



**Public Works Department, Engineering Division**

121 5th Ave N  
Edmonds, WA 98020

## **Checklist 8: Sheet Flow Dispersion BMP**

Per ECDC 18.30, all Category 1 projects must comply with Minimum Requirements No. 1 through No. 5, and all Category 2 projects must comply with Minimum Requirements No. 1 through No. 9. Sheet flow dispersion may be used to help meet Minimum Requirement Nos. 5 and 7, provided that the following requirements are met. See also Addendum Checklists 1 through 3 for submittal requirements, and Addendum Appendix A for infeasibility criteria that apply to Minimum Requirement No. 5 specifically.

Sheet flow dispersion shall be designed in accordance with the Department of Ecology's Stormwater Management Manual for Western Washington (SWMMWW), ECDC 18.30, and the requirements in the Addendum. The City of Edmonds developed the following checklist to aid project proponents and plan reviewers in complying with the applicable SWMMWW requirements for this BMP. In addition, City-specific requirements (i.e., requirements presented in ECDC 18.30, the Addendum, or other City requirements that are not included in the SWMMWW) are also included in the checklist.

This checklist reflects most, but not necessarily all, of the items that shall be documented by the project proponent, for review by the Engineering Division. It is intended to be used as an aid for developers and plan reviewers by providing a foundation for clear and consistent BMP design in the City of Edmonds. However, all items may not be applicable to every project, and all items of concern to this office may not be covered on this checklist.

**Applicant:**

**Application #:**

<p><b>Within each blank cell, enter comment codes as follows:</b></p> <p>C = Complete                      R = Revise (i.e., make corrections)</p> <p>N/A = Not Applicable            M = Missing (i.e., please include)</p> <p>IC = Incomplete</p>	
	<p><b>MODELING AND SIZING</b></p> <p>(SWMMWW Volume V, Section 5.3.1, BMP T5.12)</p>
1	Where sheet flow dispersion is used to disperse runoff into an undisturbed native landscape area or an area that meets the requirements of BMP T5.13: Post-Construction Soil Quality and Depth design criteria, and the vegetated flow path is 50 feet or more, the impervious area may be modeled as grass/lawn area. If the available vegetated flow path is 25 to 50 feet, and a dispersion trench is used, the impervious area is modeled as 50 percent impervious/50 percent landscape.
	<p><b>SETBACKS</b></p> <p>(Addendum Appendix A)</p>
2*	The sheet flow dispersion area is not within the North Edmonds Earth Subsidence and Landslide Hazard Area (ESLHA).
3*	The sheet flow dispersion is not within the buffer of the ESLHA (minimum buffer equal to the height of the steep slope or 50 feet, whichever is greater) unless a geotechnical assessment and soils report is prepared addressing the potential impact of the proposed system.
4*	For sites with on-site or adjacent septic systems, the discharge point is at least 30 feet upgradient, or 10 feet downgradient, of the drainfield primary and reserve areas (per WAC 246-272A-0210). This requirement can be modified by the City if site topography will clearly prohibit flows from intersecting the drainfield or where site conditions (soil permeability, distance between systems, etc.) indicate that this is unnecessary.
5*	The sheet flow dispersion area is not within the buffer of a Category 1 or Category 2 wetland.
6*	The sheet flow dispersion area is not within the buffer of a Category 3 or Category 4 wetland, except for the outer 25 percent of the buffer.
	<p><b>DESIGN CRITERIA</b></p> <p>(SWMMWW Volume V, Section 5.3.1, BMP T5.12)</p>
7	The dispersion of runoff does not create flooding or erosion impacts.
8*	Positive drainage for sheet flow runoff is achieved.
9*	Flow path is undisturbed native landscape, or well-established lawn, landscape, groundcover over soil.
10	Some natural resource protection areas and critical area buffers may count towards flow path lengths if they are permanently protected from modification through a covenant or easement, or a tract dedicated by the proposed project.
11*	The dispersion/buffer area is not within 50 feet of the top of slopes greater than 15 percent (unless a geotechnical assessment and soils report is prepared addressing the potential impact of the proposed system).
12*	Contributing surfaces to dispersion areas are flat or moderately sloping (less than 15 percent slope) surfaces such as driveways, sport courts, patios, roofs without gutters, lawns, pastures, or any situation where concentration of flows can be avoided.

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13*	The dispersion area is graded to avoid concentrating flows (if not, the project should use BMP T5.11: Concentrated Flow Dispersion BMP, see Addendum Checklist 9)
14	Sheet flow dispersion is designed as shown in City of Edmonds Standard Detail.
	<b>For Flat to Moderately Sloped Areas Only</b> (less than 15 percent slope)
15*	The contributing area cross-slope is a minimum of 2 percent.
16*	A transition zone and vegetated buffer is provided.
17*	The transition zone is located at least 25 feet from the right-of-way if the contributing area slopes toward street.
18*	The transition zone is 2 feet wide and is between the edge of the contributing surface (or building eaves) and the downslope vegetation.
19*	The transition zone consists of subgrade material (crushed rock), modular pavement, drain rock, or other material approved by the City.
20*	A 10-foot-wide vegetated buffer for up to 20 feet of width of paved or impervious surface, and an additional 10 feet of vegetated buffer width for each additional 20 feet of contributing area width or fraction thereof is provided.
	<b>For Variable Sloped Areas Only</b> (less than 15 percent slope overall, but variable in longitudinal and/or cross slope)
21*	Berms and dispersion trenches are provided.
22*	Berms are diagonal to the direction of surface flow to intercept and convey runoff to dispersion trenches.
23*	Berms are 6 inches wide and 2 to 4 inches high.
24*	Berms are placed such that there is no more than 700 square feet of contributing area between berms.
25*	A minimum vegetated flow path of 25 feet is provided between berms.
26*	The dispersion trench is located at least 25 feet from the right-of-way if the contributing area slopes toward street.
	<b>CONSTRUCTION CRITERIA INCLUDED IN THE SWPPP</b> (Addendum, Section 6.1)
27*	The dispersion area is clearly identified (e.g., using flagging or high visibility fencing) and protected prior to construction.
28	A soil and vegetation management plan is provided showing areas to be protected and restoration methods for disturbed areas.
29*	Construction SWPPP sheets outline construction sequencing that will protect the dispersion area during construction.
30*	General (i.e., non-BMP-specific) construction SWPPP BMPs and protection techniques are implemented as applicable. The upslope of construction areas are stabilized and overland flow distances are minimized.
31*	Machinery is operated outside of dispersion area during construction.

