



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 15 SE Name of Business/Subdivision CENTRALIZED PUBLIC WORKS
Property Tax ID Number 0060968001 Address of Property FACILITY
N72W15920 GOOD HOPE RD
MENOMONEE FALLS, WI 53051

Dry Pond	
Wet Pond	X
Other	

Description: SWP15S004 Location Of Pond 560 FT WEST OF PILGRIM RD
NORTH OF GOOD HOPE RD

Year Pond Constructed 2016 Year of Last Certification N/A

Compliance Verification	Design	Actual	Compliant Yes No		Comments (Condition of Structure)
Primary Outlet Pipe					Outlet Pipe Material
Opening Diameter (inches) (ST014911)	15” RCP	15” RCP	X		REINFORCED CONCRETE PIPE IN GOOD CONDITION
Upstream Invert	841.00	840.92			
Downstream Invert	839.80	839.76			
Length (feet)	77.0 FT	74.1 FT			
Slope (%)	0.26%	1.57%			
Secondary Outlet Pipe	(If Applicable)				Outlet Pipe Material
Opening Diameter (inches)					
Upstream Invert					
Downstream Invert					
Length (feet)					
Slope (%)					
Riser	(If Applicable)				Riser Material
Opening Diameter (inches)					
Elevation					
Upper Discharge Control	(If Applicable)				
Opening Diameter (inches)	12”	12”	X		
Elevation	843.50	840.43			

Compliance Verification	Design	Actual	Compliant Yes No		Comments	
Lower Discharge Control	(If Applicable)					
Opening Diameter (inches)	4"	4"	X			
Elevation	841.00	840.86				
Other (Description)						
Opening Type and Size (inches)	36"X36"	36"X36"	X			
Elevation	846.60	846.38				
Emergency Spillway						
Elevation	847.50	847.60				
Length of spillway (feet)	5' +	15' +				
Embankment	Present Yes No		Comments/Maintenance Requirements			
Unauthorized Plantings, trees, or woody vegetation		X	POND CONSTRUCTED IN OCTOBER 2016.			
Animal burrows or slope erosion		X				
Storm Sewer Outfalls	Type & Size		Location		Comments	
Outfall 1 (ST010926)	RCP – 15"		SW CORNER OF POND		CMP IN GOOD CONDITION	
Outfall 2						
Outfall 3						
Storage Properties	Design	Actual	Compliant Yes No		Not Applicable	Equipment Used
Normal Water Elevation (Wet Ponds)	841.00	840.86				GPS ROVER RECEIVER: GEOMAX – ZENITH 35 GPS BASE RECEIVER: SOKKIA 2700 RSX DATA COLLECTOR: CARLSON SURVEYOR 2
Design High Water Elevation	847.50	847.50				
Area at Normal Water Elevation (Ac) (Wet Ponds)		0.323 AC				
Area at Design High Water Elevation (Ac)		0.698 AC				
Active Storage Available (Ac-Ft)*		4.495 ACFT				
Lowest Elevation at Top of Embankment (If Applicable)	848.50	848.00				
Average Elevation at Top of Embankment (If Applicable)	848.50	848.25				
Maximum Bottom Elevation	836.00	836.00				
Average Pond Bottom Elevation	836.00	836.00				
Pond Bottom Area (Ac)		0.158 AC				
Maximum Pond Depth	11.5 FT	11.5 FT				
Average Pond Depth	5.0 FT	4.9 FT				
Average Permanent Pool Depth (Wet Ponds)	5.0 FT	4.9 FT				

*To Determine Active Storage $V = \left(\left(\frac{H}{3} \right) \left(A_1 + A_2 + \left(\left(A_1 + A_2 \right)^{\left(\frac{1}{2} \right)} \right) \right) \right)$

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

Centralized Public Works Facility Retention Pond – SWP15S004

Overview



Storm Water Outlet ST010926



Centralized Public Works Facility Retention Pond – SWP15S004

Storm Water Overflow Structure ST014911



Storm Water Overflow Structure ST014911 Interior



Centralized Public Works Facility Retention Pond – SWP15S004

Emergency Spillway



Sketch Outlet

Place Photograph of Pond

Place Photograph of Pond

Inspection Firm: VILLAGE OF
MENOMONEE FALLS
Phone Number: (262) 532-4411
Address: VILLAGE OF
MENOMONEE FALLS
W156N8480 PILGRIM RD
MENOMONEE FALLS, WI
53051

