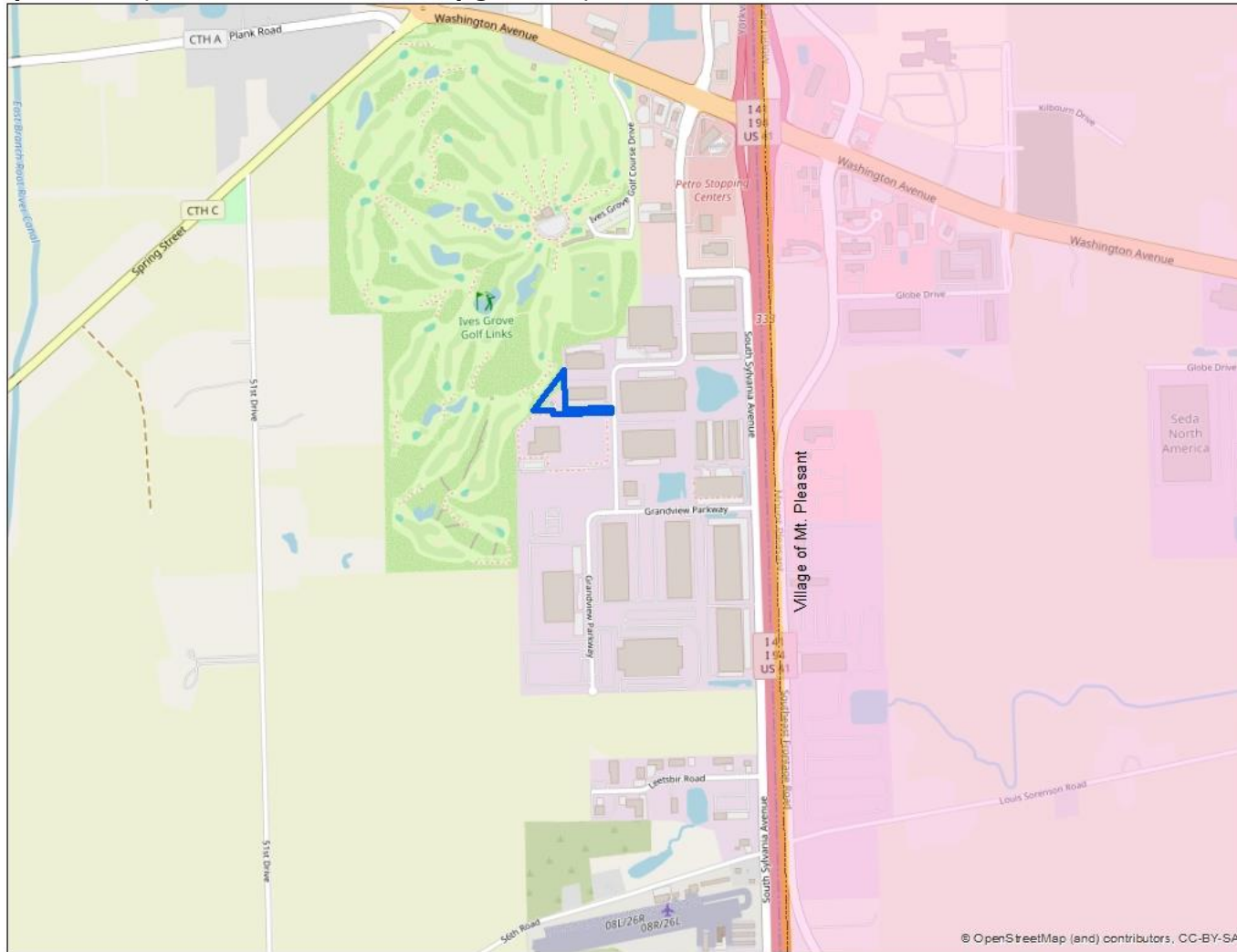


Village of Yorkville, Owner
Yorkville Sewer / Water Commission, Yorkville Water Utility District #1, Applicant (Michael McKinney, Agent)
Site Address: 1400 Grandview Parkway

Location Map

M-3 & P-2 Site Plan Review for proposed improvements to the Village of Yorkville's existing water tower site, includes new redundant water production well (Well #2); installation of raw water main infrastructure & appurtenances; installation of piping, valves & meter; electrical & controls improvements; installation of a new backup generator; & miscellaneous site restoration



