City of Monroe
Monroe, Wisconsin

Water Quality Trading Plan

WPDES Permit No. WI-0020362-08-0

Project No. 20-385

Updated May 2026
Updated April 2022
March 2021

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL

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Prepared for:

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I. INTRODUCTION AND BACKGROUND

A. Study Purpose and Scope

The purpose of this report is to provide the Wisconsin Department of Natural Resources (WI DNR) with an update to the City of Monroe's Water Quality Trading (WQT) Plan for the duration of the WPDES permit term. The permit term is January 2026 – December 2031.

B. Government Organization

The City of Monroe is incorporated and located in Green County in southern Wisconsin. The governing body is a City Council with a mayor and nine elected alderpersons. The elected officials are assisted by appointed officials, including City Administrator, Assistant City Administrator, City Clerk, Director of Public Works, Utilities Supervisor, Chief of Police, City Attorney, and Fire Chief.

The City has a Board of Public Works responsible for making recommendations to the City Council regarding the sanitary sewer collection system and wastewater treatment plant (WWTP). Any recommendations made by the Board of Public Works is presented to the City Council for review and final approval.

C. Economic, Demographic, and Land Use Information

According to the 2020 Census, the City of Monroe has a population of 10,509 persons and approximately 4,810 households. The residents of the City present a mix of people who work in Monroe and those that work outside of the community. In addition to several large businesses, there are several small businesses located in the community. The community has a number of industries that discharge wastewater into the collection system for treatment at the WWTP. The City's comprehensive plan notes that 77 percent of the planning area consists of urban land use with the remaining land being defined as rural.

D. Watershed Information

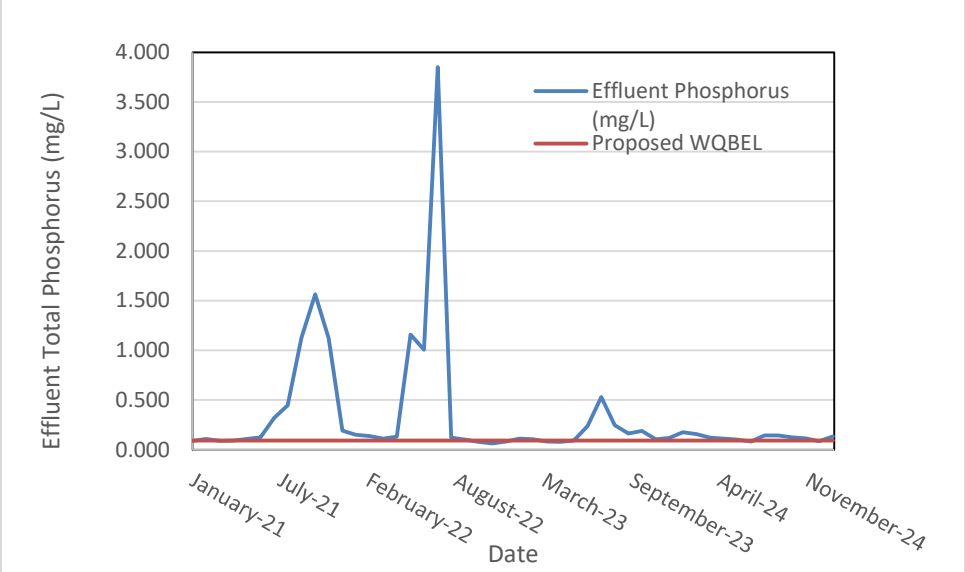
The WWTP discharges to Honey Creek (Honey Creek and Richland Creek Watershed, SP01 - Sugar-Pecatonica River Basin) in Green County. Exhibit 1 contains a copy of the HUC-12

Watershed Map, the HUC-8 Watershed Map, and the PRESTO-Lite Results. Looking at the PRESTO data it appears as if the PS:NPS ratio is 8 percent:92 percent.

II. HISTORICAL EFFLUENT QUALITY

Exhibit 2 includes the WWTP effluent flow and effluent phosphorus concentrations from January 2021 to December 2024 as reported to the WI DNR. The monthly average phosphorus data from January 2021 to December 2024 is provided in Figure 1.

Figure 1 – WWTP Effluent Phosphorus Data from January 2021 to December 2024



As this figure demonstrates the City phosphorus discharge has periodic spikes. This is a result of changes to the inflow from the various industries in the community. The Average phosphorus discharge over the WPDES permit term (permit valid January 2021 – December 2025) was 0.3318 mg/l. Due to this increase in phosphorus discharge from the previous WPDES permit term, the City has taken steps to secure additional phosphorus credits through the Water Quality Trading Clearinghouse.

Table 1 – Water Quality Trading Credit Needs 2021 – 2025

Year	Credits Used
2022 (1/2 year of credits used)	19.81
2023	447.93
2024	181.76

Because of the unexpected increase in industrial flows at the WWTP, the City has taken several steps to handle the new flows. The most important step the City has taken is to begin the process of facilities planning to expand the WWTP. This expansion will include an expanded aeration system and expanded tertiary treatment for enhanced phosphorus removal prior to discharge. Second, the City has met with the industrial customers to find a solution to the high discharges being received by the WWTP.

The City uses a variable rate structure for the discharge of phosphorus to the Category C user fees for sewer. The purpose of this rate structure was to provide an incentive for the wet industries in the City to control phosphorus from their facility and, if they choose not to control their phosphorus, the surcharge will provide the City funds to remove the phosphorus at the WWTP. This rate structure will be evaluated further in the Facilities Planning for the aforementioned expansion.

III. WATER QUALITY TRADING

A. Background

Before the implementation of the stringent Water Quality Based Effluent Limits (WQBELs), the City had implemented many Best Management Practices (BMPs) throughout the watershed to help protect the watershed. These efforts predated phosphorus removal requirements from the WI DNR and these projects are unable to be counted towards the needed trading credits to meet the WQBEL. As a result of these improvements, the creek upstream of the outfall had very low levels of phosphorus, and the City submitted a stream study to the WI DNR to request an increase in the WQBEL discharge level to reflect the high quality of water in the receiving stream. The results of this stream study are a WQBEL of 0.092 mg/L. A copy of the WI DNR calculations for the updated WQBEL are located in Exhibit 3.

B. Needed Credits Calculations

Reviewing the phosphorus data the following are the annual averages to be considered for the needed credit calculation:

Date Range	Discharge (MGD)	Phosphorus Effluent (mg/l)
January 2021-December 2024	1.7317	0.3318
January 2021-December 2021	1.750	0.448
January 2022 - December 2022	1.676	0.583
January 2023 - December 2023	1.682	0.172
January 2024 - December 2024	1.8193	0.1240
January 2023- December 2024	1.750	0.148

January 2021 – December 2024 Needed Credits

Average Discharged Flow: 1.7317 MGD

Average Phosphorus Discharge: 0.3318 mg/L

Allowable TP = 0.092 mg/L x 8.34 x 1.7317 MGD x 365 days = 484.98 lbs./year

Discharged TP = 0.3318 mg/L x 8.34 x 1.7317 MGD x 365 = 1749.1 lbs./year

Needed Credits = 1749.1-484.98 = **1264.1 lbs./year**

2021 and 2022 had phosphorus discharges that are a lot higher than 2023 and 2024. To provide an adequate range of credit needs a calculation of needs for the 2023 and 2024 years were also calculated.

January 2023 – December 2024 Needed Credits

Average Discharged Flow: 1.750 MGD

Average Phosphorus Discharge: 0.148mg/L

Allowable TP = 0.092 mg/L x 8.34 x 1.75 MGD x 365 days = 490.1 lbs./year

Discharged TP = 0.148 mg/L x 8.34 x 1.75 MGD x 365 = 788.4 lbs./year

Needed Credits = 788.4-490.1 = **298.3 lbs./year**

Using this information, the City will need a minimum of 298.3 lbs/year and could need as much as 1,264.1 lbs/year if the industrial discharges increase unexpectedly. The City is continually searching for additional trades to allow for the City to have adequate credits to meet the water quality trading needs. Additionally, in an effort to keep the phosphorus levels lower, the City has met with the large users to help balance the flows sent to the WWTP.

C. Water Quality Trading Locations

Exhibit 4 has a map showing all WQT locations.

a. Industrial Park

The City of Monroe has an industrial park and recently modified one of the ponds to allow for phosphorus removal. Exhibit 4 shows the location of the pond upgraded to include for phosphorus removal. Notice of Intent (NOI) for the ponds is located in Exhibit 5. The phosphorus credits were calculated using Windows Source Loading and Management Model (WinSLAMM). Both ponds have been constructed and are in operation. The design life for the ponds is 20 years and the City intends to complete maintenance on these ponds to maximize the removal efficiency of the ponds.

It should be noted, after conversations with the WI DNR, the City can only gain credits for the phosphorus reduction from the stormwater pond for all improvements that took place in the industrial park prior to 2015. City records and past aerial photos were used to determine what development occurred in the industrial park after 2015. Any improvements that occurred after 2015 were assumed to be undeveloped for the purposes of this calculation. No changes have been made to the pond. At the time of the submittal of the

2022 Water Quality Trading Plan the industrial park build out was nearly complete and no changes have been made to the watershed land use.

WEST POND

Trade Ratio (TR) (West Pond): 2:1

TR = (Delivery + Equivalency + Downstream + Uncertainty):1

TR = 0+0+0+2 = 2:1

Credits Generated

Pre-BMP Phosphorus Discharge: 29.7 lbs./year

Post-BMP Phosphorus Discharge: 11.21 lbs./year

Total Credits Generated by Practice: 18.49 lbs./year

With Trade Ratio: **9.25 lbs./year**

i. Total Credits from Industrial Park Pond

Total Industrial Park Pond WQT Credits = 9.25 lbs./year

The City of Monroe used WinSLAMM to calculate the available credits for this practice. A copy of the WinSLAMM results is located in Exhibit 5. Construction of this pond is complete, and the credits will be available upon the processing of Form 304-207. Copies of all forms are located in Exhibit 5.

ii. Inspections and Reporting

The City recognizes the need to inspect and maintain the sites to ensure the proposed BMPs are removing phosphorus in the most efficient method possible. A detailed breakdown of the reporting requirements is in Exhibit 5.

iii. Trade Agreement

Because this property is owned by the City, the trade agreement for this trade will be completed with the WI DNR. The City will monitor the sediment levels and verify the ponds are dredged, as needed, to maximize the removal efficiency of the ponds.

iv. Applicable Standards

Wet Detention Pond (1001): Wisconsin DNR Conservation Practice Standard.

v. Operation and Maintenance

An Operation and Maintenance (O&M) Plan for this trade is included in Exhibit 5. The O&M plan describes how the best management practices (BMPs) will be operated and maintained. The operation and maintenance for these credits will be as dictated by the WI DNR Standard, Wet Detention Pond (1001): Wisconsin DNR Conservation Practice Standard.

b. Dolan Property

i. Location

This is a property recently acquired by the City and will be used as a second industrial park for the community. The location of this property is shown on the map in Exhibit 4. This property was originally cropped with a soybean/corn rotation. Due to the water quality trading plan the land is now cropped with alfalfa. The acreage to this property has changed due to buildout of the industrial park. The original Water Quality Trading plan contained a carve out for growth in the industrial park. The City filled that carve out and permitted buildings in the property to be used for water quality trading. The permits and expansion beyond the initial carve out took place in mid 2025. At present no additional industrial expansion is planned. The City will contact DNR with any potential changes that will impact the water quality trade on that property.

ii. Site Details

Revised Soil samples were pulled in 2025 to allow for an accurate accounting of the fields impact on phosphorus, using the most recent data available. Because this property is owned by the City, it makes an advantageous location for creating trading credits. The Notice of Intent for this property is located in Exhibit 6.

iii. Existing Discharge

The first step was to run the farm though SnapPlus to determine how much phosphorus would be discharged if no WQT measures are in place. The printouts from SNAP are located in Exhibit 6. Summary of the existing runoff is as follows:

2020: 32 lbs./year

2021: 69 lbs./year

2022: 30 lbs./year

2023: 67 lbs./year

2024: 28 lbs./year

2025: 66 lbs./year

Average rotational phosphorus discharge: 48.7 lbs/year

iv. Proposed Discharge/ Available Credits

TR: 1.2:1

TR = Delivery + Equivalency + Downstream + Uncertainty:1

TR = 0+0+0+1.2 = 1.2:1

v. Cropping Alfalfa:

The possibility of cropping alfalfa was analyzed in SnapPlus. The phosphorus runoff after the cropping change is as follows:

2026: 23lbs./year

2027: 21 lbs./year

2028: 19 lbs./year

2029: 18 lbs./year

2030: 17 lbs./year

2031: 15 lbs./year

Average rotational phosphorus discharge: 18.8 lbs/year

Assuming a TR of 1.2:1 the available credits from 2020 until 2025 are:

2026: (48.7-18.8)/1.2 = 24.92 lbs./year

2027: (48.7-18.8)/1.2 = 24.92 lbs./year

2028: (48.7-18.8)/1.2 = 24.92 lbs./year

2029: (48.7-18.8)/1.2 = 24.92 lbs./year

2030: (48.7-18.8)/1.2 = 24.92 lbs./year

2031: (48.7-18.8)/1.2 = 24.92 lbs./year

No Fertilizers to be used on the field.

vi. Credits

The Credits available for the permit term will be:

2026-2031: (48.7-18.8)/1.2 = 24.92 lbs./year

Modifications to the renter's agreement have been completed so the credits are now in place. Form 3400-207 to register the practice is located in Exhibit 6.

vii. Trade Agreement

Because this property is owned by the City, the trade agreement for this trade will be completed with the WI DNR. The City will monitor the cropped property to ensure it is maintained as agreed in the renter's agreement.

i. Inspections and Reporting

The City recognizes the need to inspect and maintain the sites to ensure the proposed BMPs are removing phosphorus in the most efficient method possible. A detailed breakdown of the reporting requirements is in Exhibit 6.

ix. Operation and Maintenance

An Operation and Maintenance (O&M) Plan for this trade is included in Exhibit 6. The O&M plan describes how the best management practices (BMPs) will be operated and maintained.

c. WWTP Expansion Site

i. Location

This is a property acquired by the City to allow for the expansion of the WWTP. Before the WQT plan was put into place the property was planted with corn every year. Per the WQT agreement the property is now cropped as oats. The location of this property is shown on the map in Exhibit 4.

ii. Site Details

Revised Soil samples were pulled in 2025 to allow for an accurate accounting of the fields impact on phosphorus, using the most recent data available. Because this property is owned by the City, it makes an advantageous location for creating trading credits. The Notice of Intent for this property is located in Exhibit 7.

iii. Existing Discharge

The first step was to run the farm though SnapPlus to determine how much phosphorus is currently being discharged. The printouts from SNAP are located in Exhibit 7.

Summary of the existing runoff is as follows:

2020: 16 lbs./year

2021: 15 lbs./year

2022: 15 lbs./year

2023: 15 lbs./year

2024: 15 lbs./year

2025: 16 lbs./year

Average Rotational Discharge: 15.3 lbs/year

iv. Trade Ratio

TR: 1.2:1

TR = Delivery + Equivalency + Downstream + Uncertainty:1

TR = 0+0+0+1.2+0 = 1.2:1

v. Cover Crop:

Using updated soil data, the use of a cover crop, such as oats, on the site was analyzed in SnapPlus. The phosphorus runoff after the cropping change is as follows:

2026: 3 lbs./year

2027: 2 lbs./year

2028: 2 lbs./year

2029: 2 lbs./year

2030: 2 lbs./year

2031: 2 lbs./year

Average Rotational Discharge: 2.16 lbs/year

Assuming a TR of 1.2:1 the available credits from 2026 until 2031 are:

2026: (15.3-2.16)/1.2 = 10.95 lbs./year

2027(15.3-2.16)/1.2 = 10.95 lbs./year

2028: (15.3-2.16)/1.2 = 10.95 lbs./year

2029: (15.3-2.16)/1.2 = 10.95 lbs./year

2030: (15.3-2.16)/1.2 = 10.95 lbs./year

2031: (15.3-2.16)/1.2 = 10.95 lbs./year

Phosphorus runoff value shown was determined by averaging the rotational average as instructed by DNR reviewer.

vi. Credits

It is recommended these acres be continue to use a no-till practice and plant oats or similar crop. The farmer's current agreement with the City involves the planting of Oats. These changes this will yield a long-term phosphorus discharge of 2 lbs./year for this site. The Credits available for the permit term

2026-2031: (15.3 -2.16)/1.2 = 10.95 lbs./year starting in 2026

Form 3400-207 registering the credits is located in Exhibit 7.

viii. Trade Agreement

Because this property is owned by the City, the trade agreement for this trade will be completed with the WI DNR. The City will monitor the cropped property to ensure it is maintained as agreed in the renter's agreement.

ii. Inspections and Reporting

The City recognizes the need to inspect and maintain the sites to ensure the proposed BMPs are removing phosphorus in the most efficient method possible. A detailed breakdown of the reporting requirements is in Exhibit 7.

x. Operation and Maintenance

An Operation and Maintenance (O&M) Plan for this trade is included in Exhibit 7. The O&M plan describes how the best management practices (BMPs) will be operated and maintained.

d. Honey Creek Streambank Restoration

i. Locations

The map in Exhibit 4 shows the WQT location. Photos showing the location of the streambank improvement project are located in Exhibit 8. The flooding experienced, along this stretch of Honey Creek, caused significant erosion.

ii. Project Description

The project completed streambank restoration for 3,500 feet of Honey Creek. The restoration will involved the placement of Boulder Toe, Bank Slope Reduction, and Tree Preservation. A copy of the streambank restoration plans are included in Exhibit 8. The Notice of Intent for this property is in Exhibit 8.

iii. Trade Agreement

During the completion of the topographic survey, it was determined the centerline of the stream was not the property boundary; therefore, an agreement was made with the landowner to allow the City to construct and maintain the BMPs. A copy of the agreement is located in Exhibit 8. The remainder of the project falls onto City property and a trade agreement will be put into place with the DNR for the City owned property.

iv. Credit Calculation

The entire stretch of the creek to be restored has experienced some level of erosion and needs restoration. Because of the varied degree of erosion throughout the reach and the differing slopes at the points of erosion, the banks were separated into 13 segments of similar erosion and slope.

The streambank erosion for each eroding bank was estimated using the process defined in the NRCS Erosion Calculator, which uses the Direct Volume Method to estimate streambank erosion (NRCS Field Office Technical Guide, 2017). The Direct Volume Method was used to estimate phosphorus loss from each eroding streambank. The sum of phosphorus loss from all eroding banks was used to estimate the amount of potential phosphorus credits, which could be generated by stabilizing eroding streambanks.

To accurately estimate the phosphorus loss using the Direct Volume method, several items need to be determined for each segment.

Exhibit 8 has the results from the soil sampling, photos of each segment, creek cross-sections from the topographic survey, and spreadsheet calculation results are included in Exhibit 8.

a. Annual Lateral Recession Rate

Because the City did not have time to measure the lateral recession rate using field measurements, the annual recession rate was estimated using the qualitative descriptions outlined in the NRCS erosion control calculator. These estimates were based on field observations of the banks. In our project area, the bank erosion varies from moderate to severe. None of the banks in the project area appear to be very severe. Photographs for each segment are included in Exhibit 8.

b. Soil Bulk Density

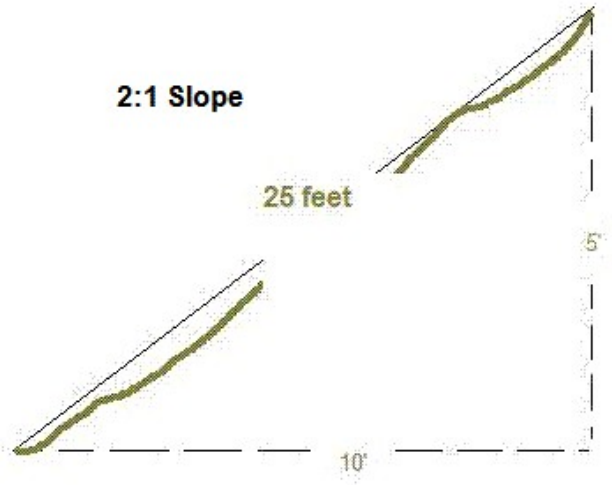
Soil bulk densities were estimated using published data from Web Soil Survey based on the mapped soil type in which each eroding bank was located. The

soil type was entered into the NRCS calculator using the soil weights provided in the calculator. The soil type for the project area is predominately Huntsville Silt Loam or Arenzville Silt Loam.

c. Eroding Bank Height and Lateral Length

A detailed survey was completed for the project area. This included the survey of cross sections to get elevations across the creek with effort being made to collect exact locations of the top of slope and toe of slope. The survey information was used to calculate the eroded lengths and the eroding bank height for each segment. Because each bank generally exhibits variability in slope height, depending on where the measurements are taken, slope heights were measured for each bank in several locations, each cross-section was approximately the same distance apart. The average bank slope height was used to estimate phosphorus loss.

** Eroding bank height is measured along the bank, not the vertical height of bank. Example: if vertical height of an eroding streambank is 5 feet, and the bank is on a 2:1 slope, the total eroding bank distance is 25 feet -- 1/2 (Base X Height).



d. Soil Samples

Soil samples were collected from the eroding bank for each segment to estimate the total phosphorus concentration of the eroding soil. The sampling was done using the probe provided by the local Green County USDA Land Conservation office.

- Cores were taken to a depth of 6-inches.
- A composite sample was created by placing all soil cores for each section into a 5-gallon bucket and mixing the cores together before filling the sample bag with a single composite sample. The composite samples were well mixed.
- Sampling was conducted taking a core near the top of bank, in the middle of the bank, and immediately above the waterline. Each group of three will be called a subset for the purposes of this analysis. Each segment of stream had multiple subsets of soil collected for analysis.
- All subsets for each segment were placed into the bucket and mixed to create a composite sample.
- The composite samples were placed in the sampling bag. The bucket was emptied and rinsed between each testing segment to guarantee no cross-contamination of soil from one segment to the next would occur.
- Per guidance from the NRCS office, a minimum of 15 cores was taken at each location. This allows for both a representative sample and enough soil for the soil lab to test.

    - Sections 1, 2, 4 and 10: 10 subsets taken (30 total cores)
    - Sections: 3, 5, 12 and 13: 5 subsets taken (15 total cores)
    - Section 6: 7 subsets taken (21 total cores)
    - Sections 7 and 11: 8 subsets taken (24 total cores)
    - Sections 8 and 9: 14 subsets taken (42 total cores)

All sample bags were labeled with the proper stream segment and mailed to the UW Soil and Forage Analysis Laboratory in Marshfield, Wisconsin and were analyzed for total leachable phosphorus. Soil Results are located in Exhibit 8.

v. Trade Ratio Calculation:

Trade Ratio (TR): 3:1

TR = Delivery + Equivalency + Downstream + Uncertainty:1

TR = 0+0+0+3 = 3:1

vi. Credits Generated

Per NRCS Estimator Credits Total Credits Generated by Practice:

308.73 lbs./year

With Trade Ratio: **102.91 lbs./year**

vii. Inspections and Reporting

The City recognizes the need to inspect and maintain the sites to ensure the proposed BMPs are removing phosphorus in the most efficient method possible. The agreement with the landowner outlines the allowed access for inspection and the maintenance agreement on the BMPs. A detailed breakdown of the reporting requirements is in Exhibit 8.

viii. Applicable Standards

NRCS 580 – Streambank and Shoreline Protection.

ix. Operation and Maintenance

An Operation and Maintenance (O&M) Plan for this trade is included in Exhibit 8. The O&M plan describes how the best management practices (BMPs) will be operated and maintained.

e. Brokered Trade

i. A trade was brokered through the Wisconsin Water Quality Trading Clearinghouse (Clearinghouse). This trade involves 403.2 lbs at a trade ration of 2.1. This results in 192 lbs/ year in trading credits. A copy of the trade agreement is located in Exhibit 9.

IV. AVAILABLE CREDITS & PRACTICE TRACK RECORD

Trade	Trade Ratio (TR)	Available Credits	Credits with TR
Industrial Park Pond (W)	2:1	18.49	9.25
Dolan Property	1.2:1	29.9	24.92
WWTP Expansion Site	1.2:1	13.14	10.95
Honey Creek Park Streambank Restoration	3:1	308.73	102.91
Water Quality Trading Clearinghouse (available 2025)	2.1:1	403.2	192
Total	-	-	340.03

The City intends to continue pursuing credit opportunities for future growth opportunities both through projects they complete and through clearinghouse credits. See Exhibit 4 for the map showing the WQT locations managed by the City. The trade managed by the Water Quality Clearinghouse are located at W6710 Melvin Road just outside of Monroe.

The City conducts inspections on the non-point sources to verify the trade locations are being properly maintained. These inspections are included in Exhibit 10.

V. CONCLUSION

The City requires between 298.3 lbs/year to 1,264.1 lbs /year of phosphorus credites to meet their current credit needs. Because of this wide range in needed credits, in addition to exploring the expansion of treatment at the WWTP, City personnel will continue conversations with landowners to build additional water quality trading project. The City will continue to work with the largest WWTP contributors to control the loads and flows received by the City and will lastly keep in touch with the Water Quality Trading Clearing house to procure additional credits until such time the construction of the WWTP is complete.

VI. CERTIFICATION

The undersigned hereby certifies that this Water Quality Trading Plan is accurate and correct to the best of his knowledge.

City of Monroe Wastewater Treatment Plant

By: _____

Michael Kennison
Water and Wastewater Supervisor
1224 10th Avenue West
Monroe, WI 53566
Phone: (608) 329-2485
Email: mkennison@cityofmonroe.org

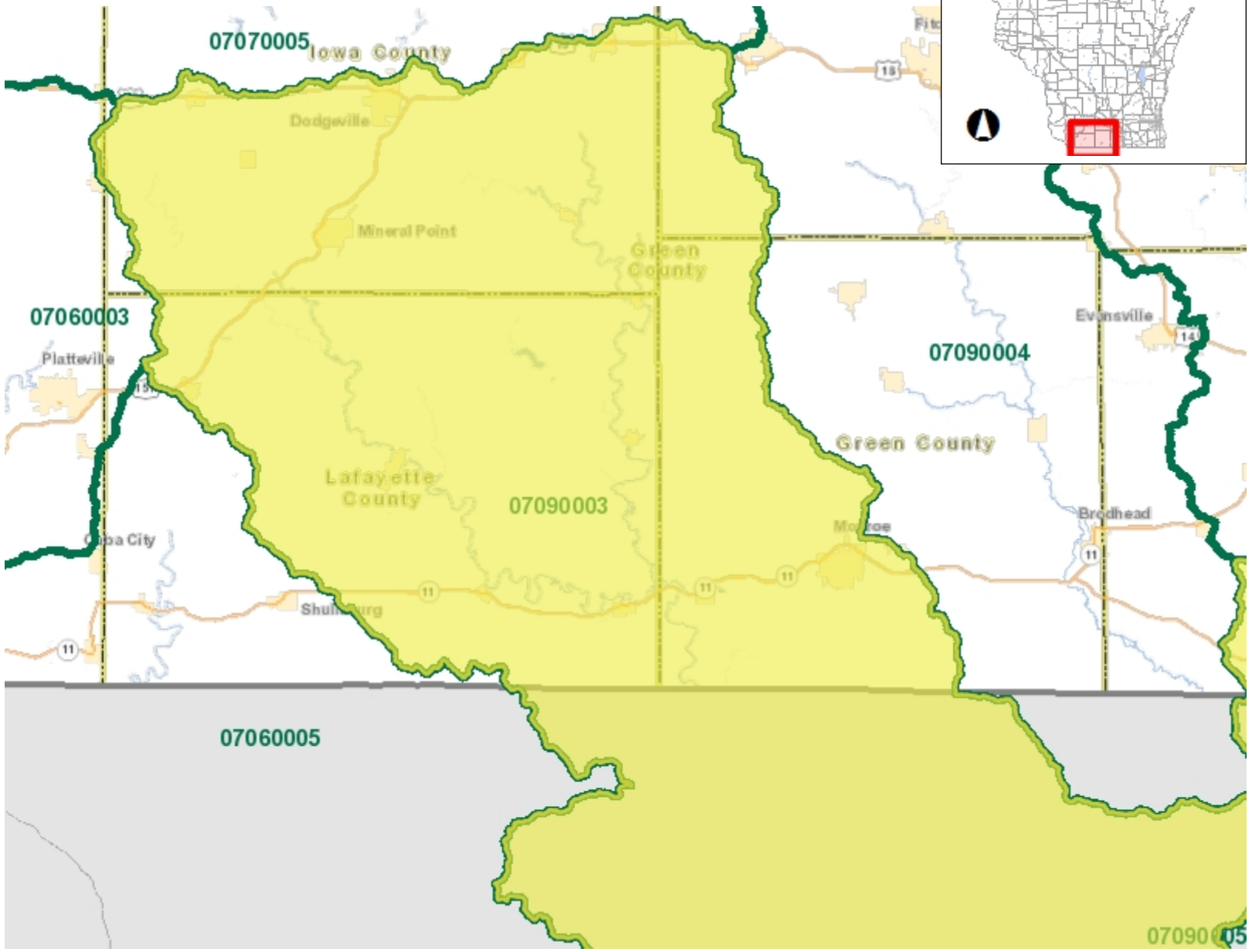
Exhibits

Exhibit 1

HUC-12 Map, HUC-8 Map and

PRESTO-Lite Results

City of Monroe - HUC 8 Watershed



Legend

- Surface Water Outfalls
- 8-digit HUCs (Subbasins)
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water

Notes

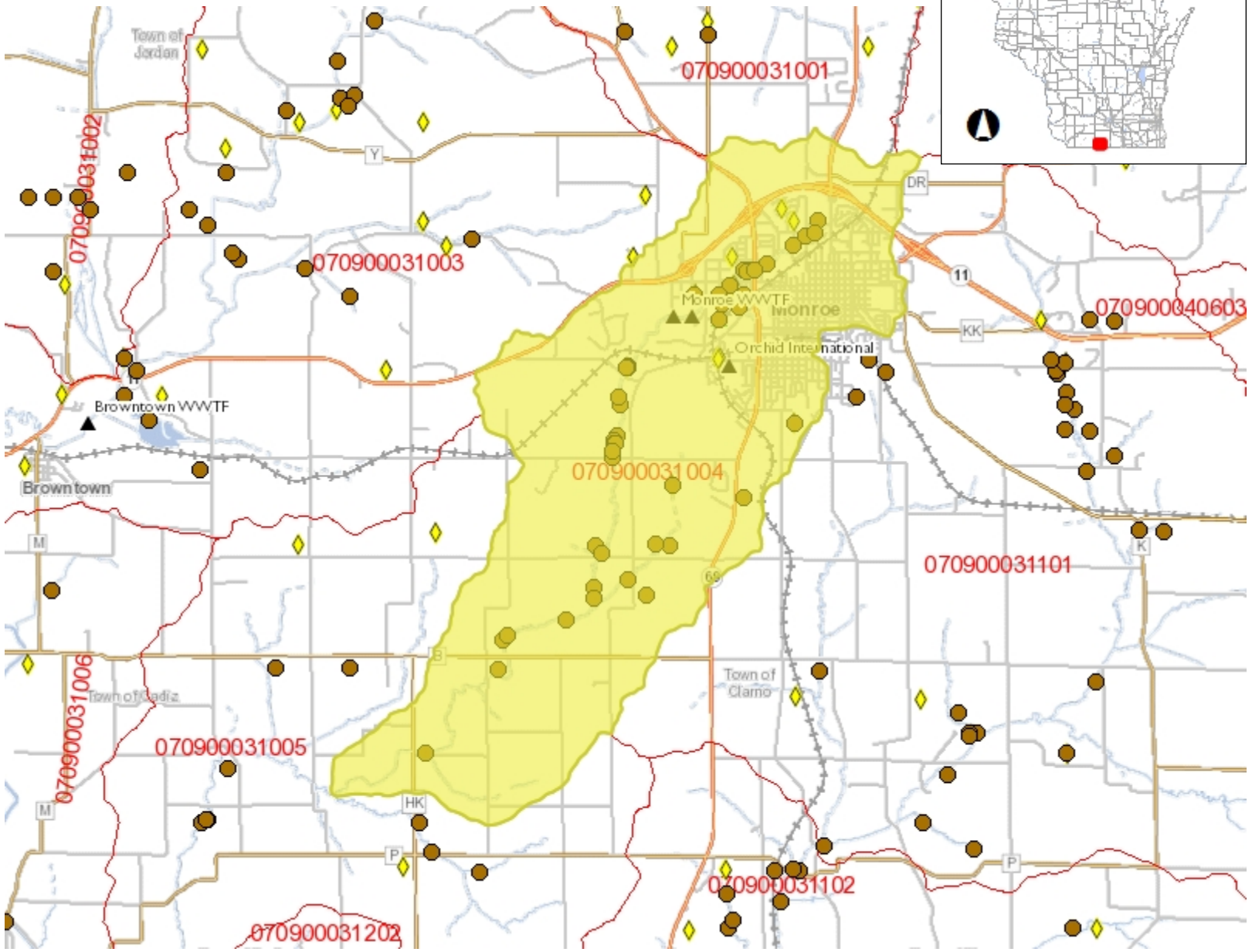
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City of Monroe - HUC 12 Watershed



Legend

- Waterway and Wetland Alterations
- Informal Actions
- Exemption Determinations
- Ordinary High Water Mark Determinations
- Navigability Determinations
  - Yes
  - Yes with Agricultural Exemption
  - No
- Surface Water Outfalls
- 12-digit HUCs (Subwatersheds)
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water

Notes

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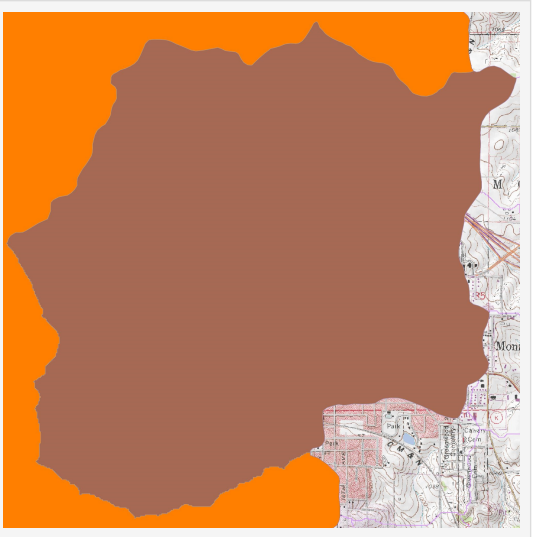
NAD_1983_HARN_Wisconsin_TM

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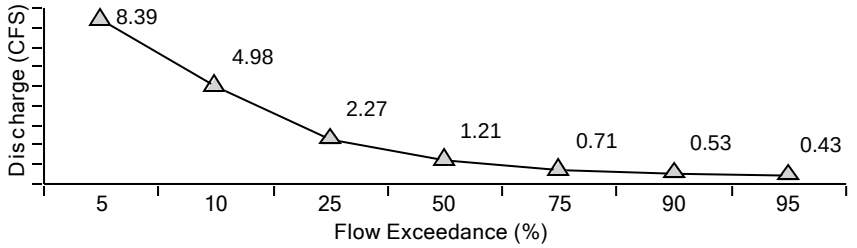
DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: http://dnr.wi.gov/legal/

PRESTO-Lite Watershed Delineation Report

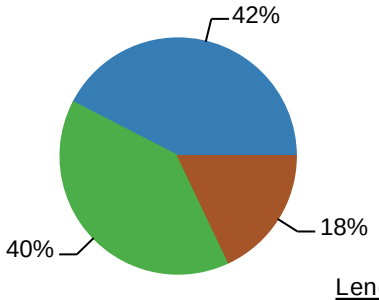
Reach ID: 200004058
Watershed Name: Hawthorn Creek-Honey Creek
Waterbody Name: Honey Creek
HUC08: Pecatonica River
Watershed Area: 4.74 mi²
Average Annual Precipitation: 36.14in



Stream Flow

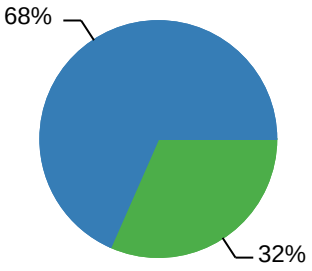


Tributary Stream Type



Type	Length
Cool-Cold Headwater	5167 ft
Cold Headwater	4821 ft
Macroinvertebrates	2182 ft
Coldwater	0 ft
Cool-Cold Mainstem	0 ft
Cold Mainstem	0 ft
Large River	0 ft
Warm Headwater	0 ft
Warm Mainstem	0 ft

Landcover



Type	Area
Urban	3.21 mi²
Agriculture	1.48 mi²
Forest	0.02 mi²
Barren	0.01 mi²
Grassland	0.01 mi²
Wetland	0.01 mi²

PRESTO Phosphorus Load Estimate

Avg. Annual Nonpoint Phosphorous Load (80% Confidence Interval)	9,714 (2,150 - 43,896) lbs
Number of Facilities (Individual Facility Information below)	1
Avg. Annual Point-source Phosphorous Load (2010 - 2012 total of all facilities)	3,997lbs
Most Likely Point : Nonpoint Phosphorous Ratio	29% : 71%
Low Estimate Point : Nonpoint Phosphorous Ratio (Adaptive Management)	8% : 92%

Adaptive Management Results

Facilities Discharging to the Hawthorn Creek-Honey Creek Watershed:

Facility Name	Permit #	Outfall #	Waste Type	Receiving Water	Avg. Phosphorus Load (lbs.) (2010 - 2012)
MONROE WASTEWATER TREATMENT FACILITY	0020362	001	Municipal	Honey Creek	3997

Watershed Analysis Limitations

- This analysis relies on pre-defined catchments from the Wisconsin Hydrography Data-Plus and may not delineate from the exact location required. When assessing phosphorus loads for specific facility in support of efforts such as adaptive management, care should be taken to ensure that additional downstream point sources do not exist. For adaptive management information related to specific facilities please reference the PRESTO website http://dnr.wi.gov/topic/surfacewater/presto.html
- Delineation of watersheds is based on a topographic assessment and therefore do not account for modified drainage networks such as stormwater sewer systems and ditched agriculture.
- If a watershed requires delineation from an exact location the user may use the desktop version of PRESTO that requires ESRI ArcGIS. The PRESTO tool and default datasets can be downloaded at http://dnr.wi.gov/topic/surfacewater/presto.html
- Data sources for this report originate from the WDNR's Wisconsin Hydrography Data-Plus value-added dataset and the point and non-point source loading information including in the WDNR's PRESTO model.
- If you have questions about the report generated from the PRESTO-Lite application please contact: DNRWATERQUALITYMODELING@wisconsin.gov

Exhibit 2

January 2021 – December 2024

Flow and Phosphorus Results

City of Monroe, WI
January 2021 - December 2024

Phosphorus & Flow Data

Month	Daily Average Flow (MGD)	Actual Discharge Flow	Phosphorus (mg/L)	Phosphorus Loading (ld/day)	Flow Rolling 12 Month Average (mg/l)	Phosphorus Rolling 12 month Average (mg/L)	Phosphorus 6-month Rolling Average (mg/L)
January-21	1.788	1.592	0.089	1.18167792			
February-21	1.789	1.606	0.109	1.45995036			
March-21	2.069	1.865	0.087	1.3532067			
April-21	1.884	1.682	0.092	1.29056496			
May-21	1.832	1.639	0.108	1.47628008			
June-21	2.014	1.843	0.123	1.89058626			0.101
July-21	2.068	1.906	0.320	5.0867328			0.140
August-21	2.201	2.030	0.447	7.5677994			0.196
September-21	2.055	1.864	1.126	17.50452576			0.369
October-21	2.041	1.836	1.563	23.93303112			0.615
November-21	1.782	1.599	1.124	14.98928184			0.784
December-21	1.713	1.543	0.193	2.48364366	1.936	0.448	0.796
January-22	1.725	1.546	0.150	1.934046	1.931	0.454	0.767
February-22	1.704	1.521	0.137	1.73786418	1.924	0.456	0.716
March-22	1.710	1.526	0.111	1.41267924	1.894	0.458	0.546
April-22	1.852	1.649	0.131	1.80159846	1.891	0.461	0.308
May-22	1.828	1.628	1.159	15.73634568	1.891	0.549	0.314
June-22	1.856	1.658	1.008	13.93834176	1.878	0.622	0.449
July-22	2.069	1.871	3.853	60.12275142	1.878	0.917	1.067
August-22	2.105	1.911	0.122	1.94440428	1.870	0.890	1.064
September-22	2.043	1.844	0.102	1.56865392	1.869	0.804	1.063
October-22	1.752	1.563	0.080	1.0428336	1.845	0.681	1.054
November-22	1.783	1.590	0.065	0.861939	1.845	0.593	0.872
December-22	1.991	1.800	0.081	1.215972	1.868	0.583	0.717
January-23	1.877	1.682	0.111	1.55709468	1.881	0.580	0.094
February-23	1.881	1.688	0.106	1.49225952	1.896	0.577	0.091
March-23	2.021	1.828	0.083	1.26537816	1.922	0.575	0.088
April-23	1.968	1.771	0.078	1.15207092	1.931	0.571	0.087
May-23	1.855	1.665	0.093	1.2914073	1.933	0.482	0.092
June-23	1.882	1.696	0.238	3.36642432	1.936	0.418	0.118
July-23	1.948	1.762	0.531	7.80308748	1.926	0.141	0.188
August-23	1.921	1.736	0.246	3.56164704	1.910	0.151	0.212
September-23	1.761	1.606	0.162	2.16983448	1.887	0.156	0.225
October-23	1.804	1.633	0.187	2.54679414	1.891	0.165	0.243
November-23	1.731	1.548	0.106	1.36849392	1.887	0.169	0.245
December-23	1.734	1.564	0.117	1.52611992	1.865	0.172	0.225
January-24	1.781	1.612	0.176	2.36615808	1.857	0.177	0.166
February-24	1.871	1.704	0.155	2.2027608	1.856	0.181	0.151
March-24	1.782	1.611	0.121	1.62572454	1.837	0.184	0.144
April-24	2.172	1.991	0.112	1.85975328	1.854	0.187	0.131
May-24	1.921	1.745	0.101	1.4698833	1.859	0.188	0.130
June-24	2.229	2.044	0.083	1.41489768	1.888	0.175	0.125
July-24	2.342	2.154	0.142	2.55093912	1.921	0.142	0.119
August-24	2.092	1.920	0.144	2.3058432	1.935	0.134	0.117
September-24	2.043	1.884	0.123	1.93264488	1.959	0.131	0.118
October-24	1.937	1.774	0.113	1.67185308	1.970	0.124	0.118
November-24	1.918	1.756	0.086	1.25947344	1.985	0.123	0.115
December-24	1.798	1.636	0.132	1.80103968	1.991	0.124	0.123

January 2021-December 2024	1.7317	0.3318
January 2024 - December 2024	1.8193	0.1240
January 2023 - December 2023	1.682	0.172
January 2022 - December 2022	1.676	0.583
January 2021-December 2021	1.750	0.448
January 2023- December 2024	1.750	0.148

Exhibit 3

WI DNR WQBEL Calculations

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: December 19, 2019

TO: Michael Kennison – Monroe Wastewater Treatment Facility

FROM: Sarah Luck – SCR/Fitchburg

SUBJECT: Preliminary Phosphorus Water Quality-Based Effluent Limitations for Monroe Wastewater Treatment Facility
WPDES Permit No. WI-0020362

This is in response to your request for an evaluation of the water quality-based effluent limitations (WQBELs) for total phosphorus for the discharge from Monroe Wastewater Treatment Facility in Green County. This municipal wastewater treatment facility discharges to Honey Creek in the Honey and Richland Creek Watershed (SP01) of the Sugar-Pecatonica River Basin.

Receiving Water Information

- Name: Honey Creek
- Classification: Warm water sport fish community, non-public water supply
  Low Flows used in accordance with chs. NR 106 and 217, Wis. Adm. Code:
  $7\text{-}Q_{10}$ = 1.8 cfs (cubic feet per second)
  $7\text{-}Q_{2}$ = 2 cfs

Effluent Information

- Flow Rate – Monroe Wastewater Treatment Facility
  Design Annual average = 3.7 MGD (Million Gallons per Day)

- Flow Rate – Badger State Ethanol
  Annual average = 0.090 MGD, which is the actual average flow (excluding zeros) from 10/1/2018 to 10/31/2019

Phosphorus Water Quality-Based Effluent Limits (WQBEL)

Revisions to administrative rules regulating phosphorus took effect on December 1, 2010. These rule revisions include additions to s. NR 102.06, Wis. Adm. Code, which establish phosphorus standards for surface waters. Subchapter III of NR 217, Wis. Adm. Code, establishes procedures for determining WQBELs for phosphorus, based on the applicable standards in ch. NR 102, Wis. Adm. Code.

Section NR 102.06(3)(a), Wis. Adm. Code, specifically names river segments for which a phosphorus criterion of 0.100 mg/L applies. For other stream segments that are not specified in s. NR 102.06(3)(a), , Wis. Adm. Code, s. NR 102.06(3)(b), Wis. Adm. Code, specifies a phosphorus criterion of 0.075 mg/L. The phosphorus criterion of 0.075 mg/L applies to Honey Creek.

A previous evaluation of background phosphorus data, calculated in 2015, resulted in a WQBEL of 0.075 mg/L using a background concentration of 0.553 mg/L. Section NR 217.13(2)(d), Wis. Adm. Code, states that the determination of upstream concentrations shall be evaluated at each permit reissuance. Additional data were considered in estimating the background phosphorus concentration.

The Department received a study titled “Phosphorus Stream Study Testing Report” dated December 2019 that contained the results of an in-stream sampling study conducted on Honey Creek from May 2019 through October 2019. Section NR 217.13(2)(d), Wis. Adm. Code, specifies that the background phosphorus concentration used in the limit calculation formula shall equal the median of at least four

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samples collected during the months of May through October, and that all samples collected during a 28-day period shall be considered as a single sample and the average of these concentrations used to determine a median. Averaging begins at the date of the first sample in the range of May through October. Using this methodology and the samples collected upstream of Badger State Ethanol (BSE) and the Monroe Wastewater Treatment Facility outfall (see table below), the median of the background phosphorus concentration was calculated to be 0.025 mg/L.

Sample Date	In-stream phosphorus concentration (mg/L)	
	200 ft upstream of BSE outfall	50 ft upstream of BSE outfall
5/23/2019	-	0.061
5/29/2019	-	0.031
6/28/2019	0.005	0.014
7/1/2019	0.014	0.015
8/1/2019	0.005	0.008
8/29/2019	0.028	0.011
9/24/2019	0.022	0.040
10/23/2019	0.038	0.042

The conservation of mass equation is described in s. NR 217.13 (2)(a), Wis. Adm. Code, for phosphorus WQBELs and includes variables of water quality criterion (WQC), receiving water flow rate (Qs), effluent flow rate (Qe), and upstream phosphorus concentrations (Cs). In accordance with NR 217.13(6), Wis. Adm. Code, when there are multiple dischargers affecting water quality, the resultant combined allowable load shall be divided among the various discharges using an allocation method based on site-specific considerations. Thus, the combined effluent flow rates (Qe) of BSE and Monroe Wastewater Treatment Facility were used. Furthermore, substituting a median value of 0.025 mg/L into the limit calculation equation below, the calculated limit is 0.092 mg/L for both Monroe Wastewater Treatment Facility and BSE.

$$\text{Limitation} = [(WQC)(Qs+(1-f)\ Qe) - (Qs-f\ Qe)\ (Cs)]/Qe$$

Where:

WQC = 0.075 mg/L for Honey Creek
Qs = 100% of the 7-Q_2 of 2.0 cfs
Cs = background concentration of phosphorus in the receiving water pursuant to s. NR 217.13(2)(d), Wis. Adm. Code = 0.025 mg/L
Qe = effluent flow rate = 3.7 MGD + 0.090 MGD = 3.79 MGD = 5.864 cfs
f = the fraction of effluent withdrawn from the receiving water = 0

Phosphorus Limit Expression

According to s. NR 217.14 (2), Wis. Adm. Code, because the calculated WQBEL is less than or equal to 0.3 mg/L, the effluent limit of 0.092 mg/L may be expressed as a six-month average. If a concentration limitation expressed as a six-month average is included in the permit, a monthly average concentration limitation of 0.28 mg/L, equal to three times the WQBEL calculated under s. NR 217.13, Wis. Adm. Code shall also be included in the permit. The six-month average should be averaged during the months of May – October and November – April.

Mass Limits
Because the discharge is to a surface water that upstream of a receiving water that listed as phosphorus impaired, a mass limit is also required, pursuant to s. NR 217.14(1)(a), Wis. Adm. Code. **This final mass limit shall be 0.092 mg/L × 8.34 × 3.7 MGD = 2.8 lbs/day expressed as a six-month average.**

Summary
The following is a summary of effluent limitations:

Parameter	Monthly Average	Six-Month Average
Total Phosphorus	0.28 mg/L	0.092 mg/L **2.8 lbs/day**

If there are any questions or comments, please contact Sarah Luck at (608) 275-3230 (Sarah.Luck@wisconsin.gov) or Diane Figiel at (608) 264-6274 (Diane.Figiel@wisconsin.gov).

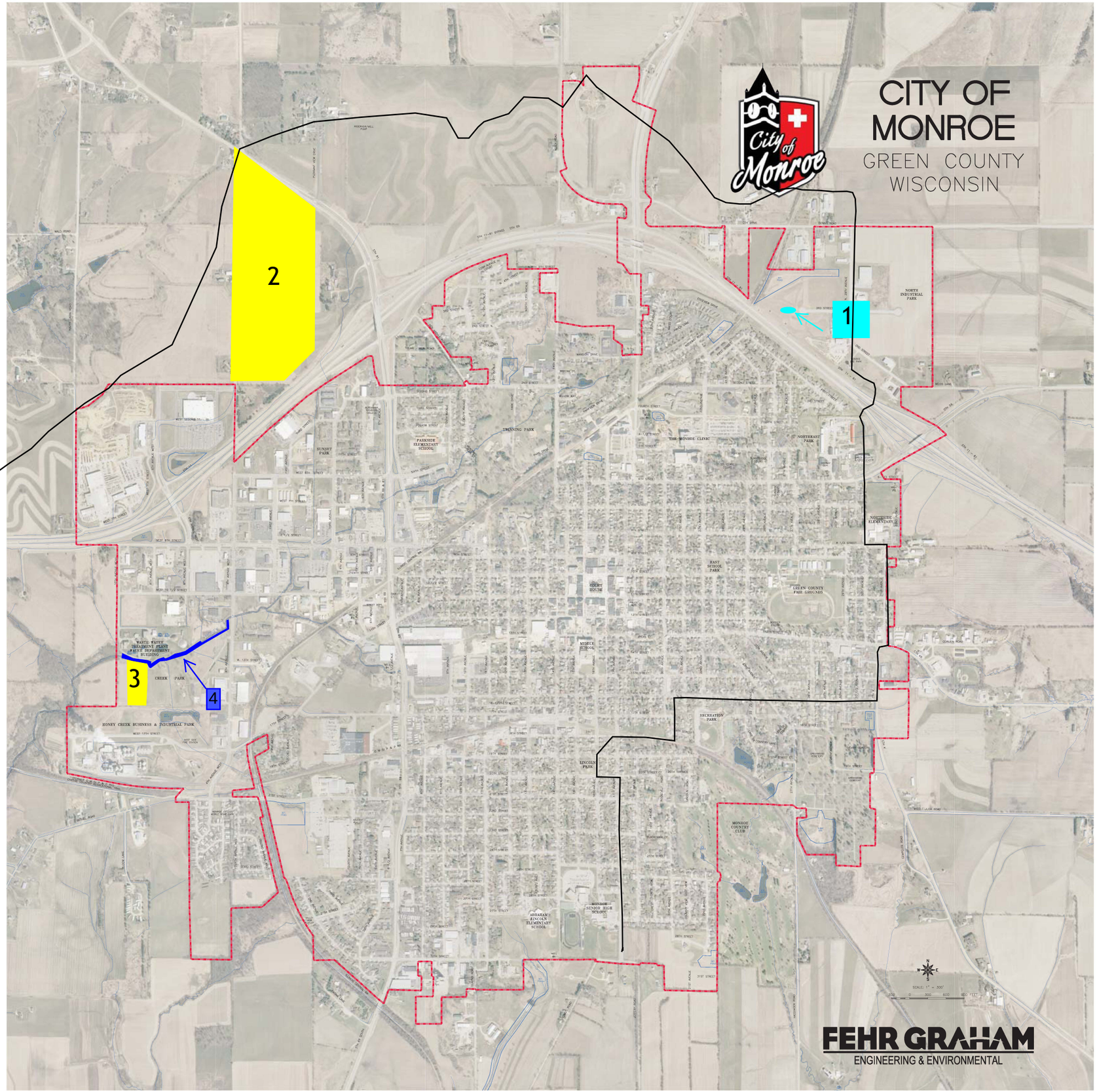
E-cc: Nathan Wells, Wastewater Engineer – SCR/Fitchburg
Diane Figiel, Water Resources Engineer – WY/3
Joseph Solawetz – Monroe Wastewater Treatment Facility
Jennifer Buholzer – Fehr Graham

Exhibit 4

WQT Location Map

EXHIBIT 4
Water Quality
Trading Locations

Approximate
HUC- 12
Boundary



Location Description:

1 - City Owned Industrial Park install wet detention pond.
2 - Dolan Property - City Owned Property
3- WWTP Expansion Site
4-Honey Creek Stream Bank Restoration

Exhibit 5

Industrial Park WQT Information

State of Wisconsin
Department of Natural Resources
101 South Webster Street
Madison WI 53707-7921
dnr.wi.gov

Notice of Intent to Conduct Water Quality Trading

Form 3400-206 (1/14)

Notice: Pursuant to s. 283.84, Wis. Stats., and ch. NR 217 Wis. Adm. Code, this form must be completed by any WPDES permittee that is using water quality trading as a method of complying with a permit limitation. Failure to complete this form would not result in penalties. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.).

Applicant Information

Permittee Name	Permit Number	Facility Site Number
City of Monroe	WI- 0020362-08-0	31428

Facility Address	City	State	ZIP Code
1110 18th Ave	Monroe	WI	53566

Project Contact Name (if applicable)	Address	City	State	ZIP Code
Jesse Duff	1107 16th Ave	Monroe	WI	53566

Project Name: Monroe Business & Industrial Park Detention Improvements

Receiving Water Name	Parameter(s) being traded	HUC 12(s)
Honey Creek/ Richland Creek	Phosphorus	070900031004 / 070900031101

Is the permittee in a point or nonpoint source dominated watershed? (See PRESTO results - http://dnr.wi.gov/topic/surfacewater/presto.html)

- ○ Point source dominated
- ◉ Nonpoint source dominated

Credit Generator Information

Credit generator type (select all that apply):

- ☐ Permitted Discharge (non-MS4/CAFO)
- ☒ Permitted MS4
- ☐ Permitted CAFO
- ☐ Urban nonpoint source discharge
- ☐ Agricultural nonpoint source discharge
- ☐ Other - Specify:

Are any of the credit generators in a different HUC 12 than the applicant?

- ◉ Yes; HUC 12: 070900031101
- ○ No
- ○ Unsure

Are any of the credit generators downstream of the applicant?

- ○ Yes
- ◉ No
- ○ Unsure

Will a broker/exchange be used to facilitate trade?

- ○ Yes; Name:
- ○ No
- ◉ Unsure

Point to Point Trades (Traditional Municipal / Industrial Discharge, MS4, CAFO)

Discharge Type	Permit Number	Name	Contact Address	Is the point source credit generator currently in compliance with their permit requirements?
○ Traditional ◉ MS4 ○ CAFO	S050075	City of Monroe	1110 18th Ave Monroe, WI 53566	○ Yes ○ No ○ Unsure
○ Traditional ○ MS4 ○ CAFO				○ Yes ○ No ○ Unsure
○ Traditional ○ MS4 ○ CAFO				○ Yes ○ No ○ Unsure
○ Traditional ○ MS4 ○ CAFO				○ Yes ○ No ○ Unsure
○ Traditional ○ MS4 ○ CAFO				○ Yes ○ No ○ Unsure

Point to Nonpoint Trades (Non-permitted Agricultural, Non-Permitted Urban, etc.)
List the practices that will be used to generate credits:

Installation of detention ponds designed for the removal of Phosphorus. See attached construction documents and Win SLAMM calculations.

Method for quantifying credits generated:
- ☐ Monitoring
- ☒ Modeling, Names: WinSLAMM
- ☐ Other: _____

Projected date credits will be available:

The preparer certifies all of the following:

- I am familiar with the specifications submitted for this application, and I believe all applicable items in this checklist have been addressed.
- I have completed this document to the best of my knowledge and have not excluded pertinent information.

Signature of Preparer	Date Signed
	5/2/2019

Authorized Representative Signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. Based on my inquiry of those persons directly responsible for gathering and entering the information, the information is, to the best of my knowledge and belief, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Authorized Representative	Date Signed
	5/2/2019

SLAMM for Windows Version 10.2.1
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Data file name: O:\Monroe City of\20-385 - Water Quality Trading Plan\Dolan Property SNAP\archive (1)\Monroe Ind Park-W Pond\14-1049 TP Analysis.mdb
Data file description:
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Madison WI 1981.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx
Start of Winter Season: 12/02 End of Winter Season: 03/12
Model Run Start Date: 01/01/81 Model Run End Date: 12/31/81
Date of run: 03-29-2021 Time of run: 10:26:40
Total Area Modeled (acres): 28.000
Years in Model Run: 1.00

	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of all Land Uses without Controls:	1.65E+06	-	123.7	12754	-
Outfall Total with Controls:	1.66E+06	-0.24%	28.48	2945	76.91%
Annualized Total After Outfall Controls:	1.66E+06			2953	

Pollutant	Concentration - No Controls	Concentration - With Controls	Conc. Units	Pollutant Yield - No Controls	Pollutant Yield - With Controls	Pol. Yield Units	Percent Reduction
Particulate Solids	123.7	28.48	mg/L	12754	2945	lbs	76.91%
Filterable Solids	60.82	60.82	mg/L	6272	6288	lbs	-0.26%
Total Solids	184.5	89.3	mg/L	19026	9233	lbs	51.47%
Particulate Phosphorus	0.2348	0.05521	mg/L	24.21	5.708	lbs	76.42%
Filterable Phosphorus	0.05321	0.05319	mg/L	5.487	5.5	lbs	-0.23%
Total Phosphorus	0.288	0.1084	mg/L	29.7	11.21	lbs	62.26%

State of Wisconsin
Department of Natural Resources
101 South Webster Street
Madison WI 53707-7921
dnr.wi.gov

Water Quality Trading Management Practice Registration

Form 3400-207 (R 1/14)

Notice: Pursuant to s. 283.84, Wis. Stats., this form must be completed by any WPDES permittee that is using water quality trading as a method of complying with a permit limitation. Failure to complete this form would not result in penalties. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.).

Applicant Information

Permittee Name	Permit Number	Facility Site Number
City of Monroe	WI- 0020362-08-0	31428

Facility Address	City	State	ZIP Code
1110 18th Ave	Monroe	WI	53566

Project Contact Name (if applicable)	Address	City	State	ZIP Code
Jennifer Buholzer	1107 16th Ave	Monroe	WI	53566

Project Name
Monroe Business & Industrial Park Detention Improvements - West Pond

Broker/Exchange Information (if applicable)

Was a broker/exchange be used to facilitate trade? ○ Yes ◉ No

Broker/Exchange Organization Name	Contact Name	
Address	Phone Number	Email

Trade Registration Information (Use a separate form for each trade agreement)

Type	Trade Agreement Number	Practices Used to Generate Credits	Anticipated Load Reduction	Trade Ratio	Method of Quantification
◉ Urban NPS ○ Agricultural NPS ○ Other	1	Installation of Wet Detention Pond	9.05	2:1	SLAMM

County	Closest Receiving Water Name	Land Parcel ID(s)	Parameter(s) being traded
Green	Honey Creek	5001.1525	phosphorus

The preparer certifies all of the following:

- I have completed this document to the best of my knowledge and have not excluded pertinent information.
- I certify that the information in this document is true to the best of my knowledge.

Signature of Preparer	Date Signed
JBBuholzer	2/22/2020

Authorized Representative Signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. Based on my inquiry of those persons directly responsible for gathering and entering the information, the information is, to the best of my knowledge and belief, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Authorized Representative	Date Signed
Alan B Baker	7-22-20

Leave Blank – For Department Use Only

Date Received		Trade Docket Number
Entered in Tracking System ☐ Yes	Date Entered	Name of Department Reviewer

Operation & Maintenance– Industrial Park Pond

For the purposes of this Operation and Maintenance Plan, severe floods are defined as any hydrologic event resulting from a 24-hour cumulative precipitation in excess of 3.8 inches of rainfall (i.e., the 5-year, 24-hour precipitation event based on the annual maximum time series as defined by NOAA Atlas 14, Volume 8, Version 2).

Refer to Inspection and Reporting requirements to be followed as part of the proper operation and maintenance of the BMPs installed as part of this water quality trading plan.

Wet Detention Pond (1001): Wisconsin DNR Conservation Practice Standard:

1. Check the slopes of the pond banks for erosion. This will include sloughing, erosion, or damage to vegetative cover. Damaged areas shall be graded, shaped, and revegetated.
2. Inspect the outfall for excess erosion and fix any areas of washout.
3. Removed excess vegetative debris
4. Repair any vandalism or vehicle damage.
5. Determine the depth of sediment accumulation in the pond. This depth to be tracked every other year.
6. Depth of sediment shall be placed onto a map to allow for easy tracking of where sediment build up is occurring.
7. As necessary, dredge pond of accumulated sediment.

Additional Conditions:

1. All repairs should be approved by WI DNR before implementing the repair to determine if a permit is needed to complete the repair.
2. Clip and/or mechanically harvest vegetated areas, as needed, to control undesirable species and woody vegetation.
3. The BMPs will be inspected following heavy rain events at a minimum. Inspection will be used to determine appropriate actions to maintain the installed BMPs for continuous TP credit generation.

4. The BMPs will be inspected annually by a licensed Professional Engineer to ensure that the BMPs are functioning as intended in order to meet the requirements of the WQT plan. Photos to be taken at time of inspection and any non-compliance areas to be documented. Photos to be taken at least once per year.

Inspection Reporting– Industrial Park Pond

a. Tracking Procedures
The City will track credits monthly and report credit usage to the DNR in the Discharge Monitoring Reports (DMRs). The annual report will summarize the 12 months of credit usage and credit generation. The City will report to DNR any concern that they have that may result in a need to modify the trade agreement and/or this trade plan. For example, a need to generate additional credits based on discharge.

b. Inspection
Inspection of the BMPs shall occur to ensure they are installed per the design and meet all applicable codes and permits. Inspections of the established BMPs shall occur each month at a minimum or following heavy rain events. A licensed professional engineer will perform an annual certification to ensure the practice is performing as designed and the City remains in compliance.
The inspection reports will include:

i. Name and contact information of the inspector

ii. Inspection Date

iii. Relevant standards set forth in the Design Plan or Operation and Maintenance Plan

iv. Issues identified

v. When and how any issues identified were addressed

vi. When and how any issues identified will be addressed in the future Inspection reports generated during each routine or after rain event inspection will be included with the Annual Water Quality Trading Report submitted by the City to DNR.

vii. Photos to be taken at time of inspection and any non-compliance areas to be documented. Photos to be taken at least once per year.

c. Annual Water Quality Trading Report Submittal

Each year the following shall be submitted to the DNR:

i. The number of pollutant reduction credits (lbs/month) used each month of the previous year to demonstrate compliance.

ii. A summary of the annual inspection of the practice that generated any of the pollutant reduction credits used during the previous year, this inspection shall be

completed by a licensed Professional Engineer.

iii. Report to include analysis of structural and vegetative conditions.

iv. Identification of noncompliance or failure to implement any terms or conditions of this permit with respect to water quality trading that have not been reported in discharge monitoring reports.

v. Photos documenting condition of practice to be completed annually.

vi. A list of all noncompliance and the correction measures and timing to address the issues throughout the year; and

vii. An updated WQT plan if management practices have or will change.

d. Certification of Management Practices

The city will certify that the BMPs are maintained and operating in a manner consistent with this Water Quality Trading Plan or provide a statement noting noncompliance with this Plan. The monthly Discharge Monitoring Report (DMR) will include the following statement as a certification of compliance:

> "I certify, to the best of my knowledge, the management practices identified in the approved water quality trading plan are installed, established and properly maintained."

e. Notification of Failure to Generate Credits

The City will notify DNR by telephone call to DNR's regional wastewater compliance engineer within 24 hours or next business day of becoming aware that phosphorus credits used or intended for use by City are not being generated as outlined in this Water Quality Trading Plan.

The City will submit a written notification within five days after the City recognizes that the phosphorus credits are not being generated as outlined in the Trading Plan. The DNR may waive the requirement for submittal for a written notice within five days and instruct the City to submit the written notice with the next regularly scheduled monitoring report required by City's WPDES Permit.

The written notice will contain a description of how and why the TP credits are not being generated as outlined, the steps taken or planned to prevent reoccurrence of the identified problem, and the length of time it will take to address the issue.

f. Conditions under which Management Practices May Be Inspected

Any DNR authorized officer, employee, or representative has the right to access and inspect the credit generating practice so long as the City's trade agreement with the DNR and this Water Quality Trading Plan remain in effect.

SHEET NUMBER: 1

MONROE BUSINESS AND INDUSTRIAL PARK DETENTION IMPROVEMENTS

FOR

CITY OF MONROE

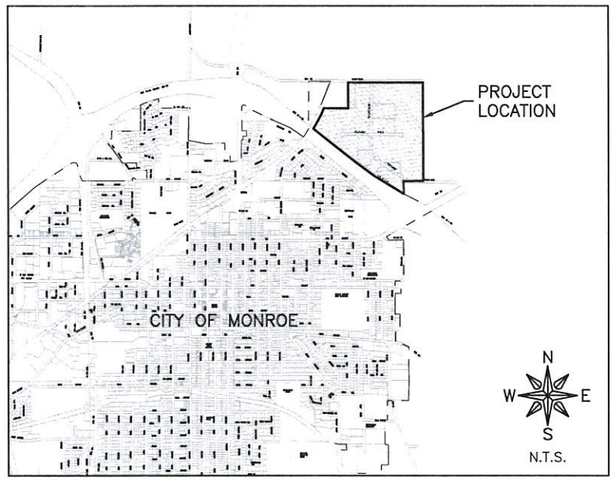
MONROE, WISCONSIN

PROPOSED SITE PLANS
GREEN COUNTY
MARCH 2019

INDEX OF SHEETS

SHEET NUMBER	SHEET TITLE
1	TITLE SHEET
2	STANDARD LEGEND
3	GENERAL NOTES
4	GENERAL NOTES
5	OVERALL DEVELOPEMENT
6	SOIL BORING LOGS
7	EAST DETENTION POND GRADING
8	EAST POND GRADING SPOILS AREA
9	EAST POND CROSS-SECTION
10	WEST DETENTION POND GRADING
11	WEST POND GRADING SPOILS AREA
12	WEST POND CROSS-SECTION
13	DETAILS
14	DETAILS





LOCATION MAP

CONTOURS AND ELEVATIONS DEPICTED HEREON ARE BASED ON THE NAVD88 DATUM
HORIZONTAL DATUM IS BASED ON NAD83 WISCONSIN SOUTH

UTILITIES

UTILITY TYPE	COMMON NAME
WATER & SEWER	CITY OF MONROE
ELECTRIC	ALLIANT ENERGY
TELEPHONE	TDS TELECOM
GAS	WE ENERGIES
CABLE	CHARTER COMMUNICATIONS

(CONTRACTOR TO BE RESPONSIBLE FOR ANY ADJUSTMENTS TO BE MADE.)

