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04E-	20 N-	28	1/4	106	1/61
DOCUMENT NUMBER					

Document Title: Stormwater Outfall Management & BMP Facilities Agreement

Grantee: City of Puyallup

Grantor: Community Health Care

Abbreviated Legal Description: Parcel A & B, BLA 200604145003

Complete Legal Description: Page 5

Assessor's Tax Parcel or Account Numbers: 7940100244, 7940100245

Reference Number of Related Document(s): N/A

Stormwater Management & BMP Facilities Agreement

- A. Parties.** The parties to this agreement are Grantee City of Puyallup, a Washington State municipal corporation (City), and Grantor landowner Community Health Care, a Washington non-profit corporation (Landowner).
- B. Property.** Landowner is the owner of certain real property (Property), which is legally described in this document and is located at the following address: 201 West Main, Puyallup, WA 98371 and 111 West Main, Puyallup, WA 98371
- C. Development Plan & Stormwater Facilities.** The site, subdivision or other development plan (Plan) for the Property, specifically known, entitled or described as Community Health Center - Puyallup, provides for detention, retention, treatment or management of stormwater that is associated with the Property through the use of identified stormwater facilities or best management practices (collectively, Stormwater Facilities). Upon approval of the Plan by the City, the Plan shall be incorporated herein by this reference. In accordance with the Plan, Landowner shall adequately construct, operate, use, maintain and repair the Stormwater Facilities.

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D. Agreement. On the terms and conditions set forth herein, the City and Landowner

agree as follows:

1. The Stormwater Facilities shall be constructed, operated, used, maintained and repaired by Landowner in accordance with the requirements of the Plan, and any other applicable law or regulation.
2. Landowner (which expressly includes its agents, successors and assigns, including any homeowners association) shall adequately and properly operate, use, maintain and repair the Stormwater Facilities as described in the maintenance and operations manual, which is on file with the City, and may be attached and recorded herewith as Exhibit A. This duty extends to all associated pipes and channels, as well as all structures, improvements, and vegetation that are provided to control the quantity and quality of the stormwater. Adequate maintenance shall mean maintenance that is sufficient to keep the Stormwater Facilities in good working order and operating so as to satisfy the design and performance standards of the Plan.
3. Landowner shall regularly inspect the Stormwater Facilities and shall submit an inspection report to the City at least once a year on a date prescribed by the City. The purpose of the inspection(s) is to ensure that the Stormwater Facilities are safe and functioning properly. The scope of the inspection shall include the entire Stormwater Facilities, including but not limited to, berms, outlet structures, pond areas, access roads, and so forth. Deficiencies and any performance or other related issues shall be noted by Landowner in the inspection report. The annual report shall be in a form and include content as prescribed from time to time by the City. An example copy of the report form may be attached hereto as Exhibit B.
4. Landowner hereby grants permission to the City to enter upon the Property to inspect the Stormwater Facilities. Except in case of emergency, the City shall provide Landowner with at least forty-eight (48) hours written notice prior to entering on to the Property. Landowner shall be entitled to have a representative accompany the City during such inspection. The City shall provide Landowner with copies of written inspection reports.
5. If Landowner fails to adequately and properly operate, use, maintain or repair the Stormwater Facilities, the City shall notify Landowner in writing and provide Landowner with a reasonable opportunity to cure. If Landowner fails to timely cure, then the City may enter upon the Property and remedy the issue(s) identified in the notice and those reasonably related thereto; Furthermore, if the City performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like while remediating the identified issues, the City may charge the cost of the remedy to Landowner, and Landowner shall promptly pay the costs to the City. Notwithstanding the foregoing, the City shall be under no obligation to inspect, maintain or repair the Stormwater Facilities.
6. Landowner shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or in connection with activities or operations, performed by Landowner, or on Landowner's behalf, that relate to the Stormwater Facilities and the subject matter of this agreement, except for injuries and damages caused by the negligence of the City.

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E. **Covenant.** The terms and provisions of this agreement constitute a covenant, which is subject to the following: This covenant is an equitable covenant. It touches and concerns the land that is described as the Property herein. The parties intend that this covenant shall bind the parties’ successor and assigns. This covenant shall run with the land that is described as the Property herein, and shall bind whoever has possession of the land, in whole or in part, without regard to whether the possessor has title, or has succeeded to the same estate that granting parties have or had. Possessors shall include, but are not limited to, leasehold tenants, contract purchasers, subtenants, and adverse possessors. This covenant shall run with the land even in the absence of the transfer of some interest in land, other than the covenant itself, between Landowner and the City. This covenant shall not be governed by the mutuality rule. The burden of the covenant can run independently from the benefit of the covenant, and the benefit need not run. The benefit may be in gross or personal to Landowner or the City. Landowner waives its right to assert any defenses to the enforcement of this covenant, including, but not limited to, the change of neighborhood doctrine, laches, estoppel, balancing of hardships, and abandonment. If Landowner breaches any term of this covenant and agreement, then all remedies in equity and at law, including, but not limited to, injunctions, mandamus, declaratory judgments, and damages, shall be available to the City.

F. **Governing Law & Venue.** This agreement shall be governed by and construed in accordance with the laws of the State of Washington. The venue for any action that arises from or out of this instrument shall be the Pierce County Superior Court.

<signature page to follow>

Dated: 12/20/24

Community Health Care

BY: [Signature]
David Flentge
President

²⁴
Dated: 12/20/24

City of Puyallup

BY: [Signature]
Kenneth Cook
Development Engineering Manager

Dated: 12/20/2024

City of Puyallup

BY: [Signature]
Approved as to form:
Joseph N. Beck
City Attorney

STATE OF WASHINGTON)
)
)

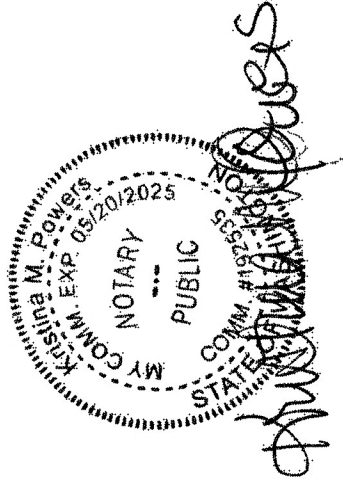
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COUNTY OF PIERCE)

Signed or attested before me on 12/20/24 by David Flentge as President of
Community Health Care.

Dated: 12/20/24

KRISTINA M POWERS
Printed Name:
Notary Public, State of: WASHINGTON
My appointment expires: 5/26/2025



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LEGAL DESCRIPTION
TAX PARCEL NUMBERS 7940100244 & 7940100245

Parcels A and B of Boundary Line Revision recorded April 14, 2006 under recording no. 200604145003, records of Pierce County, Washington.

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Exhibit A

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2 Module 2: Private Stormwater Facility Maintenance

Module 2 of the SMP documents the City’s procedures for private stormwater facilities primarily on privately owned commercial property or on property owned by a Homeowners’ Association. These properties are generally maintained by a property management company, professional landscaper, contractor, or the property owner, and includes support from the City.

Information is presented by type of activity and includes many of the same activities as on municipal and residential properties (Modules 1 and 3, respectively, of this SMP). The information is intended to be referenced and used as applicable by private stormwater facility owners when performing O&M activities or related work. The information is not intended to be comprehensive; rather the SMP serves as a guidance document to help orient private stormwater facility owners to include the management of potential stormwater impacts during O&M activities. Each activity includes the same subsections as the other modules of the SMP for consistency, which are:

Problem/Need: what initiates the need for maintenance.

Relevant Activities: the operations and maintenance activities, both direct and ancillary, performed by property owners or site managers related to the O&M topic.

Frequency: the need for the activity, the motivating factor, how often the activity occurs.

Desired Results: the generally desired outcome of the activity, especially as it relates to stormwater management.

Resources: what special equipment, personnel, or coordination is needed for the activity.

Procedures: the key steps to performing the work.

Record-keeping & Documentation: what record-keeping is done to document the work. Puyallup City code requires maintenance and inspection reports for stormwater facilities on private property, and an Annual Inspection report form is included in Appendix D of this document for private stormwater facility inspection and maintenance reporting. City code section *21.10.260 Inspection for Preventative Maintenance* contains a list of the necessary inspection reports, which shall be maintained by the City for all stormwater facilities on private property in accordance with the NPDES Permit section C5.C.7b(iii).

Best Management Practices and Maintenance Standards: what BMPs should be considered to manage stormwater and prevent pollution during the activity; options are provided from the Stormwater Management Manual for Western Washington (SWMMWW; Ecology, 2019), the King County Stormwater Pollution Prevention Manual (King County, 2021), and the Regional Road Maintenance Guidelines ESA Manual (Pierce County, 2002).

The O&M Standards for private stormwater facilities are provided in Appendix A and are listed alphabetically by topic. Links to the O&M Standards are available in the bookmarks of the PDF version of this document.

The following table summarizes the O&M activities and personnel that typically performs the activity.

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Stormwater Management & BMP Facilities Agreement

PRIVATE FACILITIES

Module 2 Topics	Property Owner Maintenance Staff	Property Management Company	Professional Landscaper	Contractor	City Staff
	1. Access and Inspection	A	A	A	S
	2. Cleaning, Maintenance, and Repair of Aboveground BMPs	A	A	A	S
	3. Cleaning, Maintenance, and Repair of Underground BMPs	A	A		S
	4. Vegetation Maintenance and Chemical Applications	X	A	X	S
	5. Animal and Solid Waste Management	X	A		S
	6. Spill Control and Cleanup	X	A	A	S
	7. Snow and Ice Control	X	A	A	S
	8. Sediment and Erosion Control, Dewatering, and Flood Control	X	A	A	S
	9. Asphalt and Concrete Pavement Repair, Resurfacing, and Cleaning	X		X	S
	10. General Property Maintenance and Good Housekeeping	X	A	A	S

Notes:

X = primarily performed by

A = ancillary work

S = support or technical assistance

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Appendix B contains source sheets for BMPs that are recommended for use in each O&M activity covered in Module 2. Table 2 lists these BMPs for Private Facilities, which are listed numerically by source and by volume, chapter, and BMP number (per each source). The BMP source sheets can be navigated via the links in each guidance sheet and the bookmarks in the PDF document navigation pane.

The information in the guidance sheets for the O&M topics can be updated with additional detail as needed or desired by the City over time. Such updates should serve to both further specify the practices and procedures and also to document the “what, where, and how” of O&M activities for consistency across Private Facilities. In this way, this SMP helps promote the shared responsibility with Private Facilities and the City’s municipal NPDES stormwater permit.

