

TOTAL PROPERTY - 62,080 sq ft / 1.39 acre	IMPERVIOUS to BMP: 40,085 sq ft / 0.92 acre
TOTAL IMPERVIOUS: 50,436 / 1.16 acre	
building - 14,069 sq ft / 0.32 acre	Subcatchment 1(drains to Infiltration chamber via underground conveyence pipe:
parking / drive - 24,900 sq ft / 0.57 acre	-- building - 14,069 sq ft / 0.32 acre
sidewalk - 8,835 sq ft / 0.06 acre	Subcatchment 2(sheet flow from parking lot to surface drains at infiltration chamber)
	--parking lot/driveway- 14,069 sq ft / 0.32 acre
	Subcatchment 3(sheet flow to raingarden)
	--parking lot/playground- 14,069 sq ft / 0.32 acre

landscaping/turf - 11,644 sq ft / 0.27 acre

40.45% Quality Credit Reduction



Application for Stormwater Quality Credit

Materials Required to Complete Application

check when attached	Completed and signed application must include:
X	* Current account information
X	* Scaled drainage map with calculations of impervious areas

Submit Application to:

City of Minneapolis Stormwater Credits
309 2nd Avenue South #300
Minneapolis, MN 55401 - 2238

Questions? Please call Stormwater Utility Office:
(612) 673 - 2766

1). Contact & Account Information

Property Owner	Minneapolis Public Schools
Mailing Address	807 NE Broadway
City, State, Zip Code	Minneapolis, MN 55413
Work Phone	(612) 668-0640
Cell Phone	
E-Mail Address	

School Name	Pratt Community School
Property Address	66 Malcolm Ave S
City, State, Zip Code	Minneapolis, MN 55414
Work Phone	(612) 668-1122
Cell Phone	
E-Mail Address	

Property ID Number (PIN)	702823410107
Utility Account Number	
Monthly Stormwater Utility Fee	\$389.64

2). Measure the impervious area on the property

Impervious area for each site measured via scaled aerial imagery. Total property square footage / acreage taken

from Hennepin County GIS.

	sq ft	acre
Property Total	62,080	1.43
Building	14,069	0.32
Parking / Drive	24,900	0.57
Sidewalk	8,835	0.20
Other: Athletic Court	2,632	0.06
Turf / Landscaping (pervious)	11,644	0.27
Total Impervious Area	50,436	1.16
% Impervious	81.24%	

3). Current Stormwater Utility Fee

Total Impervious Area (from step 2)	Divide by 1530	Multiply \$12.36
50,436	32.96	\$407.39

4). Stormwater Management Practices

Fill out the surface area of each land use type draining directly to the implemented BMP

	sq ft	acre
Building / Parking / Drive	41,601	0.92
		0.00
		0.00
		0.00
		0.00
Total Impervious Area Treated by BMP	41,601	0.94
Total % Impervious Treated	80.90%	

5). Percentage of Impervious Treated

Percentage of the total impervious surface area that drains to the implemented BMP. Used to determine amount stormwater utility fee reduction.

Total Impervious Area Treated by BMP <i>(from step 4)</i>	Divide by Total Impervious (step 2)	% of Impervious Treated for Quality
41,601	50,436	82.50%

6). Stormwater Utility Fee Reduction

Percentage of the total impervious surface area that drains to the implemented BMP. Used to determine amount stormwater utility fee reduction.

% of Impervious Treated for Quality <i>(from step 5)</i>	Divide by 2	% Reduction
80.90%	/ 2	41.25%
		\$ Amount Reduction
		\$160.72

7). Ratepayer Certification

"By signing this application, I certify that I am the authorized representative from Minneapolis Public Schools. I have read this application and understand the terms and conditions of the City of Minneapolis Stormwater Utility Fee Credit Program. I certify that this application and additional attachments accurately describe stormwater management and conveyance of runoff on the property identified on this application. I grant the City of Minneapolis permission to enter this property for the sole purpose of conducting a site inspection of the stormwater management and disposal facilities on this property."



