



May 30, 2023

BOBBI JO BRIK-LABARGE CLERK
VILLAGE OF KRONENWETTER
1582 KRONENWETTER DR
KRONENWETTER WI 54455-9003

Project Number: W-2023-0411
PWSID#: 73717006
DNR Region: WCR
County: MARATHON

SUBJECT: WELL SITE INVESTIGATION REPORT FOR WELL NO. 3

Dear Ms. Brik-LaBarge:

The Wisconsin Department of Natural Resources, Division of Environmental Management, Bureau of Drinking Water and Groundwater, has reviewed the following well site investigation report. An engineering report or information of sufficient detail to meet the requirements of s. NR 811.09(3), Wis. Adm. Code, was submitted.

Water system name: Kronenwetter Water & Sewer Utility

Date received: 04/14/2023

Engineering firm: Marathon Technical Services, LLC

Professional Engineer: Mark Thompson, P.E.

Regional DNR Contact: Kyle Priest, 473 Griffith Ave, Wisconsin Rapids, WI 54494, (715) 315-8094, kyle.priest@wisconsin.gov

DNR Plan Reviewer: McCrea Baker, 101 South Webster Street, Madison, WI 53703, (608) 279-8426, mccrea.baker@wisconsin.gov

Project description: On behalf of the Village of Kronenwetter (Village), Marathon Technical Services, LLC submitted a Well Site Investigation Report (WSIR) for the proposed Well No. 3. The department is hereby approving the WSIR and the well site subject to the conditions below.

Background: The Village water system currently consists of two groundwater wells (Well Nos. 1 and 2), a metering station to receive water from the Village of Rothschild, a 300,000-gallon elevated storage tank, and a distribution system. Treatment at Well Nos. 1 and 2 consists of sodium hypochlorite addition for disinfection and fluorosilicic acid addition for community dental health purposes. Blended phosphate is added at Well No. 2 for manganese sequestration. The department reviewed and approved the metering station for a permanent interconnection with the Village of Rothschild water system under project number W-2021-0901A and approval letter dated August 18, 2022. This metering station is currently not used.

The department approved the construction of a new water treatment facility adjacent to existing Well No. 2 for iron and manganese removal under project number W-2023-0199 and letter dated March 31, 2023. The treatment for Well No. 2 will consist of potassium permanganate and sodium hypochlorite addition for oxidation followed by detention tanks, pressure filtration for iron and manganese removal, post-filtration sodium hypochlorite

addition for disinfection, and fluoride addition for community dental health benefits. The new treatment facility will be constructed with additional space for equipment to provide treatment for another water source.

Proposed Well Site: The proposed well site is located on a Village owned property where the existing elevated storage tank is located near the intersection of Pine Road and Tower Road. Access to the well site will be provided through an existing access drive to the elevated storage tank on Pine Road. The well site is approximately 10 acres, though the well will be located on the south side of the property near the elevated tank. It is anticipated that the well will be located 60 feet north of the south property boundary and 90 feet east of the west property boundary. The current and historical land use of the well site has been a green space and utilized for the location of the Village's elevated storage tank. Land use to the north, south, and west consists of forest and an elementary school. Land use to the east consists of residential homes. The property description is the SE ¼ of the NE ¼ of Section 2, Township 27 North, Range 7E, Village of Kronenwetter, Marathon County, Wisconsin.

Final well site coordinates:

Latitude: 44.85155° N

Longitude: 89.63029° W

High Capacity Well Number: 94232

The groundwater flow direction in this area is from southwest to northeast. A large portion of the well site is located in a floodplain, however, the proposed well location on the well site is outside of the floodplain boundary. Reportedly, the well site will be graded to ensure the pumphouse floor elevation is a minimum of 2 feet above the regional flood elevation if the final well is constructed in this location. The proposed well site is not located in a wetland. The proposed well location is a minimum of 200 feet from the nearest sanitary sewer and a minimum of 50 feet from the nearest storm sewer. The proposed well location is approximately 300 feet northwest of an existing single-family home POWTS dispersal component. Reportedly, water and sewer stubs were provided to the residential home, but the residence was not required to connect to the municipal utilities. Prior to bringing final Well No. 3 online, all residential POWTS dispersal components within 400 feet of the proposed well location must be abandoned. The well site reportedly meets all the other minimum separation distances to contamination sources listed in s. NR 811.12(5)(d), Wis. Adm. Code.

The nearest well serving the Village water system is Well No. 2 which is located approximately 0.85 miles southeast of the proposed well location. The nearest well serving another utility is located approximately 1.2 miles to the northwest in the Village of Weston. It is not believed that the proposed well will have an adverse effect on any nearby wells owned by a water utility. If there is an actual adverse effect caused by the proposed well to nearby utility wells, or any other wells, the injured party may seek relief under the reasonableness of use tests set forth in State of Wisconsin v. Michels Pipeline Construction, Inc., 63, Wis. 2nd, 278 (1974).

