Appendix I-3: Penstemon Solar Project Permit Applications

KITTITAS COUNTY
DEPARTMENT OF PUBLIC WORKS

ACCESS AND ADDRESS APPLICATION

Application for: ☐ **Address $100.00** ☐ **Access $270.00** **Payment Method:** ☐ **Check** _____ ☐ **Cash**
☒ **Access and Address $330.00**

Owner Name Valley Land Company LLC **Permit #**_____
Mailing Address 1585 Tjossem Rd
Ellensburg, WA 98926
Phone Number 509-962-2840
Email Address jbrunson@fairpoint.net

Applicant Name TUUSSO Energy, LLC
Mailing Address 500 Yale Ave North
Seattle, WA 98109
Phone Number 206-303-0198
Email Address jason.evans@tuusso.com

DATE STAMP

Request Access and/or Address for:

☐ Approved Subdivision ☐ Pending Subdivision ☐ Agricultural Access
☐ Single Family Dwelling ☐ Commercial Access ☐ Temporary Access
☒ Other Photovoltaic Solar Project

Number of Lots to be served by the Access: 1

Assessor's Map No.: 17-19-17000-0004

Plat Name N/A Lot N/A

Road Name of Access Location: Tjossem Road

Distance and Direction to Nearest Intersection or Adjacent Address:
at southwest corner of intersection with Moe Rd

Desired Width of Driveway: 12 FT (Minimum Width Requirement is based on length of driveway)

CALL BEFORE YOU DIG 1-800-424-5555 OR 811

Applicant is responsible for calling for underground utility locates 48 hours prior to construction.

☒ **I have attached a site map with details on the access, driveway and any buildings (existing or proposed).**
☒ **Applicant will stake along right-of-way to mark desired location of access.**
☒ **Applicant agrees to perform the work in compliance with the Kittitas County Road Standards and the requirements on the Access Permit.**
☒ **Applicant certifies that the access applied for is only for the purpose indicated.**

Applicant declares he/she is the owner or owner's agent of the real property whose access is under construction.
Applicant Signature _____ Date _____

Reviewers Notes:

NEW ADDRESS: _____

CITY: _____ ZIP: _____

☐ PRIVATE ROAD CERTIFICATION REQUIRED PRIOR TO_____

ACCESS REQUIREMENTS PRIOR TO BUILDING PERMIT:

☐ PAVED APRON REQUIRED – WSDOT DESIGN STANDARDS
☐ CULVERT REQUIRED-MUST BE BEDDED ON A MINIMUM OF 4" OF 5/8 GRAVEL OR EQUIVALENT
-Minimum Culvert Diameter: _____ Inches
-Minimum Beveled End Length: _____ Feet
-Total Culvert Length: _____ Feet
-Minimum Cover of: _____ Inches
☐ 4:1 BEVELS REQUIRED ON CULVERT ENDS
☐ CONSTRUCT APRON(FIRST 20 FEET) WITH NO MORE THAN 6% GRADE
☐ COMPACTED GRAVEL SURFACE LAYER REQUIRED
☐ 10 FOOT TURNING RADIUS ON APRON
☐ SIDE SLOPES OFF OF APRON NOT TO EXCEED A 4:1 SLOPE

☐ PERMIT EXPIRES ON: _____

DRIVEWAY REQUIREMENTS PRIOR TO OCCUPANCY PERMIT:

☐ DRIVEWAY NOT TO EXCEED 15% GRADE
☐ DRIVEWAYS LESS THAN 150 FEET IN LENGTH TO BE A MINIMUM OF 12 FEET WIDE WITH COMPACTED GRAVEL SURFACE LAYER
☐ DRIVEWAYS LONGER THAN 150 FEET IN LENGTH TO BE A MINIMUM OF 16 FEET WIDE WITH COMPACTED GRAVEL SURFACE LAYER
☐ DRIVEWAY SET BACK OF 5 FEET FROM SIDE PROPERTY BOUNDARIES
☐ SIDE SLOPE OFF DRIVEWAY SURFACE LAYER NOT TO EXCEED A 2:1 SLOPE

NOTES: _____

Reviewers Signature Title Date

411 N. Ruby St. Suite 1
Ellensburg, WA 98926
TEL (509) 962-7523
FAX (509) 962-7663

TUUSSO ENERGY - PENSTEMON SITE

A PORTION OF THE NE 1/4 OF THE SE 1/4 OF SECTION 17, T. 17 N., R. 19 E., W.M.
KITTATAS COUNTY, STATE OF WASHINGTON

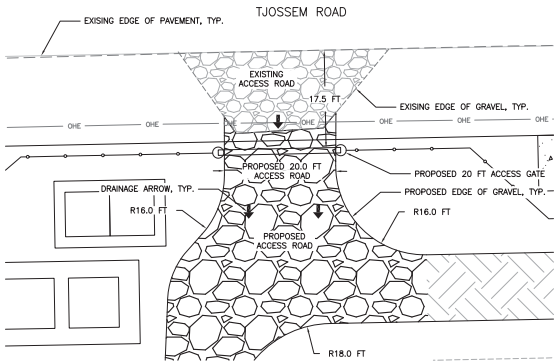
NORTH

0 25 50 100

SCALE 1" = 100'

PROPERTY INFORMATION:

APPLICANT:	TUUSSO ENERGY, LLC 500 YALE AVE N. SEATTLE, WA 98109
PARCEL NUMBER:	840233
PARCEL SIZE:	39.38 ACRES
PROPERTY ADDRESS:	TBD, ELLENSBURG, WA 98926
ZONE: IRRIGATION DISTRICT:	COMMERCIAL AGRICULTURAL ELLENSBURG WATER



SITE ACCESS DETAIL

1"=10'

