



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 S2
T8N R20E
Property Tax ID Number
MNFV00089
Date
7/31/2018

SE 1/4 S2 T8N R20E	Name of Business/Subdivision Multi-Fab Products
MNFV00089 95007	Address of Property N90 W14507 Commerce Drive
	Menomonee Falls, WI 53051

Dry Pond		Location of Pond	Southwest corner of property adjacent to Parita Drive
Wet Pond	X		
Other		Pond ID: SWP	

Year Pond Constructed
2013

Year of Last Certification
2013

Compliance Verification	Design	Actual	Compliant Yes	Comments (Condition of Structure)
Primary Outlet Pipe	Outlet Pipe Material			
Opening Diameter (inches)	8"	8"	X	Outlet pipe is HDPE pipe in good condition. No obstructions were observed in downstream or upstream ends. Pipe does not appear to be clogged.
Upstream Invert	763.50	763.31	X	
Downstream Invert	761.00	760.99	X	
Length (feet)	~70'*	65	X	*Existing plans are not to scale. Length estimated.
Slope (%)	3.6%	3.6%	X	
Secondary Outlet Pipe	(If Applicable)			
Opening Diameter (inches)				Outlet Pipe Material
Upstream Invert				
Downstream Invert				N/A
Length (feet)				
Slope (%)				
Riser	(If Applicable)			
Opening Diameter (inches)	24"	22"	X	Riser is a concrete catch basin with a Neenah casting. Design is 24" opening with trash rack.
Elevation	766.00	765.60	X	
Upper Discharge Control	(If Applicable)			
Opening Diameter (inches)	6"	6"	X	Note, there are 3 openings at upper discharge. Openings are clear and in good condition.
Elevation	764.67	764.62	X	

Compliance Verification	Design	Actual	Compliant Yes No		Comments
Lower Discharge Control	(If Applicable)				
Opening Diameter (inches)	2.4"	2"	X		Lower orifice is clear.
Elevation	763.50	763.44	X		
Other (Description)					
Opening Type and Size (inches)					N/A
Elevation					
Emergency Spillway					
Elevation	766.00	765.34	X		Elevation varies with rip-rap.
Length of spillway (feet)	14'	22'	X		
Embankment	Present Yes no		Comments/Maintenance Requirements		
Unauthorized Plantings, trees, or woody vegetation	Unknown		No animal burrows were observed. There are tree planting on the back side of the south berm. No landscape plans were available for review to determine if these are authorized plantings.		
Animal burrows or slope erosion		X			
Storm Sewer Outfalls	Type & Size		Location		Comments
Outfall 1	12" HDPE		NE corner of pond		Good condition, rip rap in good condition.
Outfall 2					
Outfall 3					
Storage Properties	Design	Actual	Compliant Yes No	Not Applicable	Equipment Used
Normal Water Elevation (Wet Ponds)	763.50	763.23	X		Equipment: GPS Survey Rover Remote Depth Souder with GPS Boat with range pole UAV *Areas are estimated based on plans that are not to scale.
Design High Water Elevation	764.67	764.62	X		
Area at Normal Water Elevation (Ac) (Wet Ponds)	0.1*	0.08	X		
Area at Design High Water Elevation (Ac)	0.13*	0.11	X		
Active Storage Available (Ac-Ft)*	0.09	0.09	X		
Lowest Elevation at Top of Embankment (If Applicable)	766.40	766.40	X		Note: the pond has the designed wet pool area and depth, however the safety shelf and shallow areas show significant cattail overgrowth which may be impeding stormwater management.
Average Elevation at Top of Embankment (If Applicable)				X	
Maximum Bottom Elevation	758.50	758.40	X		
Average Pond Bottom Elevation	758.50	758.40	X		
Pond Bottom Area (Ac)	0.02*	0.03	X		
Maximum Pond Depth	5.0	4.83	X		
Average Pond Depth	5.0	4.83	X		
Average Permanent Pool Depth (Wet Ponds)	5.0	4.83	X		

*To Determine Active Storage $V=H/3(A1+A2+(A1xA2)/2)$

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

Sketch Outlet or Attach to Document

Place Photograph of Pond or Attach to Document

See attached.

See attached.

Place Photograph of Pond or Attach to Document

See attached.

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

Inspection Firm: M Squared Engineering
Phone Number: 262-376-4246
Address: W62 N215 Washington Ave
Cedarburg, WI 53012

Inspector Name : Jon Schreiner, PE
Inspection Date: 7/31/18

Certifying Professional Jonathan E Schreiner, PE
Name: _____
Phone Number: 262-376-4246

Date: 8/1/2018

Signature: 



SITE PHOTOGRAPHS



Overview of existing pond. Note extensive vegetative growth into the pond. Open water area is consistently approximately 5' deep. Cattails have encroached into the shoreline and safety shelf of the pond.



View of pond. Cattails have encroached onto all but the deepest areas of the pond. Pond depth at the center is 5 feet as designed.



View of upper and lower orifice at control structure (from above).



View of top of outlet control structure with Neenah casting.



View of overflow spillway. Note minor weed encroachment into spillway. Trees on downstream side of berms are visible in the background.



View of pond sideslope adjacent to parking lot.

