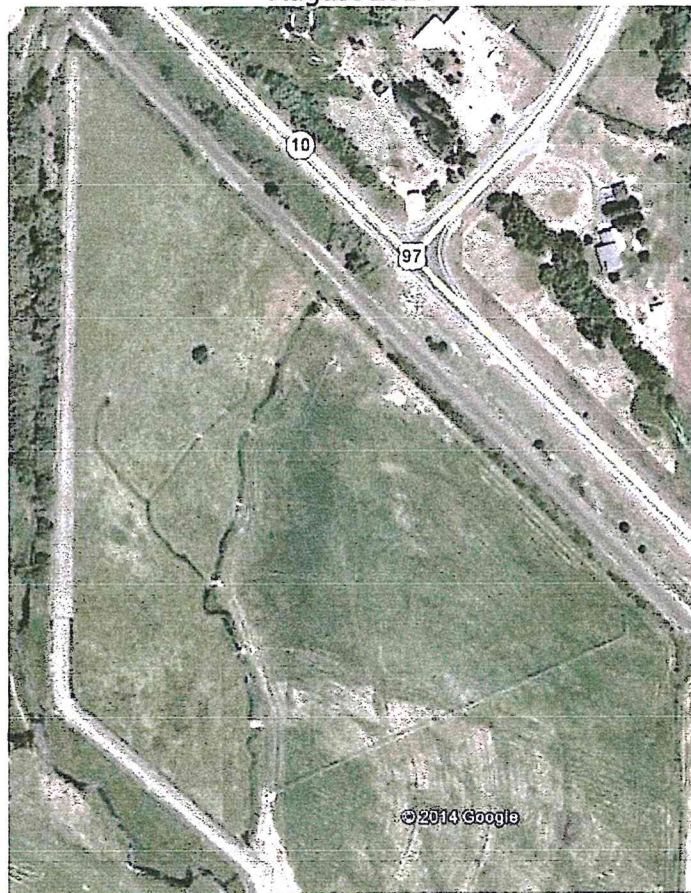


STORMWATER REPORT

OneEnergy Renewables OSPREY SITE

SITE GRADING AND UTILITY PLANS

August 2014



RECEIVED
SEP 26 2014
KITITAS COUNTY
CDS

PREPARED BY

MARK D. KELLER, P.E.



This Storm Water Report has been prepared for the OneEnergy Renewables Solar Photovoltaic (PV) site located in Kittitas County, WA. The project site is located 4 miles northwest of Ellensburg, WA via 97 (Old Highway 10) (Vicinity Map on Sheet 1/3). This report has been prepared in accordance with the requirements of the 2004 Storm Water Management Manual for Eastern Washington (SWMMEW).

Per the SWMMEW requirements of Section 2.1.1 New Development, this project must comply with the following five (5) core elements:

- Core Element #1 – Preparation of a Stormwater Site Plan
- Core Element #2 – Construction Stormwater Pollution Prevention Plan
- Core Element #3 – Source Control of Pollution
- Core Element #4 – Preservation of the Natural Drainage Systems, and
- Core Element #8 – Local Requirements

2.2.1 Core Element #1 – Preparation of a Stormwater Site Plan

The building site consists of undeveloped native soil. The proposed improvements include construction of a 2175 SF gravel driveway and the installation of an elevated solar panel array supported by pin piles.

The stormwater site plan is shown on Sheet 2/3, plan view and detail 1. The Pollution Generating Surface (PGIS) consists of the gravel driveway that is under the 5000 SF threshold for treatment; however, the project proposes to provide treatment for this area via a vegetated filter strip (BMP T5.50) as shown on the plan.

2.2.2 Core Element #2 – Construction Storm Water Pollution Prevention

The only project element that will disturb soil and create the potential for erosion is the grading for the 2175 SF driveway. Due to the small quantity of area and soil disturbed, the work of removing the topsoil and placing the crushed rock surfacing can be completed in less than one day. Due to the short duration and small quantity of work, a SWPPP is not being prepared for this project.

2.2.3 Core Element #3 – Source Control of Pollution

The primary pollutant source for this site is vehicle leakage. Due to the low traffic volumes, this site is defined as a low pollutant source facility. The stormwater system BMP that is proposed will provide adequate treatment for the runoff from the driveway.

2.2.4 Core Element #4 – Preservation of Natural Drainage Systems

Any flows that currently leave the site are sub-surface and un-concentrated. The project does not propose the construction of any site features that will alter the natural drainage system.

The Non-Pollution Generating Impervious Surfaces (NPGIS) of the solar panel arrays are constructed on pin piles so as to allow the runoff from these surfaces to infiltrate in the natural location and not alter the natural drainage system.

2.2.5 Core Element #5 – Runoff Treatment

This site is defined as a low pollutant source facility and with a total PGIS area <5000 SF is exempt from basic treatment. The project will, however, provide treatment via BMP T5.50 a vegetated filter strip for runoff leaving the compacted gravel driveway.

2.2.8 Core Element #8 – Local Requirements

Per Kittitas County requirements, this abbreviated Storm Water Report is being prepared to outline the design for storm water management regarding this site.

Summary

The project proposes to construct a small, 2175 SF, driveway that will be used intermittently for various maintenance activities on site. The amount of PGIS to be constructed is below the threshold for treatment, however, the runoff will be treated with BMP's. In addition, the NPGIS surfaces of the solar panels are constructed on pin piles which allow for the runoff from these surfaces to infiltrate in the natural location.