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2.1 Access and Inspection

Problem/Need

Impeded access and/or access for regular inspection of stormwater structures, conveyances, and BMPs on private property.

Triggers include routine maintenance, citizen concerns/requests, physical inspections, weather, flooding, and observed conditions.

Relevant Activities

Done by:

- Property Owner Maintenance Staff

Ancillary work by:

- Property Management Company
- Professional Landscaper
- Contractor

Overlaps with:

- Cleaning, Maintenance, and Repair Aboveground BMPs
- Cleaning, Maintenance, and Repair Underground BMPs
- Vegetation Maintenance and Chemical Applications
- Snow and Ice Control
- General Property Maintenance and Good Housekeeping

Frequency

Routine:

- Annual inspections by the City in accordance with the Private Stormwater Inspection Program Document
- Routine inspections by the property owner
- Preventative maintenance
- Emergency access

Special:

- After large storm events or spills
- Post-inspection City access/maintenance request
- In response to citizen complaints

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Desired Result

Unimpeded access to, and regular inspection of, stormwater structures, conveyances, and BMPs.

Inspection of stormwater utility assets on property are properly documented in an inspection report and/or maintenance standard checklist.

Resources

Special Equipment:

- Keys or combinations to locked areas
- Hi-beam spotlight
- Special keys to open vault lids
- Tape measure
- Catch Basin/Manhole hook
- Impact Drill with ½” Allen Impact Socket
- Sediment probe or other device to measure sediment depth
- Pick tools, hammer, and various wrenches
- Camera, phone, or device for taking pictures with time and date stamp and location tag
- Shovel, rake, or pitchfork
- Machete
- Confined space equipment, as applicable
- Approved Traffic Control Plan (TCP) if traffic is impacted in the public right-of-way
- Traffic cones, advanced warning signs, and flagging paddles, as needed
- PPE

Procedures

General steps:

- Rent special equipment for the day if needed
- Traffic Control as needed
- Confined Space entry, as applicable
- Perform inspection to document condition and any deficiencies
- Properly dispose of solid waste material and debris removed
- Clean work area, remove traffic control devices, as applicable
- Lock up any areas with restricted access
- Submit maintenance records and maintenance deficiency corrections to the City prior to January 30 for the previous year’s maintenance

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Pre-planning activities:

- Scheduling
- Staff, equipment, and parts availability
- Review previous site/property records for maintenance “hot spots”
- Check for access issues
- Weather forecast
- Check if permit is needed, (i.e., TCP)
- Coordination with City on when maintenance activities are scheduled

Record-keeping and Documentation

Record-keeping for maintenance at private stormwater facilities should include the following:

Maintenance Log:

- Document maintenance activities and when they occurred.
- Document repairs and maintenance to facility in accordance with the approved stormwater site plan Photos are highly encouraged for documentation.
- Keep facility maintenance records for a period of at least 3 years and submit annual reports following requirements in the facility maintenance agreement and the Puyallup Municipal Code (PMC).

Inspection Annual Report (due to City by January 30; see form in Appendix D):

- Date of inspection
- Name of inspector
- Condition of:
 - Vegetation
 - Fences
 - Spillways
 - Embankments
 - Reservoir area
 - Outlet channels
 - Underground drainage
 - Sediment load
 - Dispersion devices
 - Permeable pavement
 - Green roof
 - Drainage structures
 - Any other item that could affect the proper function of stormwater facilities
- Description of needed maintenance

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Operations and Maintenance (O&M) Manual for Site (if applicable)

- Keep a copy on site or within reasonable access to the site.
- The O&M Manual stays with the property and should be transferred to a new owner when the property is sold.

For more details, see PMC section 21.10.260 for Inspection for Preventative Maintenance, and PMC section 21.10.280 for Maintenance Responsibility.

The City maintains inspection records for all Private Stormwater Facility Inspections and tracks deficiencies and maintenance progress.

BMPs and Maintenance Standards

Reference BMPs to use for Access and Inspection are listed below (see Table 2 for links to BMPs in Appendix B).

Ecology SWMMWW

- Correcting Illicit Connections to Storm Drains, IV-1, S410
- Preventive Maintenance / Good Housekeeping, IV-1, S454
- Employee Training, IV-1, S456
- Inspections, IV-1, S457
- Record Keeping, IV-1, S458
- Maintenance of Public and Private Utility Corridors and Facilities, IV-3, S415
- Maintenance of Stormwater Drainage and Treatment Systems, IV-3, S417
- Parking and Storage of Vehicles and Equipment, IV-3, S42

The O&M Standards for private stormwater facilities are provided in Appendix A and are listed alphabetically by topic. Links to the O&M Standards are available in the bookmarks of the PDF version of this document.

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2.2 Cleaning, Maintenance, and Repair of Aboveground BMPs

Problem/Need

Periodic and scheduled cleaning, routine maintenance, and repairs of BMPs that are aboveground. These include private structural stormwater facilities and BMPs that can be accessed and maintained from aboveground, such as ditches, detention/retention ponds, swales, wet ponds, infiltration ponds and other stormwater detention and treatment systems that are open to the atmosphere or not fully enclosed.

Includes earthwork repairs (grading, berm/dike repair, scour/erosion) and facility retrofit/rehabilitation. Also includes removal of vegetation (i.e., cattails) and sediment at stormwater ponds and swales.

Removal of sediment and solid waste from private storm systems.

Triggers include routine maintenance, citizen concerns/requests, physical inspections, weather, flooding, and observed conditions.

Relevant Activities

Done by:

- Contractor

Ancillary work by:

- Property Owner Maintenance Staff
- Property Management Company
- Professional Landscaper

Overlaps with:

- Access and Inspection
- Cleaning, Maintenance, and Repair of Underground BMPs
- Vegetation Maintenance and Chemical Applications
- Animal and Solid Waste Management
- Sediment and Erosion Control, Dewatering, and Flood Control
- General Property Maintenance and Good Housekeeping

Frequency

Routine:

- Routine inspections
- Preventative maintenance
- Emergency access

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Special:

- After large storm events or spills
- City maintenance request
- In response to citizen complaints

Desired Result

Maintain treatment capacity at stormwater treatment facilities, ponds, and proprietary devices where treatment media or soil mixes are used.

Clean stormwater facilities, restore hydraulic capacity, and remove overgrown vegetation that prohibit routine maintenance and access.

Stormwater infrastructure and facilities are in accordance with O&M standards and free of deficiencies, as outlined in Appendix A and the Site’s O&M Manual.

Resources

Special Equipment:

- Vactor truck
- Excavator with ditching bucket
- Dump truck or utility trailer
- Street sweeper
- Mower/line trimmer
- Pipe video camera/truck
- Jetting sprayer and accessories
- Pumps and hoses
- Hand tools (as listed in Section 2.1)
- ESC BMPs (silt socks, straw wattles, etc.)
- PPE

Procedures

General steps:

- Rent special equipment as needed
- Traffic Control as needed
- Install ESC BMPs as needed
- Contain vactored waste material
- Properly dispose of solid waste material
- Mowing/vegetation/debris removal
- Properly dispose of debris and vegetation
- Dewatering as needed
- Soil stabilization as needed
- Clean work area and remove traffic control devices and ESC BMPs, as applicable

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Pre-planning activities:

- Obtain treatment media or soil mix to specification for facility
- Scheduling
- Staff, equipment, and parts availability
- Establish access
- Weather forecast
- Check if permit is needed, (i.e., TCP)
- Coordination with City on when maintenance activities are scheduled

Record-keeping and Documentation

Record-keeping for maintenance at private stormwater facilities should include the details provided under Section 2.1 *Access and Inspection* of this SMP. Records and documentation are required to be submitted to the City, which maintains inspection records for all Private Stormwater Facility Inspections and tracks deficiencies and maintenance progress.

BMPs and Maintenance Standards

Reference BMPs to use for Cleaning, Maintenance, and Repair of Aboveground BMPs are listed below (see Table 2 for links to BMPs in Appendix B).

Ecology SWMMWW

- Nets and Blankets, II-3.2, C122
- Plastic Covering, II-3.2, C123
- Material Delivery, Storage, and Containment, II-3.2, C153
- Riprap Channel Lining, II-3.3, C202
- Outlet protection, II-3.3, C209
- Inlet protection, II-3.3, C220
- Silt Fence, II-3.3, C233
- Straw Wattles, II-3.3, C235
- Maintenance of Public and Private Utility Corridors and Facilities, IV-3, S415
- Maintenance of Roadside Ditches, IV-3, S416
- Maintenance of Stormwater Drainage and Treatment Systems, IV-3, S417
- Dust Control at Disturbed Land Areas and Unpaved Roadways and Parking Lots, IV-4, S407
- Landscaping and Lawn/Vegetation Management, IV-4, S411
- Soil Erosion and Sediment Control at Industrial Sites, IV-4, S425
- Irrigation, IV-4, S450
- Mobile Fueling of Vehicles and Heavy Equipment, IV-6, S419
- Spills of Oil and Hazardous Substances, IV-6, S426
- Maintenance and Repair of Vehicles and Equipment, IV-7, S414
- Labeling Storm Drain Inlets on Your Property, IV-7, S442

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King County Pollution Prevention Manual

- Cleaning or Washing of Tools and Equipment, 3.0, A-1
- Storage of Liquid Materials in Portable Containers, 3.0, A-3
- Storage of Contaminated Soils, 3.0, A-6
- Clearing and Grading for Small Construction Projects, 3.0, A-27
- Dust Control for Commercial Applications, 3.0, A-44

Regional Road Maintenance Guidelines ESA Manual

- Dewatering, no. 2.50 (p. B-231)
- Dust Control, no. 2.61 (p. B-233)
- Hand Seeding, no. 2.75 (p. B-235)
- Hydroseeding, no. 2.77 (p. B-237)
- Vactoring, no. 2.166 (p. B-239)

The O&M Standards for private stormwater facilities are provided in Appendix A and are listed alphabetically by topic. Links to the O&M Standards are available in the bookmarks of the PDF version of this document.

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2.3 Cleaning, Maintenance, and Repair of Underground BMPs

Problem/Need

Periodic and scheduled cleaning, routine maintenance, and repairs of BMPs that are underground. These include private structural stormwater facilities and BMPs that are underground and accessed via a hatch, lid, or confined space entry. These include vaults, pipes, catch basins, manholes, dry wells, stormwater pump stations, and infiltration, detention/retention, and treatment facilities that are not open to the atmosphere or are fully enclosed.

