

City of Sheboygan  
2017-10-16

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BOARD OF WATERWORKS COMMISSIONERS - 4: 00 PM (Monday, October 16, 2017)Generated by Joe Trueblood on Tuesday, October 17, 2017

Members present:

Gerald Van De Kreeke, Mark Heinz.

Ray Haen, excused.

Staff/officials:

Superintendent Joe Trueblood

Visitors:

Amrou Atassi and Dan Lau, CDM Smith.

1. OPENING OF MEETINGPresident Van De Kreeke called the meeting to order at 4: 00 pm.

Pledge of AllegianceAll present recited the Pledge.

2. MINUTES

2.1 Approval of minutes from the September 18, 2017 meetingMotion by Commissioner Heinz, seconded by Commissioner Van De Kreeke, to approve the minutes.

Motion carried unanimously.

3. REPORTS

3.1 Financial reportsSuperintendent reviewed the financial reports for September.

Motion by Commissioner Van De Kreeke to accept, seconded by Commissioner Heinz.

Motion carried unanimously.

3.2 Superintendent's report including operations and construction-maintenance  
Superintendent reviewed the operations and construction-maintenance work for September.

Motion by Commissioner Van De Kreeke to accept, seconded by Commissioner Heinz.

Motion carried unanimously.

#### 4. ITEMS PREVIOUSLY HELD OVER FOR DISCUSSION AND POSSIBLE ACTION

4.1 Lead water service replacement program  
Superintendent reported ongoing progress.

There was discussion on spend-down timeframe for WDNR grant monies.

Intake feasibility project  
Superintendent introduced Mr. Atassi and Mr. Lau from CDM Smith.

Earlier this year, the Utility began an intake feasibility project with CDM Smith, and Superintendent reviewed some of the background.

There are several significant problems:

The Utility has only two active intake pipelines.

One of those pipelines dates to 1909 and is approaching the end of its working lifetime.

If the larger (36 ") pipeline were to fail, the remaining 30 " pipeline cannot deliver enough water for an average daily water production.

In addition, the suction well, where the pipelines terminate, dates to 1887 and is approaching the end of its working lifetime.

Both intakes are susceptible to frazil ice build-up.

Mr. Atassi then reviewed the final report, "Sheboygan Water Utility Raw Water Improvements."

During the study, CDM worked closely with Utility staff to compare four different options for addressing the above problems.

All options included a new 54 " intake pipeline approximately 4,000 - 5,000 feet

into Lake Michigan.

Option A included a new shorewell north of the plant and an integrated pump station.

Option B included a demo of the east basin and construction of a new shorewell in that location, along with an integrated pump station.

Option C included a new shorewell more easterly in Lake Michigan, along with an integrated pump station.

Option D included a new shorewell north of the plant and replacement of low lift pumps in existing structure but

at an elevation above max Lake levels.

Options A and D had cost estimates of \$25 - \$30 M.

Options B and C had cost estimates of >\$30 M.

A scoring rubric was developed to compare the options including factors for operation and maintenance, water quality, reliability and risk, and implementation.

Option A scored highest, with option C in second place.

CDM then completed a very preliminary layout of Option A, including a new shorewell, 54 " intake pipeline, pump station, raw water discharge piping, sitework, and instrumentation.

The estimate of overall project cost came in at \$28.5 M.

This figure is considered to be within +/- 30 % based on the preliminary conceptual status.

The Commissioners had some questions on construction techniques, pipe material selection, and construction timeframes.

There was also discussion on

industry-standard intake pipeline lengths in Lake Michigan and that the newer 36 " intake is shorter than standard.

Superintendent also advised the Board members of a recent pre-application meeting with WDNR and WI PSC to discuss the project.

Both regulatory entities expressed understanding of the need for the project.

The only initial concerns involved justification of the intake capacity and the need to go far enough into the Lake to ensure good water quality.

Superintendent and Commissioners thanked CDM for the good presentation.

Mr. Atassi and Mr. Lau then left the meeting.

There was some

additional discussion on the need for rates to increase to fund the project.

Superintendent indicated that the 9 % increase in 2018 would

be the start, but another increase would be needed prior to the start of construction, and it would need to be closer to 15 - 20 %.

After that, initial estimates indicate the need for

more modest bi-annual increases

of approximately 5 - 6 %.

However,

cost figures are very preliminary at this point.

Nonetheless, the Commissioners felt the project is necessary and timely.

South water tower project Superintendent reported that additional soil borings were taken and some logo options have been considered.

Georgia Avenue pump station project Superintendent reported that AECOM is preparing materials for submittal to WI PSC.