811 DIGGERS HOTLINE
Know what's below. Call before you dig.
OR CALL (800) 242-8511

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL

ILLINOIS IOWA WISCONSIN

WISCONSIN
JESSE W. DUFF
43495-6
MONROE, WI
PROFESSIONAL ENGINEER

SIGNATURE DATE
3/18/2019

OUT TO BID

ORIGINAL SET FOR PROJECT: 14-1049	DATE CREATED: 3/18/19

REVISIONS

REV. NO.	DESCRIPTION	DATE

G:\C3D\14\14-1049\Plans\14-1049 Plans.dwg, TITLE
PLOT DATE: 3/14/19

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ABBREVIATIONS

<	ANGLE
ABC	AGGREGATE BASE COURSE
AC	ACRE(S)
ACI	AMERICAN CONCRETE INSTITUTE
AGR	AGGREGATE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
ARCH	ARCHITECT
ASPH	ASPHALT
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
B	BALL VALVE
BFP	BACKFLOW PREVENTER
BIT	BITUMINOUS
BLDG	BUILDING
BLK	BLOCKING
BM	BENCHMARK
BOT	BOTTOM
BSMT	BASEMENT
BV	BUTTERFLY VALVE
B–B	BACK–TO–BACK OF CURB DIMENSION
CL or ℄	CENTERLINE
C TO C	CENTER TO CENTER
C & G	CURB AND GUTTER
CF	CUBIC FEET
CHD	CHORD LENGTH
CI	CAST IRON PIPE
CHK	CHECK VALVE
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CTY	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
C–B	CENTERLINE TO BACK OF CURB DIMENSION
COORD	COORDINATE
CU	COPPER PIPING
CTRS	CENTERS
CY	CUBIC YARDS
CS	CORPORATION STOP
D	DEGREE OF CURVE
DEP	DEPRESSED
DET	DETAIL
DIAG	DIAGONAL
DIM	DIMENSION
DI	DUCTILE IRON PIPE
DN	DOWN
DNSTR	DOWNSTREAM
DP	DRAINAGE PIPE/STORM PIPE
DWG	DRAWING
E	EAST
EJ	EXPANSION JOINT
EL, ELEV	ELEVATION
EP	EDGE OF PAVEMENT
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
EW	EACH WAY
EXP	EXPANSION
EX, EXIST	EXISTING
EXT	EXTERIOR
E =	EXTERNAL DISTANCE
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIELD ENTRANCE
FF	FINISH FLOOR
FIL	FILLET
FIN	FINISH
FL	FLOW LINE
FLR	FLOOR
FM	FORCE MAIN
FND	FOUND
FRMG	FRAMING
FTG	FOOTING
F–F	FACE TO FACE
GA	GAUGE
GI	GALVANIZED IRON PIPE
GRD	GRADE
GRS	GRATING SUPPORT
GRT	GROUT
GV	GAS VALVE
GYP	GYPSUM
HSE	HOUSE
HC	HORIZONTAL CURVE
HMA	HOT MIX ASPHALT
HNGR	HANGER
HORIZ	HORIZONTAL
H.P.	HIGH POINT
HW	HOT WATER
HWH	HOT WATER HEATER
Δ =	CENTRAL ANGLE
I	MOMENT OF INERTIA
ID	INSIDE DIAMETER
INT	INTERIOR
INV	INVERT ELEVATION; BASED ON BENCH MARK DATUM
IP	IRON PIPE
JST	JOIST
L	LENGTH OF CURVE
LAT	LATERAL
LAV	LAVATORY
LF	LINEAL FEET
L.P.	LOW POINT
LT	LEFT OF SURVEY BASE LINE
MAX	MAXIMUM
ME	MATCH EXISTING
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MTL	METAL
N	NORTH
No. OR #	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OO	OUTSIDE TO OUTSIDE
OPNG	OPENING
OPP	OPPOSITE
PC	POINT OF CURVATURE
PCC	PORTLAND CEMENT CONCRETE
PCF	POUNDS PER CUBIC FOOT
PDP	PERFORATED DRAIN PIPE
PE	POLYETHYLENE PIPE
PI	POINT OF INTERSECTION
PL	PLATE
PLG	PLUG VALVE
PLP	POLYPROPYLENE PIPE
PLYWD	PLYWOOD
PM	PRINCIPAL MERIDIAN
PR	PRESSURE REGULATORS
PRC	POINT OF REVERSE CURVATURE
PRESS	PRESSURE
PR, PROP	PROPOSED
PRV	PRESSURE REDUCING VALVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PIPE SLEEVE
PT	POINT OF TANGENCY
PLG	PLUG VALVE
PVC	POLYVINYL CHLORIDE (PLASTIC) PIPE
R	RADIUS
RDCR	REDUCER
RCCP	REINFORCED CONCRETE CYLINDER PIPE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REINF	REINFORCING
REQD	REQUIRED
ROW	RIGHT OF WAY
RFTR	RAFTER
RND	ROUND
RR	RAILROAD
RRSP	RAILROAD SPIKE
RT	RIGHT
R&R	REMOVE AND REPLACE
S	SOUTH
SB	STREAM BED
SCHED	SCHEDULE
SEC	SECTION
SF	SQUARE FEET
SHR	SHOWER
SHT	SHEET
SHTG	SHEATHING
SP	SANITARY PIPE
SPA	SPACING OR SPACES
SPEC	SPECIFICATION
SQ	SQUARE
SS	SANITARY SERVICE
STA	STATION
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL
SW	SIDEWALK
SY	SQUARE YARDS
SYM	SYMMETRICAL
TAN	TANGENT LENGTH
TBC	TOP BACK OF CURB
TBM	TEMPORARY BENCH MARK; BASED ON BENCHMARK DATUM
TD	TILE DRAIN
THK	THICK
TR	TREAD
TY	TYPE
TYP	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
UP	UTILITY POLE
UPSTR	UPSTREAM
UR	URINAL
USGS	US GEOLOGICAL SURVEY
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VOL	VOLUME
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPRC	VERTICAL POINT OF REVERSE CURVATURE
VPT	VERTICAL POINT OF TANGENCY
W	WEST
WC	WATER CLOSET
WF	WIDE FLANGE
WM	WATER MAIN
WMQ	WATER MAIN QUALITY
WV	WATER VALVE
WGT	WEIGHT
WP	WEATHER PROOF
WS	WATER SERVICE
WWF	WELDED WIRE FABRIC
W/	WITH
W/O	WITHOUT
XP	EXPLOSION PROOF

HATCH PATTERNS

- EARTH – FILL
- EARTH – UNDISTURBED
- ROCK (GEOLOGICAL)
- STONE OR RIP RAP
- GRAVEL
- CONCRETE
- CONCRETE BLOCK
- CMU
- ASPHALT PAVEMENT
- BRICK
- STEEL
- INSULATION (LOOSE/ BATT)
- INSULATION (RIGID)
- WOOD (ROUGH)
- WOOD (BLOCKING)
- WOOD (FINISH)
- DETECTABLE WARNING

SYMBOLS

CIVIL

EXISTING		PROPOSED
EXISTING R.O.W.	RIGHT–OF–WAY LINE	PROPOSED R.O.W.
	PROPERTY LINE	
	CENTERLINE	
	SETBACK LINE	
	EASEMENT LINE	
	SECTION LINE	
S 4 S 9	SECTION CORNER	
N 1000.00 E 1000.00	COORDINATE POINT ON GRID SYSTEM	
FND	FOUND OR SET PROPERTY PIN	SET
	RIGHT–OF–WAY MARKER	
	BENCHMARK	
600	CONTOUR LINE	600
000.00 FG	SPOT ELEVATION (AT •)	000.00 FG
X X	FENCE LINE	X X
	SILT FENCE LINE	
	CURB AND GUTTER	
	TIP OUT CURB AND GUTTER	
	SAWCUT, LIMITS OF PAVEMENT REMOVAL & REPLACEMENT	
X"	DECIDUOUS TREE W/ SIZE	X"
X"	CONIFEROUS TREE W/ SIZE	X"
X"	TREE STUMP	
	HEDGEROW	
	BUSH OR SHRUB	
	TREE LINE	
CL	CONSTRUCTION LIMIT LINE	CL
	SIGN (MULTIPLE POST, SINGLE POST)	
	SIGN (PYLON)	
	GUARD RAIL	
	RAILROAD TRACKS	
	BUILDING	
	MAILBOX	
	FLAGPOLE	
	BOLLARD	
AC	AIR CONDITIONER	AC

MISC

EXISTING		PROPOSED
S.B. #XX	SOIL BORING LOCATION AND NUMBER	S.B. #XX
MW #XX	MONITORING WELL	MW #XX
	REVISION NUMBER	1
	OUTLINE OF DETAILED AREA	
	SECTION NUMBER / SHEET WHERE SHOWN	A S–

SANITARY SEWER

EXISTING		PROPOSED
SAN	SANITARY SEWER	SAN
SSV SSV	SANITARY SEWER SERVICE	SSV SSV
FM	SANITARY SEWER FORCE MAIN	FM
	SANITARY CLEANOUT	CO
S	SANITARY MANHOLE	
	WYE FITTING	

WATER

EXISTING		PROPOSED
WSV WSV	WATER SERVICE	WSV WSV
W W	WATER PIPE	W W
	FIRE HYDRANT	
	YARD HYDRANT	
	WATER VALVE WITH BOX	
	CURB STOP W/CURB BOX	
	REDUCER	
W	WATER VALVE VAULT	W
	11.25° BEND	
	22.50° BEND	
	45° BEND	
	90° BEND	
	TEE	
	CAP	
M	WATER METER	M
	SPRINKLER HEAD	
	TRACER WIRE BOX	

STORM SEWER

EXISTING		PROPOSED
ST ST	STORM SEWER	ST ST
DT DT	DRAIN TILE	DT DT
	DITCH LINE (PAVED)	
	DITCH LINE (UNPAVED)	
D	STORM MANHOLE	
	CATCH BASIN	
	STORM SEWER INLET	
	STORM SEWER INLET – BEHIND CURB	
	DOWNSPOUT	
X" TYPE	CULVERT AND SIZE	X" TYPE
	RCCP OR RCP EQRS (RCAP) END SECTION	
	METAL OR HDPE END SECTION	
	FLOW DIRECTION	

EROSION CONTROL

EXISTING		PROPOSED
	EROSION CONTROL BLANKET	
	TEMPORARY AND PERMANENT SEEDING AREA	
	UNDISTURBED AREA	
	STABILIZED CONSTRUCTION ENTRANCE	
	SILT FENCE	
	INLET PROTECTION	
	TEMPORARY SEDIMENT TRAP	
	CULVERT INLET PROTECTION	
	ROCK OUTLET PROTECTION	
	ROCK CHECK DAM – COURSE AGGREGATE	
	ROCK CHECK DAM – RIP RAP	
	DITCH CHECK	

UTILITY

EXISTING		PROPOSED
FO FO	FIBER OPTIC LINE	FO FO
TV TV	UNDERGROUND TV CABLE	TV TV
	CABLE TV RISER PEDESTAL	
OU	OVERHEAD UTILITY	OU
UE UE	UNDERGROUND ELECTRIC	UE UE
	ELECTRIC RISER PEDESTAL	
E	ELECTRIC MANHOLE	E
T T	UNDERGROUND TELEPHONE	T T
	TELEPHONE RISER PEDESTAL	
	TELEPHONE MANHOLE	
	UTILITY POLE	
	UTILITY POLE W/ METER	
	UTILITY POLE W/ TRANSFORMER	
	UTILITY POLE W/ LIGHT	
	UTILITY POLE WITH GUY WIRE AND ANCHOR	
	LIGHT (MAST MOUNTED)	
	LIGHT POLE (SINGLE FIXTURE)	
	YARD LIGHT	
G G	GAS MAIN	G G
M	GAS METER	M
	GAS VALVE	
	GAS STRUCTURE	

TRAFFIC RELATED

EXISTING		PROPOSED
	CONTROLLER	
	MAST ARM ASSEMBLY AND POLE	
	SIGNAL HEAD AND POST	
	SIGNAL HEAD	
	PEDESTRIAN HEAD	
	PEDESTRIAN PUSH–BUTTON	
	HAND HOLE	
	DOUBLE HAND HOLE	
	HAND HOLE OR JUNCTION BOX	J
	HEAVY–DUTY HAND HOLE	
(5" – 2")	EXISTING CONDUIT (LENGTH AND SIZE) PROP GALVANIZED STEEL OR PVC CONDUIT UPPER NUMERAL INDICATES LENGTH "T" INDICATES CONDUIT IN TRENCH "P" INDICATED CONDUIT PUSHED LOWER NUMERAL INDICATES SIZE AND TYPE	5" – T 2" GS–PVC
	LUMINAIRE	
	ARROW – THROUGH, TURN LEFT	
	ARROW – THROUGH	
	ARROW – TURN LEFT	
	ARROW – TURN RIGHT	
ONLY	ONE DIRECTION TURN ONLY	ONLY
	HANDICAPPED PARKING STALL	
	TRAFFIC DETECTOR LOOP	
	TRAFFIC CONTROL BOX	

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL
ILLINOIS
IOWA
WISCONSIN

OWNER/DEVELOPER:
CITY OF MONROE
1110 18TH AVENUE
CITY OF MONROE

PROJECT AND LOCATION:
MONROE BUSINESS AND INDUSTRIAL PARK DETENTION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: G.B.
APPROVED BY: J.D.
DATE: 3/18/19
SCALE: AS NOTED

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING: STANDARD LEGEND
SET TYPE: OUT TO BID
G:\C3D\14\14–1049\Plans\14–1049 Plans.dwg, LEGEND

JOB NUMBER: 14–1049
SHEET NUMBER: 2 of 14

PLOT DATE: 3/14/19

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GENERAL NOTES

1. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MUNICIPAL CODE, CITY OF MONROE, WISCONSIN, CURRENT EDITION, THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION, SPECIAL PROVISIONS AND THE "STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN", CURRENT EDITION. SIGN CONSTRUCTION AND PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION.

2. IN THESE CONTRACT DOCUMENTS MENTION IS MADE OF THE "ENGINEER", WHICH SHALL MEAN FEHR GRAHAM OR THEIR DULY AUTHORIZED AGENT. IN THESE CONTRACT DOCUMENTS MENTION IS MADE OF THE "OWNER", WHICH SHALL MEAN CITY OF MONROE, OR THEIR DULY AWARDED AGENT.

3. AS PART OF THE BIDDING PROCEDURE, THE CONTRACTOR SHALL VERIFY THAT THE QUANTITIES FOR PAY ITEMS, AS PRESENTED IN THESE PLAN DOCUMENTS, ARE SUBSTANTIALLY CORRECT. IF DISCREPANCIES ARE DETECTED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE DISCREPANCY PRIOR TO THE BID DATE.

4. QUANTITIES SHOWN ARE ESTIMATES FOR INFORMATION ONLY. PAYMENT WILL BE BASED ON ACTUAL QUANTITIES MEASURED IN THE FIELD OR ON PAYMENT LIMIT DETAILS.

5. THE CONTRACTOR SHALL BE PAID FOR MATERIALS AND EQUIPMENT SUCCESSFULLY INSTALLED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AS MEASURED OR VERIFIED IN PLACE BY THE ENGINEER OR HIS AGENT.

6. IN CASE OF CONFLICT BETWEEN THE ABOVE MENTIONED SPECIFICATIONS, THE ENGINEER SHALL DETERMINE WHICH OF THE SPECIFICATIONS SHALL GOVERN. THE ENGINEER'S DECISION SHALL BE FINAL AND NO ADDITIONAL COMPENSATION SHALL BE AWARDED UNLESS APPROVED BY THE ENGINEER.

7. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY THE OWNER. IMPROVEMENT REPRESENTATIONS AS SHOWN ON THESE PLANS ARE AS ACCURATE AS POSSIBLE FROM THE INFORMATION AVAILABLE. HOWEVER, SOME FIELD REVISIONS MAY BE REQUIRED TO ACCOMMODATE UNFORESEEN CIRCUMSTANCES – THE ENGINEER SHALL BE ADVISED OF ANY NECESSARY REVISIONS WITH SUFFICIENT LEAD TIME ALLOWED TO PROPERLY CONSIDER AND ACT UPON SAID REQUESTS. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED IN CONSTRUCTING THOSE IMPROVEMENTS AS DETAILED IN THIS ENGINEERING PLAN.

8. THE ENGINEER SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE OR REJECT THE WORKMANSHIP AND/OR MATERIALS WHICH GO TO MAKE UP IMPROVEMENTS AS DETAILED IN THESE PLANS AND SPECIFICATIONS.

9. GENERAL SAFETY PROVISION: TO PROVIDE DRIVERS WITH SAFE TRAVEL CONDITIONS DURING THE CONSTRUCTION PROJECT, AND TO PROVIDE SAFE WORKING CONDITIONS FOR ALL EMPLOYEES, THE RULES, REGULATIONS, AND CONDITIONS STATED BELOW WILL PREVAIL FOR THE DURATION OF THIS CONTRACT. ANY EMPLOYEE OF THE CONTRACTOR OR HIS SUBCONTRACTORS WHO REFUSES TO COMPLY WITH THESE GENERAL SAFETY PROVISIONS SHALL BE REMOVED FROM THE JOB SITE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS. THE CONTRACTOR AND ANY SUBCONTRACTORS RETAINED BY HIM SHALL COMPLY WITH THE STATE AND FEDERAL REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (OSHA), JULY 1, 1987 AS IT RELATES TO CONTRACTOR'S OPERATIONS.

10. THE CONTRACTOR SHALL COMPLY WITH ALL STATE REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION. THE CONTRACTOR WILL NOT BE ALLOWED TO BUILD FIRES ON THE SITE.

11. THE SCALE SHOWN ON THE DRAWINGS APPLIES ONLY TO THE FULL SIZE PLANS NOT THE REDUCED SIZE PLANS.

12. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN DRAINAGE FLOWS AT ALL TIMES DURING THE PERFORMANCE OF THE WORK. METHODS USED BY THE CONTRACTOR SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. COST OF MAINTAINING DRAINAGE FLOWS SHALL BE INCIDENTAL TO THE CONTRACT.

13. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED OR DISTURBED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS, MONUMENTS AND RIGHT–OF–WAY PINS UNTIL THE OWNER, AND AUTHORIZED SURVEYOR, OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE–ESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS. REPLACEMENT OF MONUMENTS WILL BE DETERMINED BY THE ENGINEER.

14. THE CONTRACTOR SHALL REMOVE, STORE, AND RELOCATE TO THE SATISFACTION OF THE ENGINEER ALL EXISTING SIGNAGE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS, AND CONSIDER THIS AS INCIDENTAL TO THE CONTRACT.

15. OUTSIDE THE EXISTING RIGHT–OF–WAY, THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATION NEAR ANY AND ALL EXISTING SIGNS OUTSIDE THE RIGHT–OF–WAY. ANY SIGNS REMOVED FOR CONSTRUCTION PURPOSES SHALL BE CAREFULLY REMOVED AND RE–ERECTED BY THE CONTRACTOR AT A LOCATION NEAREST TO THE ORIGINAL LOCATION, OR AT A LOCATION DETERMINED BY THE ENGINEER IN THE FIELD. REMOVAL AND RE–ERECTED SIGNS AND ANY DAMAGE DONE TO EXISTING SIGNS BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER.

16. ALL ITEMS SHALL INCLUDE ALL THE NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE. MATERIALS AND LABOR NOT SPECIFICALLY IDENTIFIED SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

17. AT THE END OF EACH DAY, THE CONTRACTOR SHALL SECURE THE CONSTRUCTION WORK ZONE FROM POTENTIAL INTRUDERS.

18. THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES, AND VERIFY PAVEMENT ELEVATIONS WHERE MATCHING INTO EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIFY HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES. NOTIFY ENGINEER OF DISCREPANCIES IN EITHER VERTICAL OR HORIZONTAL CONTROL PRIOR TO PROCEEDING WITH WORK.

19. THE CONTRACTOR SHALL CONTACT THE ENGINEER OF ANY ERRORS OR DISCREPANCIES WHICH MAY BE SUSPECTED IN LINES AND GRADES, AND SHALL NOT PROCEED WITH THE WORK UNTIL ALL LINES AND GRADES WHICH ARE BELIEVED TO BE IN ERROR HAVE BEEN VERIFIED OR CORRECTED BY THE ENGINEER OR HIS REPRESENTATIVE.

20. THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCE OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF THEIR WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.

21. ALL ITEMS TO BE REMOVED AND NOT DEFINED AS A PAY ITEM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

22. ALL EXCESS EARTH EXCAVATION, EXCESS MATERIALS, OR OTHER REMOVED ITEMS SHALL BE HAULED OFF–SITE AT THE CONTRACTOR'S EXPENSE, UNLESS OTHERWISE APPROVED BY THE OWNER.

23. ROADWAY AND DRAINAGE EXCAVATION WORK SHALL BE IN ACCORDANCE WITH SECTION 205 OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL OBSTRUCTIONS, TREES, DEBRIS AND BRUSH AS DESIGNATED BY THE OWNER AND AS INDICATED ON THE PLANS. ALL MATERIALS SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DURING CONSTRUCTION, CARE SHALL BE TAKEN TO MINIMIZE DAMAGE TO THE EXISTING TREES AND LANDSCAPING. ONLY THOSE ITEMS DESIGNATED BY THE OWNER SHALL BE REMOVED.

24. ALL ROADWAY REMOVAL ITEMS SHALL CONFORM TO SECTION 204 OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION. ALL JOINTS BETWEEN THE PORTION REMOVED AND THAT LEFT IN PLACE SHALL BE SAWED TO SUCH A DEPTH THAT A CLEAN, NEAT EDGE WILL RESULT WITH NO SPALLING TO THE REMAINING PORTION. THE COST OF SAWING SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. ADDITIONAL SAWING OR RE–SAWING MAY BE REQUIRED AS DIRECTED BY THE ENGINEER WITH NO ADDITIONAL COMPENSATION BEING ALLOWED. THE COST OF SAWCUTTING THE EXISTING PAVEMENT SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

GENERAL NOTES

25. WHEN ARTIFICIAL LIGHTING IS UTILIZED DURING NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC, AS WELL AS ADJOINING RESIDENTIAL AREAS.

26. THE CONTRACTOR IS REQUIRED TO STAY WITHIN THE NOTED PROPERTY BOUNDARIES RIGHT–OF–WAY AND EASEMENTS AS SHOWN IN THE PLANS. ANY ADDITIONAL EASEMENTS SHALL BE SECURED BY THE CONTRACTOR AT NO EXTRA COST.

27. ANY AREAS DAMAGED OR DISTURBED DURING THE PROJECT AS A DIRECT OR INDIRECT RESULT OF CONTRACTOR OPERATIONS, SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THE ORIGINAL CONDITION. THE COST OF SAID RESTORATION OR REPAIR SHALL BE BORNE TOTALLY BY THE CONTRACTOR, WITH NO EXTRA COMPENSATION BEING AWARDED UNDER THIS CONTRACT. THE RESPONSIBILITY FOR THE REPAIR OR REPLACEMENT OF ANY UTILITY, STRUCTURE, LANDSCAPING, ETC., DAMAGED OR DESTROYED BY THE CONTRACTOR DURING MOBILIZATION OR CONSTRUCTION SHALL BE BORNE SOLELY BY THE CONTRACTOR, WITH NO EXPENSE BEING CHARGED TO THE ENGINEER OR OWNER. PRIOR TO ACCEPTANCE OF THIS REPAIR OR REPLACEMENT, THE CONTRACTOR SHALL PRESENT THE OWNER WITH A "SIGNOFF LETTER", SIGNED BY A RESPONSIBLE OFFICIAL OF THE OWNER OF THE DAMAGED UTILITY STATING THAT THE REPAIR OR REPLACEMENT IS ACCEPTABLE.

CONSTRUCTION STAKING

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING THE PROPOSED IMPROVEMENTS AND SHALL INCLUDE THE COST OF STAKING IN THEIR QUOTE. CONTROL POINTS ARE INDICATED ON THE PLANS.

EROSION CONTROL NOTES

1. UNLESS OTHERWISE SPECIFIED, ALL EROSION AND SEDIMENT CONTROL MEASURES AND THEIR MAINTENANCE, CLEARING AND REMOVAL SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

2. THIS WORK SHALL CONFORM TO THE APPLICABLE STANDARDS FROM THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES, THE WISCONSIN STORM WATER MANUAL, THE WISCONSIN DEPARTMENT TRANSPORTATION'S STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION, THE PROJECT SPECIFICATIONS, AND THE APPROPRIATE DETAILS.

3. A WATER RESOURCES APPLICATION FOR PROJECT PERMITS (WRAPP) WILL BE COMPLETED AND SUBMITTED TO THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES BY THE OWNER PRIOR TO CONSTRUCTION.

4. THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN SHALL BE CONSIDERED PART OF THE CONTRACT DOCUMENTS AND WILL BE AVAILABLE FOR REVIEW DURING THE BIDDING PROCESS.

5. A COPY OF THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN WILL BE PROVIDED TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL MAINTAIN ONE COPY OF THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN AT THE CONSTRUCTION SITE AT ALL TIMES DURING WORKING HOURS FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

6. THE CONTRACTOR SHALL LEGIBLY MARK ANY CHANGES OR REVISIONS IMPLEMENTED TO THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN. AT COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL DELIVER THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN (INCLUDING ALL REVISIONS, RECORDS, AND INSPECTION REPORTS) TO THE OWNER.

7. THE GENERAL CONTRACTOR AND ANY SUBCONTRACTOR RESPONSIBLE FOR SEDIMENT AND EROSION CONTROL MEASURES OR CONSTRUCTION ACTIVITIES THAT DISTURB SITE SOIL WILL BE REQUIRED TO CERTIFY THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN BEFORE A NOTICE TO PROCEED IS ISSUED.

8. A COPY OF THE CONSTRUCTION SITE STORM WATER RUNOFF GENERAL WPDES PERMIT MUST BE AVAILABLE FOR PUBLIC VIEWING AT THE CONSTRUCTION SITE BY THE GENERAL CONTRACTOR.

9. THE CONTRACTOR SHALL IMPLEMENT THE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THESE EROSION CONTROL PLANS AND IN THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN BEFORE CONSTRUCTION BEGINS.

10. THE CONTROLS SHALL BE INSTALLED AS DETAILED AND WHERE INDICATED ON THE EROSION CONTROL PLAN SHEETS AND AS DIRECTED BY THE INSPECTOR.

11. SITE ACTIVITIES SHOULD ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE PRACTICABLE.

12. EXCEPT AS PROVIDED IN THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN, DISTURBED PORTIONS OF THE SITE SHALL BE STABILIZED (TEMPORARILY OR PERMANENTLY SEEDED, MULCHED, SODDED OR PAVED) AS SOON AS PRACTICABLE, BUT IN NO CASE MORE THAN 7 CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

13. UNTIL SUCH TIME AS THE PROJECT SITE REACHES FINAL STABILIZATION AND A NOTICE OF TERMINATION IS FILED BY THE OWNER, THE CONTRACTOR SHALL BE RESPONSIBLE TO ADJUST, REPAIR, OR REPLACE, ALL VEGETATION, EROSION CONTROLS, SEDIMENT CONTROLS, AND ANY OTHER PROTECTIVE MEASURES AS REQUIRED IN ORDER TO MAINTAIN THEIR INTENDED FUNCTION IN A GOOD AND EFFECTIVE OPERATING CONDITION.

14. EXCEPT FOR FLOWS FROM FIRE FIGHTING ACTIVITIES, SOURCES OF NON–STORM WATER EXPECTED DURING THE CONSTRUCTION PROCESS THAT MAY BE COMBINED WITH STORM WATER DISCHARGES ARE IDENTIFIED IN THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN. THESE DISCHARGES SHALL BE DIRECTED AWAY FROM UNPROTECTED, BARE, OR OTHERWISE UNSTABILIZED SOIL, AND APPROPRIATE POLLUTION PREVENTION MEASURES SHALL BE IMPLEMENTED SO THAT THESE DISCHARGES DO NOT CAUSE EROSION OR DEGRADE THE QUALITY OF RUNOFF FROM THE CONSTRUCTION SITE.

15. REGULAR INSPECTIONS WILL BE MADE AS REQUIRED UNDER THE GENERAL WPDES PERMIT NO. WI–S067831–04 AND SPECIFIED IN THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN. BASED ON THE RESULTS OF THE INSPECTIONS, POLLUTION PREVENTION MEASURES SHALL BE REVISED AS APPROPRIATE AS SOON AS PRACTICABLE AFTER EACH INSPECTION. SUCH REVISIONS SHALL BE IMPLEMENTED WITHIN 7 CALENDAR DAYS FOLLOWING EACH INSPECTION.

16. THE INSPECTOR SHALL HAVE AUTHORIZATION TO DETERMINE THE ADEQUACY OF THE CONTRACTOR'S EROSION CONTROL EFFORTS. THE OWNER OR THE INSPECTOR SHALL HAVE FULL AUTHORITY OVER THE GENERAL CONTRACTOR AND ANY SUBCONTRACTOR TO CAUSE POLLUTANT CONTROL MEASURES TO BE REPAIRED, MODIFIED, MAINTAINED, SUPPLEMENTED, OR WHATEVER ELSE IS NECESSARY IN ORDER TO ACHIEVE EFFECTIVE POLLUTANT CONTROL OR TO SUSPEND OR LIMIT THE CONTRACTORS OPERATIONS PENDING ADEQUATE PERFORMANCE.

17. PERIMETER EROSION BARRIER TO BE CONSTRUCTED OF SILT FENCE UNLESS NOTED OTHERWISE.

18. INLET PROTECTION SHALL BE A TYPE A, B, C OR D, OR APPROVED EQUAL.

19. EROSION CONTROL BLANKET SHALL BE OF NORTH AMERICAN GREEN DS75 OR APPROVED EQUAL.

20. A TEMPORARY CONCRETE WASHOUT FACILITY SHALL BE CONSTRUCTED AT A LOCATION APPROVED BY THE ENGINEER. WASHOUT FACILITY SHALL BE UTILIZED FOR ALL APPLICABLE OPERATIONS.

EROSION CONTROL NOTES

21. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED, TO THE DIMENSIONS AS SHOWN, AT APPROVED LOCATIONS FOR THIS PROJECT. ALL CONSTRUCTION TRAFFIC MUST UTILIZE THE STABILIZED CONSTRUCTION ENTRANCES WHEN EXITING THE SITE. ALL COST FOR EROSION CONTROL AND RESTORATION WORK ASSOCIATED WITH THE APPROVED STABILIZED CONSTRUCTION ENTRANCES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

22. TEMPORARY EROSION CONTROL MEASURES INCLUDE TEMPORARY DITCH CHECKS, PERIMETER EROSION BARRIER, INLET AND PIPE PROTECTION, TEMPORARY SEEDING, AND ANY OTHER TEMPORARY EROSION CONTROL MEASURE NEEDED TO LIMIT THE AMOUNT OF SOIL EROSION AND SEDIMENTATION DURING CONSTRUCTION.

23. AT THE COMPLETION OF THE PROJECT, ALL TEMPORARY EROSION CONTROL ITEMS SHALL BE REMOVED FROM THE SITE, AND BECOME THE PROPERTY OF THE CONTRACTOR. CONTRACTOR MUST STABILIZE ANY AREA DISTURBED BY THE REMOVAL OF EROSION CONTROL ITEMS.

24. CONTRACTOR SHALL CLEAN ANY DEBRIS TRACKED OFFSITE DAILY.

SEEDING OF DISTURBED AREAS

1. THE FINAL TOP 6" INCHES OF SOIL IN ANY DISTURBANCE AREA MUST BE A COHESIVE SOIL CAPABLE OF SUPPORTING VEGETATION.

2. FERTILIZER HAVING AN ANALYSIS OF 16–6–6 SHALL BE APPLIED AT A RATE OF 7 LBS/1000 SF TO ALL DISTURBED AREAS AND INCORPORATED INTO THE SEEDBED PRIOR TO SOWING THE SEED.

3. THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS ADJACENT TO IMPROVEMENTS WITH SEEDING, WISDOT SEED MIXTURE NO. 10 AND MULCH, WISDOT METHOD C IN ACCORDANCE WITH WISDOT STANDARD SPECIFICATION OR AS APPROVED BY THE ENGINEER.

4. GUARANTEE: ALL SEEDED AREAS SHALL BE MAINTAINED AND MOWED FOR AT LEAST 30 DAYS AFTER GERMINATION. SCATTERED BARE SPOTS NO LARGER THAN TWO SQUARE FOOT WILL BE ALLOWED UP TO A MAXIMUM OF 5% OF ANY SEEDED AREA INCLUDING 30–DAY MAINTENANCE, MOWING AND WATERING AS NECESSARY.

5. THIS WORK SHALL CONFORM TO THE APPLICABLE STANDARDS FROM THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES, THE WISCONSIN STORM WATER MANUAL, THE WISCONSIN DEPARTMENT TRANSPORTATION'S STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION, THE PROJECT SPECIFICATIONS, AND THE APPROPRIATE DETAILS.

6. RESTORATION – THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED DURING CONSTRUCTION OF THE IMPROVEMENTS AND RELATED APPURTENANCES OR AS PART OF ANY OF THEIR ACTIVITIES TO A CONDITION EQUAL TO OR BETTER THAN THE ORIGINAL CONDITION.

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PROJECT AND LOCATION:
MONROE BUSINESS AND INDUSTRIAL PARK DETENTION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: G.B.
APPROVED BY: J.D.
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SCALE: HOR
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REVISIONS

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DRAWING: GENERAL NOTES

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JOB NUMBER: 14–1049

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PLOT DATE: 3/14/19

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STORM SEWER

1. STORM SEWERS THAT CROSS OVER ANY PROPOSED WATER MAIN SHALL BE CONSTRUCTED WITH RUBBER GASKETED JOINTS (ASTM C443).

2. ALL EXISTING MANHOLE CONNECTIONS MUST BE CORE–DRILLED, UNLESS A PRE–CORED HOLE, SUITABLY LOCATED, EXISTS IN THE MANHOLE.

3. THE LENGTH OF FLARED END SECTIONS IS NOT INCLUDED IN THE INDICATED PIPE LENGTH. HOWEVER, THE ENTIRE LENGTH OF THE FLARED END SECTION IS TAKEN INTO ACCOUNT FOR THE INDICATED SLOPE AND INVERT GRADES.

4. STORM SEWERS MATERIALS AND INSTALLATION SHALL CONFORM TO SECTION 508 OF THE STANDARD SPECIFICATIONS FOR REINFORCED CONCRETE PIPE STORM SEWERS. THIS WORK SHALL INCLUDE SEWER PIPE, PIPE BEDDING, TRENCH BACKFILL, MAKING CONNECTIONS TO EXISTING STRUCTURES, PATCHING EXISTING STRUCTURES AT NEW CONNECTIONS, STOPPERS AND PLUGS, AND ANY OTHER INCIDENTAL COSTS. ALL WORK SHALL CONFORM TO DETAILS INCLUDED IN THE CONTRACT DOCUMENTS, OR TO ORDERED MODIFICATIONS THEREFORE, AND TO APPLICABLE PORTIONS OF SECTIONS 607 AND 608 OF THE STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER. PIPE BEDDING OF 4" WELL GRADED DURABLE GRAVEL, CRUSHED STONE, OR SLAG WILL BE REQUIRED. IN STRUCTURAL LOCATIONS AND ROADWAY PAVEMENT, BEDDING MATERIAL SHALL BE PLACED TO ONE FOOT ABOVE THE TOP OF THE PIPE. TRENCH BACKFILL FROM THIS ELEVATION TO PAVEMENT SUBGRADE WILL BE REQUIRED. COST FOR BACKFILL, BEDDING, AND ALL NECESSARY WORK REQUIRED FOR INSTALLATION SHALL BE INCLUDED WITH THE COST OF THE PIPE.

5. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING STORM SEWER ELEVATIONS THAT PROJECT CONNECTS TO.

UTILITIES

1. UTILITIES SHOWN ON THE PLANS ARE FOR ILLUSTRATIVE PURPOSES ONLY AND NO GUARANTEE OF THEIR ACCURACY IS MADE OR INFERRED. THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THE DRAWINGS REPRESENT DATA RECEIVED FROM VARIOUS SOURCES. IT IS NOT GUARANTEED TO BE CORRECT OR ALL–INCLUSIVE. THE CONTRACTOR SHALL CONDUCT HIS OWN INVESTIGATION INTO THE LOCATION, SIZE, DEPTH AND NATURE OF ANY AND ALL EXISTING UTILITIES THAT MAY INTERFERE WITH THE WORK UNDER THIS CONTRACT. ANY EXISTING UTILITIES THAT ARE TO REMAIN IN SERVICE SHALL BE FULLY PROTECTED BY THE CONTRACTOR AND ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATIONS SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER OR THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ANY AND ALL UTILITY COMPANIES REGARDING ADJUSTMENTS NECESSARY. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE AND CONSIDERED INCIDENTAL TO THE PROJECT COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND, OVERHEAD, OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER OR THE OWNER OR REPLACED. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

2. THE CONTRACTOR MUST VERIFY AND LOCATE ALL EXISTING UTILITIES ON OR ADJACENT TO THE SITE. PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES, CONTACT DIGGERS HOTLINE AT 1–800–242–8511 (OR 811) FOR EXACT FIELD LOCATION OF UTILITIES. DAMAGE, AND THE COST THEREOF, TO ANY AND ALL UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY AND ALL EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE. THE ENGINEER AND SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF THE EXISTING UTILITIES SHOWN HEREON.

3. IF THERE ARE ANY UTILITIES WHICH ARE NOT MEMBERS OF THE DIGGERS HOTLINE SYSTEM, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THIS AND REQUESTING SAID UTILITIES TO FIELD VERIFY AND MARK PERTINENT UTILITY LOCATIONS.

4. THE UTILITY LOCATIONS, DEPTHS, ETC. SHOWN ON THESE PLANS ARE APPROXIMATE ONLY, AND SHALL BE VERIFIED BY THE CONTRACTOR WITH ALL AFFECTED UTILITY COMPANIES PRIOR TO INITIATING CONSTRUCTION OPERATIONS; THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY FOR THE ADEQUACY, SUFFICIENCY OR EXACTNESS OF THESE UTILITY REPRESENTATIONS.

5. THE CONTRACTOR SHALL CONTACT THE NECESSARY UTILITY COMPANIES FOR ANY UTILITY RELOCATIONS. THE CONTRACTOR SHALL PAY FOR ALL COSTS ASSOCIATED WITH RELOCATION OF UTILITIES ON OR ADJACENT TO THE SUBJECT PROPERTY OR WITHIN THE ROAD RIGHT–OF–WAY.

6. TRENCH BACKFILL SHALL BE FILL MATERIAL TYPE A, OR TYPE C, IN ACCORDANCE WITH AASHTO T27 GUIDELINES AND THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN", CURRENT EDITION. COST SHALL BE INCLUDED IN UNIT PRICE OF PIPE.

7. TRENCH BACKFILL SHALL BE USED IN LOCATIONS WHERE THERE IS AN EXISTING OR PROPOSED PERMANENT SURFACE.

8. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION OR HAVE THE POTENTIAL FOR CREATING FUTURE PROBLEMS SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE PROJECT AT AN APPROVED LOCATION OBTAINED BY THE CONTRACTOR, ACCORDING TO THE "STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN", CURRENT EDITION, AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

9. COST FOR REPAIRS, REPLACEMENT, AND/OR CONNECTION SHALL BE INCIDENTAL TO THE VARIOUS CONTRACT ITEMS.

SUBGRADES, SUBBASES, AND BASE COURSES

1. THE CONTRACTOR WILL BE REQUIRED TO SUBSTANTIATE BASE COURSE THICKNESSES AND FINISH PAVEMENT THICKNESSES. THE ENGINEER SHALL INSPECT BASE COURSE COREOUT PRIOR TO PLACING BASE COURSE TO ENSURE REQUIRED BASE COURSE DEPTH IS PRESENT. IN ADDITION, THE ENGINEER AND/OR THE CITY ENGINEER SHALL WITNESS THE PLACEMENT OF BITUMINOUS BINDER AND SURFACE COURSE. CORE DRILLING MAY BE REQUIRED TO DEMONSTRATE THAT BASE COURSE AND PAVEMENT THICKNESSES CONFORM TO THE SPECIFICATIONS. PRIOR TO PLACING BASE COURSE MATERIAL, THE CONTRACTOR SHALL TEST ROLL THE SUBGRADE, IN THE PRESENCE OF THE ENGINEER OR HIS AGENT TO DEMONSTRATE THAT SAID SUBGRADE IS READY FOR BASE. PRIOR TO PLACEMENT OF THE BITUMINOUS SURFACE, THE SAME VERIFICATION PROCEDURE SHALL BE PERFORMED ON THE BASE COURSE MATERIAL. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO PERFORMING ANY OF THE REQUIRED TESTS SO THAT A REPRESENTATIVE MAY BE PRESENT.

2. PRIOR TO ANY EMBANKMENT OR ROAD BASE BEING PLACED, SHOULD IT BE DETERMINED BY THE ENGINEER THAT THE SUBGRADE MATERIAL IS UNSUITABLE ON WHICH TO CONSTRUCT THE ROADWAY STRUCTURE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING THE UNSUITABLE MATERIAL TO THE SATISFACTION OF THE ENGINEER AND REPLACING SAME WITH STABILIZING SUBBASE CONSISTING OF SELECT CRUSHED MATERIAL IN ACCORDANCE WITH THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION. TO HELP MINIMIZE THE AMOUNT OF SUBBASE MATERIAL INSTALLED FOR GROUND STABILIZATION, GEOTECHNICAL FABRIC MAY BE INSTALLED AS APPROVED BY THE ENGINEER. GEOTEXTILE FABRIC SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 645 OF THE WISDOT STANDARD SPECIFICATIONS. THE COARSE AGGREGATE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR SELECT CRUSHED MATERIAL. THE EXCAVATION BELOW SUBGRADE AND DISPOSAL OF THE UNSUITABLE MATERIAL SHALL BE CONSIDERED INCIDENTAL TO SELECT CRUSHED MATERIAL. STABILIZING FABRIC SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR GEOTEXTILE FABRIC.

EXCAVATION/EARTHWORK

1. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATION NEAR ANY AND ALL EXISTING ITEMS WHICH ARE NOT INDICATED TO BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT NO ADDITIONAL EXPENSE TO THE OWNER.

2. PRIOR TO STARTING EARTHWORK OR UTILITY TRENCHING, THE CONTRACTOR SHALL STRIP THE SITE OF TOPSOIL TO A DEPTH OF 6" AND TO THE LIMITS APPROVED BY THE ENGINEER. THIS MATERIAL SHALL BE STOCKPILED IN A REMOTE LOCATION OF THE SITE (APPROVED BY THE ENGINEER) UNTIL THE PLAN IMPROVEMENTS ARE COMPLETED AND THE EXCESS MATERIAL SPREAD AS DIRECTED. IT SHALL THEN BE THE RESPONSIBILITY OF THE CONTRACTOR TO SPREAD THIS TOPSOIL MATERIAL IN AREAS OF THE SITE, OVER AREAS WHERE EXCESS EXCAVATED MATERIAL, SAND, GRAVEL HAS BEEN SPREAD OR IN OTHER AREAS AS DESIGNATED BY THE ENGINEER. THE MATERIAL SHALL THEN BE COMPACTED TO A MINIMAL DEPTH OF 6" AND FINE GRADED IN A MANNER ACCEPTABLE TO THE ENGINEER. THIS WORK SHALL BE IN ACCORDANCE WITH THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION.

3. CONSTRUCTION AND DEMOLITION (C&D) MATERIALS ARE TO BE MANAGED ACCORDINGLY PER THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MANAGE THE DIVERSION OF C&D MATERIAL AWAY FROM LANDFILLS ACCORDING TO STATE REQUIREMENTS.

4. ROCK REMOVAL TO BE PROVIDED BY MECHANICAL MEANS ONLY, NO BLASTING PERMITTED. ROCK EXCAVATION SHALL BE CONSIDERED WHEN THE PHYSICAL CHARACTERISTICS AND DIFFICULTY OF ROCK REMOVAL BY USE OF HYDRAULIC EXCAVATION IS DETERMINED BY ENGINEER TO NOT BE POSSIBLE. ROCK EXCAVATION TO BE PAID FOR AT THE BID PRICE FOR EXCAVATION. CONTRACTOR SHALL REVIEW SOIL BORINGS WHEN PREPARING BIDS.

5. ALL EXCAVATIONS FOR STRUCTURES AND PIPE SHALL BE KEPT DEWATERED DURING CONSTRUCTION UNTIL BACKFILL IS IN PLACE. DURING DEWATERING OPERATIONS, WATER SHALL BE PUMPED INTO SEDIMENT BASINS OR SILT TRAPS. (COST INCIDENTAL)

6. EXCAVATION COMMON SHALL CONFORM TO SECTION 205 OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION. THIS WORK SHALL INCLUDE THE EXCAVATION OF ALL MATERIALS TO DESIGN SUBGRADE ELEVATIONS INDICATED IN THE PLANS.

7. A SOIL REPORT CAN BE PROVIDED IN AN ELECTRONIC FORMAT TO THE CONTRACTOR UPON REQUEST FROM THE OWNER.

8. SHEETING AND SHORING SHALL BE CONSIDERED INCIDENTAL TO CONTRACT IF REQUIRED.

9. WHENEVER THE CONTRACTOR WORKS NEAR EXISTING FACILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS DURING TRENCHING OPERATIONS, HE WILL BE REQUIRED TO HAND TRENCH IN THAT AREA IN ORDER NOT TO DAMAGE THESE FACILITIES. PUSH HOLES AND SEARCH HOLES THAT ARE DUG BY THE CONTRACTOR SHALL BE BACKFILLED BY TAMPING THE EXCAVATED MATERIAL BACK IN PLACE TO KEEP SETTLEMENT TO A MINIMUM. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

10. EMBANKMENT WORK SHALL CONSIST OF THE CONSTRUCTION OF EMBANKMENTS BY DEPOSITING, PLACING AND COMPACTING EARTH, STONE, GRAVEL OR OTHER MATERIALS OF ACCEPTABLE QUALITY ABOVE THE NATURAL GROUND OR OTHER SURFACE IN ACCORDANCE WITH THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION.

11. IF SUFFICIENT TOPSOIL IS NOT PRESENT, THE CONTRACTOR SHALL SPREAD FURNISHED TOPSOIL SO AS TO MEET THE REQUIREMENTS OF THE CONTRACT. FURNISHED TOPSOIL SHALL ONLY BE USED WITH APPROVAL BY THE ENGINEER. THIS FURNISHED TOPSOIL SHALL BE PAID FOR AS TOPSOIL, DEPTH SPECIFIED.

12. IN PROPOSED FILL AREAS FOR PAVEMENT AND EMBANKMENT, TOPSOIL AND TURF SHALL BE SCARIFIED AND REMOVED PRIOR TO CONSTRUCTING THE EMBANKMENT.

ROCK EXCAVATION CONSIDERATIONS

1. IT IS ASSUMED THAT ALL EXCAVATIONS TO LEVELS AND DIMENSIONS REQUIRED BY THE CONTRACT DOCUMENTS ARE EXCAVATION COMMON. EXCAVATION INCLUDES REMOVAL AND DISPOSAL OF ALL MATERIALS ENCOUNTERED EXCEPT ROCK/SOUND BEDROCK WHICH IS DEFINED AS NATURAL MATERIALS WHICH:

A. CANNOT BE EXCAVATED WITH A MINIMUM 3/4 CUBIC YARD CAPACITY BACKHOE WITHOUT DRILLING AND BLASTING;

B. CANNOT BE ECONOMICALLY REMOVED WITH A ONE–TOOTH RIPPER ON A D8 CAT (OR EQUIVALENT);

C. REQUIRES THE USE OF SPECIAL EQUIPMENT SUCH AS A PNEUMATIC HAMMER;

D. REQUIRES THE USE OF EXPLOSIVES (AFTER OBTAINING WRITTEN PERMISSION OF THE OWNER).

2. EXAMPLES OF MATERIAL CLASSIFIED AS ROCK ARE BOULDERS 1/2 CUBIC YARD OR MORE IN VOLUME, BEDROCK, ROCK IN LEDGES, AND ROCK–HARD CEMENTITIOUS AGGREGATE DEPOSITS.

3. DO NOT PROCEED WITH ROCK EXCAVATION WORK UNTIL ENGINEER AND/OR TESTING FIRM (I.E., CGC) HAS TAKEN THE NECESSARY MEASURES TO DETERMINE QUANTITY OF ROCK EXCAVATION REQUIRED TO COMPLETE THE WORK. MEASUREMENTS WILL BE TAKEN AFTER PROPERLY STRIPPED OF EARTH BY THE CONTRACTOR. CONTRACTOR WILL BE PAID THE DIFFERENCE BETWEEN THE COST OF ROCK AND EXCAVATION COMMON BASED ON AND AGREED UPON UNIT PRICE ESTABLISHED PRIOR TO STARTING ROCK EXCAVATION.

4. STATED MODELS OF EXCAVATION EQUIPMENT ARE MERELY FOR PURPOSES OF DEFINING THE VARIOUS EXCAVATION CATEGORIES AND ARE NOT INTENDED TO INDICATE THE BRAND OR TYPE OF EQUIPMENT THAT IS TO BE USED.

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REVISIONS

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JOB NUMBER: 14–1049

SHEET NUMBER: 4 of 14

PLOT DATE: 3/14/19

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SUMMARY OF QUANTITIES

DESCRIPTION	UNIT	QUANTITY
EXCAVATION COMMON	L.S.	1
TYPE B CLAY LINER, 12" *PPQ*	S.Y.	13,629
EROSION CONTROL MAT (CLASS URBAN TYPE A)	S.Y.	3,152
TRACKING PAD	EA.	2
SILT FENCE	L.F.	1,467
RIPRAP HEAVY	C.Y.	401
RIPRAP LIGHT	C.Y.	149
STORM SEWER PIPE REINFORCED CONCRETE CLASS III, 12 – INCH	L.F.	37
STORM SEWER PIPE REINFORCED CONCRETE CLASS III, 24 – INCH	L.F.	70
STORM SEWER PIPE REINFORCED CONCRETE CLASS III, 30 – INCH	L.F.	36
APRON END WALLS FOR CULVERT PIPE REINFORCED CONCRETE 12 – INCH	EA.	2
APRON END WALLS FOR CULVERT PIPE REINFORCED CONCRETE 24 – INCH	EA.	1
APRON END WALLS FOR CULVERT PIPE REINFORCED CONCRETE 30 – INCH	EA.	1
INLET MEDIAN 2 GRATE	EA.	2
INLET COVER TYPE MS	EA.	4
CONCRETE ANTI–SEEP COLLAR	EA.	2
TOPSOIL, SEEDING AND RESTORATION	L.S.	1

PPQ – PAY PLAN QUANTITY

N
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200 0 200 400 600 FEET

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL

ILLINOIS
IOWA
WISCONSIN

OWNER/DEVELOPER:
CITY OF MONROE
1110 18TH AVENUE
CITY OF MONROE

PROJECT AND LOCATION:
MONROE BUSINESS AND
INDUSTRIAL PARK DETENTION
IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: G.B.
APPROVED BY: J.D.
DATE: 3/18/19
SCALE: HOR
VERT

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING:
OVERALL DEVELOPEMENT

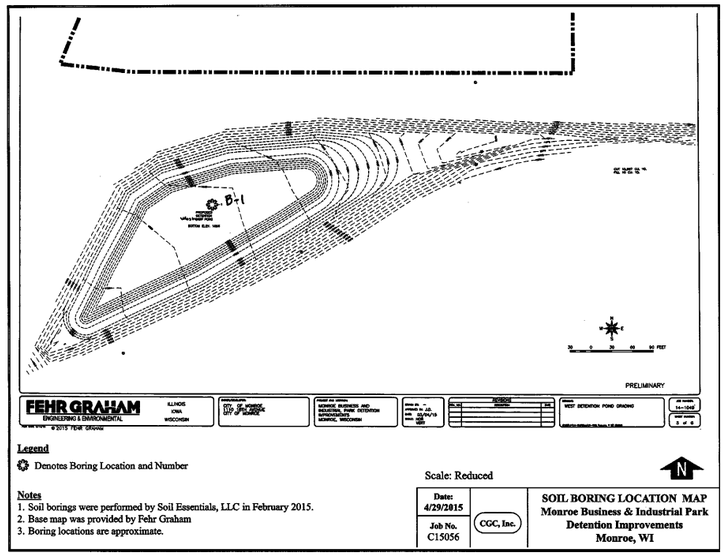
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JOB NUMBER:
14-1049

SHEET NUMBER:
5 of 14

PLOT DATE: 3/14/19

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Legend

Denotes Boring Location and Number

Notes
1. Soil borings were performed by Soil Essentials, LLC in February 2015.
2. Base map was provided by Fehr Graham
3. Boring locations are approximate.

Scale: Reduced

N

Date: 4/29/2015	CGC, Inc.	SOIL BORING LOCATION MAP Monroe Business & Industrial Park Detention Improvements Monroe, WI
Job No. C15056		

SOIL BORING #1
SURFACE ELEVATION = 1066.04

CGC Inc.

LOG OF TEST BORING

Project: Business/Industrial Park Retention West Stormwater Basin
Location: Monroe, WI

Boring No. 1
Surface Elevation (ft) 1066.0
Job No. C15056
Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7897

SAMPLE No.	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	LI
					Stiff, Dark Brown to Black Organic/Lean Clay (OL/CL - Topsoil)					
1	18	M	15*		USDA: Organic Clay Loam	(1.5-1.75)				
2	13	M	6	5		(1.0-1.5)	31.5			
3	10	M	13		Medium Dense, Brown Fine to Medium SAND, Some Silt, Trace to Little Gravel, Occasional Brown Lean Clay Layers (SM)					
4	3	M	10		USDA: Loamy Sand					
				10	Loose to Very Dense, Gravelly Brown Fine SAND, Little Silt, Scattered Cobbles/Boulders (SP-SM - Possible Highly Weathered Dolomitic Bedrock with Depth)					
5	14	M	9		USDA: Very Gravelly Sand		8.1			
				15	Firm Drilling noted at 16 ft					
					Hard Drilling noted at 18 ft					
6	1	M	100/2"		End Boring/Auger Refusal at 18.9 ft					
				20	Borehole backfilled with bentonite chips					
					*Frozen to 2 ft					
				25						
				30						

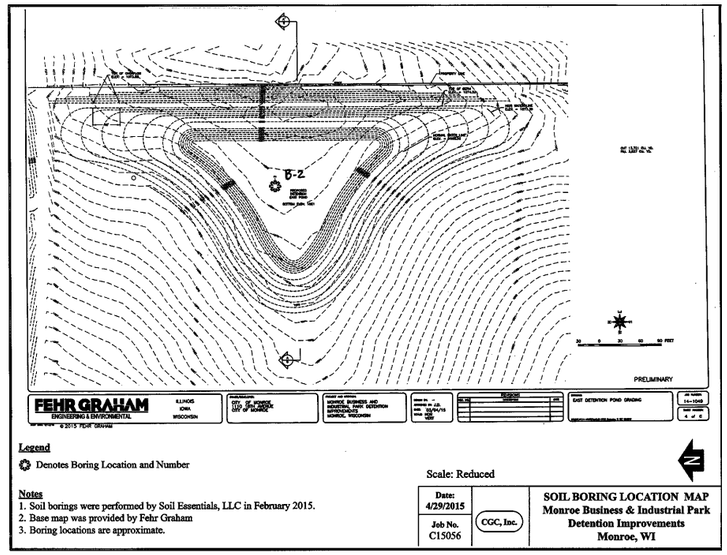
WATER LEVEL OBSERVATIONS

While Drilling ▽ NW Upon Completion of Drilling ____
Time After Drilling ____
Depth to Water ____
Depth to Cave in ____

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start 2/12/15 End 2/12/15
Driller SE Chief DAP Rig Geoprobe
Logger DAP Editor BSM 7822
Drill Method 2.25" HSA; DT
Autohammer



Legend

Denotes Boring Location and Number

Notes
1. Soil borings were performed by Soil Essentials, LLC in February 2015.
2. Base map was provided by Fehr Graham
3. Boring locations are approximate.

Scale: Reduced

N

Date: 4/29/2015	CGC, Inc.	SOIL BORING LOCATION MAP Monroe Business & Industrial Park Detention Improvements Monroe, WI
Job No. C15056		

SOIL BORING #2
SURFACE ELEVATION = 1068.54

CGC Inc.

LOG OF TEST BORING

Project: Business/Industrial Park Retention East Stormwater Basin
Location: Monroe, WI

Boring No. 2
Surface Elevation (ft) 1068.5
Job No. C15056
Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7897

SAMPLE No.	Rec (in.)	Moist	N	Depth (ft)	VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES qu (qa) (tsf)	W	LL	PL	LI
					Medium Stiff to Stiff Dark Brown to Black Organic/Lean CLAY (OL/CL - Topsoil)					
1	16	M	22*		USDA: Organic Clay Loam	(1.0)	24.1	39	24	6.3
2	12	M	9	5	Medium Stiff to Stiff, Brown Lean CLAY, Some Sand, Little Gravel (CL) USDA: Gravelly Clay Loam	(1.0)	25.6	36	21	
3	10	M	2		Very Loose to Loose, Brown Clayey Fine SAND, Some Gravel (SC)	(0.5-1.0)	14.0	20	16	
4	10	M	5	10	USDA: Very Gravelly Loam	(0.5-0.75)	6.9			
5	14	M	12		Brown Sandy Lean CLAY, Trace Gravel (CL) USDA: Loam	(2.5)	13.6	23	14	
6	17	M	10	15		(1.0-1.5)				
				20						
7	12	M	16		Medium Dense, Brown Clayey SILT, Occasional Silty Sand Seams (ML) USDA: Silt Loam					
				25	End of Boring at 25 ft					
					Borehole backfilled with bentonite chips					
				30						

WATER LEVEL OBSERVATIONS

While Drilling ▽ NW Upon Completion of Drilling ____
Time After Drilling ____
Depth to Water ____
Depth to Cave in ____

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start 2/12/15 End 2/12/15
Driller SE Chief DAP Rig Geoprobe
Logger DAP Editor BSM 7822
Drill Method 2.25" HSA; DT
Autohammer

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OWNER/DEVELOPER:
CITY OF MONROE
1110 18TH AVENUE
CITY OF MONROE

PROJECT AND LOCATION:
MONROE BUSINESS AND INDUSTRIAL PARK DETENTION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: G.B.
APPROVED BY: J.D.
DATE: 3/18/19
SCALE: ----- ----

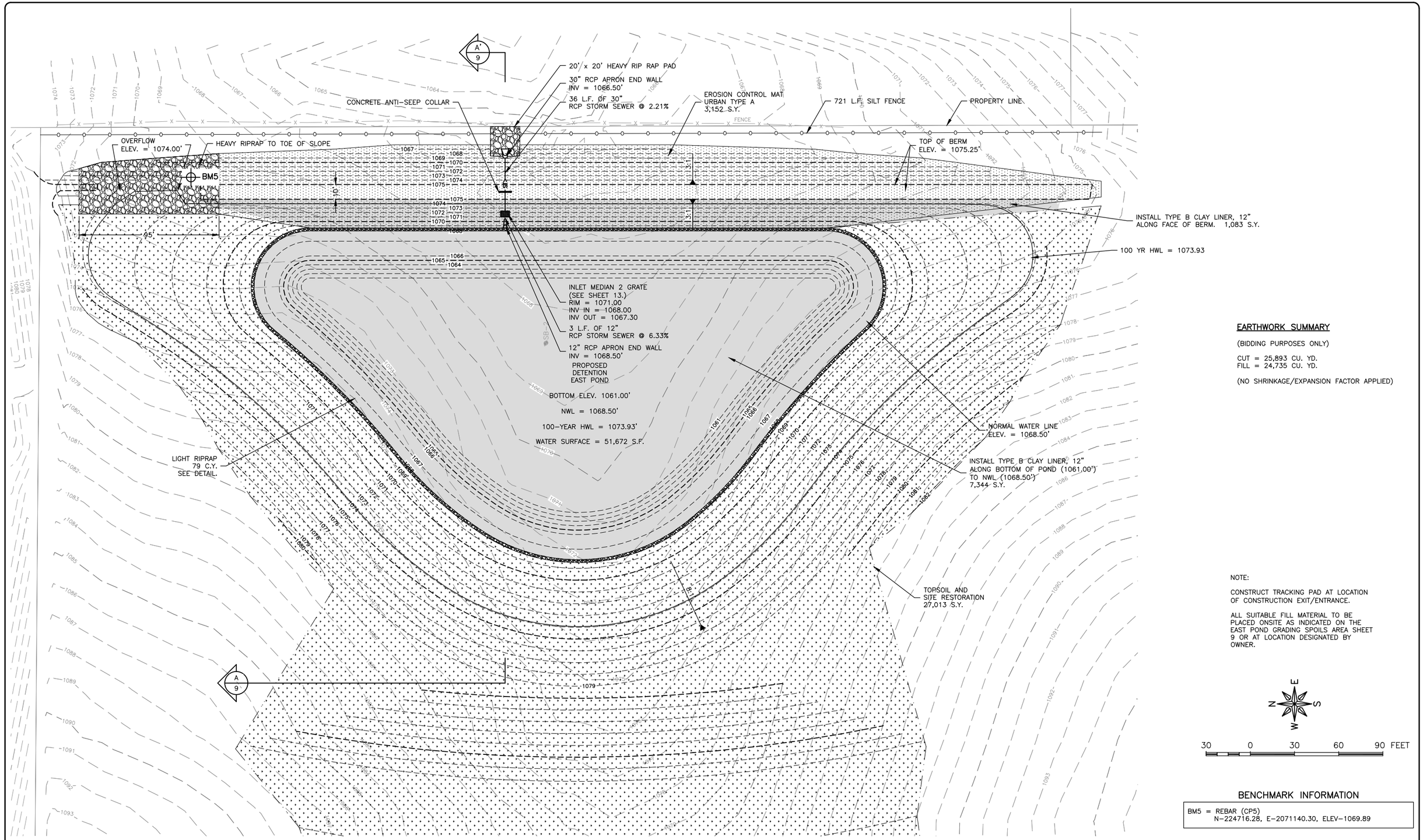
REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING: SOIL BORING LOGS
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JOB NUMBER: 14-1049
SHEET NUMBER: 6 of 14

PLOT DATE: 3/14/19

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EARTHWORK SUMMARY

(BIDDING PURPOSES ONLY)

CUT = 25,893 CU. YD.
FILL = 24,735 CU. YD.

(NO SHRINKAGE/EXPANSION FACTOR APPLIED)

NOTE:

CONSTRUCT TRACKING PAD AT LOCATION OF CONSTRUCTION EXIT/ENTRANCE.

ALL SUITABLE FILL MATERIAL TO BE PLACED ONSITE AS INDICATED ON THE EAST POND GRADING SPOILS AREA SHEET 9 OR AT LOCATION DESIGNATED BY OWNER.

BENCHMARK INFORMATION

BM5 = REBAR (CP5)
N-224716.28, E-2071140.30, ELEV-1069.89

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CITY OF MONROE

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MONROE BUSINESS AND
INDUSTRIAL PARK DETENTION
IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: G.B.
APPROVED BY: J.D.
DATE: 3/18/19
SCALE: HOR
VERT

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING:
EAST DETENTION POND GRADING

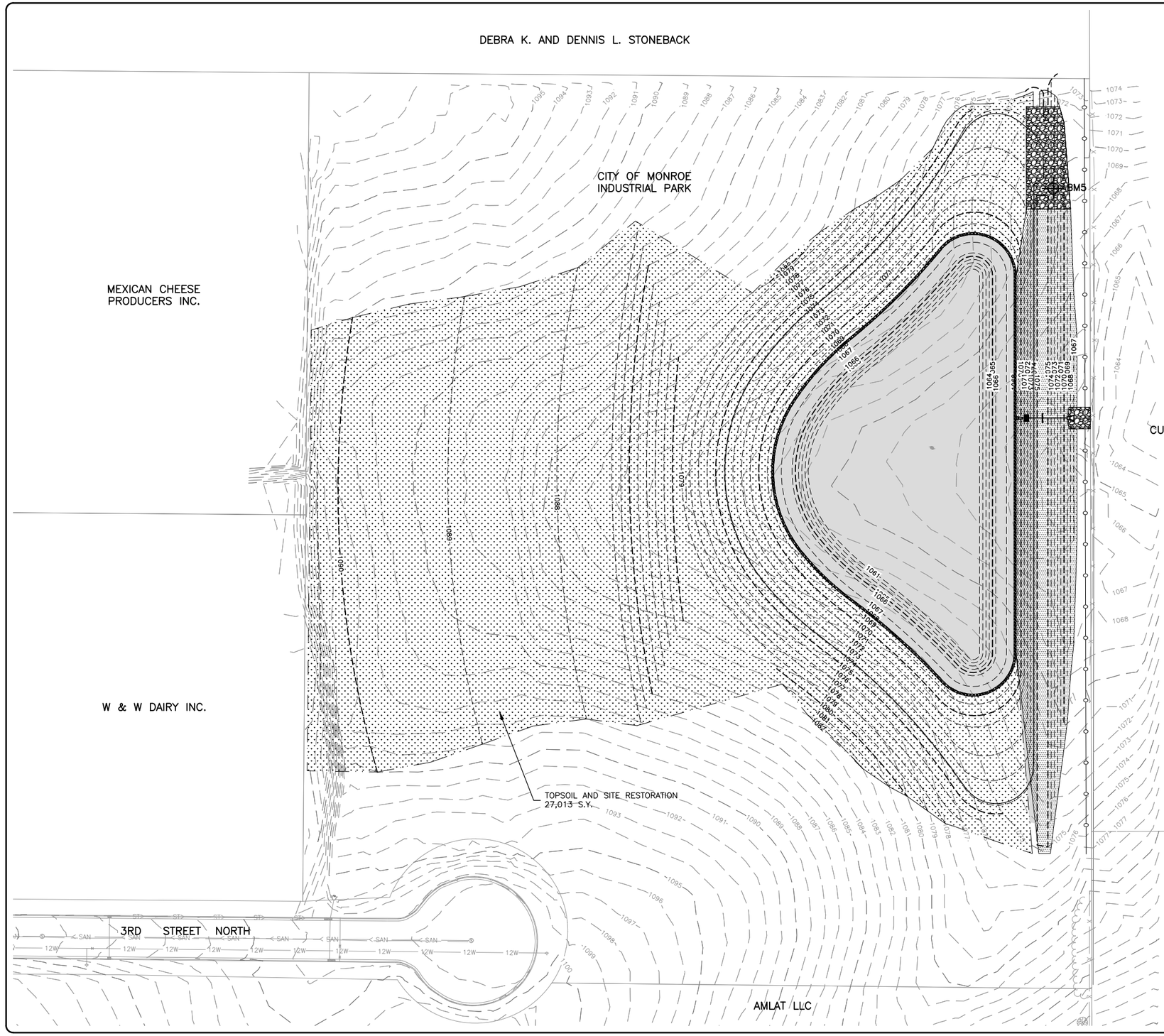
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JOB NUMBER:
14-1049

SHEET NUMBER:
7 of 14

PLOT DATE: 3/22/19

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EARTHWORK SUMMARY

(BIDDING PURPOSES ONLY)

CUT = 25,893 CU. YD.
FILL = 24,733 CU. YD.

QUANTITIES LISTED FOR BALANCE PURPOSES.
(NO SHRINKAGE/EXPANSION FACTOR APPLIED.)

NOTE:

CONSTRUCT TRACKING PAD AT LOCATION OF CONSTRUCTION EXIT/ENTRANCE.

TOPSOIL STOCKPILE LOCATION TO BE DETERMINED BY CONTRACTOR. EROSION CONTROL MEASURES AT STOCKPILE ARE TO BE CONSIDERED INCIDENTAL.

SEEDING AND RESTORATION BEYOND PLAN LIMITS DUE TO CONTRACTOR OPERATIONS INCLUDING ALL HAUL ROUTES SHALL BE CONSIDERED INCIDENTAL.

