

March 2018

Surface Water Division

Stormwater Facilities Inspection Manual



CITY OF BOTHELL

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Introduction

The City of Bothell is responsible for protecting water quality to the maximum extent practicable. Bothell's inspection program is designed to reduce flooding, erosion, and pollutant discharges by providing education, inspection, and code compliance enforcement. Public Works personnel conduct inspections of both public and private stormwater drainage systems within Bothell city limits to determine whether they are functioning properly and to issue an order to maintain for any facilities that fail to meet standards.

This manual's purpose is to define the procedures necessary to comply with federal, state, and local codes, and to establish practices to reduce and eliminate pollutants to the maximum extent practicable.

The NPDES Program

The National Pollutant Discharge Elimination System (NPDES) is a program created under the Federal Clean Water Act, with authority over the Permit given to Washington State Department of Ecology (Ecology). Ecology issues Permits to governmental and private entities. The intent of NPDES is to protect and restore water quality in lakes and streams so that they can support "beneficial human uses" such as drinking, fishing and swimming. Governmental and private entities that want to discharge water or wastewater to surface waters regulated by the Federal Government ("waters of the state") must obtain applicable federal, state, and local permits and comply with conditions of the NPDES permit.

The Western Washington Phase II Municipal Stormwater Permit

The City of Bothell has been operating under an NPDES Permit (Permit) since 2007. The Permit allows the City to discharge stormwater from our municipal system into "waters of the state," as long as the City implements programs to reduce pollutants in stormwater to the maximum extent practicable (MEP), applies all known and reasonable technologies (AKART) to address stormwater pollutants, and protects receiving waters from degradation. Section 5.C of the Permit detailing practices is broken into the five elements:

- S.5.C.1 – Public Education and Outreach
- S.5.C.2 – Public Involvement and Participation
- S.5.C.3 – Illicit Discharge Detection and Elimination
- S.5.C.4 – Controlling Runoff from New Development, Redevelopment and Construction Sites
- S.5.C.5 – Municipal Operations and Maintenance

The City of Bothell reports to Ecology annually regarding compliance with the Permit, which includes inspection and maintenance activities.

Inspection Authority

The *Bothell Municipal Code Chapter 18.04 – Storm Water and Drainage Control* lists authority for stormwater facility inspections, and *Chapter 11.20 – Enforcement* establishes procedures to enforce violations of Bothell Municipal Codes, including Chapter 18.

Standards

In order to determine whether each system is functioning as designed, the City adopts standards so that inspectors can determine whether each permanent stormwater treatment and flow control facility passes or fails during a regular inspection. The City updates these standards annually in Chapter Four of the Bothell Standards at www.bothellwa.gov/stormddraindetails.

Inspection Definitions

Over time, Bothell’s inspection definitions have changed to reflect industry standard language. The following definitions help staff determine what to inspect, and how to conduct and report routine inspections:

- **Inspection sites:** Development or subdivision with one or more defined stormwater facilities onsite
- **Stormwater facilities:** Permanent stormwater structure with flow control and/or water quality treatment aspect
- **Stormwater structures/assets:** Any permanent infrastructure that captures, conveys, or pretreats stormwater

Inspection Categories

Stormwater inspections fall into two categories: public and private. Required inspection schedules and procedures vary by ownership, type of development, time of development, and maintenance obligations.