## 5. ITEMS FOR DISCUSSION AND POSSIBLE ACTION

5.1 Review financing timeline for south water tower and refinancing Superintendent reviewed a financing schedule prepared by Carol Wirth of WI Public Finance Professionals, LLC.

The schedule shows a timeline of events for new water revenue system bonds of \$4.855 M.

This amount includes \$2.4 M for the south water tower project and the remainder for refunding the 2007 water revenue bonds, which will be callable in 2018.

By refunding the 2007 bonds, the Utility will save approximately \$220,000 in reduced interest payments.

Election of officers Due to Commissioner Haen's illness, the Commissioners determined to remain in their current officer positions until the November Board meeting.

There was some discussion of Commissioner Heinz's upcoming plans, which will impact his service.

PSC code changes:

none

5.4 Review proposal for low lift pump # 6 impeller replacement  
Superintendent reviewed information on low lift pump # 6.

In 2005, the pump took the impact of plastic debris from a diver's bucket, and repairs were done on the impeller.

Recently staff inspected the impeller due to changes in operational status.

The impeller was found to be extremely degraded and worn through in large sections.

Although the pump remains operational, the impeller needs either repair or replacement.

Bill Swearingen worked with L&S Electric and determined that repair was infeasible, leaving replacement as the only option.

The impeller has a 17 week lead time due to difficulties with Allis Chalmers parts.

Commissioner Van De Kreeke made a motion, seconded by Commissioner Heinz, to approve the replacement cost of \$40,550

for this critical piece of pumping infrastructure.

Motion carried unanimously.

Review R.O. to Council on funding for new south water tower

Superintendent reviewed the R.O. addressing the water revenue bond issuance for the new south water tower and for refunding the 2007 water revenue bonds at a savings of approximately \$229,000.

Commissioner Heinz made a motion, seconded by Commissioner Van De Kreeke, to approve the R.O.

Motion carried unanimously.

Review R.O. to Council on water rate increase Superintendent reviewed the R.O. addressing the upcoming rate case, which is intended to offset inflationary cost increases, provide funds for water main installation and for infrastructure upgrades, including the new south water tower.

Commissioner Heinz made a motion, seconded by Commissioner Van De Kreeke, to approve the R.O.

Motion carried unanimously.

Inform Board of emergency replacement of pump/motor coupling on high lift # 5 Superintendent reviewed that the coupling on this pump failed, resulting in emergency repairs by L&S to supply a new 700 hp coupling, including all additional installation and alignment, at a total cost of \$11,465.

5.8 Review proposal for gull deterrent equipment Superintendent reviewed ongoing difficulties with sea gulls at the water treatment plant.

Utility staff had contacted Mr. Jeff Schukow, of Great Lakes Avian Pest Control, who provided a falcon patrol demo unit, which was used along with drone flights and simple wind-driven deterrents.

The falcon patrol unit includes solar power units, sound system, nest, movable falcon decoy, and controlling electronics.

The unit proved successful.

Commissioner Heinz made a motion, seconded by Commissioner Van De Kreeke, to purchase the falcon patrol unit at a cost of \$2,800 for use during the 2018 gull season and thereafter.

Motion carried unanimously.

Approve vouchers Commissioner Van De Kreeke made a motion, seconded by Commissioner Heinz, that gross payroll for September of \$151,930.66 and general vouchers of \$358,268.05 be allowed and accepted.

Motion carried unanimously.

## 6. PERSONNEL

6.1 Benefit change for staff obtaining advanced degrees Superintendent reviewed various information showing salary differences in business fields between staff members with a bachelor's vs. master's degree.

After discussion, Commissioner Heinz made a motion, seconded by Commissioner Van De Kreeke, authorizing a 6 % increase on base wage for staff earning a relevant master's degree while at the Utility and subject to the superintendent's approval.

Motion carried unanimously.

Review engineering department staffing Superintendent reported on discussions with various staff members about the necessary communication from the engineering department.

Superintendent recommended that the optimum department status would be to have an engineer training to take over for

the distribution supervisor upon his retirement, and at that time, a second civil engineering tech could be hired.

So the department would then consist of the distribution supervisor and two civil techs.

The Commissioners were in agreement but

expressed concern about finding a technical person who could also manage the supervisory duties.

Superintendent agreed that recruitment is difficult.

## 7. NEXT MEETING

7.1 Next meeting will take place on November 13, 2017.

8. ADJOURN

8.1 Motion to Adjourn Motion by Commissioner Van De Kreeke, seconded by Commissioner Heinz, to adjourn at 6: 07 pm.

Motion carried unanimously.