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BENCHMARK INFORMATION

BM5 = REBAR (CP5)
N-224716.28, E-2071140.30, ELEV-1069.89

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CITY OF MONROE

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MONROE BUSINESS AND INDUSTRIAL PARK DETENTION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: G.B.
APPROVED BY: J.D.
DATE: 3/18/19
SCALE: ----- -----

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING: EAST POND GRADING SPOILS AREA

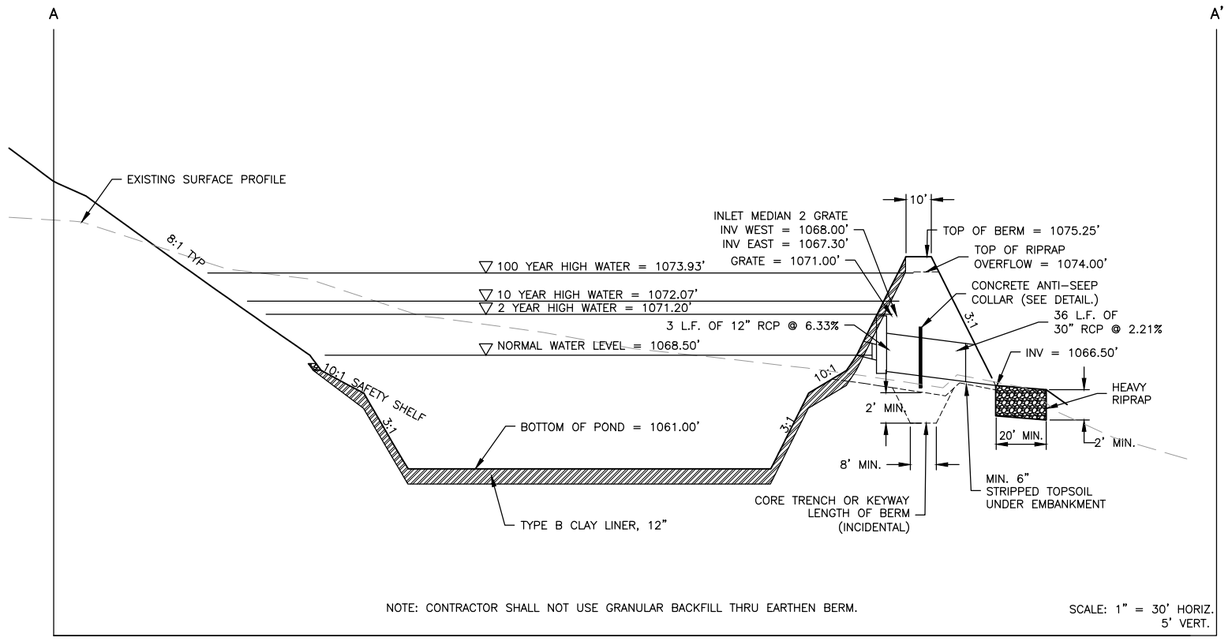
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JOB NUMBER: 14-1049

SHEET NUMBER: 8 of 14

PLOT DATE: 3/22/19

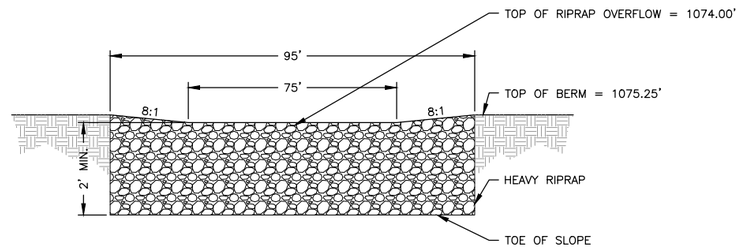
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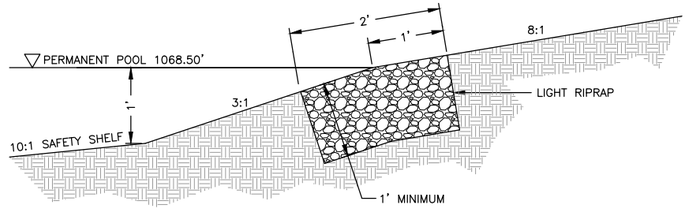
NOTE: CONTRACTOR SHALL NOT USE GRANULAR BACKFILL THRU EARTHEN BERM.

SCALE: 1" = 30' HORIZ.
5' VERT.

EAST DETENTION POND CROSS-SECTION



EAST DETENTION POND OVERFLOW DETAIL
N.T.S.



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IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: G.B.
APPROVED BY: J.D.
DATE: 3/18/19
SCALE: HOR
VERT

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING:
EAST POND CROSS-SECTION

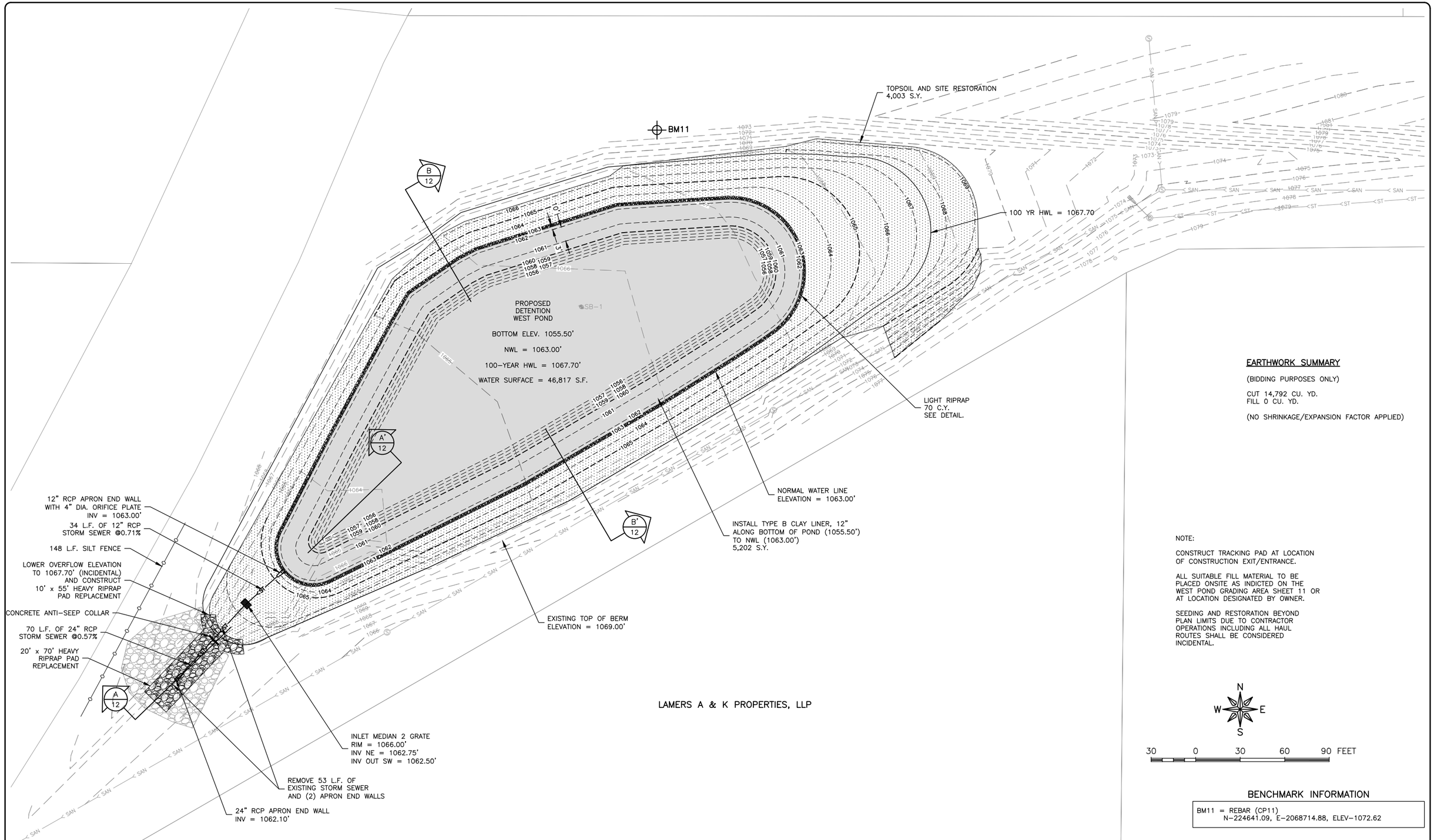
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JOB NUMBER:
14-1049

SHEET NUMBER:
9 of 14

PLOT DATE: 3/14/19

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EARTHWORK SUMMARY

(BIDDING PURPOSES ONLY)

CUT 14,792 CU. YD.
FILL 0 CU. YD.

(NO SHRINKAGE/EXPANSION FACTOR APPLIED)

NOTE:

CONSTRUCT TRACKING PAD AT LOCATION OF CONSTRUCTION EXIT/ENTRANCE.

ALL SUITABLE FILL MATERIAL TO BE PLACED ONSITE AS INDICTED ON THE WEST POND GRADING AREA SHEET 11 OR AT LOCATION DESIGNATED BY OWNER.

SEEDING AND RESTORATION BEYOND PLAN LIMITS DUE TO CONTRACTOR OPERATIONS INCLUDING ALL HAUL ROUTES SHALL BE CONSIDERED INCIDENTAL.

N
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30 0 30 60 90 FEET

BENCHMARK INFORMATION

BM11 = REBAR (CP11)
N-224641.09, E-2068714.88, ELEV-1072.62

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1110 18TH AVENUE
CITY OF MONROE

PROJECT AND LOCATION:
MONROE BUSINESS AND
INDUSTRIAL PARK DETENTION
IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: G.B.
APPROVED BY: J.D.
DATE: 3/18/19
SCALE: HOR
VERT

REVISIONS		
REV. NO.	DESCRIPTION	DATE

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WEST DETENTION POND GRADING

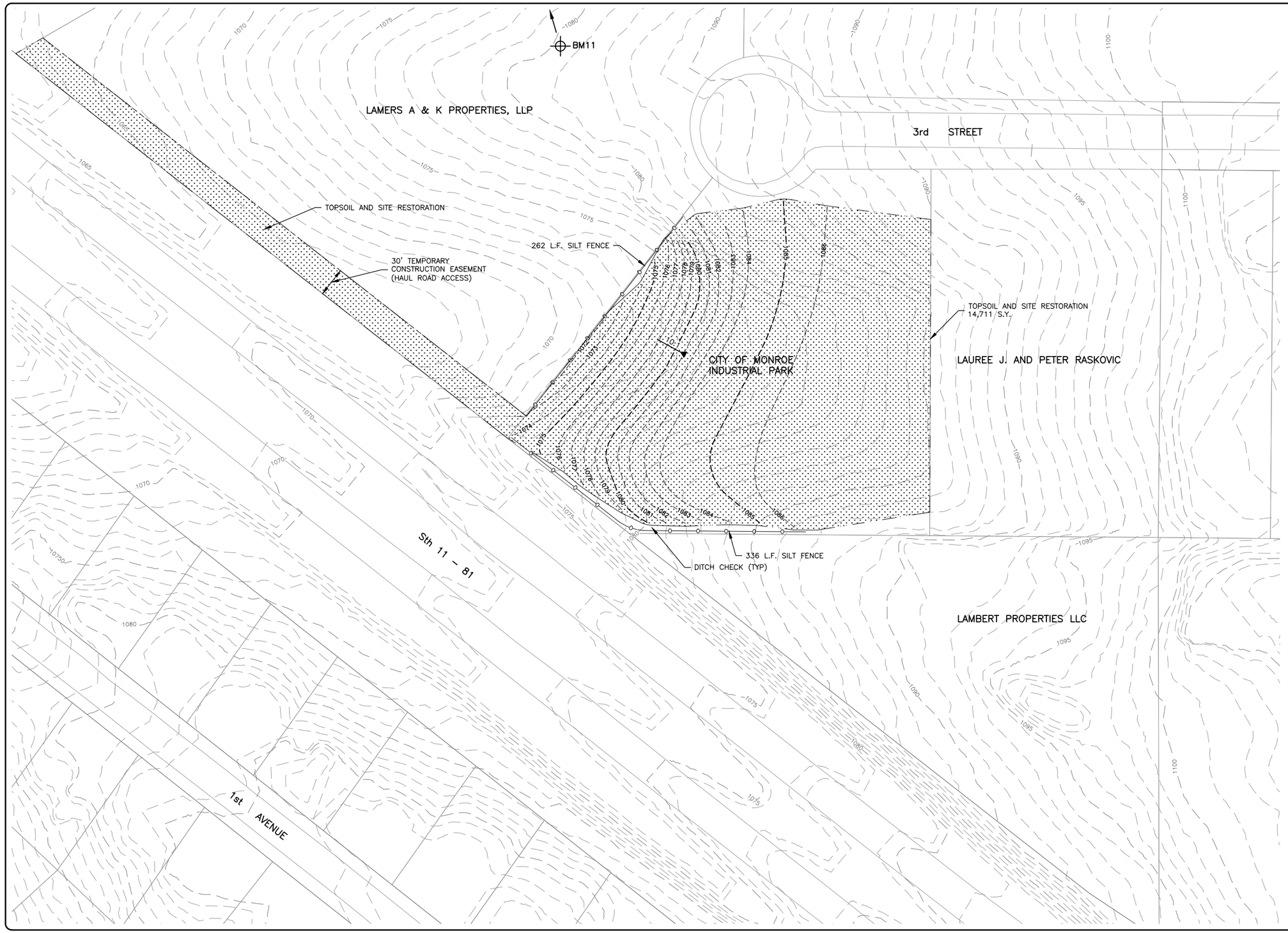
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JOB NUMBER:
14-1049

SHEET NUMBER:
10 of 14

PLOT DATE: 3/22/19

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EARTHWORK SUMMARY

(BIDDING PURPOSED ONLY)

CUT 2 CU. YD.
FILL 7,906 CU. YD.

(NO SHRINKAGE/EXPANSION FACTOR APPLIED)

NOTE:

CONSTRUCT TRACKING PAD AT LOCATION OF CONSTRUCTION EXIT/ENTRANCE.

TOPSOIL STOCKPILE LOCATION TO BE DETERMINED BY CONTRACTOR. EROSION CONTROL MEASURES AT STOCKPILE ARE TO BE CONSIDERED INCIDENTAL.

SEEDING AND RESTORATION DUE TO CONTRACTOR OPERATIONS INCLUDING HAUL ROUTES SHALL BE CONSIDERED INCIDENTAL.

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BENCHMARK INFORMATION

BM11 = REBAR (CP11)
N-224641.09, E-2068714.88, ELEV-1072.62

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CITY OF MONROE

PROJECT AND LOCATION:
MONROE BUSINESS AND INDUSTRIAL PARK DETENTION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: G.B.
APPROVED BY: J.D.
DATE: 3/18/19
SCALE: ----- -----

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING:
WEST POND GRADING SPOILS AREA

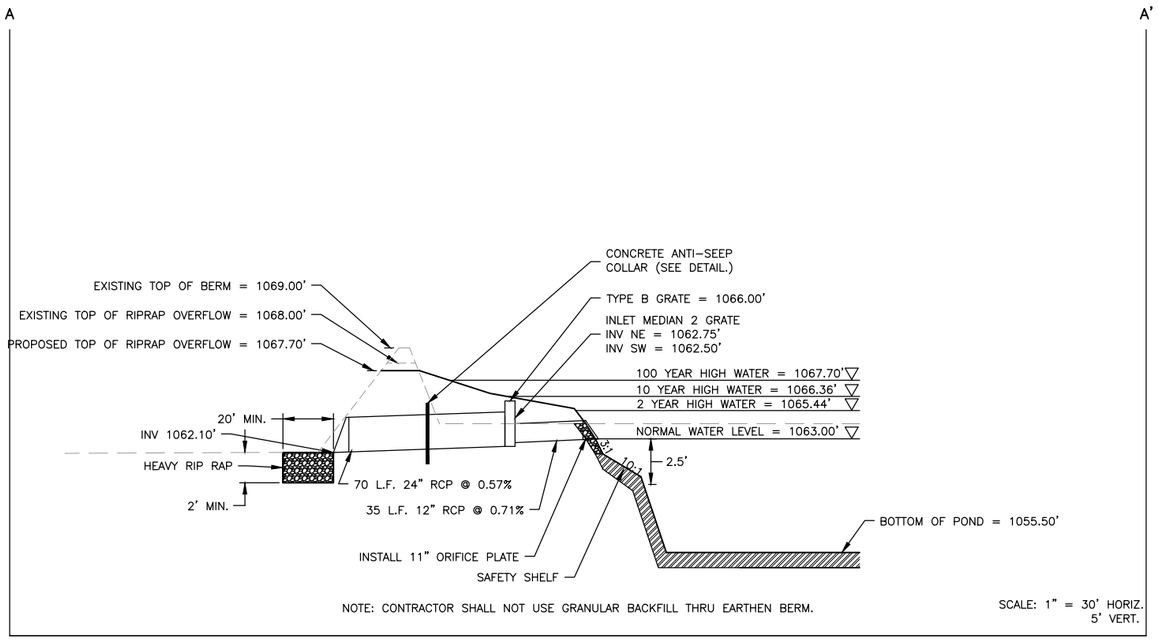
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JOB NUMBER:
14-1049

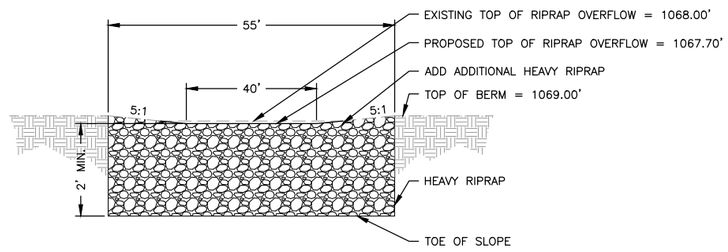
SHEET NUMBER:
11 of 14

PLOT DATE: 3/14/19

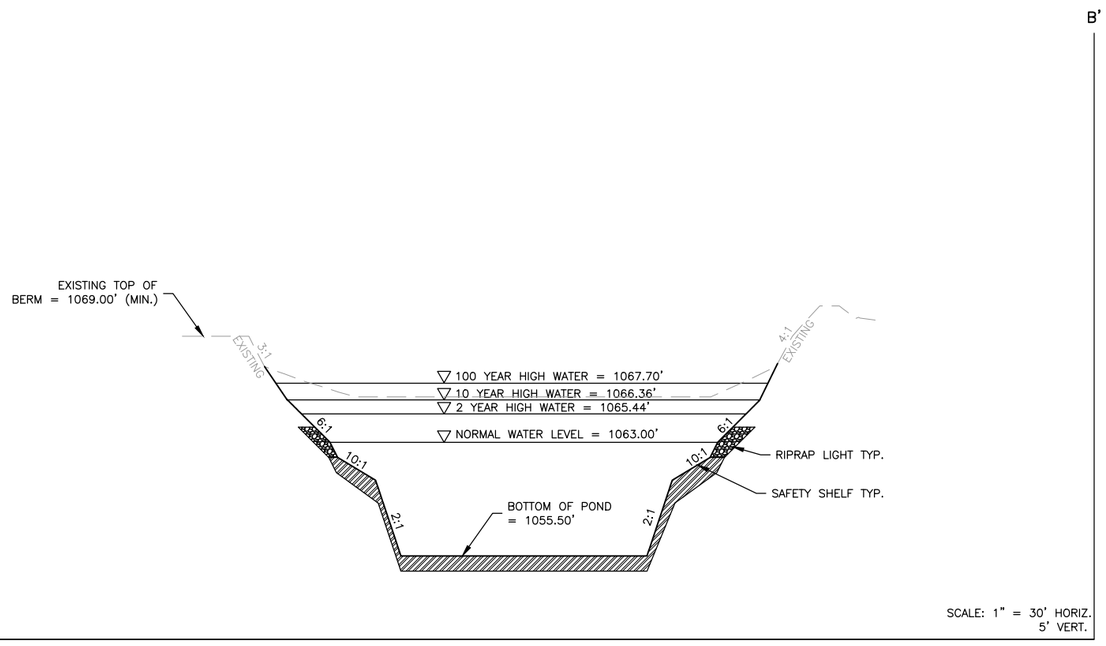
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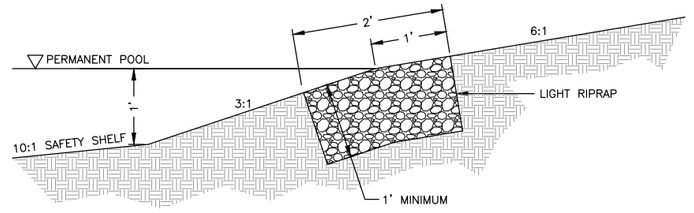
WEST DETENTION POND CROSS-SECTION A – A'



WEST DETENTION POND OVERFLOW DETAIL
N.T.S.



WEST DETENTION POND CROSS-SECTION B – B'



WATER LEVEL RIPRAP DETAIL
N.T.S.

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1110 18TH AVENUE
CITY OF MONROE

PROJECT AND LOCATION:
MONROE BUSINESS AND INDUSTRIAL PARK DETENTION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: G.B.
APPROVED BY: J.D.
DATE: 3/18/19
SCALE: HOR
VERT

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING:
WEST POND CROSS-SECTION

SET TYPE: OUT TO BID
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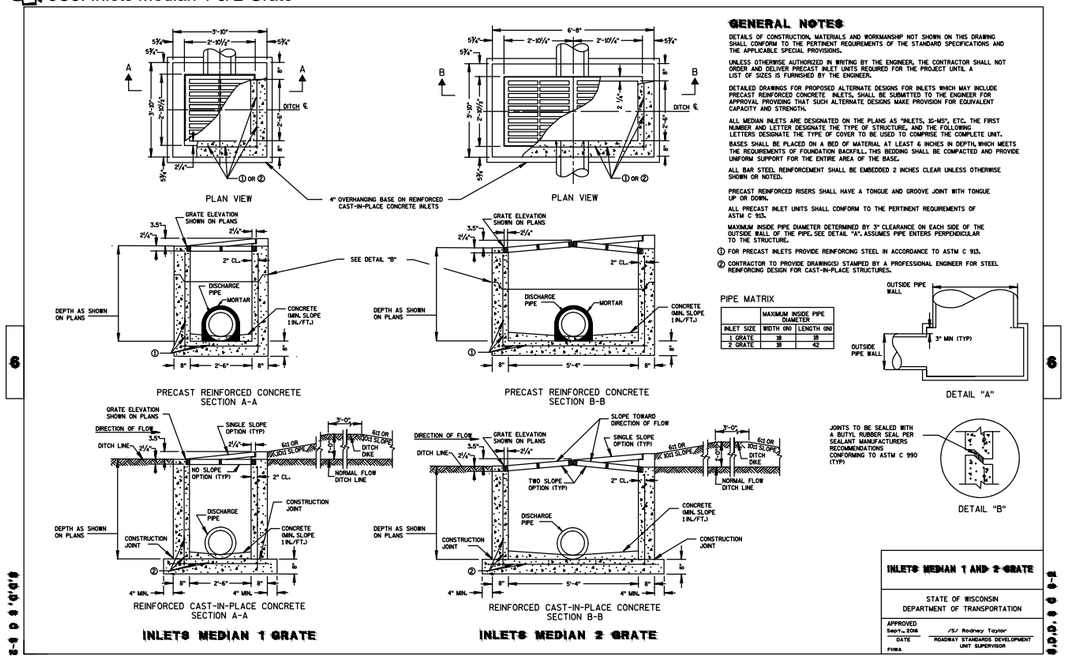
JOB NUMBER:
14-1049

SHEET NUMBER:
12 of 14

PLOT DATE: 3/14/19

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8C8: Inlets Median 1 & 2 Grate



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 10-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42

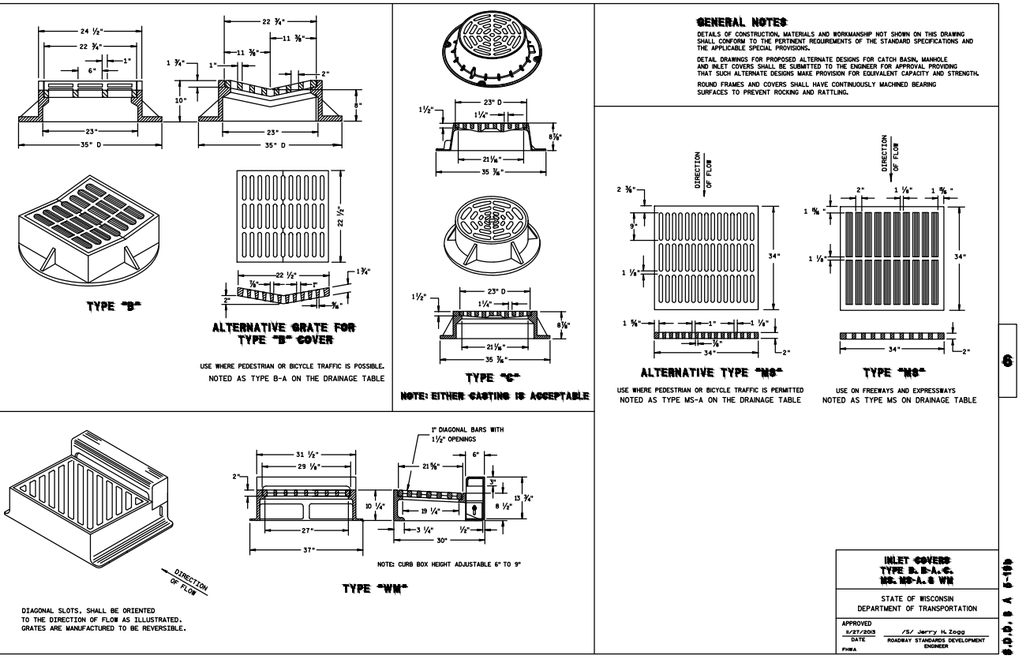
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)

INLETS MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED Sept. 2016 — /S/ Rodney Taylor
DATE — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

8A5 sheet b: Inlet Covers Type B, B-A, C, MS, MS-A, & WM



USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE

NOTE: EITHER CASTING IS ACCEPTABLE

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

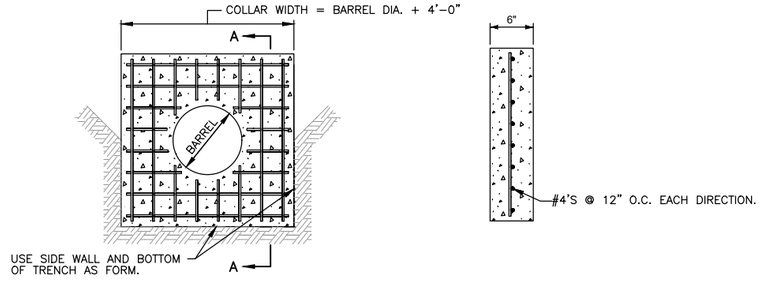
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 5/27/2003 — /S/ Jerry H. Zogg
DATE — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



NOTE: CONCRETE COLLAR SHALL BE LARGER THAN PIPE TRENCH EXCAVATION TO PREVENT POND WATER PASSAGE THROUGH PIPE BEDDING/BACKFILL.

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL
ILLINOIS
IOWA
WISCONSIN

OWNER/DEVELOPER:
CITY OF MONROE
1110 18TH AVENUE
CITY OF MONROE

PROJECT AND LOCATION:
MONROE BUSINESS AND INDUSTRIAL PARK DETENTION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: G.B.
APPROVED BY: J.D.
DATE: 3/18/19
SCALE: HOR
VERT

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING: DETAILS
SET TYPE: OUT TO BID
G:\C3D\14\14-1049\Plans\14-1049 Plans.dwg, DETAILS

JOB NUMBER: 14-1049
SHEET NUMBER: 13 of 14

PLOT DATE: 3/14/19

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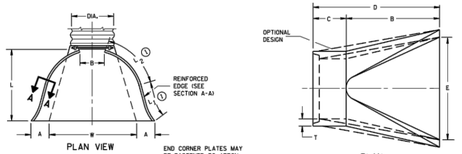
8F1: Apron Endwalls for Culvert Pipe

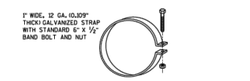
METAL APRON ENDWALLS										
PIPE DIA. (IN.)	MIN. THICK. (inches) STEEL	ALUM.	DIMENSIONS (inches) A (±1)	B (MAX.)	H (±1)	L (±1)	L1 (±1)	L2 (±1)	W (±2*)	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17½	84	2½ to 1	1 Pc.
15	.064	.060	6	6	6	26	14	21½	90	2½ to 1	1 Pc.
18	.064	.060	6	10	6	31	15	25½	96	2½ to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29½	42	2½ to 1	1 Pc.
24	.064	.075	10	12	6	41	18	33½	48	2½ to 1	1 Pc.
30	.079	.075	12	15	6	51	18	42½	60	2½ to 1	1 Pc.
36	.079	.105	14	19	9	60	24	49½	92	2½ to 1	2 Pc.
42	.109	.105	16	20	9	69	24	57½	84	2½ to 1	2 Pc.
48	.109	.105	18	27	12	78	24	61	90	2½ to 1	3 Pc.
54	.109	.105	18	30	12	84	30	65½	390	2½ to 1	3 Pc.
60	.109	.105	18	33	12	87	—	—	1M	2 to 1	3 Pc.
66	.109	.105	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109	.105	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109	.105	18	42	12	87	—	—	132	1½ to 1	3 Pc.
84	.109	.105	18	45	12	87	—	—	138	1½ to 1	3 Pc.
90	.109	.105	18	37	12	87	—	—	144	1½ to 1	3 Pc.
96	.109	.105	18	35	12	87	—	—	150	1½ to 1	3 Pc.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

REINFORCED CONCRETE APRON ENDWALLS								
PIPE DIA. (IN.)	DIMENSIONS (inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48⅜	12⅜	24	2	3 to 1
15	2⅛	6	27	46	13	30	2½	3 to 1
18	2⅛	9	27	46	13	30	2½	3 to 1
21	2⅜	9	36	37½	13½	42	2¾	3 to 1
24	3	9½	27½	30	13½	48	3	3 to 1
27	3⅛	10½	49½	24	13½	54	3½	3 to 1
30	3¾	12	54	18½	13½	60	3¾	3 to 1
36	4	15	63	5¾	9⅞	72	4	3 to 1
42	4½	21	63	35	98	78	4½	3 to 1
48	5	24	72	28	98	84	5	3 to 1
54	5½	27	65	33/-35	98/41	100	90	5½	2½ to 1
60	6	30-36	60	39	99	96	5	2 to 1
66	6½	24-36	9 9 12-18	9 9 22-27	99	102	5½	2 to 1
72	7	24-36	78	21	99	106	6	2 to 1
78	7½	24-36	78	21	99	114	6½	2 to 1
84	8	36	90½	21	111½	120	6½	1½ to 1
90	8½	41	81½	24	111½	132	6½	1½ to 1

* MINIMUM
** MAXIMUM





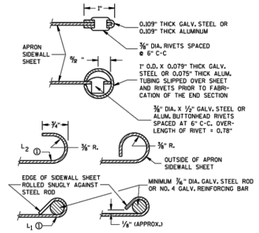
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60° DIAMETER PIPE AND LARGER SHALL HAVE 0.079" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60° DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.154" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60° THROUGH 96° DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

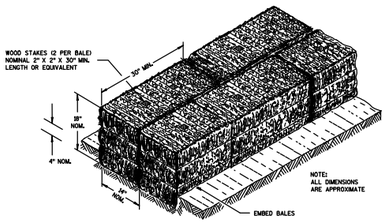
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

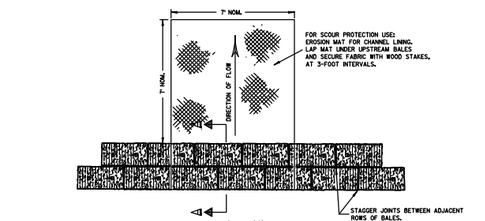
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8-30-94 DATE	/S/ Rory L. Rhinesmith CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

S.D.D. 8 F 1-11

8E8: Typical Installations of Erosion Bales/Temporary Ditch Checks

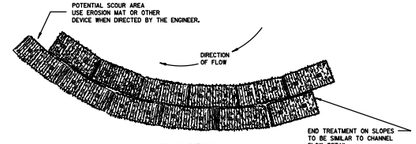


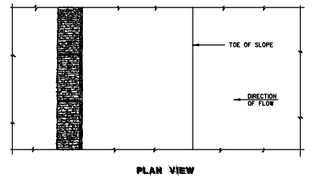


GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

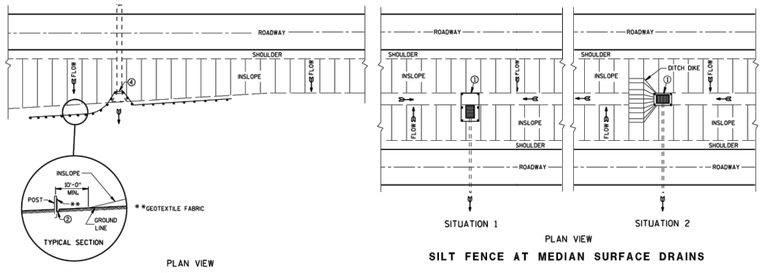


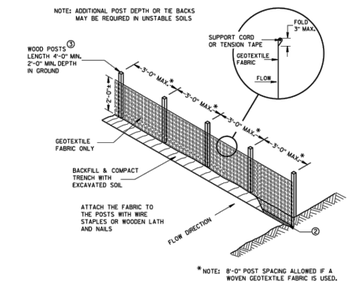


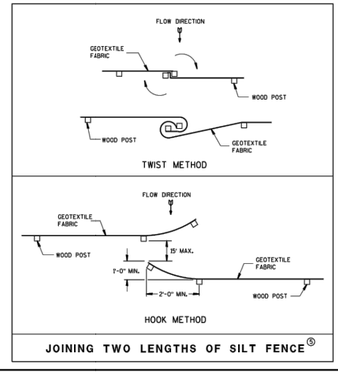
TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 6/04/02 DATE	/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

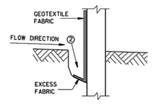
S.D.D. 8 E 8-1

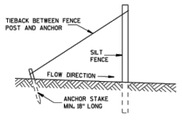
8E9: Silt Fence











SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

S.D.D. 8 E 9-6

8E14: Tracking Pad

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

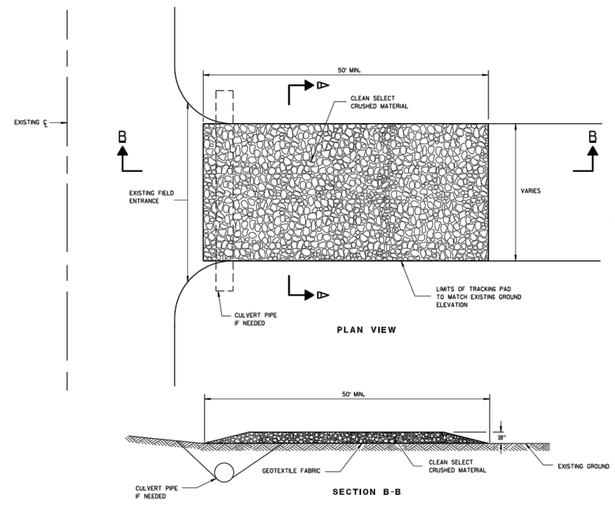
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



TRACKING PAD	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3-24-201 DATE	/S/ Jerry M. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

S.D.D. 8 E 14-1

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL
ILLINOIS
IOWA
WISCONSIN

OWNER/DEVELOPER:
CITY OF MONROE
1110 18TH AVENUE
CITY OF MONROE

PROJECT AND LOCATION:
MONROE BUSINESS AND INDUSTRIAL PARK DETENTION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: G.B.
APPROVED BY: J.D.
DATE: 3/18/19
SCALE: HOR
VERT

REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING: DETAILS

SET TYPE: OUT TO BID
G:\C3D\14\14-1049\Plans\14-1049 Plans.dwg, DETAILS (2)

JOB NUMBER: 14-1049

SHEET NUMBER: 14 of 14

PLOT DATE: 3/14/19

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Surface Water Data Viewer Map - SPARROW



0.9696

0.9696

WWTP Catchment

East Pond Catchment

0.9696

0.9696

Legend

SPARROW Model Catchment

- 0.092600 - 0.459700
- 0.459701 - 0.621400
- 0.621401 - 0.825600
- 0.825601 - 0.947100
- 0.947101 - 1.000000

Impaired Rivers and Streams

Impaired Lakes

Stream Assessments

Lake Assessments

Municipality

State Boundaries

County Boundaries

Major Roads

- Interstate Highway
- State Highway
- US Highway

County and Local Roads

- County HWY
- Local Road

Railroads

Tribal Lands

Rivers and Streams

Intermittent Streams

Lakes and Open water

Notes

1.0 0 0.50 1.0 Miles

NAD_1983_HARN_Wisconsin_TM

1: 31,680

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: http://dnr.wi.gov/legal/

Exhibit 6

Dolan Property Information

State of Wisconsin
Department of Natural Resources
101 South Webster Street
Madison WI 53707-7921
dnr.wi.gov

Notice of Intent to Conduct Water Quality Trading

Form 3400-206 (1/14)

Notice: Pursuant to s. 283.84, Wis. Stats., and ch. NR 217 Wis. Adm. Code, this form must be completed by any WPDES permittee that is using water quality trading as a method of complying with a permit limitation. Failure to complete this form would not result in penalties. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.).

Applicant Information

Permittee Name	Permit Number	Facility Site Number
City of Monroe	WI- 0020362-08-0	31428

Facility Address	City	State	ZIP Code
1110 18th Ave	Monroe	WI	53566

Project Contact Name (if applicable)	Address	City	State	ZIP Code
Jennifer Buholzer	1107 16th Ave	Monroe	WI	53566

Project Name: Monroe Industrial Park - Dolan Property

Receiving Water Name	Parameter(s) being traded	HUC 12(s)
Honey Creek	Phosphorus	070900031004

Is the permittee in a point or nonpoint source dominated watershed? (See PRESTO results - http://dnr.wi.gov/topic/surfacewater/presto.html)
- ○ Point source dominated
- ◉ Nonpoint source dominated

Credit Generator Information

Credit generator type (select all that apply):
- ☐ Permitted Discharge (non-MS4/CAFO)
- ☒ Permitted MS4
- ☐ Permitted CAFO
- ☐ Urban nonpoint source discharge
- ☐ Agricultural nonpoint source discharge
- ☐ Other - Specify:

Are any of the credit generators in a different HUC 12 than the applicant?
- ○ Yes; HUC 12:
- ◉ No
- ○ Unsure

Are any of the credit generators downstream of the applicant?
- ○ Yes
- ◉ No
- ○ Unsure

Will a broker/exchange be used to facilitate trade?
- ○ Yes; Name:
- ◉ No
- ○ Unsure

Point to Point Trades (Traditional Municipal / Industrial Discharge, MS4, CAFO)

Discharge Type	Permit Number	Name	Contact Address	Is the point source credit generator currently in compliance with their permit requirements?
○ Traditional ◉ MS4 ○ CAFO	S050075	City of Monroe	1110 18th Ave Monroe, WI 53566	○ Yes ○ No ○ Unsure
○ Traditional ○ MS4 ○ CAFO				○ Yes ○ No ○ Unsure
○ Traditional ○ MS4 ○ CAFO				○ Yes ○ No ○ Unsure
○ Traditional ○ MS4 ○ CAFO				○ Yes ○ No ○ Unsure
○ Traditional ○ MS4 ○ CAFO				○ Yes ○ No ○ Unsure

Point to Nonpoint Trades (Non-permitted Agricultural, Non-Permitted Urban, etc.)
List the practices that will be used to generate credits:

Removal of the 90 Ac.field known as the Dolan property from Agricultural use. Currently the land is being used to crop corn. Until the land is developed as an industrial park the land will have a cover crop in place. Once the land is make into an industrial park all necessary storm water BMPs will put in place to limit phosphorus runoff. Please see attached map for project location.

Method for quantifying credits generated:
- ☐ Monitoring
- ☒ Modeling, Names: SNAP + (to be completed)
- ☐ Other: _____

Projected date credits will be available: 10/01/2020

The preparer certifies all of the following:

- I am familiar with the specifications submitted for this application, and I believe all applicable items in this checklist have been addressed.
- I have completed this document to the best of my knowledge and have not excluded pertinent information.

Signature of Preparer	Date Signed
Jennifer BA Burhdzer	4/30/2020

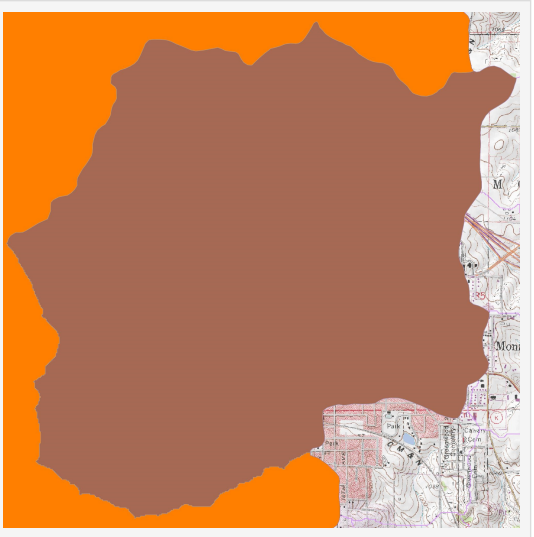
Authorized Representative Signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. Based on my inquiry of those persons directly responsible for gathering and entering the information, the information is, to the best of my knowledge and belief, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

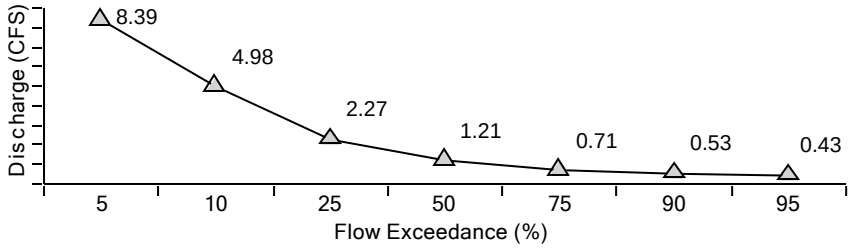
Signature of Authorized Representative	Date Signed
	4/29/20

PRESTO-Lite Watershed Delineation Report

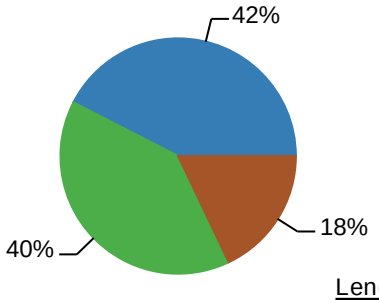
Reach ID: 200004058
Watershed Name: Hawthorn Creek-Honey Creek
Waterbody Name: Honey Creek
HUC08: Pecatonica River
Watershed Area: 4.74 mi²
Average Annual Precipitation: 36.14in



Stream Flow

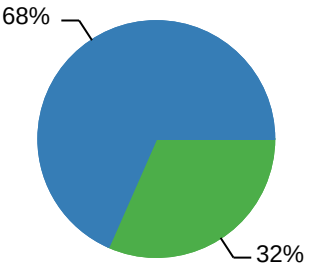


Tributary Stream Type



Type	Length
Cool-Cold Headwater	5167 ft
Cold Headwater	4821 ft
Macroinvertebrates	2182 ft
Coldwater	0 ft
Cool-Cold Mainstem	0 ft
Cold Mainstem	0 ft
Large River	0 ft
Warm Headwater	0 ft
Warm Mainstem	0 ft

Landcover



Type	Area
Urban	3.21 mi²
Agriculture	1.48 mi²
Forest	0.02 mi²
Barren	0.01 mi²
Grassland	0.01 mi²
Wetland	0.01 mi²

PRESTO Phosphorus Load Estimate

Avg. Annual Nonpoint Phosphorous Load (80% Confidence Interval)	9,714 (2,150 - 43,896) lbs
Number of Facilities (Individual Facility Information below)	1
Avg. Annual Point-source Phosphorous Load (2010 - 2012 total of all facilities)	3,997lbs
Most Likely Point : Nonpoint Phosphorous Ratio	29% : 71%
Low Estimate Point : Nonpoint Phosphorous Ratio (Adaptive Management)	8% : 92%

Adaptive Management Results

Facilities Discharging to the Hawthorn Creek-Honey Creek Watershed:

Facility Name	Permit #	Outfall #	Waste Type	Receiving Water	Avg. Phosphorus Load (lbs.) (2010 - 2012)
MONROE WASTEWATER TREATMENT FACILITY	0020362	001	Municipal	Honey Creek	3997

Watershed Analysis Limitations

- This analysis relies on pre-defined catchments from the Wisconsin Hydrography Data-Plus and may not delineate from the exact location required. When assessing phosphorus loads for specific facility in support of efforts such as adaptive management, care should be taken to ensure that additional downstream point sources do not exist. For adaptive management information related to specific facilities please reference the PRESTO website http://dnr.wi.gov/topic/surfacewater/presto.html
- Delineation of watersheds is based on a topographic assessment and therefore do not account for modified drainage networks such as stormwater sewer systems and ditched agriculture.
- If a watershed requires delineation from an exact location the user may use the desktop version of PRESTO that requires ESRI ArcGIS. The PRESTO tool and default datasets can be downloaded at http://dnr.wi.gov/topic/surfacewater/presto.html
- Data sources for this report originate from the WDNR's Wisconsin Hydrography Data-Plus value-added dataset and the point and non-point source loading information including in the WDNR's PRESTO model.
- If you have questions about the report generated from the PRESTO-Lite application please contact: DNRWATERQUALITYMODELING@wisconsin.gov

Operation & Maintenance– Dolan Property

For the purposes of this Operation and Maintenance Plan, severe floods are defined as any hydrologic event resulting from a 24-hour cumulative precipitation in excess of 3.8 inches of rainfall (i.e., the 5-year, 24-hour precipitation event based on the annual maximum time series as defined by NOAA Atlas 14, Volume 8, Version 2).

Refer to Inspection and Reporting requirements to be followed as part of the proper operation and maintenance of the BMPs installed as part of this water quality trading plan.

Conditions for Alfalfa:

1. Check planted crop to ensure alfalfa has been planted
2. Verify crop management matches the standards set forth by the Nutrient Management Standard 590.
3. After rain events check levels of erosion on the property.
4. If a crop, other than alfalfa, is planted SNAP + must be run and DNR notified of change. An update to the Water Quality Trading plan may be required at this time.
5. No Fertilizer to be used onsite.
6. The field shall maintain alfalfa vegetative practices at a minimum of 70% live cover during growing season.

Additional Conditions:

1. The property will be inspected following heavy rain events at a minimum. Inspection will be used to determine appropriate actions to maintain the installed BMPs for continuous TP credit generation. This may require replanting if a crop washout has occurred.
2. The BMPs will be inspected annually by a licensed Professional Engineer to ensure that the BMPs are functioning as intended in order to meet the requirements of the WQT plan. Photos to be taken at time of inspection and any non-compliance areas to be documented. Photos to be taken at least once per year.

Inspection Reporting– Dolan Property

a. Tracking Procedures
The City will track credits monthly and report credit usage to the DNR in the Discharge Monitoring Reports (DMRs). The annual report will summarize the 12 months of credit usage and credit generation. The City will report to DNR any concern that they have that may result in a need to modify the trade agreement and/or this trade plan. For example, a need to generate additional credits based on discharge.

b. Inspection
Inspection of the BMPs shall occur to ensure they are installed per the design and meet all applicable codes and permits. Inspections of the established BMPs shall occur each month at a minimum or following heavy rain events. If bare soil, erosion, or a concentrated flow path is noted during the inspection, the area shall be regraded and reseeded to prevent the development of permanent rills or gullies. A licensed professional engineer will perform an annual certification to ensure the practice is performing as designed and the City remains in compliance. Photos to be taken at time of inspection and any non-compliance areas to be documented. Photos to be taken at least once per year.
Location shall be cropped with Alfalfa. The field shall maintain alfalfa vegetative practices at a minimum of 70% live cover during growing season. No fertilizer shall be used onsite.

i. Name and contact information of the inspector
ii. Inspection Date
iii. Relevant standards set forth in the Design Plan or Operation and Maintenance Plan
iv. Issues identified
v. Photos to be taken at time of inspection and any non-compliance areas to be documented. Photos to be taken at least once per year.
vi. When and how any issues identified were addressed
vii. When and how any issues identified will be addressed in the future Inspection reports generated during each routine or after rain event inspection will be included with the Annual Water Quality Trading Report submitted by the City to DNR.

Annual inspections by a professional engineer will typically occur in the late spring. This time of year is ideal for evaluating the condition of BMPs as it follows the freeze/thaw which poses the greatest potential for changes to the BMPs. Minimal vegetation cover will allow for adequate visual inspection.

c. Annual Water Quality Trading Report Submittal

Each year the following shall be submitted to the DNR:

i. The number of pollutant reduction credits (lbs/month) used each month of the previous year to demonstrate compliance.
ii. A summary of the annual inspection of the practice that generated any of the pollutant reduction credits used during the previous year, this inspection shall be completed by a licensed Professional Engineer.
iii. Identification of noncompliance or failure to implement any terms or conditions of this permit with respect to water quality trading that have not been reported in discharge monitoring reports.
iv. Photos to be taken at time of inspection and any non-compliance areas to be documented. Photos to be taken at least once per year.
v. A list of all noncompliance and the correction measures and timing to address the issues throughout the year; and
vi. An updated WQT plan if management practices have or will change.

ci. Certification of Management Practices

The city will certify that the BMPs are maintained and operating in a manner consistent with this Water Quality Trading Plan or provide a statement noting noncompliance with this Plan. The monthly Discharge Monitoring Report (DMR) will include the following statement as a certification of compliance:

> "I certify, to the best of my knowledge, the management practices identified in the approved water quality trading plan are installed, established and properly maintained."

e. Notification of Failure to Generate Credits

The City will notify DNR by telephone call to DNR's regional wastewater compliance engineer within 24 hours or next business day of becoming aware that phosphorus credits used or intended for use by City are not being generated as outlined in this Water Quality Trading Plan.

The City will submit a written notification within five days after the City recognizes that the phosphorus credits are not being generated as outlined in the Trading Plan. The DNR may waive the requirement for submittal for a written notice within five days and instruct the City to submit the written notice with the next regularly scheduled monitoring report required by City's WPDES Permit.

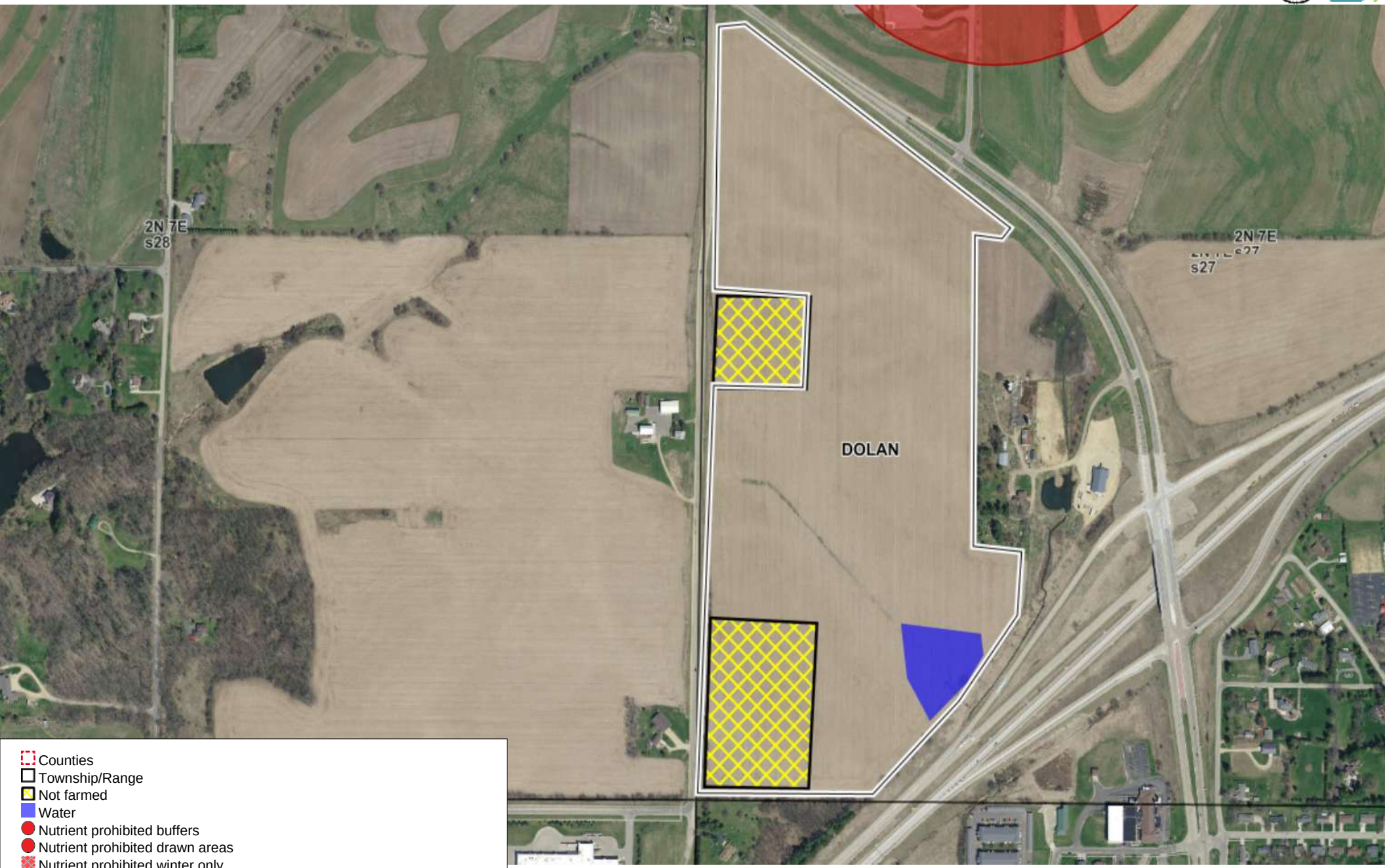
The written notice will contain a description of how and why the TP credits are not being generated as outlined, the steps taken or planned to prevent reoccurrence of the identified problem, and the length of time it will take to address the issue.

f. Conditions under which Management Practices May Be Inspected

Any DNR authorized officer, employee, or representative has the right to access and inspect the credit generating practice so long as the City's trade agreement with the DNR and this Water Quality Trading Plan remain in effect.

Revised Dolan Acreage

Farm: Monroe Dolan Property WQT - Existing, V20 Generated:5/21/2026, Crop year: 2020, Township Range Section:2N 7E s27



- Counties
- Township/Range
- Not farmed
- Water
- Nutrient prohibited buffers
- Nutrient prohibited drawn areas
- Nutrient prohibited winter only
- Fields

NM1: Narrative and Crops Report

Starting Year	**2017**
Reported For	**Monroe Dolan Property WQT - Existing**
Printed	**2026-05-21**
Plan Completion/Update Date:	**2020-06-11**
SnapPlus Version 20.4 built on 2021-06-03	
C:\Users\jbuholzer\OneDrive - Trilon Group Family of Companies\2025 - CIty of Monroe Water Quality Trading Plan Update to the DNR\2025 Modeling\Modeling\May 2026 Dolan Property - Update\Monroe Dolan Property WQT.snapDb	

Prepared for:
Monroe Dolan Property WQT - Existing
attn:Monroe Dolan Property WQT - Existing
State Highway 11/81
Monroe, 53566

Farm has 1 fields totalling 97 cropped acres.
Farm Narrative: Nutrient Managment Plan for WQT

Annual Farm Notes:

No Annual Farm Notes

Spreader Calibration Methods: Custom applications

Narrative and Crops:

Field Name	Field Acres	2017	2018	2019	2020
DOLAN	80.2	Corn grain No Till 191-210 bu/acre	Soybeans 15-20 inch row No Till 56-65 bu/acre	Corn grain No Till 191-210 bu/acre	Soybeans 15-20 inch row No Till 56-65 bu/acre

Summary by Crop:
NOTE: Yields calculated using the midpoint of the SnapPlus yield goal range for each crop.

Crops Grouped By Category		2017	2018	2019	2020
Corn grain	Acres bu	80 16,040		80 16,040	

Crops Grouped By Category		2017	2018	2019	2020
Soybeans 15-20 inch row	Acres bu		80 4,840		80 4,840

WQ1: P Trade Report

Reported For	Monroe Dolan Property WQT - Existing
Printed	2026-05-21
Plan Completion/Update Date	2020-06-11
SnapPlus Version 20.4 built on 2021-06-03	
C:\Users\jbuholzer\OneDrive - Trilon Group Family of Companies\2025 - CIty of Monroe Water Quality Trading Plan Update to the DNR\2025 Modeling\Modeling\May 2026 Dolan Property - Update\Monroe Dolan Property WQT.snapDb	

Prepared for:
Monroe Dolan Property WQT - Existing
attn:Monroe Dolan Property WQT - Existing
State Highway 11/81
Monroe, 53566

The P Trade Report estimates the annual pounds of phosphorus (P) in surface runoff from cropland entering surface waters. These P loss calculations are based on a field's soil test P concentration, crops, tillage, nutrient management practices and estimates of average runoff and sheet and rill erosion for the predominant soil type. Losses from concentrated flow channel or gully erosion with a field are not included in these calculations. Field runoff losses are calculated for each year as **PTP** (lb P/field/yr). Fields are only included if there are at least 2 years of crops before the selected start year. Before using this report as part of a Water Quality Trade activity, phosphorus losses (PTP) must be converted into 'P credits' according to DNR guidance.

For more information go to **http://dnr.wi.gov/** and type keyword: **Water Quality Trading**

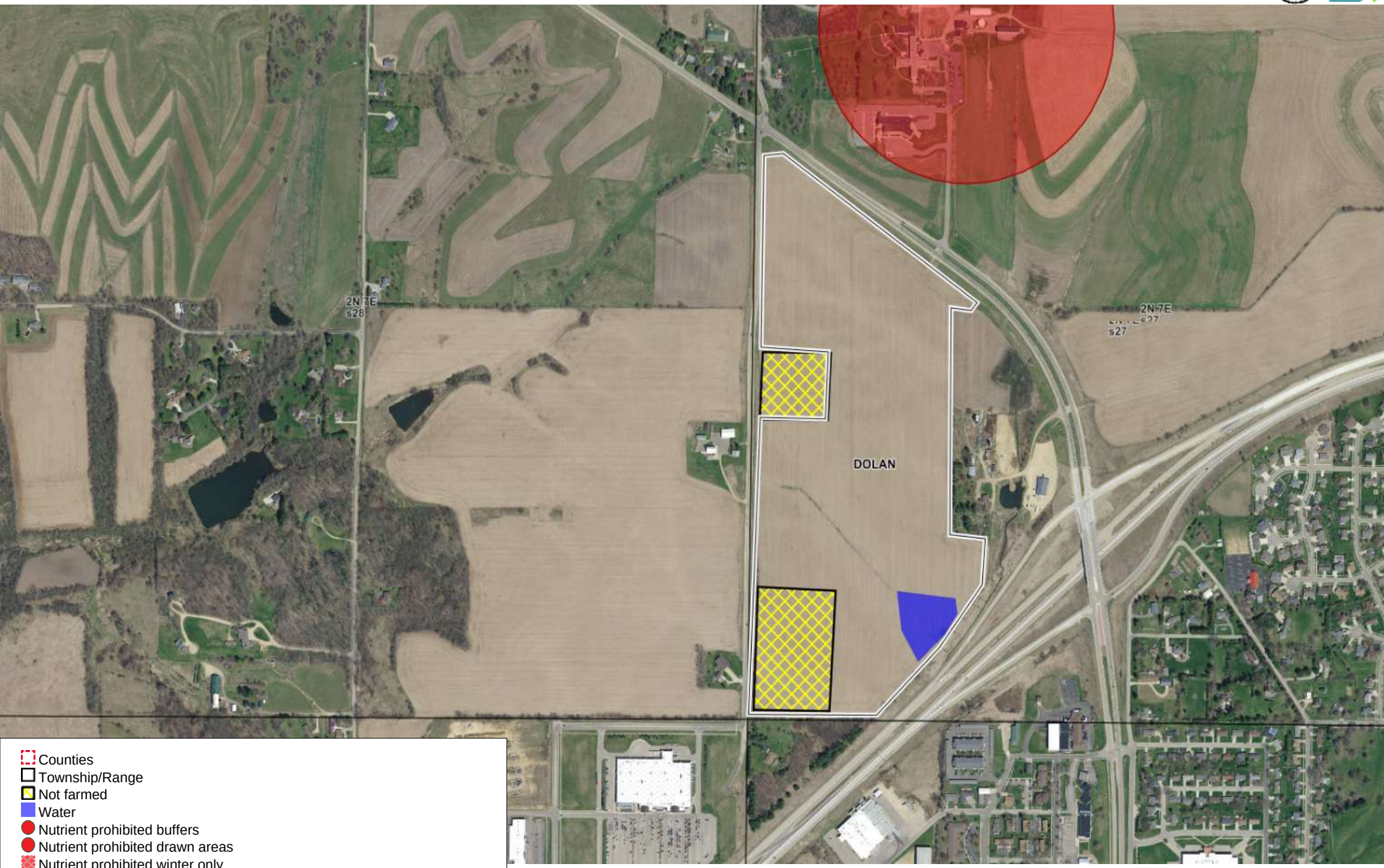
Questions? Please contact DNRphosphorus@wisconsin.gov

This report was developed for Wisconsin DNR Water Quality Trading and Adaptive Management purposes and cannot be used to demonstrate compliance with NR 151 or NRCS 590 NM plan requirements.

P Trade Report				PTP						
Field Name	Soil Series	Soil Symbol	Acres	2019	2020	2021	2022	2023	2024	2025
DOLAN	ASHDALE	AsB2	80	74	32	69	30	67	28	66
Total			**80**	**74**	**32**	**69**	**30**	**67**	**28**	**66**

Proposed Dolan Property

Farm: Monroe Dolan Property WQT - Alfalfa, V20 Generated:5/21/2026, Crop year: 2020, Township Range Section:2N 7E s27



- Counties
- Township/Range
- Not farmed
- Water
- Nutrient prohibited buffers
- Nutrient prohibited drawn areas
- Nutrient prohibited winter only
- Fields

NM1: Narrative and Crops Report

Starting Year	**2022**
Reported For	**Monroe Dolan Property WQT - Alfalfa**
Printed	**2026-05-21**
Plan Completion/Update Date:	**2020-06-11**
SnapPlus Version 20.4 built on 2021-06-03	
C:\Users\jbuholzer\OneDrive - Trilon Group Family of Companies\2025 - CIty of Monroe Water Quality Trading Plan Update to the DNR\2025 Modeling\Modeling\May 2026 Dolan Property - Update\Monroe Dolan Property WQT - Alfalfa.snapDb	

Prepared for:
Monroe Dolan Property WQT - Alfalfa
attn:Monroe Dolan Property WQT - Alfalfa
State Highway 11/81
Monroe, 53566

Farm has 1 fields totalling 97 cropped acres.
Farm Narrative: Nutrient Managment Plan for WQT

Annual Farm Notes:

No Annual Farm Notes

Spreader Calibration Methods: Custom applications

Narrative and Crops:

Field Name	Field Acres	2022	2023	2024	2025	2026	2027	2028	2029
DOLAN	80.2	Alfalfa None 3.6-4.5 ton/acre	Alfalfa None 3.6-4.5 ton/acre	Alfalfa None 3.6-4.5 ton/acre	Alfalfa None 3.6-4.5 ton/acre	Alfalfa None 3.6-4.5 ton/acre	Alfalfa None 3.6-4.5 ton/acre	Alfalfa None 3.6-4.5 ton/acre	Alfalfa None 3.6-4.5 ton/acre

Summary by Crop:
NOTE: Yields calculated using the midpoint of the SnapPlus yield goal range for each crop.

Crops Grouped By Category		2022	2023	2024	2025	2026	2027	2028	2029
Alfalfa	Acres ton	80 324	80 324	80 324	80 324	80 324	80 324	80 324	80 324

WQ1: P Trade Report

Reported For	Monroe Dolan Property WQT - Alfalfa
Printed	2026-05-21
Plan Completion/Update Date	2020-06-11
SnapPlus Version 20.4 built on 2021-06-03	
C:\Users\jbuholzer\OneDrive - Trilon Group Family of Companies\2025 - CIty of Monroe Water Quality Trading Plan Update to the DNR\2025 Modeling\Modeling\May 2026 Dolan Property - Update\Monroe Dolan Property WQT - Alfalfa.snapDb	

Prepared for:
Monroe Dolan Property WQT - Alfalfa
attn:Monroe Dolan Property WQT - Alfalfa
State Highway 11/81
Monroe, 53566

The P Trade Report estimates the annual pounds of phosphorus (P) in surface runoff from cropland entering surface waters. These P loss calculations are based on a field's soil test P concentration, crops, tillage, nutrient management practices and estimates of average runoff and sheet and rill erosion for the predominant soil type. Losses from concentrated flow channel or gully erosion with a field are not included in these calculations. Field runoff losses are calculated for each year as **PTP** (lb P/field/yr). Fields are only included if there are at least 2 years of crops before the selected start year. Before using this report as part of a Water Quality Trade activity, phosphorus losses (PTP) must be converted into 'P credits' according to DNR guidance.

For more information go to **http://dnr.wi.gov/** and type keyword: **Water Quality Trading**

Questions? Please contact DNRphosphorus@wisconsin.gov

This report was developed for Wisconsin DNR Water Quality Trading and Adaptive Management purposes and cannot be used to demonstrate compliance with NR 151 or NRCS 590 NM plan requirements.

P Trade Report				PTP										
Field Name	Soil Series	Soil Symbol	Acres	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
DOLAN	ASHDALE	AsB2	80	74	32	30	28	25	23	20	23	21	19	18
Total			**80**	**74**	**32**	**30**	**28**	**25**	**23**	**20**	**23**	**21**	**19**	**18**

PTP	
2030	2031
17	15
17	**15**

Report Number
F25178-4001

Account Number
99990

a&l greatlakes LABORATORIES
Scientists who don't mind getting dirty.™

3505 Conestoga Dr.
Fort Wayne, IN 46808
260.483.4759
algreatlakes.com

To: JENNIFER BUHOLZER
1107 16TH AVE
MONROE, WI 53566

For: KADERLY AG LLC
Farm: CITY OF MONROE
Field: DOLAN

County: GREEN
Soil: ASHDALE
Plow Depth: 7
Acres: 81

Date Received: 6/27/2025
Date Reported: 7/1/2025

SOIL TEST REPORT

Sample ID	Lab Number	OM * %	P * ppm	K * ppm	Mg** ppm	Ca ** ppm	Soil pH	Buffer pH	CEC ** meq/100g	Cation Saturation ** %K	%Mg	%Ca	%H	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Bicarb-P ppm	NO3-N ppm**
1	41116	3.6	6	54	430	1350	6.3	7.1	10.5	1.3	34.2	64.5									
2	41117	3.8	5	54	465	1450	6.5	7.1	11.3	1.2	34.4	64.4									
3	41118	4.3	11	80	670	1700	6.9		14.3	1.4	39.1	59.5									
4	41119	4.1	22	88	465	1350	6.2	7.0	10.9	2.1	35.7	62.2									
5	41120	3.5	12	52	455	1250	6.0	7.0	10.2	1.3	37.3	61.4									
6	41121	3.8	12	60	520	1450	6.2	7.0	11.7	1.3	36.9	61.8									
7	41122	3.6	18	57	390	1250	5.7	6.8	12.0	1.2	27.0	51.9	19.9								
8	41123	4.8	9	70	635	1750	6.6		14.2	1.3	37.2	61.5									
9	41124	4.1	24	68	365	1250	5.7	6.9	10.7	1.6	28.5	58.6	11.3								
10	41125	4.2	21	117	405	1400	6.1	7.0	10.7	2.8	31.6	65.6									
11	41126	4.9	34	93	810	2150	7.3		17.7	1.3	38.1	60.6									
12	41127	4.7	38	115	675	1750	7.1		14.7	2.0	38.3	59.6									
13	41128	4.0	32	81	650	1700	7.0		14.1	1.5	38.3	60.2									
14	41129	4.1	35	97	620	1650	6.9		13.7	1.8	37.8	60.4									
15	41130	4.3	37	121	705	1900	7.2		15.7	2.0	37.5	60.6									
16	41131	4.1	23	64	510	1500	6.5	7.1	11.9	1.4	35.7	63.0									
17	41132	4.9	24	74	475	1700	6.4	6.9	13.8	1.4	28.6	61.4	8.7								
Average		4.2	19^	74^	544	1562	6.5		12.8	1.6	35.1	61.0	13.3								

WI DATCP Laboratory Certification Number 01-15-03-201

Report reviewed and approved by our professional agronomy staff.

Wisoil-RES

* Soil Test Recommendations for Field, Vegetable and Fruit Crops, UW A2809, 2012. ** Recommended Chemical Soil Test Procedures for the North Central Region, NCR No. 221, 2012. ^ Weighted average, UW-A2809.

Report No: F25178-4001
Account No: 99990

SOIL TEST REPORT
(UW RECOMMENDATIONS)

a&lgreatlakes LABORATORIES
3505 Conestoga Drive
Fort Wayne, IN 46808
260.483.4759
algreatlakes.com

Date Received
6/27/2025
Date Reported
7/1/2025

JENNIFER BUHOLZER
1107 16TH AVE
MONROE, WI 53566

For: KADERLY AG LLC

Farm: CITY OF MONROE

Field
DOLAN
County
Green
Soil Name (or subsoil group)
Ashdale
(loamy soil / high yield potential)

Acres	Depth	Tiled	Irrigated
81	7	N	N

NUTRIENT RECOMMENDATIONS

Cropping Sequence	Yield Goal	Crop Nutrient Need N	Crop Nutrient Need P2O5	Crop Nutrient Need K2O	Fertilizer Credit Legume N	Fertilizer Credit Manure N	Fertilizer Credit P2O5	Fertilizer Credit K2O	Nutrients to Apply N	Nutrients to Apply P2O5	Nutrients to Apply K2O
	------ per acre ------	---------- lbs/acre ----------			lbs/acre	---------- lbs/acre ----------			---------- lbs/acre ----------		
Alfalfa, established (1)	5.6-6.5 ton	0	80	415	0	0	0	0	0	80	415
Alfalfa, established (1)	5.6-6.5 ton	0	80	415	0	0	0	0	0	80	415
Alfalfa, established (1)	5.6-6.5 ton	0	80	415	0	0	0	0	0	80	415
Alfalfa, established (1)	5.6-6.5 ton	0	80	415	0	0	0	0	0	80	415

The lime required for this rotation to reach pH 6.8 is 2 T/a of 60-69 lime or 1.5 T/a of 80-89 lime.

