

BMP T5.11: Concentrated Flow Dispersion

Purpose and Description

Concentrated flow dispersion BMPs disperse concentrated flows from driveways or other pavements through a vegetated, pervious area. These BMPs reduce peak flows by slowing entry of the runoff into the downstream conveyance system, allowing for some infiltration, and providing some water quality benefits.

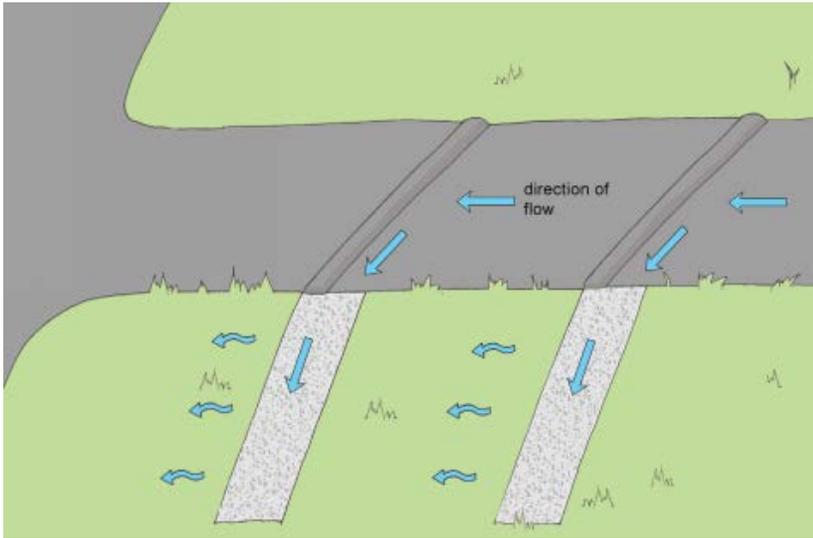


Figure 26: Illustration of Driveway Dispersion Using Berms and Dispersion Trenches

Applications, Limitations and Setbacks

Use this BMP in any situation where concentrated flow can be dispersed through the required length of vegetation.

Setbacks

- 100 feet upgradient from any septic system unless site topography clearly indicates that subsurface flows will not intersect the drainfield.
- 10 feet from any structure, property line, or sensitive area.
- 50 feet from a geohazard area per CCC 40.430.

Infeasibility

The following criteria describe conditions that make concentrated flow dispersion infeasible to meet Minimum Requirement #5. Citation of any of the infeasibility criteria must be based on an evaluation of site-specific conditions and documented in the LID Feasibility Checklist.

Dispersion BMPs listed above are considered infeasible under the following conditions:

- Where a professional geotechnical evaluation recommends dispersion not be used due to reasonable concerns about erosion, slope failure or down gradient flooding.
- Where the only location available for the discharge location is up gradient of a septic system.
- Where the only area available for the required length of the BMP's flowpath is above an erosion hazard, toward a landslide hazard area, or on a slope greater than 20% and when a professional geotechnical engineer recommends dispersion not be used in these areas.
- Where the only area available to place the dispersion device (not the flowpath), if applicable to the BMP, is located in a critical area or critical area buffer.

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Community Development
1300 Franklin Street, Vancouver, Washington
Phone: (360) 397-2375 Fax: (360) 397-2011
www.clark.wa.gov/community-development



For an alternate format, contact the Clark County ADA Compliance Office.
Phone: (360) 397-2322
Relay: 711 or (800) 833-6384
E-mail: ADA@clark.wa.gov

- Where the only area available to place the dispersion device (not the flowpath), if applicable to the BMP, is located on a slope greater than 20% or within 50 feet of a geohazard (CCC 40.430) area.

