

**STORMWATER MANAGEMENT
OPERATION AND MAINTENANCE PLAN**

Jan.11, 2018

Rev. October 28, 2021

Port Place

Newburyport, Massachusetts

The following Stormwater Management Operation and Maintenance (O&M) Plan has been prepared for the operation and maintenance of the stormwater management system for the development by Evergreen Commons LLC known as Port Place. The maintenance to be completed in perpetuity including repairs or replacement of systems to provide stormwater treatment as per the approved design as recorded in the South Essex County Registry of Deeds.

Owner/Operator: The Port Place Subdivision Homeowners Association, will be responsible for the operation and maintenance of the stormwater management systems outside of the roadway areas within open space area. These stormwater systems include but are not limited to; drainage piping, particle separators, bioretention areas and the constructed storm water wetland. Refer to the Storm water Management Facilities Location Figure for locations of the storm water systems to be maintained.

Long Term Inspection and Maintenance

Upon acceptance of the roadways and completion of homes, maintenance shall be performed as recommended below. Refer to the Grading & Drainage Plans, for drainage structure locations. Inspection and maintenance shall be performed by the Port Place Subdivision Homeowners Association as follows:

1. Snow Removal and Storage: During the winter months, snow shall be plowed from the driveways and walks and not stored or piled in or near the storm water basins.
2. Particle Separators – See attached maintenance procedures for Contech CDS proprietary particle separators. All sediments removed must be disposed of in accordance with all applicable local and state regulations. At a minimum clean each spring on a yearly basis.
3. Bioretention Areas – Inspect the bioretention areas and repair any eroded areas and remove trash on a monthly basis. Prune and remove any dead vegetation each spring and fall. Replace any dead vegetation area each spring. This includes clearing clipping from the regular mowing maintenance. Mow the natural grass vegetation on a regular basis, monthly during growing season. If the soil media fails and infiltration no longer occurs, the entire media and all vegetation must be replaced in either late spring or early summer with similar plantings. Soil media and plants must be in accordance with Massachusetts DEP Stormwater Handbook guidelines and provided detail. If excessive ponding is evident, standing water in bottom of basins more than 72 hours after a rain event with unfrozen soil conditions, the basin soil media, filter fabric and plantings shall be replaced per the provided bioretention basin construction detail and Massachusetts DEP Stormwater Handbook guidelines.

4. Constructed Storm water Wetlands- Inspect the wetlands twice a year during both the growing and non-growing seasons. During these inspections, record and map the following information:
 - The types and distribution of the dominant wetland plants
 - The presence and distribution of planted wetland species
 - The presence and distribution of invasive wetland species (must be removed)
 - Indications that other species are replacing the planted wetland species
 - Percentage of standing water that is unvegetated (excluding the deep water cells)
 - The maximum elevation and the vegetative condition in this zone
 - Stability of the original depth zones and the micro-topographic features
 - Accumulation of sediment in the forebay and micropool; and survival rate of plants (cells with dead plants must be replanted)

5. Sediment Forebay: Sediment forebays are to be cleaned twice per year.
 - Forebays to be cleaned each spring prior to growing season
 - Remove any potential accumulated trash from forebay.
 - Remove sediment from splash pad and sump
 - Replace any dislodged stones from splash pad.
 - Remove any invasive vegetation.
 - Trim and remove overgrown vegetation.
 - Confirm weir berm is not clogged or overgrown, remove debris as required.

6. Drywells: Inspect drywells twice per year, at the end of foliage season and spring after the last snowfall. and at the end of foliage and snow seasons. Remove any debris from top and area surrounding grate. Remove drywell grate and inspect bottom of drywell for any sediment or debris. Remove any accumulated sediment or debris from bottom of drywall. Inspect drywell inlet and outlet pipes for any debris blocking openings. Remove any debris or sticks from pipe openings.

7. Roof Infiltration Trench: Inspect for accumulation of silt, sediment, vegetation, or debris twice per year at end of foliage and snow seasons. Keep stone clean of any vegetation or sediment. If required remove the top layer of stone wash stone clean away from edge trench and replace clean stone into trench. In the event of an infiltration trench failure, the crushed stone shall be removed and washed clean. The non-woven filter fabric that surrounds the trench will need to be disposed of and replaced. Place clean stone on top of the new filter fabric.

Stormwater System Inspection Report

General Information			
Location: Port Place, Newburyport MA			
Date of Inspection		Start/End Time	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Purpose of Inspection			
Weather Information			
Has it rained since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Weather at time of this inspection?			

Site-Specific Stormwater Devices

	Description	Installed and Operating Properly?	Corrective Action Needed	Date for Corrective Action/Responsible Person
1		<input type="checkbox"/> Yes <input type="checkbox"/> No		
2		<input type="checkbox"/> Yes <input type="checkbox"/> No		
3		<input type="checkbox"/> Yes <input type="checkbox"/> No		
4		<input type="checkbox"/> Yes <input type="checkbox"/> No		
5		<input type="checkbox"/> Yes <input type="checkbox"/> No		
6		<input type="checkbox"/> Yes <input type="checkbox"/> No		
7		<input type="checkbox"/> Yes <input type="checkbox"/> No		
8		<input type="checkbox"/> Yes <input type="checkbox"/> No		
9		<input type="checkbox"/> Yes <input type="checkbox"/> No		

	Description	Installed and Operating Properly?	Corrective Action Needed	Date for Corrective Action/Responsible Person
10		<input type="checkbox"/> Yes <input type="checkbox"/> No		
11		<input type="checkbox"/> Yes <input type="checkbox"/> No		
12		<input type="checkbox"/> Yes <input type="checkbox"/> No		
13		<input type="checkbox"/> Yes <input type="checkbox"/> No		
14		<input type="checkbox"/> Yes <input type="checkbox"/> No		
15		<input type="checkbox"/> Yes <input type="checkbox"/> No		

	Description		Corrective Action	Date for Corrective Action/Responsible Person
1	Are all slopes properly stabilized?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
2	Are natural resource areas (e.g., streams, wetlands, etc.) being subjected to erosion?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
3	Are discharge points free of sediment deposits?	<input type="checkbox"/> Yes <input type="checkbox"/> No		

Certification Statement:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Print name: _____

Signature: _____ Date: _____