The Combined Stormwater Site Plan (SSP) and Construction Stormwater Pollution Prevention Plan (SWPPP) Report Short Form may be used for smaller projects. These typically will not trigger the need to install stormwater facilities to meet the intent of Minimum Requirement #6 (water quality), Minimum Requirement #7 (flow control), or Minimum Requirement #8 (Wetlands Protection). These projects typically fall within or below the following thresholds:

- The project adds or replaces between 2,000 and 5,000 square feet of hard surface.
- The project disturbs between 7,000 square feet and 1 acre of land.

This short form is not intended to replace the contents of the Stormwater Management Manual (SWMM) but is intended to provide an easy to use form that will help comply with the Minimum Requirements of the SWMM. This short form is appropriate for many projects in the City of Tacoma but may not be appropriate for all smaller projects. Environmental Services may require the preparation of a formal SSP and SWPPP per Volume 1 and Volume 2 of the SWMM based upon the project scope.

Utilize this Short Form for projects that are located in the Northeast Tacoma, North Tacoma, Thea Foss, Tideflats, Lower Puyallup, and Western Slopes Watersheds and discharge to marine waterbodies. For all other project locations, utilize the Combined Stormwater Site Plan and Construction Stormwater Pollution Prevention Plan Report Short Form – Freshwater located at www.cityoftacoma.org/stormwatermanual/shortforms.

The Combined SSP/SWPPP shall include both the completed attached report with associated appendices and a site plan which includes the following information at minimum. The site plan shall clearly show all necessary features and be drawn to scale. Provide at least two pages – one showing the BMPs that will be used during construction and one showing the site in the final condition including all permanent BMPs and final cover conditions (landscaping). Onsite field verification of actual conditions is required in order to complete the combined SSP and SWPPP. Environmental Services may also require additional information if warranted by project parameters.

- Vicinity Map
- Address, Parcel Number, Permit Number, and Street Names
- Parcel Lines
- North Arrow
- Boundaries of existing vegetation (e.g. tree lines, grassy areas, pasture areas, fields, etc.)
- Onsite or adjacent critical areas and associated buffers (e.g. wetlands, steep slopes, streams, etc.).
- Existing and proposed contours. Provide survey information if available; if unavailable, the City of Tacoma DART Map or govME MapGuide may be used to obtain estimated contours.
- Areas proposed to be cleared and graded.
- All cut and fill slopes, indicating top and bottom of slope catch lines.
- Indicate all locations where upstream runon enters the site and locations where runoff leaves the site.
- Show spot elevations, dimensions, and direction of flow in any ditches, swales, culverts, and pipes that will be used during construction.
City of Tacoma Combined SSP-SWPPP Short Form

- Indicate locations and outlets of any dewatering systems (usually to sediment trap).

- Identify and show the location of all erosion control techniques to be used during and after construction.

- Include details for proposed temporary erosion and sediment control best management practices.

- Finish floor elevations of all proposed structures.

- Show the location of all existing improvements, including all known utilities.

- Show the location of all proposed improvements including:
  - The location and dimensions of any hard surfaces
    - The building footprint shall show the dimension of the roof footprint to fully show the amount of hard surface coverage
  - Pipe types and slopes for all proposed utilities
  - Location and dimension of any proposed stormwater system (infiltration trench, drywell, rain garden, etc.)
  - The location and dimension for vegetated flowpaths (if dispersion is proposed)

- Details for any proposed stormwater facility.

- For compliance with BMP L613: Post-Construction Soil Quality and Depth, hatch or otherwise clearly mark the location of soils amendments and the type of amendment proposed.

- Provide a proposed landscape plan which may include a separate planting plan for any proposed rain gardens (see Volume 6, Section 2.2.2.1.2.9).
City of Tacoma Combined SSP-SWPPP Short Form

Combined Stormwater Site Plan and Construction Stormwater Pollution Prevention Plan Report Short Form - Marine

City of Tacoma Site Development or Work Order Permit Number(s): Click here to enter text.
Prepared By: Click here to enter text.
Date Prepared: Click here to enter text.
City of Tacoma SWMM Version Project is required to follow: Click here to enter text.

Chapter 1 – Project Overview

Project Address: Click here to enter text.
Parcel Number: Click here to enter text.
Size of Parcel (acres or square feet): Click here to enter text.
Brief description of project: Click here to enter text.

Associated City of Tacoma Permit Number(s) (e.g., land use permits, residential building permits): Click here to enter text.
Applicant Name: Click here to enter text.
Applicant Address: Click here to enter text.
Applicant Phone Number: Click here to enter text.
Applicant E-mail: Click here to enter text.
Property Owner Name: Click here to enter text.
Property Owner Address: Click here to enter text.
Property Owner Phone Number: Click here to enter text.
Property Owner E-mail: Click here to enter text.
Identify other agency permits required or associated with the subject parcel (e.g., hydraulic permits, Army Corps 404 permits). Provide Permit numbers if available: Click here to enter text.

Project Location Watershed: Click here to enter text.

First Waterbody Encountered in Entire Downstream Flowpath: Click here to enter text.
Final (Ultimate) Discharge Waterbody: Click here to enter text.
City of Tacoma Combined SSP-SWPPP Short Form

In the table below, list all site improvements that have occurred on this site since January 1, 2003. Include all new hard surfaces and land disturbances. Provide short description of improvement including approximate square footage and related City of Tacoma Permit Number:

<table>
<thead>
<tr>
<th>Year of Improvement</th>
<th>Description</th>
<th>Hard Surface Created (ft²)</th>
<th>Amount of Land Disturbed (ft²)</th>
<th>Related City of Tacoma Permit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Click here to enter text.</td>
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</tr>
</tbody>
</table>

Complete the following table as applicable to the proposed project (include onsite and offsite improvements):

<table>
<thead>
<tr>
<th>Description</th>
<th>Onsite</th>
<th>Offsite</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Conditions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Project Area(^b) (ft(^2))</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Existing hard surface (ft(^2))</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Existing vegetation area (ft(^2))</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td><strong>Proposed Conditions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Project Area(^b) (ft(^2))</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Amount of new hard surface (ft(^2))</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Amount of new pollution generating hard surface (PGHS)(^c) (ft(^2))</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Amount of replaced hard surface (ft(^2))</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Amount of replaced PGHS(^d) (ft(^2))</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Amount of new plus replaced hard surface (ft(^2))</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
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<tr>
<td>Amount of new + replaced PGHS (ft(^2))</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
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<tr>
<td>Amount of existing hard surfaces converted to vegetation (ft(^2))</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Amount of Land Disturbed (ft(^2))</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Vegetation to Lawn/Landscaped (acres)</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Native Vegetation to Pasture (acres)</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Existing hard surface to remain unaltered (ft(^2))</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Existing vegetation area to remain unaltered (ft(^2))</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
</tbody>
</table>

a. All terms are defined in the SWMM glossary.
b. The total project area in the existing condition should typically match the total project area in the proposed condition. The total project area includes those areas that remain unaltered and those areas that will be altered.
c. The “amount of new PGHS” should be part of or all of “amount of new hard surfaces”
d. The “amount of replaced PGHS” should be part of or all of the “amount of replaced hard surfaces”.

