



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	14 NW	Name of Business/Subdivision	DEERFIELD SUBDIVISION
Property Tax ID Number	0054271	Address of Property	W152 N7900 COUNTRYSIDE LN
			MENOMONEE FALLS, WI 53051

Dry Pond	X
Wet Pond	
Other	

Description: SWP14N003
U-0237

Location Of
Pond EAST OF GOLDENROD DR &
COUNTRYSIDE DR AT EAST END
OF DEERFIELD SUBDIVISION

Year Pond Constructed 1987 Year of Last Certification 2018

Compliance Verification	Design (Non-AsBuilt)	Actual (GPS)	Compliant Yes No		Comments (Condition of Structure)
Primary Outlet Pipe (ST005315)					Outlet Pipe Material
Opening Diameter (inches)	12" RCP	12" RCP	Y	-	12" RCP IN GOOD CONDITION
Upstream Invert	818.80	818.83	Y	-	12" RCP IN GOOD CONDITION
Downstream Invert	818.76	818.63	Y	-	12" RCP IN GOOD CONDITION
Length (feet)	11.0 FT	11.7 FT	Y	-	
Slope (%)	0.0036%	0.0170%	Y	-	ELEVATIONS TO VARY SLIGHTLY FROM YEAR TO YEAR DUE TO GPS TECHNOLOGY
Secondary Outlet Pipe	N/A				Outlet Pipe Material
Opening Diameter (inches)			-	-	
Upstream Invert			-	-	
Downstream Invert			-	-	
Length (feet)			-	-	
Slope (%)			-	-	
Riser	N/A				Riser Material
Opening Diameter (inches) (ST005316)	4'3"	3'6"	Y	-	REINFORCED CONCRETE/CAST IRON
Elevation	823.00	823.04	Y	-	
Upper Discharge Control	N/A				
Opening Diameter (inches)			-	-	
Elevation			-	-	

Compliance Verification	Design	Actual	Compliant Yes No		Comments	
Lower Discharge Control	N/A					
Opening Diameter (inches)			-	-		
Elevation			-	-		
Other (Description)	N/A					
Opening Type and Size (inches)			-	-		
Elevation			-	-		
Emergency Spillway						
Elevation	825.20	824.91	Y	-		
Length of spillway (feet)	21.0 FT	34.0 FT	Y	-		
Embankment	Present Yes No		Comments/Maintenance Requirements			
Unauthorized Plantings, trees, or woody vegetation	-	N				
Animal burrows or slope erosion or hole	-	N				
Storm Sewer Outfalls	Type & Size		Location		Comments	
Outfall 1 (ST005314)	RCP - 24"		NORTHWEST CORNER		RCP IN GOOD CONDITION	
Outfall 2						
Outfall 3						
Storage Properties	Design (NON-ASBUILT)	Actual (GPS)	Compliant Yes No		Not Applicable	Equipment Used
Normal Water Elevation (Wet Ponds)	-	-	-	-	N/A	GPS EQUIPMENT: GEOMAX ZENITH 35 & CARLSON SURVEYOR2 WITH SURV CE v5.04
Design High Water Elevation	825.20	825.00	-	-		
Area at Normal Water Elevation (Ac) (Wet Ponds)	-	-	-	-	N/A	
Area at Design High Water Elevation (Ac)	-	0.294 AC	-	-		
Active Storage Available (Ac-Ft)*	-	1.427 ACFT	-	-		
Lowest Elevation at Top of Embankment (If Applicable)	-	825.46	-	-		
Average Elevation at Top of Embankment (If Applicable)	-	825.80	-	-		
Maximum Bottom Elevation	-	818.86	-	-		
Average Pond Bottom Elevation	-	820.10	-	-		
Pond Bottom Area (Ac)	-	0.027AC	-	-		
Maximum Pond Depth	-	6.1 FT	-	-		
Average Pond Depth	-	4.9 FT	-	-		
Average Permanent Pool Depth (Wet Ponds)	-	-	-	-	N/A	

