



# CONSTRUCTION / FULL STORMWATER SITE PLAN SUBMITTAL CHECKLIST FOR PROJECTS VESTED ON OR AFTER JANUARY 22, 2016

Please attach a copy of this checklist to the Drainage Review Submittal Form

**General Project Information**

**Project Name:** \_\_\_\_\_

**Applicant's Name:** \_\_\_\_\_

**Project File Number (PFN):** \_\_\_\_\_

**Fees**

\_\_\_\_\_ 1. Drainage and other fees per SCC 30.86.510, SCC 30.86.515 and SCC 30.86.710

**Required Forms, Reports, Narratives (3 copies of reports are required unless otherwise specified)**

Drainage reports shall be stamped by an engineer, when required.

\_\_\_\_\_ 1. Full Stormwater Site Plan Drainage Report including (Drainage Manual Vol. I, Chap. 3; SCC 30.63A.815):

- Executive summary of the drainage plan and drainage summary form (See Attachments A and B)
- Stormwater Site Plan Narrative addressing report information required by Snohomish County Drainage Manual Volume 1, Chapter 3 and any other information related to applicable minimum requirements of chapter 30.63A SCC (See Attachment C)

\_\_\_\_\_ 2. Soil Management Plan Summary Form and Compost and topsoil calculation worksheet for a pre-approved (Soil) amendment rate, if Option 2 or 3 is selected for MR 5 compliance.

\_\_\_\_\_ 3. Stormwater Pollution Prevention Plan (SWPPP) Narrative (SCC 30.63A.450(3))

\_\_\_\_\_ 4. LID BMP Feasibility Analysis -or- MS4 determination per SCC 30.63A.210

\_\_\_\_\_ 5. Operation & Maintenance Manual (Drainage Manual Vol. I, section 3.7).

\_\_\_\_\_ 6. Other reports required (for compliance with chapters 30.63A, 30.63B, critical areas, etc. as applicable (Drainage Manual Vol. I, Chap 3):

Y	N	Other reports
		Mitigation Report
		Geotechnical Report
		Soils Report
		Hydrogeologic Report
		Engineering geology report
		Liquefaction report
		Other:

\_\_\_\_\_ 7. Planting/Clearing/Landscape Buffer Plan, Chapters 30.41B and 30.41C (Rural Cluster Plat/Short Plat only)

- \_\_\_\_\_ 8. Recreation Plan and Specifications (PRD) SCC 30.42B (Planned Residential Development only)
- \_\_\_\_\_ 9. Landscape Plan
- \_\_\_\_\_ 10. Hearing Examiner Decision or Preliminary Approval (submit 1 copy)
- \_\_\_\_\_ 11. Water Plan showing existing and proposed fire hydrant locations

**Plan Specifications**

Plan specifications apply to the following projects: Planned Residential Developments (PRD), Single-Family Residences (SFRs)/Duplexes, all Subdivisions and road projects

**Plan sheet size:** Engineered plans shall be 24 by 36 inches or 22 by 34 inches per Engineering Design and Development Standards (EDDS) 10 - 02(A)(1). For single-family residence (SFRs)/duplex, permit applications may be a minimum of 8½ by 11 inches and a maximum of 11 X 17 inches, if adequate details can be shown.

**Plan Copies Shall Meet the Following Specifications:**

- a. Plan View:
  - 1. 1 inch = 50 feet for sites of five acres or less
  - 2. 1 inch = 100 feet for sites of more than five acres but less than twenty acres
  - 3. 1 inch = 200 feet for sites of more than twenty acres
- b. Details: 1 inch = 10 feet or 1 inch = 20 feet. Please choose the scale that will give the most information on the sheet selected. Individual details may require larger scales.
- b. Cross sections and profiles: Minimum 1 inch = 50 feet horizontal and 1 inch = 5 feet vertical. The ratio of the vertical to the horizontal scale shall be 1 inch V:10 feet H, except the bridge plans shall have horizontal and vertical scales of 1 inch = 20 feet.
- c. Overall Plan View: Indicate isolated enlargement of the site development area to be shown at another location or on a separate sheet, at a minimum scale of 1 **inch = 50 feet**.

**Full Stormwater Site Maps and Plans Required (Single family residential: 3 sets of maps and plans. All other projects: 10 sets of maps and plans)** Drainage plans shall be stamped by an engineer, when required.

