 BLURTON CT	BEND	OR	97702
26S16E33A000800	SCOTT GEOFFERY	5088 SO 2575 WEST	ROY	UT	84067
26S16E33A000801	LAWRENCE J CHANDLER & YONG HUI FAM TR	1032 AGUILERA CT.	LAS CRUCES	NM	88005
26S16E33D000100	BOLOSAN RHONEIL TUNAY	295 NW CHERRYHILL LOOP	OAK HARBOR	WA	98277
26S16E33D000200	SCHICK LOIS	12823 W 3RD PLACE	LAKEWOOD	CO	80228-1301
26S16E33D000300	WILSON ELIZABETH M	PO BOX 121	NEWPORT	OR	97365
26S16E33D000400	SIMPER ROBYN K	5899 SAGEWOOD DR.	SALT LAKE CITY	UT	84107

Table F-1. Property Owners within 500 feet of the Proposed Facility Site Boundary (Data Obtained January 11, 2018)

Map and Tax Lot	Owner Name	Owner Address	City	State	ZIP
26S16E33D000500	ALPHA FOUNDATION THE	14751 S LEABO ROAD	MOLALLA	OR	97038
26S16E33D000600	ADAMS IRVING W & MARGARET F	1754 BISMARCK ST	RICHLAND	WA	99354
26S16E33D000700	TINSLEY BYRON & JUDY	417 NE WILSHIRE AV	BARTLESVILLE	OK	74006
26S16E33D000800	KREBS REALTY LLC	9208 NE HWY 99 STE 107-51	VANCOUVER	WA	98665
26S16E33D000900	WILLSEY ROXANNE V	PO BOX 131	CHRISTMAS VALLE	OR	97641
26S16E33D001000	CARMONA IKE & ISABLE	8808 NE 379TH STREET	LA CENTER	WA	98629
26S16E33D001100	KARR MYRON D II	1600 SILVER CREEK RD	BULLHEAD CITY	NV	86442-8505
26S16E33D001200	KALLEPPAN ANITA DEVI	225 S TROPICAL TRL APT 412	MERRITT ISLAND	FL	32952-4875
26S16E33D001300	PRITCHARD TIMOTHY DEAN	3018 HARDIES LN	SANTA ROSA	CA	95403
26S16E33D001400	GOODNATURE STACY L	83615 SALT FLAT LN.	SILVER LAKE	OR	97638
26S16E33D001500	AMEREH FAUD F	1293 ECHO WIND AVENUE	HENDERSON	NV	89052
26S16E33D001600	IGLOO INDUSTRIES LLC	301 THELMA DR #153	CASPER	WY	82609
26S16E33D001700	GROTE FREDRICH A & ELKE M	2177 CARMELITA DR	SAN CARLOS	CA	94070
26S16E33D001800	PIERSON JULIA ANN & TRAVIS LANE	1739 NIEDERMAYER DR	CENTRAL POINT	OR	97502
26S16E33D001900	REICH GRANT VAUGHAN	1895 N 8TH ST	COOS BAY	OR	97420
26S16E33D002000	GOODSON KAPAYA	807 NE BEECH ST	PORTLAND	OR	97212
26S16E33D002100	MADDEN DON	83615 SALT FLAT LN	SILVER LAKE	OR	97638
26S16E33D002100	JAHNS RONALD & KARLA	1827 NE WELLS ACRES RD	BEND	OR	97701