Includes structural repairs (grouting, settlement repair, riser repair), cleaning, and structure replacement. Also includes sediment removal from vaults and other confined space structures.

Soil and treatment media removal and replacement at enclosed private stormwater treatment facilities and vaults.

Removal of sediment and solid waste from private storm systems.

Triggers include routine maintenance, citizen concerns/requests, physical inspections, weather, flooding, and observed conditions.

Relevant Activities

Done by:

- Contractor

Ancillary work by:

- Property Owner Maintenance Staff
- Property Management Company

Overlaps with:

- Access and Inspection
- Cleaning, Maintenance, and Repair of Aboveground BMPs
- Vegetation Maintenance and Chemical Applications
- Animal and Solid Waste Management
- Sediment and Erosion Control, Dewatering, and Flood Control
- General Property Maintenance and Good Housekeeping

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Frequency

Routine:

- Routine inspections
- Preventative maintenance
- Emergency access
- Manufacturer-recommended maintenance

Special:

- After large storm events or spills
- City maintenance request
- In response to citizen complaints

Desired Result

Clean, maintain, and repair structural stormwater infrastructure and facilities to restore functionality as designed.

Cleanup of solid waste and sediment from structures underground and on property.

Removal of sediment in vaults and tanks.

Stormwater infrastructure and facilities are in accordance with O&M standards and free of deficiencies, as outlined in Appendix A and the Site’s O&M Manual.

Resources

Special Equipment:

- Grader
- Backhoe
- Compactor
- Vactor truck
- Street sweeper
- Pipe video camera/truck
- Confined space entry equipment
- Jetting sprayer and accessories
- Pumps and hoses
- Hand tools
- ESC BMPs (silt socks, straw wattles, etc.)
- PPE

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Procedures

General steps:

- Rent special equipment as needed
- Install ESC BMPs as needed
- Jetting and vactoring in sections
- Contain vactored waste material
- Removal and replacement of soil or media
- Properly dispose of solid waste material
- Mowing/vegetation/debris removal
- Properly dispose of debris and vegetation
- Compaction as specified
- Dewatering as needed
- Soil stabilization as needed
- Clean work area and remove traffic control devices and ESC BMPs, as applicable

Pre-planning activities:

- Obtain treatment media or soil mix to specification for facility
- Scheduling
- Staff, equipment, and parts availability
- Establish access
- Weather forecast
- Required Environmental permits (in-stream work only)
- Check if permit is needed, (i.e., TCP)
- Coordination with City on when maintenance activities are scheduled

Record-keeping and Documentation

Record-keeping for maintenance at private stormwater facilities should include the details provided under Section 2.1 *Access and Inspection* of this SMP. Records and documentation are required to be submitted to the City, which maintains inspection records for all Private Stormwater Facility Inspections and tracks deficiencies and maintenance progress.

BMPs and Maintenance Standards

Reference BMPs to use for Cleaning, Maintenance, and Repair of Underground BMPs are listed below (see Table 2 for links to BMPs in Appendix B).

Ecology SWMMWW

- Materials on Hand, II-3.2, C150
- Concrete Handling, II-3.2, C151
- Sawcutting and Surfacing Pollution Prevention, II-3.2, C152
- Material Delivery, Storage, and Containment, II-3.2, C153

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- Concrete Washout Area, II-3.2, C154
- Outlet protection, II-3.3, C209
- Inlet protection, II-3.3, C220
- Straw Wattles, II-3.3, C235
- Treating and Disposing of High pH Water, II-3.3, C252
- Maintenance of Public and Private Utility Corridors and Facilities, IV-3, S415
- Maintenance of Stormwater Drainage and Treatment Systems, IV-3, S417
- Dust Control at Disturbed Land Areas and Unpaved Roadways and Parking Lots, IV-4, S407
- Soil Erosion and Sediment Control at Industrial Sites, IV-4, S425
- Storage or Transfer (Outside) of Solid Raw Materials, Byproducts, or Finished Products, IV-5, S429
- Mobile Fueling of Vehicles and Heavy Equipment, IV-6, S419
- Spills of Oil and Hazardous Substances, IV-6, S426
- Maintenance and Repair of Vehicles and Equipment, IV-7, S414
- Labeling Storm Drain Inlets on Your Property, IV-7, S442

King County Pollution Prevention Manual

- Storage of Contaminated Soils, 3.0, A-6
- Storage of Liquid Materials in Portable Containers, 3.0, A-3
- Cleaning or Washing of Tools and Equipment, 3.0, A-11
- Concrete and Asphalt Recycling, 3.0, A-19
- Concrete and Asphalt Application, 3.0, A-20
- Clearing and Grading for Small Construction Projects, 3.0, A-27
- Potable Water Line Flushing, Water Tank Maintenance and Hydrant Testing, 3.0, A-42
- Dust Control for Commercial Applications, 3.0, A-44

Regional Road Maintenance Guidelines ESA Manual

- Dewatering, no. 2.50 (p. B-231)
- Dust Control, no. 2.61 (p. B-233)
- Hand Seeding, no. 2.75 (p. B-235)
- Hydroseeding, no. 2.77 (p. B-237)
- Vactoring, no. 2.166 (p. B-239)

The O&M Standards for private stormwater facilities are provided in Appendix A and are listed alphabetically by topic. Links to the O&M Standards are available in the bookmarks of the PDF version of this document.

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2.4 Vegetation Maintenance and Chemical Applications

Problem/Need

Trimming, mowing, removing, and generally maintaining vegetation on private property. This includes tree removal and hazard tree removal.

Regular application of fertilizers, pesticides, and herbicides for private property vegetation management.

Triggers include routine maintenance, citizen concerns/requests, physical inspections, weather, flooding, and observed conditions.

Relevant Activities

Done by:

- Property Owner Maintenance Staff
- Professional Landscaper

Ancillary work by:

- Property Management Company

Overlaps with:

- Access and Inspection
- Cleaning, Maintenance, and Repair of Aboveground BMPs
- Sediment and Erosion Control, Dewatering, and Flood Control
- General Property Maintenance and Good Housekeeping

Frequency

Routine:

- Routine inspections
- Preventative maintenance
- Seasonal leaf debris removal
- Emergency access
- All fertilizer, pesticide, and herbicide applications are dependent on weather conditions

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Special:

- City maintenance request
- Hazard tree removal
- In response to citizen complaints

Desired Result

Health and aesthetics of property vegetation.

Vegetation is maintained alongside roadways and parking lots at a level where it does not impede or limit sight distance.

Control invasive and noxious weeds, pests, and poisonous or nuisance vegetation.

Resources

Special Equipment:

- Backhoe
- Bucket truck
- Chipper
- Line trimmers
- Mowers
- Chain saw
- Pole saw
- Hedge trimmers
- Backpack blower
- Handheld blower
- Backpack sprayers
- Herbicide and pesticide liquid material
- Fertilizer liquid material
- Spill kit
- Hand tools
- ESC BMPs (silt socks, straw wattles, etc.)
- PPE

Procedures

General steps:

- Rent special equipment as needed
- Mowing/vegetation/debris removal
- Clearing and grubbing, as needed
- Properly dispose of debris and vegetation

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- Apply fertilizer, pesticide, and/or herbicide according to WSDA protocols, training, and the instructions for their use, including reducing nutrients and pesticides using alternatives that minimize environmental impacts
- Soil stabilization and erosion control as needed
- Clean work area, as applicable

Refer to the City of Puyallup’s Integrated Pest Management Plan in Appendix C of this document for detailed guidance on pest management.

Pre-planning activities:

- Training and licensing for fertilizer, pesticide, and/or herbicide applicators
- Develop an Integrated Pest Management Plan (IPMP)
- Scheduling
- Safety data sheets (SDS) for pesticides, herbicides, and fertilizers
- Staff, equipment, and parts availability
- Establish access
- Weather forecast
- Required Environmental permits (in-stream work only)

Record-keeping and Documentation

Record-keeping for maintenance at private stormwater facilities should include the details provided under Section 2.1 *Access and Inspection* of this SMP. Records and documentation are required to be submitted to the City, which maintains inspection records for all Private Stormwater Facility Inspections and tracks deficiencies and maintenance progress.

For record-keeping related to chemical applications to vegetation (e.g., pesticides, herbicides), refer to the BMPs below on chemical application, pesticides, pest management, and fertilizer application. The City’s Integrated Pest Management plan is provided in Appendix C.

BMPs and Maintenance Standards

Reference BMPs to use for Vegetation Maintenance and Chemical Applications are listed below (see Table 2 for links to BMPs in Appendix B).

Ecology SWMMWW

- Material Delivery, Storage, and Containment, II-3.2, C153
- Outlet protection, II-3.3, C209
- Inlet protection, II-3.3, C220
- Straw Wattles, II-3.3, C235
- Spill Prevention and Cleanup, IV-1, S455
- Maintenance of Public and Private Utility Corridors and Facilities, IV-3, S415
- Maintenance of Roadside Ditches, IV-3, S416

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- Maintenance of Stormwater Drainage and Treatment Systems, IV-3, S417
- Landscaping and Lawn/Vegetation Management, IV-4, S411
- Pesticides and an Integrated Pest Management Program, IV-4, S435
- Storage of Dry Pesticides and Fertilizer, IV-4, S444
- Irrigation, IV-4, S450
- Storage of Liquids in Permanent Aboveground Tanks, IV-5, S428
- Mobile Fueling of Vehicles and Heavy Equipment, IV-6, S419
- Spills of Oil and Hazardous Substances, IV-6, S426
- Fertilizer Application, IV-7, S443

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- Storage of Liquid Materials in Portable Containers, 3.0, A-3
- Cleaning or Washing of Tools and Equipment, 3.0, A-11
- Chemical Application, 3.0, A-25
- Clearing and Grading for Small Construction Projects, 3.0, A-27
- Nurseries and Greenhouses, 3.0, A-49

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- Hand Seeding, no. 2.75 (p. B-235)
- Hydroseeding, no. 2.77 (p. B-237)

The O&M Standards for private stormwater facilities are provided in Appendix A and are listed alphabetically by topic. Links to the O&M Standards are available in the bookmarks of the PDF version of this document.

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2.5 Animal and Solid Waste Management

Problem/Need

Removal of animal waste and solid waste from private storm systems.