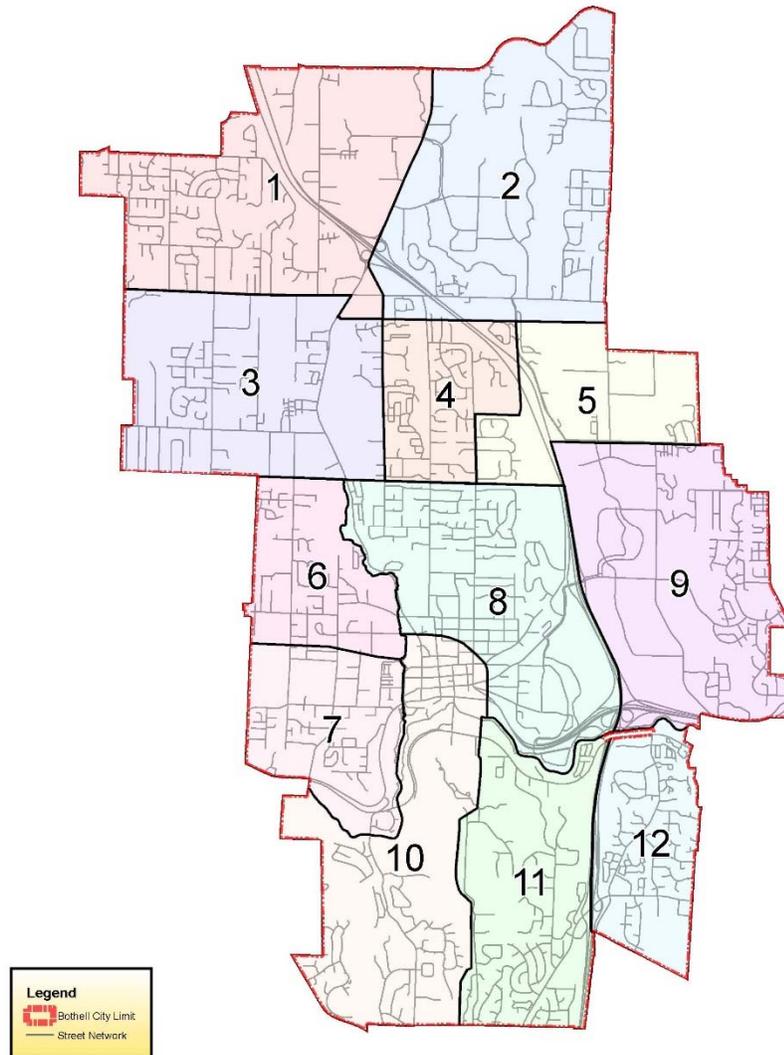
Public Inspections

Public stormwater sites consist of all City of Bothell-owned and operated stormwater facilities. Surface Water Inspectors currently inspect over 166 public sites. All publicly-owned and maintained facilities fall under Permit element S.5.C.55 – Municipal Operations and Maintenance.

Inspection Schedule

The Permit requires that “inspections must be conducted annually unless there is sufficient data to justify a different frequency.” The annual inspection schedule of a facility may be changed to a lesser frequency “based on maintenance records of double the length of time of the proposed inspection frequency.” City staff conduct a thorough inspection of all City-owned and operated stormwater facilities at least annually to ensure all facilities are in proper working order. To

coordinate with the Operations Stormwater Division, the City is broken into twelve zones. Each zone receives inspections during a one-month period. Inspectors conduct inspections in order of the zone, so zone one receives inspections in January, zone two in February, and so on. The map below shows the inspection zones for reference:



Some facilities in the right-of-way require traffic control. Each site requiring either Operations or Police traffic control support must be scheduled and coordinated with the appropriate staff as necessary.

Private Inspections

Private Stormwater Sites

Private stormwater sites consist of all stormwater facilities that are not City-owned or operated within Bothell. Private stormwater facilities are currently divided into two categories: private facilities permitted prior to the requirements adopted pursuant to the 2007 Ecology stormwater permit (called private facilities), and private facilities permitted according to the requirements adopted pursuant to the

2007 Ecology stormwater permit (called private NPDES facilities). Private NPDES facilities fall under Permit element S.5.C.4 – Controlling Runoff from New Development, Redevelopment, and Construction Sites. Surface Water Inspectors currently inspect over 400 private stormwater sites and over 40 sites that fall under the private NPDES facilities.

Inspection Schedule

Private facilities fall under Bothell Municipal Code and can be subject to an annual inspection; however, a City inspection is not required. Private NPDES facility inspections are conducted according to the stormwater permit requirements. Private commercial sites are inspected every 12 months and new residential developments are inspected every six months until 90% of the lots are constructed, then they fall under the every 12 months inspection category.