Test well: The proposed well site was investigated as a well site in the late 1980s. A test well was constructed on the well site in 1989 to determine the aquifer water quality and quantity. The test well was drilled to a depth of 90 feet through the sand and gravel formation. Reportedly, the test well produced water with high iron and manganese levels. At the time, the water system elected to pursue other well sites that would not require treatment. The Village anticipates constructing a new test well on the well site prior to constructing the final well to determine water quality and quantity in the unconfined formation.

Alternate well sites for Well No. 3 were considered through multiple desktop studies and test wells. Other well sites did not produce favorable water quality or quantity. It is anticipated that the proposed well site will require treatment, and that a raw water transmission main would direct water from the new well to the treatment facility adjacent to Well No. 2 for treatment.

Anticipated final Well No. 3 construction: The construction details of final Well No. 3 will be determined following the construction and testing of the test well. The anticipated final design of Well No. 3 includes an 18-inch diameter casing installed to 65 feet and an 18-inch diameter screen extending from 65 feet to 90 feet. The well will draw water from the shallow unconsolidated sand and gravel formation.

Associated improvements: The construction or installation of the pumphouse, well pump, any necessary water treatment, pump discharge piping, chemical feed equipment, and raw water transmission main is not being approved at this time. Plans and specifications for these improvements must be submitted to the department for review and approval following the construction and test pumping of the final well.

Approval conditions related to Chapters NR 810 and NR 811, Wis. Adm. Code:

1. Final plans and specifications for the construction of Well No. 3 and the pumphouse, transmission main, and any treatment, along with any required DNR checklists shall be submitted to the department for review and written approval prior to constructing the well, installing the permanent pump in the well, or constructing the other improvements. (s. NR 108.04(2), Wis. Adm. Code)
2. Any existing sanitary sewers located within 50 to 200 feet of a final well site shall be lined with CIPP or replaced with water main class pipe as approved by the department in writing prior to placing Well No. 3 in service. (ss. NR 811.12(5)(d)2.&3., Wis. Adm. Code)
3. Any existing private onsite wastewater treatment system dispersal components located within 400 feet of the proposed well location must be removed from service prior to bringing the final well online. (s. NR 811.12(5)(d)6., Wis. Adm. Code)
4. The final well shall be located no less than 50 feet from any property boundary. (s. NR 811.12(5)(a), Wis. Adm. Code)
5. The floor of any future pumphouse shall be a minimum of 2 feet above the regional flood elevation. (s. NR 811.25(1)(d), Wis. Adm. Code)
6. A test well shall be drilled for permanent wells proposed in unconsolidated formations to determine geologic formation information and water quality and quantity data. (s. NR 811.12(1)(g)1., Wis. Adm. Code)

Approval constraints: The project was reviewed in accordance with ss. 281.34 and 281.41, Wis. Stats. for compliance with Chapters NR 108, NR 810, NR 811 and NR 820, Wis. Adm. Code and is hereby approved in accordance with ss. 281.34 and 281.41, Wis. Stats. subject to the conditions listed above. This approval is valid for two years from the date of approval. If construction or installation of the improvements has not commenced within two years the approval shall become void and a new application must be made and approval obtained prior to commencing construction or installation.

This approval is based on the applicant's representation that the plans and specifications submitted to the department are complete and accurately represent the project being approved. Discovery that the applicant failed to submit complete and accurate plans and specifications may void this approval.

Be advised that this project may require permits or approvals from other federal, state or local authorities. For example, a certificate of authority from the Public Service Commission of Wisconsin may be required per s. 196.49, Wis. Stats. and ch. PSC 184, Wis. Adm. Code.

Appeal rights: If you believe that you have a right to challenge this decision, you should know that the Wisconsin Statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. To request a contested case hearing pursuant to s. 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the

Secretary of the Department of Natural Resources. Requests for contested case hearings must be made in accordance with ch. NR 2, Wis. Adm. Code. Filing a request for a contested case hearing does not extend the 30 day period for filing a petition for judicial review. For judicial review of a decision pursuant to ss. 227.52 and 227.53, Wis. Stats., you must file your petition with the appropriate circuit court and serve the petition on the Department within 30 days after the decision is mailed. A petition for judicial review must name the Department of Natural Resources as the respondent.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

For the Secretary

A handwritten signature in blue ink, appearing to read 'McCrea J. Baker', is written over a horizontal line.

McCrea J. Baker, P.E.
Public Water Engineering Section
Bureau of Drinking Water and Groundwater

cc: Dan Hekrdle – Director of Public Works, Village of Kronenwetter
Mark Thompson, P.E. – Marathon Technical Services, LLC., Wausau
Kyle Priest – DNR, Wisconsin Rapids
Troy Stapelmann – DNR, Eau Claire
Rachel Greve – DNR, Madison
WG&NHS – Madison
PSC – Madison