4
Chapter 2 – Existing Condition Summary

Existing Site Conditions

1. Existing site conditions. (Check all that apply)
   - ☐ Forest
   - ☐ Pasture/prairie grass
   - ☐ Pavement
   - ☐ Landscaping
   - ☐ Brush
   - ☐ Trees
   - ☐ Structure/Building
   - ☐ Other: Click here to enter text.

2. Describe how stormwater flows across/from the site. (Check all that apply)
   - ☐ Sheet Flow
   - ☐ Gutter
   - ☐ Catch Basin
   - ☐ Ditch/Swale
   - ☐ Stormwater Pipes
   - ☐ Stream/Creek
   - ☐ Other: Click here to enter text.

3. Existing Site Topography (Check all that apply)
   - ☐ Flat
   - ☐ Rolling
   - ☐ Steep

4. Are there any known historical drainage problems such as flooding, erosion, etc.?
   - ☐ Yes (show on site plan)
   - ☐ No

5. Existing utilities (Check all that are on the site and show on site map with legend)
   - ☐ Stormwater
   - ☐ Water
   - ☐ Wastewater
   - ☐ Other: Click here to enter text.

6. Are sensitive and critical areas present on or near the site (i.e. vegetative buffers, wetlands, steep slopes, floodplains, geologic hazard areas, streams, creeks, ponds, ravines, springs, etc.)?
   - ☐ Yes (show on site plan)
   - ☐ No

7. Are existing fuel tanks present on the site?
   - ☐ Yes (show on site plan)
   - ☐ No

8. Is this site within the South Tacoma Groundwater Protection District (on GovME or SWMM Volume 1, Chapter 2, Figure 1 - 2)?
   - ☐ Yes
   - ☐ No

9. Is the site within the aquifer recharge area (on GovME under Building and Land Use/ Critical Areas)?
   - ☐ Yes
   - ☐ No

10. Are groundwater wells present onsite and/or within 100 feet of the site?
    - ☐ Yes (show on site plan)
    - ☐ No

11. Are septic systems present onsite and/or within 100 feet of the site?
    - ☐ Yes (show on site plan)
    - ☐ No

12. Are there existing public and/or private easements on the project site?
    - ☐ Yes (show on site plan & provide recording numbers)
    - ☐ No

13. When a soils report is required (see Volume 3, Appendix B of the SWMM), provide a soils report (attach soils report as Appendix to this SSP Report).
Chapter 3 – Offsite Analysis (Qualitative)

1. Provide a map showing the downstream drainage path leading from the site to the receiving waterbody or ¼ mile (whichever is less). The map must show the location of the stormwater conveyance location and describe pipe diameters. Include map in appendices of this stormwater site plan. Alternatively, in writing below, describe the downstream drainage path leading from the site to the receiving waterbody or ¼ mile (whichever is less). (e.g. water flows from the project site into the existing concrete curb-line which connects to a catch basin at intersection of X and Y streets. A 12-inch pipe system conveys water another 1000 feet to a ravine/wetland.)

2. Perform a site visit to investigate the drainage system ¼ mile downstream from the project and check the boxes below indicating any visual signs of drainage problems:
   - ☐ No sign of drainage problems
   - ☐ Damaged catch basins
   - ☐ Damaged pipes
   - ☐ Excessive leaf fall or debris blocking catch basin
   - ☐ Localized flooding (large puddles)
   - ☐ Signs of erosion (sediment build-up in curb line)
   - ☐ Other: Click here to enter text.

   Date of Inspection: Click here to enter text.
   Weather at the time of the inspection (was it raining during site visit?): Click here to enter text.

Chapter 4 – Low Impact Development Principles

Where feasible, sites shall use the following low impact development site design principles. Check those principles that will be used onsite. The applicant is not required to revise their proposed design in order to accommodate these principles, but shall use the principles when feasible.

☐ Minimization of land disturbance by fitting development to the natural terrain.
☐ Minimization of land disturbance by confining construction to the smallest area feasible and away from critical areas.
☐ Preservation of natural vegetation.
☐ Locating impervious surfaces over less permeable soils.
☐ Clustering buildings
☐ Minimizing Impervious Surfaces

Chapter 5 – Discussion of Minimum Requirements

Check the box which describes how each of the Minimum Requirements will be satisfied. The applicant can check the boxes that apply or describe the alternate means used to comply with the Minimum Requirements. Review Volume 1 of the SWMM to determine which Minimum Requirements apply to a project.

Minimum Requirement #1 – Preparation of a Stormwater Site Plan

☐ This Combined SSP and SWPPP Report Short Form and associated plan set satisfy this requirement.

Minimum Requirement #2 – Construction Stormwater Pollution Prevention

☐ This Combined SSP and SWPPP Report Short Form and associated plan set satisfy this requirement.
City of Tacoma Combined SSP-SWPPP Short Form

Minimum Requirement #3 – Source Control of Pollution
☐ For a single family residence, the homeowner shall comply with all Best Management Practices (as applicable) contained in Volume 4, Chapter 3 of the 2016 SWMM.
☐ For commercial or industrial facilities, complete the “Worksheet for Commercial and Industrial Activities” contained in Volume 4, Chapter 2 of the 2016 SWMM. Attach the worksheet as an appendix to this Report. The owner or operator shall comply with all BMPs checked.

Minimum Requirement #4 – Preservation of Natural Drainage Systems and Outfalls
All boxes should be checked for this Minimum Requirement. If all boxes cannot be checked an exception to the Minimum Requirement may be required per Volume 1, Section 3.5 of the SWMM.