City staff conducts facility site inspections outside of the NPDES permit every three years, with the private facility owner self-reporting their inspection compliance on the off years. Surface Water Inspectors conduct at least 130 private site inspections each year.

Inspection Process

Roles and Responsibilities of Stormwater Inspectors

The major roles and responsibilities of the City’s inspectors as they relate to inspections are as follows:

- Identify sites needing inspection
- Conduct inspections of stormwater facilities and structures/assets
- Identify and document any stormwater facilities and structures/assets that fail to meet maintenance standards
- Provide accurate and consistent “Orders to Maintain” for any stormwater facilities and structures/assets that fail to meet standards
- Keep complete and accurate files, including the asset management system (Lucity)
- Conduct initial water quality complaint investigations

Conducting the Inspection

Once stormwater facility inspections have been planned and coordinated among the inspectors, each inspector will do the following:

1. Review the as-built or approved plans and familiarize him/herself with the site.
2. Print hardcopy maps or approved plans of the sites that he/she will inspect that day. These are optional for public facilities.
3. Walk around his/her work truck to ensure he/she has all necessary gear (see field gear and truck equipment checklists) and vehicle is in proper functioning order.

4. Perform a visual inspection of all elements of the stormwater site.
 - a. Use the adopted standards documents as a guideline for whether a facility passes or fails.
 - b. In a typical inspection, maintenance standards will highlight the following:
 - i. Structural damage to the lid, frame, slab, walls, pipes (i.e. cracks or parts missing)
 - ii. Sediment, debris, or trash accumulation
 - iii. Pollution or foreign materials (i.e. illegal discharge or dumped chemicals)
5. Fill out the necessary forms from his/her notes or on tablet in Lucy in the associated work order.
6. If public, include any necessary information for Operations in the comments section of the associated work order in Lucy.
7. If private, provide the necessary forms based on the inspection findings and submit them to the property owner in either electronic or hard copy format.

Field Gear Checklist

- Gloves
- Steel-toe boots
- High-visibility vest
- Employee cell phone
- Tablet
- Printed maps or approved plans of facilities you will visit that day (if necessary)
- Sunscreen
- Hat
- Sunglasses
- Water

Truck Equipment Checklist

- Flashlight
- Probing rod
- T-bar
- Manhole cover hook
- Catch basin cover hook
- Orange traffic cones
- Tool box (screwdrivers, hammers, bolts, nuts, anti-cease, etc.)

Right of Entry

Consent for an inspection shall be obtained from the property or business owner before entering private property. Inspectors should use reasonable means to obtain permission including phone calls, a mailed letter, in-person communication, and, if possible, leaving contact information for a reasonable amount of time before returning to the site. If the site requires an emergency inspection, the inspector will make every effort to immediately contact the property owner before entering the site.

It is acceptable for a public employee to access the “public area” of a property to complete an inspection. “Public area” is defined as the area a postal worker or delivery person would traverse to deliver the mail or where the public would reasonably traverse in their daily activities (like a parking lot, etc.).

After receiving permission from the property or business owner, the inspector shall document who gave them permission to access the property including name, title, and business card if available. Inspections should occur with a property owner or authorized representative present whenever possible. This provides an opportunity for the property owner or authorized representative to learn about their system and interact with the inspector prior to receiving an order to maintain.

If a property owner refuses entry, the inspector must comply. If the property owner grants access to the inspector but during the course of an inspection or investigation the owner or representative asks the inspector to leave and the inspector cannot persuade the owner to complete the inspection, the inspector should courteously and promptly comply with the request and leave the premises. Once back at the office, the inspector shall discuss the situation with the supervisor and document the refusal.

Private Notice of Inspection and Order to Maintain

Notification Process

1. The City sends letters to property owners and managers after the initial inspection. The owners and managers will receive either a “Meets Standards Notice” or an “Order to Maintain” depending on the findings.
 - a. If a facility passes inspection, then nothing more is required of the property owner or manager.
2. If a facility fails the initial inspection, then the property owner (or their representative) has 30 days to respond to the Order to Maintain.
 - a. Property owners can either do the work themselves or hire an outside vendor to complete it.