REVISIONS

DESCRIPTION	BY	DATE

NOT FOR CONSTRUCTION

TUUSSO ENERGY, LLC
PENSTEMON SITE
ACCESS SITE PLAN

Encompass
ENGINEERING & SURVEYING
Western Washington Division
165 NE Juniper Street, Suite 201 ■ Issaquah, WA 98027 ■ Phone: (425) 392-0250 ■ Fax: (425) 391-3055
Eastern Washington Division
407 Southeaster Blvd ■ Cle Elum, WA 98922 ■ Phone: (509) 674-7433 ■ Fax: (509) 674-7419

JOB NO.	17020
DATE	JULY 2017
SCALE	AS SHOWN
DESIGNED	SF
DRAWN	SF
CHECKED	TML
APPROVED	TML
SHEET	EX-1

KITTITAS COUNTY
COMMUNITY DEVELOPMENT SERVICES
411 NORTH RUBY STREET SUITE #2 ■ ELLENSBURG, WA 98926
PHONE (509) 962-7506 ■ FAX (509) 962-7682

General Application for Construction

Assessor Map Number:	Official Use Only:
(Use http://www.co.kittitas.wa.us/assessor/property.asp if needed) Example 21-12-35000-0021 1 7 - 1 9 - 1 8 0 4 0 - ___ ___ ___ ___	**Permit #:**
Short Plat/ Subdivision: / Lot #:	**Date Applied:**
	Intake:

Site Address: 4561 No. 6 Road and 2100 Tjossem Road, Ellensburg, WA 98926			
Project Description/ Nature of Work: Camas 5-MW Solar Project		~~Square Foot~~ Total:	
Specific Use of Structure: To generate renewable electricity		No. of Bedrooms: 0	
Heating System Type & Location: N/A	Heating System Fuel Type: N/A	Fireplace Fuel Type: N/A	Hot Water Location & Fuel: N/A
☐ New Residential ☐ Residential Alteration ☐ Residential Addition ☐ Foundation	☐ New Commercial ☐ Commercial Alteration ☐ Commercial Addition ☐ Tenant Improvement	☐ Multi-Family ☐ Demolition ☐ Mobile Home ☐ Accessory Building	☐ Accessory Building Alteration ☐ Agricultural Building ■ Other New Industrial

PROPERTY OWNER:	Valley Land Company, LLC	Day Phone: 509-962-2840
Mailing Address:	1585 Tjossem Road	
City, State, ZIP:	Ellensburg, WA 98926	
E-mail:	jbrunson@fairpoint.net	Cell Phone: 509-899-2840
CONTRACTOR:		Day Phone:
Contact:		
Address, City, State, ZIP:		
E-mail:		Cell Phone:
Contractor License #:		Expiration Date:
ARCHITECT/ ENGINEER/ DESIGNER:		Day Phone:
Contact:		
Address, City, State, ZIP:		
E-mail:		Cell Phone:
Professional License No.:		Expiration Date:

APPLICANT/ AGENT:	Jason Evans	Day Phone: 206-708-6055
Company (if any):	TUUSSO Energy LLC	
Address, City, State, ZIP:	500 Yale Avenue North, Seattle, WA 98109	
E-mail:	Jason.evans@tuusso.com	Cell Phone: 206-303-0198

This Section To Be Completed For Construction Permits Only

Pursuant to RCW 19.27.095 (2)(i-ii) The requirements for a fully completed construction application shall include:

i. The name, address, and phone number of the office of the lender administering the interim construction financing, if any: OR

ii. The name and address of the firm that has issued a payment bond, if any, on behalf of the prime contractor for the protection of the owner, if the bond is for an amount not less than 50% of the total amount of the construction project.

If for any reason the information requested below is not available at the time of application, the applicant shall provide the information as soon as it can be reasonably be obtained.

☐ Lending Agency Name: Phone:

Mailing Address: City: State: ZIP:

☐ I acknowledge by checking this box that this project has no lending agency for construction financing.

☐ Bonding Agency Name: Phone:

Mailing Address: City: State: ZIP

☐ I acknowledge by checking this box that this project has no bonding agency.

If you are the Owner and Acting As Your Own Contractor, please complete the following declaration:

I acknowledge that I am applying for a construction permit through the Kittitas County Community Development Services. I also acknowledge that I *am* not a licensed contractor, specialty or general, or that I am not acting as a contractor and wish to be exempt from the requirements of the Washington State Contractor's Act, per RCW 18.27.090, and will abide by all provisions and conditions of the exemption as stated. I agree that if I use the assistance of any person(s) to provide labor and/or assistance, I will retain only contractors registered and currently licensed as required under the laws of the State of Washington.

I (print name) _____ certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Owner Signature: _____ Date: _____

1. All permits shall expire by limitation and be declared void if any one of the following apply:
   a. Work is not started within 365 days of obtaining a permit.
   b. Work is abandoned for 365 days or more after beginning work.
   c. An inspection and approval of work completed has not been performed by Kittitas County Community Development Services for 365 days.
2. The building permit card and approved construction plans shall be kept on the site of work until completion of the project.
3. It shall be the duty of the permit holder or their agent to notify the building official that such work is ready for inspection. It shall by the duty of the person requesting any inspections required by code to provide access to and means for inspection of such work. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. Any portion that does not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.
4. No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a Certificate of Occupancy.
5. Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

I hereby acknowledge that I have read this application and certify under penalty of perjury under the laws of the State of Washington that the above answers are true and complete to the best of my knowledge. I agree to comply with all current codes, laws, regulations and permit requirements related to this project. I hereby certify that I will pay all fees as required by law, including any applicable review fees if I do not purchase the permit. I further agree to, and hereby grant to Kittitas County Community Development Services and Department of Public Works a right to enter onto the premises as described for this permit application, for the purpose of making such inspections and tests as may be required. By signing this application, the Owner certifies that they are the legal owner of the property. All permit fees are non-refundable.