26S16E33D002200	MOORE MICHELLE ROSALIND	304 VINE ST	CHENEY	WA	99004
26S16E33D002300	RAWLINGS DONALD E & BARBARA J	6203 COWLITZ LN	PASCO	WA	99301
26S16E33D002400	CASE SHARON	6160 MYRTLE AVE	LONG BEACH	CA	90805
26S16E33D002500	IGLOO INDUSTRIES LLC	301 THELMA DR #153	CASPER	WY	82609
26S16E33D002600	RG CHILDREN'S TRUST	1960 CARLA RIDGE	BEVERLY HILLS	CA	90210
26S16E33D002700	JACKSON MERYLE A ET AL	25276 AVENIDA DORENA	NEWHALL	CA	91321
26S16E33D002800	JACKSON MERYLE A ET AL	25276 AVENIDA DORENA	NEWHALL	CA	91321
26S16E33D002900	ROBERTS ANTHONY J	8651 FOOTHILL BLVD #120	RANCHO CUCAMO	CA	91730
26S16E33D003000	MURAO HATSUO & KENNETH A	P.O. BOX 17669	HONOLULU	HI	96817
26S16E33D003100	KENNEY CHERRI A	9237 N CHARLESTON AVENUE	PORTLAND	OR	97203
26S16E33D003200	EIDE DANIEL S & CAMILLE J	39186 AMHERST ST	SANDY	OR	97055
26S16E34C000100	LUKENBAUGH DALE & DARLA	PO BOX 293	SCIO	OR	97374
26S16E34C000200	SUTTON LESLIE R 1/5 ETAL	8817 262ND ST E	GRAHAM	WA	98338
26S16E34C000300	PELHAM CHANDLER	2117 CACTUS DESERT CT	LAS VEGAS	NV	89084-3172
26S16E34C000400	MORSE BETH ANN	PO BOX 845	CHRISTMAS VALLE	OR	97641
26S16E34C000500	MORSE BETH ANN	PO BOX 845	CHRISTMAS VALLE	OR	97641
26S16E34C000600	ADAIR CLYDE ALAN & LORIANN	GENERAL DELIVERY	CHRISTMAS VALLE	OR	97641
26S16E34C000700	TATE DONALD	1512 FRANKLIN ST APT #3	VANCOUVER	WA	98660
26S16E34C000800	DAY DONALD	1466 NW BEACON ST	ROSEBURG	OR	97470
26S16E34C000900	PURVIS CECIL C & BERNICE A	P.O. BOX 42	LODI	CA	95241
26S16E34C001000	PURVIS CECIL & BERNICE	P.O. BOX 42	LODI	CA	95241
26S16E34C001100	RATKAY LEIGHTON	463-265 MAIN STREET	JANESVILLE	CA	96114
26S16E34C001200	RATKEY LEIGHTON	3949 HOEPKER RD	MADISON	WI	53718
26S16E34C001300	JOHNSON VERNON E & NANCY L	6307 MAIN AVE.	ORANGEVALE	CA	95662
26S16E34C001400	JOHNSON VERNON E & NANCY L	6307 MAIN AVE.	ORANGEVALE	CA	95662
26S16E34C001500	ROTA ANTONIO & DARLEEN	20089 SERRANO	APPLE VALLEY	CA	92307
26S16E34C001600	HANEY PAULA R	12814 NE 7TH AVE	VANCOUVER	WA	98685