- b. Once the work is complete, the property owner must sign and return the Order to Maintain to the appropriate inspector. If the work is complete, then no further work is required and a “Notice of Documents Received” is sent.
3. If the property owner does not respond to the initial Order to Maintain after 30 days, City staff sends them a follow-up letter requesting immediate action to comply.
4. If the property owner still does not comply, then a civil infraction or notice of violation is sent.
 - a. All notices of violation or civil infraction require Legal Department approval and should be sent by both certified and standard mail. The recipient has 30 days to comply from receipt of the notice.
5. If the property owner has not contacted the appropriate inspector with their maintenance schedule, returned the signed Order to Maintain (and completed the work), or filed a written appeal request with the City Clerk within 15 days after service of the Notice, the property owner can be subject to civil penalties. Exceptions may occur when the property owner is in contact with the Surface Water Inspector, there are extenuating circumstances, and/or the property owner is actively working to perform the maintenance. If there are no exceptions, staff does one of the following:
 - a. Discuss with Legal Department and supervisor to determine next steps.
 - b. For properties with covenants, follow the covenant requirements for contracting maintenance and send bills to Public Works Administration at the Bothell Operations Center to bill the responsible party for reimbursement.
 - c. For properties without covenants, follow Bothell Municipal Code requirements for performing maintenance for issues that affect water quality or are considered an illicit discharge. Send a list of properties that are in violation to the Code Compliance Officer.
6. Track all correspondence in its original format regarding notifications and property owner’s attempt to comply until either maintenance is complete or until it is transferred to the Code Compliance Officer or Legal Department. This allows involved parties to agree upon new deadlines and provides a tracking mechanism for those new deadlines. For example, if the property has work contracted after a notification but the contractor cannot meet the deadline, note it in the Order to Maintain. Change the Projected Finish Date to reflect the extended time period given. Follow up with the property owner or manager based on the new Projected Finish Date.

Facility Maps

Any property owner or manager with a facility failing to meet standards will receive a copy of the map with an Order to Maintain notice in writing. These maps include all of the stormwater

structures included in the inspection. Since the mapping is constantly being updated, a new map should be created using the current GIS data each year.

Recordkeeping

City staff will keep all public inspection records in Lucity for tracking and reporting purposes. For private inspections, staff will keep the following records until they can be added into Lucity or Laserfiche:

- **Hard copy file:** Contents will contain the inspection map, Order to Maintain or Meets Standards notice, and any hard copy documentation requesting an extension.
- **Electronic copy file:** Contents will contain the inspection map, Order to Maintain or Meets Standards notice, photos, cover letter, and any formal request for extension or compliance outside of electronic communication. All emails need to stay in their original format and should not be printed.

At the end of each year, the electronic file will be transferred to Laserfiche for permanent recordkeeping.

City staff will keep a master spreadsheet to provide an overview of all sites, and will update it with basic information (name of site, site number, site address, county, list each permanent water quality or flow control type, and date of inspection) including whether each facility met standards for tracking purposes.

Storm and Surface Water Illicit Connection and Spill Response

Illicit Connections

City staff document any illicit connections discovered as a result of investigations or inspections of the stormwater system, and complete an illicit discharge request with the relevant information entered into the Lucity database. If it is not already part of an existing investigation, it is assigned to the staff member who oversees the Illicit Discharge Program for further consideration.

Spill Response

City staff log spills into Lucity as illicit discharge requests and address them through the procedures in the Illicit Discharge Detection and Elimination Program Manual.

Enforcement

The inspectors make the initial effort to achieve compliance for both Orders to Maintain for routine inspections and Emergency Orders for spill response. If the property owner is unwilling to comply, the task is assigned to Code Compliance and Legal for review and possible civil penalties which may include fines and cost recovery.