

**City of Miamisburg's Water Treatment Facility Softening Improvements
Construction Project, FS390593-0039**

**February 1, 2016 Project Fact Sheet: Request for Public Input
Comments Requested by March 4, 2016 (30 days)**

Public Comment Period and Who to Contact for More Information

The City of Miamisburg appreciates your review of the following project fact sheet and is interested in hearing from you. If you have any questions, concerns, or comments on the information presented in this fact sheet, please list them on the form provided and return the form to Mr. Stephen Morrison, Project Manager, City of Miamisburg, 600 North Main Street, Miamisburg, Ohio 45342 by March 4, 2016. A representative of the city will respond to your concerns. Or, if you prefer to provide verbal comments, please contact Mr. Morrison at his office at 937-847-6492 between 8:00 A.M. and 4:00 P.M. You may also e-mail your comments to Mr. Morrison at: steve.morrison@cityofmiamisburg.org

Upon completing the 30-day comment period on this fact sheet and reporting to Ohio EPA's Division of Environmental and Financial Assistance on the results, the city will have met its responsibilities for notifying the public about the proposed project and the expected funding through Ohio EPA's Water Supply Revolving Loan Account (WSRLA) program, as well as involving the public in its decision-making process.

All written and verbal comments on this fact sheet will be responded to during the 30-day public comment period, and will become part of the public participation record sent to Ohio EPA's Division of Environmental and Financial Assistance. Recipients of this fact sheet may also receive a copy of Ohio EPA's environmental review document on this project and the city's proposal to finance these projects through the WSRLA program.

Introduction

The City of Miamisburg is proposing to upgrade its Water Treatment Facility (WTF) by adding a new softening process building and access drive on its remaining undeveloped property at 302 South Riverview Avenue.

According to city officials, the purpose of this project is to address problems associated with the hardness of the city's raw water by adding a softening process to the existing WTF treatment train. The addition of a softening process will reduce the hardness of the city's drinking water to below 150 mg/L. Softening will enhance the aesthetics of the city's

drinking water and provide customers with water quality similar to that of surrounding water utilities.

Four alternative softening processes were considered during the planning phase of the project.

Lime Softening,
Ion Exchange Softening,
Electrodialysis Reversal Softening, and
nanofiltration/reverse osmosis (NF/RO) membrane softening

The city selected the nanofiltration/reverse osmosis (NF/RO) membrane softening process for implementation because it has the lowest cost over the twenty year analysis period, requires a small footprint that can fit in the

WTF's limited acreage, and produces a better quality of water than some of the other softening processes. More information on the city's proposed project can be found below.

To produce a softened drinking water, the NF/RO process creates a safe but "extra hard" sidestream water to carry the hardness away from the plant. This sidestream will be released to the Great Miami River. The extra hard water discharged to the river already meets the standards set for such discharges and will be monitored by the OEPA similarly to every other discharge into the river. Discharging this water into a

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sanitary sewer was considered but was not elected because the wastewater treatment plant (WWTP) at the end of the sanitary sewer does not treat for water hardness prior to releasing water into the river, using the sewer would reduce the capacity of the sewer to carry sewage, and would require the cost to pass the hard water through the WWTP's treatment processes only to be released to the river thereafter.

Project Description

The proposed project has two main parts. First, a new building, roughly 106-feet by 70-feet, will be constructed at the south end of the existing WTF facility site to house the proposed NF/RO water softening equipment, skids, piping, high pressure pumps, production well, water treatment chemical room, and an isolated electrical room. Oversized doors will provide access for equipment to maneuver the NF/RO skids at the 302 South Riverview Avenue location. The high pressure pump room will be equipped with an overhead monorail hoist to assist in pump and valve maintenance.

Second, a new drive off South Riverview Avenue will be constructed to provide access to the proposed water softening building. The proposed site layout includes provisions for water treatment chemical unloading. The city proposes to complete this project with financial assistance from Ohio EPA's WSRLA program. See Figure 1

for the location of all the proposed improvements.