Signature

3/27/2018

Date

Curtis Hartog, Executive Director

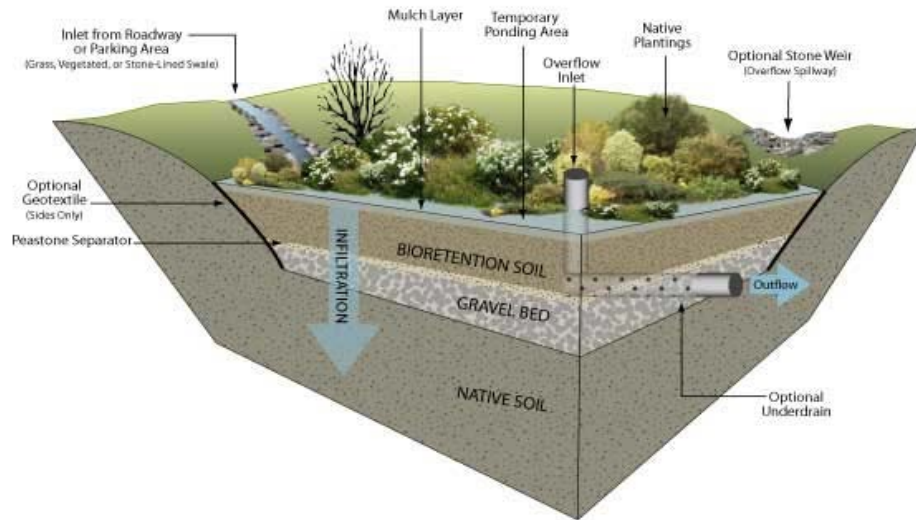
Print Name



Operations & Maintenance Plan

Bioretention / Raingarden

BMP ID		Location	<u>Pratt Community School</u>
Owner	Minneapolis Public Schools	Inspector	<u>Metro Blooms</u>
Date	xxxxx		



Overview of Bioretention / Raingardens

Raingarden Operations:

Bioretention works by routing stormwater runoff into shallow, landscaped depressions. These landscaped depressions are designed to hold and remove many of the pollutants in a manner similar to natural ecosystems. During storms, runoff ponds above the mulch and engineered soil mix in the system. Runoff from larger storms is generally diverted past the facility to the storm drain system. The runoff remaining in the bioretention facility filters through the Engineered Soil Mix. The filtered runoff can either be designed to enhance groundwater infiltration or can be collected in an under drain and discharged per local stormwater management requirements.

Raingarden Inspection:

Inspection of the rain garden is required after each major rain (more than 1" of rainfall) or at least 4 times per year during the growing season (March - November).

During inspection the following should be noted on the inspection form

- *Presence of any trash, debris and soil accumulation*
- *Presence of weeds*
- *Depth of mulch material present*
- *Condition of plants (note any plants that appear to be dead or dying)*
- *Condition of rain garden overflow structure.*
- *Visible indication of rain garden clogging or overtopping.*

Raingarden Maintenance:

Routine rain garden maintenance shall be done as prescribed in the approved plan, and when an inspection reveals any of the following conditions:

- *Trash, debris and soil accumulation*
- *Soil accumulation*
- *Rain Garden Design depth is not sufficient*
- *Presence of weeds*
- *Presence of invasive plants or weeds (Canada Thistle, Garlic Mustard and any tree seedlings)*
- *Mulch depth less than 3 inches (Use only shredded hardwood mulch material)*
- *Overflow structure in need of cleaning (ex: grate covered with grass/leaves)*
- *Any damage to the inlet structure exists.*
- *Any indication that rain garden has insufficient capacity (debris on pavement surrounding the rain garden, etc.).*

Inspection Activities - Bioretention / Raingardens

Activity	Frequency	Outcome / Actions
<i>Visual inspection for trash and debris in pre-treatment, inlet, bioretention area, and outlet.</i>	<i>Monthly and/or following large storm events</i>	<i>Notify Metro Blooms of need for service.</i>
<i>Erosion in pretreatment, inlet, bioretention area, and outlet</i>	<i>Monthly and/or following large storm events</i>	<i>Notify Metro Blooms of need for service.</i>
<i>Sediment accumulation in pretreatment, inlet, bioretention area, and outlet</i>	<i>Monthly and/or following large storm events</i>	<i>Notify Metro Blooms of need for service.</i>
<i>Vegetation & Mulch</i>	<i>Annual inspection for dead or diseased plants and void areas; Monthly inspections during growing season for weeds and vegetation damage.</i>	<i>Notify Metro Blooms of need for service.</i>
<i>Inspect inlet and outlet structural components (if applicable)</i>	<i>As part of all inspection visits</i>	<i>Notify Metro Blooms of need for service of any observed structural damage</i>
<i>Inspect for standing water</i>	<i>Annually and/or following large storm events</i>	<i>Notify Metro Blooms of need for service if there is standing water at the surface or in observation wells (underdrain systems) 48 hours after a storm event</i>
<i>Mulch condition and depth</i>	<i>Annually and/or following large storm events</i>	<i>Mulch depth should be 2" - Mulch using only a double shredded hardwood mulch</i>

