

Stormwater Pollution Prevention Plan Narrative

A Stormwater Pollution Prevention Plan (SWPPP) has been prepared as part of the construction of a Sewer Water Main Extension and Connection to Fire Station 72. Project location: 3431 180th St SE, Bothell, WA 98012. Currently the Fire Station is served by an outdated septic drainfield and well, both of which will be retired.

The purpose of the SWPPP is to describe the temporary and permanent erosion and sediment control (TESC) measures, pollution prevention measures, inspection/monitoring activities, and recordkeeping to be implemented during the proposed project. This narrative is to be considered a “living document.” This project’s Certified Erosion and Sediment Control Specialists to amend this document as needed during construction. Applications of these elements on the TESC Plan Sheet. The specific elements included in the SWPPP are:

Element #1: Mark Clearing Limits

Prior to the beginning of land disturbing activities, the clearing limits, (area of trenching to install the sewer main within the grass area of the Fire District property), are defined on the TESC plan. Applicable BMPs for this project are:

- BMP C103: High Visibility Fence

Element #2 – Establish Construction Access

During construction, if material is being deposited on streets, additional strategies may be required including: 1. Regenerative-type vacuum sweepers and repeated or continuous sweeping. 2. Special site procedures and provisions (such as transferring haul outs to trucks that travel only on paved and maintained surfaces in the site). 3. Suspension of work until dry weather.

The existing driveway will provide temporary construction access to the Fire District Site and the Fire District site will provide the staging area to support construction activities.

Element #3 – Control Flow Rates

This project consists of trenching and installation of a sewer and water main extensions. There is no clearing in the sense of site development; rather trenching within areas primarily already covered with asphalt pavement. Since, no new impervious area is proposed to be created with this project, storm water flow rates are not anticipated to be increased over that of the flow rates in the pre-construction condition.

Element #4 – Install Sediment Controls

Specific controls include:

- Cover soil stockpiles with plastic, (BMP C 123)
- Street sweeping

Element #5 – Stabilize Soils

Areas that are to remain uncovered for more than 7 days, are to be stabilized with BMPs.

Applicable BMPs Include:

- BMP C120: Temporary and Permanent Seeding
- BMP C123: Plastic Covering
- BMP C121: Mulching

Element #6 – Protect Slopes

This element is not applicable since there is no grading work that would result in exposed slopes. The project exists entirely of trenching to installation both a sewer and water main extension and relatively flat topography.

Element #7 – Protect Drain Inlets

The Contractor shall remove inlet protection at the end of the project without releasing captured sediment into the storm system.

Inlet protection will be utilized on catch basins down gradient and in the vicinity of the disturbed areas.

- BMP C220: Storm Drain Inlet Protection

Element #8 – Stabilize Channels and Outlets

NA-It is not anticipated that flows of significant velocity will leave the site or cause any negative impact to the downstream.

Element #9 – Control Pollutants

All pollutants, including waste materials and demolition debris, that occur onsite shall be handled and disposed of in a manner that does not cause contamination of stormwater. Good housekeeping and preventative measures will be taken to ensure that the site will be kept clean, well-organized, and free of debris.

- BMP C 153-Material Storage, Delivery, and Containment

Element #10 – Control Dewatering

De-watering is anticipated within trenches which will be up to 17-feet deep. The contractor is to ensure sediment laden water is not released from the site with the use of:

- BMP C203: Water Bars
- BMP C236: Vegetative Filtration

Element #11 – Maintain BMPs

All temporary and permanent erosion and sediment control 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 BMPs specifications. Visual monitoring of the BMPs will be conducted at least once every calendar week and within 24 hours of any rainfall event that causes a discharge from the site. If the site becomes inactive, and is temporarily stabilized, the inspection frequency will be reduced to once every month.

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

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

Element #12 – Manage the Project

For Certified Erosion and Sediment Control Lead (CESCL) requirements, and Rainy Season Requirements and Seasonal Suspension Plan, refer to EDM Chapter 22, Construction Stormwater Pollution Prevention Plan.

Erosion and sediment control BMPs for this project have been designed based on the following principles:

- 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.

Element #13 – Protection of Lid BMP's

All proposed and existing LID BMPs shall be shown on the Applicant/Permittee's erosion control plan. The erosion control plan shall detail the protection and cleaning of all LID BMPs, including protecting any infiltration-based BMPs and sub-grades from over compaction before, during and after construction activities.

During the construction, all proposed BMPs shall fully comply with the DOE's regulations for Element #13. Restore the BMP to their fully functioning condition if they accumulate sediment during construction. Restoring the BMP must include removal of sediment and replacing the removed soils with soils meeting the design specification. Protect completed lawn and landscaped areas from compaction due to construction equipment. Keep all heavy equipment off existing soils under LID facilities that have been excavated to final grade to retain the infiltration rate of the soils.