☐ The natural (or existing) drainage patterns have been maintained to the maximum extent feasible.
☐ Discharges from the project site occur at the natural (or existing) location to the maximum extent feasible.
☐ Discharge from the project site will not cause a significant adverse impact to downstream receiving waters and downgradient properties.

Minimum Requirement #5 – Onsite Stormwater Management
Minimum Requirement #5 is dependent upon the watershed in which the project is located. See Volume 3 and Volume 6 of the SWMM for feasibility and design requirements for onsite stormwater management techniques. If there are multiple surface types (i.e. more than one roof), ensure the means of onsite management is described for each.

Include a description of how the facility size was determined including any calculations used to determine the facility size. Show the amount of surface area mitigated for each surface type and each facility. Include sizing calculations as an attachment to this SSP. See Volume 3, Appendix B of the SWMM to determine if a soils report is required for the facility type chosen. Include soils report as an attachment to this SSP.

Place a checkmark next to the BMP proposed to be used for each surface type. Complete an infeasibility checklist to determine which BMPs are appropriate for the project. See www.cityoftacoma.org/stormwatermanual/shortforms for infeasibility checklists for each BMP. Attach the completed infeasibility checklist(s) as an appendix to this SSP Report. Include an Operation and Maintenance Manual for all permanent facilities as an attachment to this SSP Report.

For projects within Northeast Tacoma, North Tacoma, Thea Foss, Tideflats, Lower Puyallup, and Western Slopes that discharge to marine waterbodies one of the following BMPs for each surface type must be utilized if feasible. The optional BMPs may be used as an alternative to the required BMPs if feasible.

Roofs:
Required BMPs: At least one of these BMPs must be analyzed for feasibility. If any BMP is found to be infeasible, the applicant may utilize BMP L605: Collect and Convey per the SWMM.
☐ BMP L602: Downspout Infiltration Trench
  ☐ Not feasible – see infeasibility checklist in appendices
☐ BMP L602: Downspout Dry Well
  ☐ Not feasible – see infeasibility checklist in appendices
☐ BMP L603: Dispersion Trench
  ☐ Not feasible – see infeasibility checklist in appendices
☐ BMP L603: Splashblocks
  ☐ Not feasible – see infeasibility checklist in appendices
☐ BMP L604: Perforated Stubout
  ☐ Not feasible – see infeasibility checklist in appendices
☐ No Roofs – Not Required
☐ Required BMPs are not feasible – utilize BMP L605: Collect and Convey
Optional BMPs: These BMPs may be utilized as an alternative to those listed above. The BMPs must be feasible for the proposed development and must be designed in accordance with the SWMM.
- BMP L601: Rain Garden
- BMP L630: Bioretention
- BMP L614: Full Dispersion

Other Hard Surfaces:
Optional BMPs: These BMPs may be utilized as an alternative to those listed above. The BMPs must be feasible for the proposed development and must be designed in accordance with the SWMM.
- BMP L633: Permeable Pavement
- BMP L601: Rain Garden
- BMP L630: Bioretention
- BMP L614: Full Dispersion

Other Hard Surfaces:
Required BMPs: At least one of these BMPs must be analyzed for feasibility. If any BMP is found to be infeasible the applicant may utilize BMP L605: Collect and Convey per the SWMM. Additional treatment may be required if proposing to infiltrate pollution generating surfaces in the South Tacoma Groundwater Protection District. See Volume 5, Appendix D of SWMM. If treatment is required the Short Form SSP cannot be used.
- BMP L611: Concentrated Flow Dispersion
  - Not feasible – see infeasibility checklist in appendices
- BMP L612: Sheet Flow Dispersion
  - Not feasible – see infeasibility checklist in appendices
- Required BMPs are not feasible – utilize BMP L605: Collect and Convey

Optional BMPs: These BMPs may be utilized as an alternative to those listed above. The BMPs must be feasible for the proposed development and must be designed in accordance with the SWMM.
- BMP L633: Permeable Pavement
- BMP L601: Rain Garden
- BMP L630: Bioretention
- BMP L614: Full Dispersion

Lawn and Landscaped Areas:
Required BMP: The following BMP must be analyzed for feasibility. Place a checkmark next to the option(s) that will be utilized onsite.
- BMP L613: Post Construction Soil Quality and Depth
  - Option 1: Leave Native Vegetation and Soil Undisturbed
  - Option 2: Amend the Existing Site Topsoil
  - Option 3: Stockpile existing topsoil during grading and replace it prior to planting.
  - Option 4: Import Topsoil Mix
- Required BMP is not feasible – see infeasibility checklist attached in appendices

Minimum Requirement #9 – Operation and Maintenance
- See operation and maintenance manual contained in appendix of this Stormwater Site Plan Short Form Report.
- No stormwater facilities are proposed for this project (all stormwater is being collected and conveyed to the City system).

Minimum Requirement #10 – Offsite Analysis and Mitigation
- See Chapter 3 of this Stormwater Site Plan Short Form Report.
City of Tacoma Combined SSP-SWPPP Short Form

Construction Stormwater Pollution Prevention Plan

13 Elements of a Construction SWPPP

The following 13 elements are required for each SWPPP. If an element does not apply to the project site, describe why the element does not apply. Check off those BMPs that are proposed to be used to meet the requirements of the 13 elements below. Everything that is checked below must be shown on the site plan. If a BMP is checked as a possible contingent BMP, state that in this report. Only those erosion and sediment control techniques most pertinent to small construction sites are included here. More detailed information on construction BMPs can be found in Volume 2 of the City of Tacoma Stormwater Management Manual. The BMP numbers referenced are BMPs located in the City of Tacoma SWMM. Attach those BMPs from the SWMM that will be used for the project as a separate appendix.

Element #1 – Preserve Vegetation and Mark Clearing Limits

Retain the duff layer, native topsoil, and natural vegetation in an undisturbed state to the maximum extent practicable. If it is not practicable to retain the duff layer in place, it should be stockpiled onsite, covered to prevent erosion, and replaced immediately upon completion of the ground-disturbing activity.

All construction projects must clearly mark any clearing limits, sensitive areas and their buffers, and any trees that will be preserved prior to beginning any land disturbing activities, including clearing and grading. Clearly mark the limits both in the field and on the plans. Limits shall be marked in such a way that any trees or vegetation to remain will not be harmed. See Figure 3 - 13 of the SWMM.