- \_\_\_\_\_ 1. Existing conditions map and preliminary site layout
- \_\_\_\_\_ 2. Full Stormwater Site Plan (SCC 30.63A.815) / Permanent Stormwater Control Plan
- \_\_\_\_\_ 3. Stormwater Pollution Prevention Plan (SWPPP) (SCC 30.63A.445-450, Snohomish County Drainage Manual Vol. II, chap. 3)
- \_\_\_\_\_ 4. Mitigation Plan, when applicable
- \_\_\_\_\_ 5. Soil Management Plan for MR 5 (SCC 30.63A.525 for BMP T5.13 Post Construction Soil Quality and Depth)
- \_\_\_\_\_ 6. Basin maps or plans for the site and offsite areas which show the location of basins and sub-basins which correspond to the analysis for the site, as well as the upstream and downstream areas (include in the Drainage Report)

### **Items Required on All Plan Sheets**

- \_\_\_\_\_ 1. Project file number (located in large, bold type in the lower right corner) – leave placeholder at first submittal
- \_\_\_\_\_ 2. Project title
- \_\_\_\_\_ 3. Sheet titles (Examples: “Site Plan,” “Stormwater Site Plan,” “SWPPP”)
- \_\_\_\_\_ 4. Section, township, and range (located at the top of each sheet)
- \_\_\_\_\_ 5. Graphic scale clearly indicated on plan view
- \_\_\_\_\_ 6. North arrow clearly indicated on plan view
- \_\_\_\_\_ 7. Current engineer’s stamp, signature and date signed when required
- \_\_\_\_\_ 8. Snohomish County approval block

#### ***Snohomish County Planning & Development Services***

#### **APPROVED FOR CONSTRUCTION**

By: \_\_\_\_\_

R/W Permit No. \_\_\_\_\_

Date: \_\_\_\_\_

### **Items Required on Cover Sheets**

- \_\_\_\_\_ 1. Items required on all sheets in the section above
- \_\_\_\_\_ 2. Owner and applicant’s name, address, e-mail address and phone and fax numbers
- \_\_\_\_\_ 3. Contact person or agent’s name, address, e-mail address and phone and fax numbers
- \_\_\_\_\_ 4. Engineer’s name, address, phone number and e-mail address
- \_\_\_\_\_ 5. Certified Erosion and Sediment Control Lead’s (CESCLs) contact information (sites >1 acre)
- \_\_\_\_\_ 6. Vicinity map with north arrow and scale
- \_\_\_\_\_ 7. Legal description of project site
- \_\_\_\_\_ 8. Site address, if applicable or driving instructions
- \_\_\_\_\_ 9. Property tax account number(s) of subject property and adjacent properties
- \_\_\_\_\_ 10. Sheet index (include all sheets in construction plan set on the index)
- \_\_\_\_\_ 11. Quantities in yards of earth moved (cut and fill amount)
- \_\_\_\_\_ 12. Amounts of new, replaced and new plus replaced hard surfaces
- \_\_\_\_\_ 13. Extent of clearing in square feet or acres
- \_\_\_\_\_ 14. For large sites, show at least one sheet with full development

### **Existing Condition and Drainage Plan with Surveyed Information**

- \_\_\_\_\_ 1. Significant geographical features and Existing contours (shown as dashed lines) 20-foot USGS quadrangle contour intervals. Projects going to Hearing Examiner: minimum 5-foot contour intervals, except for flat properties with less than 5 percent slope: 2-foot contour intervals

