City of Reedsburg Wastewater Treatment Plant Project Town of Excelsior Board Meeting November 15, 2023

Project Need

The City of Reedsburg's existing wastewater treatment plant is located within the floodway and has been seriously impacted by flooding in both 2008 and 2018. Additionally, the treatment facility has become overloaded and portions of the treatment facility would need expansion or replacement.

Proposed Project Scope

- Construct new pumping station at the intersection of South Dewey Avenue and Division Street within the City of Reedsburg. Extend sanitary sewer from the existing wastewater treatment plant on Division Street to the new pumping station.
- 2. Extend two 18 inch diameter pipelines to convey pumped wastewater from the pumping station to the new wastewater treatment plant site, located between Wengel Drive and Golf Course Road.
- 3. Construct a new wastewater treatment plant on the parcel owned by the City of Reedsburg east of and adjacent to the City's public works facilities. (WWTP site plan included as attachment.)
- 4. Install new 30 inch effluent (treated wastewater) pipeline to convey treated wastewater back to the Baraboo River. Proposed route would follow Golf Course Road to the intersection with Junction Road, then extend east along Junction Road to STH 136. Discharge would occur at the STH 136 Bridge. The entire pipeline is proposed within the Townships' and State ROW. (effluent pipeline route included as an attachment, example photo attached depicting potential outfall).

Anticipated Impacts to Town Residents

- From new wastewater treatment plant
 - Noise: Minimal impact. Noise generation potential is primarily associated with blowers and standby generators. Proposed blowers and generator will have sound attenuating enclosures.
 - Odor: Minimal impact. High odor potential structures located on west end of site and all include odor treatment systems. Biosolids odors will be minimized through drying and pelletizing.
 - Traffic: Minor impact during construction. Construction traffic planned to enter site through Wengel Drive. Minimal impact during operations; normal traffic includes 4-6 staff cars and septic haulers. All normal traffic to enter through Wengel Drive. Bi annually (spring and fall) biosolids hauling will exit site through Golf Course Road.
- Effluent Pipeline:
 - Construction: During construction portions of roadways along effluent pipeline will be closed.
 Access will be provided to all residents homes as well as mail/trash pickup during construction.
 - Post Construction: No observable impact. Project will repave entire outfall route. Manholes will
 exist within road ROW. Effluent will be discharged direct to Baraboo River with better quality
 than the river.

What is the WWTP Effluent compared to the Baraboo River:

Average Volume (cubic feet per second) Quality**	<u>Baraboo River</u> 253 (at EX WWTP)	<u>WWTP Effluent</u> 3.6 – 4.5*
Turbidity (parts per million TSS) Phosphorus (parts per million)	30 0.16 – 0.2	<10 PPM <0.25 PPM

All discharges will comply with DNR requirements and have been analyzed to be deemed acceptable for the Baraboo River.

^{*}Range represents current annual average through design annual average flows.

^{**}New WWTP is being designed for significant improvement to effluent quality as compared to existing. Anticipate approximately 2 – 4 times better effluent quality.





