



## Legislation Details (With Text)

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**Title:** Resolution to Approve Change Order No. 1 with Kiser Hydro LLC for Barton Dam Hydroturbine Project and Appropriate Funds (\$151,260.63) (8 Votes Required)

**Sponsors:**

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**Attachments:** 1. Kiser\_Change Order 1.pdf

Date	Ver.	Action By	Action	Result
11/8/2018	1	City Council	Approved	Pass

### Resolution to Approve Change Order No. 1 with Kiser Hydro LLC for Barton Dam Hydroturbine Project and Appropriate Funds (\$151,260.63) (8 Votes Required)

This memorandum and resolution requests approval to approve a change order with Kiser Hydro LLC (Kiser) for the Barton Dam hydroturbine: 10-year Inspection and Overhaul - ITB #4467 (\$151,260.63) and to appropriate the necessary funding.

Barton Dam is one of the two hydroelectric power generating facilities owned by the City of Ann Arbor (City). The Barton facility generates on average \$280,000.00 per year in revenue for the City. The hydroturbine is the critical component of Barton Dam Hydroelectric facility and recommended operation and maintenance (O&M) practices call for rebuilding the turbine every 10 years. The last rebuild of the Barton Dam hydroturbine was in 2005 and the equipment was therefore overdue for this work.

The project was awarded to Kiser Hydro LLC in the amount of \$542,858.00 as part of Resolution R-18-034 in February 2018. The scope of the project included disassembly, removal, rebuilding and reinstalling existing turbine parts, replacement of various mechanical components, and all related work. Critical components of the work include overhaul of the generator, rebuilding of the gearbox, replacing bearings, start-up, testing and commissioning.

In the original memorandum and resolution to Council (R-18-034) authorizing this work, it was noted that there was a risk of up to an additional \$190,000.00 for repairs that could not be identified until the hydroturbine was disassembled and assessed. Disassembly of the turbine is now complete and the Contractor has identified additional items that are required to complete the turbine rebuild. The total cost for these additional repairs is \$131,260.63, plus a contingency for \$20,000.00.

If the additional repairs are not completed, the City risks that the hydroturbine would be placed back into service in a compromised condition, creating the potential for failure and damage to the existing equipment. The cost to the City to repair potential future damage would be a minimum of \$270,000.00, assuming no additional damaged is realized. This cost includes the repairs currently identified (\$131,260.63) plus an additional \$150,000.00 to disassemble the unit. If this additional work is completed now, the City would not incur this additional cost to disassemble the unit because the unit is already disassembled.

The annual revenue generated by the hydroturbine results in a simple payback of less than 2 ½ years for the total cost of this project (\$694,118.63). Therefore, Staff recommends that Council

approve this change order.

Kiser complies with the City's Living Wage and Non-Discrimination Ordinances.

Budget/Fiscal Impact: Funding for the requested change order exists in the current Fund Balance of the General Fund.

City Staff recommends reallocation of funds for Barton Steel and Structural Coating Design phase, in the approved FY19 General Fund Capital Budget, to this project. After prioritization, City Staff prioritized the completion of this project and the services required to complete by Stantec, in the \$20,000.00, along with staff time, \$5,000.00 as a higher necessity than the Barton Steel and Structural Coating Design.

Prepared by: Brian Steglitz, P.E., Water Treatment Plant Manager

Reviewed by: Craig Hupy, Public Services Area Administrator

Approved by: Howard S. Lazarus, City Administrator

Whereas, The Barton Dam hydroturbine was overdue for its 10-year inspection and overhaul which is recommended best practice for type of equipment;

Whereas, The project possessed inherent risks that could not be avoided or identified until complete disassembly of the hydroturbine;

Whereas, The total cost for the additional repairs is \$131,260.63, plus a \$20,000.00 contingency;

Whereas, The turbine is completely disassembled and it will be significantly more costly to perform the additional repairs at a later date;

Whereas, The Barton Dam Inspection and Overhaul project is identified as a high priority project;

Whereas, The financial payback for this project including Change Order No. 1 is less than 2 1/2 years;

Whereas, Funding for the requested change order is available in the Fund Balance of the General Fund; and

Whereas, Kiser Hydro LLC complies with the requirements of the City's Living Wage and Non-Discrimination ordinances;

RESOLVED, That Council approves the Change Order No. 1 with Kiser Hydro LLC in the amount not to exceed \$131,260.63;

RESOLVED, That the Mayor and City Clerk be authorized and directed to execute said agreement after approval as to substance by the City Administrator and approval as to form by the City Attorney;

RESOLVED, That \$25,000.00 be reallocated from the Barton Steel and Structural Coating Project to the Barton Turbine Rebuild Capital Project to fund ongoing construction needs by Stantec Consulting and City Staff;

RESOLVED, That \$151,260.63 be appropriated from the Fund Balance of the General Fund and transferred to the existing Barton Turbine Rebuild General Fund Capital Project Budget for such Change Order and contingency;

RESOLVED, That City Council approve a \$20,000.00 contingency to be expendable from the existing

project, subject to City Administrator approval; and

RESOLVED, That the City Administrator be authorized to take the necessary administrative actions to implement this resolution including execution of any change orders that do not exceed the contingency amount.