

CHECKLIST FOR INSPECTION OF BIORETENTION SYSTEM/TREE FILTERS

Location: Morrill, STG, 6011 S. Rockwell

Inspector: Chris Bourbois

Date: August 15th 2023

Time: 10:30AM

Site Conditions: Sunny, 68°

Days Since Last Rain Event: 1

Inspection Items	Satisfactory (S) or Unsatisfactory (U)	Comments/Corrective Action
1. Initial Inspection After Planting		The installed plants left here are healthy, but there are few of them and much of the site is bare ground and weedy species that are struggling to establish (purslane, crabgrass, quackgrass). Luckily, despite the bare ground there is no evidence yet of preferential flow or inlet/outlet problems.
Plants are stable, roots not exposed	S <u>U</u>	
Surface is at design level, no evidence of preferential flow/shoving	<u>S</u> U	
Inlet and outlet/bypass are functional	<u>S</u> U	
2. Debris Cleanup (1 time/year minimum, Spring/Fall)		The site is clean and contains no dead leaves, dead vegetation, or litter. The trees on site are healthy and not in need of pruning, while the vegetation is not dense enough currently to need mowing.
Litter, leaves, and dead vegetation removed from the system	<u>S</u> U	
Prune/mow vegetation	<u>S</u> U	
3. Standing Water (1 time/year and/or after large storms)		No standing or pooled water one day after rain. Outlet drain is not vegetated but is like the rest of the site and does not show evidence of pooling water.
No evidence of standing water after 24-48 hours since rainfall	<u>S</u> U	
4. Vegetation Condition and Coverage		Vegetation conditions are fairly poor here overall. Although the trees (swamp white oaks and american hophornbeams) and shrubs are good choices and in good shape, the complete lack of a ground layer of vegetation is a serious problem. The lack of real invasive species allows for an easier path to an effective native community than at other sites, but it still can not be said to be in good shape.
Vegetation condition good with good coverage (typically >75%)	S <u>U</u>	
Final Comments		

This site is in fairly poor shape, but the lack of invasive species and the healthy tree and shrub populations should allow for easier establishment of a native ground cover community. In the higher-lying areas, it should be as simple as seeding and planting plugs while maintaining the mulching of the site. The mulch seems to have helped prevent invasive species establishment in these areas, so using that to cover areas that are not vegetating should be continued. The lower-lying area may be more complicated to effectively vegetate. It seems to be a fairly wet system, enough so that even the crabgrass/quackgrass/purslane is having trouble establishing. Given this fact, plants installed in this area will need a clear preference for wet areas, perhaps enough that only obligate wetland plants should be installed. Additionally, there should be some consideration for placing large flagstones or a number of smaller rocks underneath the boardwalk areas. The areas underneath these boardwalks receive little light and are unlikely to be effectively vegetated by native species. The areas may also be too marginal for invasive species, but rock placements will ensure invasive species cannot grow there while also slowing down stormwater on its way to the drain outlet. It would also probably be best to start with plugs, since the qualities of the site would likely make it hard for seedlings to establish without being washed away by stormwater. A combination of sedge and rush plugs and wetland grass plugs (perhaps bluejoint grass, prairie cordgrass, and/or switchgrass) could be the start of revegetating the lower-lying areas, although the site should be monitored to determine if the trouble with vegetation is being caused by the wetness or the shadiness of the area.