Northeast Ohio Regional Sewer District

November 7, 2019

Mr. Timothy Tramble
Executive Director
Burten, Bell, Carr Development Inc
7201 Kinsman Rd #104, Cleveland, OH 44104
Cleveland, OH 44104

Re: Annual Inspection with Concerns
Project Title: Colfax Green Links

Dear Mr. Tramble:

The Northeast Ohio Regional Sewer District (District) supports the strategic implementation and long-term maintenance of green infrastructure that protects, preserves, enhances, and restores natural hydrologic function.

The attached Inspection Report provides review and recommendations of the above project in response to the Northeast Ohio Regional Sewer District's Small Scale Stormwater Demonstration Projects (S3DP) Grant or Green Infrastructure Grant (GIG) Program Agreement. As a grantee or sub-grantee, you are responsible for the long-term operation and maintenance of the project. District staff recently completed an annual inspection of your project, and as a result operation and maintenance concerns have been identified that need attention, please see attached inspection report for details.

Once the action steps have been completed, please provide email confirmation (including pictures) to indicate that maintenance concerns have been addressed. Email for confirmation should be sent to Crystal Davis at DavisC@neorsd.org.

Please contact me, Crystal Davis, at 216-881-6600 ext. 6447 with any questions.

Sincerely,

Crystal Davis
Watershed Programs Specialist
davisc@neorsd.org

Enclosure

Bioretention Area Inspection and Maintenance Checklist

Green Infrastructure Site Location and Address: Colfax Ave & East 75th Street and & 541 Kinsman Road, Cleveland, OH, 44104		
Date and Time: 10:35am 10/31/2019	**Weather Conditions:** Rain	**Date of Last Inspection: N/A**
Inspector and Title: Crystal Davis, Watershed Programs Specialist, Spencer Nash, Watershed Programs Intern		
Site Plan or As-Built Plan Available: YES		

Inspection Item	Images
DEWATERING	 **Photo 1.**
Standing water is present after 24 hours. If yes, describe sheen, color, or smell. ☐ Yes ☑ No ☐ NA	
Action needed. ☐ Yes ☑ No ☐ NA	
Comments: No additional comments	
INLETS	
Inlets are in poor structural condition. ☐ Yes ☑ No ☐ NA	
Sediment has accumulated and/or is blocking the inlets. ☑ Yes ☐ No ☐ NA	
Erosion is occurring around the inlets. ☐ Yes ☑ No ☐ NA	
Action needed. ☑ Yes ☐ No ☐ NA	
Comments: Both trench drains located on the right side of East 75th Street, facing North, are clogged with sediment and debris. Stormwater is bypassing the drains. Drains will need to be cleared (**Refer to photo 1**).	 **Photo 2.**
VEGETATION	
Vegetation is wilting, discolored, or dying due to disease or stress. ☐ Yes ☑ No ☐ NA	
Vegetation needs to be controlled through mowing or manual removal. ☐ Yes ☑ No ☐ NA	
Action needed. ☐ Yes ☑ No ☐ NA	
Comments: No additional comments.	
BIORETENTION MAIN INFILTRATION AREA	
Trash and debris have accumulated. ☑ Yes ☐ No ☐ NA	
Sediment has accumulated at the surface. ☐ Yes ☑ No ☐ NA	
Topmost layer is caked or crusted over with sediment. ☐ Yes ☑ No ☐ NA	
Erosion is evident. ☐ Yes ☑ No ☐ NA	
Mulch is compacted. ☐ Yes ☑ No ☐ NA	
Sinkholes or animal borrows are present. ☐ Yes ☑ No ☐ NA	

