



2008

Rec 8-11-09

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

Mutual Savings Bank

STORMWATER MANAGEMENT FACILITIES
OPERATION AND INSPECTION REPORT

Quarter Section _____
Property Tax ID Number MNFV00139 Name of Business/Subdivision Bank Mutual
Address of Property W178 N9379 Water
82
139 88007
Tower Place

Dry Pond	<input checked="" type="checkbox"/>	Description: <u>04 NOOS</u>			Location Of Pond	<u>SW corner of STH "175" and Watertown Pl.</u>
Wet Pond	<input type="checkbox"/>					
Other	<input type="checkbox"/>					

constructed 2002

Year Pond Constructed 2008 Year of Last Certification _____

Compliance Verification	Design	Actual	Compliant Yes	Non-Compliant No	Comments (Condition of Structure)
<i>Primary Outlet Pipe</i>					
Opening Diameter	2.5"	2.4"	<input checked="" type="checkbox"/>		2 yr rate is less than
Upstream Invert	897.85	898.34	<input checked="" type="checkbox"/>		2 yr design rate
Downstream Invert	897.60	897.75	<input checked="" type="checkbox"/>		
Length	25'	28'	<input checked="" type="checkbox"/>		
Slope	1%	1.4%	<input checked="" type="checkbox"/>		
<i>Secondary Outlet Pipe</i> (If Applicable)					
Opening Diameter	3.5"	3.5"	<input checked="" type="checkbox"/>		10 yr rate is less than
Upstream Invert	900.25	900.46	<input checked="" type="checkbox"/>		10 yr design rate
Downstream Invert	897.60	897.75	<input checked="" type="checkbox"/>		
Length	25'	28'	<input checked="" type="checkbox"/>		100 yr rate is less than
Slope	1%	1.4%	<input checked="" type="checkbox"/>		100 yr design rate
<i>Riser</i> (If Applicable)					
Opening Diameter	12"	18"	<input checked="" type="checkbox"/>		
Elevation	903.00	902.93	<input checked="" type="checkbox"/>		
<i>Upper Discharge Control</i> (If Applicable)					
Opening Diameter					
Elevation					

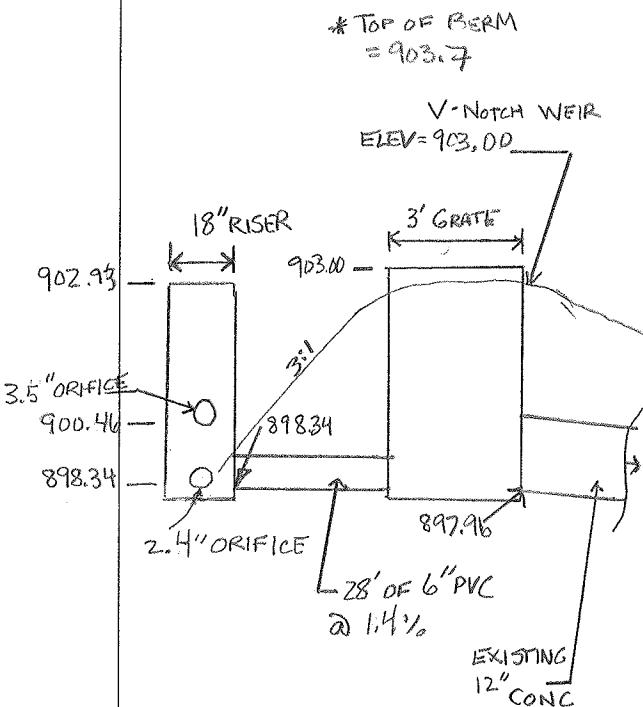
Compliance Verification	Design	Actual	Compliant Yes	No	Comments
<i>Lower Discharge Control</i>	(If Applicable)				
Opening Diameter					
Elevation					
<i>Other (Description)</i>					
Opening Type					
Elevation					
<i>Emergency Spillway</i>					
Elevation	903.50	903.00	x		
Length of spillway	3	12.70	x		
<i>Embankment</i>			Present Yes	No	
Unauthorized plantings, trees, or woody vegetation			x		
Animal burrows or slope erosion			x		
Storage Properties	Design	Actual	Compliant Yes	Points Surveyed	Equipment Used
Normal Water Elevation (Wet Ponds)	n/a	n/a	x		
Design High Water Elevation	902.79	902.88	x	NO	Obtained by hydraflow hydrographs
Area at Normal Water Elevation (Ac) (Wet Ponds)	n/a	n/a	x		
Area at Design High Water Elevation (Ac)	.156	.16	x	Yes	Obtained from as-built
Active Storage Available (Ac-Ft)*	.406	.409	x		Obtained from hydraflow hydrographs
Lowest Elevation at Top of Embankment (If Applicable)	904.00	903.70	x	Yes	Tremble robotic total station
Average Elevation at Top of Embankment (If Applicable)	904.00	903.80	x	Yes	Tremble robotic total station
Maximum Bottom Elevation	898.00	898.34	x	Yes	
Average Pond Bottom Elevation	900	900	x		Obtained from as-built
Pond Bottom Area (Ac)	.006	.07	x	Yes	
Maximum Pond Depth	5'	4.66'	x	Yes	
Average Pond Depth	3'	3'	x	Yes	