- \_\_\_\_\_ 2. Proposed contours (shown as solid lines) pursuant to the intervals stated above
- \_\_\_\_\_ 3. Acreage and boundaries of all drainage basins also submit basin maps for the site and offsite areas which show the location of sub-basins that correspond to the analysis for the site, as well as upstream and downstream areas.
- \_\_\_\_\_ 4. Existing stormwater drainage to and from the site to the natural receiving waters, or one quarter mile off-site, whichever is less.
- \_\_\_\_\_ 5. Location and type of soils (using soil survey maps from the Natural Resources Conservation Service or Soil Conservation Service) and vegetative cover, as well as the location of areas with high potential for erosion and sediment deposition (based upon soil properties, slope, etc.) before and after completion of clearing or grading ( land disturbing activity)
- \_\_\_\_\_ 6. Location of zoning (Title 30 SCC) and shoreline designations (chapter 30.44 SCC)
- \_\_\_\_\_ 7. Location of vegetative cover, open space, tree retention and replacement areas, if applicable
- \_\_\_\_\_ 8. Datum and description of benchmark used (example: concrete monument, railroad spike in power pole, top of fire hydrant), tied to Mean Sea Level (MSL), (NGVD 29) or (NAVD 88) with equation for MSL when required
- \_\_\_\_\_ 9. Property lines shown with bearings, distances and ties to controlling corners or subdivision corners.
- \_\_\_\_\_ 10. A survey showing existing structures within 15 feet of the subject properties boundaries (identify structure use) and property boundaries with bearings and distances and ties to controlling corners, or subdivision corners.
- \_\_\_\_\_ 11. Location, size and type of all existing and proposed structures, hard surface areas, drainage facilities, stormwater facilities and BMPs (detention ponds, rain gardens, etc.), roads, and utilities on the site and adjacent on-and off-site utilities, and setbacks, when applicable. Provide high water elevations for infiltration design when applicable.
- \_\_\_\_\_ 12. Location, size and type of all proposed structures, hard surface areas, drainage facilities, stormwater facilities, wells, drainfields, drainfield reserve areas, roads, and utilities on the site and adjacent on-and off-site utilities, and setbacks, when applicable.
- \_\_\_\_\_ 13. Routes of existing drainage courses, construction pipes, ditches and future flows at all discharge points
- \_\_\_\_\_ 14. Existing drainage pattern(s), (i.e., ditch lines, culverts, catch basins, french drains, and surface drainage or sheet flows)
- \_\_\_\_\_ 15. Location of all property boundaries, easements, lakes, streams, creeks and structures on-site and within 15 feet of site boundaries (Show structures that are farther if they will be affected by the construction)
- \_\_\_\_\_ 16. Length of travel time from the farthest up stream end of a proposed storm drainage system to any proposed flow control and treatment facility
- \_\_\_\_\_ 17. Locations of all critical areas on-site including required setbacks/buffers for each and
  - a. Wetlands and fish & wildlife habitat conservation areas within 300 feet of the site (SCC 30.62A.130);
  - b. Geologically hazardous areas on or within 200 feet of the site (SCC 30.62B.130);
- \_\_\_\_\_ 18. Flood hazard areas and Community Panel number of the Flood Insurance Rate Map
- \_\_\_\_\_ 19. Location of all existing native growth protection areas (NGPAs) or native growth protection areas easements (NGPAEs), and proposed critical area protection areas (CAPAs) (see SCC 30.62A.160), and required open space areas, tracts or easements, if applicable

- \_\_\_\_\_ 20. Boundaries of site disturbance or land disturbing activity (clearing and grading) (Chapter 30.63B SCC)
- \_\_\_\_\_ 21. Soil Management Plan Summary Form and Compost and topsoil calculation worksheet for a pre-approved (Soil) amendment rate, if Option 2 or 3 is selected for MR 5 compliance.
- \_\_\_\_\_ 22. Existing stormwater facilities and BMPs on-site and within 15 feet of the site.
- \_\_\_\_\_ 23. Existing wells, drainfields, and drainfield reserve areas, and setbacks when applicable, located within 100 feet of the proposed development (relates to Snohomish Health District regulations)
- \_\_\_\_\_ 24. Show calculations and depict the effective impervious surfaces within the buffers of all wetlands, streams, lakes and marine shorelines, and within 300 feet of all wetlands, streams, lakes and marine shorelines containing salmonids.
- \_\_\_\_\_ 25. Show post development drainage patterns. Include pipe and stream flow directions with arrows. Show flow directions in swales with notes, broad drainage courses and when needed, sheet flow areas with notes.
- \_\_\_\_\_ 26. Grading quantities shall be shown on the plan, showing both cut and fill quantities in cubic yards
- \_\_\_\_\_ 27. Grading setback detail to include 1/2 height of fill, 1/5 height of cut, 2" minimum.
- \_\_\_\_\_ 28. General notes and drainage notes and specifications or references to compliance with standards in EDDS (if not the current EDDS, please specify which edition) and the WSDOT/APWA Standard Specifications, material specifications for the construction of the project
- \_\_\_\_\_ 29. Hydraulic Project Approval (HPA) summary information or permit conditions shall be attached or affixed to the plans and specifications, if work is with OHWM of a stream
- \_\_\_\_\_ 30. All projects which impact WSDOT and City rights of way shall secure the necessary permits from either the State or City
- \_\_\_\_\_ 31. Prominent "Call 1-800-424-5555 Before You Dig" note