Includes disposal of sediment and solid waste from stormwater system cleaning.

Regular cleanup of trash, trash enclosures, garbage compactors, grease containers, recycling containers, and pet waste within private property.

Triggers include observed field conditions, weather, citizen concerns/requests, and routine maintenance.

Relevant Activities

Done by:

- Property Owner Maintenance Staff
- Contractor

Ancillary work by:

- Property Management Company

Overlaps with:

- Cleaning, Maintenance, and Repair of Aboveground BMPs
- Cleaning, Maintenance, and Repair of Underground BMPs
- Vegetation Maintenance and Chemical Applications
- Spill Control and Cleanup
- Sediment and Erosion Control, Dewatering, and Flood Control
- General Property Maintenance and Good Housekeeping

Frequency

Routine:

- Routine inspections
- Preventative maintenance
- Emergency access

Special:

- After large storm events
- After garbage service pickup

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- After stormwater system cleaning
- City maintenance request
- In response to citizen complaints

Desired Result

Proper disposal of sediment and waste from storm system cleaning operations.

Litter-free and pet waste-free property.

Clean garbage enclosures and leak-free containers.

Resources

Special Equipment:

- Vactor truck
- Street sweeper
- Trash pickers
- Sharps containers
- Pet waste collection bags
- Pressure washer
- PPE

Procedures

General steps:

- Rent equipment as needed
- Sweeping or vactoring
- Collect trash and bring to dumpster on property
- Clean garbage enclosure area and dispose of waste properly
- Check containers for leaks and overflow
- Waste is hauled away by trash collection service or hauled to an approved disposal location

Pre-planning activities include:

- Scheduling
- Staff, equipment, and parts availability
- Establish access
- Weather forecast

Record-keeping and Documentation

Record-keeping for maintenance at private stormwater facilities should include the details provided under Section 2.1 *Access and Inspection* of this SMP. Records and

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documentation are required to be submitted to the City, which maintains inspection records for all Private Stormwater Facility Inspections and tracks deficiencies and maintenance progress.

BMPs and Maintenance Standards

Reference BMPs to use for Animal and Solid Waste Management are listed below (see Table 2 for links to BMPs in Appendix B).

Ecology SWMMWW

- Material Delivery, Storage, and Containment, II-3.2, C153
- Outlet protection, II-3.3, C209
- Inlet protection, II-3.3, C220
- Storage of Liquid, Food Waste, or Dangerous Waste Containers, IV-5, S427
- Storage of Liquids in Permanent Aboveground Tanks, IV-5, S428
- Storage or Transfer (Outside) of Solid Raw Materials, Byproducts, or Finished Products, IV-5, S429
- Loading and Unloading Areas for Liquid or Solid Material, IV-6, S412
- Commercial Animal Handling Areas, IV-7, S402
- Commercial Composting, IV-7, S403
- Commercial Printing Operations, IV-7, S404
- Recyclers and Scrap Yards, IV-7, S423
- Pet Waste, IV-7, S440
- Goose Waste, IV-7, S452

King County Pollution Prevention Manual

- Storage of Contaminated Soils, 3.0, A-6
- Concrete and Asphalt Production and Recycling, 3.0, A-19
- Animal Waste, 3.0, A-34
- Keeping Livestock, 3.0, A-35

Regional Road Maintenance Guidelines ESA Manual

- Vactoring, no. 2.166 (p. B-239)

The O&M Standards for private stormwater facilities are provided in Appendix A and are listed alphabetically by topic. Links to the O&M Standards are available in the bookmarks of the PDF version of this document.

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2.6 Spill Control and Cleanup

Problem/Need

Spill prevention and response on the property.

Spill cleanup for vehicles and equipment when in accidents or leaking.

Spill cleanup for dumpster, grease container, or recycling container overflows or spills.

Triggers include routine maintenance, citizen concerns/requests, physical inspection, observed field conditions.

Relevant Activities

Done by:

- Property Owner Maintenance Staff

Ancillary work by:

- Property Management Company
- Contractor

Overlaps with:

- Animal and Solid Waste Management
- General Property Maintenance and Good Housekeeping

Frequency

Routine:

- Spill cleanup
- Emergency access
- In response to equipment break downs, vehicle incidents and spills

Special:

- Emergency spill response
- After special events, holidays, or large crowds
- City maintenance request
- In response to citizen complaints

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Desired Result

Spills are cleaned up prior to entering the private storm system, the City’s MS4, or infiltrating into groundwater.

Resources

Special Equipment:

- Street sweeper
- Vactor truck (if entered private storm system or MS4)
- Spill kits and cat litter (non-oil-based spills)
- Absorbent materials for oil-based spills
- Hand tools
- ESC BMPs (silt socks, straw wattles, etc.)
- PPE

Procedures

General steps:

- Rent special equipment as needed
- Install ESC BMPs as needed
- Traffic Control as needed
- Properly dispose of waste fluids and spill cleanup waste materials
- Remove traffic control devices and ESC BMPs, as applicable

Pre-planning activities include:

- Scheduling
- Develop and maintain a Spill Response Plan (SRP)
- Safety data sheet (SDS) for hazardous materials or dangerous waste stored at site
- Staff, equipment, and parts availability
- Weather forecast

Record-keeping and Documentation

Record-keeping for maintenance at private stormwater facilities should include the details provided under Section 2.1 *Access and Inspection* of this SMP. Records and documentation are required to be submitted to the City, which maintains inspection records for all Private Stormwater Facility Inspections and tracks deficiencies and maintenance progress.

Additional record-keeping and documentation is required for spills, including calling the City’s pollution hotline number at 253-770-3336, notifying the Washington State Department of Ecology at 360-407-6300. For larger spills or spills directly to natural waters, notify the Coast Guard at 1-800-424-8802.

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BMPs and Maintenance Standards

Reference BMPs to use for Spill Control and Cleanup are listed below (see Table 2 for links to BMPs in Appendix B).

Ecology SWMMWW

- Materials on Hand, II-3.2, C150
- Material Delivery, Storage, and Containment, II-3.2, C153
- Inlet Protection, II-3.3, C220
- Wattles, II-3.3, C235
- Spill Prevention and Cleanup, IV-1, S455
- Spills of Oil and Hazardous Substances, IV-6, S426
- Formation of a Pollution Prevention Team, IV-1, S453
- Preventive Maintenance / Good Housekeeping, IV-1, S454
- Employee Training, IV-1, S456
- Parking and Storage of Vehicles and Equipment, IV-3, S421
- Storage of Dry Pesticides and Fertilizer, IV-4, S444
- Storage of Liquid, Food Waste, or Dangerous Waste Containers, IV-5, S427
- Storage of Liquids in Permanent Aboveground Tanks, IV-5, S428
- Storage or Transfer (Outside) of Solid Raw Materials, Byproducts, or Finished Products, IV-5, S429
- Fueling At Dedicated Stations, IV-6, S409
- Loading and Unloading Areas for Liquid or Solid Material, IV-6, S412
- Mobile Fueling of Vehicles and Heavy Equipment, IV-6, S419

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- Storage of Liquid Materials in Portable Containers, 3.0, A-3
- Storage of Contaminated Soils, 3.0, A-6
- Cleaning or Washing of Tools and Equipment, 3.0, A-11
- Cleaning and Washing of Food Service Areas, 3.0, A-12
- Chemical Application, 3.0, A-25
- Swimming Pool and Spa Cleaning and Maintenance, 3.0, A-33
- Potable Water Line Flushing, Water Tank Maintenance and Hydrant Testing, 3.0, A-42

The O&M Standards for private stormwater facilities are provided in Appendix A and are listed alphabetically by topic. Links to the O&M Standards are available in the bookmarks of the PDF version of this document.

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2.7 Snow and Ice Control

Problem/Need

Removal and control of snow and ice from private properties.
Triggers include weather, observed field conditions, and citizen concerns/requests.

Relevant Activities

Done by:

- Property Owner Maintenance Staff

Ancillary work by:

- Property Management Company
 - Contractor
- Overlaps with:
- Access and Inspection
 - Spill Control and Cleanup
 - General Property Maintenance and Good Housekeeping

Frequency

Routine:

- In anticipation of, during, and following snow and freezing weather events
- Emergency access

Special:

- City maintenance request
- In response to citizen complaints

Desired Result

Safe roads, parking lots, and sidewalk conditions for the public and City staff during periods of snow and freezing wet weather.

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Resources

Special Equipment:

- Truck with plow mounted
- Gator with blade
- Excavator
- Bobcat
- Dump truck
- Snowplow
- V-box plow
- De-icer tank/sprayer
- De-icer brine maker
- Hand tools
- PPE

Procedures

General steps:

- Route planning
- Rent needed equipment
- Snow removal
- Cleanup and street sweeping

Pre-planning activities include:

- Pre-planned and documented de-icer and plow routes
- Mapping and knowledge of permeable pavement and porous sidewalk locations. Permeable pavement and porous sidewalks should use limited amounts of de-icer and sand to prevent clogging and groundwater contamination.
- Weather forecast
- Scheduling
- Staff, equipment, and parts availability

Record-keeping and Documentation

Record-keeping for maintenance at private stormwater facilities should include the details provided under Section 2.1 *Access and Inspection* of this SMP. Records and documentation are required to be submitted to the City, which maintains inspection records for all Private Stormwater Facility Inspections and tracks deficiencies and maintenance progress.

In addition, special record-keeping is required for de-icing activities to record how much and what type of deicing salt and sand are used.

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BMPs and Maintenance Standards

Reference BMPs to use for Snow and Ice Control are listed below (see Table 2 for links to BMPs in Appendix B).

Ecology SWMMWW

- Material Delivery, Storage, and Containment, II-3.2, C153
- Storage of Liquid, Food Waste, or Dangerous Waste Containers, IV-5, S427
- Storage of Liquids in Permanent Aboveground Tanks, IV-5, S428
- Storage or Transfer (Outside) of Solid Raw Materials, Byproducts, or Finished Products, IV-5, S429
- Loading and Unloading Areas for Liquid or Solid Material, IV-6, S412
- Spills of Oil and Hazardous Substances, IV-6, S426

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- Outdoor Storage of Liquid Materials in Stationary Tanks, 3.0, A-2
- Storage of Liquid Materials in Portable Containers, 3.0, A-3
- Cleaning or Washing of Tools and Equipment, 3.0, A-11
- Parking Lots, Driveways and Outside Storage Areas, 3.0, A-31
- Sidewalk Maintenance, 3.0, A-32

The O&M Standards for private stormwater facilities are provided in Appendix A and are listed alphabetically by topic. Links to the O&M Standards are available in the bookmarks of the PDF version of this document.

