

Letter of Preference:

Post-construction Stormwater Treatment Practice

Stormwater Treatment Practice Measures: either structural or non-structural, that is determined to be the most effective, practical means of preventing or reducing point source or nonpoint source pollution inputs to Stormwater runoff and water bodies.

Created by: John Gibson, Director of Public Works

Created for: Civil Engineers, Landscape Architects, developers, and others developing plans for renovations and new sites within the City of Waukee.

Objective: To notify site designers of a preference by the City of Waukee for a particular stormwater treatment practice.

Preferred Stormwater Treatment Practice:

- Vegetated swales and/or soft armor protection are preferred downstream of storm water runoff outlets (parking lots), overflow structures, pipes, and culverts. This practice supports all bio-retention/filtration type practices as part of a tool box of vegetates, “green” solutions for reducing, filtering, and preventing runoff pollution; and recharging groundwater; as well as helping us achieve our NPDES Phase II requirements.
- The vegetation in these swales would be reinforced, as needed, by transition mats (or equal) at potential scour areas, and turf reinforcement mats (TRMs) in the channels.
- TRMs performance requirements will be calculated by using their unvegetated, or installation-day, performances ratings.
- ‘Or equal’ is defined by the performance standards (velocities and shear stresses) of transition mats (independent and third party verification testing). The party proposing an alternative product must provide their “or equal data” at their own cost.
- NPDES Phase II Minimum Requirements and stormwater permits require Post-Construction Storm Water Management, Inspection, and Maintenance. The City of Waukee feels vegetated conveyances offer the best, most-economical long-term means of achieving these goals.
- Development plans using hard armor protection practices must document the considerations for ‘green alternatives’ and why ‘green alternative’ limitations mandate hard armor use.
- The City of Waukee is attempting to move in a different direction rather than rock rip rap at outfalls because of issues that evolve over time.



John R. Gibson
Director of Public Works
City of Waukee