Table F-1. Property Owners within 500 feet of the Proposed Facility Site Boundary (Data Obtained January 11, 2018)

Map and Tax Lot	Owner Name	Owner Address	City	State	ZIP
26S16E34C001700	IVY JESSE K & MASON PATTI E	60353 TALL PINE AVE	BEND	OR	97702
26S16E34C001800	EVANS SCOTT G	PO BOX 387	TOLEDO	OR	97391
26S16E34C001900	FERGUSON WILLIAM D & LOIS M TTEES	10866 MARTIN TERRACE CT.	SONORA	CA	95370
26S16E34C002000	FERGUSON WILLIAM D & LOIS M	10866 MARTIN TERRACE CT.	SONORA	CA	95370
26S16E34C002100	O'NEILL PAMELIA E	1463 OLD STATE RD	BINGHAMTON	NJ	13904
26S16E34C002200	O'NEILL PAMELIA E	1463 OLD STATE RD	BINGHAMTON	NJ	13904
26S16E34C002300	WHITAKER JOYCE M TR	1663 PALA PL	ORANGE	CA	92667
26S16E34C002400	LOOP BETTINA A TRUSTEE OF THE	131 S IRENA AV	REDONDO BEACH	CA	90277
26S16E34C002500	BURTON DAVID B	51588 NW HAYWARD ROAD	MANNING	OR	97125
26S16E34C002600	SUTTON LESLIE R 1/5 ETAL	8817 262ND ST E	GRAHAM	WA	98338
26S16E34C002700	TAYLOR ANDREW M	127 TUSTIN COURT	BENICIA	CA	94510
26S16E34C002800	TAYLOR ANDREW M	127 TUSTIN COURT	BENICIA	CA	94510
26S16E34C002900	MILLER SANDRA	1200 N MAIN ST UNIT 668	MERIDIAN	ID	83680
26S16E34C003000	LEE KAI JING	3428 SE KELLY	PORTLAND	OR	97202
26S16E34C003100	GIN KAN TOY	3929 SE 52ND	PORTLAND	OR	97206
26S16E34C003200	LUTMAN GARY & CHERIE	P O BOX 41	LORANE	OR	97451
26S16E350000100	CAMERON RICHARD LEON	PO BOX 882	CHRISTMAS VALLE	OR	97641
26S16E350000200	CAMERON RICHARD L	PO BOX 882	CHRISTMAS VALLE	OR	97641
26S16E350000300	ORTIZ ALBERTO M & DENISE	14613 LAKE VICTOR DR	PFLUGERVILLE	TX	78660
26S16E350000400	HEDMAN RANDALL KEITH	3751 GRIFFITH AVE	CLOVIS	CA	93619
26S16E350000500	MCELHATTON JAMES & ALISA	PO BOX 483	OAKLAND	OR	97462
26S16E350000500	MCELHATTON JAMES	PO BOX 483	OAKLAND	OR	97462
26S16E350000600	PELUSO LUIGI	63 AMAZON DR	PUNTA GORDA	FL	33983
26S16E350000700	KEHOE PEGGY	1907 HAVEMEYER LANE #A	REDONDO BEACH	CA	90278
26S16E350000800	ALEXANDER FRANK H. & JANET L.	93148 BEAR CREEK RANCH ROAD	JUNCTION CITY	OR	97448
26S16E350000900	CORCUERA JULIO AND SARA	3232 ARROWHEAD ST.	EUGENE	OR	97404
26S16E350001000	RISHEL CRAIG A	16840 BARBARA WAY	BEND	OR	97701
26S16E350001100	IVY JESSE K & MASON PATTI E	60353 TALL PINE AVE	BEND	OR	97702
26S16E350001101	HEDRICKS ANDY	PO BOX 7	SUMMER LAKE	OR	97640-0007
26S16E350001200	DOMINGO R & CABRERA E & YUSUF M	481 LELAND AVE	SAN FRANCISCO	CA	94134
26S16E350001300	ANDREAS THOMAS D & GWENDOLYN V	PO BOX 531	CHRISTMAS VALLE	OR	97641-0531
26S16E350001400	WILSON LINDA 1/3	BRANDON, CHERYL 1/3 17415 KENT RD	SISTERS	OR	97759
26S16E350001500	LAND RUN PROPERTIES, LLC	1205 AIR DEPOT BLVD SUITE 295	MIDWEST CITY	OK	73110
26S16E350001600	HOOVER GERALD T & LINDA	2274 N SIRIUS AVE	THOUSAND OAKS	CA	91360
26S16E350001700	BOYDSTON LARRY	1322 NW DEER DR	TOLEDO	OR	97391
26S16E350001800	HUNT GAILA J	PO BOX 6211	PAHRUMP	NV	89041
26S16E350001900	SOUTHWEST LAND VENTURES TWO LLC	4594 VELVET CREST LN	LAS VEGAS	NV	89139
26S16E350002000	ARTTU DENNIS	129 TUCKER AVE	SAN FRANCISCO	CA	94134
26S16E350002100	PERRY KEN & KELLI	13025 HIGHWAY 42	CAMAS VALLEY	OR	97416
26S16E350002200	EBERHARD RICHARD & ROBYN	PO BOX 2191	REDMOND	OR	97756

Figure B -1

Facility Layout (Option 1)

To come.

Figure B-2

Facility Layout (Option 2)

To come.



SWINERTON
RENEWABLE ENERGY

CONSULTANT



BLMYER
ENGINEERS
1101 MARINA VILLAGE PARKWAY # 100
ALAMEDA, CA 94501 510.521.3773

STAMP/SEAL

REV # DESCRIPTION DATE
FOR CLIENT REVIEW

PROJECT TITLE:
**FORT ROCK SOLAR
SINGLE-AXIS TRACKER
600 MWAC PV ARRAYS +
1200 MWH BESS
LAKE COUNTY, OR**

SHEET TITLE:

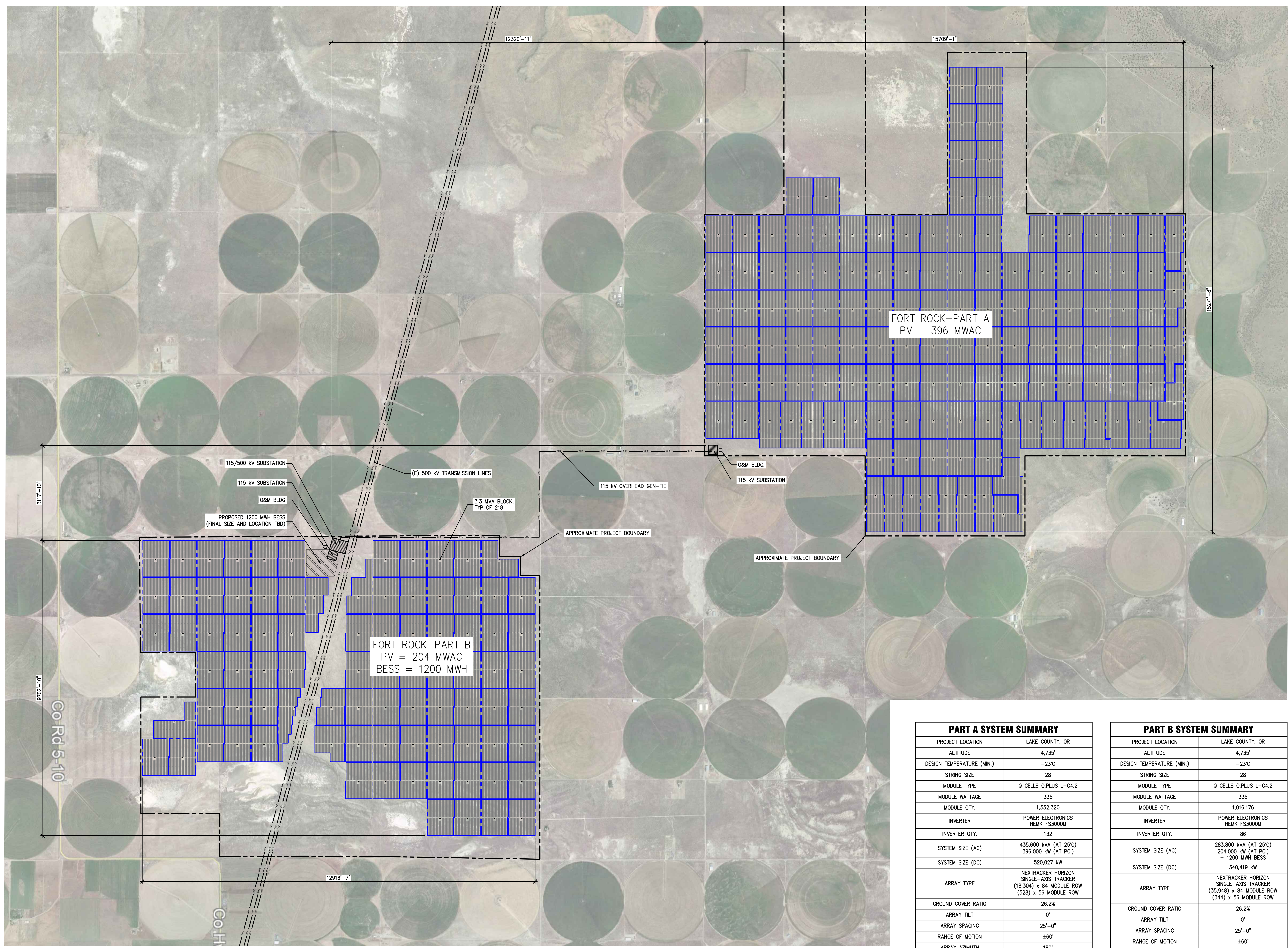
**PHOTOVOLTAIC ARRAY
SITE PLAN**

JOB NO.: - PROJECT MGR: CG
DRAWN: KS SCALE: 1" = 1200'-0"

SHEET NUMBER

G-100.0

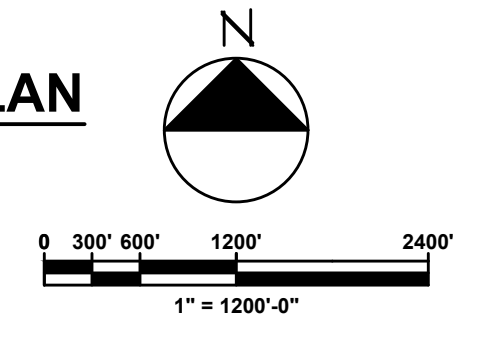
**OPTION #1
PRELIMINARY**



PART A SYSTEM SUMMARY	
PROJECT LOCATION	LAKE COUNTY, OR
ALTITUDE	4,735'
DESIGN TEMPERATURE (MIN.)	-23°C
STRING SIZE	28
MODULE TYPE	Q CELLS Q.PLUS L-G4.2
MODULE WATTAGE	335
MODULE QTY.	1,552,320
INVERTER	POWER ELECTRONICS HEMK F53000M
INVERTER QTY.	132
SYSTEM SIZE (AC)	435,600 kVA (AT 25°C) 396,000 kW (AT PO)
SYSTEM SIZE (DC)	520,027 kW
ARRAY TYPE	NEXTRACKER HORIZON SINGLE-AXIS TRACKER (18,304) x 84 MODULE ROW (528) x 56 MODULE ROW
GROUND COVER RATIO	26.2%
ARRAY TILT	0°
ARRAY SPACING	25'-0"
RANGE OF MOTION	±60°
ARRAY AZIMUTH	180°