### **Road Information**

- \_\_\_\_\_ 32. Road names identified
- \_\_\_\_\_ 33. Road alignment with 100 foot stationing and stationing at PTs and PCs with bearing and distances on centerlines
- \_\_\_\_\_ 33. Right of way lines and widths for existing and proposed road and intersecting roads
- \_\_\_\_\_ 34. Curve data, at least three elements (radius, delta, arc length or tangent distance) on all curves, these may be shown in a curve table
- \_\_\_\_\_ 35. Show details of frontage improvements on separate plan sheet
- \_\_\_\_\_ 36. Limits of existing and proposed paving
- \_\_\_\_\_ 37. Typical roadway sections of **existing** or **proposed** roads to be improved plus their functional road classifications and posted/design speeds.
- \_\_\_\_\_ 38. Existing and proposed monumentation per EDDS

\_\_\_\_\_ 39. Mailbox location and detail with Post Master approval

### **Road Profiles**

\_\_\_\_\_ 40. Original ground lines with elevations at 100-foot stations and at significant ground breaks extended 100' beyond property line

\_\_\_\_\_ 41. Final road and storm drain profile with stationing, same as horizontal plan extended 100' beyond property line

\_\_\_\_\_ 42. Vertical curve elevation and stations of vertical PI, PC, and PT(s), sag (low point) and crest (highpoint), clearances for overpasses or bridges and grade breaks shown

\_\_\_\_\_ 43. Design of roadway extended beyond project 100' (match existing driveway profiles at road connection, when drive exceeds 5%. Show compliance with EDDS 2-070).

### **Full Stormwater Site Plan: Permanent Stormwater Control Plan Sheet**

(SCC 30.63A.815 and Drainage Manual Vol. I, Chap. 3)

The Full Stormwater Site Plan must comply with chapter 30.63A including MRs 1-9 and any other applicable minimum requirement as determined by the MR 1 site planning process.

\_\_\_\_\_ 1. Items on existing conditions and preliminary layout

\_\_\_\_\_ 2. Show post development drainage patterns. Include pipe and stream flow directions with arrows. Show flow directions in swales with notes, broad drainage courses and when needed, sheet flow areas with notes.

\_\_\_\_\_ 3. Location of developed basin areas, threshold discharge areas, and flows cross-referenced to computer printouts or calculation sheets. Developed basin flows need to be listed and tabulated in the documentation (SCC 30.63A.430(3)(b))

\_\_\_\_\_ 4. Show and clearly label the location of any existing and proposed stormwater conveyance system(s) labeling all pipes, culverts, catch basins, channels, swales, and other stormwater conveyance appurtenances

\_\_\_\_\_ 5. Location of stormwater entering and exiting the site in relation to proposed drainage facilities

\_\_\_\_\_ 6. Location of area downstream of subject property for the entire flow path from the project site to the receiving water or up to one mile, whichever is less

\_\_\_\_\_ 7. Location of area upstream of subject property which drains onto or through the site

\_\_\_\_\_ 8. Location of roof downspout controls

\_\_\_\_\_ 9. Location of dispersion and soil quality BMPs

\_\_\_\_\_ 10. Location of other types of on-site stormwater management and LID features

\_\_\_\_\_ 11. Location and size of energy dissipation outfalls

\_\_\_\_\_ 12. Location of groundwater and vertical separation, when applicable (On-site Stormwater Management SCC 30.63A.525 (MR 5))

\_\_\_\_\_ 13. Location and types of BMPs (including roof downspout control, dispersion and soil quality) used to infiltrate, disperse, and retain stormwater runoff on-site to the maximum extent feasible for non-pollution and pollution generating surfaces

\_\_\_\_\_ 14. The same basin identification used for the pre-developed site hydrology is used. Where the boundaries of a basin are modified by the project proposal, they are clearly shown and the identification is modified to indicate the change

