

## NOTICE

### Municipal Services Committee

Regular Meeting

Tuesday, December 28<sup>th</sup>, 2021 at 5:00 pm

Meeting will be held in person at the City Hall, 31 S Madison St Evansville, WI. Public may also attend virtually at [meet.google.com/wje-xuct-mbr](https://meet.google.com/wje-xuct-mbr), or by teleconference at +1 (315)-801-9407 then enter conference pin: 863 831 330#

## AGENDA

1. Call meeting to order
2. Roll call.
3. Civility Reminder
4. Motion to approve the agenda as presented.
- Pg 3-7 5. Motion to waive the reading and approve the minutes as printed from the November 30<sup>th</sup>, 2021 regular Municipal Services Committee meeting.
6. Citizen appearances other than agenda items.
  -
7. Review of sanitary sewer billing adjustments. (Jan, Apr, Jul, Oct)
8. Director's Report
  - a. Parks and Recreation Report
  - b. AMI Project (Placeholder)
    - (1) Current AMI count remaining- Elec: **0** Water: 231
  - c. Lake Leota Dam Repair Update (Placeholder)
  - d. Municipal Services building expansion progress report. (Placeholder)
  - Pg 8-10 e. CMAR Grading Results
  - f. Equipment Changes
9. City Engineer Report
  - a. Sub-division / Development Update
  - b. Inflow and Infiltration Study (Placeholder)
  - Pg 11-29 c. Water Quality
    - Test Results & Recommendation
  - d. Roadway construction & other project updates.
    - First & Second St Projects
    - Sidewalks
10. Administrative Staff's Report
  - a. West Side Park Progress (Placeholder)

Pg 30-37    b. Motion to recommend the land division of a residential lot, parcel 6-27-965, into two residential lots.

11. WPPI

- a. Amy Wanek – ESR Report
- b. APPA Rally – Washington DC Feb 28<sup>th</sup> – March 2<sup>nd</sup>
- c. Upcoming Events / Meetings
  - APPA Joint Action Conference Jan 9<sup>th</sup> – 11<sup>th</sup>
  - MEUW Expo & Conference Jan 12<sup>th</sup> – 14<sup>th</sup>
  - Distribution Services & Joint Purchasing Meeting Jan 12<sup>th</sup>
  - Finance & Audit Committee Jan 26<sup>th</sup>
  - EC Committee Jan 27<sup>th</sup>

12. Old Business

13. New Business

14. Upcoming Meeting Date, January 25<sup>th</sup>, 2021 at 5:00 pm

15. Adjourn

James Brooks, Committee Chair

*Please turn off all cell phones and electronic devices before meeting commences. If you have any special accessibility issues, please contact Evansville City Hall at 608-882-2266 prior to the scheduled meeting. Thank you.*

## NOTICE

**Municipal Services Committee**  
Regular Meeting  
Tuesday, November 30<sup>th</sup>, 2021 at 5:00 pm

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## MINUTES

1. **Call meeting to order: 5:00 PM**
2. **Roll call.** Committee Chair Jim Brooks, Gene Lewis and Ben Ladick. Also present were: Donna Hammett, Amy Wanek, Chad Renly, Dale Roberts, Kerry Lindroth, Nick Bubolz, Jason Sergeant, Bill Lathrop, William Wasing, Lisa Legler, Brian Raimer, Lisa Trevatowski
3. **Civility Reminder**
4. **Motion to approve the agenda as presented.** Lewis/Brooks, Motion carries 3-0
5. **Motion to waive the reading and approve the minutes as printed from the October 26<sup>th</sup>, 2021 regular Municipal Services Committee meeting.** Motion carries 3-0
6. **Citizen appearances other than agenda items.**
  - Mrs. Legler wanted to express her concerns about the road construction on S First St., She sent an email to Bubolz about the following concerns: sidewalk height, water runoff, and a retention wall issue. Bubolz has been working with the resident about these concerns and will meet again onsite.
7. **Review of sanitary sewer billing adjustments. (Jan, Apr, Jul, Oct)**

Will review in January.
8. **Director's Report**
  - a. **Parks and Recreation Report**

Anderson is getting the park ready for the winter season.
  - b. **AMI Project (Placeholder)**

(1) Current AMI count remaining- Elec: 0 Water: 231  
No Change
  - c. **Lake Leota Dam Repair Update (Placeholder)**

The city has received approval from State Historic Preservation for the concrete wall. Renly will work with Jewell Associates for remaining items needed to go to bid in February.

- d. Local Roads Improvement Program (LRIP) Brown School Rd Update**  
Renly stated that the Brown School Rd project which was submitted for the discretionary or supplemental funding was placed as 2<sup>nd</sup> in priority at the LRIP meeting. He expects to hear back on funding within the next few months.

**Wastewater Class Action – Wipes Settlement (informational)**

Renly reviewed the settlement; the city will not be seeing any monetary value from this settlement. However, they will most likely be required to change their current advertising strategies of products as flushable.

- e. Charter / Spectrum attachment agreement - motion to recommend to Common Council for approval.** There will be a total of 177 poles at \$14.00 per pole per year. Renly stated that he worked with Mark Kopp through several rounds of edits with Charter. Renly has no concerns with the agreement and stated that the changes made to the verbiage did not change the overall intent of the agreement.  
Ladick/Lewis Motion carries 3-0

**f. Increase in material costs & lead times (informational)**

AMI-update: Renly received a notice from Honeywell regarding an increase in material cost at about 15%, this includes meters. For the substation transformer, we are locked in at \$383,000 until December 3<sup>rd</sup>. From March of this year until now there has been a 50% increase in cost. Current lead times for new substation transformers are about 2 years. We ordered electric meters 6 months ago and still don't have them, Water meter update: still waiting on communication modules, manufactures are waiting for parts, possibly by the first of the year, but currently there is no guarantee of that time.

**g. Solar – Utility Scale (informational)**

Renly presented information about Sol America Energy. They currently have a first right to purchase agreement with a land owner on Cemetery Rd. Once they have the agreement in place, the utility is then asked if they would be interested in a purchase agreement of a solar field. Renly and Wanek met and ran comparison numbers. Currently it would not be cost effective for the city. Renly will let Sol America know that the city is not interested in moving forward at this time.

**h. WPPI Electric Utility Benchmark Report (informational)**

Report of the sales revenue per kWh by customer class, from 2011-2020 has remained relatively stable. Renly said that the revenue to operations and maintenance costs in 2020 are now at the same levels as they were in 2011 prior to the last rate case. Operation and maintenance numbers have seen an increase due to required maintenance and inflation; Renly expects this to continue to go up with the cost of materials in 2021 and into 2022. The Operating Margin Percentage, in 2011 was at 1.7% and we were at 1.6% in 2020.

**i. Municipal Services building expansion progress report.**

Project is wrapped up for the season, foundation is poured and graded. The site is ready for next year, when the building materials are available, materials are expected in July of 2022.

**j. Storm sewer rate case review and possible motion.**

Ehlers was present to present a storm sewer rate case. The last storm sewer rate increase was 5 years ago. Ehlers discussed the rate performance and what we do going into the future. Ehlers has recommended an increase in the user rate annually starting in 2022 at 20% and 10% annually starting 2023 through 2027. Motion to recommend to adopting the report, pending a revisit of the capital expense report. Ladick/Lewis motion carries 3-0

**9. City Engineer Report**

**a. Sub-division / Development Update**

Lot 15 Development curb and gutter is complete, in the spring the sidewalk will be completed. The rest of the development will be slowing down and start back up in the spring.

**b. Inflow and Infiltration Study (Placeholder)**

The city has not seen adequate rain fall to do the study, will remain on the agenda until next year.

**c. Water Quality (Placeholder)**

We are still waiting on a few results from lab. Once received we will finalize a memo and present it at a staff meeting and MSC for review.

**d. Roadway construction & other project updates. (Placeholder)**

- **First & Second St Projects**

There are a few minor restoration items that remain, we will go back in the spring to complete. Started the work for the Liberty St project, sidewalk review etc. for the project.

- **Sidewalks**

Seargent related some positive comments about the new sidewalks put in around the South Meadow Apartments/ House Authority and the School.

**10. Administrative Staff's Report**

**a. West Side Park Progress (Placeholder)**

Baker Street has completed their study, and will be presented to council at some point. They believe is feasible to raise 1.5-1.7 million dollars. MSA held a couple open houses with the school. We received a lot of comments, more than half were about number of soccer and baseball fields. Once the survey data is finalized some of the data will be released online to the public. An aquatics meeting was held and MSA will be creating some new concepts to reflect the public comments, there will be a meeting tomorrow

to talk through the fields dispute at West Side Park to discuss what can be done and what can't be done. The public input on field allocation was pretty far apart from where it currently is, and there is no way to make all parties involved happy. MSA will keep working on it.

The mayor informed Sergeant of a sewer back up on Thanksgiving on Liberty and 4<sup>th</sup>. DPW had to jet the system to almost 2<sup>nd</sup> St. this was caused by grease and rags being put down the system, and this also caused 2 resident's homes to have sewer back-up in the basement.

Current policy is if the sewer backup is caused by something that the city did, then we pay for the cleanup, but this was not our doing. Renly stated that they have a good idea of where the issue is coming from, this has happened several times at this location over the last few years. Renly has asked Hammett to put an insert in with utility bills at some point about this issue.

Sergeant meet with the Admin. of Edgerton and Milton about a grant from the Office of Energy Independence, this grant is possible \$100,000 split 3 ways.

