

Monday, April 28, 2025

6:00 PM

McFarland Municipal Center
5915 Milwaukee St, McFarland
Community Room

AGENDA

The public may attend in-person or remotely through the Zoom webinar or telephone options listed below. *Please Note: Virtual attendance is offered as a convenience, but technical difficulties beyond the Village's control may prevent or limit its availability at any meeting. The public is encouraged to attend the meeting in person to assure full access to the proceedings.*

PLEASE CLICK THE LINK BELOW TO JOIN THE ZOOM WEBINAR:

<https://us02web.zoom.us/j/83788865413>

Or by Telephone: +1 (312) 626-6799

Webinar ID: 837 8886 5413

Press *9 to raise/lower hand. Press *6 to mute/unmute.

1. CALL TO ORDER, ROLL CALL.
2. PUBLIC APPEARANCES.
 - a. This is an opportunity for members of the public to address the Public Works and Utilities Committee for items that are not on the agenda. Please remember this is a hybrid meeting conducted in person and through the Zoom online meeting platform. Meeting attendees wishing to address the Committee about items not on the agenda may do so at this time. Zoom attendees should type their name and address in the Question and Answer feature within the Zoom online meeting platform at this time. Members of the public who are present in person and wish to address the Committee should fill out a public comment form and turn into the meeting chairperson. When you are called upon to speak, state your name, address, and provide your comments to the Committee for their consideration. Please adhere to the 3-minute time limit. Additionally, you may send your public comments to public.works@mcfarland.wi.us to be included as part of the meeting.

Members of the public may also speak during their selected agenda item as they designate on the public comment form or in the Question and Answer feature on Zoom.
3. APPROVAL OF MINUTES.
 - a. Motion to approve the minutes of the March, 24, 2025, Public Works & Utilities Committee meeting.
4. BUSINESS.
 - a. Discussion and action to make a recommendation to the Village Board regarding the award of contract for 2025 Street & Utility Improvements project for storm sewer repairs
 - b. Update regarding Well 5
 - c. Discussion and action to make a recommendation to the Village Board regarding design services for Well #5.
 - d. Discussion and action to make a recommendation to the Village Board regarding the draft Babcock Channel and Stormwater Lagoon Restoration Plan.

5. SCHEDULE NEXT MEETING DATE.

- a. Wednesday, May 28, 2025, at 6:00 p.m.

6. ADJOURNMENT.

Any person who has a qualifying disability as defined by the Americans with Disabilities Act that requires the meeting or materials at the meeting to be in an accessible location or format should contact the McFarland Municipal Center at (608)838-3153, 5915 Milwaukee Street, McFarland, Wisconsin, or village.clerk@mcfarland.wi.us by 2:00 p.m. at least 5 business days prior to the meeting so that any necessary arrangements can be made to accommodate each request. If the meeting or request is less than 5 business days from the meeting, requests for accommodations may still be made and reasonable efforts will be made to accommodate each request.

VILLAGE OF MCFARLAND

Public Works & Utilities Committee Minutes

Monday, March 24, 2025 - 6:00 PM

1. CALL TO ORDER, ROLL CALL.

Village President Clow called the regular meeting of the Public Works & Utilities Committee to order at 6:00 PM in the Community Room of the Municipal Center. This meeting was also held via Zoom webinar.

Members present: President Clow, Trustee Prill, Chris Fredrick, Zach Freeman, Eric Kindschi, Marc Nielsen

Members not present: Pauline Boness

Staff Present: Public Works Director Lee Igl, Assistant to the Public Works Director Aimee Irwin, and Town & Country staff, Brian Berquist and Tim Stieve

2. PUBLIC APPEARANCES.

a. This is an opportunity for members of the public to address the Public Works and Utilities Committee for items that are not on the agenda. Please remember this is a hybrid meeting conducted in person and through the Zoom online meeting platform. Meeting attendees wishing to address the Committee about items not on the agenda may do so at this time. Zoom attendees should type their name and address in the Question and Answer feature within the Zoom online meeting platform at this time. Members of the public who are present in person and wish to address the Committee should fill out a public comment form and turn into the meeting chairperson. When you are called upon to speak, state your name, address, and provide your comments to the Committee for their consideration. Please adhere to the 3-minute time limit. Additionally, you may send your public comments to public.works@mcfarland.wi.us to be included as part of the meeting.

Members of the public may also speak during their selected agenda item as they designate on the public comment form or in the Question and Answer feature on Zoom.

None.

3. APPROVAL OF MINUTES.

a. Motion to approve the minutes of the January 27, 2025 Public Works & Utilities Committee meeting.

Motion by President Clow, seconded by Trustee Prill, to approve the minutes of the January 27, 2025, Public Works & Utilities Committee meeting. Motion carries 6 - 0 - 0.

4. BUSINESS.

a. Presentation regarding the draft Babcock Channel and Stormwater Lagoon Restoration Plan.

Stieve presented the draft plan, including a brief history, the studies conducted for the area, data trends related to lake levels, and a cost analysis for possible restoration.

- Nielsen asked what area was dredged in 1987. Stieve responded that the entire channel was dredged.
- Nielsen stated that the stormwater lagoon had been dredged since 2006. Berquist responded that while some maintenance work has occurred, there has not been a full dredge of the area.
- President Clow asked the depth of the stormwater lagoon. Stieve stated that the last measurements show the area at about three feet, which is why the area was included in the stormwater maintenance plan.
- Igl asked Stieve to review the removal of piers related to possible work. Stieve stated that piers would need to be removed as part of the construction maintenance if the full-width dredging occurred.
- President Clow asked what access points would be necessary. Stieve reviewed the various proposed access points to the channel.
- Fredrick recommended that an option be added to the draft plan for the no-build alternative.

Public comments were provided by attendees in person and on zoom by the following:

- James Zirbel, 6107 South Ct, expressed his concerns related to the highway runoff, that the site is a neglected remediation site, and that the residents of the area may have to pay for the maintenance work. Zirbel recommended additional discussions with the county related to their suck the muck campaign and an inquiry into how the county could assist with the maintenance work.
- Gordon Kinder, 5210 N Autumn Ln, provided his additional history of the area.
- Tim Ebert, 4592 Burma Rd, commented on the importance of the area for the village, his observations of the area, including the lack of current flow, and recommended that the north end be opened first to allow for flow through the channel.
- Joan Garrett, 5911 Lake Edge Rd, provided her history of the area, including the storm sewer. Garrett supports the dredging of the entire area.
- James & Cynthia McNielly, 4620 Burma Rd, stated they are in favor of dredging all four areas and suggested that the cost be borne mostly by the Village.
- Michael Margetis, 6021 South Ct, provided his observations of the area following rain events. Margetis recommended the village be required to pay for the maintenance, not only the adjoining property owners. Margetis added that the pictures he provided were taken in September 2024.
- Tara Gray Zirbel, 6107 South Ct, expressed the importance of the channel to the McFarland community.
- David Junck, 6106 Overlook Dr, supports dredging of all areas and believes the village should fund the project.
- Jack Watts, 4604 Burma Rd Unit 1, commented that the channel provides a sense of community and should be maintained. Watts commented that it's in the best interest of the village to keep the area clean and presentable.
- Kathy Carl, 6014 Lake Edge Rd, provided written comments which were included in the packet for the evening's meeting. Carl recommends the area be

dredged, and no special assessments should be imposed on adjacent property owners.

Stieve provided additional comments related to current lake water levels, sediment quality, the lack of flooding concerns, outfalls in the channel, and the proper functioning of the gabion wall.

President Clow and Igl provided an overview of the draft plan in terms of financial plans and next steps. President Clow noted that area four is included in the Capital Improvement Plan (CIP) for 2026, but the other areas of the plan are not currently included in the CIP. Igl explained that the draft plan would be updated based on this evening's meeting and would return to the committee in a future month for additional review and possible recommendation to the Village Board.

- Fredrick recommended that objectives are developed and included in the draft plan as to what the goals of the project would be. Fredrick also commented that this work would involve the waters of the state and be a project conducted on state property.

b. Discussion and action to make a recommendation to the Village Board regarding the award of contract for the 2025 Street & Utility Improvements project.

Stieve reviewed the bid results and scope of work, including an explanation of the alternative bid items.

- Fredrick asked if the quantities were reviewed for the water items as the pricing was higher than estimated. Stieve stated quantities were reviewed and stated that the work corridor was a contributor to the higher-than-estimated pricing.
- Freeman inquired about the resurfacing of Severson Rd and potential damage that may occur in 2026 related to the stormwater lagoon.

Motion by President Clow, seconded by Fredrick, to recommend to the Village Board the award of contract to Parisi Construction, LLC of Verona, Wisconsin for an amount of \$2,551,414 including the base bid and supplemental bids, while rejecting all alternative bids with additional expenses for engineering, construction administration, and contingency for a total project cost in the amount of \$3,033,000 with the condition of staff evaluating the resurfacing of Severson Rd. Motion carries 6 - 0 - 0 by acclamation.

c. Discussion and action to make a recommendation to the Village Board regarding the MS4 Annual Report for 2024

Stieve provided an overview of the MS4 annual report which summarizes the village's activities in 2024. Stieve added that the new permit term may have new requirements based on discussions with the DNR.

- President Clow asked if the stormwater basin cleaning helps keep the village in compliance. Stieve stated that the maintenance helps the village stay within

requirements.

Motion by President Clow, seconded by Freeman, to recommend approval to the Village Board regarding the 2024 MS4 Annual Report as presented. Motion carries 6 - 0 - 0.

d. Discussion and action to make a recommendation to the Village Board regarding award of contract for sanitary sewer main cleaning and televising services.

Igl reviewed the proposals received for sanitary sewer main cleaning and televising services. Igl stated the low bidder was Green Bay Pipe & TV, which is the same contractor the village had contracted with for the previous three-year term.

- Fredrick asked what the cost escalation was from Green Bay Pipe & TV from the previous contract. Igl stated there was no change.
- Freeman asked for clarification regarding the lineal footage per year. Igl stated the lineal footage is an estimated amount per year for approximately one-third of the village's system.

Motion by President Clow, seconded by Trustee Prill, to recommend approval to the Village Board regarding award of contract to Green Bay Pipe & TV of Green Bay for sanitary sewer main cleaning and televising services for a three-year term not to exceed the village's budgeted amounts. Motion carries 6 - 0 - 0.

e. Discussion and action to make a recommendation to the Village Board regarding a proposal from Baker Tilly to conduct a conventional rate case for the water utility.

Berquist provided an overview regarding a proposal from Baker Tilly to conduct a conventional water rate case. Igl stated the main reason for the conventional water rate case is related to the construction of Well 5.

- Freeman inquired about engaging Baker Tilly for the rate case. Irwin responded that Baker Tilly is the village's auditor and Baker Tilly has conducted previous water rate cases for the utility.

Motion by President Clow, seconded by Fredrick, to recommend approval to the Village Board regarding a proposal from Baker Tilly to conduct a conventional rate case for the water utility as presented. Motion carries 5 - 0 - 1, with Nielsen abstaining.

5. SCHEDULE NEXT MEETING DATE.

a. Monday, April 28, 2025, at 6:00 p.m.

6. ADJOURNMENT.

Motion by Fredrick, seconded by Freeman, to adjourn at 8:25 p.m. The meeting was adjourned by unanimous consent.

Pursuant to law, written notice of this meeting was given to the public and posted on the public bulletin board in accordance with Open Meetings Law.

Respectfully submitted,
Aimee Irwin
Assistant to the Public Works Director


VILLAGE OF
McFarland
SUMMARY SHEET

MEETING DATE: Monday, April 28, 2025

SECTION: Business

DEPARTMENT: Public Works

CONTACT: Lee Igl, Public Works Director, Matt Schuenke, Village Administrator

AGENDA ITEM: Discussion and action to make a recommendation to the Village Board regarding the award of contract for 2025 Street & Utility Improvements project for storm sewer repairs

PREVIOUS ACTION:

The Public Works & Utilities Committee recommended approval to the Village Board regarding the 2025 Street & Utility Improvements project and authorized the project for bid at their January 27, 2025, meeting.

The Village Board approved the project and authorized the project for bid at their February 11, 2025, meeting.

The Public Works & Utilities Committee recommended approval to the Village Board regarding the award of contract to Parisi Construction, LLC at their March 24, 2025, meeting while rejecting all alternative bids which included the storm sewer lining items.

ISSUE SUMMARY:

Storm sewer lining at Lake Edge Drive, Bremer Road, and a short liner on Exchange Street were originally bid with the 2025 Street & Utility Improvements Project. Due to the bid tabulation results, these alternative bid items were not awarded by the Committee during their March meeting. The storm sewer lining was then bid separately, and the bid opening occurred on April 24th.

Only one bid was received from Visu-Sewer in the amount of \$182,500. This bid amount is higher than the estimate calculated by Town & Country Engineering of \$45,000. Town & Country inquired with Visu-Sewer about their bid amount, and they stated they feel their estimated amount accurately represents the work that needs to be done. With that being said, Visu-Sewer is not qualified based on the pre-qualification documents and bidders ordinance language due to an OSHA violation. Therefore, staff recommend rejecting the bid submitted by Visu-Sewer. Staff will evaluate other options to bring this work forward in the future.

FINANCIAL/BUDGET IMPACT:

Projected funds for this project may be included in future Capital Improvement Plans and budgets as applicable.

VILLAGE PLAN REFERENCE:

[Long Range Capital Improvement Plan](#)



ORDINANCE REFERENCE:

None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

Recommended motion:

Motion, second to recommend rejection to the Village Board regarding the award of contract for the 2025 Street & Utility Improvements project for storm sewer lining.

ATTACHMENTS:

None


VILLAGE OF
McFarland
SUMMARY SHEET

MEETING DATE: Monday, April 28, 2025

SECTION: Business

DEPARTMENT: Public Works

CONTACT: Lee Igl, Public Works Director

AGENDA ITEM: Update regarding Well 5

PREVIOUS ACTION:

None.

ISSUE SUMMARY:

When the Park View Estates neighborhood was created, the Village secured land to accommodate a future drinking water well. The Village-owned Lots 87 & 88 in the subdivision for the well site. Continued growth within the village has led to the need to construct the well in the near future. The Wisconsin Department of Natural Resources permitted the site for the new well in 2007, and the Village's capital plan calls for constructing the well and well house in 2026. The site of the well was relocated to Outlot 10 and additional square footage was obtained from the School District in order to accommodate the well site. Lots 87 & 88 were purchased by Urso to develop two new single-family homes. The adjustment of lots was discussed during the July 22, 2024, committee meeting, with the committee recommending approval of these adjustments.