Owners Signature: (Required)		Authorized Agent Signature:	
Print Name:		Print Name:	
Date:		Date:	

Tuusso Energy: Penstemon Solar Project

NOI Application

September 5, 2017

SECTION 1. CONTACT INFO

Contact Information Section Help

This Notice of Intent application requires the following contact types: **Permittee, Site Owner, and Site Contact**. Please use the table below to fill in your required contacts. You may add additional contact types that are not pre-listed.

Note: Please remember you are responsible for notifying the Department of Ecology when your contact information changes.

Contact Type	First Name	Last Name	Organization Name	Action
Permittee	Jason	Evans	Tuusso Energy	Edit - Remove
Site Contact	Jason	Evans	Tuusso Energy	Edit - Remove
Site Owner	Jeff	Brunson	Valley Land Company LLC	Edit - Remove

Your mailing address will be standardized against the postal service (USPS) mailing database when you click on the "Update" button. Verfication may be necessary.

Honorific: | **Contact Type:** Permittee
First Name: Jason | **Last Name:** Evans
Organization Name: Tuusso Energy | Title:
Mailing Address: 500 Yale Ave N
Country: UNITED STATES
City: Seattle **State:** WA **Zip:** 98109 - 5680
Email Address: jason.evans@tuusso.com
Business Phone: 206 - 708 - 6055 Ext. | Fax Number: - -
Cell Phone: 206 - 303 - 0198 | UBI Number:

Your mailing address will be standardized against the postal service (USPS) mailing database when you click on the "Update" button. Verfication may be necessary.

Honorific: | **Contact Type:** Site Owner
First Name: Jeff | **Last Name:** Brunson
Organization Name: Valley Land Company LL | Title:
Mailing Address: 1585 Tjossem Rd
Country: UNITED STATES
City: Ellensburg **State:** WA **Zip:** 98926 - 8925
Email Address: jbrunson@fairpoint.net
Business Phone: 509 - 962 - 2840 Ext. | Fax Number: - -
Cell Phone: - - | UBI Number:

Copy From... My Profile | Save Contact | Cancel

SECTION 2. FACILITY/SITE INFO

Facility/Site Information Section Help

Your facility address will be standardized against the postal service (USPS) mailing database when you click on the "Select facility from map" link. Verfication may be necessary.

This Facility/Site's Ownership Type is: Private

Facility/Site Name: Penstemon Solar Project

Street Address:

City: Zip:

Or

If the site lacks a street address, list its specific location. Example: Intersection of Highway 61 and 34.

Location Description: SW corner of intersection of Tjossem Rd and Moe Rd, Ellensburg,WA 98926

Find my facility/site on a map

Please use the pop up map to complete the latitude, longitude and county information below. Use the pencil tool on the map to locate your facility at the front door or site entrance. *(The map may take a second to pop up.)*

Select facility/site from map

Latitude: 46.963135 **Longitude:** -120.480647 **County:** Kittitas

SECTION 3. SITE/PROJECT INFO

Project Information

Section Help

Type of Construction Activity: *(check all that apply)*

☐ Highway or Road (city, county, state) ☐ Residential ☐ Commercial ☐ Industrial

☐ Utilities ☑ Other *(specify):* Photovoltaic solar panel s

Project/Site Size: 39.38 acres

The total size of the project site in acres. This is all land that is owned or controlled by the permittee.

Soil Disturbance Size: 36.55 acres

Total area of soil disturbance for your site/project over the life of the project. Include grading, equipment staging, excavation, borrow pit, material storage areas, dump areas, haul roads, side-cast areas, off-site construction support areas, and all other soil disturbance acreage associated with the project. (Note: 1 acre = 43,500 ft²).

Estimated Project Start Date: 4/1/2018

Estimated Project End Date: 10/31/2018

Will 1,000 cubic yards or more of poured concrete or recycled concrete be used over the life of the project? ○ Yes ◉ No

Site Conditions

Are you aware of contaminated soils present on the site? ○ Yes ◉ No

Are you aware of groundwater contamination located within the site boundary? ○ Yes ◉ No

Other Permits

Please enter other permits issued by Water Quality for this site.

Permit Number	Action
	Add

SECTION 4. DISCHARGE LOCATION

Discharge Location/Outfall Information

Section Help

Will water discharge directly or indirectly (through a storm drain system or roadside ditch) into one or more surface waterbodies (wetlands, creeks, lakes, and all other surface waters and water courses)?

No, no discharge to surface waters (100% infiltration) ▼

If your project includes dewatering, you must include dewatering plans and discharge locations in your site Stormwater Pollution Prevention Plan.

Location of Discharge into Surface Waterbody (Outfall Location)

Select the waterbody location (outfall) on the pop up map where the site has the potential to discharge into a waterbody (enter all locations). If you have 100% infiltration, you must select where the infiltration point is as your outfall. *(The map may take a second to pop up.)*

Outfall Number	Outfall Name	Lat/Long	Action
1	Infiltration	46.959452/-120.479649	Edit - Remove

SECTION 5. NOI INFORMATION

Stormwater Pollution Prevention Plan (SWPPP)

You must develop a SWPPP prior to starting construction. Do **not** submit your SWPPP with your application. The exception is that Ecology may request a copy of all or part of your SWPPP if you answered yes to the questions under the Site Conditions heading on the Site/Project Info tab.

☑ I have read and agree to the information above

Best Management Practices (BMPs)

You must use the BMPs listed in the Stormwater Management Manual for Western Washington or the Stormwater Management Manual for Eastern Washington or other manuals approved by Ecology. Alternatively, you may use demonstrably equivalent BMPs on the basis of permit condition S9.C.4. If you intend to use a BMP at your site that is not included in these manuals, but that you believe meets the definition of a demostrably equivalent BMP, you must notify the appropriate regional office. (See Definitions in the Construction Stormwater General Permit).