- \_\_\_\_\_ 15. Location of the proposed flow control facilities and appurtenances, identification of basic measurements necessary to calculate the storage volumes available in live and dead storage, location of all orifice/restrictor sizes and head relationships, control structure/restrictor placement, and placement on the site
- \_\_\_\_\_ 16. Location of developed basin areas, threshold discharge areas, and flows cross-referenced to computer printouts or calculation sheets. Developed basin flows need to be listed and tabulated in the documentation
- \_\_\_\_\_ 17. Location and description of the proposed treatment facilities, and any structural source control BMPs. The drawing shows overall measurements and dimensions, placement on the site, location of inflow, bypass, and discharge systems.
- \_\_\_\_\_ 18. Location and type of treatment facility selected, sized and designed in accordance with Vol. I and Vol. 5 of the Drainage Manual
- \_\_\_\_\_ 19. Project facilities design details consistent with the requirements and design criteria of Vol. V of the Drainage Manual.
- \_\_\_\_\_ 20. Identify discharge locations and multiple discharge points when applicable
- \_\_\_\_\_ 21. Points where stormwater discharges directly or indirectly through a conveyance system into a fresh water system
- \_\_\_\_\_ 22. Depict parking lot ponding details, if applicable
- \_\_\_\_\_ 23. Location, size and category of the wetland including buffer (in acres) that are being used for detention
- \_\_\_\_\_ 24. Depict where stormwater is discharged into a wetland or wetland buffer, either directly or indirectly, through a conveyance system.
- \_\_\_\_\_ 25. Detention performance chart to include amount of hard surface and LID credits taken.

<b>Detention Performance Chart (sample)</b>							
<b>Storm</b>	<b>Volume Storage Requirements (Cu Ft)</b>				<b>Maximum Release Rates</b>		
	<b>Dead</b>	<b>Live</b>	<b>Designed</b>	<b>As-Built</b>	<b>Rate</b>	<b>Designed</b>	<b>As-Built</b>
2 YR							
50 YR							

- \_\_\_\_\_ 26. Design of LID stormwater facilities, LID BMPs and LID performance standards, as applicable



**ATTACHMENT A**  
**Drainage Report Executive Summary**  
**SCC 30.63A.400 and 30.63A.815**

An executive summary shall be included in the drainage report that explains how the proposal will comply with chapter 30.63A SCC (Drainage). It shall include a description of the drainage plan outlining how the plan complies with chapter 30.63A SCC (findings & conclusions). It must address the following:

- Drainage plan description, outline how the stormwater site plan concepts will comply with chapter 30.63A SCC including minimum requirements 1 - 5 and other applicable minimum requirements (findings & conclusions).
- Water quality measures being proposed, identified in the Stormwater Pollution Prevention Plan (SWPPP) and meeting Minimum Requirement 3 (Source Control).
- Describe the drainage basins, sub-basin design on-site and off-site, existing and proposed (refer to basin maps in the report).
- Describe sketch of the schematic drainage system design proposed for the development.
- Downstream analysis, summary of key issues and limitations.
- Upstream analysis, summary of key issues to be addressed.
- Detention or retention sizing and storage volume
- Conveyance sizing, if required

When site planning requires Minimum Requirement 6 (Runoff Treatment) Minimum Requirement 7 (Flow Control), or Minimum Requirement 8 (Wetlands Protection):

- List all stormwater treatment BMPs to meet Minimum Requirement 6 (Runoff Treatment).
- List all flow control facilities and/or land use management BMPs to meet Minimum Requirement 7 (Flow Control).
- Description of how MR 8 will be met if required by project scope





**ATTACHMENT B  
REPORT SUMMARY  
DRAINAGE INFORMATION SUMMARY FORM**  
Required for projects vested on or after January 22, 2016

**Project Total Area:** \_\_\_\_\_

**Project Development Area:** \_\_\_\_\_

**Number of Lots (if applies):** \_\_\_\_\_

**Summary Table**

Drainage Basin Information	Individual Basin Information			
	A	B	C	D
On-Site Sub-basin Area (acres)				
Type of Storage Proposed				
Approx. Live Storage Volume (cu. ft.)				
Approx. Dead Storage Volume (cu. ft.)				
Soil Type(s) (Natural Resource Conservation Service)				
<b>Pre-developed Runoff Rates</b>				
Q (cfs.)	2 yr.			
	10 yr.			
	50 yr.			
Redevelopment Area				
<b>Post-development Runoff Rates (without quantity controls)</b>				
Q (cfs.)	2 yr.			
	10 yr.			
	50 yr.			
<b>Post-development Runoff Rates (with quantity controls)</b>				
Q (cfs.) (8-50%)	2 yr.			
	10 yr.			
	50 yr.			
<b>Offsite Upstream Area</b>				
Number of acres				
<b>Offsite Downstream Flow</b>				
Q (cfs)	50 yr			

Note: Entire form must be included in the stormwater site plan narrative.



## ATTACHMENT C

### Report Detail Summaries

The following attachments are provided as a general guide to submitting reports and plans that will meet code requirements. The items are summarized, please see chapter 30.63A SCC and Snohomish County Drainage Manual 2016 for complete requirements.

