



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 26 NE Name of Business/Subdivision MILL RIDGE NO. 5 SUBD
Property Tax ID Number 0101158 Address of Property (INDEX NO. 01.15)

Dry Pond	X
Wet Pond	
Other	

Description: SWP26N002
P-0144
Location Of Pond WEST OF LILLY RD
NORTH OF MANHARDT DR

Year Pond Constructed 2001 Year of Last Certification 2013

Compliance Verification	Design (Non-AsBuilt)	Actual (GPS)	Compliant Yes No	Comments (Condition of Structure)
Primary Outlet Pipe (ST012544-ST012543)				Outlet Pipe Material
Opening Diameter (inches)	12" CMP	12" CMP		***REPAIR NEEDED*** 12" CMP PARTIALLY CRUSHED AT POND SIDE OF BERM
Upstream Invert (ST012544)	769.50	769.41		
Downstream Invert (ST012543)	769.25	769.33		
Length (feet)	70.0 FT	73.5 FT		
Slope (%)	0.0036',	0.0011',		ELEVATIONS TO VARY SLIGHTLY FROM YEAR TO YEAR DUE TO GPS TECHNOLOGY
Secondary Outlet Pipe (1 of 3) (ST012500-ST012499)				Outlet Pipe Material
Opening Diameter (inches)	12" CMP	12" CMP		12" CMP IN GOOD CONDITION
Upstream Invert (ST012500)	769.50	769.68		
Downstream Invert (ST012499)	769.25	769.47		
Length (feet)	70.0 FT	71.1 FT		
Slope (%)	0.0036',	0.0030',		
Secondary Outlet Pipe (2 of 3) (ST012501-ST012502)				Outlet Pipe Material
Opening Diameter (inches)	12" CMP	12" CMP		12" CMP IN GOOD CONDITION
Upstream Invert (ST012501)	769.50	769.72		
Downstream Invert (ST012502)	769.25	769.08		
Length (feet)	70.0 FT	61.4 FT		
Slope (%)	0.0036',	0.0104',		

Compliance Verification	Design (Non-AsBuilt)	Actual (GPS)	Compliant Yes No		Comments (Condition of Structure)
Secondary Outlet Pipe (3 of 3) (ST012503-ST012504)					Outlet Pipe Material
Opening Diameter (inches)	12” CMP	12” CMP			***REPAIR NEEDED*** 12” CMP CRUSHED AT POND SIDE OF BERM
Upstream Invert (ST012503)	769.50	769.32			
Downstream Invert (ST012504)	769.25	769.00			
Length (feet)	50.0 FT	43.3 FT			
Slope (%)	0.0050’/,	0.0074’/,			
Riser	N/A				Riser Material
Opening Diameter (inches)					
Elevation					
Upper Discharge Control	N/A				
Opening Diameter (inches)					
Elevation					
Lower Discharge Control	N/A				
Opening Diameter (inches)					
Elevation					
Other (Description)	N/A				
Opening Type and Size (inches)					
Elevation					
Emergency Spillway					
Elevation	773.00	772.00			
Length of spillway (feet)	45.0 FT	78.7 FT			
Embankment	Present Yes No		Comments/Maintenance Requirements		
Unauthorized Plantings, trees, or woody vegetation	-	N	CAT TAILS NOW PREVALENT THROUGHOUT THE POND AREA		
Animal burrows or slope erosion or hole	-	N			
Storm Sewer Outfalls	Type & Size		Location		Comments
Outfall 1 (ST016420)	34”x53” RCP		SE OF POND AT LILLY RD		NEW OUTLET W/2018 LILLY ROAD RECONSTRUCTION.
Outfall 2					

Storage Properties	Design (NON- ASBUILT)	Actual (GPS)	Compliant Yes No		Not Applicable	Equipment Used
Normal Water Elevation (Wet Ponds)	-	-	-	-	N/A	
Design High Water Elevation	773.00	773.15	-	-	-	
Area at Normal Water Elevation (Ac) (Wet Ponds)	-	-	-	-	N/A	GPS EQUIPMENT: GEOMAX ZENITH35 & CARLSON SURVEYOR2 WITH SURV CE v5.04
Area at Design High Water Elevation (Ac)	2.357 AC	2.824 AC	-	-	-	
Active Storage Available (Ac-Ft)*	5.160 ACFT	7.263 ACFT	-	-	-	
Lowest Elevation at Top of Embankment (If Applicable)	773.00	772.80	-	-	-	
Average Elevation at Top of Embankment (If Applicable)	773.00	773.25	-	-	-	
Maximum Bottom Elevation	773.00	770.80	-	-	-	
Average Pond Bottom Elevation	770.00	770.20	-	-	-	
Pond Bottom Area (Ac)	0.977 AC	1.916 AC	-	-	-	
Maximum Pond Depth	3.0 FT	3.15 FT	-	-	-	
Average Pond Depth	3.0 FT	2.0 FT	-	-	-	
Average Permanent Pool Depth (Wet Ponds)	-	-	-	-	N/A	

