



CITY OF MENOMONIE  
COUNCIL MEETING  
CITY COUNCIL CHAMBERS  
7:00 PM  
Monday – July 15, 2024



City of Menomonie  
800 Wilson Ave  
1<sup>st</sup> Floor

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## AGENDA

### *Pledge of Allegiance*

1. **Roll Call & Special Recognitions**
2. **Approval of Minutes**
3. **Public Comments**
4. **Unfinished Business**
  - a. Proposed Ordinance 2024-11, an Ordinance Repealing and Recreating Title 6, Chapter 1, Section 12 All-Terrain and Utility Terrain Vehicle Usage – discussion and possible waiver of the second reading.
  - b. Proposed selection of engineering firm for Well #9 and Water Treatment Plant #9 Project – discussion and possible action.
5. **New Business**
  - a. Proposed rejection of all bids for the Bongey Drive Resurfacing Project – discussion and possible action.
  - b. Possible Traffic Pattern Changes on Main Street East between 3<sup>rd</sup> Street East and 4<sup>th</sup> Street East – discussion (No Action).
6. **Budget Transfers**
7. **Mayor’s Report**
8. **Communications and Miscellaneous Business**
9. **Claims**
10. **Licenses**
  - a. Normal license list – discussion and possible action.
11. **Adjourn**

### “PUBLIC ACCESS”

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# City Council Agenda

## Staff Comments

### Monday – July 15, 2024



#### 4. Unfinished Business

- A. City Staff have prepared Ordinance 2024-11 repealing and recreating Title 6, Chapter 1, Section 12 All-Terrain and Utility Terrain Vehicle Usage. Staff will be available to answer Council questions as needed. If the City Council is willing to consider the proposed Ordinance 2024-11, the appropriate motion would be: **Waive the Second Reading of Ordinance 2024-11 to Repeal and Recreate Title 6, Chapter 1, Section 12 All-Terrain and Utility Terrain Vehicle Usage** (simple majority).
- B. City Staff issued a Request for Proposals for Engineering Services for Well #9 and Water Treatment Plant #9. Four (4) proposals were received and were scored in accordance with a scoring matrix found in the RFP. City Staff recommends the selection of MSA Professional Services, Inc of Baraboo, Wisconsin. David Schofield and Jeremy Hoyt will be in attendance to answer any questions the City Council might have. If the City Council concurs, the appropriate motion would be **Accept the Proposal from MSA Professional Services, Inc of Baraboo, Wisconsin for engineering services for Well #9 and Water Treatment Plant #9 at a total cost not to exceed \$1,320,000** (roll call vote).

#### 5. New Business

- A. Two bids were received for the Bongey Drive Resurfacing Project. Unfortunately, both bids exceed the available budget. City Staff recommends rejection of all bids. David Schofield will be in attendance to answer any questions the City Council might have. If the City Council concurs, the appropriate motion would be **Reject all bids for the Bongey Drive Resurfacing Project** (simple majority).
- B. Staff will provide information on possible Traffic Pattern Changes on Main Street between 3<sup>rd</sup> Street East and 4<sup>th</sup> Street East. This will be for discussion only, no action will be taken.

## 6. Budget Transfers

The Police Department has proposed an internal budget transfer to pay for an additional computer to be used for video redaction. If the City Council concurs, the appropriate motion would be ***Approve Police Department budget transfer, as presented*** (roll call vote).

## 9. Claims

Claims list is enclosed in the packet. If the City Council concurs, the appropriate motion would be ***Approve the claims list, as presented*** (roll call vote).

If any additional claims are identified, a revised claims list will be distributed prior to the meeting. In that case, the appropriate motion would be ***Approve the revised claims list, as presented*** (roll call vote).

## 10. Licenses

Normal license list is enclosed in the packet. If the City Council concurs, the appropriate motion would be ***Approve the normal license list, as presented*** (simple majority).

If any additional normal licenses are identified, a revised normal license list will be distributed prior to the meeting. In that case, the appropriate motion would be ***Approve the revised normal license list, as presented*** (simple majority).

## OFFICIAL COUNCIL PROCEEDINGS

A regular meeting of the City Council of the City of Menomonie, Dunn County, Wisconsin, was held in open session on July 1, 2024, and was called to order by Mayor Knaack at 7:00 p.m. in the City Council Chambers. The following members were present: Luther, Crowe, Yonko, McCullough, Schwebs, Gentz, Solberg, Schlough, Erdman, and Sommerfeld. Sutherland was absent.

MOTION made by Luther, seconded by Crowe, and carried unanimously to approve the minutes of the June 17, 2024 council meeting.

PUBLIC HEARING – None

PUBLIC COMMENTS – Eric Schultz, President of the Dunn County ATV Association, spoke in support of agenda item 4(a). Becca Schoenborn, Executive Director of Downtown Menomonie, spoke in support of agenda item 4(i).

MOTION to waive the rules to allow Schultz to address council on the proposed ordinance was made by Schwebs, seconded by Luther, and carried. ORDINANCE 2024-11 to Repeal and Recreate Title 6, Chapter 1, Section 12 All-Terrain and Utility Terrain Vehicle Usage was INTRODUCED by Luther. MOTION to waive the first reading of Ordinance 2024-11 to Repeal and Recreate Title 6, Chapter 1, Section 12 All-Terrain and Utility Terrain Vehicle Usage was made by Luther, seconded by Solberg and carried.

NO ACTION was taken regarding the selection of an engineering firm for the Well #9 and Water Treatment Plant #9 Project. Mayor Knaack indicated that this matter would be placed on the July 15 City Council Meeting agenda.

MOTION made by Erdman, seconded by Sommerfeld, and carried unanimously to approve the request from the Water Utility Department to sell or dispose of miscellaneous surplus items, as presented.

MOTION made by Yonko, seconded by Gentz, and carried unanimously to Endorse the Letter of Support for the Project Hope Phase 3 Grant application, as presented

MOTION to waive the rules was made by Erdman, seconded by McCullough, and carried to allow Thomas Sahr, Regional Manager for the 8<sup>th</sup> District of the FSET Program at CW Solutions, LLC, to address council on the services provided by the company. MOTION made by Crowe, seconded by McCullough, and carried unanimously to approve the Letter of Intent to Lease as presented and direct the City Attorney to draft formal Lease Agreement with CW Solutions, LLC.

MOTION made by Erdman, seconded by Yonko, and carried unanimously to approve the Mayor's appointment of Jay Collins to the Library Board as presented.

MOTION made by Luther, seconded by Gentz, and carried unanimously on roll call vote to authorize Construction of the Wilson Park Sidewalk Improvement project at a cost not to exceed \$50,000.

MOTION made by Luther, seconded by Crowe, and carried unanimously to direct staff to include the Lakebank Trail and Dock Project for consideration in the draft 2025-2029 Capital Improvement Plan.

MOTION made by Crowe, seconded by Solberg, and carried unanimously approve the Special Event permit for Music on Main on July 12, 2024 and August 9, 2024, as presented, contingent upon receiving certificates of insurance.

BUDGET TRANSFERS – None

MAYOR'S REPORT – Mayor Knaack reported that there are fireworks on Saturday night in Menomonie and no fireworks on the actual 4<sup>th</sup> of July holiday.

COMMUNICATIONS AND MISCELLANEOUS BUSINESS – Public Works Director Schofield reported that there have been 87 kayak rentals so far this summer from the new lakeside rental kiosk. Schofield also reported that there have been 7500 visitors to the waterpark so far this year, exceeding previous attendance. Yonko shared that she recently attended the local Focus on Energy event and the Energy Efficiency Excellence Award was given to UW-Stout.

CLAIMS - MOTION was made by Solberg, seconded by Sommerfeld, and carried unanimously on roll call vote to approve payment of the following claims:

**July 1, 2024 Claims**

Ehlers	\$16,137.50
Employee	\$450.41
Manpower	\$1,804.91
Weld Riley	\$11,025.02
City of Menomonie	\$12,294.15
<b>Total</b>	<b>\$41,711.99</b>

**2024 Parking Utility Claims**

Auto Parts Store	\$5.49
Airtec Sports	\$104.99
City of Menomonie	\$537.50
<b>Parking Total</b>	<b>\$647.98</b>

LICENSES – MOTION was made by Luther, seconded by Crowe, and carried to approve the following licenses:

**LICENSE YEAR – 2025 (expires June 30, 2025)**

**CABARET:**

The Raw Deal (DJ Fedderly Management Consultant - 603 S Broadway)

**CLASS "A" BEER & CLASS "A" LIQUOR CIDER ONLY:**

Speedway #4482 (Northern Tier Retail, LLC - 1708 N Broadway St)

Speedway #4484 (Northern Tier Retail, LLC - 2020 S Broadway St)

**CLASS "A" BEER & "CLASS A" LIQUOR:**

Junction Liquor (Junction Liquor, LLC - 2521 Hills Ct STE F)

Menomonie Market Food Co-op (The Menomonie Food Co-op - 815 Main St E)

**CLASS "B" BEER & "CLASS B" LIQUOR:**

Applebee's Neighborhood Grill & Bar (Apple Minnesota, LLC - 2302 Hwy 25 N)

Fiesta Cantina (Fiesta Cantina - 1705 Plaza Dr)

The Gin Mill (The Gin Mill - 228 Main St)

Log Jam Bar & Eatery (Log Jam Inc. - 709 S Broadway)

Menomonie Golf & Country Club (RAAR, LLC - 802 Heller Rd)

Tanglewood Greens (Eaglewood Golf, LLC - 2200 Crestwood Dr)

Waterfront (JMDavis, LLC - 512 Crescent St)

Wilson Creek Inn (Wilson Creek Inn, LLC - 932 N Broadway)

The Wisco A Go Go / The Market (JMDavis, LLC - 545 S Broadway)

**CLASS "B" BEER & "CLASS C" WINE:**

Acoustic Cafe (Acoustic Cafe II, Inc.- 102 Main St W)

The Raw Deal (DJ Fedderly Management Consultant - 603 S Broadway)

Yamato (Yamato Sushi Inc.- 1320 Broadway St N)

Oriental Massage & Foot Spa (Xujin Qin, 1700 Tainter St E)

Young for Life (Travis Young, 1807 Wilson St NE)

**MOBILE HOME PARK:**

Maple Lane Estates, LLC (3033-3415 Wilson St)

**MOBILE FOOD TRUCK:**

Mike's Gyros (Michael Sand - 326 S Woodworth St, Elmwood WI 54740)

Pleasing LLC (N7137 540th St)

Wilder Waffle Co (937 Wert Rd, Hudson, WI 54016)

MOTION to adjourn was made by Gentz, seconded by Crowe, and carried unanimously.



**City of Menomonie**  
David Schofield

Director of Public Works  
800 Wilson Avenue  
Menomonie, WI 54751  
715 232-2221 Ext. 1020  
dschofield@menomonie-wi.gov

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**TO:** Mayor Knaack & City Council  
**FROM:** David Schofield, Director of Public Works  
**SUBJECT:** Proposed Ordinance 2024-11 Repealing and Recreating Title 6, Chapter 1, Section 12 All-Terrain and Utility Terrain Vehicle Usage  
**DATE:** July 15, 2024 City Council Meeting

The City Council introduced and waived the first reading of the proposed Ordinance 2024-11 at the July 1 meeting.

As requested, City Staff have posted information regarding the ordinance to our social media accounts. It is anticipated that additional public comment may be received.

If the City Council is willing to consider the proposed Ordinance 2024-11, the appropriate motion would be ***Waive the Second Reading of Ordinance 2024-11 to Repeal and Recreate Title 6, Chapter 1, Section 12 All-Terrain and Utility Terrain Vehicle Usage*** (simple majority).

If the second reading is approved, City Staff will place possible adoption on the August 5 agenda. If adopted, the Ordinance would go into effect no earlier than September 1 to provide sufficient time to install all necessary route signs.

**Attachments:**

- Proposed Ordinance 2024-11
- Proposed Designated ATV Route Map

ORDINANCE 2024 - \_\_\_\_\_ OF THE ORDINANCES FOR THE CITY OF MENOMONIE FOR 2024.

An ordinance repealing and recreating Section 6-1-12 relating to the use of All-Terrain Vehicles (ATV) and Utility Terrain Vehicles (UTV) and establishing ATV and UTV routes within the City of Menomonie.

THE COMMON COUNCIL OF THE CITY OF MENOMONIE DO ORDAIN AS FOLLOWS:

Section 1. Section 6-1-12 of the City Code is hereby repealed and recreated to read as follows:

**6-1-12: ALL-TERRAIN VEHICLE AND UTILITY TERRAIN VEHICLE USAGE:**

- A. Intent and Purpose: The intent of purpose of this Section is to establish All-Terrain and Utility Terrain Vehicle routes in the City and to regulate the safe operation of All-Terrain and Utility Terrain Vehicles in the City.
- B. Authority: The City Council of the City of Menomonie, Dunn County, Wisconsin, has the specific authority to adopt this All-Terrain and Utility Terrain Vehicle Ordinance under Wis. Stats. § 23.33(8)(b) and (11).
- C. Applicability and Enforcement: The provisions of this Section shall apply to all streets, roads, and highways, hereinafter at times referred to as City Streets, in the City of Menomonie, Wisconsin which are designated as ATV and UTV Routes as provided in this Section and the provisions of this Section shall be enforced by the City of Menomonie Police Department or any other law enforcement official as set forth in Wis. Stat. § 23.33(12).

This Section shall not prohibit any law enforcement officer or DNR warden from proceeding under any other ordinance, regulation, statute, law, or order that pertains to the subject matter addressed in this Section.

- D. For the purpose of this Section, the following terms shall have the following meaning:
  - 1. All-Terrain Vehicle (“ATV”) shall have the meaning as provided in Wis. Stat. § 23.33(1)(b).
  - 2. Utility Terrain Vehicle (“UTV”) shall have the meaning as provided in Wis. Stat. § 23.33(1)(ng).
- E. Designation of ATV and UTV Routes: All City maintained roads, streets, alleys, and highways, including any City maintained parking lots, are designated as ATV and UTV routes in the City except for the following:
  - 1. County Highway B.



2. Interstate Highway 94.
3. USH 12 from Oak Avenue to the northern City Limits.
4. Pine Avenue from Broadway Street to Heller Road.
5. Broadway Street from Tainter Street to the northern City Limits.
6. Broadway Street from 1st Avenue West to the southern City Limits.
7. 11th Avenue West from Broadway Street to River Road/Riverview Drive.
8. Hudson Road from Hofland Road / Brickyard Road East to the western City Limits.
9. Crescent Street from Broadway Street to 4th Street East.
10. Main Street from 4th Street East to 7th Street East.
11. Crescent Street from 7th Street East to 11th Street East.
12. 4th Avenue from 11th Street East to 13th Street East.
13. Stout Road from 13th Street East to the eastern City Limits.

F. Route Signs: Under the direction of the City, all ATV and UTV routes shall be designated by route signs as provided in Wis. Stat. § 23.33 and Wisconsin Administrative Code NR 64. The route signs shall be provided by the Dunn County ATV/UTV Association, Inc., or its successor, as provided through an agreement with the City and shall be installed by the Public Works Department. The route signs shall be inspected by the City annually and shall be maintained by the Dunn County ATV/UTV Association, Inc., or its successor. The City shall be promptly notified by Dunn County ATV/UTV Association, Inc., of any change in responsibility for maintenance of ATV and UTV route signs.

G. Rules and Regulations: The following rules and regulations apply to the use of ATVs and UTVs in the City and to all areas of operation of ATVs and UTVs designated in this Section:

1. Operators and passengers of ATVs and UTVs must comply with all federal, state, and local laws, orders, regulations, restrictions, and rules including, but not limited to, Wis. Stat. § 23.33 and Wisconsin Administrative Code NR 64. Unless provided otherwise in this Section, all definitions under Wis. Stat. § 23.33 and Wisconsin Administrative Code NR 64 and any other applicable Wisconsin Law defining ATVs and UTVs and regulating ATV and UTV use are hereby incorporated by reference herein.

2. ATVs and UTVs must not be operated on the Red Cedar Trail, in public parks, on public sidewalks, on public multi-purpose trails, on roadway shoulders, on roadway boulevards, nor on any private property without express permission from the property owner. ATVs and UTVs owned and operated by the City of Menomonie, Wisconsin Department of Natural Resources, University of Wisconsin-Stout, and School District of the Menomonie Area for the purpose of maintaining these facilities are exempt from this Paragraph. ATVs and UTVs engaged in snow removal activities on behalf of the adjacent property owner are exempt from this Paragraph.
3. ATVs and UTVs must not be operated at a speed greater than the fixed or posted speed limits.
4. All ATV and UTV operators shall ride in single file.
5. ATVs and UTVs may not be operated within the City between the hours of nine (9:00) p.m. and seven (7:00) a.m.
6. ATVs and UTVs are not allowed to park in or along any roadways, alleyways, or public parking lots within the City between the hours of nine (9:00) p.m. and seven (7:00) a.m.
7. All ATVs and UTVs being operated in the City must be equipped with head lamps (white light), tail lamps (red light), brake lamps (red light), and turn signals (amber light in front, red light in back). ATV and UTV operators must have head lamps and tail lamps turned on at all times.
8. All ATV and UTV operators and passengers under the age of eighteen (18) must wear a Department of Transportation approved helmet.
9. All UTV operators and passengers must wear seat belts at all times.
10. ATV and UTV operators must possess a valid operator's license as defined in Wis. Stat. § 340.01(41g), as may be amended from time to time.
11. ATV and UTV operators under the age of eighteen (18) must have a valid ATV/UTV safety certificate in their possession.
12. No person may operate an ATV or UTV within the City unless the owner or operator of the vehicle has in effect, a liability policy covering the vehicle being operated and such operator has in the operator's immediate possession a certificate or proof of insurance covering such vehicle which must be displayed upon demand from any traffic officer.
13. No open intoxicants shall be allowed while operating on, or as a passenger in, any ATV or UTV in the City.

14. All Wisconsin Statutes related to the operation of an ATV or UTV while under the influence of alcohol or a restricted controlled substance will be strictly enforced, including Absolute Sobriety by ATV and UTV operators under the age of twenty one (21).

15. ATV and UTV operators may tow a trailer in the City so long as the trailer has working brake lights and turn signals and the width of the trailer does not exceed the width of the ATV or UTV.

H. Closures: The Police Chief shall have the authority to temporarily close any ATV and UTV route for a period of sixty (60) days or less due to an emergency, complaint, or other necessary condition as determined by the Police Chief.

I. Penalty: Any person who shall violate any provision of this Section shall, upon conviction, be subject to the penalties set forth at section 23.33(13), Wisconsin Statutes, provided, however, for violations of this Section that are not set forth in the State Statutes, the forfeiture for said violation shall not exceed two hundred fifty dollars (\$250.00) together with the costs of prosecution.

J. Severability: If any provision, paragraph, word, or subsection of this Section is invalidated or deemed unconstitutional by any court of competent jurisdiction, the remaining provisions, paragraphs, words, and subsections shall not be affected and shall continue in full force and effect.

Section 2. This ordinance shall take effect after publication on September 1, 2024.

INTRODUCED \_\_\_\_\_

APPROVED THIS \_\_\_\_\_ DAY

FIRST READING \_\_\_\_\_

OF \_\_\_\_\_, 2024

SECOND READING \_\_\_\_\_

\_\_\_\_\_  
MAYOR, Randy Knaack

PASSED \_\_\_\_\_

PUBLISHED \_\_\_\_\_

SUBMITTED BY:

ATTEST \_\_\_\_\_

\_\_\_\_\_

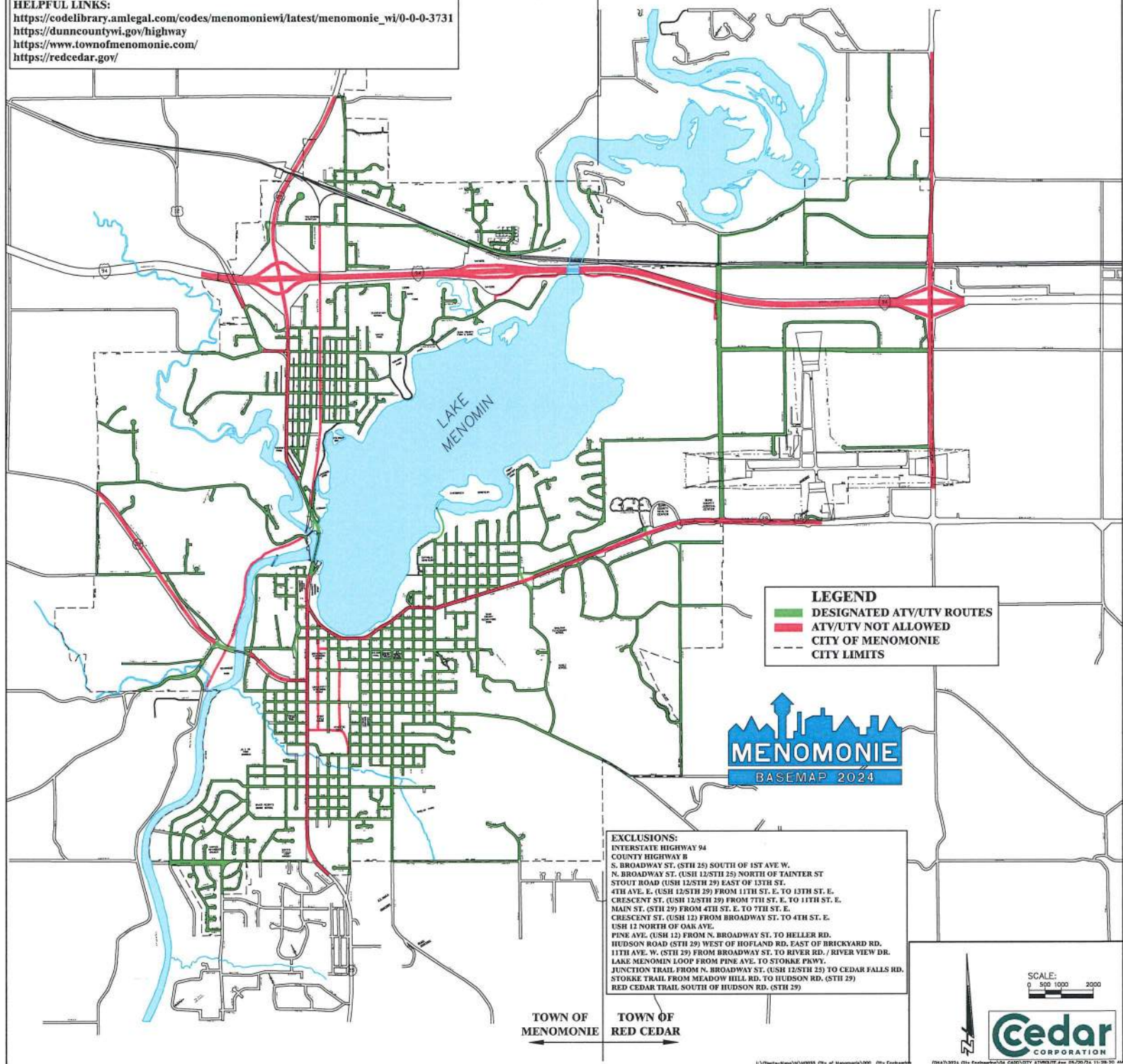
CITY CLERK, Catherine Martin

ALDERPERSON

**CITY OF MENOMONIE**  
**PROPOSED 2024 DESIGNATED ATV/UTV ROUTES**  
 SEE CITY CODE 6-1-12 FOR MORE INFORMATION  
 HELPFUL LINKS:  
[https://codelibrary.amlegal.com/codes/menomoniemi/latest/menomonie\\_wi/0-0-0-3731](https://codelibrary.amlegal.com/codes/menomoniemi/latest/menomonie_wi/0-0-0-3731)  
<https://dunncountywi.gov/highway>  
<https://www.townofmenomonie.com/>  
<https://redcedar.gov/>

TOWN OF MENOMONIE      TOWN OF RED CEDAR

5/29/2024 DRAFT



**LEGEND**  
 ■ DESIGNATED ATV/UTV ROUTES  
 ■ ATV/UTV NOT ALLOWED  
 - - - CITY OF MENOMONIE  
 - - - CITY LIMITS



**EXCLUSIONS:**  
 INTERSTATE HIGHWAY 94  
 COUNTY HIGHWAY B  
 S. BROADWAY ST. (STH 25) SOUTH OF 1ST AVE. W.  
 N. BROADWAY ST. (USH 12/STH 25) NORTH OF TAINTER ST  
 STOUT ROAD (USH 12/STH 29) EAST OF 13TH ST.  
 4TH AVE. E. (USH 12/STH 29) FROM 11TH ST. E. TO 13TH ST. E.  
 CRESCENT ST. (USH 12/STH 29) FROM 7TH ST. E. TO 11TH ST. E.  
 MAIN ST. (STH 29) FROM 4TH ST. E. TO 7TH ST. E.  
 CRESCENT ST. (USH 12) FROM BROADWAY ST. TO 4TH ST. E.  
 USH 12 NORTH OF OAK AVE.  
 PINE AVE. (USH 12) FROM N. BROADWAY ST. TO HELLER RD.  
 HUDSON ROAD (STH 29) WEST OF HOPLAND RD. EAST OF BRICKYARD RD.  
 11TH AVE. W. (STH 29) FROM BROADWAY ST. TO RIVER RD. / RIVER VIEW DR.  
 LAKE MENOMIN LOOP FROM PINE AVE. TO STORKE PKWY.  
 JUNCTION TRAIL FROM N. BROADWAY ST. (USH 12/STH 29) TO CEDAR FALLS RD.  
 STORKE TRAIL FROM MEADOW HILL RD. TO HUDSON RD. (STH 29)  
 RED CEDAR TRAIL SOUTH OF HUDSON RD. (STH 29)

SCALE:  
 0 500 1000 2000



TOWN OF MENOMONIE      TOWN OF RED CEDAR



**City of Menomonie**  
David Schofield

Director of Public Works  
800 Wilson Avenue  
Menomonie, WI 54751  
715 232-2221 Ext.1020  
dschofield@menomonie-wi.gov

**TO:** Mayor Knaack & City Council  
**FROM:** David Schofield, Director of Public Works  
**SUBJECT:** Well #9 and Water Treatment Plant #9 Engineering Services  
**DATE:** July 15, 2024 City Council Meeting

As discussed previously, the Water Utility needs an additional well and water treatment plant to meet current and future water demands. The City previously commissioned a well site investigation paper study which identified two possible locations for the well and water treatment plant. This paper study identified Phelan Park and Wakanda Park as the two most feasible locations.

The next step in the project is to retain an engineering firm to design and bid test wells at both sites, then design and bid the final well and water treatment plant and, finally, apply for and administer Safe Drinking Water Loan Program and Community Development Block Grant funding applications.

Pursuant to the new procurement policy, City Staff prepared and issued a Request for Proposals ("RFP"). The RFP was sent directly to six (6) engineering firms and a notice was published in the newspaper. Four (4) engineering firms submitted Proposals.

In order to objectively compare the proposals, City Staff followed the scoring matrix presented in the RFP which awarded points as follows:

- 50 Points Experience/Expertise
- 10 Points Proximity
- 10 Points Schedule
- 30 Points Fee
- 100 Points Total

MSA Professional Services scored the highest in the Experience/Expertise category, followed closely by Short Elliott Hendrickson. This category was reviewed by a committee made up of David Schofield, Jeremy Hoyt, Brenden Uetz, Scott Quilling, Nick Howard, Paul Sterk and Eric Atkinson. The committee reviewed the proposals, and input gleaned from phone calls with the project references provided therein, and individually scored each proposer. Each committee member's scores for each proposer were averaged and ranked. A sensitivity analysis was performed by throwing out the high and low scores for each proposer which resulted in no change to the rankings.

In the Proximity category, Cedar Corporation scored the highest. This category was based upon the average distance of the Project Manager, Lead Water Engineer, Lead Architect and Lead Site Designer to City Hall.

In the Schedule category, all proposers provided a schedule that would allow the Well to be placed on-line by the end of 2027.

In the Fee category, CBS Squared scored the highest with a fee of \$498,000. City Staff does not believe that a proposed fee of \$498,000 is reasonable for a project of this magnitude particularly when the other proposer's fees were relatively closely grouped. The risk of an "off-scale low" fee is that it implies a fundamental misunderstanding of the scope of the project and/or the level of effort required. City Staff notes that the cost of engineering services will be only a small portion of the overall cost of constructing and operating Well #9 and Water Treatment Plant #9 for many years.

