

April 15, 2021

Mr. Mike Gitter, P.E.
Interim-General Manager
Racine Water & Wastewater Utility
City Hall Annex - Room 227
800 Center Street
Racine, Wisconsin 53403

RE: 42-inch Plant to Perry Foxconn Water Main Analysis

Dear Mr. Gitter:

As part of the overall contract with the Village of Mount Pleasant to supply water for the TID 5 and Foxconn projects, various projects need to be constructed. Most of the projects have been constructed and completed with only a few projects remaining. One of these projects is a 42-inch water main from the treatment plant to Perry Avenue. This water main project, while not directly in the area of TID 5, is critical to the ability of the RWWU to supply the forecasted and contracted demand. This project is a deficiency project, which means that in addition to being necessary to meet the contractual requirements with Mount Pleasant, it is also needed for the proper operation and maintenance of the existing water main system to service all customers.

The proposed water main was initially identified as a needed project in the 2002 Water Service Provision Study for the Greater Racine Area and also in the 2017 Water System Study for the Racine Water Utility. Under the current system, without this project, the Perry and Newman tanks do not operate properly and efficiently. Additionally, existing water mains within the City are close to their service life and are having an increased number of breaks. This not only causes service outages, but also causes greater operational issues for the Perry and Newman tanks and different pressure zones within the Racine Water Utility Service Area. The following items will occur in the event the projects do not proceed:

- If the existing system is left in place, any attempt to supply the contractual volume to Mount Pleasant TID 5 will result in over pressurization of the system in Racine.
 - This may result in additional water main breaks and a failure to provide the contracted volume.
- If the existing system is left in place, attempts to supply the full volume to TID 5 may result in excessive velocities in the existing system. This could result in water main damage or failure.
- The existing system cannot supply the full water volume required.

The proposed 42-inch water main provides water directly to the Perry and Newman tanks. These tanks then feed the system that will supply water to TID 5 and the Foxconn area. The 42-inch water main route also replaces portions of an existing aging 20-inch water main which has started to have a history of failures and breaks. The full supply needed from the 42-inch water main to the tanks in conjunction with the 48-inch water main between the tanks (completion by June 1, 2021) will make the system fully operational to supply and provide redundancy for the TID 5 and Foxconn areas as contractually required.

Bids for two of the three 42-inch water main projects have been received and recommended for construction. Both projects have long lead times for the pipe materials (steel and prestressed concrete) and any additional delay of the bid will not only delay completion, but will open the projects up to price increases. Current prices are being held, but we have seen recent increases in the cost of pipe products go up anywhere from 15 to 40 percent. Such a price increase would put these projects beyond their contingency value. Additionally, approximately half of the cost of these projects are being paid for within the agreement with Mount Pleasant. This amounts to approximately \$7 million in value plus potential PILOT payments of approximately \$300,000 annually.

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Given all the above items, we strongly recommend that the bids for the two projects, W-21-2, and W-21-3, 42-inch water main be awarded by the Utility.

If you have any questions on the above, please feel free to contact me.

Respectfully,

RUEKERT & MIELKE, INC.



Kenneth R. Ward, P.E. (WI)
Vice President/Office Manager
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KRW:sjs

cc: Evelin Garcia, Racine Water and Wastewater Utilities
Chad W. Regalia, P. E., Racine Water & Wastewater Utility