A test well was completed to confirm the characteristics of the aquifer and area geology in 2024 at the newly identified well site.

Enclosed in the packet are the Well #5 draft site plan, draft floor plan, and draft rendering. Town & Country will review the enclosed items and provide additional update information. Town & Country will also review the next steps in the process.

FINANCIAL/BUDGET IMPACT:

Well 5 design is included in the Capital Improvement Plan for 2025 with construction in 2026.

VILLAGE PLAN REFERENCE:

[Public Facilities Needs Assessment 2023](#)

ORDINANCE REFERENCE:

None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

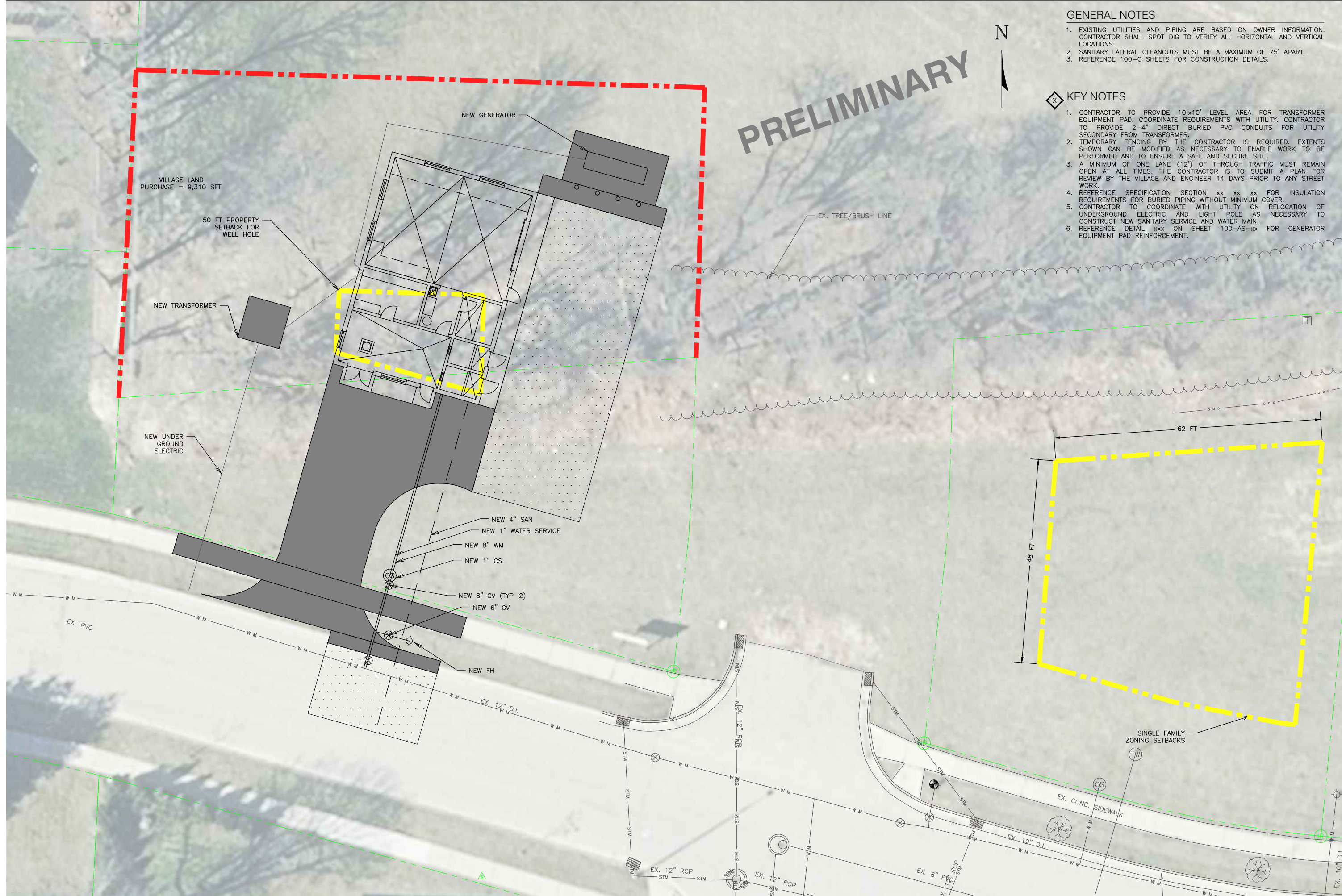
No action is required at this time.

ATTACHMENTS:

1. Well #5 Draft Site



2. Well 5 Draft Rendering
3. WELL #5 draft floor plan



PRELIMINARY



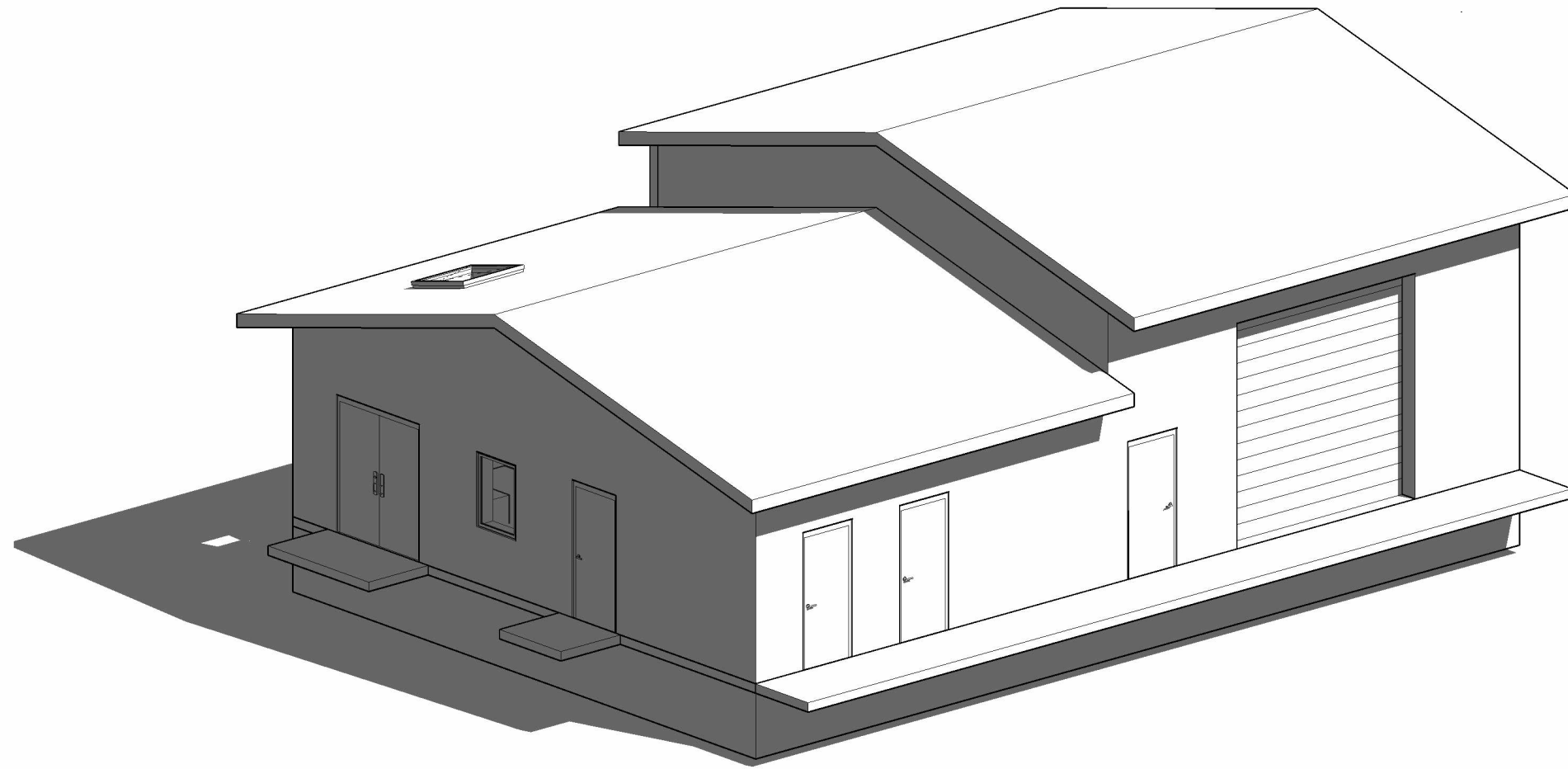
GENERAL NOTES

- EXISTING UTILITIES AND PIPING ARE BASED ON OWNER INFORMATION. CONTRACTOR SHALL SPOT DIG TO VERIFY ALL HORIZONTAL AND VERTICAL LOCATIONS.
- SANITARY LATERAL CLEANOUTS MUST BE A MAXIMUM OF 75' APART.
- REFERENCE 100-C SHEETS FOR CONSTRUCTION DETAILS.

KEY NOTES

- CONTRACTOR TO PROVIDE 10'x10' LEVEL AREA FOR TRANSFORMER EQUIPMENT PAD. COORDINATE REQUIREMENTS WITH UTILITY. CONTRACTOR TO PROVIDE 2-4" DIRECT BURIED PVC CONDUITS FOR UTILITY SECONDARY FROM TRANSFORMER.
- TEMPORARY FENCING BY THE CONTRACTOR IS REQUIRED. EXTENTS SHOWN CAN BE MODIFIED AS NECESSARY TO ENABLE WORK TO BE PERFORMED AND TO ENSURE A SAFE AND SECURE SITE.
- A MINIMUM OF ONE LANE (12') OF THROUGH TRAFFIC MUST REMAIN OPEN AT ALL TIMES. THE CONTRACTOR IS TO SUBMIT A PLAN FOR REVIEW BY THE VILLAGE AND ENGINEER 14 DAYS PRIOR TO ANY STREET WORK.
- REFERENCE SPECIFICATION SECTION xx xx xx FOR INSULATION REQUIREMENTS FOR BURIED PIPING WITHOUT MINIMUM COVER.
- CONTRACTOR TO COORDINATE WITH UTILITY ON RELOCATION OF UNDERGROUND ELECTRIC AND LIGHT POLE AS NECESSARY TO CONSTRUCT NEW SANITARY SERVICE AND WATER MAIN.
- REFERENCE DETAIL xxx ON SHEET 100-AS-xx FOR GENERATOR EQUIPMENT PAD REINFORCEMENT.

PROJECT NO.: MC-220
DRAWING FILE: MC 220 BASE.DWG
DRAWN BY: R.T.G.
CHECKED BY: XXX
DATE: 3-14-25
REVISIONS:
SCALE:
0 5 10 20
SHEET:



6264 Nesbitt Road
 Madison, WI 53719
 (608) 273-3350
 www.tceengineers.net



Roof Option 1
 Well #5

2025 Well #5 Preliminary Design
 Village of McFarland

PROJECT NO:
 MC 220

DRAWING FILE:
 J:\JOB#\SMcFarland
 Design\Drawings\

CHECKED BY:
 BJH

DATE:
 3/26/2025

REVISION:
 12:20:46 PM

SCALE:
 0 1 2 4 8
 FEET

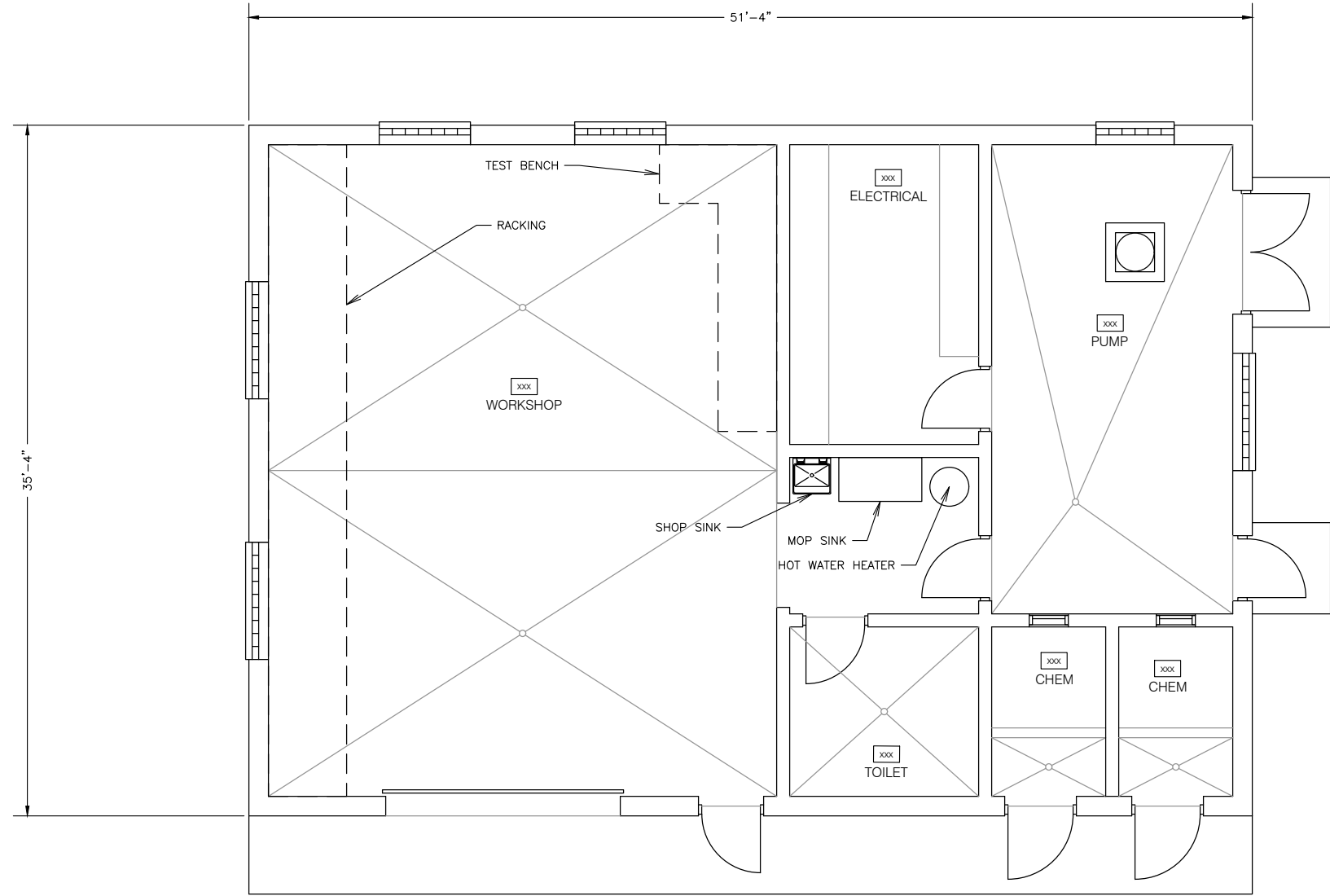
Sheet:
 00-02-04



GENERAL NOTES

1. DRAWINGS IN GENERAL DO NOT SHOW DIMENSIONS OF EXISTING CONSTRUCTION, BUT ARE DRAWN APPROXIMATELY TO SCALE. CONTRACTOR SHALL OBTAIN ALL DIMENSIONS REQUIRED FOR CONSTRUCTION.
2. ROOM/TANK NAMES SHOWN ON DEMOLITION (EXISTING) PLANS MAY DIFFER FROM ROOM/TANK DESIGNATIONS FOR IMPROVEMENTS PLANS.
3. SEE SPECIFICATIONS FOR GENERAL DEMOLITION REQUIREMENTS.
4. PLANS DO NOT NECESSARILY CALL FOR ALL ITEMS REQUIRING DEMOLITION REMOVAL, CUTTING, OR PATCHING. WHERE NOT SHOWN, ALL DEMOLITION, REMOVAL, CUTTING, PATCHING AND OTHER WORK NECESSARY TO ACCOMMODATE NEW CONSTRUCTION SHALL BE PROVIDED AS A PART OF THE CONTRACT.
5. REFER TO ARCHITECTURAL, STRUCTURAL, PLUMBING, HVAC, AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION AND MODIFICATIONS NOT LISTED HERE.
6. EXISTING STRUCTURE IS TO REMAIN IN SERVICE DURING CONSTRUCTION. REFER TO SPECIFICATION SECTION 01 00 00 FOR ANTICIPATED SEQUENCE OF CONSTRUCTION. COORDINATE DEMOLITION SCHEDULE WITH THE OWNER.