Note that if you receive permit coverage without indicating the preference for a demostrably equivalent BMP and later decide to use one, you must provide Ecology with notice of the selection of an equivalent BMP no less than 60 days before the intended use of the equivalent BMP.

http://www.ecy.wa.gov/programs/wq/stormwater/construction/contacts.html

☑ I have read and agree to the information above

SECTION 6. DMR

Discharge Monitoring Reports (DMRs)

Permittees must submit monitoring data using Ecology's WQWebDMR program.

To sign up for WQWebDMR, or to register a new site, go to http://www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html. If you are unable to submit your DMRs electronically, you may contact Ecology to request a waiver. Ecology will generally only grant waiver requests to those permittees without internet access. Only a permittee or representative, designated in writing, may request access to or a waiver from WQWebDMR. If you have questions on this process, contact Ecology's WQWebDMR staff at WQWebPortal@ecy.wa.gov or 1-800-633-6193, Option 3 (toll free).

☑ I have read and agree to the information above

SECTION 7. SEPA

State Environmental Policy Act (SEPA)

Section Help

This Notice of Intent (NOI) is incomplete and cannot be approved until the applicable SEPA requirements under Chapter 197-11 WAC are met.

Who is the SEPA lead agency on your site? Energy Facility Site Evaluation Council

Has the SEPA lead agency issued a final decision on your checklist? ○ No ○ Yes ○ Exempt

More SEPA information is available at: http://www.ecy.wa.gov/programs/sea/sepa/e-review.html

SECTION 8. PUBLIC NOTICE

Public Notice

Section Help

You must publish a public notice at least **once** a week for **two** consecutive weeks with **seven days** between publications, in at least a **single** newspaper of general circulation in the county in which the construction is to take place. Ecology cannot grant permit coverage sooner than the end of the 30-day public comment period, which begins on the date of the **second** public notice.

You may choose to use a system generated public notice and download it below. If not, you need to upload the public notice used.

- (•) I will use the system generated public notice document
- ( ) I will upload my own public notice

```
Tuusso Energy, Jason Evans, 500 Yale Ave N Seattle, WA 98109, is seeking coverage under the
Washington State Department of Ecology's Construction Stormwater NPDES and State Waste Discharge
General Permit.
The proposed project, Penstemon Solar Project, is located at  SW corner of intersection of Tjossem
Rd and Moe Rd, Ellensburg,WA 98926 in  in Kittitas county.
This project involves 36.55 acres of soil disturbance for Other (Photovoltaic solar panel site)
construction activities.
All discharges and runoff goes to ground water.
Any persons desiring to present their views to the Washington State Department of Ecology regarding
this Application, or interested in Ecology's action on this Application, may notify Ecology in
writing no later than 30 days of the last date of publication of this notice. Ecology reviews
public comments and considers whether discharges from this project would cause a measurable change
in receiving water quality, and, if so, whether the project is necessary and in the overriding
public interest according to Tier II antidegradation requirements under WAC 173-201A-320.

Comments can be submitted to:
Department of Ecology
Attn: Water Quality Program, Construction Stormwater
P.O. Box 47696, Olympia, WA 98504-7696
```

Clicking the text will copy it to your clipboard, if allowed. Open notice in a new window for printing.

To add a public notice to your application, select the newspaper name and enter your public notice dates, then click on the "Add" link. If you do not click the "Add" link, the public notice entry will be lost.

Note: This system does not publish your public notice in the newspaper for you. You must submit your public notice text to your selected newspaper.

Newspaper Name	First Notice	Second Notice	Action
Ellensburg - Daily Record ▼	*	*	Add

* First notice date is required.
* Second notice date is required.

SECTION 9. QUESTIONS

For Questions...

Please contact the following staff per your construction site's location.

If your construction site is located in:	Contact the following staff:
City of Seattle, Kitsap, Pierce, or Thurston County	Josh Klimek 360-407-7451 josh.klimek@ecy.wa.gov
Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Skagit, Snohomish, Spokane, Stevens, Walla Walla, Whatcom, or Whitman County	Shawn Hopkins 360-407-6442 shawn.hopkins@ecy.wa.gov
Benton, Chelan, Clallam, Clark, Cowlitz, Douglas, Grays Harbor, Jefferson, Kittitas, Klickitat, Lewis, Mason, Okanogan, Pacific, Skamania, Wahkiakum, or Yakima County	Joyce Smith 360-407-6858 joyce.smith@ecy.wa.gov
Island, King, or San Juan County	RaChelle Stane 360-407-6556 rachelle.stane@ecy.wa.gov

Tuusso Energy, Jason Evans, 500 Yale Ave N Seattle, WA 98109, is seeking coverage under the Washington State Department of Ecology's Construction Stormwater NPDES and State Waste Discharge General Permit.

The proposed project, Penstemon Solar Project, is located at SW corner of intersection of Tjossem Rd and Moe Rd, Ellensburg,WA 98926 in in Kittitas county.

This project involves 36.55 acres of soil disturbance for Other (Solar Panel Farm) construction activities.

All discharges and runoff goes to ground water.

Any persons desiring to present their views to the Washington State Department of Ecology regarding this application, or interested in Ecology's action on this application, may notify Ecology in writing no later than 30 days of the last date of publication of this notice. Ecology reviews public comments and considers whether discharges from this project would cause a measurable change in receiving water quality, and, if so, whether the project is necessary and in the overriding public interest according to Tier II antidegradation requirements under WAC 173-201A-320.