#### **WPPI**

##### **b. Amy Wanek – ESR Report**

The office of EIT update has 4.6 million dollars allocated for energy efficiency and demand response and 4.6 million for renewables and storage.

Hammett was able to put together a Choose Renewable insert. Wanek wanted to thank Hammett and Miller for fielding phone calls for that. Wanek also took phone calls as well to answer questions about the program. It is important to encourage this program vs onsite solar, we are not against onsite solar, but this puts the utility at an economic disadvantage, until we can get the net metering for solar so there is not so much of a loss, we need to focus on the Choose Renewable program. We have gotten 9 new solar application since that last meeting. The percentage of customers getting solar is high. Hammett and Wanek thinks we need to provide more information how the solar credits on the utility bills work.

There are a couple of key customers that are interested in applying for the efficiency and renewable grants.

Brooks asked if the Baker Manufacturing billing issue was resolved and it has.

##### **c. Upcoming Meetings**

- DSAG (Distribution Services Advisory Group) Dec 8<sup>th</sup>
- EC (Executive Committee) Dec 15<sup>th</sup>
- Board of Directors Meeting Dec 16<sup>th</sup>
- Finance & Audit Committee Dec 21<sup>st</sup>

**d. WPPI Funds Distribution – Motion to approve the below expenditures:**

Ladick/Lewis Motion carries 3-0

- Christmas Lights \$9,000 from Branding fund
- Christmas Lights \$1,000 from Economic fund
- National Theater \$1,800 from Branding and Outreach funds
- Rebates \$100 from Branding fund
- Remaining balance of \$3,985.26 to be distributed from Branding
  1. Home Depot -Customer Appreciation Event - \$1,285.96
  2. Green Team - \$2,699.30

Brooks has been getting very good reviews of the new Christmas lights on Main St and many thanks for all those who worked on the lights

**11. Old Business**

None

**12. New Business**

None

**13. Upcoming Meeting Date, December 28<sup>th</sup>, 2021 at 5:00 pm**

**14. Adjourn: Ladick/Lewis 3-0**

James Brooks, Committee Chair

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# Compliance Maintenance Annual Report

Evansville Wastewater Treatment Facility

Last Updated: Reporting For:  
6/9/2021 2020

## DNR Response to Resolution or Owner's Statement

Name of Governing  
Body or Owner:

City of Evansville

Date of Resolution or  
Action Taken:

2021-06-08

Resolution Number:

2021-12

Date of Submittal:

6/10/2021

### ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO SPECIFIC CMAR SECTIONS (Optional for grade A or B. Required for grade C, D, or F):

Influent Flow and Loadings: Grade = A

#### Permittee Response:

#### DNR Response:

The influent hydraulic loading for 2020 was excellent averaging 0.445 MGD (31.8% design capacity) with a maximum of 0.538 MGD (38.4% design capacity).

The influent organic loading for 2020 was excellent averaging 530.333 lbs/day (36.6% design capacity) with a maximum of 851 lbs/day (58.7% design capacity).

Effluent Quality: BOD: Grade = A

#### Permittee Response:

#### DNR Response:

The effluent BOD quality for 2020 was excellent averaging 2.75 mg/L (5.50% of the limit) with a maximum of 6 mg/L (12.00% of the limit) for the month of February.

Effluent Quality: Nitrogen: Grade = B

#### Permittee Response:

#### DNR Response:

The effluent total nitrogen quality for 2018 was acceptable averaging 7.949 mg/L (77.23% of the limit) with a maximum of 10.439 mg/L (4.39% over the limit) for the month of September.

Treatment should still be optimized to ensure that the TN limit of 10 mg/L is met year round.

Groundwater: Grade = A

# Compliance Maintenance Annual Report

Evansville Wastewater Treatment Facility

Last Updated: Reporting For:  
6/9/2021 2020

## Permittee Response:

### DNR Response:

Question 1.1 should have been marked as "yes" as there were PAL/ACL exceedances of Chloride, Nitrogen Ammonia, and Nitrite+Nitrate in downgradient wells. The exceedances were as follows:

Nitrogen, ammonia - 3rd quarter at well 821

Nitrite+Nitrate - 3rd quarter at well 820

Chloride - wells 812 (all 4 quarters), 820 (all 4 quarters), 821 (all 4 quarters), 822 (3rd quarter) & 823 (1st & 3rd quarter)

Chloride source reduction measures should continue to be implemented to reduce the influent source of chlorides.

Biosolids Quality and Management: Grade = A

### Permittee Response:

### DNR Response:

Land spreading records and reporting is all acceptable and meeting NR 204 requirements.

Staffing: Grade = A

### Permittee Response:

### DNR Response:

Please continue to do preventive maintenance at the wastewater treatment facility as you have in the past.

Operator Certification: Grade = A

### Permittee Response:

### DNR Response:

The new collection system subclass (SS) study guide and exam are now available. It is recommended that an individual take the exam and be the operator in charge (OIC) for the collection system. The collection system OIC does not need certification in other wastewater subclasses or have taken the basic general wastewater exam.

Financial Management: Grade = A

### Permittee Response:

### DNR Response:

Continue to monitor the financial situation and make changes as necessary.

Collection Systems: Grade = A

(Regardless of grade, response required for Collection Systems if SSOs were reported)

### Permittee Response:

### DNR Response:

Please make sure an annual review and update occurs according to NR 210.23(5)(b) Wis. Adm. Code. At this time the goals should be evaluated to help determine the success of the CMOM program. It is recommended that the developed goals are realistic and measurable to assist with the annual audits.

## ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO THE OVERALL GRADE POINT AVERAGE AND ANY GENERAL COMMENTS

(Optional for G.P.A. greater than or equal to 3.00, required for G.P.A. less than 3.00)

# Compliance Maintenance Annual Report

Evansville Wastewater Treatment Facility

Last Updated: Reporting For:  
6/9/2021 **2020**

**G.P.A. = 3.82**

**Permittee Response:**

**DNR G.P.A. Response:**

The Department does not require any additional action be taken this year in response to the CMAR.

**DNR CMAR Overall Response:**

Thank you for completing and submitting your 2020 CMAR. The CMAR is an annual self-evaluation of your wastewater treatment plant, collection system and associated wastewater management activities. Everything looks to be in order and your facility is operating very well. There are no other requirements at this time. Nice job and thank you again.

**DNR Reviewer:** Garbe, Amy

**Address:** PO Box 7921, Madison, WI 53707-7921

**Phone:** (262) 574-2135

**Date:** 12/7/2021

## MEMORANDUM

Date: December 13, 2021

To: Jason Sergeant, City Administrator  
Chad Renly, Municipal Services Director  
City of Evansville

From: Amy Bares, P.E., Senior Project Engineer – Town & Country Engineering  
Ben Heidemann, P.E., Vice President – Town & Country Engineering

Subject: Investigation of Discolored Water Occurrences

This memo provides a summary of the work completed to investigate the causes of brown or discolored water occurrences in the City of Evansville.

### System Description and Operation

The City's water system includes three water supply wells, a 300,000-gallon elevated storage tank and a 400,000 gallon ground reservoir with booster station, which operate as follows:

- Wells 1 and 2 discharge to the ground reservoir. The reservoir calls for both Well 1 and Well 2 each pumping cycle, with Well 1 starting a few minutes before Well 2. The flow rate from Well 1 is controlled by a VFD to provide the required blending ratio for radium compliance.
- High lift booster pumps at the Well 2 building draw water from reservoir and boost it to system pressure, discharging at Entry Point 200 to the distribution system.
- Well 3 discharges directly to the distribution system.
- When the water level in the tower indicates the need for more water, the SCADA system calls for Well 3 and the booster pumps alternately to fill the tower.

The City currently adds a blended polyphosphate chemical (AquaMag) to sequester iron and manganese in the water and prevent discolored water occurrences, but additional investigation is needed to address aesthetic water quality issues that have been reported by water customers. Chlorine and fluoride are also added for each entry point.

### Compliance Sampling

The City is required by the DNR to perform routine sampling to demonstrate compliance with drinking water standards. According to past compliance sampling results, the City's water meets primary regulatory standards for safe drinking water and is safe to consume. However, past samples show elevated concentrations of manganese that are above the secondary aesthetic standard of 50 ug/L but below the Health Advisory Level of 300 ug/L (Table 1). Iron has also been detected, but has not exceeded the aesthetic standard of 0.3 mg/L. Manganese and iron in excess of the secondary aesthetic standards can cause staining of fixtures and unacceptable taste or color, but the water is still safe to drink unless the Health Advisory Level is exceeded.

**Table 1 - Recent Compliance Sample Results  
Manganese Concentration (ug/L)**

Year	Entry Point 200	Well 3
1999	140	Not constructed
2005	Not sampled	86
2008	148	85
2017	67	93
2021	91	151

### TOWN & COUNTRY ENGINEERING, INC.

All of the compliance samples listed in Table 1 exceed the secondary aesthetic standard of 50 ug/L but are below the Health Advisory Level of 300 ug/L. If a public water system reports manganese concentrations greater than the Health Advisory Level of 300 ug/L, the DNR will require the system to post a public notice informing consumers of the water quality. If concentrations exceed the secondary standard of 50 µg/L, the municipality may be required to address the concentrations, especially if customers report aesthetic issues related to the water quality. The DNR recently increased the City's sampling frequency for manganese to quarterly at each entry point, in part due to customer complaints and the results of the compliance and investigative sampling that has been performed. The quarterly compliance sampling requirement starts in 2022.