KEY NOTES



PROCESS PLAN
Ground Level

PROJECT NO.:	MC-220
DRAWING FILE:	WELL #5-M
DRAWN BY:	X.X.X.
CHECKED BY:	X.X.X.
DATE:	3-18-25
REVISIONS:	
SCALE:	
	0 1 2 4 FEET


VILLAGE OF
McFarland
SUMMARY SHEET

MEETING DATE: Monday, April 28, 2025

SECTION: Business

DEPARTMENT: Public Works

CONTACT: Lee Igl, Public Works Director

AGENDA ITEM: Discussion and action to make a recommendation to the Village Board regarding design services for Well #5.

PREVIOUS ACTION:

None.

ISSUE SUMMARY:

When the Park View Estates neighborhood was created, the Village secured land to accommodate a future drinking water well. The Village-owned Lots 87 & 88 in the subdivision for the well site. Continued growth within the village has led to the need to construct the well in the near future. The Wisconsin Department of Natural Resources permitted the site for the new well in 2007, and the Village's capital plan calls for constructing the well and well house in 2026. The site of the well was relocated to Outlot 10 and additional square footage was obtained from the School District in order to accommodate the well site. Lots 87 & 88 were purchased by Urso to develop two new single-family homes. The adjustment of lots was discussed during the July 22, 2024, committee meeting, with the committee recommending approval of these adjustments.

A test well was completed to confirm the characteristics of the aquifer and area geology in 2024 at the newly identified well site.

Enclosed in the packet are the Well #5 draft site plan, draft floor plan, and draft rendering. One of the next steps in the process for Well #5 is reviewing and providing a recommendation on the enclosed proposal prepared by Town & Country Engineering. The proposal is for Town & Country to perform engineering services related to Well #5 design and bidding.

FINANCIAL/BUDGET IMPACT:

The estimate provided in the enclosed proposal for design and bidding services is \$182,000. These funds were included within the Capital Projects fund up to \$200,000.

VILLAGE PLAN REFERENCE:

[Public Facilities Needs Assessment 2023](#)

ORDINANCE REFERENCE:

None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

Recommended motion:



Motion, second to recommend approval to the Village Board regarding a proposal from Town & Country Engineering for design and bidding services related to Well #5.

ATTACHMENTS:

1. Well 5 Scope Memo - Attachment A

ATTACHMENT A

MEMORANDUM

Date: April 24, 2025

To: Lee Igl
Director of Public Works – Village of McFarland

From: Brian Berquist, P.E.
President – Town and Country Engineering

Subject: Engineering Services Contract for Well No. 5 Design and Bidding

The Village of McFarland has expressed a desire to construct new Well No. 5. The project is anticipated to be constructed in 2026 with funding being provided by the Safe Drinking Water Fund loan program. The proposed project will include the following:

- Construct new deep well.
- Construct a new well house consisting of a masonry building with separated pump, chemical, electrical, bathroom, and workspace rooms. Architectural styles will be similar to that of Lift Station 2, which is currently being constructed.
- Site improvements adjacent to the well house will include driveways to provide access to workspace, chemical room, and pump room.
- An outdoor standby generator will be located on the site.

Engineering Scope

The scope of services for the design includes the following:

1. Complete a site topographic survey to obtain data necessary for the site plans for the new wellhouse.
2. Site civil design shall include site grading, utility plans for the new well-house and generator, and driveway design.
3. Prepare structural/architectural, HVAC, plumbing, electrical, and instrumentation and control design for the new building. These plans will be prepared and shared with the Village staff at approximately 10%, 50%, 90% and final completion.
4. Prepare of project cost estimates based on the preliminary building drawings. A final cost estimate will also be prepared at 90% completion of the plans and specifications.
5. Submittal of plans and specifications to all necessary review agencies, including Wisconsin DNR. This will also include necessary engineering/design reports to the DNR. DSPS submittal will also be performed, if required.
6. Assist the Village with the submittal of an application for Safe Drinking Water Loan Program (SDWLP) for project funding.

TOWN & COUNTRY ENGINEERING, INC.

Madison ♦ Rhinelander ♦ Kenosha ♦ Platteville
6264 Nesbitt Road • Madison, WI 53719 • (608) 273-3350 • tce@tcengineers.net

7. Assist the Village with an application to the Wisconsin PSC for the Certificate of Authority for Construction (CA). This does not include a Rate Case as required by the PSC; this service will be secured by the Village outside of this project.
8. Preparation of the final bid/construction specifications and drawings for two separate contracts; Well Drilling and Wellhouse Construction.
9. Coordination of bidding, a pre-bid meeting, and bid award for both contracts.
10. Construction administration and resident observation for well drilling.
11. Meetings with staff and the Village Board as necessary.

Contract Costs

The cost for providing final design and bidding of the new well project is estimated to be \$182,000 and will be invoiced on an hourly basis.

Services Outside This Scope

Several work scope items which may be required for document preparation or implementation of the proposed project, but that are not included in our scope of work for this contract are outlined below. Town and Country can assist with these items on an hourly basis or will help to coordinate completion of these items as required.

- Soil borings and geotechnical analysis
- Archeological, floodplain or wetland studies/evaluations
- Asbestos and lead investigations and testing
- Land or easement acquisitions
- Creation of special assessments or impact fees
- Loan or grant applications, except Safe Drinking Water Fund
- Water rate study/rate case
- Wellhouse Construction Administration or Resident Engineering (proposal will be provided after bidding)

This contract does not include services for construction administration or resident engineering. These services shall be provided under a subsequent and separate contract.

We at Town and Country Engineering, Inc. wish to thank you for allowing us to serve the Village of McFarland. If you have any questions regarding the above scope, please feel free to call.

BJH

J:\JOB#\S\McFarland\MC-00-00\O&E and Scopes\Task Order Contract\Task Order No. 7 - Well No. 5 Final Design and Bidding\Attachment A.docx

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VILLAGE OF
McFarland
SUMMARY SHEET

MEETING DATE: Monday, April 28, 2025

SECTION: Business

DEPARTMENT: Public Works

CONTACT: Lee Igl, Public Works Director, Matt Schuenke, Village Administrator

AGENDA ITEM: Discussion and action to make a recommendation to the Village Board regarding the draft Babcock Channel and Stormwater Lagoon Restoration Plan.

PREVIOUS ACTION:

For at least 10 years, the conceptual idea of revising the previous dredging effort to some extent has been discussed at Committee in different ways with public input and discussion among members.

An update regarding the draft Babcock Channel and Stormwater Lagoon Restoration Plan was provided to the committee on January 27, 2025.

The Committee hosted a Public Information Meeting and further discussed the plan at its meeting on March 24, 2025.

ISSUE SUMMARY:

The Village has been studying possible improvements to the Babcock Channel, which runs north to south between Lake Waubesa and the Yahara River, and the village's stormwater lagoon, which intersects the channel from east to west and sits adjacent to an outfall for the village's stormwater conveyance system near US Highway 51. A map of the area was developed to aid ongoing discussions with the Public Works & Utilities Committee, village staff, and residents.

The key concern during these ongoing discussions has been the amount of sediment that has built up since the last and only dredge operation, conducted as a village public works project in 1987. Additional concerns discussed and studied have included the functionality of the channel to convey stormwater, recreational navigability for watercraft, and a concern regarding water quality.

The village studied sediment depths in both 2017 and 2023. The 2023 study indicated little change in the various areas measured throughout the channel. Based on these findings and recommendations included in the stormwater management plan adopted by the village board in 2023, the stormwater lagoon, designed as Area 4 on the project map, will require dredging. This work is anticipated in 2026.

Following the Public Works & Utilities Committee meeting on January 27, 2025, the draft



Babcock Channel and Stormwater Lagoon Restoration Planning document was published and shared to gather additional public comment on the project before considering next steps. The plan will serve as a tool to be utilized by the committee and village board, providing necessary information and guidance should they desire to move a restoration project forward. [Babcock Channel and Stormwater Lagoon](#) site was created for background and information pertaining to the plan. Letters were mailed to adjacent property owners regarding the draft plan and public information meeting held at the previous meeting. A final draft is provided within the packet for review and consideration to recommend to the Village Board for acceptance.

Since that last meeting, Dane County was provided a copy of the draft and was supportive of its contents agreeing with the findings provided. We have also included a watershed basin map within the plan showing the flow from the Village into the Lagoon, and also incorporated the newspaper article shared at the last meeting discussing changing elevations of the lakes. The goal of the plan was to provide objective data for all involved to help aid in decision making process in the future if dredging the channel were to move forward. If the Committee feels the plan accomplishes that, then it is complete and discussions regarding the improvements discussed can be conducted in the future.

FINANCIAL/BUDGET IMPACT:

Expenses

- \$ 579,000 Base Bid - Center channel only.
- \$ 665,000 Alternative Bid - Expanding dredge to cover entire channel.
- \$ 125,000 Allowances - Shoreline improvements, grass restoration, and erosion control.
- \$ 219,000 Engineering - Design, bidding, and inspection.
- \$ 162,000 Consulting/Permitting - Permits, sediment testing, legal, surveying, and TLEs.
- \$ 262,500 Contingency (15%)

\$2,012,500 Total Cost - Full Width

If we were not to select the alternative bid, Staff estimates the cost to lower to around \$1,247,750, given the amount of dredged material would be less. A higher than usual contingency is applied given the current unknown conditions. If the project were to proceed further into design and gain approvals along the way, eliminating unknowns, the cost could change further up or down with additional detail. To figure that out though, it would not be without significant investment to do so.

Revenues

Offsetting the above expenses could come in a variety of different approaches, depending on how, ultimately, the Village wishes to finance the project. Our options include borrowing through the tax levy, borrowing through the stormwater utility, special assessments of adjoining landowners, and/or financial assistance through Dane County. Any of these options or combination thereof could be explored or used depending on if the Village wants to move forward, which could further review the pros and cons of each approach.

VILLAGE PLAN REFERENCE:

[Stormwater Best Management Practices 2023](#)



ORDINANCE REFERENCE:

None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:

Recommended Action:

Motion, second to make a recommendation to the Village Board to accept the Babcock Channel and Stormwater Lagoon Restoration Plan.

ATTACHMENTS:

1. Babcock Channel and Stormwater Lagoon Restoration Plan 04242025 DRAFT

**BABCOCK CHANNEL AND LAGOON RESTORATION PLANNING
LAKE WAUBESA TO YAHARA RIVER**

Village of McFarland, Wisconsin

2025

**BABCOCK CHANNEL AND LAGOON RESTORATION PLANNING
LAKE WAUBESA TO YAHARA RIVER**

Village of McFarland, Wisconsin

2025

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ATTACHMENTS

Exhibit 1 – Segment Areas and Parcel Numbers

Exhibit 2 – Sediment Levels Areas 1, 2, and 4

Exhibit 3 – Sediment Levels Area 3

Exhibit 4 – 2017 Sediment Sample Report

Exhibit 5 – Babcock Channel Watershed

Exhibit 6 – *“Low Lake Levels Leaving Boaters, Anglers High and Dry. Here’s why.”* Published in the Wisconsin State Journal on March 19, 2025.

CONTRIBUTORS

Village of McFarland
Board
Public Works and Utilities Committee
Staff

Town and Country Engineering

Drax, Inc.

Speedway Sand and Gravel, Inc.

1 Plan Introduction

The Village is located adjacent to the southeast side of the City of Madison in Dane County. The current population is estimated just under 10,000. The Village has approximately 43.50 road miles and is a little under 5 square miles in total land area. The Village is serviced by US Highway 51 as the main connection point between the cities of Madison and Stoughton. The Community is home to a high quality of life within the Madison metropolitan area as demonstrated by its excellent schools, variety in commercial enterprises, vast parks, safe neighborhoods, and abundant natural resources. More information about the Village is available at www.mcfarland.wi.us.

A significant contribution to the abundance of natural resources offered within the Village includes the natural water ways that border the Village on the north, west, and south sides of the Community (Graphic 1). Upper Mud Lake borders the Village on the northwest side which feeds into the main body of water known as Lake Waubesa. This lake is located on the west side of the Village also sharing borders with the Town of Dunn and City of Madison feeding into the Lower Yahara River to the south. Ultimately, the river flows into Lower Mud Lake bordering the Village on the south before it continues on to Lake Kegonsa beyond the Village's boundaries.