The total scores, including all four categories, were as follows:

1. MSA Professional Services (Baraboo, WI) – 73.4
2. Short Elliott Hendrickson (Chippewa Falls, WI) – 62.9
3. Cedar Corporation (Menomonie, WI) – 55.8
4. CBS Squared (Chippewa Falls, WI) – 55.7

Accordingly, City Staff recommends acceptance of the proposal from MSA Professional Services of Baraboo, Wisconsin for engineering services for Well #9 and Water Treatment Plant #9.

If the City Council concurs, the appropriate motion would be ***Accept the Proposal from MSA Professional Services, Inc of Baraboo, Wisconsin for engineering services for Well #9 and Water Treatment Plant #9 at a total cost not to exceed \$1,320,000*** (roll call vote).

**Attachments:**

- Request for Proposals
- MSA Professional Services, Inc. Proposal
- Short Elliott Hendrickson Proposal
- RFP Scoring Sheet

Well #9 & Water Treatment Plant #9 Request for Proposals															
Experience Ranking															
Firm	Reviewer							Average	Rank	Avg. (Toss High)	Rank	Avg. (Toss Low)	Rank	Avg. (Toss High+Low)	Rank
	1	2	3	4	5	6	7								
CBS Squared	32	23	26	29	16	26	21	24.7	4	23.5	4	26.2	4	25.0	4
Cedar Corporation	30	27	18	32	26	28	26	26.7	3	25.8	3	28.2	3	27.4	3
Short Elliott Hendrickson	38	35	39	36	44	33	29	36.3	2	35.0	2	37.5	2	36.2	2
MSA Professional Services	42	32	35	36	46	37	29	36.7	1	35.2	1	38.0	1	36.4	1

Well #9 & Water Treatment Plant #9 Request for Proposals								
Firm	Experience/Expertise Score		Proximity Score		Schedule Score	Fee Score		Total Score
	Rank (#)	Experience/Expertise Score (/50)	Firm Average (mi)	Proximity Score (/10)	Schedule Score (/10)	Fee (\$)	Fee Score (/30)	Total Score (/100)
CBS Squared	4	10.0	31.2	5.7	10.0	\$498,000	30.0	55.7
Cedar Corporation	3	23.3	17.8	10.0	10.0	\$1,194,800	12.5	55.8
Short Elliott Hendrickson	2	36.7	37.8	4.7	10.0	\$1,300,000	11.5	62.9
MSA Professional Services	1	50.0	86.6	2.1	10.0	\$1,320,000	11.3	73.4
Scoring	1	50.0	17.8	Shortest		\$498,000	Lowest	
	2	36.7						
	3	23.3	(Shortest / Firm Average) x 10.0		10.0	(Lowest / Fee) x 30		Sum
	4	10.0						

# PROPOSAL TO PROVIDE ENGINEERING SERVICES FOR Well #9 and Water Treatment Plant #9



**Prepared for:**  
City of Menomonie  
June 13, 2024





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## **MSA PROFESSIONAL SERVICES, INC.**

60 Plato Boulevard E., Suite 420 | St. Paul, MN 55107-1835

**Contact:** Chuck Schwartz, PE  
**Phone:** (651) 272-0041  
**Email:** [cschwartz@msa-ps.com](mailto:cschwartz@msa-ps.com)  
**Website:** [www.msa-ps.com](http://www.msa-ps.com)



June 13, 2024

David Schofield, Director of Public Works  
City of Menomonie  
800 Wilson Avenue  
Menomonie, WI 54751

Re: Proposal to Provide Engineering Services for Well #9 and Water Treatment Plant #9

Dear David,

The City needs additional water supply capacity and desires to add a new well and water treatment plant to its existing water system to provide safe, reliable drinking water to the residents of Menomonie. To address the current supply deficiency, prepare for future growth and bolster reliability of the Menomonie water supply system, the Well #9 project is a prudent step. We are happy to provide this proposal to assist the City with this important project. MSA has a lengthy list of successful municipal well and water treatment projects throughout Wisconsin.

MSA has a deep pool of technical expertise when it comes to wells and water treatment for iron and radium. Our company established a collection of Communities of Practice (CoPs) within the firm – groups that focus on specific technical disciplines and important knowledge-sharing activities. The team assembled for your project includes many members of our Potable Water CoP, whose primary purpose is to provide safe and reliable drinking water to our partner communities. Our lead water engineer, Brad Stuczynski, served three years as chair of the Potable Water CoP. Our Quality Control Manager, Scott Chilson, has also been an active member in the CoP since its inception. Brad and Scott bring a long history of expertise in potable water solutions, and they will both be supported by a team of experts who thrive on helping water utilities achieve their goals.

MSA has the breadth of staff needed for this project. MSA is a full-service engineering firm, and we do not intend to use any subconsultants, except for pilot testing. In addition to the core disciplines needed for this project (water supply engineers, site/civil engineers and architects), we also have plumbing, HVAC, structural, electrical engineers, wetland delineators, GIS mapping and a Utility Services Group that operates water and wastewater plants across the state. Our certified water system operators will provide expert assistance and support during start-up and the post-construction phase.

Our funding team knows SDWLP and CDBG. In the last five years, our team has submitted more than 32 SDWLP applications, secured more than \$6.6 million in principal forgiveness financing, and secured more than \$26.5 million in low-interest loans. In the recent past, MSA typically submits more CDBG-PF applications than any other consulting firm.

This proposal includes a description of our firm, examples of relevant MSA staff and their related experience, an outline of our understanding and approach to your project, a listing of similar projects completed by MSA, resumes of the personnel we plan to utilize to complete the work, as well as a project schedule and fee.

We look forward to helping the City plan and grow for the future. Thank you for your time and opportunity to propose on this project. I am certainly available to answer any questions that you may have relating to our proposal.

Sincerely,  
MSA Professional Services, Inc.

A handwritten signature in black ink, appearing to read "Chuck Schwartz", is written over a light grey background.

Chuck Schwartz, PE  
Project Manager

**MSA has received and acknowledges Addendum No. 1 dated June 3, 2024.**

## FIRM PROFILE

MSA Professional Services, Inc. (MSA) specializes in the sustainable development of communities. We achieve this by building honest, open relationships that go beyond the project to become a trusted source of expertise and support for immediate challenges and long-term goals. Big or small, we do whatever it takes to meet each need, working to make communities stronger in the process. **It's more than a project. It's a commitment.**

**DATE INCORPORATED:**  
July 2, 1962

MSA's roots reach back to 1919. Our firm consists of 425+ engineers, architects, planners, landscape architects, funding experts, surveyors, GIS experts and environmental scientists. MSA excels at helping clients identify grant and funding sources and then delivering high-quality, cost-effective solutions.

WE'RE PROUD TO BE 100%  
**EMPLOYEE-OWNED**

**425+**  
TEAM MEMBERS




**17**  
OFFICE LOCATIONS




ENABLING PEOPLE TO **POSITIVELY IMPACT**  
THE LIVES OF OTHERS SINCE 1919

**33** INDUSTRY AWARDS  
EARNED SINCE  
2017



**\$625+ MILLION**  
GRANTS & LOW-INTEREST LOANS  
We've helped our clients  
secure to help offset the cost  
of infrastructure projects



## CLIENT EXPERIENCE

As part of our ongoing quality assurance program, we periodically request feedback from clients and project stakeholders to create better project outcomes for you.

These easy-to-complete surveys offer you the opportunity to comment on several areas of our performance throughout the duration of your project, which in turn helps us adapt our processes to your unique needs. Your feedback is specific to your project, and is returned directly to the people working with you. We pledge to respond to any issues you identify as the project proceeds.

To the right, you'll find the percentage of clients who say MSA met or exceeded their expectations based on the following categories.

**98%**  
ACCURACY



**96%**  
HELPFULNESS



**98%**  
RESPONSIVENESS



**98%**  
SCHEDULE



**99%**  
QUALITY



**97%**  
SCOPE & FEES



**MAIN OFFICE WHERE WORK  
WILL BE CONDUCTED**

60 Plato Boulevard E.  
Suite 420  
St. Paul, MN 55107

**APPLETON, WI**

1500 N. Casaloma Drive  
Suite 100  
Appleton, WI 54913

**BARABOO, WI**

1230 South Boulevard  
Baraboo, WI 53913

**BEAVER DAM, WI**

201 Corporate Drive  
Beaver Dam, WI 53916

**CEDAR RAPIDS, IA**

6045 Rockwell Drive NE  
Suite A  
Cedar Rapids, IA 52402

**CHAMPAIGN, IL**

201 W Springfield Avenue  
Suite 400  
Champaign, IL 61820

**DES MOINES, IA**

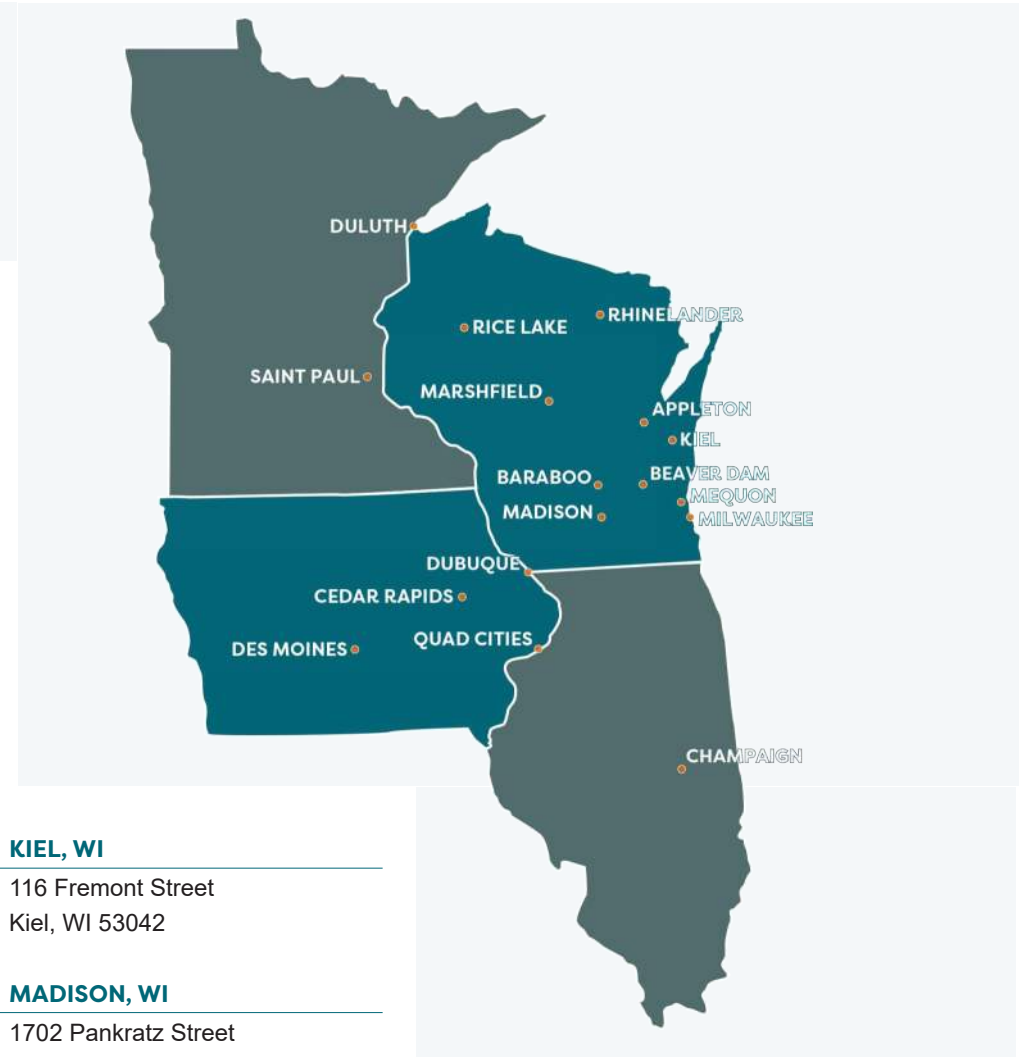
1555 SE Delaware Avenue  
Suite F  
Ankeny, IA 50021

**DUBUQUE, IA**

400 Ice Harbor Drive  
Suite 110  
Dubuque, IA 52001

**DULUTH, MN**

332 W. Superior Street  
Suite 600  
Duluth, MN 55802



**KIEL, WI**

116 Fremont Street  
Kiel, WI 53042

**MADISON, WI**

1702 Pankratz Street  
Madison, WI 53704

**MARSHFIELD, WI**

146 North Central Avenue  
Suite 201  
Marshfield, WI 54449

**MEQUON, WI**

12308 Corporate Parkway  
Suite 400  
Mequon, WI 53092

**MILWAUKEE, WI**

220 East Buffalo Street  
Suite 201  
Milwaukee, WI 53202

**QUAD CITIES, IA**

2117 State Street  
Suite 200  
Bettendorf, IA 52722

**RHINELANDER, WI**

1835 North Stevens Street  
Rhineland, WI 54501

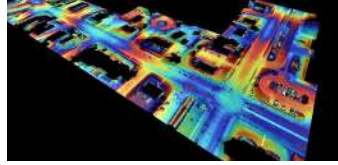
**RICE LAKE, WI**

11 E. Marshall Street  
Suite 201  
Rice Lake, WI 54868

**ST. PAUL, MN**

60 Plato Boulevard E.  
Suite 420  
St. Paul, MN 55107

## AREAS OF EXPERTISE



### ENGINEERING

We know the key to strong communities is the happiness of their residents and the health of their economies. MSA focuses on working alongside public and private clients to achieve both these ends by designing and constructing projects that solve age-old problems and encourage new development.

- Street and Utility Design and Reconstruction
- Potable Water Supply, Treatment and Distribution
- Wastewater Collection and Treatment Systems
- Stormwater Management
- Park and Recreational Space Design
- Site and Land Development Civil Design
- Airport Planning and Design
- Agricultural Engineering
- Bridge Design and Construction
- Traffic Planning and Engineering
- Real Estate Acquisition

### ARCHITECTURE

From intricate historical restorative projects to high-rise programming and design, our team aspires to design buildings that enrich the lives of our clients and enhance their futures.

- Architectural Design
- Mechanical, Electrical, Plumbing and Fire Protection Design
- Building Planning and Feasibility Studies
- Programming and Space Planning
- Site/Building Evaluation
- LEED® and Sustainable Design

### SURVEYING & ASSET MANAGEMENT

MSA's surveyors have the resources and expertise to efficiently and accurately complete fieldwork and to provide high-quality survey documents.

- Land Surveys (Boundary Location or Establishment)
- Subdivision Surveys
- Topographical Surveys for Development Projects
- Redevelopment/Streetscape Surveys
- Infrastructure/Facility Design Surveys
- Utility Surveys
- Flood Elevation Surveys
- Construction Staking
- Control Surveys for Environmental Assessments
- ALTA/NSPS Land Title Surveys
- Mobile and Web-Based GIS Development

### FUNDING

Our funding experts excel at coordinating grant and loan applications, and fulfilling the requirements of various agencies to help our clients turn project ideas to reality.

- Tax Increment Financing (TIF)
- Grant Writing
- Grant Administration
- Project Financing
- Stormwater Utility Studies and Creation

### PLANNING & LANDSCAPE ARCHITECTURE

MSA has specialists in all areas of community planning, urban design and economic development. Our award-winning planners and landscape architects work to understand the challenges our clients face and help them develop sustainable, implementable plans to provide guidance in overcoming those hurdles.

- Comprehensive Planning
- Neighborhood and Corridor Planning
- Park and Recreation Planning
- Downtown Revitalization
- Housing
- Economic Development
- Capital Improvement and Strategic Planning
- Public Administration
- Urban Design
- Transportation Planning

### ENVIRONMENTAL SERVICES

MSA's environmental scientists and technicians help communities identify and clean up contamination. We understand regulatory requirements and have built critical relationships with regulatory agencies.

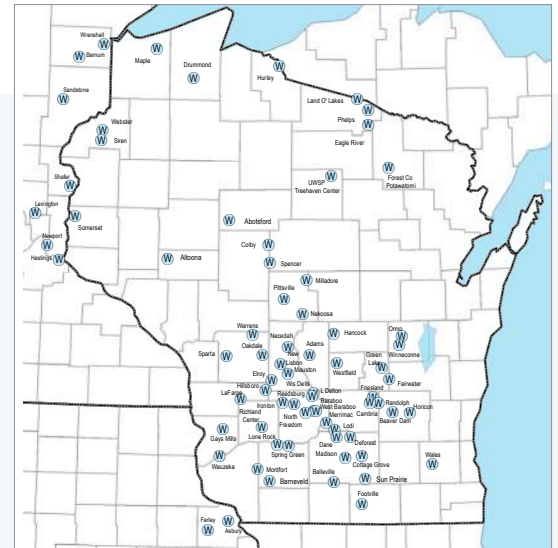
- Phase I and II Environmental Site Assessments
- Wetland Design, Delineation, Restoration and Permitting
- Brownfield Site Development
- Asbestos, Lead and Mold Inspection/Remediation
- Spill Investigation and Remediation
- Solid and Hazardous Waste Management
- Permitting and Planning
- NPDES Compliance, Adaptive Management Plans, and Nutrient Trading

## MUNICIPAL WATER SYSTEM INFRASTRUCTURE EXPERIENCE SUMMARY

- **Municipal Wells** – planning, well siting, design, permitting, bidding, and construction services for over 100 municipal wells.
- **Potable Water Treatment** – planning, design, permitting, bidding and construction services for over 40 projects including treatment for radium, lead/copper, iron, manganese, bacteria, arsenic, nitrate, uranium, and hardness.
- **Water Storage Reservoirs** – capacity analysis, design, permitting bidding, construction services for over 100 new municipal water storage reservoirs.
- **Water System Studies and Modeling** – water system studies for over 150 projects, many of which included water system modeling.
- **Water Distribution** – planning, design, permitting, bidding and construction services for projects of all sizes and complexity for a large number of municipal clients, including evaluation and improvements to enhance fire flow, system redundancy, directional drilling, and railroad crossings.
- **Supervisory Control and Data Acquisition (SCADA) Systems** – projects of all sizes and complexity including multiple pressure zones, using a variety of technologies, to provide automated control and reporting.

### Municipal Water Well Project Experience

The map to the right shows select MSA water well projects. In several of these communities, MSA provided engineering services for more than one well, either as a single project or as multiple projects over several years. For almost all of these projects, MSA provided engineering services beginning with the well site selection and extending through the design, bidding, construction and start-up of the final well, wellhouse and related facilities.



## FUNDING EXPERIENCE

### GET CREATIVE IN YOUR FUNDING STRATEGY.

Our team partners with you from the start. We champion your project vision, advise on what types of projects can be funded and help with feasibility studies to analyze your project’s potential. *Then, we can help you strategize the funding of your project by applying our knowledge of a variety of funding sources with our experience in bundling them together to help keep costs low.* We provide expert guidance to help you determine the best financing options for your project, and its success.

### PLANNING FOR A THRIVING COMMUNITY.

It is important to partner with you to determine which funding sources are most appropriate for your goals. Our team of funding specialists have included the following sources that can help your community plan and attract growth.

### Clean Water Fund (CWF)

In the last five years, we’ve helped Wisconsin communities:

- Submit more than 39 Clean Water Fund Program (CWFP) applications on behalf of our clients.
- Secure \$24.4 million, including \$1 million for phosphorus reduction, in principal forgiveness and hardship financing.
- Secure \$59.9 million in low- and no-interest loans.

### Safe Drinking Water Loan Program (SDWLP)

In the last five years, we’ve helped Wisconsin communities:

- Submit more than 32 SDWLP applications on behalf of our clients.
- Secure \$6.6 million in principal forgiveness financing (essentially grant dollars)
- Secure \$26.5 million low-interest loans.

## WATER | WASTEWATER | STORMWATER ELECTRICAL & CONTROL SERVICES



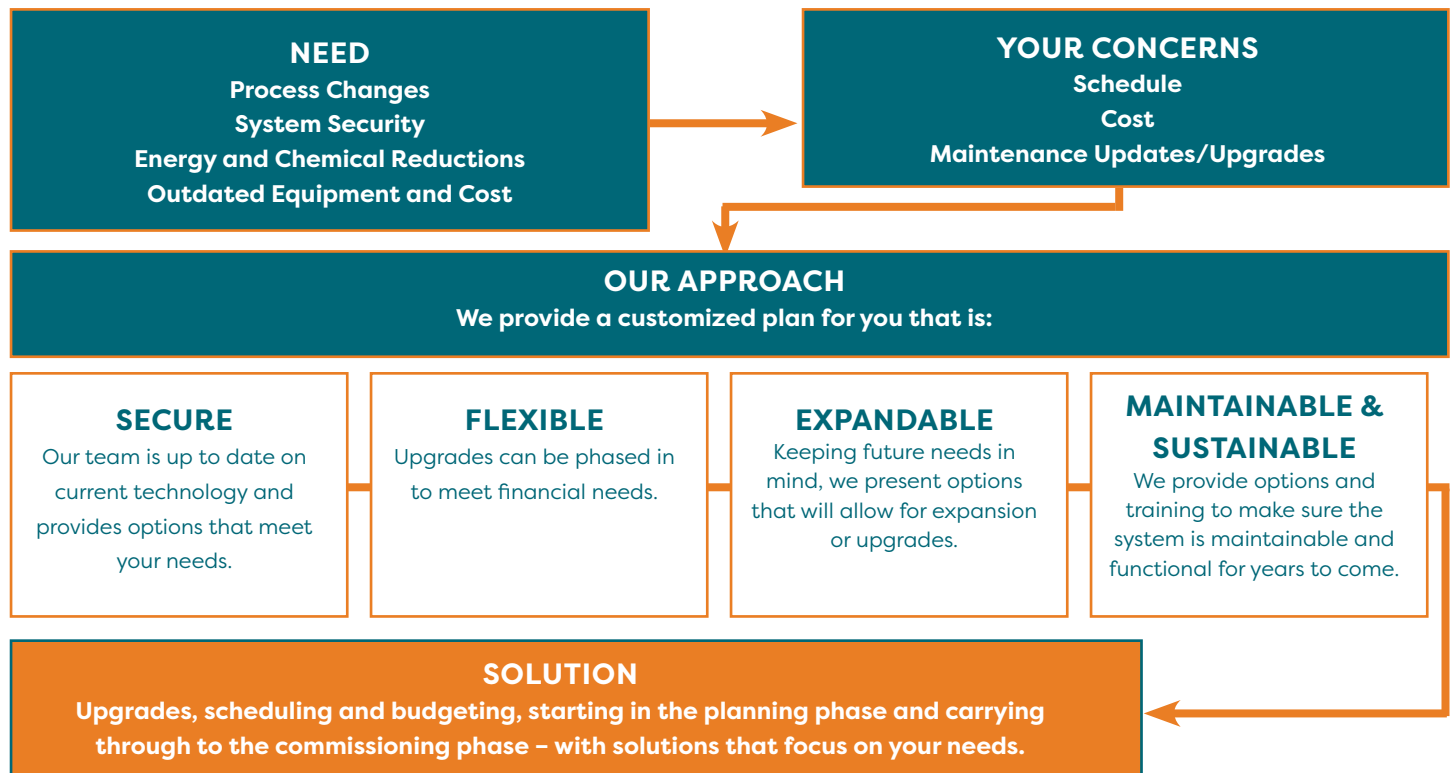
**Creating that often-missing synergy between controls engineers and electrical engineers. All under one roof and only at MSA.**

The electrical components of water, wastewater and stormwater operations are complex and detailed – requiring a high level of precision to provide clients with the up-to-date and state-of-the-art services needed to keep communities running smoothly. At MSA, we have a dedicated team of engineers that specialize in both electrical engineering and automation so the needs of the system are seamlessly addressed.

### WE ARE HERE TO HELP WITH ELECTRICAL AND SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM NEEDS

Is your SCADA system up to date and functioning as it should? | Does your system have the appropriate security parameters installed to make sure the infrastructure of your community is safe? | Is your next project reviewable by the state regulatory agency?

MSA helps answer these types of questions often. The topic of cost is a common thread in conversation when deciding when and how to make necessary system upgrades. We can help determine and execute code-required agency reviews as needed. Our approach to helping you navigate upgrades in the most cost-effective way is described below:



## ORGANIZATIONAL CHART

Our team is staffed to handle the needs of your project. We are a group of experienced water engineers, structural engineers and funding specialists backed by more than 425 other technical specialists who are accustomed to working together on similar projects. Our familiarity with each other will enable us to meet your workload and timeline requirements. **We have chosen a team that reflects the needs for this project, including familiarity with similar-sized projects, and the expertise to explore all viable alternatives.**



**Scott Chilson, PE, ENV SP**  
QA/QC Manager  
Office Location: Baraboo



**Chuck Schwartz, PE**  
Project Manager  
Office Location: St. Paul



**Brad Stuczynski, PE, LEED® AP**  
Lead Water Engineer  
Office Location: Baraboo



**Tim Bicknell, AIA, LEED® AP BD+C, NCARB**  
Lead Architect  
Office Location: St. Paul



**Carolyn Wastlund, PE, LEED® BD+C**  
Plumbing/HVAC Engineer  
Office Location: Baraboo



**Lance Teunissen, PE**  
Electrical Engineer  
Office Location: Kiel



**Lucas Jones, PE**  
Lead Site Engineer  
Office Location: St. Paul



**Brittney Mitchell**  
Funding Specialist  
Office Location: Baraboo



**Bob Uelmen**  
Area Construction Supervisor  
Office Location: St. Paul



**Scott Olson, PLS**  
Survey  
Office Location: St. Paul



**Jeff Powell, sUAS**  
GIS Mapping  
Office Location: St. Paul



**Jason Terry**  
Water Utility Operations  
Office Location: Baraboo



**Serena Gilles, PE, SE**  
Structural Engineer  
Office Location: Baraboo

## APPROPRIATE LICENSES AND CERTIFICATIONS

MSA Professional Services, Inc. is a licensed engineering firm in the state of Wisconsin and holds required and necessary licenses and certifications to providing engineering services.

## PROXIMITY TO MENOMONIE CITY HALL

MSA's St. Paul office is located ~1 hour from the Menomonie City Hall.





**Chuck Schwartz, PE**  
**PROJECT MANAGER**  
**11 Years at MSA**

*Chuck will serve as the overall project manager and be involved in all aspects of the project.*

Chuck has 31 years of experience providing municipal engineering services to Wisconsin and Minnesota communities. He leads MSA St. Paul's municipal engineering group and is an experienced City Engineer who works cooperatively with staff, councils, residents, businesses and other agencies to solve problems and complete projects. In addition to his engineering responsibilities, he is an experienced grant writer. Chuck provides client liaison services for a number of communities including New Richmond, supplying useful information and easy access to MSA's full palette of technical specialists. He provides timely responses and accurate answers for communities' questions, challenges, and concerns.

#### Education

B.S., Civil Engineering, Institute of Technology, University of Minnesota

#### Registration

Professional Engineer, MN, WI

#### Selected Project Experience

- Well and Wellhouse #5, Somerset, WI
- Water Tower #2 Rehabilitation, Somerset, WI
- Water Tower Rehabilitation, Harris, MN
- Well #3 and WTP Modifications, Harris, MN
- Wellhead Protection Plan, Oak Grove, MN
- 11<sup>th</sup> Utility and Street Improvements, Hudson, WI
- WWTF Phase 1 WWTF Improvements, Somerset, WI
- Highway 64 Stormwater and Wastewater Coalition, Various Communities, WI
- Mary Park Boat Launch, New Richmond, WI
- Stormwater Management Planning, New Richmond, WI
- Inwood Avenue Booster Station and Trunk Watermain Project, Lake Elmo, MN
- Lift Station Replacement Project, Cumberland, WI
- Sunrise Drive Roundabout, Somerset, WI
- Municipal State Aid System Management and Maintenance, Oak Grove, MN
- Upper Rum River Watershed Management 10-year Plan Update, Anoka County
- MS4 Management Activities, Oak Grove, MN



**Scott Chilson, PE**  
**QA/QC MANAGER**  
**14 Years at MSA**

*Scott will draw upon his vast experience and deep technical knowledge to provide input and quality control reviews of the project at all milestones of the design process.*

Scott has nearly 25 years of experience as a designer of electrical power systems and process and instrumentation controls. His expertise includes low and medium voltage power distribution, stand-by power, SCADA network design, and I&C design. In addition to electrical design, Scott also offers expertise in mechanical and hydraulic design. This includes the technical design and implementation of municipal infrastructure, complex pumping, force main and conveyance system analysis and design, mechanical systems, wastewater and storm water facilities.

