



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 SE 1/4 Sec. Name of Business/Subdivision Heritage Reserve Holdings, LLC
13-8-20
 Property Tax ID Number MNFV00519 Address of Property Heritage Reserve
44052
 Date 5/29/2015

Dry Pond	X
Wet Pond	
Other	

Location of Pond Southeast portion of property
 Pond ID: SWP13S017

Year Pond Constructed 2005 Year of Last Certification 2014 Design data based on Stantec Memo dated August 5, 2014, File No. 1938990300

Compliance Verification	Design	Actual	Compliant		Comments (Condition of Structure)
			Yes	No	
Primary Outlet Pipe					
Opening Diameter (inches)	24"	24"	X		24" Reinforced Concrete Pipe
Upstream Invert	764.33	764.35	X		
Downstream Invert	763.71	763.89	X		
Length (feet)	41'	40'	X		
Slope (%)	1.51%	1.15%	X		
Secondary Outlet Pipe (If Applicable)					
Opening Diameter (inches)	_____	_____			Outlet Pipe Material
Upstream Invert	_____	_____			
Downstream Invert	_____	_____			
Length (feet)	_____	_____			
Slope (%)	_____	_____			
Riser (If Applicable)					
Opening Diameter (inches)	_____	_____			Riser Material
Elevation	_____	_____			
Upper Discharge Control (If Applicable)					
Opening Diameter (inches)	_____	_____			
Elevation	_____	_____			

Compliance Verification	Design	Actual	Compliant Yes No		Comments	
Lower Discharge Control	(If Applicable)					
Opening Diameter (inches)	_____	_____				
Elevation	_____	_____				
Other (Description)						
Opening Type and Size (inches)	_____	_____				
Elevation	_____	_____				
Emergency Spillway						
Elevation	766.19	766.18	X			
Length of spillway (feet)	20.0	10.0	X			
Embankment	Present Yes No		Comments/Maintenance Requirements			
Unauthorized Plantings, trees, or woody vegetation		X				
Animal burrows or slope erosion		X				
Storm Sewer Outfalls	Type & Size		Location		Comments	
Outfall 1	RCP 15"		North portion of pond			
Outfall 2						
Outfall 3						
Storage Properties	Design	Actual	Compliant Yes No		Not Applicable	Equipment Used
Normal Water Elevation (Wet Ponds)	_____	_____				HWL Calculated by HydroCAD Area at HWL Calculated by HydroCAD Trimble R6 GPS Lowest Bottom Elevation
Design High Water Elevation	766.65	766.50	X			
Area at Normal Water Elevation (Ac) (Wet Ponds)	_____	_____				
Area at Design High Water Elevation (Ac)	0.171	0.156	X			
Active Storage Available (Ac-Ft)*	0.325	0.305	X			
Lowest Elevation at Top of Embankment (If Applicable)	766.19	766.86	X			
Average Elevation at Top of Embankment (If Applicable)	767.00	767.33	X			
Maximum Bottom Elevation	764.00	764.00	X			
Average Pond Bottom Elevation	764.00	764.00	X			
Pond Bottom Area (Ac)	0.025	0.029	X			
Maximum Pond Depth	2.19	2.86	X			
Average Pond Depth	2.19	2.86	X			
Average Permanent Pool Depth (Wet Ponds)	_____	_____				

*To Determine Active Storage $V=H/3(A1+A2+(A1 \times A2)^{1/2})$

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

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

<p><i>Outlet Sketch</i></p> <p><i>The Outlet Structure is a typical 24" Reinforced Concrete Pipe with End Wall</i></p>	<p><i>See Attached Photo Document</i></p>
	<p><i>See Attached Photo Document</i></p>

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

Inspection Firm: JSD Professional Services, Inc Inspector Name : Ryder Fischer
 Phone Number: (262) 513-0666 Inspection Date: 5/29/2015
 Address: N22 W22931 Nancys Ct.
 Suite 3
 Waukesha, WI 53186

Certifying Professional Name: Rizal Iskandarsjach P.L.S., P.E.
 Phone Number: (262) 513-0666



<p>Date:</p> <p><i>7/31/15</i></p>	<p>Signature:</p> <p><i>Rizal Iskandarsjach</i></p>
------------------------------------	---



Figure 1- Overview of Pond Looking South



Figure 2- View of the 24" RCP Outlet Structure



Figure 3- View of 15" RCP Outfall Located on the North End of Pond