ADDITIONAL INFORMATION

- The lime required for this rotation to reach pH 6.8 is 2 T/a of 60-69 lime or 1.5 T/a of 80-89 lime.
- Recommended rates are the total amount of nutrients to apply (N-P-K), including starter fertilizer.
- If alfalfa will be maintained for more than three years, increase recommended K2O by 20% each year.
- N.R.=Not required for calculation of lime requirement when soil pH is 6.6 or higher.
- Parts of this field may not benefit from liming. Please see the unadjusted lime requirements in the Laboratory Analysis section below.
- If lime has been applied in the last two years, more lime may not be needed due to incomplete reaction.

TEST INTERPRETATION

Cropping Sequence	Very Low	Low	Optimum	High	Very High	Excessive
Phosphorus	PPPPPPPPPPPPPPPPPPPPPPPPPPPPPP					
Potassium	KKKKKK					
Rotation pH	XXXXXXXXXXXXXXXXXX					

LABORATORY ANALYSIS SUMMARY

	Soil pH	Buffer pH	O.M. %	Phosphorus ppm	Potassium ppm	Calcium ppm	Magnesium ppm	Estimated CEC	Boron ppm	Manganese ppm	Zinc ppm	Sulfate-S ppm	Texture Code	Sample Density
Adjusted Averages	6.5	7.1	4.2	19	74								2	4.77

SECONDARY AND MICRONUTRIENT RECOMMENDATIONS

Interpretations ——————————>

Comments:

Exhibit 7

WWTP Expansion Site Information

State of Wisconsin
Department of Natural Resources
101 South Webster Street
Madison WI 53707-7921
dnr.wi.gov

Notice of Intent to Conduct Water Quality Trading

Form 3400-206 (1/14)

Notice: Pursuant to s. 283.84, Wis. Stats., and ch. NR 217 Wis. Adm. Code, this form must be completed by any WPDES permittee that is using water quality trading as a method of complying with a permit limitation. Failure to complete this form would not result in penalties. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.).

Applicant Information

Permittee Name	Permit Number	Facility Site Number
City of Monroe	WI- 0020362-08-0	31428

Facility Address	City	State	ZIP Code
1110 18th Ave	Monroe	WI	53566

Project Contact Name (if applicable)	Address	City	State	ZIP Code
Jennifer Buholzer	1107 16th Ave	Monroe	WI	53566

Project Name
Monroe WWTP Expansion Site - Buffer Strips, No Till, Nutrient Management

Receiving Water Name	Parameter(s) being traded	HUC 12(s)
Honey Creek	Phosphorus	070900031004

Is the permittee in a point or nonpoint source dominated watershed?
(See PRESTO results - http://dnr.wi.gov/topic/surfacewater/presto.html)

- ◯ Point source dominated
- ◉ Nonpoint source dominated

Credit Generator Information

Credit generator type (select all that apply):

- ☐ Permitted Discharge (non-MS4/CAFO)
- ☒ Permitted MS4
- ☐ Permitted CAFO
- ☐ Urban nonpoint source discharge
- ☐ Agricultural nonpoint source discharge
- ☐ Other - Specify: _____

Are any of the credit generators in a different HUC 12 than the applicant?

- ◯ Yes; HUC 12: _____
- ◉ No
- ◯ Unsure

Are any of the credit generators downstream of the applicant?

- ◯ Yes
- ◉ No
- ◯ Unsure

Will a broker/exchange be used to facilitate trade?

- ◯ Yes; Name: _____
- ◉ No
- ◯ Unsure

Point to Point Trades (Traditional Municipal / Industrial Discharge, MS4, CAFO)

Discharge Type	Permit Number	Name	Contact Address	Is the point source credit generator currently in compliance with their permit requirements?
◯ Traditional ◉ MS4 ◯ CAFO	S050075	City of Monroe	1110 18th Ave Monroe, WI 53566	◯ Yes ◯ No ◯ Unsure
◯ Traditional ◯ MS4 ◯ CAFO				◯ Yes ◯ No ◯ Unsure
◯ Traditional ◯ MS4 ◯ CAFO				◯ Yes ◯ No ◯ Unsure
◯ Traditional ◯ MS4 ◯ CAFO				◯ Yes ◯ No ◯ Unsure
◯ Traditional ◯ MS4 ◯ CAFO				◯ Yes ◯ No ◯ Unsure

Point to Nonpoint Trades (Non-permitted Agricultural, Non-Permitted Urban, etc.)

List the practices that will be used to generate credits:

Addition of buffer strips and creation of a nutrient management plan for property. The property is ~5.0 Ac and currently the land is being used to crop corn.

Method for quantifying credits generated:
- ☐ Monitoring
- ☒ Modeling, Names: SNAP + (to be completed)
- ☐ Other: _____

Projected date credits will be available: 10/31/2021

The preparer certifies all of the following:

- I am familiar with the specifications submitted for this application, and I believe all applicable items in this checklist have been addressed.
- I have completed this document to the best of my knowledge and have not excluded pertinent information.

Signature of Preparer	Date Signed

Authorized Representative Signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. Based on my inquiry of those persons directly responsible for gathering and entering the information, the information is, to the best of my knowledge and belief, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Authorized Representative	Date Signed
	3/19/21

Operation & Maintenance– WWTP Expansion Site

For the purposes of this Operation and Maintenance Plan, severe floods are defined as any hydrologic event resulting from a 24-hour cumulative precipitation in excess of 3.8 inches of rainfall (i.e., the 5-year, 24-hour precipitation event based on the annual maximum time series as defined by NOAA Atlas 14, Volume 8, Version 2).

Refer to Inspection and Reporting requirements to be followed as part of the proper operation and maintenance of the BMPs installed as part of this water quality trading plan.

Conditions for Oats:

1. Check planted crop to ensure Oats has been planted
2. Verify crop management matches the standards set forth by the Nutrient Management Standard 590.
3. After rain events check levels of erosion on the property.
4. If a crop, other than oats, is planted SNAP + must be run and DNR notified of change. An update to the Water Quality Trading plan may be required at this time.
5. No Fertilizer to be used onsite.
6. The field shall maintain vegetative practices at a minimum of 70% live cover during growing season.

Additional Conditions:

1. The property will be inspected following heavy rain events at a minimum. Inspection will be used to determine appropriate actions to maintain the installed BMPs for continuous TP credit generation. This may require replanting if a crop washout has occurred.
2. The BMPs will be inspected annually by a licensed Professional Engineer to ensure that the BMPs are functioning as intended in order to meet the requirements of the WQT plan. Photos to be taken at time of inspection and any non-compliance areas to be documented. Photos to be taken at least once per year.

Inspection Reporting – WWTP Expansion Site

a. Tracking Procedures

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b. Inspection

Inspection of the BMPs shall occur to ensure they are installed per the design and meet all applicable codes and permits. Inspections of the established BMPs shall occur each month at a minimum or following heavy rain events. If bare soil, erosion, or a concentrated flow path is noted during inspection, the area shall be regraded and reseeded to prevent the development of permanent rills or gullies. A licensed professional engineer will perform an annual certification to ensure the practice is performing as designed and the City remains in compliance. Photos to be taken at time of inspection and any non-compliance areas to be documented. Photos to be taken at least once per year.

Location shall be cropped with Oats. The field shall maintain vegetative practices at a minimum of 70% live cover during growing season. No fertilizer shall be used onsite.

The inspection reports will include:

i. Name and contact information of the inspector
ii. Inspection Date
iii. Relevant standards set forth in the Design Plan or Operation and Maintenance Plan
iv. Issues identified
v. Photos to be taken at time of inspection and any non-compliance areas to be documented. Photos to be taken at least once per year.
vi. When and how any issues identified were addressed
vii. When and how any issues identified will be addressed in the future Inspection reports generated during each routine or after rain event inspection will be included with the Annual Water Quality Trading Report submitted by the City to DNR.

Annual inspections by a professional engineer will typically occur in the late spring. This time of year is ideal for evaluating the condition of BMPs as it follows the freeze/thaw which poses the greatest potential for changes to the BMPs. Minimal vegetation cover will allow for adequate visual inspection.

c. Annual Water Quality Trading Report Submittal

Each year the following shall be submitted to the DNR:

i. The number of pollutant reduction credits (lbs/month) used each month of the previous year to demonstrate compliance.
ii. A summary of the annual inspection of the practice that generated any of the pollutant reduction credits used during the previous year, this inspection shall be completed by a licensed Professional Engineer.

iii. Identification of noncompliance or failure to implement any terms or conditions of this permit with respect to water quality trading that have not been reported in discharge monitoring reports.
iv. Photos to be taken at time of inspection and any non-compliance areas to be documented. Photos to be taken at least once per year.
v. A list of all noncompliance and the correction measures and timing to address the issues throughout the year; and
vi. An updated WQT plan if management practices have or will change.

d. Certification of Management Practices

The city will certify that the BMPs are maintained and operating in a manner consistent with this Water Quality Trading Plan or provide a statement noting noncompliance with this Plan. The monthly Discharge Monitoring Report (DMR) will include the following statement as a certification of compliance:

> "I certify, to the best of my knowledge, the management practices identified in the approved water quality trading plan are installed, established and properly maintained."

e. Notification of Failure to Generate Credits

The City will notify DNR by telephone call to DNR's regional wastewater compliance engineer within 24 hours or next business day of becoming aware that phosphorus credits used or intended for use by City are not being generated as outlined in this Water Quality Trading Plan.

The City will submit a written notification within five days after the City recognizes that the phosphorus credits are not being generated as outlined in the Trading Plan. The DNR may waive the requirement for submittal for a written notice within five days and instruct the City to submit the written notice with the next regularly scheduled monitoring report required by City's WPDES Permit.

The written notice will contain a description of how and why the TP credits are not being generated as outlined, the steps taken or planned to prevent reoccurrence of the identified problem, and the length of time it will take to address the issue.

f. Conditions under which Management Practices May Be Inspected

Any DNR authorized officer, employee, or representative has the right to access and inspect the credit generating practice so long as the City's trade agreement with the DNR and this Water Quality Trading Plan remain in effect.

NM1: Narrative and Crops Report

Starting Year	**2017**
Reported For	**WTP Expansion Site**
Printed	**2026-05-21**
Plan Completion/Update Date:	**2020-10-30**
SnapPlus Version 20.4 built on 2021-06-03	
C:\Users\jbuholzer\OneDrive - Trilon Group Family of Companies\2025 - CIty of Monroe Water Quality Trading Plan Update to the DNR\2025 Modeling\Modeling\May 2026 WTP Expansion SIte\Monroe - Land Application Site\Land Application Site.snapDb	

Prepared for:
WTP Expansion Site
attn:WTP Expansion Site
1224 W. 10th Street
Monroe, 53566

Farm has 1 fields totalling 0 cropped acres.
Farm Narrative: Land Application Site

Annual Farm Notes:

No Annual Farm Notes

Spreader Calibration Methods: Custom applications

Narrative and Crops:

Field Name	Field Acres	2017	2018	2019	2020
WTP	5.2	Corn grain Spring Cultivation 191-210 bu/acre	Corn grain Spring Cultivation 191-210 bu/acre	Corn grain Spring Cultivation 191-210 bu/acre	Corn grain Spring Cultivation 191-210 bu/acre

Summary by Crop:
NOTE: Yields calculated using the midpoint of the SnapPlus yield goal range for each crop.

Crops Grouped By Category		2017	2018	2019	2020
Corn grain	Acres bu	5 1,003	5 1,003	5 1,003	5 1,003

WQ1: P Trade Report

Reported For	WTP Expansion Site
Printed	2022-04-25
Plan Completion/Update Date	2020-10-30
SnapPlus Version 20.0 built on 2020-10-21	
C:\Users\jbuholzer\OneDrive - Fehr Graham\2022 - City of Monroe Water Quality Submittal to DNR\Modeling\WTP Expansion SIte\Monroe - Land Application Site\Land Application Site.snapDb	

Prepared for:
WTP Expansion Site
attn:WTP Expansion Site
1224 W. 10th Street
Monroe, 53566

The P Trade Report estimates the annual pounds of phosphorus (P) in surface runoff from cropland entering surface waters. These P loss calculations are based on a field's soil test P concentration, crops, tillage, nutrient management practices and estimates of average runoff and sheet and rill erosion for the predominant soil type. Losses from concentrated flow channel or gully erosion with a field are not included in these calculations. Field runoff losses are calculated for each year as **PTP** (lb P/field/yr). Fields are only included if there are at least 2 years of crops before the selected start year. Before using this report as part of a Water Quality Trade activity, phosphorus losses (PTP) must be converted into 'P credits' according to DNR guidance.

For more information go to **http://dnr.wi.gov/** and type keyword: **Water Quality Trading**

Questions? Please contact DNRphosphorus@wisconsin.gov

This report was developed for Wisconsin DNR Water Quality Trading and Adaptive Management purposes and cannot be used to demonstrate compliance with NR 151 or NRCS 590 NM plan requirements.

P Trade Report				PTP						
Field Name	Soil Series	Soil Symbol	Acres	2019	2020	2021	2022	2023	2024	2025
WTP	TAMA	TaB2	5	16	15	15	15	15	15	16
Total			**5**	**16**	**15**	**15**	**15**	**15**	**15**	**16**

NM1: Narrative and Crops Report

Starting Year	**2024**
Reported For	**WTP Expansion Site - Proposed**
Printed	**2026-05-21**
Plan Completion/Update Date:	**2020-10-30**
SnapPlus Version 20.4 built on 2021-06-03	
C:\Users\jbuholzer\OneDrive - Trilon Group Family of Companies\2025 - CIty of Monroe Water Quality Trading Plan Update to the DNR\2025 Modeling\Modeling\WTP Expansion SIte\Monroe - Land Application Site - Proposed Cover\Land Applicati - Copy.snapDb	

Prepared for:
WTP Expansion Site - Proposed
attn:WTP Expansion Site
1224 W. 10th Street
Monroe, 53566

Farm has 1 fields totalling 0 cropped acres.
Farm Narrative: Land Application Site

Annual Farm Notes:

No Annual Farm Notes

Spreader Calibration Methods: Custom applications

Narrative and Crops:

Field Name	Field Acres	2024	2025	2026	2027	2028	2029	2030
WTP	5.2	Oats No Till 61-90 bu/acre	Oats No Till 61-90 bu/acre	Oats No Till 61-90 bu/acre	Oats No Till 61-90 bu/acre	Oats No Till 61-90 bu/acre	Oats No Till 61-90 bu/acre	Oats No Till 61-90 bu/acre

Summary by Crop:
NOTE: Yields calculated using the midpoint of the SnapPlus yield goal range for each crop.

Crops Grouped By Category		2024	2025	2026	2027	2028	2029	2030
Oats	Acres bu	5 378	5 378	5 378	5 378	5 378	5 378	5 378

WQ1: P Trade Report

Reported For	WTP Expansion Site - Proposed
Printed	2025-12-22
Plan Completion/Update Date	2020-10-30
SnapPlus Version 20.4 built on 2021-06-03	
C:\Users\jbuholzer\OneDrive - Trilon Group Family of Companies\2022 - City of Monroe Water Quality Submittal to DNR\2025 Modeling\Modeling \WTP Expansion SIte\Monroe - Land Application Site - Proposed Cover \Land Application Site Proposed Cover.snapDb	

Prepared for:
WTP Expansion Site - Proposed
attn:WTP Expansion Site
1224 W. 10th Street
Monroe, 53566

The P Trade Report estimates the annual pounds of phosphorus (P) in surface runoff from cropland entering surface waters. These P loss calculations are based on a field's soil test P concentration, crops, tillage, nutrient management practices and estimates of average runoff and sheet and rill erosion for the predominant soil type. Losses from concentrated flow channel or gully erosion with a field are not included in these calculations. Field runoff losses are calculated for each year as **PTP** (lb P/field/yr). Fields are only included if there are at least 2 years of crops before the selected start year. Before using this report as part of a Water Quality Trade activity, phosphorus losses (PTP) must be converted into 'P credits' according to DNR guidance.

For more information go to **http://dnr.wi.gov/** and type keyword: **Water Quality Trading**

Questions? Please contact DNRphosphorus@wisconsin.gov

This report was developed for Wisconsin DNR Water Quality Trading and Adaptive Management purposes and cannot be used to demonstrate compliance with NR 151 or NRCS 590 NM plan requirements.

P Trade Report				PTP										
Field Name	Soil Series	Soil Symbol	Acres	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
WTP	TAMA	TaB2	5	8	7	6	4	3	2	2	3	2	2	2
Total			**5**	**8**	**7**	**6**	**4**	**3**	**2**	**2**	**3**	**2**	**2**	**2**

PTP	
2030	2031
2	2
2	**2**

Report Number
F25178-4000

Account Number
99990

a&l greatlakes LABORATORIES
Scientists who don't mind getting dirty.™

3505 Conestoga Dr.
Fort Wayne, IN 46808
260.483.4759
algreatlakes.com

To: JENNIFER BUHOLZER
1107 16TH AVE
MONROE, WI 53566

For: KADERLY AG LLC
Farm: CITY OF MONROE
Field: WTP

County: GREEN
Soil: ASHDALE
Plow Depth: 7
Acres: 5

Date Received: 6/27/2025
Date Reported: 7/1/2025

SOIL TEST REPORT

Sample ID	Lab Number	OM * %	P * ppm	K * ppm	Mg** ppm	Ca ** ppm	Soil pH	Buffer pH	CEC ** meq/100g	Cation Saturation ** %K	%Mg	%Ca	%H	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Bicarb-P ppm	NO3-N ppm**
1	41113	2.1	49	49	220	750	5.3	6.7	9.3	1.3	19.7	40.3	38.7								
2	41114	2.1	48	43	220	850	5.2	6.8	8.6	1.3	21.3	49.5	27.9								
3	41115	1.8	40	40	260	800	5.2	6.8	8.7	1.2	25.0	46.1	27.7								
Average		2.0	46^	44^	233	800	5.2		8.9	1.3	22.0	45.3	31.4								

WI DATCP Laboratory Certification Number 01-15-03-201

Report reviewed and approved by our professional agronomy staff.

Wisoil-RES

* Soil Test Recommendations for Field, Vegetable and Fruit Crops, UW A2809, 2012. ** Recommended Chemical Soil Test Procedures for the North Central Region, NCR No. 221, 2012. ^ Weighted average, UW-A2809.

Report No: F25178-4000
Account No: 99990

SOIL TEST REPORT
(UW RECOMMENDATIONS)

a&lgreatlakes LABORATORIES
3505 Conestoga Drive
Fort Wayne, IN 46808
260.483.4759
algreatlakes.com

Date Received
6/27/2025
Date Reported
7/1/2025

JENNIFER BUHOLZER
1107 16TH AVE
MONROE, WI 53566

For: KADERLY AG LLC

Farm: CITY OF MONROE

Field
WTP
County
Green
Soil Name (or subsoil group)
Ashdale
(loamy soil / high yield potential)

Acres	Depth	Tiled	Irrigated
5	7	N	N

NUTRIENT RECOMMENDATIONS

Cropping Sequence	Yield Goal	Crop Nutrient Need N	P2O5	K2O	Fertilizer Credit Legume N	Manure N	P2O5	K2O	Nutrients to Apply N	P2O5	K2O
	------ per acre ------	---------- lbs/acre ----------			lbs/acre	---------- lbs/acre ----------			---------- lbs/acre ----------		
Oats, grain (75)	61-90 bu	40	0	60	0	0	0	0	40	0	60
Oats, grain (75)	61-90 bu	40	0	60	0	0	0	0	40	0	60
Oats, grain (75)	61-90 bu	40	0	60	0	0	0	0	40	0	60
Oats, grain (75)	61-90 bu	40	0	60	0	0	0	0	40	0	60

The lime required for this rotation to reach pH 5.8 is 2 T/a of 60-69 lime or 1.5 T/a of 80-89 lime.

ADDITIONAL INFORMATION

- The lime required for this rotation to reach pH 5.8 is 2 T/a of 60-69 lime or 1.5 T/a of 80-89 lime.
- Recommended rates are the total amount of nutrients to apply (N-P-K), including starter fertilizer.
- If barley or oats are underseeded with a legume forage, eliminate or reduce N by half.
- If lime has been applied in the last two years, more lime may not be needed due to incomplete reaction.

TEST INTERPRETATION

Cropping Sequence	Very Low	Low	Optimum	High	Very High	Excessive
Phosphorus	PPPPPPPPPPPP	PPPPPPPPPPPP	PPPPPPPPPPPP	PPPPPPPPPPPP	PPPPPPPPPPPP	PPPPPPPP
Potassium	KKKKKK					
Rotation pH	XXXXXXXXXXX	XXXXXXX				

LABORATORY ANALYSIS SUMMARY

	Soil pH	Buffer pH	O.M. %	Phosphorus ppm	Potassium ppm	Calcium ppm	Magnesium ppm	Estimated CEC	Boron ppm	Manganese ppm	Zinc ppm	Sulfate-S ppm	Texture Code	Sample Density
Adjusted Averages	5.2	6.7	2.0	46	44								2	3.47

SECONDARY AND MICRONUTRIENT RECOMMENDATIONS

Interpretations ——————————>

Comments:

Exhibit 8

Honey Creek Park Streambank

Restoration Information

State of Wisconsin
Department of Natural Resources
101 South Webster Street
Madison WI 53707-7921
dnr.wi.gov

Notice of Intent to Conduct Water Quality Trading

Form 3400-206 (1/14)

Notice: Pursuant to s. 283.84, Wis. Stats., and ch. NR 217 Wis. Adm. Code, this form must be completed by any WPDES permittee that is using water quality trading as a method of complying with a permit limitation. Failure to complete this form would not result in penalties. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.).

Applicant Information

Permittee Name	Permit Number	Facility Site Number
City of Monroe	WI- 0020362-08-0	31428

Facility Address	City	State	ZIP Code
1110 18th Ave	Monroe	WI	53566

Project Contact Name (if applicable)	Address	City	State	ZIP Code
Jennifer Buholzer	1107 16th Ave	Monroe	WI	53566

Project Name: Honey Creek Park/ WWTP Streambank Restoration

Receiving Water Name	Parameter(s) being traded	HUC 12(s)
Honey Creek	Phosphorus	070900031004

Is the permittee in a point or nonpoint source dominated watershed?
(See PRESTO results - http://dnr.wi.gov/topic/surfacewater/presto.html)

- ○ Point source dominated
- ◉ Nonpoint source dominated

Credit Generator Information

Credit generator type (select all that apply):

- ☐ Permitted Discharge (non-MS4/CAFO)
- ☒ Permitted MS4
- ☐ Permitted CAFO
- ☐ Urban nonpoint source discharge
- ☐ Agricultural nonpoint source discharge
- ☐ Other - Specify: _____

Are any of the credit generators in a different HUC 12 than the applicant?

- ○ Yes; HUC 12: _____
- ○ No
- ○ Unsure

Are any of the credit generators downstream of the applicant?

- ○ Yes
- ○ No
- ○ Unsure

Will a broker/exchange be used to facilitate trade?

- ○ Yes; Name: _____
- ○ No
- ○ Unsure

Point to Point Trades (Traditional Municipal / Industrial Discharge, MS4, CAFO)

Discharge Type	Permit Number	Name	Contact Address	Is the point source credit generator currently in compliance with their permit requirements?
○ Traditional ◉ MS4 ○ CAFO	S050075	City of Monroe	1110 18th Ave. Monroe, WI 53566	○ Yes ○ No ○ Unsure
○ Traditional ○ MS4 ○ CAFO				○ Yes ○ No ○ Unsure
○ Traditional ○ MS4 ○ CAFO				○ Yes ○ No ○ Unsure
○ Traditional ○ MS4 ○ CAFO				○ Yes ○ No ○ Unsure
○ Traditional ○ MS4 ○ CAFO				○ Yes ○ No ○ Unsure

Point to Nonpoint Trades (Non-permitted Agricultural, Non-Permitted Urban, etc.)

List the practices that will be used to generate credits:

Streambank restoration will be conducted on 2,760 ft of Honey Creek in Honey Creek Park and near the WWTP. See attached map. Preliminary Modeling has been completed and final model will be provided upon the completion of the topographic survey and soil testing. The modeling will be completed using the NRCS Streambank Irrigation Ditch Erosion Estimator. Final modeling will be included in the submittal package for registering the practice.

Method for quantifying credits generated:
- ☐ Monitoring
- ☒ Modeling, Names: NRCS Erosion Tool
- ☐ Other: _____

Projected date credits will be available: 01/01/2022

The preparer certifies all of the following:

- I am familiar with the specifications submitted for this application, and I believe all applicable items in this checklist have been addressed.
- I have completed this document to the best of my knowledge and have not excluded pertinent information.

Signature of Preparer	Date Signed

Authorized Representative Signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. Based on my inquiry of those persons directly responsible for gathering and entering the information, the information is, to the best of my knowledge and belief, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Authorized Representative	Date Signed
	3/19/21

City of Monroe: Honey Creek Property Trade Agreement
Effective Date:

Permittee Information

Credit User Name (Permittee)	Permit Number
City Of Monroe	WI-0020362-09-00

Credit User Address: 1110 18th Ave. Monroe, WI 53566

Permittee/Broker/Exchange Name (if applicable)	Trade Agreement Number
NA	001

Permittee/Broker/Exchange Address (if applicable)

Street Address	City	State	ZIP Code
1110 18th Ave.	Monroe	WI	53566

Project Name: Honey Creek Park Streambank Restoration

Name of Credit Generator (Landowner/Operator) (Last, First, M.I.)

Morrison Newspaper Corp of Wisconsin

Street Address	City	State	ZIP Code
1065 4th Avenue West	Monroe	WI	53566

Property Information

Name of Landowner(s) (if not Operator) (Last, First, M.I.)

Street Address	City	State	ZIP Code

Legal Description of Property - Contiguous sites under the same ownership: (add additional sheets if necessary)

See attached mapping for areas of stream bank improvements to be included in Trade Agreement.

23251.2354.1090

Parcel ID(s):

Site Locator for Construction Projects

County	Township	Range E / W	Section	Quarter/Quarter (e.g., NW ¼ of the NE ¼)
Green	2 N	7E	33	
	N			
	N			
	N			

Agreement

The property described above is enrolled in a Water Quality Trade Agreement. Funds are provided to the landowner/ operator in return for the installation, operation and maintenance of best management practices (BMPs) designed to enhance water quality. This agreement commits the landowner/operator, their heirs, successors and assigns to fulfill the trade agreement until a satisfaction or release is filed by the grantee.

Addenda which describe the BMPs, costs, installation schedule, and conditions are hereby incorporated into this agreement and are on file with the grantee and may be given to Wisconsin DNR upon request by the Department.

Landowner&City Agreement

Signed this 27th day of January, 20 22.

Signature of Landowner/Operator

Morrison Newspaper Corp of Wisconsin

Typed Name of Landowner/Operator

Signature of Village Authorized Representative

Typed Name of Village Authorized Representative

STATE OF WISCONSIN)
Green County) ss.
)
)

Personally came before me this 27th day of January, 20 22.

The above named _____ to me known to be the person(s) who executed the foregoing instrument and acknowledge the same.

Kathleen M. Pierce
Signature of Notary Public

Kathleen M. Pierce
Typed Name of Notary Public

Notary Public Green County, Wisconsin

My commission (is permanent) (expires 2/29/24).

Landowners (if not operator)

If the landowner section is not completed, check (X) one or both of the following that apply

[X] Landowner is also operator

[ ] Trade agreement contains only high residue management, nutrient management, pesticide management, cropland protection cover (green manure)

Signed this _____ day of _____, 20 _____.

Signature of Landowner (if not operator)

Signature of Landowner (if not operator)

Typed Name of Landowner (if not operator)

Typed Name of Landowner (if not operator)

STATE OF WISCONSIN)
_____ County) ss.
)
)

Personally came before me this _____ day of _____, 20 _____.

The above named _____ to me known to be the person(s) who executed the foregoing instrument and acknowledge the same.

Signature of Notary Public

Typed Name of Notary Public

Notary Public _____ County, Wisconsin

My commission (is permanent) (expires _____).

Credit user/broker/exchange Not applicable

Signed this _____ day of _____, 20 _____.

Signature of credit user/broker/exchange

Typed Name of credit user/broker/exchange

STATE OF WISCONSIN)
_____ County) ss.
)
)

Personally came before me this _____ day of _____, 20 _____.

The above named _____ to me known to be the person(s) who executed the foregoing instrument and acknowledge the same.

Signature of Notary Public

Notary Public _____ County, Wisconsin

My commission (is permanent) (expires _____).

Other Signer- Specify title or relationship: _____

Signed this _____ day of _____, 20 _____.

_____ Signature

_____ Typed Name

_____ Signature

_____ Typed Name

STATE OF WISCONSIN)
)
_____ County) ss.
)
)

Personally came before me this _____ day of _____, 20 _____.

The above named _____ to me known to be the person(s) who executed the foregoing instrument and acknowledge the same.

_____ Signature of Notary Public

_____ Typed Name of Notary Public

Notary Public _____ County, Wisconsin

My commission (is permanent) (expires _____).

Other Signer- Specify title or relationship: _____

Signed this _____ day of _____, 20 _____.

_____ Signature

_____ Typed Name

_____ Signature

_____ Typed Name

STATE OF WISCONSIN)
)
_____ County) ss.
)
)

Personally came before me this _____ day of _____, 20 _____.

The above named _____ to me known to be the person(s) who executed the foregoing instrument and acknowledge the same.

_____ Signature of Notary Public

_____ Typed Name of Notary Public

Notary Public _____ County, Wisconsin

My commission (is permanent) (expires _____).

Other Signer- Specify title or relationship: _____

Signed this _____ day of _____, 20 _____.

_____ Signature

_____ Typed Name

_____ Signature

_____ Typed Name

STATE OF WISCONSIN)
)
_____ County) ss.
)
)

Personally came before me this _____ day of _____, 20 _____.

The above named _____ to me known to be the person(s) who executed the foregoing instrument and acknowledge the same.

_____ Signature of Notary Public

_____ Typed Name of Notary Public

Notary Public _____ County, Wisconsin

My commission (is permanent) (expires _____).

[X] Check this box if this page is purposely left blank.

Section A – General Requirements

- This agreement may be amended by mutual agreement of either party as long as the agreement has not expired.
- BMP may only be removed is approved in writing by the DNR.

Section B – Landowner/Operator Shall:

- The landowner shall alllow access by City personnel or authorized representative for inspection of the operation and maintenance of the BMPs.

- All maintenance to be completed at the City's cost.

Section C – Grantee Shall:

.

- City will inspect and maintain the BMP to be paid for by City at no cost to the landwoner.

TA Number	Typed Name of Landowner/Operator Morrison Newspaper Corp of Wisconsin	Initials of Landowner/Operator	Date

The cost-share recipient shall implement and maintain all best management practices listed in this Addendum, unless otherwise amended in accordance with this agreement.							Insta From (MM/YY)	
Field #	DNR BMP Code	Practice Name	Quantity	Unit	Unit Cost	Estimated Total Cost	Reimburs-ement Rate (%)	Estimated Cost-Share Amt.
* Identify Program Names: _____					**TOTALS**			
CSA Number		Typed Name of Landowner/Operator					Initials of Landowi	

Operation & Maintenance– Honey Creek Streambank Restoration

For the purposes of this Operation and Maintenance Plan, severe floods are defined as any hydrologic event resulting from a 24-hour cumulative precipitation in excess of 3.8 inches of rainfall (i.e., the 5-year, 24-hour precipitation event based on the annual maximum time series as defined by NOAA Atlas 14, Volume 8, Version 2).

Refer to Inspection and Reporting requirements to be followed as part of the proper operation and maintenance of the BMPs installed as part of this water quality trading plan.

Conditions for Boulder Toe, Bank Slope Reduction, and Tree Preservation:

1. Check the boulder toe, plantings, and trees at least once each year and immediately after severe floods. Rock removed or displaced shall be replaced as needed. Repair or replace any damaged or missing revetments.
2. Logs, trees, driftwood, and other debris lodged in or near the boulder toe shall be removed.
3. Check for sloughing, erosion, or damage to vegetative cover. Damaged areas shall be graded, shaped, and revegetated.
4. Repair any vandalism, vehicle, or livestock damage.

Additional Conditions:

1. All repairs which include the streambank or streambed should be approved by WI DNR before implementing the repair to determine if a permit is needed to complete the repair.
2. Clip and/or mechanically harvest vegetated areas, as needed, to control undesirable species and woody vegetation.
3. The BMPs will be inspected following heavy rain events at a minimum. Inspection will be used to determine appropriate actions to maintain the installed BMPs for continuous TP credit generation.

4. The BMPs will be inspected annually by a licensed Professional Engineer to ensure that the BMPs are functioning as intended in order to meet the requirements of the WQT plan. Photos to be taken at time of inspection and any non-compliance areas to be documented. Photos to be taken at least once per year.

Inspection Reporting– Honey Creek Streambank Restoration

a. Tracking Procedures

The City will track credits monthly and report credit usage to the DNR in the Discharge Monitoring Reports (DMRs). The annual report will summarize the 12 months of credit usage and credit generation. The City will report to DNR any concern that they have that may result in a need to modify the trade agreement and/or this trade plan. For example, a need to generate additional credits based on discharge.

b. Inspection

Inspection of the BMPs shall occur to ensure they are installed per the design and meet all applicable codes and permits. Inspections of the established BMPs shall occur each month at a minimum or following heavy rain events. A licensed professional engineer will perform an annual certification to ensure the practice is performing as designed and the City remains in compliance.

The inspection reports will include:

i. Name and contact information of the inspector

ii. Inspection Date

iii. Relevant standards set forth in the Design Plan or Operation and Maintenance Plan

iv. Issues identified

v. When and how any issues identified were addressed

vi. Photos to be taken at time of inspection and any non-compliance areas to be documented. Photos to be taken at least once per year.

vii. When and how any issues identified will be addressed in the future Inspection reports generated during each routine or after rain event inspection will be included with the Annual Water Quality Trading Report submitted by the City to DNR.

Annual inspections by a professional engineer will typically occur in the late spring. This time of year, is ideal for evaluating the condition of BMPs as it follows the freeze/thaw which

poses the greatest potential for changes to the BMPs. Minimal vegetation cover will allow for adequate visual inspection.

c. Annual Water Quality Trading Report Submittal

Each year the following shall be submitted to the DNR:

i. The number of pollutant reduction credits (lbs/month) used each month of the previous year to demonstrate compliance.

ii. A summary of the annual inspection of the practice that generated any of the pollutant reduction credits used during the previous year, this inspection shall be completed by a licensed Professional Engineer.

iii. Report to include analysis of structural and vegetative conditions.

iv. Identification of noncompliance or failure to implement any terms or conditions of this permit with respect to water quality trading that have not been reported in discharge monitoring reports.

v. Photos documenting condition of practice to be completed annually.

vi. A list of all noncompliance and the correction measures and timing to address the issues throughout the year; and

vii. An updated WQT plan if management practices have or will change.

ci. Certification of Management Practices

The city will certify that the BMPs are maintained and operating in a manner consistent with this Water Quality Trading Plan or provide a statement noting noncompliance with this Plan. The monthly Discharge Monitoring Report (DMR) will include the following statement as a certification of compliance:

"I certify, to the best of my knowledge, the management practices identified in the approved water quality trading plan are installed, established and properly maintained."

e. Notification of Failure to Generate Credits

The City will notify DNR by telephone call to DNR's regional wastewater compliance engineer within 24 hours or next business day of becoming aware that phosphorus credits used or intended for use by City are not being generated as outlined in this Water Quality Trading Plan.

The City will submit a written notification within five days after the City recognizes that the phosphorus credits are not being generated as outlined in the Trading Plan. The DNR may waive the requirement for submittal for a written notice within five days and instruct the City to submit the written notice with the next regularly scheduled monitoring report required by City's WPDES Permit.

The written notice will contain a description of how and why the TP credits are not being generated as outlined, the steps taken or planned to prevent reoccurrence of the identified problem, and the length of time it will take to address the issue.

f. Conditions under which Management Practices May Be Inspected

Any DNR authorized officer, employee, or representative has the right to access and inspect the credit generating practice so long as the City's trade agreement with the DNR and this Water Quality Trading Plan remain in effect.

SEGMENT 1



SEGMENT 1 – Some bare ground, some exposed roots.



SEGMENT 1 (CONT.)





SEGMENT 2



SEGMENT 2 – Vegetative overhang, bare banks, and exposed roots.



SEGMENT 2 (CONT.)





SEGMENT 2 (CONT.)



SEGMENT 3



SEGMENT 3 – Bare banks with some root exposure.



SEGMENT 4



SEGMENT 4- Some bare ground, exposed roots, and some trees starting to slip into the stream. Banks have slid in a couple of locations.



SEGMENT 4 (CONT.)





SEGMENT 5A



SEGMENT 5A – Bare banks, root exposure, and vegetative overhang.

SEGMENT 5B



SEGMENT 5B – Slumping soil, exposed banks, vegetative overhang.

SEGMENT 6



SEGMENT 6- Bare banks, some rills, and exposed roots.



SEGMENT 6 (CONT.)





SEGMENT 7



SEGMENT 7 – Bare banks, some exposed roots.





SEGMENT 7 – Bare banks, some exposed roots and some rills beginning to form. Some trees starting to slip into the creek.



SEGMENT 8



SEGMENT 8 – Exposed roots and bare soil.



SEGMENT 8 (CONT.)



SEGMENT 8 – Exposed Roots and bare soil. Some foliage tipping into creek.



SEGMENT 9



SEGMENT 9- Exposed roots, bare banks in some location, slumping soil in other locations.



SEGMENT 9 (CONT.)



SEGMENT 9- Exposed roots, bare banks in some location, slight vegetative overhang.



SEGMENT 10A



SEGMENT 10A- some exposed roots, vegetative overhang, and bare bank under the vegetative overhang. Some slumping of bank into the creek.



SEGMENT 10B



SEGMENT 10B- Exposed roots, vegetative overhang, and bare bank under the vegetative overhang. Some slumping of bank into the creek. Different bank height than Segment 10A.

SEGMENT 11



SEGMENT 11 – Bare banks and some vegetative overhang.





SEGMENT 12A



Segment 12A – Bare bank, visible roots, and some vegetative overhang.



SEGMENT 12B



Segment 12B – Note slumped bank and visible roots. There is some vegetative overhang.



SEGMENT 13



Segment 13 – It is hard to see, but this growth is overhung over the bank and the bank is largely bare behind the overhang. The bank has started to drop into the stream in a couple of spots.



Soil and Forage Analysis Lab
COLLEGE OF AGRICULTURAL & LIFE SCIENCES
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Jennifer Buholzer
Fehr Graham
1107 16th Ave
Monroe WI 53566

Date 8/24/2021
Account # 559071
Report # 3946

Soil Total Mineral Analysis

Sample ID	*TP* %
1	0.07
2	0.06
3	0.07
4	0.07
5	0.08
6	0.06
7	0.08
8	0.05
9	0.06
10	0.06
11	0.06
12	0.06
13	0.06

SHEET NUMBER: 1

HONEY CREEK STREAMBANK STABILIZATION IMPROVEMENTS

FOR

CITY OF MONROE

MONROE, WISCONSIN

PROPOSED STREAMBANK IMPROVEMENT PLANS

GREEN COUNTY

FEBRUARY 2022

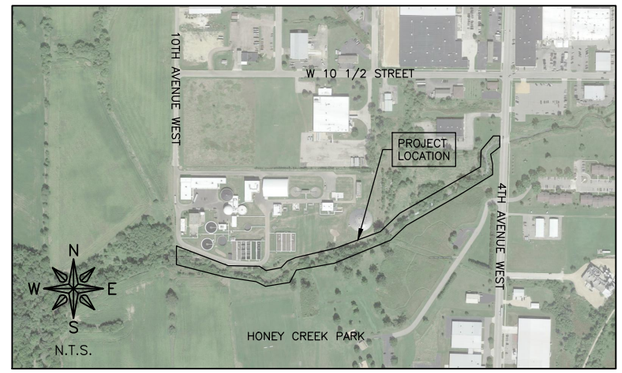
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UTILITIES

UTILITY TYPE	COMMON NAME	CONTACT
WATER & SEWER	CITY OF MONROE	608-329-2480
ELECTRIC	ALLIANT ENERGY	608-328-5339
TELEPHONE	TDS TELECOM	608-328-1158
GAS	WE ENERGIES	800-261-5325
CABLE	CHARTER COMMUNICATIONS	608-373-7544
STORM	CITY OF MONROE	608-329-2535

(CONTRACTOR TO BE RESPONSIBLE FOR ANY ADJUSTMENTS TO BE MADE.)



LOCATION MAP



HORIZONTAL 20 0 20 40 60 FEET

VERTICAL 5 0 5 10 15 FEET

PLAN & PROFILE

HORIZONTAL 10 0 10 20 30 FEET

VERTICAL 5 0 5 10 15 FEET

CROSS SECTIONS

WISCONSIN
SETH W. GRONEWOLD
E-47315-6
ROCKFORD, ILLINOIS
PROFESSIONAL ENGINEER

SIGNATURE DATE

PERMIT SET

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL

ILLINOIS IOWA WISCONSIN

811 DIGGERS HOTLINE
Know what's below. Call before you dig.
OR CALL (800) 242-8511

ORIGINAL SET FOR PROJECT: 21-635	DATE CREATED: 02/11/2022

REVISIONS

REV. NO.	DESCRIPTION	DATE

G:\C3D\21\21-635\Plans\21-635 Plans.dwg, TITLE
PLOT DATE: 2/11/22

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GENERAL NOTES

1. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MUNICIPAL CODE, CITY OF MONROE, WISCONSIN, CURRENT EDITION, THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION, SPECIAL PROVISIONS AND THE "STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN", CURRENT EDITION. SIGN CONSTRUCTION AND PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION.

2. IN THESE CONTRACT DOCUMENTS MENTION IS MADE OF THE "ENGINEER", WHICH SHALL MEAN FEHR GRAHAM OR THEIR DULY AUTHORIZED AGENT. IN THESE CONTRACT DOCUMENTS MENTION IS MADE OF THE "OWNER", WHICH SHALL MEAN CITY OF MONROE, OR THEIR DULY AWARDED AGENT.

3. AS PART OF THE BIDDING PROCEDURE, THE CONTRACTOR SHALL VERIFY THAT THE QUANTITIES FOR PAY ITEMS, AS PRESENTED IN THESE PLAN DOCUMENTS, ARE SUBSTANTIALLY CORRECT. IF DISCREPANCIES ARE DETECTED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE DISCREPANCY PRIOR TO THE BID DATE.

4. QUANTITIES SHOWN ARE ESTIMATES FOR INFORMATION ONLY. PAYMENT WILL BE BASED ON ACTUAL QUANTITIES MEASURED IN THE FIELD OR ON PAYMENT LIMIT DETAILS.

5. THE CONTRACTOR SHALL BE PAID FOR MATERIALS AND EQUIPMENT SUCCESSFULLY INSTALLED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AS MEASURED OR VERIFIED IN PLACE BY THE ENGINEER OR HIS AGENT.

6. IN CASE OF CONFLICT BETWEEN THE ABOVE MENTIONED SPECIFICATIONS, THE ENGINEER SHALL DETERMINE WHICH OF THE SPECIFICATIONS SHALL GOVERN. THE ENGINEER'S DECISION SHALL BE FINAL AND NO ADDITIONAL COMPENSATION SHALL BE AWARDED UNLESS APPROVED BY THE ENGINEER.

7. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY THE OWNER. IMPROVEMENT REPRESENTATIONS AS SHOWN ON THESE PLANS ARE AS ACCURATE AS POSSIBLE FROM THE INFORMATION AVAILABLE. HOWEVER, SOME FIELD REVISIONS MAY BE REQUIRED TO ACCOMMODATE UNFORESEEN CIRCUMSTANCES – THE ENGINEER SHALL BE ADVISED OF ANY NECESSARY REVISIONS WITH SUFFICIENT LEAD TIME ALLOWED TO PROPERLY CONSIDER AND ACT UPON SAID REQUESTS. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED IN CONSTRUCTING THOSE IMPROVEMENTS AS DETAILED IN THIS ENGINEERING PLAN.

8. THE ENGINEER SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE OR REJECT THE WORKMANSHIP AND/OR MATERIALS WHICH GO TO MAKE UP IMPROVEMENTS AS DETAILED IN THESE PLANS AND SPECIFICATIONS.

9. GENERAL SAFETY PROVISION: TO PROVIDE DRIVERS WITH SAFE TRAVEL CONDITIONS DURING THE CONSTRUCTION PROJECT, AND TO PROVIDE SAFE WORKING CONDITIONS FOR ALL EMPLOYEES, THE RULES, REGULATIONS, AND CONDITIONS STATED BELOW WILL PREVAIL FOR THE DURATION OF THIS CONTRACT. ANY EMPLOYEE OF THE CONTRACTOR OR HIS SUBCONTRACTORS WHO REFUSES TO COMPLY WITH THESE GENERAL SAFETY PROVISIONS SHALL BE REMOVED FROM THE JOB SITE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS. THE CONTRACTOR AND ANY SUBCONTRACTORS RETAINED BY HIM SHALL COMPLY WITH THE STATE AND FEDERAL REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (OSHA), JULY 1, 1987 AS IT RELATES TO CONTRACTOR'S OPERATIONS.

10. THE CONTRACTOR SHALL COMPLY WITH ALL STATE REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION. THE CONTRACTOR WILL NOT BE ALLOWED TO BUILD FIRES ON THE SITE.

11. THE SCALE SHOWN ON THE DRAWINGS APPLIES ONLY TO THE FULL SIZE PLANS NOT THE REDUCED SIZE PLANS.

12. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN DRAINAGE FLOWS AT ALL TIMES DURING THE PERFORMANCE OF THE WORK. METHODS USED BY THE CONTRACTOR SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. COST OF MAINTAINING DRAINAGE FLOWS AND ASSOCIATED PERMITTING SHALL BE INCIDENTAL TO THE CONTRACT.

13. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED OR DISTURBED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS, MONUMENTS AND RIGHT-OF-WAY PINS UNTIL THE OWNER, AND AUTHORIZED SURVEYOR, OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS. REPLACEMENT OF MONUMENTS WILL BE DETERMINED BY THE ENGINEER.

14. THE CONTRACTOR SHALL REMOVE, STORE, AND RELOCATE TO THE SATISFACTION OF THE ENGINEER ALL EXISTING SIGNAGE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS, AND CONSIDER THIS AS INCIDENTAL TO THE CONTRACT.

15. OUTSIDE THE EXISTING RIGHT-OF-WAY, THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATION NEAR ANY AND ALL EXISTING SIGNS OUTSIDE THE RIGHT-OF-WAY. ANY SIGNS REMOVED FOR CONSTRUCTION PURPOSES SHALL BE CAREFULLY REMOVED AND RE-ERECTED BY THE CONTRACTOR AT A LOCATION NEAREST TO THE ORIGINAL LOCATION, OR AT A LOCATION DETERMINED BY THE ENGINEER IN THE FIELD. REMOVAL AND RE-ERECTED SIGNS AND ANY DAMAGE DONE TO EXISTING SIGNS BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER.

16. ALL ITEMS SHALL INCLUDE ALL THE NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE. MATERIALS AND LABOR NOT SPECIFICALLY IDENTIFIED SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

17. THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO FIELD VERIFY LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES, AND VERIFY PAVEMENT ELEVATIONS WHERE MATCHING INTO EXISTING WORK. THE CONTRACTOR SHALL FIELD VERIFY HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES. NOTIFY ENGINEER OF DISCREPANCIES IN EITHER VERTICAL OR HORIZONTAL CONTROL PRIOR TO PROCEEDING WITH WORK.

18. THE CONTRACTOR SHALL CONTACT THE ENGINEER OF ANY ERRORS OR DISCREPANCIES WHICH MAY BE SUSPECTED IN LINES AND GRADES, AND SHALL NOT PROCEED WITH THE WORK UNTIL ALL LINES AND GRADES WHICH ARE BELIEVED TO BE IN ERROR HAVE BEEN VERIFIED OR CORRECTED BY THE ENGINEER OR HIS REPRESENTATIVE.

19. THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCE OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF THEIR WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.

20. ALL ITEMS TO BE REMOVED AND NOT DEFINED AS A PAY ITEM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

21. ALL EXCESS EARTH EXCAVATION, EXCESS MATERIALS, OR OTHER REMOVED ITEMS SHALL BE HAULED OFF-SITE AT THE CONTRACTOR'S EXPENSE, UNLESS OTHERWISE APPROVED BY THE OWNER.

22. ROADWAY AND DRAINAGE EXCAVATION WORK SHALL BE IN ACCORDANCE WITH SECTION 205 OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL OBSTRUCTIONS, TREES, DEBRIS AND BRUSH AS DESIGNATED BY THE OWNER AND AS INDICATED ON THE PLANS. ALL MATERIALS SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DURING CONSTRUCTION, CARE SHALL BE TAKEN TO MINIMIZE DAMAGE TO THE EXISTING TREES AND LANDSCAPING. ONLY THOSE ITEMS DESIGNATED BY THE OWNER SHALL BE REMOVED.

23. ALL ROADWAY REMOVAL ITEMS SHALL CONFORM TO SECTION 204 OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION. ALL JOINTS BETWEEN THE PORTION REMOVED AND THAT LEFT IN PLACE SHALL BE SAWED TO SUCH A DEPTH THAT A CLEAN, NEAT EDGE WILL RESULT WITH NO SPALLING TO THE REMAINING PORTION. THE COST OF SAWING SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. ADDITIONAL SAWING OR RE-SAWING MAY BE REQUIRED AS DIRECTED BY THE ENGINEER WITH NO ADDITIONAL COMPENSATION BEING ALLOWED. THE COST OF SAWCUTTING THE EXISTING PAVEMENT SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

GENERAL NOTES

25. WHEN ARTIFICIAL LIGHTING IS UTILIZED DURING NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC, AS WELL AS ADJOINING RESIDENTIAL AREAS.

26. THE CONTRACTOR IS REQUIRED TO STAY WITHIN THE NOTED PROPERTY BOUNDARIES RIGHT-OF-WAY AND EASEMENTS AS SHOWN IN THE PLANS. ANY ADDITIONAL EASEMENTS SHALL BE SECURED BY THE CONTRACTOR AT NO EXTRA COST.

27. ANY AREAS DAMAGED OR DISTURBED DURING THE PROJECT AS A DIRECT OR INDIRECT RESULT OF CONTRACTOR OPERATIONS, SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THE ORIGINAL CONDITION. THE COST OF SAID RESTORATION OR REPAIR SHALL BE BORNE TOTALLY BY THE CONTRACTOR, WITH NO EXTRA COMPENSATION BEING AWARDED UNDER THIS CONTRACT. THE RESPONSIBILITY FOR THE REPAIR OR REPLACEMENT OF ANY UTILITY, STRUCTURE, LANDSCAPING, ETC., DAMAGED OR DESTROYED BY THE CONTRACTOR DURING MOBILIZATION OR CONSTRUCTION SHALL BE BORNE SOLELY BY THE CONTRACTOR, WITH NO EXPENSE BEING CHARGED TO THE ENGINEER OR OWNER. PRIOR TO ACCEPTANCE OF THIS REPAIR OR REPLACEMENT, THE CONTRACTOR SHALL PRESENT THE OWNER WITH A "SIGNOFF LETTER", SIGNED BY A RESPONSIBLE OFFICIAL OF THE OWNER OF THE DAMAGED UTILITY STATING THAT THE REPAIR OR REPLACEMENT IS ACCEPTABLE.

CONSTRUCTION STAKING

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING THE PROPOSED IMPROVEMENTS AND SHALL INCLUDE THE COST OF STAKING IN THEIR QUOTE. CONTROL POINTS ARE INDICATED ON THE PLANS.

EROSION CONTROL NOTES

1. UNLESS OTHERWISE SPECIFIED, ALL EROSION AND SEDIMENT CONTROL MEASURES AND THEIR MAINTENANCE, CLEARING AND REMOVAL SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

2. THIS WORK SHALL CONFORM TO THE APPLICABLE STANDARDS FROM THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES, THE WISCONSIN STORM WATER MANUAL, THE WISCONSIN DEPARTMENT TRANSPORTATION'S STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION, THE PROJECT SPECIFICATIONS, AND THE APPROPRIATE DETAILS.

3. A WATER RESOURCES APPLICATION FOR PROJECT PERMITS (WRAPP) WILL BE COMPLETED AND SUBMITTED TO THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES BY THE OWNER PRIOR TO CONSTRUCTION.

4. THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN SHALL BE CONSIDERED PART OF THE CONTRACT DOCUMENTS AND WILL BE AVAILABLE FOR REVIEW DURING THE BIDDING PROCESS.

5. A COPY OF THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN WILL BE PROVIDED TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL MAINTAIN ONE COPY OF THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN AT THE CONSTRUCTION SITE AT ALL TIMES DURING WORKING HOURS FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

6. THE CONTRACTOR SHALL LEGIBLY MARK ANY CHANGES OR REVISIONS IMPLEMENTED TO THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN. AT COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL DELIVER THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN (INCLUDING ALL REVISIONS, RECORDS, AND INSPECTION REPORTS) TO THE OWNER.

7. THE GENERAL CONTRACTOR AND ANY SUBCONTRACTOR RESPONSIBLE FOR SEDIMENT AND EROSION CONTROL MEASURES OR CONSTRUCTION ACTIVITIES THAT DISTURB SITE SOIL WILL BE REQUIRED TO CERTIFY THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN BEFORE A NOTICE TO PROCEED IS ISSUED.

8. A COPY OF THE CONSTRUCTION SITE STORM WATER RUNOFF GENERAL WPDES PERMIT MUST BE AVAILABLE FOR PUBLIC VIEWING AT THE CONSTRUCTION SITE BY THE GENERAL CONTRACTOR.

9. THE CONTRACTOR SHALL IMPLEMENT THE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THESE EROSION CONTROL PLANS AND IN THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN BEFORE CONSTRUCTION BEGINS.

10. THE CONTROLS SHALL BE INSTALLED AS DETAILED AND WHERE INDICATED ON THE EROSION CONTROL PLAN SHEETS AND AS DIRECTED BY THE INSPECTOR.

11. SITE ACTIVITIES SHOULD ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE PRACTICABLE.

12. EXCEPT AS PROVIDED IN THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN, DISTURBED PORTIONS OF THE SITE SHALL BE STABILIZED (TEMPORARILY OR PERMANENTLY SEEDED, MULCHED, SODDED OR PAVED) AS SOON AS PRACTICABLE, BUT IN NO CASE MORE THAN 7 CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

13. UNTIL SUCH TIME AS THE PROJECT SITE REACHES FINAL STABILIZATION AND A NOTICE OF TERMINATION IS FILED BY THE OWNER, THE CONTRACTOR SHALL BE RESPONSIBLE TO ADJUST, REPAIR, OR REPLACE, ALL VEGETATION, EROSION CONTROLS, SEDIMENT CONTROLS, AND ANY OTHER PROTECTIVE MEASURES AS REQUIRED IN ORDER TO MAINTAIN THEIR INTENDED FUNCTION IN A GOOD AND EFFECTIVE OPERATING CONDITION.

14. EXCEPT FOR FLOWS FROM FIRE FIGHTING ACTIVITIES, SOURCES OF NON-STORM WATER EXPECTED DURING THE CONSTRUCTION PROCESS THAT MAY BE COMBINED WITH STORM WATER DISCHARGES ARE IDENTIFIED IN THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN. THESE DISCHARGES SHALL BE DIRECTED AWAY FROM UNPROTECTED, BARE, OR OTHERWISE UNSTABILIZED SOIL, AND APPROPRIATE POLLUTION PREVENTION MEASURES SHALL BE IMPLEMENTED SO THAT THESE DISCHARGES DO NOT CAUSE EROSION OR DEGRADE THE QUALITY OF RUNOFF FROM THE CONSTRUCTION SITE.

15. REGULAR INSPECTIONS WILL BE MADE AS REQUIRED UNDER THE GENERAL WPDES PERMIT NO. WI-S067831-06 AND SPECIFIED IN THE EROSION CONTROL AND STORM WATER MANAGEMENT PLAN. BASED ON THE RESULTS OF THE INSPECTIONS, POLLUTION PREVENTION MEASURES SHALL BE REVISED AS APPROPRIATE AS SOON AS PRACTICABLE AFTER EACH INSPECTION. SUCH REVISIONS SHALL BE IMPLEMENTED WITHIN 7 CALENDAR DAYS FOLLOWING EACH INSPECTION.

16. THE INSPECTOR SHALL HAVE AUTHORIZATION TO DETERMINE THE ADEQUACY OF THE CONTRACTOR'S EROSION CONTROL EFFORTS. THE OWNER OR THE INSPECTOR SHALL HAVE FULL AUTHORITY OVER THE GENERAL CONTRACTOR AND ANY SUBCONTRACTOR TO CAUSE POLLUTANT CONTROL MEASURES TO BE REPAIRED, MODIFIED, MAINTAINED, SUPPLEMENTED, OR WHATEVER ELSE IS NECESSARY IN ORDER TO ACHIEVE EFFECTIVE POLLUTANT CONTROL OR TO SUSPEND OR LIMIT THE CONTRACTORS OPERATIONS PENDING ADEQUATE PERFORMANCE.

17. PERIMETER EROSION BARRIER TO BE CONSTRUCTED OF SILT FENCE UNLESS NOTED OTHERWISE.

18. INLET PROTECTION SHALL BE A TYPE A, B, C OR D, OR APPROVED EQUAL.

19. EROSION CONTROL BLANKET SHALL BE OF NORTH AMERICAN GREEN DS75 OR APPROVED EQUAL.

20. A TEMPORARY CONCRETE WASHOUT FACILITY SHALL BE CONSTRUCTED AT A LOCATION APPROVED BY THE ENGINEER. WASHOUT FACILITY SHALL BE UTILIZED FOR ALL APPLICABLE OPERATIONS.

EROSION CONTROL NOTES

21. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED, TO THE DIMENSIONS AS SHOWN, AT APPROVED LOCATIONS FOR THIS PROJECT. ALL CONSTRUCTION TRAFFIC MUST UTILIZE THE STABILIZED CONSTRUCTION ENTRANCES WHEN EXITING THE SITE. ALL COST FOR EROSION CONTROL AND RESTORATION WORK ASSOCIATED WITH THE APPROVED STABILIZED CONSTRUCTION ENTRANCES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

22. TEMPORARY EROSION CONTROL MEASURES INCLUDE TEMPORARY DITCH CHECKS, PERIMETER EROSION BARRIER, INLET AND PIPE PROTECTION, TEMPORARY SEEDING, AND ANY OTHER TEMPORARY EROSION CONTROL MEASURE NEEDED TO LIMIT THE AMOUNT OF SOIL EROSION AND SEDIMENTATION DURING CONSTRUCTION.

23. AT THE COMPLETION OF THE PROJECT, ALL TEMPORARY EROSION CONTROL ITEMS SHALL BE REMOVED FROM THE SITE, AND BECOME THE PROPERTY OF THE CONTRACTOR. CONTRACTOR MUST STABILIZE ANY AREA DISTURBED BY THE REMOVAL OF EROSION CONTROL ITEMS.

24. CONTRACTOR SHALL CLEAN ANY DEBRIS TRACKED OFFSITE DAILY.

SEEDING OF DISTURBED AREAS

1. THE FINAL TOP 6" INCHES OF SOIL IN ANY DISTURBANCE AREA MUST BE A COHESIVE SOIL CAPABLE OF SUPPORTING VEGETATION.

2. FERTILIZER HAVING AN ANALYSIS OF 16-6-6 SHALL BE APPLIED AT A RATE OF 7 LBS/1000 SF TO ALL DISTURBED AREAS AND INCORPORATED INTO THE SEEDBED PRIOR TO SOWING THE SEED.

3. GUARANTEE: ALL SEEDED AREAS SHALL BE MAINTAINED AND MOWED FOR AT LEAST 30 DAYS AFTER GERMINATION. SCATTERED BARE SPOTS NO LARGER THAN TWO SQUARE FOOT WILL BE ALLOWED UP TO A MAXIMUM OF 5% OF ANY SEEDED AREA INCLUDING 30-DAY MAINTENANCE, MOWING AND WATERING AS NECESSARY.

4. THIS WORK SHALL CONFORM TO THE APPLICABLE STANDARDS FROM THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES, THE WISCONSIN STORM WATER MANUAL, THE WISCONSIN DEPARTMENT TRANSPORTATION'S STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION, THE PROJECT SPECIFICATIONS, AND THE APPROPRIATE DETAILS.

5. RESTORATION – THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED DURING CONSTRUCTION OF THE IMPROVEMENTS AND RELATED APPURTENANCES OR AS PART OF ANY OF THEIR ACTIVITIES TO A CONDITION EQUAL TO OR BETTER THAN THE ORIGINAL CONDITION.

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL
ILLINOIS DESIGN FIRM NO. 184-003525
ILLINOIS
IOWA
WISCONSIN

OWNER/DEVELOPER:
CITY OF MONROE
1110 18TH AVENUE
MONROE, WISCONSIN, 53566

PROJECT AND LOCATION:
HONEY CREEK STREAMBANK
STABILIZATION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING: GENERAL NOTES 1

SET TYPE: PERMIT SET
G:\C3D\21\21-635\Plans\21-635 Plans.dwg, GENERAL NOTES

JOB NUMBER: 21-635

SHEET NUMBER: 2 of 59

PLOT DATE: 2/11/22

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UTILITIES

1. UTILITIES SHOWN ON THE PLANS ARE FOR ILLUSTRATIVE PURPOSES ONLY AND NO GUARANTEE OF THEIR ACCURACY IS MADE OR INFERRED. THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THE DRAWINGS REPRESENT DATA RECEIVED FROM VARIOUS SOURCES. IT IS NOT GUARANTEED TO BE CORRECT OR ALL-INCLUSIVE. THE CONTRACTOR SHALL CONDUCT HIS OWN INVESTIGATION INTO THE LOCATION, SIZE, DEPTH AND NATURE OF ANY AND ALL EXISTING UTILITIES THAT MAY INTERFERE WITH THE WORK UNDER THIS CONTRACT. ANY EXISTING UTILITIES THAT ARE TO REMAIN IN SERVICE SHALL BE FULLY PROTECTED BY THE CONTRACTOR AND ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATIONS SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER OR THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ANY AND ALL UTILITY COMPANIES REGARDING ADJUSTMENTS NECESSARY. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE AND CONSIDERED INCIDENTAL TO THE PROJECT COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND, OVERHEAD, OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER OR THE OWNER OR REPLACED. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

2. THE CONTRACTOR MUST VERIFY AND LOCATE ALL EXISTING UTILITIES ON OR ADJACENT TO THE SITE. PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES, CONTACT DIGGERS HOTLINE AT 1-800-242-8511 (OR 811) FOR EXACT FIELD LOCATION OF UTILITIES. DAMAGE, AND THE COST THEREOF, TO ANY AND ALL UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY AND ALL EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE. THE ENGINEER AND SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF THE EXISTING UTILITIES SHOWN HEREON.

3. IF THERE ARE ANY UTILITIES WHICH ARE NOT MEMBERS OF THE DIGGERS HOTLINE SYSTEM, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THIS AND REQUESTING SAID UTILITIES TO FIELD VERIFY AND MARK PERTINENT UTILITY LOCATIONS.

4. THE UTILITY LOCATIONS, DEPTHS, ETC. SHOWN ON THESE PLANS ARE APPROXIMATE ONLY, AND SHALL BE VERIFIED BY THE CONTRACTOR WITH ALL AFFECTED UTILITY COMPANIES PRIOR TO INITIATING CONSTRUCTION OPERATIONS; THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY FOR THE ADEQUACY, SUFFICIENCY OR EXACTNESS OF THESE UTILITY REPRESENTATIONS.

5. THE CONTRACTOR SHALL CONTACT THE NECESSARY UTILITY COMPANIES FOR ANY UTILITY RELOCATIONS. THE CONTRACTOR SHALL PAY FOR ALL COSTS ASSOCIATED WITH RELOCATION OF UTILITIES ON OR ADJACENT TO THE SUBJECT PROPERTY OR WITHIN THE ROAD RIGHT-OF-WAY.

6. TRENCH BACKFILL SHALL BE FILL MATERIAL TYPE A, OR TYPE C, IN ACCORDANCE WITH AASHTO T27 GUIDELINES AND THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN", CURRENT EDITION. COST SHALL BE INCLUDED IN UNIT PRICE OF PIPE.

7. TRENCH BACKFILL SHALL BE USED IN LOCATIONS WHERE THERE IS AN EXISTING OR PROPOSED PERMANENT SURFACE.

8. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION OR HAVE THE POTENTIAL FOR CREATING FUTURE PROBLEMS SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE PROJECT AT AN APPROVED LOCATION OBTAINED BY THE CONTRACTOR, ACCORDING TO THE "STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN", CURRENT EDITION, AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

9. ANY AND ALL FIELD TILES AND OR STORM SEWERS DAMAGED OR ENCOUNTERED DURING THE CONSTRUCTION ACTIVITIES SHALL BE REPAIRED, REPLACED AND/OR CONNECTED IMMEDIATELY BY THE CONTRACTOR. COST FOR SAID REPAIRS, REPLACEMENT, AND/OR CONNECTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

EXCAVATION/EARTHWORK

1. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATION NEAR ANY AND ALL EXISTING ITEMS WHICH ARE NOT INDICATED TO BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT NO ADDITIONAL EXPENSE TO THE OWNER.

2. PRIOR TO STARTING EARTHWORK OR UTILITY TRENCHING, THE CONTRACTOR SHALL STRIP THE SITE OF TOPSOIL TO A DEPTH OF 6" AND TO THE LIMITS APPROVED BY THE ENGINEER. THIS MATERIAL SHALL BE STOCKPILED IN A REMOTE LOCATION OF THE SITE (APPROVED BY THE ENGINEER) UNTIL THE PLAN IMPROVEMENTS ARE COMPLETED AND THE EXCESS MATERIAL SPREAD AS DIRECTED. IT SHALL THEN BE THE RESPONSIBILITY OF THE CONTRACTOR TO SPREAD THIS TOPSOIL MATERIAL IN AREAS OF THE SITE, OVER AREAS WHERE EXCESS EXCAVATED MATERIAL, SAND, GRAVEL HAS BEEN SPREAD OR IN OTHER AREAS AS DESIGNATED BY THE ENGINEER. THE MATERIAL SHALL THEN BE COMPACTED TO A MINIMAL DEPTH OF 6" AND FINE GRADED IN A MANNER ACCEPTABLE TO THE ENGINEER. THIS WORK SHALL BE IN ACCORDANCE WITH THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION.

3. CONSTRUCTION AND DEMOLITION (C&D) MATERIALS ARE TO BE MANAGED ACCORDINGLY PER THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MANAGE THE DIVERSION OF C&D MATERIAL AWAY FROM LANDFILLS ACCORDING TO STATE REQUIREMENTS.

4. ROCK IS NOT ANTICIPATED TO BE ENCOUNTERED.

5. EXCAVATION COMMON SHALL CONFORM TO SECTION 205 OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION. THIS WORK SHALL INCLUDE THE EXCAVATION OF ALL MATERIALS TO DESIGN SUBGRADE ELEVATIONS INDICATED IN THE PLANS.

6. SHEETING AND SHORING SHALL BE CONSIDERED INCIDENTAL TO CONTRACT IF REQUIRED.

7. WHENEVER THE CONTRACTOR WORKS NEAR EXISTING FACILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS DURING TRENCHING OPERATIONS, HE WILL BE REQUIRED TO HAND TRENCH IN THAT AREA IN ORDER NOT TO DAMAGE THESE FACILITIES. PUSH HOLES AND SEARCH HOLES THAT ARE DUG BY THE CONTRACTOR SHALL BE BACKFILLED BY TAMPING THE EXCAVATED MATERIAL BACK IN PLACE TO KEEP SETTLEMENT TO A MINIMUM. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

8. IF SUFFICIENT TOPSOIL IS NOT PRESENT, THE CONTRACTOR SHALL SPREAD FURNISHED TOPSOIL SO AS TO MEET THE REQUIREMENTS OF THE CONTRACT. FURNISHED TOPSOIL SHALL ONLY BE USED WITH APPROVAL BY THE ENGINEER. THIS FURNISHED TOPSOIL SHALL BE PAID FOR AS TOPSOIL, DEPTH SPECIFIED.

