OPERATION & MAINTENANCE MANUAL

DFI No. : D00536
Facility Type: Water Quality Biofiltration Swale

July, 2012

INDEX

1. Identification

Drainage Facility ID (DFI):	**D00536**
Facility Type:	Water Quality Biofiltration Swale
Construction Drawings:	(V-File Number) 52V-104
Location:	District: 3
	Highway No.: 30
	Mile Post: [0.265; 0.255 (beg./end)]
	Description: This facility is located northwest of the Wallace Bridge over the Yamhill River and adjacent to the park and ride lot.

2. Facility Contact Information

Contact the Engineer of Record, Region Technical Center, or Geo-Environmental's Senior Hydraulics Engineer for:

- Operational clarification
- Maintenance clarification
- Repair or restoration assistance

Engineering Contacts:

Region Technical Center Hydro Unit Manager

Or

Geo-Environmental Senior Hydraulics Engineer (503) 986-3365.

3. Construction

Engineer of Record:	ODOT Designer – Region 2 Tech. Center, Chris Carman, (503) 986-2691
Facility construction:	2011
Contractor:	ODOT Bridge Maintenance

4. Facility Overview and Operations

This water quality swale is a flat-bottomed open channel designed to treat stormwater runoff from the Wallace Bridge prior to entering the Yamhill River. The swale is lined with 18 inches of a soil mix consisting of leaf compost and sand, and grass. Treatment by trapping sedimentation occurs when runoff flows through the grass or through the amended soil. Absorption of dissolved pollutants may also occur when runoff filters through the amended soil.

An asphalt curb channels runoff from the bridge to the upland portion of the swale. Runoff then drains along the swale and outfalls into the Yamhill River.

Photo 1: Biofiltration swale. Willamina – Salem Highway is to the right

A. Maintenance equipment access:
Access to the swale is through the park and ride.

B. Heavy equipment access into facility:

☐ Allowed (no limitations)
☐ Allowed (with limitations)
X Not allowed

C. Special Features:

X Amended Soils
☐ Porous Pavers
☐ Liners
☐ Underdrains

5. Facility Haz Mat Spill Feature(s)

The swale could be used to store a small volume of hazardous liquid by blocking the outlet with sandbags.

6. Auxiliary Outlet (High Flow Bypass)

There is no high flow bypass for the swale. It is sized to convey high flows.

7. Maintenance Requirements

Routine maintenance table for non-proprietary stormwater treatment and storage/detention facilities have been incorporated into ODOT's Maintenance Guide. These tables summarize the maintenance requirements for ponds, swales, filter strips, bioslopes, and detention tanks and vaults. Special maintenance requirements in addition to the routine requirements are noted below when applicable.

The ODOT Maintenance Guide can be viewed at the following website:

http://www.oregon.gov/ODOT/HWY/OOM/MGuide.shtml

The following stormwater facility maintenance table (See ODOT Maintenance Guide) should be used to maintain the facility outlined in this Operation and Maintenance Manual or follow the Maintenance requirements outlined in Appendix C when proprietary structure is selected below:

- ☒ Table 1 (general maintenance)
- ☐ Table 2 (stormwater ponds)
- ☒ Table 3 (water quality biofiltration swales)
- ☐ Table 4 (water quality filter strips)
- ☐ Table 5 (water quality bioslopes)
- ☐ Table 6 (detention tank)
- ☐ Table 7 (detention vault)
- ☐ Appendix C (proprietary structure)
- ☐ Special Maintenance requirements:

8. Waste Material Handling

Material removed from the facility is defined as waste by DEQ. Refer to the roadwaste section of the ODOT Maintenance Yard Environmental Management System (EMS) Policy and Procedures Manual for disposal options: http://egov.oregon.gov/ODOT/HWY/OOM/EMS.shtml

