



**BUSINESS OF THE CITY COUNCIL
CITY OF MERCER ISLAND**

**AB 6183
November 15, 2022
Consent Agenda**

AGENDA BILL INFORMATION

TITLE:	AB 6183: Reservoir Standby Generator Replacement Project Bid Award	<input type="checkbox"/> Discussion Only <input checked="" type="checkbox"/> Action Needed: <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution
RECOMMENDED ACTION:	Award the Reservoir Standby Generator Replacement project to McClure and Sons, Inc.	

DEPARTMENT:	Public Works
STAFF:	Jason Kintner, Chief of Operations Allen Hunter, Utilities Operations Manager George Fletcher, CIP Project Manager
COUNCIL LIAISON:	n/a
EXHIBITS:	1. Project Location Map
CITY COUNCIL PRIORITY:	n/a

AMOUNT OF EXPENDITURE	\$ 1,605,279
AMOUNT BUDGETED	\$ 360,000
APPROPRIATION REQUIRED	\$ 1,245,279

EXECUTIVE SUMMARY

The purpose of this agenda bill is to award a public works contract for the construction of the Reservoir Standby Generator Replacement project.

- This project will replace the existing 235-kilowatt emergency generator inside the reservoir booster pump station building with a new 500-kilowatt generator outside the building.
- Five bids were received, and the low construction bid is \$1,138,555.11.
- This work is included in the 2021-2022 Capital Budget and is funded through the Water Fund.
- Estimated project expenditures are higher than the \$360,000 available budget. An appropriation of \$1,245,279 is requested from the Water Fund.
- Construction will begin in mid to late 2023 due to expected long lead times in obtaining the new generator.

BACKGROUND

The City’s water reservoir site houses an emergency backup electrical generator that serves both the booster pump station facility at the reservoir and the emergency well at nearby Rotary Park. This diesel generator, installed in 1975, is now 47 years old, has reached the end of its useful life, and needs to be replaced to ensure continued reliable operation of the City’s water system in case of a power outage.

Design on this project began in 2019. The original scope of work was to replace the existing 235-kilowatt generator with an equal capacity unit in the same location inside the building, and retain the existing transfer switch, fuel system, and other associated wiring and equipment. The engineering firm Murraysmith was hired to conduct a study of the system’s load requirements and complete the design for the generator’s replacement.

Murraysmith evaluated the existing generator’s load capacity and determined it could not meet the operational requirements of the booster pumps (as outlined in the Water System Plan), the booster chlorination system, and the electrical loads of future improvements planned at the reservoir site. Therefore, the capacity of the replacement generator was increased from 235-kilowatts to 500-kilowatts.

This increased size combined with the need for floor space inside the pump station building for other planned equipment installations led to the decision to place the new generator outside the building. The engineering team also determined the current automated transfer switch hardware was outdated and repair parts were no longer available. Replacement of the transfer switch was added to the project scope along with a system to accommodate the connection of a portable generator in the event of failure of the permanent generator.

The new generator includes a sound attenuated enclosure to reduce the noise impact to nearby properties. The new generator will be quieter than the existing generator. In addition, the existing fuel tank will be relocated from behind the reservoir pump building to alongside the new generator location, making it much easier to access and refuel.

ISSUE/DISCUSSION

PROJECT DESCRIPTION

The Reservoir Standby Generator Replacement Project as currently designed consists of installing a new 500-kilowatt diesel powered generator, load bank, and automated transfer switch. Work also includes removal of the 1975 generator, relocation of an existing diesel fuel tank, modification of an existing rockery retaining wall and excavation for a concrete mounting pad, and replacement of related electrical components, conduits, and wiring.

Design of this project was completed in September 2022 and the project was advertised for bids in October. At completion of design, the estimated construction cost of the project was \$1,245,000.

BID RESULTS

Five construction bids were received and opened on Thursday October 20, 2022. The lowest bid was received from McClure and Sons, Inc for \$1,138,555.11, approximately 8% below the engineer’s construction cost estimate. The following table shows the bid results.