Maintenance Activities - Bioretention / Raingardens

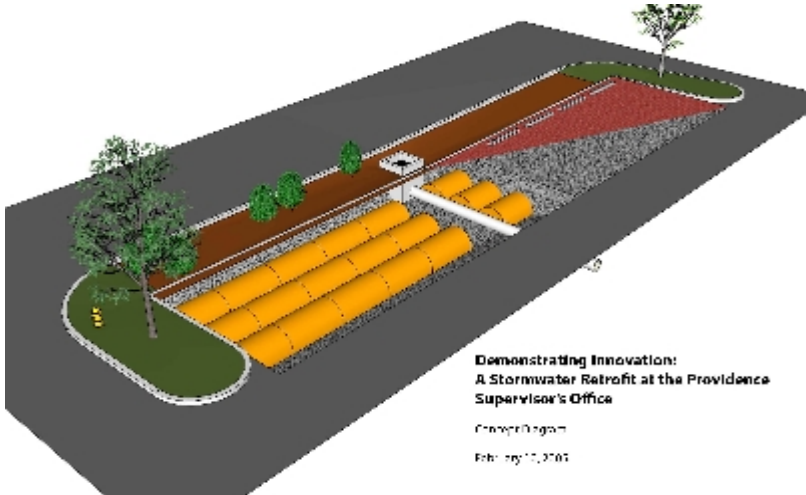
Activity	Frequency	Procedure
<i>Trash and debris removal from pretreatment, inlets, bioretention area, and outlets</i>	<i>Spring, Summer, Fall maintenance visits</i>	<i>Handwork by MN Conservation Corps with Metro Blooms Oversight</i>
<i>Erosion repair</i>	<i>When Identified</i>	<i>Handwork by MN Conservation Corps with Metro Blooms Oversight</i>
<i>Sediment removal</i>	<i>As required when infiltration is reduced.</i>	<i>Handwork by MN Conservation Corps with Metro Blooms Oversight</i>
<i>Vegetation management</i>	<i>As needed based upon inspection</i>	<i>Follow appropriate vegetation management guidelines. Handwork by MN Conservation Corps with Metro Blooms Oversight</i>
<i>Mulching</i>	<i>Replace all mulch every 2-3 years and as needed to cover eroded or void areas</i>	<i>Handwork by MN Conservation Corps with Metro Blooms Oversight</i>
<i>Standing Water</i>	<i>As needed based upon failure to drain within 48 hours of a storm event</i>	<i>Handwork by MN Conservation Corps with Metro Blooms Oversight. Handwork (sediment removal; surface raking; core/disc aeration; punching holes in filter fabric lining, etc.)</i>
<i>Soil Replacement</i>	<i>When infiltration capacity is reduced</i>	<i>Remove clogged layer of soil from bioretention area with appropriate equipment and replace with new material. By MN Conservation Corps with Metro Blooms Oversight</i>
<i>Repair structural components</i>	<i>As needed per inspection</i>	<i>Dependent on type of damage; Repair structure per manufacturer's recommendations. By School facilities department unless designated</i>



Operations & Maintenance Plan

Underground Infiltration Structure

BMP ID		Location	<u>Pratt Community School</u>
Owner	Minneapolis Public Schools	Inspector	<u>Metro Blooms / Pratt Facilities</u>
Date	xxxxx		



**Demonstrating Innovation:
A Stormwater Retrofit at the Providence
Supervisor's Office**
Covington
February 2005

Overview of Underground Infiltration Structures

Underground Infiltration Structure Operations:

Underground Infiltration Structures work by routing stormwater runoff into large engineered storage structures constructed underground. These structures are designed to hold and remove many of the pollutants by slowing the volumetric flow of stormwater runoff and allowing that runoff time necessary for infiltration into the existing native soils on the site. During storms, runoff will pool within the system. The pooled runoff in the infiltration facility slowly seeps out of the pip structure and filters through engineered soil mix before passing into the surrounding native soils. The filtered runoff can enhance groundwater infiltration and overflow is discharged per local stormwater management requirements through the public system.