### **Iron and Manganese Treatment and History**

There are three main options for dealing with iron and manganese in drinking water:

- Changes in source water/well construction to avoid iron and manganese. The presence of these metals in groundwater water is generally due to the dissolution of naturally occurring minerals (iron hydroxides and manganese dioxide) in the aquifer over time.
- Treatment to remove iron and manganese, generally through oxidation followed by filtration.
- Addition of chemicals to sequester dissolved iron and manganese, to keep them in solution and prevent them from being oxidized to particulate forms, which would show up as brown or black discoloration in water.

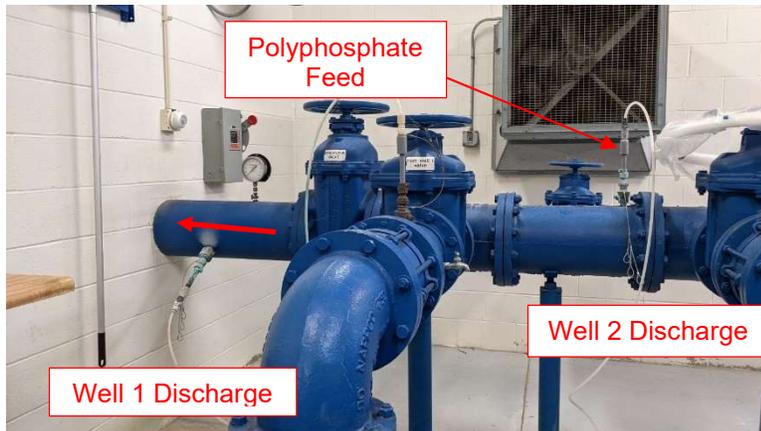
As noted previously, the City uses the third option, sequestration, as the method for treating iron and manganese. This method is usually suitable if the total combined concentration of iron and manganese is less than 1 mg/L, as it is in Evansville. This memo focuses primarily on examining and optimizing the current treatment method and system operation practices, as the other two options would involve considerable capital costs.

AquaMag has been added to the City's water since the mid-1990s to address a long-standing problem with elevated manganese concentrations in the raw water. In a 1989 Comprehensive Water System Study, it was noted that elevated levels of dissolved manganese have been recorded at Wells 1 and 2 and have been linked to discolored water events in the distribution system. The Study reported concentrations of dissolved manganese ranging from approximately 65 ug/L to over 200 ug/L at Wells 1 and 2 from 1966 to 1989. Dissolved iron was also noted as a problem, but concentrations had been below aesthetic standards following reconstruction work on both wells in 1977. Two treatment alternatives, sequestration and filtration, were considered in the 1989 Study to address the problem, with chemical addition for sequestration recommended as the less costly and most practical solution. A subsequent 1991 Comprehensive Water System Study Update noted that discolored water problems could be directly attributed to manganese in the water supply. The report states that "black water complaints usually increase immediately after the water system has been stirred up by flowing hydrants or surges in water usage". Sequestration of manganese with chemical addition of polyphosphates was recommended, to be constructed with the new booster station. According to Martelle, the City's chemical supplier, AquaMag has been added since 1995.

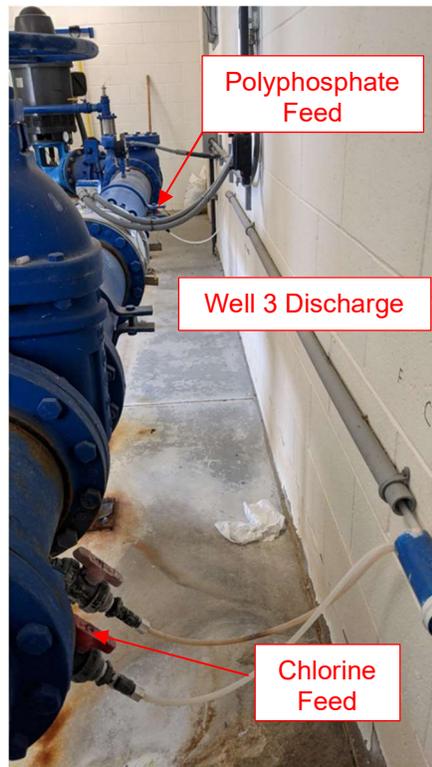
AquaMag is a blend of approximately 70% polyphosphate and 30% orthophosphate. The polyphosphate in the blend is intended to sequester dissolved iron and manganese and keep them from being oxidized. The orthophosphate in the blend provides benefits for corrosion control by forming a protective coating on pipe walls. Polyphosphate can revert to orthophosphate over time in the distribution system.

Oxidized manganese generally forms a black precipitate while oxidized iron is generally reddish-brown/rust colored. The dissolved forms of iron and manganese can be easily oxidized when placed in contact with oxygen or another oxidizing agent such as chlorine. For that reason, polyphosphate should be added as far upstream as possible from chlorine addition in well discharge piping and chemical feed arrangements.

At Wells 1 and 2, the polyphosphate is added to the Well 2 discharge just prior to where the Well 1 discharge joins the piping. Chlorine is added in the chemical room at the downturned elbow, before the piping goes through the floor and to the reservoir. At Well 3, the polyphosphate feed point is just after the well discharge head and the chlorine feed point is as far downstream as possible.



**Well 1 and 2 Chemical Feed Points**



**Well 3 Chemical Feed Points**

### Discolored Water Occurrences

Current City staff have noted that discolored water events are often linked to disturbances of the distribution system such as construction or flushing events, which is consistent with historical observations. The most discolored water is encountered when they flush near Genesis Drive (northeast area) and Franklin Street (east-central area).

The City has implemented a web-based form for collecting customer complaints, with the location of complaints available on the City's GIS. The map in Attachment 1 shows the locations of the customer comments collected since October 2021, including complaints that were submitted to the PSC in August 2021. The locations of the complaints do not appear to have any specific spatial distribution or pattern but many mention brown/discolored water and sediment. The four complaints that were collected using the web-based form in October-November 2021 are included in Attachment 1. The City will continue to log concerns if received.

### Investigative Sampling

In September and October 2021, investigative sampling was performed by City staff at the following locations:

- Raw/untreated water from Wells 1, 2, and 3
- Treated water at Entry Point 200 (ground reservoir discharge, combined Wells 1 and 2)
- Treated water from Well 3 at the nearby park building, considered the Well 3 Entry Point
- Water Tower discharge
- Three distribution system locations - Countryside Park, the City Offices, and the Water & Light building

Four rounds of samples were collected and sent to the Wisconsin State Laboratory of Hygiene for analysis of dissolved and total iron and manganese, hardness, calcium, magnesium, orthophosphate and total phosphorus, total organic carbon (TOC), pH and conductivity. The intent was to provide a comprehensive set of water quality data to help make decisions about optimizing water treatment, operation, and maintenance efforts. The results from the 2021 investigative sampling are provided in the Attachment 2 summary tables for the wells/entry points and the distribution system samples.

### Summary of Investigative Results

Table 2 below summarizes the raw and entry point manganese results. Raw water from all three wells exceeded the aesthetic standard for manganese in all of the recent samples, with ranges of 87 – 113 ug/L at Well 1, 140 - 147 ug/L at Well 2, and 49 – 151 ug/L at Well 3. Almost all of the manganese in the raw water is in dissolved form and is likely from dissolution of naturally occurring minerals in the aquifer. Iron was detected in the raw water from Well 2 at approximately 0.15 mg/L, half of the aesthetic standard, and does not appear to be a significant issue. Iron was not detected or near the detection limit for Wells 1 and 3.

**Table 2 - Raw and Entry Point Sample Results**

Sample Location	Sample Date	Manganese, Total	Manganese, Dissolved	Calculated % Dissolved	Manganese, Particulate*	Calculated % Particulate
Units		ug/L	ug/L	%	ug/L	%
Raw Water Well 1	9/16/2021	87.4				
	10/5/2021	110	114	104%	0	0%
	10/11/2021	113	115	102%	0	0%
	10/18/2021	110	108	98%	2	2%
	10/26/2021	107	112	105%	0	0%
Raw Water Well 2	9/16/2021	140				
	10/5/2021	143	148	103%	0	0%
	10/11/2021	147	146	99%	1	1%
	10/18/2021	141	136	96%	5	4%
	10/26/2021	147	151	103%	0	0%
Entry Point 200 (Well 1 and 2 Combined)	9/20/2021	111				
	10/5/2021	136	73.8	54%	62.2	46%
	10/13/2021	91.3				
	10/11/2021	130	119	92%	11.0	8%
	10/18/2021	129	95.8	74%	33.2	26%
	10/25/2021	136	105	77%	31.0	23%

\*Particulate manganese estimated by subtracting dissolved manganese from total manganese. Shading indicates exceedance of aesthetic standard for total manganese results.

**Table 2 - Raw and Entry Point Sample Results (continued)**

Sample Location	Sample Date	Manganese, Total	Manganese, Dissolved	Calculated % Dissolved	Manganese, Particulate*	Calculated % Particulate
Units		ug/L	ug/L	%	ug/L	%
Raw Water Well 3	9/16/2021	143				
	10/4/2021	92.5	89.9	97%	2.6	3%
	10/13/2021	151				
	10/13/2021	91.4	89.0	97%	2.4	3%
	10/18/2021	87.6	84.3	96%	3.3	4%
	10/26/2021	48.7	47.9	98%	0.8	2%
Entry Point Well 3 (175 Parkview, D-43)	9/21/2021	25.5				
	10/4/2021	86.2	55.7	65%	30.5	35%
	10/11/2021	26.0	11.6	45%	14.4	55%
	10/19/2021	32.4	19.5	60%	12.9	40%
	10/25/2021	29.8	16.5	55%	13.3	45%

\*Particulate manganese estimated by subtracting dissolved manganese from total manganese. Shading indicates exceedance of aesthetic standard for total manganese results.