#### **Full Stormwater Site Plan Report (Narrative) Details**

<b>MR 1 – Full Stormwater Site Plan Narrative</b> (SCC 30.63A.400, 30.63A.815 and Drainage Manual Vol. I, Chap. 3) includes the following:	
	<p><b>Project Overview and Executive Summary</b> including a description of the drainage plan outlining how the plan complies with the code (findings &amp; conclusions). It must address MRs 1-9 including the following:</p> <ul style="list-style-type: none"> <li>• Water quality measures being proposed, identified in the Stormwater Pollution Prevention Plan (SWPPP) and meeting Minimum Requirement 3 (Source Control).</li> <li>• Describe the drainage basins, sub-basin design on-site and off-site, existing and proposed (refer to basin maps in the report).</li> <li>• Describe sketch of the schematic drainage system design proposed for the development.</li> <li>• Downstream analysis, summary of key issues and limitations.</li> <li>• Upstream analysis, summary of key issues to be addressed.</li> <li>• Detention or retention sizing and storage volume using continuous runoff model, if required.</li> <li>• Conveyance sizing, if required.</li> <li>• Stormwater treatment BMPs to meet MR 6 (Runoff Treatment).</li> <li>• Flow control facilities and/or land use management BMPs to meet MR 7 (Flow Control)</li> <li>• Protection of wetlands to meet MR 8</li> <li>• Conveyances and parking lot details</li> <li>• Other applicable reporting requirements in Chapter 30.63A SCC</li> </ul>
	<p><b>Existing Conditions Summary</b> including: Information on the existing site conditions, including topography, drainage patterns, soils, depth to groundwater or impermeable layer, ground cover, presence of any critical areas, adjacent areas, existing development, existing stormwater facilities, and adjacent on- and off-site utility facilities. Soil analyses shall include particle size distribution, cation exchange capacity, and organic content, determined in accordance with test methods set forth in volume V, chapter 5 of the Drainage Manual. Description of site limitations including areas with high potential for erosion and sediment deposition (based upon soil properties, slope, etc.); critical areas; landscaping, tree retention, replacement areas, open space, tracts, easements, etc.</p>
	<p><b>Off-site Analysis and Mitigation</b></p> <p>Tabulations of the totals of hard surfaces, pollution-generating impervious surfaces, and pollution-generating pervious surfaces for each threshold discharge area for which on-site stormwater management BMPs are the sole stormwater management approach.</p>
	<p><b>Upstream Analysis</b></p> <p>Provide an upstream and downstream analysis that evaluates potential drainage impacts, and calculates the area of land and drainage flow to the site. The analysis shall include proposed mitigation for all significant drainage impacts from the development or redevelopment activity identified in the upstream analysis.</p>
	<p><b>Downstream Analysis</b></p> <p>Provide a downstream analysis consistent with Vol. I, Chap. 3 of the Drainage Manual and assesses the area downstream of the subject property <b>for the entire flow path from the project site to the nearest receiving water or up to one mile whichever is less.</b></p>
	<p>Evaluate potential downstream drainage impacts as well as the adequacy of the downstream drainage facilities to accommodate flows from the development activity and all other upstream</p>

