



TO: Environmental Services Managers, Surface Water Management Staff and City of Tacoma Website

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M.P.S.

SUBJECT: Infiltration Trench Sizing

DATE: August 13, 2013

Background

The City of Tacoma (City) Environmental Services Department has developed this guidance document to clarify the requirements of the City's 2012 Stormwater Management Manual (SWMM).

The design criteria for infiltration trenches are contained in Volume 1, Section 2.6.1.1 of the 2012 SWMM. The design criteria specifies the following downspout infiltration trench lengths based on USDA soil type. Table 3-5, below, provides the following minimum trench lengths (in linear feet) per 1,000 square feet of roof area.

USDA Soil Type	Trench Length (linear feet)
Coarser	20
Sand	85
Loamy Sand	90
Sandy Loam	115
Loam	270
Silt Loam	270

The City recently completed additional modeling efforts using updated software and has determined that the following trench lengths are sufficient for meeting the intent of Minimum Requirement #5. Table 3-5 shall be revised as follows:

USDA Soil Type	Trench Length (linear feet)
Clean Sandy Gravels and Gravelly Sands	20
Sand	30
Loamy Sand	75
Sandy Loam	125
Loam	190
Silt Loam	270