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL
ILLINOIS DESIGN FIRM NO. 184-003525
ILLINOIS
IOWA
WISCONSIN

OWNER/DEVELOPER:
CITY OF MONROE
1110 18TH AVENUE
MONROE, WISCONSIN, 53566

PROJECT AND LOCATION:
HONEY CREEK STREAMBANK
STABILIZATION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING: GENERAL NOTES 2

SET TYPE: PERMIT SET
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JOB NUMBER: 21-635

SHEET NUMBER: 3 of 59

PLOT DATE: 2/11/22

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ABBREVIATIONS

<	ANGLE
ABC	AGGREGATE BASE COURSE
AC	ACRE(S)
ACI	AMERICAN CONCRETE INSTITUTE
AGR	AGGREGATE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
ARCH	ARCHITECT
ASPH	ASPHALT
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
B	BALL VALVE
BFP	BACKFLOW PREVENTER
BIT	BITUMINOUS
BLDG	BUILDING
BLK	BLOCKING
BM	BENCHMARK
BOT	BOTTOM
BSMT	BASEMENT
BV	BUTTERFLY VALVE
B-B	BACK-TO-BACK OF CURB DIMENSION
CL or ℄	CENTERLINE
C TO C	CENTER TO CENTER
C & G	CURB AND GUTTER
CF	CUBIC FEET
CHD	CHORD LENGTH
CI	CAST IRON PIPE
CHK	CHECK VALVE
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CTY	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
C-B	CENTERLINE TO BACK OF CURB DIMENSION
COORD	COORDINATE
CU	COPPER PIPING
CTRS	CENTERS
CY	CUBIC YARDS
CS	CORPORATION STOP
D	DEGREE OF CURVE
DEP	DEPRESSED
DET	DETAIL
DIAG	DIAGONAL
DIM	DIMENSION
DI	DUCTILE IRON PIPE
DN	DOWN
DNSTR	DOWNSTREAM
DP	DRAINAGE PIPE/STORM PIPE
DWG	DRAWING
E	EAST
EJ	EXPANSION JOINT
EL, ELEV	ELEVATION
EP	EDGE OF PAVEMENT
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
EW	EACH WAY
EXP	EXPANSION
EX, EXIST	EXISTING
EXT	EXTERIOR
E =	EXTERNAL DISTANCE
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIELD ENTRANCE
FF	FINISH FLOOR
FIL	FILLET
FIN	FINISH
FL	FLOW LINE
FLR	FLOOR
FM	FORCE MAIN
FND	FOUND
FRMG	FRAMING
FTG	FOOTING
F-F	FACE TO FACE
GA	GAUGE
GI	GALVANIZED IRON PIPE
GRD	GRADE
GRS	GRATING SUPPORT
GRT	GROUT
GV	GAS VALVE
GYP	GYPSUM
HSE	HOUSE
HC	HORIZONTAL CURVE
HMA	HOT MIX ASPHALT
HNGR	HANGER
HORIZ	HORIZONTAL
H.P.	HIGH POINT
HW	HOT WATER
HWH	HOT WATER HEATER
Δ =	CENTRAL ANGLE
I	MOMENT OF INERTIA
ID	INSIDE DIAMETER
INT	INTERIOR
INV	INVERT ELEVATION; BASED ON BENCH MARK DATUM
IP	IRON PIPE
JST	JOIST
L	LENGTH OF CURVE
LAT	LATERAL
LAV	LAVATORY
LF	LINEAL FEET
L.P.	LOW POINT
LT	LEFT OF SURVEY BASE LINE
MAX	MAXIMUM
ME	MATCH EXISTING
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MTL	METAL
N	NORTH
No. OR #	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OO	OUTSIDE TO OUTSIDE
OPNG	OPENING
OPP	OPPOSITE
PC	POINT OF CURVATURE
PCC	PORTLAND CEMENT CONCRETE
PCF	POUNDS PER CUBIC FOOT
PDP	PERFORATED DRAIN PIPE
PE	POLYETHYLENE PIPE
PI	POINT OF INTERSECTION
PL	PLATE
PLG	PLUG VALVE
PLP	POLYPROPYLENE PIPE
PLYWD	PLYWOOD
PM	PRINCIPAL MERIDIAN
PR	PRESSURE REGULATORS
PRC	POINT OF REVERSE CURVATURE
PRESS	PRESSURE
PR, PROP	PROPOSED
PRV	PRESSURE REDUCING VALVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PIPE SLEEVE
PT	POINT OF TANGENCY
PLG	PLUG VALVE
PVC	POLYVINYL CHLORIDE (PLASTIC) PIPE
R	RADIUS
RDCR	REDUCER
RCCP	REINFORCED CONCRETE CYLINDER PIPE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REINF	REINFORCING
REQD	REQUIRED
ROW	RIGHT OF WAY
RFTR	RAFTER
RND	ROUND
RR	RAILROAD
RRSP	RAILROAD SPIKE
RT	RIGHT
R&R	REMOVE AND REPLACE
S	SOUTH
SB	STREAM BED
SCHED	SCHEDULE
SEC	SECTION
SF	SQUARE FEET
SHR	SHOWER
SHT	SHEET
SHTG	SHEATHING
SP	SANITARY PIPE
SPA	SPACING OR SPACES
SPEC	SPECIFICATION
SQ	SQUARE
SS	SANITARY SERVICE
STA	STATION
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL
SW	SIDEWALK
SY	SQUARE YARDS
SYM	SYMMETRICAL
TAN	TANGENT LENGTH
TBC	TOP BACK OF CURB
TBM	TEMPORARY BENCH MARK; BASED ON BENCHMARK DATUM
TD	TILE DRAIN
THK	THICK
TR	TREAD
TY	TYPE
TYP	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
UP	UTILITY POLE
UPSTR	UPSTREAM
UR	URINAL
USGS	US GEOLOGICAL SURVEY
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VOL	VOLUME
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPRC	VERTICAL POINT OF REVERSE CURVATURE
VPT	VERTICAL POINT OF TANGENCY
W	WEST
WC	WATER CLOSET
WF	WIDE FLANGE
WM	WATER MAIN
WMQ	WATER MAIN QUALITY
WV	WATER VALVE
WGT	WEIGHT
WP	WEATHER PROOF
WS	WATER SERVICE
WWF	WELDED WIRE FABRIC
W/	WITH
W/O	WITHOUT
XP	EXPLOSION PROOF

HATCH PATTERNS

- EARTH – FILL
- EARTH – UNDISTURBED
- ROCK (GEOLOGICAL)
- STONE OR RIP RAP
- GRAVEL
- CONCRETE
- CONCRETE BLOCK
- CMU
- ASPHALT PAVEMENT
- BRICK
- STEEL
- INSULATION (LOOSE/ BATT)
- INSULATION (RIGID)
- WOOD (ROUGH)
- WOOD (BLOCKING)
- WOOD (FINISH)
- DETECTABLE WARNING

SYMBOLS

CIVIL

EXISTING		PROPOSED
EXISTING R.O.W.	RIGHT-OF-WAY LINE	PROPOSED R.O.W.
	PROPERTY LINE	
	CENTERLINE	
	SETBACK LINE	
	EASEMENT LINE	
	SECTION LINE	
	SECTION CORNER	
N 1000.00 E 1000.00	COORDINATE POINT ON GRID SYSTEM	
FND	FOUND OR SET PROPERTY PIN	SET
	RIGHT-OF-WAY MARKER	
	BENCHMARK	
600	CONTOUR LINE	600
000.00 FG	SPOT ELEVATION (AT •)	000.00 FG
X X	FENCE LINE	X X
	SILT FENCE LINE	
	CURB AND GUTTER	
	TIP OUT CURB AND GUTTER	
	SAWCUT, LIMITS OF PAVEMENT REMOVAL & REPLACEMENT	
X"	DECIDUOUS TREE W/ SIZE	X"
X"	CONIFEROUS TREE W/ SIZE	X"
X"	TREE STUMP	
	HEDGEROW	
	BUSH OR SHRUB	
	TREE LINE	
CL	CONSTRUCTION LIMIT LINE	CL
	SIGN (MULTIPLE POST, SINGLE POST, STREET SIGN)	
	SIGN (PYLON)	
	GUARD RAIL	
	RAILROAD TRACKS	
	BUILDING	
	MAILBOX	
	FLAGPOLE	
	BOLLARD	
AC	AIR CONDITIONER	

MISC

EXISTING		PROPOSED
S.B. #XX	SOIL BORING LOCATION AND NUMBER	S.B. #XX
MW #XX	MONITORING WELL	MW #XX
	REVISION NUMBER	
	OUTLINE OF DETAILED AREA	
	SECTION NUMBER / SHEET WHERE SHOWN	

SANITARY SEWER

EXISTING		PROPOSED
SAN	SANITARY SEWER	SAN
SSV SSV	SANITARY SEWER SERVICE	SSV SSV
FM	SANITARY SEWER FORCE MAIN	FM
	SANITARY CLEANOUT	CO
S	SANITARY MANHOLE	
	WYE FITTING	

WATER

EXISTING		PROPOSED
WSV WSV	WATER SERVICE	WSV WSV
W W	WATER PIPE	W W
	FIRE HYDRANT	
	YARD HYDRANT	
	WATER VALVE WITH BOX	
	CURB STOP W/CURB BOX	
	REDUCER	
W	WATER VALVE VAULT	W
	11.25° BEND	
	22.50° BEND	
	45° BEND	
	90° BEND	
	TEE	
	CAP	
M	WATER METER	M
	SPRINKLER HEAD	
	TRACER WIRE BOX	

STORM SEWER

EXISTING		PROPOSED
ST ST	STORM SEWER	ST ST
DT DT	DRAIN TILE	DT DT
	DITCH LINE (PAVED)	
	DITCH LINE (UNPAVED)	
D	STORM MANHOLE	
	CATCH BASIN	
	STORM SEWER INLET	
	STORM SEWER INLET – BEHIND CURB	
	DOWNSPOUT	
X" TYPE	CULVERT AND SIZE	X" TYPE
	RCCP OR RCP EQRS (RCAP) END SECTION	
	METAL OR HDPE END SECTION	
	FLOW DIRECTION	

EROSION CONTROL

EXISTING		PROPOSED
	EROSION CONTROL BLANKET	
	TEMPORARY AND PERMANENT SEEDING AREA	
	UNDISTURBED AREA	
	STABILIZED CONSTRUCTION ENTRANCE	
	SILT FENCE	
	INLET PROTECTION	
	TEMPORARY SEDIMENT TRAP	
	CULVERT INLET PROTECTION	
	ROCK OUTLET PROTECTION	
	ROCK CHECK DAM – COURSE AGGREGATE	
	ROCK CHECK DAM – RIP RAP	
	DITCH CHECK	

UTILITY

EXISTING		PROPOSED
FO FO	FIBER OPTIC LINE	FO FO
TV TV	UNDERGROUND TV CABLE	TV TV
TV	CABLE TV RISER PEDESTAL	TV
OU	OVERHEAD UTILITY	OU
UE UE	UNDERGROUND ELECTRIC	UE UE
E	ELECTRIC RISER PEDESTAL	E
E	ELECTRIC MANHOLE	E
T T	UNDERGROUND TELEPHONE	T T
T	TELEPHONE RISER PEDESTAL	T
T	TELEPHONE MANHOLE	T
	UTILITY POLE	
	UTILITY POLE W/ METER	
	UTILITY POLE W/ TRANSFORMER	
	UTILITY POLE W/ LIGHT	
	UTILITY POLE WITH GUY WIRE AND ANCHOR	
	LIGHT (MAST MOUNTED)	
	LIGHT POLE (SINGLE FIXTURE)	
	YARD LIGHT	
G G	GAS MAIN	G G
M	GAS METER	M
	GAS VALVE	
G	GAS STRUCTURE	G
XFR	TRANSFORMER	
XFR	GENERATOR	

TRAFFIC RELATED

EXISTING		PROPOSED
	CONTROLLER	
	MAST ARM ASSEMBLY AND POLE	
	SIGNAL HEAD AND POST	
	SIGNAL HEAD	
	PEDESTRIAN HEAD	
	PEDESTRIAN PUSH-BUTTON	
	HAND HOLE	
	DOUBLE HAND HOLE	
	HAND HOLE OR JUNCTION BOX	
	HEAVY-DUTY HAND HOLE	
(5" – 2")	EXISTING CONDUIT (LENGTH AND SIZE) PROP GALVANIZED STEEL OR PVC CONDUIT UPPER NUMERAL INDICATES LENGTH "T" INDICATES CONDUIT IN TRENCH "P" INDICATED CONDUIT PUSHED LOWER NUMERAL INDICATES SIZE AND TYPE	5' – T 2" GS-PVC
	LUMINAIRE	
	ARROW – THROUGH, TURN LEFT	
	ARROW – THROUGH	
	ARROW – TURN LEFT	
	ARROW – TURN RIGHT	
ONLY	ONE DIRECTION TURN ONLY	ONLY
	HANDICAPPED PARKING STALL	
	TRAFFIC DETECTOR LOOP	
	TRAFFIC CONTROL BOX	

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ILLINOIS
IOWA
WISCONSIN

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1110 18TH AVENUE
MONROE, WISCONSIN, 53566

PROJECT AND LOCATION:
HONEY CREEK STREAMBANK STABILIZATION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING: LEGEND

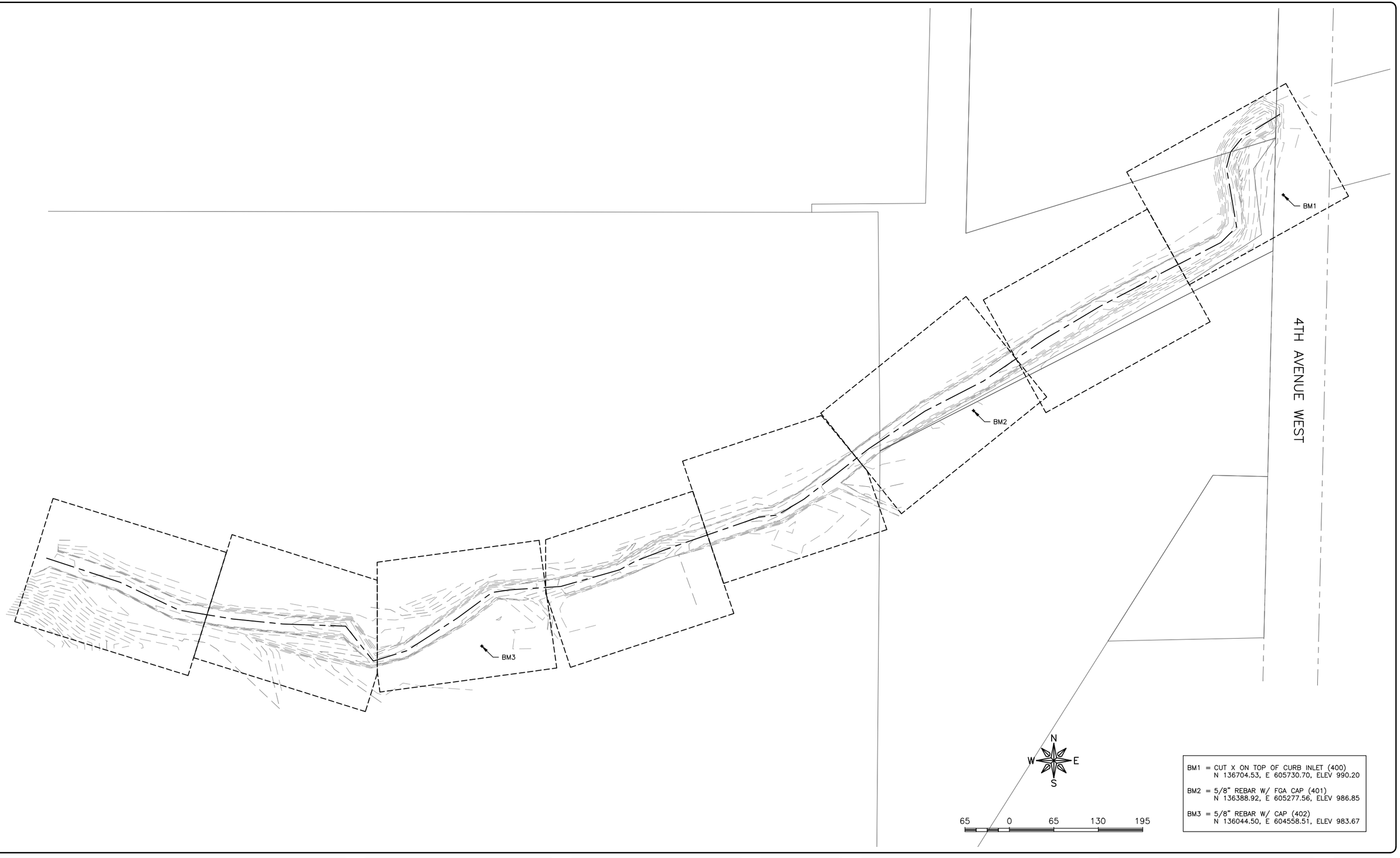
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JOB NUMBER: 21-635

SHEET NUMBER: 4 of 59

PLOT DATE: 2/11/22

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BM1 = CUT X ON TOP OF CURB INLET (400)
N 136704.53, E 605730.70, ELEV 990.20

BM2 = 5/8" REBAR W/ FGA CAP (401)
N 136388.92, E 605277.56, ELEV 986.85

BM3 = 5/8" REBAR W/ CAP (402)
N 136044.50, E 604558.51, ELEV 983.67

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DRAWING:
OVERALL PLANVIEW LAYOUT

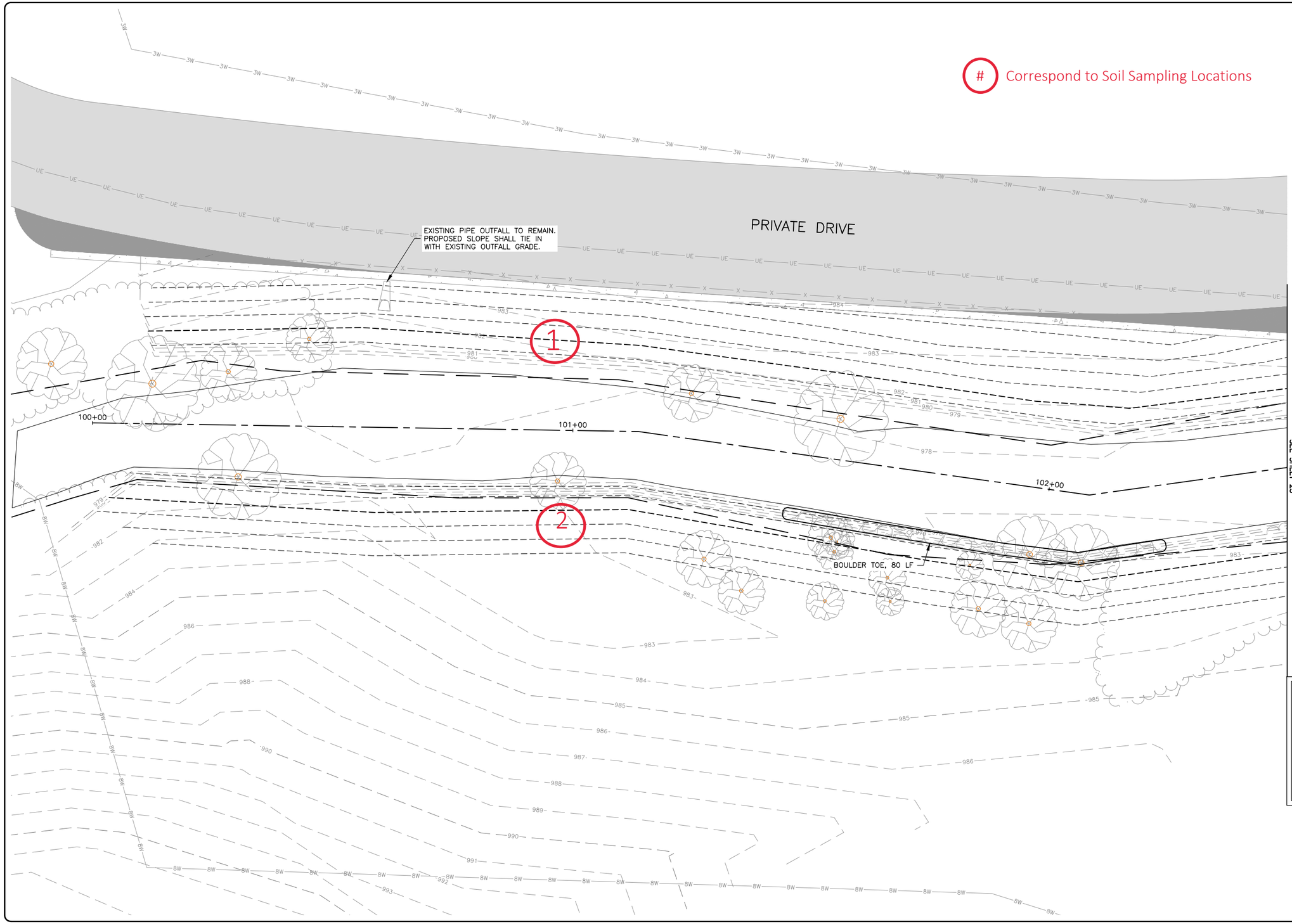
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JOB NUMBER:
21-635

SHEET NUMBER:
5 of 59

PLOT DATE: 2/11/22

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Correspond to Soil Sampling Locations

LEGEND

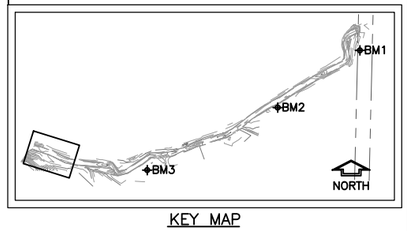
- PROPOSED BOULDER WALL
- PROPOSED FLEXAMAT
- PROPOSED BOULDER TOE
- WETLAND
- EXISTING TREE LINE
- SURVEYED OHWM

GENERAL NOTES:

SEE GRADING, SEDIMENT AND EROSION CONTROL PLAN FOR SEEDING.

North Bank:
1 100+00 - 103+50
South Bank
2 100+00 - 103+50

10 0 10 20 30 FEET



KEY MAP

BM1 = CUT X ON TOP OF CURB INLET (400)
N 136704.53, E 605730.70, ELEV 990.20

BM2 = 5/8" REBAR W/ FGA CAP (401)
N 136388.92, E 605277.56, ELEV 986.85

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REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING: SITE PLAN 1

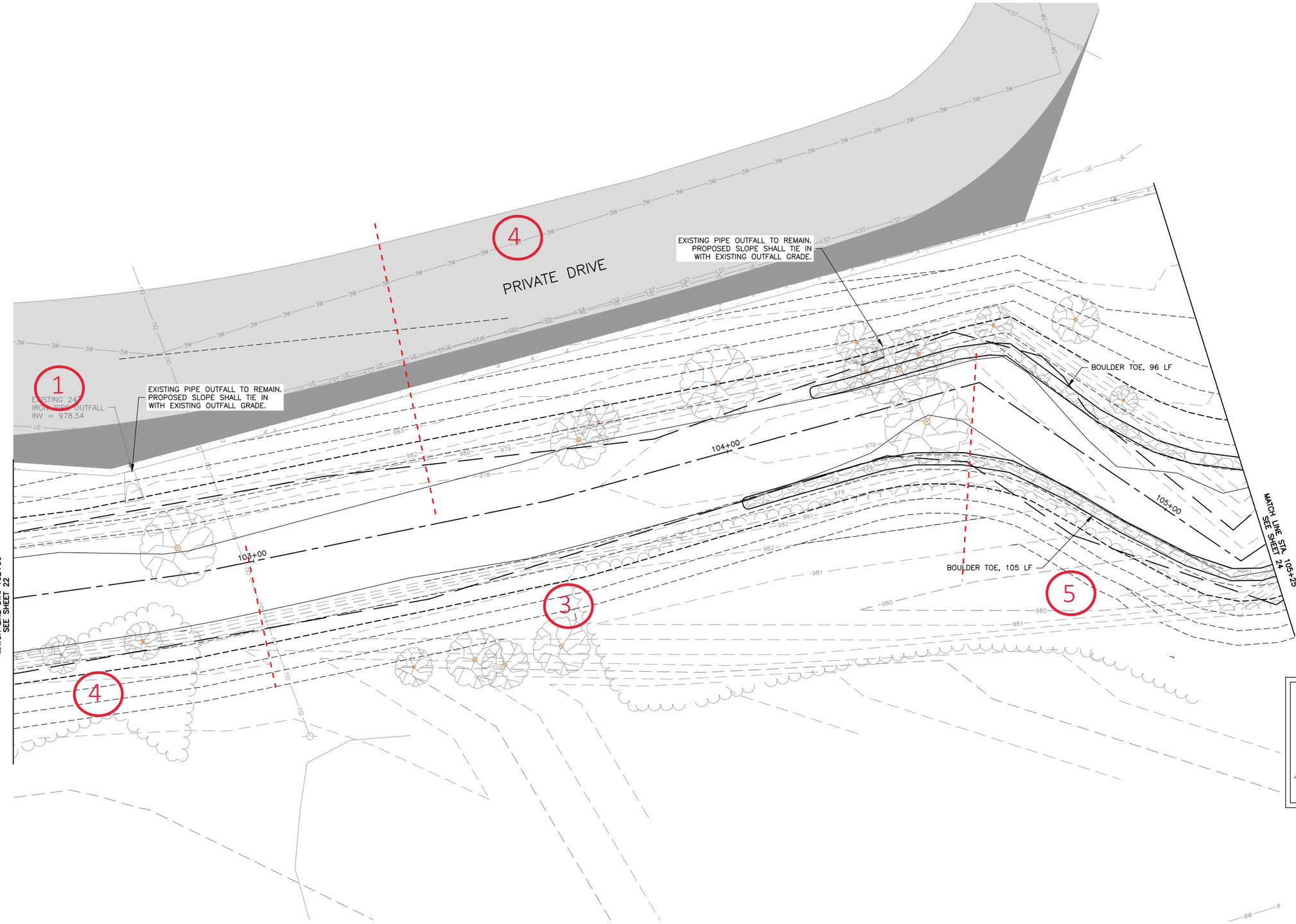
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JOB NUMBER: 21-635

SHEET NUMBER: 22 of 59

PLOT DATE: 2/11/22

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LEGEND

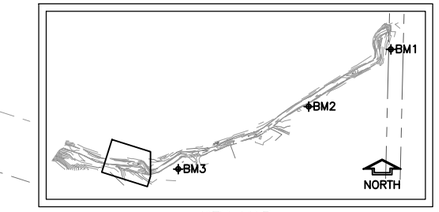
- PROPOSED BOULDER WALL
- PROPOSED FLEXAMAT
- PROPOSED BOULDER TOE
- WETLAND
- EXISTING TREE LINE
- SURVEYED OHWM

GENERAL NOTES:

SEE GRADING, SEDIMENT AND EROSION CONTROL PLAN FOR SEEDING.

North Bank:
4 103+50 - 106+00
South Bank
3 103+00 - 104+70
5 104+70 - 106+20

10 0 10 20 30 FEET



KEY MAP

BM1 = CUT X ON TOP OF CURB INLET (400)
N 136704.53, E 605730.70, ELEV 990.20

BM2 = 5/8" REBAR W/ FGA CAP (401)
N 136388.92, E 605277.56, ELEV 986.85

BM3 = 5/8" REBAR W/ CAP (402)
N 136044.50, E 604558.51, ELEV 983.67

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ENGINEERING & ENVIRONMENTAL
ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS
IOWA
WISCONSIN

OWNER/DEVELOPER:
CITY OF MONROE
1110 18TH AVENUE
MONROE, WISCONSIN, 53566

PROJECT AND LOCATION:
HONEY CREEK STREAMBANK STABILIZATION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING: SITE PLAN 2

SET TYPE: PERMIT SET

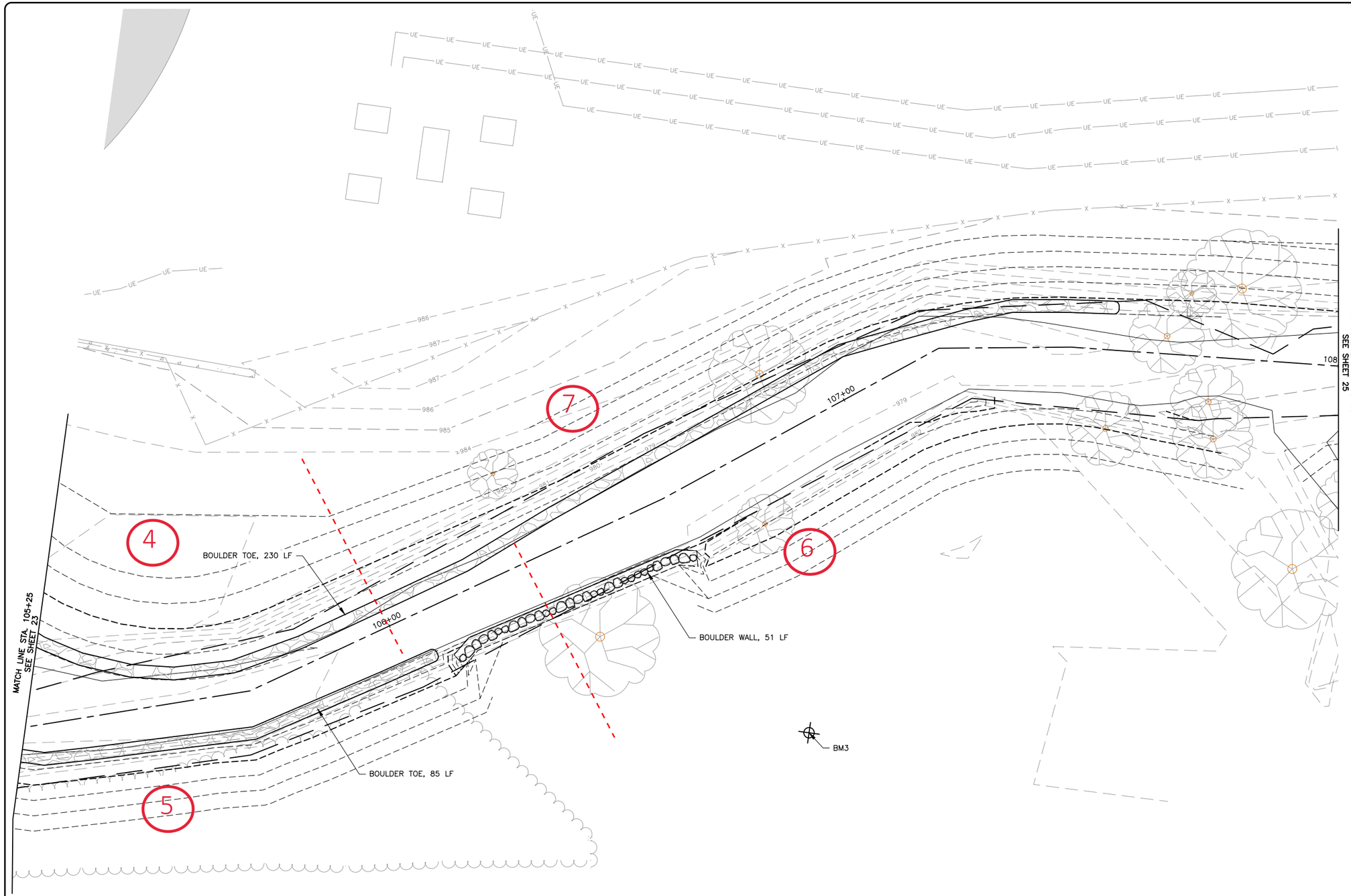
C:\C3D\21\21-635\21-635 Design.dwg, SITE PLAN 2

JOB NUMBER: 21-635

SHEET NUMBER: 23 of 59

PLOT DATE: 2/11/22

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LEGEND

- PROPOSED BOULDER WALL
- PROPOSED FLEXAMAT
- PROPOSED BOULDER TOE
- WETLAND
- EXISTING TREE LINE
- SURVEYED OHWM

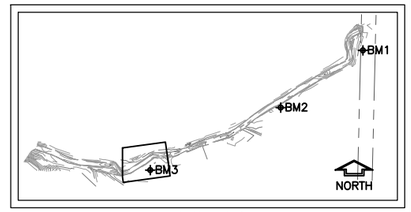
GENERAL NOTES:

SEE GRADING, SEDIMENT AND EROSION CONTROL PLAN FOR SEEDING.

North Bank:
7 106+00 - 108+00
South Bank
6 106+20 - 108+00

N
W E
S

10 0 10 20 30 FEET



KEY MAP

BM1 = CUT X ON TOP OF CURB INLET (400)
N 136704.53, E 605730.70, ELEV 990.20

BM2 = 5/8" REBAR W/ FGA CAP (401)
N 136388.92, E 605277.56, ELEV 986.85

BM3 = 5/8" REBAR W/ CAP (402)
N 136044.50, E 604558.51, ELEV 983.67

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MONROE, WISCONSIN, 53566

PROJECT AND LOCATION:
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MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING: SITE PLAN 3

SET TYPE: PERMIT SET

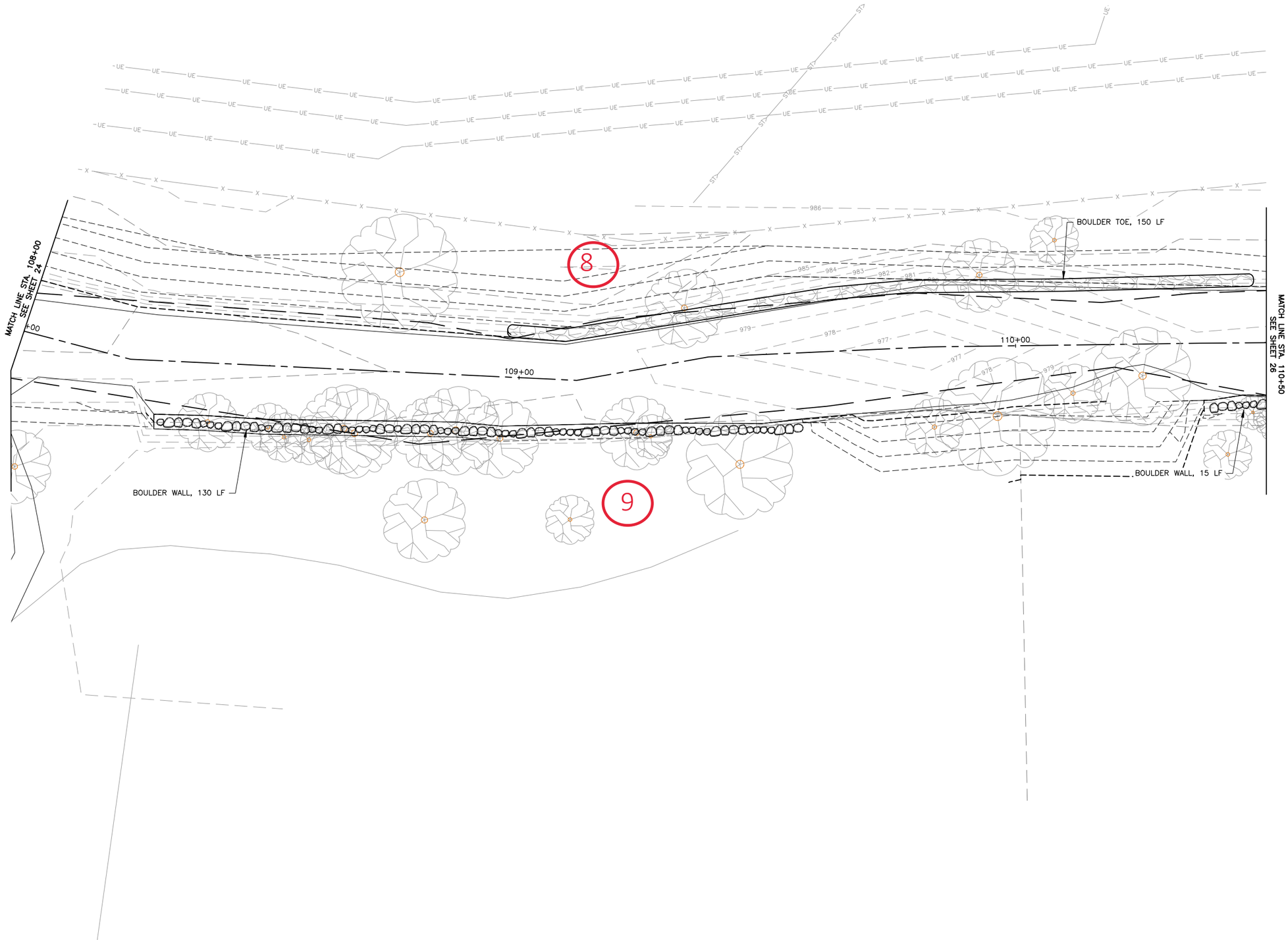
G:\C3D\21\21-635\21-635 Design.dwg, SITE PLAN 3

JOB NUMBER: 21-635

SHEET NUMBER: 24 of 59

PLOT DATE: 2/11/22

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LEGEND

- PROPOSED BOULDER WALL
- PROPOSED FLEXAMAT
- PROPOSED BOULDER TOE
- WETLAND
- EXISTING TREE LINE
- SURVEYED OHWM

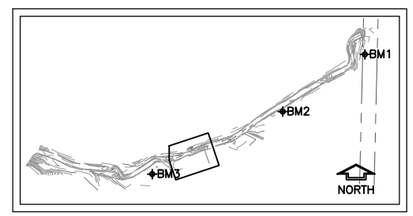
GENERAL NOTES:

SEE GRADING, SEDIMENT AND EROSION CONTROL PLAN FOR SEEDING.

North Bank:
8 108+00 - 113+00
South Bank
9 108+00- 113+00

N
W E
S

10 0 10 20 30 FEET



KEY MAP

BM1 = CUT X ON TOP OF CURB INLET (400)
N 136704.53, E 605730.70, ELEV 990.20

BM2 = 5/8" REBAR W/ FGA CAP (401)
N 136388.92, E 605277.56, ELEV 986.85

BM3 = 5/8" REBAR W/ CAP (402)
N 136044.50, E 604558.51, ELEV 983.67

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PLOT DATE: 2/11/22

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STABILIZATION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

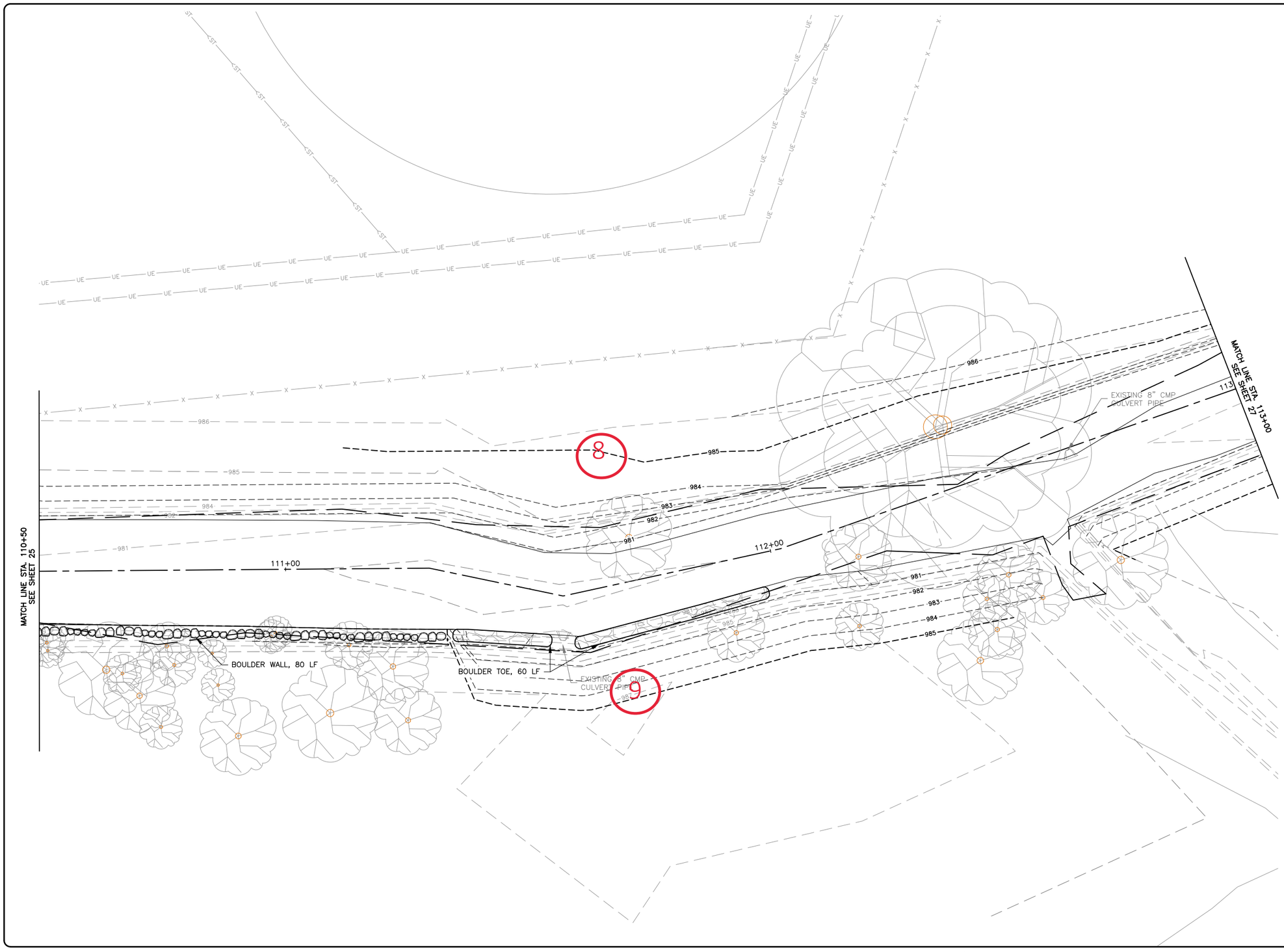
REV. NO.	DESCRIPTION	DATE

DRAWING:
SITE PLAN 4

SET TYPE: PERMIT SET
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JOB NUMBER:
21-635

SHEET NUMBER:
25 of 59



LEGEND

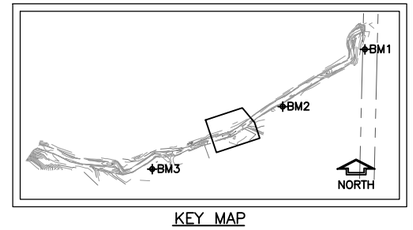
- PROPOSED BOULDER WALL
- PROPOSED FLEXAMAT
- PROPOSED BOULDER TOE
- WETLAND
- EXISTING TREE LINE
- SURVEYED OHWM

GENERAL NOTES:

SEE GRADING, SEDIMENT AND EROSION CONTROL PLAN FOR SEEDING.

N W E S

10 0 10 20 30 FEET



KEY MAP

BM1 = CUT X ON TOP OF CURB INLET (400)
N 136704.53, E 605730.70, ELEV 990.20

BM2 = 5/8" REBAR W/ FGA CAP (401)
N 136388.92, E 605277.56, ELEV 986.85

BM3 = 5/8" REBAR W/ CAP (402)
N 136044.50, E 604558.51, ELEV 983.67

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IOWA
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MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING: SITE PLAN 5

SET TYPE: PERMIT SET

C:\C3D\21\21-635\21-635 Design.dwg, SITE PLAN 5

JOB NUMBER: 21-635

SHEET NUMBER: 26 of 59

PLOT DATE: 2/11/22

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NOT IN PROJECT SCOPE

MATCH LINE STA. 113+00
SEE SHEET 26

MATCH LINE STA. 115+75
SEE SHEET 28

114+00

115+00

BOULDER TOE, 165 LF

10

BM2

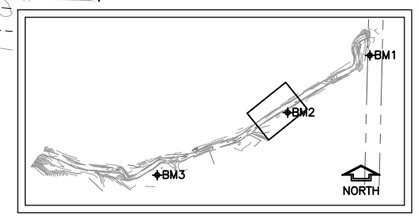
LEGEND

- PROPOSED BOULDER WALL
- PROPOSED FLEXAMAT
- PROPOSED BOULDER TOE
- WETLAND
- EXISTING TREE LINE
- SURVEYED OHWM

GENERAL NOTES:

SEE GRADING, SEDIMENT AND EROSION CONTROL PLAN FOR SEEDING.

South Bank
10 113+00 - 116+50



KEY MAP

BM1 = CUT X ON TOP OF CURB INLET (400)
N 136704.53, E 605730.70, ELEV 990.20

BM2 = 5/8" REBAR W/ FGA CAP (401)
N 136388.92, E 605277.56, ELEV 986.85

BM3 = 5/8" REBAR W/ CAP (402)
N 136044.50, E 604558.51, ELEV 983.67

10 0 10 20 30 FEET

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PROJECT AND LOCATION:
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STABILIZATION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING: SITE PLAN 6

SET TYPE: PERMIT SET

G:\C3D\21\21-635\21-635 Design.dwg, SITE PLAN 6

JOB NUMBER: 21-635

SHEET NUMBER: 27 of 59

NOT IN PROJECT SCOPE

MATCH LINE STA. 115+75
SEE SHEET 27

MATCH LINE STA. 118+50
SEE SHEET 29

116+00

117+00

118+00

BOULDER TOE, 30 LF

10

11

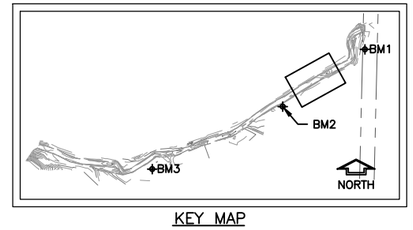
South Bank
11 116+50 - 119+00

LEGEND

- PROPOSED BOULDER WALL
- PROPOSED FLEXAMAT
- PROPOSED BOULDER TOE
- WETLAND
- EXISTING TREE LINE
- SURVEYED OHWM

GENERAL NOTES:

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KEY MAP

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BM2 = 5/8" REBAR W/ FGA CAP (401)
N 136388.92, E 605277.56, ELEV 986.85

BM3 = 5/8" REBAR W/ CAP (402)
N 136044.50, E 604558.51, ELEV 983.67

10 0 10 20 30 FEET

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ILLINOIS
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HONEY CREEK STREAMBANK STABILIZATION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING: SITE PLAN 7

SET TYPE: PERMIT SET

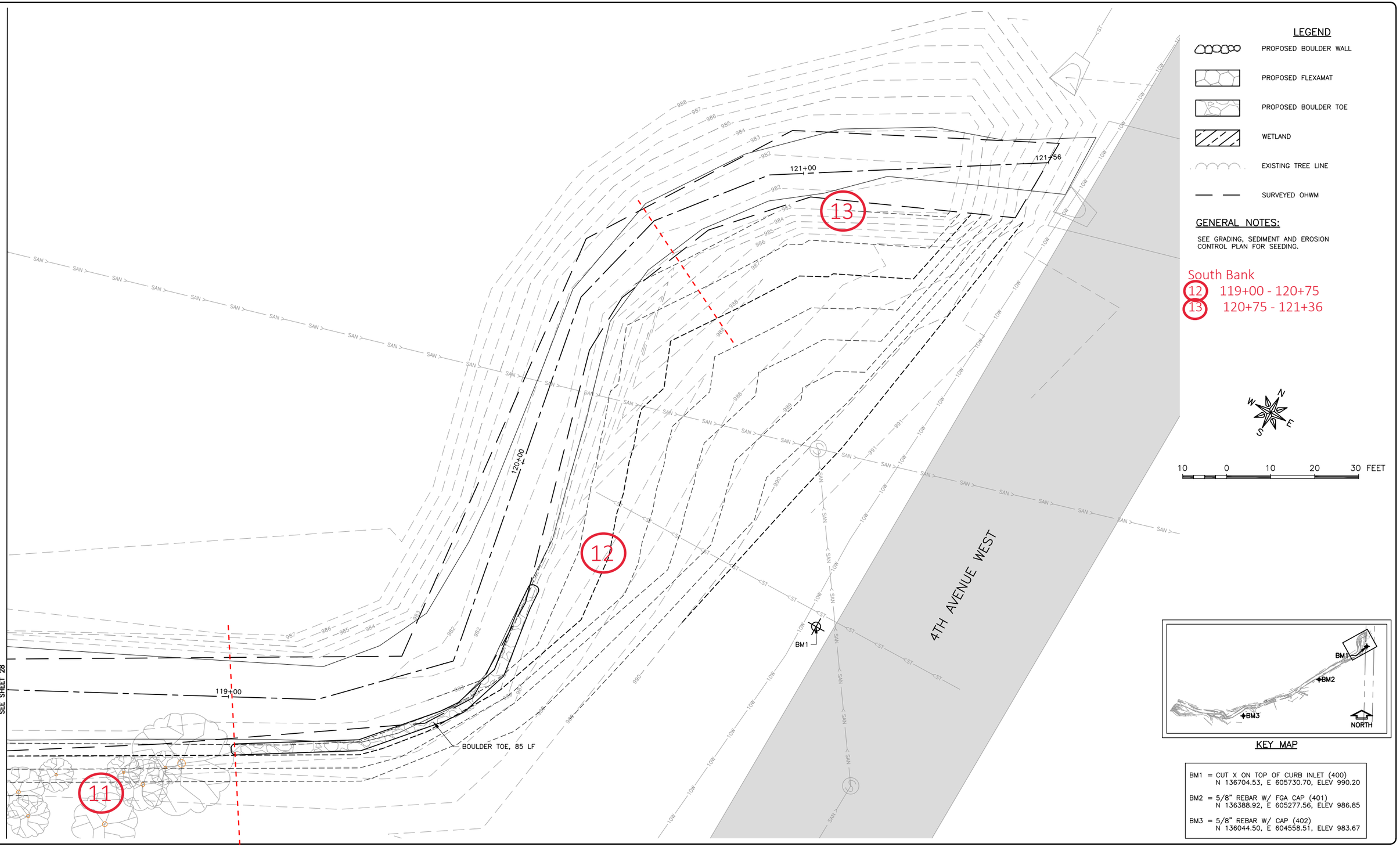
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JOB NUMBER: 21-635

SHEET NUMBER: 28 of 59

PLOT DATE: 2/11/22

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MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING:
SITE PLAN 8

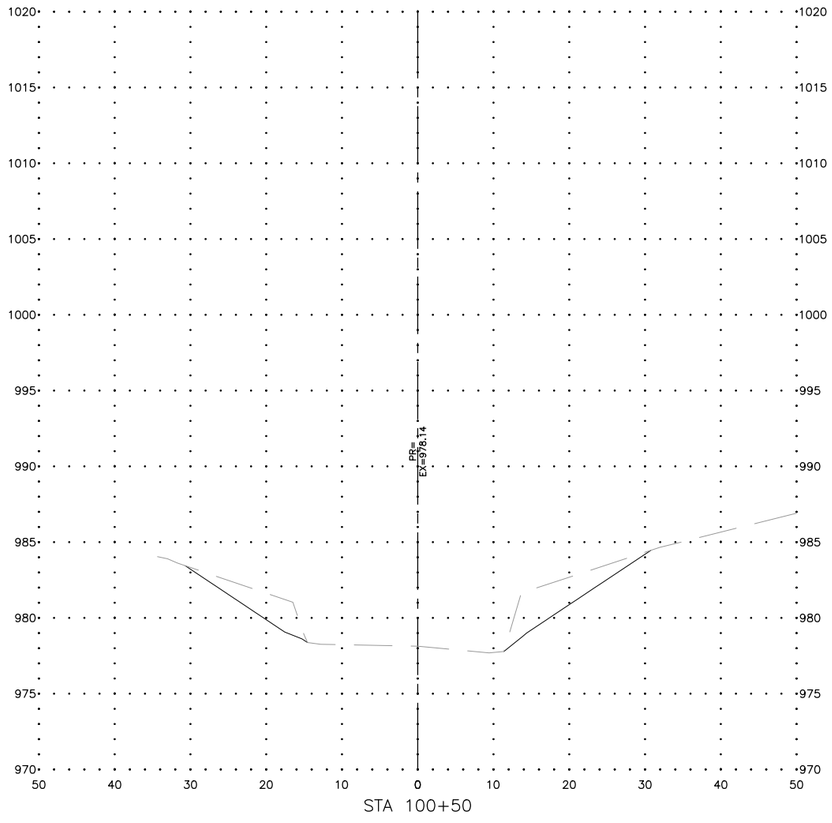
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JOB NUMBER:
21-635

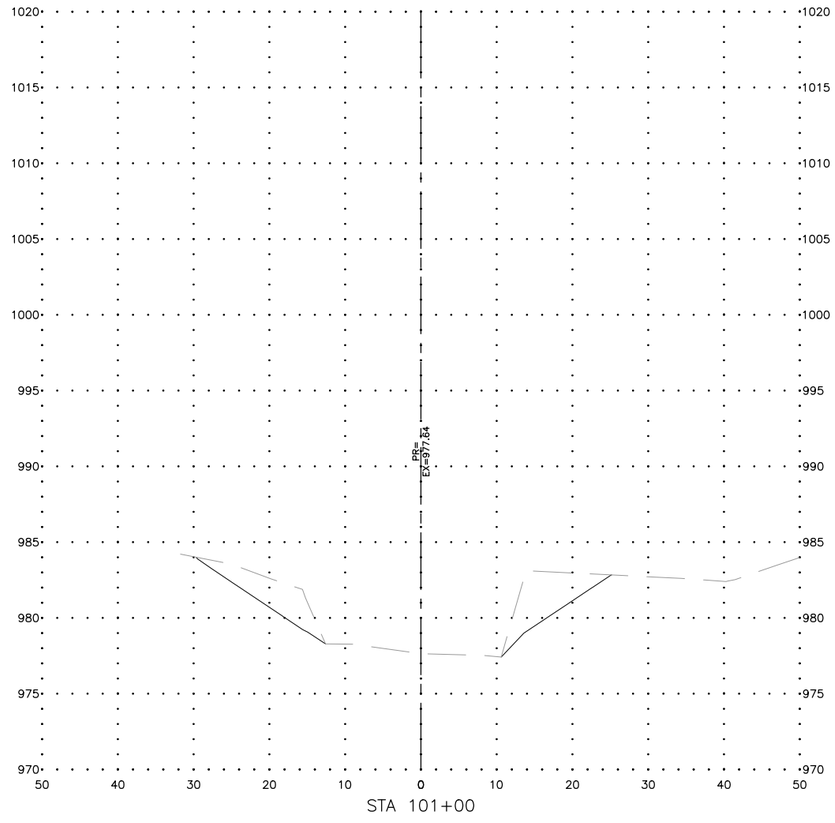
SHEET NUMBER:
29 of 59

PLOT DATE: 2/11/22

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STA 100+50



STA 101+00

SCALE
HOR 10 0 10 20
VER 5 0 5 10

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ILLINOIS
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PLOT DATE: 2/11/22

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PROJECT AND LOCATION:
HONEY CREEK STREAMBANK
STABILIZATION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

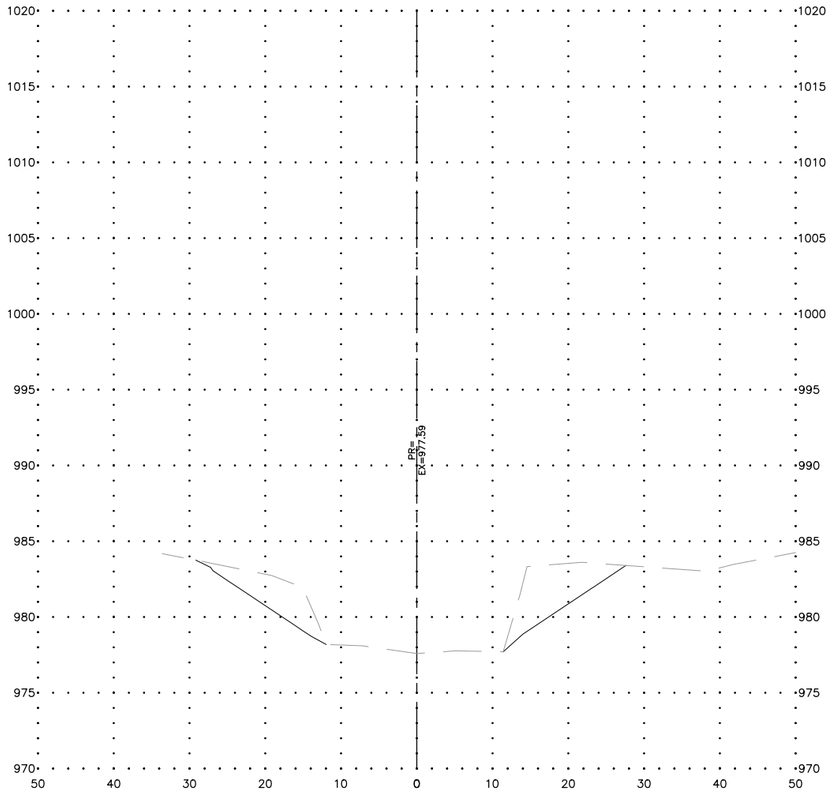
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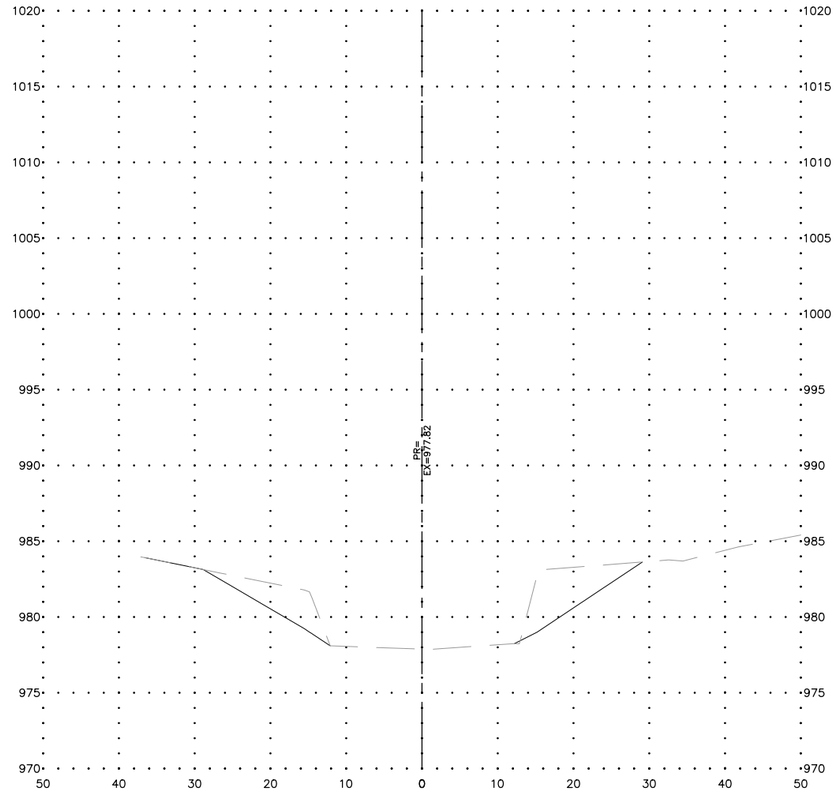
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JOB NUMBER:
21-635

SHEET NUMBER:
38 of 59



STA 101+50



STA 102+00

SCALE
HOR 10 0 10 20
VER 5 0 5 10

FEHR GRAHAM
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DRAWN BY: ARS
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REVISIONS

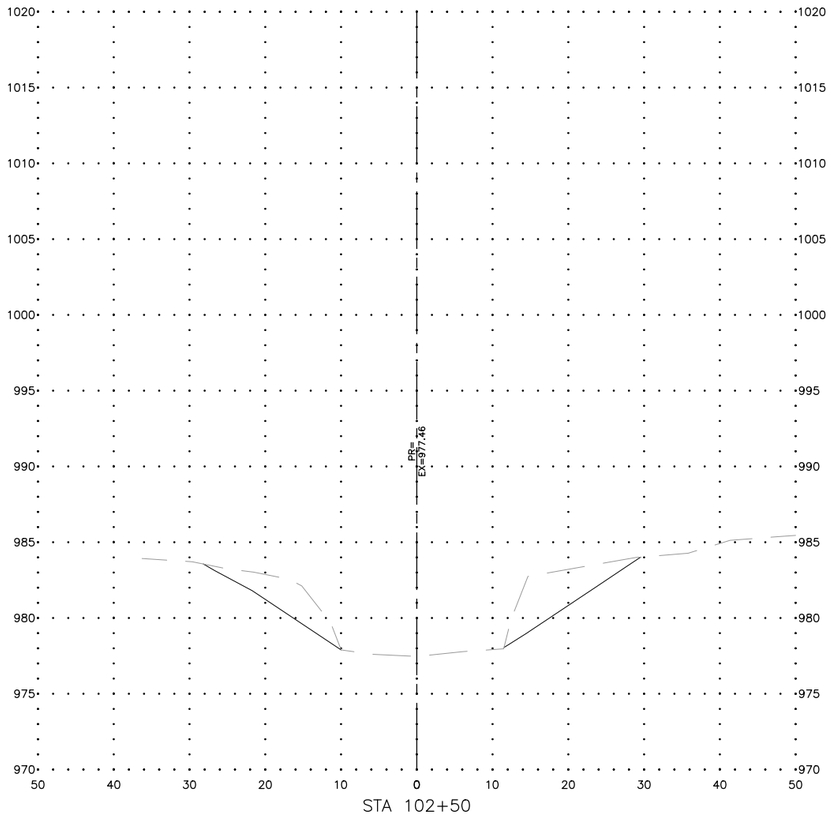
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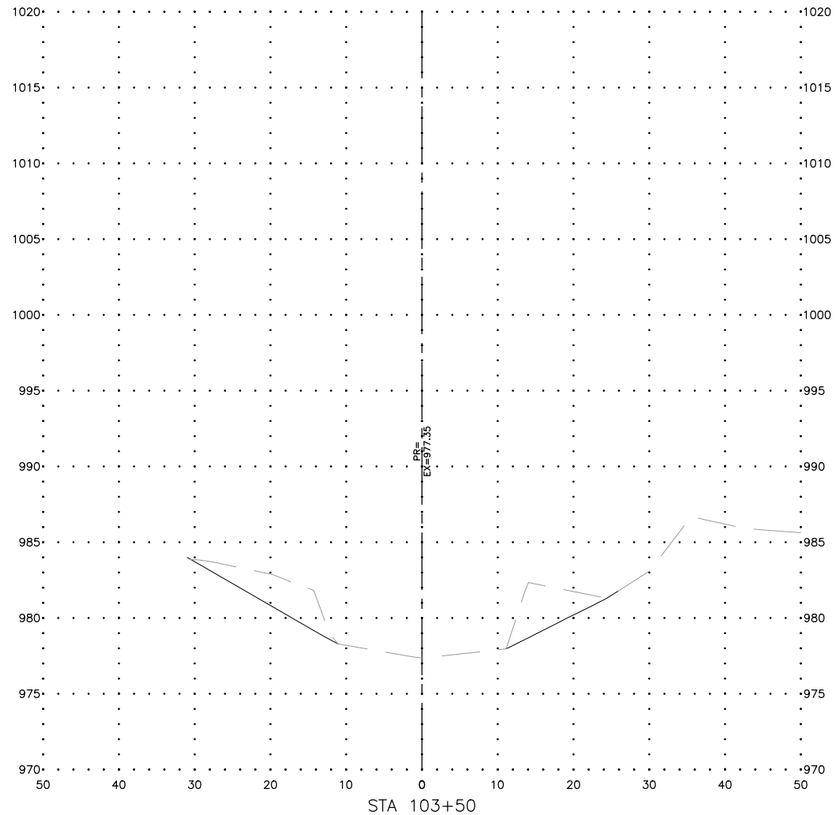
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JOB NUMBER:
21-635

SHEET NUMBER:
39 of 59



STA 102+50



STA 103+50

SCALE
HOR 10 0 10 20
VER 5 0 5 10

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ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS
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PLOT DATE: 2/11/22

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MONROE, WISCONSIN

DRAWN BY: ARS
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REVISIONS

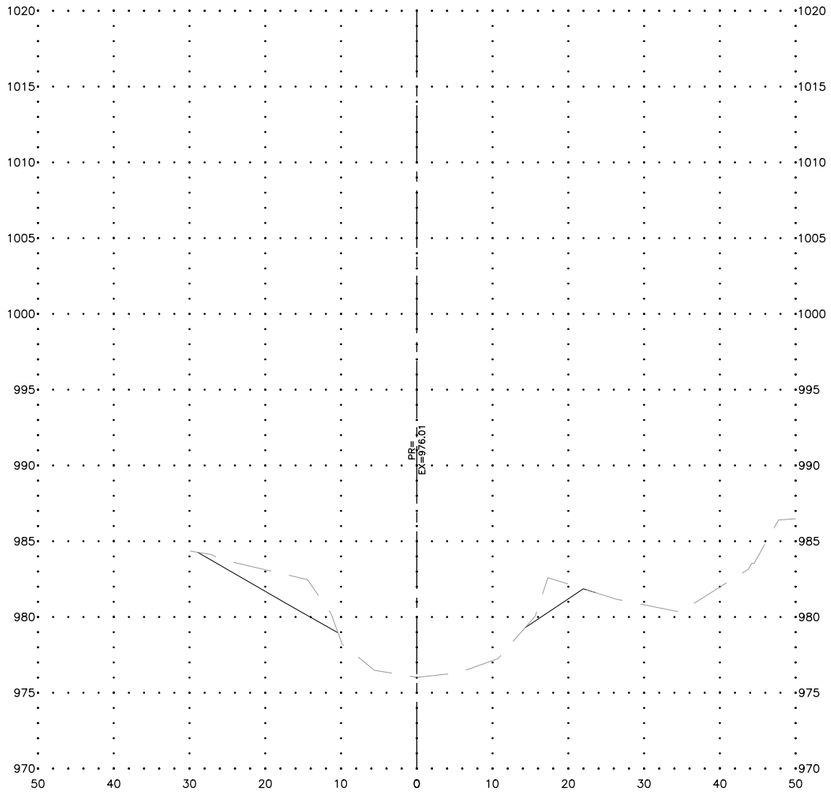
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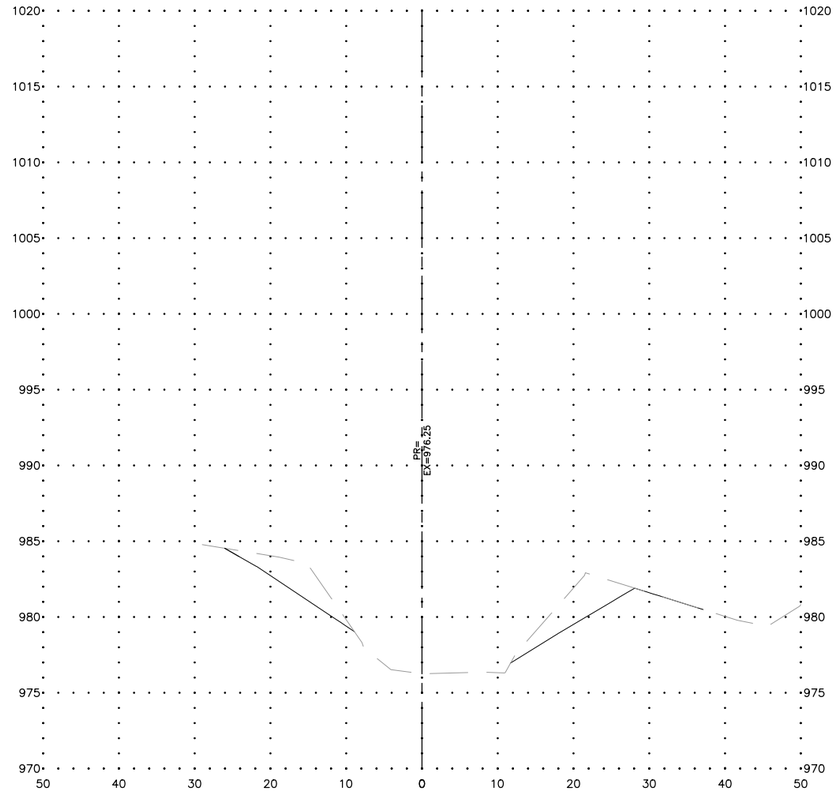
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JOB NUMBER:
21-635