SEC 13 – T3N – R21E

Village of Yorkville

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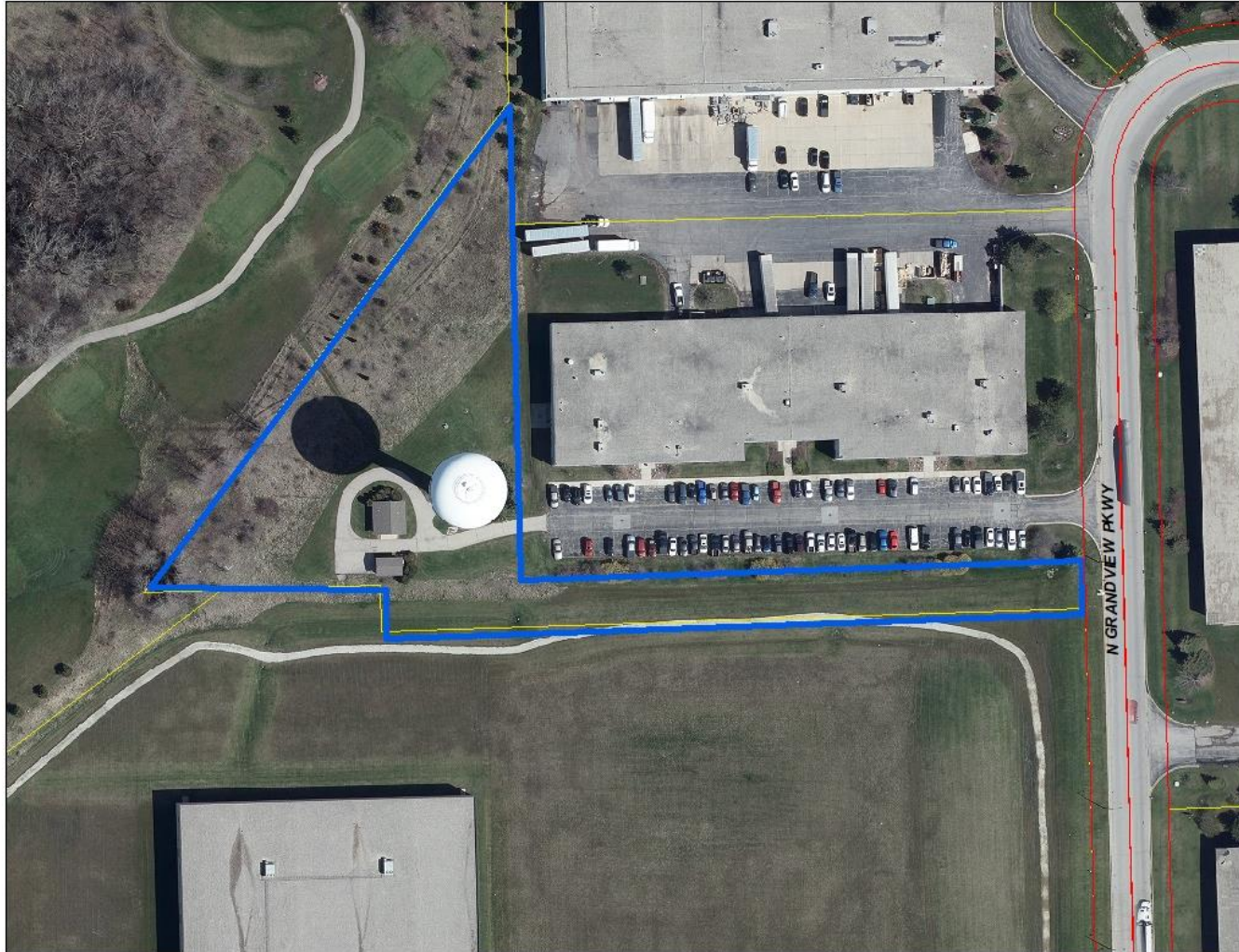
SEC 13 – T3N – R21E

Village of Yorkville

Village of Yorkville, Owner
Yorkville Sewer / Water Commission, Yorkville Water Utility District #1, Applicant (Michael McKinney, Agent)
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2022 Aerial