The BMP(s) being proposed to meet this element are:
☐ BMP C101: Preserving Natural Vegetation
☐ BMP C102: Buffer Zones
☐ BMP C103: High Visibility Fence
☐ BMP C233: Silt Fence
☐ Other (Describe Method): Click here to enter text.

Or
☐ This element is not required for this project because: Click here to enter text.

Element #2 – Establish Construction Access

All construction projects subject to vehicular traffic shall provide a means of preventing vehicle “tracking” of soil from the site onto City streets or neighboring properties. Limit vehicle ingress and egress to one route if possible. All access points shall be stabilized with a rock pad, construction entrance per BMP C105 or other City of Tacoma approved BMP. The applicant should consider placing the entrance in the area for future driveway(s), as it may be possible to use the rock as a driveway base material. The entrance(s) must be inspected weekly, at a minimum, to ensure no excess sediment buildup or missing rock.

If sediment is tracked offsite, it shall be swept or shoveled from the paved surface immediately. Keep streets clean at all times. Street washing for sediment removal is not allowed as it can transport sediment to downstream water courses and clog the downstream stormwater system.

The location of the proposed construction entrance must be identified on the site plan.

The BMP(s) being proposed to meet this element are:
☐ BMP C105: Stabilized Construction Entrance/Exit
☐ BMP C107: Construction Road/Parking Area Stabilization
☐ Other (Describe Method): Click here to enter text.

Or
☐ This element is not required for this project because: Click here to enter text.
Element #3 – Control Flowrates

Protect properties and waterways downstream of the project site from erosion due to increases in volume, velocity, and peak flow of stormwater runoff from the project site. Permanent infiltration facilities shall not be used to control flowrates during construction unless specifically approved in writing by Environmental Services.

The BMP(s) being proposed to meet this element are:
☐ BMP C203: Water Bars
☐ BMP C207: Check Dams
☐ BMP C209: Outlet Protection
☐ BMP C235: Wattles
☐ BMP C240: Sediment Trap
☐ Other (Describe Method): Click here to enter text.

Or
☐ This element is not required for this project because: Click here to enter text.

Element #4 – Install Sediment Controls

Stormwater runoff from disturbed areas must pass through an appropriate sediment removal device prior to leaving a construction site or discharging into an infiltration facility.

Install/construct the sediment removal BMP before site grading.

The BMP(s) being proposed to meet this element are:
☐ BMP C233: Silt Fence
☐ BMP C234: Vegetated Strip
☐ BMP C235: Wattles
☐ BMP C240: Sediment Trap
☐ Other (Describe Method): Click here to enter text.

Or
☐ This element is not required for this project because: Click here to enter text.

Element #5 – Stabilize Soils

Stabilize exposed and unworked soils by applying BMPs that protect the soils from raindrop impact, flowing water, and wind. Minimize the amount of soil exposed during construction activity. Minimize the disturbance of steep slopes. Minimize soil compaction and, unless infeasible, preserve topsoil.

From October 1 through April 30, no soils shall remain exposed or unworked for more than 2 days. From May 1 to September 30, no soils shall remain exposed and unworked for more than 7 days. This applies to all soils on site whether at final grade or not.

The BMP(s) being proposed to meet this element are:
☐ BMP C120: Temporary and Permanent Seeding
☐ BMP C121: Mulching
☐ BMP C122: Nets and Blankets
☐ BMP C123: Plastic Covering
☐ BMP C124: Sodding
☐ BMP C125: Compost
☐ BMP C126: Topsoiling
☐ BMP C140: Dust Control
☐ Other (Describe Method): Click here to enter text.

Or
Element #6 – Protect Slopes

Design and construct cut-and-fill slopes in a manner to minimize erosion.

Protect slopes by diverting water at the top of the slope. Reduce slope velocities by minimizing the continuous length of the slope, which can be accomplished by terracing and roughening slope sides. Establishing vegetation on slopes will protect them as well.

The BMP(s) being proposed to meet this element are:
☐ BMP C120: Temporary and Permanent Seeding
☐ BMP C121: Mulching
☐ BMP C122: Nets and Blankets
☐ BMP C200: Interceptor Dike and Swale
☐ BMP C203: Water Bars
☐ BMP C204: Pipe Slope Drains
☐ BMP C205: Subsurface Drains
☐ BMP C207: Check Dams
☐ BMP C208: Triangular Silt Dike
☐ Other (Describe Method): Click here to enter text.

Or
☐ This element is not required for this project because: Click here to enter text.

Element #7 – Protect Drain Inlets

Protect all storm drain inlets that are operable during construction to ensure untreated stormwater does not enter conveyance system. Install catch basin protection on all catch basins within 500 feet downstream of the project. The catch basin inlet protection shown in Figure 2-45 is the only catch basin protection allowed within the City right of way. Once the site is fully stabilized, catch basin protection must be removed.

The BMP(s) being proposed to meet this element are:
☐ BMP C220: Storm Drain Inlet Protection
☐ Other (Describe Method): Click here to enter text.

Or
☐ This element is not required for this project because: Click here to enter text.

Element #8 – Stabilize Channels and Outlets

Stabilize all temporary onsite conveyance channels. Provide stabilization to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches at the outlets of conveyance systems.

The BMP(s) being proposed to meet this element are:
☐ BMP C122: Nets and Blankets
☐ BMP C202: Channel Lining
☐ BMP C207: Check Dams
☐ BMP C209: Outlet Protection
☐ Other (Describe Method): Click here to enter text.

Or
☐ This element is not required for this project because: Click here to enter text.

Element #9 – Control Pollutants

Handle and dispose of all pollutants, including demolition debris and other solid wastes in a manner that does not cause contamination of the stormwater. Provide cover and containment for all chemicals, liquid products
City of Tacoma Combined SSP-SWPPP Short Form
(including paint), petroleum products, and other materials. Handle all concrete and concrete waste appropriately. All discharges to the City sanitary sewer system require City approval, which may include a Special Approved Discharge (SAD) permit, see http://www.cityoftacoma.org/government/city_departments/environmentalservices/wastewater/wastewater_permits_and_manuals for additional information.

The BMP(s) being proposed to meet this element are:
☐ BMP C151: Concrete Handling
☐ BMP C152: Sawcutting and Surfacing Pollution Prevention
☐ BMP C153: Material Delivery, Storage, and Containment
☐ BMP C154: Concrete Washout Area
☐ Other (Describe Method): Click here to enter text.
Or
☐ This element is not required for this project because: Click here to enter text.