SHEET NUMBER:
40 of 59



STA 104+00



STA 104+50

SCALE
HOR 10 0 10 20
VER 5 0 5 10

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REVISIONS

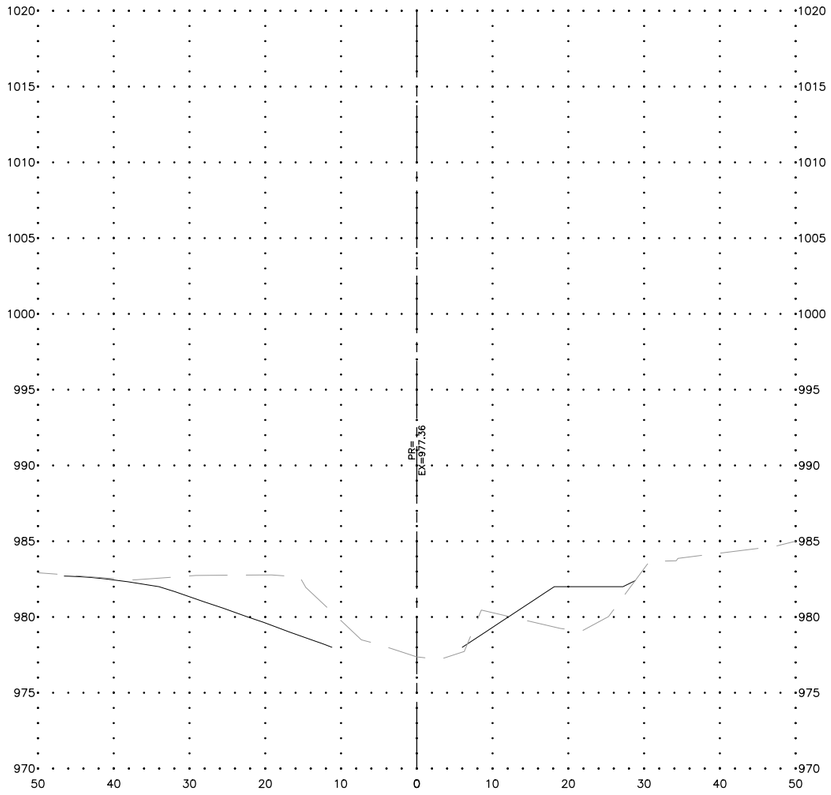
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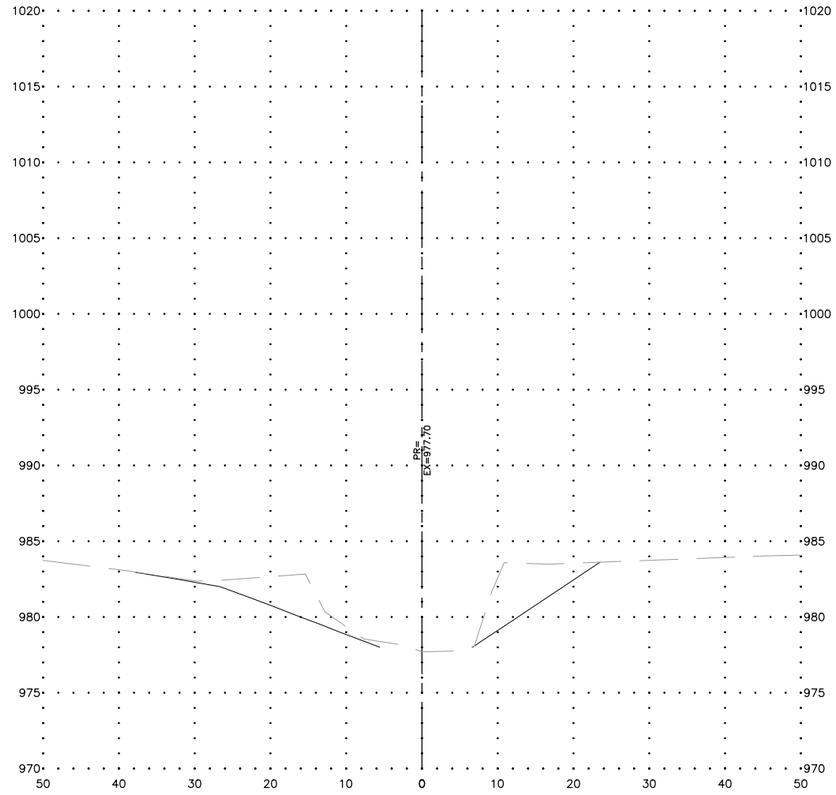
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JOB NUMBER:
21-635

SHEET NUMBER:
41 of 59



STA 105+00



STA 105+50

SCALE
HOR 10 0 10 20
VER 5 0 5 10

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MONROE, WISCONSIN

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REVISIONS

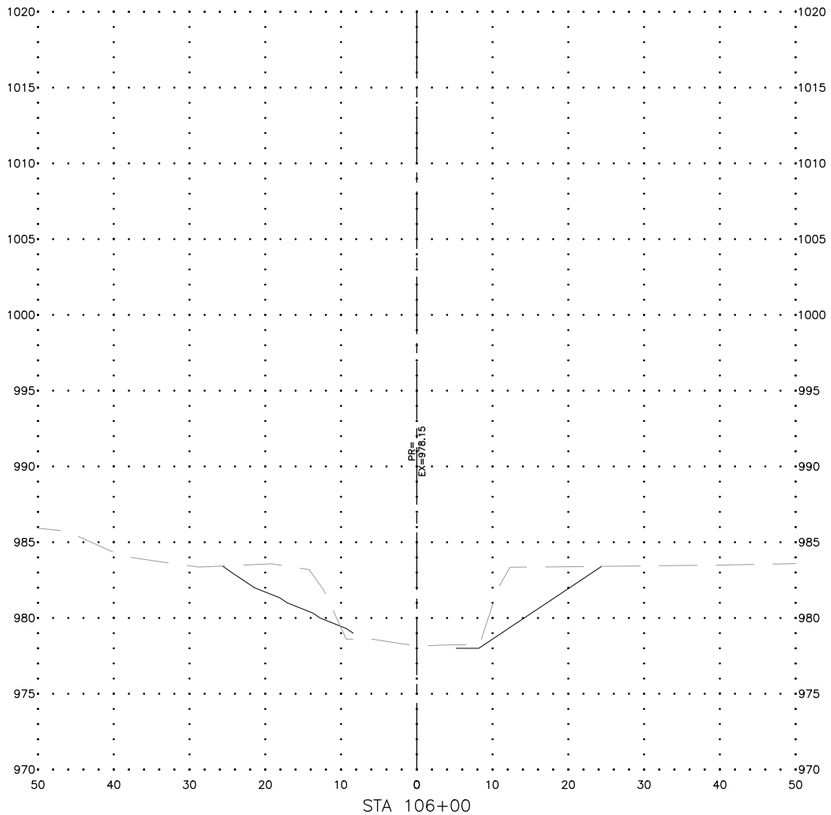
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DRAWING:
CROSS SECTION SHEET 5

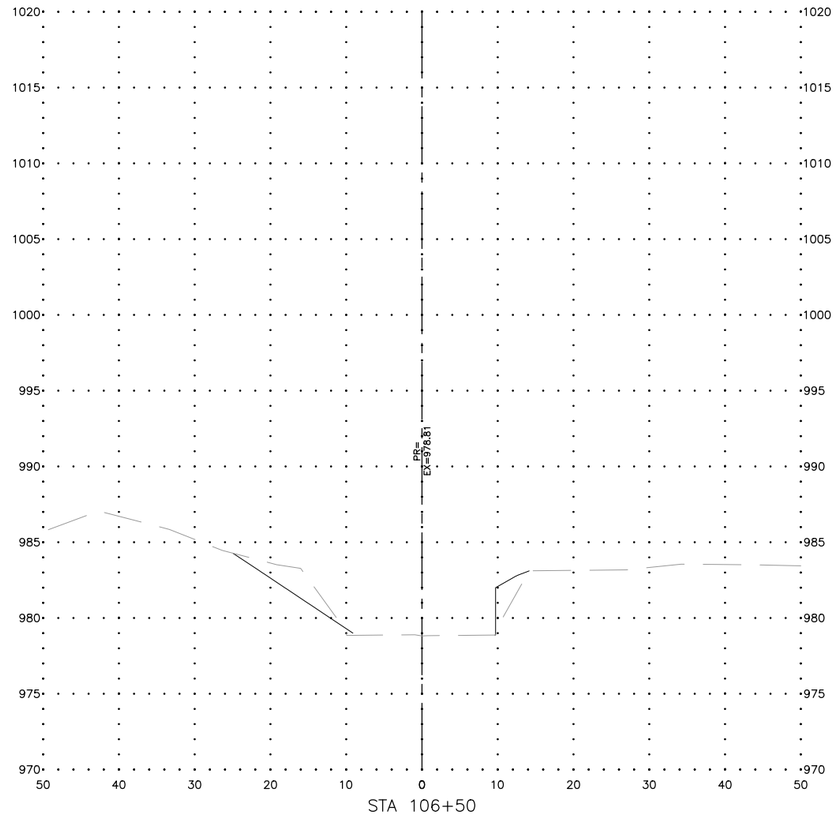
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JOB NUMBER:
21-635

SHEET NUMBER:
42 of 59



STA 106+00



STA 106+50

SCALE
HOR 10 0 10 20
VER 5 0 5 10

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MONROE, WISCONSIN

DRAWN BY: ARS
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SCALE: AS NOTED

REVISIONS

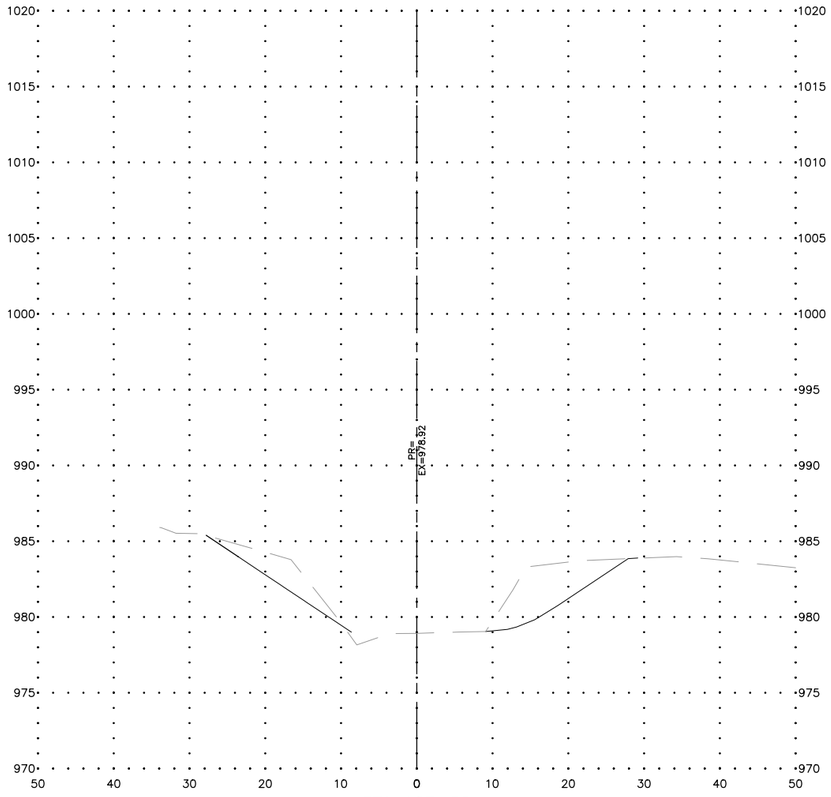
REV. NO.	DESCRIPTION	DATE

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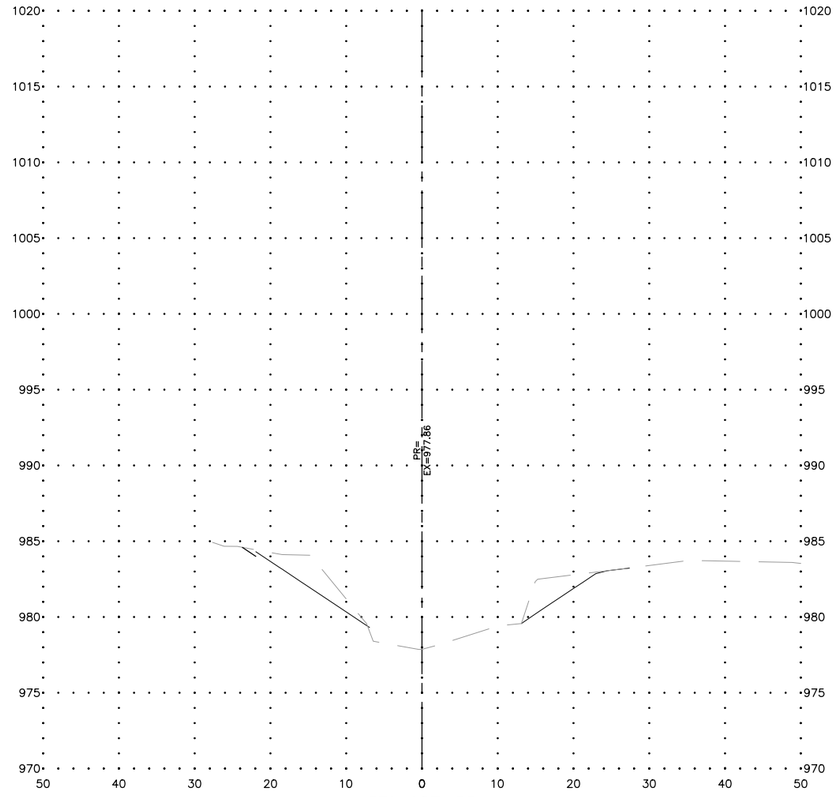
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JOB NUMBER:
21-635

SHEET NUMBER:
43 of 59



STA 107+00



STA 107+50

SCALE
HOR 10 0 10 20
VER 5 0 5 10

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ENGINEERING & ENVIRONMENTAL
ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS
IOWA
WISCONSIN

OWNER/DEVELOPER:
CITY OF MONROE
1110 18TH AVENUE
MONROE, WISCONSIN, 53566

PROJECT AND LOCATION:
HONEY CREEK STREAMBANK
STABILIZATION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING:
CROSS SECTION SHEET 7

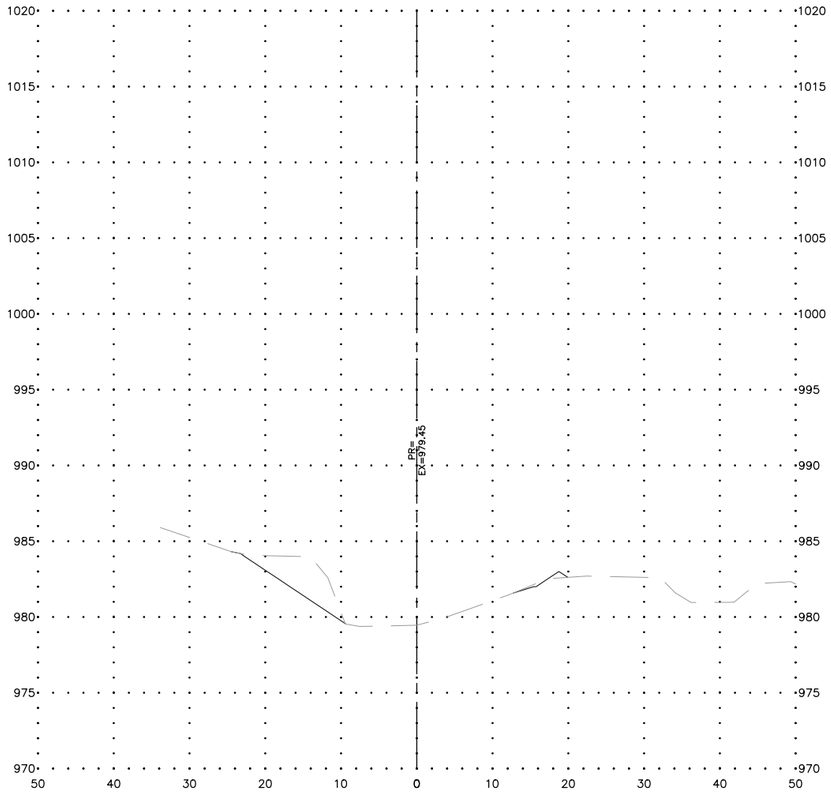
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JOB NUMBER:
21-635

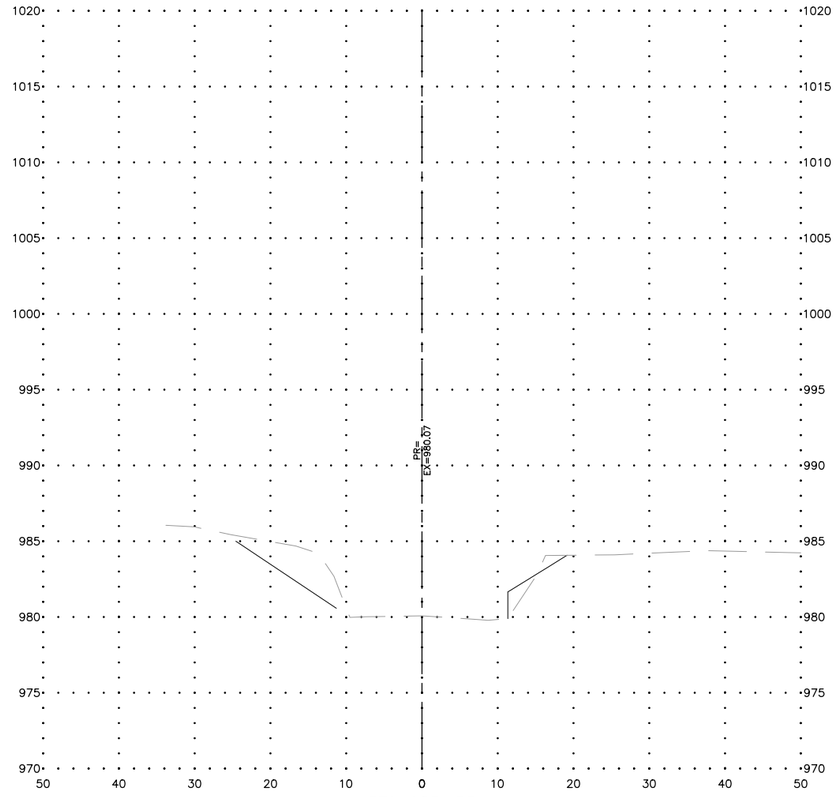
SHEET NUMBER:
44 of 59

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MONROE, WISCONSIN

DRAWN BY: ARS
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DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

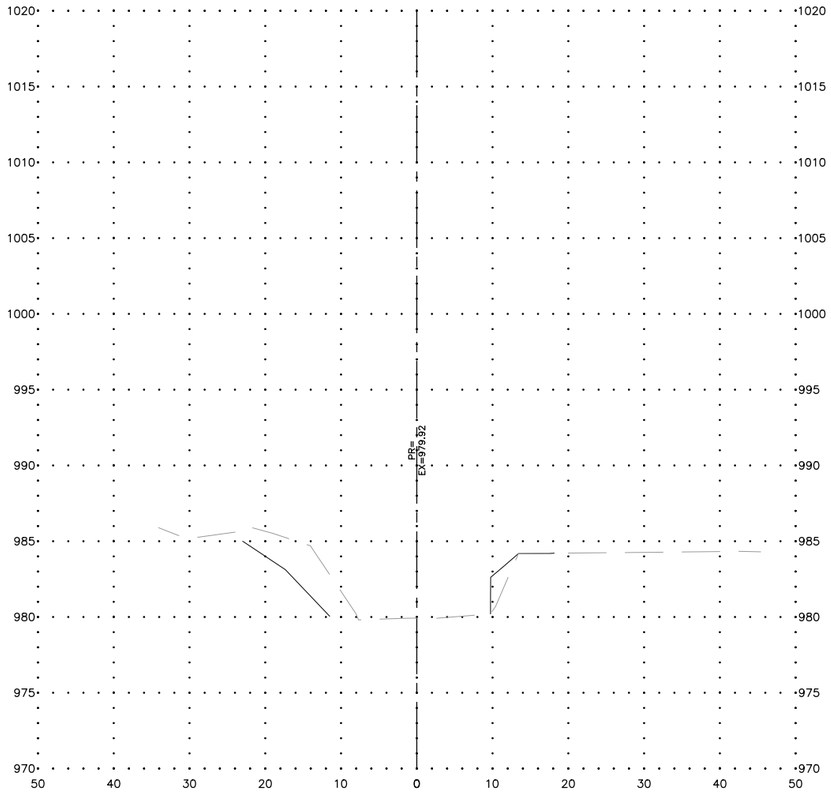
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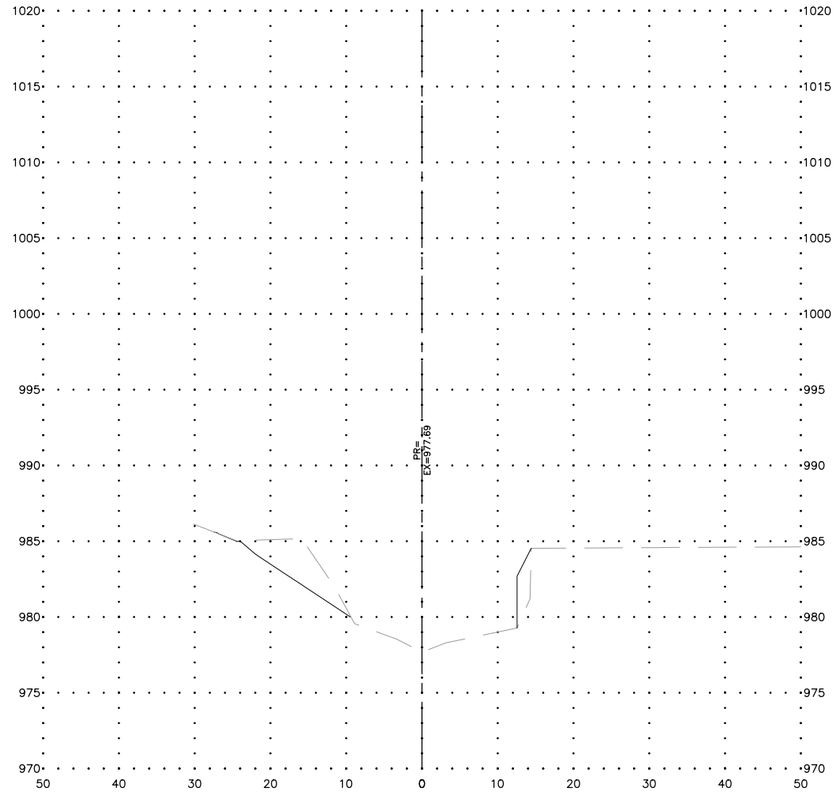
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JOB NUMBER:
21-635

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SCALE
HOR 10 0 10 20
VER 5 0 5 10

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MONROE, WISCONSIN

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REVISIONS

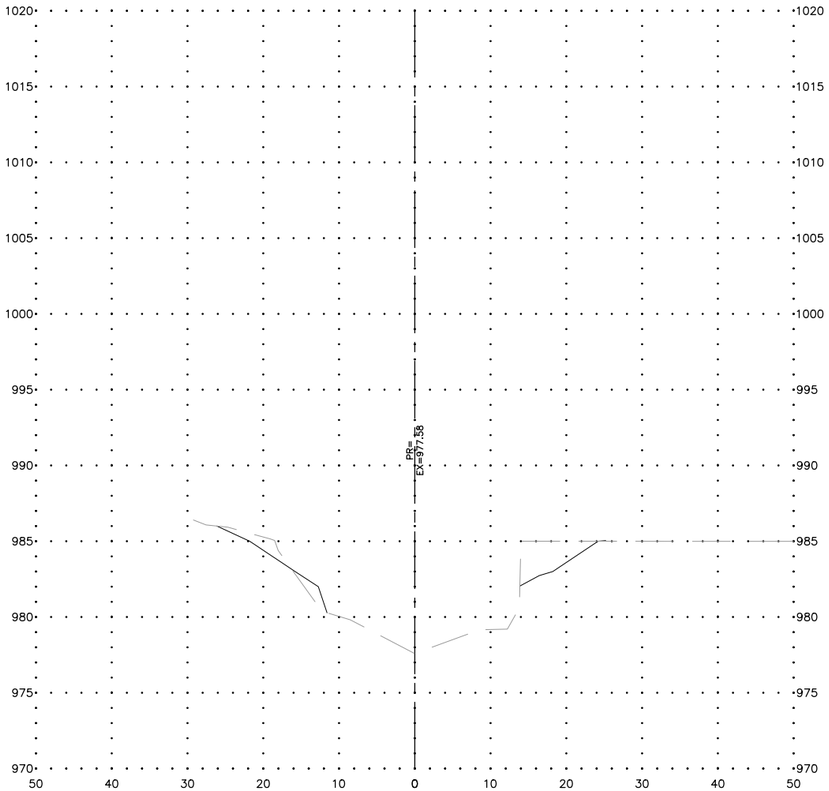
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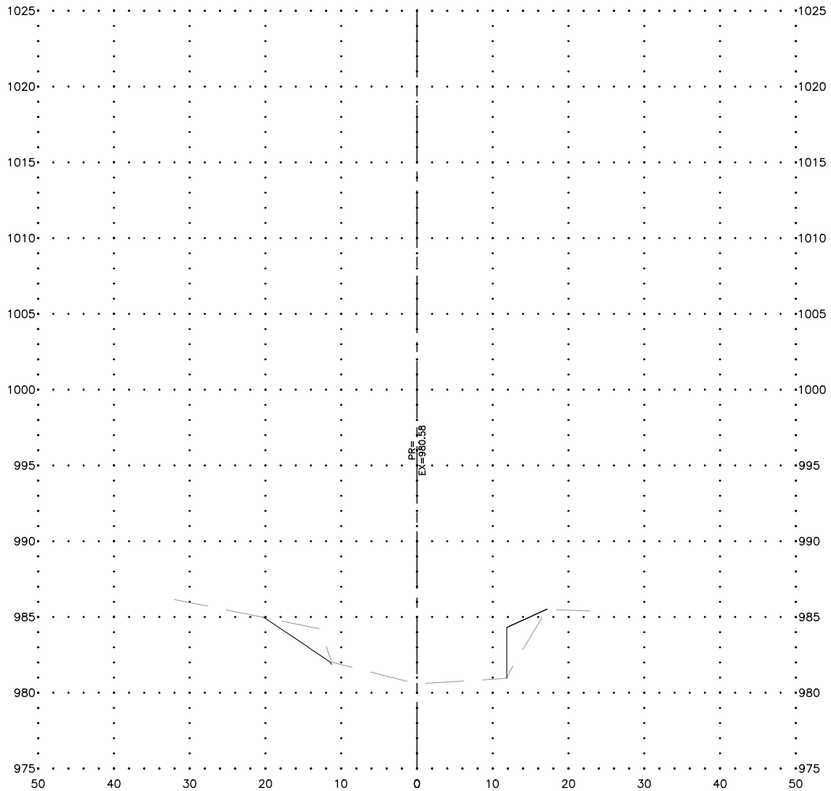
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JOB NUMBER:
21-635

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SCALE
HOR 10 0 10 20
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REVISIONS

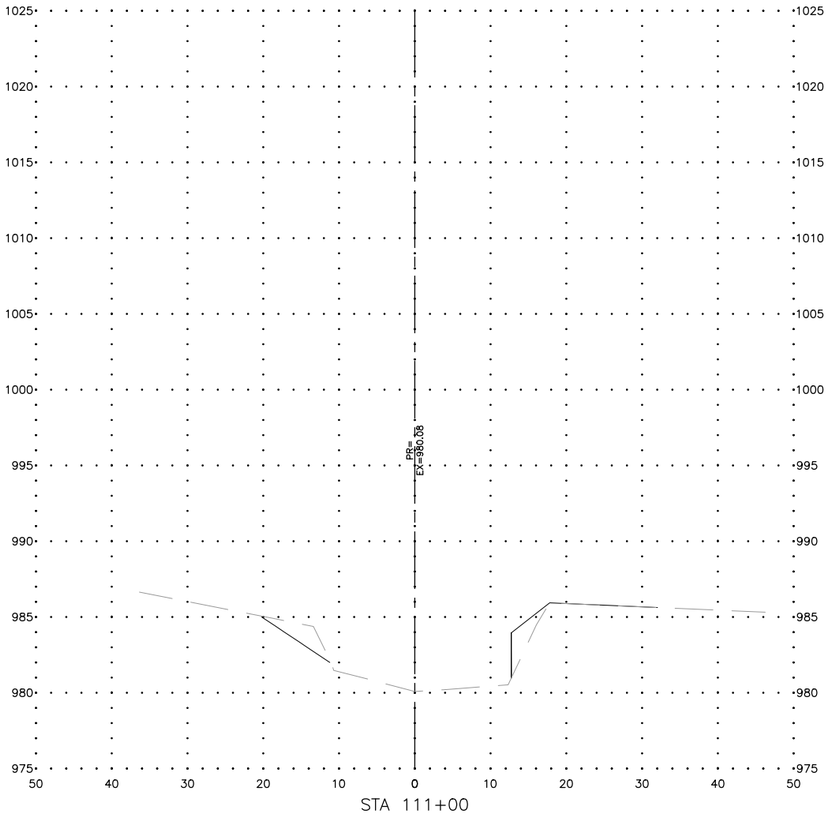
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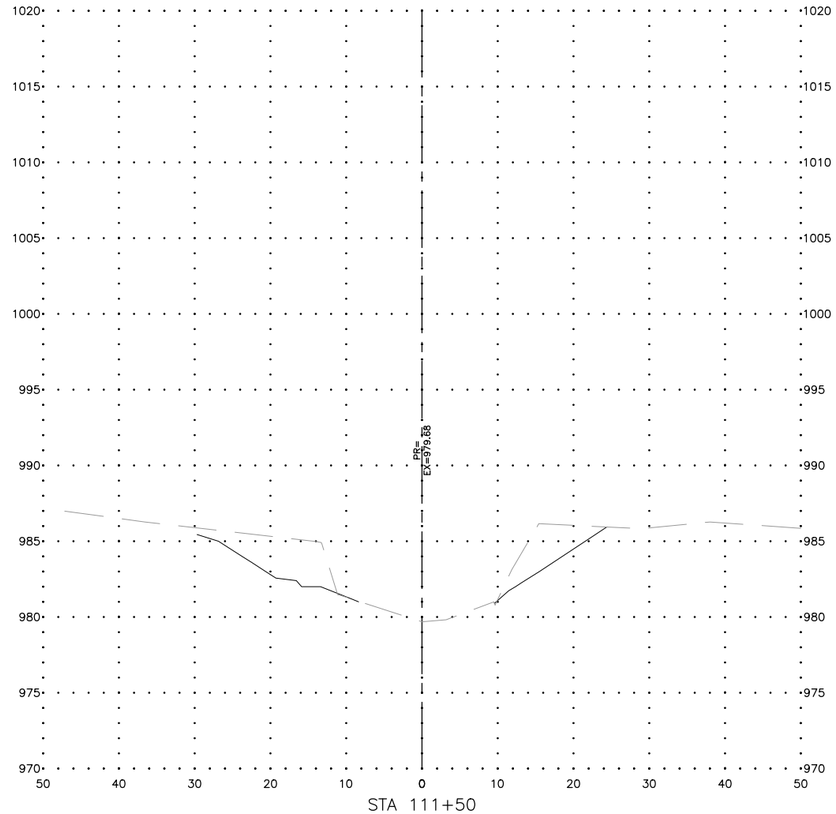
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JOB NUMBER:
21-635

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SCALE
HOR 10 0 10 20
VER 5 0 5 10

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MONROE, WISCONSIN

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REVISIONS

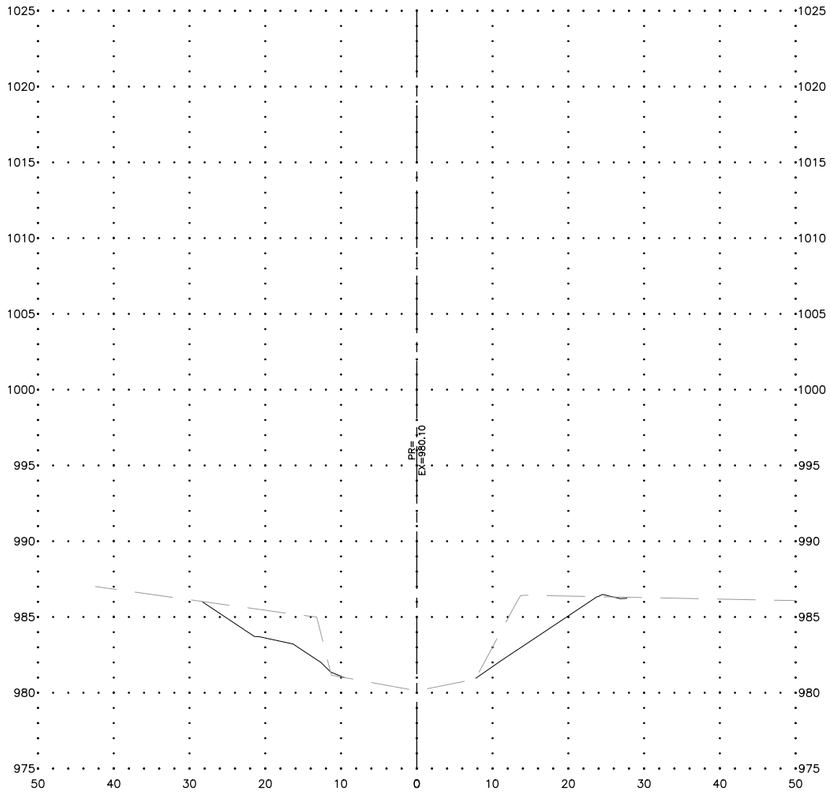
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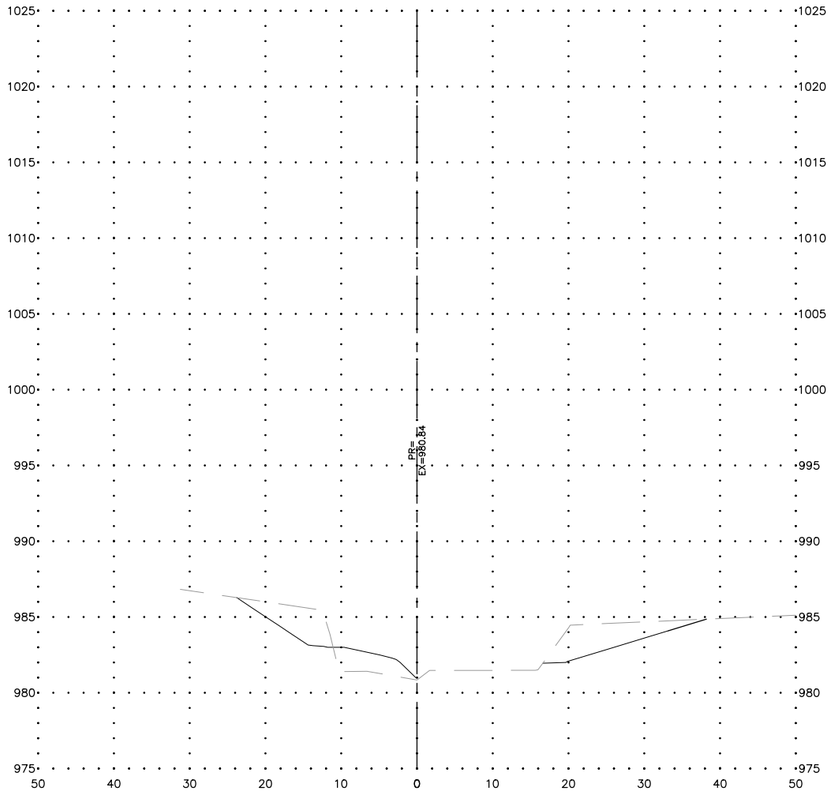
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JOB NUMBER:
21-635

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SCALE
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MONROE, WISCONSIN

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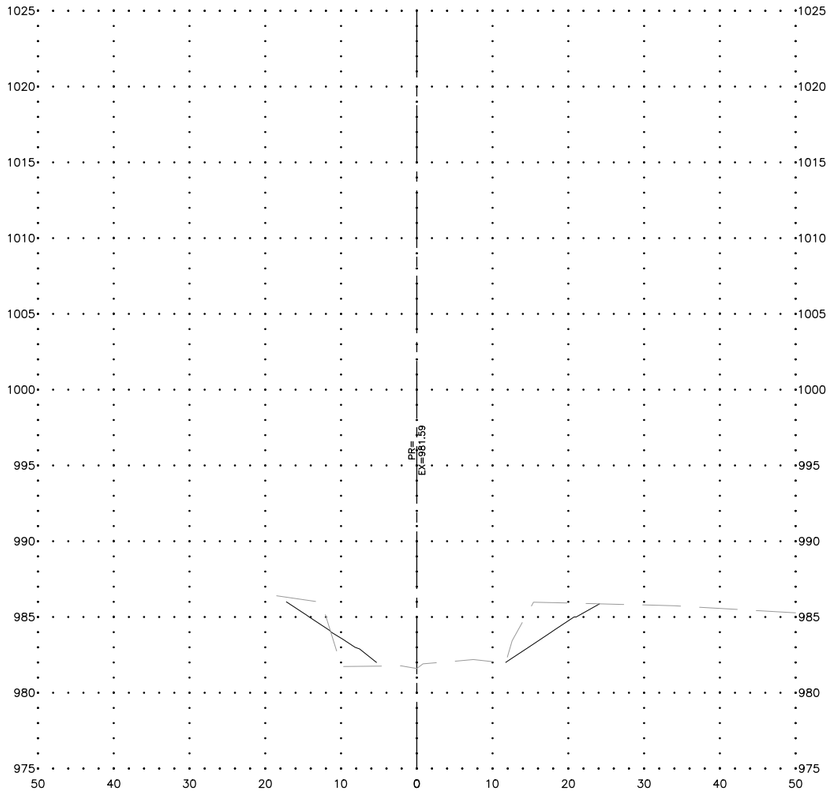
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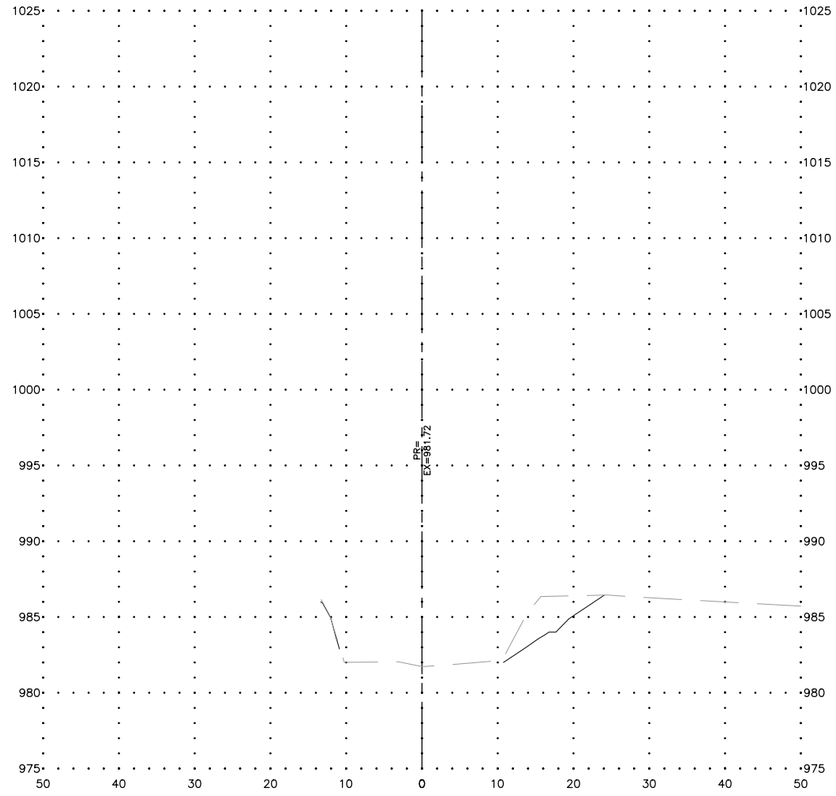
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JOB NUMBER:
21-635

SHEET NUMBER:
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SCALE
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MONROE, WISCONSIN

DRAWN BY: ARS
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DATE: 02/11/2022
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REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING:
CROSS SECTION SHEET 13

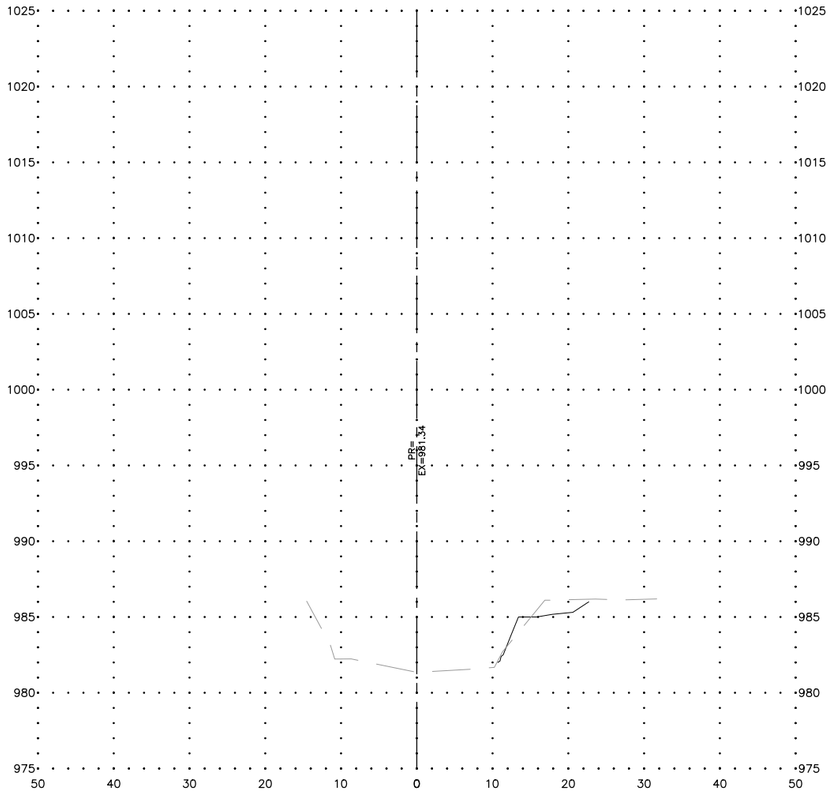
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JOB NUMBER:
21-635

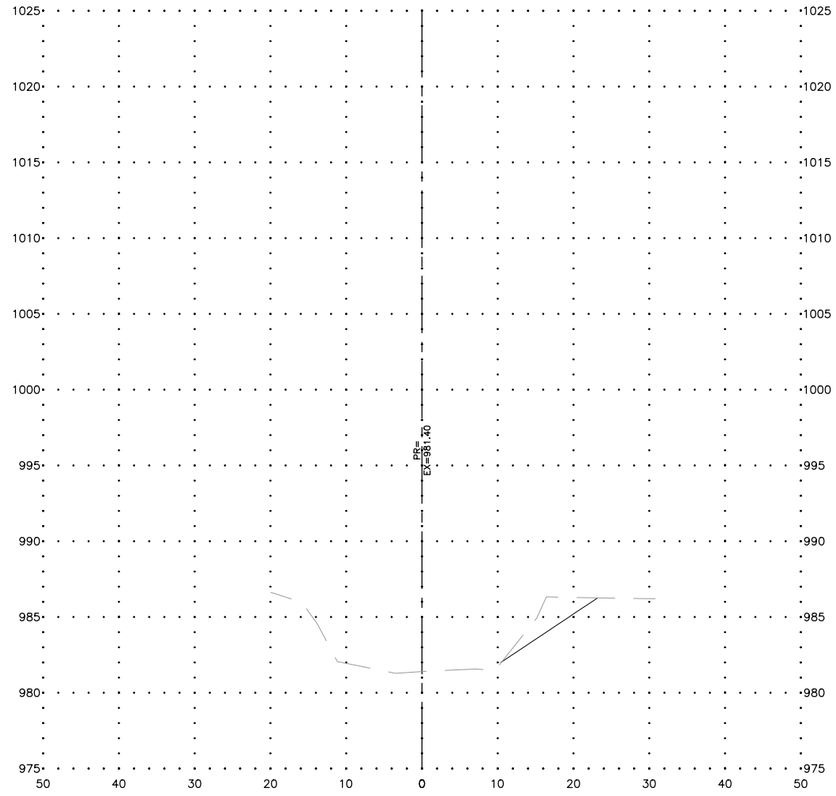
SHEET NUMBER:
50 of 59

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OWNER/DEVELOPER:
CITY OF MONROE
1110 18TH AVENUE
MONROE, WISCONSIN, 53566

PROJECT AND LOCATION:
HONEY CREEK STREAMBANK
STABILIZATION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: ARS
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DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

REV. NO.	DESCRIPTION	DATE

DRAWING:
CROSS SECTION SHEET 14

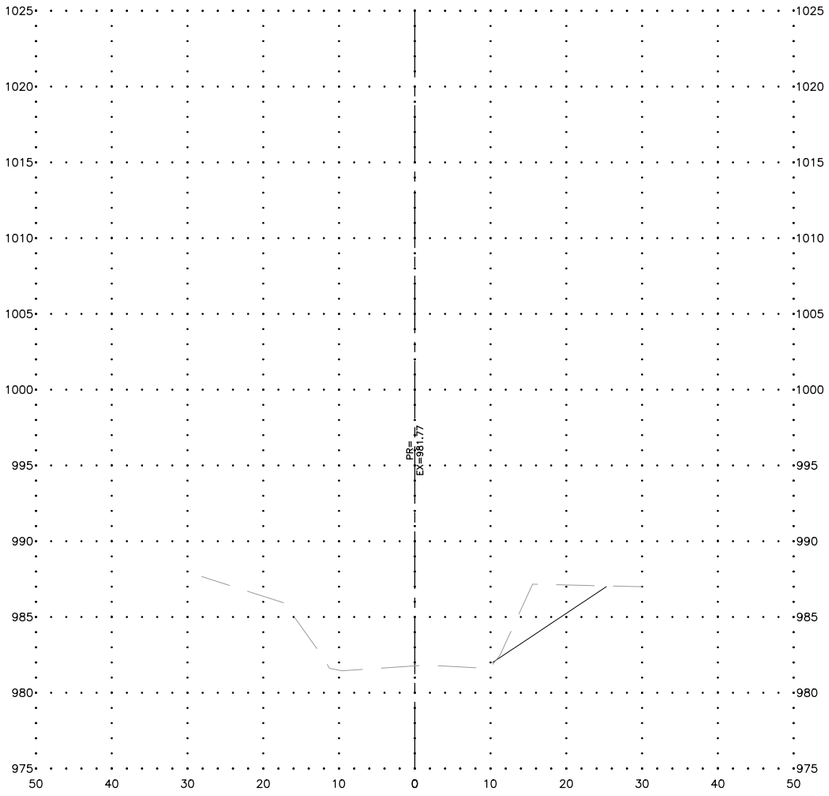
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JOB NUMBER:
21-635

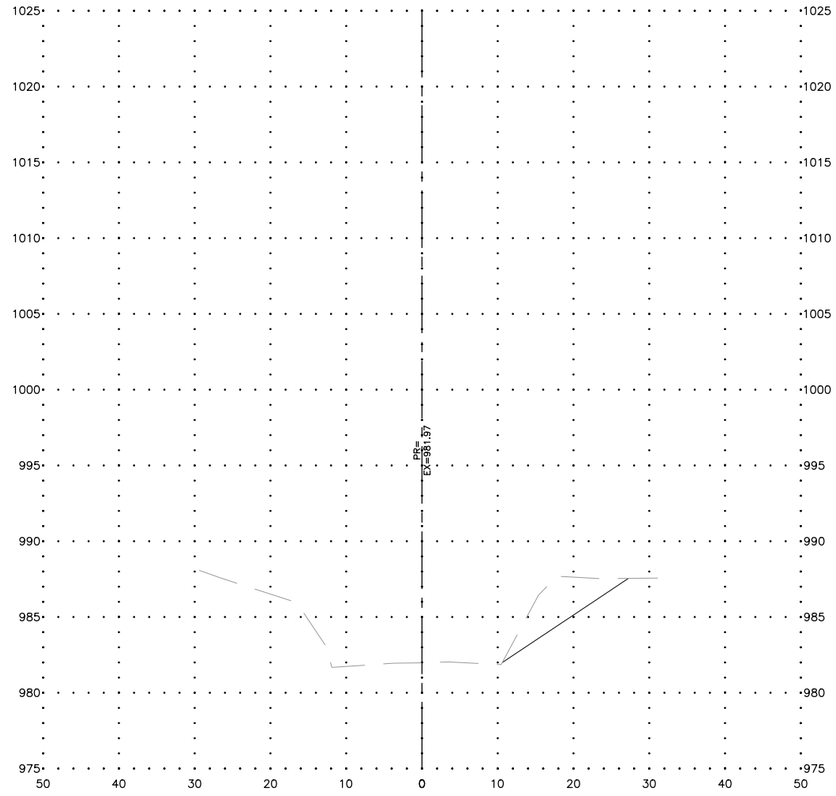
SHEET NUMBER:
51 of 59

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SCALE
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ILLINOIS
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OWNER/DEVELOPER:
CITY OF MONROE
1110 18TH AVENUE
MONROE, WISCONSIN, 53566

PROJECT AND LOCATION:
HONEY CREEK STREAMBANK
STABILIZATION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

REV. NO.	DESCRIPTION	DATE

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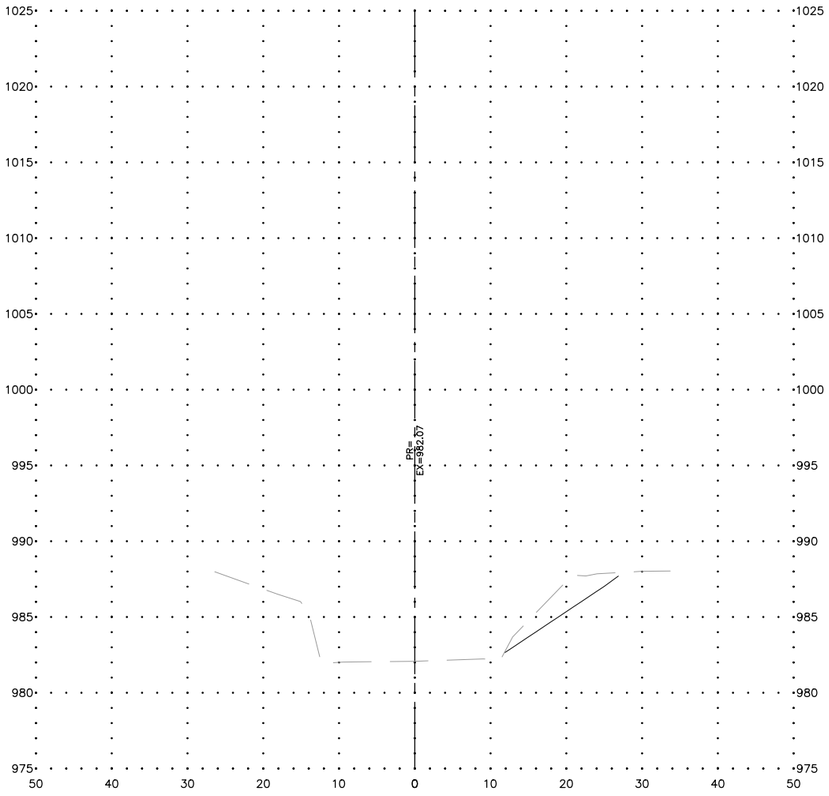
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21-635

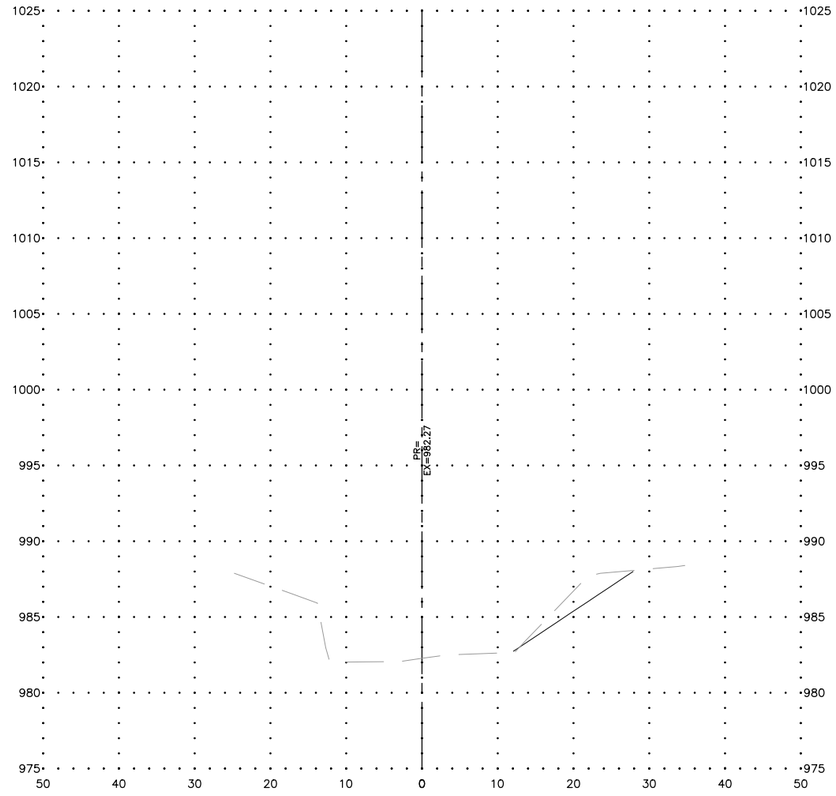
SHEET NUMBER:
52 of 59

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MONROE, WISCONSIN

DRAWN BY: ARS
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REVISIONS

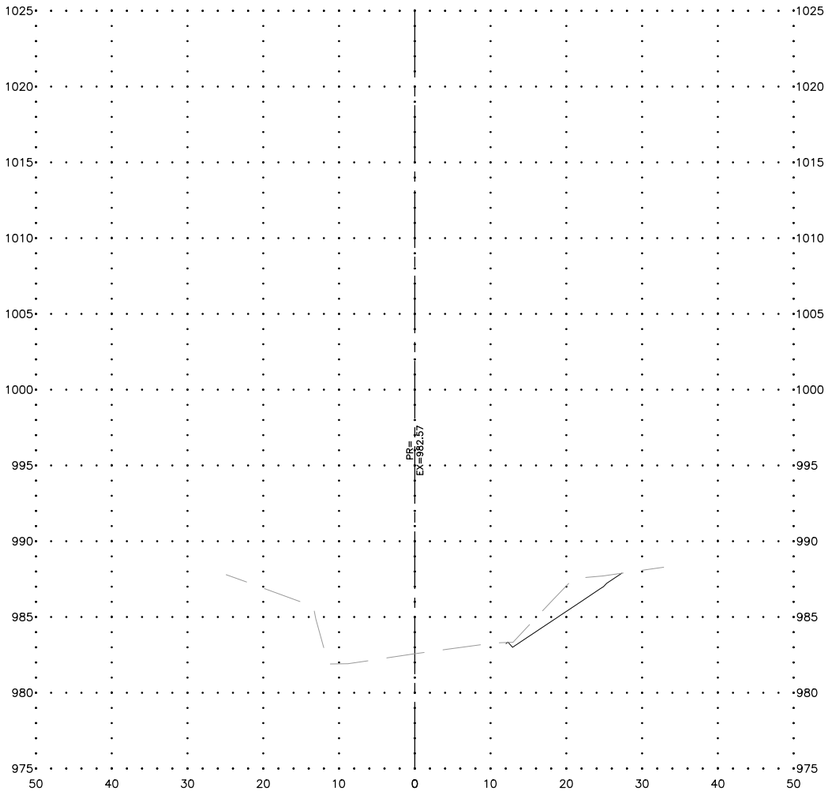
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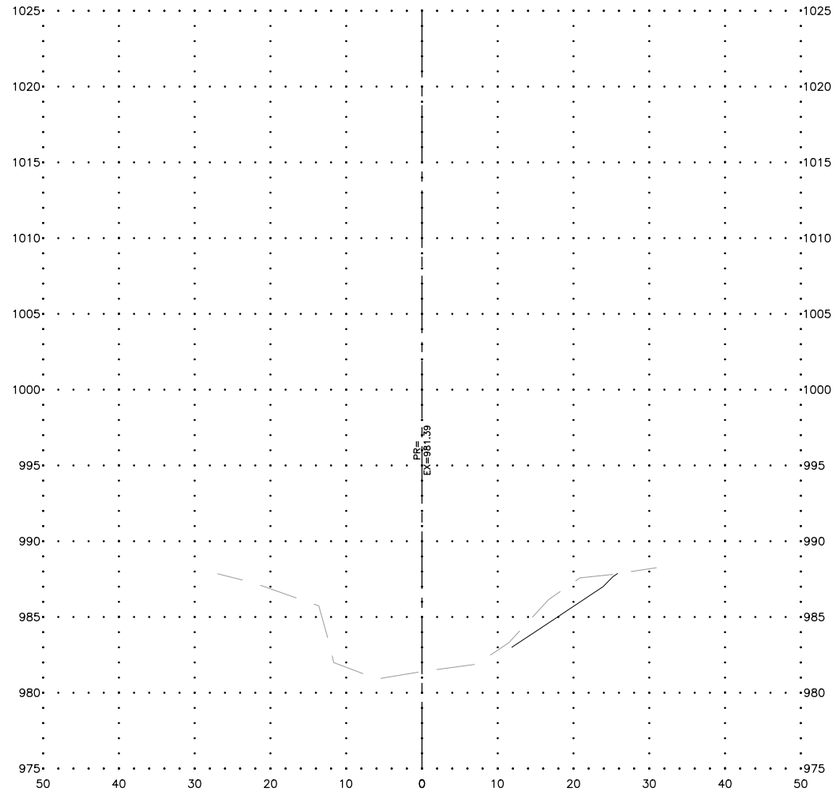
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JOB NUMBER:
21-635

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53 of 59



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STA 117+50

SCALE
HOR 10 0 10 20
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MONROE, WISCONSIN

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REVISIONS

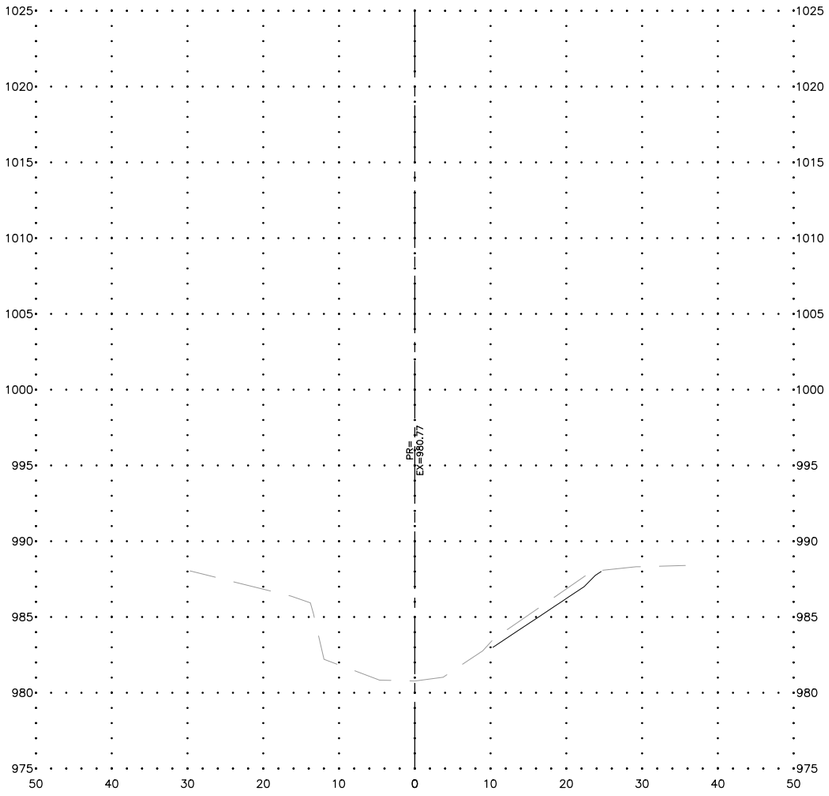
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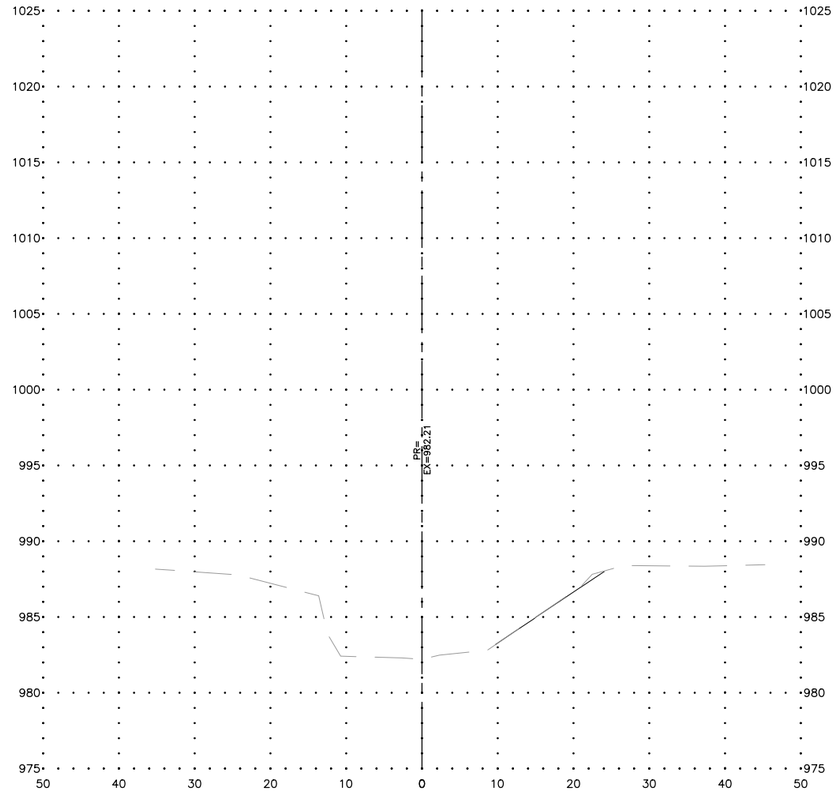
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JOB NUMBER:
21-635

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54 of 59



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SCALE
HOR 10 0 10 20
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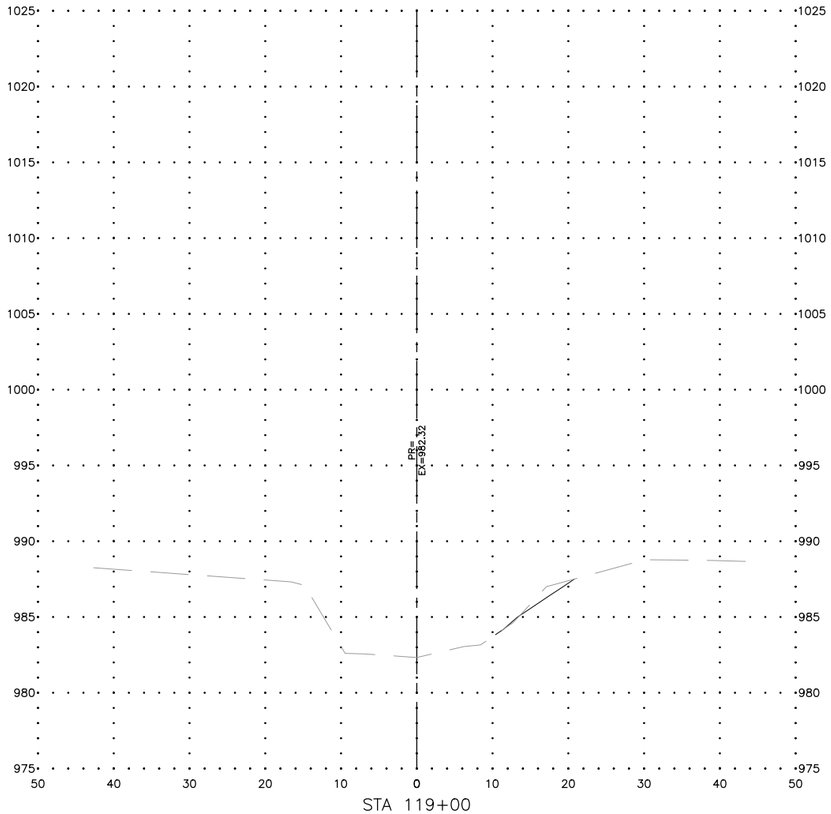
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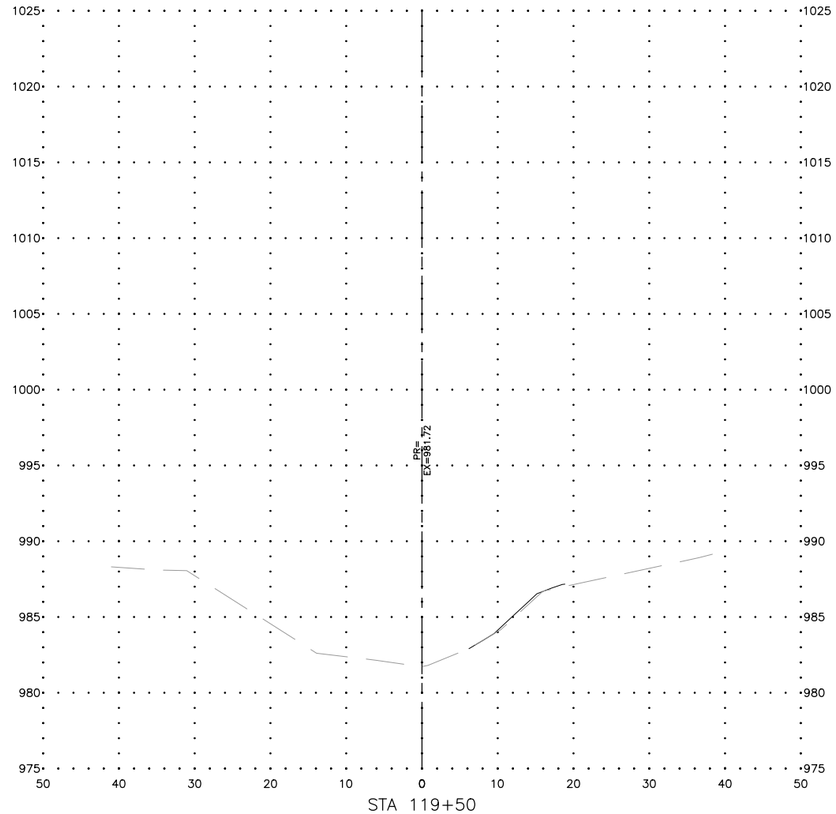
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21-635

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SCALE
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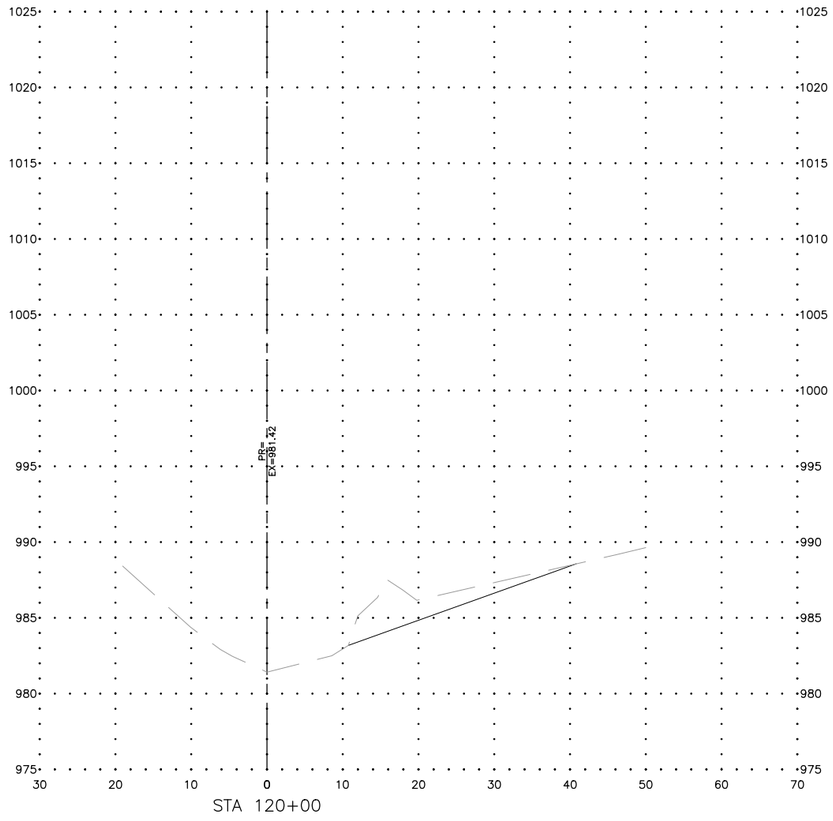
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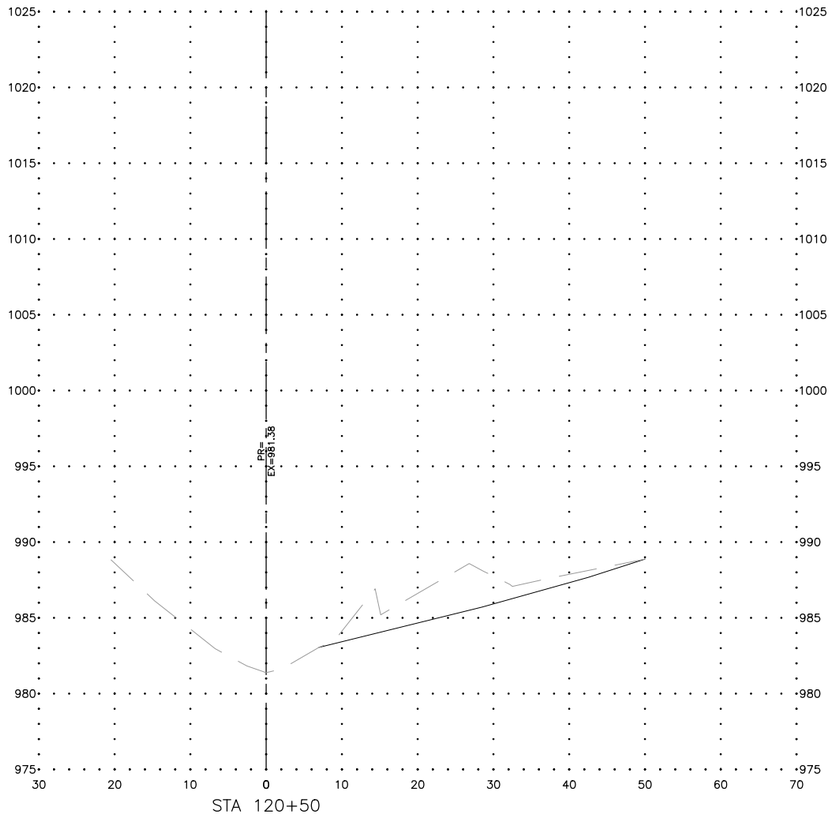
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JOB NUMBER:
21-635

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SCALE
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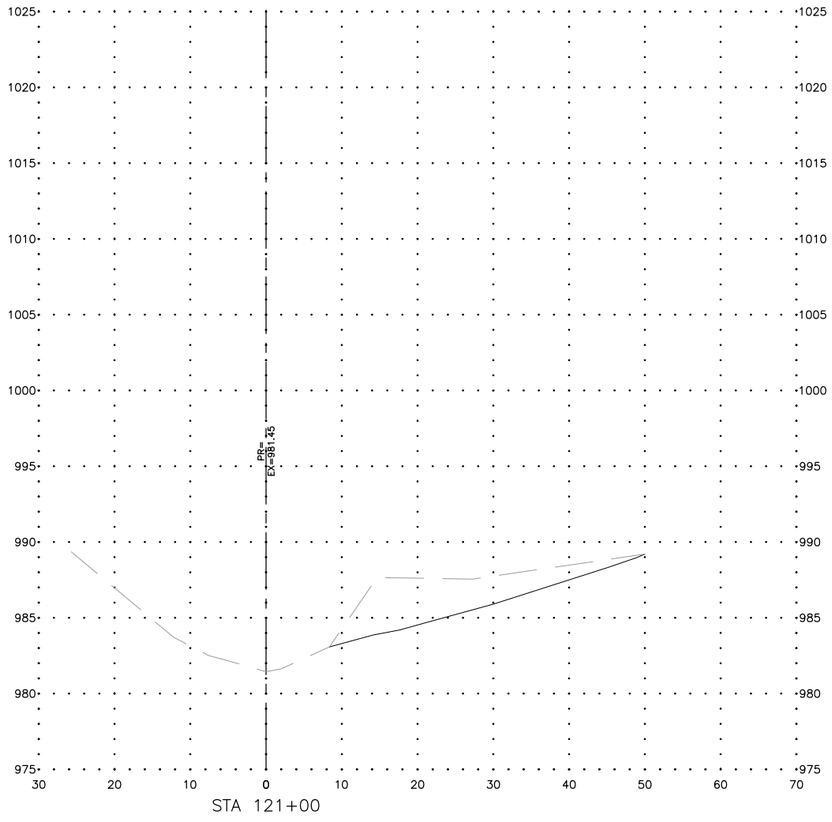
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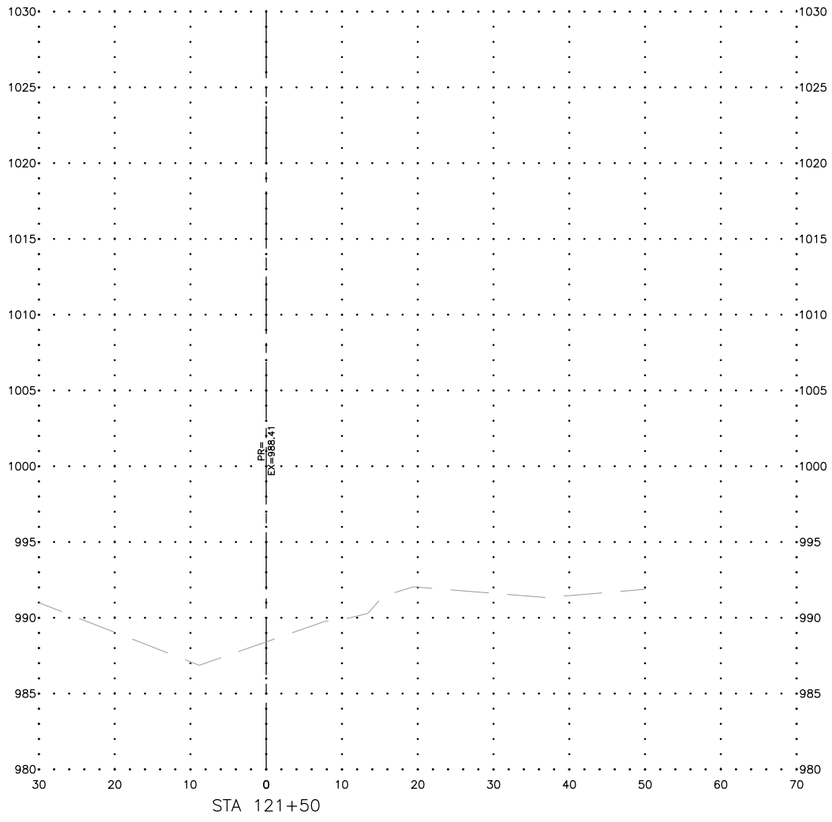
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JOB NUMBER:
21-635

SHEET NUMBER:
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STA 121+50

SCALE
HOR 10 0 10 20
VER 5 0 5 10

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ENGINEERING & ENVIRONMENTAL
ILLINOIS DESIGN FIRM NO. 184-003525
ILLINOIS
IOWA
WISCONSIN

PLOT DATE: 2/11/22

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OWNER/DEVELOPER:
CITY OF MONROE
1110 18TH AVENUE
MONROE, WISCONSIN, 53566

PROJECT AND LOCATION:
HONEY CREEK STREAMBANK
STABILIZATION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS

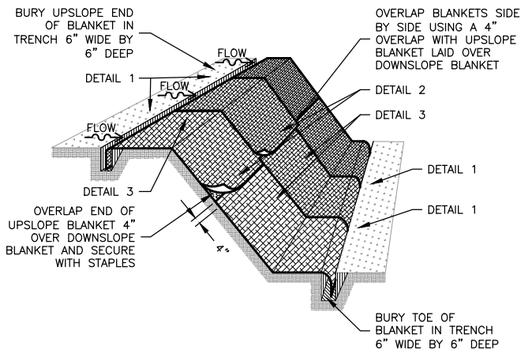
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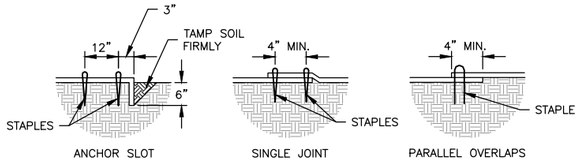
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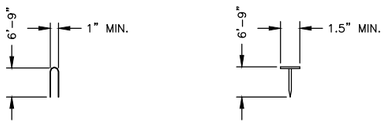
JOB NUMBER:
21-635

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DETAIL 1 DETAIL 2 DETAIL 3



STAPLE DETAIL PUSH PIN DETAIL

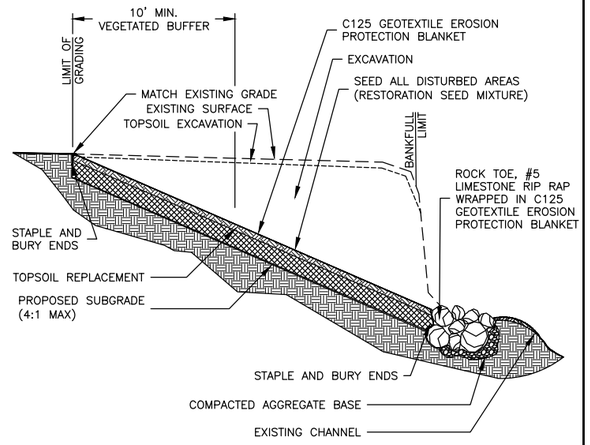
NOTE: STAPLES SHALL BE PLACED IN A DIAMOND PATTERN AT 2 PER S.Y. FOR STITCHED BLANKETS. NON-STITCHED SHALL USE 4 STAPLES PER S.Y. OF MATERIAL. THIS EQUATES TO 200 STAPLES WITH STITCHED BLANKET AND 400 STAPLES WITH NON-STITCHED BLANKET PER 100 S.Y. OF MATERIAL.