	sources identified by the threshold discharge area (SCC Figure 30.91T.054B)
	The analysis includes proposed mitigation (SCC 30.63A.420(4) above for all significant drainage impacts from the development or redevelopment activities identified in the downstream or upstream analysis.
	Describe the downstream conditions and a computation of the adequacy of downstream conveyance systems in accordance with SCC 30.63A.730
	Describes problems identified in the Drainage Needs Report (DNR) or equivalent studies, and in the department of public works' surface water management, complaint database, shall be documented and mitigated as needed
	Document the visual inspection of the condition of the downstream drainage system and include a summary of that inspection including photographic documentation to verify that it will function in accordance with the downstream analysis
	Evaluate the potential impacts of the new development activity to the downstream area beyond one mile if the analysis finds that flooding of buildings, structures, or public roads has the potential to occur, or that significant critical area impacts may occur within one mile downstream of the property or to the nearest receiving water
	The proposed drainage facilities are designed so that stormwater enters and exits the site at the existing location(s) of entry and exit.
	Describe if the thresholds for application of treatment, flow control facilities pursuant to MR 6 and MR 7 are exceeded (SCC 30.63A.530 and SCC 30.63A.550)
	If flow control facilities are proposed to comply with minimum requirement 7 in SCC 30.63A.550, applicant submitted list of assumptions and site parameters used in analyzing the pre-developed site hydrology. This list shall be reflected in the stormwater calculations.
	The acreage, soil types, and land cover used to determine the pre-developed flow characteristics, along with basin maps, graphics, and exhibits for each subbasin affected by the project are included. If not included, reasonable, historic information is provided that indicates the site was prairie prior to settlement.
	A topographic map is included using 5-foot contour intervals, unless another scale is approved by PDS, to determine basin boundaries accurately, and showing: <ul style="list-style-type: none"> <li>a) Delineation and acreage of upstream areas contributing runoff to the site;</li> <li>b) Flow control facility location;</li> <li>c) Outfall;</li> <li>d) Overflow route;</li> <li>e) All natural streams and drainage features including the direction of flow, acreage of areas contributing drainage, and the limits of land disturbing activity shall be indicated; and</li> <li>f) Each basin within or flowing through the site shall be identified and model input parameters for the basins shall be referenced.</li> </ul>
	When the project involves development activities that require treatment and flow control facilities pursuant to MRs 6, 7 and 8 in SCC 30.63A.530, 30.63A.550 and 30.63A.570 address the following information: <ul style="list-style-type: none"> <li>a) Narrative, mathematical, and graphic presentation of model input parameters selected for the developed site condition, including acreage, soil types, and land covers, road layout, and all drainage facilities and easements.</li> </ul> If treatment facilities are required or proposed, applicant submits list of the water quality menus used according to Vol. V, Chap. 3 of the Drainage Manual. If flow control facilities are required or proposed, confirmation shall be provided that the flow control standard is achieved using the flow duration standards in the Drainage Manual.

<b>MR 2 SWPPP Narrative</b> (SCC 30.63A.450 and Vol. II, Chap. 3 of the Snohomish County Drainage Manual)	
The SWPPP narrative shall describe how each of the 13 applicable SWPPP elements has been addressed. The standard SWPPP format for narratives is available on the Washington State Department of Ecology website.	
<b>MR 3 Water pollution Source Control for New Development</b> (SCC 30.63A.515 and Vol. IV, Chaps. 3, 4 and 5 of the Snohomish County Drainage Manual)	
Describe the selection, design and construction of source control BMPs that will be used pollution generating <b>activities or uses</b> during construction and on the developed site following construction.	
<b>MR 4 Preservation of natural drainage systems and outfalls, and provisions of off-site mitigation</b> (SCC 30.63A.520 and Volume III of the Snohomish County Drainage Manual)	
Describe how discharges to the site will occur to the maximum extent possible and how energy dissipation is provided in accordance with the Snohomish County Drainage Manual and the EDDS. Describe runoff discharge and any required mitigation for off-site drainage impacts	
<b>MR 5 – On-site Stormwater Management</b> (SCC 30.63A.525)	
	Describe the LID BMP selection process including List 1 or List 2 from the Drainage Manual.
	Describe the location and types of BMPs (including roof downspout control, dispersion and soil quality) selected to infiltrate, disperse, and retain stormwater runoff on-site to the maximum extent feasible for non-pollution and pollution generating surfaces.
	Discuss the soil management plan sheet and calculations for BMP T.5.13 Post Construction Soils Quality and Dept may be submitted – see PDS Bulletin Achieving the Post Construction Soil Standard
<b>MR 6 Run-off Treatment Requirements</b> (SCC 30.63A.530 and Volume V of the Snohomish County Drainage Manual)	
	Identify the threshold treatment areas and the type of treatment facility proposed to meet run-off treatment requirements and document how the facility was selected, sized and designed and will be maintained in accordance with the Snohomish County Drainage Manual.
	Describe how the facility achieves the applicable performance goal at the water quality design flow rate.
	If an alternative design flow rate used, describe its equivalency.
	When applicable describe drainage into Blackman’s, Loma, Sunday or Ketchum Lakes.
	Describe treatment system(s) indicating enhanced, basic, phosphorous, oil
<b>MR 7 – Flow Control</b> (SCC 30.63A.550, Volume I, Appendix I-E and Volume III of the Snohomish County Drainage Manual)	
	Discharge areas and discharge points are identified and analyzed.
	Describes if project discharges stormwater directly or indirectly through a conveyance system into a fresh water system.
	If the project requires construction of flow control, it is described.
	Compliance with on-site stormwater management requirements in MR 5 is described.
	Flow control facilities and/or land use BMPs that will achieve flow control are identified.
	Flow control in parking lots is designed per requirements in Drainage Manual Vol. III
<b>MR 8 – Wetlands Protection</b> (SCC 30.63A.570), when applicable Yes <input type="checkbox"/> No <input type="checkbox"/>	
	A hydrologic analysis is provided that documents the existing hydrologic conditions and compliance with SCC 30.63A.570 and with Volume I, Chapter 2 and Volume I, Appendix I-D of the Snohomish County Drainage Manual.
	Compliance with and documentation of the runoff treatment criteria and requirements in MR 6 in chapter 30.63A SCC is documented.
	Compliance with the requirements and criteria in SCC 30.63A.570 are documented regarding discharge of stormwater into a wetland or wetland buffer, either directly or indirectly, through a conveyance system.
	The location of stormwater treatment and flow control facilities are described.
	Mitigation is addressed for loss of wetlands.
<b>MR 9 – Operation and Maintenance manual</b> (Drainage Manual Vol. I, Chap. 3)	