Inspector Name : CHRISTOPHER M. GARIEPY

Inspection Date: NOVEMBER 1, 2016

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

Date: 1/31/17

Signature: 



Affix Seal Here

$$H_1 = 840.86$$

$$H_2 = 847.50$$

$$\Delta H = 6.64'$$

$$A_1 = 0.323 \text{ AC}$$

$$A_2 = 0.698 \text{ AC}$$

SWP155004 *As-Built*
Active Storage 2016

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

$$V = \left(\frac{6.64'}{3}\right) (0.323 \text{ AC} + 0.698 \text{ AC} + \sqrt{0.323 \text{ AC} \cdot 0.698 \text{ AC}})$$

$$V = (2.213') (1.021 \text{ AC} + \sqrt{1.021 \text{ AC}})$$

$$V = (2.213') (1.021 \text{ AC} + 1.010 \text{ AC})$$

$$V = (2.213') (2.031 \text{ AC})$$

$$V = 4.495 \text{ AC FT} \checkmark \text{ CMG 1/26/17}$$

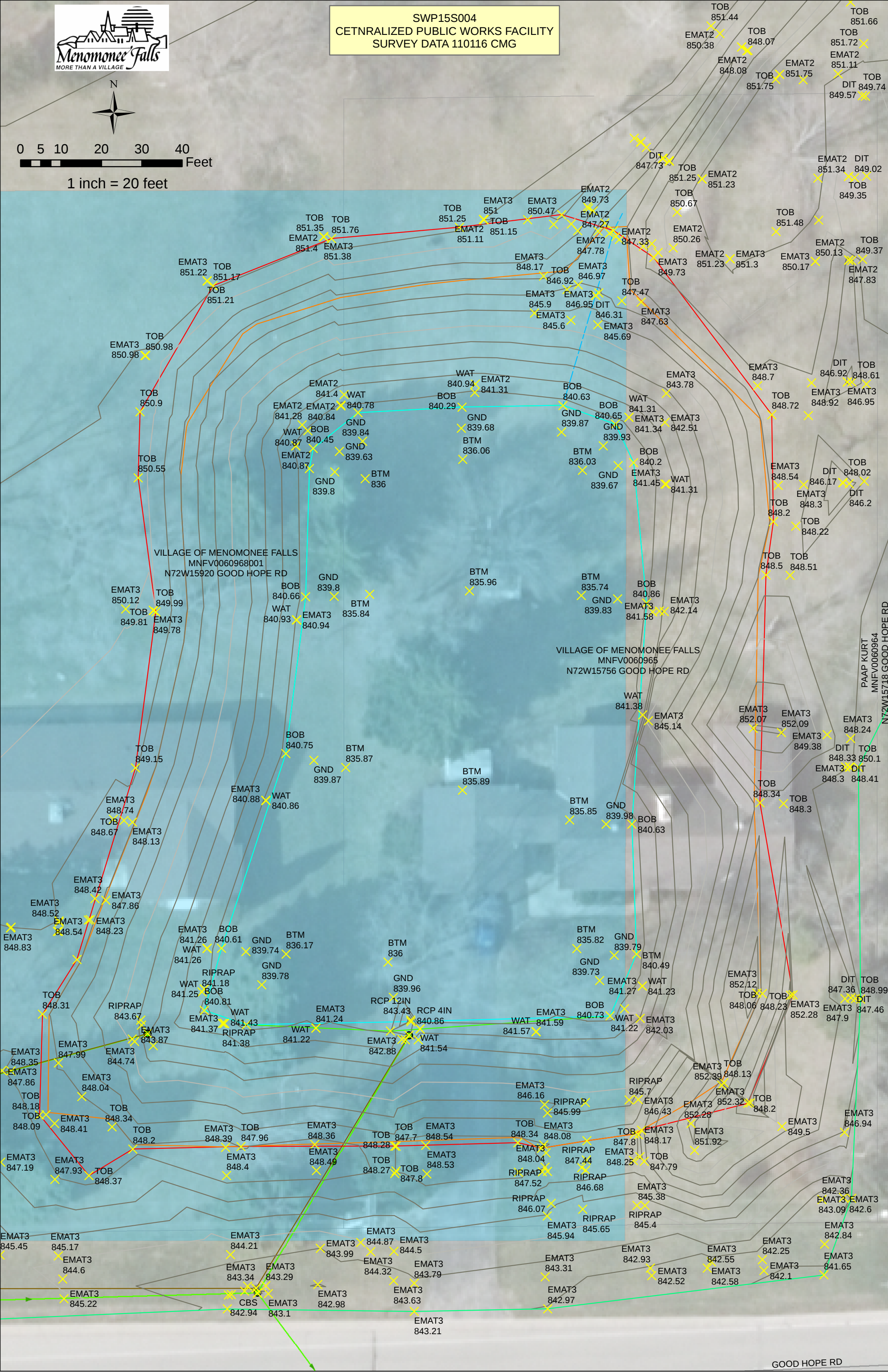


SWP15S004
CETNRALIZED PUBLIC WORKS FACILITY
