



Public Works
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Business Hours: M - F, 7:30 am- 4:00 pm

Stormwater, Erosion and Sediment Control Plan (SMC 13.104)

Stormwater, Erosion and Sediment Control Plan Checklist

- ☐ Refer to Ecology's 2012 Stormwater Management Manual for Western Washington (Amended 2014) and the City's 2017 Addendum to the Storm Manual. Provide a TESC (Temporary Erosion plan sheet containing the following items (at a minimum): [SMC13.104, SMC18.82.050, SMC18.82.070]
- ☐ Show location and identification of all temporary erosion plan elements, including clearing limits
- ☐ Include details for all TESC Best Management Practices (BMPs)
- ☐ Location of all contributing off-site drainage.
- ☐ Show and identify (i.e., asphalt, concrete, gravel, etc.) existing pervious and impervious surfaces (SF). [SMC13.104, SMC18.82.070]
- ☐ Show and identify (i.e., asphalt, concrete, gravel, etc.) proposed pervious and impervious surfaces (SF). [SMC13.104, SMC18.82.070]
- ☐ List area of lot in square feet, lot coverage, area of land disturbing activities, building envelope exterior in square feet, area of hard surfaces - to be used in #3 Stormwater Site Plan (defined as roofs, concrete, patios, gravel, decks, sidewalks etc.)
- ☐ Provide Stormwater and drainage site plan including drywells, infiltration trenches, swells, drainage ditches, natural water courses, etc. and supporting calculations based on 2 year 24 hr storm or other as per Stormwater Management Manual for Western Washington. "Demonstrate through hydrologic and hydraulic analysis that the increase of stormwater runoff volume from pre-construction to post-construction for the two-year storm is infiltrated." [SMC13.104.070, SMC18.82.070, IBC107].
- ☐ Stormwater Site Plan - SMC 13.104 adopted the 2012 Stormwater Management Manual for Western Washington (amended 2014), herein referred to as the *Manual*

STORMWATER MANAGEMENT MINIMUM REQUIREMENTS DETERMINATION

GENERAL INFORMATION

Most development within the City of Sequim that involves disruption of soils, or construction of buildings, streets, parking lots, etc. requires a Stormwater review. Stormwater review requirements are based on either the amount of soil to be disturbed (grading, vegetation removal), or the amount of hard surface that is created or replaced on a site (building footprint, concrete, asphalt or gravel parking, sidewalk, etc.). For larger projects and more information please refer to the Sequim Municipal Code (Chapter 13.104 Stormwater Management) and the latest Washington State Department of Ecology Stormwater Management Manual for Western Washington (Ecology Manual).

HARD SURFACE AREA CALCULATION

Please calculate your project's hard surface amount; guidance is provided on the next page of this document. Use your project's total hard surface calculation to follow the flow chart(s) in this packet and determine the level of stormwater management required for you project.

When determining your permit level or if stormwater thresholds are met or exceeded the entire project must be considered. A project is that portion of a property, properties, or right of way subject to land disturbing activities, new hard surfaces and replaced hard surfaces. All new or replaced hard surfaces should be accounted for. Below are excerpts from the Sequim Municipal Code and Ecology Manual that may assist you in preparing this information.

"Hard surface area" means an impervious surface, a permeable pavement, or a vegetated roof.

"Impervious surface" means a non-vegetated surface area which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A non-vegetated surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development.

"Replaced impervious surface" means, for structures, the removal and replacement of impervious surfaces down to the foundation. For other impervious surfaces, the removal down to bare soil or base course and replacement.

LAND DISTURBANCE

DESCRIPTION	TOTAL (SQ. FT.)
Total Area of Land Disturbing Activity	
Total Area Converted from Vegetation to Lawn or Landscaped Area	