M-3 & P-2 Site Plan Review for proposed improvements to the Village of Yorkville's existing water tower site, includes new redundant water production well (Well #2); installation of raw water main infrastructure & appurtenances; installation of piping, valves & meter; electrical & controls improvements; installation of a new backup generator; & miscellaneous site restoration



SEC 13 – T3N – R21E

Village of Yorkville



Project Owner:

RECEIVED
 SEP 27 2024
 RACINE COUNTY

VILLAGE OF YORKVILLE
 YORKVILLE WELL #2
 RACINE COUNTY, WISCONSIN

Site plan shall be prepared and submitted to the Board of Supervisors of the Village of Yorkville, Wisconsin, for their review and approval. The Board of Supervisors may require the applicant to provide additional information or to revise the site plan. The Board of Supervisors may also require the applicant to provide a copy of the site plan to the Racine County Engineer for his review and approval. The Board of Supervisors may also require the applicant to provide a copy of the site plan to the Racine County Engineer for his review and approval.

Site Plan
 Checked By: [Signature]
 Drawn By: [Signature]
 Project Name: YORKVILLE WELL #2
 Date: 09/27/24

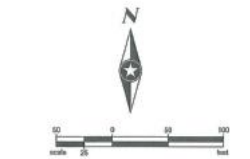
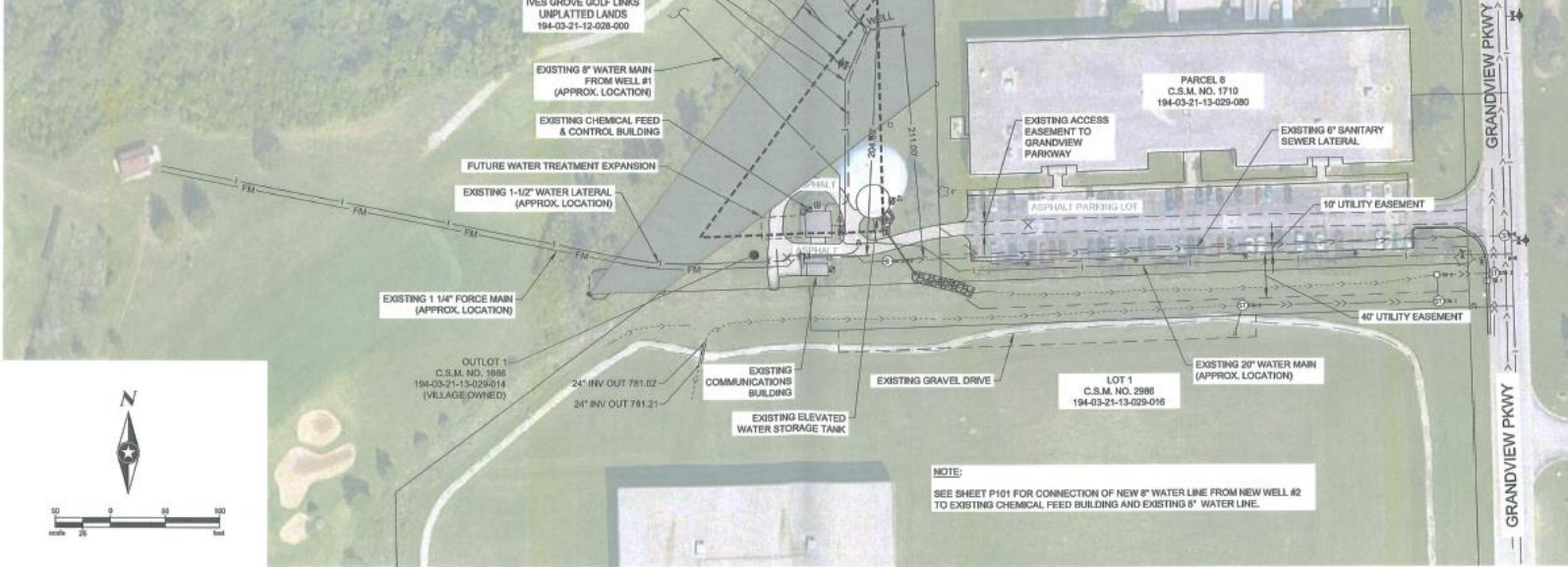
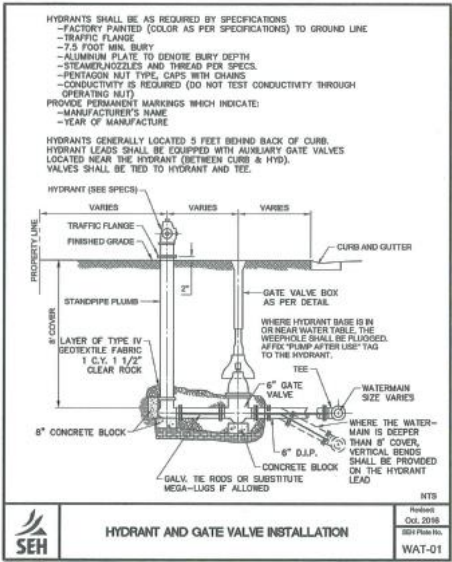
REVISIONS

