

AGENDA REPORT

TO: Mayor & City Commissioners
FROM: Ken Hibl, City Manager
DATE: May 12, 2010
RE: Approval of Well-Cleaning Bids – Well #8



For the Agenda of May 17, 2010

Background. The City's departments have developed service schedules for all mechanical equipment and apparatus owned by the City, to include cleaning of its public water system wells. We strive to budget for and maintain the established schedules in an attempt to extend the life-cycle of our equipment. A recent requested evaluation (*see copy of att'd report*) of our water wells by Peerless-Midwest, Inc., indicates we have two wells requiring near-term attention – the most critical of these being Well #8. Based on this report, we solicited bids (*see copy of att'd memo of John Holland*) for cleaning of the well. We received two bids, the low bid being submitted by Peerless-Midwest, Inc. The City Commission is asked to approve the bids, thereby allowing the well to be cleaned.

Issues & Questions Specified. Should the City Commission approve the well-cleaning bids?

Alternatives.

1. Approve the bids.
2. Direct solicitation of additional bids.
3. Direct the well not be cleaned.
4. Set aside decision regarding this matter to a later date.

Financial Impact. The contractual cost to clean Well #8 is \$28,769.50. The Water Fund has funds available to complete this work.

Recommendation. I recommend that the City Commission approve the bids by adoption of Resolution 2010-040 (*copy att'd*).

Attachments.

1. Peerless-Midwest Report.
2. Resolution 2010-040.



PEERLESS-MIDWEST, INC.

505 APPLE TREE DRIVE / IONIA, MICHIGAN 48846
PHONE: 616/527-0050 FAX: 616/527-5508

Ken FYI

John

April 23, 2010

City of Clare
11175 South Eberhart
Clare, MI 48617-9611

Attention: Mr. John Holland

Re: 2010 Annual Well and Pump Servicing & Testing

Dear Mr. Holland:

Please find enclosed updated service inspection reports with data from the recently completed performance testing and inspection of your wells and pumping equipment.

Well #5 was not tested and has been abandoned in 2009.

Well #6 The well's specific capacity (SC) has remained about the same as in 2009 at 4.7 gpm/ft drawdown compared to the last test in 2009 but at a lower flow rate. This well was cleaned in 2007 and specific capacity has remained between 4.4 and 4.9. At 302 gpm the well was breaking suction. You should clean this well. **It is inevitable the well will need cleaned with increasing frequency and substantial effort given the age and the high iron content of the water. You should consider replacing this well since it was drilled in 1966 and has probably lived its useful service life as evidenced by the increasing frequency of cleanings.**

Pump #6 The pump in this well is producing 225 GPM @ 28 pounds of pressure at the surface and 58.7' pumping level. The pump is off its design curve by 8%, but is right on the curve at shut-off. This typically indicates an iron plugging problem. The pump most likely needs to be cleaned in place with acid to clear the pump of iron fouling and in-place cleaning of the well would accomplish this.

Meter @ Well #6 We have also noted the flow meter is off by 33% compared to the flow orifice used to test the well and it was off that much last year. The meter was reading 335 GPM compared to the orifice reading of 225 GPM at the same pressure of 28#. We recommend that the meter be rebuilt or replaced so that you may accurately measure how much flow the well is producing.

Pump #7 The pump in this well is producing 329 GPM @ 13 pounds of pressure at the surface and 71' pumping level. The pump is currently performing only 5% below its design curve. This pump is still in good shape. No other work is needed for the pump at this time.

Well #7 The well's specific capacity (SC) has decreased by about 10% to 6.2 gpm/ft drawdown compared to the last test in 2009. This is not enough for an immediate concern, but we will need to watch this closely during our testing next year. Considering the pattern of SC decline, this well may need to be cleaned in the next 1-2 years to insure a long service life.

