

OPERATIONS & MAINTENANCE MANUAL

December 2024

PROJECT:

Hackett Residence
Parcel No: 531510-0756
2965 74th Ave SE
Mercer Island, WA 98040

OWNER:

Patricia Hackett
2965 74th Ave SE
Mercer Island, WA 98040

ENGINEER:

Axea Civil, LLC
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Section 1 –Project Description

The Hackett Residence project will include a new single-family home. The site is located in northwest Mercer Island at 2965 74th Ave SE, Mercer Island, WA 98040 on King County parcel number 531510 0756. The proposed project includes the removing existing improvements and constructing a new single-family home and associated site, utility, and stormwater management facilities. Stormwater on this site, including run-off from the roof, area drain, and driveway will be collected and conveyed to the on-site stormwater management system, which consists of two infiltration drywells.

Section 2 – Maintenance Importance and Intent

The importance of maintenance for the proper functioning of stormwater control facilities cannot be over-emphasized. A substantial portion of failures (clogging of filters, resuspension of sediments, loss of storage capacity, etc.) are due to inadequate maintenance. Stormwater BMP maintenance is essential to ensure that BMPs function as intended throughout their full life cycle. The fundamental goals of maintenance activities are to insure the entire flow regime and treatment train designed for this site continue to fully function. For this site these include: (engineer can delete non applicable BMPs listed below):

- Maintain designed stormwater infiltration capacity
- Maintain designed stormwater detention/retention volume
- Maintain ability of storm facility to attenuate flow rates
- Maintain ability to safely convey design stormwater flows
- Maintain ability to treat stormwater runoff quality
- Preserve soil and plant health, as well as stormwater flow contact with plant and soil systems
- Clearly identify systems so they can be protected
- Keep maintenance costs low
- Prevent large-scale or expensive stormwater system failures
- Prevent water quality violations or damage to downstream properties.

The intent of this section and manual is to pass on to the responsible party(s) all the information critical to understand the design of the system, risks and considerations for proper use, suggestions for maintenance frequencies, and cost so that realistic budgets can be established.

Section 3 – Responsible Parties

The property owner shall be responsible for maintaining all stormwater facilities.

Section 4 – Facilities Requiring Maintenance

The following is a list of facilities requiring maintenance:

- (2) Infiltration Drywells
- (6) area drains
- ~290 feet drain pipe

Section 5 – Maintenance instructions

The parties responsible for maintenance must review and apply the maintenance requirements contained herein. These maintenance instructions outline conditions for determining if maintenance actions are required, as identified through inspection. However, they are not intended to be measures

of the facility's required condition at all times between inspections. Exceedance of these conditions at any time between inspections or maintenance activity does not automatically constitute a violation of these standards. However, based upon inspection observations, the inspection and maintenance presented in the checklists shall be adjusted to minimize the length of time that a facility is in a condition that requires a maintenance action. For facilities not owned and maintained by the City, a log of maintenance activity that indicates what actions were taken must be kept on site and be available for inspection by the City.

See the maintenance checklists provided at the end of this manual

Section 6 – Vegetation Maintenance

Maintain established vegetation in all all areas to prevent erosion of exposed soils.

Section 7 – Pollution Source Control Measures

Refer to Volume IV Chapter 3 of the Western Washington Stormwater Management manual for a detailed description of best management practices to prevent pollution at its source. That chapter contains information on automobile washing and maintenance, storage of hazardous materials, yard maintenance, and septic system maintenance.

Section 8 – Annual Cost of Maintenance

See Section 4 for a list of the facilities requiring maintenance. The average annual cost of maintenance is estimated to be \$100 - \$350 per year.