#### Education

B.S., Civil Engineering, University of Wisconsin-Platteville

B.S., Environmental Engineering, University of Wisconsin-Platteville

#### Registration | Certification

Professional Engineer, WI, MN, IA, IL, MI  
 Envision Sustainability Professional

#### Selected Project Experience

- Municipal Wellhouse #7, Lake Delton, WI
- Municipal Wellhouse #2, Arena, WI
- Municipal Wellhouse #8 and #9, Altoona, WI
- Municipal Wellhouse #5, Somerset, WI
- Municipal Wellhouse #2, Drummond, WI
- Municipal Wellhouse #5, Beaver Dam, WI
- Elevated Reservoir and Booster Station, Beaver Dam, WI
- Elevated Reservoir and PRV Station, Cottage Grove, WI
- PRV Station, Sun Prairie Utilities, WI
- Booster Station, Lomira, WI
- Lexington Well House Renovations, Lexington, MN
- Lakewood Pump House Evaluation, Duluth, MN
- Middle Booster Pump Station, Duluth, MN
- Elevated Reservoir and PRV Booster Station, Lake Delton, WI
- Arlington Pump Station, Duluth, MN
- Highland Pump Station, Duluth, MN
- Inwood Avenue Water Booster Station and Trunk Watermain, Lake Elmo, MN



**Brad Stuczynski, PE,  
LEED® AP**  
LEAD WATER ENGINEER  
21 Years at MSA

*Brad will serve as the lead water engineer and be heavily involved with the well site investigation and well design.*

Brad currently serves as a senior water supply engineer and project manager. He works closely with municipal governments planning, designing and constructing potable water facilities. Brad served three years as chairperson for MSA's Potable Water Community of Practice, which is dedicated to knowledge transfer and improvement of all potable water-related projects.

#### Education

B.S., Civil Engineering, University of Wisconsin-Madison

#### Registration | Certification

Professional Engineer, WI  
LEED® Accredited Professional - AP

#### Selected Project Experience

- Municipal Well & Wellhouse #2, Arena, WI
- Municipal Wells & Wellhouses #8 & 9, Altoona, WI
- Municipal Well & Wellhouse #3, Omro, WI
- Municipal Well & Wellhouse #7, Lake Delton, WI
- Municipal Well & Wellhouse #3, Belleville, WI
- Municipal Well & Wellhouse #5, Somerset, WI
- Municipal Well & Wellhouse #8, Richland Center, WI
- Municipal Well & Wellhouse #5, Horicon, WI
- Municipal Well & Wellhouse #3, Hillsboro, WI
- Municipal Well & Wellhouse #2, Drummond, WI
- Municipal Well & Wellhouse #7, New Lisbon, WI
- Municipal Well & Wellhouse #3, Dane, WI
- Municipal Well & Wellhouse #4, Elroy, WI
- Municipal Well & Wellhouse #2, Warrens, WI
- Water System Evaluation, Richland Center, WI
- Water System Study, Lake Geneva, WI
- Well #4 PFAS Treatment Facility, Adams, WI
- PFAS Feasibility Study for Well #2, Green Lake, WI
- Corrosion Control Study, Richland Center, WI
- Corrosion Control Study, Omro, WI
- Radium Removal Treatment Facility, Omro, WI
- Radium Removal Treatment Facility (Radium), Waupun Correctional, WI
- Treatment Plant Modifications for Radium Removal, Mayville, WI
- Manganese Treatment Facility, Montreal, WI



**Tim Bicknell, AIA, LEED®  
AP BD+C, NCARB**  
LEAD ARCHITECT

*Tim will serve as lead architect for this project.*

Tim has over 27 years of professional architectural design experience. This includes work at varying scales in municipal, government, workplace, non-profit, transportation, healthcare, cultural and multifamily housing. His background includes experience in all phases of design from initial feasibility studies through construction administration and he makes sure design excellence is maintained throughout the process. He strives to create innovative design solutions that are functional and economical. Many of the projects Tim has worked on have been recognized at the local and national level.

#### Education

Master of Architecture, University of Illinois at Urbana-Champaign  
B.A., Architecture, University of New Mexico

#### Registration | Certification

Registered Architect, WI, MN  
LEED® Accredited Professional BD+C  
National Council of Architectural Registration Board (NCARB)

#### Selected Project Experience

- Mill Creek Community Sports Complex, Marshfield, WI
- Historic Fort Snelling Visitors Center and Gallery Space Renovation, Minneapolis, MN\*
- St. Croix Meadows Ballpark Concept Design, Hudson, WI\*
- Dogwood Coffee Corporate Office Study, Minneapolis, MN\*
- Kleinman Office Center Study, Minneapolis, MN\*
- Project For Pride in Living & YouthLink Housing, Minneapolis, MN\*
- Accenture Tower Corporate Plaza Renovation, Minneapolis, MN\*
- YouthLink Youth Opportunity Center, Minneapolis, MN\*
- The Marquette Hotel Entry Renovation, Minneapolis, MN\*
- U.S. General Services Administration Federal Office Building Renovation, Chicago, IL\*
- Interim Space for Burger Federal Court Building, St. Paul, MN\*
- Cloud 9 Sky Flats Housing, Minnetonka, MN\*

*\*Denotes experience prior to MSA.*



**Carolyn Wastlund, PE,**  
**LEED® BD+C**  
**PLUMBING/HVAC ENGINEER**  
**25 Years at MSA**

*Carolyn will provide plumbing and HVAC design for the water treatment plant.*

Carolyn has 35 years of diversified experience in the architectural, structural, plumbing, fire protection, and heating, ventilating, and air conditioning design of water treatment facilities, wastewater treatment facilities, municipal pool and park structures, community centers, town/village halls, public works garages, fire and EMS stations, industrial buildings, warehouses, office buildings, and commercial projects consisting of new construction, additions, remodeling, and maintenance.

#### Education

B.S., Architectural Engineering, Milwaukee School of Engineering

#### Registration | Certification

Professional Engineer, WI, MN, IL

LEED Accredited Professional - BD+C

#### Selected Project Experience

- Wells 7, 8 & 9, Pittsville, WI
- Municipal Well #5 and Wellhouse, Somerset, WI
- Wellhouse #5 Improvements, Stratford, WI
- Water Treatment Facility, Stetsonville, WI
- Municipal Wells #14 & 15 and Wellhouse, Colby, WI
- Well #3 Treatment and Wellhouse, Colby, WI
- Municipal Well #6 and Wellhouse, Spencer, WI
- Well #3 and Wellhouse, Omro, WI
- Radium Removal Treatment Facility, Omro, WI
- Municipal Well #3 and Wellhouse, Belleville, WI
- Municipal Wellhouse #7, New Lisbon, WI
- Municipal Wellhouse #4, Sauk City, WI
- Municipal Well #7 and Wellhouse, Lake Delton, WI
- Municipal Water Treatment Facility, Necedah, WI
- Municipal Well #4 and Wellhouse, Elroy, WI
- Water Treatment Plant for Radium Removal, Waupun Correctional, WI



**Lance Teunissen, PE**  
**ELECTRICAL ENGINEER**  
**7 Years at MSA**

*Lance will provide the electrical and process instrumentation design, as well as SCADA integration.*

Lance has 26 years of industrial, water, and wastewater experience. He has been involved in the planning, design, and construction of a wide spectrum of water and wastewater projects including both SCADA systems and electrical distribution design. Lance has been involved in all aspects of process instrumentation and electrical distribution design for water and wastewater facilities and has been the lead designer for over 15 years on projects of all sizes. This experience includes programmable logic controllers, supervisory control and data acquisition, primary instrumentation and sensing devices, networks, and electrical distribution solutions for many Midwest clients.

#### Education

B.S., Pulp and Paper Engineering, Western Michigan University

#### Registration

Professional Engineer, WI

#### Selected Project Experience

- Water Treatment Plant for Radium Removal, Waupun Correctional, WI
- Municipal Well #3 and SCADA Upgrades, Belleville, WI
- Municipal Well #3, Wellhouse and Treatment Facilities and SCADA Upgrades, Omro, WI
- Municipal Wellhouse #4 Reconstruction and SCADA Upgrades, Sauk City, WI
- Adams Well #4 PFAS Treatment, Adams, WI
- Well #9 Chemical Feed Systems, Sparta, WI
- Municipal Wellhouse #4 and Water Treatment Plant and SCADA Upgrades, Albany, IL
- Municipal Wellhouses #4 and #5 and SCADA Upgrades, Stockton, IL
- Wellhouse Improvements, Knight, WI
- Wellhouse #1 Improvements, Elizabeth, IL
- Well Improvements, Devil's Lake State Park, WI
- West Side Well #3 & Wellhouse, Belleville, WI
- New Well Design, Bidding and Construction, Abbotsford, WI
- Water System SCADA and Well Improvements, Hawkins, WI
- Well 3 Water Treatment Facilities, Cambridge, WI



**Lucas Jones, PE**  
**LEAD SITE ENGINEER**  
**18 Years at MSA**

*Lucas will serve as the lead site and utility designer.*

Lucas is an experienced project manager with diversified municipal and state experience, including a strong wastewater and collection system background. Lucas has designed, inspected and managed various wastewater, regional connection and collection system projects. He has also prepared condition assessments, design reports, facility plans, preliminary engineering reports as well as environmental documents as required by state and federal agencies. His diverse background is ideally suited for complex projects that incorporate many disciplines in one project. His project leadership and commitment to excellence is evident in his ability to successfully navigate project challenges and keep all stakeholders informed and involved.

#### Education

B.S., Environmental Engineering, University of Wisconsin-Platteville

#### Registration

Professional Engineer, WI, MN

#### Selected Project Experience

- Water System Update, Webster, WI
- Municipal Supply Well #2, Barnum, MN
- Municipal Supply Well #2, Wrenshall, MN
- Water System Update, Siren, WI
- Lakewood Water Treatment Plant Sludge Removal, Duluth, MN
- Highland Booster Station Refurbishment, Duluth, MN
- Arlington Pump Station, Duluth, MN
- Water System Improvements, Two Harbors, MN
- Water Tower & Watermain Improvements, Shafer, MN
- Water System Improvements, Harris, MN
- Lake Lane Watermain Replacement, Lindstrom, MN
- Water Supply Plan, Lindstrom, MN
- Water System Interconnection Improvements, Newport, MN
- Phase 2 Water System Design, Mt. Carroll, IL
- WWTF Facility Plan, Minong, WI
- Wastewater Treatment Facility Upgrade, Willow River, MN
- Siren Wastewater Treatment Facility Design, Siren, WI
- Prescott WWTF Facility Plan, Prescott, WI
- Big Lake Area Sanitary District WWTF Facility Plan, Cloquet, MN



**Brittney Mitchell**  
**FUNDING SPECIALIST**  
**9 Years at MSA**

*Brittney will provide funding research, assistance, and administration. She leads a team that specializes in funding and administration.*

Brittney leads MSA's in-house funding team and is responsible for a variety of project financing from start to finish, including the administration to benefit the communities she serves. Brittney also:

- Finances projects from start to finish, including application and administering to benefit communities.
- Completes grant and funding applications, coordinates funds, and administers project funding from design phase through project completion.
- Provides Davis-Bacon Labor Standards compliance and payroll review reporting.
- Works with numerous grant, principal forgiveness and loan programs to assist the community and other resource personnel to tailor funding packages to meet their needs.

#### Education

B.S., Marketing and Business Administration, University of Wisconsin-Whitewater

#### Selected Project Experience

- Well and Wellhouses #8 and #9, Altoona, WI
- Application Submittals, Various Agencies
  - Wisconsin DNR Environmental Loan Program for Safe Drinking Water, Safe Drinking Water Lead Service Line (LSL) Program, Clean Water Fund, Clean Water Fund Hardship Programs, FEMA, and Economic Development Administration.
- Administration of Grants and Loans, Various Projects
  - Many projects have included EDA, Rural Development, FEMA, CDBG, and DNR funding.
- Light & Water EDA Funding Grant Application & Administration, Eagle River, WI
- LSL projects: Antigo, Baraboo, Clintonville, Eagle River, North Fond du Lac, Princeton, Randolph, Stratford
- Reservoir Richland Center, WI
- Well #3 and Wellhouse, Omro, WI
- New Wells and Rehabilitation, Abbotsford, WI
- Street Projects, Omro, WI
- WWTF Upgrade, Holmen, WI



**Bob Uelmen**  
**AREA CONSTRUCTION SUPERVISOR**  
**22 Years at MSA**

*Bob will provide construction observation services and documentation, as well as coordination of staff throughout construction.*

Bob has 30 years of work experience as a construction project manager and engineer. He has developed great working relationships with clients and construction companies. He manages and schedules inspection and fieldwork, designs roadway and utility layouts, traffic control, performs project cost estimates and provides project quality control. He also provides construction inspection and staking for municipalities and private developments.

#### Education

B.S., Industrial Technology Management, University of Wisconsin-Platteville

#### Selected Project Experience

- Municipal Well and Wellhouse #5, Somerset, WI
- Omro Well #3 Site Investigation, Omro, WI
- Fox Lake Monitoring Well, Fox Lake, WI
- Omro-Hawthorne Dr. Water Main Replacement, Omro, WI
- Water Tower & Water, Shafer, MN
- Main Street and Front Street Improvements, Deer Park, WI
- Winesap Prairie, Somerset, WI
- Main Street Bridge Utility Replacement, Somerset, WI
- Wastewater System Improvements, New Richmond, WI
- Sunrise Prairie Trail Improvements, North Branch, MN
- Cedar Creek Hills, Oak Grove, MN
- 207<sup>th</sup> Avenue NW and 217<sup>th</sup> Avenue NW, Oak Grove, MN
- Street Improvements, Oak Grove, MN
- The Farmstead, Oak Grove, MN
- Premier Estates, Oak Grove, MN
- 438<sup>th</sup> Street Sanitary Sewer Improvements, Harris, MN
- Housing Area Utility Replacement, Fond du Lac Band of Lake Superior Chippewa, MN
- Memorial Park, Lexington, MN
- 205<sup>th</sup> Avenue, Somerset, WI
- Curb & Sidewalk Repairs, Somerset, WI
- 288<sup>th</sup> Street and Pedestrian Path Improvements, Lindstrom, MN
- Deer Ridge/Preserve Trail Improvements, Oak Grove, MN



**Scott Olson, PLS**  
**SURVEY**  
**21 Years at MSA**

*Scott will provide surveying and CSM services as needed.*

Scott has 27 years of work experience in field surveying, including 18 years of experience as a field survey crew chief. He has extensive experience performing ALTA, topographic, and boundary surveys. He has served as survey crew chief for numerous street and utility improvement projects throughout the State of Minnesota, and has worked on a wide variety of projects, ranging from highway and street construction, to building construction, to amusement park attraction layouts.

#### Education

A.A., Civil Technology, Dunwoody Institute

#### Registration

Professional Land Surveyor, MN

#### Selected Project Experience

- Municipal Well and Wellhouse #5, Somerset, WI
- Well #4, Somerset, WI
- Well #3, Harris, MN
- Water System Interconnection Improvements, Newport, MN
- Woodland Water Pump Station, Duluth, MN
- Water Quality Assessment, Bethel, MN
- Inwood Trunk Watermain, Lake Elmo, MN
- Lake Lane Watermain Replacement, Lindstrom, MN
- CSAH 20 Watermain Relocation, Lindstrom, MN
- Wastewater Treatment Facility, Somerset, WI
- Lift Station #15, Duluth, MN
- East Second Street, Duluth, MN
- RiverWest Drive, Duluth, MN
- Vincent Street and Maple Drive Street Improvements, St. Croix Falls, WI



## Jeff Powell, sUAS

**GIS MAPPING**

**7 Years at MSA**

*Jeff brings unique and advanced GIS solutions to the MSA GIS team, and will provide additional assistance and advisement to the project and project team as needed.*

Jeff specializes in ArcGIS Online custom configurations for municipal clients seeking advanced asset management solutions for the field and office. He provides comprehensive GIS services to over 40 municipal clients in the Twin Cities Metro, and western Wisconsin including Lindstrom, Newport, Oak Grove, Somerset, Cumberland Utilities, Rice Lake Utilities, Ladysmith, and Hayward. In addition, his background as an FAA Remote sUAS Pilot and environmental scientist supports MSA projects in the greater Minnesota region.

### Education

B.S., Biology and Environmental Science, Coe College

### Registration

FAA Remote Drone Pilot, Small Unmanned Aircraft System (sUAS)

### Selected Project Experience

- Cross Connection Inspection and Water Meter Replacement Program, Menomonie, WI
- Sump Pump and Water Softener Inspection Program, Rosendale, WI
- Cross Connection Inspection Management GIS System, Hillsboro, WI
- Cross Connection Inspection Management GIS System, Hayward, WI
- Lead Water Service Inventory, Port Byron, IL



## Jason Terry

**WATER UTILITY OPERATIONS**

**17 Years at MSA**

*Jason will provide his certified water operator expertise during start-up and post-construction.*

Jason provides water and wastewater treatment system operation and maintenance services at several projects in Wisconsin. He has worked on various types of water and wastewater treatment systems to provide operator training, operation assistance, and treatment process optimization.

### Selected Project Experience

- Bluffview Sanitary District Drinking Water System, Northview, WI
- Well #2 Generator, Friesland, WI
- Bluffview Sanitary District Well House Improvements, WI
- Ho-Chunk - Che Nunk Community Water System Preliminary Planning, WI
- Aerated Lagoon Upgrade, O'Dell's Bay Sanitary District, Germantown, WI
- Pump Station Replacement, Bluffview Sanitary District, Baraboo, WI
- Wazee Area WWTF Upgrade, Wazee Area Wastewater Commission, Black River Falls, WI
- Wisconsin Dells/Lake Delton WWTF, Biosolids Dryer installation, Wisconsin Dells, WI
- Barneveld WWTF Wastewater Operations, Barneveld, WI
- Necedah WWTF Wastewater Operations, Necedah, WI
- Sand Valley Golf Resort Wastewater Operations, Rome, WI
- Ho Chunk Village WWTP, Baraboo, WI



## Serena Gilles, PE, SE

**STRUCTURAL ENGINEER**

**4 Years at MSA**

*Serena will provide structural engineering services for this project.*

Serena has more than 14 years of experience in structural design and project management. Her experience includes the analysis and design of multi-story residential, mixed-use and industrial buildings as well as seismic retrofit design for K-12 schools and commercial buildings. She is the structural Engineer of Record on a variety of masonry, concrete and wood structures.

### Education

M.S., Civil Engineering, North Carolina State University

B.S., Civil Engineering, North Carolina State University

### Registration

Professional Engineer, WI, OR, WA, AZ, MN, MI

Structural Engineer, IL, OR

### Selected Project Experience

- Waupun CGP Water System Improvements, Waupun, WI
- Cambridge Well #3 Water Treatment Facilities, Cambridge, WI
- Sparta Well #9 Chemical Feed Systems, Sparta, WI
- Well #9 Site Investigation, Rhinelander, WI
- Sun Prairie Utilities WI Well #10 and Related Facilities, Sun Prairie, WI
- Well #3 and Wellhouse, Omro, WI
- Well #8 Development, Altoona, WI
- Water System SCADA and Well Improvements, Hawkins, WI



### REFERENCE INFORMATION

Steve Bilkey, Public Works Director  
City of Omro  
(920) 685-7020  
sbilkey@omro-wi.com

### KEY STAFF



**Brad Stuczynski, PE, LEED® AP**  
Lead Water Engineer



**Carolyn Wastlund, PE, LEED®**  
BD+C  
Plumbing/HVAC



**Lance Teunissen, PE**  
Electrical Engineer



**Brittney Mitchell**  
Funding

## WELL #3

502 E RIVER DR, FOX AND HOUNDS PARK, OMRO, WI | COMPLETION DATE: 2022

**FUNDING SOURCES:** DNR Safe Drinking Water Loan Program | Community Development Block Grant

The City was deficient in water supply capacity and was looking to add redundancy to their water system. MSA performed a well siting investigation, coordinated sampling of private wells, and coordinated the construction of two test wells. Geophysical logging and test pumping of isolated zones through packer testing was used to optimize the final well design and significantly reduce radium concentrations in the final well.

After these significant reductions, the radium concentrations were still close the maximum contaminant level. Therefore, the Wellhouse #3 design was expanded to include space for future radium removal equipment. Because of available funding, the City proceeded with the Phase 2 radium removal equipment immediately following the Phase 1 wellhouse construction.



Well #3 was constructed at a City park, and on the opposite side of the river compared to the two existing wells to enhance system redundancy.

The City received funding through CDBG–Public Facilities, CDBG–CLOSE, as well as the DNR Safe Drinking Water Loan Program. MSA provided funding assistance for these programs. As the City had elevated copper in the system, MSA completed a corrosion control study to investigate the potential impacts the new treatment facility would have on the distribution system.



### REFERENCE INFORMATION

Bob Gunther, Community Development and Public Works Director  
Village of Somerset  
(715) 247-5555 | [rmgunther@somtel.net](mailto:rmgunther@somtel.net)

### KEY STAFF



**Brad Stuczynski, PE, LEED® AP**  
Lead Water Engineer



**Chuck Schwartz, PE**  
Project Manager



**Carolyn Wastlund, PE, LEED® BD+C**  
Plumbing/HVAC



**Scott Chilson, PE, ENV SP**  
Electrical Engineer



**Bob Uelmen**  
Construction Observation

## WELL #5

CHURCH HILL ROAD, SOMERSET, WI | COMPLETION DATE: 2020

### FUNDING SOURCES: DNR Safe Drinking Water Loan Program | Community Development Block Grant

Existing Village Well #4 had water quality and sand production concerns. Water quality sample results showed that manganese was above the aesthetic limit. The Village had an investigation conducted and determined that lining a portion of the well to decrease manganese levels was not feasible. Due to the sand production issues and extensive improvements needed at the existing wellhouse, constructing a new well and wellhouse facility would be more cost effective than adding treatment facilities to the existing wellhouse.

MSA performed a well site investigation that led to siting a new 1,200-gallon-per-minute screened municipal well with improved manganese concentrations compared to existing Well #4. The project also included land acquisition, 500 linear feet of 12-inch diameter watermain, and a new masonry block wellhouse building.

MSA provided assistance with funding applications and administrations for the improvements via two separate projects, which received grants and low-interest loans through the DNR Safe Drinking Water Loan Program and a Community Development Block Grant.





## WELLS #8 AND #9

WELL #8: 2071 NINE MILE CREEK RD, WELL #9: 1586 KYLER ST, ALTOONA, WI | COMPLETION DATE: 2024

### FUNDING SOURCES: DNR Safe Drinking Water Loan Program

The City's water system could not meet peak summer demands and needed to issue water bans to limit water use. MSA performed a well siting investigation and coordinated test well construction. The Altoona geology, particularly the varying thickness of the St. Peter sandstone and the shallow depth to the Precambrian layer, limits the City's six existing wells to pumping capacities between of 150 to 250 gpm. After the first test well site proved unsuccessful, additional sites were considered, and two additional test wells were constructed. Geophysical logging and test pumping of isolated zones through packer testing was used to optimize the final well designs.





What began as a project for one additional well doubled due to the urgent need for water. Wells #8 and #9 were constructed in the fall of 2022 and test pumping results confirmed that these were both viable sites for permanent wells.

As one of the test wells had elevated nitrates, the wellhouse design included provisions for expanding the building in the future to accommodate nitrate removal facilities. The wellhouse facilities construction were substantially completed in the spring 2024, and the water supply in Altoona has been greatly improved. MSA provided funding assistance for the DNR Safe Drinking Water Loan Program.



**REFERENCE INFORMATION**  
Scott Kwick, Public Works Director  
City of Altoona  
(715) 839-6092 | [skwick@ci.altoona.wi.us](mailto:skwick@ci.altoona.wi.us)

**KEY STAFF**

-  **Brad Stuczynski, PE, LEED® AP**  
Lead Water Engineer
-  **Carolyn Wastlund, PE, LEED® BD+C**  
Plumbing/HVAC
-  **Scott Chilson, PE, ENV SP**  
Electrical Engineer
-  **Brittney Mitchell**  
Funding



# RADIUM REMOVAL

WAUPUN CORRECTIONAL INSTITUTION, 2 W. LINCOLN, WAUPUN, WI  
COMPLETION DATE: 2024

In 2020, Well #4 exceeded the maximum contaminant level for combined Radium 226+228. This resulted in a consent order from the Wisconsin Department of Natural Resources (WDNR). The Division of Facilities Development (DFD) hired MSA for engineering services for the design and construction of a new central treatment plant and Well #6.



The Waupun Correctional Institution municipal water system serves three correctional facilities and the Central Generating Plant. The water system serves a non-transient (inmate) population of 3,263 and a transient (staff) population of 1,172 persons.

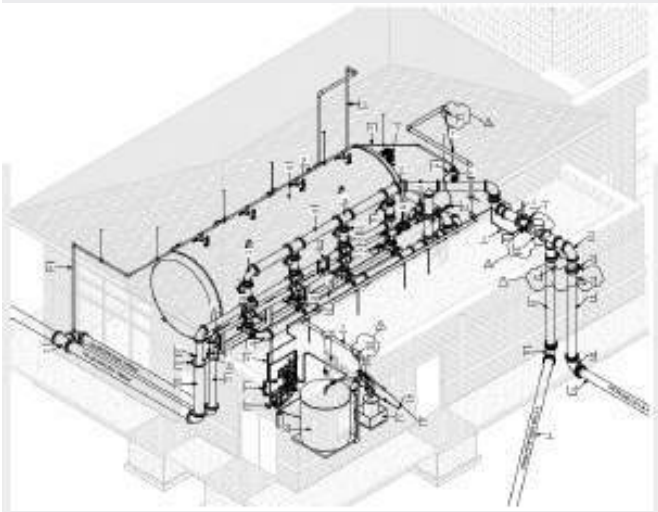
The municipal water system is supplied by two active bedrock wells (Wells #3 and #4) that furnishes hard and soft cold water to the facilities. The two wells are located approximately 330 feet apart and are interconnected by an open bedding plane.

The solution to address the radium exceedance was to provide a central treatment facility utilizing hydrous manganese oxide (HMO), chlorine oxidation, and pressure filtration using sand and anthracite media. The filter was designed for a flow rate of 900 gpm and normal operation where raw water supply is split between two wells to take advantage of blending. The treatment plant is scheduled to be operational by October 2024.

**REFERENCE INFORMATION**  
Katherine Kalscheur, PE, Team Leader  
Wisconsin DOA-DFD  
(608) 267-0509  
Katherine.Kalscheur@wisconsin.gov

**KEY STAFF**

-  **Brad Stuczynski, PE, LEED® AP**  
Lead Water Engineer
-  **Carolyn Wastlund, PE, LEED®**  
BD+C  
Plumbing/HVAC
-  **Lance Teunissen, PE**  
Electrical Engineer





### REFERENCE INFORMATION

Cody Vanderhei, Director of Public Works and Utilities | City of Horicon  
(920) 485-3540  
cvanderhei@horiconwi.gov

### KEY STAFF



**Brad Stuczynski, PE, LEED® AP**  
Lead Water Engineer



**Carolyn Wastlund, PE, LEED®**  
BD+C  
Plumbing/HVAC

## WELL AND WELLHOUSE #5

740 VALLEY ST, RIVER BEND PARK, HORICON, WI | COMPLETION DATE: 2012

### FUNDING SOURCES: DNR Safe Drinking Water Loan Program

As the result of a Water Source and Supply Study of existing facilities, the City of Horicon learned about a deficient firm well capacity as well as two non-code-compliant wells. Constructed in 1912, both non-compliant wells had insufficient casing depths and one of had perforations in the casing. Action needed to be taken in order to remedy these issues and to provide clean drinking water to Horicon's residents.

The City's goals were twofold. The primary goal was to develop a new water supply without the need for advanced treatment. Since all existing wells were located west of the Rock River, a secondary goal was to locate a new source east of the river and ultimately bolster system capabilities.

To begin working toward these goals, test wells were constructed to locate a source with water quality similar to the primary well. The City ultimately selected a site and constructed a new municipal well in a city park east of the Rock River. In order to satisfy a goal of shoring up the water system capabilities east of the Rock River, a new 12-inch-diameter water main river crossing was installed via horizontal directional drilling. Since the wellhouse location fell within City park boundaries, the addition of related infrastructure and utilities also helped create more resources for park users. For instance, the City now has restrooms, a drinking fountain, and expanded access to electrical service for events in the southern areas of the park. The City opted to design the facility with an expanded footprint to allow for the future addition of treatment facilities if water quality were to change. The radium treatment facilities were once approved by DNR, but fortunately for the City, radium treatment has not been needed.

The project was funded by two separate loan/grants received through the DNR Safe Drinking Water Loan Program (SDWLP) and the American Recovery and Reinvestment Act (ARRA). A total of \$800,000 in principle forgiveness was obtained for the \$2.4 million project.



