

NOTES:

- 1. See Std. Plans GSI-05a and b for plan view. See Std. Plan GSI-04 for transition zone requirements.
- 2. 24-inch minimum required where adjacent to parking.
- 3. Geomembrane liner per SWMM BMP L630 and shall be PVC with a minimum thickness of 30 mils and in accordance with ASTM D7176. Seams shall be waterproof. Liner to create a watertight installation to top of freeboard. Prepare subgrade for liner per Engineer, Liner specification may vary based on site conditions.
- 4. Penetrations through facility liner shall be watertight and shall prevent preferential flow into utility trenches (e.g. water stop, trench block, or trench collar). as appropriate.

- sharp rocks if recommended by liner manufacturer. Geotextile per liner manufacturer.
- seams to be sealed and waterproof per manufacturer and all penetrations to be booted. Liner shall be installed and seamed to create a watertight installation to top of freeboard.
- 7. Plantings per Std. Plan GSI-20a and plans.
- Plantings adjacent to parking shall be selected and spaced to allow pedestrian access to vehicles.
- 9. Sizing and design of facility per SWMM BMP L630.

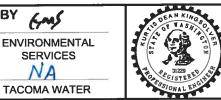
- Provide geotextile under PVC liner to protect liner from 10. Freeboard depth varies (2-inches or 6-inches) depending upon size of drainage area. For freeboard. ponding and overflow depth, see SWMM BMP L630.
- Liner secured at top and/or keyed per manufacturer. All 11. Underdrain bedding per WSDOT 9-03.12(4) Gravel Backfill for Drains.
 - 12. Overflow type depends on project design. See Std. Plan GSI-13 or GSI-14. Alternate overflow type may be
 - 13. Side slopes steeper than 3:1 may be approved if overall facility depth is less than 3 feet from top of mulch to top of facility.
 - 14. Inlet elevation to be above freeboard elevation.

REVIEWED BY DUS

PUBLIC WORKS

NA

TACOMA POWER



APPROVED FOR PUBLICATION

CITY ENGINEER

CITY OF TACOMA BIORETENTION SECTION WITH LINER AND UNDERDRAIN

STANDARD PLAN NO.

GSI-03c