The existing security fence at the WRF will be extended around the proposed building, and an automatic rolling gate will be installed as part of the new roadway access drive. In addition, a minimum of two parking spaces and provisions for chemical unloading at a concrete paved area will be provided. The remainder of the site will be paved with asphalt. Other proposed improvements include (1) clearing and grubbing of an existing drainage swale on-site and directing storm water runoff to this location; (2) installing a new sanitary service which will route to the front of the facility and connect to the existing sanitary service; and (3) laying a new NF/RO concentrate discharge line that will pass under the CSX railroad and then continue to a discharge point on the bank of the Great Miami River. The latter project component will be required to meet all applicable National Pollutant Discharge Elimination System (NPDES) permit requirements.

Finally, electrical power will be supplied via the electrical equipment in the existing facility and brought to the new construction via buried ductbanks, and a new production well to supplement the existing wells and meet the 20-year demand predicated by demand projections and the new softening process will be constructed near the existing wellfield. Buried site piping

will be ductile iron pipe up to 30" in diameter.

Construction of all these proposed improvements will occur entirely within the existing WTF site and well field. Interruption of water service is expected to be limited during construction. Restoring the site to its original (or better) condition is an additional component of the proposed project.

The total estimated cost of the WTF Facility Softening improvements is \$19,000,000 of which \$15,200,000 is the estimate for construction. The remainder is for design and construction related engineering services and construction contingency.

Project Costs and Financial Effects

The city estimates that the proposed project's construction will cost \$15.2 million. Currently, the city is on the Final Intended Project Priority List for funding in the form of an Ohio EPA, 20 year, standard interest rate loan.

Starting in 2014, the City increased water and sewer utility rates to address critical needs for infrastructure improvements. The rate increases approved by City Council will enable the City to make important investments in the system over the next several years, while also keeping up with the impacts of inflation in the general operation of the systems, meeting increased regulatory requirements, and addressing

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the 20-year demand projections. The planned increases in water rates will be 18% in 2016 and 15% in 2017. After 2017, rates increases will stabilize to around 3% per year. A typical residential customer using on average 2200 cubic feet per quarter currently pays a fee of \$99.00 per quarter, or about \$396.00 a year. This fee is scheduled to increase to \$117 per quarter, or \$468.00 a year in January 2016. When expressed as a percentage of the city's latest median household income (MHI) figure of \$52,689, these annual fees are about 0.75% of the city's 2008-2012 MHI, and thus are considered to be generally affordable for an average residential water customer of Miamisburg.

Implementation Schedule

The city is currently designing the WTF Softening construction project. Advertisement is scheduled to take place on February 7, 2016 with bids opened on Wednesday, March 9, 2016. The city expects the WTF NF/RO construction project

will take approximately twenty-four months to complete. The construction of these improvements is expected to begin in June of 2016 and be completed in 2018.

Summary of Expected Construction Impacts

During this project, all of the proposed improvements will be installed within previously disturbed locations at the WTF property and the existing wellfield. For any ground disturbing activities, the contractor will be required to restore the area to its original (or better) condition. In addition, silt fences will be erected around construction areas. Reasonable efforts will be made to minimize trench widths and to construct around any existing trees and shrubs. The City expects there will be no tree removal needed to construct the WTF NF/RO building and related improvements. The project has been designed to stay within the WTF owned property and public right of way and the majority of the construction will be within the

WTF site. The contractor will also be responsible for addressing any spills from construction equipment, and not placing any fill within wetlands or floodplains.

Given the location of the proposed improvements on City owned property and public right of ways, city officials expect that these projects will not result in any adverse environmental or socio-economic impacts. Any effects can be addressed by routine mitigative measures to control impacts to surface water, floodplains, terrestrial habitats, air quality, noise and traffic levels, worker safety, energy use, and other important environmental attributes. Readers should note that Ohio EPA will review the contract documents for these projects to assure that these minimal components are included, and to prevent any short-term impacts from becoming significant, long-term concerns. The proposed production well location continues to be evaluated to meet local and Federal floodplain regulations.