Company Name	Bid amount + 10.1% sales tax
McClure and Sons, Inc.	\$1,138,555.11
Fury Site Works, Inc.	\$1,147,297.92
Northeast Electric, LLC	\$1,258,443.00
CDK Construction Services, Inc.	\$1,328,969.76
Gary Harper Construction Inc.	\$1,359,259.37
Engineer’s Estimate	\$1,245,000.00

The apparent low bidder, McClure and Sons, Inc. from Mill Creek, Washington has completed numerous utility projects for public agencies across the pacific northwest including the replacement of a \$3.3M wastewater pumping station for the City of Redmond and a \$4M project to retrofit and modify a wastewater treatment plant for the City of Marysville. Both projects included installing diesel backup generators. They also completed a Treatment Plant in Central Kitsap in 2015 that had a cost of \$31M. Review of the Labor and Industries (L&I) website confirms McClure and Sons is a contractor in good standing with no license violations, outstanding lawsuits, or L&I tax debt.

Based on the review of the McClure and Sons bid submittal and reference checks, staff has determined that McClure and Sons is the lowest responsive bidder for this project. Staff recommends awarding the project to McClure and Sons, Inc.

PROJECT BUDGET

Adding amounts for construction contingency, design, construction support services and inspection, and project management brings the total estimated cost of the project to \$1,605,279. Historically, staff applies a 20% construction contingency to utility construction due to the unknowns associated with underground work. Project costs are summarized in the following table.

RESERVOIR STANDBY GENERATOR REPLACEMENT PROJECT	
PROJECT BUDGET	
Construction Contract	\$1,034,110
Sales Tax @ 10.1%	\$104,445
Construction Award to McClure and Sons	\$1,138,555
Design Phase 2021-2022	\$77,013
Contingency - 20%	\$227,711
Construction Support Services	\$50,000
Project Management/Utility Team	\$62,000
Inspection Services	\$50,000
Total Project Cost	\$1,605,279
Approved Budget (2021-2022)	\$360,000
Total Budget Allocated for Project	\$360,000
Budget Remaining	-\$1,245,279
Budget Appropriation Needed	\$1,245,279

The original budget allocated for this project included \$200,000 in the 2019-2020 Capital Budget for design work and \$360,000 in the 2021-2022 Capital Budget for construction. Due to the complexity of the project and coordination with other projects (i.e. booster chlorination station), the project scope evolved significantly after approval of these budgets. Additionally, the Puget Sound region is experiencing construction cost escalations on the order of 15% since August of 2021.

To construct this project as currently designed and bid, an additional \$1,245,279 in funding is needed. Staff recommends that this additional cost be covered by an appropriation from the Water Fund balance. At the

end of FY 2021, the Water Fund balance amounted to \$19.9 M. Staff will provide an updated fund balance figure with the 2022 year-end financial status update in FY 2023.

NEXT STEPS

Staff recommends authorizing the City Manager to execute a contract with McClure and Sons, Inc. for the construction of the Reservoir Standby Generator Replacement Project and set the total project budget at \$1,605,279, with budget appropriation of \$1,245,279 coming from the Water Fund balance.

The City and contractors continue to experience supply chain issues in the form of long lead times on critical items. It is known at this time that the lead time on the generators for this project may be a full year and this has been taken into account during the development and advertisement of this project. Staff will work closely with the contractor to manage the project timeline and work schedule, as there will need to be a backup power source available throughout the project. The proper sequencing of construction will allow the existing backup generator to be in service until the new generator is installed, tested, and ready.

A limited Notice to Proceed will be given to McClure and Sons soon after award of the project, to get the generator into production. Notice to Proceed with construction will occur once the generator delivery date is known.

RECOMMENDED ACTION

1. Authorize a \$1,245,279 appropriation from the Water Fund balance to accommodate the additional costs resulting from the expanded scope of work in the Reservoir Standby Generator Replacement Project.
2. Award the Reservoir Standby Generator Replacement project to McClure and Sons, Inc. in the amount of \$1,138,555.11, set the total project budget at \$1,605,279, and authorize the City Manager to execute the construction contract.