NO.	DESCRIPTION	DATE

SITE PLAN

C001

27

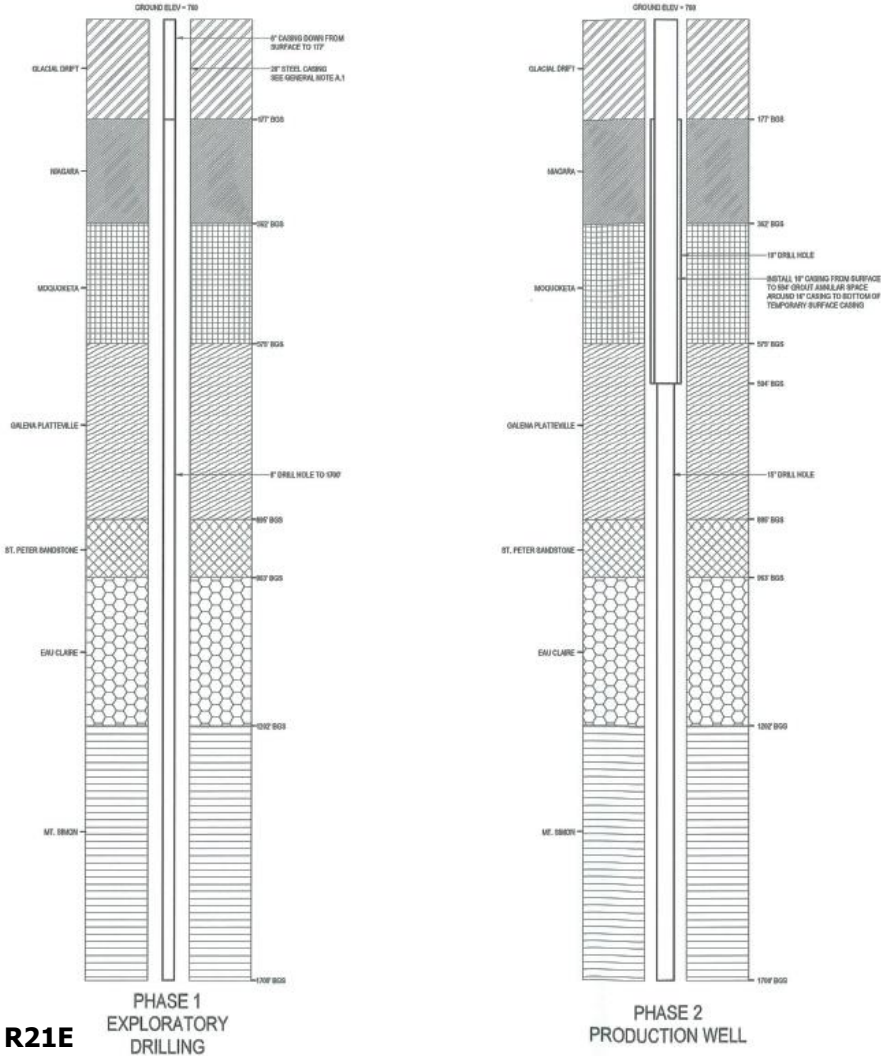


NOTE:
 SEE SHEET P101 FOR CONNECTION OF NEW 8" WATER LINE FROM NEW WELL #2 TO EXISTING CHEMICAL FEED BUILDING AND EXISTING 8" WATER LINE.