Element #10 – Control Dewatering

Clean, non-turbid dewatering water, such as groundwater, can be discharged to the stormwater system provided the dewatering flow does not cause erosion or flooding of receiving waters. All other water shall be discharged to the City wastewater system.

All discharges to the City wastewater system require City approval, which may include a Special Approved Discharge (SAD) permit.

The BMP(s) being proposed to meet this element are:
☐ BMP C203: Water Bars
☐ BMP C236: Vegetative Filtration
☐ Other (Describe Method): Click here to enter text.
Or
☐ This element is not required for this project because: Click here to enter text.

Element #11 – Maintain BMPs

Maintain and repair temporary erosion and sediment control BMPs as needed. Inspect all BMPs at least weekly and after every storm event.

Remove all temporary erosion and sediment control BMPs within 30 days after final site stabilization or if the BMP is no longer needed. Any trapped sediment should be removed or stabilized onsite. No sediment shall be discharged into the storm drainage system or natural conveyance systems.

The BMP(s) being proposed to meet this element are:
☐ BMP C150: Materials on Hand
☐ BMP C160: Erosion and Sediment Control Lead
☐ Other (Describe Method): Click here to enter text.
Or
☐ This element is not required for this project because: Click here to enter text.

Element #12 – Manage the Project

Phase development projects in order to prevent soil erosion and the transport of sediment from the project site during construction.

Coordinate all work before initial construction with subcontractors and other utilities to ensure no areas are prematurely worked.

An Erosion Control Lead is required for all construction sites. The Erosion Control Lead is the party
City of Tacoma Combined SSP-SWPPP Short Form

responsible for ensuring that the proposed erosion and sediment control BMPs are appropriate for the site and are functioning. They are also responsible for updating the SWPPP as necessary as site conditions warrant. They must be available 24 hours a day to ensure compliance.

The BMP(s) being proposed to meet this element are:
☐ BMP C150: Materials on Hand
☐ BMP C160: Erosion and Sediment Control Lead
  - Name of ESC Lead: Click here to enter text.
  - Phone Number for ESC Lead: Click here to enter text.
☐ BMP C162: Scheduling
☐ Other (Describe Method): Click here to enter text.
Or
☐ This element is not required for this project because: Click here to enter text.

Element #13 – Protect BMPs

Protect all permanent stormwater BMPs from sedimentation through installation and maintenance of erosion and sediment control BMPs on portions of the site that drain into the BMPs. Restore all BMPs to their fully functioning condition if they accumulate sediment during construction. Restoring the BMP shall include removal of all sediment. Keep heavy equipment off of infiltration surfaces.

The BMP(s) being proposed to meet this element are:
☐ BMP C102: Buffer Zone
☐ BMP C103: High Visibility Fence
☐ BMP C200: Interceptor Dike and Swale
☐ BMP C201: Grass-Lined Channels
☐ BMP C207: Check Dams
☐ BMP C208: Triangular Silt Dike (TSD) (Geotextile-Encased Check Dam)
☐ BMP C231: Brush Barrier
☐ BMP C233: Silt Fence
☐ BMP C234: Vegetated Strip
☐ Other (Describe Method): Click here to enter text.
Or
☐ This element is not required for this project because: Click here to enter text.

Complete the following information regarding construction sequencing, phasing, and scheduling:

Construction Sequencing

The standard construction sequence is as follows:

- Mark clearing/grading limits.
- Schedule an inspection with the City to verify clearing/grading limits and TESC BMP placement prior to the start of any work on the site.
- Clear, grade, and fill site as outlined in the site plan while implementing and maintaining TESC BMPs at the same time.
- Install proposed site improvements (hard surface, landscaping, etc.).
- Schedule an inspection with the City for approval of permanent site stabilization protection and site grades.
- Remove TESC BMPs as permitted by the City inspector and repair permanent landscaping as necessary.
- Monitor and maintain permanent erosion protection (lawn/landscaping) until fully established.

List any changes from the standard construction sequence outlined above: Click here to enter text.
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Construction Phasing
Construction phasing: If construction is going to occur in separate phases, describe: Click here to enter text.

Construction Schedule
Provide a proposed construction schedule (dates construction begins and ends and dates for any construction phasing).

Start Date: Click here to enter text.
End Date: Click here to enter text.
Interim Phasing Dates: Click here to enter text.

Wet Season Construction Activities: Wet season occurs from October 1 to April 30. Describe construction activities that will occur during this time period: Click here to enter text.

NOTE: Additional erosion control measures beyond those shown may be required to manage site runoff.
Stormwater Site Plan and Construction Stormwater Pollution Prevention Plan Appendices

The following are potential appendices that may be required for your project. Only includes those items applicable to your project. Additional appendices may be required in addition to those typical appendices shown below.

Appendix A – Qualitative Analysis Map
- See Chapter 3 for additional information of what should be included on this map.

Appendix B – Completed Infeasibility Checklists
- See Chapter 5, Minimum Requirement #5 for additional information for what to include in this appendix.

Appendix C – Stormwater Facility Sizing
- Complete all relevant information in Appendix C. Remove sizing information that is not relevant to the project.
- See Volume 3 of the SWMM for information on how to size onsite stormwater BMPs.

Appendix D – Soils Report
- See Volume 3, Appendix B of the SWMM.

Appendix E – BMP Operation and Maintenance Manual
- If a permanent stormwater BMP is proposed for this project, an O&M Manual is required.

Appendix F – Source Control Worksheet for Commercial and Industrial Facilities
- Required for commercial and industrial facilities. See Volume 4, Chapter 2 of the SWMM.

Appendix G – Temporary Erosion and Sediment Control BMPs
- Only include applicable BMPs from Volume 2 of the SWMM.
Appendix A – Qualitative Analysis Map
Appendix B – Completed Infeasibility Checklists
Appendix C – Stormwater Facility Sizing
BMP L602.a - Roof Downspout Infiltration Trench Sizing

The minimum trench length is based upon the soil type in the location of the infiltration trench. The soils report will provide the USDA Soil Type. The table below provides the minimum trench length per 1,000 ft² of contributing roof area. Roof downspout infiltration trenches shall be designed in accordance with the SWMM and Typical Detail Figure 001 – Downspout Infiltration Trench.