Comments can be submitted to:

Department of Ecology

Attn: Water Quality Program, Construction Stormwater

P.O. Box 47696, Olympia, WA 98504-7696

Construction Stormwater General Permit

Stormwater Pollution Prevention Plan (SWPPP)

for

Tuusso Energy: Penstemon Solar Project

Prepared for:

The Washington State Department of Ecology

Central Regional Office

Permittee / Owner	Developer	Operator / Contractor
Tuusso Energy LLC	Jason Evans	TBD

TBD (Near 3950 Tjossem Rd), Ellensburg, WA 98926

Certified Erosion and Sediment Control Lead (CESCL)

Name	Organization	Contact Phone Number
TBD	TBD	TBD

SWPPP Prepared By

Name	Organization	Contact Phone Number
Sarah Foster, EI	Encompass Engineering & Surveying	(509) 674- 7433

SWPPP Preparation Date

July 28, 2017

Project Construction Dates

Activity / Phase	Start Date	End Date
Phase 1	4/1/2018	10/31/2018

Table of Contents

List of Tables

List of Appendices

List of Acronyms and Abbreviations

Acronym / Abbreviation	Explanation
303(d)	Section of the Clean Water Act pertaining to Impaired Waterbodies
BFO	Bellingham Field Office of the Department of Ecology
BMP(s)	Best Management Practice(s)
CESCL	Certified Erosion and Sediment Control Lead
CO_2	Carbon Dioxide
CRO	Central Regional Office of the Department of Ecology
CSWGP	Construction Stormwater General Permit
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DO	Dissolved Oxygen
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
ERO	Eastern Regional Office of the Department of Ecology
ERTS	Environmental Report Tracking System
ESC	Erosion and Sediment Control
GULD	General Use Level Designation
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Units
NWRO	Northwest Regional Office of the Department of Ecology
pH	Power of Hydrogen
RCW	Revised Code of Washington
SPCC	Spill Prevention, Control, and Countermeasure
su	Standard Units
SWMMEW	Stormwater Management Manual for Eastern Washington
SWMMWW	Stormwater Management Manual for Western Washington
SWPPP	Stormwater Pollution Prevention Plan
TESC	Temporary Erosion and Sediment Control
SWRO	Southwest Regional Office of the Department of Ecology
TMDL	Total Maximum Daily Load
VFO	Vancouver Field Office of the Department of Ecology
WAC	Washington Administrative Code
WSDOT	Washington Department of Transportation
WWHM	Western Washington Hydrology Model

1 Project Information

Project/Site Name: Penstemon Solar Project
Street/Location: TBD (Near 3950 Tjossem Rd)
City: Ellensburg State: WA Zip code: 98926
Subdivision: NA
Receiving waterbody: Existing irrigation ditch

1.1 Existing Conditions

Total acreage (including support activities such as off-site equipment staging yards, material storage areas, borrow areas).

Total acreage:	39.38
Disturbed acreage:	36.55
Existing structures:	None
Landscape topography:	Gently sloped grassland/range, sloping to the south.
Drainage patterns:	Flows through the center of the lot towards the south, into an offsite irrigation ditch.
Existing Vegetation:	Range/grassland
Critical Areas (wetlands, streams, high erosion risk, steep or difficult to stabilize slopes):	Coleman Creek borders the eastern boundary of the site and an existing irrigation ditch borders the southern boundary of the site.

List of known impairments for 303(d) listed or Total Maximum Daily Load (TMDL) for the receiving waterbody: None

Table 1 includes a list of suspected and/or known contaminants associated with the construction activity.

No known contamination n site or associated with the construction activity.

Table 1 – Summary of Site Pollutant Constituents

Constituent (Pollutant)	Location	Depth	Concentration
NA	NA	NA	NA

1.2 Proposed Construction Activities

Description of site development (example: subdivision):
Photovoltaic solar facility project site with all weather-access roads, inverter stations, and modular trackers with solar panels

Description of construction activities (example: site preparation, demolition, excavation):

1. Pre-construction meeting

2. Grade and install construction entrance
3. Install perimeter protection
4. Grade and stabilize construction roads
5. Install vibratory driven H piles for wide flange steel beams
6. Install electrical underground and mechanical trackers
7. Install panels
8. Perform any required site restoration

Description of site drainage including flow from and onto adjacent properties. Must be consistent with Site Map in Appendix A:
The site drains towards the south, into an existing irrigation ditch that flows to the east.

Description of final stabilization (example: extent of revegetation, paving, landscaping):
The site will be revegetated with native vegetation.

Contaminated Site Information:
Proposed activities regarding contaminated soils or groundwater (example: on-site treatment system, authorized sanitary sewer discharge):
No contamination is known to be on site.

2 Construction Stormwater Best Management Practices (BMPs)

The SWPPP is a living document reflecting current conditions and changes throughout the life of the project. These changes may be informal (i.e., hand-written notes and deletions). Update the SWPPP when the CESCL has noted a deficiency in BMPs or deviation from original design.

2.1 The 13 Elements

2.1.1 Element 1: Preserve Vegetation / Mark Clearing Limits

List and describe BMPs:

BMP C101: Preserving Natural Vegetation

Natural vegetation will be preserved along the eastern border of the site near Coleman creek and near the offsite irrigation ditch along the southern boundary of the site.

BMP C102: Buffer Zones

Buffer zones will be established at the limits of the proposed facility to protect existing wetlands and relieve downstream impacts. Existing vegetation will be maintained within the buffer zones throughout construction.

Installation Schedules: TBD

Inspection and Maintenance plan: TBD

Responsible Staff: TBD

2.1.2 Element 2: Establish Construction Access

List and describe BMPs:

BMP C105 – Stabilized Construction Entrance

A single, stabilized construction entrance will be provided off of Tjossem Rd, where vehicles will be entering/exiting, in order to prevent tracking out from the site.