SURVEY DATA 110116 CMG

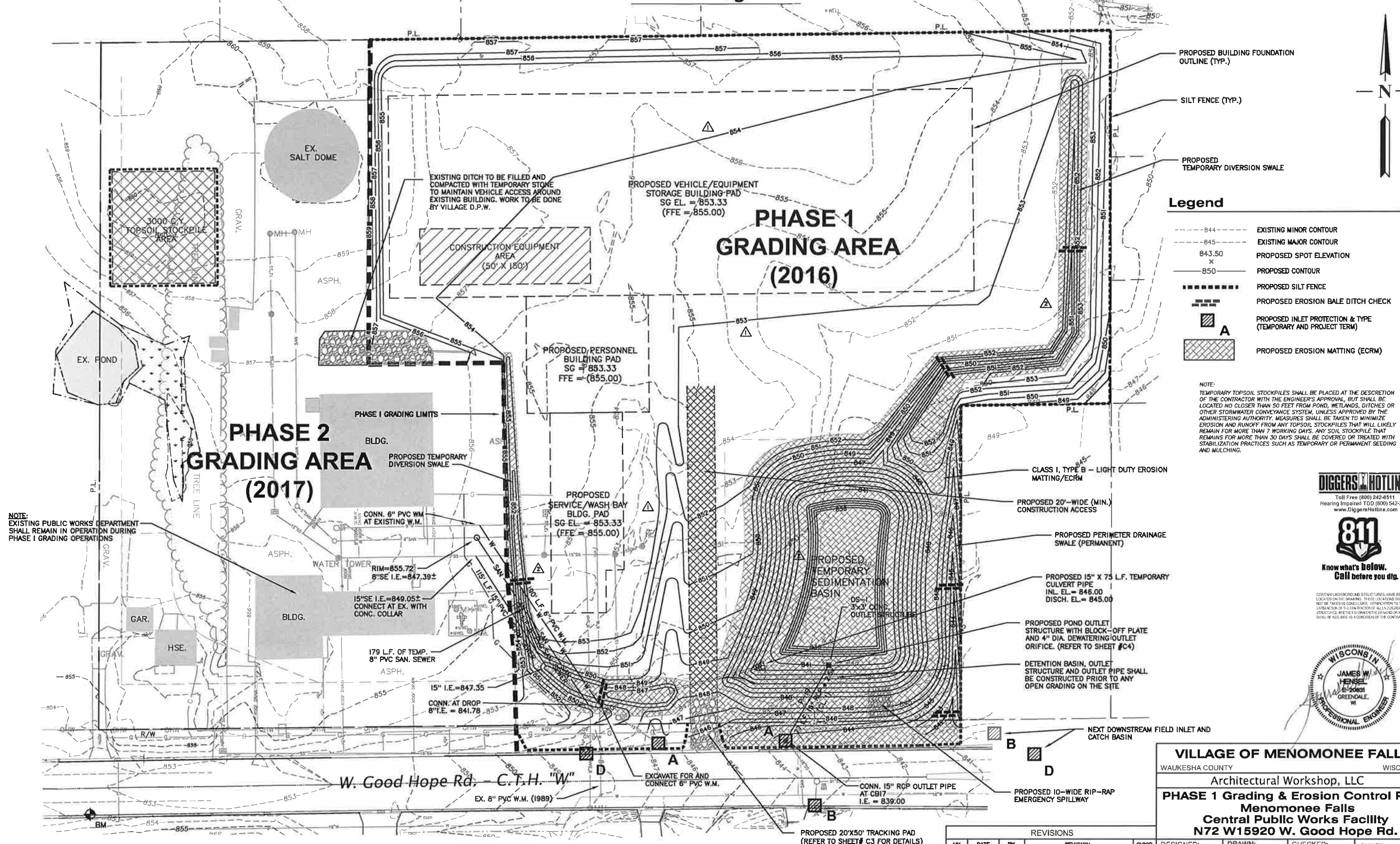


0 5 10 20 30 40
Feet

1 inch = 20 feet



Site Grading Plan



Legend

- 844 --- EXISTING MINOR CONTOUR
- 845 --- EXISTING MAJOR CONTOUR
- 843.50 x PROPOSED SPOT ELEVATION
- 850 --- PROPOSED CONTOUR
- PROPOSED SILT FENCE
- PROPOSED EROSION BALE DITCH CHECK
- A --- PROPOSED INLET PROTECTION & TYPE (TEMPORARY AND PROJECT TERM)
- PROPOSED EROSION MATTING (ECRM)

NOTE:
TEMPORARY TOPSOIL STOCKPILES SHALL BE PLACED AT THE DISCRETION OF THE CONTRACTOR WITH THE ENGINEER'S APPROVAL, BUT SHALL BE LOCATED NO CLOSER THAN 50 FEET FROM POND, WETLANDS, DITCHES OR OTHER STORMWATER CONVEYANCE SYSTEM, UNLESS APPROVED BY THE ADMINISTERING AUTHORITY. MEASURES SHALL BE TAKEN TO MINIMIZE EROSION AND RUNOFF FROM ANY TOPSOIL STOCKPILES THAT WILL LIKELY REMAIN FOR MORE THAN 7 WORKING DAYS. ANY SOIL STOCKPILE THAT REMAINS FOR MORE THAN 30 DAYS SHALL BE COVERED OR TREATED WITH STABILIZATION PRACTICES SUCH AS TEMPORARY OR PERMANENT SEEDING AND MULCHING.

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811
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CERTAIN UNDERGROUND STRUCTURES HAVE BEEN LOCATED ON THE GRADING. THESE LOCATIONS SHALL NOT BE TAKEN AS GUARANTEE. VERIFICATION TO THE LOCATION OF THE CONTRACTOR OF ALL UNDERGROUND STRUCTURES WHETHER TO OWNERS OR NOT SHALL BE ASSURED AS A CONDITION OF THE CONTRACT.



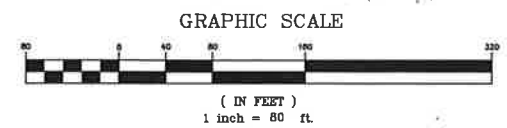
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY WISCONSIN

Architectural Workshop, LLC

PHASE 1 Grading & Erosion Control Plan
Menomonee Falls
Central Public Works Facility
N72 W15920 W. Good Hope Rd.

