



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 ¼ SEC 32 Name of Business/Subdivision Zion Evangelical Lutheran
SW ¼ SEC 33 Congregation

Property Tax ID Number MNFV Address of Property N48W18700 Lisbon Road
0131991008

Date November 03, 2020 Menomonee Falls, WI 53051

Location of Pond North side of Lisbon Road,
650 feet east of Emerald Hills
Drive

| | |
|----------|----------|
| Dry Pond | |
| Wet Pond | X |
| Other | |

Pond ID: SWP33s001

Year Pond 2006 Year of Last 2015
Constructed _____ Certification _____

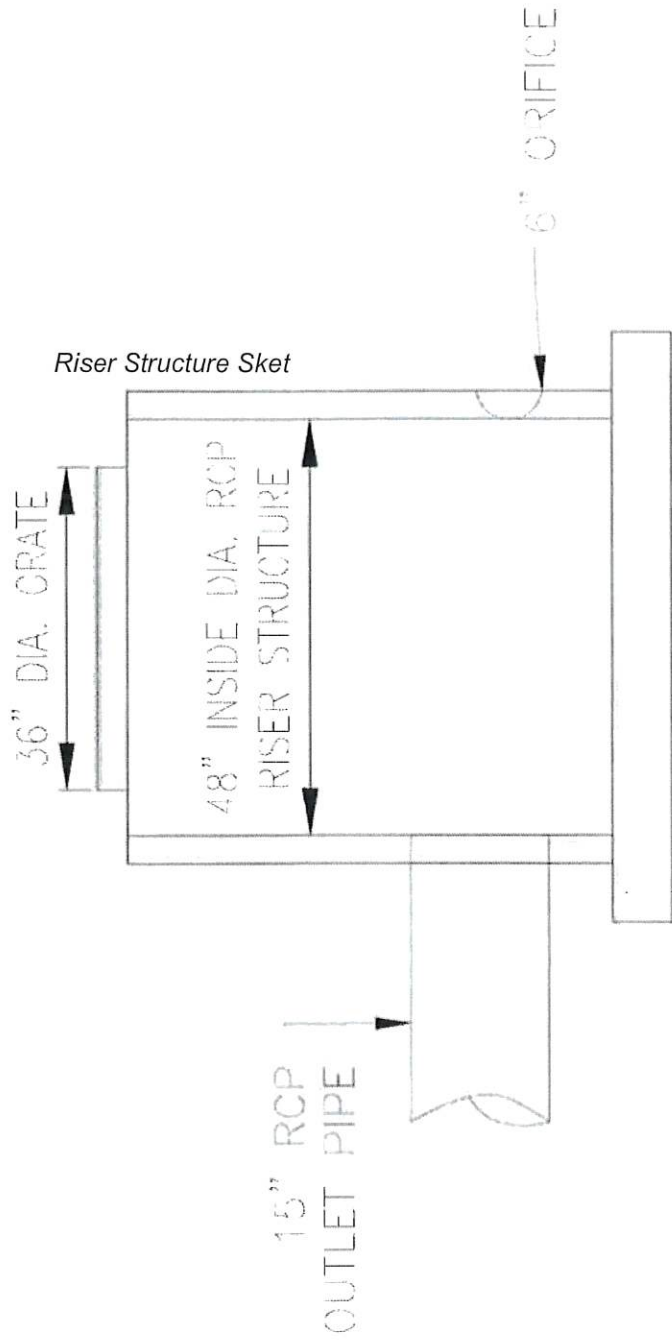
| Compliance Verification | Design | Actual | Compliant | | Comments (Condition of Structure) |
|--------------------------------|-----------------|--------|-----------|----|----------------------------------------------------------------------------------------------|
| | | | Yes | No | |
| <i>Primary Outlet Pipe</i> | | | | | Outlet Pipe Material |
| Opening Diameter (inches) | 15" | 15" | X | | RCP |
| Upstream Invert | 891.0 | 890.9 | X | | |
| Downstream Invert | 890.5 | 890.4 | X | | |
| Length (feet) | 44.33' | 43.8' | X | | |
| Slope | 1.13% | 1.14% | X | | |
| <i>Secondary Outlet Pipe</i> | (If Applicable) | | | | Outlet Pipe Material |
| Opening Diameter (inches) | | | | | |
| Upstream Invert | | | | | |
| Downstream Invert | | | | | |
| Length (feet) | | | | | |
| Slope | | | | | |
| <i>Riser</i> | (If Applicable) | | | | Riser Material |
| Opening Diameter (inches) | 36" | 36" | X | | Riser structure is RCP, Riser structure is in good condition, no clogging or cracking. |
| Elevation | 894.0 | 894.0 | X | | |
| <i>Upper Discharge Control</i> | (If Applicable) | | | | |
| Opening Diameter (inches) | - | | | | |
| Elevation | - | | | | |