## PROJECT UNDERSTANDING

### EXISTING SYSTEM

The City of Menomonie has a current population of approximately 16,556 (2023 U.S. Census Bureau). The water utility serves approximately 5,144 residential, commercial, industrial and public customers within the City corporate boundaries and in the Town of Red Cedar (2023 PSC). The average daily demand over the past three years was between 1.92 and 2.02 million gallons per day (MGD). The maximum day demand over the past three years was between 2.89 and 3.13 million gallons (MG).

The Menomonie municipal water system includes three wells (Wells #4, 6 and 8), all drawing water from the Mount Simon aquifer. The wells have a reported combined maximum well pump capacity of approximately 4,100 gallons per minute (gpm), an operational capacity of 3,100 gpm, and a firm well capacity of 2,000 gpm.

The water from each of the wells is being treated to remove iron, manganese and radium via pressure filtration. Each of the wells pump through an aerator, then are injected with permanganate and gas chlorine, and then to a clear well. Then water is pumped to a pressure filter and then to the system by twin booster pumps. Additionally, fluoride is added to each of the wells.

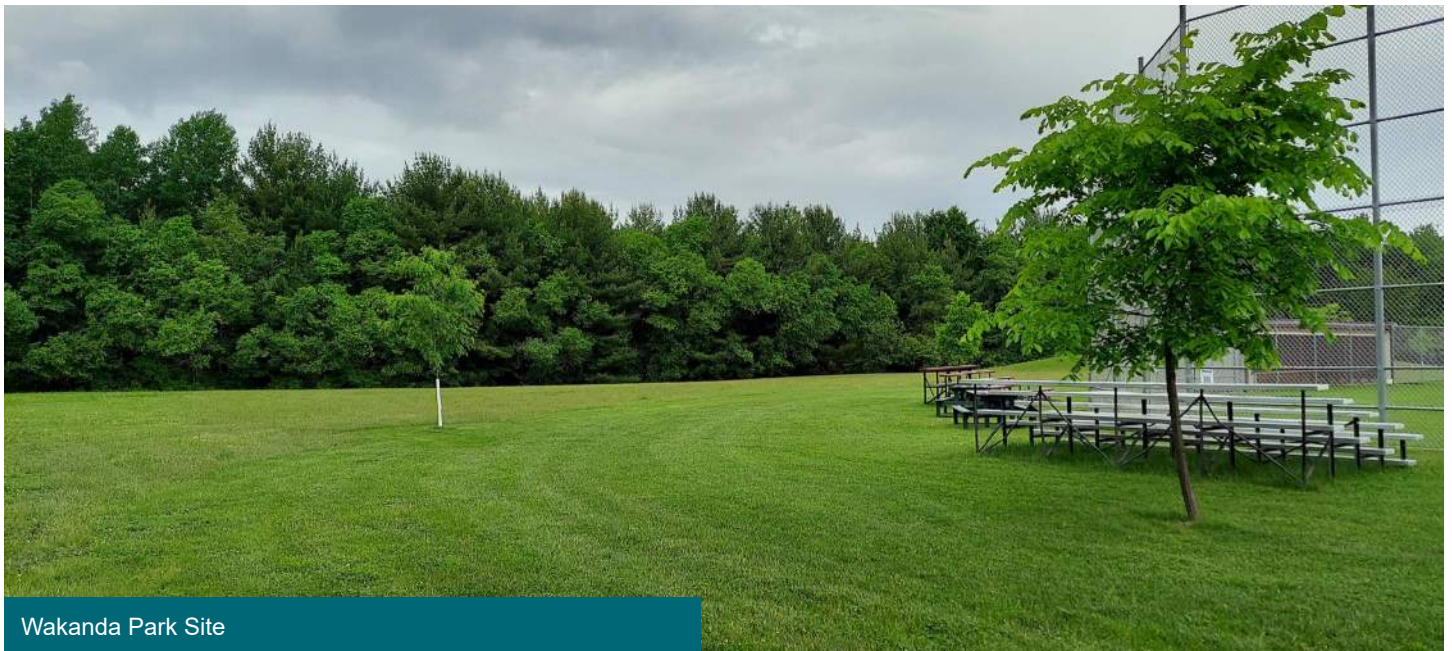
There are three elevated storage reservoirs with a combined capacity of 1,900,000 gallons. The system operates as a single pressure zone. A supervisory control and data acquisition (SCADA) system controls the operation of the wells based on the water levels in the reservoirs and monitors system operation.

### PROJECT NEED

The City has determined that additional water supply capacity is necessary. The 2021 DNR Sanitary Survey indicates that “the source capacity is not adequate to meet current and future demand” under the category of deficiency. In 2023, the City completed a Water System Demand and Capacity Study which projected the average day water demand will increase to 2.40 MGD and the maximum day demand will increase to 3.97 MG by year 2041. This study concluded that the current water supply is deficient with respect to providing the current average day demand pumped in a 12-hour period and the maximum day demand within an 18-hour period. This Study recommended installation of a new well initially to provide 1,100 gpm as soon as feasible and an additional 600 gpm (1,700 gpm total) by 2041.

In order to meet these capacity deficiencies, the City has solicited engineering services to complete the following:

- Construct Well #9 with a capacity of at least 1,100 gpm.
- Construct Water Treatment Plant #9 with an immediate capacity of 1,100 gpm and a future capacity (with modifications) of 1,700 gpm.
- Eventually construct Future Well #10 with a capacity of at least 600 gpm. Future Well #10 would be located near, and send its raw water to, Water Treatment Plant #9. Future Well #10 is not included in this project.
- Eventually modify Water Treatment Plant #9 to accommodate Future Well #10. Modifications to Water Treatment Plant #9 to accommodate Future Well #10 are not included in this project.



Wakanda Park Site

## PROJECT APPROACH

The Well #9 water system improvement project includes the construction of Well #9 and associated water treatment plant with a planned pumping capacity of up to 1,100 gpm, as well as connection to existing water main, sewer main and three-phase electric power. Our specific project approach to add this infrastructure will emphasize the following four components:

### OPTIMIZING THE WELL DESIGN

The City has identified two preferred well sites for the Well #9 project: Wakanda Park and Phelan Park. The test well design will be critical to providing the best possible raw water quality from Well #9. MSA plans to utilize multiple packer tests, geophysical logging, flow spinner testing, and optical borehole imaging.

### MAXIMIZING FUNDING

MSA knows how to help our clients secure funding. The viability and benefits of the two funding sources identified in the RFP, as well as a few additional options, are considered below:

#### DNR Safe Drinking Water Loan Program (SDWLP)

This program offers a fixed-rate low interest loan for a 20-year term. The application process begins with the submittal of a Notice of Intent to Apply (NOI) and a Priority Evaluation Ranking Form (PERF) to establish eligibility and allow application in the following state fiscal year. The most recent estimated interest rate for the City was 1.287%. This interest is subject to change quarterly until a loan is issued. The City is currently eligible for principal forgiveness (PF) up to 35% of the project cost, or \$1.6 million. As the City population is greater than 15,000, this would be considered a federal equivalency project and compliance with the Build America Buy America Act (BABA) would be required.

#### Community Development Block Grant (CDBG) – Public Facilities

Examples of projects eligible for CDBG-PF funding include improvements, repairs or street expansions, drainage systems, water and sewer systems, libraries, senior centers and community centers. Projects must meet a CDBG national objective and be an eligible activity.

Application process for CDBG-PF funding includes:

- The deadline for the CDBG-PF competitive grant application is typically in May for the next state fiscal year funding cycle.
- To best position your community, application preparation should begin in January.
- Applicants may apply for 67% of project costs, with possible grant awards up to \$1,000,000.
- The community must cover at least 10% of project costs using local resources, including water/sewer budget, general fund budget and/or loans.

- The community must serve a population where greater than 51% of the population is low-to-moderate income, community-wide or in a targeted neighborhood. Recent data indicates that the City LMI is 61.20% and the distress score is 42 out of a possible 70 points.
- The community is not eligible if it received awards in the previous two funding cycles. Compliance with BABA is required for this funding program.

#### Tax Increment Financing (TIF)

A TIF District is a joint public investment in the development or redevelopment of an area. It increases development in the area through public improvements for up to 20-27 years and reinvests incremental revenue created by development in identified, under-performing areas.

#### Typical TIF District projects include:

- Providing infrastructure needed to develop a site for new industrial, residential, or commercial use.
- The redevelopment of substandard, obsolete, or vacant buildings.
- Cleaning up polluted areas.
- Improving the viability of downtown business districts.

#### Congressional Appropriation

The Senate and House Appropriations Committees consider spending requests that highlight Wisconsin values and has been a source of funding for municipal infrastructure projects. The deadline to request funds for state fiscal year 2026 is anticipated in March of 2025. These funds may be in competition with CDBG or SDWL funding.



Phelan Park Site

### CONSIDERATION OF FUTURE EXPANSION

MSA has designed many well buildings with the consideration of future expansion and/or future treatment. In our list of example projects, four of the projects had considerable design effort to plan for the future, including:

- **Omro Well #3** - Treatment equipment was installed in a separate phase that included additional funding (CDBG-PF and CDBG-Close)
- **Waupun Correctional Treatment Plant** – The plant was designed to take on water from a future well (#6) as well as potentially expand the building for water softening facilities.
- **Horicon Well #5** – The wellhouse was designed to accommodate future treatment equipment for radium removal. The radium removal equipment was approved by DNR, but to date Well #5 has not required radium treatment.
- **Altoona Well #9** – The wellhouse was designed to potentially expand the building for nitrate removal facilities. Nitrates were a concern identified in the test well. To date Well #9 has not required nitrate treatment.

### ASSISTANCE DURING START-UP

MSA has our own Utility Services Group that operates water and wastewater plants across the state. Our certified water system operators will provide expert assistance and support during start-up and the post-construction phase. Additionally, our lead water engineer and QC Manger will be heavily involved in start up and available to trouble shoot any issues that arise with the new facility.

### PROJECT SCOPE

MSA proposes to provide engineering services for the design, permitting, bidding, construction and post-construction phases of the **Well #9 and Water Treatment Plant #9 project**, in conformance with the standards stipulated by the Engineers Joint Contract Document Committee.

The primary components of the project include the following:

- Two (2) test wells to evaluate water quality and quantity between the two preferred well sites.
- Final well with a minimum capacity of 1,100 gpm.
- Water treatment plant building to contain the well, booster pumps, concrete ground reservoir and house pumping equipment, controls, and chemicals.
  - Chemical rooms (2), one to house chlorine gas feed equipment and one to house liquid fluoride chemical addition equipment (as required by Wis. Administrative Code) including HVAC equipment, emergency eyewash/shower, and other safety equipment.
  - Motor control/supervisory control equipment.
  - Provisions to accommodate future treatment for future Well #10.

- Standby generator with automatic transfer switch.
- Supervisory Control and Data Acquisition (SCADA) system upgrade to incorporate the new well and treatment plant.
- Site work to include asphalt driveway/parking area and stormwater conveyance.
- Water main from new well to connect to the existing water distribution system.
- Provisions for sanitary sewer service to new wellhouse.
- Three-phase electric service and natural gas service to the well site, to be extended by the electric and gas utility.
- Provisions for future treatment of water from future well.

The project will be completed in the following phases:

### SITE SELECTION AND TEST WELL PHASE

- Complete partial topographic survey of the two sites at Wakanda Park and Phelan Park.
- Complete test well design for two sites.
- Review local geology through publications, proximate well construction reports and geologic logs.
- Review publications and other available data regarding local hydrogeology and consult with local well drillers regarding area hydrogeology.
- Compile and review well construction reports and geologic logs in the area.
- Sample private wells in the area, especially high-capacity wells (if available).
- Preliminary review of archaeological and endangered resource records.
- Conference call with Wisconsin DNR and Wisconsin Public Service Commission (PSC) regarding need for project.
- Submit Well Site Investigation Report to DNR for review.
- Identify and evaluate project funding opportunities.
- Correspondence with City, DNR and funding agencies.
- Internal quality control and quality assurance.
- Distribute electronic plans/specifications to statewide “plan rooms.”

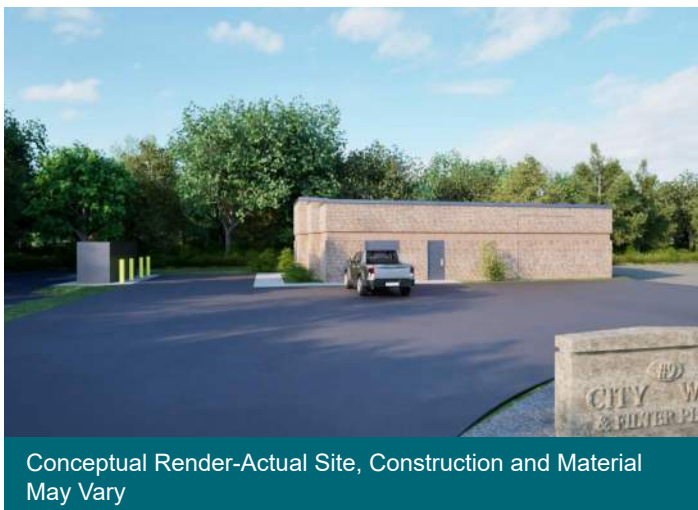


Existing Pressure Filter at Well #4

- Solicit prospective bidders utilizing the Quest electronic bidding network.
- Correspondence with prospective bidders and material suppliers to address questions during project advertising period.
- Prepare and distribute addenda to plan holders (one assumed).
- Conduct electronic bid opening at MSA office.
- Review bids, prepare bid tabulation and recommendation memo.
- Make recommendation to City at a Council meeting regarding Contractor selection and prepare contract documents for execution by City and Contractor.
- Attend and conduct pre-construction meeting, prepare meeting minutes and distribute.
- Stake test well location.
- Provide full-time construction observation during test well drilling and pumping to document construction and testing for conformance with contract documents.
  - Water quality testing by an independent laboratory will be specified in the contract documents and is the responsibility of the Contractor.
- Review test pumping results for water quantity and quality.
- Provide a summary of test pumping results and meet with the City to review.
- Review and process pay applications and any change order requests.
- Submit required documentation to DNR for review and concurrence.
- Coordination with electric and natural gas utilities for utility extensions.
- Topographic survey of well/water treatment plant site and connecting water main route, on County coordinate system.
- Complete CSM for well/water treatment plant and parcel(s).
- Complete archeological/historical screening.
- Complete wetland delineation.
- Prepare legal description of easement for utilities and/or well access.
- Coordinate geotechnical investigation. (City to pay geotechnical firm directly).
- Evaluate downstream sanitary sewer capacity and consider equalization options.
- Evaluate need for clear well and high lift pumps vs. direct pumping to the system.
- Prepare preliminary plans and specifications for a final well and water treatment plant, to include design of the following:
  - Well design
  - Site/grading plan and driveway design
  - Architectural design
  - Well pump/motor design
  - Booster pump/motor design
  - Clearwell storage design
  - Mechanical, heating, ventilating, and plumbing design
  - Process mechanical and treatment design (aeration and pressure filtration)
  - Chemical feed systems: chlorine, fluoride, and permanganate
  - Electrical, process instrumentation and SCADA integration design
  - On-site generator design
  - Connecting water main and sanitary sewer
  - Backwash tank design
  - Site lighting
  - Connecting natural gas, electric and telecommunication service

### PRELIMINARY DESIGN - WELL AND WATER TREATMENT PLANT

- Meet with City Staff and review MSA's "Wellhouse Design Checklist" at 30% design.
- Project administration and correspondence.



- Review plans and estimate with City Staff. City to provide preliminary plan approval.
- Conduct Well Site Investigation to meet the requirements of Wis. Admin. Code NR 811.04, for potential sites at Wakanda Park and Phelan Park.
- Prepare Well Site Investigation Report [Wis. Admin. Code NR 811.09(4)] and final well design, submit to DNR.
- Review available studies relating to this project including 2023 Water Demand and Capacity Study, 2023 Phase 1 Site Study and 2024 Phase 2 Site Study.
- Review potential contamination sources through various governmental databases, groundwater remediation reports and City personnel.
- Map areas of potential contamination, including minimum separation distances per Wis. Admin. Code NR 811.12(5).

## FINAL DESIGN - WELL AND WATER TREATMENT PLANT

- Conduct pilot study (to include protocol, DNR submittal, on-site pilot, laboratory testing, and final report).
- Meet with City Staff and review MSA's "Wellhouse Design Checklist" at 60% design.
- Project administration and correspondence.
- Coordination with electric and natural gas utilities for utility extensions.
- Evaluate downstream sanitary sewer capacity and consider equalization options.
- Prepare final plans and specifications for a final well and water treatment plant.
  - List of specific design tasks are noted above in preliminary design.
- DNR Stormwater Pollution Prevention and Erosion Control Plan and Construction Site Notice of Intent.
- Coordinate with City Zoning ordinances as required.
- Submit plans, specifications, and Engineering Design Report to WDNR on behalf of the Owner. Submittal shall include the following required DNR Forms:
  - Form 3300-260 Water System Approval Checklist
  - Form 3300-066 Water Main Submittal Checklist
  - Form 3300-227 Chemical Feeder Submittal Checklist (one for each chemical)
  - Form 3300-044 Public Well Approval Submittal Request
  - Form 3300-226 Well Pump Submittal Checklist
  - Form 3300-303 Ground Reservoir Submittal Checklist
  - Form 3300-304 Water Treatment Plant Building Checklist
  - Form 3300-340 Pumphouse/Pumping Station Submittal Checklist
- Prepare and submit Request for Construction Authorization to Public Service Commission on behalf of the Owner.
  - City will receive invoices from PSC for their review efforts during the process.
- Respond to requests for information from Public Service Commission.
- Correspondence with DNR and revisions to plans, permits, specifications and other documents as necessary based on DNR review comments.
- Coordinate development of Wellhead Protection Plan (WHPP) for the new well.
  - Assumes WHPP shall be completed by Wisconsin Rural Water Association using information provided by MSA Well Site Investigation Report and subsequent test well and final well data, at no cost to City.
- Prepare final specifications and bidding documents for final well and water treatment plant.
- Review final plans, specifications, and estimate with City Staff. City to provide final plan approval.

## BIDDING - WELL AND WATER TREATMENT PLANT

- Prepare advertisement for bids and provide to City for advertising.
  - Assumes two (2) bid packages, one for final well and one for water treatment plant and related facilities.
- Distribute electronic plans/specifications to statewide "plan rooms."
- Solicit prospective bidders utilizing the Quest electronic bidding network.
- Correspondence with prospective bidders and material suppliers to address questions during project advertising period.
- Prepare and distribute addenda to plan holders (one assumed).
- Conduct electronic bid opening at MSA office.



Conceptual Render-Actual Site, Construction and Material May Vary



- Review bids, prepare bid tabulation and recommendation letter.
- Make recommendation to City regarding contractor selection and prepare contract documents for execution by City and Contractors.
- Attend meeting to present bidding results and recommendation for award of construction contracts (one meeting assumed).

### CONSTRUCTION – WELL AND WATER TREATMENT PLANT

- Attend and conduct preconstruction meetings; prepare meeting minutes and distribute.
  - Final well (1 assumed)
  - Water treatment plant (1 assumed)
- Review shop drawings and RFIs.
- Perform construction staking for final well, treatment plant, access road, and utilities.
- Provide full-time construction observation when construction is occurring on-site. (Assumes 18 days for Well and 122 days for Water Treatment Plant. Each day is 8 hours on site.)
- Attend on-site construction progress meetings.
- Process pay applications and change order requests.
- Provide monthly written construction progress update to City.
- Evaluate final well test pumping results for water quality and quantity.
- Submit treatment equipment shop drawings to DNR for approval.
- Compile manufacturer’s operation and maintenance manuals.
- Start-up assistance.
- Prepare “punch” list of required corrections before final close-out. This will include a project walk-thru with the City staff and contractors.
- Prepare record drawings based on information compiled by contractors and provide to City in electronic PDF format.

- Notify City at 11 months after substantial completion and perform follow-up warranty inspection.
- Process project closeout documentation.
- Project administration and correspondence.

### POST-CONSTRUCTION PHASE

- Provide service after start-up to make sure that Well #9 and the Water Treatment Plant #9 are operating as designed and permitted, inclusive of MSA certified operational staff and engineering support.
- Correspondence with City staff.
- Assumes five hours per week for six months.

### FUNDING PHASE (THROUGHOUT THE PROJECT)

- Verify WisDNR Safe Drinking Water Loan Program (“SDWLP”) and Wisconsin Department of Administration (“WisDOA”) Community Development Block Grant for Public Facilities (“CDBG-PF”) eligibility.
- Prepare and submit WisDNR Intent to Apply / Priority Evaluation and Ranking Formula (“ITA/PERF”).
- Prepare and submit WisDNR SDWLP Application.
- Prepare and submit WisDOA CDBG-PF Application.
- Administer WisDNR SDWLP and WisDOA CDBG-PF grants and/or loans.
- Assist the City of Menomonie to forecast cash needs throughout the project.
- Correspondence with City Staff.
- Note: Engineer cannot guarantee WisDNR and/or WisDOA grant awards or loan eligibility.

### ADDITIONAL SERVICES/FEES

The following additional services are not included in the proposed Scope of Services.

- Radio path survey for SCADA
- PSC Rate case assistance
- Corrosion Control Study



## PROPOSED SCHEDULE

TASK DESCRIPTION	COMPLETION
Bid Test Wells	September 2024
Test Well Results	April 2025
DNR Submittal for Well Site Investigation and Well #9	June 2025
SDWLP Application	June 2025
SDWLP Award Announcement	November 2025
CDBG-PF Application (Plans/Specs for Well and WTP)	May 2026
Bid Final Well	May 2026
CDBG-PF Award Announcement	August 2026
Bid Water Treatment Plant	October 2026
CDBG-PF Grant Execution	November 2026
Final Well On-Site Construction Start	December 2026
Final Well Results	February 2027
Water Treatment Plant Start On-Site Construction Start	April 2027
Water Treatment Plant Substantial Completion	December 2027
Water Treatment Plant Final Completion	March 2028
End Post Construction Phase	September 2028

## PROPOSED FEE

## PROPOSED FEE

TASK	DESCRIPTION	HOURS	FEE
100	Site Selection and Test Well	466	\$78,000
200	Preliminary Design	1,441	\$278,000
300	Final Design	1,974	\$404,000
400	Bidding	70	\$14,000
500	Construction	2,441	\$414,000
600	Post Construction	156	\$26,000
700	Funding	588	\$106,000
<b>Total</b>		<b>7,136</b>	<b>\$1,320,000</b>

**IT'S MORE THAN A PROJECT. IT'S A COMMITMENT.**  
WELL #9 AND WATER TREATMENT PLANT #9 | MENOMONIE, WI | JUNE 13, 2024



PROPOSAL FOR ENGINEERING SERVICES

# Well #9 and Water Treatment Plant #9

CITY OF MENOMONIE, DUNN COUNTY, WISCONSIN | JUNE 13, 2024



Building a Better World  
for All of Us®

Engineers | Architects | Planners | Scientists

June 13, 2024

David Schofield  
City of Menomonie Director of Public Works  
dschofield@menomonie-wi.gov



Building a Better World  
for All of Us®

**Re: Engineering Services for Well #9 and Water Treatment Plant #9**

Dear Dave and Members of the Review/Selection Committee:

The City of Menomonie is embarking on a critical project to develop a new well and water treatment plant to address Wisconsin Department of Natural Resources (WisDNR) requirements for source capacity to meet current and future demands on the City's water system. This project is essential not only for compliance with regulatory requirements, but also for ensuring a reliable and safe water supply for the community. With pressure from the DNR and the need for a sustainable water source, this project holds real significance for the City's future.

At Short Elliott Hendrickson Inc. (SEH®), we're poised to exceed your expectations for this project. Our proposal is built on a foundation of extensive experience and deep expertise in drinking water engineering, specifically in ground water wells and water treatment plant design and construction. We bring a skilled team that is familiar with the unique challenges and requirements of such projects. Here are some of the reasons we think our team makes an ideal partner for Menomonie's new well and water treatment plant project:

**PROVEN EXPERTISE AND IMMEDIATE IMPACT.** We have a well-documented history of successful drinking water projects in Wisconsin, including water storage, ground water source capacity, and treatment. This includes team experience with projects funded by SDWLP, CDBG-PF, and USDA Rural Development. What this means for Menomonie is that we can deliver immediate and effective solutions with no on-the-job learning curve.

**IN-HOUSE TEAM ADVANTAGE.** The design and construction engineers on our team routinely collaborate on drinking water projects and bring that cohesiveness to your project. This integration leads to higher efficiency, accountability, and reliability in project execution. Drinking water projects are inherently complex. Our in-house team will perform all tasks except geotechnical design reports and soil borings.

**INNOVATIVE SOLUTIONS AND DEEP EXPERTISE.** SEH's unique pilot trailer and advanced water modeling capabilities enable us to test and optimize solutions under real-world conditions. This innovation, combined with our grant funding expertise, allows us to provide cost-effective and compliant solutions tailored to

Menomonie's specific needs. The water treatment pilot trailer can be mobilized to the site and can complete the required testing independent of influence from specific treatment manufacturers.

**STRONG RELATIONSHIPS AND LOCAL KNOWLEDGE.** Familiarity and trust are critical for a collaborative and successful project. Our long-standing relationship with the City of Menomonie, and specifically with key figures such as Dave Schofield and Jeremy Hoyt, means we understand and will align closely with your objectives. New drinking water infrastructure has to integrate not only into the drinking water system but also the rest of the City's infrastructure. While with a previous firm, Jeff Nussbaum worked on all three Menomonie water towers and all three wells and projects at the water treatment plants, giving him significant understanding of your water infrastructure. Jeff has also led the SEH team in current drinking water projects with Menomonie, including water treatment plant filter evaluations, filter media assessment at Well 8 (formerly known as Well 3), and a current contract for inspection of the water storage facilities.

From securing funding and permits, to designing and constructing the new well and water treatment plant, the SEH team offers a comprehensive, one-stop solution. We are dedicated to meeting the project's goals on time and within budget, ensuring long-term benefits for the City's water supply. We're confident that our experience, innovative solutions, and dedicated in-house team will result in exceptional results for the Menomonie community and look forward to the opportunity to discuss how we can contribute to the success of this vital project. Thank you for your consideration!

Sincerely,



A handwritten signature in blue ink that reads "Jeff Nussbaum".

**JEFF NUSSBAUM** PE (WI)  
**PROJECT MANAGER**



A handwritten signature in blue ink that reads "Torey Leonard".

**TOREY LEONARD** PE (WI)  
**ASSISTANT PROJECT  
MANAGER**

Engineers | Architects | Planners | Scientists

Short Elliott Hendrickson Inc., 10 North Bridge Street, Chippewa Falls, WI 54729-2550

715.720.6200 | 800.472.5881 | 888.908.8166 fax | [sehinc.com](http://sehinc.com)

SEH is 100% employee-owned | Affirmative Action–Equal Opportunity Employer



# General Background of Firm

As an employee-owned collective of engineers, architects, planners, and scientists, **Short Elliott Hendrickson Inc. (SEH®)** is driven to provide technically advanced, sustainable solutions for government, commercial, and industrial partners nationwide.

Our 900+ dedicated employee-owners are united by a shared vision to create positive, lasting change. We are deeply committed to fostering an equitable environment and building safer, more sustainable infrastructure for governments, industries, and businesses across the nation. By embracing technology and delivering climate-sensitive design solutions, we strive to improve lives, enhance communities, and establish a legacy of positive change.

From our headquarters in St. Paul, Minnesota, to projects from coast to coast, we harness the power of our multidisciplinary expertise to create thriving communities that bring people together.

## PROXIMITY TO YOUR PROJECT

Our services for Menomonie's Well 9 and Water Treatment Plant 9 project will be based out of SEH's Chippewa Falls office, supported by team members from our La Crosse and New Richmond offices and additional specialists housed in our St. Paul and Brainerd, Minnesota offices. This approach ensures access to top expertise from across the company, coordinated from nearby Chippewa Falls.

SHORT ELLIOTT  
HENDRICKSON INC.  
founded in  
**1927**



**WE PARTNER WITH CLIENTS**  
in nearly every U.S. state and many Canadian provinces



**EMPLOYING 900+**  
engineers, architects, planners, scientists, and talented professionals

**WHO WORK TOGETHER TO SERVE**

**4** market areas: mobility, better places, clean water, and renewing infrastructure



**AN IMPRESSIVE 80%**  
of our clients are repeat customers

## Experienced Project Manager

## Familiar with Menomonie



**Project Manager Jeff Nussbaum** has in-depth experience working in the City of Menomonie prior to joining SEH.

Although Jeff worked on many parts of the City's infrastructure, designing and managing engineering projects for Menomonie's water system was his passion. Over a 19-year period, Jeff completed engineering and project management work for the City's water distribution system, water tower coatings and maintenance projects, well and water treatment plant improvement projects at all of the utility's wells and water plants.


