

Engineering and Operations Committee Meeting

Minutes

January 19, 2017

The Chairperson convened the meeting at 1:30 P.M., Thursday, January 19, 2017, at the Lakeway Municipal Utility District's office located at 1097 Lohman's Crossing, Lakeway, Texas 78734-4459.

The following Engineering and Operations (E&O) Committee Members, General Manager (GM), and Board Liaison were in attendance:

Phil Lanier, *Chairperson*,
Earl Foster, *General Manager, Lakeway M.U.D.*,
Bob Rives, *Committee Member (Secretary)*,
Wayne Seime, *Committee Member*.

Not in attendance were:

Jerry Hietpas, *Board Member and Board Liaison to Committee*,
Beverly Carter, *Committee Member*.

The meeting's agenda had been distributed by e-mail to all committee members on January 16, 2017. The designated agenda for the meeting was:

1. Construction Project Update (W-2) & (S-5, I-4),
2. Review I & I Proposal for Work in Manholes and Collection Line Work,
3. Review Proposal for SCADA Panel Rehab Over a Three Year Period,
4. Review Bond Projects for CIP.

Mr. Lanier called the meeting to order at 1:30 P.M. and then turned it over to Mr. Foster for the introduction of agenda item number one. He stated that the mechanical-seal leakage problem on W-2 was fixed with cartage seals by Excel Construction Services to the satisfaction of L.M.U.D. and, as a result, that he and engineer Castleberry approved the final payout on January 12th for a sum of \$63,972.16. Furthermore, he mentioned that L.M.U.D. is now working on S-5 following a pre-con meeting with the City.

The next item was a review of the Inflow and Infiltration (I&I) work in manholes and collection lines. This is basically cleaning roots out of 560 feet of collection lines and placing a PVC wall liner after the general cleaning. The cost for this is nearly \$42,000. An additional

cost, at about \$18,000, is to seal and coat walls for manholes at 1113, 1122, 1128 Challenger and Challenger Cove. A further I&I item is the L-14 seal and coat wall of the discharge pipes against corrosion with a cost near \$12,000. Next item is to cut roots at Morning Cloud and seal the manhole along with 390 feet of 8-inch main-liner for a cost of about \$34,600. The final item has been added for an estimated cost of about \$34,000 and that is some rehab work at L-2. An odor problem was reported there and an investigation indicated that hydrogen sulfide was eating away at some of the pipe's lining. Temporary bio-filters helped with the corrosion problem but further work is deemed necessary to protect the pipes and fix the problem. The total estimated cost for all five items on the I&I work list is estimated at \$140,673. Mr. Foster indicated that he will need Board approval for this work and costs. It was motioned and seconded that, "The Committee recommend to the Board for approval all five proposals to the Inflow and Infiltration Work for an estimated cost of \$140,673." All committee members present approved the motion.

Mr. Foster proceeded to the System Control and Data Acquisitions (SCADA) mentioned in item three of the agenda. He told the committee that L.M.U.D. needed to replace and/or upgrade their present SCADA system within a three year period so as to keep up with desired industry standards. He mentioned that the monies would come out of Construction and Capital Programs. The SCADA rehab work would be at turnkey costs for all items. L.M.U.D. would purchase the necessary hardware and software and that Mr. Hasting would spend part of the next three years overseeing the project to completion. Mr. Foster noted that Mr. Hasting is retiring and moving to Montana. Mr. Hasting, however, has agreed to spend part of the winters in Lakeway over the next three years to see that the project is up and running. Because of his retirement and distance from Lakeway Mr. Foster says he has a back-up plan in case of any contingencies. The committee asked that Mr. Foster break down the rehab work into priorities by year for the Board, making sure that the most critical work be accomplished first, and to assure us that someone could be made available to assist with and/or finalize the work in case Mr. Hasting were not available for any reason. It was motioned and seconded that, "The Committee recommend that the Board replace and/or upgrade the present SCADA for L.M.U.D., and that this be accomplished within a three year period at a turnkey costs of about \$310,000." The motion was unanimously approved by the members present.

The last item on the agenda was a cursory review of the Bond projects for CIP. It was shown that the awarded projects for 2016 were completed under budget. However, two engineering projects in progress were over budget. Mr. Foster said that the I-4 under-drain ran over due to the inclusion of another pump, and the S-5 project was running over primarily due to unforeseen inflation. The committee talked about this latter problem and it was a general consensus that inflation and especially maintenance costs were going up anywhere from 8% to 15%, and that estimates of future capital projects should be increased by as much as 15%. Mr. Foster stated that L.M.U.D. would need about \$3.42 million extra to fund the necessary CIP. He could reduce most of this from the "general funds" but would still have to make up the difference.

Additionally, after reviewing the Scrubber System at the I-4 water treatment plant, the committee again conversed at length about the chlorine-gas safety issue in regards to loading and off-loading gas-cylinders. Again, the committee members were at odds on how to accomplish the task due to complexities of securing of an outdoor area. Industrial stats show that very few

major accidents ever occur during this procedure. Yet, some large chemical industries provide total enclosures in order to have scrubber systems available where transport tanker trucks are involved. Presently our personnel who handle the cylinders are fully in HASMAT compliance both with safety instructions and usage in protective clothing and safety equipment, as well as evacuation procedures in case of a major emergency (a catastrophic breakage of the cylinder or its valve system such that all the gas would be rapidly evacuated). The committee could not come to any conclusive assessments in solving the problem. The problem continues to be one of severity. Minor breaks in the valve or leaks to cylinders are containable by L.M.U.D. personnel; however, the problematic concern of major seam-rupture or a total breakage of the valve system could possibly create problems which might be beyond our present ability to readily and safely contain. Our future budgeted item for buying a scrubber system may not be adequate in case of a major *outdoor* breakage of a cylinder. After a discussion of the problem the committee did not have the knowledge as to how best answer or solve this problem. A fully contained indoor transfer system with a heavy-duty scrubber system seems an over-kill as the large size truck-to-loading dock enclosure may not even be a feasible answer. But other possibilities such as a water-flood system where the truck offloads over a sand filled concrete pit is another solution (however, water poured on chlorine gas can produce an acid which becomes yet another danger and problem). Because of the weight of the cylinder a major breakage would be difficult to contain by simply wrapping or enclosing the cylinder in a secure liner or box. In the past L.M.U.D. has checked with other companies on how they handle the situation but no viable solutions were found in an industry search.

The next meeting was called for February 16, 2017 at 1:30 P.M. With no further business Mr. Lanier closed the meet at 2:46 P.M.

The minutes have been read and approved by e-mail:

The minutes approved this 24th day of January, 2017.

Yeas 3, Nays 0, Abstain 0.

Robert Rives, Secretary, E&O Committee, Lakeway MUD