| Compliance Verification | Design | Actual | Compliant Yes No | | Comments | |
|--------------------------------------------------------|-------------------|--------|---------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| <i>Lower discharge Control</i> | (If Applicable) | | | | | |
| Opening Diameter (inches) | 6" | 6" | X | | *Normal water level was lower than design; presumed to be due to dry weather this summer. Vegetation indicates typical water level is higher (near design). Continue to monitor. | |
| Elevation | 891.0 | 890.9 | X | | | |
| <i>Other (Description)</i> | | | | | | |
| Opening Type and Size (inches) | | | | | | |
| Elevation | | | | | | |
| <i>Emergency Spillway</i> | | | | | | |
| Elevation | 895.3 | 895.15 | X | | | |
| Length of spillway (feet) | 10' | 10' | X | | | |
| <i>Embankment</i> | Present Yes no | | | | Comments/Maintenance Requirements | |
| Unauthorized Plantings, trees, or woody vegetation | | X | | | A lot of cattails, no other unauthorized vegetation. | |
| Animal burrows or slope erosion | | X | | | | |
| <i>Storm Sewer Outfalls</i> | type & Size | | Location | | Comments | |
| Outfall 1 | 12" HDPE | | North end of pond | | Good condition, slight scour at outfall | |
| Outfall 2 | | | | | | |
| Outfall 3 | | | | | | |
| <i>Storage Properties</i> | Design | Actual | Compliant Yes No | | Not Applicable | Equipment Used |
| Normal Water Elevation (Wet Ponds) | 891.0 | 889.8 | X* | | | Level Loop & GPS (Navcom) |
| Design High Water Elevation | 893.64 | 893.64 | X | | | |
| Area at Normal Water Elevation (Ac) (Wet Ponds) | 0.22 | .18 | X | | | (3.94/3)*(0.18+0.38+(0.18*0.38) 5) |
| Area at Design High Water Elevation (Ac) | 0.33 | .38 | X | | | |
| Active Storage Available (Ac-Ft)* | 0.72 | 1.08 | X | | | |
| Lowest Elevation at Top of Embankment (If Applicable) | 896.3 | 896.1 | X | | | Level Loop & GPS (Navcom) |
| Average Elevation at Top of Embankment (If Applicable) | 896.3 | 896.1 | X | | | Level Loop & GPS (Navcom) |
| Maximum Bottom Elevation | 884 | 884.65 | X | | | Extended rod with measure down rod |
| Average Pond Bottom Elevation | 884 | 884.9 | X | | | Extended rod with measure down rod |
| Pond Bottom Area (Ac) | 0.014 | 0.014 | X | | | |
| Maximum Pond Depth | 7' | 6' | X | | | Extended rod with measure down rod |
| Average Pond Depth | 5' | 5 | X | | | Extended rod with measure down rod |
| Average Permanent Pool Depth (Wet Ponds) | 5' | 5' | X | | | |

*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

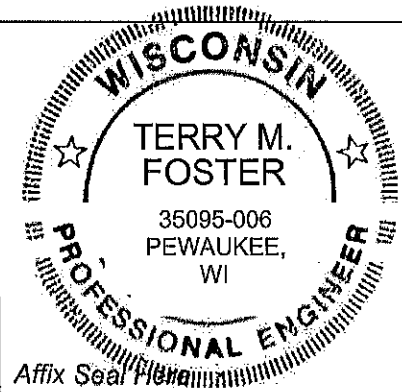
Dry Ponds Use H —Height of Section, $A1$ —pond bottom area, $A2$ —area at top section