Action needed. ☑ Yes ☐ No ☐ NA	
Comments: Trash and debris has accumulated in the cell (**Refer to photo 2**).	**Photo 3.**
SIDE SLOPES AND EMBANKMENT	
Erosion is evident. ☐ Yes ☑ No ☐ NA	
Sinkholes or animal borrows are present. ☐ Yes ☑ No ☐ NA	
Action needed. ☐ Yes ☑ No ☐ NA	
No additional comments.	
OUTLETS AND OVERFLOW STRUCTURE (i.e., catch basin)	
Outlets or overflow structures in poor structural condition. ☐ Yes ☑ No ☐ NA	
Sediment, trash or debris is blocking the outlets or overflow structure. ☐ Yes ☑ No ☐ NA	
Erosion is occurring around the outlets or overflow structure. ☐ Yes ☑ No ☐ NA	
Height from surface of practice to top of overflow structure is insufficient to allow for ponding during rain events. ☐ Yes ☑ No ☐ NA	
Action needed. ☐ Yes ☑ No ☐ NA	
Comments: No additional comments.	

Summary:

1. **Both trench drains need to be cleared of trash and debris (Refer to photo 1).**
2. **Cell on the right side of East 75th street has collected trash. Remove trash and dispose of properly (Refer to photo 2).**
3. **Stone placed at the end of the first trench drain located on the right side of East 75th is too high. This creates a small dam and does not allow water to enter the cell properly. Reduce stone height and spread out stone (Refer to photo 3).**

Bioretention Area Inspection and Maintenance Checklist

Green Infrastructure Site Location and Address: Colfax Ave & East 75th street and & 541 Kinsman Road, Cleveland, OH, 44104		
Date and Time: 10:35am 10/31/2019	**Weather Conditions:** Rain	**Date of Last Inspection: N/A**
Inspector and Title: Chris Hartman, CPESC, CESSWI, CPSWQ, Stormwater Technical Specialist, Crystal Davis, Watershed Programs Specialist, Spencer Nash, Watershed Programs Intern		
Site Plan or As-Built Plan Available: YES		

Inspection Item	Images
DEWATERING	 **Photo 1.**
Standing water is present after 24 hours. If yes, describe sheen, color, or smell. ☐ Yes ☑ No ☐ NA	
Action needed. ☐ Yes ☑ No ☐ NA	
Comments: No additional comments.	
INLETS	
Inlets are in poor structural condition. ☐ Yes ☑ No ☐ NA	
Sediment has accumulated and/or is blocking the inlets. ☐Yes ☑ No ☐ NA	
Erosion is occurring around the inlets. ☐Yes ☑ No ☐ NA	
Action needed. ☐Yes ☑ No ☐ NA	
Comments: No additional comments.	
VEGETATION	
Vegetation is wilting, discolored, or dying due to disease or stress. ☐ Yes ☑ No ☐ NA	
Vegetation needs to be controlled through mowing or manual removal. ☐ Yes ☑ No ☐ NA	
Action needed. ☐ Yes ☑ No ☐ NA	
Comments: No additional comments.	
BIORETENTION MAIN INFILTRATION AREA	
Trash and debris have accumulated. ☐ Yes ☑ No ☐ NA	
Sediment has accumulated at the surface. ☐ Yes ☑ No ☐ NA	
Topmost layer is caked or crusted over with sediment.	

☐ Yes ☑ No ☐ NA	
Erosion is evident. ☐ Yes ☑ No ☐ NA	
Mulch is compacted. ☐ Yes ☑ No ☐ NA	
Sinkholes or animal borrows are present. ☐ Yes ☑ No ☐ NA	
Action needed. ☐ Yes ☑ No ☐ NA	
Comments: No additional comments.	
SIDE SLOPES AND EMBANKMENT	
Erosion is evident. ☐ Yes ☑ No ☐ NA	
Sinkholes or animal borrows are present. ☐ Yes ☑ No ☐ NA	
Action needed. ☐ Yes ☑ No ☐ NA	
Comments: No additional comments.	
OUTLETS AND OVERFLOW STRUCTURE (i.e., catch basin)	
Outlets or overflow structures in poor structural condition. ☐ Yes ☑ No ☐ NA	
Sediment, trash or debris is blocking the outlets or overflow structure. ☐ Yes ☑ No ☐ NA	
Erosion is occurring around the outlets or overflow structure. ☐ Yes ☑ No ☐ NA	
Height from surface of practice to top of overflow structure is insufficient to allow for ponding during rain events. ☐ Yes ☑ No ☐ NA	
Action needed. ☐ Yes ☑ No ☐ NA	
Comments: No additional comments.	
Summary: 1. **Cell is in good condition and is ponding water correctly.**	