PART B SYSTEM SUMMARY	
PROJECT LOCATION	LAKE COUNTY, OR
ALTITUDE	4,735'
DESIGN TEMPERATURE (MIN.)	-23°C
STRING SIZE	28
MODULE TYPE	Q CELLS Q.PLUS L-G4.2
MODULE WATTAGE	335
MODULE QTY.	1,016,176
INVERTER	POWER ELECTRONICS HEMK F53000M
INVERTER QTY.	86
SYSTEM SIZE (AC)	283,800 kVA (AT 25°C) 204,000 kW (AT PO) + 1200 MWH BESS
SYSTEM SIZE (DC)	340,419 kW
ARRAY TYPE	NEXTRACKER HORIZON SINGLE-AXIS TRACKER (35,948) x 84 MODULE ROW (344) x 56 MODULE ROW
GROUND COVER RATIO	26.2%
ARRAY TILT	0°
ARRAY SPACING	25'-0"
RANGE OF MOTION	±60°
ARRAY AZIMUTH	180°

PHOTOVOLTAIC ARRAY SITE PLAN
SCALE: 1" = 800'-0"



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SWINERTON
RENEWABLE ENERGY

CONSULTANT



BLMYER
ENGINEERS
1101 MARINA VILLAGE PARKWAY # 100
ALAMEDA, CA 94501 510.521.3773

STAMP/SEAL

REV # DESCRIPTION DATE
FOR CLIENT REVIEW

PROJECT TITLE:
**FORT ROCK SOLAR
SINGLE-AXIS TRACKER
600 MWAC PV ARRAYS +
1200 MWH BESS
LAKE COUNTY, OR**

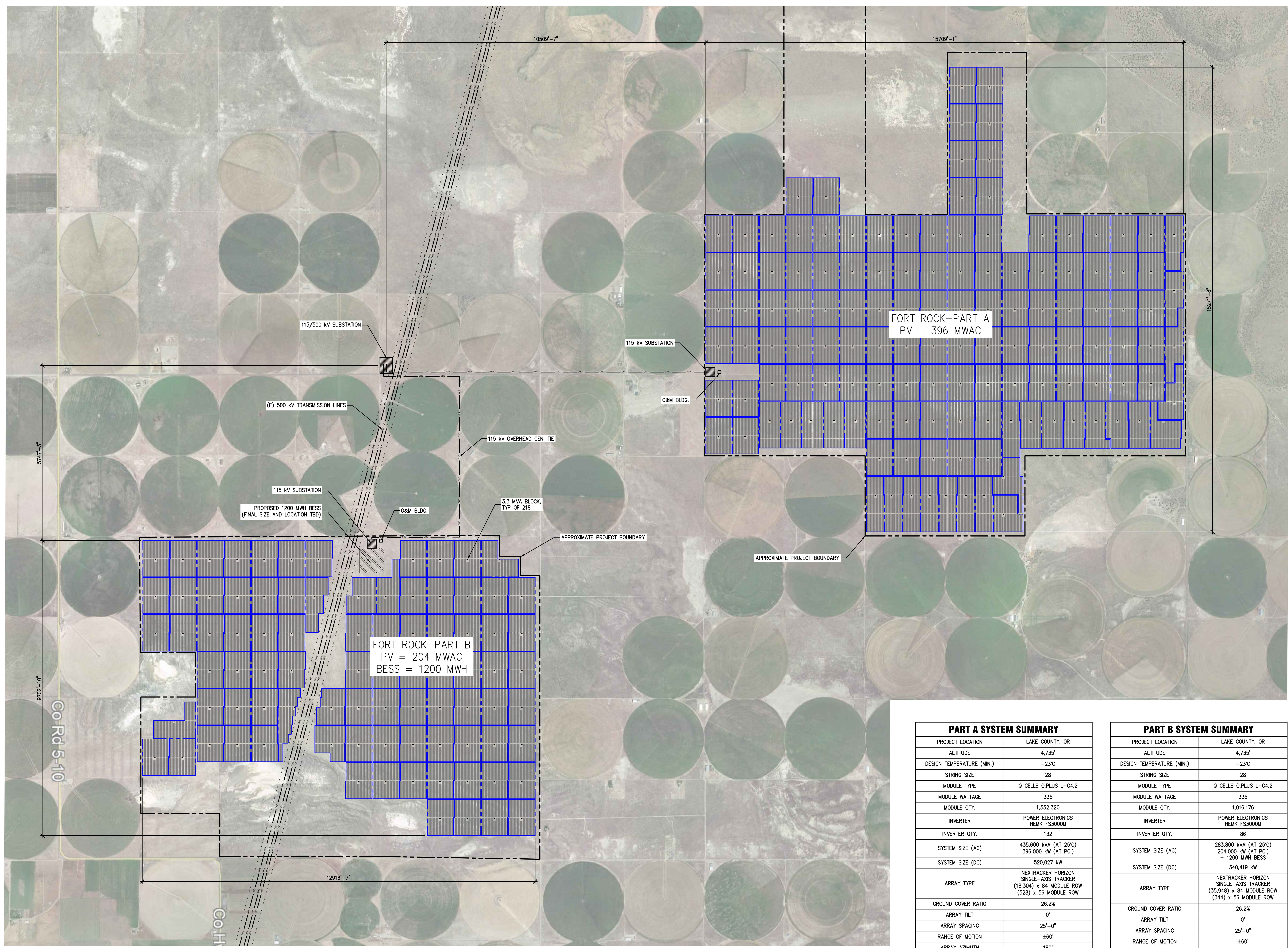
SHEET TITLE:

