

VILLAGE OF LIBERTYVILLE
BOARD OF TRUSTEES
WATER & SEWER COMMITTEE

Tuesday, January 12, 2016
7:00 pm
Village Hall

Agenda

1. Call to Order
2. Minutes of December 8, 2015 Meeting
3. Water & Sewer Capital Improvement Project Update
4. Water & Sewer Rate Study Update
5. Wastewater Plant Screw Pump Wiring Repairs
6. Other
7. Adjournment

VILLAGE OF LIBERTYVILLE
BOARD OF TRUSTEES
WATER & SEWER COMMITTEE

Tuesday, December 8, 2015

7:00 pm
Village Hall

Minutes

Attendance

Committee: Trustee Scott Adams, Trustee Rich Moras
Village Board: Mayor Terry Wepler, Trustee Pete Garrity
Village Staff: Village Administrator Kevin Bowens, Finance Director Pat Wesolowski, Public Works Director Paul Kendzior, Assistant to the Director Laura Ditanto, Police Chief Clint Herdegen
Absent Trustee Donna Johnson

Agenda

1. Call to Order at 7:00 pm

2. Minutes of October 13, 2015 Meeting

The minutes were approved as written.

3. Water & Sewer Capital Improvement Project Update

(a) Peterson Road Interconnect:

All work on this project is complete except sampling. Staff anticipates start up of the watermain to happen on December 21, 2015.

(b) W. Park Avenue Easement:

The Village Attorney has been in contact with the resident on W. Park Avenue regarding the easement request. The resident was likely to appeal the decision regarding his fines for code compliance. Depending on the outcome, the Village could soon start condemnation proceedings.

(c) Inflow & Infiltration:

The project was completed by Michels Pipe Services. The work was done using cured-in-place pipe technology – which is a trenchless method.

(d) Grease Trap Program:

Grease trap inspections are up to date, no violations thus far. Staff is formalizing this system with the use of BS&A to track inspections. Staff plans to reinspect all commercial food preparations due to new restaurants coming to the Village, moving locations or closing down.

(e) Wastewater Treatment Plant Facilities/Master Plan:

Public Works continues to meet with RHMG Consulting Engineers to discuss the

project. RHMG will be working with Village staff to assemble several reports that are required by Village staff as part of the NPDES Requirements; and evaluate changes that may be necessary at the WWTP due to the NPDES requirements.

(f) WWTP Pretreatment Survey:

Staff received survey responses all the letters that were sent out except from the County for Winchester House. This pretreatment survey was completed to identify significant industrial users as a Special Condition of the NPDES permit.

(g) Underground Utilities Improvements – 2016 Program:

Staff is still on track to advertise for competitive contractor bids is mid-December, open bids in early January 2016 and start construction in mid-March, once the weather breaks.

4. Lake County Sewer Rate and Connection Fee Modifications

Lake County Public Works is raising their rates for connection to the Southeast Central Service Area which will affect new development making connection to the sanitary system. Their rates are being increased to \$1,280 per residential customer equivalent.

5. Water & Sewer Rate Study

The Finance Director, Assistant Finance Director and Assistant to the DPW met with the consultant from Municipal and Financial Services Group (MFSG) on November 23rd to review progress made on the project. The consultant has been working on rate models, projected revenues based on alternative rate models, looking at the Village's senior discount and projecting funding requirements for 20-year capital improvements plan. The consultant will present Village staff with rate models and recommendations in mid-December. Staff can present these findings at the January 2016 Water & Sewer Committee meeting.

6. Adjournment

The meeting was adjourned at 7:24 pm.

Respectfully Submitted:
Laura Ditanto, Assistant to the Director

Memorandum

To: Water & Sewer Committee

From: Public Works Staff

Date: January 6, 2016

Re: Staff Report

Item 3: Water and Sewer Capital Improvement Projects Update

- (a) Peterson Road Interconnect:
Startup is scheduled for January 5, 2016.
- (b) W. Park Avenue Easement:
A second written offer has been made to the homeowner.
- (c) Grease Trap Program:
Grease trap inspections are up to date and no violations thus far. Moving forward, Public Works and Community Development Staff will work together to develop a Fats, Oils & Grease (FOG) List for all applicable establishments in the Village. Public Works Utility crews will then inspect all public sewers immediately downstream of the establishments on the FOG List. If grease is observed in the line, inspections will be made by the Community Development Department for those establishment's grease traps that may be contributing to the grease build-up. Depending upon compliance follow-up inspections and enforcement procedures will be undertaken.
- (d) WWTP Pretreatment Survey:
 - Staff received survey responses all the letters that were sent out except from the County for Winchester House. As of December 23, 2015, The County told Village Staff that they would be sending the pretreatment survey to the Village.
 - Staff has received a Proposal from Baxter & Woodman for further assistance with Pretreatment Activities for our identified significant industrial users. This is a requirement of our new IEPA NPDES Permit (Special Condition 11) for the WWTP.
- (e) Underground Utilities Improvements – 2016 Program:
 - The tentative date for advertising for competitive contractor bids is January 13th.
 - The Bid Opening will be February 12th.
 - Construction is anticipated to start once the weather breaks, likely late March and be completed by the end of June.

