

Checklist LID.07 Concentrated Flow Dispersion

This checklist reflects most, but not necessarily all of the items that will be reviewed by the Development Review. It is intended to be used as an aid by us to provide a consistent review of development work in Thurston County. All items may not be applicable in the review of each project and all items of concern to this office may not be covered on this checklist.

Y	N	
		MODELING AND SIZING
		Where concentrated flow dispersion is used to disperse impervious area runoff into an undisturbed native landscape area or an area that meets the requirements of LID.02: Post-Construction Soil Quality and Depth design criteria, the impervious area is modeled as a lateral flow impervious area. The design must adhere to the flow path lengths and dispersion trench/rock pad options described in Volume V, section 2.2.5.5 as a prerequisite to using the lateral flow elements.
		In situations where multiple instances of concentrated flow dispersion will occur, the following options are allowed: When a <ul style="list-style-type: none"> • When a pad of crushed rock or dispersion trenches are used per the guidance above, and the length of the vegetated flow path is at least 50 feet, the impervious area may be modeled as a landscaped area (grass). • When dispersion trenches are used per the guidance above, and the length of the vegetated flow path is 25 - 50 feet, the impervious area may be modeled as 50%landscaped / 50%impervious.
		DESIGN CRITERIA
		The dispersion of runoff does not create flooding or erosion impacts of downstream properties.
		Flow path is undisturbed native landscape, or well-established lawn, landscape, groundcover over soil.
		Natural resource protection areas and critical area buffers counted towards flow path lengths are permanently protected from modification through a covenant or easement, or a tract dedicated by the proposed project.
		Discharge point is not within 300 feet erosion hazard or landslide hazard areas.
		Dispersion facility is setback a minimum of 50 feet from top of slopes steeper than 20% and greater than 10 feet high and a vegetated flow path is maintained between the outlet of the facility and the slope.
		For sites with septic systems, the discharge point is downgradient of the drainfield primary reserve areas. This requirement may be waived by Thurston County if site topography clearly prohibits flows from intersecting the drainfield.
		Flow path is not over contaminated sites or abandoned landfills.

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		Concentrated flow dispersion is dispersed through vegetation.
		Concentrated flow dispersion is designed as shown in Volume V, Figure V-2.10.
		A slotted drain, diagonal berm, or similar measure is provided to direct flow from the impervious surface to the concentrated flow dispersion device (i.e., rock pad or dispersion trench).
		If used, slotted drains are located a minimum of 25-feet from the right-of-way if the contributing area slopes towards the street.
		If used, slotted drains must be perpendicular the direction of surface flow to intercept and convey runoff to concentrated flow dispersion devices.
		If used, berms are 6-inches wide and 2 to 4 inches high.
		A maximum of 700 square feet of impervious area drains to each concentrated flow dispersion BMP.
		Berms are diagonal to the direction of surface flow to intercept and convey runoff to the concentrated flow dispersion device.
		A pad of crushed rock (2 feet wide by 3 feet long by 6 inches deep) or a dispersion trench is included at each discharge point as the dispersion device.
		Each concentrated flow dispersion device has a separate flow path.
		If a rock pad is used, a minimum vegetated flow path of 50 feet between the discharge point and any property line, structure, steep slope (greater than 20%), stream, lake, wetland, or other impervious surface is provided.
		If a dispersion trench is used, a minimum vegetated flow path of 25 feet between the discharge point and any property line, structure, steep slope (greater than 20%), stream, lake, wetland, or other impervious surface is provided.
CONSTRUCTION CRITERIA		
		The dispersion area is clearly identified (e.g., using flagging or high visibility fencing) and protected prior to construction.
		A soil and vegetation management plan is provided showing areas to be protected and restoration methods for disturbed areas.
		Construction SWPPP sheets outline construction sequencing that will protect the dispersion area during construction.
		Construction SWPPP BMPs and protection techniques are implemented as applicable. The upslope of construction areas are stabilized and overland flow distances are minimized.
		Operate machinery outside of dispersion area during construction.

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		Excavate dispersion area to final grade only after all disturbed areas in the upgradient project drainage area have been permanently stabilized.
		The dispersion flow path is protected from sedimentation and compaction during construction.
		If the flow path area is disturbed during construction, the area is restored to meet LID.02: Post-Construction Soil Quality and Depth requirements in Volume V, and a dense cover of lawn, landscape, or groundcover is established.
		INSPECTION CRITERIA
		The dispersion facility meets applicable design and construction criteria (see Design Criteria above).