Installation Schedules: TBD

Inspection and Maintenance plan: TBD

Responsible Staff: TBD

2.1.3 Element 3: Control Flow Rates

Will you construct stormwater retention and/or detention facilities?
☐ Yes ☒ No

Will you use permanent infiltration ponds or other low impact development (example: rain gardens, bio-retention, porous pavement) to control flow during construction?

☐ Yes ☒ No

Project will not impair or alter downstream conveyance systems. Full dispersion on site will be used to account for increased flows due to proposed impervious areas. Per Chapter 2.2.6 of the SWMMEW there are exemptions for new development when flow control is not required as long as certain conditions are met. Per exemption 1, “Any project able to disperse, without discharging to surface waters, the total 25-year runoff volume for the proposed development condition” is exempt from meeting the flow control requirements. The Penstemon project will use full dispersion as the main way to handle increased flows due to impervious areas. As outlined in SWMMEW Chapter 6.5, BMP F6.42, full dispersion allows up to 10% of the site that is impervious to be characterized as non-effective impervious area by dispersing runoff into the native vegetation area. On the Penstemon site, the impervious areas may conservatively make up to 3.3% of the site while the rest of the site maintains plantings similar to existing vegetation. This is under the 10% threshold, making full dispersion a viable option.

List and describe BMPs:

BMP F6.42- Full dispersion: Runoff from impervious areas within the site will be dispersed within the site utilizing the native vegetation.

BMP C102 – Buffer Zones (See Element 1)

BMP C233 – Silt Fence will also control flow rates from the site during construction (See Element 4).

Installation Schedules: TBD

Inspection and Maintenance plan: TBD

Responsible Staff: TBD

2.1.4 Element 4: Install Sediment Controls

BMP C233- Silt Fence: Silt Fence will surround the site at all areas downslope of all disturbed areas and will be placed upslope of any existing water bodies and wetlands. The silt fence will also serve to mark the clearing limits per Element 1 above.

Installation Schedules: TBD

Inspection and Maintenance plan: TBD

Responsible Staff: TBD

2.1.5 Element 5: Stabilize Soils

The Central Basin*, East of the Cascade Mountain Crest

Season	Dates	Number of Days Soils Can be Left Exposed
During the Dry Season	July 1 – September 30	30 days

During the Wet Season	October 1 – June 30	15 days

*Note: The Central Basin is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches.

Soils must be stabilized at the end of the shift before a holiday or weekend if needed based on the weather forecast.

Anticipated project dates: Start date: 4/1/2018 End date: 10/31/2018

Will you construct during the wet season?
☒ Yes ☐ No

List and describe BMPs:

BMP C123- Plastic Covering: Plastic covering will be used as necessary to protect any soil stockpiles that are produced from construction activity.

Installation Schedules: TBD

Inspection and Maintenance plan: TBD

Responsible Staff: TBD

2.1.6 Element 6: Protect Slopes

Will steep slopes be present at the site during construction?
☐ Yes ☒ No
The site is relatively flat and is not expected to require protection for slopes.

List and describe BMPs: None

Installation Schedules: NA

Inspection and Maintenance plan: NA

Responsible Staff: NA

2.1.7 Element 7: Protect Drain Inlets

There are no storm drain inlets on the site

List and describe BMPs: None

Installation Schedules: NA

Inspection and Maintenance plan: NA

Responsible Staff: NA

2.1.8 Element 8: Stabilize Channels and Outlets

Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches, will be installed at the outlets of all conveyance systems.

List and describe BMPs: None

Installation Schedules: NA

Inspection and Maintenance plan: NA

Responsible Staff: NA

2.1.9 Element 9: Control Pollutants

The following pollutants are anticipated to be present on-site: No known pollutants

Table 2 – Pollutants

Pollutant (List pollutants and source, if applicable)
NA

List and describe BMPs: None

Installation Schedules: NA

Inspection and Maintenance plan: NA

Responsible Staff: NA

Will maintenance, fueling, and/or repair of heavy equipment and vehicles occur on-site?
☒ Yes ☐ No

Contractor is required to keep a spill kit on site and use spill prevention measures throughout the construction process, in order to address any potential fuel spills or equipment breakdowns.

List and describe BMPs: None

Installation Schedules: NA

Inspection and Maintenance plan: NA

Responsible Staff: NA

Will wheel wash or tire bath system BMPs be used during construction?
☐ Yes ☒ No

List and describe BMPs: Wheel wash is not proposed at this time; however, if construction activities are such that sediment may be tracked with tires off-site a wheel wash will be used and any wastewater generated would be disposed at a local permitted facility.

Installation Schedules: NA

Inspection and Maintenance plan: NA

Responsible Staff: NA

Will pH-modifying sources be present on-site?

☐ Yes ☒ No

Table 3 – pH-Modifying Sources

☒	None
☐	Bulk cement
☐	Cement kiln dust
☐	Fly ash
☐	Other cementitious materials
☐	New concrete washing or curing waters
☐	Waste streams generated from concrete grinding and sawing
☐	Exposed aggregate processes
☐	Dewatering concrete vaults
☐	Concrete pumping and mixer washout waters
☐	Recycled concrete
☐	Recycled concrete stockpiles
☐	Other (i.e., calcium lignosulfate) [please describe:]

List and describe BMPs: None

Installation Schedules: NA

Inspection and Maintenance plan: NA

Responsible Staff: NA

Concrete trucks must not be washed out onto the ground, or into storm drains, open ditches, streets, or streams. Excess concrete must not be dumped on-site, except in designated concrete washout areas with appropriate BMPs installed.

Will uncontaminated water from water-only based shaft drilling for construction of building, road, and bridge foundations be infiltrated provided the wastewater is managed in a way that prohibits discharge to surface waters?