Item 4: Water & Sewer Rate Study

Staff met with the consultant (MFSG) that is working on the water & sewer rate study and reviewed the preliminary assumptions they are including in the rate structure. Village staff provided additional information related to connection fees, underground assets, future capital improvements and estimated CLCJAWA water rates. MFSG will have a PowerPoint presentation at the meeting to review the water and sewer rates required to support the water and sewer system and to obtain input from the Committee.

Item 5: Wastewater Plant Screw Pump Wiring Repairs

The electrical wiring that supplies power from the lower level control panel to the upper level motors for the screw pumps at the Wastewater Treatment Plant is corroded, which is causing arcing and shorting out wiring circuits. Years of air saturated with moisture and hydrogen sulfides have corroded the electrical duct and subsequently has caused damage to the wiring that controls the operation of the screw pumps. Moisture is also entering the lower level control cabinet, which is increasing the risk of pump failure and

safety concerns. The screw pumps are the most critical component of the waste water treatment process at the plant and also ensure against sanitary sewer system backups.

Three proposals were obtained to address the electrical service wire issues for the screw pumps. The work involves replacing the corroded exterior duct with sealed conduits and replacing the wiring between the control panel and pump motors. Pieper Electric, Inc. provided the lowest cost proposal at \$22,980.00. The next two proposals were \$10,000 and \$20,000 more than Pieper Electric. Staff has placed this item on the 1/12/16 Village Board agenda requesting a waiver of bids to complete this work and accept the proposal from Pieper Electric, Inc.



VILLAGE BOARD AGENDA SUPPLEMENT

Meeting Date: January 12, 2016

Agenda Item: Waste Water Treatment Plant Screw Pump Wiring Repairs

Staff Recommendation: Waive Bidding Process and Accept Proposal from Pieper Electric, Inc.

Staff Contact: Paul Kendzior, P.E., C.F.M., Director of Public Works

Background: The electrical wiring that supplies power from the lower level control panel to the upper level pump motors for the screw pumps at the Waste Water Treatment Plant is corroded, which is causing arcing and shorting out wiring circuits. Years of air saturated with moisture and hydrogen sulfides have corroded the electrical duct that subsequently caused damage to the wiring that controls the screw pumps operation. Moisture is entering the lower level control cabinet, which is increasing the risk of pump failure and safety concerns.

Three proposals were obtained to address the electrical service wire issues for the screw pumps. The work involves replacing the corroded exterior duct with sealed conduits and replacing the wiring between the control panel and pump motors. Pieper Electric Inc. provided the lowest price Proposal and is the Staff's recommendation to perform the work for the not-to-exceed amount of \$22,980.00. Proposal results are as follows:

Pieper Electric, Inc.	\$22,980.00
Okeh Electric Company	\$38,000.00
Homestead Electric, LLC	\$49,800.00

Sufficient funding is available in the Water and Sewer Capital Improvement Fund (Account 20-2024-5-799). The screw pumps are the most critical component of the waste water treatment process at the plant, ensuring against sanitary sewer system backups. The recommendation is to waive the formal bidding process and accept the Proposal from Pieper Electric, Inc. to complete these critical repairs.

Four positive votes are required for approval.



PIEPER ELECTRIC, INC.

December 11, 2015
Libertyville WWTP
Attn. Steve Vella

RE: Screw Pump bldg. control wire and raceway repair. (Two prices)

Pieper Electric Inc. proposes to provide the following labor and material for the above referenced project per our inspections and conversations.

Replace wire only Inclusions:

- Tax exempt.
- Remove existing control wires and small power wires only and install new and reterminate onto existing terminals.
- Large power cables to remain.
- Test equipment.
- Normal working hours.
- Coordination with plant employees.

Total Price: \$8,995.00

Replace raceways Inclusions:

- Tax exempt.
- Remove all wires and cables and reuse if new and reterminate onto existing terminals and lugs.
- Install necessary new cables.
- Remove existing trough that is on exterior of bldg.
- Install with new GRC conduits and condulets.
- All exterior junction boxes to be stainless steel.
- Replace part of trough that protrudes through the wall only. Rest of trough above MCC to remain.
- Use existing junction box on upper floor and terminate new cables in this box.
- Test equipment. -
- Normal working hours.
- Coordination with plant employees.

Total Price: \$22,980.00

Exclusions:

Permit and utility fees
Temporary power and lighting
Damaged equipment, breakers, lighting, due to previous electrical problem.

Thank you for allowing me to quote on this project. If you have any questions, please call me.

Sincerely,

John J. Wicks Department Supervisor / Illinois Division

KENOSHA BRANCH Pieper Electric, Inc. 4210 43rd Avenue Kenosha, WI 53144 Tel. (847) 599-1774 www.pieperpower.com

Symbol, "Pieperpower" and "Certified Electrical Authority" are service marks of Pieper Electric, Inc., Milwaukee, Wisconsin.