



Village of Menomonee Falls  
W156 N8480 Pilgrim Road  
Menomonee Falls, WI 53051-3140  
Telephone: (262) 532-4200

## STORMWATER MANAGEMENT FACILITIES OPERATION AND INSPECTION REPORT

Quarter Section NE1/4, Sec 34 Name of Business/Subdivision Ravenswood Subdivision  
Property Tax ID Number 0133.216 Address of Property \_\_\_\_\_  
Date: 8/14/2021 \_\_\_\_\_

Dry Pond	
Wet Pond	X
Other	

Pond ID: SWP34n003

Location of Pond Outlot 3 – Pond #2  
Northern Pond

Year Pond Constructed 2004 Year of Last Certification 2014

Compliance Verification	Design	Actual	Compliant Yes No	Comments ( Condition of Structure)
<b>Primary Outlet Pipe</b>				<b>Outlet Pipe Material</b>
Opening Diameter (inches)	12"	12"	X	Outlet pipe material is RCP.  RCP is in good condition and no evidence of sediment accumulation within pipe, appears to be operating as originally intended.
Upstream Invert	801.20	800.78	X	
Downstream Invert	799.17	799.25	X	
Length (feet)	78	74	X	
Slope (%)	2.6%	2.07%	X	
<b>Secondary Outlet Pipe</b>	(If Applicable)			<b>Outlet Pipe Material</b>
Opening Diameter (inches)				
Upstream Invert				
Downstream Invert				
Length (feet)				
Slope (%)				
<b>Riser</b>	(If Applicable)			<b>Riser Material</b>
Opening Diameter (inches)	24"x36"	24"x36"	X	Riser is a concrete structure with a metal inlet grate placed on top
Elevation	807.90	807.65	X	
<b>Upper Discharge Control</b>	(If Applicable)			
Opening Diameter (inches)				
Elevation				

Compliance Verification	Design	Actual	Compliant Yes    No		Comments
<b>Lower Discharge Control</b>	(If Applicable)				
Opening Diameter (inches)	5"	5"	X		Orifice is in good condition and operating as intended, however, it appears that there is some sediment or dead vegetation blocking some of the water trying to flow through the system
Elevation	801.20	800.78	X		
<b>Other (Description)</b>					
Opening Type and Size (inches)					
Elevation					
<b>Emergency Spillway</b>					
Elevation	808.90	808.50	X		
Length of spillway (feet)	20'	18'	X		Some weedy vegetation growing, spray or hand remove
<b>Embankment</b>	Present Yes    no		Comments/Maintenance Requirements		
Unauthorized Plantings, trees, or woody vegetation	X		There are couple of trees that reside within the active storage area of the wet pond that should be moved and or cut down. Trees can be installed above the high water elevation of 808.24. The tree located along the west edge of the pond has its root system showing and this is causing erosion issues around the tree. Tree and stump should be removed and the area should be filled in and covered with erosion mat and seed.		
Animal burrows or slope erosion	X				
<b>Storm Sewer Outfalls</b>	Type & Size		Location		Comments
Outfall 1	RCP, 24"		Southwest Corner		There is evidence that there is sediment accumulation within the riprap outfall area, however, at this time, it does not seem to be hindering the conveyance of stormwater and there are no signs of erosion or movement of sediment into the wet pond. Pipe is in good working condition and sediment is not accumulating within the pipe itself.
Outfall 2	RCP, 15"		Northwest Corner		The invert of this pipe is at 801.63. The invert of the outlet structure orifice is 880.78. Therefore no water should be pooling at the bottom of the pipe. This suggests that the orifice is plugged, not allowing water to flow through the system properly. Otherwise, the pipe is in good working condition. There is very little riprap at the end of the pipe, however, with the water elevation currently above the bottom of the pipe, erosion at the end of the pipe is not of concern.
Outfall 3					

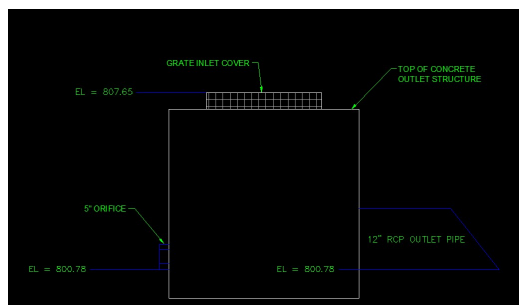
Storage Properties	Design	Actual	Compliant Yes No		Not Applicable	Equipment Used
Normal Water Elevation (Wet Ponds)	801.20	801.73	X			Drone technology and laser level To determine elevations and contours  HydroCAD 10.0 to determine areas and pond volumes
Design High Water Elevation	808.24	808.25	X			
Area at Normal Water Elevation (Ac) (Wet Ponds)	0.27	0.29	X			
Area at Design High Water Elevation (Ac)	0.77	0.76	X			
Active Storage Available (Ac-Ft)*	3.5	3.43	X			
Lowest Elevation at Top of Embankment (If Applicable)	809.90	809.75	X			
Average Elevation at Top of Embankment (If Applicable)	809.90	809.85	X			
Maximum Bottom Elevation	795.00	796.81		X		The majority of the sediment accumulation is near the outlet structure and the southwest infall pipe. These areas have anywhere from 16" of sediment to 22" of sediment accumulation. There is a spot closer to the outlet structure where the sediment accumulation is about 48" thick. It is recommended that these areas of sediment be removed and the pond returned to its original shape and volume.
Average Pond Bottom Elevation	795.00	795.95	X			
Pond Bottom Area (Ac)		0.12	X			
Maximum Pond Depth	6.2 ft	7.25 ft	X			
Average Pond Depth	6.2 ft	5.78 ft	X			
Average Permanent Pool Depth (Wet Ponds)	6.2 ft	5.78 ft	X			

\*To Determine Active Storage  $V = (H/3)(A1 + A2 + \sqrt{A1 \cdot A2})$

Wet Ponds Use  $H$  = Height of Section ,  $A1$  = area at normal water elevation,  $A2$  = area at top section

Dry Ponds Use  $H$  = Height of Section,  $A1$  = pond bottom area,  $A2$  = area at top section

*Sketch Outlet or Attach to Document*



*View of overall wet pond and outlet structure.*



*View of exposed roots and erosion.*



*View of emergency overflow weir.*



*View of southwest infall pipe.*





Northwest infall pipe.

*Attach As-built Survey to the Document for the first report submission*

Inspection Firm: Drainage Doctor, LLC

Phone Number: 608.535.9380

Address: 416 W Red Pine Circle

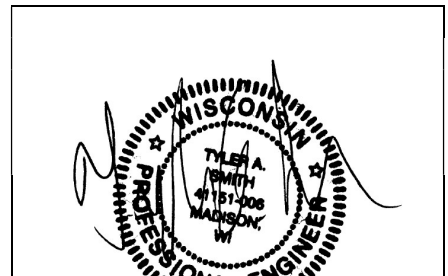
Dousman, WI 53118

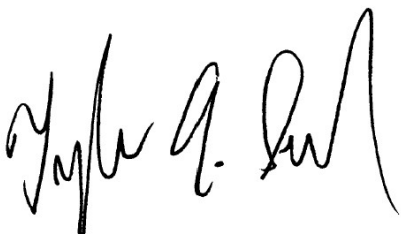
Inspector Name : Tyler Smith, PE

Inspection Date: 06.01.2021

Certifying Professional Name: Tyler Smith, PE

Phone Number: 608.535.9380



<i>Date:</i>  08.14.2021	<i>Signature:</i>  	<i>Affix Seal Here</i>
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