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

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

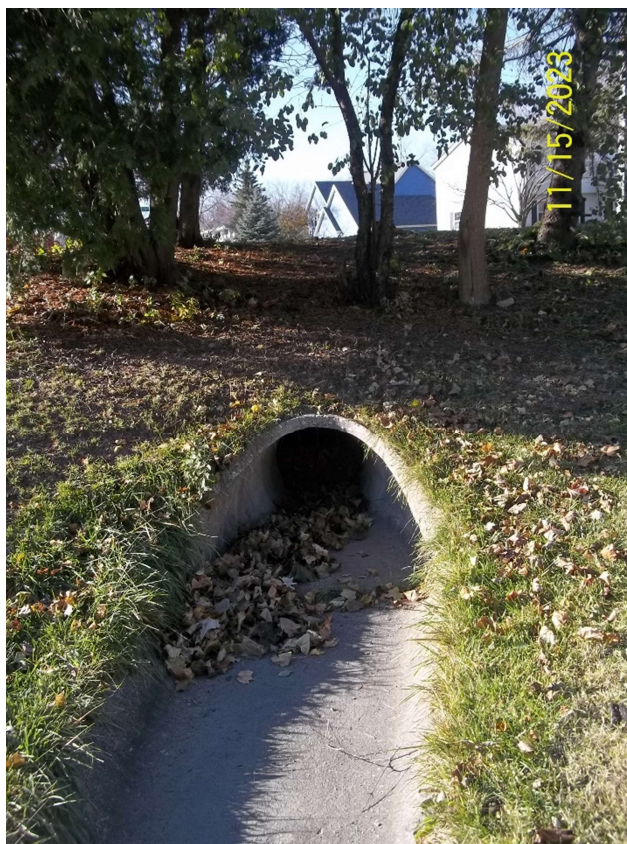
Dry Ponds Use H = Height of Section, $A1$ = pond bottom area, $A2$ =area at top section

Deerfield Subdivision (Countryside & Goldenrod) Retention Pond – SWP14N003

Overview

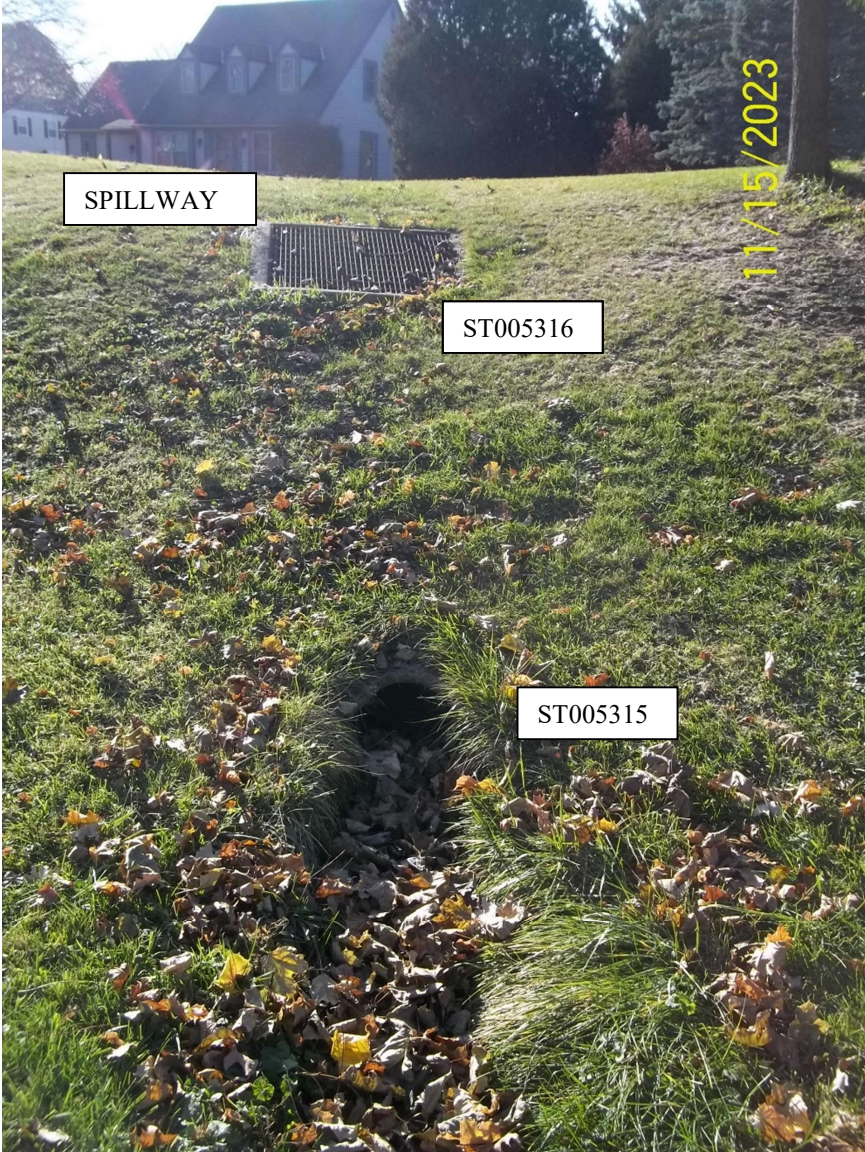


Outlet ST005314



Deerfield Subdivision (Countryside & Goldenrod)
Retention Pond – SWP14N003

Inlet ST005315, Overflow ST005316, & Spillway



Deerfield Subdivision (Countryside & Goldenrod)
Retention Pond – SWP14N003

Repairs Needed (11/2023)

None

Sketch Outlet

Place Photograph of Pond

Place Photograph of Pond

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

Inspector Name : CHRISTOPHER M GARIEPY

Inspection Date: 11/15/2023

Certifying THOMAS M. HOFFMAN, P.E.