Graphic 1



The Study Area noted in Graphic 1 is known locally as the Babcock Channel due to its adjacency with Babcock County Park (Graphic 2) while flowing between Lake Waubesa from its north to south. It is also connected to what is referred to as the lagoon which connects to an outfall for the Village of McFarland’s stormwater sewer system. The channel and the lagoon receive flow from an approximately 425 acre watershed. A map of the approximate watershed boundaries is attached as Exhibit 5. The bulk of the channel lies contiguous to mainly private property with the exception of Babcock County Park that is owned and maintained by Dane County and undefined conservancy area owned by the Village. The channel itself is a navigable waterway as defined by State law allowing for the use of small water craft on a recurring basis. The channel unmistakably follows the ups and downs of Lake Waubesa, and the cleaning of the lagoon area from the outfall is completed on an as needed basis depending on material buildup. As a result, access to the channel is impeded at times based on the conditions which has caused the Village to study solutions to improve its functionality. ***The purpose of this study is to provide data and information to assist in future decisions on how to advance improvements of the channel if desired.***



1987 Dredging Project



The Village awarded Homburg Contractors, Inc. a contract to conduct “lagoon dredging” on January 23, 1987 in the amount of \$84,070. The act of dredging is to clean out the bottom and sides in some instances of a water way with a piece of equipment designed to scoop or drag material from the bottom. The work outlined within the design and specifications for the project addressed the entirety of the channel and lagoon areas, it also represents the only known maintenance of the entire area since its existence dating back over 50 years ago. The Village was not as developed during that time with an estimated population of 4,407. A graphic is provided showing an aerial photograph of the area circa 1987 that was dredged at that time. Conventional dredging methods were used to excavate materials according to designed elevations and targeted material extraction. Additionally, a gabion wall (i.e. rock wall) was installed to limit the flow of solid materials from the storm sewer outfall. The materials are either disposed of through land spreading as “clean fill” or through the landfill if testing suggests the material is not suitable for land spreading.

2 Sediment Level Findings

The current channel has an accumulated layer of soft and loose sediment that is distinct from a lower layer of harder and firmer soils. The lower layer of harder and firmer soils is the likely elevation level to which the channel was previously dredged in 1987. To determine the level of effort that would be required to dredge the channel to full-depth again, the amount of accumulated sediment in the channel must be measured. The Village has performed these measurements a couple of times in recent years and that effort and those results are described in this section of the report.

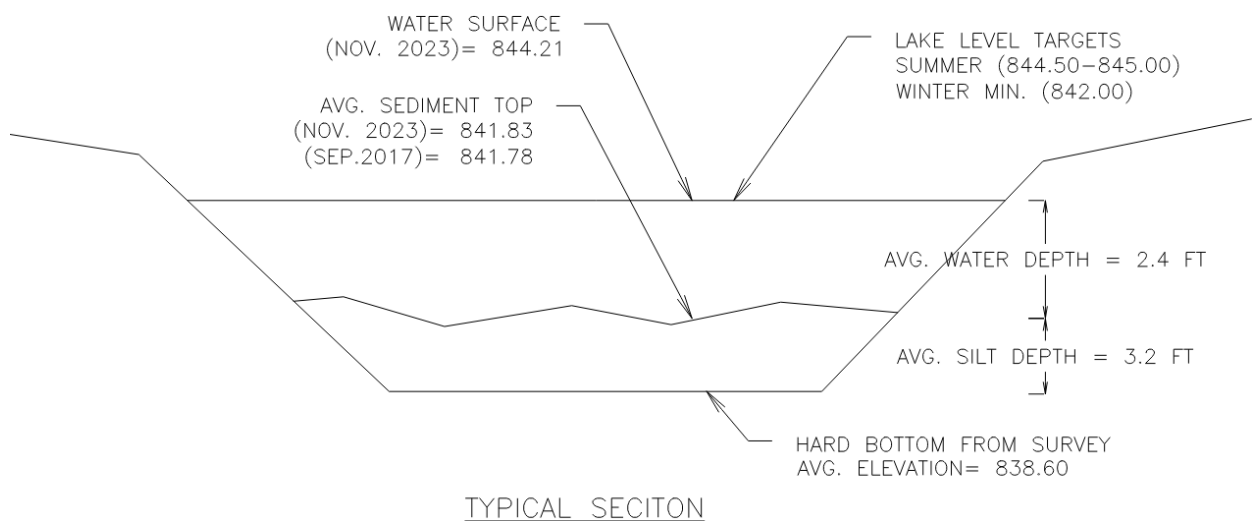
Measurements are performed by entering the channel in a boat with survey equipment capable of recording precise location and elevation data. A survey rod was used to detect and measure both the top of the loose accumulated sediment and the hard bottom of the channel at numerous locations. The depth of sediment in areas 2, 3, and 4 were measured in both 2017 and in 2023. The same procedure and equipment for taking these measurements was used in both of these years.

The detected bottom of sediment was generally in the range of 837.5 to 839 throughout all areas. On average, the hard bottom level detected by survey was 838.60. These levels are consistent with a target elevation of 838.50, which would be 6 feet below the current summer minimum lake level elevation for Lake Waubesa of 844.50. These numbers remained consistent from 2017 to 2023.

The top of the sediment detected between 2017 and 2023 also remained consistent. The overall average elevation of sediment in 2017 was 841.83. In 2023, the average elevation of the top of the sediment was 841.83. These findings indicate that the current sediment level in the channel seems to have reached an equilibrium with the typical lake levels and overall hydraulic flow of the channel.

The measured 2017 and 2023 top of sediment elevations are shown on Exhibits 2 and 3 attached to this report. Additionally, the information described above is shown displayed in Figure 1 below.

Figure 1



3 Historical Lake Levels

The lake level has a direct impact on the navigability of this channel. Lake levels are monitored, tracked and reported by the Dane County Land and Water Resources Department. This information is publicly available on their website at this address:

<https://lwr.danecounty.gov/chartlakelevels>.

The Land & Water Resources Department is responsible for maintaining lake levels for the four major lakes in Dane County: Lake Mendota, Lake Monona, Lake Waubesa and Lake Kegonsa. Minimum and maximum lake levels were set by the Wisconsin Department of Natural Resources in 1979. For Lake Waubesa, the target summer maximum elevation is 845.00, the summer minimum elevation is 844.50 and the winter minimum elevation is 842.00.

As of this writing, current lake levels are between the appropriate summer minimum and maximum elevations. However, the average lake level has been steadily declining since 2019. Figure 2 below shows the average lake level on Lake Waubesa between September 2004 and September 2024.

Figure 2

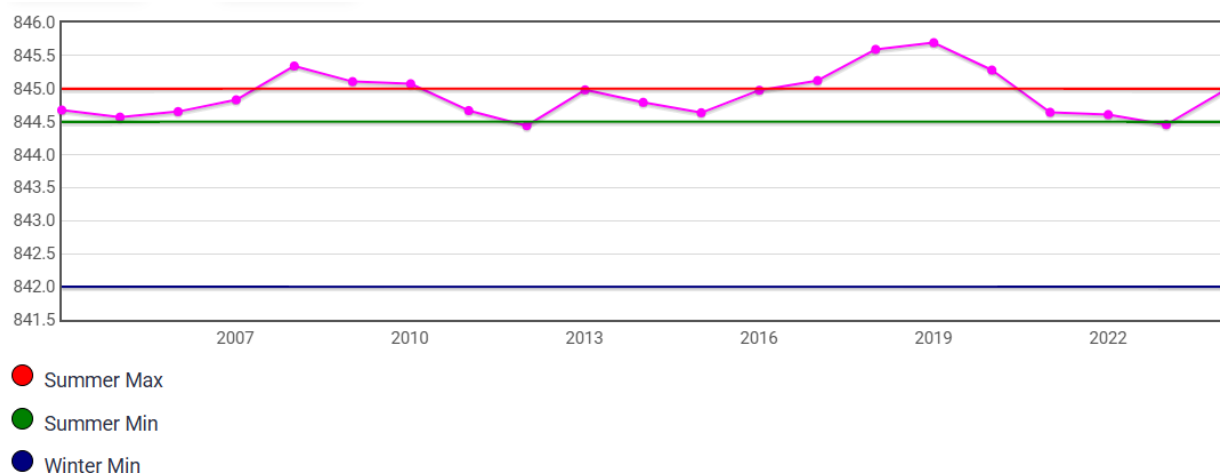
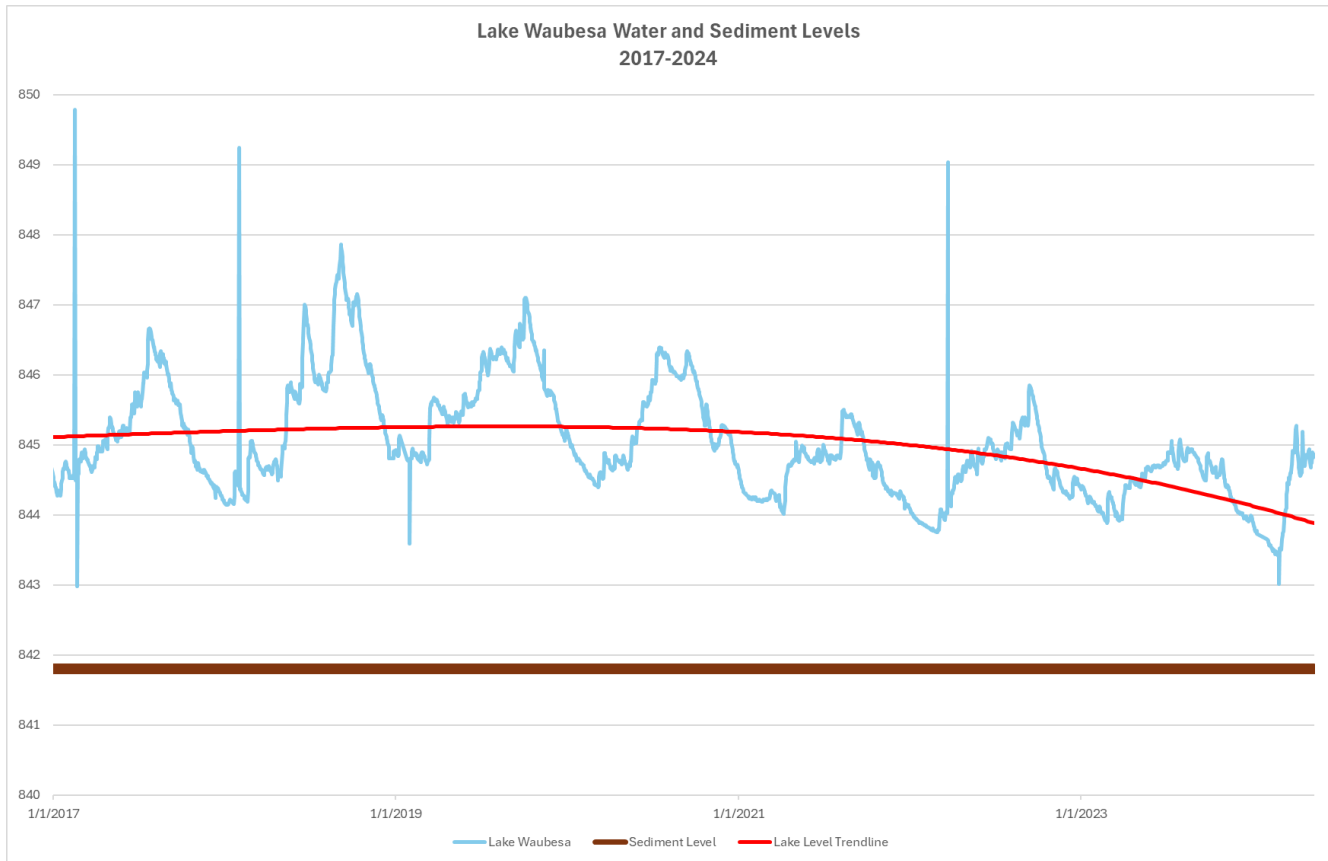


Figure 3 shows the measured lake levels in comparison to measured sediment level from 2017 to 2024. It includes an average lake level trendline in red. Although the sediment levels have remained consistent, the recent steady decline in water elevation in the channel has had major effects on navigability and exacerbated the issues experienced by users of the channel.

Figure 3



Enclosed within the packet as Exhibit 6 is an article from the Wisconsin State Journal that was published on March 19, 2025. The article reviews the relationship between the lakes in the Madison area connected by the Yahara River including Lake Waubesa. It further helps to narrate the graphs depicted above reviewing the seasonal ups and downs experienced within the lakes as it relates to the flow within the watershed.

Field Observations

Please note the following field observations within 2024 comparing the water height and channel performance as we transitioned from Winter to Spring and Summer. Area #2 was used for this purpose that is located between Burma Road north to Lakeview Road/Lagoon. The pictures in question were taken from the Lakeview Road bridge looking south to where the channel splits with the Lagoon. This is also an area where the depth of the channel was measured at 843.24 in 2017 and then at 843.55 in 2023. The two measured sediment depths have changed very little whereas the water height that sits on top of the sediment has fluctuated by a wide amount. The pictures are presented with the lake elevations measured on those specific dates the pictures were taken.

February 28, 2024



843.02 Lake Elevation

843.55 Measured Channel Bottom

- 0.53 Clearance

The channel bottom was measured as part of the survey within the area the channel bends to the Lagoon. At this point the lake elevation was 0.53' below the measured bottom or about 6 inches below the channel bottom. As expected, there is little to any water being held in the channel due to the low lake level.

April 30, 2024

844.88

Lake Elevation

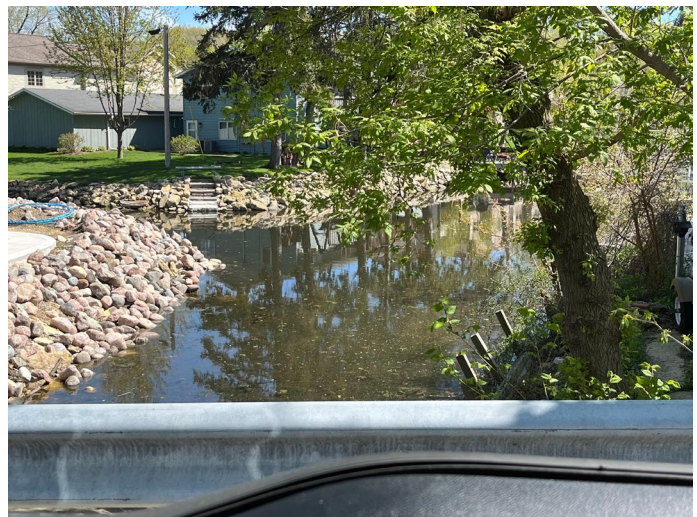
843.55

Measured Channel Bottom

1.33

Clearance

As expected, the lake elevation has risen and as a result the channel has filled up with water. This added about 16 inches of depth within the channel from when it was measured in February.