A comparison of raw water and entry point sample provides an indication of the effectiveness of sequestration. At Entry Point 200 (Well 1 and 2 combined), total manganese concentrations were similar to the raw concentrations and ranged from 91 to 136, with the majority (54-92%) of it in dissolved form. This indicates that a good portion of the manganese is sequestered by the polyphosphate and is not oxidized in the reservoir, but some oxidation is occurring.

At the entry point sampling location for Well 3, total manganese concentrations ranged from 26 to 86 ug/L, with approximately half (45-65%) of the manganese in dissolved form. This indicates that sequestration may not be as effective at Well 3 as it is at Wells 1 and 2, and that oxidation of manganese is occurring, likely from contact with chlorine before sequestration can occur. However, the total manganese concentrations at the Well 3 entry point are considerably lower than the raw water concentrations, and only one of the three samples exceeded the aesthetic standard. The reason for the difference in total manganese between raw and entry point samples at Well 3 is not entirely known, but it is possible that particulate manganese is settling out before it reaches the entry point at the park building.

Samples were collected at the water tower and three other distribution system sites with four sets of samples each and one additional round of total manganese samples. The manganese results for these samples are summarized in Table 3. Of the 20 total manganese samples, three samples exceeded the aesthetic standard, two at the City Office (53 and 67 ug/L) and one at Countryside Park (78 ug/L). 11 of the 20 samples were 30 ug/L or higher. The lowest manganese concentrations were at the Utility building on S. Madison. The majority of the manganese in the distribution samples is in the particulate form, indicating that it is in the oxidized/colored form. The difference between entry point and distribution system manganese indicates that the manganese is being oxidized and settled out as solids in the distribution system. There is a great deal of variability in the data, which also indicates that water quality may be influenced by movement of water and disturbance of sediment in the distribution system.

**Table 3 - Distribution System Sample Results**

Sample Location	Sample Date	Manganese, Total	Manganese, Dissolved	Calculated % Dissolved	Manganese, Particulate*	Calculated % Particulate
Units		ug/L	ug/L	%	ug/L	%
200 Cemetery Rd (Water Tower)	9/16/2021	38.4				
	10/5/2021	40.0	3.70	9%	36.3	91%
	10/11/2021	30.1	3.12	10%	27.0	90%
	10/13/2021	23.9	4.80	20%	19.1	80%
	10/26/2021	22.3	5.25	24%	17.1	76%
43 N Water St (Countryside Park, D-37)	9/21/2021	46.3				
	10/4/2021	77.7	25.3	33%	52.4	67%
	10/11/2021	30.0	16.0	53%	14.0	47%
	10/12/2021	16.7	7.20	43%	9.5	57%
	10/25/2021	26.0	9.77	38%	16.2	62%
31 S Madison St (City Office, D-38)	9/22/2021	52.9				
	10/4/2021	67.4	15.7	23%	51.7	77%
	10/11/2021	31.0	19.0	61%	12.0	39%
	10/19/2021	28.1	7.51	27%	20.6	73%
	10/25/2021	17.6	7.41	42%	10.2	58%
535 S Madison (Utility Building, D-40)	9/22/2021	30.4				
	10/4/2021	32.8	2.71	8%	30.1	92%
	10/11/2021	16.4	8.07	49%	8.3	51%
	10/19/2021	19.0	6.78	36%	12.2	64%
	10/25/2021	21.2	4.67	22%	16.5	78%

\*Particulate manganese estimated by subtracting dissolved manganese from total manganese.  
 Shading indicates exceedance of aesthetic standard for total manganese results.

The total and ortho phosphorus data in Tables 4 and 5 shows that the current polyphosphate feed results in fairly consistent residuals at the entry points and in the distribution system, with some reversion of polyphosphate to ortho in the distribution system, as expected.

**Table 4 – Total and Ortho Phosphorus Sample Results – Wells/Entry Points**

Sample Location	Sample Date	Phosphorus, Total	Phosphorus, Dissolved Reactive (Ortho)	
Units		mg/L as P	mg/L as P	
Raw Water Well 1	10/5/2021	<0.009	0.00492	
	10/11/2021	<0.009	<0.003	
	10/18/2021	<0.009	0.00519	
	10/26/2021	<0.009	0.00512	
Raw Water Well 2	10/5/2021	0.0133	0.006	
	10/11/2021	0.0203	0.00853	
	10/18/2021	0.00909	0.00686	
Raw Water Well 2	10/26/2021	0.0124	0.00727	
	Entry Point 200 (Well 1 and 2 Combined)	10/5/2021	1.28	0.508
		10/11/2021	1.16	0.451
10/18/2021		1.12	0.453	
10/25/2021		0.994	0.403	
Raw Water Well 3	10/4/2021	<0.009	0.00328	
	10/13/2021	<0.009	0.00365	
	10/18/2021	<0.009	0.0045	
	10/26/2021	<0.009	0.00488	
Entry Point Well 3 (175 Parkview, D-43)	10/4/2021	1.27	0.523	
	10/11/2021	1.29	0.751	
	10/19/2021	1.24	0.709	
	10/25/2021	1.16	0.645	

**Table 5 – Total and Ortho Phosphorus Sample Results – Distribution System**

Sample Location	Sample Date	Phosphorus, Total	Phosphorus, Dissolved Reactive (Ortho)
Units		mg/L as P	mg/L as P
200 Cemetery Rd (Water Tower)	10/5/2021	1.26	0.726
	10/11/2021	1.24	0.713
	10/13/2021	1.11	0.719
	10/26/2021	1.12	0.659
43 N Water St (Countryside Park, D-37)	10/4/2021	1.26	0.564
	10/11/2021	1.15	0.580
	10/12/2021	1.15	0.666
	10/25/2021	1.08	0.593
31 S Madison St (City Office, D-38)	10/4/2021	1.26	0.710
	10/11/2021	1.18	0.689
	10/19/2021	1.12	0.801
	10/25/2021	1.06	0.717
535 S Madison (Utility Building, D-40)	10/4/2021	1.24	0.764
	10/11/2021	1.19	0.724
	10/19/2021	1.11	0.685
	10/25/2021	1.04	0.654

**Conclusions and Recommendations**

The first steps in addressing the City’s discolored water issues involve optimizing the current raw water treatment and distribution system maintenance based on the following recommendations:

- Results show that there may be opportunities to improve/optimize chemical addition for sequestration. Some oxidation of manganese is occurring prior to water entering the distribution system and the distribution system samples indicate that manganese is being oxidized and settled out as solids in the distribution system. The recommended next step is to share the data with the City’s chemical supplier, Martelle Water Treatment, and ask them about options for better sequestration, including different polyphosphate blends, dosage, and mixing options. Any changes to the type of chemical, phosphate blend, and dosage will require plan review and approval by the DNR.
- Observations from City staff and customer complaints indicate that discolored water events are often associated with disturbances of the distribution system. Since high concentrations of iron and manganese occurred for decades prior to the installation of treatment, and data indicate that particulate manganese is still being created, it is likely that there are substantial deposits of sediment/scale containing iron and manganese in the City’s pipes that contribute to discolored water occurrences. Legacy deposits of manganese in a distribution system are sensitive to changes in water quality and chemical addition, as well as physical and hydraulic disturbances. Any of these could cause mobilization of these deposits and lead to discolored water events. Although the City performs routine flushing of its system, this flushing most likely does not develop the scouring velocities needed to remove the legacy deposits. A structured uni-directional flushing (UDF) program should be implemented to develop the required velocities for effective distribution system cleaning. UDF will need to be performed on a regular (annual or semi-annual) basis to clean and maintain the system.
- Property owners that have specific, localized problems with discolored water may have similar legacy deposits in their service lines and premise plumbing. Flushing and/or air scouring of these private lines could be recommended to property owners with specific concerns.

- Additional sampling is recommended after UDF to document system changes and flushing effectiveness. Sampling should be performed at the same locations as the previous investigative sampling and on the same day throughout the system to allow for direct comparison of the results, with analysis for total iron, total and dissolved manganese, total and reactive (ortho) phosphorus, and residual chlorine.
- The City should continue to track water quality complaints and encourage customers to provide feedback using the on-line form. The results should be examined quarterly, particularly following any changes to system operation and maintenance.

If optimization of chemical feed and implementation of UDF are not successful in addressing the discolored water issues, then the City may need to consider other options for dealing with manganese, including rehabilitation of existing wells, constructing a new well, or installing filtration.

Raw water from the City's wells has high concentrations of dissolved manganese, with similar results for all three wells. The current manganese concentrations are similar to data collected in past decades, indicating that this is a long-standing water quality issue in the local aquifer. The wells have similar total depths but differing casing depths, meaning that they may draw water from different geologic formations. All three boreholes are open to the Wonewoc, Eau Claire and Mt Simon formations, with Well 2 also open to the overlying St. Lawrence and Tunnel City formations. Given the similar manganese data for the three wells, there does not appear to be one particular location or geologic formation that is the cause of the manganese issues, and a new well constructed within the City may have the same issues as the existing wells. An investigation of the existing wells could be performed to see if one zone is the source of the high manganese concentrations, and whether casing past or filling this portion of the wells would lead to significant loss of capacity, but these investigations are costly and may not be conclusive.