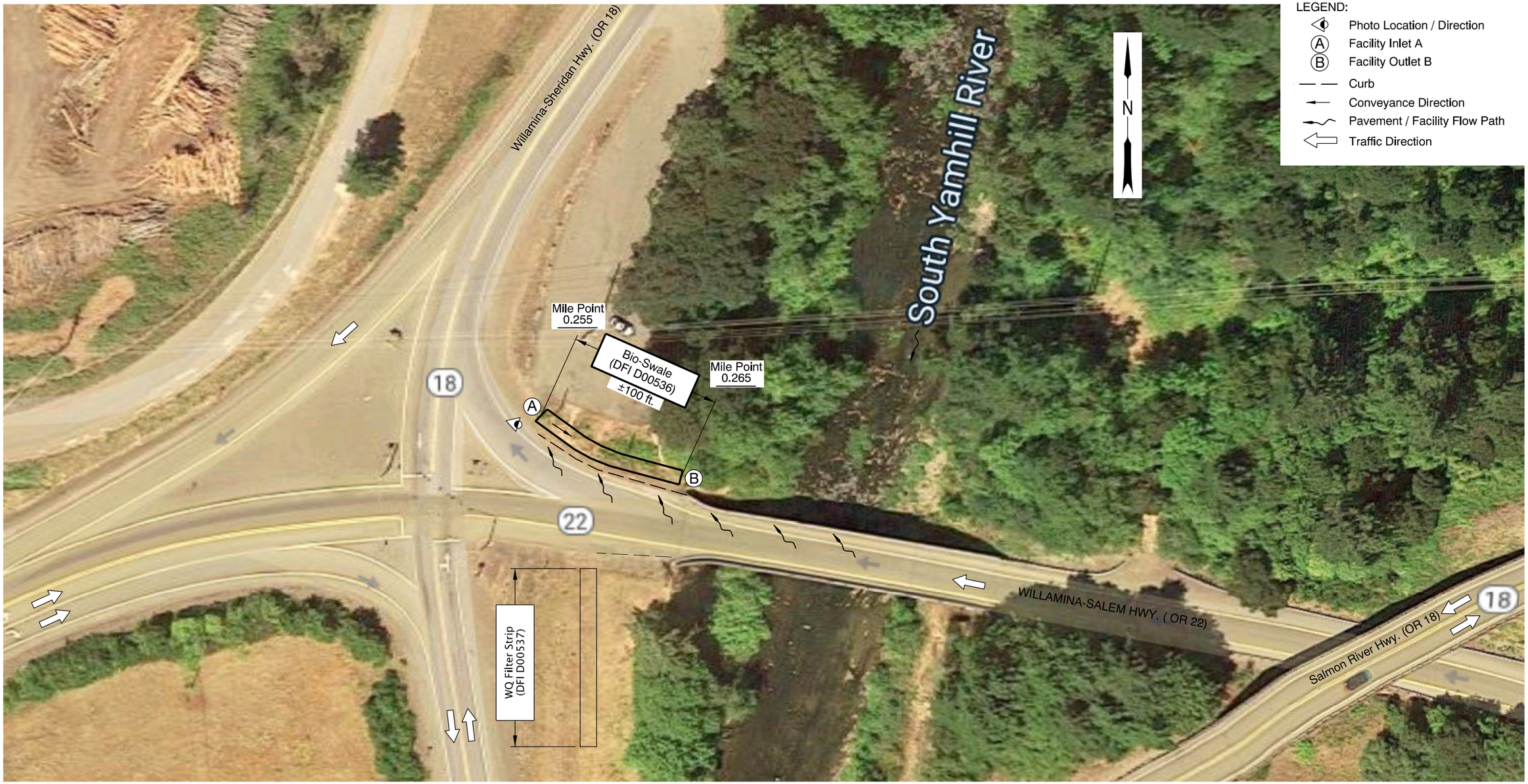
Contact any of the following for more detailed information about management of waste materials found on site:

ODOT Clean Water Unit	(503) 986-3008
ODOT Statewide Hazmat Coordinator	(503) 229-5129
ODOT Region Hazmat Coordinator	(503) 986-2647
ODEQ Northwest Region Office	(503) 229-5263

Appendix A – Site Specific Operational Plan

Contents:

Operational Plan: DFI D00536



OREGON DEPARTMENT OF TRANSPORTATION

Prepared By: Chris Carman

Drafted By: Sergy Chernishoff

DFI D00536
MAINTENANCE DISTRICT 3 HWY 30
WATER QUALITY BIOFILTRATION SWALE
WILLAMINA-SALEM HIGHWAY MP 0.265-0.255
POLK COUNTY

DFI_D00536.dgn :: OM_Tblk 7/30/2019 7:54:05 AM hwye31g

Appendix B – Project Contract Plans

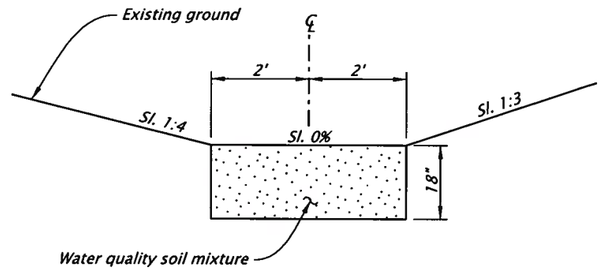
Contents:

Site Specific Subset of Project Contract Plan 52V-104

N

(1) *Milepoint 0.255 to milepoint 0.265*
Const. water quality biofiltration swale no. D00536
Water quality soil mixture - 12 cu. yd.
Gen. exc. - 12 cu. yd.

(2) *Install stormwater facility marker (See dwg. RD399)*



Milepoint 0.255 to MP 0.265

TYPICAL SECTION

REGISTERED PROFESSIONAL ENGINEER
17,807
Chris Carman Aug 22 2019 8:17 AM
OREGON
JULY 25, 1995
CHRIS CARMAN
RENEWS: 12-31-2019

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

OREGON DEPARTMENT OF TRANSPORTATION

DISTRICT 3 STORMWATER RETROFIT
WILLAMINA - SALEM HIGHWAY
POLK COUNTY

HWY: 30	
M.P.: 0.255-0.265	
UNIT FILE CODE: N/A	
DFI/TSSU NO.: D00536	
Designer: Chris Carman	Reviewer: N/A
Drafter: Sergy Chernishoff	Checker: -
STORMWATER	SHEET NO.: HA01