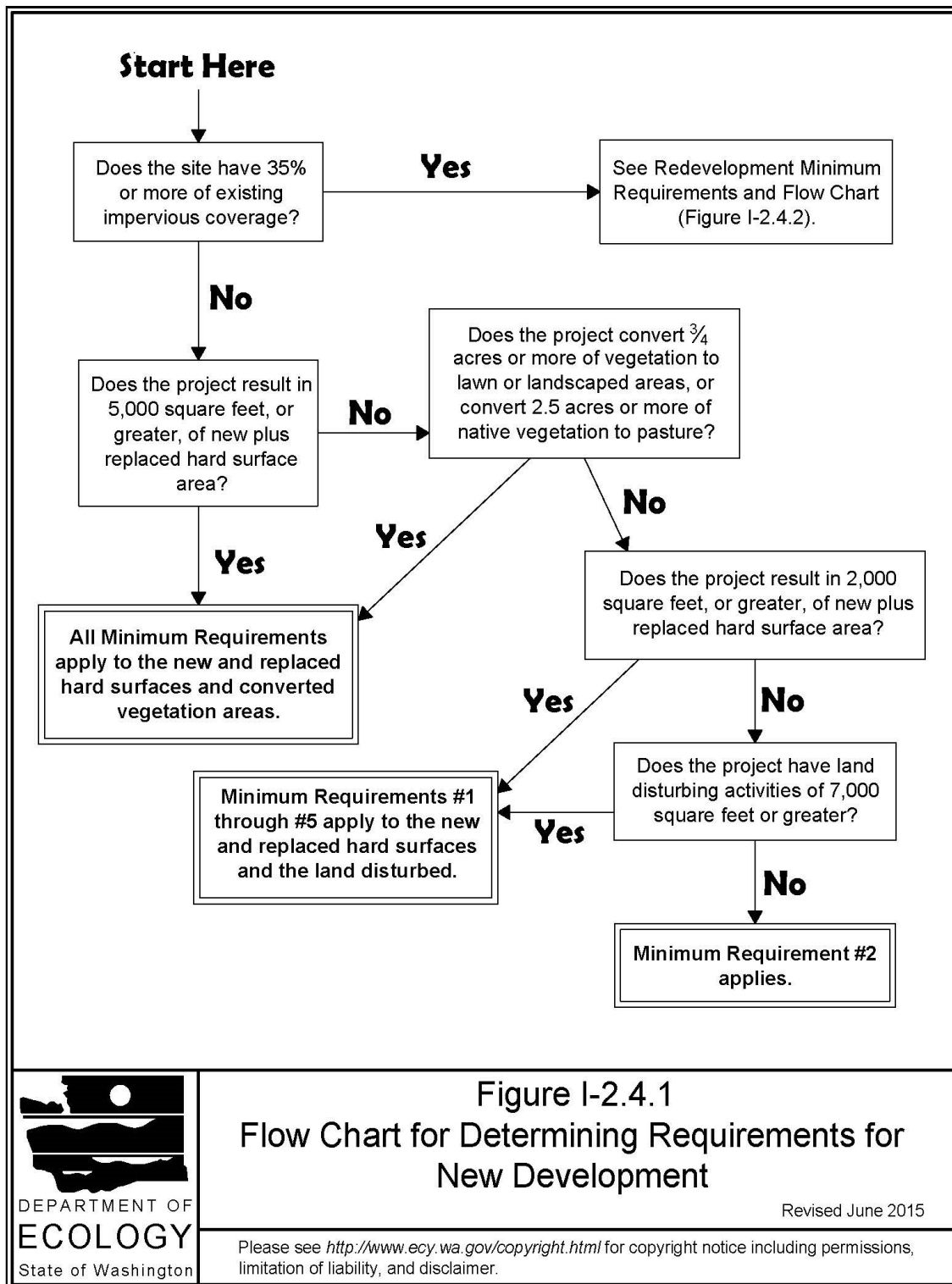
HARD SURFACE AREA CALCULATION

DESCRIPTION	Existing (SF)	Removed (SF)	Proposed Replaced (SF)	Proposed New (SF)
Non-Pollution Generating Hard Surface Area (Sidewalks, paths, patios, etc.)				
Pollution Generating Hard Surface Area (Driveways, parking areas, etc.)				
TOTAL HARD SURFACE				
Site Size				
Existing Impervious Surface Coverage % (sq. ft. hard surface / site size)				

MINIMUM REQUIREMENTS CALCULATIONS

Use the information in the above table to navigate the flow chart(s) on the next few pages to determine the applicable stormwater management minimum requirements for your project.