<table>
<thead>
<tr>
<th>USDA Soil Type</th>
<th>Minimum Trench Length (ft) per 1,000 ft² of Roof Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Coarse Sand” (more than 50% of sand fraction remains on #4 sieve)</td>
<td>20</td>
</tr>
<tr>
<td>“Medium Sand” (more than 50% of sand fraction remains on #40 sieve)</td>
<td>30</td>
</tr>
<tr>
<td>Loamy Sand</td>
<td>75</td>
</tr>
<tr>
<td>Sandy Loam</td>
<td>125</td>
</tr>
<tr>
<td>Loam</td>
<td>190</td>
</tr>
<tr>
<td>Silt Loam</td>
<td>275</td>
</tr>
<tr>
<td>Fill (only per SWMM requirements)</td>
<td>60</td>
</tr>
</tbody>
</table>

\[
\text{Trench Length Required (ft)} = \frac{\text{Roof Area (sf)}}{1000 \text{ (sf)}} \times (\text{minimum trench length (ft)})
\]

- Roof Area Requiring Mitigation (ft²): [Click here to enter text.]
- USDA Soil Type per Soils Report: [Click here to enter text.]
- Trench Length Required: [Click here to enter text.]
  *Trench Length cannot exceed 100 feet. If trench length exceeds 100 feet, multiple trenches will be required.
- Number of Trenches: [Click here to enter text.]
- Length of Each Trench: [Click here to enter text.]
NOTES:
1. Cleanouts recommended at pipe bends and end of trench.
2. Solid lid yard drain or catch basin shall be designed to be traffic bearing in areas subject to traffic.
3. Place non-woven geotextile fabric along walls and top of washed rock. Non-woven geotextile to conform to WSDOT Spec. 9-33.2(1), Tables 1 and 2.
4. All disturbed areas not covered with hard surfaces shall be stabilized by planting or mulching.
The minimum rock volume and dry well rock layer height are based upon the soil type in the location of the drywell. The soils report will provide the USDA Soil Type. The table below provides the volume of washed rock and height of washed rock required. Roof downspout dry wells shall be designed in accordance with the SWMM and Typical Detail Figure 002 – Downspout Infiltration Drywell.

<table>
<thead>
<tr>
<th>USDA Soil Type</th>
<th>Volume of Washed Rock (ft³)</th>
<th>Drywell Rock Layer Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Coarse Sand” (more than 50% of sand fraction remains on #4 sieve)</td>
<td>60</td>
<td>4’9”</td>
</tr>
<tr>
<td>“Medium Sand” (more than 50% of sand fraction remains on #40 sieve)</td>
<td>90</td>
<td>7’2”</td>
</tr>
</tbody>
</table>

- Roof Area Requiring Mitigation (ft²): Click here to enter text.
- USDA Soil Type per Soils Report: Click here to enter text.
- Volume of Washed Rock Required: Click here to enter text.
- Rock Layer Height Required: Click here to enter text.
NOTES:
1. Sizing per SWMM BMP L602b.
2. Cleanouts recommended at any pipe bends.
3. Solid lid yard drain or catch basin shall be designed to be traffic bearing in areas subject to traffic.
4. For amended soils guidance, see Standard Detail BMP L613 Options 2, 3 or 4 (Std. Plan GSI - 01).
5. All disturbed areas not covered with hard surfaces shall be stabilized by planting or mulching.
6. Place non-woven geotextile fabric along walls and top of washed rock. Non-woven geotextile to conform to WSDOT Spec. 9-33.2(1), Tables 1 & 2.
Appendix C – Stormwater Facility Sizing

BMP L601 - Rain Garden Sizing

The top of the ponded surface area below the overflow shall be at least 5% of the total hard surface area draining to the rain garden. If lawn/landscaped areas will also be draining to the rain garden, it is recommended that the top of the ponded surface area below the overflow be increased by 2% of the lawn/landscaped area. The table below provides rain garden geometry based upon contributing area. Rain gardens shall be designed in accordance with the SWMM and the applicable Typical Detail Figure 011 – 0.16.

<table>
<thead>
<tr>
<th>Side Slope</th>
<th>Contributing Area (ft²)</th>
<th>Minimum Top of Ponding Area (ft²)</th>
<th>Minimum Bottom of Ponding Area (ft²)</th>
<th>Minimum Top of Berm Area (ft²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:1</td>
<td>800 or less</td>
<td>40</td>
<td>0.11</td>
<td>50</td>
</tr>
<tr>
<td>2:1</td>
<td>1400 or less</td>
<td>70</td>
<td>0.13</td>
<td>110</td>
</tr>
<tr>
<td>3:1</td>
<td>3000 or less</td>
<td>150</td>
<td>0.06</td>
<td>235</td>
</tr>
</tbody>
</table>

- Roof Area Requiring Mitigation (ft²): Click here to enter text.
- Total Contributing Area (ft²): Click here to enter text.
- Minimum Top of Ponded Surface Area: Click here to enter text.

Top of Ponded Surface Area (sf) = (total hard surface area (sf)) * (0.05)
NOTES:
1. For guidance on plants for each zone and for example planting plans see the 2013 Rain Garden Handbook for Western Washington, available at CityofTacoma.org/raingardens.
2. Choose a minimum 50% evergreen plants.
3. Keep plants clear of inlet, outlet and/or overflows.

LEGEND:
- LOW PERENNIALS / GROUND COVERS
- EMERGENTS
- HERBACEOUS PERENNIALS
- FERNS
- HERBACEOUS PERENNIALS / SMALL SHRUBS
- LARGE SHRUBS / DECIDUOUS TREES
- SHRUBS

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RAIN GARDEN - PLANTING ZONES

FIGURE NO. 011
January 2016
Rain garden section

1. Rain gardens sized for compliance with MR #6 shall be in accordance with SWMM BMP L601, available at www.cityoftacoma.org/stormwatermanual. Rain gardens not required to comply with SWMM can be sized per the Rain Garden Handbook for Western Washington, available at cityoftacoma.org/raingardens - where sizing is based upon depth of either 6-inches or 12-inches of ponding.

2. Transition zone
   a. 1-inch grade change from edge of sidewalk, curb and/or other hard surface.
   b. 2% max. slope.
   c. Transition shall be amended soils per BMP L613 (Std. Plan GSI-01) if applicable or per note 3.

3. Scour or till subgrade to 3-inch depth. Place 3-inches of topsoil on surface and till into 5-inches of site soil. Install 3-inches woodchip mulch or as specified on plans.