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

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

Mill Ridge No. 5 (Lilly Rd)
Retention Pond – SWP26N002
Overview



Four (4) 12" Culverts Service Pond
Through Westerly Bank into stream.



ST012544



ST012543

Mill Ridge No. 5 (Lilly Rd)
Retention Pond – SWP26N002



ST012500



ST012499



ST012501



ST012502



ST012503



ST012504

Mill Ridge No. 5 (Lilly Rd)
Retention Pond – SWP26N002

SPILLWAY
(North end of retention pond.)

Mill Ridge No. 5 (Lilly Rd)
Retention Pond – SWP26N002
Repairs Needed (12/2013)

- 1) Fix crushed northerly most (ST012503) and southerly most (ST012544) culvert ends.
- 2) Markers placed at each damaged culvert .



ST012503

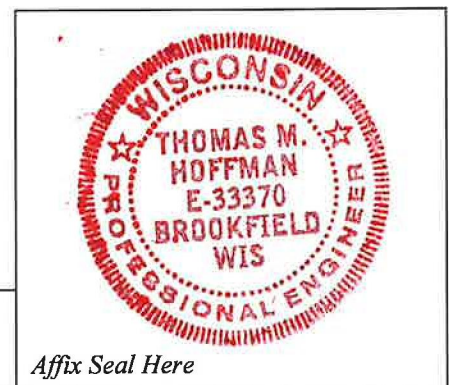


ST012544

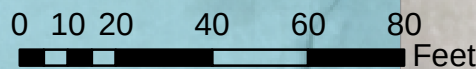
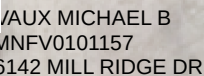
<i>Sketch Outlet</i>	<i>Place Photograph of Pond</i>
	<i>Place Photograph of Pond</i>

Inspection Firm:	<u>VILLAGE OF</u> <u>MENOMONEE FALLS</u>	Inspector Name :	<u>CHRISTOPHER M GARIEPY</u>
Phone Number:	<u>262-532-4411</u>	Inspection Date:	<u>8/23/2018</u>
Address:	<u>W156N8480 PILGRIM RD</u> <u>MENOMONEE FALLS, WI</u> <u>53051</u>		

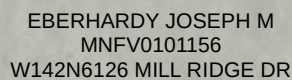
Certifying
Professional Name: THOMAS M. HOFFMAN, P.E.
Phone Number: (262) 532-4415



Date: <u>4/3/2019</u>	Signature: <u>[Signature]</u>
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1 inch = 40 feet



JACKSON JONATHAN W
MNFB0101155
W142N6112 MILL RIDGE DR

New culvert outlet.

PLUER MARK
MNFV0101005
N59W14176 KAUL AVE

MILETTI MOTOR SPORTS LLC
 MNFV0101011
 W140N6035 LILLY RD

$$H = 773.15 - 770.00 = 3.15 \text{ FT}$$

$$A_1 = 83,478.15 \text{ SF} = 1.916 \text{ AC}$$

$$A_2 = 123,006.25 \text{ SF} = 2.824 \text{ AC}$$

Miller Ridge #5

2018

26.N002

$$V = \left(\frac{H}{3} \right) (A_1 + A_2 + \sqrt{A_1 A_2})$$

$$V = \left(\frac{3.15 \text{ FT}}{3} \right) ((1.916 \text{ AC} + 2.824 \text{ AC}) + \sqrt{1.916 \text{ AC} \times 2.824 \text{ AC}})$$

$$V = (1.05 \text{ FT}) (4.74 \text{ AC} + \sqrt{4.74 \text{ AC}})$$

$$V = (1.05 \text{ FT}) (4.74 \text{ AC} + 2.177 \text{ AC})$$

$$V = (1.05 \text{ FT}) (6.917 \text{ AC})$$

$$V = 7.263 \text{ AC FT} \quad \checkmark \text{ CMAA 1/5/19}$$