FLOW CHART FOR DETERMINING REQUIREMENTS FOR NEW DEVELOPMENT



FLOW CHART FOR DETERMINING REQUIREMENTS FOR REDEVELOPMENT

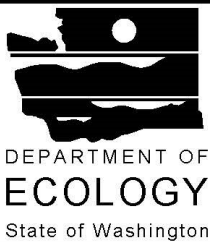
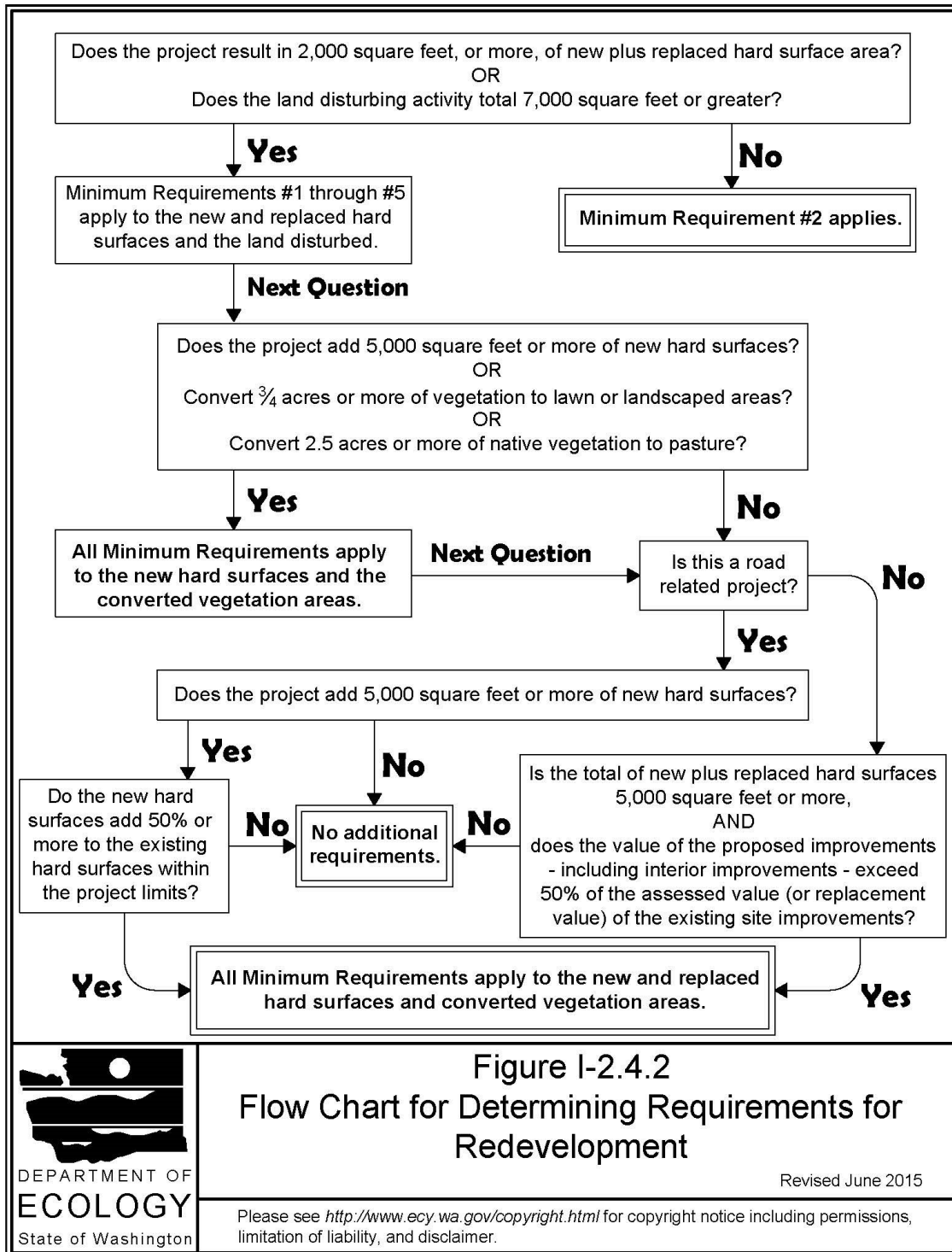


Figure I-2.4.2
Flow Chart for Determining Requirements for Redevelopment

Revised June 2015

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Attachment A
Stormwater Minimum Requirements (MR):

