



Service is Our Nature

GRAND RAPIDS WATER TREATMENT PLANT RENOVATION PROJECT

500 SE Fourth Street • Grand Rapids, Minnesota 55744

Project Summary

The proposed Grand Rapids Water Treatment Plant Renovation Project includes the necessary upgrades to provide the thriving greater Grand Rapids community with reliable, affordable, high-quality, potable water.



Project Background

- ❖ Grand Rapids Public Utilities (GRPU) provides water service to the cities of Grand Rapids and LaPrairie, and the Itasca Community College/University of Minnesota campus. The population served is ~12,000.
- ❖ The water system relies on five wells and one treatment plant to produce one to two million gallons per day. Treatment consists of aeration, gravity filtration, fluoridation, and zeolite ion exchange for softening.
- ❖ GRPU conducted a Comprehensive Water Plan in 2020 that analyzed the existing water system facilities and evaluated the future needs based on projected growth within the City of Grand Rapids.
- ❖ Expected growth and redevelopment, in and around Grand Rapids, would add approximately 5,600 people and a significant expansion of commercial and industrial users to the GRPU water system.
- ❖ The existing 33-year-old treatment facility, with its original equipment, has served the community well for three decades, but it is reaching the end of its useful life and an upgrade is vital to ensure the ability to serve the future demands of the growing Grand Rapids community without suffering water shortfalls.
- ❖ The 1987 treatment building itself is sound; however, it needs a new roof, HVAC and lighting upgrades.
- ❖ Pre-design investigation shows that through thoughtful process and equipment upgrades, the increased capacity needed can be obtained within the footprint of the existing facilities with this Renovation Project.
- ❖ The Project includes upgrading well pumps to increase well efficiency, and secure well houses will be constructed at two wells as identified in the recent America's Water Infrastructure Act (AWIA) audit.
- ❖ The Project includes upgrades to equipment that has far lower efficiencies than today's pumps. High efficiency pumps with VFDs will not only increase capacity, but will also increase the energy efficiency of the treatment operations and provide an electric bill savings of over \$1,200 per month.
- ❖ The Project includes replacing the outdated motor control center and SCADA instrumentation with modern equipment to help reduce maintenance downtime, improve reliability, and lower operating costs.

GRAND RAPIDS

WATER TREATMENT PLANT

RENOVATION PROJECT

Project Timeline

❖ Preliminary Design	August 2021 to February 2022
❖ Design	March 2022 to August 2022
❖ Contractor Bidding and Procurement	September 2022 to October 2022
❖ Construction	November 2022 to December 2023

Project Cost & Funding

❖ Opinion of cost based on preliminary design	\$5,170,000
❖ GRPU funds (CAPEX replacement funds, rate revenue, bonds)	\$2,670,000
❖ Funding needed	\$2,500,000

Project Need

- ❖ Grand Rapids is the preferred location for most of the area's future housing development. From 2010 to 2019, Grand Rapids saw a 4.79% increase in population, the highest in the Arrowhead region. [MN State Demographer]
- ❖ In 2020, the City of Grand Rapids permitted \$57.7M in new construction:
 - 19 New Single Family (6 Twin-homes, 6 manufactured, & 7 site built SFD's) - \$3.42M
(11 in 2018, 16 in 2019, Ten year – year-end average = 12.7)
 - Major New Commercial
 - The Pillars – New Senior Housing Facility – 118 units - \$17M
 - Unique Opportunities – New Apartment Building - 48 units - \$3M
 - Aurora Heights – New Apartment Bldg. and Townhomes - \$10.2M
 - Grand Rapids Hotel Properties – New 82 Room Hotel - \$7.2M
 - Grand Rapids Sawmill Retail – New 3-Tenant Strip Mall - \$1.5M
 - New Institutional
 - ICC – New Student Center/Remodel Media Center – \$3.67M
- ❖ In 2022, a \$4M construction project will begin on the extension of GRPU water and sanitary sewer infrastructure to the former Ainsworth site, a 130-acre industrial park, with the help of a Public Infrastructure Grant from the U.S. EDA, American Rescue Plan monies, and funding from both the cities of Grand Rapids and Cohasset.
- ❖ For GRPU to fund this Water Treatment Plant Renovation Project without State support, the customer water rates would need to increase by over 20% to cover operations, capital and the significant new debt.
- ❖ With the requested \$2.5M in State bonding funds, GRPU could keep the water rate increase closer to 7%.
- ❖ Funding assistance for this Project is essential to keep water rates affordable for the GRPU customers. The 2020 census data shows that the median household income for Grand Rapids residents (\$48,287) is 35% below the state median household income (\$74,593).