Jeff's knowledge of and history with the water system in Menomonie will allow him to get the SEH team off to a quick start. In addition, his unique familiarity with the water system will streamline the flow of knowledge and information from City staff.





# Project Team

Your project is unique and requires a technical team with the capacity and expertise to address water supply and infrastructure improvements while seamlessly coordinating with you and your project stakeholders. Our core water team is supported by dedicated in-house resources, including architects, MEP specialists, and funding experts, to ensure no element of design, funding, or constructability is overlooked. Team member biographies, roles, and qualifications are provided on the following pages. The **highlighted team members below** have worked to deliver many water projects together, including the five completed projects shown in our Project Experience/References section.

<b>MANAGEMENT</b>	<b>City of Menomonie</b> David Schofield, PE					
	<b>Jeff Nussbaum</b> PE Project Manager and Lead Water Engineer (Chippewa Falls, WI)	<b>Torey Leonard</b> PE Assistant Project Manager	<b>Jeremiah Wendt</b> PE Quality Manager			
<b>WELLS AND WATER TREATMENT</b>	<b>Brad Weiss</b> PE Sr. Water Engineer (St. Paul, MN)	<b>Simon McCormack</b> PE Water Engineer	<b>Jeff Ledin</b> PE Sr. Well Siting and Design Advisor	<b>Mark Sherrill</b> GIT Geologist Well Site Investigation	<b>Miles Jensen</b> PE Sr. Water Treatment Advisor	<b>John Thom</b> Water Treatment Plant and Pilot Plant Operations Specialist
	<b>David Walter</b> PE Lead Site Engineer	<b>Justin Mankowski</b> LEED AP®, CDT Lead Architectural Designer (St. Paul, MN)	<b>Ariel Christenson</b> PE Structural Engineer	<b>John Carlson</b> PE Electrical Engineer	<b>Nick Brula</b> PE Mechanical Engineer	
<b>SUPPORT SERVICES</b>	<b>Luke Pederson</b> Lead CAD Designer	<b>Duane Kowalczyk</b> Site Surveyor	<b>Tim Greene</b> Resident Project Representative	<b>Brea Grace</b> AICP, NCI Funding Specialist		
					<b>SUBCONSULTANT FOR PROJECT COST ESTIMATING SERVICES</b>  <b>100% EMPLOYEE OWNED</b>	

The specific licenses and credentials of the team members are described in the resumes that follow.

# JEFF NUSSBAUM PE

PROJECT MANAGER AND LEAD WATER ENGINEER

**As project manager and Lead Water Engineer, Jeff will be responsible for leading the process design, permitting requirements, and coordination with the team's discipline leads to deliver the Well and Water Treatment Plant projects.** Jeff has extensive experience in successfully completing feasibility studies, planning, design, construction and project management for a multitude of public well siting, well design, and private drinking water projects including water distribution systems, water booster stations, wellhouses, water filter plant improvements, water tower coatings rehabilitation, sanitary sewer systems, low pressure sanitary sewer systems, sanitary sewer force main and lift stations, and wastewater treatment plants.

## EXPERIENCE

### Water Treatment Plant Phase II Improvements – City of Eau Claire, WI

Project manager and lead water engineer. The project consists of improvements to the pre-filter treatment processes to increase solids removal in the sedimentation basins. Major elements include the renovation of the two existing sedimentation basins to include rapid mixing, four stage flocculation, and plate settlers, the construction of a new chemical feed room that includes polymer feed, installation of a basin overflow system, and the construction of a new electrical room and garage.

### Well 3 Pilot Study and Water Treatment Plant – City of Osseo, WI

Project manager and lead water engineer for the water treatment plant design. This \$5.2 million dollar new facility includes a backwash water tank with reclaim ability, and a new water treatment plant building that houses the clear well, gravity filters, sedimentation tank with plate settlers, flocculation, rapid mixing and aeration, chemical feed, and lab/office. The project included a complete SCADA upgrade as well as new site piping and site finishes for the new building.

### Well 5 Site Investigation, Test Well, Well, and Wellhouse – Village of Lake Hallie, WI

Project manager and lead water engineer. The project started with a Village-wide well site investigation

study to narrow down the site location of a new well. Exploratory borings were completed and the well site was selected by the Village. New Well 5 was constructed along with a new wellhouse with radon removal equipment, chemical feed, a pump tank and high service pumps. The well is in service and providing approximately 200 gallons per minute to the system.

### Pilot Study and Water Treatment Plant for Wells 1, 2, 3, and 4 - Iron, Manganese, and PFAS – Village of Rib Mountain, WI

Project manager and lead water engineer. The project was initiated by a manganese and iron removal pilot study in 2018 for Wells 1 and 2 for a new treatment plant. During final design of the water treatment plant, PFAS was discovered in Rib Mountain's four wells. Jeff led the SEH team to quickly implement a design change including a RSSCT pilot and an onsite pilot study for PFAS removal. SEH designed and permitted the first temporary treatment plant in Wisconsin for PFAS removal at Well 1. The temporary plant helped Rib Mountain provide safe drinking water to customers while a permanent plant was designed to treat all four of Rib Mountain's wells for iron, manganese, and PFAS removal. The plant design is complete and permitted and will be constructed starting summer 2024. The project is funded by the SDWLP including Emerging Contaminant grant funding of \$3.5 million for PFAS.



There's a reason why so many of Jeff's client relationships begin with pilot studies and extend to long-term, multi-project engagements. He listens closely to your specific needs and long-term goals, and then proposes solutions that address immediate concerns while setting you up for future project success.

28

YEARS OF EXPERIENCE



#### OFFICE LOCATION

Chippewa Falls, WI



#### EDUCATION

Bachelor of Science  
Civil Engineering  
University of Wisconsin-Platteville



#### REGISTRATIONS/CERTIFICATIONS

Professional Engineer in WI (#37104-006)



# TOREY LEONARD PE

## ASSISTANT PROJECT MANAGER

Torey will assist Jeff in managing the SEH team and provide another layer of assurance that the schedule is being met and the right resources are in place. Torey's strength lies in his ability to understand the needs of each project and effectively communicate those needs to his clients and team. He has developed a set of proven project management practices that lead to successful designs requiring little to no changes. Torey's experience leading water and municipal related projects includes design and construction of water main and sanitary sewer improvements, including well investigations and sanitary collection facilities/planning. He also brings experience in site grading, stormwater management, erosion control, construction staking, topographic survey, and construction inspection and administration.

### EXPERIENCE

#### Greens Coulee Water Reservoir – City of Onalaska, WI

Torey was project manager of the second phase of the project, the final design and construction oversight of the 150,000 gallon cast-in-place concrete reservoir. The reservoir is buried in a hillside to blend into the neighborhood aesthetics and horizontal directional drilling was used to minimize impacts to nearby homes and properties. This project won the 2023 Project of the Year Award for AWWA Wisconsin Section. The first phase of this project involved conducting a study of pressure zone population growth, historical performance of the Aspen Valley booster station, projections for future water needs and proposed recommendations with a capital improvements plan. Recommendations included a new 150,000 gallon cast-in-place concrete ground storage reservoir.

#### Well 2 and Wellhouse - Arbor Hills – Town of Shelby, WI

Project manager overseeing two-phased construction of Well 2 involving a pilot hole to provide verification of the available quantity/quality of the water supply, then enlarging the pilot hole to allow for a permanent production well more

than 900 ft. deep in the Mt. Simon formation. New wellhouse facilities include an 8,000 gallon hydropneumatic tank, separate chemical feed rooms and systems for chlorine and fluoride, a permanent standby generator, and a water main connection to the existing water system and SCADA connection between existing Well 1 and new Well 2.

#### Well and Reservoir Design – Village of Holmen, WI

Project manager overseeing project team, schedule, and budget. The project involved construction of a new well and pumphouse, 500,000 gallon ground storage reservoir, one mile of water main, 0.5 miles of sanitary sewer main, and street reconstruction. Along with connecting the new well and reservoir, the water main created looping within the existing system to help serve new development in this growing area of Holmen. Water main construction included 350 ft. of horizontal directional drilling up a steep bluff. Both water and sewer mains utilized jack and bore construction to cross under US Highway 53 without disruption to traffic. SEH worked through several regulatory approvals to successfully design and permit this complex project.



Torey is a highly effective communicator who takes a collaborative approach to projects and prioritizes building strong relationships with his clients through responsive service and on-time deliverables.

# 16

YEARS OF EXPERIENCE



#### OFFICE LOCATION

La Crosse, WI



#### EDUCATION

Bachelor of Science  
Civil Engineering  
University of Wisconsin-Platteville

Bachelor of Science  
Physics  
University of Wisconsin-La Crosse



#### REGISTRATIONS/CERTIFICATIONS

Professional Engineer in WI (#42982)

# JEREMIAH WENDT PE

## QUALITY MANAGER

**Jeremiah will oversee the implementation of quality control and quality assurance practices for the project.** Jeremiah is SEH's Regional Practice Center Leader for Water and Wastewater. As a consultant and previous director of public works, Jeremiah has designed wastewater treatment facilities, including preliminary treatment, aerated lagoons, activated sludge processes, attached growth processes, solids handling, disinfection, tertiary filtration, and collection system components such as lift stations and force main. He leads a team of 20 talented engineers and technicians to deliver creative and reliable water and wastewater solutions.

### EXPERIENCE

#### Wastewater Treatment Plant (WWTP) Upgrades – City of Osseo, WI

Project manager on design of a new WWTP including fine screening, grit removal, oxidation ditch, secondary clarification, seepage cells, sludge dewatering and drying. Jeremiah managed the work of all engineering disciplines on this project, which targeted total nitrogen removal and implemented new solids drying technology.

#### WWTP Construction Engineering – Village of Baldwin, WI

Project manager on the construction phase of a new WWTP for the Village of Baldwin. The WWTP included fine screening, grit removal, influent pumping, oxidation ditch with biological phosphorus removal, final clarification, UV disinfection and tertiary filtration for low-level phosphorus removal. Solids handling components included ultra-fine screening, membrane thickening and thickened sludge storage. Jeremiah coordinated with the client and contractor to deliver a successful project that meets the Village's new stringent effluent phosphorus limits.

### EXPERIENCE PRIOR TO JOINING SEH

#### Director of Public Works – City of New Richmond, WI

As DPW, Jeremiah oversaw the operation of the City's streets and parks departments, along with stormwater, water, and wastewater utilities as well as the City's dam and closed landfills. During his tenure, he developed and implemented a Capital Improvement Plan, including project selection, scoping, consultant selection/management, and overall project supervision on projects totaling more \$15 million in seven years. These projects included street and utility projects, park and trail improvements, WWTP facility planning and improvements, and water tower rehabilitation. Jeremiah was also instrumental in creatively securing and managing funding from outside sources for City projects including DNR Clean Water Fund, DNR Safe Drinking Water Fund, DNR Urban Non-Point Source Planning and Implementation, DNR Recreational Boating Facilities, DNR/USFWS Sport Fish Restoration, DNR Knowles/Nelson Stewardship Fund, DOT Local Roads Improvement Program, and DOT Transportation Alternatives Program.



Jeremiah's experience as a DPW gives him an unique perspective in his current role as SEH's Water and Wastewater Practices Leader. He understands the level of quality expected by the City and will ensure that the team meets expectations.

# 20

YEARS OF EXPERIENCE



#### OFFICE LOCATION

New Richmond, WI



#### EDUCATION

Bachelor of Science  
Environmental Engineering  
University of Wisconsin-Platteville



#### REGISTRATIONS/CERTIFICATIONS

Professional Engineer in WI (#E-40472)  
Professional Engineer in FL (98532)  
Professional Engineer in IN (#PE12300253)  
Professional Engineer in NE (#E-18559)  
Professional Engineer in SC (#42376)  
Professional Engineer in SD (#11250)  
Professional Engineer in VA (#065742)

# BRAD WEISS PE

SR. WATER ENGINEER

**Brad will lead the process team efforts to ensure a seamless transition between water supply and water treatment components of the project.** Brad provides expertise in delivering plans, specifications and estimates for water treatment facilities. He is a professional engineer with a diverse industry background that enables him to quickly and effectively develop customized treatment solutions for a variety of settings, timelines and goals. He frequently provides engineering assistance through the preliminary design and final design phases and assists with the treatment design, calculations and cost estimating. Brad also brings extensive knowledge from serving as the resident project representative for numerous water treatment facility projects.

## EXPERIENCE

### Well 4 and 5 Water Treatment Plants – Village of Sussex, WI

Project engineer who prepared bidding documents and is responsible for offsite project coordination and construction administration. This project involved design and construction of improvements to a 1.3 mgd and a 1.1 mgd WTP for radium removal by Hydrous Manganese Oxide (HMO) treatment.

### Well 8 Water Treatment Plant – Village of Sussex, WI

Project engineer responsible for preparation of the preliminary engineering report and design and bidding documents, off-site project coordination, construction administration, onsite inspection visits and project meetings. The WTP included a backwash retention basin, chemical feed systems including radium removal by HMO treatment, mechanical/electrical systems, an office/laboratory, standby generator power, and electrical renovation of a nearby water booster station. Project tasks included a well siting study, construction of a test well, a pilot treatment plant study, and design and construction services for a 1,400 gpm well.

### Water Treatment Plant Phase II Improvements – City of Eau Claire, WI

Project engineer responsible for the preliminary engineering report and the design and preparation

of bidding documents. The project consists of improvements to the pre-filter treatment processes to increase solids removal in the sedimentation basins. Major elements include the renovation of the two existing sedimentation basins to include rapid mixing, four stage flocculation, and plate settlers, the construction of a new chemical feed room that includes a new hydrated lime silo and polymer feed, installation of a basin overflow system, and the construction of a new electrical room and garage.

### Well 3 Pilot Study and Water Treatment Plant – City of Osseo, WI

Project engineer responsible for technical design assistance, QA/QC, and technical construction coordination. The downtown site for the new plant is constrained for room between two highways and the existing well and treatment plant. The new plant had to be designed to be built next to the old one and around the existing well head, in phases, to keep producing water. The \$5.2 million dollar new facility includes a backwash water tank with reclaim ability, and a new water treatment plant building which houses the clear well, gravity filters, sedimentation tank with plate settlers, flocculation, rapid mixing, and aeration, chemical feed, lab/office. The project includes a complete SCADA upgrade as well as new site piping and site finishes for the new building.



Brad's design and construction experience with iron, manganese, and radium removal pressure filter plants, combined with his history working with this multidiscipline team, provide a time-tested project delivery approach.



8 YEARS OF EXPERIENCE



#### OFFICE LOCATION

St. Paul, MN



#### EDUCATION

Master of Science  
Environmental Engineering  
Michigan Technological University-Houghton  
  
Bachelor of Civil Engineering  
University of Minnesota-Twin Cities



#### REGISTRATIONS/CERTIFICATIONS

Professional Engineer in MN (#57741)  
Professional Engineer in TX (#144172)  
Professional Engineer in VA (#0402063557)  
Professional Engineer in WI (#48442-6)

## DAVID WALTER PE

### LEAD SITE ENGINEER

**David will lead site selection and design tasks.** David is a project manager and senior professional engineer with extensive experience designing and managing diverse infrastructure projects, specializing in roadway and utility systems. He has orchestrated and managed all capital improvement phases, secured grants and funding from state and federal agencies, as well as managed the Capital Improvement Plan for a local community. David also has municipal experience with ordinance review, budget development, permit review, regulatory agency compliance, special assessments, pavement management, and private development review.

#### EXPERIENCE

##### **Water System Improvement (Hillcrest Estates) – Altoona, WI**

Civil team lead on the project to replace a failing privately-owned water system with an extension of the municipal distribution system.

##### **SFY24 SDW Application/Administration - STH 33 Water Replacements – City of Baraboo, WI**

Project manager who led the team in the production of design and bidding documents. The project involved replacement of 56 private lead service lines in conjunction with the reconstruction of STH 33.

##### **The Yard – City of Altoona, WI**

Project manager responsible for the site design, bidding, and construction of a publicly-owned commercial development in downtown Altoona. The project is funded in part by the Neighborhood Investment Fund Grant Program, and is currently in the design stage. The project consists of refurbished shipping containers to house five commercial tenants, as well as a stage, restroom facilities, an ADA viewing platform/seating area, and a second-story seating area.

##### **Division Street Reconstruction – City of Altoona, WI**

Project manager responsible for the design, bidding, and reconstruction of a downtown street. This is a companion project to The Yard above.

##### **2024 Water Main Replacement – City of Black River Falls, WI**

Project manager responsible for assisting the Black River Falls Municipal Utility in meeting DNR permitting requirements for the annual water main replacement program.

##### **Elevator Street Sanitary Sewer and Water Main Design – City of Osseo, WI**

Project manager for the replacement of sanitary sewer and water main along Elevator Street, as a companion project to the WisDOT-funded street reconstruction.

#### EXPERIENCE PRIOR TO JOINING SEH

##### **Wells 8 and 9 Development – City of Altoona, WI**

While employed by the City of Altoona, David was responsible for the development of two additional municipal wells to meet the demands of the growing community. This included budget allocation, initial site review, coordination with the Altoona School Board on a potential site on school property, and consultant selection for construction of test wells and final well and wellhouse construction.



David's experience as a Director of

Public Works/City Engineer as well

as a consultant will bring a valuable

perspective to the team.

# 27

YEARS OF  
EXPERIENCE



#### OFFICE LOCATION

Chippewa Falls, WI



#### EDUCATION

Bachelor of Science  
Civil Engineering  
University of Wisconsin-Madison



#### REGISTRATIONS/CERTIFICATIONS

Professional Engineer in WI (#34935)

# JUSTIN MANKOWSKI LEED AP®

## LEAD ARCHITECTURAL DESIGNER

**As lead architect, Justin will be responsible for designing a wellhouse building to fit the size, layout, and architectural treatment needs of the City.** Justin is a project design leader with extensive architectural and construction engineering experience. He brings expertise in managing projects and developing project scopes, schedules, and cost estimates. Justin has worked on overall production of projects from design through construction administration. His software experience includes AutoCAD and Revit. He is a U.S. Navy Seabees Veteran and served five years in the military, where he received specialized training and education, work experience, and leadership skills.

### EXPERIENCE

#### Water Treatment Plant Phase II Improvements – City of Eau Claire, WI

Lead architect for water treatment plant building design. The project consists of improvements to the pre-filter treatment processes to increase solids removal in the sedimentation basins. Major elements include the renovation of the two existing sedimentation basins to include rapid mixing, four stage flocculation and plate settlers, construction of a new chemical feed room that includes a new hydrated lime silo and polymer feed, installation of a basin overflow system, and the construction of a new electrical room and garage.

#### Wells 4 and 5 Water Treatment Plants – Village of Sussex, WI

Lead architect on the project involving design and construction of improvements to the existing 1.3 mgd Well 4 and the 1.1 mgd Well 5 facilities to include pressure filtration and HMO feed systems for the radium removal while maintaining the existing building footprint. Major elements of the project include the installation of horizontal pressure filters and HMO feed systems in two existing treatment plants as well as the construction of a backwash tank at each plant.

#### Well 8 Water Treatment Plant – Village of Sussex, WI

Lead architect for design of the water treatment plant building. The project consists of the construction of a new 2.0 mgd WTP for the removal of radium from Well 8 by hydrous manganese oxide (HMO) treatment. To accommodate the steep slope of the site, the WTP and backwash tank were constructed into the hillside. Major elements include a new cavity wall building, horizontal pressure filter, chemical feed systems, a backwash tank and generator.

#### Well 10 and Water Treatment Plant – City of Hudson, WI

Architectural project design leader on the project involving the design of a new WTP with a horizontal pressure filter and chemical feed.

#### Well 9 Water Treatment Plant Improvements – City of Thorp, WI

Architectural project design leader on the project involving the design of a new addition to the existing WTP at Well 9 to treat the water to remove high levels of manganese utilizing pressure filtration. This project consisted of a pilot study, WisDNR engineering report, water treatment design, SDWLP and CDBG funding assistance, and Grant and Principle Forgiveness funding.



Justin's extensive experience designing public facilities will be a strong asset for the City. He will blend functionality with aesthetics to provide a facility that looks good and performs well.

31  
YEARS OF  
EXPERIENCE



OFFICE LOCATION  
St. Paul, MN



EDUCATION  
Associate  
Construction Management Concentration\  
Inver Hills Community College - Inver Grove  
Heights, MN



REGISTRATIONS/CERTIFICATIONS  
LEED Accredited Professional (AP), U.S. Green  
Building Council  
Construction Document Technologist (CDT),  
Construction Specifications Institute

## SIMON McCORMACK PE

### WATER ENGINEER

**Simon will work hand in hand with Brad to provide preliminary and final design of the new well and water treatment plant.** Simon is a professional engineer with in-depth knowledge of water system engineering from design to operation. He is well-informed about the Safe Drinking Water Act, Minnesota Plumbing Code, Minnesota Well Code and procedures for enforcing these standards. Simon is proficient in AutoCAD Civil 3D, Microsoft Office Suite, ArcMap, and JIRA.

#### EXPERIENCE

- Well 8 Water Treatment Plant – Village of Sussex, WI
- Water Treatment Plant Well 3 Preliminary Design – Village of Balsam Lake, WI
- Well and Reservoir Design – Village of Holmen, WI
- Well 2 Replacement and Modifications – City of Brownton, MN
- Well 17 Design and Construction – City of Rosemount, MN
- Well 9 – City of Cambridge, MN
- Water Treatment Plant Expansion, Wells 6 and 8 – City of Anoka, MN
- New Water Treatment Plant, Well, and Tower – City of Onamia, MN

## JEFF LEDIN PE

### SR. WELL SITING ADVISOR

**Jeff will guide the team in determining the optimal site for the new well.** Jeff has more than three decades of experience in water supply planning and development of test boring and test well programs, and has completed numerous well site investigation reports for small cities, towns, and villages across Wisconsin and Minnesota. Jeff's knowledge of well drilling, hydrogeology, and high capacity well permitting will be a valuable asset for Menomonie.

#### EXPERIENCE

- Wells 4, 5, and 8 and Water Treatment Plants – Village of Sussex, WI
- New Production Well 24 – City of Eau Claire, WI
- Water Treatment Plant Phase II Improvements – City of Eau Claire, WI
- Well 5 Site Investigation, Test Well, Well, and Wellhouse – Village of Lake Hallie, WI
- Well 3 Pilot Study and Water Treatment Plant – City of Osseo, WI
- New Well 2 (Village of Yorkville Utility Commission) – Union Grove, WI
- Water Treatment Plant Well 3 Preliminary Design – Village of Balsam Lake, WI
- Wells 3 and 4 Well Siting and New Pump House Design – City of Moose Lake, MN



11  
YEARS OF  
EXPERIENCE



**OFFICE LOCATION**  
St. Paul, MN



**EDUCATION**  
Bachelor of Science, Civil Engineering  
University of Minnesota-Duluth



**REGISTRATIONS/CERTIFICATIONS**  
Professional Engineer in MN (#56159)



32  
YEARS OF  
EXPERIENCE



**OFFICE LOCATION**  
Brainerd, MN



**EDUCATION**  
Bachelor of Science, Civil Engineering  
University of Colorado-Denver



**REGISTRATIONS/CERTIFICATIONS**  
Professional Engineer in AZ (#69195),  
CO (#PE.0031701), IA (#18809), IN (#11800256),  
MN (#25222), MO (#PE-2017006948),  
ND (#PE-8724), NM (#26093), NV (#26666),  
OH (#PE.85979), SD (#9638), WI (#46100), and  
WY (#17401)

## MARK SHERRILL PG

### GEOLOGIST, WELL SITE INVESTIGATION

**Mark will be responsible for aquifer testing and hydrology modeling.** Mark is a geologist and hydrogeologist with extensive experience in rock formation and underground water flow review. Mark has been involved with almost every municipal well development that SEH has completed in the past several years. Mark also has extensive field experience includes using GIS, mapping, ground penetrating radar, gravimeter, electrical resistivity, seismic and magnetic gradiometer equipment. Some of the programs Mark is proficient in include: ESRI ArcGIS, Mathematica, Phreeqc, GravMag, Refract, Resist, Diffract and Microsoft Office Suite.

#### EXPERIENCE

- Cedar Community Well Investigation and Hydrogeology Investigation – West Bend, WI
- Water Treatment Plant 1 – City of Cloquet, MN
- North Post Wells (US Army-Fort McCoy) – Fort McCoy, WI
- Well Head Protection Plan – City of Anoka, MN

## MILES JENSEN PE

### SR. WATER TREATMENT ADVISOR

**Miles will provide guidance to the team in selecting and designing treatment processes.** Miles is a senior project manager with extensive engineering experience as a project manager, client service manager, and SEH Water Market leader. Miles specializes in the design and construction of water treatment plants; specifically advanced water treatment facility process design; and construction management and plant start-up. His experience includes more than 80 new and renovated plant designs for ground and surface water supplied systems using conventional treatment, direct filtration, enhanced coagulation, lime softening and ion exchange processes for iron, manganese, arsenic, radium, volatile organic compound (VOC) removal and disinfection by-product (DBP) control. Miles has worked on operations audits, pilot studies, backwash and solids collection improvements, hydraulic profiles, lime softening and lime sludge handling/conveyance, filter pressing, and site layouts.

#### EXPERIENCE

- Water Treatment Plant Phase II Improvements – City of Eau Claire, WI
- Water Treatment Plant Filter Rehabilitation and Two New Production Wells – City of Eau Claire, WI
- Wells 4, 5, and 8 and Water Treatment Plants – Village of Sussex, WI
- Well 10 and Water Treatment Plant – City of Hudson, WI
- Unit Well 19 Design and Construction (City of Madison Water Utility) – Madison, WI



10  
YEARS OF  
EXPERIENCE



**OFFICE LOCATION**  
St. Paul, MN



**EDUCATION**  
Master of Science, Environmental Science  
Indiana University-Bloomington  
Bachelor of Science, Environmental Geoscience  
Michigan State University-East Lansing



**REGISTRATIONS/CERTIFICATIONS**  
Professional Geologist in MN (#58626),  
Professional Geologist in WI (#1462-13)



40  
YEARS OF  
EXPERIENCE



**OFFICE LOCATION**  
St. Paul, MN



**EDUCATION**  
Bachelor of Civil Engineering  
University of Minnesota-Twin Cities



**REGISTRATIONS/CERTIFICATIONS**  
Civil Engineer in AZ (#70056), CO (#PE.0056390), IA (#P25149), IL (#062.062027), IN (#PE19700293), KS (#28758), MD (#56463), MI (#6201069414), MN (#19869), MO (#PE-2022008537), ND (#PE-9186), NE (#E-17833), NM (#25895), OH (#PE.85970), SD (#11966), TX (#144147), VA (#0402051131), and WI (#27788)

## JOHN THOM

### OPERATIONS SPECIALIST

**With John's almost six decades of operational experience and water chemistry knowledge, you can rest assured that our team's water quality solutions will be realistic and achievable.** John is a water and wastewater operations specialist with extensive experience with management of water and wastewater utilities, including project management, plant studies, plant start-up, maintenance manuals, operation procedures manuals, water and wastewater operator training, and wastewater and water treatment pilot plant designer and operator. John was recognized for outstanding performance in the water and wastewater industry by numerous professional organizations.

#### EXPERIENCE

- Wells 4, 5, and 8 and Water Treatment Plants – Village of Sussex, WI
- Pilot Study and Well 3 Water Treatment Plant – City of Osseo, WI
- Water Treatment Plant Phase II Improvements – City of Eau Claire, WI
- Well 3 Pilot Study and Water Treatment Plant – City of Osseo, WI
- Water Treatment Plant Well 1 and 2 (Rib Mountain Sanitary District) – Town of Rib Mountain, WI
- Well 10 and Water Treatment Plant – City of Hudson, WI

## ARIEL CHRISTENSON PE

### STRUCTURAL ENGINEER

**Ariel will lead the structural evaluation and design tasks for the water treatment plant.** Ariel is a professional engineer with design experience in a variety of structural projects ranging from reconstruction and repair projects for existing buildings and tanks to multiple-story new construction. Her experience in water treatment spans over 10 years beginning with her role as an intern in the water treatment industry where she often traveled to several sites per day performing on-site engineering. Currently, Ariel manages the development of structural construction documents for primarily water and wastewater treatment plants with an emphasis in concrete structures.