If filtration is pursued, this will require significant capital costs for installation of a treatment system at each entry point, as centralized treatment is not feasible. Typical treatment for manganese removal includes addition of a chemical oxidant, such as chlorine or permanganate, followed by pressure filtration. This would be required at the both the Well 1 and 2 location and at Well 3. Costs for adding a pressure filter could be as much as \$1.5 to \$2 Million per location.

AMB

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## **ATTACHMENT 1**

### **Water Quality Complaints Map and Web Forms**

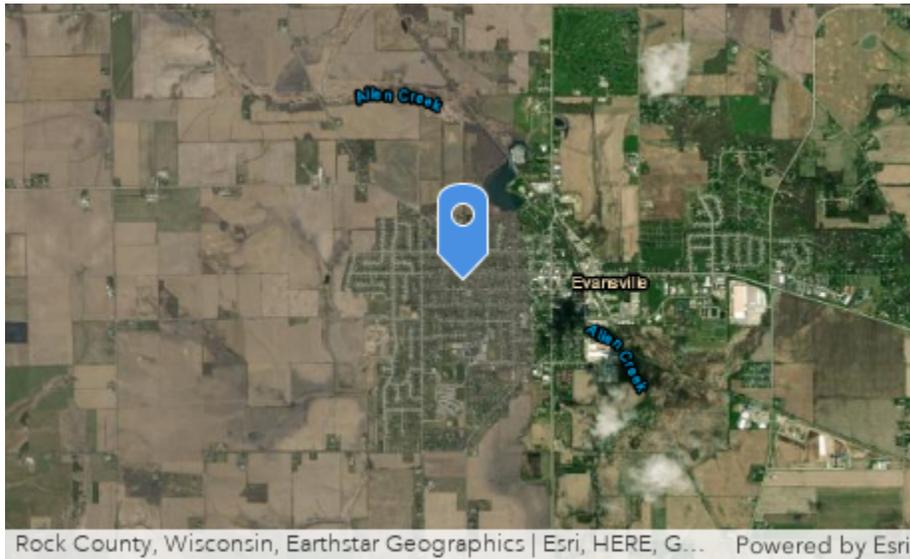


# Water Quality Issue Evansville, WI

Submitted By: Anonymous user

Submitted Time: November 23, 2021 9:32 AM

## Location Where Issue Occurred



## Name

Sarah Krause

## Email Address

Sarah.k.krause@gmail.com

## Date Issue Occurred

November 22, 2021

## Please describe the issue you observed

Ongoing issue. Water is discolored (brown) and contains black specks of sediment.  
23 1/2 S 4th St

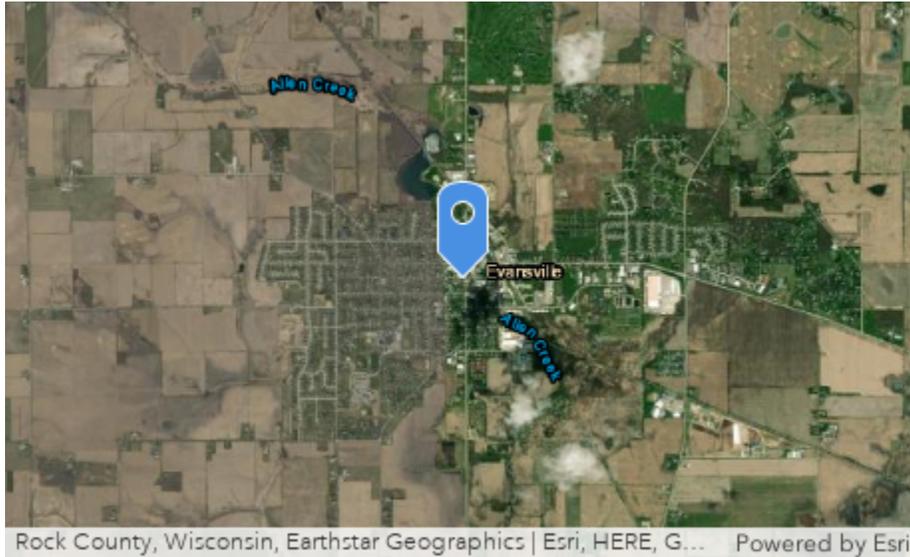
## Water Service Type (if known)

# Water Quality Issue Evansville, WI

Submitted By: Anonymous user

Submitted Time: October 24, 2021 7:51 PM

## Location Where Issue Occurred



## Name

Rudolph Lothary

## Email Address

lotharyr@yahoo.com

## Date Issue Occurred

October 24, 2021

## Please describe the issue you observed

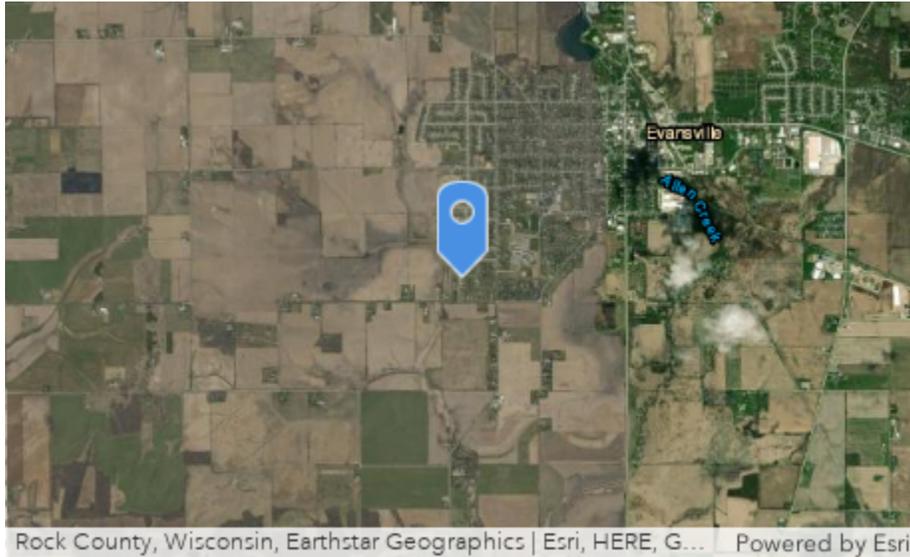
Nasty brown color and taste change. Same problem comes and goes every few weeks. Happened today. We live in the white multi-apartment building across the street from city hall. Not exactly sure what kind of pipe service this building has. 105 S Madison Street

# Water Quality Issue Evansville, WI

Submitted By: Anonymous user

Submitted Time: October 8, 2021 8:37 AM

## Location Where Issue Occurred



## Name

Corey & Brooke Breezer

## Email Address

breezer18@gamil.comg

## Date Issue Occurred

October 8, 2021

## Please describe the issue you observed

Concern about water quality, would like water tested. Animals have been sick and they have had to put one of them down and are now on the way to the vet with the other 2 dogs that had the same thing as the other dog. Also kids have been sick off and on for months with stomach issue. She doesn't know if it is the water but that

seems to be the common denominator. Would like someone to call her today. 608-575-7420

**Water Service Type (if known)**

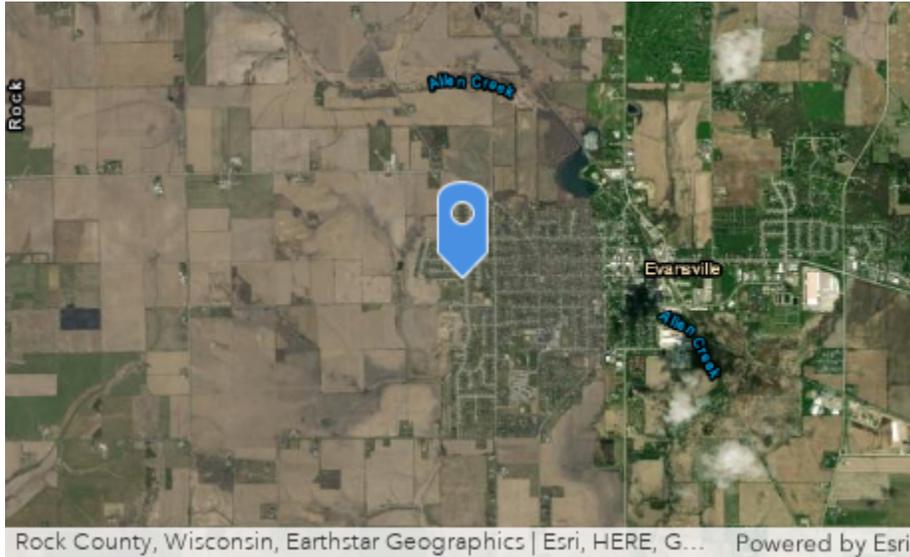
Copper

# Water Quality Issue Evansville, WI

Submitted By: Anonymous user

Submitted Time: November 4, 2021 2:02 PM

## Location Where Issue Occurred



## Name

Barbara Ischi

## Email Address

## Date Issue Occurred

November 3, 2021

## Please describe the issue you observed

Noticed sediment in glass of water from the kitchen sink.