- ☐ **MR #1: Preparation of Stormwater Site Plan (SMC 13.104, Manual I-2.5.1):** The stormwater site plan is a comprehensive report that contains all of the technical information and analysis necessary, for the City to evaluate a proposed new development or redevelopment for compliance with the stormwater requirements of the Manual.
 - ☐ Prepare a Stormwater Site Plan consistent with the requirements of the Manual I-3.
 - ☐ If in Subdivision, show connection to the stormwater system stub out and provide information on limits to stormwater contributions to the system based on the stormwater report or plat notes. Show roof downspouts, conveyance to off-site facilities, and how on-site stormwater from driveways and other hard surfaces will be infiltrated.
 - ☐ Show stormwater conveyance system for the site with locations, pipe size and structures identified, including dimensions and volumes (i.e., downspouts, drywells, infiltration trenches, etc.)
 - ☐ Setback requirements met for infiltration system (typically 10' from property line and structures)
 - ☐ If infiltration is proposed, provide percolation/infiltration test results
- ☐ **MR #2: Construction Stormwater Pollution Prevention (SMC 13.104, Manual I-2.5.2):** The project proponent shall prepare a project SWPPP in accordance with the Manual. See "MR #2 Very Small Project Fact Sheet" and "MR#2 Small Project Worksheet".
 - ☐ If in Subdivision, is there a communal stormwater system intended for on-lot stormwater discharge? If so, show roof downspouts, conveyance to off-site facilities, and how on-site stormwater from driveways and other hard surfaces will be infiltrated.
 - ☐ Construction Storm Water Pollution Prevention Plan (SWPP), All Elements #1-13 apply
 - ☐ Element #1: Preserve Vegetation/Mark Clearing Limits
 - ☐ Element #2: Establish Construction Access
 - ☐ Element #3: Control Flow Rates (*Outlet protection, Wattles, Sediment Trap, etc.*)
 - ☐ Element #4: Install Sediment Controls (*Silt Fence, Vegetated Strip, wattle, gravel filter berm etc.*)
 - ☐ Element #5: Stabilize Soils (*Seeding, mulching, plastic covering, sodding, PAM, etc.*)
 - ☐ Element #6: Protect Slopes (*subsurface drains, seeding, mulching, plastic cover, etc.*)
 - ☐ Element #7: Protect Drain Inlets
 - ☐ Element #8: Stabilize Channels and Outlets (*channel lining, check dams, outlet protection, etc.*)
 - ☐ Element #9: Control Pollutants (*Concrete wash out area, construction stormwater filtration, etc.*)
 - ☐ Element #10: Control De-watering (*vegetative infiltration, water bars, level spreader etc.*)
 - ☐ Element #11: Maintain BMP's (*Maintenance requirements, materials on hand, when to remove temporary measures, etc.*)
 - ☐ Element #12: Manage the Project (*Identify CECL Lead, identify seasonal work limitations, maintain SWPP*)
 - ☐ Element #13: Protect Low Impact Development BMP's (*Buffer zones, silt fence, vegetative strips, etc.*)
- ☐ **Min Req #3: Source Control of Pollution (SMC 13.104, Manual I-2.5.3):** Show source control BMPs. Source control BMP's must be selected, designed, and maintained according to the Manual.
- ☐ **Min Req #4: Preservation of Natural Drainage Systems and Outfalls (SMC 13.104, Manual I-2.5.4):**
 - ☐ Natural drainage patterns shall be maintained, and discharges from the project site shall occur at the natural location, to the maximum extent practicable.
- ☐ **Min Req #5: On-Site Stormwater Management (SMC 13.104, Manual I-2.5.5):**
 - ☐ Projects shall employ On-site stormwater management BMPs in accordance with the Manual to infiltrate, disperse, and retain stormwater runoff on-site to the extent feasible without causing flooding or erosion impacts.

- ☐ Min Req #6: Runoff Treatment (SMC 13.104, Manual I-2.5.6):
 - ☐ Size stormwater treatment facilities for the entire area that drains to them, even if some of those areas are not pollution-generating or were not included in the project site threshold decisions.
- ☐ Min Req #7: Flow Control (SMC 13.104, Manual I-2.5.7):
 - ☐ Projects must provide flow control to reduce the impacts of stormwater runoff from hard surfaces and land cover conversions. Stormwater discharge shall match developed discharge durations to pre-developed durations for the range of pre-developed discharge rates from 50% of the 2-year peak flow up to the full 50-year peak flow.
- ☐ Min Req #8: Wetlands Protection (SMC 13.104, Manual I-2.5.8):
 - ☐ Requirement applies to projects whose stormwater discharges into a wetland, either directly or indirectly through a conveyance system. Stormwater treatment and flow control facilities shall be built within a natural vegetated buffer (unless exceptions are met per the Manual I-2.5.8).
- ☐ Min Req #9: Operation and Maintenance (SMC 13.104, Manual I-2.5.9):
 - ☐ Provide an operation and maintenance manual consistent with the provisions in the Volume V of the Manual.