

**DATE:** 2/15/2023

**TO:** City of Puyallup  
Development Engineering  
Puyallup City Hall  
333 S. Meridian  
Puyallup, WA 98371

**FROM:** Marc Pudists, P.E.

**SUBJECT:** Engineering Memo

**PROJECT:** Enterprise Puyallup

**MC Job No:** ENTP0008

**CC:**



Momentum Civil has been contracted by EAN Holdings, LLC to provide civil engineering services associated with installing a new vehicle wash area in an existing structure located at 733 River Road. This Engineering Memo is provided to summarize the storm water requirements and oil/water separator sizing for the project.

### Storm Water Requirements

This project results in less than 2,000 square feet of new plus replaced hard surface area. Therefore, per Figure I-3.2 in the Department of Ecology 2019 Storm Water Management Manual (the Manual) for Western Washington, only Minimum Requirement #2 applies. As the project also disturbs less than 7,000 square feet of land, a Construction SWPPP is not required to be prepared. However, the project must consider all of the Construction SWPPP elements and develop controls for all Construction SWPPP elements that pertain to the project site. Construction SWPPP elements are considered below:

- Element 1: Preserve Vegetation / Mark Clearing Limits – No vegetation will be cleared, as improvements will be made exclusively within areas that are already hardscape.
- Element 2: Establish Construction Access – Construction access will be via the existing paved drive entrance and parking lot.
- Element 3: Control Flow Rates – This project will not affect existing flow rates or patterns.
- Element 4: Install Sediment Controls – Soil exposure will be minor and temporary. All exposed soils will be surrounded entirely by a sawcut pavement edge.

- Element 5: Stabilize Soils – Soil exposure will be temporary and will consist of pavement removal for utility trenching and pavement removal for installation of two concrete ramps.
- Element 6: Protect Slopes – There are no slopes within the project area.
- Element 7: Protect Drain Inlets – Catch basin filters are called for on the civil plans.
- Element 8: Stabilize Channels and Outlets – Surface water will flow existing catch basins. No conveyance channels or outlets are included in this project.
- Element 9: Control pollutants – The contractor will be responsible for controlling pollutants during construction.
- Element 10: Control Dewatering – No dewatering is anticipated for this project.
- Element 11: Maintaining BMPs – The contractor will be responsible for maintaining BMPs for the duration of the project (until final stabilization is achieved).
- Element 12: Manage the Project – The contractor will be responsible for appropriate management of the project.

#### Oil Water Separator Sizing Assumptions

Wash throughput for car washes at this location (provided by owner):

- 3.5 gallons per car wash
- Average exterior car wash cycle 3 minutes
- Single wash bay

Engineer's calculation:

During a car wash 3.5 gallons will be used over a minimum time period of 3 minutes. This equates to a flow rate of 1.2 gallons per minute from the car wash activity.

Two hose bibs are anticipated for each wash bay with a flow rate of 5 gpm each (2 hose bibs x 5 gpm = 10 gpm).

Therefore, a max flow to the oil/water separator is expected to be approximately 11.2 gpm.

An oil/water separator with capacity for 47 gpm flow rate has been selected and will provide adequate protection.

Attachments/Enclosures: Enterprise Rent-A-Car Tenant Improvement Plans submitted under separate cover.