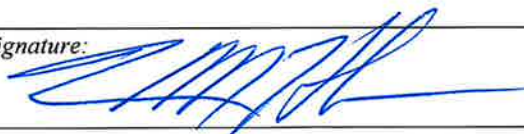
Professional Name:

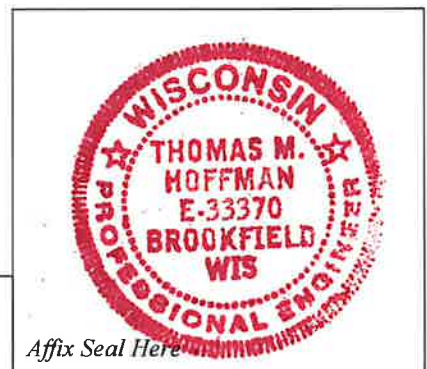
Phone Number: (262) 532-4415

Date:

2/26/2024

Signature:





Acre Feet pond storage volume calculations for:

Deerfield Subd on Countryside Dr
SWP14N003

= Entered Value
= Calculated Value
= Description of Elevations Calculated

Year of Inspection: 2023

Example: $H = H2 - H1$, where $H2 > H1$

H1 =	<u>819.90</u>	Lower Height Elevation in Feet (Pond Bottom for Dry Pond OR Top of Observed Water Level)
H2 =	<u>824.91</u>	Height at Bottom of Spillway (Wet or Dry)
H3 =	<u>825.80</u>	Higher Height Elevation in Feet (Top of Bank Around Pond - Wet or Dry)
H4 =	<u>0.00</u>	Bottom of Wet Pond Elevation in Feet (Wet Ponds Only)
	Sq.Ft.	Acres
Area 1 =	<u>1,828.96</u>	<u>0.0420</u> Area of H1
		Area 1 = Area at Pond Bottom for Dry Pond OR Top of Observed Water Level
Area 2 =	<u>11,398.85</u>	<u>0.2617</u> Area of H2
		Area 2 = Area at Bottom of Spillway
Area 3 =	<u>12,812.88</u>	<u>0.2941</u> Area of H2
		Area 3 = Area at Top of Bank
Area 4 =	<u>-</u>	<u>0.0000</u> Area of H3
		Area 4 = Area at Bottom of Pond (Wet Ponds Only)

Equation to determine Volume (AcFt) of pond storage capacity from
Bottom of Dry Pond to Bottom of Spillway:

$$V = (((H2-H1)/3)(A1+A2 + (\sqrt{A1+A2})))$$

	Feet		Acres		Acres
V=	$((H2-H1)/3)$	x	$(A1+A2)$	+	$\sqrt{A1+A2}$
V=	1.6700	x	0.3037	+	0.5511
V=	1.6700	x	0.8547		
V=	1.4274	AcFt			

Equation to determine Volume (AcFt) of pond storage capacity from
Bottom of Dry Pond to Top of Bank at Spillway:

$$V = (((H3-H1)/3)(A1+A3 + (\sqrt{A1+A3})))$$

	Feet		Acres		Acres
V=	$((H3-H1)/3)$	x	$(A1+A3)$	+	$\sqrt{A1+A3}$
V=	1.9667	x	0.3361	+	0.5798
V=	1.9667	x	0.9159		
V=	1.8013	AcFt			

Equation to determine Volume (AcFt) of pond storage capacity from
Bottom of Pond to Top of Water:

$$V = (((H1-H4)/3)(A1+A4 + (\sqrt{A1+A4})))$$

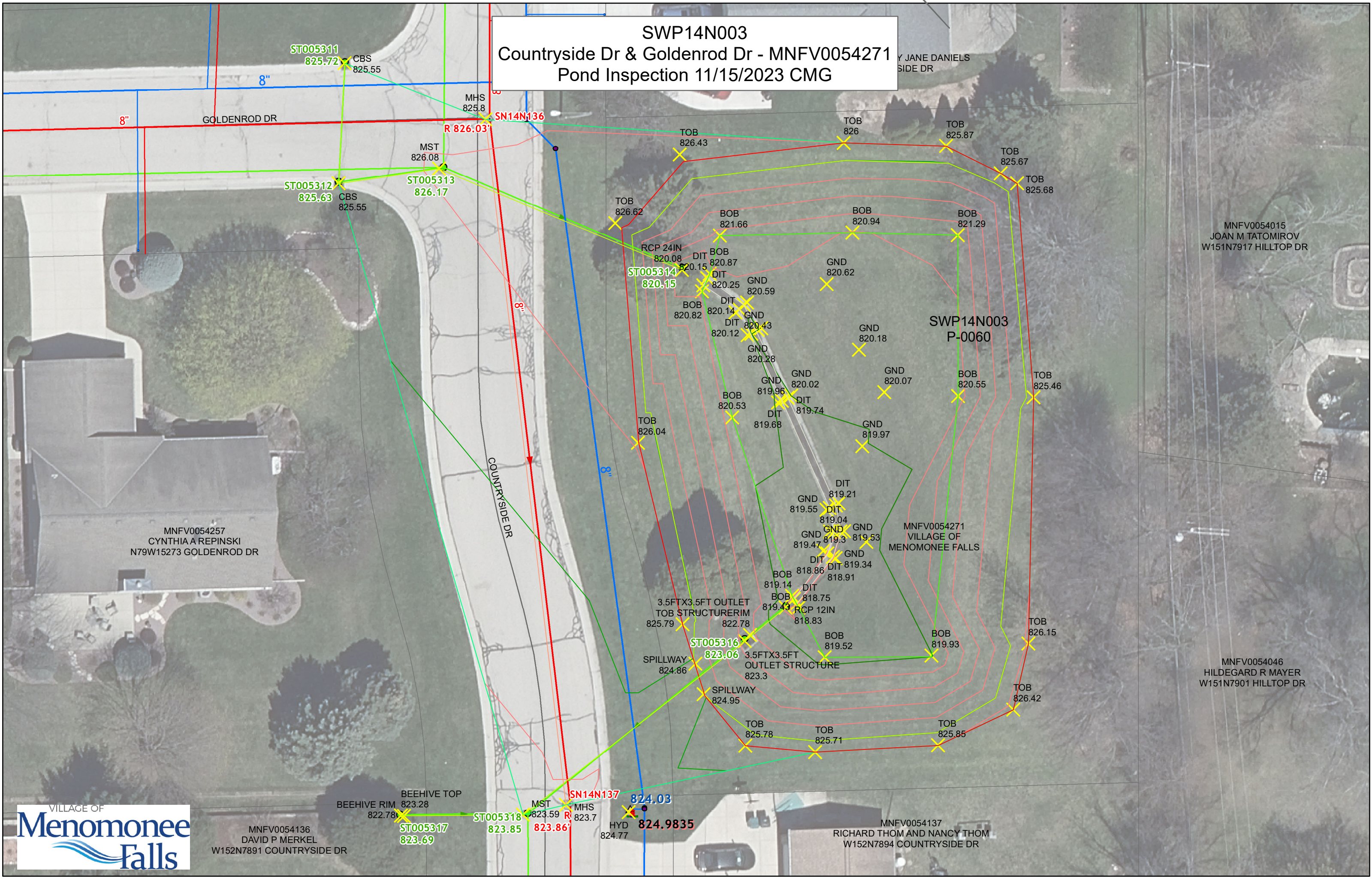
	Feet		Acres		Acres
V=	$((H1-H4)/3)$	x	$(A1+A4)$	+	$\sqrt{A1+A4}$
V=	273.3000	x	0.0420	+	0.2049
V=	273.3000	x	0.2469		
V=	67.4763	AcFt			

Equation to determine Volume (AcFt) of pond storage capacity from
Bottom of Pond to Top of Bank at Spillway:

$$V = (((H3-H4)/3)(A3+A4 + (\sqrt{A3+A4})))$$

	Feet		Acres		Acres
V=	$((H3-H4)/3)$	x	$(A3+A4)$	+	$\sqrt{A3+A4}$
V=	275.2667	x	0.2941	+	0.5423
V=	275.2667	x	0.8365		
V=	230.2586	AcFt			

SWP14N003
Countryside Dr & Goldenrod Dr - MNFV0054271
Pond Inspection 11/15/2023 CMG



MNFV0054257
CYNTHIA A REPINSKI
N79W15273 GOLDENROD DR

MNFV0054015
JOAN M TATOMIROV
W151N7917 HILLTOP DR

MNFV0054271
VILLAGE OF
MENOMONEE FALLS

MNFV0054046
HILDEGARD R MAYER
W151N7901 HILLTOP DR

MNFV0054137
RICHARD THOM AND NANCY THOM
W152N7894 COUNTRYSIDE DR

MNFV0054136
DAVID P MERKEL
W152N7891 COUNTRYSIDE DR

