EXECUTIVE SUMMARY

TITLE: Water Treatment Plant #4 Rehabilitation – Approve Plans & Specs and Authorize Advertisement for Bids

RECOMMENDED ACTION: Motion to Adopt Resolution approving final plans and specifications, and authorizing advertisement for bids (Project No. 5318-5004).

POLICY CONSIDERATION: Does the City Council wish to continue to move forward with the renovation of Water Treatment Plant #4?

SUMMARY: Water Treatment Plant #4 is located at 4701 West 41st Street. It was removed from service on December 28, 2016. Staff has been working with the Minnesota Pollution Control Agency (MPCA) on a retrofit of the treatment plant. The City Council approved the consultant contract with AECOM to finalize plans for construction on July 17, 2017. The new treatment plant design will remove the current contaminants and is designed with the flexibility to add additional treatment processes in the future.

Project Schedule:
The following is the proposed schedule:

- Open Bids: October 26, 2017
- City Council approves construction contract: November 6, 2017
- Contractor begins project: November 2017
- Construction complete: Fall 2018

FINANCIAL OR BUDGET CONSIDERATION: The estimated cost for this project is $4,715,300. This project is included in the City’s Capital Improvement Program (CIP). Funding will be provided using General Obligation Revenue Bonds to be repaid by the Water Fund.

VISION CONSIDERATION: St. Louis Park is committed to being a leader in environmental stewardship. We will increase environmental consciousness and responsibility in all areas of city business.

SUPPORTING DOCUMENTS:
- Discussion
- Resolution

Prepared by: Joseph Shamla, Senior Engineering Project Manager
Mark Hanson, Public Works Superintendent

Reviewed by: Debra M. Heiser, Engineering Director

Approved by: Tom Harmening, City Manager
DISCUSSION

BACKGROUND: Water Treatment Plant #4 (SLP4) is located at 4701 West 41st Street. Staff has been working with the Minnesota Pollution Control Agency (MPCA) on a retrofit of the treatment plant. The MPCA hired the consulting firm AECOM to design the revised treatment plant to 90% plans. The City Council approved the consultant contract with AECOM to finalize plans for construction on July 17, 2017.

SLP4 is a water supply well in the City’s local water distribution system. The City removed SLP4 from service on December 28, 2016 due to concerns with trichloroethylene (TCE) effluent concentrations that were above the health risk limit (HRL) but below the maximum contaminant level (MCL).

AECOM submitted the 90% plans to the Minnesota Department of Health (MDH) and has received their approval. The review of the plans by MDH took longer than anticipated. Staff has also been working with the consultant on minor changes which were requested by the City when the consultant was under contract with the MPCA. The MPCA did not make the changes requested by the City because it was not part of their scope. These minor changes have delayed the schedule slightly. The completion of the work is still planned for Fall of 2018.

Generator and Chlorine Room
Staff worked with the consultant to change the design of the plant to include a new 500kw generator. The plan designed under the MPCA contract had two 250 kw generators (one existing and one new). Having two generators has more maintenance and also provides another item within the plant which could fail. During a power outage if one of the generators was to fail, the plant would need to shut down as it takes the power of both generators to run the plant.

Chlorine is needed to treat the water and must be handled with care. The MPCA design for the chlorine room required the 150 lb. chlorine cylinders to be brought in to the building using a ramp along the side of the building. Removing the existing 250w generator and installing a new 500kw generator in another location of the plant allows the chlorine room to be moved into the space currently occupied by the existing generator. This allows entrance to the chlorine room from the driveway which staff believes will be much safer for handling the chlorine cylinders.

Another benefit of having one 500 kw generator is the ability to enter the Xcel Energy off peak program. Xcel Energy will sell us power at a discounted price for all the power used on the property in exchange for switching to generator power during peak periods. This program is already in place at City Hall and several other treatment plants and has been working well.

The existing generator at SLP4 is still in good condition. Staff plans to utilize this generator at Well #8 which currently does not have a back-up generator. This will provide redundancy in the system in case of a power outage. After SLP4 goes out to bid, staff will be working with a consultant on relocating the existing generator to Well #8.

The estimated cost for the change in generators is approximately $365,000.

Ozone Equipment
Ozone equipment will be a part of the plans and specifications. As discussed last November, this equipment is not needed for the treatment of the current contaminants in the well, but would be used in the future should other contaminants, such as 1,4 Dioxane, reach the well. The ozone equipment is included in the bid document as a bid alternate. The cost of the ozone equipment is estimated to be around $700,000. If the ozone equipment is not installed at this time, the treatment plant will be constructed in the same layout, with space to add the ozone equipment in the future.
**Financial Consideration:**
This project is included in the City’s Capital Improvement Plan (CIP) for 2017 and 2018. Below is a summary of the costs and funding sources.

**Estimated Costs**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Construction costs</td>
<td>$3,500,000</td>
</tr>
<tr>
<td>500 kw generator</td>
<td>365,000</td>
</tr>
<tr>
<td>Contingency (10%)</td>
<td>$386,500</td>
</tr>
<tr>
<td>Engineering and administration (12%)</td>
<td>$463,800</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$4,715,300</strong></td>
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*This cost is higher than the July 17 report due to the generator improvements.
*Includes the expense for the Ozone equipment

**Funding Sources**

General Obligation Revenue Bonds/Water Fund $4,715,300

Staff is asking for approval of the plans and specifications and the authorization to advertise the project for bid. The proposed schedule is shown below.

**Project Schedule:**

The following is the proposed schedule:

- Open Bids: October 26, 2017
- City Council approves construction contract: November 6, 2017
- Contractor begins project: November 2017
- Construction complete: Fall 2018
RESOLUTION NO. 17-145

RESOLUTION APPROVING
FINAL PLANS AND SPECIFICATIONS,
AND AUTHORIZING ADVERTISEMENT FOR BIDS
FOR IMPROVEMENT PROJECT NO. 5318-5004

WHEREAS, the City Council of the City of St. Louis Park has received a report from the Project Manager related to the Water Treatment Plant #4 modifications.

NOW THEREFORE BE IT RESOLVED by the City Council of the City of St. Louis Park, Minnesota, that:

1. The Project Report regarding Project 5318-5004 is hereby accepted.
2. Such improvements as proposed are necessary, cost effective, and feasible as detailed in the project report.
3. The proposed project, designated as Project No. 5318-5004, is hereby established and ordered.
4. The final plans and specifications to construct these improvements, as prepared under the direction of the Project Manager, or designee, are approved.
5. The City Clerk shall prepare and cause to be inserted at least two weeks in the official City newspaper and in relevant industry publications an advertisement for bids for the making of said improvements under said-approved plans and specifications. The advertisement shall appear not less than ten (10) days prior to the date and time bids will be received by the City Clerk, and that no bids will be considered unless sealed and filed with the City Clerk and accompanied by a bid bond payable to the City for five (5) percent of the amount of the bid.
6. The Project Manager, or designee, shall report the receipt of bids to the City Council shortly after the letting date. The report shall include a tabulation of the bid results and a recommendation to the City Council.

Reviewed for Administration:                Adopted by the City Council September 18, 2017

Thomas K. Harmening, City Manager          Jake Spano, Mayor

Attest:

Melissa Kennedy, City Clerk