



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
Property Tax ID Number
Date November 3, 2020

NW ¼ of Sec 25
MNFV0098151

Name of Business/Subdivision
Address of Property

Weyerhaven Subdivision-Phase 2
Weyerhaven Drive
Menomonee Falls, WI

Dry Pond	
Wet Pond	X
Other	

Location of
Pond

Wet Pond P-3

Pond ID: Wet Pond P-3
SWP25N012

Outlot 11
North of Weyer Farm Drive

Year Pond
Constructed

2015

Year of Last
Certification

2015

Compliance Verification	Design	Actual	Compliant Yes No	Comments (Condition of Structure)
Primary Outlet Pipe				Outlet Pipe Material
Opening Diameter (inches)	15	15	X	- 15" RCP pipe extended across Sunburst Drive to discharge in OL 15 of Weyerhaven Add No 2. - Manhole provided at mid-point of outlet pipe. - Repair slight grout cracking at top of outlet pipe connection to riser structure.
Upstream Invert	776.27	776.26	X	
Downstream Invert	775.5	775.45	X	
Length (feet)	298.0	298.03	X	
Slope (%)	0.26	0.21	X	
Secondary Outlet Pipe	(If Applicable)			Outlet Pipe Material
Opening Diameter (inches)	24	24	X	(3) – 24" RCP outlet pipes across Sunburst Drive provide conveyance of emergency spillway runoff (for events > 100-year storm)
Upstream Invert	780.7	780.78	X	
Downstream Invert	780.28	780.31	X	
Length (feet)	82.7	84.0	X	
Slope (%)	0.51	0.56	X	
Riser	(If Applicable)			Riser Material
Opening Diameter (inches)	36	36	X	RCP riser structure built into the western slope of the pond; in good condition.
Elevation	780.30	780.14	X	
Upper Discharge Control	(If Applicable)			
Opening Diameter (inches)	8	8	X	The upper discharge control in Phase 2 is a 8" diameter orifice cored into RCP riser structure.
Elevation	777.50	777.40	X	

Compliance Verification	Design	Actual	Compliant Yes No		Comments	
Lower Discharge Control	(If Applicable)					
Opening Diameter (inches)	8	8	X		Good condition. 1" deep running water at time of inspection.	
Elevation	776.30	776.16	X			
Other (Description)						
Opening Type and Size (inches)	8	8		X	(2) – 8" Orifices are required, only (1) one exists today. A second upper 8" orifice is required, per detail.	
Elevation	777.40	777.40	X			
Emergency Spillway						
Elevation	782.00	782.05	X		Grass vegetation established (spillway located immediately south of (3) – 24" RCP pipes at Sunburst Dr	
Length of spillway (feet)	10	10	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	12" RCP		West Embankment		Stabilized Outfall	
Outfall 2	24", 27", 36" RCP		NW, N, E		Stabilized Outfalls	
Storage Properties	Design	Actual	Compliant Yes No		Not Applicable	Equipment Used
Normal Water Elevation (Wet Ponds)	776.30	776.26	X			GPS (Navcom)
Design High Water Elevation	778.61	778.56	X			GPS (Navcom)
Area at Normal Water Elevation (Ac) (Wet Ponds)	0.85	0.85	X			Active Storage Per Hydraflow Model
Area at Design High Water Elevation (Ac)	1.04	1.04	X			
Active Storage Available (Ac-Ft)*	2.18	2.17	X			
Lowest Elevation at Top of Embankment (If Applicable)	783.00	782.80	X			
Average Elevation at Top of Embankment (If Applicable)	783.00	782.84	X			GPS (Navcom)
Maximum Bottom Elevation	767.00	767.3	X			Depth line
Average Pond Bottom Elevation	767.00	767.5	X			" "
Pond Bottom Area (Ac)	0.23	0.23	X			For ponding depth between Normal Water Elevation and Overflow Spillway
Maximum Pond Depth	5.70	5.69	X			
Average Pond Depth	5.70	5.69	X			
Average Permanent Pool Depth (Wet Ponds)	9.30	8.76	X			Depth line

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

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

EXISTING RISER STRUCTURE

FRONT VIEW

NO SCALE

OUTLET PIPE EXTENSION
150' - 15" RCP
@ S=0.26%
0.29%

OUTLET PIPE
298'-15" RCP
@ S=0.26%
(ULTIMATE OUTLET PIPE LENGTH)

STM MH W/ INLET GRATE
(48" DIA)
RM EL.=782.50-781.94
EX. 15" SE 775.89
15" NW 775.89

REMOVE EXISTING
15" FES W/ RIPRAP & FABRIC, CONNECT TO EXISTING WITH STORM MANHOLE

LEVEL SPREADER
5'-9" MEDIUM RANDOM RIPRAP OVER FABRIC

15" FES
I.E. 775.50-775.45

15" FES W/ RIPRAP & FABRIC
(TEMP. PHASE 2)
I.E. 775.89

OUTLET PIPE
148'-15" RCP
@ S=0.26%
(TEMP. PHASE 2)
(OUTLET PIPE LENGTH)

LOCATE AT TOP OF BERM

OVERFLOW=779.00

TOP=780.00

10'

36" DIAMETER PRECAST CONCRETE STRUCTURE

TOP VIEW

TOP=780.14

3"

DIA.

TRASH GRATE BOLTED TO STRUCTURE

MANHOLE SIDE GRATE (10"x26") [BY HALLA INDUSTRIES OR EQUIV.]

100-YEAR EL. 778.61

(2)" ORIFICE I.E. 777.40

2" ORIFICE (PHASE 2) I.E. 776.16

8" ORIFICE I.E. 776.16 (FOR PHASE 2)

12" WIDE SAFETY SHELF AT 6H:1V SLOPE

NORMAL WATER EL.=776.30

9.3'

2" THICK CLAY LINER (REFER TO CLAY LINER NOTES)

BOTTOM EL.=767.00

THE 2" DIAMETER TEMPORARY ORIFICE CAP ON THE OUTLET STRUCTURE IS REQUIRED FOR THIS PHASE 2 SUBMISSION AND DURING SITE CONSTRUCTION FOR SEDIMENT CONTROL. THE ORIFICE IS PLANNED TO BE OPENED TO 8" DIAMETER WITH FUTURE PHASE 3 OF THIS PROJECT.

INSTALL SECOND 8" SECONDARY ORIFICE AT ELEVATION 777.40



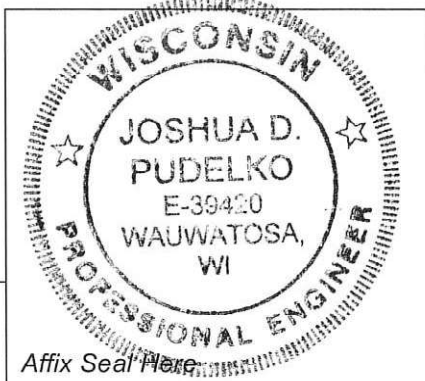
A photograph showing a row of modern, single-story houses with light-colored siding and dark roofs, situated behind a large, calm pond. The water in the pond reflects the sky and the houses. The sky is a clear, pale blue. The houses are built on a slight rise, and there is some greenery and grass around the pond's edge.

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

Inspection Firm: Trio Engineering, LLC Inspector Name : Joshua D. Pudelko, PE
Phone Number: 262-790-1480 Inspection Date: November 3, 2020
Address: 4100 N. Calhoun Road
Brookfield, WI 53005

Certifying Professional
Name: Joshua D. Pudelko, PE
Phone Number: 262-790-1480

Date: <u>11/4/20</u>	Signature: 
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11-03-2020