SEC 13 – T3N – R21E
 Village of Yorkville

Village of Yorkville, Owner
 Yorkville Sewer / Water Commission, Yorkville Water Utility District #1, Applicant (Michael McKinney, Agent)

Well Plan



GENERAL NOTES

WELL NO. 2 IS TO BE CONSTRUCTED INTO TWO PHASES FOR THE PURPOSES OF FIRST ASSESSING THE FORMATION DEPTHS, GROUNDWATER QUALITY, AND CONFIRMING PRODUCTION WELL DESIGN.

- A. PHASE 1 - EXPLORATORY DRILLING IS ANTICIPATED TO BE CONSTRUCTED AS FOLLOWS:
 1. DRILLHOLE IS HIGH TEMPORARY STEEL CASING TO AN APPROPRIATE DEPTH OF 07 FEET THROUGH GLACIAL DRIFT AND AT LEAST 10 FEET INTO THE NIAGARA AQUIFER. CHECK TO ENSURE PLUMBNESS AND ALIGNMENT.
 2. INSTALL AN 8" HIGH STEEL CASING (WITH CENTRALIZER) INSIDE THE SURFACE CASING @ FEET - 177 FEET FOR A WORKING CASING DURING PILEOT DRIVING.
 3. DRILL 8" HIGH HORIZONTAL OPEN PILEOT HOLE, IDENTIFYING AND LOGGING LAYERS, UNTIL REACHES A DEPTH OF 170 FEET.
 4. PREPARE USED AND GEOLOGICAL LOGGING OF THE ENTIRE BOREHOLE.
 5. FUNDERS AND INITIAL TEST PUMPING EQUIPMENT.
 6. COORDINATE WITH ENGINEER TO SET TEST PUMPING EQUIPMENT WITH PACKERS.
 - a. PUMP BRINE APPROXIMATELY 700 FEET DEEP.
 - b. PACKERS AT 84 FEET AND 89 FEET.
 7. CONDUCT 24-HOUR CONSTANT RATE PUMP TEST.
 8. FALL DATE OF WATER QUALITY ANALYSIS.
- B. PHASE 2 - PRODUCTION WELL CONSTRUCTION IS ANTICIPATED AS FOLLOWS:
 1. REMOVE 8" HIGH WORKING CASING FROM INSIDE SURFACE CASING.
 2. ENLARGE 8" HIGH PILEOT HOLE TO 18" INCHES FROM 177 FEET TO 104 FEET.
 3. INSTALL 18" HIGH CASING FROM SURFACE @ FEET TO 104 FEET.
 4. GREAT ANNULAR SPACE AROUND 18" HIGH CASING TO BOTTOM OF TEMPORARY SURFACE CASING.
 5. CONTINUE GROUTING ANNULUS WHILE REMOVING 20" SURFACE CASING.
 6. ALLOW GROUT TO SET AND PROCEED TO DRILL 18" DIAMETER OPEN HOLE FROM THE BOTTOM OF THE 18" HIGH CASING TO A DEPTH OF 1206 FEET.
 7. DEVELOP WELL.
 8. STOP - GRINDDOWN PUMP TEST.
 9. 72 HOUR CONSTANT RATE PUMP TEST.
 10. FALL DATE OF WATER QUALITY ANALYSIS.
 11. TELETYPE.

THE TARGET YIELD FOR WELL NO. 2 PRODUCTION IS 800 GPM. HOWEVER, THE WELL MAY BE INITIALLY EQUIPPED WITH A PUMP OF LOWER CAPACITY, (200-400 GPM)



Client/Date



VILLAGE OF YORKVILLE
 YORKVILLE WELL #2
 RACINE COUNTY, WISCONSIN

This design is intended for the specific project and site conditions. It is not to be used for any other project or site without the written consent of the engineer. The engineer assumes no responsibility for the construction of the project or the performance of the project.

Author: Michael McKinney
 Checked By: [Signature]
 Date: 9/27/24

Project/Title: YORKVILLE WELL #2
 Issue Date: 9/27/24

WELL # YORKVILLE
 DATE

WELL 2 - WELL CONSTRUCTION WELL DRILLING

SEC 13 - T3N - R21E

Village of Yorkville