STAPLE OR PUSH PIN LENGTHS SHALL BE SELECTED BASED ON SOIL TYPE AND CONDITIONS. (MINIMUM STAPLE LENGTH IS 6".)

EROSION CONTROL MATERIAL SHALL BE PLACED IN CONTACT WITH THE SOIL OVER A PREPARED SEEDBED.

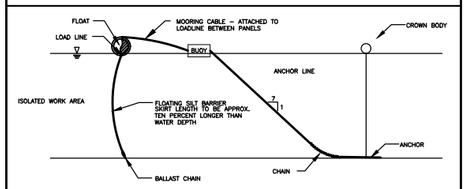
ALL ANCHOR SLOTS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

EROSION CONTROL BLANKET DETAIL
N.T.S.

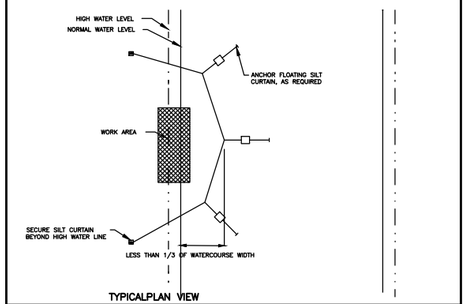


BANK RECONTOUR DETAIL
N.T.S.

FLOATING SILT CURTAIN - TYPICAL LAYOUT



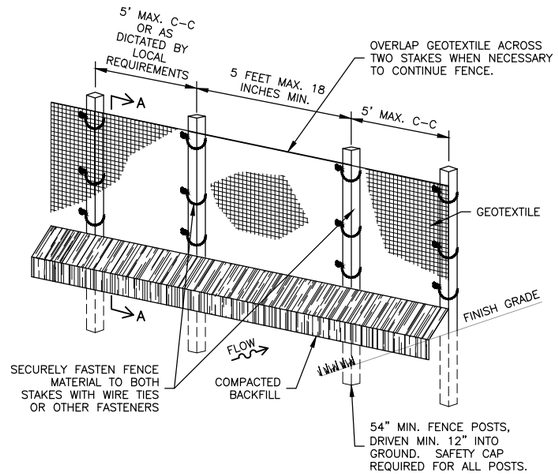
TYPICAL COMPONENTS / ANCHORAGE SYSTEM



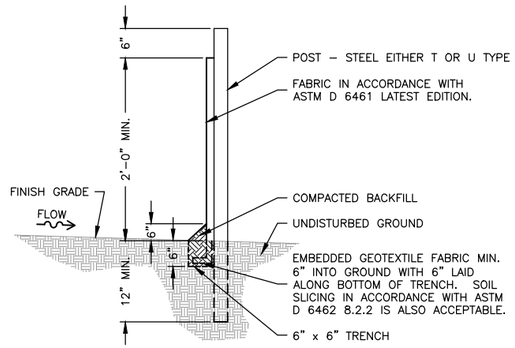
TYPICALPLAN VIEW

Maximum flow for waterbody shall be less than 5fps.
Isolated work area shall not exceed more than 1/3 stream width.
Silt curtain shall be placed parallel to stream flow.

REFERENCE			STANDARD DWG. NO.
Project			IUM-617A
Designed	Date		SHEET 1 OF 1
Checked	Date		DATE 1-06-2012
Approved	Date		



ELEVATION



SECTION A - A

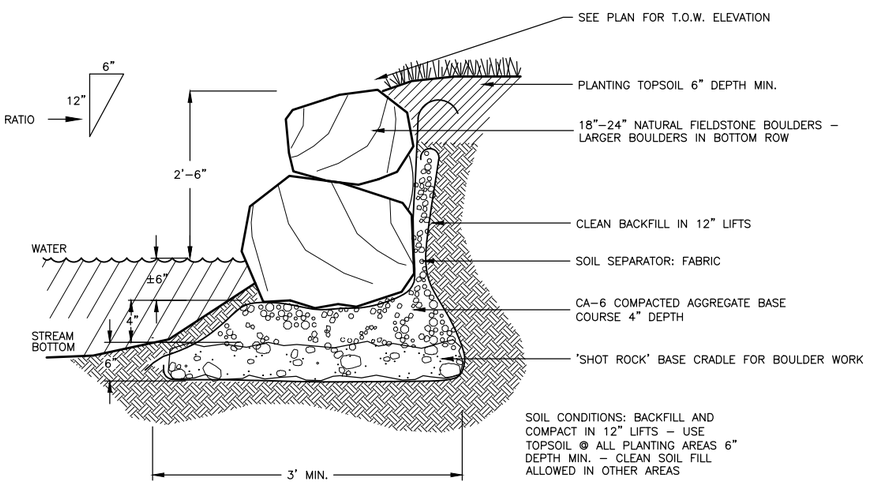
NOTE: INSTALLATION SHALL COMPLY WITH ASTM D 6462 LATEST EDITION.

GEOTEXTILE TO BE FASTENED SECURELY TO STAKES.

WHEN TWO SECTIONS OF GEOTEXTILE ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 18 to 60 INCHES AS SHOWN.

MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE SWPPP. COLLECTED MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE WITHOUT WIRE SUPPORT DETAIL
N.T.S.



BOULDER RETAINING WALL DETAIL
N.T.S.

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ILLINOIS IOWA WISCONSIN

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MONROE, WISCONSIN, 53566

PROJECT AND LOCATION:
HONEY CREEK STREAMBANK STABILIZATION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 02/11/2022
SCALE: AS NOTED

REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING: DETAILS 1
SET TYPE: PERMIT SET
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JOB NUMBER: 21-635
SHEET NUMBER: 59 of 59

PLOT DATE: 2/11/22

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NRCS Streambank and Irrigation Ditch Erosion Estimator (Direct Volume Method)

Farmer / Cooperator Name: City of Monroe
Tract Number:

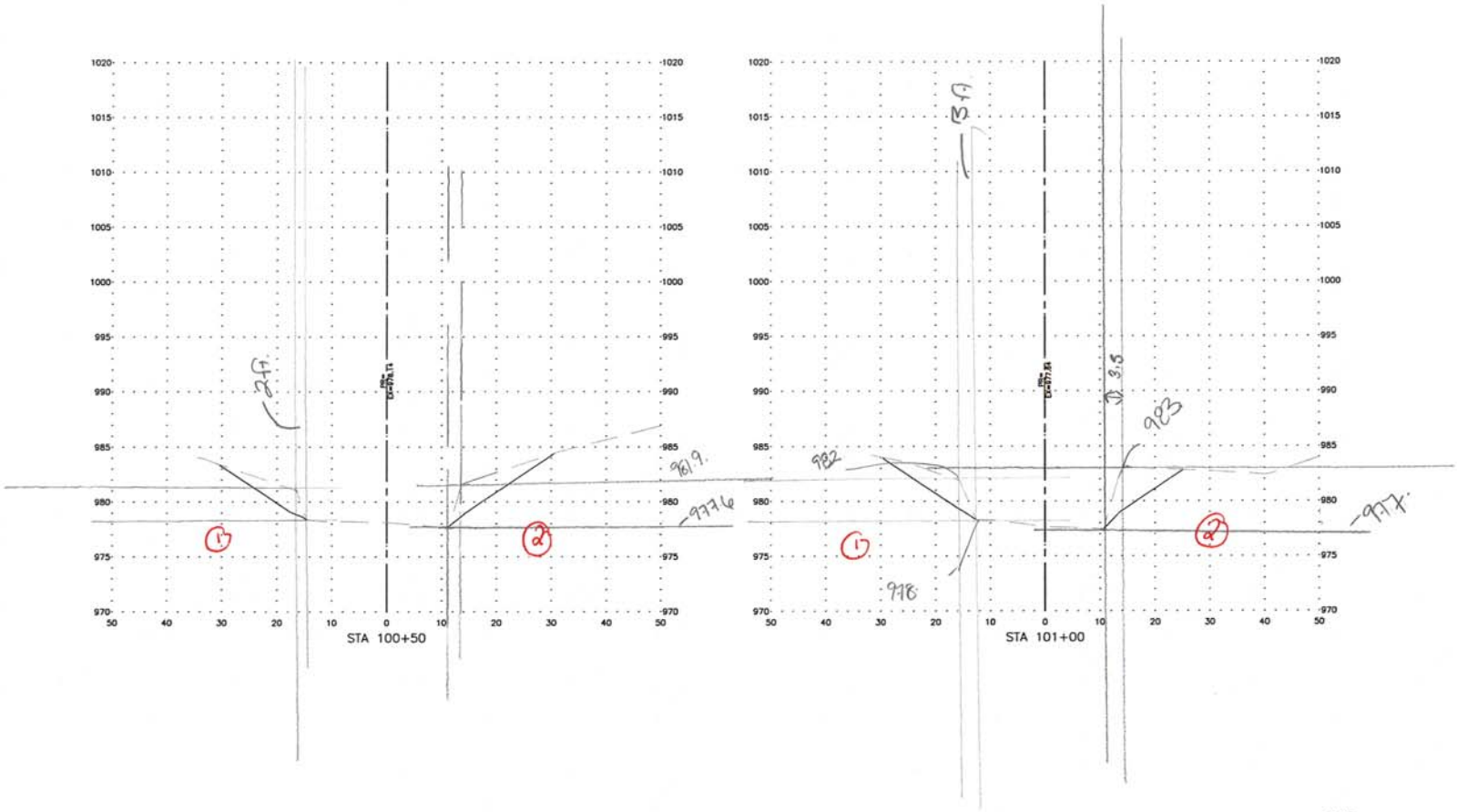
Evaluated By: JBB
Evaluation Date: March 7, 2022

Eroding Strmbnk Reach #; or Ditch Side/Bottom	Eroding Bank or Ditch Length (Feet)	Eroding Bank Height; or Ditch Bottom Width* (Feet)	Area of Eroding Strmbank or Ditch (FT^2)	Lateral or Ditch Bottom Recession Rate (Estimated) (FT / Year)	Estimated Volume (FT^3) Eroded Annually	Soil Texture	Approximate Pounds of Soil per FT^3	Estimated Soil Loss (Tons/Year)	Percentage P (%)	Tons/Year Phosphorus
1	350.0	5.1	1,789	0.15	268.3	Silt Loam	85	11.4	0.07	0.0079812
2	300.0	5.9	1,782	0.20	356.4	Silt Loam	85	15.1	0.06	0.0090882
3	170.0	8.2	1,397	0.15	209.6	Silt Loam	85	8.9	0.07	0.0062359
4	250.0	6.3	1,575	0.30	472.5	Silt Loam	85	20.1	0.07	0.0140569
5A	95.0	6.6	627	0.30	188.1	Silt Loam	85	8.0	0.08	0.0063954
5B	55.0	13.9	765	0.30	229.4	Silt Loam	85	9.7	0.08	0.0077979
6	205.0	7.0	1,435	0.30	430.5	Silt Loam	85	18.3	0.06	0.0109778
7	267.0	7.7	2,048	0.20	409.6	Silt Loam	85	17.4	0.08	0.0139257
8	500.0	5.3	2,635	0.15	395.3	Silt Loam	85	16.8	0.05	0.0083991
9	525.0	6.3	3,308	0.30	992.3	Silt Loam	85	42.2	0.06	0.0253024
10A	150.0	10.9	1,635	0.30	490.5	Silt Loam	85	20.8	0.06	0.0125078
10B	150.0	7.7	1,151	0.30	345.2	Silt Loam	85	14.7	0.06	0.0088013
11	250.0	11.6	2,905	0.15	435.8	Silt Loam	85	18.5	0.06	0.0111116
12A	150.0	8.1	1,215	0.20	243.0	Silt Loam	85	10.3	0.06	0.0061965
12B	25.0	19.8	494	0.30	148.1	Silt Loam	85	6.3	0.06	0.0037772
13	61.0	7.8	473	0.15	70.9	Silt Loam	85	3.0	0.06	0.0018083
3,503.0			Total Estimated Annual Streambank or Ditch Erosion Soil Loss (Tons):					241.6		
			Total Estimated Annual Streambank or Ditch Erosion Soil Loss (Tons):							0.1544

* Eroding bank height is measured along the bank, not the vertical height of bank.

$$\frac{\text{Eroding Bank/Ditch Length} \times \text{Eroding Bank Ht or Ditch Bottom Width} \times \text{Lateral or Ditch Bottom Recession Rate (FT/YR)} \times \text{Soil Weight (lbs/ft}^3\text{)}}{2000} = \text{Estimated Soil Loss Per Year (Tons)}$$

Estimated Phosphorus Loss (lbs) = 308.73
WQT (TR= 3) = 102.91



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ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS
IOWA
WISCONSIN

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MONROE, WISCONSIN, 53566

PROJECT AND LOCATION:
HONEY CREEK STREAMBANK
STABILIZATION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 01/18/2022
SCALE: AS NOTED

REVISIONS

REV. NO.	DESCRIPTION	DATE

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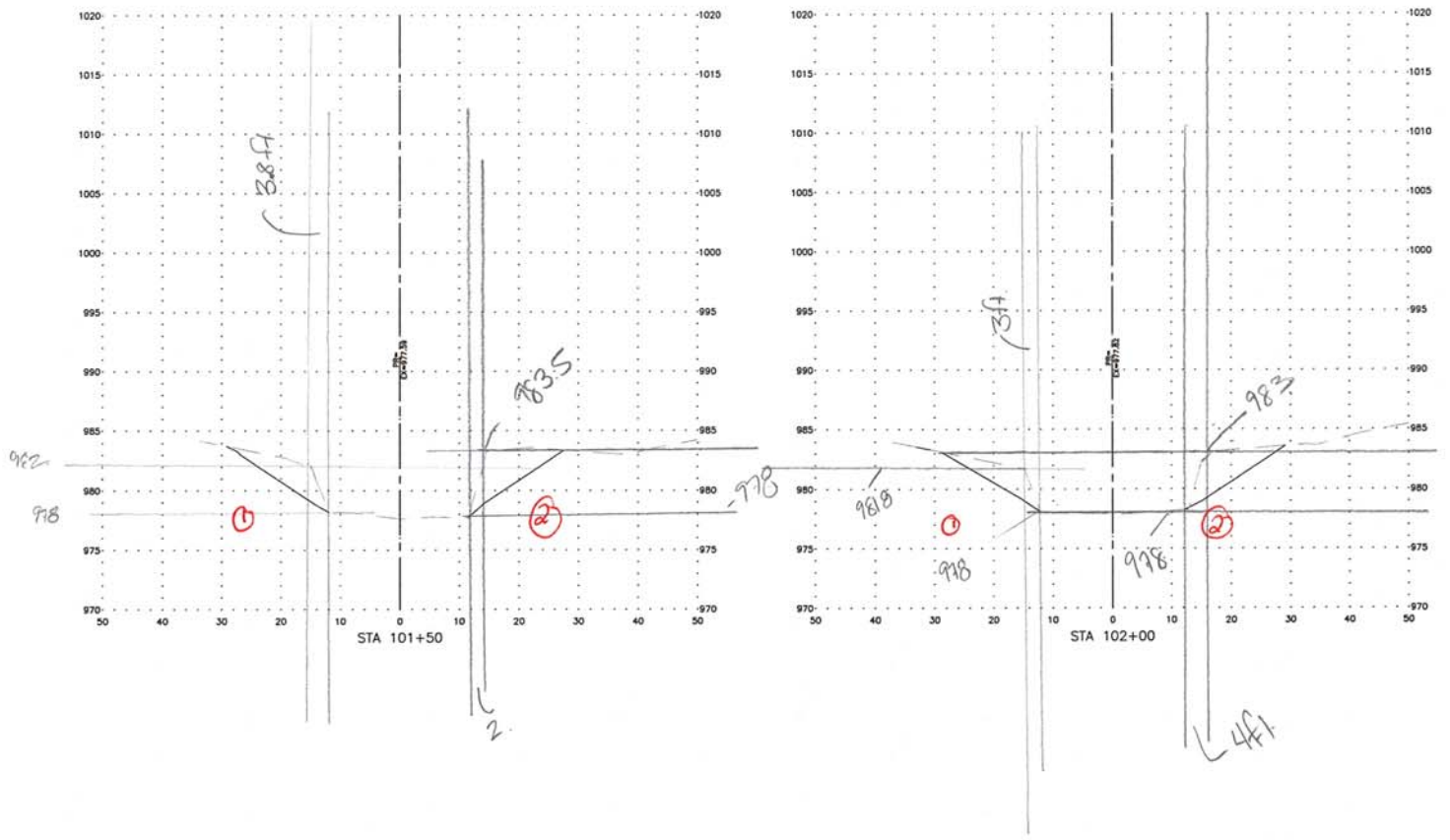
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JOB NUMBER:
21-635

SHEET NUMBER:
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PLOT DATE: 1/18/22

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ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS
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DATE: 01/18/2022
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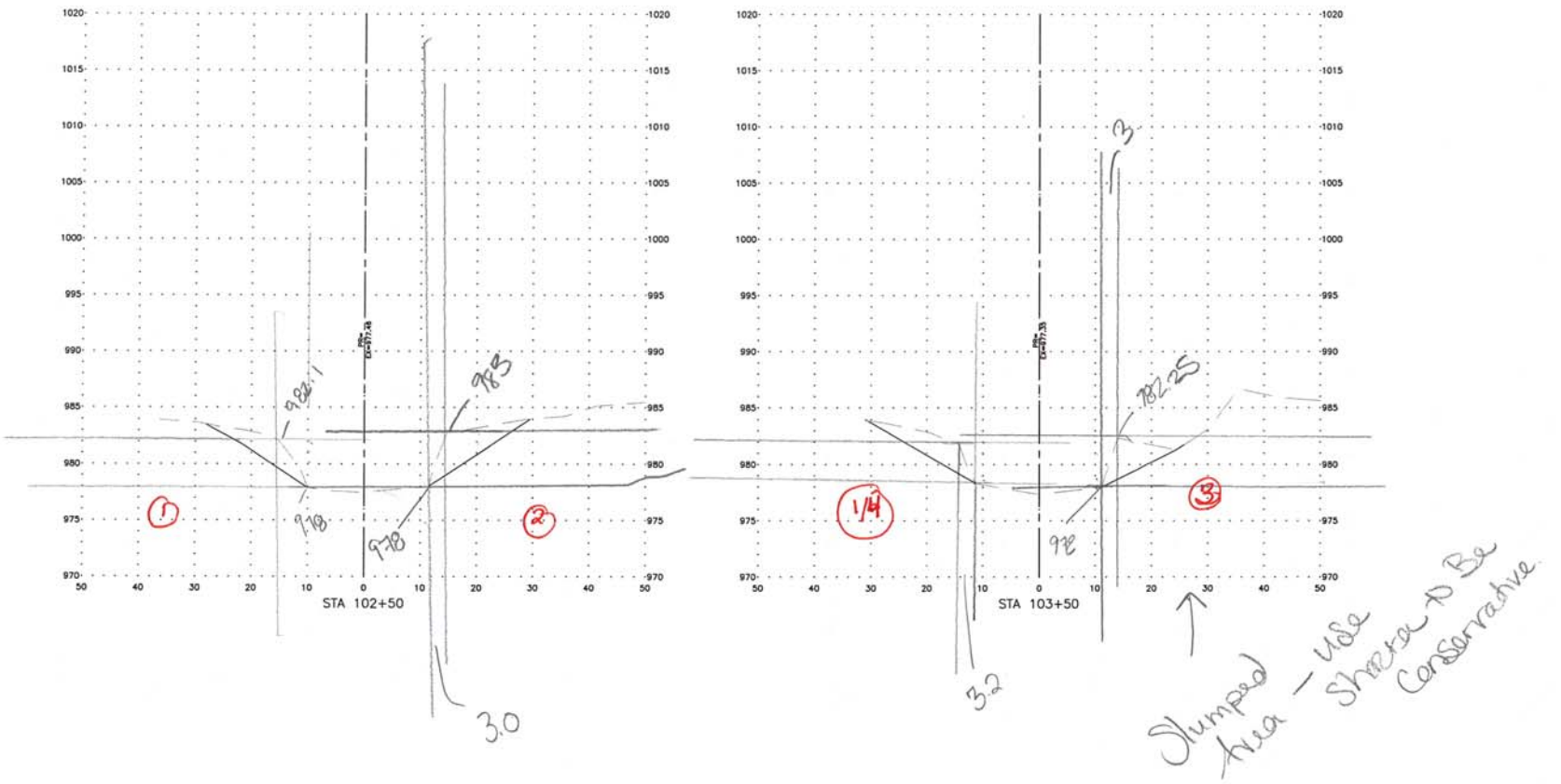
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21-635

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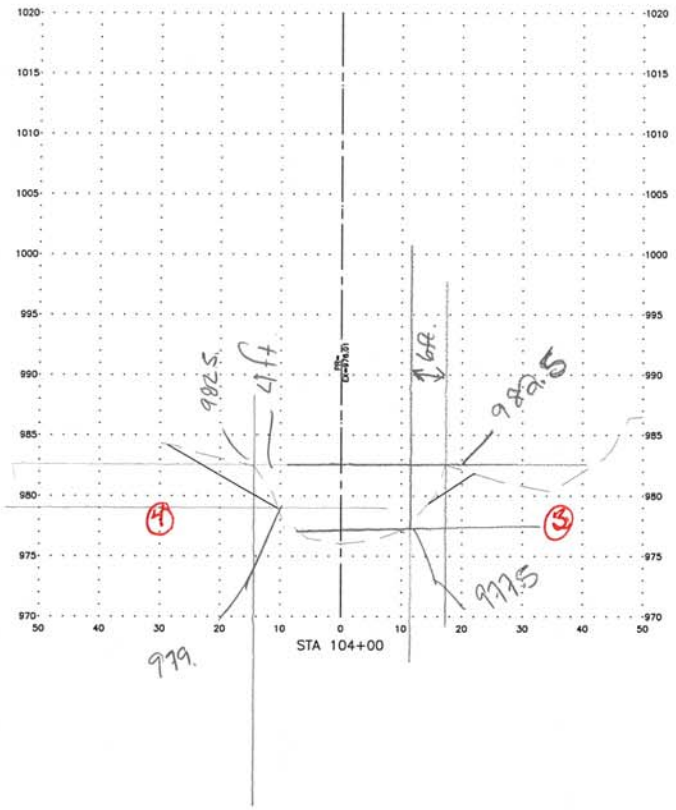
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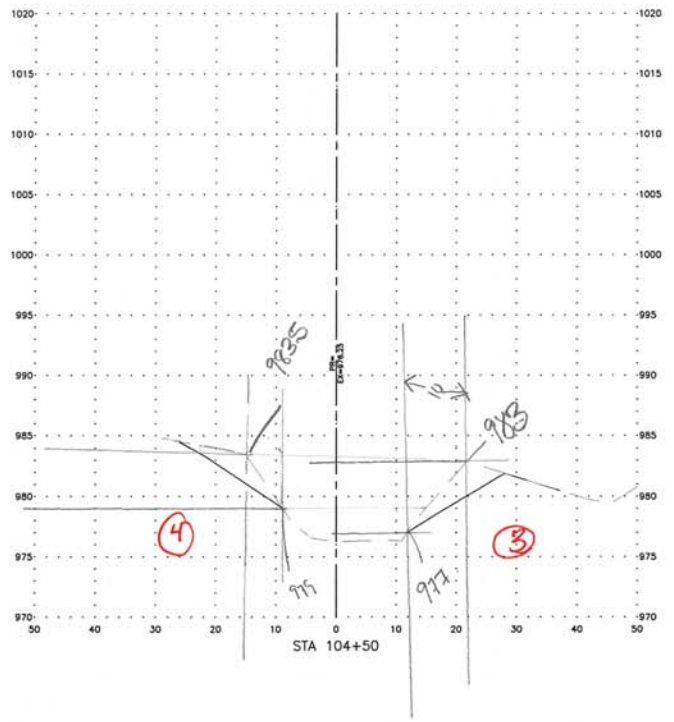
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21-635

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ILLINOIS DESIGN FIRM NO. 184-003525

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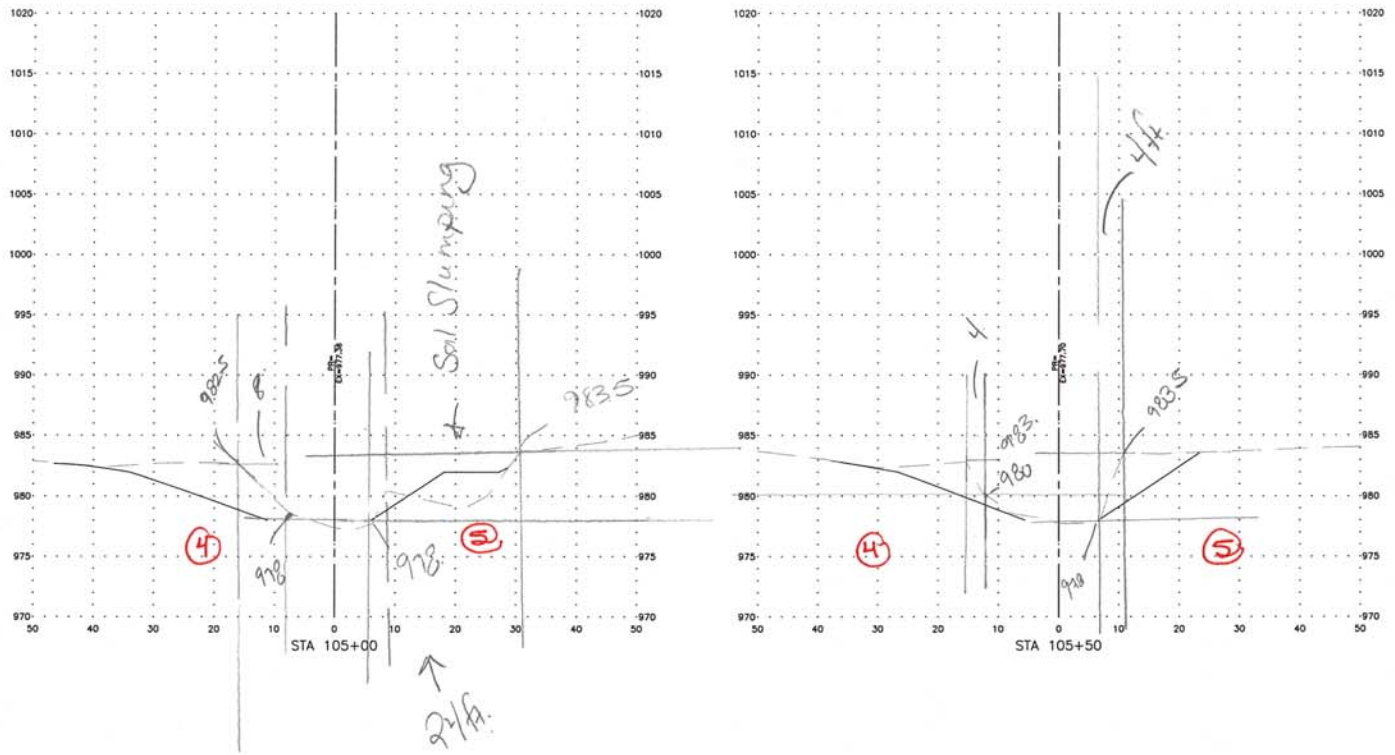
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ILLINOIS DESIGN FIRM NO. 184-003525
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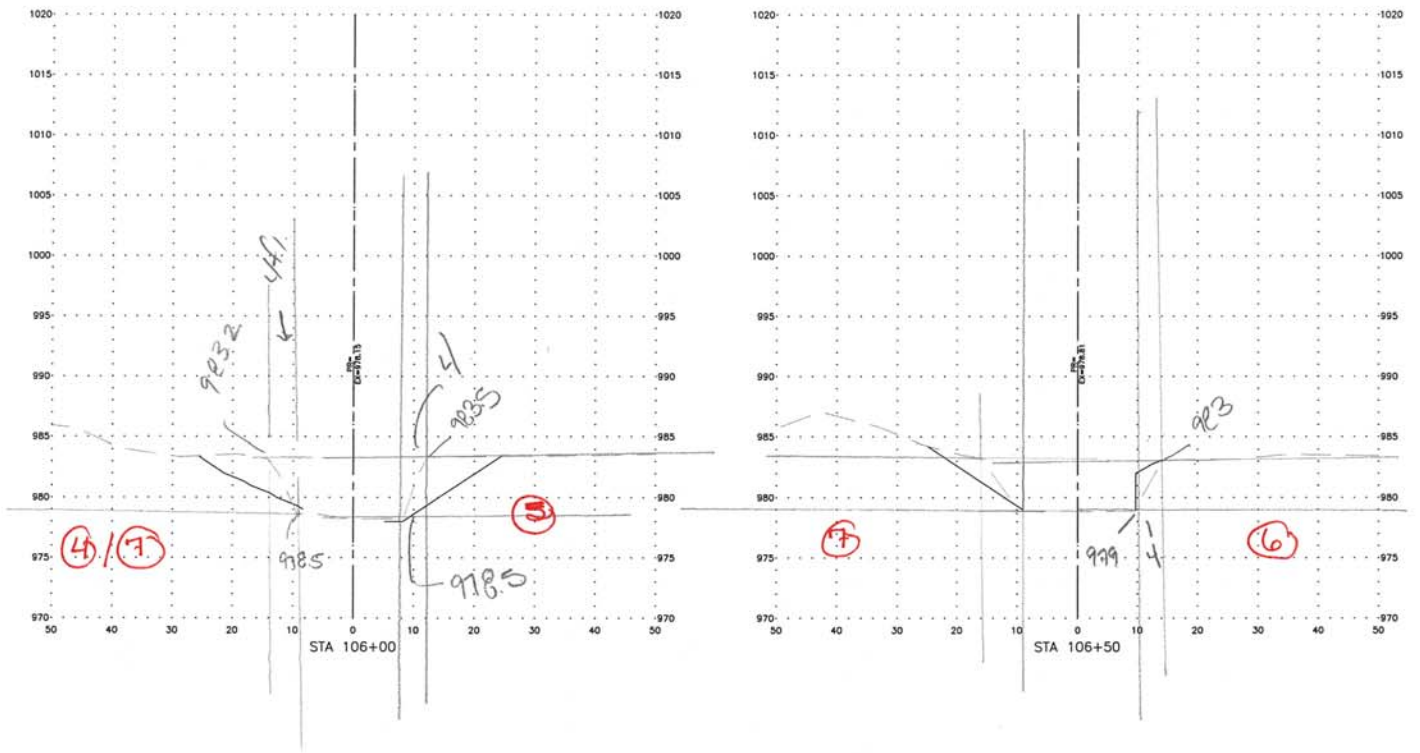
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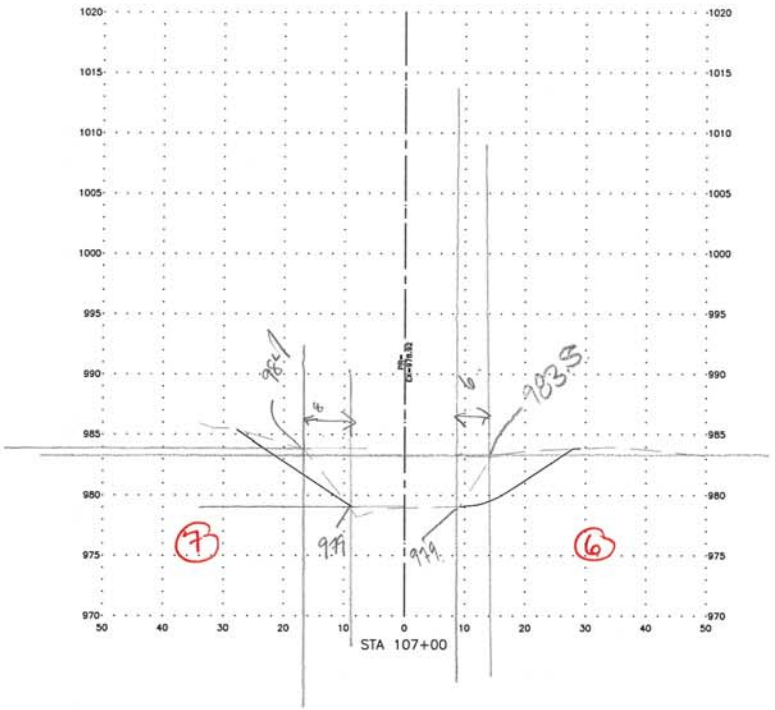
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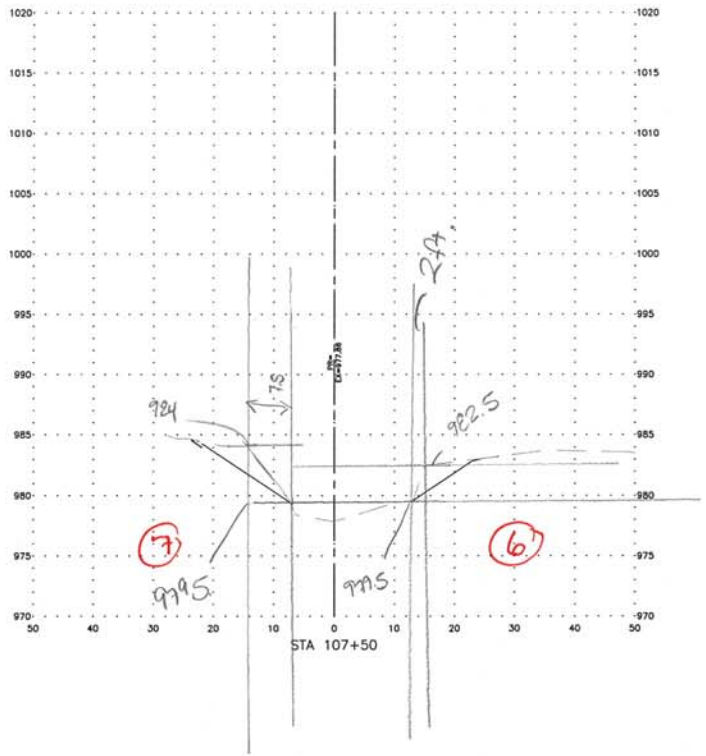
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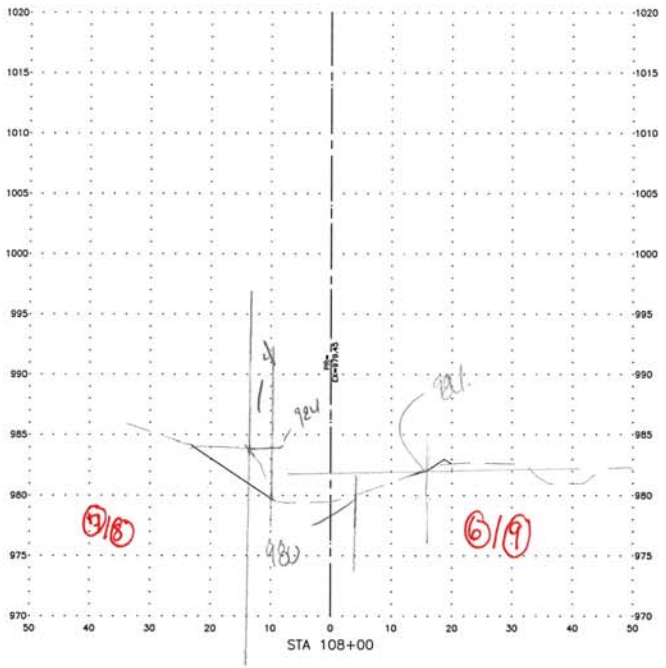
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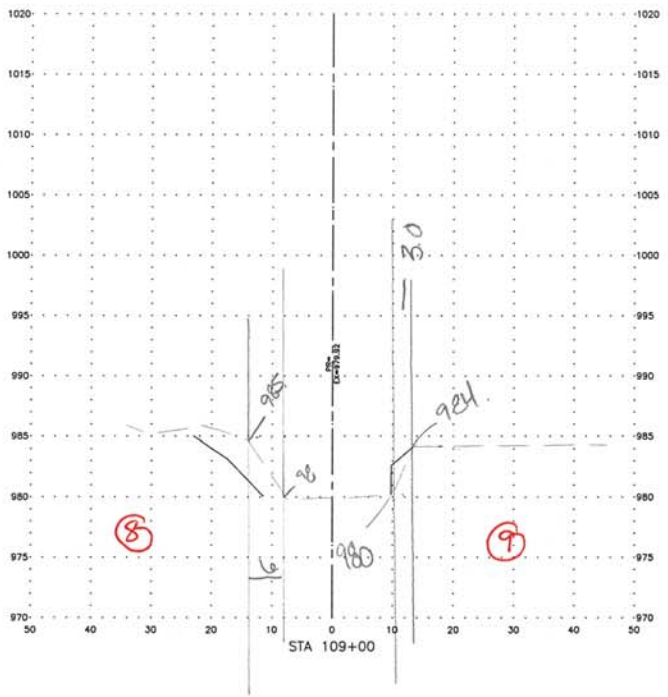
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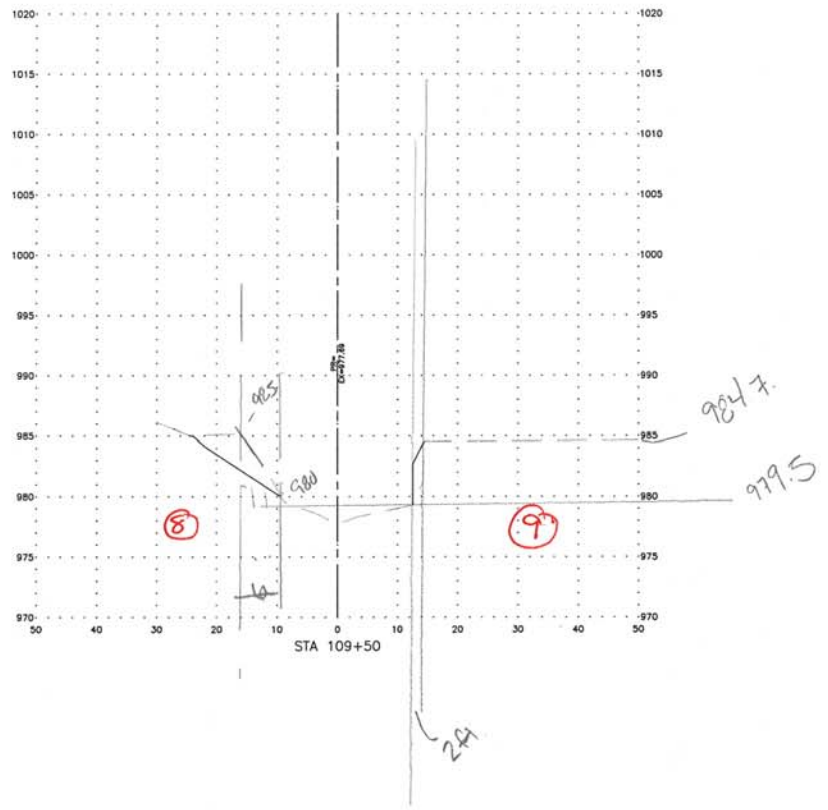
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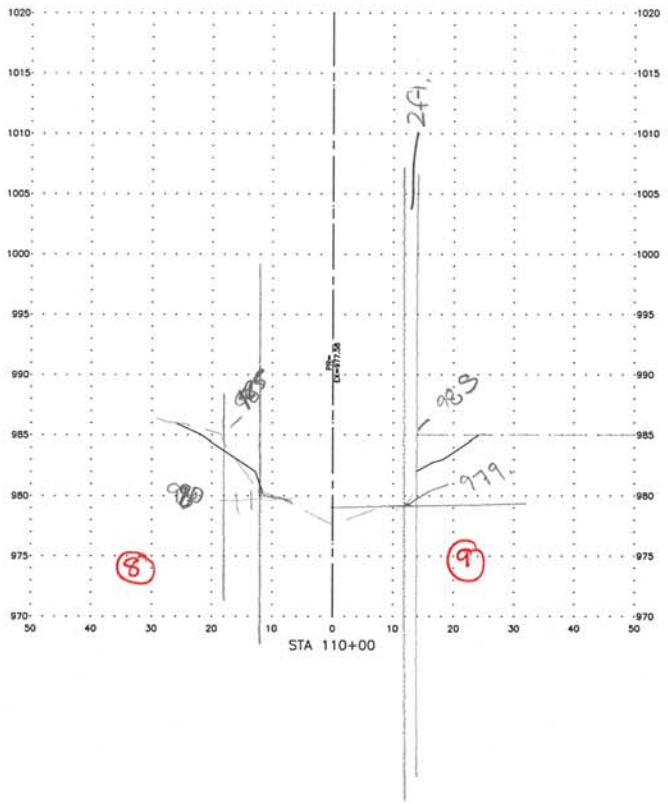
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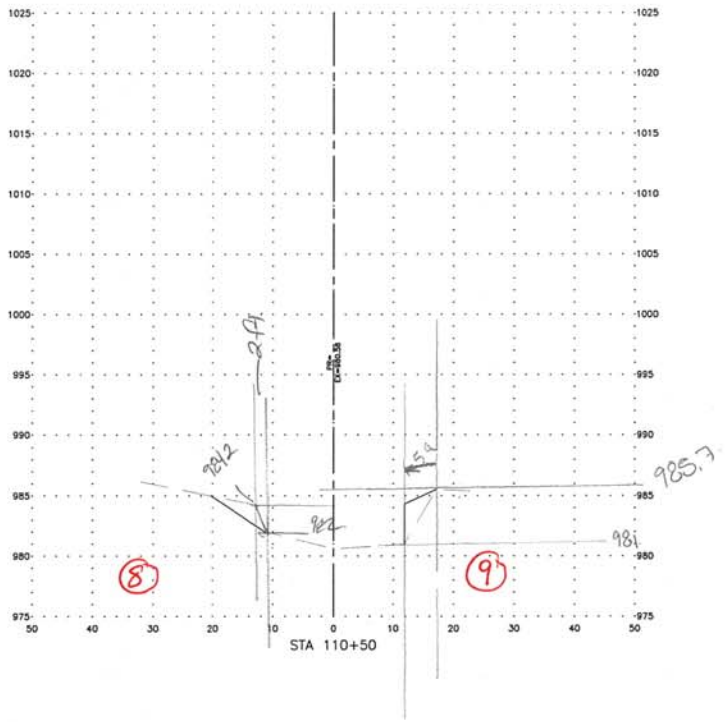
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SET TYPE: PERMIT SET

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DRAWN BY: ARS
APPROVED BY: JWM
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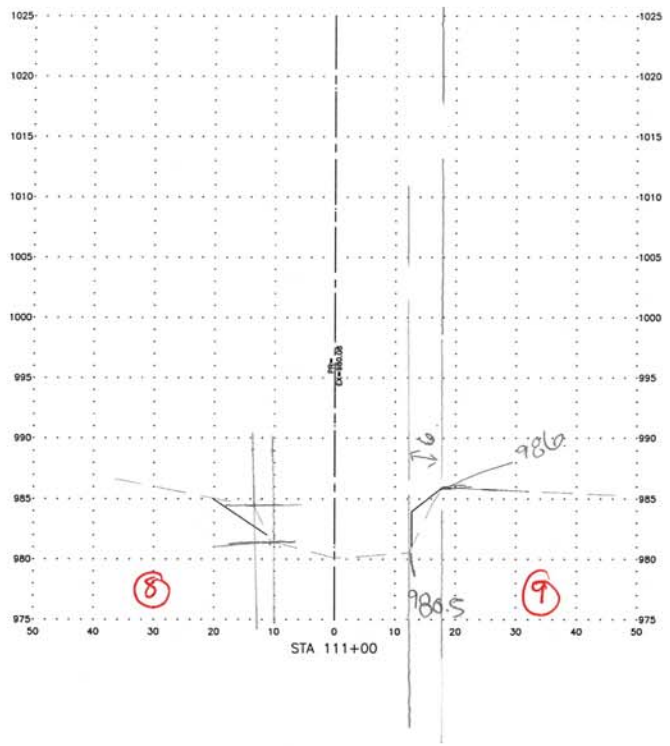
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ILLINOIS DESIGN FIRM NO. 184-003525
ILLINOIS
IOWA
WISCONSIN

OWNER/DEVELOPER:
CITY OF MONROE
1110 18TH AVENUE
MONROE, WISCONSIN, 53566

PROJECT AND LOCATION:
HONEY CREEK STREAMBANK
STABILIZATION IMPROVEMENTS
MONROE, WISCONSIN

DRAWN BY: ARS
APPROVED BY: JWM
DATE: 01/18/2022
SCALE: AS NOTED

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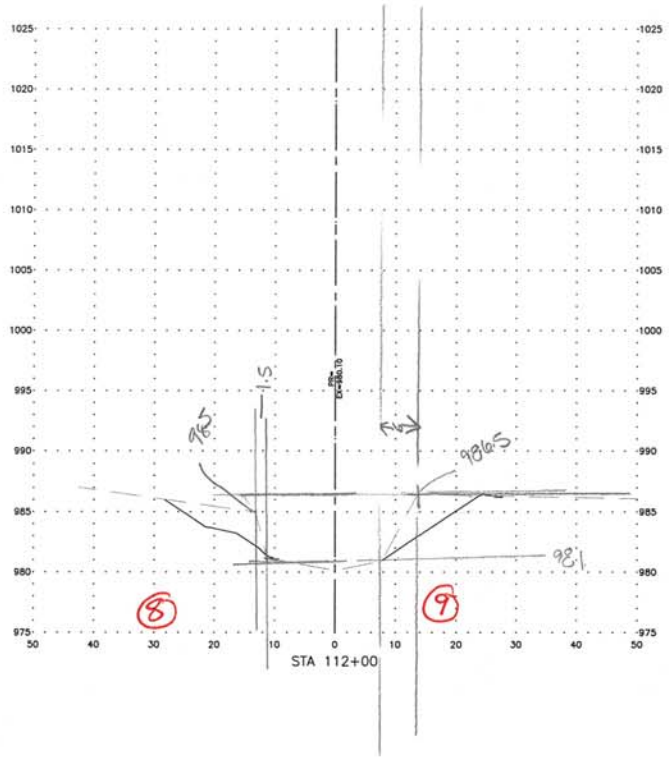
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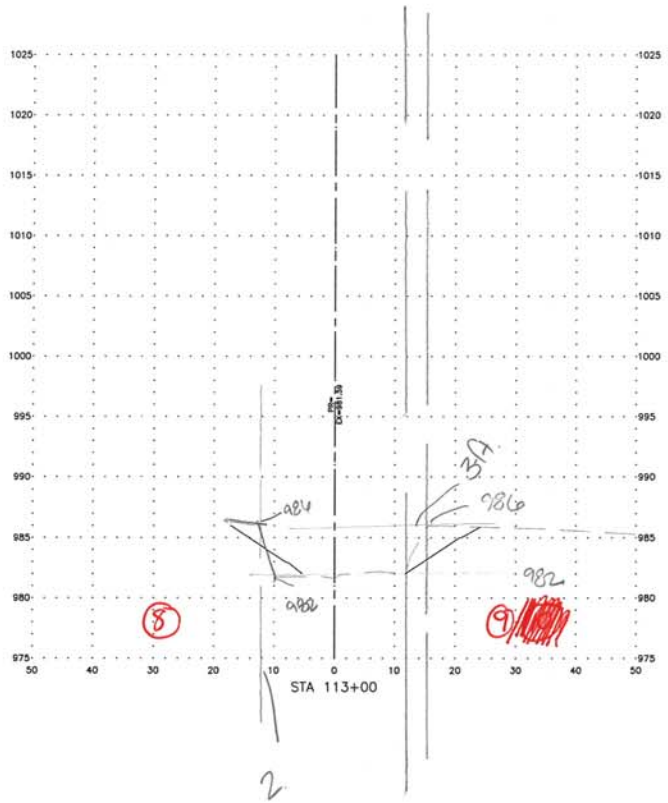
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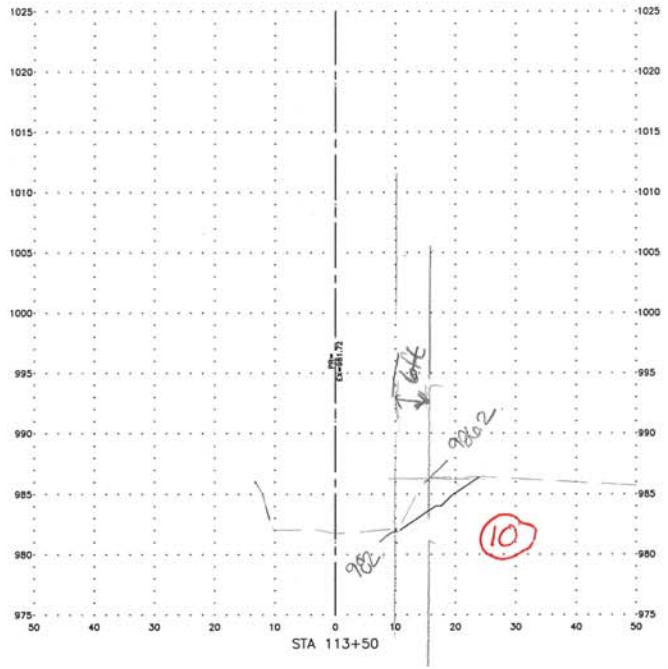
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MONROE, WISCONSIN

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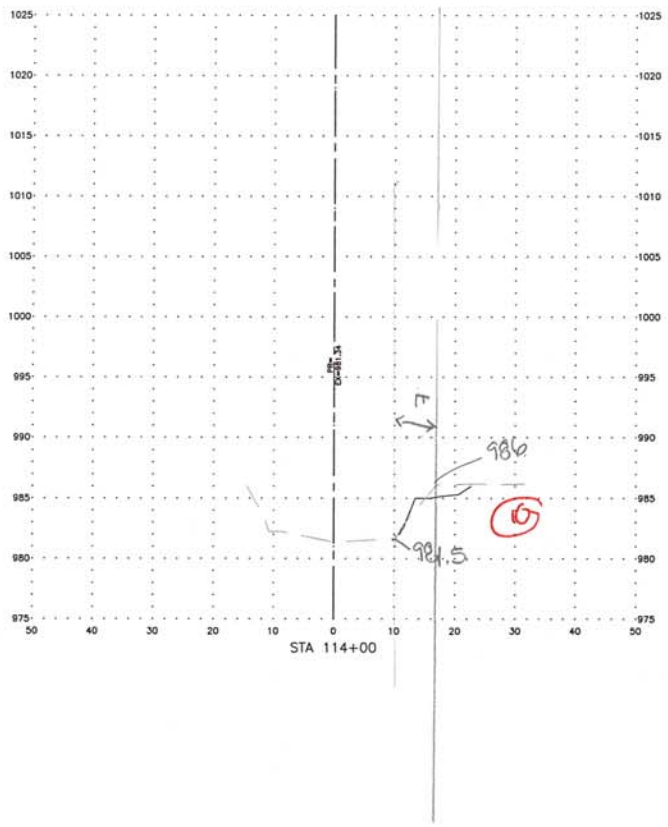
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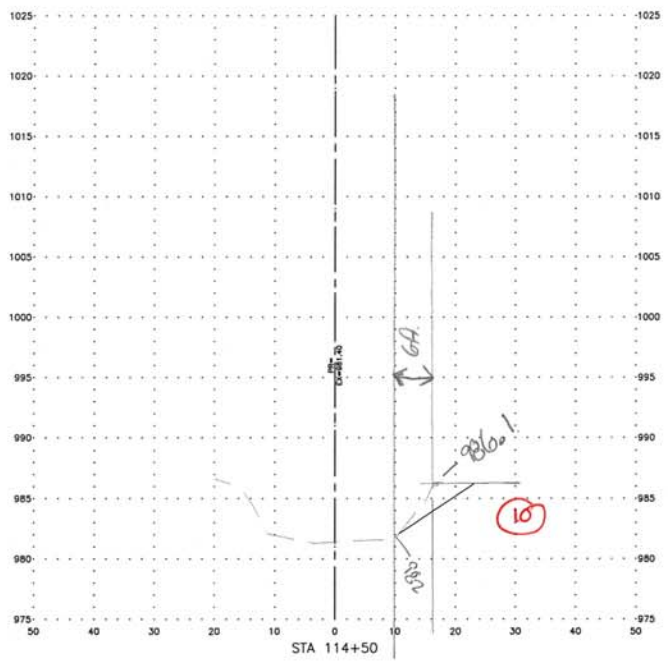
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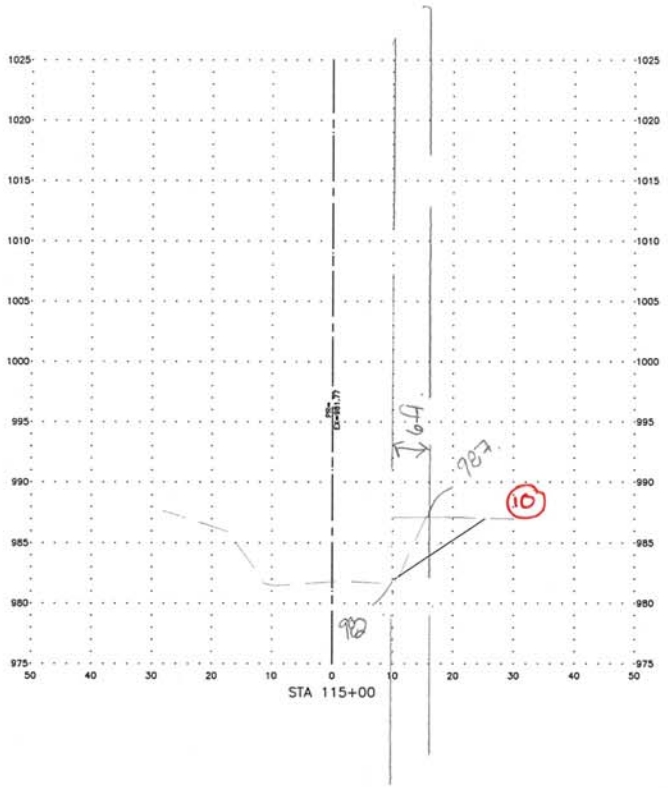
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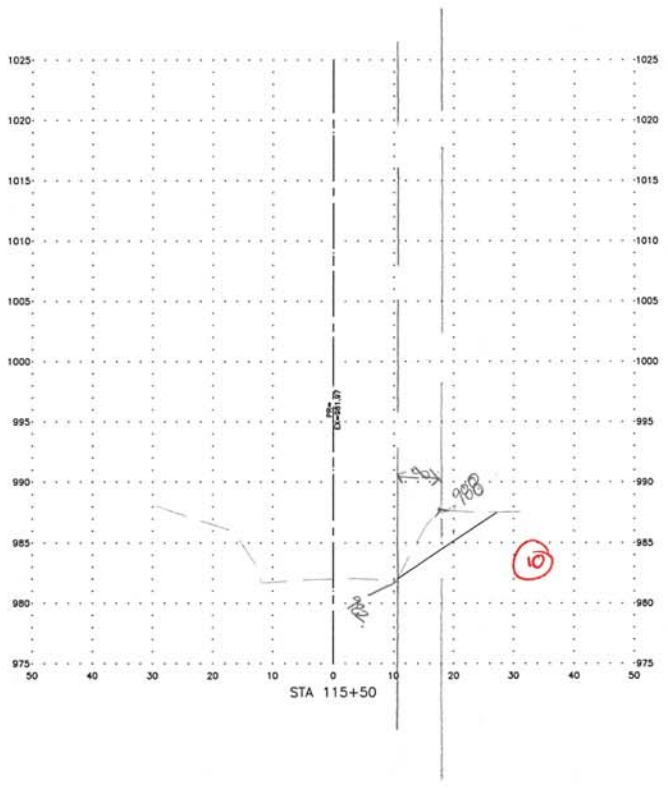
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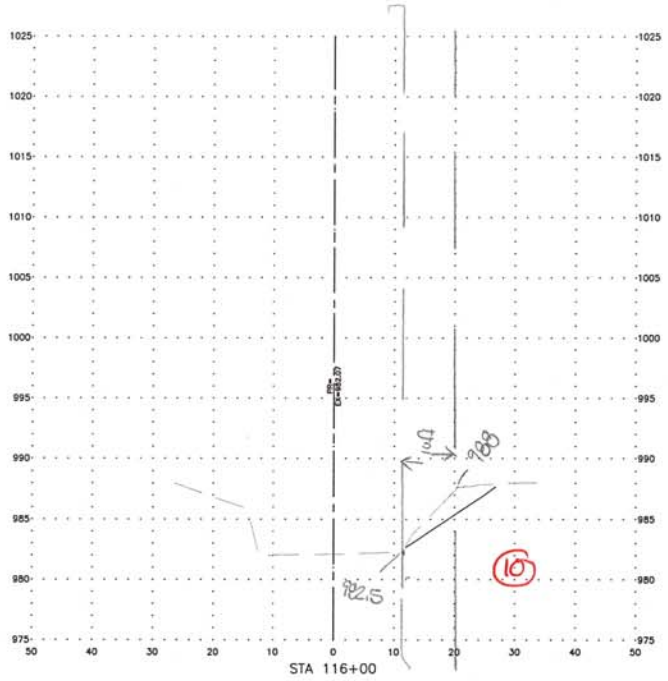
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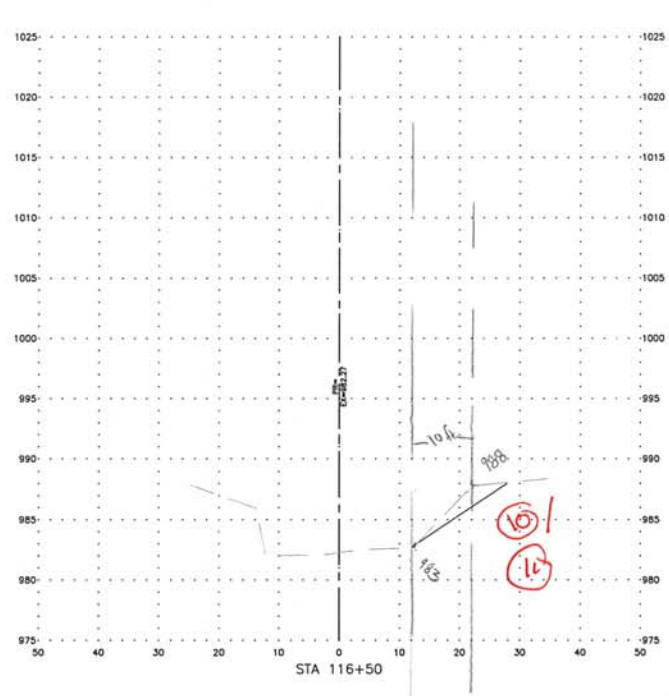
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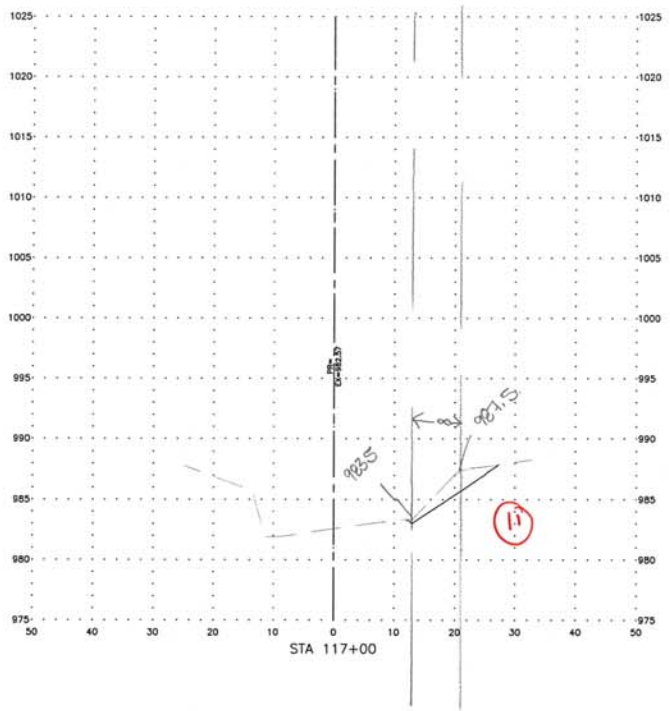
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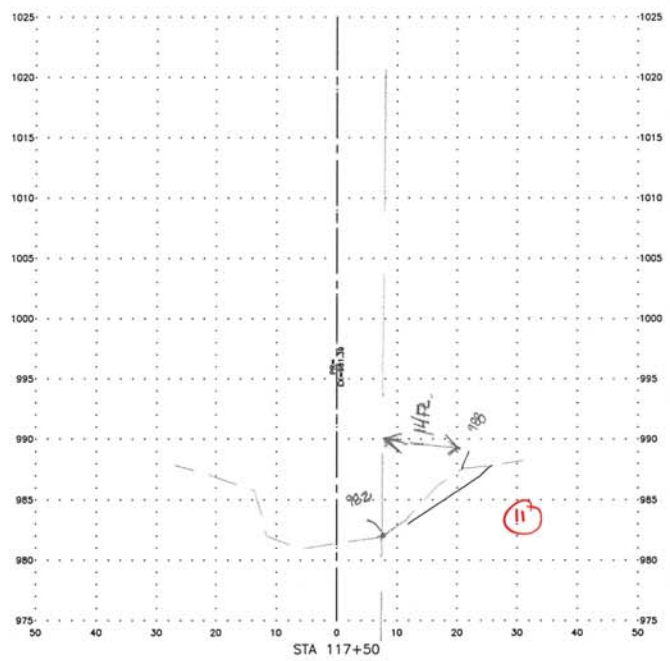
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DRAWN BY: ARS
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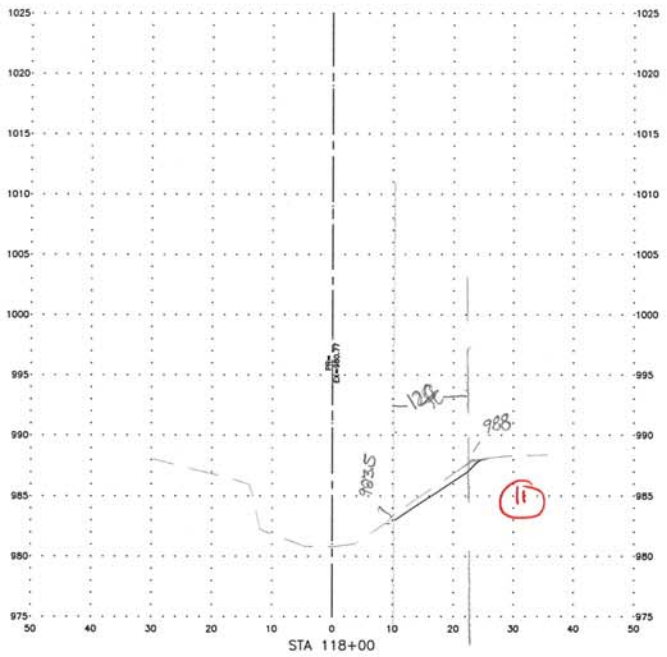
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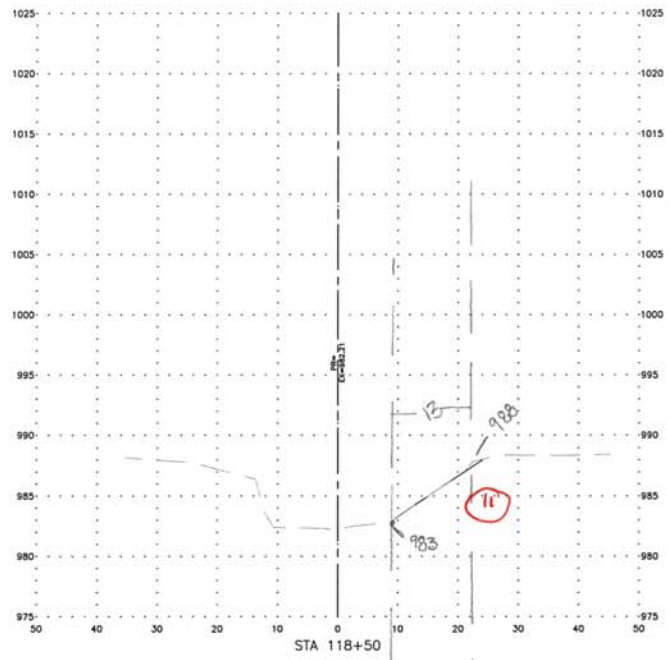
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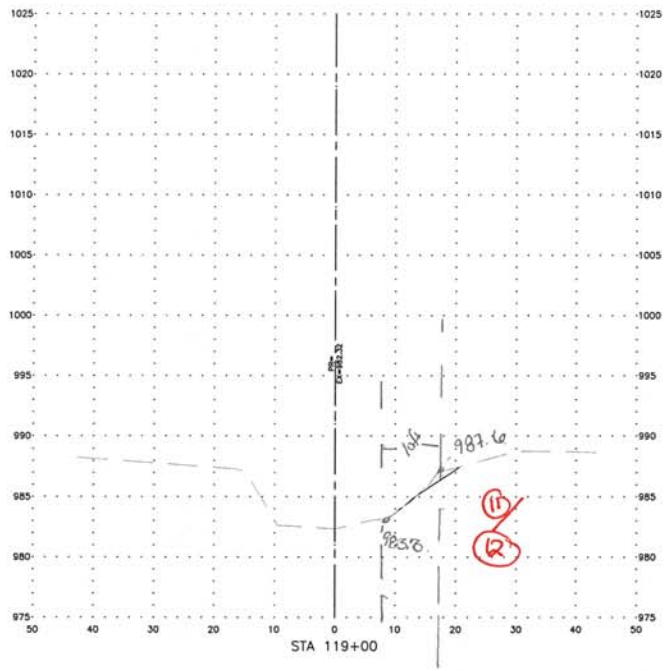
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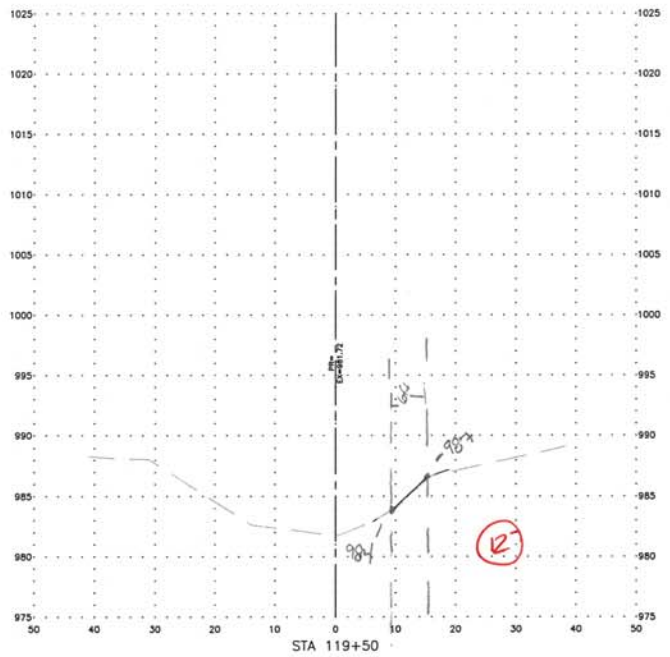
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MONROE, WISCONSIN