**PHOTOVOLTAIC ARRAY
SITE PLAN**

JOB NO.: - PROJECT MGR: CG
DRAWN: KS SCALE: 1" = 1200'-0"
SHEET NUMBER

G-100.0

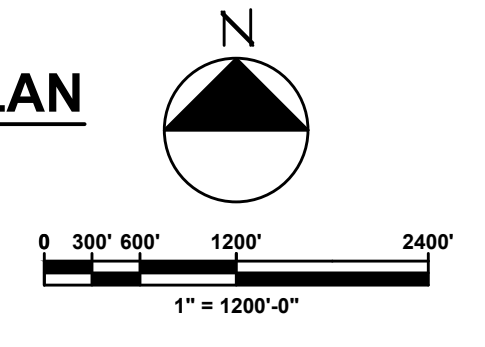
**OPTION #2
PRELIMINARY**



PART A SYSTEM SUMMARY	
PROJECT LOCATION	LAKE COUNTY, OR
ALTITUDE	4,735'
DESIGN TEMPERATURE (MIN.)	-23°C
STRING SIZE	28
MODULE TYPE	Q CELLS Q.PLUS L-G4.2
MODULE WATTAGE	335
MODULE QTY.	1,552,320
INVERTER	POWER ELECTRONICS HEMK FS3000M
INVERTER QTY.	132
SYSTEM SIZE (AC)	435,600 kVA (AT 25°C) 396,000 kW (AT PO)
SYSTEM SIZE (DC)	520,027 kW
ARRAY TYPE	NEXTRACKER HORIZON SINGLE-AXIS TRACKER (18,304) x 84 MODULE ROW (528) x 56 MODULE ROW
GROUND COVER RATIO	26.2%
ARRAY TILT	0°
ARRAY SPACING	25'-0"
RANGE OF MOTION	±60°
ARRAY AZIMUTH	180°

PART B SYSTEM SUMMARY	
PROJECT LOCATION	LAKE COUNTY, OR
ALTITUDE	4,735'
DESIGN TEMPERATURE (MIN.)	-23°C
STRING SIZE	28
MODULE TYPE	Q CELLS Q.PLUS L-G4.2
MODULE WATTAGE	335
MODULE QTY.	1,016,176
INVERTER	POWER ELECTRONICS HEMK FS3000M
INVERTER QTY.	86
SYSTEM SIZE (AC)	283,800 kVA (AT 25°C) 204,000 kW (AT PO) + 1200 MWH BESS
SYSTEM SIZE (DC)	340,419 kW
ARRAY TYPE	NEXTRACKER HORIZON SINGLE-AXIS TRACKER (35,948) x 84 MODULE ROW (344) x 56 MODULE ROW
GROUND COVER RATIO	26.2%
ARRAY TILT	0°
ARRAY SPACING	25'-0"
RANGE OF MOTION	±60°
ARRAY AZIMUTH	180°