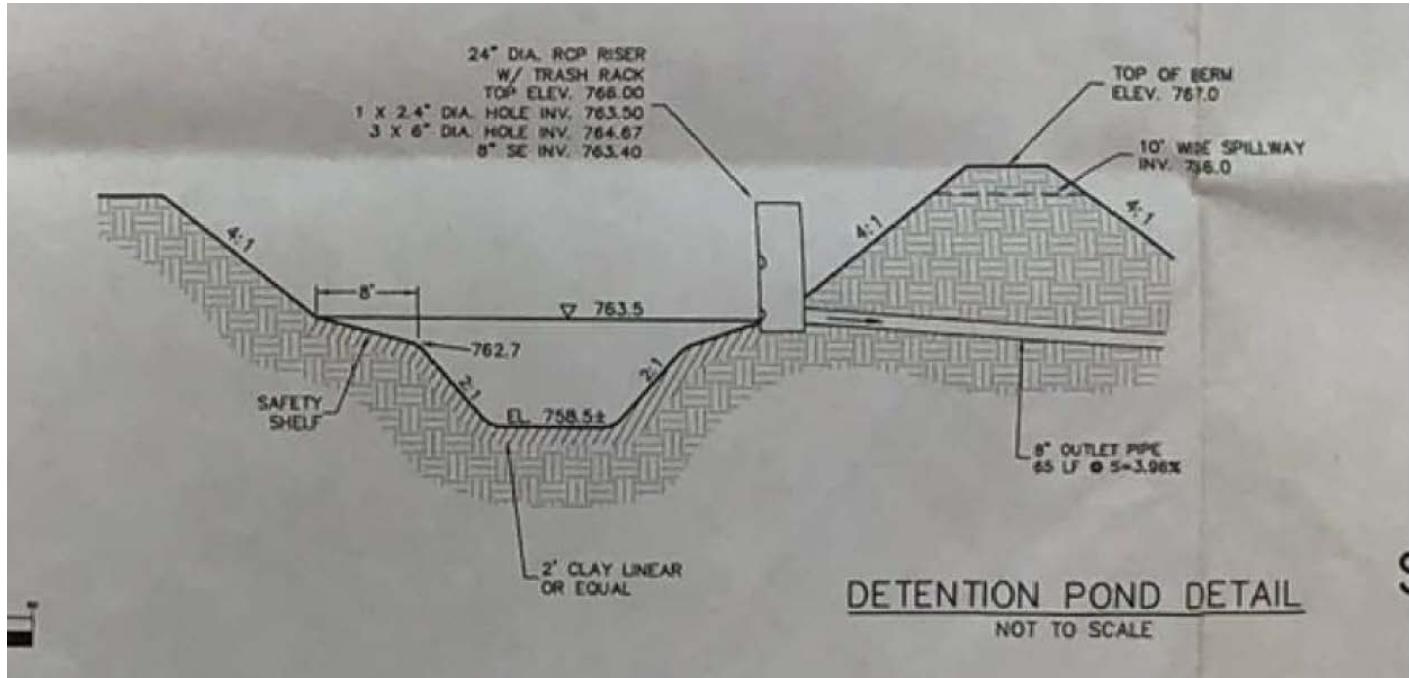


Pond inlet at NE corner. Pipe and riprap in good condition.

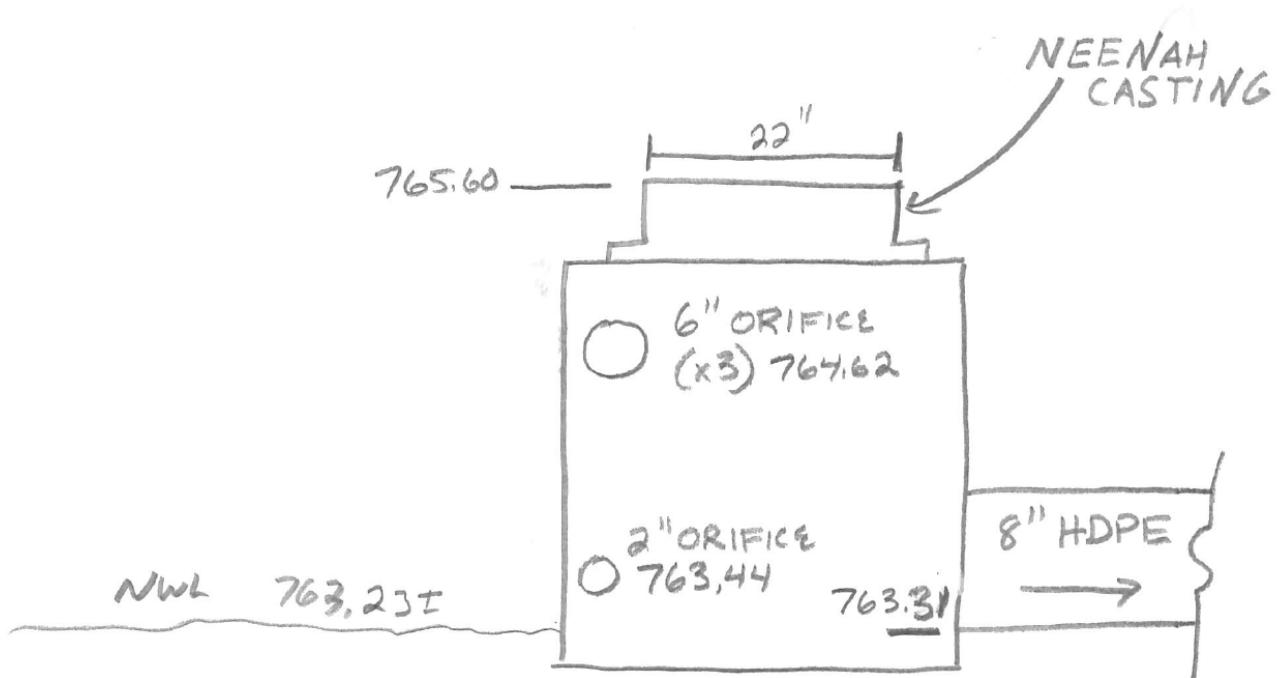


Minor erosion at edge of asphalt pavement adjacent to the pond east side.

OUTLET DIAGRAM



Detention Pond Detail from grading plan.



Sketch of existing outlet structure.