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2.8 Sediment and Erosion Control, Dewatering, and Flood Control

Problem/Need

Routine maintenance for flood control structures, including berms, dikes, and emergency overflows and erodible banks, slopes, and stockpiles on private property. Scouring repairs from high flows.

Removal of eroded soil from floods and earth works projects.

Lowering of a high-water table for safe and efficient construction activities.

Triggers include routine maintenance, citizen concerns/requests, physical inspections, weather, flooding, and observed field conditions.

Relevant Activities

Done by:

- Property Owner Maintenance Staff
- Contractor

Ancillary work by:

- Property Management Company
- Professional Landscaper

Overlaps with:

- Access and Inspection
- Cleaning, Maintenance, and Repair of Aboveground BMPs
- Cleaning, Maintenance, and Repair of Underground BMPs
- Vegetation Maintenance and Chemical Applications
- Animal and Solid Waste Management
- General Property Maintenance and Good Housekeeping

Frequency

Routine:

- Routine inspections
- Preventative maintenance
- Emergency access

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Special:

- After large storm events
- City maintenance request
- Onsite construction and maintenance projects
- In response to citizen complaints

Desired Result

Prevent flooding and erosion at construction and industrial sites.

Maintain the structural integrity of flood control structures.

Limit the exposure of erodible soil. Stabilize or cover stockpiles where necessary to prevent erosion.

Removal of dewatering water in vaults, tanks, trenches, and other structures.

Resources

Special Equipment:

- Plastic sheeting to cover stockpiles
- Sandbags
- Filter fabric for catch basins
- Silt fencing
- Pumps and hoses
- Hand tools
- ESC BMPs
- PPE

Procedures

General steps:

- Rent special equipment as needed
- Install soil stabilization and other ESC BMPs
- Dewatering excavated areas
- Properly dispose of debris and vegetation
- Sweeping
- Clean work area and remove traffic control devices and ESC BMPs, as applicable

Pre-planning activities:

- Scheduling
- Staff, equipment, and parts availability
- Establish access

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- Weather forecast
- Required Environmental permits (in-stream work only)
- For construction projects, refer to site-specific SWPPP and erosion control plan
- For Industrial Properties, refer to Individual Stormwater General Permit (ISGP)

Record-keeping and Documentation

Record-keeping for maintenance at private stormwater facilities should include the details provided under Section 2.1 *Access and Inspection* of this SMP. Records and documentation are required to be submitted to the City, which maintains inspection records for all Private Stormwater Facility Inspections and tracks deficiencies and maintenance progress.

In addition, record-keeping for erosion and sediment control (ESC) activities should follow the requirements of the site Stormwater Pollution Prevention Plan (SWPPP) or the construction erosion control plan.

BMPs and Maintenance Standards

Reference BMPs to use for Sediment and Erosion Control, Dewatering, and Flood Control are listed below (see Table 2 for links to BMPs in Appendix B).

Ecology SWMMWW

- Stabilized Construction Entrance, II-3.2, C105
- Nets and Blankets, II-3.2, C122
- Plastic Covering, II-3.2, C123
- Mulching, II-3.2, C121
- Certified Erosion and Sediment Control Lead, II-3.2, C160
- Scheduling, II-3.2, C162
- Riprap Channel Lining, II-3.3, C202
- Outlet protection, II-3.3, C209
- Inlet protection, II-3.3, C220
- Silt Fence, II-3.3, C233
- Straw Wattles, II-3.3, C235
- Maintenance of Roadside Ditches, IV-3, S416
- Dust Control at Disturbed Land Areas and Unpaved Roadways and Parking Lots, IV-4, S407
- Soil Erosion and Sediment Control at Industrial Sites, IV-4, S425
- Irrigation, IV-4, S450
- Pools, Spas, Hot Tubs, and Fountains, IV-7, S433

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- Washing of Buildings, Rooftops, and Other Large Surfaces, 3.0, A-15
- Clearing and Grading for Small Construction Projects, 3.0, A-27

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- Swimming Pool and Spa Cleaning and Maintenance, 3.0, A-33
- Potable Water Line Flushing, Water Tank Maintenance and Hydrant Testing, 3.0, A-42

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- Dewatering, no. 2.50 (p. B-231)
- Dust Control, no. 2.61 (p. B-233)
- Hand Seeding, no. 2.75 (p. B-235)
- Hydroseeding, no. 2.77 (p. B-237)

The O&M Standards for private stormwater facilities are provided in Appendix A and are listed alphabetically by topic. Links to the O&M Standards are available in the bookmarks of the PDF version of this document.

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2.9 Asphalt and Concrete Pavement Repair, Resurfacing, and Cleaning

Problem/Need

Repair of roadways, sidewalks, parking lots, and other paved areas on private property.

Striping or restriping on private roadways and parking lots.

Cleaning roadways, sidewalks, parking lots and concrete pads.

Sweeping of debris and grindings during road or parking lot repair and resurfacing.

Repair and resurfacing of private roadways, public parking lots, and other paved areas, including:

- Patching, grinding, chip sealing, crack sealing, and asphalt overlay
- Sidewalk repair and replacement
- Curb and gutter repair and replacement
- Sawcutting and grinding

Triggers include routine maintenance, citizen concerns/requests, observed field conditions, emergency repairs/ response, and clogged permeable pavements.

Relevant Activities

Done by:

- Property Owner Maintenance Staff
- Contractor

Overlaps with:

- Access and Inspection
- Cleaning, Maintenance, and Repair of Aboveground BMPs
- Cleaning, Maintenance, and Repair of Underground BMPs
- Animal and Solid Waste Management
- Spill Control and Cleanup
- Snow and Ice Control
- Sediment and Erosion Control, Dewatering, and Flood Control

Frequency

Routine:

- Yearly scheduled maintenance
- In response to vehicle incidents or spills

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Special:

- Emergency repairs/ response (e.g., road and shoulder damage, water main breaks)
- In response to citizen concerns/requests.
- After storm events where permeable pavements have poor infiltration rates or standing water.

Desired Result

Maintain pavement and striping within parking lots and other paved areas, as needed.

Keep private streets and parking lots clear of accumulated sediments, debris, trash, and yard waste that could impact water quality and enter the private stormwater system or MS4.

Maintain acceptable infiltration rates for permeable pavements and porous sidewalks.

Unobstructed road surface to allow safe vehicle travel at designated speed limits.

Extend the lifecycle of private roadways and parking lots.

Maintain a smooth and comfortable ride quality.

Resources

Special Equipment:

- Asphalt roller/compactor
- Asphalt/concrete saw cutter
- Backhoe
- Belt loader
- Bobcat
- Bobcat with water sprayer (dust control)
- Dump truck
- Emulsion sprayer/tank
- ESC BMPs (silt socks, straw waddles, etc.)
- Excavator
- Generators
- Grader
- Grinder vacuum
- Hand tools
- Jack hammer
- Layton box paver
- LeeBoy emulsion sprayer/tank
- Paint sprayer machine
- Paver
- Plate compactor
- Pressure washers

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- Propane torches
- Service truck
- Sidewalk grinder
- Street sweeper
- Regenerative air street sweeper
- Thermo machine
- Vactor truck

Special Procedures and Notes

General steps:

- Work and route planning
- Rent special equipment as needed
- Traffic Control as needed
- Install ESC BMPs as needed
- Road repair and preparation
- Place surfacing and compact
- Sweep paved areas as scheduled
- Sweeper waste disposed at an approved facility
- Waste asphalt grindings hauled to a recycling facility
- Apply sprayed paint and thermoplastic striping
- Properly treat, recycle, and/or dispose of leftover paint and thermoplastic material
- Properly dispose of waste fluids
- Clean work area and remove traffic control devices and ESC BMPs, as applicable

Pre-planning activities include:

- Weather forecast
- Scheduling
- Pre-planned and scheduled sweeper routes
- Staff, equipment, and parts availability
- Check if permit is needed, (i.e., TCP)
- Coordination with City on when maintenance activities are scheduled

Record-keeping and Documentation

Record-keeping for maintenance at private stormwater facilities should include the details provided under Section 2.1 *Access and Inspection* of this SMP. Records and documentation are required to be submitted to the City, which maintains inspection records for all Private Stormwater Facility Inspections and tracks deficiencies and maintenance progress.

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DOCUMENT NUMBER					

BMPs and Maintenance Standards

Reference BMPs to use for Asphalt and Concrete Pavement Repair, Resurfacing and Cleaning are listed below (see Table 2 for links to BMPs in Appendix B).

Ecology SWMMWW

- Materials on Hand, II-3.2, C150
- Concrete Handling, II-3.2, C151
- Sawcutting and Surfacing Pollution Prevention, II-3.2, C152
- Material Delivery, Storage and Containment, II-3.2, C153
- Concrete Washout Area, II-3.2, C154
- Treating and Disposing of High pH Water, II-3.3, C252
- Spill Prevention and Cleanup, IV-1, S455
- Streets and Highways, IV-3, S406
- Parking and Storage of Vehicles and Equipment, IV-3, S421
- Urban Streets, IV-3, S430
- Dust Control at Disturbed Land Areas and Unpaved Roadways and Parking Lots, IV-4, S407
- Storage of Liquid, Food Waste, or Dangerous Waste Containers, IV-5, S427
- Loading and Unloading Areas for Liquid or Solid Material, IV-6, S412
- Mobile Fueling of Vehicles and Heavy Equipment, IV-6, S419
- Spills of Oil and Hazardous Substances, IV-6, S426
- Maintenance and Repair of Vehicles and Equipment, IV-7, S414

King County Pollution Prevention Manual

- Outdoor Storage of Liquid Materials in Stationary Tanks, 3.0, A-2
- Storage of Liquid Materials in Portable Containers, 3.0, A-3
- Storage of Contaminated Soils, 3.0, A-6
- Cleaning or Washing of Tools and Equipment, 3.0, A-11
- Concrete and Asphalt Production and Recycling, 3.0, A-19
- Concrete and Asphalt Application, 3.0, A-20
- Clearing and Grading for Small Construction Projects, 3.0, A-27
- Parking Lots, Driveways and Outside Storage Areas, 3.0, A-31
- Sidewalk Maintenance, 3.0, A-32
- Dust Control for Commercial Applications, 3.0, A-44

Regional Road Maintenance Guidelines ESA Manual

- Dust Control, no. 2.61 (p. B-233)

The O&M Standards for private stormwater facilities are provided in Appendix A and are listed alphabetically by topic. Links to the O&M Standards are available in the bookmarks of the PDF version of this document.