PHOTOVOLTAIC ARRAY SITE PLAN
SCALE: 1" = 800'-0"



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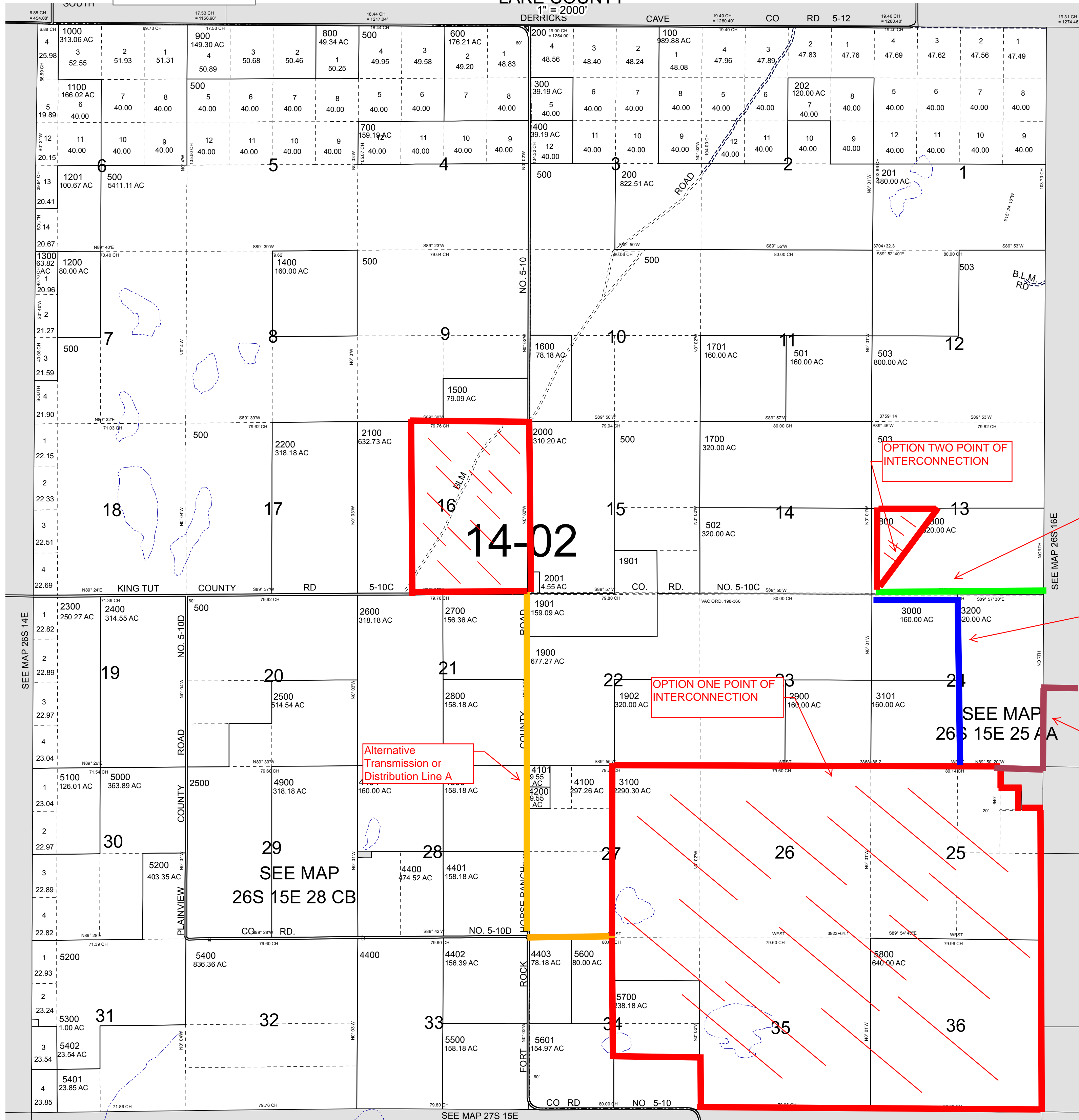
THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY

T.26S. R.15E. W.M. LAKE COUNTY

1" = 2000'