4. Freeboard shall be a minimum of 2-inches for contributing areas under 1,000 square feet, or 6-inches for contributing areas 1,000 square feet or greater per SWMM.

5. Do not compact the rain garden soil mix.
   a. Do not operate heavy equipment within the rain garden.
   b. Do not place or amend rain garden soil when the ground is frozen or when the soil is excessively wet.

6. Continue mulch for a minimum of 2-feet past the top of bank elevation or install landscape edging if rain garden is adjacent to turf.

7. Maximum side slope (2:1 or 3:1) varies with size of contributing area. See SWMM BMP L601 or the Rain Garden Handbook for Western Washington, as applicable.
NOTES:
1. Gravel or stream bed cobble splash pad minimum depth of 6 inches. Rock splash pad shall be minimum of 1 foot wide and extend beyond the pipe outlet by a minimum of 1 foot.
2. Pipe shall be per SWMM Volume 3.
NOTES:
1. Do not place plants that will restrict or concentrate the flow of water in the bottom of the swale.
3. Use impervious liner instead of geotextile fabric if you have observed flooding issues in your basement or near your building foundation.
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NOTES:
1. Beehive grate must be made of UV stabilized material.
2. Pipe per the City of Tacoma SWMM Volume 3 for privately maintained pipe to edge of ROW. Pipe within ROW shall be per SU-29 or SU-29a.
City of Tacoma Combined SSP-SWPPP Short Form

OVERFLOW THROUGH CONVEYANCE SWALE TO R.O.W.

NOTES:
1. See GSI Figure 015 for conveyance swale detail.
2. Minimum slope = 0.5%. If greater than 0.4% slope, provide erosion control options such as a rock check dam.
3. Overflow dispersion trench consists of a minimum 6" wide by 6" deep by 24" long drain rock layer lined with geotextile fabric on the sides and bottom for separation.
Appendix C – Stormwater Facility Sizing

Roof Downspout Dispersion

**BMP L603 - Downspout Dispersion Setbacks**

On the site plan clearly show the vegetated flowpath. Typical Detail Figure 005 provides the minimum vegetated flowpath lengths required for dispersion trenches and splashblocks.

**BMP L603.a - Downspout Dispersion Trenches**

Roof downspout dispersion trenches shall be designed in accordance with the SWMM and Typical Detail Figure 003 – Dispersion Trench or Typical Detail Figure 004 – Dispersion Trench with Notched Grade Board. Trenches serving up to 700 ft² roof area may use a Simple Dispersion Trench as shown in Typical Detail Figure 003 – Dispersion Trench. For roof areas larger than 700 ft² dispersion trenches with notched grade boards may be used with a total length not to exceed 50 feet.

- Roof Area Requiring Mitigation: Click here to enter text.
- Roof Area Discharging to Trench: Click here to enter text.
- Number of Simple Dispersion Trenches Proposed: Click here to enter text.

\[
\text{Notched Grade Board Trench Length (ft)} = \frac{(10 \text{ ft}) \times (\text{roof area to trench (sf)})}{700 \text{ (sf)}}
\]

- Notched Grade Board Trench Length Required: Click here to enter text.
  *If greater than 50 feet needed more than one trench will be required:
- Number of Notched Grade Board Trenches Required: Click here to enter text.
- Length of each Notched Grade Board Trenches: Click here to enter text.

**BMP L603.b - Splashblocks**

Splashblocks shall be designed in accordance with the SWMM and Typical Detail Figure 006 – Splash Block. A maximum of 700 ft² of roof area can drain to a single splashblock.

- Roof Area Requiring Mitigation: Click here to enter text.
- Roof Area Discharging to Splashblock: Click here to enter text.
NOTES:
1. Per BMP L603.a, sensitive area buffers may count towards flowpath lengths if approved by the City of Tacoma.
2. Vegetative flowpath is measured from the downspout or dispersion system discharge point to the downstream property line, stream, wetland, or other hard surface. The vegetative flowpath shall be measured perpendicular to site contours. A vegetated flow path of at least 50 feet in length must be maintained between the outlet of the trench and any slope 15% or greater.
3. The discharge point shall be at least 10 feet from any building structure and at least 5 feet from any other structure or property line unless approved by Environmental Services. If necessary, setbacks shall be increased from the minimum 10 feet in order to maintain a 1H:1V side slope for future excavation and maintenance.
4. Additional setbacks may be required by other local, state, or federal agencies. Where a conflict between setbacks occurs, the City shall require compliance with the most stringent of the setback requirements from various codes/regulations.
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NOTES:
1. Trench may be placed no closer than 10 feet to another (100 feet along flowpath).
2. Trench must be level. Align to follow contours on site.
3. Trench may serve roof areas up to 700 square feet. For larger roof areas, refer to GSI Figure No. 004 - Dispersion Trench with Notched Grade Board.
4. Refer to SWMM BMP L603.a.
5. Trench length not to exceed 10 feet.
6. Place non-woven geotextile fabric along walls and bottom of washed rock. Non-woven geotextile to conform to WSDOT Spec. 9-33.2(1), Tables 1 and 2.

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GREEN STORMWATER INFRASTRUCTURE
TYPICAL DETAILS

DISPERSION TRENCH

FIGURE NO. 003
January 2016
NOTCHED GRADE BOARD 2"X2" NOTCHES 18" O.C. INSTALL U BOLTS ON GRADE 3 FEET ON CENTER TO ATTACH TO STAKES TO SUPPORT GRADE BOARD

VEGETATED FLOWPATH, 25" OR 50" PER BMP L603.a

PLAN NTS

VEGETATED FLOWPATH, 25" OR 50" PER BMP L603.a

NOTCHED GRADE BOARD 2"X2" NOTCHES 18" O.C. INSTALL U BOLTS ON GRADE 3 FEET ON CENTER TO ATTACH TO STAKES TO SUPPORT GRADE BOARD

VEGETATED FLOWPATH, 25" OR 50" PER BMP L603.a

PLAN NTS

PVC PIPE CLEANOUT RISER

45° BEND

WYE

PVC PIPE

END CAP OR PLUG

GRADE BOARD NOTCH DETAIL NTS

NOTES:
1. Trench may be placed no closer than 10 feet to another (100 feet along flowpath).
2. Trench and grade board must be level. Align to follow contours on site.
3. Trench length not to exceed 50 feet. Trench length minimum 10 feet.
4. ¾ inch diameter - 24 inch minimum height round steel stakes (concrete form stakes), 3 feet on center.
5. Refer to SWMM BMP L603.a.