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2.10 General Property Maintenance and Good Housekeeping

Problem/Need

General property maintenance, including cleaning, sweeping, washing, and cleanup.

Training for City staff and establishing pollution prevention teams.

Prevent contamination of stormwater and surface waters during exterior cleaning; installation and repairs of fencing, gates, bollards, and other access repairs; and other general maintenance activities at private property buildings.

Triggers include routine maintenance, citizen concerns/requests, physical inspection, observed field conditions, and weather.

Relevant Activities

Done by:

- Property Owner Maintenance Staff

Ancillary work by:

- Property Management Company
- Professional Landscaper
- Contractor

Overlaps with:

- Access and Inspection
- Cleaning, Maintenance, and Repair of Aboveground BMPs
- Cleaning, Maintenance, and Repair of Underground BMPs
- Vegetation Maintenance and Chemical Applications
- Animal and Solid Waste Management
- Spill Control and Cleanup
- Snow and Ice Control
- Sediment and Erosion Control, Dewatering, and Flood Control

Frequency

Routine:

- Routine inspections
- Preventative maintenance
- Emergency repairs/response
- Emergency access

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Special:

- City maintenance request
- In response to citizen complaints

Desired Result

Maintained property appearance and access for vehicles and people.

Employees are trained, pollution prevention plans are in place, and records are maintained for all stormwater-related activities.

Keep paved areas clear of accumulated sediments, debris, trash, and yard waste that could impact water quality and enter the MS4.

Cleaned and maintained building exterior surface and grounds.

Resources

Special Equipment:

- Service truck
- Pressure washers
- Street sweeper
- Line trimmers
- Mowers
- Chain saw
- Pole saw
- Hedge trimmers
- Backpack blower
- Handheld blower
- Generators
- Pressure washers
- Hand tools
- Spill kit
- ESC BMPs (silt socks, straw wattles, etc.)
- Confined space entry equipment as needed
- PPE

Procedures

General steps:

- Work and route planning
- Rent special equipment as needed
- Traffic Control as needed
- Install ESC BMPs as needed
- Pressure wash building exterior

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- Properly dispose of waste fluids
- Clean work area and remove traffic control devices and ESC BMPs, as applicable

Pre-planning activities include:

- Weather forecast
- Scheduling
- Staff, equipment, and parts availability
- Pre-planned and scheduled sweeping and striping
- Check if permit is needed, (i.e., TCP)
- Coordination with City on when maintenance activities are scheduled

Record-keeping and Documentation

Record-keeping for maintenance at private stormwater facilities should include the details provided under Section 2.1 *Access and Inspection* of this SMP. Records and documentation are required to be submitted to the City, which maintains inspection records for all Private Stormwater Facility Inspections and tracks deficiencies and maintenance progress.

BMPs and Maintenance Standards

Reference BMPs to use for General Property Maintenance and Good Housekeeping are listed below (see Table 2 for links to BMPs in Appendix B).

Ecology SWMMWW

- Material Delivery, Storage, and Containment, II-3.2, C153
- Correcting Illicit Connections to Storm Drains, IV-1, S410
- Formation of a Pollution Prevention Team, IV-1, S453
- Preventive Maintenance / Good Housekeeping, IV-1, S454
- Spill Prevention and Cleanup, IV-1, S455
- Employee Training, IV-1, S456
- Inspections, IV-1, S457
- Record Keeping, IV-1, S458
- Washing and Steam Cleaning Vehicles/Equipment/Building Structures, IV-2, S431
- Maintenance of Public and Private Utility Corridors and Facilities, IV-3, S415
- Maintenance of Roadside Ditches, IV-3, S416
- Parking and Storage of Vehicles and Equipment, IV-3, S421
- Landscaping and Lawn/Vegetation Management, IV-4, S411
- Storage of Dry Pesticides and Fertilizer, IV-4, S444
- Storage of Liquid, Food Waste, or Dangerous Waste Containers, IV-5, S427
- Storage of Liquids in Permanent Aboveground Tanks, IV-5, S428
- Storage or Transfer (Outside) of Solid Raw Materials, Byproducts, or Finished Products, IV-5, S429

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- Loading and Unloading Areas for Liquid or Solid Material, IV-6, S412
- Spills of Oil and Hazardous Substances, IV-6, S426
- Maintenance and Repair of Vehicles and Equipment, IV-7, S414
- Painting/Finishing/Coating of Vehicles/Boats/Buildings/Equipment, IV-7, S420
- Roof/Building Drains at Manufacturing and Commercial Buildings, IV-7, S424
- Pet Waste, IV-7, S440
- Labeling Storm Drain Inlets on Your Property, IV-7, S442
- Building, Repair, Remodeling, Painting, and Construction, IV-7, S451
- Goose Waste, IV-7, S452

King County Pollution Prevention Manual

- Outdoor Storage of Liquid Materials in Stationary Tanks, 3.0, A-2
- Storage of Liquid Materials in Portable Containers, 3.0, A-3
- Storage of Contaminated Soils, 3.0, A-6
- Cleaning or Washing of Tools and Equipment, 3.0, A-11
- Interior Washing Operations, 3.0, A-14
- Washing of Buildings, Rooftops, and Other Large Surfaces, 3.0, A-15
- Building Repair, Remodeling, and Construction, 3.0, A-29
- Parking Lots, Driveways and Outside Storage Areas, 3.0, A-31
- Sidewalk Maintenance, 3.0, A-32
- Animal Waste, 3.0, A-34
- Nurseries and Greenhouses, 3.0, A-49

The O&M Standards for private stormwater facilities are provided in Appendix A and are listed alphabetically by topic. Links to the O&M Standards are available in the bookmarks of the PDF version of this document.

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Access Road and Easement

Many stormwater facilities have access roads to bring in heavy equipment for facility maintenance. These roads should be maintained for inspection access and ease of equipment access.

All facilities should allow access for the inspection process.

The easement area should not consist of bare soil. Bare soil areas may generate higher levels of stormwater runoff and increase erosion and sedimentation in stormwater facilities. The following checklist gives some general guidance for management.

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Access Road/Easement					Minimum Performance Standard
Drainage System Feature	Potential Defect	Conditions When Maintenance Is Needed			
General	Erosion	Soils are bare or eroded.			
	Road Surface	Condition of road surface may lead to erosion of the facility or limit access.			
	Erosion of Ground Surface	Noticeable rills are seen in landscaped areas.			
	Trash & Debris / Litter	Litter accumulation exceeds 1 cubic foot per 1,000 square feet.			
	Poisonous Plants and Noxious weeds	Any poisonous plants or nuisance vegetation which may constitute a hazard to maintenance personnel or the public. Any evidence of noxious weeds as defined by State or local regulations.			
	Tree Growth and Hazard Trees	Tree growth does not allow maintenance access or interferes with maintenance activity (i.e., slope moving, silt removal, vacuuming, or equipment movements). If trees are not interfering with access or maintenance, do not remove. If dead, diseased, or dying trees are identified. (Use a certified Arborist to determine health of tree or removal requirements.)			
		Trees or shrubs that have been blown down or knocked over.			
	Weeds (Nonpoisonous)	Weeds growing in more than 20% of the landscaped area (trees and shrubs only).			
	Insects	When insects such as wasps and hornets interfere with maintenance activities.			

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Conveyance Pipe

Storm sewer pipes convey stormwater. Inlet and outlet stormwater pipes convey stormwater in, through, and out of stormwater facilities.

Pipes are built from many materials. Pipes are cleaned to remove sediment or blockages when problems are identified. Stormwater pipes must be clear of obstructions and breaks to prevent localized flooding. All stormwater pipes should be in proper working order and free of the possible defects listed below.

Key Operations and Maintenance Considerations

- The most common tool for cleaning stormwater conveyance pipes is a truck with a tank, vacuum hose, and a jet hose (Vactor® truck) to flush sediment and debris from the pipes.

Conveyance Pipe				
Drainage System Feature	Potential Defect	Conditions When Maintenance Is Needed	Minimum Performance Standard	
General	Contaminants and Pollution	Any evidence of oil, gasoline, contaminants, or other pollutants. Sheen, obvious oil, or other contaminants present. • Identify and remove source.	No contaminants or pollutants present.	
	Obstructions, Including Roots	Root enters or deforms pipe, reducing flow.	Roots have been removed from pipe (using mechanical methods; do not put root-dissolving chemicals in storm sewer pipes). If necessary, vegetation over the line removed.	
	Sediment and Debris	Sediment depth is greater than 20% of pipe diameter.	Pipe has been cleaned and is free of sediment/ debris. (Upstream debris traps installed where applicable.)	
	Debris Barrier or Trash Rack Missing	Stormwater pipes > than 18 inches need debris barrier.	Debris barrier present on all stormwater pipes 18 inches and greater.	
	Damage to protective coating or corrosion	Protective coating is damaged; rust or corrosion is weakening the structural integrity of any part of pipe.	Pipe repaired or replaced.	
	Damaged	Any dent that decreases the cross section area of pipe by more than 20% or is determined to have weakened structural integrity of the pipe.	Pipe repaired or replaced.	

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Grounds

Grounds (Landscaping)				
Drainage System Feature	Potential Defect	Conditions When Maintenance Is Needed	Minimum Performance Standard	
Site	Trash or litter	Any trash and debris which exceed 1 cubic foot per 1,000 square feet (this is about equal to the amount of trash it would take to fill up one standard size office garbage can). In general, there should be no visual evidence of dumping.	Trash and debris cleared from site.	
	Noxious weeds	Any noxious or nuisance vegetation which may constitute a hazard to County personnel or the public.	Noxious and nuisance vegetation removed according to applicable regulations. No danger of noxious vegetation where County personnel or the public might normally be.	
	Contaminants and pollution	Any evidence of contaminants or pollution such as oil, gasoline, concrete slurries or paint.	Materials removed and disposed of according to applicable regulations. Source control BMPs implemented if appropriate. No contaminants present other than a surface oil film.	
	Grass/groundcover	Grass or groundcover exceeds 18 inches in height.	Grass or groundcover mowed to a height no greater than 6 inches.	
	Hazard	Any tree or limb of a tree identified as having a potential to fall and cause property damage or threaten human life. A hazard tree identified by a qualified arborist must be removed as soon as possible.	No hazard trees in facility.	
Trees and Shrubs	Damaged	Limbs or parts of trees or shrubs that are split or broken which affect more than 25% of the total foliage of the tree or shrub.	Trees and shrubs with less than 5% of total foliage with split or broken limbs.	
		Trees or shrubs that have been blown down or knocked over.	No blown down vegetation or knocked over vegetation. Trees or shrubs free of injury.	
		Trees or shrubs which are not adequately supported or are leaning over, causing exposure of the roots.	Tree or shrub in place and adequately supported; dead or diseased trees removed.	