June 24, 2024



846.05 Lake Elevation

843.55 Measured Channel Bottom

2.50 Clearance

Water has increased in elevation within the lake to add another 1.17' on top of what was measured in April. This brings the total clearance from the existing bottom to around 30 inches from when it was measured in February.

Other pictures from Area #1 the area of the channel from Lake Edge Road north to Lake Waubesa.

February 28, 2024



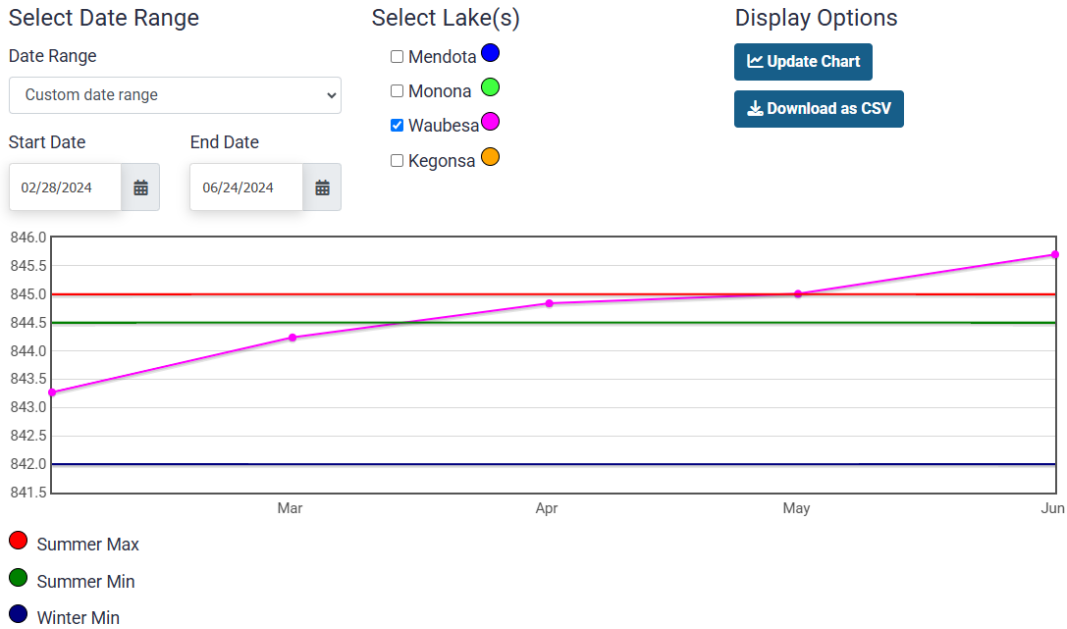
April 30, 2024



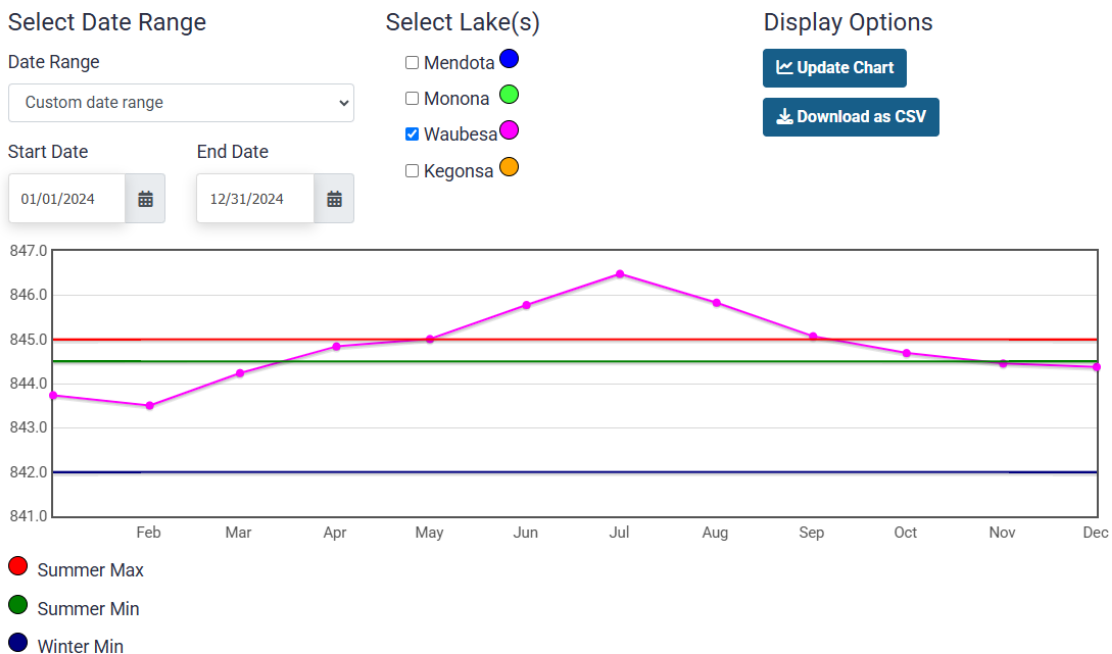
June 24, 2024



The following chart from the Dane County lake levels shows the progression of the growth during that time from February 28, 2024 to June 24, 2024 when the pictures were taken.



Adjusted then for the full year, one can see the progression of decline in lake levels within the winter months only to grow during the summer before starting the cycle over again. This is directly attributed to weather conditions but also control of lake volumes within the entire chain maintained by Dane County. We have very little to no control over this and while we may be able to adjust the bottom through a dredging project, we will never ultimately be able to control how much water actually goes into the channel.



4 Channel Area Overview

Dredging is the process of excavating and removing sediment and debris from underwater environments like rivers, harbors, and lakes. It is commonly used to deepen or maintain navigable waterways, create artificial land, and change drainage patterns. Typical dredging methods include mechanical excavation using barge-loaded equipment, hydraulic dredging with pumps and pipelines, and mechanical excavation in a dewatered condition.

The preferred dredging method for a project will vary based on the site conditions and on contractor approach. For the purposes of this evaluation, the channel has been broken out into distinct areas. A map of these areas is shown on Exhibit 1. Area 1 is from Lake Edge Road to Lake Waubesa. Area 2 is between Lake Edge Road, the gabion wall, and Burma Road. Area 3 is from Burma Road to the Yahara River. Area 4 is the Village stormwater treatment lagoon, from USH 51 to the gabion wall. The following is a description of the potential approaches and issues within each project area.

Area 1

This is the smallest segment of the project and it does not have good access points from the adjacent shoreline. The likely approach for dredging this segment would be to access the area with barge-mounted excavation equipment. That process involves an excavator loaded on a floating barge that digs the material out of the channel and places it on the barge. Once the barge is at full capacity, it would then be moved to the northern end of South Court where the material could be loaded onto a truck. As noted, the likely access point for this work would be off of the northern end of Court.

It should be noted that navigable water ways are accessible to the public and in this area the channel passes through private property. Upon receipt of approved permits, the Village would have the legal right to dredge this area within the navigable channel even though it passes through private property; however, we would have to stay within the extent of the channel and not be able to affect or access the adjoining private property. The recommended approach would be to seek an agreement through a temporary limited easement with the property owner to properly access and maintain the channel including the shoreline as applicable. This is the approach used in 1987 and was agreed to at that time by the property owner. This would be the best practice in this area and all areas to partner with the adjoining property owners to ensure the most successful outcome for the project. The remaining channel areas exist within the public domain and have access points available through existing public right of way.

Area 2

This segment has a couple of potential locations for access. The Village has right-of-way that extends into this area from Severson Road. Additionally, there is some undeveloped greenspace on private property directly to the northeast of the Burma Road bridge that could be a potential point for access if the private property owner was agreeable.

This area is distinct from the others in that it is almost entirely fronted by private property owners and has a significant number of piers on both sides. If the area were to be dredged to its full-width, these piers would need to be removed. The dredging of this area may take the form of a couple of different approaches. One approach would be similar to the one described for area 1. A floating barge and excavator could remove the material from the channel bed and load it onto a truck at one of the access points. Another dredging approach would be to use temporary berms to block flow getting into the area from the Lake Edge Road and Burma Road Bridge. All of area 2 could then be pumped out and excavation equipment could be driven directly down into the channel at an access point. That equipment would then remove the accumulated sediment and load it onto trucks for removal from the site. This is the same approach that was applied within the 1987 project.

Area 3

This segment is almost entirely fronted by public property owners. There are 7 private property owners along this area. If the channel were to be dredged to the full width, the piers would need to be removed. The best access to this area would be from Babcock Park. The exact location of preferred access would need to be coordinated with Dane County, but a likely point would be near the existing police boat pier. This access point has the additional benefit of immediate proximity to USH 51 for trucking traffic. The potential approaches to dredging this area would be the same as those described in area 2. The area could be dredged with a barge-mounted excavator or by berm and draining the channel prior to excavation.

Area 4

This area contains solely the lagoon from the existing gabion wall to USH 51 where it meets the Village's stormwater outfall. This lagoon is a stormwater treatment device meant to capture sediment and built to accommodate routine dredging and maintenance. As a result, this area is the most straightforward in approach and construction. The area is readily accessed off of Severson Road. Dredging could be completed using a long-boom excavator from Severson Road directly loading dredged material onto trucks. It could also be dredged by draining the area first and tracking equipment into the lagoon area.

5 Cost Analysis

Expenses

The total expenses for the dredging project is estimated at \$1,247,750 for the navigational width to \$2,012,500 for the full width including all sections of the enclosed plan. These costs are summarized in the following table:

ITEM NO.	DESCRIPTION OF WORK	ESTIMATED AMOUNT
BASE- Navigational Width Dredging		
1.	Dredging Area 1	\$30,000
2.	Dredging Area 2	\$163,000
3.	Dredging Area 3	\$263,000
4.	Dredging Area 4	\$123,000
	BASE TOTAL	\$579,000
ALTERNATIVE- Full Width Dredging		
A1	Dredging Area 1	\$30,000
A2	Dredging Area 2	\$388,000
A3	Dredging Area 3	\$703,000
A4	Dredging Area 4	\$123,000
	ALTERNATIVE TOTAL	\$1,244,000
ALLOWANCE		
AL1	Shoreline Rip-Rap Replacement	\$50,000
AL2	Grass Restoration	\$25,000
AL3	Erosion Control	\$50,000
	ALLOWANCE TOTAL	\$125,000
ENGINEERING		
E1	Construction and Design Engineering	\$169,000
E2	Construction Inspection	\$50,000
	ENGINEERING TOTAL	\$219,000
CONSULTING/PERMITTING		
P1	Permit Fees	\$2,000
P2	Sediment Sampling and Testing	\$20,000
P3	Legal	\$15,000
P4	Surveying	\$25,000
P5	Temporary Limited Easements	\$100,000
	CONSULTING/PERMITTING TOTAL	\$162,000

PROJECT TOTAL COSTS		
	Navigational Width Sub-Total	\$1,085,000
	Contingency (15%)	\$162,750
	NAVIGATIONAL WIDTH TOTAL	\$1,247,750
	Full Width Sub-Total	\$1,750,000
	Contingency (15%)	\$262,500
	FULL WIDTH TOTAL	\$2,012,500

These estimated costs are based on the following assumptions:

1. Average cost of dredging across all areas is \$75/cubic yard.
2. Dredging area for navigational purposes assumes a dredging width of 24'.
3. Dredging volumes assume an average sediment depth to be 3.2 feet with a target bottom of channel elevation of 838.50.
4. All costs assume that dredged materials are suitable for land application.
5. Allowances, consulting, and permitting are applied to the sub-total for both the navigational and full width options.
6. Higher contingency at 15% used for the project given the unique and rare nature of the project.

Revenues

With the use of funds identified above through the expenses listed, we would need to decide how to find sources of revenues to pay for the project in order for it to move forward. The following options could be considered with some of them in full or others used in combination to advance the project.

- **Borrowing** – The Village has the ability to borrow for capital projects of this nature. Actual terms could be studied further to understand the additional cost to incur interest on the loans based on the amount borrowed, term, etc. There are two options to consider regarding how the borrowing ultimately is repaid:
 - **Tax Levy** – Funds could be borrowed for the project that would be paid back through the tax levy. This would be similar to how we use borrowing to fund road projects, vehicles, or other general capital needs of the Village. It would affect the tax rate and our projections on debt utilization that are backed by the assessed value of the Village as a whole.
 - **Stormwater Utility** – The utility has the ability to borrow for funds that are paid back through the unit charge paid to maintain the utility. We would have to build the debt service calculation into our projects along with other capital and operating needs, but otherwise some amount could be attributed to this source likely as a revenue bond versus a general obligation bond the tax levy funds. Area 4 will be paid 100% through the Village and funded by the Stormwater Utility. The determination would need to be made if the utility should further fund the work in Areas 1-3.
- **Special Assessments** – The Village does not utilize special assessments very often, but municipalities do apply special assessments to property owners abutting improvements they stand to benefit from. Again, most of the channel area is adjacent to private property with exception to Babcock Park owned by Dane County and some undefined conservancy property owned by the Village. In theory, they have exclusive access to the waterway that the general public does not as there is no direct public access point to the channel other than through Lake Waubesa. A funding methodology could be developed for abutting property owners to share in the improvement to an extent to be determined. The total lienal feet within Areas 1-3 is 4,693 for all parcels abutting the channel. The cost per lienal foot of the navigable width is \$265.87 per lf and for the full width would be \$428.83. A property with a lienal footage of 50' as an example would expect to pay \$13,294 to \$21,442 if 100% of the cost were applied in this manner. There is the ability to charge special assessments through the tax bill and establish long term payment plans to offset the high up front cost.

- Dane County – If the Assessment route was pursued, they ultimately would be responsible for their share of the costs as it is determined adjacent to their property similar also to what would apply to the Village. Additionally, the Village could apply for an Urban Water Quality Grant or other possible grants available from the County to help offset the cost. [Information about that program is available through this link](#) and any amount of funding received would lessen the need for any of the other options to be applied.

Regardless of the amount of money we wish to expend on the project or what source of funds we want to pull from, it is a large project to take on within either option presented. The costs are meant to be conservatively high to ensure enough funding is forecasted to take on the unknown which depending on what might be encountered could be significant. The use of estimates on the expenses and providing conceptual options on the revenues is meant to add options to the discussion to understand what might be available to pursue should we want to move forward with all or part of the project.

6 Permitting Requirements

The Village submitted preliminary project information on this potential work to the WDNR for their review in June 2024. WDNR confirmed that the permitting path that this project would take would be to obtain a Chapter 30 dredging permit. This permit would be necessary for work in any of the areas. They have thus far confirmed that the Village would be able to receive a permit for this work assuming the application conditions are met following review by their appropriate divisions.