#### EXPERIENCE

- Wells 4, 5, and 8 and Water Treatment Plants – Village of Sussex, WI
- Water Treatment Plant Phase II Improvements – City of Eau Claire, WI
- Well 10 and Water Treatment Plant – City of Hudson, WI
- Well 3 Pilot Study and Water Treatment Plant – City of Osseo, WI
- Well 5 Site Investigation, Test Well, Well, and Wellhouse – Village of Lake Hallie, WI
- Unit Well 19 Design and Construction (City of Madison Water Utility) – Madison, WI



59  
YEARS OF  
EXPERIENCE



#### OFFICE LOCATION

St. Paul, MN



#### EDUCATION

Certificate, Technical Teaching  
University of Minnesota-Twin Cities



#### REGISTRATIONS/CERTIFICATIONS

Class A Water Operator, Minnesota Department of Health



13  
YEARS OF  
EXPERIENCE



#### OFFICE LOCATION

St. Paul, MN



#### EDUCATION

Master of Science, Civil Engineering  
University of Minnesota-Twin Cities

Bachelor of Civil Engineering  
University of Minnesota-Twin Cities



#### REGISTRATIONS/CERTIFICATIONS

Professional Engineer in IN (#PE 11800642), MN (#53867), NC (#053449), TX (#151033), VA (#0402064703, 2022), and WI (#46515-6)



## JOHN CARLSON PE

### ELECTRICAL ENGINEER

**John will serve as lead electrical engineer for the new water treatment plant.** John is a senior professional engineer specializing in project management and electrical design with experience in power distribution, lighting, short circuit, coordination and arc flash evaluation for municipal water, wastewater, supervisory control and data acquisition (SCADA), public works, and industrial facilities. He is also proficient in AutoCAD, Revit, MicroStation, SKM Power Tools, EasyPower, Visual and SMS Builder RED.

#### EXPERIENCE

- Water Treatment Plant Phase II Improvements – City of Eau Claire, WI
- Well 5 Site Investigation, Test Well, Well, and Wellhouse – Village of Lake Hallie, WI
- Water Treatment Plant Well 1 and 2 (Rib Mountain Sanitary District) – Town of Rib Mountain, WI
- Well 2 – Village of Maiden Rock, WI
- Wells 7 and 8 and Pump House – City of Becker, MN
- Well 3 Design – Village of Cascade, WI
- Water Treatment Plant Well 3 Preliminary Design – Village of Balsam Lake, WI
- New Water Treatment Plant, Well, and Tower – City of Onamia, MN

## NICK BRULA PE

### MECHANICAL ENGINEER

**Nick will lead HVAC and plumbing design tasks for the new water treatment plant.** Nick has extensive experience in the mechanical and construction engineering field. He has worked with energy analysis/modeling and ASHRAE 90.1 appendix G. He's is experienced in every phase of HVAC project development, including initial cost estimation, facility analysis, system design, and construction administration. Nick has helped design and oversee the construction of multiple industrial HVAC projects, including chiller replacements, boiler upgrade and replacements, constant volume and VAV systems, variable refrigerant flow systems, water and wastewater treatment facilities, and plumbing upgrades.

#### EXPERIENCE

- Water Treatment Plant Phase II Improvements – City of Eau Claire, WI
- Water Treatment Plant Filter Rehabilitation and Two New Production Wells – City of Eau Claire, WI
- Well 3 Pilot Study and Water Treatment Plant – City of Osseo, WI
- Well 10 and WTP – City of Hudson, WI
- Wells 4, 5, and 8 and Water Treatment Plants – Village of Sussex, WI
- Well 5 Site Investigation, Test Well, Well, and Wellhouse – Village of Lake Hallie, WI
- Well 2 and Wellhouse - Arbor Hills (Town of Shelby Sanitary District 2) – Shelby, WI



33  
YEARS OF  
EXPERIENCE



**OFFICE LOCATION**  
St. Paul, MN



**EDUCATION**  
Bachelor of Science, Electrical Engineering  
Michigan Technological University-Houghton



**REGISTRATIONS/CERTIFICATIONS**  
Professional Engineer in CO (#PE.0037884),  
IA (#P15669), IL (#062.054680, 2001),  
IN (#PE10607337), MI (#6201051210), MN (#24001),  
MO (#2004019769), NE (#E-19041), WI (#31823), and  
WY (#19340)



20  
YEARS OF  
EXPERIENCE



**OFFICE LOCATION**  
St. Paul, MN



**EDUCATION**  
Bachelor of Mechanical Engineering  
University of Minnesota-Twin Cities  
  
Bachelor of Arts, Physics  
St. John's University - Collegeville, MN



**REGISTRATIONS/CERTIFICATIONS**  
Professional Engineer in CO (#PE.0055026),  
IA (#P24983), IN (#PE11500740), MN (#46656), NC  
(#36975), ND (#PE-28209), NJ, (#24GE05273000),  
SD (#9965), VA (#402055261), WI (#44297)

## LUKE PEDERSON

### LEAD CAD TECHNICIAN

**Luke will be responsible for drafting preliminary and final design plans.** Luke is a senior technician with experience in the design of wastewater treatment facilities, water treatment facilities, wells and wellhouses, water booster stations, and water towers; Spill Prevention, Control, and Countermeasure (SPCC) writing; and shop drawing review. Luke also has experience as a surveyor and resident project representative on multiple projects. His experience includes use of AutoCAD, Revit Architecture, and Revit MEP, drafting of title sheets, typical sections, proposed plan and profiles, and water modeling. Luke is one of two trained operators of the Faro 3D laser scanner, which can be used to three-dimensionally scan the interior and exterior of a facility, a critical step in developing accurate 3D models for design purposes.

#### EXPERIENCE

- Water Treatment Plant Phase II Improvements – City of Eau Claire, WI
- New Production Well 24 – City of Eau Claire, WI
- Water Treatment Plant Design – City of Osseo, WI
- New Wellhouse 4 – Village of Lake Hallie, WI
- Well 5 Site Investigation, Test Well, Well, and Wellhouse – Village of Lake Hallie, WI
- Well 31 Facility Construction (City of Madison Water Utility) – Madison, WI

## DUANE KOWALCZYK

### SITE SURVEYOR

**Duane will lead topographical and boundary survey activities as part of the final site selection and preliminary design tasks.** Duane is a senior technician with extensive roadway survey, design and construction, and field layout experience. He regularly serves in the role of resident project representative on municipal street and utility improvement projects. Duane's experience includes survey, materials testing, underground utilities, recordkeeping, construction inspection, utility coordination and public involvement.

#### EXPERIENCE

- Water Treatment Plant Filter Rehabilitation and Two New Production Wells – City of Eau Claire, WI
- Well 6 Land and Topographic Survey – Village of Lake Hallie, WI
- Well 5 Site Investigation, Test Well, Well, and Wellhouse – Village of Lake Hallie, WI
- Well 3 Pilot Study and Water Treatment Plant – City of Osseo, WI
- Water Treatment Plant Well 3 Preliminary Design – Village of Balsam Lake, WI
- Water Treatment Plant Well 1 and 2 (Rib Mountain Sanitary District) – Town of Rib Mountain, WI
- Well and Reservoir Design – Village of Holmen, WI
- Well 9 Water Treatment Plant Improvements – City of Thorp, WI



**24**  
YEARS OF  
EXPERIENCE



**OFFICE LOCATION**  
Chippewa Falls, WI



**EDUCATION**  
Bachelor of Arts, Computer Science  
Lakeland College - Chippewa Falls, WI  
Associate, Civil Engineering, Structural Technology  
Chippewa Valley Technical College - Eau Claire, WI



**REGISTRATIONS/CERTIFICATIONS**  
Faro 3d Laser Scanner Advanced Training  
Autodesk Certified Professional, Revit Architecture



**47**  
YEARS OF  
EXPERIENCE



**OFFICE LOCATION**  
Chippewa Falls, WI



**REGISTRATIONS/CERTIFICATIONS**  
MSHA 24 Hour New Miner, Mine Safety and Health Administration  
MSHA 8 Hour Refresher, Mine Safety and Health Administration

## TIM GREENE

### RESIDENT PROJECT REPRESENTATIVE (RPR)

Tim will serve as our RPR on the project responsible for daily on-site construction observation. Tim has an extensive background in water systems management, specifically in chemical management, water quality testing, DNR and EPA regulatory compliance, and plant safety. He is well regarded for his analytical ability to identify opportunities to improve processes resulting in reduced cost and lower risk. As a decisive and engaging individual, he is able to train and lead top-performing teams that meet all standards for quality, safety, and efficiency.

#### EXPERIENCE

- Water Treatment Plant Phase II Improvements – City of Eau Claire, WI
- New Production Well 24 – City of Eau Claire, WI
- Well 3 Pilot Study and Water Treatment Plant – City of Osseo, WI
- Unit Well 19 Design and Construction (City of Madison Water Utility) – Madison, WI
- Well 31 Facility Construction (City of Madison Water Utility) – Madison, WI
- Well 9 Water Treatment Plant Improvements – City of Thorp, WI
- Well 5 Site Investigation, Test Well, Well, and Wellhouse – Village of Lake Hallie, WI
- Well 2 – Village of Maiden Rock, WI

## BREA GRACE AICP, NCI

### FUNDING SPECIALIST

Brea will assist the City with identifying, pursuing, and administering funding opportunities. As part of SEH's team dedicated to project funding, Brea brings a high level of experience leveraging funding sources to assist communities in realizing their project goals. By identifying the best-fit funding solutions for a project, She has helped local villages, cities, counties and towns build their infrastructure, track project funding, meet compliance requirements, and plan their futures. Brea is an experienced urban planner, having worked in both the public and private sectors. This work has involved issues surrounding land use, economic development, the environment, and transportation, as well as engaging the public in decisions about their communities.

#### EXPERIENCE

- New Water Tower and Well Pumps, SDWL Application/Administration – City of Chetek, WI
- Ash Street Water and LSL Replacements, SDWL Application/Administration – City of Spooner, WI
- New Well 2 Funding Strategy, SDWL and CDBG Grant Applications and Administration – Village of Maiden Rock, WI
- Hillcrest Estates Water System Improvements, SDWL and CDBG Grant Applications/Administration – City of Altoona, WI
- Water Treatment Plant, SDWL Application/Administration – Rib Mountain Sanitary District



34  
YEARS OF  
EXPERIENCE



**OFFICE LOCATION**  
Chippewa Falls, WI



**EDUCATION**  
Bachelor of Science  
Industrial Technology (Concentrations in  
Manufacturing Engineering and Secondary  
Resources Management)  
University of Wisconsin-Stout - Menomonie



25  
YEARS OF  
EXPERIENCE



**OFFICE LOCATION**  
La Crosse, WI



**EDUCATION**  
Master of Science  
Urban and Regional Planning  
University of Wisconsin-Madison



**REGISTRATIONS/CERTIFICATIONS**  
Certified Planner, American Planning Association

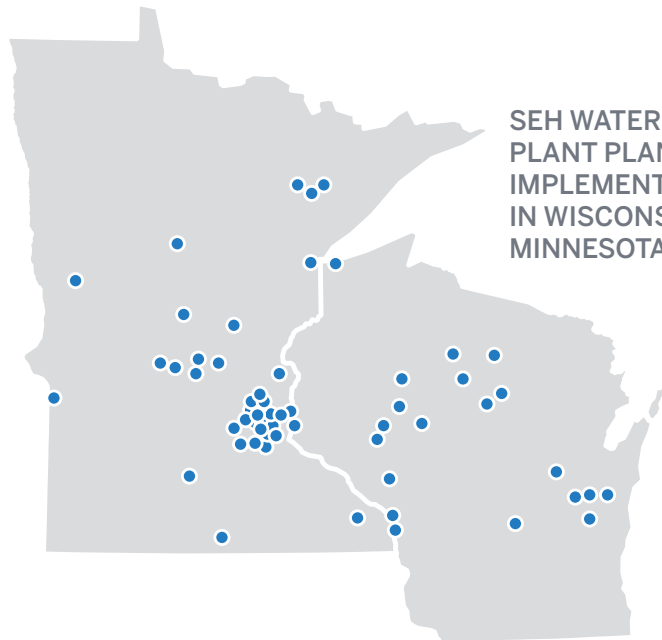


# Project Experience/References

This section highlights the breadth of our team’s relevant water treatment planning and implementation experience. The projects featured are evidence of our ability to integrate a range of water treatment and funding services to meet Menomonie's distinct needs. By partnering with SEH, our knowledge and experience becomes yours, leaving no detail or alternative unexamined. **We encourage you to contact our references to confirm our commitment to quality deliverables and responsive client service.**

SEH is a recognized iron, manganese, and radium treatment team for Wisconsin's many groundwater supplies. Our water treatment professionals have worked for many years under a strict quality control and quality assurance (QA/QC) process that provides utilities with accurate assessments and reliable solutions.

Our hands-on approach to water treatment is unique to the industry. We own and operate a mobile pilot plant trailer that brings the lab to your site. The list at right provides a sample of our work helping communities meet their objectives.



SEH WATER TREATMENT PLANT PLANNING AND IMPLEMENTATION WORK IN WISCONSIN AND MINNESOTA

## RECENT SEH IRON, MANGANESE, PFAS, AND RADIUM REMOVAL PROJECTS

Client	Year Complete	Treatment Capacity (mgd)
Balsam Lake, WI	Ongoing	1.0
Rib Mountain, WI**	Ongoing	1.4
Port Washington, WI	Ongoing	4
Anoka, MN*	Ongoing	4.33
Madison, WI* (Well 19)	Ongoing	3.3
Marshfield, WI (S. Side Well Field)**	2024	1.3
Rib Mountain, WI (Well 1) **	2022	0.5
Eau Claire, WI Phase II	2021	24
Thorp, WI	2020	0.15
Cloquet, MN	2020	1.4
Sussex, WI*	2019	2.0
Madison, WI* (Well 31)	2018	3.3
Savage, MN	2018	4.3
Sussex, WI*	2018	1.1 and 1.3
Hudson, WI	2019	1
St. Joseph, MN	2018	1
Eau Claire, WI Phase I	2017	24
Gilbert, MN	2017	1

\*Radium removal    \*\* PFAS removal

# PHASES I AND II WATER TREATMENT PLANT IMPROVEMENTS AND WELL 24

EAU CLAIRE, WI



## PROJECT RELEVANCE

-  WisDNR SDWLP Funding in Phase II
-  Well Design and Construction
-  Water Treatment
-  Iron and Manganese Removal
-  Future Expansion

### PILOT STUDY

A phased series of water treatment plant improvements began with the water distribution model update and pilot studies to rehabilitate plant processes, rather than building new. SEH conducted the pilot study, which identified that a single filter media preceded by detention with plate settlers would allow adequate manganese removal and more efficient production of 24 mgd at the necessary rated capacity.

### PHASE I – FILTER MEDIA AND UNDERDRAIN REPLACEMENT

Water quality issues stemmed from the plant's four concrete gravity filters experiencing deterioration of the filter underdrain system, media, and backwashing system. SEH designed rehabilitation of the existing filters including replacement of the underdrain piping, sand media, and backwash troughs. SEH also remediated lead paint, installed a new clear well overflow, overhauled the SCADA system, and installed backwash piping and appurtenances. SEH provided conceptual design and proposed costs, followed by bidding assistance, construction phase services, and startup assistance.

### PHASE II – SEDIMENTATION BASIN IMPROVEMENTS

The SEH team provided planning, design, and construction services for improvements to the pre-filter treatment

processes to increase manganese solids removal in the sedimentation basins. Improvements have consisted of converting the two existing 90 ft. by 90 ft. sedimentation basins into parallel treatment trains, each consisting of four stage advanced flocculation followed by plate settler sedimentation. Services also included construction of a new chemical feed room with polymer feed, installation of a basin overflow system, major electrical improvements to the plant and new process, and new electrical room and garage. These efforts increased filter run times tenfold – from approximately 10 hours to 100 hours. Well 24 was also designed and constructed with this project, as a new pitless unit well in the well field, replacing Well 10 which was abandoned.

### WELL 24 DESIGN AND CONSTRUCTION

The Well 24 project included design, construction, and bidding efforts to construct a new well, installing a 1,500 gpm submersible pitless well pump and electrical system, and modifying the existing Well 10 wellhouse. The project also included disconnecting and abandoning Well 10, constructing a new raw water main, and integrating Well 24 into SCADA. The project required shoring and bracing of the Well 10 foundation to prevent building collapse.

<b>CLIENT</b>	City of Eau Claire
<b>PROJECT LOCATION</b>	2711 Riverview Drive Eau Claire, WI 54703
<b>YEAR COMPLETED</b>	Phase I – 2017 Phase II – 2021
<b>REFERENCE</b>	Lane Berg Community Services Director (Utilities Manager during the Phase II project construction) 715.839.1876 lane.berg@eauclairewi.gov
<b>KEY PERSONNEL</b>	Jeff Nussbaum Jeff Ledin Justin Mankowski Ariel Christenson Brad Weiss John Carlson Nick Brula Tim Greene Miles Jensen Luke Pederson John Thom

# WELL 10 AND WATER TREATMENT PLANT

HUDSON, WI



## PROJECT RELEVANCE

-  Well Design
-  Water Treatment
-  Iron Removal

<b>CLIENT</b>	City of Hudson
<b>PROJECT LOCATION</b>	1101 Carmichael Road
<b>YEAR COMPLETED</b>	2018
<b>REFERENCE</b>	Kip Peters Utility Manager 715.386.4765 kpeters@ci.hudson.wi.us
<b>KEY PERSONNEL</b>	Justin Mankowski Ariel Christenson Nick Brula Miles Jensen John Thom

The City of Hudson drilled Well 10 in 2007 and had a water treatment plant designed and issued for bidding. Due to a declining economy and bids that were higher than desired, the City of Hudson decided not to construct the water treatment plant at that time.

In 2016, water demands in the City were high enough that adding a pumping facility and water treatment plant at Well 10 was warranted. The City hired SEH to perform Value Engineering on the previous design and come up with a project that met the community's needs and was cost-effective.

The SEH team designed a treatment and pumping facility that includes a single pressure filter for iron removal, chemical rooms, and a control room. A natural gas standby generator was included to ensure the facility would be available when needed.

Electrical design included new electrical service, the standby generator that is rated for peak-shaving, power distribution including motor control center, lighting and instrumentation, and a PLC panel and filter console for manual control. The new PLC panel also integrates into the City's existing SCADA system via radio communication.

SEH's cost-effective design saved the City more than \$2 million on a project that was issued for bidding more than eight years ago.

# WELL 3 PILOT STUDY AND WATER TREATMENT PLANT

OSSEO, WI



## PROJECT RELEVANCE

-  WisDNR SDWLP Funding
-  Well Design
-  Water Treatment
-  Iron and Manganese Removal
-  Future Expansion

The City of Osseo was faced with an aging water treatment plant and needed to improve iron and manganese removal to improve water quality for its residents. To address these needs, the City hired SEH to design a new water treatment plant.

The downtown site for the new plant was constrained for space, situated between two highways and the existing well and treatment plant. The new plant had to be designed in phases to be built next to the old one and around the existing well head to keep producing water. Construction started in late 2021 and was completed in 2023.

The new, \$5.1 million dollar facility includes a backwash water tank with reclaim ability and a new water treatment plant building that houses the clear well, gravity filters, sedimentation tank with plate settlers, flocculation, rapid mixing and aeration,

chemical feed, and lab/office. The SEH team also designed a complete SCADA upgrade, new site piping, and site finishes for the new building.

The plant includes water process piping design that will accommodate adding a future well remote to this location, connected via piping stubbed out under the foundation of the plant that can easily be tied into the head of the treatment piping ahead of the induced draft aerator and chemical feed.

Following startup in 2023, the water treatment plant has been exhibiting excellent performance, typically removing iron and manganese to the limit of detection and greatly improving water quality for City of Osseo residents.

### CLIENT

City of Osseo

### PROJECT LOCATION

13806 9th Street  
Osseo, WI, 54758

### YEAR COMPLETED

2023

### REFERENCE

Steve Durham  
Director of Public Works  
715.597.2207  
dpw@cityofosseowi.us

### KEY PERSONNEL

Jeff Nussbaum  
Jeff Ledin  
Ariel Christenson  
Brad Weiss  
Nick Brula  
Tim Greene  
John Thom  
Duane Kowalczyk

# WELLS 4, 5, AND 8 AND WATER TREATMENT PLANTS

SUSSEX, WI



## PROJECT RELEVANCE

-  Well Design
-  Water Treatment
-  Radium Removal
-  Future Expansion

### WELLS 4 AND 5

Faced with high radium levels at Well 4, the Village of Sussex sought SEH's assistance. Under a WisDNR consent order, SEH was tasked with designing a radium reduction system within an existing garage to minimize costs. A pilot study tested high-rate pressure filters using manganese greensand and pyrolusite media with in-situ HMO feed. Previous methods had failed, but the pilot proved a compact system could work within the space.

With the pilot's success, SEH began designing the 1.44 mgd Well 4 improvements. Simultaneously, Well 5 exceeded its radium levels, and SEH was asked to design a similar 0.72 mgd system within another garage. The pilot study at Well 5 confirmed the effectiveness of pyrolusite media and HMO feed.

The designs for both wells were combined into one bid package, including high-rate pressure filters, backwash retention tanks, chemical feed systems, electrical and mechanical systems, and a standby generator for Well 4. After a successful bid, SEH provided construction administration and periodic observation services.

### WELL 8

The Village also engaged SEH to develop new Well 8 with a treatment plant. Tasks included a well siting study, test well construction, a pilot treatment plant study, and design and construction services for a 1,400 gpm municipal supply well. SEH assisted with WisDNR regulatory compliance, coordination with Wisconsin Geological and Natural History, and well head protection plan updates.

Well 8 features a 1,300 ft. deep well with 100 ft. of 30 in. upper casing through overburden, 650 ft. of 20 in. steel inner casing to seal off upper formations, and an open hole into deep bedrock formations. It is equipped with deep static pumping equipment, with the static water level over 400 ft. below ground surface.

To address high radium levels, Phase 3 involved constructing the Well 8 water treatment plant, which includes a new production well and water treatment plant. The water treatment plant, designed for radium removal using in-situ blended HMO feed, treats 800 gpm through a horizontal pressure filter with pyrolusite media, with 600 gpm in additional filtering capacity and a backwash tank

to manage waste. Located on a steep, wooded hillside, the water treatment plant and backwash tank were built into the slope. Key project components included the new production well, cavity wall building, horizontal pressure filter, chemical feed systems, backwash tank, and generator.

<b>CLIENT</b>	City of Sussex
<b>PROJECT LOCATION</b>	N59W23551 Clover Drive
<b>YEAR COMPLETED</b>	2023
<b>REFERENCE</b>	Judy Neu, PE Village Engineer Director of Public Works 262.246.5229 jneu@villagesussex.org
<b>KEY PERSONNEL</b>	Jeff Ledin Justin Mankowski Ariel Christenson Brad Weiss Nick Brula Miles Jensen John Thom Simon McCormack



# WELL 5 SITE INVESTIGATION, TEST WELL, WELL, AND WELLHOUSE

LAKE HALLIE, WI



## PROJECT RELEVANCE

-  Well Design
-  Water Treatment
-  Radon Removal
-  Future Expansion

SEH was hired to perform a well site investigation to identify potential well sites, construct exploratory borings at the preferred sites, analyze the site for final selection, and provide the submittal to WisDNR for well site approval.

The SEH team was subsequently engaged for the next phase of the project which included design and construction services for the well, wellhouse, and site civil improvements. The wellhouse design included aeration equipment for radon removal, a clear well tank, high service pumps, chemical feed, and electrical, SCADA, and HVAC equipment.

The building, interior piping and radon (air stripping tower) treatment equipment, and site were designed for the potential future addition of another well on the same site. The future well could be located remotely from the wellhouse in a pitless unit and connected. The wells could alternate run times through the treatment and wellhouse.

SEH completed design, bidding services, construction administration, construction resident project representative work, and startup services for the project. Permitting included WisDNR Drinking Water Plan Review for the Well Site Investigation Report, Well 5 Design, Watermain, Wellhouse, and Site Design, and PSC Construction Authorization for the project. Construction of the well was completed in the fall of 2022.

<b>CLIENT</b>	Village of Lake Hallie
<b>PROJECT LOCATION</b>	13136 30th Avenue
<b>YEAR COMPLETED</b>	2023
<b>REFERENCE</b>	Gary Spilde Village President 715.726.2660 gspilde@lakehallie.us
<b>KEY PERSONNEL</b>	Jeff Nussbaum Jeff Ledin Ariel Christenson John Carlson Nick Brula Tim Greene Luke Pederson Duane Kowalczyk John Thom



# Project Understanding, Approach, and Schedule

**SEH understands that the supply and treatment of water is one of the most important functions a City provides to its residents.** Community water systems must be safe, dependable, cost-effective, and constructed to serve the specific needs of the community – both now and into the future. Our team offers an established approach that has resulted in the successful implementation of hundreds of high capacity wells and treatment plants in communities similar to yours.

## PROJECT UNDERSTANDING

The City of Menomonie is committed to servicing your water utility customers with high quality drinking water that is sourced, treated, and distributed across the City with three wells, three water treatment plants, and three elevated storage tanks, all in one pressure zone.

With the proposed project, the City's goal is to find additional source capacity adequate to meet current and future demands, increase firm capacity of the City's system, and correct a "Deficiency" noted in WisDNR's 2021 Sanitary Survey Report.

The City recognizes that existing Wells 4, 6, and 8 are all constructed within similar geology, which contains varying amounts of radionuclides, iron, and manganese, and that it's likely that a new well drilled and constructed in similar geology will produce water with these same contaminants. Therefore, it is prudent to plan for the treatment facilities that will be necessary to treat the well water down to limits that are less than the primary and secondary drinking water standards. With an eye to the future, the City understands that enforcement standards change over time, and that treatment will allow

you to maintain equal and similar water qualities throughout the system.

As stated in the RFP, the City's Water System Demand and Capacity Study will be utilized as the design basis for the firm capacity needs for the project. Site Study Phase I and Site Study Phase II will also be utilized to complete the Well Site Investigation Report for Well 9 and the PSC construction authorization application.

## PROJECT APPROACH/WORK PLAN

Based on a close reading of the RFP and Addendum 1, our conversations with City staff, a visit to the project sites, and investigations with City staff into the existing infrastructure at Wells 4 and 6, the SEH team understands the desired project approach and has detailed the following tasks, in accordance with the RFP, to accomplish the project scope.

## PROJECT FUNDING

SEH's Brea Grace will lead SEH's funding team and communicate with Jeff Nussbaum and the design team throughout the project to accomplish the requirements for funding the project as listed in the

RFP. We have intertwined the requested services into each phase of the project and project schedule. SDWLP and CDBG-PF program requirements and deadlines require a smooth integration of the project deadlines with engineering and regulatory approval requirements to ensure eligibility and maintain compliance with the program requirements. The approach and work plan for each funding program is similar but unique. SEH will capitalize on our experience as a team on dozens of successfully funded municipal well and water treatment plant projects in Wisconsin and communicate with the City for the following at a minimum:

- Verify WisDNR SDWLP and CDBG-PF eligibility and prepare and submit WisDNR Intent to Apply and Priority Evaluation and Ranking Form – see Phase 1 Approach and Schedule.
- Prepare and submit WisDNR SDWLP and CDBG-PF applications – see Phase 2 Approach and Schedule.
- Coordinate with the SEH design teams to prepare and submit environmental documentation with SDWLP and CDBG-PF applications.
- Administer SDWLP and CDBG-PF grants and loans.

- Assist City of Menomonie to forecast cash needs throughout the project and communicate with staff.

## **PHASE 1 – FINAL SITE SELECTION AND TEST WELLS**

### **PHELAN PARK SITE AND WAKANDA PARK SITE(S)**

- Perform a topographic survey of each site.
- Prepare test well designs and bidding documents in accordance with WisDNR NR 811 and submit permit applications to WisDNR Drinking and Ground Water.
- Prepare entire project cost estimates and test well bidding documents.
- Project funding approach (funding tasks will be led by Brea Grace in a parallel timeline with engineering work).
- Begin planning CDBG and SDWLP eligibility and approach for applications.
- Complete ITA/PERF for submittal no later than the October 2024 deadline.
- Begin preparing Public Service Commission (PSC) construction authorization application (for the entire project).
  - Note that after submittal of the application to PSC, the approval process can take eight months before a final decision is received, and authorization is necessary prior to construction beginning on Well 9 (before the City expends funds on the infrastructure for the water utility).
- Complete bidding and award process, construction administration, and construction staking.
- Resident project representative (RPR) will be on-site for 40 hours per week during active construction periods and critical inspection and

testing times. Full-time RPR will be performed by an SEH licensed hydrogeologist to observe construction and witness testing of each well.

- Evaluate test well(s) data provided by the contractor and prepare report and recommendations based on findings.
- Attend public meetings as necessary to communicate and inform decision-making in accordance with the City's timeline.
- Obtain approval on the final site selection before proceeding to Phase 2, preliminary design of Well 9.
- Assist City staff by providing project information to the City's financial advisor, with high level estimates and input on construction schedules. This informs the approach for funding strategies and for PSC Rate Case, if applicable, and PSC Construction Authorization application.