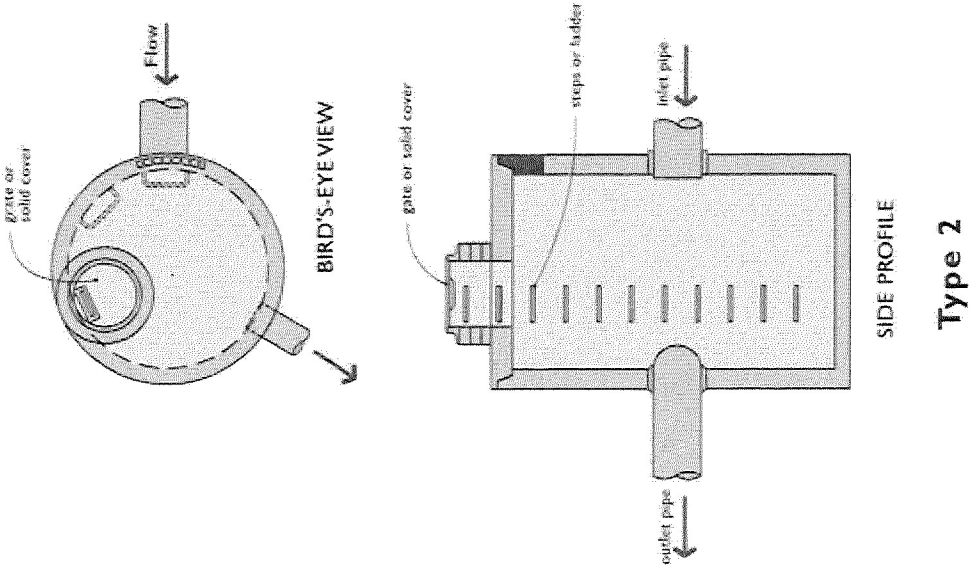
Manhole

A manhole is an underground concrete structure typically fitted with a slotted grate to collect stormwater runoff and route it through underground pipes. Manholes can also be used as a junction in a pipe system and may have a solid lid. A manhole is also known as a Type 2 catch basin.

Manholes are round concrete structures ranging in diameter from 4 feet to 8 feet. They are used when the connecting conveyance pipe is 18 inches or greater or the depth from grate to pipe bottom exceeds 5 feet. Manholes typically have steps mounted on the side of the structure to allow access.

Manholes typically provide a storage volume (sump) below the outlet pipe to allow sediments and debris to settle out of the stormwater runoff. Some manholes are also fitted with a spill control device (inverted elbow on outlet pipe) intended to contain large quantities of grease or oils.

Manholes are often associated with other stormwater facilities.



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Key Operations and Maintenance Considerations

- The most common tool for cleaning manholes is a truck with a tank and vacuum hose (Vactor® truck) to remove sediment and debris from the sump.
- A manhole may be an enclosed space where harmful chemicals and vapors can accumulate. Therefore, if the inspection and maintenance requires entering a manhole, it should be conducted by an individual trained and certified to work in hazardous confined spaces.

Manhole				Minimum Performance Standard
Drainage System Feature	Potential Defect	Conditions When Maintenance Is Needed	Note: table spans multiple pages.	
General	Trash and Debris	Trash or debris which is located immediately in front of the opening or is blocking inletting capacity of the basin by more than 10%.	No trash or debris located immediately in front of manhole or on grate opening.	
		Trash or debris (in the basin) that exceeds 60 percent of the sump depth as measured from the bottom of basin to invert of the lowest pipe into or out of the basin, but in no case less than a minimum of six inches clearance from the debris surface to the invert of the lowest pipe.	No trash or debris in the basin.	
		Trash or debris in any inlet or outlet pipe blocking more than 1/3 of its height.	Inlet and outlet pipes free of trash or debris.	
		Dead animals or vegetation that could generate odors that could cause complaints or dangerous gases (e.g., methane).	No dead animals or vegetation present within the catch basin.	
	Sediment	Sediment (in the basin) that exceeds 60 percent of the sump depth as measured from the bottom of basin to invert of the lowest pipe into or out of the basin, but in no case less than a minimum of 6 inches clearance from the sediment surface to the invert of the lowest pipe.	No sediment in the basin.	
	Structure Damage to Frame and/or Top Slab	Top slab has holes larger than 2 square inches or cracks wider than 1/4 inch. (Intent is to make sure no material is running into manhole.)	Top slab is free of holes and cracks.	
		Frame not sitting flush on top slab, i.e., separation of more than 3/4 inch of the frame from the top slab. Frame not securely attached.	Frame is sitting flush on the riser rings or top slab and firmly attached.	
	Fractures or Cracks in Basin Walls/Bottom	Maintenance person judges that structure is unsound.	Basin replaced or repaired to design standards.	
		Grout fillet has separated or cracked wider than 1/2 inch and longer than 1 foot at the joint of any inlet/outlet pipe or any evidence of soil particles entering manhole through cracks.	Pipe is regrouted and secure at basin wall.	

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	Settlement/ Misalignment	Manhole has settled more than 1 inch or has rotated more than 2 inches out of alignment.	Manhole replaced or repaired to design standards.
	Vegetation Inhibiting System	Vegetation growing across and blocking more than 10% of the opening.	No vegetation blocking opening to manhole.
		Vegetation growing in inlet/outlet pipe joints that is more than six inches tall and less than six inches apart.	No vegetation or root growth present.
	Contaminants and Pollution	Any evidence of oil, gasoline, contaminants, or other pollutants. Sheen, obvious oil, or other contaminants present. • Identify and remove source.	No contaminants or pollutants present.
Manhole Cover	Cover Not in Place	Cover is missing or only partially in place. Any open manhole is a safety hazard and requires immediate maintenance.	Manhole cover is closed.
	Locking Mechanism Not Working	Mechanism cannot be opened by one maintenance person with proper tools. Bolts into frame have less than 1/2 inch of thread. One or more bolts are missing.	Mechanism opens with proper tools. All bolts are seated and no bolts are missing. Cover is secure.
	Cover Difficult to Remove	One maintenance person cannot remove lid after applying normal lifting pressure (Intent is to keep cover from sealing off access to maintenance).	Cover can be removed by one maintenance person.
	Ladder	Ladder is unsafe due to missing rungs, not securely attached to manhole wall, misalignment, rust, cracks, or sharp edges.	Ladder meets design standards and allows maintenance person safe access.
Metal Grates (If Applicable)	Grate Opening Unsafe	Grate with opening wider than 7/8 inch.	Grate opening meets design standards.
	Trash and Debris	Trash and debris that is blocking more than 20% of grate surface inletting capacity.	Grate free of trash and debris.
	Damaged or Missing	Grate missing or broken member(s) of the grate.	Grate is in place and meets design standards.

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Pump Stations

Stormwater pumping stations are necessary for the removal of stormwater where gravity drainage is impossible or impractical. Pumps stations are responsible for ‘lifting’ the stormwater up and allowing it to flow back into the gravity conveyance system. Some pump stations do apply pressure to a conveyance pipe—those sections of pipe are referred to as force mains.

Key Operations and Maintenance Considerations

- Some Stormwater Pump Stations are enclosed spaces where harmful chemicals and vapors can accumulate. Therefore, the inspection and maintenance of these enclosed facilities should be conducted by an individual trained and certified to work in hazardous confined spaces.
- All elements of the pump station should be thoroughly reviewed for safety during operation and maintenance. Particular attention should be given to all safety features in order to maintain a safe working environment.
- Normal operation of the collection system will result in a buildup of debris on trash racks, gratings and screens and sediment in the storage unit and sump. The build-up of debris may cause the bearings, impellers, and bowls to be damaged, reducing the pump efficiency and often resulting in failure.

Stormwater Pump Stations			
Drainage System Feature	Potential Defect	Conditions When Maintenance Is Needed	Minimum Performance Standard
General	Debris and Sediment	Accumulation of sediment and/or debris on trash racks, gratings, and screens reducing or preventing the inflow of stormwater.	Trash rack, gratings, and screens free of sediment and debris.
		Accumulation of sediment in the storage unit and/or sump.	Storage unit and sump free of accumulated sediment.
	Trash and Debris	Trash or debris which is located immediately in front of the catch basin opening or is blocking inletting capacity of the basin by more than 10%.	No trash or debris located immediately in front of catch basin or on grate opening.
		Trash or debris (in the basin) that exceeds 60 percent of the sump depth as measured from the bottom of basin to invert of the lowest pipe into or out of the basin, but in no case less than a minimum of six inches clearance from the debris surface to the invert of the lowest pipe.	No trash or debris in the catch basin.
		Trash or debris in any inlet or outlet pipe blocking more than 1/3 of its height.	Inlet and outlet pipes free of trash or debris.
		Dead animals or vegetation that could generate odors that could cause complaints or dangerous gases (e.g., methane).	No dead animals or vegetation present within the catch basin.