Meter @ Well #7 We have also noted the flow meter is off by 9% compared to the flow orifice used to test the well. The meter was reading 390 GPM compared to the orifice reading of 369 GPM at the same pressure of 4#. We recommend that the meter be rebuilt so that you may accurately measure how much flow the well is producing.

Pump #8 The pump in this well is producing 358 GPM @ 11 pounds of pressure at the surface and 44.167' pumping level. This pump is designed to produce 700 GPM at 105' TDH. The pump was breaking suction at the system operating pressure of 11 psi. The pump is currently operating over 20% below its design curve and should be overhauled at the time the well is cleaned.

Well #8 The well's specific capacity has decreased dramatically (over 40%) this year and should be chemically cleaned as soon as possible. This should be a top priority to prevent long term damage to the well as it has very high iron that will need cleaned before it gets too far out from the well bore.

High Service Pump #1 This pump is currently producing 166' TDH while flowing 1,050 GPM. The pump is currently performing 12.8% below its design curve with no change from last year. This is a meter test only, so there could be some error due to the meter's accuracy which we cannot verify. Also, the meter is after the filter so there is probably about 10' (3-4 psi) of head loss across the filters. We changed the motor oil and adjusted the packing. No other work is necessary at this time.

High Service Pump #2 This pump is currently producing 205' TDH while flowing 1060 GPM. The pump is operating right on its design curve factoring in a few pounds of head loss across the filter, therefore no further work is needed at this time. We changed the motor oil and adjusted the packing. No other work is necessary at this time.

We appreciate the opportunity to be of service to you with our annual inspection and testing program. A copy of the invoice for this work has been forwarded to your accounts payable and is attached to this letter. If you have any questions or would like to schedule this work, please contact me at 616-527-0050 or 616-490-1348.

Thank You,
PEERLESS-MIDWEST, INC.



Bob Masters
Project Manager

Enc.

INTEROFFICE MEMORANDUM

TO: KEN HIBL
FROM: JOHN HOLLAND
SUBJECT: WELL 8 BIDS
DATE: 5/11/2010
CC:

Ken

We received the following bids for the cleaning of Well 8.

Company	Total Price
Peerless-Midwest	\$ 28,769.50
Raymer Well Drilling	\$ 62,595.00
Layne-Northern	Received nothing
Brown Well Drilling	Declined to Bid

Both of the companies supplying bids have performed work for us in the past. Both have performed very well. Therefore, I will recommend Peerless-Midwest be awarded the bid.

John

CC: bids

RESOLUTION 2010-040

A RESOLUTION OF THE CLARE CITY COMMISSION APPROVING CONTRACT BIDS TO CLEAN WELL #8.

WHEREAS, the City solicited the services of Peerless-Midwest, Incorporated to conduct an evaluation of its public water wells to determine current flows and recommendations for maintenance and service; and

WHEREAS, based on the completion of said evaluation and the subsequent report of evaluation received from Peerless-Midwest, Inc., the City solicited bids to clean Well #8 due to the loss of production of said Well outlined in said report; and

WHEREAS, the City received two bids, the low bid being submitted by Peerless-Midwest; and

WHEREAS, the two bids received were submitted by companies known by the City by their respected reputations and past satisfactory work-relationship; and

WHEREAS, the City Staff can offer no justifiable reason not to accept the low bid.

NOW THEREFORE BE IT RESOLVED THAT, the Clare City Commission hereby approves the bids to clean Well #8 and awards the work related to said cleaning of said well to Peerless-Midwest, Incorporated for a cost not to exceed its bid price of \$28,769.50.

ALL RESOLUTIONS AND PARTS OF RESOLUTIONS INsofar AS THEY CONFLICT WITH THE PROVISIONS OF THIS RESOLUTION BE AND THE SAME ARE HEREBY RESCINDED.

The Resolution was introduced by Commissioner _____ and supported by Commissioner _____. The Resolution declared adopted by the following roll call vote:

YEAS:

NAYS:

ABSENT:

Resolution approved for adoption on this 17th day of May 2010.

Diane Schmidt, City Clerk