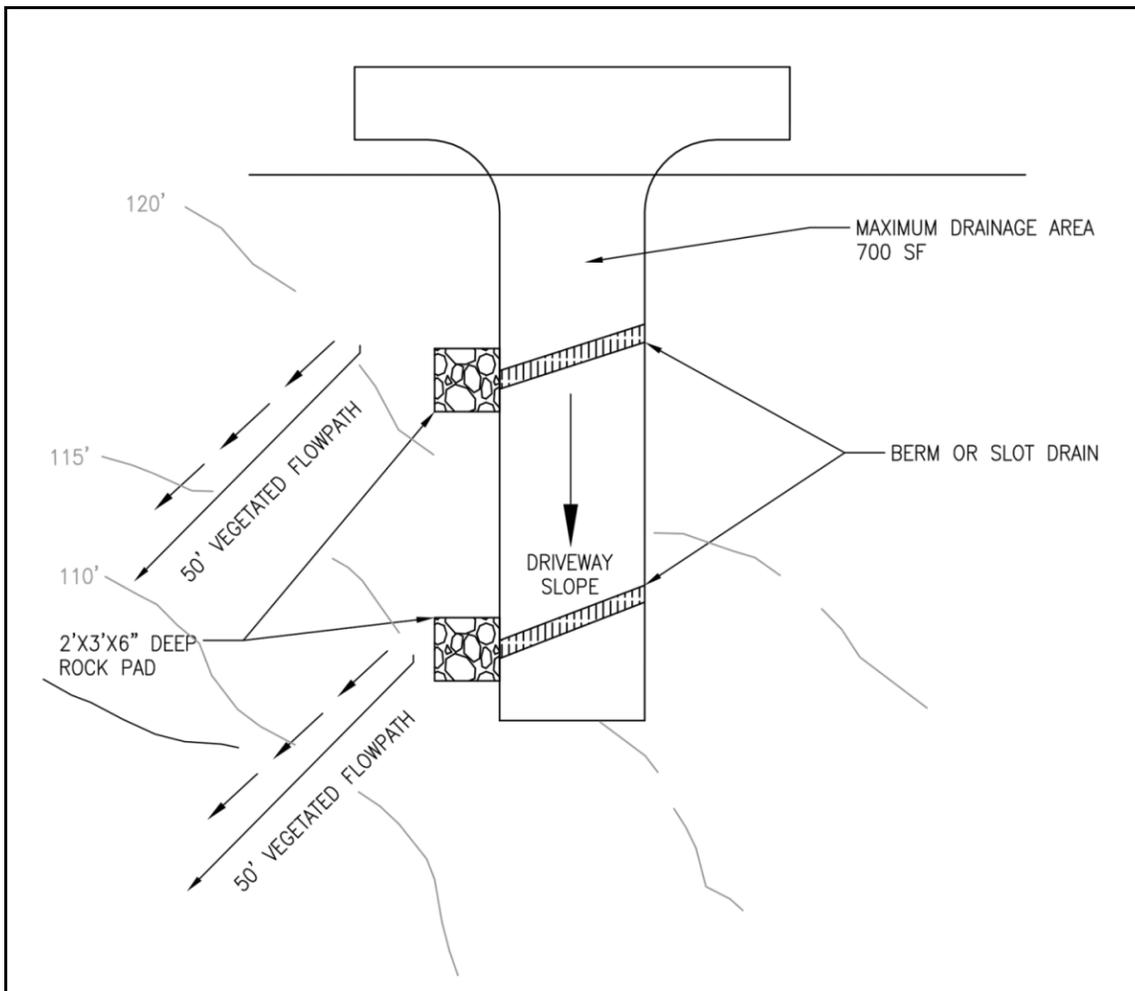


Figure 27: Concentrated Flow Dispersion Using Rock Pad (Source: Clark County)

