



# MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

*Rely on us.*

TO: Commissioners Brown, Mital, Helgeson, Manning and Simpson  
FROM: Mel Damewood, Engineering Manager  
DATE: August 22, 2014  
SUBJECT: Leaburg Dam Roll Gate Bulkhead Installation and Removal  
Change Order Update  
OBJECTIVE: Information Only

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## Issue

EWEB has an existing contract with Wildish Construction Company to construct a bulkhead at Leaburg Dam's Roll Gate 2. During the initial installation of the bulkhead, integrity issues were discovered. To correct these issues, the consulting engineer redesigned the bulkhead panels, piles and installation procedure. EWEB has negotiated a change order with Wildish Construction. On August 5<sup>th</sup>, the Board gave the General Manager authorization to approve the change order in order to keep critical timelines for the project. This memorandum provides an update on the status of the change order.

## Background

As part of the work to replace the failed hydraulic motor for Roll Gate 2, EWEB awarded a contract to install a bulkhead upstream of the gate. The bulkhead will permit gate testing without causing excessive lake level or downstream river flow fluctuations. To eliminate potential work space conflicts at the dam, the contract timing was such that the bulkhead installation would be completed before the hoist replacement contractor arrived on site to perform their work.

In early March 2014, an EWEB inspector reported concerns over the apparent integrity of the partially installed bulkhead. Subsequent investigation revealed that the consultant's design would not result in a safe, reliable barrier, and modifications were necessary to achieve a level of safety/constructability that EWEB and the contractor had greater confidence in. The consultant, the bulkhead contractor, and EWEB Engineering have worked collaboratively to correct the deficiency.

The consultant submitted a revised design on June 25, 2014. The contractor prepared and submitted a cost estimate to implement the design changes on July 23, 2014. A final change order cost estimate was submitted on August 20, 2014. At \$146,488, the cost of the change order is 37 percent of the original contract amount. This change order has been approved by the General Manager as authorized by the Board.

The original contract included installing the bulkhead in front of Gates 1 and 3 to facilitate testing and inspection of these gates. Schedule delays associated with the bulkhead design issue will postpone this work until 2015. The value of the Gate 1 and 3 work (\$169,000) exceeds the cost of the design correction change order. Therefore, a 2014 budget amendment is not required.

EWEB also has the option of eliminating the work on Gates 1 and 3 from the contract. This would provide a net cost reduction to the overall project budget of \$22,521. However, eliminating this work would result in increased risk as the condition of Gates 1 and 3 would remain uncertain. Based on the current project schedule, a decision on whether or not to proceed with condition assessments of Gates 1 and 3 is not needed until early 2015 at the soonest. If EWEB ultimately decides to preserve the Gate 1 and 3 inspection scope, the Board would have the opportunity to approve that cost at the 2015 April True-up or through another regular capital budget approval process.

Staff is also considering two other potential scope reductions that were presented by the schedule delays. These would result in a project cost reduction of \$20,000 to \$40,000. In addition, Staff is investigating the possibility of obtaining compensation from the design consultant for the design error.

### **Recommendation and Action**

The \$146,488 change order was authorized for approval by the General Manager on August 5th, 2014. This memorandum is for information only, no Board action is requested at this time.

If there are any questions please contact Mel Damewood @ 541-685-7145 or [mel.damewood@eweb.org](mailto:mel.damewood@eweb.org)