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Stormwater Pump Stations				
Drainage System Feature	Potential Defect	Conditions When Maintenance Is Needed	Minimum Performance Standard	
General	Sediment	Sediment (in the basin) that exceeds 60 percent of the sump depth as measured from the bottom of basin to invert of the lowest pipe into or out of the basin, but in no case less than a minimum of 6 inches clearance from the sediment surface to the invert of the lowest pipe.	No sediment in the catch basin.	
	Structure Damage to Frame and/or Top Slab	Top slab has holes larger than 2 square inches or cracks wider than 1/4 inch. (Intent is to make sure no material is running into basin.)	Top slab is free of holes and cracks.	
		Frame not sitting flush on top slab, i.e., separation of more than 3/4 inch of the frame from the top slab. Frame not securely attached.	Frame is sitting flush on the riser rings or top slab and firmly attached.	
	Fractures or Cracks in Basin Walls/Bottom	Basin Walls/ Bottom	Basin replaced or repaired to design standards.	
		Grout fillet has separated or cracked wider than 1/2 inch and longer than 1 foot at the joint of any inlet/outlet pipe or any evidence of soil particles entering catch basin through cracks.	Pipe is regouted and secure at basin wall.	
	Vegetation Inhibiting System	Vegetation growing across and blocking more than 10% of the basin opening.	No vegetation blocking opening to basin.	
Access Manhole		Vegetation growing in inlet/outlet pipe joints that is more than six inches tall and less than six inches apart.	No vegetation or root growth present.	
	Contaminants and Pollution	Any evidence of oil, gasoline, contaminants, or other pollutants. Sheen, obvious oil, or other contaminants present. Identify and remove source.	No contaminants or pollutants present.	
	Access cover/lid damaged or difficult to open	Access cover/lid cannot be easily opened by one person. Corrosion/deformation of cover/lid	Access cover/lid can be opened by one person.	
	Locking mechanism not working	Mechanism cannot be opened by one maintenance person with proper tools. Bolts cannot be sealed. Self-locking cover/lid does not work.	Mechanism opens with proper tools.	
	Cover/lid difficult to remove	One maintenance person cannot remove cover/lid after applying 80 lbs of lift.	Cover/lid can be removed and reinstalled by one maintenance person.	
	Access doors/ plate has gaps, doesn't cover completely	Large access doors not flat and/or access opening not completely covered.	Doors close flat; covers access opening completely.	
	Liftin Rings missing, rusted	Liftin rings not capable of lifting weight of door or plate.	Liftin rings sufficient to lift or removed door or plate.	
	Ladder rungs unsafe	Missing rungs, misalignment, rust, or cracks.	Ladder meets design standards. Allows maintenance person safe access.	

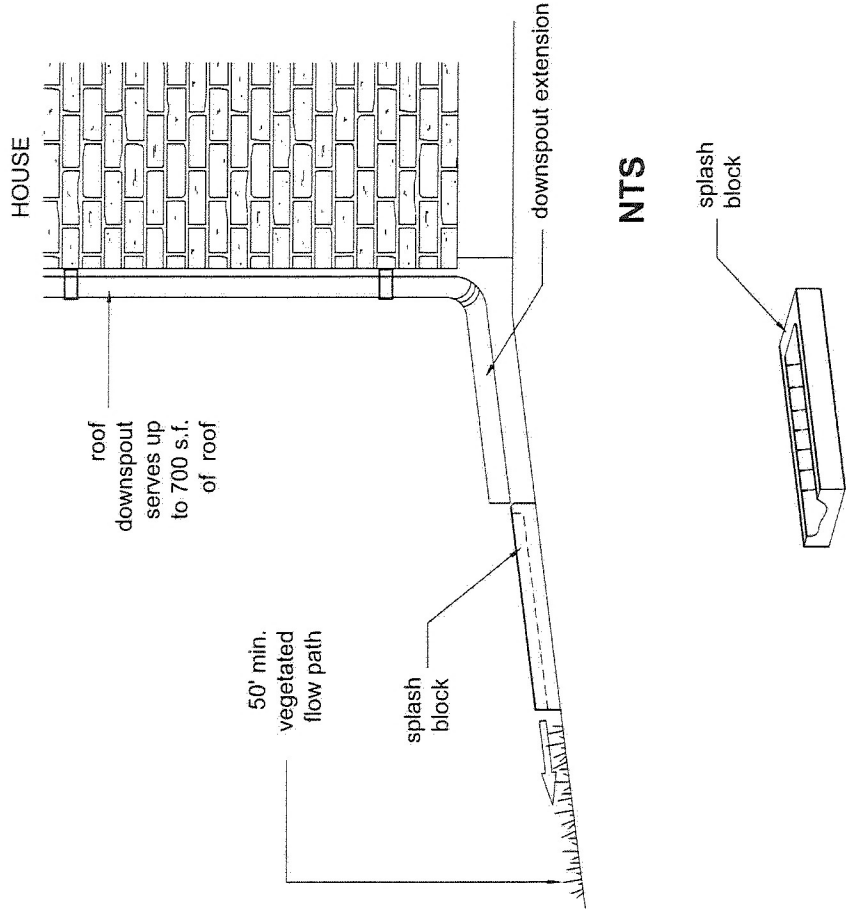
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Downspout Splash Block

Downspout splash block dispersion systems consist of splash blocks, which serve to spread roof runoff over vegetated pervious areas.

Facility objects that are typically associated with downspout splash block include:

- Splash block
- Downspout extension
- Dispersal area: Stormwater is dispersed to an area vegetated with well-established lawn or pasture, landscaping with well-established groundcover, or native vegetation with natural groundcover. The required vegetated flow path is 50 feet for splash blocks and concentrated dispersion.



Downspout Dispersion using Splash Blocks

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Key Operations and Maintenance Considerations

- For dispersion practices to be effective, the dispersion area must remain covered with dense, well-established vegetation. Site uses should protect vegetation and avoid compaction.
- The groundcover for the extent of the flow in any dispersal area must be maintained to be dense enough to help disperse and infiltrate flows and to prevent erosion.
- The most common tools for cleaning these systems are hand tools to redistribute material disturbed by concentrated flows and a hose to flush downspouts.

Downspout Splash Block			
Drainage System Feature	Potential Defect	Conditions When Maintenance Is Needed	Minimum Performance Standard
Note: table spans multiple pages.			
General	Pests	Signs of pest infestations (IPM protocol threshold(s) are exceeded), including rodent holes or mounds that disturb dispersion flow paths.	Pests are not present or engaged in activities that present a significant public health risk or compromise to the intended design function of the facility. Pests that have exceeded acceptable thresholds have been addressed using appropriate IPM measures.
	Inspection Frequency	Annually and after large storms.	Rain harvesting equipment is functioning normally.
Splash Block	Water Directed Towards Building	Water is being directed towards building structure.	Water is directed away from foundations and other building structures.
	Downspout water misdirected	Water coming from the downspout is not discharging to the dispersal area.	Water is discharging normally to the dispersal area.
	Dislodged	Splash block moved from outlet of downspout.	Splash block correctly positioned to catch discharge from downspout.
	Trash and Debris	Trash and debris accumulated on the splash block.	Splash block site free of any trash or debris.
	Erosion	Water coming off the splash block causing erosion.	No erosion occurs from the splash block.
		Water disrupts soil media.	Water is dispersed into soil/mulch/plantings in a manner that does not create erosion or other issues due to concentrated flows.

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Dispersal Area	Erosion or Sediment Accumulation	Erosion (gullies/ rills) greater than 2 inches deep in dispersal area. Accumulated sediment or debris to extent that blocks or channelizes flow path.	Cause of erosion has been eliminated and the damaged area has been repaired and stabilized.
	Standing Water After Storm Event	Standing surface water in dispersion area remains for more than 3 days after the end of a storm event.	Standing water drains within 72 hours of a storm event.
	Transition Zone Erosion and Sizing	Adjacent soil erosion; uneven surface creating concentrated flow discharge; or less than two feet of width.	Transition zone meets design criteria and does not exhibit erosion or other evidence of concentrated flows.
	Poor Vegetation Cover	Poor vegetation cover such that erosion is occurring.	Vegetation has been properly watered and established to meet facility design specifications.
	Excessive Vegetation Cover	Vegetation inhibits dispersed flow along flow path.	Vegetation has been weeded, trimmed, pruned, or thinned to meet facility design criteria.

Exhibit B

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Annual Inspection Report

City of Puyallup – Stormwater BMP Facilities Inspection and Maintenance Log

Return Form to:
Stormwater Engineer/ City of Puyallup
333 South Meridian
Puyallup, WA 98371

Facility Name: CHC Puyallup

Address: 201 West Main Street and 101 West Main Street

Begin Date: _____

End Date: _____

Date	BMP ID#	BMP facility Description	Inspected By	Cause for Inspection	Exceptions Noted	Notes / Actions Taken

Instructions:

Record all inspections and maintenance for all treatment BMP's on this form. Use additional log sheets and/or attach extended comments or documentation as necessary. Submit a copy of the completed log with the Annual Independent Inspector Report to the City, and start a new log at that time. Checklists provided should be used prior to filling out this form. If you have any questions on how to complete your inspection, please contact City staff.

BMP ID #- always use ID# from the Operation and Maintenance Manual.

Inspected by- Note all Inspections and maintenance on this form, including the required independent annual inspection.

Cause for Inspection- Note if the inspection is routine, pre-rainy season, post storm, annual, or in response to a noted problem or complaint.

Exceptions Noted- Note any condition that requires correction or indicates a need for maintenance.

Notes / Actions Taken- Describe any maintenance done and need for follow up.

RANGE	TOWNSHIP	SECTION	QUARTER	SERIAL NUMBER	PAGE NUMBER
04E-	20 N-	28	1/4	106	61/ 61
DOCUMENT NUMBER					

Operations and Maintenance Manual

Community Health Center - Puyallup
Coughlin Porter Lundeen
Project No. C22033
November 12, 2024

GENERAL DESCRIPTION

The following Operations and Maintenance Manual (O&M) provides the technical information for developing the Stormwater Drainage system for the Community Health Center – Puyallup (CHC). The stormwater design for the project is based on the requirements set forth by the City of Puyallup Stormwater Manual.

CHC is located at 201 and 111 West Main Street, Puyallup (See Vicinity Map). The existing site consists of two separate parcels which are currently developed with two buildings and a parking lot.

The proposed development consists of internal renovations to the existing buildings and associated utility revisions. Site improvements include minor pedestrian access paths utility restoration, and Right-of-way improvements include updated driveway aprons and minor revisions to the existing public sidewalks.

EXISTING SITE HYDROLOGY

The existing site consists of commercial developments with buildings, parking lots, and minimal landscape areas. Roof runoff is collected through downspouts. Runoff from the parking lot is routed to an existing water quality treatment facility before it is conveyed to the public storm system in Main Street.

DEVELOPED SITE HYDROLOGY

The proposed development will maintain the existing site hydrology. A new building exit at the NW corner of the east building will require a sump pump to route storm water to the existing onsite conveyance system.

OPERATIONS AND MAINTENANCE

Operations and maintenance activities are outlined in the Stormwater Management Plan. Specifically, collection structures will need to be monitored for sediment accumulation and periodically cleaned. Grates will need to be cleared to ensure stormwater collection and removal from the surface. The new pump is connected to an alarm to warn of malfunctions or excessive storm events.