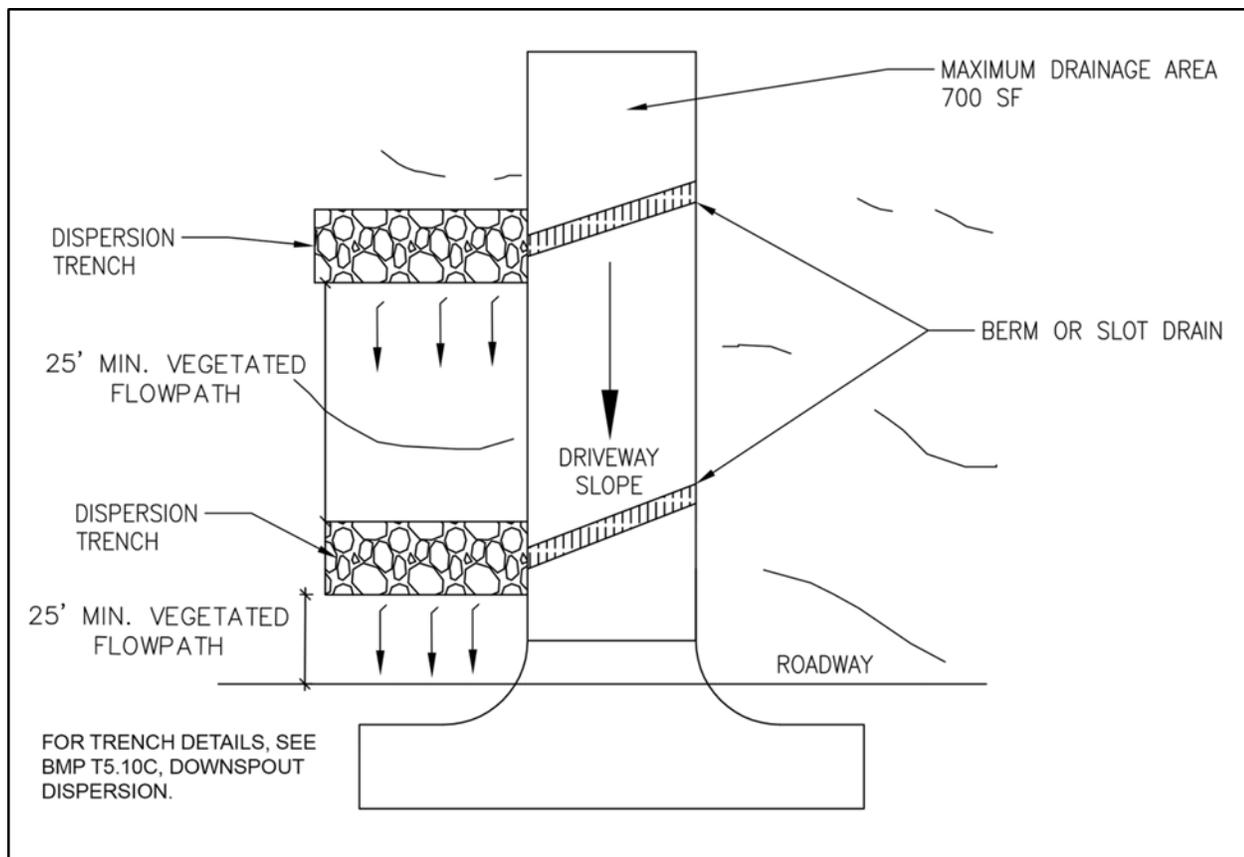


Figure 28: Concentrated Flow Dispersion Using Dispersion Trench
(Source: Clark County)

Design Criteria

- Each Concentrated Flow Dispersion BMP can serve a drainage area up to 700 square feet.
- A vegetated flow path of at least 50 feet shall be maintained between the discharge point and any property line, structure, steep slope (>20%), stream, lake, wetland, lake, or other impervious surface, unless a dispersion trench is used.
- When a dispersion trench per BMP T5.10C is used, the vegetated flow path described above can be reduced to 25 feet. A pad of crushed rock (a minimum of 2 feet wide by 3 feet long by 6 inches deep) shall be placed at each discharge point unless a dispersion trench per BMP T5.10C is being used.
- No erosion or flooding of downstream properties shall result.
- Any runoff discharged towards landslide hazard areas shall be evaluated by a geotechnical engineer or qualified geologist. The discharge point shall not be placed on or above slopes greater than 20%, or above erosion hazard areas, without evaluation by a geotechnical engineer or qualified geologist and approval by Clark County.
- For sites with septic systems, the discharge point must be at least ten feet below the elevation of the drainfield primary and reserve areas. Clark County may waive this requirement during plan approval if site topography clearly prohibits flows from intersecting the drainfield.