The regulations of the Chapter 30 permit require additional environmental consulting for soils testing both before and during project construction. This testing would verify that the material is suitable for land application and that it is uncontaminated. Testing of the material was performed in 2017 and indicated no contamination at that time, but additional testing would need to be performed for a modern effort. A copy of that report is provided as Exhibit 4.

The US Army Corps of Engineers reviews all waterway permits submitted to WDNR and determines the need for additional permitting from their agency at that time. It is anticipated that this project would necessitate a permit from USACE. The requirements of the WDNR Chapter 30 permit cover those of the USACE permitting.

The project will require a Village Shoreland Erosion Control Permit. This permit will contain erosion control and shoreline disturbance.

7 Additional Considerations

Longevity of Dredging Project

It would be useful to be able to have an accurate prediction of how long this dredging effort will remain effective or how frequently the dredging will need to be done in the future. Unfortunately, there is no data on the past accumulation rate of sediment in this channel to provide a good forecast of future conditions. The closest local corollary to this area might be Belle Isle in the City of Monona which was dredged in approximately 2012. The dredging effort in Monona has remained effective to date and has not had to be re-dredged. For the Babcock Channel, it is recommended that the Village initially plan to dredge the area every 10-15 years. It is also recommended that sediment levels be monitored annually in the channel to track the actual rate of sediment accumulation and attempt to derive a more accurate forecast. The ongoing need to this is directly attributed to our lack of control over the rise and fall of the lack that has water flow through the area.

“Do Nothing” Option

It is common engineering industry practice to evaluate and discuss the effects of not implementing a project under consideration. This is frequently referred to as evaluating the “do nothing” option. In this case, doing nothing would be assumed to entail performing no dredging activity within the channel at all.

The channel elevation data obtained in 2017 and again in 2023 indicates that the sediment in the channel has reached approximate equilibrium. The sediment level elevations seem to have stabilized at around elevation 842, which corresponds to the wier elevation at the Babcock Dam and the County’s target winter minimum lake level elevation. Given this information, it appears that performing no dredging in the channel would result in sediment level conditions continuing to remain at their current elevation. Additional long-term accumulation of material is unlikely to occur.

Disposal of Dredged Materials

If this dredging effort is to be pursued, the Village will need to work to identify a method/location of disposal for the dredged material. Trucking the material from the project site could add significant costs to the project if the distance is excessive. Working with the County to identify potential users or locations or utilizing the material on Village-owned property would be recommended.

Conceptual Timeline

Babcock Channel – Areas 1-3

Design work and extensive coordination with adjacent property owners would still need to be conducted in order to advance the dredging project studied within the channel. Timeline for completion would forecast continued planning level dialogue in 2025 with consideration for design/permitting to be conducted in 2026 with anticipated construction in 2027. This is a hypothetical timeline as there are no permits, agreements, or other design level detail approved at this time. The additional planning to move forward would allow for additional discussions on desired funding methods and ability to include within the next Capital Improvement Plan to properly forecast the financial impact. Just like any other public works improvement project, the Village has to go through the process to design the improvement and submit that work for review within a number of different jurisdictions. The plan in and of itself is not approval to proceed but meant to outline the areas that will need to be addressed in the future for it to proceed.

Lagoon – Area 4

This area is recommended within the second year of implementation of the Village's Stormwater Management Plan. The first year of work within that plan was recently awarded for completion in 2025. Staff will be preparing the 2026 Stormwater Maintenance design this year which presently includes dredging the lagoon area next year as recommended within that plan to improve performance of the stormwater system.

There are limited economies of scale in doing the projects at the same time. If it were desired to do all at one, then Area 4 would be aligned with a timeline for Areas 1-3 which would push its implementation out a few years. This is possible but completing the lagoon before the channel from a constructible standpoint would not alter the feasibility of the plan.

8 Plan Closing

This plan is meant to provide information on what it would entail to move forward with another effort to dredge the Babcock Channel. The last effort to do this was 37 years ago, and if we embark on it again we will at some point have to continue this effort into the future to maintain some sort of desirable functionality of the channel. All the plan serves to do is provide the information necessary to consider taking that effort on again and to what extent. It ultimately is a plan that can be accepted to receive the information to aide in the decision making process in the future. The Village Board holds the final say whether to move forward, and if desired the Public Works and Utilities Committee may further review this project's inclusion within a future Capital Improvement Plan. Its acceptance certainly does not guarantee that but all acceptance stands to do is provide information to help all involved reach a conclusion that is desirable to move forward.

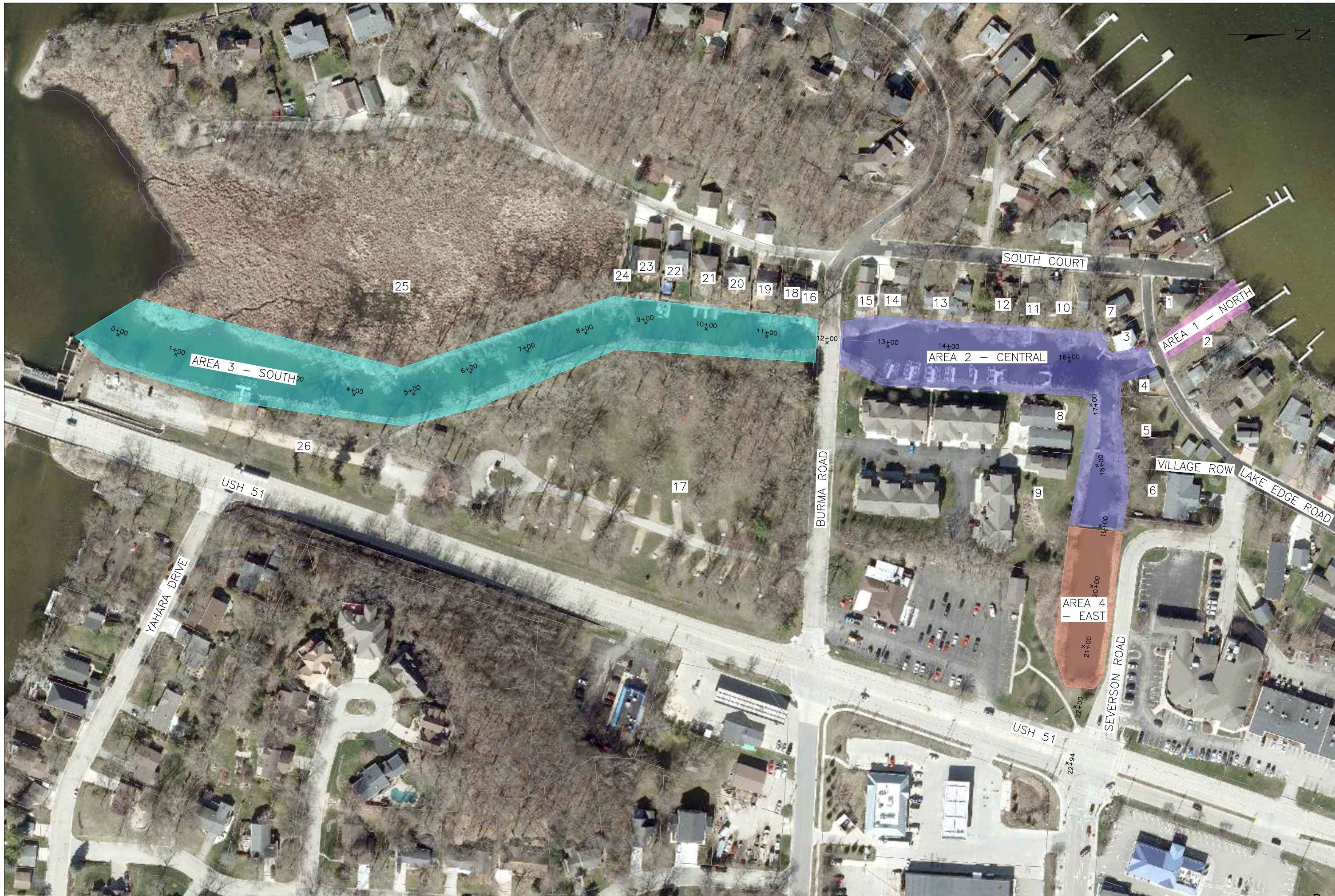
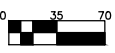


EXHIBIT 1 - SEGMENT AREAS AND PARCEL NUMBERS
 Babcock Channel and Farwell Outfall
 Village of McFarland, Wisconsin

PROJECT NO.:	MC 216
DRAWING FILE:	MC 216 BASE.DWG
DRAWN BY:	T.J.S.
CHECKED BY:	B.R.B.
DATE:	1-16-25
REVISIONS:	
SCALE:	
	
SHEET:	E1

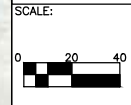


PROJECT NO.:	MC 216
DRAWING FILE:	MC 216 BASE.DWG
DRAWN BY:	T.J.S.
CHECKED BY:	T.J.S.
DATE:	1-16-25
REVISIONS:	
SCALE:	
	0 20 40
SHEET:	E2



EXHIBIT 3 - AREA 3
 Babcock Channel
 Village of McFarland, Wisconsin

PROJECT NO.: MC 216
 DRAWING FILE: MC 216 BASE.DWG
 DRAWN BY: T.J.S.
 CHECKED BY: T.J.S.
 DATE: 1-16-25
 REVISIONS:



SHEET:
 E3



ANALYTICAL REPORT

TOWN & COUNTRY ENGINEERING
 TOM TEBEEST
 2912 MARKETPLACE DR
 SUITE 103
 MADISON, WI 53719
 Copy: ttebeest@tcengineers.net

Project Name: MC FARLAND SEDIMENT TESTING
 Project Phase:
 Contract #: 3085
 Project #:
 Folder #: 128411
 Purchase Order #:

Page 1 of 6
 Arrival Temperature: See COC
 Report Date: 07/03/2017
 Date Received: 06/23/2017
 Reprint Date: 07/03/2017

CT LAB Sample#: 883746 Sample Description: SOUTH END Sampled: 06/22/2017 1235

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Conductivity	970	uS/cm	1.00		1			06/27/2017 11:00	BKB	EPA 9050A
Fecal Coliform	168	MPN/g_TS	10		1			06/23/2017 11:10	SAW	SM 9221
pH	7.07	S.U.	N/A	N/A	1			06/30/2017 11:00	MER	EPA 9045D
Phosphorus	724	mg/kg	120	410	1	M	06/28/2017 09:00	06/30/2017 14:32	BKB	EPA 365.4
Total Organic Carbon as % OM	12.9	%	0.1	0.1	1			06/26/2017 15:30	SAW	MOSA 29-4,3,2,4
Nitrogen Kjeldahl	3240	mg/kg	130	450	1	M	06/28/2017 09:00	06/30/2017 11:38	BKB	EPA 351.2
Nitrate Nitrogen	<1.4	mg/kg	1.4	5.0	1		06/27/2017 11:15	06/27/2017 15:14	DGS	EPA 9056A
Metals Results										
Arsenic	<2.4	mg/kg	2.4	8.6	1		06/23/2017 11:00	06/26/2017 15:07	NAH	EPA 6010C
Cadmium	<0.17	mg/kg	0.17	0.56	1		06/23/2017 11:00	06/26/2017 15:07	NAH	EPA 6010C
Chromium	11.6	mg/kg	5.0 *	17	1		06/23/2017 11:00	06/26/2017 15:07	NAH	EPA 6010C
Copper	13.8	mg/kg	0.96	3.2	1		06/23/2017 11:00	06/26/2017 15:07	NAH	EPA 6010C
Lead	15.2	mg/kg	1.0	3.5	1		06/23/2017 11:00	06/26/2017 15:07	NAH	EPA 6010C
Nickel	8.9	mg/kg	1.0	3.5	1		06/23/2017 11:00	06/26/2017 15:07	NAH	EPA 6010C

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB Sample#: 883746	Sample Description: SOUTH END	Sampled: 06/22/2017 1235
------------------------	-------------------------------	--------------------------

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Zinc	92.0	mg/kg	1.2	4.2	1		06/23/2017 11:00	06/26/2017 15:07	NAH	EPA 6010C
Potassium	542.6	mg/kg	76	250	1	B	06/23/2017 11:00	06/26/2017 11:28	MDS	EPA 6010C

CT LAB Sample#: 883752	Sample Description: BABCOCK PARK PIER	Sampled: 06/22/2017 1000
------------------------	---------------------------------------	--------------------------

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Solids, Percent	50.8	%	0.1	0.1	1			06/27/2017 13:30	BMM	EPA 8000C
Conductivity	1210	uS/cm	1.00		1			06/27/2017 11:00	BKB	EPA 9050A
Fecal Coliform	57.6	MPN/g_TS	10		1			06/23/2017 11:10	SAW	SM 9221
pH	7.25	S.U.	N/A	N/A	1			06/30/2017 11:00	MER	EPA 9045D
Phosphorus	457	mg/kg	71	240	1		06/28/2017 09:00	06/30/2017 14:36	BKB	EPA 365.4
Total Organic Carbon as % OM	5.9	%	0.1	0.1	1			06/26/2017 15:30	SAW	MOSA 29-4,3,2,4
Nitrogen Kjeldahl	2060	mg/kg	78	260	1		06/28/2017 09:00	06/30/2017 11:42	BKB	EPA 351.2
Nitrate Nitrogen	2.56	mg/kg	0.78 *	2.7	1		06/27/2017 11:15	06/27/2017 16:10	DGS	EPA 9056A

Metals Results

Arsenic	<1.2	mg/kg	1.2	4.2	1		06/23/2017 11:00	06/26/2017 15:13	NAH	EPA 6010C
Cadmium	<0.082	mg/kg	0.082	0.27	1		06/23/2017 11:00	06/26/2017 15:13	NAH	EPA 6010C
Chromium	10.2	mg/kg	2.4	8.1	1		06/23/2017 11:00	06/26/2017 15:13	NAH	EPA 6010C
Copper	12.4	mg/kg	0.47	1.5	1		06/23/2017 11:00	06/26/2017 15:13	NAH	EPA 6010C
Lead	21.4	mg/kg	0.50	1.7	1		06/23/2017 11:00	06/26/2017 15:13	NAH	EPA 6010C
Nickel	8.1	mg/kg	0.50	1.7	1		06/23/2017 11:00	06/26/2017 15:13	NAH	EPA 6010C
Zinc	57.9	mg/kg	0.60	2.0	1		06/23/2017 11:00	06/26/2017 15:13	NAH	EPA 6010C
Potassium	467.1	mg/kg	37	120	1	B	06/23/2017 11:00	06/26/2017 11:39	MDS	EPA 6010C

