3.3.2 Vegetated Swale

The standards outlined below specify optimum design elements for a successful vegetated swale. If sufficient supporting data is submitted, the City will consider other swale design(s).

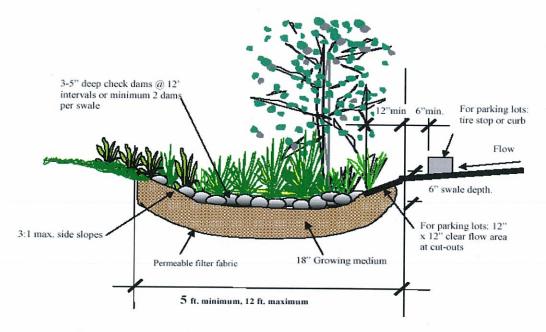


Figure 3.3.2: Vegetated Swale

Section Not to Scale

Source: City of Portland Stormwater Management Manual, September 2002

- 1. The swale width and profile shall be designed to convey the water quality design storm event (0.2 inches per hour) at a maximum design storm depth of 0.4 foot and maximum design velocity of 1-foot per second.
- 2. Overflow routes and additional means for disposal must be provided.
- 3. Minimum swale length is 20 feet. Maximum slope is 6%.
- 4. Silty or clayey soils shall be amended with 50% sandy loam in the top 12 inches of the swale.
- 5. Check dams shall be of durable, non-toxic materials- i.e., rocks. Check dams shall be 12 inches in length x (width of swale) x 3 to 5 inches in height.
- 6. Liners may be required for groundwater protection or if the facility is located within 10 feet of a building foundation.
- 7. Appropriate access and maintenance easement shall be provided to the swale. Refer to Section 4.6.2 and 4.6.3 of this *Manual* for details.
- 8. See Section 3.4 of this Manual for erosion control requirements.