Bioretention Area Inspection and Maintenance Checklist

Green Infrastructure Site Location and Address: 7531 Kinsman Rd, Cleveland, OH 4410.		
Date and Time: 10:40am 10/31/2019	**Weather Conditions:** Rain	**Date of Last Inspection: N/A**
Inspector and Title: Crystal Davis, Watershed Programs Specialist, Spencer Nash, Watershed Programs Intern		
Site Plan or As-Built Plan Available: YES		

Inspection Item	Images
DEWATERING	
Standing water is present after 24 hours. If yes, describe sheen, color, or smell. ☐ Yes ☑ No ☐ NA	
Action needed. ☐ Yes ☑ No ☐ NA	
Comments: No additional comments.	
INLETS	
Inlets are in poor structural condition. ☐ Yes ☑ No ☐ NA	
Sediment has accumulated and/or is blocking the inlets. ☐Yes ☑ No ☐ NA	
Erosion is occurring around the inlets. ☐Yes ☑ No ☐ NA	 **Photo 1.**
Action needed. ☑Yes ☐No ☐ NA	
Comments: The District needs clarification on how stormwater is getting to the cell (**Refer to photo 2**). If the inlet goes from the roof to main cell area, the inlet needs to be clear of debris (**Refer to photo 1).**	 **Photo 2.**
VEGETATION	
Vegetation is wilting, discolored, or dying due to disease or stress. ☐ Yes ☑ No ☐ NA	
Vegetation needs to be controlled through mowing or manual removal. ☐ Yes ☑ No ☐ NA	
Action needed. ☐ Yes ☑ No ☐ NA	
Comments: No additional comments.	
BIORETENTION MAIN INFILTRATION AREA	
Trash and debris have accumulated. ☐Yes ☑ No ☐ NA	
Sediment has accumulated at the surface. ☐ Yes ☑ No ☐ NA	
Topmost layer is caked or crusted over with sediment. ☐ Yes ☑ No ☐ NA	
Erosion is evident.	

☐ Yes ☑ No ☐ NA	
Mulch is compacted. ☐ Yes ☑ No ☐ NA	
Sinkholes or animal borrows are present. ☐ Yes ☑ No ☐ NA	
Action needed. ☐ Yes ☑ No ☐ NA	
Comments: No additional comments.	
SIDE SLOPES AND EMBANKMENT	
Erosion is evident. ☐Yes ☑ No ☐ NA	
Sinkholes or animal borrows are present. ☐ Yes ☑ No ☐ NA	
Action needed. ☐Yes ☑ No ☐ NA	
No additional comments.	
OUTLETS AND OVERFLOW STRUCTURE (i.e., catch basin)	
Outlets or overflow structures in poor structural condition. ☐ Yes ☑ No ☐ NA	
Sediment, trash or debris is blocking the outlets or overflow structure. ☐ Yes ☑ No ☐ NA	
Erosion is occurring around the outlets or overflow structure. ☐ Yes ☑ No ☐ NA	
Height from surface of practice to top of overflow structure is insufficient to allow for ponding during rain events. ☐Yes ☑ No ☐ NA	
Action needed. ☐Yes ☑ No ☐ NA	
Comments: No additional comments.	
Summary: 1. **Provide an explanation on how stormwater is getting into the cell. Being on site, it looks like the downspouts are connected. Need clarification on whether they are connected to local storm drains or conveyed to the bioretention cell (Refer to photos 1 & 2).**	