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB Sample#: 883753 Sample Description: MIDDLE APT PIER

Sampled: 06/22/2017 1210

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Solids, Percent	14.2	%	0.1	0.1	1			06/27/2017 13:30	BMM	EPA 8000C
Conductivity	924	uS/cm	1.00		1			06/27/2017 11:00	BKB	EPA 9050A
Fecal Coliform	151	MPN/g_TS	10		1			06/23/2017 11:10	SAW	SM 9221
pH	7.07	S.U.	N/A	N/A	1			06/30/2017 11:00	MER	EPA 9045D
Phosphorus	401	mg/kg	230 *	760	1		06/28/2017 09:00	06/30/2017 14:37	BKB	EPA 365.4
Total Organic Carbon as % OM	16.6	%	0.1	0.1	1			06/26/2017 15:30	SAW	MOSA 29-4,3,2,4
Nitrogen Kjeldahl	3800	mg/kg	250	840	1		06/28/2017 09:00	06/30/2017 11:43	BKB	EPA 351.2
Nitrate Nitrogen	<2.8	mg/kg	2.8	9.8	1		06/27/2017 11:15	06/27/2017 16:29	DGS	EPA 9056A
Metals Results										
Arsenic	<4.0	mg/kg	4.0	14	1		06/23/2017 11:00	06/26/2017 15:38	NAH	EPA 6010C
Cadmium	<0.28	mg/kg	0.28	0.94	1		06/23/2017 11:00	06/26/2017 15:38	NAH	EPA 6010C
Chromium	15.0	mg/kg	8.4 *	28	1		06/23/2017 11:00	06/26/2017 15:38	NAH	EPA 6010C
Copper	27.0	mg/kg	1.6	5.3	1		06/23/2017 11:00	06/26/2017 15:38	NAH	EPA 6010C
Lead	25.1	mg/kg	1.7	5.8	1		06/23/2017 11:00	06/26/2017 15:38	NAH	EPA 6010C
Nickel	5.9	mg/kg	1.7	5.8	1		06/23/2017 11:00	06/26/2017 15:38	NAH	EPA 6010C
Zinc	159	mg/kg	2.1	7.0	1		06/23/2017 11:00	06/26/2017 15:38	NAH	EPA 6010C
Potassium	533.4	mg/kg	130	420	1	B	06/23/2017 11:00	06/26/2017 11:41	MDS	EPA 6010C

CT LAB Sample#: 883754 Sample Description: LAGOON

Sampled: 06/22/2017 1200

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Solids, Percent	42.7	%	0.1	0.1	1			06/27/2017 13:30	BMM	EPA 8000C

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB Sample#: 883754 Sample Description: LAGOON

Sampled: 06/22/2017 1200

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Conductivity	986	uS/cm	1.00		1			06/27/2017 11:00	BKB	EPA 9050A
Fecal Coliform	131	MPN/g_TS	10		1			06/23/2017 11:10	SAW	SM 9221
pH	7.07	S.U.	N/A	N/A	1			06/30/2017 11:00	MER	EPA 9045D
Phosphorus	343	mg/kg	79	260	1		06/28/2017 09:00	06/30/2017 14:38	BKB	EPA 365.4
Total Organic Carbon as % OM	9.1	%	0.1	0.1	1			06/26/2017 15:30	SAW	MOSA 29-4,3,2,4
Nitrogen Kjeldahl	1720	mg/kg	87	290	1		06/28/2017 09:00	06/30/2017 11:44	BKB	EPA 351.2
Nitrate Nitrogen	<0.93	mg/kg	0.93	3.3	1		06/27/2017 11:15	06/27/2017 16:47	DGS	EPA 9056A

Metals Results

Arsenic	<1.0	mg/kg	1.0	3.7	1		06/23/2017 11:00	06/26/2017 15:45	NAH	EPA 6010C
Cadmium	0.079	mg/kg	0.072 *	0.24	1		06/23/2017 11:00	06/26/2017 15:45	NAH	EPA 6010C
Chromium	11.1	mg/kg	2.1	7.1	1		06/23/2017 11:00	06/26/2017 15:45	NAH	EPA 6010C
Copper	18.6	mg/kg	0.41	1.3	1		06/23/2017 11:00	06/26/2017 15:45	NAH	EPA 6010C
Lead	12.2	mg/kg	0.44	1.5	1		06/23/2017 11:00	06/26/2017 15:45	NAH	EPA 6010C
Nickel	5.4	mg/kg	0.44	1.5	1		06/23/2017 11:00	06/26/2017 15:45	NAH	EPA 6010C
Zinc	152	mg/kg	0.53	1.8	1		06/23/2017 11:00	06/26/2017 15:45	NAH	EPA 6010C
Potassium	286.9	mg/kg	32	110	1	B	06/23/2017 11:00	06/26/2017 11:44	MDS	EPA 6010C

CT LAB Sample#: 883755 Sample Description: NORTH CHANNEL

Sampled: 06/22/2017 1130

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Solids, Percent	66.8	%	0.1	0.1	1			06/27/2017 13:30	BMM	EPA 8000C
Conductivity	1150	uS/cm	1.00		1			06/27/2017 11:00	BKB	EPA 9050A
Fecal Coliform	50.3	MPN/g_TS	10		1			06/23/2017 11:10	SAW	SM 9221

Inorganic Results

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB Sample#: 883755 Sample Description: NORTH CHANNEL

Sampled: 06/22/2017 1130

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
pH	7.48	S.U.	N/A	N/A	1			06/30/2017 11:00	MER	EPA 9045D
Phosphorus	151	mg/kg	51 *	170	1		06/28/2017 09:00	06/30/2017 14:39	BKB	EPA 365.4
Total Organic Carbon as % OM	2.1	%	0.1	0.1	1			06/26/2017 15:30	SAW	MOSA 29-4,3,2,4
Nitrogen Kjeldahl	902	mg/kg	57	190	1		06/28/2017 09:00	06/30/2017 11:45	BKB	EPA 351.2
Nitrate Nitrogen	<0.60	mg/kg	0.60	2.1	1		06/27/2017 11:15	06/27/2017 17:06	DGS	EPA 9056A
Metals Results										
Arsenic	<0.83	mg/kg	0.83	3.0	1		06/23/2017 11:00	06/26/2017 11:45	NAH	EPA 6010C
Cadmium	<0.058	mg/kg	0.058	0.19	1		06/23/2017 11:00	06/26/2017 11:45	NAH	EPA 6010C
Chromium	1.9	mg/kg	1.7 *	5.8	1		06/23/2017 11:00	06/26/2017 11:45	NAH	EPA 6010C
Copper	1.5	mg/kg	0.33	1.1	1		06/23/2017 11:00	06/26/2017 11:45	NAH	EPA 6010C
Lead	3.1	mg/kg	0.36	1.2	1		06/23/2017 11:00	06/26/2017 11:45	NAH	EPA 6010C
Nickel	0.77	mg/kg	0.36 *	1.2	1		06/23/2017 11:00	06/26/2017 11:45	NAH	EPA 6010C
Zinc	8.5	mg/kg	0.43	1.4	1		06/23/2017 11:00	06/26/2017 11:45	NAH	EPA 6010C
Potassium	115.1	mg/kg	26	86	1		06/23/2017 11:00	06/26/2017 11:52	MDS	EPA 6010C

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

Notes: * Indicates a value in between the LOD (limit of detection) and the LOQ (limit of quantitation). All LOD/LOQs are adjusted to reflect dilution and also any differences in the sample weight / volume as compared to standard amounts.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
 Project Manager
 608-356-2760

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	BOD incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
 Wisconsin (DATCP) Bacteriology ID# 105-289
 Louisiana NELAP (primary) ID# ACC20160002
 Illinois NELAP Lab ID# 200073
 Kansas NELAP Lab ID# E-10368
 Virginia NELAP Lab ID# 460203
 Maryland Lab ID# WI00061
 ISO/IEC 17025-2005 A2LA Cert # 3806.01
 DoD-ELAP A2LA 3806.01
 GA EPD Stipulation ID ACC20160002
 Pennsylvania NELAP Lab ID# 68-04201, # 008

Table C-1: Testing Parameters

Parameters required under s. NR 528.06				Additional parameters*
Physical ↗	Nutrients***↗	Trace Elements** ↗	Pathogens ↗	Other**
pH Percent solids, Percent organic matter, Electrical conductivity (EC) as a saturated paste 9045C MDA 29-4.3 9050A	Total Kjeldahl nitrogen, ^{ANNO} Total nitrate nitrogen, Total phosphorus, Total potassium 351.2 9056 365.4 6010	Arsenic Cadmium Copper Chromium Nickel Lead Zinc 6010C	Pathogen or indicator organism Fecal MN SM 9221	 Inorganics and pathogens Heavy metals/trace elements (beyond routine). Additional pathogenic organisms, as necessary (bacteria, viruses, helminth, protozoa, etc.) Organics Volatiles, Acid extractable compounds, Base/neutral, Pesticides, Polynuclear aromatic hydrocarbons (PAH)s, Oil and grease

* There may be other applicable and appropriate tests.
 ** Indicates a parameter that must be run at a laboratory certified or registered in accordance with ch. NR 149.
 ***In addition, the DNR recommends consulting the procedures employed by the University of Wisconsin Soil and Plant Analysis Laboratory or a soil testing lab certified by DATCP for tests that are nutrient in nature. The UW Soil Lab procedures are available at: <http://uwlab.soils.wisc.edu/lab-procedures/>. The DATCP certified labs are available at: <http://datcp.wi.gov/uploads/Farms/pdf/Doc9eSoil&ManureTestingLabs.pdf>.

Analytical considerations

As Table C-1 indicates the parameters listed in the columns labeled as “Trace Elements” and “Other” must be analyzed at a laboratory certified or registered in ch. NR 149. This requirement does not apply to the parameters listed in the other three columns.

Consider the following items when developing a sampling and analysis plan:

- Choose detection levels below the environmental standards levels.
- Choose test methods appropriate to the sediment material.
- Use standard methods as much as possible.

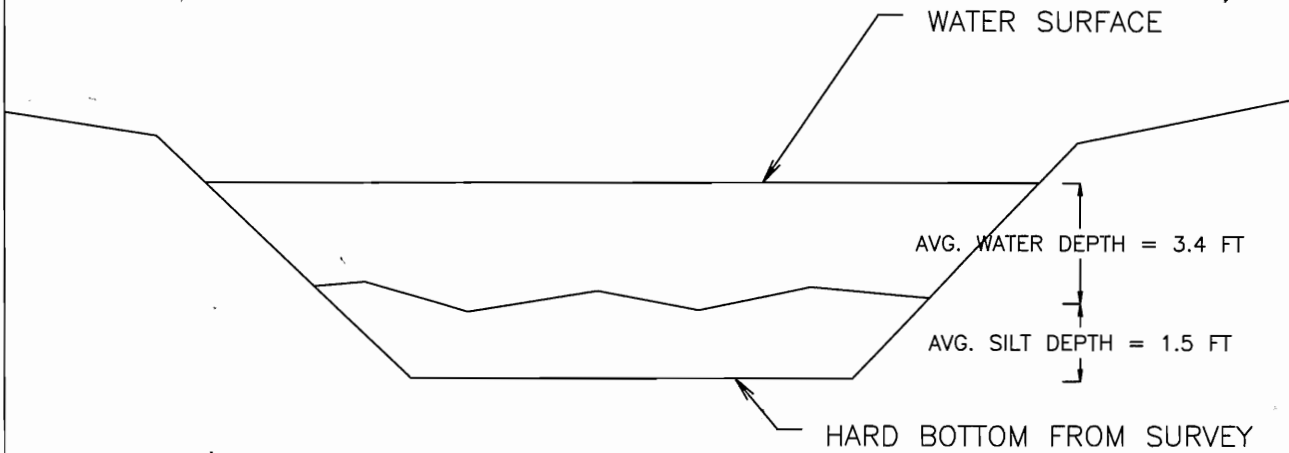
Here are some references to assist in determining appropriate analytical methods:

- EPA SW-846, Methods, Third Edition, rev. March 2009. Online version available at: <http://www.epa.gov/epawaste/hazard/testmethods/sw846/online/index.htm>
- Ch. NR 347, Sediment Sampling and Analysis, Monitoring Protocol and Disposal Criteria for Dredging Projects: <http://www.legis.state.wi.us/rsb/code/nr/nr347.pdf>
- Ch. NR 219 provides the protocol for analyzing samples for both municipal and industrial wastewater and solids (NR 204 and NR 214). These are very similar to the accumulated sediment to be sampled in stormwater control structures: <http://www.legis.state.wi.us/rsb/code/nr/nr219.pdf>
- Coliform and indicator pathogens: APHA. 1992. Standard methods for the examination of water and wastewater. 18th ed. American Public Health Association, Washington, DC: <http://www.epa.gov/volunteer/stream/vms511.html>

APPROX. WATER
ELEV. = 845.81
(7.3 FT ABOVE WEIR)

CONCRETE WEIR
ELEV. = 838.48

SEDIMENT SAMPLE LOCATIONS 6/2



TYPICAL SECTION



APPROX. WATER
ELEV. = 845.90

PIPE INVERT
ELEV. = 843.65

2/17 TST
FRANKLIN ST.