## Water Service Type (if known)

Copper

**ATTACHMENT 2**  
**Water Quality Data Summaries**

City of Evansville  
**Water Quality Data Summary - Wells and Entry Points**

Sample Location		Raw Water Well 1					Raw Water Well 2					Entry Point 200 (Well 1 and 2 Combined)						
Sample Date		9/16/2021	10/5/2021	10/11/2021	10/18/2021	10/26/2021	9/16/2021	10/5/2021	10/11/2021	10/18/2021	10/26/2021	9/20/2021	10/5/2021	10/13/2021	10/11/2021	10/18/2021	10/25/2021	
Sample Time		11:30	9:45	10:20	8:00	10:45	11:45	9:50	10:25	10:18/2021	11:00	13:00	10:20	12:30	10:30	8:15	9:45	
Sample Type		Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Compliance	Investigative	Investigative	Investigative	
Parameter	Units																	
pH	SU		7.71	7.73	7.69	7.56		7.67	7.58	7.72	7.52		7.58		7.81	7.73	7.71	
Alkalinity	mg/L as CaCO3		317	315	315	316		311	309	310	309		311		309	312	308	
Hardness	mg/L as CaCO3		311	331	318	316		310	322	307	316		314		320	319	315	
Calcium	mg/L		51.1	54.7	52.2	52.7		59.7	63.0	60.3	62.2		59.8		61.0	60.6	60.8	
Magnesium	mg/L		44.4	47.2	45.4	44.8		39.2	40.0	38.1	39.0		40.1		40.7	40.7	39.6	
Conductivity	uS/cm		565	562	564	566		562	555	563	561		572		562	571	564	
Phosphorus, Total	mg/L as P		<0.009	<0.009	<0.009	<0.009		0.0133	0.0203	0.00909	0.0124		1.28		1.16	1.12	0.994	
Phosphorus, Dissolved Reactive (Ortho)	mg/L as P		0.00492	<0.003	0.00519	0.00512		0.006	0.00853	0.00686	0.00727		0.508		0.451	0.453	0.403	
TOC mg/L	mg/L		<0.40	<0.40	<0.40	<0.40		<0.40	<0.40	<0.40	<0.40		<0.40		<0.40	<0.40	<0.40	
Iron, Total	mg/L		<0.05	<0.05	<0.05	<0.05		0.155	0.147	0.106	0.148		0.109		0.11	0.108	0.107	
Iron, Dissolved			<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05		<0.05		<0.05	<0.05	<0.05	
Manganese, Total	ug/L		87.4	110	113	110	107	140	143	147	141	147	111	136	91.3	130	129	136
Manganese, Dissolved	ug/L		114	115	108	112		148	146	136	151		73.8		119	95.8	105	
Calculated % Dissolved	%		104%	102%	98%	105%		103%	99%	96%	103%		54%		92%	74%	77%	
Manganese, Particulate*	ug/L		0	0	2	0		0	1	5	0		62.2		11.0	33.2	31.0	
Calculated % Particulate	%		0%	0%	2%	0%		0%	1%	4%	0%		46%		8%	26%	23%	

Sample Location		Raw Water Well 3					Entry Point Well 3 (175 Parkview, D-43)						
Sample Date		9/16/2021	10/4/2021	10/13/2021	10/18/2021	10/26/2021	9/21/2021	10/4/2021	10/11/2021	10/19/2021	10/25/2021		
Sample Time		12:45	10:18	10:00	8:00	10:30	10:30	10:20	9:50	9:00	10:15		
Sample Type		Investigative	Investigative	Compliance	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative		
Parameter	Units												
pH	SU		7.71		7.88	7.82	7.72		7.71	7.62	7.82	7.73	
Alkalinity	mg/L as CaCO3		306		305	308	311		306	304	304	306	
Hardness	mg/L as CaCO3		301		314	312	310		310	326	301	308	
Calcium	mg/L		50.8		53.3	53.1	50.8		52.4	55.6	51.2	53.1	
Magnesium	mg/L		42.2		43.9	43.6	44.5		43.6	45.5	42.1	42.5	
Conductivity	uS/cm		548		546	555	558		558	551	553	553	
Phosphorus, Total	mg/L as P		<0.009		<0.009	<0.009	<0.009		1.27	1.29	1.24	1.16	
Phosphorus, Dissolved Reactive (Ortho)	mg/L as P		0.00328		0.00365	0.0045	0.00488		0.523	0.751	0.709	0.645	
TOC mg/L	mg/L		<0.40		<0.40	<0.40	<0.40		<0.40	<0.40	<0.40	<0.40	
Iron, Total	mg/L		0.055		<0.05	<0.05	0.0917		<0.05	<0.05	<0.05	<0.05	
Iron, Dissolved			<0.05		<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	
Manganese, Total	ug/L		143	92.5	151	91.4	87.6	48.7	25.5	86.2	26.0	32.4	29.8
Manganese, Dissolved	ug/L		89.9		89.0	84.3	47.9		55.7	11.6	19.5	16.5	
Calculated % Dissolved	%		97%		97%	96%	98%		65%	45%	60%	55%	
Manganese, Particulate*	ug/L		2.6		2.4	3.3	0.8		30.5	14.4	12.9	13.3	
Calculated % Particulate	%		3%		3%	4%	2%		35%	55%	40%	45%	

Notes:  
 Shading indicates an exceedance of the secondary/aesthetic standard for drinking water.  
 Investigative Samples were collected by City to investigate water quality and aesthetics.  
 Compliance Samples were collected by City as part of normal DNR compliance sampling.  
 \*Particulate Manganese estimated by subtracting dissolved manganese from total manganese.

Water Quality Data Summary - Distribution System

Sample Location		200 Cemetery Rd (Water Tower)					43 N Water St (Countryside Park, D-37)				
Sample Date		9/16/2021	10/5/2021	10/11/2021	10/13/2021	10/26/2021	9/21/2021	10/4/2021	10/11/2021	10/12/2021	10/25/2021
Sample Time		12:30	10:00	11:15	9:15	10:15		10:40	10:10	9:30	10:30
Sample Type		Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative
Parameter	Units										
pH	SU		7.64	7.81	7.98	7.75		7.68	7.65	7.83	7.66
Alkalinity	mg/L as CaCO3		311	307	307	308		311	311	311	310
Hardness	mg/L as CaCO3		301	316	314	306		318	325	299	309
Calcium	mg/L		57.3	60.5	59.9	59.1		60.2	62.2	57.3	59.7
Magnesium	mg/L		38.4	40.0	39.9	38.5		40.6	41.1	37.9	38.9
Conductivity	uS/cm		571	561	563	566		567	564	569	567
Phosphorus, Total	mg/L as P		1.26	1.24	1.11	1.12		1.26	1.15	1.15	1.08
Phosphorus, Dissolved Reactive (Ortho)	mg/L as P		0.726	0.713	0.719	0.659		0.564	0.580	0.666	0.593
TOC mg/L	mg/L		<0.40	<0.40	<0.40	<0.40			<0.40	<0.40	<0.40
Iron, Total	mg/L		0.0521	<0.05	<0.05	<0.05		0.0838	0.0605	<0.05	<0.05
Iron, Dissolved	mg/L		<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05
Manganese, Total	ug/L	38.4	40.0	30.1	23.9	22.3	46.3	77.7	30.0	16.7	26.0
Manganese, Dissolved	ug/L		3.70	3.12	4.80	5.25		25.3	16.0	7.2	9.8
Calculated % Dissolved	%		9%	10%	20%	24%		33%	53%	43%	38%
Manganese, Particulate*	ug/L		36.3	27.0	19.1	17.1		52.4	14.0	9.5	16.2
Calculated % Particulate	%		91%	90%	80%	76%		67%	47%	57%	62%

Sample Location		31 S Madison St (City Office, D-38)					535 S Madison (Utility Building, D-40)				
Sample Date		9/22/2021	10/4/2021	10/11/2021	10/19/2021	10/25/2021	9/22/2021	10/4/2021	10/11/2021	10/19/2021	10/25/2021
Sample Time		12:00	12:30	11:00	8:30	10:00	12:30	11:55	10:45	8:00	10:45
Sample Type		Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative	Investigative
Parameter	Units										
pH	SU		7.63	7.73	7.79	7.83		7.66	7.78	7.86	7.72
Alkalinity	mg/L as CaCO3		309	308	311	308		309	309	310	310
Hardness	mg/L as CaCO3		315	321	324	310		306	322	319	318
Calcium	mg/L		59.8	61.1	61	59.5		58.4	61.7	61.000	61.6
Magnesium	mg/L		40.2	40.9	41.6	39.2		38.8	40.7	40.6	39.9
Conductivity	uS/cm		563	561	567	562		567	564	564	568
Phosphorus, Total	mg/L as P		1.26	1.18	1.12	1.06		1.24	1.19	1.11	1.04
Phosphorus, Dissolved Reactive (Ortho)	mg/L as P		0.710	0.689	0.801	0.717		0.764	0.724	0.685	0.654
TOC mg/L	mg/L		0.411	<0.40	<0.40	<0.40		<0.40	<0.40	<0.40	<0.40
Iron, Total	mg/L		0.0767	0.0584	0.0659	<0.05		<0.05	<0.05	<0.05	0.0509
Iron, Dissolved	mg/L		<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05
Manganese, Total	ug/L	52.9	67.4	31.0	28.1	17.6	30.4	32.8	16.4	19.0	21.2
Manganese, Dissolved	ug/L		15.7	19.0	7.51	7.4		2.71	8.07	6.78	4.67
Calculated % Dissolved	%		23%	61%	27%	42%		8%	49%	36%	22%
Manganese, Particulate*	ug/L		51.7	12.0	20.59	10.2		30.1	8.3	12.2	16.5
Calculated % Particulate	%		77%	39%	73%	58%		92%	51%	64%	78%

Notes:

Shading indicates an exceedance of the secondary/aesthetic standard for drinking water

Investigative Samples were collected by City to investigate water quality and aesthetics.