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

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

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

Sketch Outlet



SEE No. 14

Place Photograph of Pond

SEE No. 18

Place Photograph of Pond

Inspection Firm: Excel Engineering
Phone Number: 920-926-9800
Address: 100 Camelot Drive
Fond du Lac, WI 54935

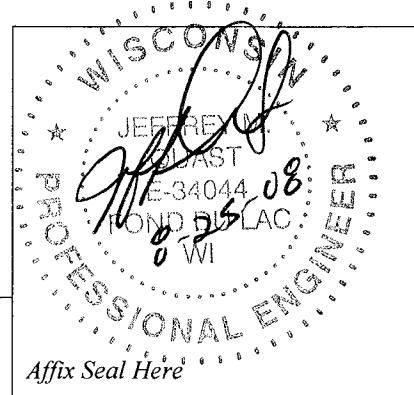
Inspector Name: Paul Groell
Inspection Date: 8/11/08

Certifying
Professional Name: Jeff Quast, P.E.
Phone Number: 920-926-9800

Date:

8/25/08

Signature:



EXCEL ENGINEERING, INC.

100 CAMELOT DRIVE
FOND DU LAC, WISCONSIN 54935
PHONE: (920)926-9800 FAX: (920)926-9801

LETTER OF TRANSMITTAL

Village of Menomonee Falls
W156 N8480 Pilgrim Road
Menomonee Falls, WI 53051-3140

JOB NUMBER : 714440

AUGUST 25, 2008

ATTN: BRIAN HORNICKEL

REGARDING: BANK MUTUAL SWM FACILITIES OPERATIONS AND
INSPECTIONS REPORT

WE ARE SENDING YOU THE ATTACHED

VIA:	FORMAT	ELECTRONIC FILES
<input type="checkbox"/> Fax	<input checked="" type="checkbox"/> Next Day UPS a.m.	<input type="checkbox"/> .dwg Autocad 2002
<input type="checkbox"/> Website	<input type="checkbox"/> Next Day UPS p.m.	<input type="checkbox"/> .dwg Autocad 2004
<input type="checkbox"/> Mail	<input type="checkbox"/> DELIVERED	<input type="checkbox"/> .plt files
<input type="checkbox"/> UPS	<input type="checkbox"/> PICKED UP	<input type="checkbox"/> .pdf files
		<input type="checkbox"/> .tiff files
		<input type="checkbox"/> Other

COPIES	DATE	NUMBER	DESCRIPTION
1			As-Built
1			CD of As-Built
1			Stormwater Management Facilities Operation and Inspection Report

THESE ARE TRANSMITTED as checked below:

For approval
 For your use
 As requested

FOR BIDS DUE ON
 Approved as submitted
 Approved as noted

Returned for corrections
 For review and comment

REMARKS: Please accept the new As-Built drawing and Inspection Report for the newly reworked pond. Please call with questions. Thank you.

SIGNED:

Eric Drazkowski



COPY TO :

Jeff Quast - Excel
Dennis - Jos. Schmitt (overnight AM delivery)
Michael Crowley III - Bank Mutual

WE ARE SENDING YOU:

<input type="checkbox"/> Same as above	<input type="checkbox"/> LOT Only	<input type="checkbox"/> Other	FORMAT	ELECTRONIC FILES
			<input type="checkbox"/> 8 1/2 x 11 Plans <input type="checkbox"/> 11 x 17 Plans <input type="checkbox"/> Half size Plans <input type="checkbox"/> Full size Plans <input type="checkbox"/> CD	<input type="checkbox"/> .dwg Autocad 2002 <input type="checkbox"/> .dwg Autocad 2004 <input type="checkbox"/> .plt files <input type="checkbox"/> .pdf files <input type="checkbox"/> .tiff files <input type="checkbox"/> Other

If enclosures are not as noted, please notify us at once.



f:\714440

Bank Mutual Menomonee Falls
Storm Water Certification 8/11/08

14



f:\714440

Bank Mutual Menomonee Falls
Storm Water Certification 8/11/08

18