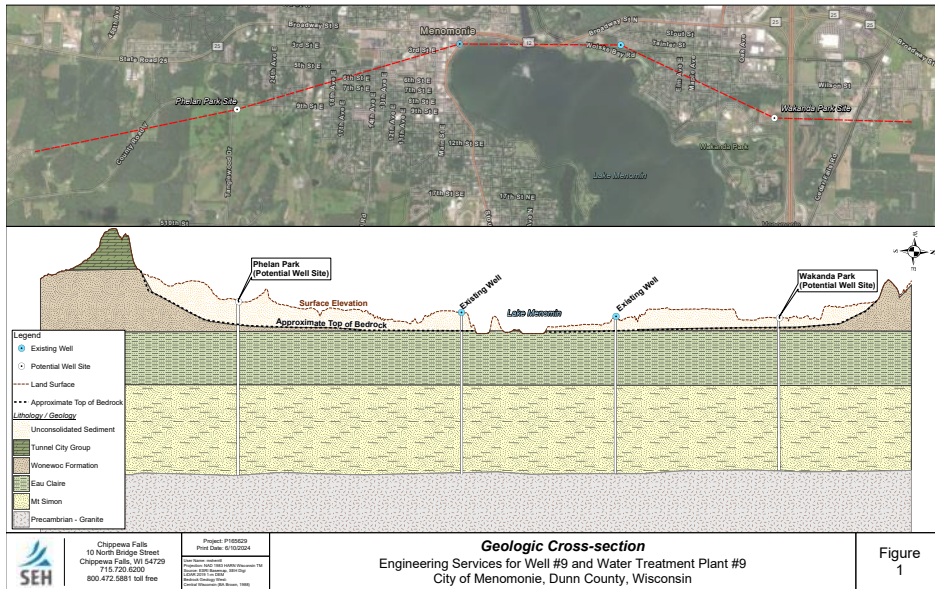
### **PHASE 2 – PRELIMINARY DESIGN – WELL 9**

- Prepare and submit Well Site Investigation Report (WSIR) to WisDNR in accordance with NR 811. Note that SEH would like to include this in preliminary design phase, instead of the final design phase, for the following reasons:
  - Approval of this engineering report by WisDNR is required before the final well design for Well 9 is submitted to WisDNR and prior to construction of Well 9.
  - Approval of this engineering report by WisDNR is required for eligibility for the SDWLP; the pump house or water treatment plant design can be submitted after the application for SDWLP is submitted.
- Perform a complete topographic survey of the site and utility routing.
- Complete the boundary survey and title searches.

- Review wetlands and perform delineation.
- Complete the Archeological and Historical and Endangered Resources process.
- Continue project funding approach from Phase 1 for funding program applications for SDWLP and CDBG.
- Continue any PSC construction authorization work, such as answering requests for information (RFI) or addressing Notices of Incomplete Applications (requests for additional information).
- Complete preliminary design of Well 9 and obtain City approval of preliminary plan.

### **PHASE 3 – PHASE 3, FINAL DESIGN, BIDDING, CONSTRUCTION, AND RPR FOR WELL 9**

- Prepare final Well 9 engineering plans and specifications, including the abandonment of the test well at the unselected site, in accordance with WisDNR NR 811, the approved WSIR from Phase 2, and City approvals.
- Submit permit applications to WisDNR Drinking and Ground Water, and obtain City approval of the final plans.
- Continue project funding approach from Phases 1 and 2 by submitting selected applications for CDBG and SDWLP as applicable by the deadlines.
- Complete the bidding and award process, construction administration, and staking for Well 9 construction.
  - Note that the City will receive the final decision from the PSC on the construction authorization prior to award of a bid and starting construction.



- RPR will be on site for 40 hours per week during active construction periods and critical inspection and testing times. Full-time RPR will be performed by an SEH licensed hydrogeologist to observe construction and witness testing of Well 9, ensuring that the work of drilling the well and completing construction aligns with the plans and specifications and also with field geology conditions. (i.e., completing the drilling and setting casing in the expected formations included with the designs and permits).
- Evaluate data provided by contractor, including laboratory analysis of water quality, quantity testing, geological sampling, and test pumping data, and prepare a report and recommendations based on findings.
  - Note that water quality testing as required by WisDNR (especially radionuclide testing) can take several months to obtain the results.
- Water quality results for any contaminants will inform the pre-pilot plan approach in Phase 4.
- Upon completion and approval of the Well 9 construction, begin the Well Head Protection Plan (WHPP) for Well 9. The City has an existing WHPP for the existing Wells, so the report and plan will be written as an amendment to that plan.
  - Note that the City will be responsible for preparing and following the legislative process to adopt a Well Head Protection Ordinance (WHPO) or modify the existing WHPO to include Well 9. It is suggested that the chosen site be protected for a future well field, addition of a future Well 10.

The Phelan Park site appears to be challenging from a WHPO standpoint, due to its proximity to the City's corporate boundary and zoning enforcement limits.

- Communicate with the City and review information with staff. Attend public meetings as necessary to communicate and inform decision-making in accordance with the City's timeline.

## PHASE 4 – PILOT STUDY

- Prepare and submit pre-pilot study report, per WisDNR NR 811 requirements and WisDNR pilot study guidance documents. This will be started during the end of Phase 3 and completed once the final water quality from the Well 9 construction process is available.
- This plan is anticipated to include treatment of Well 9 water using the following process, assumed to be similar to that used by the City at Wells 4, 6, and 8:
  - Well 9 pumping to aeration (raises pH and starts Fe and Mn oxidation processes)
  - Chemical addition for oxidation of iron and manganese (permanganate and chlorine)
  - Detention tank
  - Chemical addition (Fluoride for dental health)
  - High service pumping from detention tank through the pressure filters to distribution system
  - Horizontal or vertical pressure filters containing filter media for the removal of iron, manganese, and radionuclides
  - Backwashing of filters to a backwash water waste tank and sanitary sewer

SEH's pilot trailer treatment plant team and water engineers will include (as an option) the testing for HMO for removal of radium. Depending on the final water quality results from the testing of Well 9 and radium or radionuclide levels, our team will evaluate the benefits of including HMO now or include future planning for a chemical room and equipment to feed HMO in the future if necessary (Well 10 expansion). Water quality parameters in groundwater wells change over time and may get higher or go lower than the initial water quality reports. It's important to consider the need for future radium or radionuclide removal and plan accordingly so fiscally responsible efforts during design are not forgotten.

Our pilot treatment plant team will consider the use of a single layer filter media for removal of contaminants as applicable, such as pyrolusite and OxiPlus 75. The benefits of a single media filter system are many, but should be tested

against the option of multiple layer filter beds (anthracite and greensand plus or greensand) to demonstrate performance in the pilot study.

- Upon approval of pre-pilot plan by the City and WisDNR, mobilize SEH-owned pilot study trailer to the Well 9 site and perform pilot study per the approved pre-pilot plan.
  - Note: typical on-site pilot studies for iron, manganese, and radium removal take two full weeks to complete the required two full filter runs.

## PROCESS DETAILS

### HMO: PREFORMED VERSUS IN-SITU

In a **performed HMO feed process**, manganese sulfate, permanganate and water are mixed in a common batch tank, forming a solution containing small, solid particles of HMO. This solution is then dosed into the raw water as manganese at concentrations approaching 1.0 to 1.5 mg/l.

For **in-situ HMO processes**, separate manganese sulfate and permanganate feeds are injected into the raw water in close proximity to one another at dosages that result in HMO solids approaching 0.25 mg/l to 0.75 mg/l as manganese.



Radium Removal Pilot Study – Sussex, WI

- SEH's pilot trailer has the capability to test four columns of filter media at one time (in the same run), enabling us to compare multiple filter medias in an efficient manner.
- Because we own our own pilot plant trailer and staff it with our own water operator to run the pilot and collect the data, we are not reliant on pilot services provided by a filter manufacturer or media supplier which may influence the options utilized in the pilot study. Nor do we require the City to collect data, since we have included time in our fee to be on site full time during the time the pilot study is running at Well 9.
  - Note that temporary power for the pilot trailer may need to be provided by the City depending on site conditions at the time Well 9 is finished. Temporary power is not included in our cost.
- Summarize final pilot study data and complete final pilot study report. Upon approval by the City, submit the final report to the WisDNR per NR 811 for review. Approval of the final report is required as part of the final design permitting process of the water treatment plant. Preliminary design and final design can proceed in parallel with this submittal and review. It is optimal to receive approval of the final pilot report from WisDNR prior to finishing the final design of the water treatment plant.

**Jeff will manage the timing of the SEH team's approach to the water treatment plant design to ensure no time is lost waiting for WisDNR approval of the pilot plan.**

## PHASE 5 – WATER TREATMENT PLANT DESIGN, BIDDING, CONSTRUCTION, AND POST CONSTRUCTION SERVICES

### PRELIMINARY DESIGN

- Hold project kickoff meeting to discuss project details.
- Gather and compile all necessary data required from City and County records, field reconnaissance, and other sources as necessary. Utilize topographic and boundary survey from Phase 2.
- Prepare a QA/QC Plan for review and approval, including periodic checks for budget and cost control.
- After QA/QC Plan approval, schedule and coordinate QC reviews throughout the duration of the work. The approved QA/QC Plan will define QC requirements for the project.
- Following selection of the final project configuration, assist Menomonie in procuring a geotechnical engineer for site-specific soil borings and design geotechnical report to aid in determining proposed locations of a new treatment building, detention tank or clearwell, site utilities, and backwash tank.
- Develop regular task reporting and communication methods concerning progress of the work to communicate with the City.
- Prepare for and attend one pre-design/workshop meeting with key Menomonie staff. This workshop will consider up to two new conceptual designs, with information regarding process flow diagrams, interior process piping, proposed filtration equipment, pumping plans, and other specific water treatment options to be evaluated. Two architectural alternatives will be developed to complement civil site design, existing parcel size, and landscape options.

- Prepare for and attend one architectural/workshop meeting with key Menomonie staff. This workshop will demonstrate the two different alternatives incorporating architectural features into Menomonie's processes and water treatment needs as demonstrated from the pre-design/workshop meeting.
  - Each conceptual design concept will be prepared with the following in mind:
    - Site utility coordination and location for gas, electric, telephone, cable, fiber optics, storm sewer, sanitary sewer, and water main.
    - Building locations and configurations as created during the workshops will be evaluated in conjunction with the site plan to use the available space efficiently and effectively on the new lot.
    - Environmental issues surrounding the site will be sensitive to and protect all aspects of the site pertaining to local, state, and federal laws.
  - All preliminary layouts of the facilities will be reviewed with Menomonie staff based on construction cost, maintenance efficiencies, and access. All layouts will be planned according to current zoning ordinance.
  - The site plan will include grading and stormwater management. We will review the site to drain away from the proposed building and manage stormwater in a way that controls flooding or excessive ponding of surface runoff. Stormwater will be managed per the WHPO and setback rules for stormwater facilities in relation to a municipal well.
  - Architectural building features will be illustrated in sufficient detail to review probable layouts.
    - Development of interior and exterior renderings of treatments, process equipment, piping layouts, building sections and elevations will consider general maintenance and operations for the new facilities.
    - Architectural features to be explored include concrete block with a mix of concrete brick, precast concrete panels, or other mix of low-maintenance metal panels of industrial-type architecture that are easily erected and maintained.
  - Prepare preliminary process, well pump, SCADA, electrical, generator sizing, utility extension, site, grading, building, structural, site lighting, HVAC, and plumbing designs. Evaluate downstream sanitary sewer capacity to handle filter backwash water flows and consider equalization options for the site.
  - Constructability, 30% cost estimating, and schedule are important parts of the preliminary concepts. Our team will work closely with Menomonie staff to control these issues throughout the project. Each alternative will be evaluated and a one-page technical memo prepared to help the City make informed decisions.
  - Document the information from the alternative development and conceptual design process by preparing a Design Basis Report and Evaluations Matrix Document. This information, combined with a presentation to the staff and City Council (as appropriate) will complete the services under preliminary design.
  - Upon written authorization from Menomonie of the preferred alternative, proceed to final design services for the water treatment plant and site.
- FINAL DESIGN**
- Based on the selected alternative at the end of preliminary design, begin preparing final plans, specifications, reports, and permit applications required to obtain regulatory agency approvals, competitive bids, and enable construction of the project. Review plans and opinion of probable cost with the Menomonie staff at approximately the 60% and 90% completion levels. Final plans and specifications will be prepared from the approved preliminary design and will include:
    - Site plan design consistent with Planning and Engineering Department.
    - New well pump and equipment for Well 9. Test well abandonment at the unselected site.
    - Construction staging analysis.
    - Site grading and sewer, water, and storm sewer utility connections and site piping.
    - Architectural requirements such as interior space layout meeting ADA requirements; building material schedules; window and door schedules; and room finish schedules.
    - Process piping, valves, pumps, and filter equipment within the facility. Other process piping items include pumping equipment locations, chemical feed requirements, storage, and integration with filtration equipment.
    - Filtration and backwashing equipment will be laid out with one preferred equipment manufacturer and will address size, efficiencies, redundancy and backwash tank placement. Backwash tank equalization tank discharge to the sanitary sewer will be evaluated.
    - Coordinate operations for the water facility operations with Menomonie's preferred SCADA provider and their existing communication system
    - Permitting of the final design will include all WisDNR requirements and PSC requirements. Our team will provide the necessary engineering reports to these agencies and coordinate final permit approval.
    - Structural review of geotechnical design report (by others) and design of new water treatment plant foundations and walls, underground concrete backwash tank

- design, and underground detention tank or clearwell design.
- Plumbing design and HVAC design for the building, including dehumidification systems, heat, and ventilation.
- Electrical design for building power, lighting, control systems, on site generator, site lighting, and power and controls for new equipment, including SCADA coordination with City's preferred vendor. New MCC to include VFDs and programmable logic controller (PLC) systems; communication system wiring, and security if required, emergency backup generator requirements. SCADA systems would be specified based on the functional description for the process design and design and integration (programming) provided by the City's preferred vendor through the construction project.
- o Prepare 60% and 90% complete set of plans, specifications and opinion of probable costs, and construction schedule. Meet with the project team to review. Obtain the City's approval to proceed with bidding.
- o Complete Certified Survey Map.
- o Coordinate with private utility companies for gas, electric and telecommunications services for the new facility
- o Estimating projects in this inflationary time period in the construction industry requires thought and careful planning. SEH can have a subconsultant, Staab Construction Corporation, providing up to date independent cost estimates at the 60% and 90% plan completion levels. We will integrate this effort as a quality control measure for budgeting for your project. This is an extra service that the City can choose to incorporate into our services.

- o Provide the City with complete sets of all final plans, specifications, bid documents, significant reports, and correspondence.
- o Submit plans and specifications to regulatory including WisDNR , NOI, and DSPS agencies for review and approval.

### **BIDDING SERVICES**

- o Prepare and coordinate advertisement for bids and the bid process via SEH's Quest on-line bidding platform.
- o Prepare bidding forms, conditions of the contract and the form of agreement between the Contractor and Menomonie in typical EJCDC format.
- o Participate in a pre-bid meeting with prospective contractors explaining the project concepts and goals and answering questions.
- o Respond to bidder's questions and prepare addenda as necessary.
- o Review bids and make bid award recommendation, attend City Council meeting and communicate with staff.

### **CONSTRUCTION ADMINISTRATION**

- o Following award of contract by Menomonie, secure the completed contract documents, (contract, bonds, insurance certificates, etc.) from the contractor for the City.
- o Conduct a pre-construction meeting with contractor, City's representatives, and other parties directly affected by the construction.
- o Provide necessary horizontal alignment and vertical control staking for the construction activity.
- o Review shop drawings that the contractor is required to submit. Answer RFIs, issue change bulletins and field orders.
- o RPR will be on site for 40 hours per week during active construction periods and critical inspection and testing times.

- o Periodically advise Menomonie of the progress of construction. Consult with the City on all issues regarding construction and completion of the project.
- o Assist the City in reviewing all contractor pay requests and change orders. Coordinate with the funding programs, review and approval of pay applications, and change orders as required.
- o Conduct final inspection of the project with Menomonie staff and prepare final punch-list. Review final pay requests and submit project completion letter/documentation. Coordinate final completion requirements with the funding programs for CDBG and SDWLP.
- o Assemble record drawings in PDF format from records provided by the contractor and SEH RPR staff. Review submittals for O&M manuals and other "record" documentation provided by the contractor.
- o Assist Menomonie with an open house and dedication at the completion of the project.

### **POST CONSTRUCTION SERVICES**

SEH's in-house water operations specialists, who have worked on dozens of Wisconsin water treatment plants and wells, will be scheduled for six months at five hours per week to assist City staff, as needed, to make sure Well 9 and Water Treatment Plant 9 are operating as designed and permitted or to assist in making adjustments. This amount of scheduled time includes travel time to the project as needed.

## **PROJECT SCHEDULE**

The schedule on the following page outlines the dates, tasks, and deliverables required for a successful project in five phases. Grant/loan funding timelines have been included to help the City envision how the various project milestones will be interwoven with funding activities.

TASK DESCRIPTION	TIMING/DURATION	NOTES
Kickoff Meetings (Engineering and Funding)	Aug 2024	
<b>PHASE I – FINAL SITE SELECTION AND TEST WELLS</b>		
Topographic Survey and Test Well Design	Aug 2024	
Cost Estimating – Entire Project Estimate	Aug 2024	
Permitting – PSC CA Application Submittal, Entire Project Scope	N.L.T. Sep 2024	Approval required prior to Well 9 construction, plan 8-10 months for process
WisDNR Permitting	Sep – Oct 2024	90 day review time by statute
Funding – SDWLP ITA/PERF Submittal, Entire Project Scope	Oct 2024	
Bid and Award Process	Oct – Nov 2024	
Test Well Construction and Testing	Nov – Dec 2024	
Final Report and Well Site Selection	Jan 2025	
Begin Funding Applications for CDBG and SDWLP	Oct 2024 – Jun 2025	Environmental report to be completed prior to application
<b>PHASE 2 – PRELIMINARY DESIGN, WELL 9</b>		
Complete WSIR and Submit to WisDNR	Jan – Mar 2025	
Surveying, Wetlands, Arch and History, Environmental for Site	Mar – Jun 2025	Wetland delineation can only be officially performed during the growing season per WisDNR requirements
<b>PHASE 3 – FINAL DESIGN, WELL 9</b>		
Well 9 Design and Permitting Process	Mar – Jun 2025	Includes review time for WisDNR plan review
Funding Alternative – CDBG Application Due, Well 9 Only	May 2025	Must include biddable plans and specifications for the funded project
Funding – SDWLP Application Due	Jun 2025	WSIR and plans and specifications for the Well 9 construction must also be submitted
Permitting – PSC CA, Receive Final Decision	Jun 2025	Approval required prior to construction starting on Well 9
Bid and Award Process	Jun – Jul 2025	
Construction of Well 9	Jul –Aug 2025	
Final Water Quality Testing and Report	Aug – Sep 2025	
Prepare Well Head Protection Plan for Well 9	Sep – Nov 2025	Approval required for the WHPP prior to starting up the new well to the system in Phase 5
<b>PHASE 4 – PILOT STUDY</b>		
Pre-Pilot Report	Aug – Sep 2025	Start report preparation ahead of receiving final water quality reports from Well 9 construction
Permitting – WisDNR Pre-Pilot Report	Sep – Nov 2025	90 day review time by statute, typical is 60 days
Perform Pilot Study – (assume 10-day run time) at Well 9	Nov 2025	
Final Pilot Report	Dec 2025	
Permitting – WisDNR, Final Pilot Study Review and Approval	Dec 2025 – Feb 2026	90 day review time by statute
<b>PHASE 5 – TREATMENT PLANT</b>		
Preliminary Design and Concept Approval	Dec 2025 – Feb 2026	
Final Design (60%, 90%, and Final Design Reviews)	Feb – Jun 2026	
Optional Funding – CDBG application for WTP instead of Well 9	May 2026	City could choose to apply for CDBG for the WTP instead of the Well 9
Permitting – WisDNR, DSPS, Planning, and Zoning	Jun – Aug 2026	
Bidding/Award/Contracting	Jul – Aug 2026	
Construction (assume 15 months)	Sep 2026 – Dec 2027	15 months is a tight timeline given the scope of work and material lead times
Start-Up and Demonstration, Plant In-Service	Dec 2027	
Funding – SDWLP and CDBG Administration (Well and WTP Projects)	2025 – 2027	
SEH Post-Construction Services Support (6 months)	Jan – Jun 2028	



# Proposed Fee

The fee presented below, which has been broken down by phase as requested, is derived from our thorough reconnaissance of the City of Menomonie's existing water supply conditions and future needs. This fee has been carefully developed to **deliver the best value and highest quality results to the City and your constituents.**

RFP TASK	SEH APPROACH PHASE(S)	COST
Final Site Selection	1	\$44,000
Preliminary Design	2 and 5	\$115,000
Final Design	3, 4, and 5	\$450,000
Bidding *	3 and 5	\$31,000
Construction **	3 and 5	\$560,000
Post Construction	5	\$18,000
Funding ***	All	\$82,000
<b>TOTAL LUMP SUM</b>		<b>\$1,300,000</b>

\* Bidding three contracts: 1) test wells, 2) Well No. 9, and 3) the Water Treatment Plant

\*\* Includes construction services listed in the RFP, including RPR for the estimated 15-month construction period for the Water Treatment Plant Contract and RPR for Well No. 9 construction

\*\*\* Includes all services listed in the RFP. If the applications for SDWLP or CDBG are not successful, the administration costs for those programs would be removed from this price



**City of Menomonie**  
David Schofield

Director of Public Works  
800 Wilson Avenue  
Menomonie, WI 54751  
715 232-2221 Ext.1020  
dschofield@menomonie-wi.gov

**TO:** Mayor Knaack & City Council  
**FROM:** David Schofield, Director of Public Works  
**SUBJECT:** Rejection of Bongey Drive Resurfacing Bids  
**DATE:** July 15, 2024 City Council Meeting

Bongey Drive is in poor condition between 24<sup>th</sup> Avenue West and 28<sup>th</sup> Avenue West. Cedar Corporation solicited bids on the City's behalf for replacement of the existing surface with 4-inches of new asphalt. Two bids were received on Wednesday July 10, 2024, ranging from \$184,352.85 to \$221,483.45. Both bids exceed the available budget for this project. City Staff therefore recommends rejection of all bids.

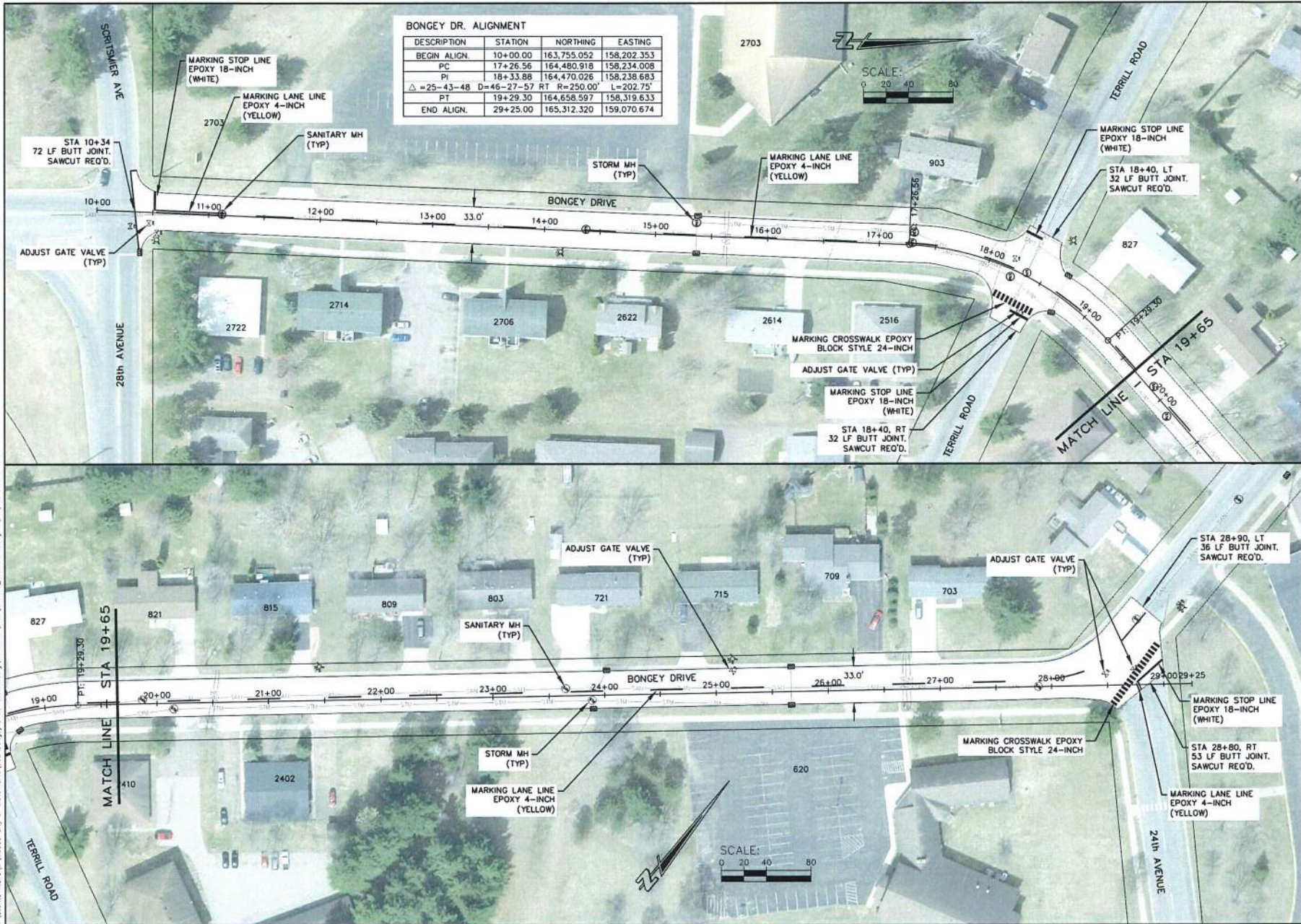
If the City Council concurs, the appropriate motion would be ***Reject all bids for the Bongey Drive Resurfacing Project*** (simple majority).

If the bids are rejected, City Staff and Cedar Corporation will work to reduce the cost of the project, likely by revising the project to a 1.5-inch mill and overlay, and bring new bids to a future meeting for the City Council's consideration.

**Attachments:**

- Plan Excerpt
- Bid Tabulation

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**BONGEY DR. ALIGNMENT**

DESCRIPTION	STATION	NORTHING	EASTING
BEGIN ALIGN.	10+00.00	163,755.052	158,202.353
PC	17+26.56	164,480.918	158,234.008
PI	18+33.88	164,470.026	158,238.683
$\Delta = 25-43-48$ D=46-27-57 RT R=250.00' L=202.75'			
PT	19+29.30	164,658.597	158,319.633
END ALIGN.	29+25.00	165,312.320	159,070.674

JOB NO.  
M00055-0993

DRAWN BY  
KAT

CHECKED BY  
KRO

DATE  
JUNE 2024

REVISIONS

REFERENCE FILE  
dwg

DRAWING FILE  
00base\_00550993

www.cedarcorp.com  
800-472-7372

**Cedar**  
corporation

2025 Nelson Commons W  
1000 Main Street  
Green Bay, WI 54301  
Phone: 920-861-1111  
Fax: 920-861-1111

1000 Main Street  
Green Bay, WI 54301  
Phone: 920-861-1111  
Fax: 920-861-1111

CITY OF MENOMONIE  
2024 STREET RESURFACING  
DUNN COUNTY, WISCONSIN  
PLAN SHEET - BONGEY DR.