☐ Yes ☒ No

List and describe BMPs: None

Installation Schedules: NA

Inspection and Maintenance plan: NA

Responsible Staff: NA

2.1.10 Element 10: Control Dewatering

No dewatering is proposed or expected to occur as part of this project.

Table 4 – Dewatering BMPs

☐	Infiltration
☐	Transport off-site in a vehicle (vacuum truck for legal disposal)
☐	Ecology-approved on-site chemical treatment or other suitable treatment technologies
☐	Sanitary or combined sewer discharge with local sewer district approval (last resort)
☐	Use of sedimentation bag with discharge to ditch or swale (small volumes of localized dewatering)

List and describe BMPs: None

Installation Schedules: NA

Inspection and Maintenance plan: NA

Responsible Staff: NA

2.1.11 Element 11: Maintain BMPs

All temporary and permanent Erosion and Sediment Control (ESC) BMPs shall be maintained and repaired as needed to ensure continued performance of their intended function.

Maintenance and repair shall be conducted in accordance with each particular BMP specification (see *Volume II of the SWMMWW or Chapter 7 of the SWMMEW*).

Visual monitoring of all BMPs installed at the site will be conducted at least once every calendar week and within 24 hours of any stormwater or non-stormwater discharge from the site. If the site becomes inactive and is temporarily stabilized, the inspection frequency may be reduced to once every calendar month.

All temporary ESC BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed.

Trapped sediment shall be stabilized on-site or removed. Disturbed soil resulting from removal of either BMPs or vegetation shall be permanently stabilized.

Additionally, protection must be provided for all BMPs installed for the permanent control of stormwater from sediment and compaction. BMPs that are to remain in place following completion of construction shall be examined and restored to full operating condition. If sediment enters these BMPs during construction, the sediment shall be removed and the facility shall be returned to conditions specified in the construction documents.

2.1.12 Element 12: Manage the Project

The project will be managed based on the following principles:

- Projects will be phased to the maximum extent practicable and seasonal work limitations will be taken into account.
- Inspection and monitoring:
    - Inspection, maintenance and repair of all BMPs will occur as needed to ensure performance of their intended function.
    - Site inspections and monitoring will be conducted in accordance with Special Condition S4 of the CSWGP. Sampling locations are indicated on the Site Map. Sampling station(s) are located in accordance with applicable requirements of the CSWGP.
- Maintain an updated SWPPP.
    - The SWPPP will be updated, maintained, and implemented in accordance with Special Conditions S3, S4, and S9 of the CSWGP.

As site work progresses the SWPPP will be modified routinely to reflect changing site conditions. The SWPPP will be reviewed monthly to ensure the content is current.

Table 5 – Management

☒	Design the project to fit the existing topography, soils, and drainage patterns
☒	Emphasize erosion control rather than sediment control
☒	Minimize the extent and duration of the area exposed
☒	Keep runoff velocities low
☒	Retain sediment on-site
☒	Thoroughly monitor site and maintain all ESC measures
☐	Schedule major earthwork during the dry season
☐	Other (please describe)

2.1.13 Element 13: Protect Low Impact Development (LID) BMPs

There are no existing or proposed LID facilities associated with the project site. Buffer zones will be established during construction to protect the Coleman Creek and the offsite irrigation system.

3 Pollution Prevention Team

Table 7 – Team Information

Title	Name(s)	Phone Number
Certified Erosion and Sediment Control Lead (CESCL)	TBD	TBD
Resident Engineer	TBD	TBD
Emergency Ecology Contact	TBD	TBD
Emergency Permittee/ Owner Contact	TBD	TBD
Non-Emergency Owner Contact	TBD	TBD
Monitoring Personnel	TBD	TBD
Ecology Regional Office	Central Regional Office	(509)-575-2490

4 Monitoring and Sampling Requirements

Monitoring includes visual inspection, sampling for water quality parameters of concern, and documentation of the inspection and sampling findings in a site log book. A site log book will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Stormwater sampling data

File a blank form under Appendix D.

The site log book must be maintained on-site within reasonable access to the site and be made available upon request to Ecology or the local jurisdiction.

Numeric effluent limits may be required for certain discharges to 303(d) listed waterbodies. See CSWGP Special Condition S8 and Section 5 of this template.

4.1 Site Inspection

Site inspections will be conducted at least once every calendar week and within 24 hours following any discharge from the site. For sites that are temporarily stabilized and inactive, the required frequency is reduced to once per calendar month.

The discharge point(s) are indicated on the Site Map (see Appendix A) and in accordance with the applicable requirements of the CSWGP.

4.2 Stormwater Quality Sampling

4.2.1 Turbidity Sampling

Requirements include calibrated turbidity meter or transparency tube to sample site discharges for compliance with the CSWGP. Sampling will be conducted at all discharge points at least once per calendar week.

Method for sampling turbidity:

Table 8 – Turbidity Sampling Method

☒	Turbidity Meter/Turbidimeter (required for disturbances 5 acres or greater in size)
☐	Transparency Tube (option for disturbances less than 1 acre and up to 5 acres in size)

The benchmark for turbidity value is 25 nephelometric turbidity units (NTU) and a transparency less than 33 centimeters.

If the discharge's turbidity is 26 to 249 NTU **or** the transparency is less than 33 cm but equal to or greater than 6 cm, the following steps will be conducted:

1. Review the SWPPP for compliance with Special Condition S9. Make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.

2. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible. Address the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.
3. Document BMP implementation and maintenance in the site log book.