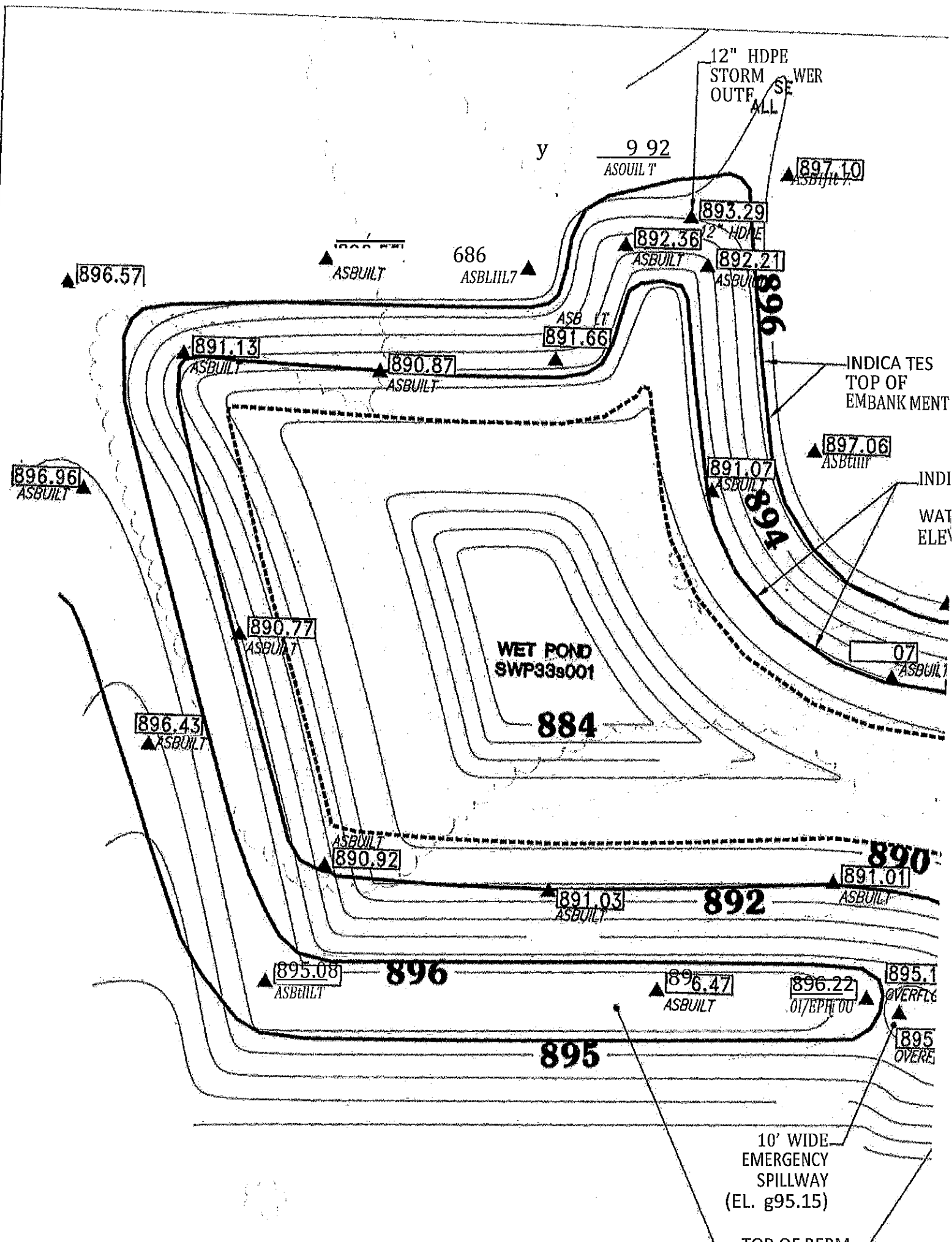
Inspection Firm: Trio Engineering
Phone Number: (262) 790-1480
Address: 4100 N. Calhoun Road
Brookfield, WI 53005

Inspector Name : Terry Foster
Inspection Date: November 4, 2020

Certifying Professional
Name: Terry Foster
Phone Number: (262) 790-1480



| | |
|-----------|------------------------|
| 11-4-2020 | <i>Terry M. Foster</i> |
|-----------|------------------------|



12" HDPE
STORM SEWER
OUTFALL

9 92
ASBUILT

897.10
ASBUILT

893.29
ASBUILT

892.36
ASBUILT

892.21
ASBUILT

686
ASBUILT

896.57
ASBUILT

891.66
ASBUILT

966
ASBUILT

INDICATES
TOP OF
EMBANKMENT

891.13
ASBUILT

890.87
ASBUILT

897.06
ASBUILT

891.07
ASBUILT

INDI
WAT
ELE

896.96
ASBUILT

WET POND
SWP33a001

884

07
ASBUILT

890.77
ASBUILT

896.43
ASBUILT

890.92
ASBUILT

890

891.03
ASBUILT

892

891.01
ASBUILT

895.08
ASBUILT

896

896.47
ASBUILT

896.22
01/BPH/OU

895.1
OVERFLS

895

895
OVERE

10' WIDE
EMERGENCY
SPILLWAY
(EL. g95.15)

TOP OF BERM