SHEET NO.  
5 OF 5



**BID TABULATION**

Bongey Drive Resurfacing  
City of Menomonie

July 10, 2024

Line		Monarch Paving Co. Amery, WI				Stout Construction, LLC Chetek, WI	
Item	Item Description	Unit	Qty	Unit Price	Extension	Unit Price	Extension
1	Pulverize and Relay	S.Y.	7435	\$3.40	\$25,279.00	\$2.10	\$15,613.50
2	Sawcut	L.F.	235	\$4.02	\$944.70	\$5.00	\$1,175.00
3	HMA, Binder, 1.75"	S.Y.	7435	\$8.70	\$64,684.50	\$10.14	\$75,390.90
4	HMA, Surface, 1.25"	S.Y.	7435	\$6.98	\$51,896.30	\$8.33	\$61,933.55
5	Pavement Markings Line, 4" Epoxy, Yellow	L.F.	175	\$2.51	\$439.25	\$2.65	\$463.75
6	Pavement Markings Line, 18" Epoxy, White	L.F.	55	\$21.11	\$1,161.05	\$22.05	\$1,212.75
7	Pavement Markings Crosswalk, 24" Epoxy, White	L.F.	165	\$32.17	\$5,308.05	\$33.60	\$5,544.00
8	Concrete Manhole Collar	EA.	13	\$1,700.00	\$22,100.00	\$2,600.00	\$33,800.00
9	Concrete Gate Valve Collar	EA.	5	\$825.00	\$4,125.00	\$2,200.00	\$11,000.00
10	Traffic Control	L.S.	1	\$8,415.00	\$8,415.00	\$15,350.00	\$15,350.00
PROJECT TOTAL					\$184,352.85		\$221,483.45



**City of Menomonie**  
David Schofield

Director of Public Works  
800 Wilson Avenue  
Menomonie, WI 54751  
715 232-2221 Ext.1020  
dschofield@menomonie-wi.gov

**TO:** Mayor Knaack & City Council  
**FROM:** David Schofield, Director of Public Works  
**SUBJECT:** Possible Traffic Pattern Changes on Main Street East between 3<sup>rd</sup> Street East and 4<sup>th</sup> Street East  
**DATE:** July 15, 2024 City Council Meeting

City Staff have been in discussions with WisDOT regarding a possible “jurisdictional transfer” to relocate STH 29 off of Main Street and onto 6<sup>th</sup> Avenue East. This transfer would allow the City more flexibility on how to utilize Main Street between Broadway Street and 4<sup>th</sup> Street East as it would no longer be a state highway. Between 3<sup>rd</sup> Street East and 4<sup>th</sup> Street East, City Staff have identified two possible traffic pattern changes:

- Case 1 – Main Street would be converted to an eastbound one-way road between 3<sup>rd</sup> Street East and 4<sup>th</sup> Street East. Westbound traffic would utilize Crescent Avenue and 6<sup>th</sup> Avenue East. Parking stalls count on Main Street would remain the same, with parallel parking on both sides of the eastbound one-way road.
- Case 2 – Main Street would be converted to a pedestrian mall between 3<sup>rd</sup> Street East and 4<sup>th</sup> Street East. All traffic would utilize Crescent Avenue and 6<sup>th</sup> Avenue East. The parking stall count on Main Street would be reduced by 18.

The City commissioned a traffic study to determine the possible impacts of the cases listed above. Figures from the traffic study, which are attached, indicate the following:

- Case 1 and Case 2 would require removal some parking on the east side of Broadway Street near 6<sup>th</sup> Avenue and the north side of 6<sup>th</sup> Avenue East near Broadway Street to accommodate turn lanes.
- Case 1 and Case 2 would both increase traffic (and accidents) on 6<sup>th</sup> Avenue East.
- Case 2 would require a traffic signal at the intersection of 6<sup>th</sup> Avenue East and Crescent Street.
- Case 2 would allow for the removal of the traffic signal at the intersection of Main Street, Crescent Street and 4<sup>th</sup> Street East.

This item is presented for discussion only. No action need be taken. City Staff will be seeking input from Downtown Menomonie at their Board Meeting later this month. This topic will be brought back for consideration at a future meeting.

**Attachments:**

- Concept Sketches
- Figures from Traffic Study

# MAIN STREET CONCEPTS

11/17/23 DAS







CASE 0: EXISTING CONDITIONS (NO BUILD)

# MAIN STREET CONCEPTS

11/17/23 DAS

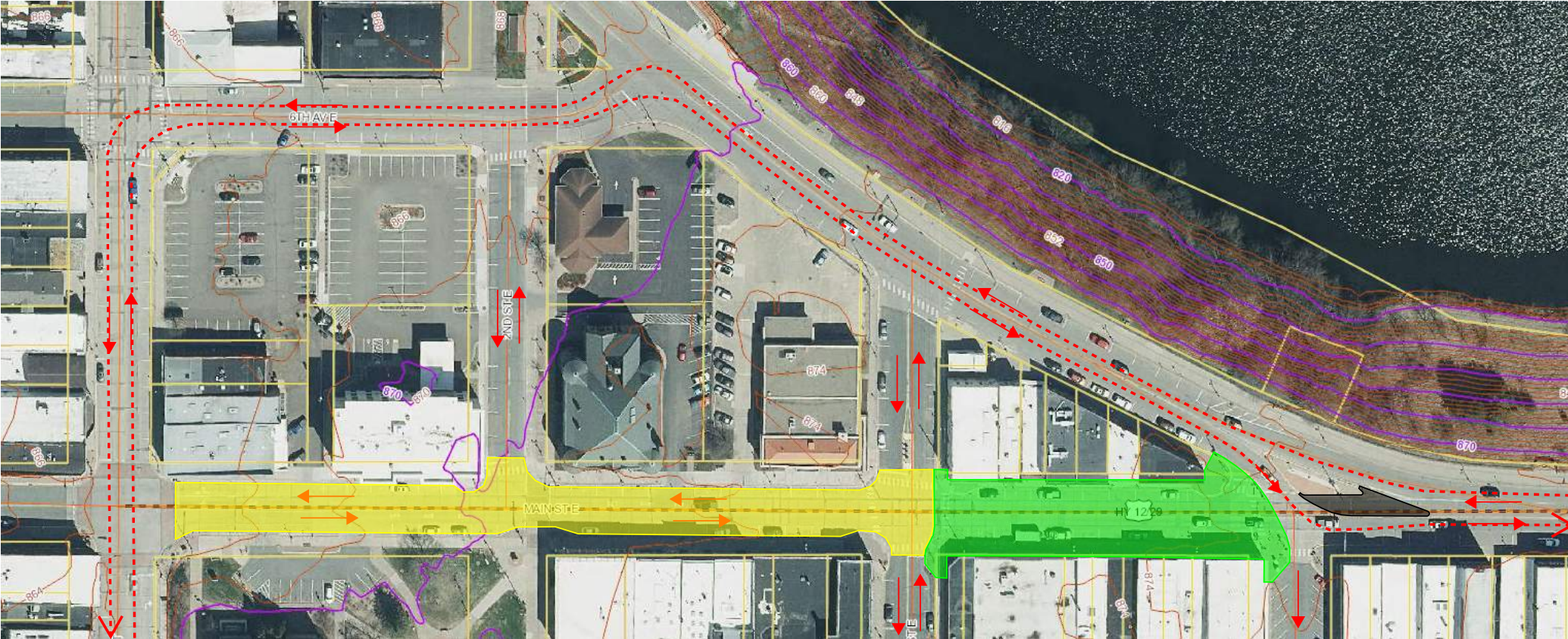


## CASE 1: ONE BLOCK ONE-WAY




-  Truck Route
-  No Trucks (by Enforcement)
-  One-Way (Eastbound)
-  New Pedestrian Plaza

# MAIN STREET CONCEPTS

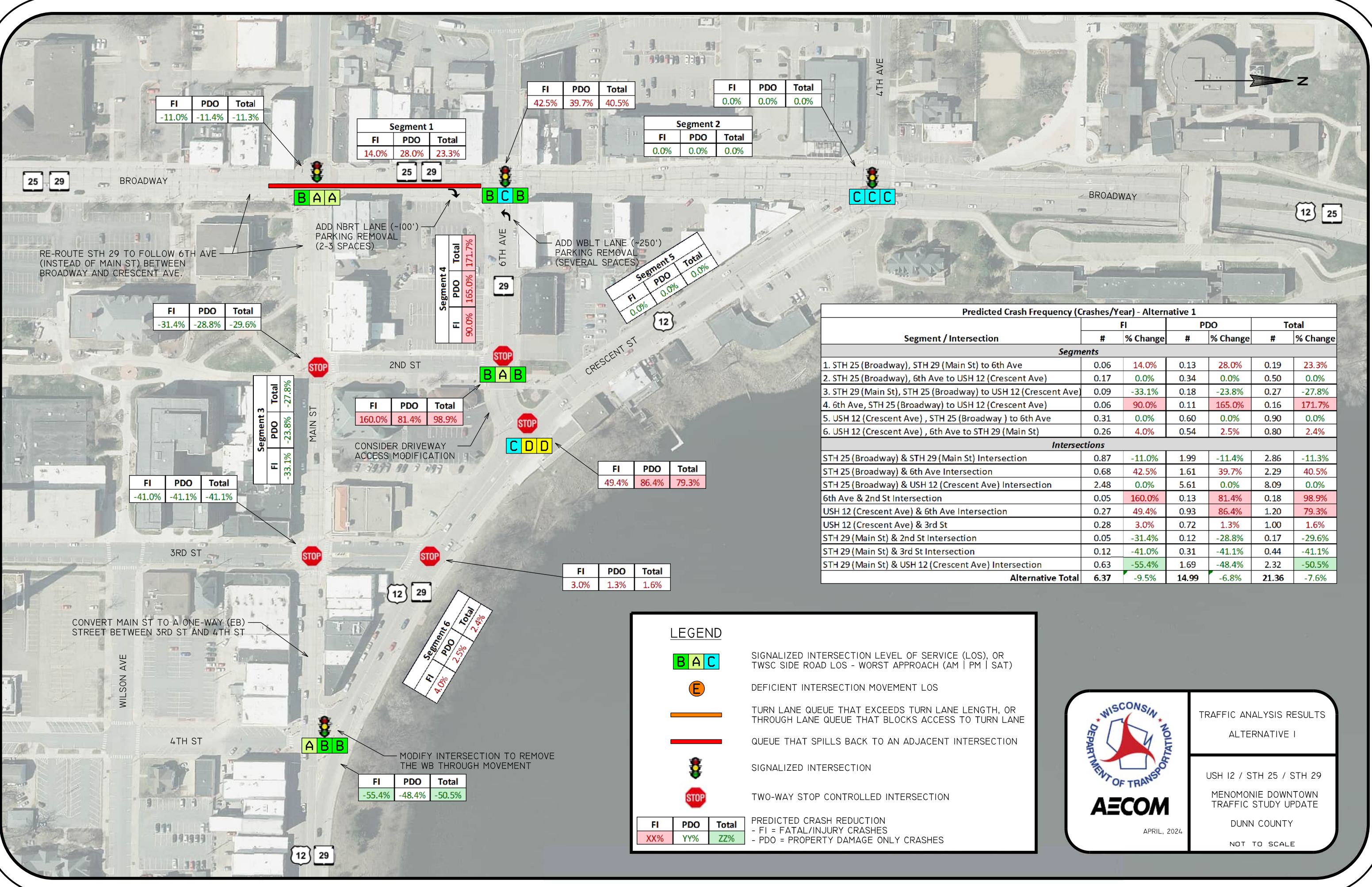
11/17/23 DAS



## CASE 2: ONE BLOCK PEDESTRIAN MALL

-  Truck Route
-  No Trucks (by Enforcement)
-  New Pedestrian Plaza





FI	PDO	Total
-11.0%	-11.4%	-11.3%

Segment 1		
FI	PDO	Total
14.0%	28.0%	23.3%

FI	PDO	Total
42.5%	39.7%	40.5%

FI	PDO	Total
0.0%	0.0%	0.0%

Segment 2		
FI	PDO	Total
0.0%	0.0%	0.0%

FI	PDO	Total
-31.4%	-28.8%	-29.6%

Segment 4		
FI	PDO	Total
90.0%	165.0%	171.7%

Segment 5		
FI	PDO	Total
0.0%	0.0%	0.0%

Segment 3		
FI	PDO	Total
-33.1%	-23.8%	-27.8%

FI	PDO	Total
160.0%	81.4%	98.9%

FI	PDO	Total
49.4%	86.4%	79.3%

FI	PDO	Total
-41.0%	-41.1%	-41.1%

FI	PDO	Total
3.0%	1.3%	1.6%

Segment 6		
FI	PDO	Total
4.0%	2.5%	2.4%

FI	PDO	Total
-55.4%	-48.4%	-50.5%

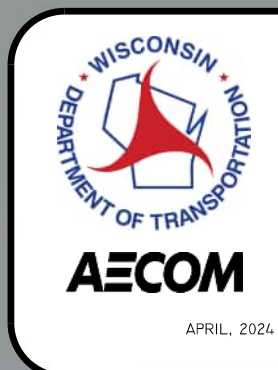
Predicted Crash Frequency (Crashes/Year) - Alternative 1						
Segment / Intersection	FI		PDO		Total	
	#	% Change	#	% Change	#	% Change
Segments						
1. STH 25 (Broadway), STH 29 (Main St) to 6th Ave	0.06	14.0%	0.13	28.0%	0.19	23.3%
2. STH 25 (Broadway), 6th Ave to USH 12 (Crescent Ave)	0.17	0.0%	0.34	0.0%	0.50	0.0%
3. STH 29 (Main St), STH 25 (Broadway) to USH 12 (Crescent Ave)	0.09	-33.1%	0.18	-23.8%	0.27	-27.8%
4. 6th Ave, STH 25 (Broadway) to USH 12 (Crescent Ave)	0.06	90.0%	0.11	165.0%	0.16	171.7%
5. USH 12 (Crescent Ave), STH 25 (Broadway) to 6th Ave	0.31	0.0%	0.60	0.0%	0.90	0.0%
6. USH 12 (Crescent Ave), 6th Ave to STH 29 (Main St)	0.26	4.0%	0.54	2.5%	0.80	2.4%
Intersections						
STH 25 (Broadway) & STH 29 (Main St) Intersection	0.87	-11.0%	1.99	-11.4%	2.86	-11.3%
STH 25 (Broadway) & 6th Ave Intersection	0.68	42.5%	1.61	39.7%	2.29	40.5%
STH 25 (Broadway) & USH 12 (Crescent Ave) Intersection	2.48	0.0%	5.61	0.0%	8.09	0.0%
6th Ave & 2nd St Intersection	0.05	160.0%	0.13	81.4%	0.18	98.9%
USH 12 (Crescent Ave) & 6th Ave Intersection	0.27	49.4%	0.93	86.4%	1.20	79.3%
USH 12 (Crescent Ave) & 3rd St	0.28	3.0%	0.72	1.3%	1.00	1.6%
STH 29 (Main St) & 2nd St Intersection	0.05	-31.4%	0.12	-28.8%	0.17	-29.6%
STH 29 (Main St) & 3rd St Intersection	0.12	-41.0%	0.31	-41.1%	0.44	-41.1%
STH 29 (Main St) & USH 12 (Crescent Ave) Intersection	0.63	-55.4%	1.69	-48.4%	2.32	-50.5%
<b>Alternative Total</b>	<b>6.37</b>	<b>-9.5%</b>	<b>14.99</b>	<b>-6.8%</b>	<b>21.36</b>	<b>-7.6%</b>

**LEGEND**

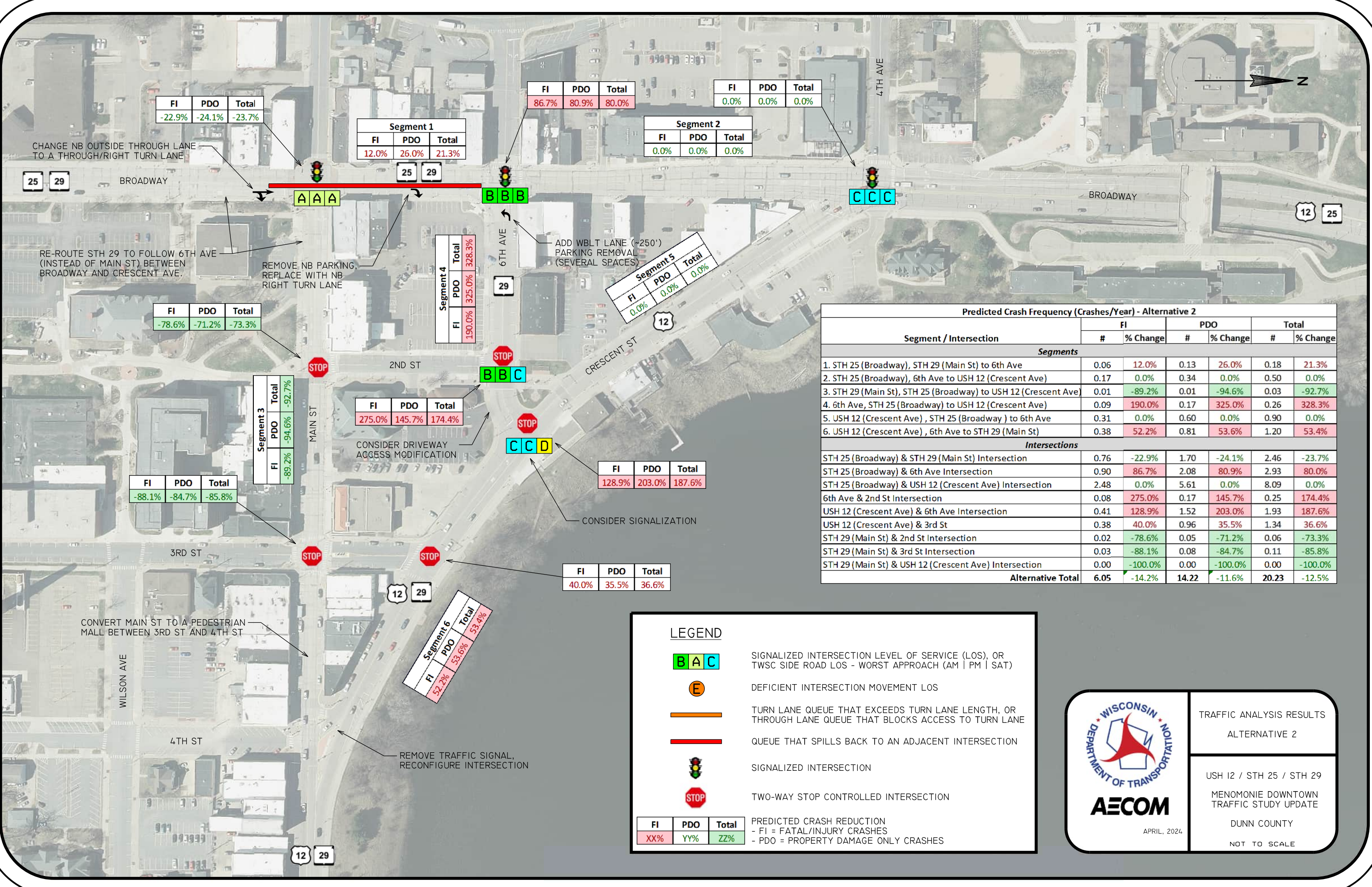
- BAC SIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS), OR TWSC SIDE ROAD LOS - WORST APPROACH (AM | PM | SAT)
- E DEFICIENT INTERSECTION MOVEMENT LOS
- TURN LANE QUEUE THAT EXCEEDS TURN LANE LENGTH, OR THROUGH LANE QUEUE THAT BLOCKS ACCESS TO TURN LANE
- QUEUE THAT SPILLS BACK TO AN ADJACENT INTERSECTION
- SIGNALIZED INTERSECTION
- TWO-WAY STOP CONTROLLED INTERSECTION

FI	PDO	Total
XX%	YY%	ZZ%

PREDICTED CRASH REDUCTION  
 - FI = FATAL/INJURY CRASHES  
 - PDO = PROPERTY DAMAGE ONLY CRASHES



TRAFFIC ANALYSIS RESULTS  
 ALTERNATIVE I  
 USH 12 / STH 25 / STH 29  
 MENOMONIE DOWNTOWN  
 TRAFFIC STUDY UPDATE  
 DUNN COUNTY  
 NOT TO SCALE



FI	PDO	Total
-22.9%	-24.1%	-23.7%

Segment 1		
FI	PDO	Total
12.0%	26.0%	21.3%

FI	PDO	Total
86.7%	80.9%	80.0%

FI	PDO	Total
0.0%	0.0%	0.0%

Segment 2		
FI	PDO	Total
0.0%	0.0%	0.0%

FI	PDO	Total
-78.6%	-71.2%	-73.3%

Segment 4		
FI	PDO	Total
190.0%	325.0%	328.3%

Segment 5		
FI	PDO	Total
0.0%	0.0%	0.0%

Segment 3		
FI	PDO	Total
-89.2%	-94.6%	-92.7%

FI	PDO	Total
275.0%	145.7%	174.4%

FI	PDO	Total
128.9%	203.0%	187.6%

FI	PDO	Total
-88.1%	-84.7%	-85.8%

FI	PDO	Total
40.0%	35.5%	36.6%

Segment 6		
FI	PDO	Total
52.2%	53.6%	53.6%

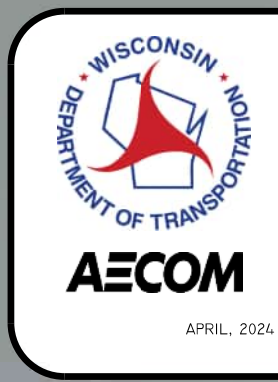
Predicted Crash Frequency (Crashes/Year) - Alternative 2						
Segment / Intersection	FI		PDO		Total	
	#	% Change	#	% Change	#	% Change
Segments						
1. STH 25 (Broadway), STH 29 (Main St) to 6th Ave	0.06	12.0%	0.13	26.0%	0.18	21.3%
2. STH 25 (Broadway), 6th Ave to USH 12 (Crescent Ave)	0.17	0.0%	0.34	0.0%	0.50	0.0%
3. STH 29 (Main St), STH 25 (Broadway) to USH 12 (Crescent Ave)	0.01	-89.2%	0.01	-94.6%	0.03	-92.7%
4. 6th Ave, STH 25 (Broadway) to USH 12 (Crescent Ave)	0.09	190.0%	0.17	325.0%	0.26	328.3%
5. USH 12 (Crescent Ave), STH 25 (Broadway) to 6th Ave	0.31	0.0%	0.60	0.0%	0.90	0.0%
6. USH 12 (Crescent Ave), 6th Ave to STH 29 (Main St)	0.38	52.2%	0.81	53.6%	1.20	53.4%
Intersections						
STH 25 (Broadway) & STH 29 (Main St) Intersection	0.76	-22.9%	1.70	-24.1%	2.46	-23.7%
STH 25 (Broadway) & 6th Ave Intersection	0.90	86.7%	2.08	80.9%	2.93	80.0%
STH 25 (Broadway) & USH 12 (Crescent Ave) Intersection	2.48	0.0%	5.61	0.0%	8.09	0.0%
6th Ave & 2nd St Intersection	0.08	275.0%	0.17	145.7%	0.25	174.4%
USH 12 (Crescent Ave) & 6th Ave Intersection	0.41	128.9%	1.52	203.0%	1.93	187.6%
USH 12 (Crescent Ave) & 3rd St	0.38	40.0%	0.96	35.5%	1.34	36.6%
STH 29 (Main St) & 2nd St Intersection	0.02	-78.6%	0.05	-71.2%	0.06	-73.3%
STH 29 (Main St) & 3rd St Intersection	0.03	-88.1%	0.08	-84.7%	0.11	-85.8%
STH 29 (Main St) & USH 12 (Crescent Ave) Intersection	0.00	-100.0%	0.00	-100.0%	0.00	-100.0%
<b>Alternative Total</b>	<b>6.05</b>	<b>-14.2%</b>	<b>14.22</b>	<b>-11.6%</b>	<b>20.23</b>	<b>-12.5%</b>

**LEGEND**

- B A C SIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS), OR TWSC SIDE ROAD LOS - WORST APPROACH (AM | PM | SAT)
- E DEFICIENT INTERSECTION MOVEMENT LOS
- TURN LANE QUEUE THAT EXCEEDS TURN LANE LENGTH, OR THROUGH LANE QUEUE THAT BLOCKS ACCESS TO TURN LANE
- QUEUE THAT SPILLS BACK TO AN ADJACENT INTERSECTION
- SIGNALIZED INTERSECTION
- TWO-WAY STOP CONTROLLED INTERSECTION

FI	PDO	Total
XX%	YY%	ZZ%

PREDICTED CRASH REDUCTION  
 - FI = FATAL/INJURY CRASHES  
 - PDO = PROPERTY DAMAGE ONLY CRASHES



TRAFFIC ANALYSIS RESULTS  
 ALTERNATIVE 2

USH 12 / STH 25 / STH 29  
 MENOMONIE DOWNTOWN  
 TRAFFIC STUDY UPDATE

DUNN COUNTY  
 NOT TO SCALE

APRIL, 2024

# BUDGET TRANSFER REQUEST FORM

**TRANSFER TO:** AMOUNT \$ 2,500

ACCOUNT TITLE AND NUMBER Menomonie Police Department 01.52110

LINE ITEM NAME AND EXTENSION Office Supplies .410

**TRANSFER FROM:**

ACCOUNT TITLE AND NUMBER Menomonie Police Department 01.52110

LINE ITEM NAME AND EXTENSION Radio Maintenance Contracts .242

REASON: (This does not mean "budget overdrawn:" It means why the proposed budget overdraft is necessary!)

The Police Department is requesting a budget transfer to order a second computer station as recently purchased in 2024 for the Records Bureau. Due to the high volume of police videos being processed, two staff members have collateral assignments which are dedicated to the Records Bureau for completing video retention, responding to court proceeding requests, open records requests, and redacting measures. Currently, we have one computer station that has the capabilities to meet video processing tasks. With video processing & retention continuing to grow and with the police department recently changing responsibilities for a second staff member assisting with these duties, a second computer station is needed for processing video in an efficient & timely manner.

Eric M. Atkin  
Authorized Signature

July 10, 2024  
Date



# Menomonie Police Department

615 Stokke Parkway Suite G200  
Menomonie, WI 54751  
715-232-2198  
[www.menomonie-pd.com](http://www.menomonie-pd.com)

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## Memorandum

**To:** Mayor Randy Knaack & City Council  
**From:** Rick Hollister, Chief of Police  
**Date:** 07/10/2024  
**Subject:** Budget Transfer Request  
**CC:** Eric Atkinson, City Administrator

---

The Police Department is requesting a budget transfer for ordering a second computer station as recently purchased in 2024 for the Records Bureau. Due to the high volume of police videos being processed, two staff members have collateral assignments which are dedicated to the Records Bureau for completing video retention, responding to court proceeding requests, open records requests, and redacting measures. Currently, we have one computer station that has the capabilities to meet video processing tasks. With video processing & retention continuing to grow and with the police department recently changing responsibilities for a second staff member assisting with these duties, a second computer station is needed for processing video in an efficient & timely manner. The new computer cost is \$2500.00. We are asking for a budget transfer request of \$2500.00 from Radio Maintenance Contracts 01.52110.242 be transferred into Office Supplies 01.52110.410.

Thank you for your consideration!

---

Rick Hollister  
Chief of Police

Chris King  
Commander

Brian Hagen  
Commander

15-Jul-24

2024 Claims

Carrico  
Cedar Corp  
  
Haas  
Manpower  
Xcel

Description

Pool and Beach Chemicals  
Bongey Heller, Water Well #8, Point Comfort Boat Ramp -  
Engineering Services  
Street Oiling Trap Rock  
Treasurer Wages  
Police Range - Electricity

Total Invoice

\$4,973.09  
\$45,298.94  
  
\$7,637.25  
\$798.00  
\$21.93

Amt Overdrawn

\$1,180.68  
\$3,143.75  
  
\$14.91  
\$798.00  
\$21.93

**Total**                    **\$58,729.21**                    **\$5,159.27**

2024 Parking Utility Claims

City Treasurer  
IPS  
US Postal Service

Description

June 2024 Sales Tax  
June Fees  
Postage

Total Invoice

\$546.88  
\$1,614.16  
\$1.28

**Parking**  
**Total**                    **\$2,162.32**

7/11/24

**LICENSES – July 15, 2024**

**TEMPORARY CLASS “B” BEER & “CLASS B” WINE LICENSE:**

Dunn County Fair - 3001 US Hwy. 12 E., Suite 2

Dunn County Fair, 620 17<sup>th</sup> St SE

07/24/2024 – 07/31/2024

**LICENSE YEAR – 2024-2025 (expires June 30<sup>th</sup>, 2025)**

**CHANGE OF AGENT:**

Ashley Asher – Eaglewood Golf, LLC, Tanglewood Greens

**“CLASS B” LIQUOR & CLASS “B” BEER:**

Menomonie Lodge #1584 Loyal Order of Moose, Inc, Menomonie Moose Lodge #1584, 720 19th Ave E

**MOBILE FOOD ESTABLISHMENT:**

Rex-Mex, LLC, 1710 Riverview Dr., Barron, WI 54812

Eat O’Clock, 4418 Echo Valley Dr., Eau Claire, WI 54701

**CABARET LICENSE:**

Dunn County Fish & Game Association, Dunn County Fish & Game Club, 1600 Pine Ave

**TAXI CAB/ VEHICLE FOR HIRE:**

Pulse Party Bus, LLC, Austin Witt, 2819 Knapp St.