## ATTACHMENT C, CONTINUED

### SWPPP DETAIL SUMMARIES

The following summaries are provided as a guide to submitting reports and plans that will meet code requirements. Compliance items are summarized, please see chapter 30.63A SCC and the Snohomish County Drainage Manual 2016 for complete requirements.

#### **Stormwater Pollution Prevention Plan (SWPPP) - MR 2**

(SCC 30.63A.445 and .450 and Volume II, Chapter 3 of the Snohomish County Drainage Manual)

The Stormwater Pollution Prevention Plan must show the BMPs selected to comply with comply with the detailed SWPPP submittal checklist in the Snohomish County Drainage Manual. Unless site conditions render the element unnecessary, and the applicant must written justification in the SWPPP narrative that the element is not applicable to the site or project. The following twelve SWPPP elements shall be considered in the development of a construction SWPPP and must be shown on the SWPPP when applicable:

- \_\_\_\_\_ 1. Construction sequence
- \_\_\_\_\_ 2. CESCL information appears on all SWPPP sheets
- \_\_\_\_\_ 3. ELEMENT 1: Mark clearing limits
- \_\_\_\_\_ 4. ELEMENT 2: Establish construction access
- \_\_\_\_\_ 5. ELEMENT 3: Control flow rates
- \_\_\_\_\_ 6. ELEMENT 4: Install sediment controls
- \_\_\_\_\_ 7. ELEMENT 5: Stabilize soils
- \_\_\_\_\_ 8. ELEMENT 6: Protect slopes
- \_\_\_\_\_ 9. ELEMENT 7: Protect drain inlets
- \_\_\_\_\_ 10. ELEMENT 8: Stabilize channels and outlets
- \_\_\_\_\_ 11. ELEMENT 9: Control pollutants
- \_\_\_\_\_ 12. ELEMENT 10: Control de-watering
- \_\_\_\_\_ 13. ELEMENT 11: Maintain BMPs
- \_\_\_\_\_ 14. ELEMENT 12: Manage the project
- \_\_\_\_\_ 15. ELEMENT 13: Protect on-site stormwater management BMPs from runoff from roofs and other hard surfaces



**ATTACHMENT D**  
**PRELIMINARY DEVELOPMENT LAYOUT GUIDELINES**  
**(Snohomish County Drainage Manual 2016, Vol. I, Section 3.2)**

The preliminary site plan layout shall reflect the following design principles:

- Project fits development to the terrain to minimize land disturbance
- Project confines construction activities to the minimum area necessary, and away from critical areas
- Project preserves areas with natural vegetation (especially forested areas) as much as possible
- When project is located on sites with a mix of soil types, locate new hard surface areas and structures over less permeable soil (e.g. till), and try to restrict development and land disturbing activities over more porous soils (e.g. outwash)
- Project clusters buildings together
- Project minimizes impervious areas
- Project maintains and utilizes natural drainage patterns
- Submittal demonstrates how the BMPs and drainage facilities fit within and serve the entire preliminary development layout
- Submittal demonstrates how reducing the need for constructed facilities was considered
- Submittal demonstrates consideration of how reducing the amount of effective impervious surfaces through implementation of LID BMPs results in reduced sizing of constructed stormwater facilities
- Submittal demonstrates how areas left undisturbed in the preliminary development layout may be increased to meet site planning criteria that would favor low impact development

**AUTHORITY:** Snohomish County Code 30.70.030 authorizes the Director of Planning and Development Services to establish and revise submittal requirements for all permit applications. These requirements are hereby established as shown above, and shall be on file with the department. Due to site-specific circumstances, the Director or his designee may waive individual requirements on a case-by-case basis.