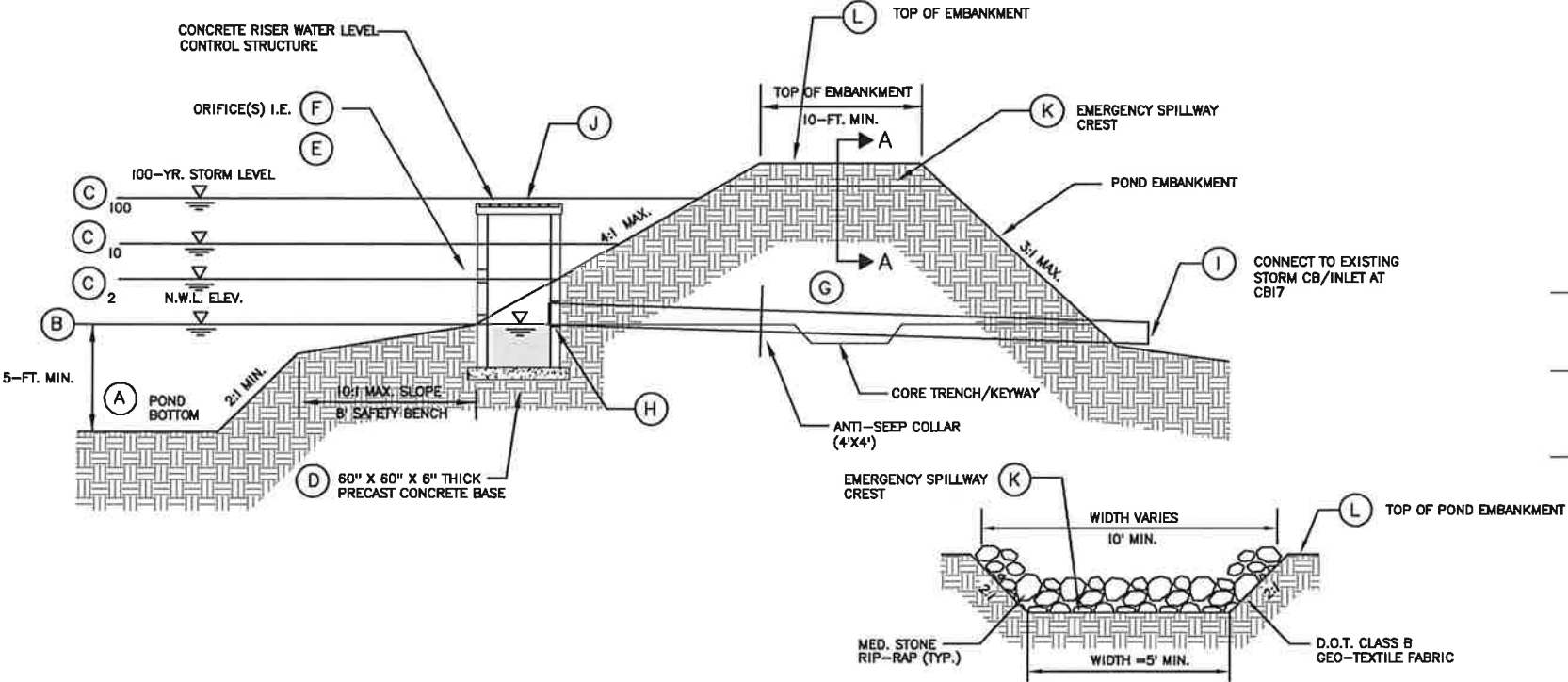
DESIGNED: J.W.H.	DRAWN: J.A.W.	CHECKED: J.G.S.	SHEET
DATE: 7-28-2016	SCALE: 1"=80'	C2A	
APPROVED:	PROJECT: LS-3978	OF 13	

REVISIONS				
NO.	DATE	BY	REVISION	CHKD
1	8-9-16	J.W.H.	PHASE 1 INTERIM CONTOURS	J.A.W.
2	8-13-16	J.A.W.	CONSTR. SEQUENCING & CLAY LINER	J.W.H.
3			EROSION MATTING	



NSE **NORTH SHORE ENGINEERING, INC.**
Consulting Engineers & Land Surveyors
11433 N. Port Washington Rd., Mequon, Wisconsin, 53092
(262) 241-9400 • FAX: (262) 241-5337
www.northshoreengineering.net