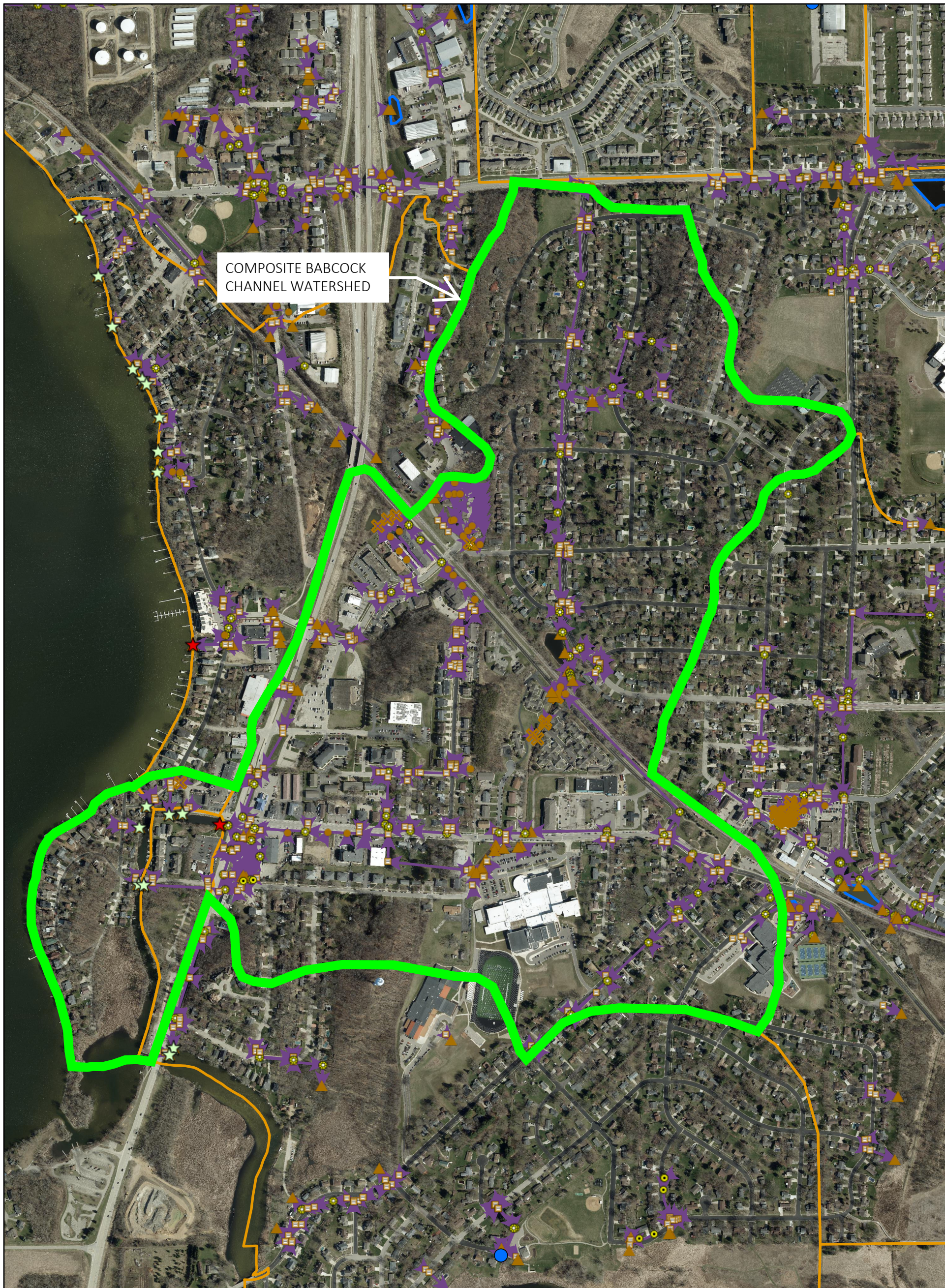
RESTORATION TO HARD BOTTOM

- REMOVAL OF APPROXIMATELY 7400 CUBIC YARDS WILL ACHIEVE THE HARD BOTTOM FOUND DURING SURVEY
- ESTIMATED COST = \$300,000
- ESTIMATED COST/SHORELINE FOOT = \$62/FT FOR 4850 FT

RESTORATION TO BELOW HARD BOTTOM TO ACHIEVE 6 FOOT DEPTH

- REMOVAL OF APPROXIMATELY 18000 CUBIC YARDS WILL ACHIEVE A 6 FOOT CENTER DEPTH
- ESTIMATED COST = \$725,000
- ESTIMATED COST/SHORELINE FOOT = \$150/FT FOR 4850 FT

Exhibit 5- Babcock Channel Watershed



4/22/2025, 9:41:44 AM

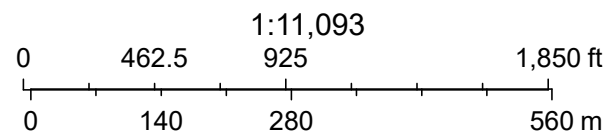
Discharge Points

- ★ Major
- ☆ Minor

Storm Appurtenances

- Area Inlet

- Clean Out
- ▲ Endwall
- Manhole
- Other BMP
- ✕ Pipe End
- Street Inlet
- ➔ Storm Pipes
- ▭ Storm Ponds
- ▭ Drainage Basins Major



We are currently undergoing maintenance on some services, which may temporarily affect access to subscription accounts and the E-edition. We apologize for any inconvenience and appreciate your patience as we work to resolve the issues.

Exhibit 6

https://madison.com/news/local/environment/article_7c4526c2-0365-11f0-ab38-e7e7bdbc51f4.html

ALERT TOP STORY

YAHARA CHAIN OF LAKES | LOW WATER LEVELS

Low lake levels leaving boaters, anglers high and dry. Here's why

Barry Adams | Wisconsin State Journal

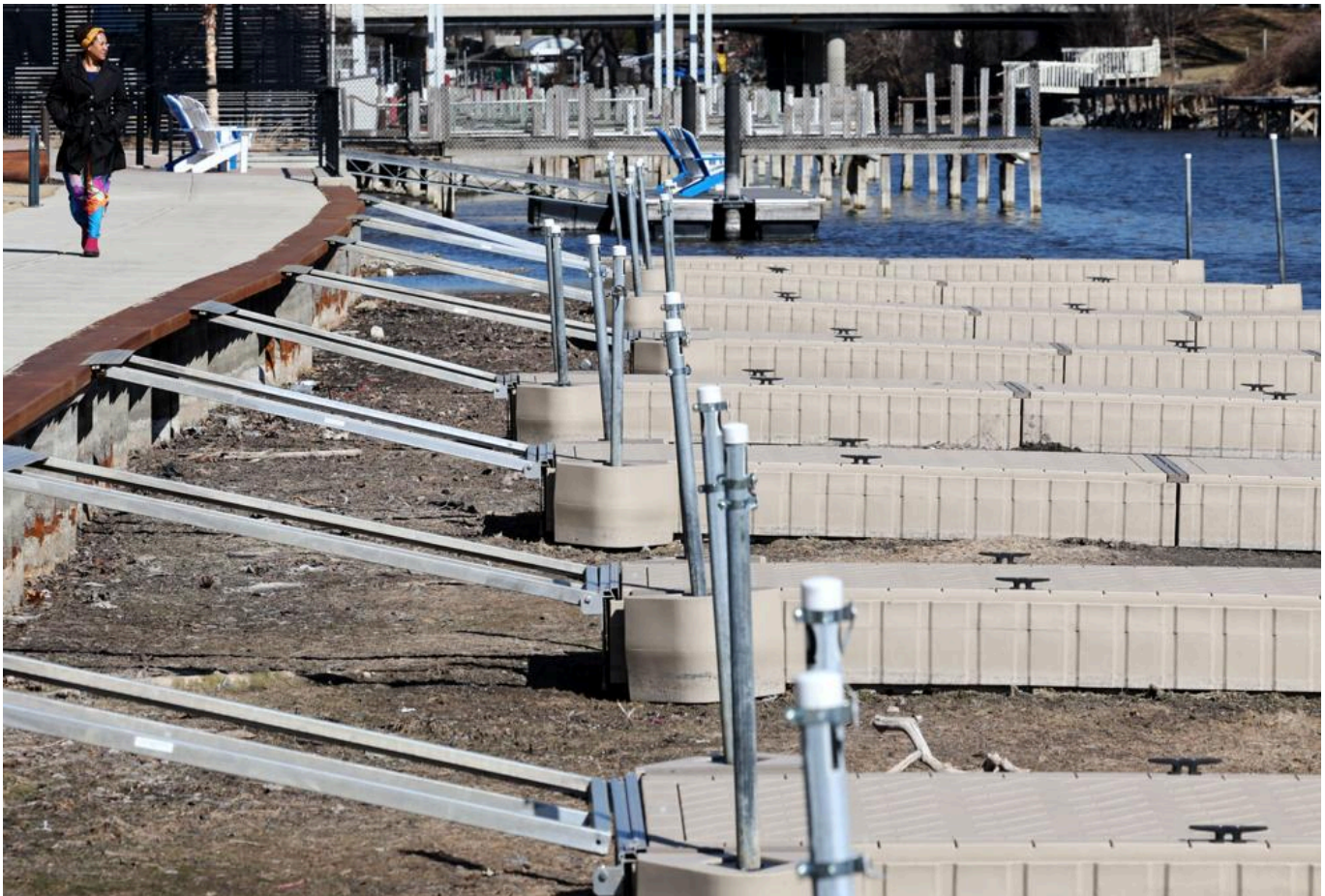
Mar 19, 2025



MONONA — Bernie Quinlan knows better than most how the Yahara River can change.

There have been times when rising water has covered part of his backyard after winters that have seen ample snowfall followed by steady spring rains.

Quinlan, 88, has lived along Winnequah Road just north of Pirate Island for the past 50 years, so he's not bothered by the sight of normally floating docks mired in mud or normally navigable channels containing just inches of water.



Floating docks at Grand Crossing Park in Monona are mired in the muck of the Yahara River due to low water levels. A lack of snow and spring rain has slowed efforts to raise water levels on Madison-area lakes to their summer minimums.

AMBER ARNOLD, STATE JOURNAL

He's confident the water will return in time for him to take his grandchildren fishing for bluegill. But for now, his 16-foot boat with a 25-horsepower motor is in drydock on a lift on the bank of the shallow river across from Buck & Honey's.

"It'll come up," Quinlan said as he looked out over the river from his backyard. "It's a little low now, but I've seen this before. We just don't want it too high."

People are also reading...

- 1 How teams are seeded in this year's state boys basketball tournament**
 - 2 Suspect sought in Saturday afternoon stabbing on State Street**
 - 3 Restaurant review: Haven't been to Fresh Mart? You're missing out**
 - 4 How a troubling trend is impacting girls high school basketball in Wisconsin**
-

It's all part of the aquatic dance Madison-area lakes put on in March.

It plays out each spring with the extremes drawing attention from those who own waterfront property, the anglers who come here to fish, and local officials who in some years have had to close roads and provide sandbags when heavy rains come on the heels of melting ice and snow. Slow, no-wake orders have also been common in years of high water, which has kept recreational boaters and water skiers at home.



Bernie Quinlan, 88, who has lived along the Yahara River in Monona for 50 years, looks over his dock and boat lift. Despite the low water levels, he's confident the levels will be adequate for the coming boating and fishing seasons.

AMBER ARNOLD, STATE JOURNAL

But this spring is about a lack of water.

In 2024, the area received 48.5 inches of precipitation, 11.5 inches more than normal, according to John Reimer, assistant director of Dane County's Land and Water Resources Department. The department is charged with operating dams along the Yahara River to control water levels on lakes Mendota, Monona, Waubesa and Kegonsa.

But a lack of snow over the winter and meager spring rain have the lakes off to a slow start toward reaching their summer minimum levels, established by the state Department of Natural Resources.



Lake levels on the Yahara Chain of Lakes are controlled by a series of dams, including this lock and dam at Babcock County Park in McFarland.

AMBER ARNOLD, STATE JOURNAL

Lake Mendota, for example, was about 10 inches lower Tuesday than its summer minimum of 849.6 feet above sea level and 16 inches below the summer maximum. The largest lake in the chain, Mendota could also be the last to fill.

Lake Kegonsa near Stoughton, and home to a state park, was about 5 inches below its summer minimum and about 11 inches from its summer maximum. It could be the first to fill, since it is at the bottom of the chain, Reimer said.

That's why the gates on most of the Yahara River's five dams are largely closed, allowing just a minimal amount of water to flow in an attempt to bring lakes up to their summer target by Memorial Day weekend.

"It's just a timing thing. If we get rain right now, they'll fill up quicker," Reimer said. "We're closing the dams down so we can hold water in the lakes and have the lakes rise up."

The watershed could get a needed boost Wednesday with a half to three-quarters of an inch of rain predicted for the Madison area followed by 1 to 3 inches of snow. Combined, it could help raise lake levels over the coming days through a combination of precipitation falling directly in the waterways and from runoff of rain and melting snow. That could raise lake levels by 1 to 3 inches, Reimer said.



While Madison-area lakes are experiencing low water levels this year, the situation is sometimes the opposite. In 2018, high lake levels led to flooding, prompting members of the Wisconsin Army National Guard to help build sandbag berms along the Lake Monona shoreline in Monona's Belle Isle neighborhood.

JOHN HART, STATE JOURNAL ARCHIVES

A complicated watershed

The 62-mile Yahara River is fed by a 536-square-mile watershed that covers about a quarter of Dane County. It includes a mix of urban and agricultural land and is populated by more than 370,000 people, according to the Center for Limnology at UW-Madison.

The watershed has been challenged by flooding, invasive weeds, runoff of phosphorous and road salt, and competing uses from those who canoe, kayak, fish and use powerful boats to ski and wakeboard.

Efforts have been made in recent years to improve the flow of water through aquatic plant removal, dredging, dam management and runoff projects, but when and how much precipitation falls cannot be controlled.

Water levels are lowered in the fall to prevent flooding in the spring and ice damage to shorelines in the winter, said Reimer. After March 1, the county begins its effort to return the lakes to their summer minimums using dams and locks at Tenney Park in Madison, Babcock Park in McFarland, the La Follette Dam at the outlet of Lake Kegonsa, the Stoughton Dam a few blocks south of the city's downtown, and the Dunkirk Dam along Highway N, about a mile south of Stoughton.

“Now we're in that transition zone going up to summer minimum,” Reimer said.



Signs normally in the water of Starkweather Creek at Olbrich Park are now on land due to low water levels throughout the Yahara River watershed.

AMBER ARNOLD, STATE JOURNAL

Stranded docks, bigger beaches

In the meantime, there is more exposed shoreline around Lake Mendota.

At the outlet of Starkweather Creek into Lake Monona at Olbrich Park, a sign warning boaters of shallow water isn't even in the water but sits in a bank of dry mud and sand. There's more beach at Bernie's Beach on Monona Bay, while it's unclear whether a boat launched at Babcock Park would be able to make it out of the lagoon and into the main body of Lake Waubesa.

Back on the Yahara River, the docks in front of the Waypoint Public House in Monona no longer touch water, while pontoon boats in a channel surrounding Pirate Island have no chance of launching since there's only a trickle of water. At the nearby Grand Crossing Park and in front of the Four Lakes Yacht Club, it would be nearly impossible to dock a boat due to the low water.

But even without rain, the lakes will continue to rise due to groundwater that continually seeps into the system. Throw in a few rain events, and hitting the summer minimum lake levels by Memorial Day weekend could happen.

"I'm pretty confident about it," Reimer said. "We're generally lower than we are in prior springs."

The Yahara Lakes: Giants Among Us

The Yahara lakes are the Madison-area's dominant natural feature. They affect our daily lives, yet we may not know them well. This Wisconsin State Journal series examines the history, impact and health of our lakes.