If the turbidity exceeds 250 NTU **or** the transparency is 6 cm or less at any time, the following steps will be conducted:

1. Telephone or submit an electronic report to the applicable Ecology Region's Environmental Report Tracking System (ERTS) within 24 hours.
    - **Central Region** (Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima): (509) 575-2490 or http://www.ecy.wa.gov/programs/spills/forms/nerts_online/CRO_nerts_online.html
    - **Eastern Region** (Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman): (509) 329-3400 or http://www.ecy.wa.gov/programs/spills/forms/nerts_online/ERO_nerts_online.html
    - **Northwest Region** (King, Kitsap, Island, San Juan, Skagit, Snohomish, Whatcom): (425) 649-7000 or http://www.ecy.wa.gov/programs/spills/forms/nerts_online/NWRO_nerts_online.html
    - **Southwest Region** (Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum,): (360) 407-6300 or http://www.ecy.wa.gov/programs/spills/forms/nerts_online/SWRO_nerts_online.html
2. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible. Address the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period
3. Document BMP implementation and maintenance in the site log book.
4. Continue to sample discharges daily until one of the following is true:
    - Turbidity is 25 NTU (or lower).
    - Transparency is 33 cm (or greater).
    - Compliance with the water quality limit for turbidity is achieved.
        - 1 - 5 NTU over background turbidity, if background is less than 50 NTU
        - 1% - 10% over background turbidity, if background is 50 NTU or greater
    - The discharge stops or is eliminated.

4.2.2 pH Sampling

pH monitoring is required for “Significant concrete work” (i.e., greater than 1000 cubic yards poured concrete over the life of the project). The use of recycled concrete or engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD] or fly ash) also requires pH monitoring.

For significant concrete work, pH sampling will start the first day concrete is poured and continue until it is cured, typically three (3) weeks after the last pour.

For engineered soils and recycled concrete, pH sampling begins when engineered soils or recycled concrete are first exposed to precipitation and continues until the area is fully stabilized.

If the measured pH is 8.5 or greater, the following measures will be taken:

1. Prevent high pH water from entering storm sewer systems or surface water.
2. Adjust or neutralize the high pH water to the range of 6.5 to 8.5 su using appropriate technology such as carbon dioxide (CO_2) sparging (liquid or dry ice).
3. Written approval will be obtained from Ecology prior to the use of chemical treatment other than CO_2 sparging or dry ice.

Method for sampling pH: None required

Table 9 – pH Sampling Method

☐	pH meter
☐	pH test kit
☐	Wide range pH indicator paper

5 Discharges to 303(d) or Total Maximum Daily Load (TMDL) Waterbodies

5.1 303(d) Listed Waterbodies

Is the receiving water 303(d) (Category 5) listed for turbidity, fine sediment, phosphorus, or pH?

☐ Yes ☒ No

List the impairment(s):

NA

5.2 TMDL Waterbodies

Waste Load Allocation for CWSGP discharges:

NA

List and describe BMPs:

NA

Discharges to TMDL receiving waterbodies will meet in-stream water quality criteria at the point of discharge.

The Construction Stormwater General Permit Proposed New Discharge to an Impaired Water Body form is included in Appendix F.

6 Reporting and Record Keeping

6.1 Record Keeping

6.1.1 Site Log Book

A site log book will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Sample logs

6.1.2 Records Retention

Records will be retained during the life of the project and for a minimum of three (3) years following the termination of permit coverage in accordance with Special Condition S5.C of the CSWGP.

Permit documentation to be retained on-site:

- CSWGP
- Permit Coverage Letter
- SWPPP
- Site Log Book

Permit documentation will be provided within 14 days of receipt of a written request from Ecology. A copy of the SWPPP or access to the SWPPP will be provided to the public when requested in writing in accordance with Special Condition S5.G.2.b of the CSWGP.

6.1.3 Updating the SWPPP

The SWPPP will be modified if:

- Found ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site.
- There is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the State.

The SWPPP will be modified within seven (7) days if inspection(s) or investigation(s) determine additional or modified BMPs are necessary for compliance. An updated timeline for BMP implementation will be prepared.

6.2 Reporting

6.2.1 Discharge Monitoring Reports

Cumulative soil disturbance is one (1) acre or larger; therefore, Discharge Monitoring Reports (DMRs) will be submitted to Ecology monthly. If there was no discharge during a given monitoring period the DMR will be submitted as required, reporting “No Discharge”. The DMR due date is fifteen (15) days following the end of each calendar month.

DMRs will be reported online through Ecology's WQWebDMR System.

6.2.2 Notification of Noncompliance

If any of the terms and conditions of the permit is not met, and the resulting noncompliance may cause a threat to human health or the environment, the following actions will be taken:

1. Ecology will be notified within 24-hours of the failure to comply by calling the applicable Regional office ERTS phone number (Regional office numbers listed below).
2. Immediate action will be taken to prevent the discharge/pollution or otherwise stop or correct the noncompliance. If applicable, sampling and analysis of any noncompliance will be repeated immediately and the results submitted to Ecology within five (5) days of becoming aware of the violation.
3. A detailed written report describing the noncompliance will be submitted to Ecology within five (5) days, unless requested earlier by Ecology.

Anytime turbidity sampling indicates turbidity is 250 NTUs or greater, or water transparency is 6 cm or less, the Ecology Regional office will be notified by phone within 24 hours of analysis as required by Special Condition S5.A of the CSWGP.

- **Central Region** at (509) 575-2490 for Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, or Yakima County
- **Eastern Region** at (509) 329-3400 for Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, or Whitman County
- **Northwest Region** at (425) 649-7000 for Island, King, Kitsap, San Juan, Skagit, Snohomish, or Whatcom County
- **Southwest Region** at (360) 407-6300 for Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, or Wahkiakum

Include the following information:

1. Your name and / Phone number
2. Permit number
3. City / County of project
4. Sample results
5. Date / Time of call
6. Date / Time of sample
7. Project name

In accordance with Special Condition S4.D.5.b of the CSWGP, the Ecology Regional office will be notified if chemical treatment other than CO_2 sparging is planned for adjustment of high pH water.

Please see Page G-3-35 for shared SWPPP Appendices