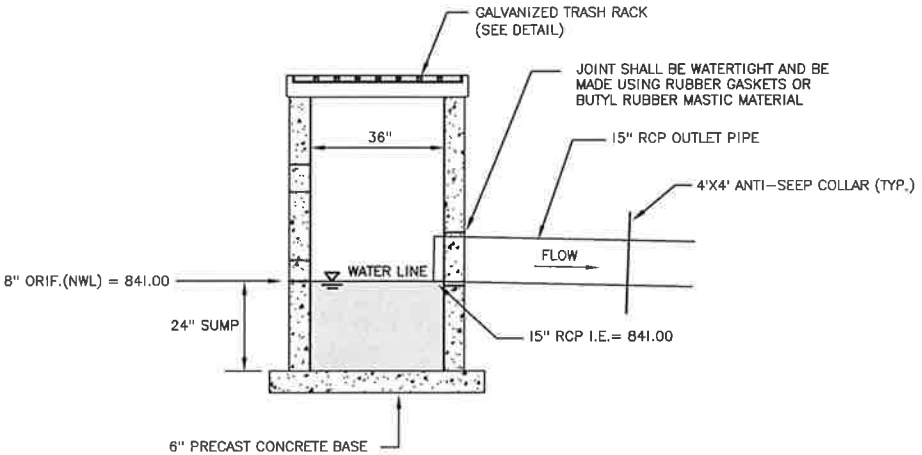
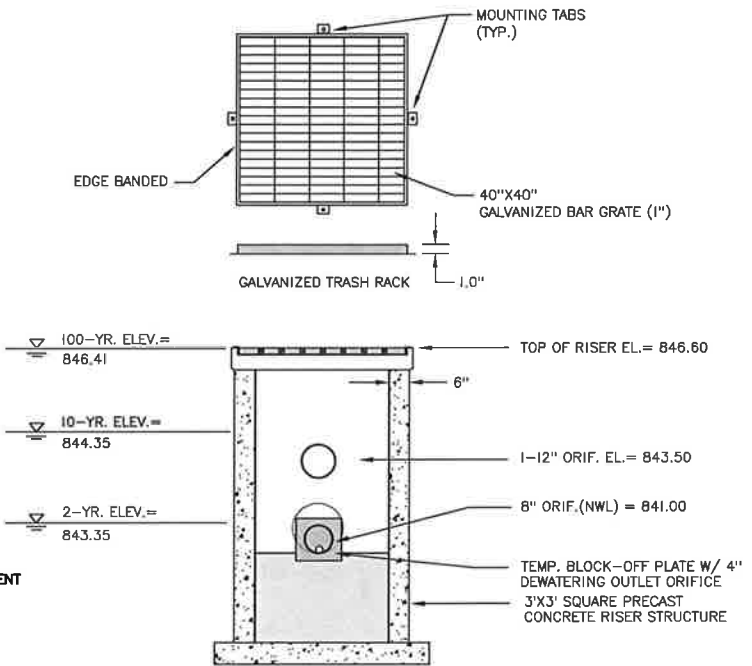
WET DETENTION BASIN AND CONCRETE OUTLET STRUCTURE
(PROFILE VIEW)



SECTION A-A

POND DATA

KEY	DESCRIPTION	POND-I			MATERIAL/COMMENTS
A	POND BOTTOM ELEVATION	838.00			
B	NORMAL WATER LEVEL (N.W.L.)	841.00			
C 2	2-YR. STORM ELEVATION	843.35			
C 10	10-YR. STORM ELEVATION	844.35			
C 100	100-YR. STORM ELEVATION	846.41			
D	BOTTOM OF WATER LEVEL CONTROL STRUCTURE	839.00			
E	ORIFICE(S) SIZE - I.E. 2-YR.	8" - 841.00			
F	ORIFICE(S) SIZE - I.E. 10-YR.	12" - 843.50			
G	OUTLET PIPE SIZE	15" X 80'			
H	OUTLET PIPE (INLET)	841.00			
I	OUTLET PIPE (DISCHARGE)	839.80			REINFORCED CONC. PIPE CLASS I
J	TOP OF STRUCTURE	846.50			
K	EMERGENCY SPILLWAY CREST ELEV.	847.50			MEDIUM RIP-RAP
L	TOP OF EMBANKMENT ELEVATION	848.50			



WET DETENTION BASIN OUTLET STRUCTURE
(3' X 3' SQUARE)



REVISIONS					DESIGNED:	DRAWN:	CHECKED:	SHEET
1	0-30-18	J.A.W.	CONTROL STRUCTURE DETAIL	J.W.H.	J.W.H.	J.A.W.	J.G.S.	
					DATE:	SCALE:		
					7-28-2016	N.T.S.		
					APPROVED:	PROJECT:	LS-3978	C4

VILLAGE OF MENOMONEE FALLS	
WAUKESHA COUNTY	WISCONSIN
Architectural Workshop, LLC	
PHASE 1 Construction Details	
Menomonee Falls	
Central Public Works Facility	
N72 W15920 W. Good Hope Rd.	