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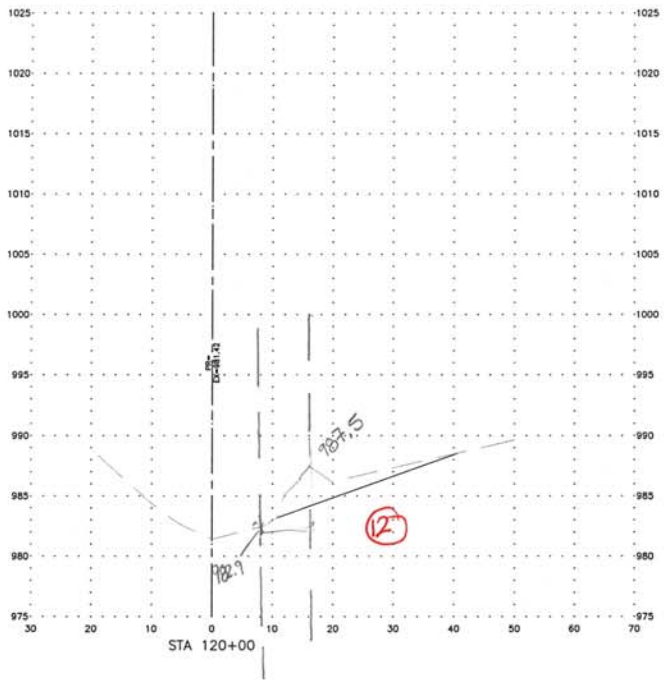
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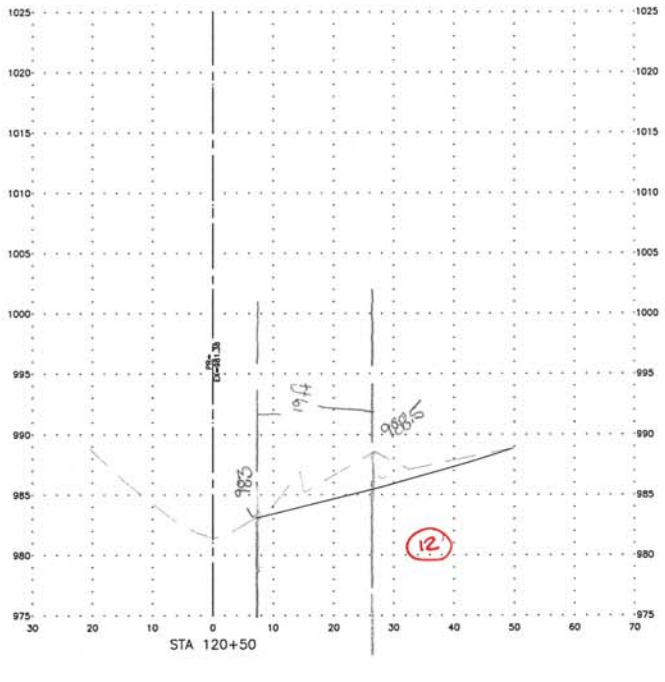
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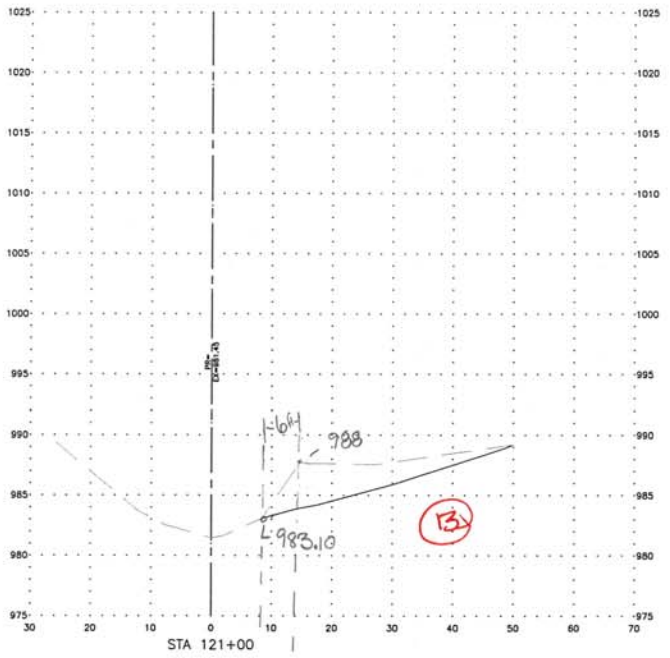
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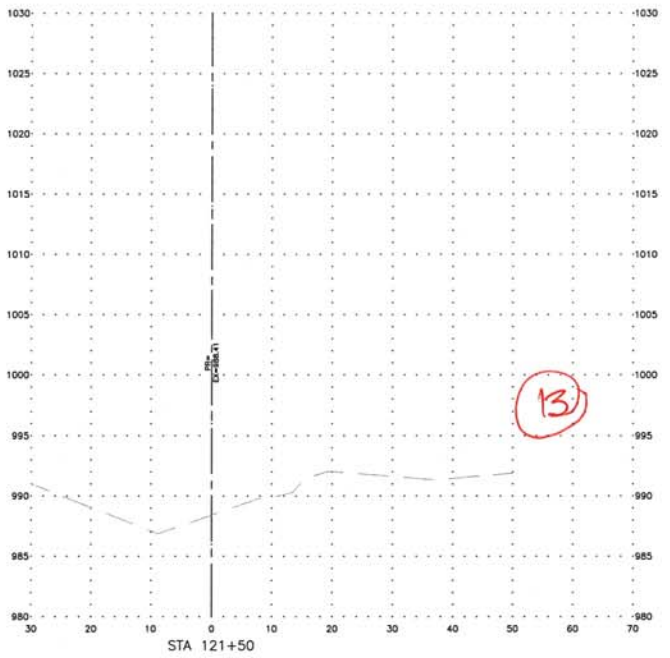
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21-635

SHEET NUMBER:
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↑ Structure No Erosion Control / Restoration to be completed.

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21-635

SHEET NUMBER:
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Exhibit 9

Water Quality Trading Clearinghouse

Trade Agreement

WATER QUALITY TRADING CLEARINGHOUSE AGREEMENT

THIS WATER QUALITY TRADING CLEARINGHOUSE AGREEMENT (this "**Agreement**") is entered as of the latest date set forth on the signature pages hereto (the "**Effective Date**"), by and between the City of Monroe ("**Buyer**"); Kenneth and Diane Clark ("**Generator**"); and Wisconsin Clearinghouse, LLC, a Wisconsin limited liability company (the "**Clearinghouse**" and together with Buyer and Generator, the "**Parties**" and each individually, a "**Party**").

RECITALS

WHEREAS, the Wisconsin Department of Natural Resources (the "**WDNR**") regulates the discharge of pollutants to waters of the state and administers a program for the trading of water pollutant reduction credits in accordance with Wis. Stat. § 283.84;

WHEREAS, the State of Wisconsin, as represented by its Department of Administration, Division of Enterprise Operations ("**DOA**"), entered a contract with the Clearinghouse (the "**Clearinghouse Contract**") for the establishment and operation of a centralized clearinghouse for the buying and selling of water pollutant reduction credits ("**Credits**") that may be traded under Wis. Stat. § 283.84(1)(f);

WHEREAS, the Clearinghouse is authorized to facilitate water quality trades by contracting with parties for the generation of Credits through water pollutant reduction activities and the purchase of Credits generated by such activities;

WHEREAS, Buyer operates the City of Monroe Waste Water Treatment Facility (the "**Facility**") located at 1224 10th Ave West Monroe, WI 53566, under an existing Wisconsin Pollutant Discharge Elimination System Permit, No. WI-0020362-09-2 (the "**Permit**");

WHEREAS, Buyer and/or its agents have, prior to the date hereof, in good faith and using the WDNR's *Guidance for Implementing Water Quality Trading in WPDES, Edition 2, 3200-3400-3800-2020-03* dated June 1, 2020) (the "**Guidance**"), estimated that Buyer's Facility will discharge pollutants above its permitted limit per year (the "**Excess Pollutant**"), requiring a modification and/or a reissuance of Buyer's Permit ("**Permit Reissuance**");

WHEREAS, as a condition of Permit Reissuance, the WDNR will require Buyer to offset the Excess Pollutant with Credits in accordance with Wis. Stat. § 283.84;

WHEREAS, in order to generate Credits within the applicable hydrologic area of the Facility, as defined under Wis. Stat. § 283.84(1m)(e), Generator desires to undertake the water pollutant reduction activities ("**BMP(s)**") set forth in Attachment A on that certain real property (the "**Property**") described in Attachment B;

WHEREAS, the Clearinghouse submitted to the WDNR for review, information pertaining to the BMP(s) (the "**Credit Verification Package**"), as required under Wis. Stat. § 16.9685(3)(g), including the amount of Credits generated by the BMP(s) and the duration for which the Credits are valid;

WHEREAS, following the WDNR's review of the Credit Verification Package, the WDNR fully verified the number of Credits (the "**Verified Credits**") generated by the BMP(s) in each year of Buyer's Permit (the "**Permit Term**"), and such amounts are shown in Attachment A; and

WHEREAS, Buyer desires for Generator to implement and maintain the BMP(s) in order to generate the Verified Credits for the duration of the Permit Term, and Buyer and Generator desire to engage the Clearinghouse to facilitate the transaction.

NOW, THEREFORE, for and in consideration of the premises and the payments set forth herein, and subject to the terms and conditions set forth herein, the Parties agree to the following:

AGREEMENTS

1. Generator Services.

(a) Generator has implemented and shall maintain the BMP(s) on the Property consistent with the plans and specifications contained in the Credit Verification Package, in order to generate the Verified Credits throughout the Permit Term described in Attachment A. The Generator will perform the requirements set forth in the Credit Verification Package, including (i) constructing the BMP(s) contemplated thereby; and (ii) maintaining the BMP(s) according to the maintenance schedule. Additionally, Generator will execute and record a deed restriction which protects the Property during the Permit Term. Generator shall timely respond to any reasonable requests from the Clearinghouse for information relating to this Agreement, the Verified Credits, the Property, or the BMP(s).

(b) To the best of Generator's knowledge, (i) the description of the Property on Attachment B is accurate in all respects; (ii) the Property does not contain any significant archaeological or historical artifacts and no party other than Generator (and the Clearinghouse with respect to inspection rights granted herein) has any material rights in all or any part of the Property. Throughout the Permit Term, Generator shall maintain all rights in the Property necessary to carry out its obligations as set forth in this Agreement. Prior to the sale, lease, or conveyance of any material rights in all or any part of the Property during the Permit Term, Generator shall notify the intended grantee, in writing, of any continuing obligations of Generator in the Property.

(c) Generator has completed the construction of the BMP.

(d) Generator shall not be required to perform any annual inspection of the BMP(s) or report the results of any such inspections to the WDNR or the WDOA.

2. Engagement of the Clearinghouse.

(a) *Registration.* Following the complete execution of this Agreement and payment by Generator and Buyer of the Clearinghouse Fees (defined below), the Clearinghouse will ensure that the Verified Credits are registered to support Buyer's Permit compliance.

(b) *Reporting.* The Clearinghouse will submit to the WDNR and the WDOA Contract Manager digital monthly reports, including (i) a monthly transaction report, and (ii) a monthly inspection report, as further described in the Clearinghouse Contract.

(c) *Inspections.* The Clearinghouse will perform, or cause to be performed by qualified third parties, inspections of the BMPs to confirm compliance with Permit requirements and at the frequency described in the Credit Verification Package. Generator shall permit and enable the Clearinghouse, its agents, and the WDNR to conduct such inspections and hereby authorizes the Clearinghouse, its agents, representatives, and contractors, and the WDNR to enter the Property at any reasonable time to conduct the Inspections. The Clearinghouse and WDNR will provide at least 24 hours' notice of any planned inspection to the Generator.

(d) *Enforcement.* The Clearinghouse shall be permitted to enforce the transaction contemplated by this Agreement as described herein. The Clearinghouse reserves the right to stop work or withhold payment if Generator has breached any of the terms of this Agreement. Notwithstanding anything to the contrary in this Agreement, the Clearinghouse shall not be required to provide any prior notice or cure period if the Clearinghouse determines that immediate intervention is necessary to prevent or mitigate imminent harm to the waters of the state.

3. Required Payments.

(a) *Clearinghouse Fees.* As consideration for the Clearinghouse facilitating the trade of Verified Credits and other services described in this Agreement, **Generator** agrees to pay to the Clearinghouse the sum of **$3,000.00**, and **Buyer** agrees to pay to the Clearinghouse the sum of **$5,000.00** (together, the "**Clearinghouse Fees**"). The Clearinghouse Fees were determined using the Fee Structure set out in Attachment C, which is based on the total number of Verified Credits. The Clearinghouse Fees shall be due and payable on the Effective Date and shall be nonrefundable.

(b) *Default.* If Generator or Buyer fails to pay their respective portion of the Clearinghouse Fees when due, then after a ten (10) day cure period beginning upon the Clearinghouse's notification of non-payment to the defaulting Party, the Clearinghouse may terminate this Agreement upon written notice to both Generator and Buyer.

(c) *Purchase Price.* **The total purchase price for 192 annual Verified Credits is $66,240.00 (the "Purchase Price"), which reflects a per Credit price of $69.00 for a term of five years.** The Purchase Price shall be paid to the Clearinghouse in annual installments for five years as shown in Attachment A.

(d) Any amount due and payable hereunder shall be paid within thirty (30) days of such amount becoming due and payable and shall be paid by wire transfer or by other method as directed by the Clearinghouse. If Buyer fails to pay any of the Purchase Price when due, (i) Generator shall not be required to perform hereunder unless and until such default is cured and shall not be responsible for any breach, liability, or damage resulting from such non-performance; and (ii) after a 30-day cure period beginning upon the Clearinghouse's notification to Buyer of such non-payment, Generator shall be entitled to terminate this Agreement upon written notice to Buyer.

(e) *Payments to Generator.* All payments from the Clearinghouse to Generator are expressly and unequivocally contingent upon and subject to the Clearinghouse's receipt of payment from Buyer. Within thirty (30) days of the Clearinghouse's receipt of any installment payment from Buyer, the Clearinghouse shall pay to Generator all amounts paid by Buyer.

4. Credit Certification by WDNR. The Verified Credits have been fully certified for trade by the WDNR pursuant to Wis. Stat. § 16.9685(4) and following the WDNR's review of the Credit Verification Package. The Credit Verification Package contained pertinent information about the proposed pollution reducing activities, including (i) the location of the activities; (ii) the type of practice or technology used; (iii) any maintenance schedule; (iv) the frequency of inspections; (v) the duration for which the Credits are valid; and (vi) the number of Credits generated by the proposed pollution reducing activities. The Verified Credits are located within the applicable hydrologic area of Buyer's Facility, as defined in Wis. Stat. § 283.84(1m)(e), and were calculated using a final trade ratio based on the location of Buyer relative to Generator and which is consistent with the Guidance. Generator shall fully comply with the requirements for performance set forth in the Credit Verification Package during the term of the Permit and shall not deviate therefrom without the prior written approval of the WDNR.

5. Noncompliance. If Generator fails to (i) implement any BMP in a timely manner; (ii) implement any BMP pursuant to the plans and specifications contained in the Credit Verification Package; or (iii) maintain any BMP after implementation, such failure may constitute noncompliance. Generator shall immediately report any noncompliance to the Clearinghouse. Following the Clearinghouse's discovery or notification by Generator of any potential noncompliance, the Clearinghouse shall notify (i) the WDNR's designated compliance engineer of such discovery by electronic mail within twenty-four (24) hours (or the next business day), and (ii) Buyer of such discovery, promptly following notification to the WDNR. The foregoing reporting requirement does not increase the frequency of inspections performed by the Clearinghouse as described in Section 2(c) of this Agreement. Neither the WDNR nor the WDOA shall have any right of enforcement against the Clearinghouse for BMP noncompliance or for any failure by Buyer to comply with its Permit obligations.

6. Default Security. Intentionally Deleted.

7. Buyer's Default Remedies. If Generator fails to perform any of its obligations under this Agreement and such failure remains uncured for a period of thirty (30) days after receipt of written notice from Buyer, then without limiting any of Buyer's other rights or remedies, Buyer shall be entitled to terminate this Agreement upon written notice to Generator. Buyer shall simultaneously deliver to the Clearinghouse copies of any written notices sent to Generator pursuant to this Section 7.

8. Term. This Agreement shall remain in force for a period of **five (5) years beginning August 1, 2025.**

9. Termination.

(a) If the Clearinghouse terminates this Agreement as permitted by Section 3(b), then neither Party will have any remaining obligations or responsibilities to the other hereunder, except that the Clearinghouse will return any Clearinghouse Fees that have been paid by the non-defaulting party.

(b) If Generator terminates this Agreement as permitted by Section 3(d), then:

i. any Milestone Payment that has been paid, or is at the time of termination due and payable to Generator, shall be retained by and/or paid to Generator as compensation for services performed;

ii. Buyer shall not owe any additional amounts to Generator;

iii. Generator shall not have any additional obligations to Buyer;

iv. the Clearinghouse shall be entitled to retain the Clearinghouse Fees; and

v. the Parties shall execute and deliver such additional documents, instruments, conveyances, and assurances, and take such further actions as may be reasonably required to carry out the intent of this Section 9(b), including as required by the WDNR and/or WDOA.

(c) If Buyer terminates this Agreement as permitted by Section 7, then:

i. Within thirty (30) days of receiving Buyers's termination notice, Generator will repay all payments paid to Generator during the term of the Buyer's existing permit. The Generator shall not be required to repay any payments for credits used during the previous permit;

ii. the Clearinghouse shall be entitled to retain the Clearinghouse Fees;

iii. Buyer shall be entitled to all amounts retained by the Clearinghouse pursuant to Section 3(d); and

iv. Buyer may enforce its rights under any Default Security obtained by Buyer in accordance with Section 6.

(d) Termination under this Agreement shall not be deemed to relieve any Party of any obligations that expressly survive termination of this Agreement (e.g., confidentiality obligations under Section 14(a)).

10. Indemnification.

(a) Buyer and Generator each (as "**Indemnifying Party**") shall indemnify, hold harmless, and defend the other Party and the Clearinghouse and their respective managers, officers, directors, employees, consultants, agents, affiliates, successors, and permitted assigns (the "**Indemnified Parties**") against any and all losses, damages, liabilities, claims, penalties, fines, costs, or expenses of whatever kind arising out of any third-party claim alleging (i) a material breach of any representations, warranties, covenants, or agreements contained herein by Indemnifying Party; (ii) any negligent or more culpable act or omission of Indemnifying Party (including reckless or willful misconduct) in connection with the performance of its obligations under this Agreement; or (iii) any failure by Indemnifying Party to materially comply with any applicable federal, state, or local laws, regulations, or codes in the performance of its obligations under this Agreement. Notwithstanding the foregoing, Indemnifying Party is not obligated to indemnify, hold harmless, or defend Indemnified Party against any claim if such claim or corresponding losses arise out of or result from Indemnified Party's negligence or more culpable act or omission (including reckless or willful misconduct) or bad faith failure to materially comply with any of its obligations set forth in this Agreement. The terms and conditions of this Section 10 shall survive any termination of this Agreement.

(b) Buyer and Generator hereby further release the Clearinghouse from any and all claims of damage of any kind which may arise as a result of constructing, installing, maintaining, and operating the BMP(s) in accordance with this Agreement.

11. Insurance. Subject to and without limiting the defense and indemnity obligations here, Generator or Buyer, at its expense, may maintain insurance coverage and shall provide the Clearinghouse with a certificate of insurance evidencing the coverage within thirty (30) days of the Effective Date:

12. Responsibilities, Representations and Covenants. The Parties each, as applicable, expressly acknowledge, represent, covenant, and agree that:

(a) the number of Credits ultimately required by the WDNR and WDOA as a condition to Permit Reissuance may be greater than the number of Verified Credits, and Generator is not responsible for providing any additional Credits unless otherwise agreed to in a written amendment signed by all Parties.

(b) Buyer is responsible for providing the Clearinghouse with the amount of Excess Pollutant required by the WDNR as a condition to Permit Reissuance.

(c) the Clearinghouse shall not be responsible for the actions or omissions of Generator.

(d) the Clearinghouse shall not be responsible for any failure by Buyer to meet its respective obligations, such as under a WPDES permit.

(e) the WDNR and WDOA shall in no way be responsible for making any payments that may become due and owing under this Agreement.

(f) Generator shall at all times comply with and observe all federal, state, and local laws, ordinances, and regulations that are in effect during the term of this Agreement and that are applicable to Generator's work or obligations hereunder.

(g) Buyer (i) has provided the Clearinghouse with true, correct, and complete copies and/or summaries of any correspondence with the WDNR or WDOA related to the compliance requirements associated with the Facility or the Permit, and (ii) shall promptly provide to the Clearinghouse true, correct, and complete copies or summaries of any such correspondence or requirements received or occurring after Effective Date.

(h) the Parties shall execute and deliver such additional documents, instruments, conveyances, and assurances and take such further actions as may be reasonably required to carry out the intent of the provisions hereof.

13. Miscellaneous.

(a) *Confidentiality.* Neither this Agreement nor the terms hereof may be furnished to any third party, without the written consent of all Parties, except as may otherwise be required by law (including, without limitation, Wisconsin's Open Records Law, Wis. Stat. §19.31 et seq.), an administrative tribunal, the Clearinghouse-WDOA contract established under s. 16.9685(2), Wis. Stats., or a court of competent jurisdiction; provided, that the foregoing shall not prohibit the Parties from providing this Agreement or the terms hereof to their attorneys, consultants, professional advisors, and current and prospective investors and primary lenders. Buyer agrees that it shall not, without the prior written consent of Generator, which consent may be withheld by Generator in its sole discretion, contact or communicate directly or indirectly (including through its advisors) with any landowners, third party easement holders, or other parties having a right in the Property. The terms and conditions of this paragraph shall survive any termination of this Agreement.

(b) *Clearinghouse's Records.* This Agreement may be subject to public disclosure under Wis. Stat. §19.36(3), unless otherwise exempted by applicable law. The Clearinghouse shall retain all records produced or collected under this Agreement for no less than three (3) years following the expiration or earlier termination of the Clearinghouse Contract. The Clearinghouse has established an internet-based platform which will serve as a centralized registry and contain information related to Credit transactions. Generator and Buyer hereby permit the Clearinghouse to store in its internet-based registry any information pertaining to the transaction contemplated by this Agreement.

(c) *Governing Law and WAIVER OF JURY TRIAL.* This Agreement and all matters arising out of or relating to this Agreement are governed by the laws of Wisconsin, including its statutes of limitations, without giving effect to any conflict of laws provisions thereof. Any Party may institute any legal suit, action, or proceeding arising out of or relating to this Agreement in the federal or state courts in each case located in Madison, Wisconsin. EACH PARTY HEREBY IRREVOCABLY AND UNCONDITIONALLY: (A) CONSENTS AND SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE AFOREMENTIONED COURTS; (B) WAIVES ANY OBJECTION TO THAT CHOICE OF FORUM BASED ON VENUE OR TO THE EFFECT THAT THE FORUM IS NOT CONVENIENT; AND (C) WAIVES ANY RIGHT TO TRIAL BY JURY. The provisions of this paragraph shall survive the expiration or termination of this Agreement.

(d) *Counterparts and Authorization.* This Agreement may be signed by electronic signature, which signature shall be deemed to constitute an original signature and be binding as such. This Agreement may be executed in identical counterparts, each of which when so executed and delivered will constitute an original, but all of which taken together will constitute one and the same instrument. The Parties each represent that the person signing this Agreement on their behalf is duly authorized to sign this Agreement.

(e) *Notices.* All notices, requests, consents, claims, demands, waivers, approvals, and other communications hereunder (each, a "**Notice**") shall be in writing and addressed to the Parties at the addresses set forth on its signature page (or to such other address that may be designated by the receiving Party from time to time in accordance with this Section 14(e)). All Notices shall be delivered by personal delivery, nationally recognized overnight courier, email (with confirmation of transmission), certified or registered mail, or electronic mail. A Notice is effective only if the Party giving the Notice has complied with the requirements of this Section 14(e). Copies of all written notices issued between Buyer and Generator pursuant to this Agreement shall be provided to the Clearinghouse. The provisions of this paragraph shall survive the expiration or termination of this Agreement.

(f) *Entire Agreement, Severability and Waiver.* This Agreement embodies the entire agreement between the Parties and supersedes all prior agreements and understandings relating to the subject matter of this Agreement. If any portion of this Agreement is held invalid or inoperative, then so far as is reasonable and possible the remainder of this Agreement shall be deemed valid and operative, and, to the greatest extent legally possible, effect shall be given to the intent manifested by the portion held invalid or inoperative. The failure by any Party to enforce against the other any term or provision of this Agreement shall not be deemed to be a waiver of such Party's right to enforce against the other Party the same or any other such term or provision in the future. In the event of a conflict or inconsistency between the terms of the body of this Agreement and those of any exhibit attached hereto, the terms of the body of this Agreement shall control. The provisions of this paragraph shall survive the expiration or termination of this Agreement.

(g) *Survivability.* The Clearinghouse Contract, dated effective March 20, 2023, contains an initial term of five (5) years, which may be extended for an additional one (1) year by mutual agreement, or at the WDOA's request, on a month-to-month basis for a period not to exceed six (6) months. Upon expiration of the term or earlier cancellation or termination of the Clearinghouse Contract by the WDOA, this Agreement shall continue in force and effect (unless otherwise terminated as permitted herein) and shall remain subject to the terms of the Clearinghouse Contract. If the Clearinghouse Contract is terminated or the Clearinghouse ceases to function, the WDNR shall continue to administer all Credit transactions then in effect until a new entity is appointed as Clearinghouse.

(h) *Force Majeure.* No Party shall be liable or responsible to the other Party, or deemed to have breached this Agreement, for any failure or delay in satisfying its obligations hereunder if such failure is attributable to any of the following: strikes, riots, acts of God, war, terrorist acts or activities, orders, or any other causes which are beyond the reasonable control of the responsible Party. Following any such failure or delay, Generator shall cooperate with Buyer and the Clearinghouse to reasonably respond to any requests from the WDOA or WDNR for information about any such failure or delay and shall provide all relevant information in connection therewith upon request.

(i) *No Interest.* No provision of this Agreement shall be deemed to grant to Buyer or the Clearinghouse any interest in any property of Generator or any of its affiliates.

(j) *Amendment and Assignment.* This Agreement may not be changed, amended, or modified except by an instrument in writing signed by all Parties. This Agreement shall be binding upon the Parties and their respective successors and assigns; however, this Agreement may not be assigned by any Party without the prior written consent of the other Party, which consent shall not be unreasonably withheld, conditioned or delayed. The foregoing restriction shall not be deemed to prohibit the assignment or transfer of this Agreement by any Party to (i) any third party that controls, is controlled by, or is under common control with, the assigning Party, or (ii) any purchaser of all, or substantially all, of the assets of the assigning Party, as long as, in each case, the assignee agrees to assume all obligations of the assigning Party hereunder. The Clearinghouse shall notify the WDNR within seven (7) days of any amendment or termination of this Agreement, including the details of any amendment and justification for such change(s).

(k) *Interpretation.* Section headings are included for convenience of reference only and are not intended to define or limit the scope of any provision of this Agreement and should not be used to construe or interpret this Agreement. Any singular term in this Agreement shall be deemed to include the plural, and any plural term the singular. Whenever the words "include", "includes" or "including" are used in this Agreement, they shall be deemed to be followed by the words "without limitation", whether or not they are in fact followed by those words or words of like import. "Writing", "written" and comparable terms refer to printing, typing and other means of reproducing words (including electronic media) in a visible form. The schedules and exhibits referred to herein shall be construed with, and as an integral part of, this Agreement to the same extent as if they were set forth verbatim herein; provided that in the event of any conflict between the body of this Agreement and an Exhibit, the terms of the body of the Agreement shall control.

(l) *Independence of Parties.* Nothing herein shall be construed to create a joint venture or partnership between the Parties hereto or an employer/employee or agency relationship.

NOW THEREFORE, the Parties have caused this Agreement to be executed, sealed, and delivered all as of the Effective Date.

CREDIT GENERATOR: Kenneth and Diana Clark

By:_____

Name: Kenneth Clark

Title: Owner

Date:_____

Address:
W6710 Melvin Road
Monroe, WI 53566

Email: kclark3773@gmail.com

By:_____

Name: Diana Clark

Title: Owner

Date:_____

Address:
W6710 Melvin Road
Monroe, WI 53566

Email:

NOW THEREFORE, the Parties have caused this Agreement to be executed, sealed, and delivered all as of the Effective Date.

CREDIT BUYER: City of Monroe

By: Donna Douglas

Name: Donna Douglas

Title: Mayor

Date: June 17, 2025

Address:
1110 18th Ave
Monroe, WI 53566
Attn:

Email:

NOW THEREFORE, the Parties have caused this Agreement to be executed, sealed, and delivered all as of the Effective Date.

CLEARINGHOUSE: Wisconsin Clearinghouse, LLC, a Wisconsin limited liability company

By: Chris Murphy

Name: Chris Murphy

Title: Nutrient Trading Manager

Date: 6/18/25

Address:
17921 W Smith Road
Brodhead, WI 53520
Attn: Chris Murphy, Clearinghouse Manager

Email: cmurphy@res.us

ATTACHMENT A

			UNIQUE TRACKING CODE NO. 44422498							
BMP NO. 1				Filter Strips						
	TOTAL COST		$66,240.00					FINAL TRADE RATIO	2.1:1	
				WPDES PERMIT TERM						
VERIFIED CREDITS[1]	2025	2026	2027	2028	2029	2030	2031	2032	2033	
	192	192	192	192	192					
INCENTIVE PAYMENT	$13,248	$13,248	$13,248	$13,248	$13,248					

ATTACHMENT B

Description of the Property

Parcel ID: 0169.1000
Section-Township-Range: 17, T1N, R7E
Legal Description: E1/2 SE4, EXC CSM 1431 LOT 1

Parcel ID: 0164.0100
Section-Township-Range: 16, T1N, R7E
Legal Description: CSM 4690 (V20-P149) LOT 1 BNG PRT SE4 NE4 SEC 17 & PRT SW4 NW4 & NW4 SW4 SEC 16

Parcel ID: 0162.0000
Section-Township-Range: 17, T1N, R7E
Legal Description: N1/2 NE4

ATTACHMENT C

FEE STRUCTURE

Fee Paid By	Size of Credit Transaction	Fee Paid to the Clearinghouse
Generator	0-100	$ 1,400.00
	101-200	$ 3,000.00
	201-450	$ 6,000.00
	451-700	$ 10,000.00
	701-1000	$ 16,500.00
	1001-1500	$ 20,000.00
	1501-2000	$ 28,000.00
	2001-2700	$ 36,000.00
	2701-3400	$ 49,000.00
	3401-4100	$ 63,000.00
	4101-4600*	$ 75,000.00
Buyer	0-100	$ 3,200.00
	101-200	$ 5,000.00
	201-450	$ 10,500.00
	451-700	$ 20,000.00
	701-1000	$ 32,000.00
	1001-1500	$ 42,000.00
	1501-2000	$ 64,000.00
	2001-2700	$ 84,000.00
	2701-3400	$ 114,000.00
	3401-4100	$ 150,000.00
	4101-4600*	$ 180,000.00

*Generations or purchases exceeding these thresholds will pay by the tier over 1000 (e.g., 5000 credits will incur a fee from the 4101-4600 tier plus the fee from the 201-450 tier).

Exhibit 10

WQT Annual Reports (2022, 2023, 2024)

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL

2022 Water Quality Trading Annual Report

April 2023

1107 16th Ave
Monroe, WI 53566

City of Monroe
1224 10th Ave
Monroe, WI 53566

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL

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4.2 Annual Inspection Honey Creek 3
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PART 1: INTRODUCTION

1.1 Study Purpose and Scope

This report has been prepared at the direction of City of Monroe and it to serve as the Water Quality Trading (WQT) Annual Report summarizing the WQT credits used by the City for the reduction of phosphorus.

This report will cover the following:

- Summary of Credits used per month and source of credits.
- Annual Inspection Summary
- Areas of Non - Compliance

PART 2: PERMIT TERM

This WQT Annual .Report covers from August 1, 2022 - December 31, 2022

PART 3: SUMMARY OF CREDITS USED

3.1 Credits Available

Table 3.1.1 summarizes the available credits for the permit term.

Table 3.1.1 – 2022 Available Credits

Trade	Trade Ratio (TR)	2022 Available Credits	Credits with TR
Industrial Park Pond (W)	2:1	9.25	4.63
Dolan Property	1.2	26.5	22.1
WWTP Expansion Site	1.2	7.5	5.85
Honey Creek Park Streambank Restoration **	-	-	-
Total	-	-	32.58

**Streambank Restoration Project still under construction – no credits available in 2022.

3.2 Credits Used

Table 3.2.1 summarizes the credits used each month and the source of the credits. Table 3.2.2 Summarizes the total credits used for the year from each source.

Table 3.2.1 – Credits Used

Month	Needed Credits	Source Credits
August	15.04	From Dolan Property
September	4.77	From Dolan Property
October	0	NA
November	0	NA
December	0	NA

Table 3.2.2 – WQT Source Summary

WQT Location	Used	Remaining
Industrial Park (W)	0	4.63
Dolan Property	19.81	2.29
WWTP Expansion Site	0	5.85
Honey Creek Park	0	0

PART 4: ANNUAL INSPECTION

4.1 Annual Inspection – Dolan Property, WWTP Expansion, Industrial Park

The Industrial Park, Dolan Property and WWTP Expansion properties were inspected for compliance May 31, 2022.

For the Dolan property and the WWTP expansion property, the inspection checked the method of planting and included a call with the farmers to verify crop and fertilizer application. The property was reviewed to verify no washouts occurred during the spring rains. Both properties met all requirements and were approved for WQT compliance.

The inspection at the industrial park involved walking the perimeter of the pond to inspect the outfall, the condition of the slopes, the vegetation growth and if there was any vehicle damage that needed fixed. The pond met all requirements and was approved for WQT compliance.

4.2 Annual Inspection Honey Creek

A permit was not issued by the DNR for the Honey Creek Streambank Restoration project until late October 2022. Therefore, the Honey Creek Streambank project has not been completed. There is a construction moratorium on the Creek until June 15th to protect the habitat. The project will begin after June 15th. The delay in construction was discussed with the DNR and all parities will be contacted at the time construction begins.

PART 5: NON-COMPLIANCE

As detailed in section 4.2, the honey creek project is still under construction and has not yet been completed. The city contacted the DNR about the timing of the permit issuance and the timing of the construction limitations in 2022. The city understands it is in non-compliance with the streambank portion of the WQT plan until such time as construction on the project is complete. The project is set to be constructed after June 15, 2023. The city will be in touch with the DNR when the project begins.

Exhibits

Exhibit A

INSPECTION REPORTS

Dolan - Inspection/ Communication

Date	Inspector (name/phone number)	BMPs in place			Comments/Needed Maintenance/Dates Problems Addressed	Follow -Up Inspection needed	Phone Call Summary
		No-Till	Crop Type	management - meets NMS 590			
5/31/2023	Jennifer Buhozler - 608-329-6400	yes	alfalfa	yes	planting looks good and no additional action needd at this time.	none	

WWTP Expansion Site - Inspection/ Communication

Date	Inspector (name/phone number)	BMPs in place			Comments/Needed Maintenance/Dates Problems Addressed	Follow -Up Inspection needed	Phone Call Summary
		No-Till	Crop Type	management - meets NMS 590			
5/31/2023	Jennifer Buhozler - 608-329-6400	yes	cover crop - oats	yes	planting looks good and no additional action needd at this time.	none	

Industrial Park Pond - Inspection

		BMPs in place					
Date	Inspector (name/phone number)	Slope Condition	Vandalism/ Vehicle damage	Condition vegetation	Outfall	Comments/Needed Maintenance/Dates Problems Addressed	Follow -Up Inspection needed
5/31/2022	Jennifer Buholzer/ 608-329-6400	Good	None noted	No overgrowth noted	good condition- no erosion	WQT measure is in good condition and needs no additional maintenance at this time.	No

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL

2023 Water Quality Trading Annual Report WQT – 2022 – 005

January 2024

1107 16th Ave
Monroe, WI 53566

City of Monroe
1224 10th Ave
Monroe, WI 53566

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL

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PART 1: INTRODUCTION

1.1 Study Purpose and Scope

This report has been prepared at the direction of City of Monroe and it to serve as the Water Quality Trading (WQT) Annual Report summarizing the WQT credits used by the City for the reduction of phosphorus.

This report will cover the following:

- Summary of Credits used per month and source of credits.
- Annual Inspection Summary
- Areas of Non - Compliance

PART 2: PERMIT TERM

This WQT Annual .Report covers from January 1, 2023- December 31, 2023

PART 3: SUMMARY OF CREDITS USED

3.1 Credits Available

Table 3.1.1 summarizes the available credits for the permit term.

Table 3.1.1 – 2023 Available Credits

Trade	Trade Ratio (TR)	2022 Available Credits	Credits with TR
Industrial Park Pond (W)	2:1	18.49	9.25
Dolan Property	1.2	53	44.2
WWTP Expansion Site	1.2	14	11.7
Honey Creek Park Streambank Restoration **	NA	NA	NA
Total	-	-	65.15

**Streambank Restoration Project still under construction – no credits available in 2023.

3.2 Credits Needed

Table 3.2.1 summarizes the credits used each month and the source of the credits. Table 3.2.2 Summarizes the total credits used for the year from each source.

Table 3.2.1 – Credits Needed

Month	Needed Credits	Source Credits
January	9.22	From Industrial Park
February	5.36	From Dolan Property
March	0	NA
April	0	NA
May	0.6	From Industrial Park/ Dolan Property
June	61.87	Dolan Property/ WWTP Expansion Property Non- Compliance
July	199.74	Non-Compliance
August	68.95	Non-Compliance
September	46.28	Non-Compliance
October	40.32	Non-Compliance
November	5.55	Non-Compliance
December	10.04	Non-Compliance

Table 3.2.2 – WQT Source Summary

WQT Location	Used	Remaining
Industrial Park (W)	9.25	0
Dolan Property	44.2	0
WWTP Expansion Site	11.7	0
Honey Creek Park	0	0

PART 4: ANNUAL INSPECTION

4.1 Annual Inspection – Dolan Property, WWTP Expansion, Industrial Park

The Industrial Park, Dolan Property and WWTP Expansion properties were inspected for compliance June 1, 2023.

For the Dolan property and the WWTP expansion property, the inspection checked the method of planting and included a call with the farmers to verify crop and fertilizer application. The property was reviewed to verify no washouts occurred during the spring rains. Both properties met all requirements and were approved for WQT compliance.

The inspection at the industrial park involved walking the perimeter of the pond to inspect the outfall, the condition of the slopes, the vegetation growth and if there was any vehicle damage that needed fixed. The pond met all requirements and was approved for WQT compliance.

Photos will be provided starting in 2025 of the annual inspection of the WQT practices.

4.2 Annual Inspection Honey Creek

Therefore, the Honey Creek Streambank project has not been completed. This project is out to bid and construction will begin in the spring of 2024.

PART 5: NON-COMPLIANCE

As detailed in section 4.2, the honey creek project is still under construction and has not yet been completed. The city understands it is in non-compliance with the streambank portion of the WQT plan until such time as construction on the project is complete. The project is out to bid and will begin in the spring of 2024. The city will be in touch with the DNR when the project begins.

The City has started the process of coordinating with the Water Quality Trading Clearinghouse if credits are needed in 2024.

PART 6: FUTURE COMPLIANCE

6.1 Future Compliance

Due to increased flows and loading at the WWTP, the City of Monroe will unlikely be able to meet the necessary effluent value of approximately 0.112 mg/l for phosphorus. The City is in the process of completing the facilities planning process to expand the WWTP to adequately treat the increased flows and loading. The City will also be looking for additional projects for WQT trading to create the necessary credits to meet the WQBEL.

Exhibits

Exhibit A

INSPECTION REPORTS

Dolan - Inspection/ Communication

		BMPs in place					
Date	**Inspector (name/phone number)**	**No-Till**	**Crop Type**	**management - meets NMS 590**	**Comments/Needed Maintenance/Dates Problems Addressed**	**Follow -Up Inspection needed**	**Phone Call Summary**
5/31/2022	Jennifer Buhozler - 608-329-6400	yes	alfalfa	yes	planting looks good and no additional action needd at this time.	none	
6/1/2023	Jennifer Buhozler - 608-329-6400	yes	alfalfa	yes	planting looks good no additional needs	none	

WWTP Expansion Site - Inspection/ Communication

Date	Inspector (name/phone number)	BMPs in place			Comments/Needed Maintenance/Dates Problems Addressed	Follow -Up Inspection needed	Phone Call Summary
		No-Till	Crop Type	management - meets NMS 590			
5/31/2022	Jennifer Buhozler - 608-329-6400	yes	cover crop - oats	yes	planting looks good and no additional action needd at this time.	none	
6/1/2023	Jennifer Buhozler - 608-329-6400	yes	cover crop - oats	yes	planting looks good no additional needs	none	

Industrial Park Pond - Inspection

Date	Inspector (name/phone number)	BMPs in place				Comments/Needed Maintenance/Dates Problems Addressed	Follow -Up Inspection needed
		Slope Condition	Vandalism/ Vehicle damage	Condition vegetation	Outfall		
5/31/2022	Jennifer Buholzer/ 608-329-6400	Good	None noted	No overgrowth noted	good condition- no erosion	WQT measure is in good condition and needs no additional maintenance at this time.	No
6/1/2023	Jennifer Buholzer/ 608-329-6400	Good	none	No overgrowth noted - maintained well	good condition- no erosion and well maintained	WQT measure is in good condition and needs no additional maintenance at this time.	NO

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL

2024 Water Quality Trading Annual Report WQT – 2022 – 005

January 2025
REVISED June 2025

1107 16th Ave
Monroe, WI 53566

City of Monroe
1224 10th Ave
Monroe, WI 53566

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL

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PART 1: INTRODUCTION

1.1 Study Purpose and Scope

This report has been prepared at the direction of City of Monroe and it to serve as the Water Quality Trading (WQT) Annual Report summarizing the WQT credits used by the City for the reduction of phosphorus.

This report will cover the following:

- Summary of Credits used per month and source of credits.
- Annual Inspection Summary
- Areas of Non - Compliance

PART 2: PERMIT TERM

This WQT Annual Report covers from January 1, 2024 - December 31, 2024

PART 3: SUMMARY OF CREDITS USED

3.1 Credits Available

Table 3.1.1 summarizes the available credits for the permit term.

Table 3.1.1 – 2024 Available Credits

Trade	Trade Ratio (TR)	2024 Available Credits	Credits with TR
Industrial Park Pond (W)	2:1	18.49	9.25
Dolan Property	1.2	53	44.2
WWTP Expansion Site	1.2	14	11.7
Honey Creek Park Streambank Restoration **	3:1	308.73	102.91**
Total	-	-	77.92

**Streambank Restoration Project Completed Beginning of November 2024 – credits applied to December.

3.2 Credits Needed

Table 3.2.1 summarizes the credits used each month and the source of the credits. Table 3.2.2 Summarizes the total credits used for the year from each source.

Table 3.2.1 – Credits Needed

Month	Needed Credits	Source Credits
January	35.029	Dolan Property
February	25.951	From Industrial Park/ Dolan Property/WWTP Expansion
March	12.265	Industrial Park/ Non- Compliance
April	9.9123	Non- Compliance
May	3.9094	Non- Compliance
June	0	
July	27.785	Non-Compliance
August	26.02	Non-Compliance
September	14.39	Non-Compliance
October	9.4706	Non-Compliance
November	0	
December	17.029	Streambank Restoration

Total Credits Needed: 181.76

Table 3.2.2 – WQT Source Summary

WQT Location	Used	Remaining
Industrial Park (W)	9.25	0
Dolan Property	44.2	0
WWTP Expansion Site	11.7	0
Honey Creek Park Streambank	17.029	0***

*** project only applied to December Credits – not available Remainder of year.

PART 4: ANNUAL INSPECTION

4.1 Annual Inspection – Dolan Property, WWTP Expansion, Industrial Park

The Industrial Park, Dolan Property and WWTP Expansion properties were inspected for compliance a couple of times during the year.

For the Dolan property and the WWTP expansion property, the inspection checked the method of planting and included a call with the farmers to verify crop and fertilizer application. The property was reviewed to verify no washouts occurred during the spring rains. Both properties met all requirements and were approved for WQT compliance.

The inspection at the industrial park involved walking the edge of the pond to inspect the condition of the slopes, the vegetation growth and if there was any vehicle damage that needed fixed. The pond met all requirements and was approved for WQT compliance.

4.2 Annual Inspection Honey Creek

This project was completed at the beginning of November 2024. The practice registration is in Exhibit B of this report. This WQT practice will be inspected annually beginning in 2025.

PART 5: NON-COMPLIANCE

As detailed in section 4.2, the honey creek project was under construction until November 2024. Therefore, the credits were not available until the end of the year. This project will not be part of the WQT inspection and included in the available credits in 2025.

The city has been in contact with the Water Quality Trading Clearinghouse. To date no credits are available. Regular contact has been made with the clearinghouse throughout the year with the most recent conversation taking place November 5, 2024. The city will maintain open communication with the Clearinghouse in 2025.

PART 6: FUTURE COMPLIANCE

6.1 Future Compliance

Due to increased flows and loading at the WWTP, the City of Monroe will unlikely be able to meet the necessary effluent value of approximately 0.112 mg/l for phosphorus. The city is in the process of completing the facilities planning process to expand the WWTP to adequately treat the increased flows and loading. The City will also be looking for additional projects for WQT trading to create the necessary credits to meet the WQBEL.

Exhibits

Exhibit A

INSPECTION REPORTS/PHOTOS

Dolan - Inspection/ Communication

Date	Inspector (name/phone number)	BMPs in place			Comments/Needed Maintenance/Dates Problems Addressed	Follow -Up Inspection needed	Phone Call Summary
		No-Till	Crop Type	management - meets NMS 590			
5/31/2022	Jennifer Buhozler - 608-329-6400	yes	alfalfa	yes	planting looks good and no additional action needd at this time.	none	
6/1/2023	Jennifer Buhozler - 608-329-6400	yes	alfalfa	yes	planting looks good no additional needs	none	
5/30/2024	Jennifer Buhozler - 608-329-6400	yes	alfalfa	yes	planting looks good no additional needs	yes - for photos	
9/5/2024	Jennifer Buhozler - 608-329-6400	yes	alfalfa	yes	Look good, can see crop coming up, likely one more mow this season, no additional needs	none	

WWTP Expansion Site - Inspection/ Communication

Date	Inspector (name/phone number)	BMPs in place			Comments/Needed Maintenance/Dates Problems Addressed	Follow -Up Inspection needed	Phone Call Summary
		No-Till	Crop Type	management - meets NMS 590			
5/31/2022	Jennifer Buhozler - 608-329-6400	yes	cover crop - oats	yes	planting looks good and no additional action needd at this time.	none	
6/1/2023	Jennifer Buhozler - 608-329-6400	yes	cover crop - oats	yes	planting looks good no additional needs	none	
5/30/2024	Jennifer Buhozler - 608-329-6400	yes	cover crop - oats	yes	planting looks good no additional needs	yes - for photos	
9/5/2024	Jennifer Buhozler - 608-329-6400	yes	cover crop - oats	yes	Look good, no additional needs	none	

Industrial Park Pond - Inspection

Date	Inspector (name/phone number)	BMPs in place				Comments/Needed Maintenance/Dates Problems Addressed	Follow -Up Inspection needed
		Slope Condition	Vandalism/ Vehicle damage	Condition vegetation	Outfall		
5/31/2022	Jennifer Buholzer/ 608-329-6400	Good	None noted	No overgrowth noted	good condition- no erosion	WQT measure is in good condition and needs no additional maintenance at this time.	No
6/1/2023	Jennifer Buholzer/ 608-329-6400	Good	none	No overgrowth noted - maintained well	good condition- no erosion and well maintained	WQT measure is in good condition and needs no additional maintenance at this time.	NO
5/30/2024	Jennifer Buhozler - 608-329-6400	Good	None noted	No washout noted - well established vegetation	Good Condition - no erosion	Return for photos later in year	Yes - photos
9/5/2024	Jennifer Buhozler - 608-329-6400	yes	None noted	No washout noted - well established vegetation	Could not see - return early 2025 to get	Return Early 2025 for photos of outfall - difficult to get to outfall due to plant growth	yes - inspect outfall/ photos

Streambank Restoration - Inspection/ Communication

Date	Inspector (name/phone number)	BMPs in place				Comments/Needed Maintenance/Dates Problems Addressed	Follow -Up Inspection needed
		Boulder Toe / plantings/ trees	Debris	Erosion	Vandalism		
11/5/2024	Jennifer Buhozler - 608-329-6400	NA	NA	NA	NA	Talked to Clearinghouse - update on available Credits. No Credits Available.	Maintain contact until credits come available.
11/23/2024	Jennifer Buhozler - 608-329-6400	Good Condition	None Noted	None Noted	None Noted	Project Completed Early November plants appear to be taking root well	None



1. Dolan Property

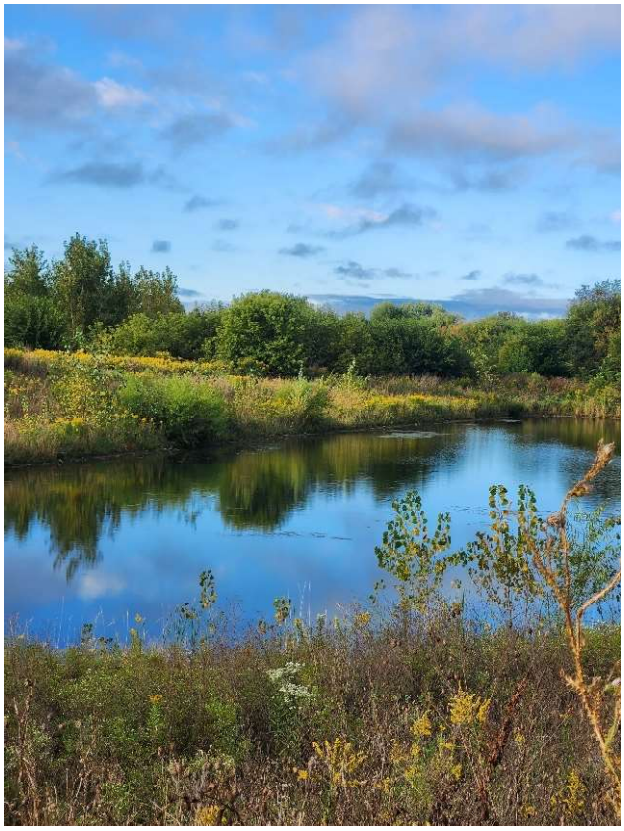
2. Dolan Property



3. Industrial Park Pond



4. Industrial Park Ponds



5. WWTP Expansion Site



6. WWTP Expansion Site

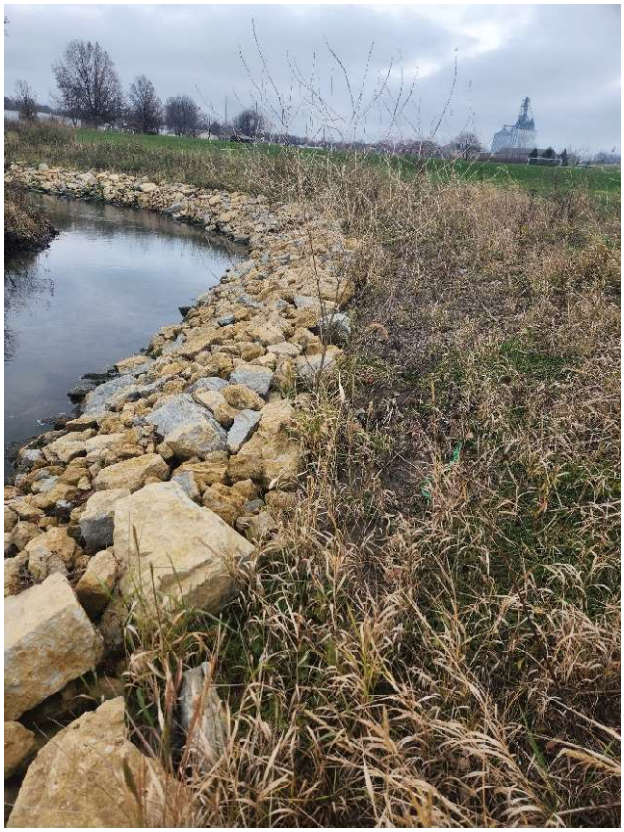




7. Streambank Restoration



8. Streambank Restoration



9. Streambank Restoration



10. Streambank Restoration

11. Streambank Restoration



Exhibit B

STREAMBANK RESTORATION PRACTICE REGISTRATION

State of Wisconsin
Department of Natural Resources
101 South Webster Street
Madison WI 53707-7921
dnr.wi.gov

Water Quality Trading Management Practice Registration

Form 3400-207 (R 1/14)

Notice: Pursuant to s. 283.84, Wis. Stats., this form must be completed by any WPDES permittee that is using water quality trading as a method of complying with a permit limitation. Failure to complete this form would not result in penalties. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.).

Applicant Information

Permittee Name	Permit Number	Facility Site Number
City of Monroe	WI- 0020362-08-0	31428

Facility Address	City	State	ZIP Code
1110 18th Ave	Monroe	WI	53566

Project Contact Name (if applicable)	Address	City	State	ZIP Code
Jennifer Buholzer	1107 16th Ave	Monroe	WI	53566

Project Name
Honey Creek Streambank Restoration Project

Broker/Exchange Information (if applicable)

Was a broker/exchange be used to facilitate trade? ○ Yes ◉ No

Broker/Exchange Organization Name	Contact Name

Address	Phone Number	Email

Trade Registration Information (Use a separate form for each trade agreement)

Type	Trade Agreement Number	Practices Used to Generate Credits	Anticipated Load Reduction	Trade Ratio	Method of Quantification
◉ Urban NPS ○ Agricultural NPS ○ Other	WQT-2022-0005	Streambank Restoration	308.73	3:1	NRCS Stream bank Erosion Calculator

County	Closest Receiving Water Name	Land Parcel ID(s)	Parameter(s) being traded
	Honey Creek	2354.11	Phosphorus

The preparer certifies all of the following:

- I have completed this document to the best of my knowledge and have not excluded pertinent information.
- I certify that the information in this document is true to the best of my knowledge.

Signature of Preparer	Date Signed
Jennifer B Buholzer	1/1/2025

Authorized Representative Signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. Based on my inquiry of those persons directly responsible for gathering and entering the information, the information is, to the best of my knowledge and belief, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Authorized Representative	Date Signed
Alan E Arber OPW	1-20-2025

Leave Blank – For Department Use Only

Date Received	Trade Docket Number

Entered in Tracking System ☐ Yes	Date Entered	Name of Department Reviewer

Exhibit 11

Water Quality Trading Agreement

Water Quality Trade Agreement between
City of Monroe and Wisconsin Department of Natural Resources

This Water Quality Trade Agreement (this "Agreement") is made by and between City of Monroe ("Monroe") and the Wisconsin Department of Natural Resources ("the Department") and together "the Parties".

1. Recitals

a. Water quality trading is an alternative compliance option for Wisconsin Permit Discharge Elimination System ("WPDES") Permit holders and is authorized by Wis. Stat. § 283.84.

b. Wis. Stat. § 283.84(l)(e) provides that, "the [the Department] may authorize a person required to obtain a permit to increase the discharge of pollutants above levels that would otherwise be authorized in the permit if the person . . . reaches a binding, written agreement with [the Department] under which the person constructs a project or implements a plan that results in reducing the amount of water pollution from sources other than the source covered by the permit."

c. The Department has issued guidance regarding water quality trading, including:

1) Guidance for Implementing Wisconsin's Phosphorus Water Quality Standards for Point Source Discharges, No. 3400-2020-12, (Edition 3, June 1, 2020);

2) Guidance for Implementing Water Quality Trading in WPDES Permits, No. 3200-3400-3800-2020-03 (June 1, 2020).

d. Monroe submitted a Permit application for issuance of a WPDES Permit on February 20, 2020. The Permit is for a wastewater discharge from its treatment facility located in Monroe, Wisconsin.

e. The WPDES Permit will contain phosphorus water quality based effluent limits ("WQBELs") for Outfall 001, which is located in HUC-12 subwatershed 070900031004.

f. Monroe owns and will implement a wet detention pond, removal of cropland from production, and streambank stabilization within the same hydrologic region as Outfall 001.

g. The descriptions of the lands that include the wet detention pond, cropland conversion, and streambank stabilization are:

Detention Pond: Industrial park owned by Monroe for future expansion of the municipality. Parcel #: 2325150011525
Cropland: One field was recently acquired by the city for use as a second industrial park that is currently farmed in a corn/soy rotation. Parcel #s: 2325150270000 & 2325150282000. The second field is property acquired by the facility to allow for expansion of the treatment facility that is currently farmed in corn. Parcel #: 2302005311000
Streambanks: A portion of the bank along Honey Creek is owned by the City. Parcel #: 2325123541100

Monroe submitted to the Department a Water Quality Trading Plan (WQT Plan) under which Monroe will install a wet detention, remove cropland from production, and implement streambank stabilization to reduce pollution to surface waters of the State.

h. The management practices will be installed and maintained relative to the NRCS Conservation Practice Standard listed below in Table One:

Table One – Conservation Practice Standards

NRCS Conservation Practice Standard	Number
NRCS Standard – Streambank Stabilization	580
NRCS Standard – Crop Conversion	590
DNR Standard – Wet Detention Pond	1001

l. The WQT Plan includes an Establishment Plan and an Operation and Maintenance Plan for the wet detention pond, crop fields, and streambanks.

2. Agreement Terms

a. Monroe shall establish practice consistent with the requirements in the approved WQT Plan (including the Establishment Plan, and the Operation and Maintenance Plan).

b. The Department will propose to reissue the WPDES Permit to allow Monroe to use water quality trading as a compliance option, in accordance with the WQT Plan as approved by the Department.

c. Subject to the terms of this Agreement and the terms of the WPDES Permit issued to Monroe, the Department shall allow Monroe to utilize phosphorus credits in the amount set forth in the approved WQT Plan to demonstrate compliance with phosphorus WQBELs in the WPDES Permit, provided Monroe implements the approved WQT Plan and complies with the related trading terms of the Permit.

d. Any duly authorized officer, employee or representative of the Department

shall have the right to access and inspect practice location pursuant to Wis. Stat. § 283.55(2) so long as this Agreement remains in effect.

e. The Agreement shall become effective on the later date of the completion of the following conditions: i.) the Department approves a WQT plan that is consistent with this Agreement; and ii.) The WPDES Permit includes trading terms that are consistent with both the approved WQT Plan and the terms of this Agreement.

f. The Agreement applies and is effective for the term of the issued Permit unless, subject to this section the Permit is modified, terminated or revoked and reissued by the Department to eliminate the trade or to revise the trading terms in a manner that is inconsistent with this Agreement. If the trade is removed or revised through a Permit action, this Agreement is terminated. In accordance with Wis. Stat. § 227.51(2), if the trade has not been eliminated or modified through a Permit action, and if Monroe files a timely application for the reissuance of the Permit, the terms of the Agreement will continue until the later of the following: 1.) the application has been finally acted upon by the Department, 2.) the last day for seeking review of the agency's decision or 3.) a later date fixed by a reviewing court. The Agreement may extend into a subsequent reissued Permit upon approval of the Department.

g. The Parties may terminate this Agreement by written mutual agreement at any time.

h. Monroe may terminate this Agreement by providing at least sixty (60) days written notice to the Department of Monroe's intent to terminate the Agreement.

i. In accordance with paragraph (h) and the procedures and requirements of Wis. Stat. § 283.53(2) and Wis. Admin. Code §§ NR 203.135 and 203.136, the Department may terminate this Agreement and modify or remove the terms of the Permit related to the trade if any one of the following occur:

1) Monroe fails to implement the WQT Plan as approved by the Department;

2) Monroe fails to comply with WPDES Permit terms and conditions related to water quality trading;

3) New information becomes available that causes the Department to determine that water quality trading is no longer an acceptable option, including an objection or disapproval of the trade by USEPA.

j. Any action by the Department to terminate this Agreement or otherwise to reduce or eliminate the number of phosphorus credits in the reissued WPDES Permit and approved WQT Plan shall be implemented through a modification, revocation and reissuance or reissuance of the W PDES Permit. Prior to

termination of this agreement, the Department shall notify Monroe of its intent to terminate the trading agreement and shall provide an opportunity for Monroe to discuss the proposed termination with the Department. If appropriate and feasible, the Department shall provide Monroe with a reasonable time period to correct the grounds for the proposed termination.

k. This Agreement may be amended only by a further written document signed by each of the Parties. The WQT Plan, Agreement and Permit terms may be revised as part of a future Permit reissuance or modification.

l. This Agreement shall be interpreted pursuant to the laws of the State of Wisconsin.

m. This Agreement may be executed in one or more counterparts, and all such executed counterparts shall constitute the same agreement. A signed copy of this Agreement transmitted by facsimile or email shall be treated as an original and shall be binding against the party whose signature appears on such copy.

n. If any provision of this Agreement is held invalid or unenforceable, the invalidity or unenforceability shall be limited to the particular provision involved and shall not affect the validity or enforceability of the remaining provisions. The Parties shall work together in good faith to modify this Agreement if necessary to preserve its original intent.

o. In no event shall the Department be liable to any party under this Agreement or to any third party in contract, tort or otherwise for incidental or consequential damages of any kind, including, without limitation, punitive or economic damages or lost profits, except as provided under federal or state laws.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the day and year entered below.

City of Monroe

By: _____

Title: Utility Supervisor

Date: 5/13/22

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By: _____

Title: Water Quality Director

Date: 5/16/2022