Underground Infiltration Structure Inspection:

Inspection of the Underground Infiltration Structure is required after each major rain (more than 1" of rainfall) or at least 4 times per year during the rain season (March - November).

During inspection the following should be noted on the inspection form:

- *Presence of any trash, debris and / or sediment accumulation within the pretreatment, underground, and overflow structures.*
- *Condition of pretreatment and overflow structures (inlets and outlets).*
- *Visible indication of clogging or overtopping.*
- *Presence of sinkholes or depressions in the landscape on the ground surface above the structure.*

Dewatering / infiltration of runoff through the system

Underground Infiltration Structure Maintenance:

Routine maintenance shall be done as prescribed in the approved plan, and when an inspection reveals any of the following conditions:

- *Trash, debris accumulation.*
- *Sediment accumulation.*
- *Erosion.*
- *Compromised structural integrity of the feature.*
- *Overflow structure in need of cleaning (ex: grate covered with debris/grass/leaves)*
- *Any damage to the inlet structure exists.*
- *Any indication that infiltration structure has insufficient capacity.*
- *Any standing water within the system 48 hours after a rain event inspection.*

Inspection Activities - Undreground Infiltration Structure

Activity	Frequency	Outcome / Actions
<i>1. Visual inspection for trash and debris in pre-treatment, inlet, underground area, and/or outlet.</i>	<i>Monthly and following large storm events</i>	<i>Pratt facility maintenance staff will remove trash and debris as needed. (maintenance activity #1)</i>
<i>2. Visual inspection for erosion around inlet and outlet structures (if applicable)</i>	<i>Monthly and following large storm events</i>	<i>Pratt facility maintenance staff will repair erosion damage as needed, or contract with service provider. (maintenance activity #2)</i>
<i>3. Sediment accumulation in pretreatment, inlet, underground structure, and/or outlet</i>	<i>Every 6 monthes</i>	<i>Pratt facility maintenance staff will remove accumulated sediment as needed, or contract with service provider. (maintenance activity #3)</i>
<i>4. Inspect structural components of inlet and outlet structures</i>	<i>As part of all inspection visits</i>	<i>Pratt facility maintenance staff will inspect structural components of inlets and outlets as part of all inspection visits. (maintenance activity #4)</i>
<i>5. Inspect ground surface above underground structure for sinkholes or other unusual depression areas</i>	<i>As part of all inspection visits</i>	<i>Pratt facility maintenance staff will inspect ground above underground structure as part of each inspection visit. (maintenance activity #5)</i>
<i>6. Inspect for standing water</i>	<i>Annually and following large storm events</i>	<i>Pratt facility maintenance staff will provide repairs in system or contract with service provider if water fails to drain within 72 hours. (maintenance activity #6)</i>

Maintenance Activities - Underground Infiltration Structure

Activity	Frequency	Procedure
1. Trash and debris removal from pretreatment, inlets, underground structure, and/or outlets.	As needed per inspection.	Pratt facility maintenance staff will remove trash and debris as needed.
2. Erosion repair	As needed per inspection.	Pratt facility maintenance staff will repair erosion damage as needed, or contract with service provider.
3. Sediment removal from pretreatment, inlet, underground, and outlet structures	As required when infiltration is reduced or annually or as required when sediment exceeds manufacturer's specifications.	Pratt facility maintenance staff will remove accumulated sediment as needed, or contract with service provider.
4. Clean/Fix structural components	As needed based upon inspection	Pratt facility maintenance staff will repair structure per manufacturer's recommendations or contract with service provider to make repairs.
5. Repair of underground structures	As needed based upon inspection	Pratt facility maintenance staff will provide repairs in system or contract with service provider to repair system as per manufacturer / engineer recommendations.
6. Dewatering	As needed per inspection, when infiltration capacity is reduced and water has failed to drain within 72 hours.	Pratt facility maintenance staff will provide repairs in system or contract with service provider if water fails to drain within 72 hours.