

## **BMP T5.12 Sheet Flow Dispersion**

### ***Purpose and Definition***

Sheet flow dispersion is the simplest method of runoff control. This BMP can be used for any impervious or pervious surface that is graded so as to avoid concentrating flows. Because flows are already dispersed as they leave the surface, they need only traverse a narrow band of adjacent vegetation for effective attenuation and treatment.

### ***Applications and Limitations***

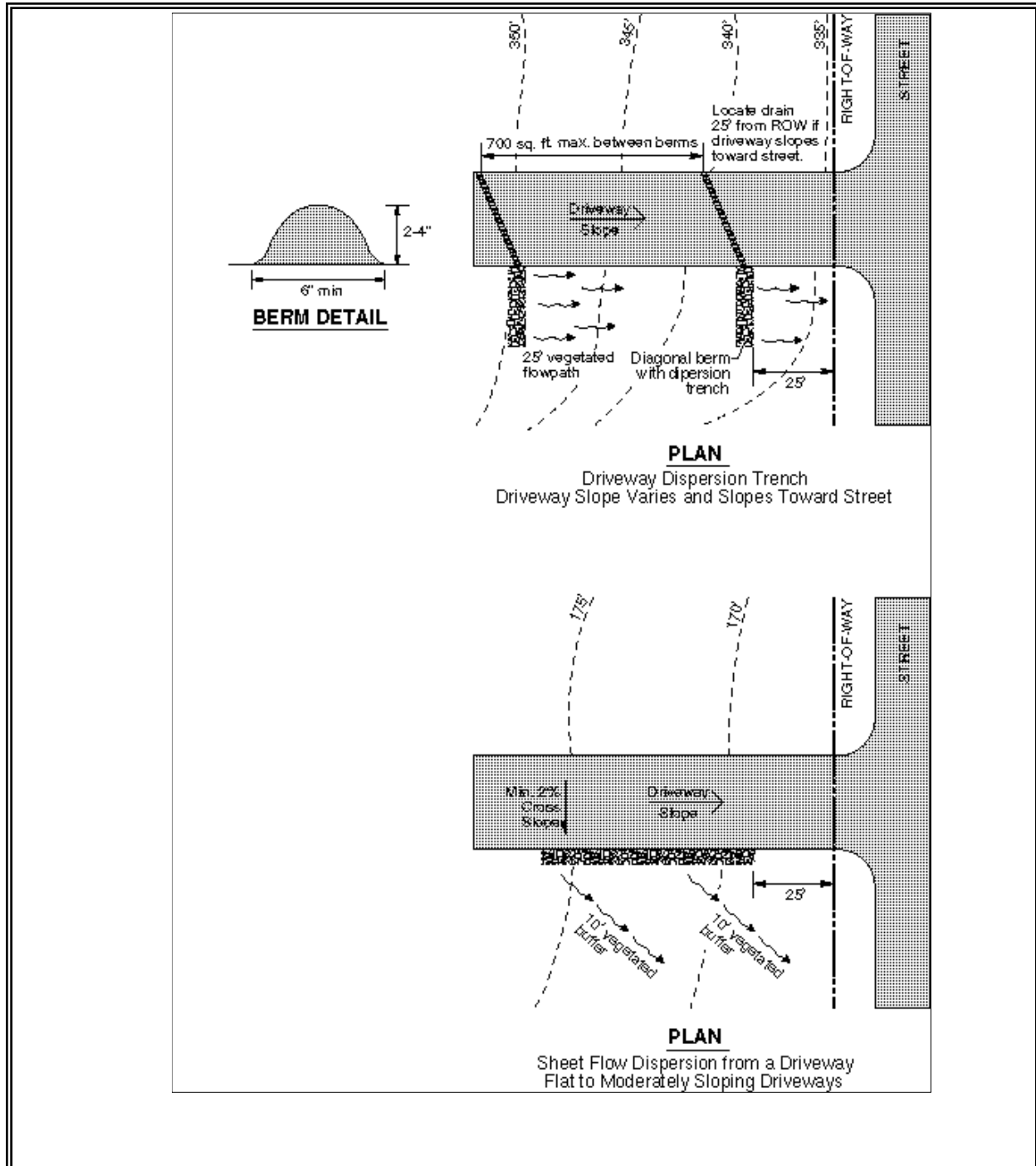
Flat or moderately sloping (<15% slope) impervious surfaces such as driveways, sport courts, patios, and roofs without gutters; sloping cleared areas that are comprised of bare soil, non-native landscaping, lawn, and/or pasture; or any situation where concentration of flows can be avoided.

### ***Design Guidelines***

- See Figure 5.5 for details for driveways.
- **A 2-foot-wide transition zone to discourage channeling should be provided between the edge of the driveway pavement and the downslope vegetation, or under building eaves.** This may be an extension of subgrade material (crushed rock), modular pavement, drain rock, or other material acceptable to the Local Plan Approval Authority.
- **A vegetated buffer width of 10 feet of vegetation must be provided for up to 20 feet of width of paved or impervious surface. An additional 5 feet of width must be added for each additional 20 feet of width or fraction thereof.**
- A vegetated buffer width of 25 feet of vegetation must be provided for up to 150 feet of contributing cleared area (i.e., bare soil, non-native landscaping, lawn, and/or pasture). Slopes within the 25-foot minimum flowpath through vegetation should be no steeper than 8 percent. If this criterion cannot be met due to site constraints, the 25-foot flowpath length must be increased 1.5 feet for each percent increase in slope above 8%.
- No erosion or flooding of downstream properties may result.
- Runoff discharge toward landslide hazard areas must be evaluated by a geotechnical engineer or a qualified geologist. The discharge point may 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 the Local Plan Approval Authority.
- **For sites with septic systems, the discharge point must be downgradient of the drainfield primary and reserve areas.** This requirement may be waived by the Local Plan Approval Authority if site topography clearly prohibits flows from intersecting the drainfield.

**Flow Credits**

- Where BMPT5.12 is used to disperse runoff into an undisturbed native landscape area or an area that meets BMP T5.13, the impervious area may be modeled as landscaped area. This is done in the WWHM by entering the impervious area into the "landscaped area" field.



**Figure 5.5 – Sheet Flow Dispersion for Driveways**