Transportation Planning - Jaron Hogenson - 512-974-2253

No TR comments

Water Quality Review - Kyle Virr - 512-974-2538

Release of this application does not constitute a verification of all data, information, and calculations supplied by the applicant. The engineer of record is solely responsible for the completeness, accuracy, and adequacy of his/her submittal, whether or not the application is reviewed for code compliance by city engineers.

WQ1: Show the water quality volume water surface elevation on the cross-sectional detail of the pond. ECM 1.6.7 H.

WQ2: ECM 1.6.7(H)(2) Soil conditions - When siting a full or partial infiltration rain garden, appropriate soil conditions must be present. The depth to an impermeable layer must be at least 12 inches below the bottom of the rain garden. For full infiltration rain gardens, the underlying native soil must have a design infiltration rate that will draw down the full ponded depth in less than 48 hours. For example, for a 12-inch maximum ponding depth, the design infiltration rate must be at least 0.25 inches per hour. For a 6-inch maximum ponding depth, the design infiltration rate must be least 0.13 inches per hour. For a 3-inch maximum ponding depth, the minimum design infiltration rate is 0.06 inches per hour. The design infiltration rate is based on applying at least a factor of safety of two (2) to the measured steady state saturated infiltration rate (i.e., the design infiltration rate is equal to one-half of the measured infiltration rate). A higher factor of safety may be used at the discretion of the design engineer to take into variability associated with assessment methods, soil texture, soil uniformity, influent sediment loads, and compaction during construction. For full infiltration systems, the infiltration rate of the soil subgrade below the growing medium of the rain garden must be determined using in-situ testing as described in Section 1.6.7.4. If a range of values is measured then the geometric mean should be used.

WQ3: ECM 1.6.8 states, “On-site control of the two-year storm is achieved when the developed-conditions peak runoff rate leaving the site for a given drainage area is less than or equal to the existing-conditions runoff rate. The flow rates can be considered equal if the developed rate is no more than one-half (0.5) cfs greater than the existing rate or if the developed rate is no more than one-half (0.5) percent greater than the existing rate and there are no existing erosion problems downstream of the site” (LDC 25-7-61). Please provide compliance.

WQ4: For stacked detention, the velocity of the flows entering the SCM for the developed 100 year peak flow must not exceed two feet per second. ECM 1.6.2 B.2.

WQ5: Please provide Certification of Compliance 25-1-83 – Applications Related to a Closed Municipal Solid Waste Landfill. The certification form can be found at the following website: http://austintexas.gov/sites/default/files/files/Planning/Applications_Forms/Landfill_Verification_Form.pdf

WQ6: ECM 1.6.7(H)(2) Land Use - The use of rain gardens as a water quality control is limited to Commercial, Multi-Family, Civic Uses, Public Right of Way , and single family residential projects. The restrictions on use of rain gardens for single family residential are as follows:

1. Rain Garden must be located in a dedicated common area or within a drainage easement that is accessible by standard maintenance equipment from the right of way.

2. A minimum of four (4) single-family lots must be treated by the rain garden.

3. No rain gardens are to be located in backyards or fenced in yards.