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Figure 1, Location of Project Work (Softening Membrane Building, Maintenance Building and Outfall Piping)

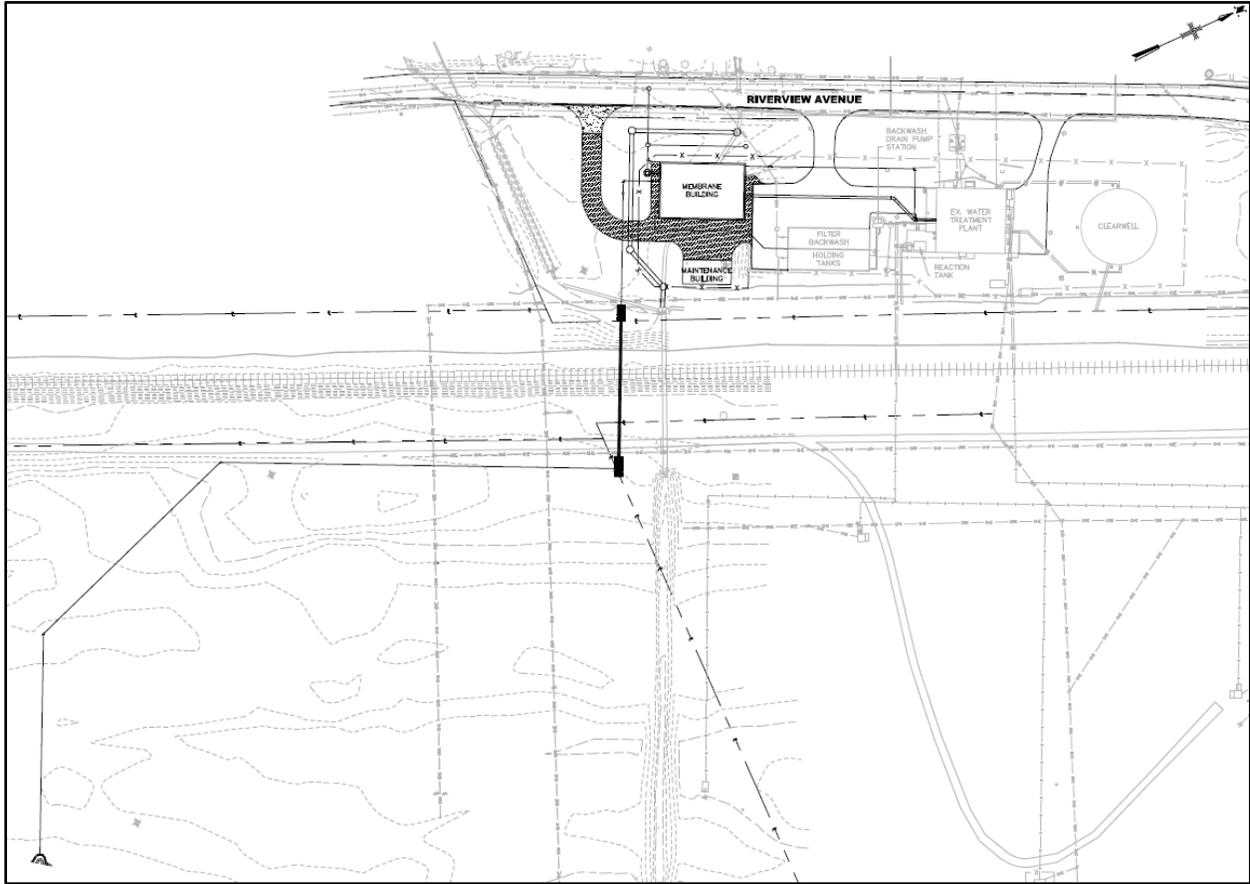


Figure 2, Location of Project Work (Proposed Production Well)

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Public Comment Sheet

Based on the information presented in the project fact sheet above, do you have any concerns that the city should address? If so, please list them below. The City will respond to your verbal or written comments which will become part of the public record on this project. Please note that your comments must be received by March 4, 2016.

Name

Telephone Number

Address

Comments

Please return comments to:

Mr. Stephen Morrison
Project Manager
City of Miamisburg
600 North Main Street
Miamisburg, Ohio 45342
Email: steve.morrison@cityofmiamisburg.org
Telephone: 937-847-6492