26S15E

LCATDWC - 2014-08-05 08:45



CANCELLED
601
3300 THRU
4000
4500 THRU
4801

Figure F-1
(1 of 2)
updated
1.17.18

Alternative
Transmission Line B

Alternative
Transmission Line C

Alternative
Transmission
Line D

26S15E

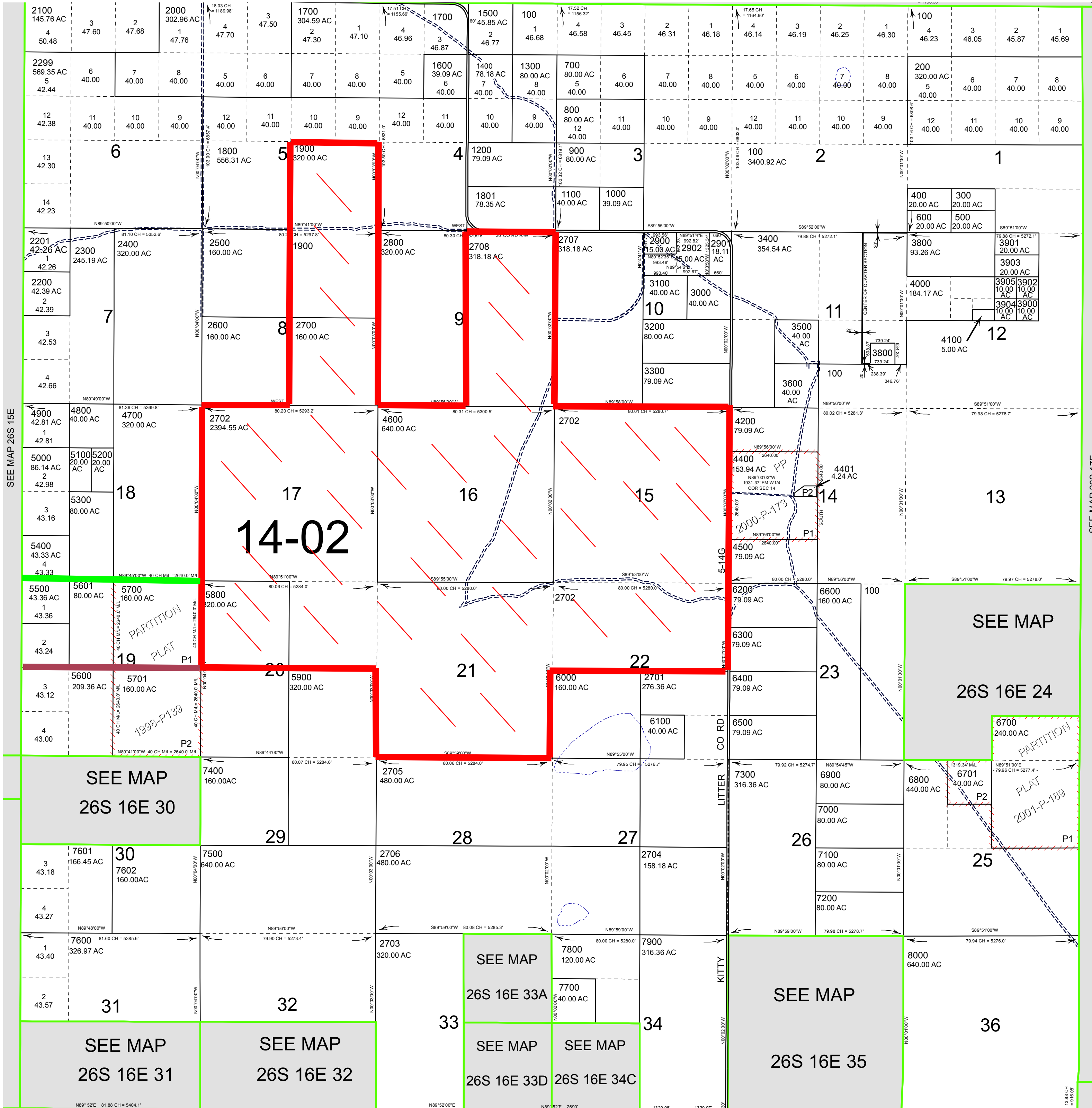
THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY

0 475 950 1,900 Feet

T.26S. R.16E. W.M. LAKE COUNTY 1" = 2000'

26S16E

6/12/2017



CANCELLED
1700U1
1700U2
1800U1
1800U2
1801U1
1801U2
4300
3700

Figure F-1 (2 of 2)

26S16E