MEMORANDUM

TO: Tad Johnsen, Director, Utilities

FROM: David Storvick, Engineering Manager

DATE: October 25, 2018

SUBJECT: Response to John Conway's Inquiry on Water Bond Projects

The following comments from John Conway were forwarded to Water and Light staff from Councilman Trapp (Staff's response have been imbedded following each inquiry):

"When the updated "Jacobs Report" was submitted to the WLAB, I remember the proposal to replace the Prathersville Tower with a new 2.0 MG Elevated Storage Tank. I went back to the Jacobs Report to review the details for the size and related Water Storage Tank details. The attached spreadsheet summarizes what was in the Jacobs engineering report. Will there sufficient funds in the Water Bond Issue to build the Southwest Elevated Storage Tank? Since the size of the new tank for the Southwest in the Water Bond Issue has not been disclosed, I assumed it would be the same size as the Prathersville Tank since the Southwest Tank will be built first. Why are there not more design details of this tank since it was a part of the Water Bond Issue?"

Staff has preliminarily modeled the proposed Southwest Elevated Storage Tank and estimated the tank size to be 1.5 MG. The \$3,000,000 included under Project W0282 in the FY18 Water Bond is based on a typical average cost of \$2.00 per gallon for elevated tanks of this size. The project is in its preliminary planning stages and design details will be developed during the design phase of the project once funding becomes available. The detailed design of the elevated tank, based on hydraulic and geologic studies, is highly dependent on the location within the system and cannot be conducted until the final tank location has been determined. The final costs of land acquisition could have significant impacts to the overall project costs.

"Has the "Long Range Water System Study" by Jacobs dated January, 2015 ever been submitted to DNR for Approval?

Has the "2016 McBaine Water Treatment Plant Condition Assessment" by Black & Veatch ever been submitted to DNR for approval prior to going to final design?

Has the "Integrated Water Resource Plan" of 2017 by Black & Veatch ever been submitted to DNR for approval prior to going to final design?

Has the "2018 Update of the 2012 Preliminary Water Treatment Plant Expansion Study" by Carollo ever been submitted to DNR for approval prior to going to final design?

Please refer to Missouri Design Standards for Missouri Community Water Systems dated December 10, 2013 by DNR - Division of Environmental Quality - Public Drinking Water Branch for submittal of engineering reports before final design."

The above referenced reports have not been formally submitted to MDNR, as there is no specific requirement to do so. The Minimum Design Standards for Missouri Community Water Systems, effective December 10, 2013, does require an Engineering Report to be submitted for certain projects that meet identified criteria. These reports will be prepared and submitted to MDNR during the design phase of each project where a construction permit is required per the regulations. Article 1.1 of the Minimum Design Standards details the information to be included in Engineering Reports that are required to be submitted with the Construction Permit Application.

While a formal submittal of the above referenced reports is not required by MDNR, staff does work closely with MDNR to keep them abreast of our future planning and regularly seeks their input. During the development of the 2012 Preliminary Water Treatment Plant Expansion Study, MDNR staff were actively involved with plan reviews and provided feedback. A courtesy copy of the 2012 Preliminary Water Treatment Plant Expansion Study has been provided to MDNR. In addition, Columbia Water and Light participates in the Supervised Progam through MDNR. The majority of our distribution system projects, identified in our various long range studies and Capital Improvement Program, are detailed in our submissions for the Supervised Program renewal every five years.