



## Agenda Item Summary

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**File #:** RES 21-243, **Version:** 1

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### **Submitted By**

Bill McKenna, Village Engineer

### **Reviewed By**

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### **Agenda Item Title**

**A Resolution Approving a Task Order for Professional Engineering Services with Baxter & Woodman, Inc. for Design and Construction Engineering for Project 22-11, Central Pump Station Variable Frequency Drive and Pump Replacement Project, in an Amount Not To Exceed \$81,000 and Authorizing its Execution**

### **Overview**

The Engineering Division requested a proposal from Baxter & Woodman to do the engineering design and construction management for the Central Pump Station variable frequency drive (VFD) and pump replacement project. The project involves replacing two existing older pumps and fittings at the central pump station along with the VFDs that control the various pumps. Design work is planned for 2021 and early 2022 with construction planned for the fall of 2022. Baxter & Woodman has previously completed work at the Village's pump stations and has conducted multiple studies of the Village's water distribution system and is best qualified to perform this work.

### **Recommendation**

Approve the Resolution.

### **Fiscal Impact**

The FY2021 Budget includes \$100,000 for this design work in the Water & Sewer Fund, Public Works - Water, Water Supply, Capital Improvements, account no. 504-43730-776-570707. The proposed FY2022 Budget includes \$670,000 for the construction and construction engineering work in the same account.

### **Background**

The 2017 Pump Station Energy Study recommends replacement of the VFD system and these older pumps in order to improve pumping efficiencies and save energy and costs. The existing VFDs are approximately 25-30 years old and are near the end of their useful life and the two pumps planned for replacement are from 1996 and are also in need of replacement in order to maintain efficiencies and ensure reliability.

The Engineering Division requested a proposal from Baxter & Woodman to perform the design for this project. Baxter & Woodman have previously completed engineering design for various water projects for the Village, developed the Village's hydraulic model of the water distribution system and are best qualified for this design work due to their thorough understanding of the Village's pump station operations. Baxter & Woodman are one of the four engineering consulting firms with a Master Agreement approved by the Village Board for doing

projects via a task order procurement process. The not to exceed cost for the engineer design work for this project is \$43,500 and the not to exceed cost for the construction engineering is \$37,500.

The project is proposed to be design in the fall and winter of 2021 and into 2022. The construction contract is proposed to be bid and presented to the Village Board for consideration in the spring of 2022. Construction work is planned for the fall of 2022 following fabrication of the pumps and VFDs and when drinking water demand is lower since the central pump station will be out of service at times during this work.

### **Alternatives**

The alternative to this recommendation could be to delay action to gain additional information.

### **Previous Board Action**

On September 20, 2021 the Village Board approved a Three-Year Master Agreement with Baxter & Woodman, Inc. for Professional Engineering Services with an Option to Renew the Agreement for up to Two Additional One Year Periods.

### **Citizen Advisory Commission Action**

N/A.

### **Anticipated Future Actions/Commitments**

A future Village Board items will be presented for the construction of this project in the spring of 2022.

### **Intergovernmental Cooperation Opportunities**

None at this time.