\*Particulate Manganese estimated by subtracting dissolved manganese from total manganese.



**APPLICATION FOR PRELIMINARY AND FINAL LAND DIVISION – STAFF REPORT**

**Application No.:** RZ-2021-08 **Applicant:** Dora/Harlin Miller

Parcel 6-27-965

**December 20, 2021**

Prepared by: Colette Spranger, Community Development Director

Direct questions and comments to: [colette.spranger@ci.evansville.wi.gov](mailto:colette.spranger@ci.evansville.wi.gov) or 608-882-2263



Figure 1 Approximate Location Map

**Description of request:** An application to divide an existing residential lot, parcel 6-27-965, into two residential lots through a Certified Survey Map, has been submitted for consideration by the Municipal Service Committee and the Plan Commission.

**Existing and Proposed Uses:** The existing 0.8 acre parcel is developed with two separate dwelling units and two accessory buildings. The CSM will divide the parcel into two lots. The northernmost lot is proposed to be 9,938 square feet (0.23 acres) and will include the dwelling unit with the address of 143 N. Fifth Street. The second lot will contain the remaining 24,844 square feet (0.57 acres) and will include both accessory buildings and the dwelling unit addressed at 123 N. Fifth Street. The newly created parcels will retain R-1 zoning.

**Consistency with the City of Evansville Comprehensive Plan and Municipal Code:** The proposed land division and land uses are thoroughly consistent with the Future Land Use Map of the Comprehensive Plan. The proposal complies with the design standards and environmental considerations as set forth in the Land Division Ordinance.

Staff has requested the applicant fill out and submit an annexation application in order for the portion of Fifth Street in front of the property to come into the City. Currently the western half of Fifth Street in front of parcel 6-27-965 is under the jurisdiction of the Town of Union.

At present, there are no sidewalks along this stretch of Fifth Street, which begins at Garfield Avenue. This type of land division would trigger the City enforcing its sidewalk standards as the area is brought into compliance. Staff is recommending that a condition be made as part of the land division that the City may require sidewalks within 5 years of this application

**Staff Recommended Motion: Motion to recommend to Common Council approval of certified survey map to divide parcel 6-27-635 into two lots located at 123 N. Fifth Street, finding that the application is in the public interest and meets the objectives contained within Section 110-102(g) of city ordinances, with the condition the final CSM is recorded with Rock County Register of Deeds.**

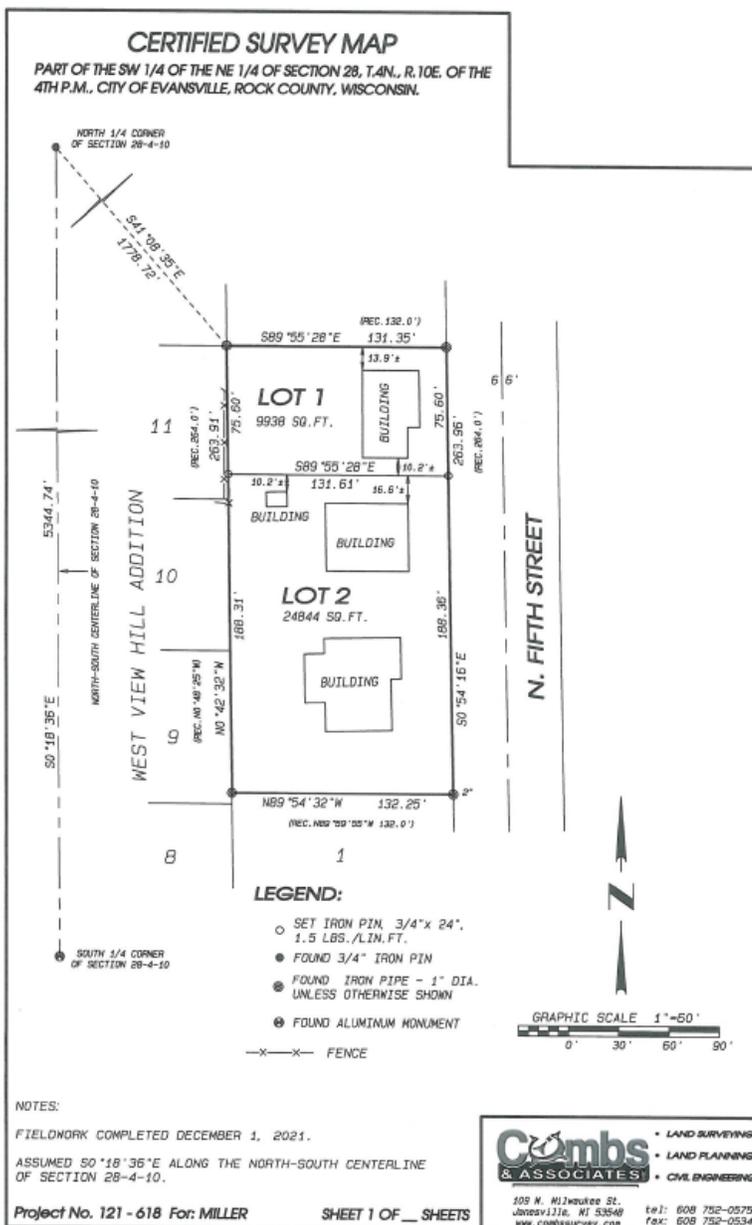


Figure 2 – Proposed CSM

# PRELIMINARY LAND DIVISION APPLICATION

## Evansville, Wisconsin

Version: September 28, 2015

**General instructions.** Complete this application as it applies to your project and submit 12 copies to the City Clerk along with the required application fee. Before you formally submit your application and fee, you may submit one copy to the Community Development Director, who will ensure it is complete. If you have any questions, contact the Community Development Director at 608.882.2285 or [jason.sergeant@ci.evansville.wi.com](mailto:jason.sergeant@ci.evansville.wi.com). You may download this file as a Microsoft Word file off of the City's website at: [www.ci.evansville.wi.gov](http://www.ci.evansville.wi.gov).

**- Office Use Only -**

Initial application fee	\$150 for CSM \$300 for plat
Receipt number	
Date of pre-application meeting	
Date of determination of completeness	
Name of zoning administrator	
Date of Plan Commission review	
Application number	

**1. Applicant information**

Applicant name Dora A. & Harlin W. Miller

Street address 123 N. 5th Street

City Evansville

State and zip code Wisconsin 53536

Daytime telephone number 608-290-6990

Fax number, if any \_\_\_\_\_

E-mail, if any harlin.angie.miller@gmail.com

**2. Property owner information, if different than applicant.**

	Property Owner 1	Property Owner 2	Property Owner 3
Name			
Street address			
City			
State and zip code			

**3. Agent contact information** Include the names of agents, if any, that helped prepare this application including the supplemental information. Agents may include surveyors, engineers, landscape architects, architects, planners, and attorneys.

	Agent 1	Agent 2	Agent 3
Name	Ronald J. Combs		
Company	Combs & Associates, Inc.		
Street address	109 W. Milwaukee Street		
City	Janesville		
State and zip code	Wisconsin 53536		
Daytime telephone number	608-752-0575		
Fax number, if any			
E-mail, if any	rjcombs@combssurvey.com		

# PRELIMINARY LAND DIVISION APPLICATION

## Evansville, Wisconsin

Version: September 28, 2015

**4. Subject property information**

Parcel number(s)	6 - 27 - 965 . _____	6 - 27 - _____ . _____	6 - 27 - _____ . _____
	6 - 27 - _____ . _____	6 - 27 - _____ . _____	6 - 27 - _____ . _____
	Note: The parcel number can be found on the tax bill for the property or may be obtained from the City.		
Current zoning classification(s)	<p style="margin: 0;"><b>Residential</b> <span style="float: right;">Note: The zoning districts are listed below.</span></p> <p style="margin: 0;">Agricultural District    A</p> <p style="margin: 0;">Residential Districts    <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">R-1</span>    R-2    R-3    RR    LL-R12    LL-R15</p> <p style="margin: 0;">Business Districts    B-1    B-2    B-3</p> <p style="margin: 0;">Planned Office District    O-1</p> <p style="margin: 0;">Industrial Districts    I-1    I-2    I-3</p>		

**5. Proposed name of subdivision, if applicable.**

**6. Complete the following chart.**

	Phase 1	Phase 2	Phase 3	Total
Developed areas (acres)	_____	_____	_____	_____
Common areas / parks (acres)	_____	_____	_____	_____
Stormwater management (acres)	_____	_____	_____	_____
Undevelopable areas (acres)	_____	_____	_____	_____
Total acres	_____	_____	_____	_____
Single-family residential lots	Lot 1 0.23 Acres / Lot 2 0.57 Acres		_____	_____
Duplex lots	_____	_____	_____	_____
Multi-family lots	_____	_____	_____	_____
Commercial lots	_____	_____	_____	_____
Industrial lots	_____	_____	_____	_____
Other lots	_____	_____	_____	_____
Total number of lots	2	_____	_____	_____
Dwelling units	_____	_____	_____	_____
K - 12 school enrollment (dwelling units x 1.5)	_____	_____	_____	_____

# PRELIMINARY LAND DIVISION APPLICATION

## Evansville, Wisconsin

Version: September 28, 2015

### 7. Project information

Yes	No	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Will your project, as designed, require the issuance of a variance?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Will your project require all or a portion of the subject property to be rezoned?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Currently, are there any restrictive covenants or deed restrictions on the property? If yes, be sure your project is consistent with them.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Will you impose restrictive covenants or deed restrictions on any portion of the property? If yes, attach a draft copy to this application.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Will all of the project's stormwater management needs be met on site?