CITY OF TACOMA
GREEN STORMWATER INFRASTRUCTURE
TYPICAL DETAILS

DISPERSION TRENCH WITH NOTCHED GRADE BOARD

FIGURE NO.

January 2016
NOTES:
1. Refer to Stormwater Management Manual BMP L603.b and GSI Figure 005 for setbacks.
2. Splash block shall be concrete, plastic, or similar material. Commerically available splash blocks generally meet design criteria.
3. Rock pad shall consist of 4" cobbles per WSDOT 9-03.11(2) or ballast meeting WSDOT 9-03.9(1).
Perforated stub-out connections shall be designed in accordance with the SWMM and Typical Detail Figure 007 – Perforated Stub-Out Connection.

- Roof Area Requiring Mitigation (ft²): Click here to enter text.
- Roof Area Discharging to perforated stub-out connection: Click here to enter text.
- Perforated Pipe Length (ft): Click here to enter text.

\[
\text{Perforated Pipe Length (ft)} = \frac{(10 \text{ ft}) \times (\text{roof area to facility (sf)})}{5000 \text{ (sf)}}
\]

The minimum perforated pipe length shall be 10 feet.
AMENDED SOIL PER BMP L613
OPTION 2, 3, OR 4, OR SUBGRADE MATERIAL AS REQUIRED WHERE COVERED BY HARD SURFACE. SEE NOTE 7.

PLAN VIEW OF ROOF

NOTES:
1. Provide 10 feet of perforated pipe per 5,000 square feet of roof area laid in a level, 2-foot wide trench.
2. 3/4" - 1 1/2" washed rock or WSDOT Specification 9-03.12(5).
3. Place non-woven geotextile fabric along walls, bottom, and top of washed rock. Non-woven geotextile to conform to WSDOT Spec. 9-33.2(1), Tables 1 and 2.
4. A minimum one foot of separation is required from the trench bottom to the seasonal high ground water.
5. Perforated stub-out to be sized and located per SWMM BMP L604.
6. Do not build on slopes steeper than 20%.
7. All disturbed areas not covered with hard surfaces shall be stabilized by planting and mulching.
8. Cleanouts recommended at pipe bends and one end of the perforated section.

CITY OF TACOMA
GREEN STORMWATER INFRASTRUCTURE
TYPICAL DETAILS

PERFORATED STUB-OUT SECTION

PERFORATED STUB-OUT CONNECTION

FIGURE NO. 007

January 2016
Appendix C – Stormwater Facility Sizing
Dispersion BMPs

BMP L611 – Concentrated Flow Dispersion

Concentrated flow dispersion BMPs shall be designed in accordance with the SWMM and Typical Detail Figure 009 – Concentrated Flow Driveway Dispersion. Clearly show the vegetated flowpath on the site plan. A maximum of 700 ft$^2$ of roof area can drain to each dispersion BMP.

- Hard Surface Area Requiring Mitigation: [Click here to enter text.]
- Hard Surface Draining to Dispersion BMP: [Click here to enter text.]

BMP L612 – Sheet Flow Dispersion

Sheet flow dispersion BMPs shall be designed in accordance with the SWMM and Typical Detail Figure 008 – Sheet Flow Dispersion for Driveways.

- Hard Surface Area Requiring Mitigation: [Click here to enter text.]
- Width of Paved Surface Discharging into Sheet Flow Dispersion BMP: [Click here to enter text.]
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NOTES:
1. See SWMM BMP L611 for additional requirements.
2. Rock pad shall be clean crushed rock or 4 inch cobbles per WSDOT 9-03.11(2), 2 feet wide by 3 feet long by 6 inches deep.
3. Dispersion trench shall conform to BMP L603.a and GSI Figure 003.
4. Berms or drains may be used to concentrate flow. Slotted drains shall be modular trench channel units for driveways with a minimum width of 4 inches.
5. Dispersion systems shall be set back a minimum of 10 feet from buildings.
6. Dispersion systems shall be set back a minimum of 50 feet from the top of any steep (greater than 15%) slope.

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GREEN STORMWATER INFRASTRUCTURE
TYPICAL DETAILS

CONCENTRATED FLOW DRIVEWAY
DISPERSION

FIGURE NO. 009
January 2016
NOTES:

1. For driveways greater than 20 feet in width, additional flow path is required. See SWMM BMP L612.
2. Transition zone material may be crushed rock, modular pavement, drain rock or other material approved by the City.
3. Dispersion systems shall set back a minimum 10 feet from buildings and a minimum of 5 feet from property line unless approved in writing by the City.
4. Dispersion systems shall be set back a minimum of 50 feet from the top of any steep (greater than 15%) slope.
Appendix D – Soils Report

Attach the soils report if required.
Appendix E – BMP Operation and Maintenance Manual

At a minimum, include the following in the operation and maintenance manual along with a site plan showing the location of each permanent stormwater BMP:

Responsible Party Information

- Name of person or organization responsible for maintenance: Click here to enter text.
- Phone Number of Responsible Party: Click here to enter text.
- Address of Responsible Party: Click here to enter text.
- Email Address of Responsible Party: Click here to enter text.

Operation and Maintenance Manual Location

- Indicate where the Operation and Maintenance manual will be kept. Note that it must be made available to the City for inspection. Click here to enter text.
## Facility Summary

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Facility Description</th>
<th>Estimated Operation and Maintenance Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
<tr>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
<td>Click here to enter text.</td>
</tr>
</tbody>
</table>
City of Tacoma Combined SSP-SWPPP Short Form

**Maintenance Schedules**
- Attach the maintenance schedules from Volume 1, Appendix C for all facilities/stormwater components used on the site, or create maintenance schedules for the proposed facilities.
- Attach manufacturer’s manuals if applicable.

**Maintenance Activity Log**
- Provide a sample maintenance activity log indicating emergency and routine actions to be taken. Attach to this document.
Appendix F – Completed Source Control Worksheet for Commercial and Industrial Facilities

Attach completed source control worksheet if the project is a commercial or industrial facility.
Appendix G – Temporary Erosion and Sediment Control BMPs

Attach only those BMPs from Volume 2 of the SWMM that will be utilized for the project.