



# City of Blaine Anoka County, Minnesota

Blaine City Hall  
10801 Town Sq Dr NE  
Blaine MN 55449

## Legislation Text

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**File #:** RES 21-204, **Version:** 1

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**Administration** - *Jon Haukaas, Director of Public Works*

### **Title**

**Approve Purchase and Installation of Improvements to Lift Stations 17, 20, 21, 22, 26, and 27**

### **Executive Summary**

Staff has been in the process of upgrading older lift stations as the pumps and motors wear out. These improvements are included in annual Capital Improvement Program budgets.

This action approves the purchase and installation of improvements to six different lift stations by Electric Pump for an estimated amount of \$345,476.75 plus a requested 10% contingency to allow for unanticipated issues during the projects.

### **Background**

In 2018, staff went through a process to improve system efficiency, reduce redundancy and standardize equipment with a single pump manufacturer. A primary focus was to find a system that was better able to handle 'flushables' that cause clogging.

After researching all manufacturers' newest products it was determined that only the Flygt N style submersible pump provided the combination of material cutting and clog free operation that was being sought. This pump includes a hard iron impeller and the company provides a two-year clog free guarantee on their products. No other manufacturers were able to provide a competitive bid that met the equivalent specifications. The local distributor for this product is Electric Pump. Council approved standardizing on this pump manufacturer for system efficiency.

The following are the Lift Stations being considered for improvement, the issues of concern, and proposed work:

#### Lift Station 17

Work includes replacement of both pumps, guiderails, base elbows, discharge piping, and VFD controls for improved electric efficiency. The existing pumps are of different horsepower resulting in an unbalanced load. Pump #2 has developed a major vibration due to a shaft deflection. This station has also been experiencing regular clogging requiring weekly response. Estimated replacement cost is \$39,376.75.

#### Lift Station 20

Work includes the addition of a grinder pump and motor control center to manage the floating mat comprised of 'flushable' wipes and grease. Additionally base elbows and discharge piping are deteriorating requiring replacement. This station has also been experiencing regular clogging requiring weekly response. Estimated replacement cost is \$84,525.00.

#### Lift Station 21

Work includes the addition of a grinder pump and motor control center to manage the floating mat comprised of 'flushable' wipes and FOG (fats, oils, and grease). Additionally base elbows, guide rails (replace with stainless steel), discharge piping are deteriorating requiring replacement. The access hatch will be upgraded for clearance and to meet current safety regulations.

This is a major station serving a large portion of the city. The project will require at least five days and the hiring of a company to perform bypass pumping. Estimated project cost is \$109,120.00 plus \$17,650.00 for bypass pumping.

#### Lift Station 22

Work includes replacement of both pumps. The majority of appurtenances have been upgraded in the past ten years and are still in good shape. This station is currently running on only one pump as the redundant pump has already failed. Estimated replacement cost is \$26,455.00.

#### Lift Station 26 and 27

Work includes replacement of both pumps and VFD controls for improved electric efficiency. The majority of appurtenances have been upgraded in the past ten years and are still in good shape. LS 26 is currently running on only one pump as the redundant pump has already failed. These two stations are in the air park and are designed for interchangeability of parts. Estimated replacement cost is \$34,170.00 for each station.

Bids provided by Electric Pump to perform these needed improvements are as follows:

Lift Station 17	\$ 39,376.75
Lift Station 20	\$ 84,525.00
Lift Station 21	\$ 109,120.00
LS 21 Bypass Pumping	\$ 17,650.00
Lift Station 22	\$ 26,455.00
Lift Station 26	\$ 34,170.00
Lift Station 27	\$ 34,170.00
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	\$345,466.75
10% Contingency	\$ 34,546.68
<b>Total Approval Amount</b>	<hr/>
	\$ 380,013.43

City Council is also asked to approve a 10% contingency to bring the total project budget to \$380,013.43.

#### **Strategic Plan Relationship**

The reconstruction of these Lift Stations align with the City's strategic plan goal of a well-maintained infrastructure by providing a high-quality sanitary sewer collection system.

#### **Board/Commission Review**

N/A

#### **Financial Impact**

Funds for upgrades to several lift stations were included in the 2021 Capital Improvement budget.

**Public Outreach/Input**

N/A

**Staff Recommendation**

By motion, adopt the resolution.

**Attachment List**

N/A

**WHEREAS**, the City has been in the process of upgrading our older lift stations as the pumps and motors wear out, and

**AND WHEREAS**, These improvements are included in the City's annual Capital Improvement Program budgets, and

**AND WHEREAS**, The City has gone through a process to standardize on a single pump manufacturer for system efficiency and redundancy and determined that the Flygt N style submersible pump provided the combination of material cutting and clog free operation that was being sought, and

**AND WHEREAS**, Electric Pump as the local distributor for this product has provided quotes to purchase and install the necessary improvements.

**NOW, THEREFORE, BE IT RESOLVED**, by the City Council of the City of Blaine as follows:

1. The Mayor and City Manager are hereby authorized and directed to enter into a contract with Electric Pump for the designated improvements at the listed Lift Stations for a total amount of \$345,466.75.
2. A 10% contingency is hereby approved to bring the total project budget to 380,013.43 and the Director of Public Works is hereby authorized to sign all change orders up to the authorized project budget amount.

**PASSED** by the City Council of the City of Blaine this 18th day of October, 2021.