### 8. Adjoining land uses. Generally describe the land uses that adjoin the subject property.

North	Residential
South	Residential
East	Residential
West	Residential

### 9. Other information. You may provide any other information you feel will assist city staff, the City Council, and the Plan Commission with the review of this application.

2 Lot CSM
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10. Attach 14 copies of the preliminary plat or CSM showing the information listed in the table at the end of this application.

11. Attach a preliminary land divider's agreement to this application.

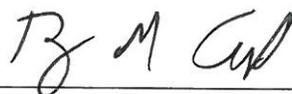
# PRELIMINARY LAND DIVISION APPLICATION

Evansville, Wisconsin

Version: September 28, 2015

**12. Applicant certification**

- ◆ I certify that the application is true as of the date it was submitted to the City for review.
- ◆ I understand that I may be charged additional fees (above and beyond the initial application fee) consistent with the Municipal Code.
- ◆ I understand that submission of this application authorizes City officials, plan commission members, employees, and other designated agents to enter the property to conduct whatever site investigations are necessary to review this application. This does not authorize any individual to enter any structure on the property.

	12-7-21
Applicant Signature	Date

<b>Governing Regulations</b>	The procedures and standards governing this application process are found in Chapter 110, Article 3, Division 2, of the Municipal Code.
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Checklist for Contents of Certified Survey Map / Preliminary Plat	Complete ?	
	Yes	No
a. Location of the property and adjacent properties, with street addresses, and current and proposed zoning	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Name and approximate location and width of all existing adjoining streets	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Location and dimension of all boundary lines of the property, expressed in feet	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Two-foot contour intervals (subdivision plats only)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Existing easements, water bodies, regional floodplain, wetlands, railroads, cemeteries, drainage ditches, bridges, outcroppings, areas in excess of 20 percent slope, and other information required by the plan commission or its designee	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Approximate location and width of all proposed streets, alleys, and other public ways and proposed street rights-of-way, including proposed names	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Approximate location of existing buildings	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Approximate location, dimensions, and area of all proposed or existing lots and outlots. All lots and blocks shall be numbered for reference	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Approximate location and dimensions of all property proposed to be set aside for park or playground use or other public or private reservation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. The location of proposed easements for utilities, drainageways, pedestrian ways, etc	<input type="checkbox"/>	<input checked="" type="checkbox"/>
k. Name and address of the owner of land to be divided, the name and address of the developer if other than the owner, and the name, address, and telephone number of the land surveyor	<input checked="" type="checkbox"/>	<input type="checkbox"/>
l. Proposed name of the land division and signature of the owner or agent	<input checked="" type="checkbox"/>	<input type="checkbox"/>
m. Date of the map or preliminary plat, scale, and north arrow	<input checked="" type="checkbox"/>	<input type="checkbox"/>
n. Name and location of any existing or proposed lake, pond, or stream	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o. Proposed use of lots other than single-family residential use	<input type="checkbox"/>	<input checked="" type="checkbox"/>

# FINAL LAND DIVISION APPLICATION

Evansville, Wisconsin

Version: September 28, 2015

**General instructions.** Complete this application and submit one copy to the City Clerk along with the required attachments. Before you formally submit your application, you may submit one copy to the Community Development Director, who will ensure it is complete. If you have any questions, contact the Community Development Director at 608.882.2285 or [jason.sergeant@ci.evansville.wi.com](mailto:jason.sergeant@ci.evansville.wi.com) . You may download this file as a Microsoft Word file off of the City's website at: [www.ci.evansville.wi.gov](http://www.ci.evansville.wi.gov).

**- Office Use Only -**

Initial application fee	na
Receipt number	na
Date of determination of completeness	_____
Name of city planner	_____
Date of Plan Commission review	_____
Application number	_____

**1. Applicant information**

Applicant name Dora A. & Harlin W. Miller  
 Street address 123 N. 5th Street  
 City Evansville  
 State and zip code Wisconsin 53536  
 Daytime telephone number 608-290-6990  
 Fax number, if any \_\_\_\_\_  
 E-mail, if any harlin.angie.miller@gmail.com

**2. Attachments.** Please attach the following in the number specified:

Final plat/certified survey map 11" x 17"	14 copies
Final plat/certified survey map 24" x 36"	3 copies
Decision letter from the Common Council	one copy
Draft of final land divider's agreement	one copy

**3. Compliance with conditions of approval.** Provide documentation (e.g., face of the plat/CSM) that all of the conditions of approval have been satisfied.

**4. Applicant certification**

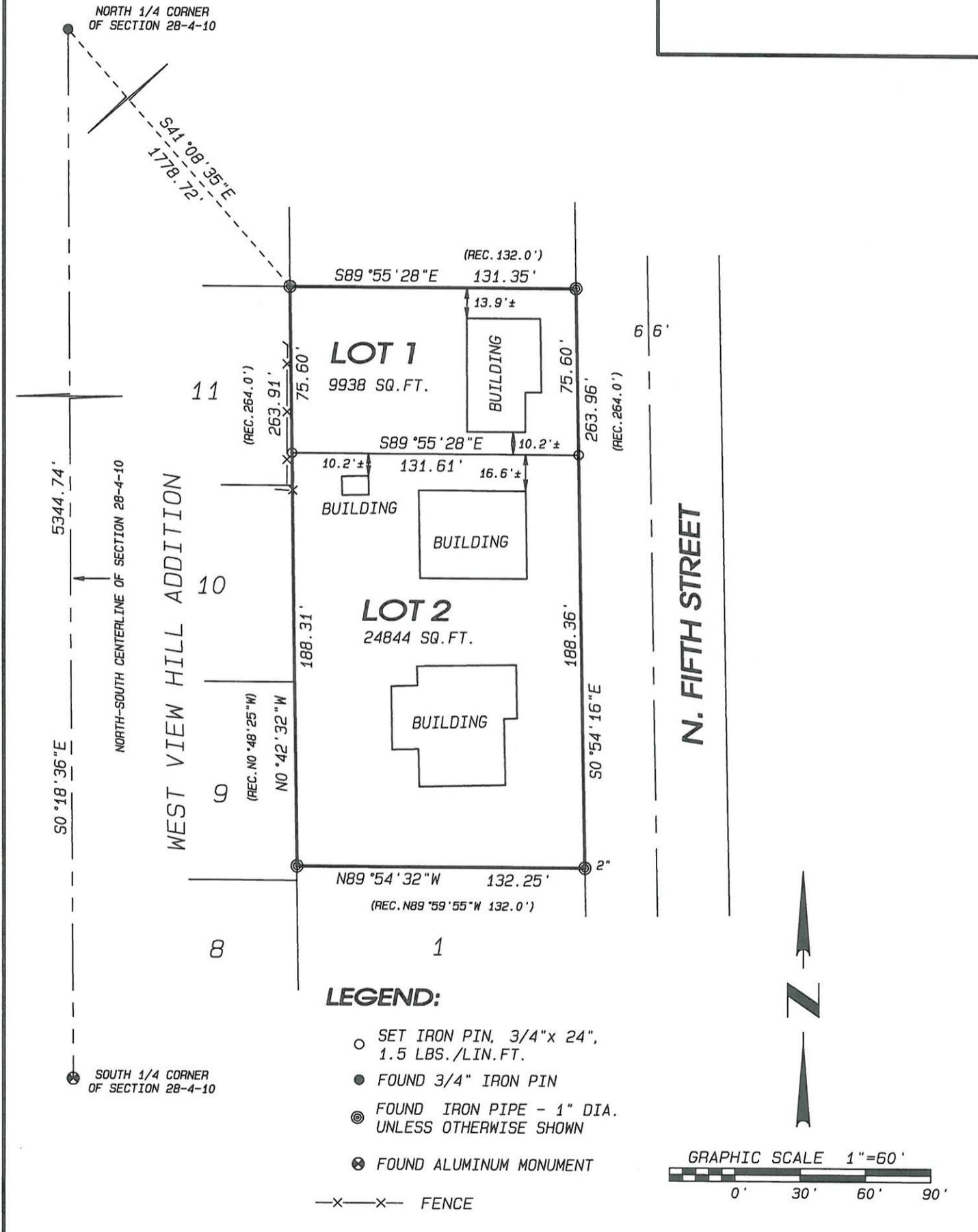
- ◆ I certify that the application is true as of the date it was submitted to the City for review.
- ◆ I understand that submission of this application authorizes City officials, plan commission members, employees, and other designated agents to enter the property to conduct whatever site investigations are necessary to review this application. This does not authorize any individual to enter any structure on the property.

	12-7-21
Applicant Signature	Date

<b>Governing Regulations</b>	The procedures and standards governing this application process are found in Chapter 110, Article 3, Division 2, of the Municipal Code.
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# CERTIFIED SURVEY MAP

PART OF THE SW 1/4 OF THE NE 1/4 OF SECTION 28, T.4N., R.10E. OF THE 4TH P.M., CITY OF EVANSVILLE, ROCK COUNTY, WISCONSIN.



**NOTES:**

FIELDWORK COMPLETED DECEMBER 1, 2021.  
 ASSUMED S0°18'36"E ALONG THE NORTH-SOUTH CENTERLINE OF SECTION 28-4-10.

**Project No. 121 - 618 For: MILLER SHEET 1 OF \_\_ SHEETS**

**Combs & ASSOCIATES**

- LAND SURVEYING
- LAND PLANNING
- CIVIL ENGINEERING

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