



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Brown, Carlson, Mital, Simpson and Helgeson
FROM: Mel Damewood, Chief Water Engineering & Operations Officer
DATE: August 28, 2018
SUBJECT: Water Pipeline Crossings over Amazon Creek
OBJECTIVE: Board Approval

Issue

A recent City of Eugene bid opening will result in higher than originally approved costs for EWEB.

Background

In 2017, EWEB discovered that at least three of its water distribution pipelines crossing the upper reaches of Amazon Creek were exposed and visible in the creek bottom due to erosion of the creek bed. Two of these lines feed from our transmission system to our Spring and Dillard upper level pump stations and are thus critical infrastructure. These pipelines were constructed between 1958 and 1967 and were not restrained sufficiently to resist the potential forces caused by the continued erosion of Amazon Creek.

To mitigate this risk, EWEB began investigating alternatives to replace these crossings. Alternatives considered included boring new lines deeper under Amazon Creek or constructing pipe bridges. Both of these options required significant permitting efforts and have high construction costs.

Staff also approached the City of Eugene (City) with the idea of partnering with them to hang new pipelines on two pedestrian bridges the City was planning to construct across Amazon Creek. With relatively minor modifications to the city's planned bridges, the City's contractor would be able to attach two 16" ductile iron pipelines to the bridges, allowing EWEB to eventually abandon all three existing exposed, at risk, pipe crossings. By partnering with the City on this project, EWEB would be able to reduce the costs to replace our at risk pipelines across Amazon Creek as well as reduce construction impacts to the community.

Staff developed an Inter-Governmental Agreement (IGA) collaboratively with the City for this partnership which was approved and signed by the City on May 16th, 2018. This IGA included a not to exceed cost for EWEB of \$190,000. This cost was based on preliminary cost estimates prepared by the City and supplemented by estimates from EWEB staff. The IGA was approved by the EWEB Board on June 5th, 2018.

Construction bids were opened recently on this project and the costs were significantly higher than was originally estimated. While the original estimate for the EWEB costs for the two crossings was less than \$190,000, the recent bid will result in an EWEB cost of approximately \$186,000 for one

crossing. The second crossing will not be bid until 2019 but using the unit costs provided with the recent bid, EWEB's cost for the second crossing would be an additional \$175,000, resulting in a total cost for both crossings of approximately \$360,000. EWEB is paying 10 percent of the incremental cost to help cover overhead, inspection, and project management incurred by the City of Eugene. This 10 percent is included in the overall price being asked to be approved.



Exposed 12" water main near 35th Street, Constructed 1958.

Discussion

Constructing two new pipe crossing over Amazon Creek was considered a great bargain at \$190,000 for both. Now with the recent bid opening, and the costs significantly higher, EWEB had to determine whether to proceed with the project.

Staff have discussed this project with multiple boring contractors and have estimated the cost to hire a contractor to bore two new crossing beneath Amazon Creek at approximately \$530,000. This is approximately \$170,000 more than partnering with the City on their bridges. These bores would need to be deep and there are numerous conflicting utilities buried in this area which add uncertainty to this alternative.

EWEB could construct its own pipe bridges however staff anticipate that the costs would be higher than paying for a portion of the costs for the City's bridges. Under the current IGA EWEB is only paying for the incremental cost to increase the strength of the bridges to support the waterline and not contributing to the many other costs required for constructing a bridge such as bridge footings and environmental costs. In addition, EWEB would be required to secure all environmental permits and approvals, which the City has already completed for their bridges at no cost to EWEB.

Given the above, staff anticipate that the least cost alternative is to continue with the partnership with the City. If this is approved, both bridge crossings would be constructed in 2019.

Requested Board Action

Management requests the Board approve increasing the amount of the IGA with the City of Eugene for the installation of two pipeline crossing over Amazon Creek from \$190,000 to \$360,000.

If you have any questions please contact Mel Damewood, Chief Water Engineering and Operations Officer at 541-685-7145

EWEB Board Consent Calendar Request

For Contract Awards, Renewals, and Increases

The Board is being asked to approve an Intergovernmental Agreement with **City of Eugene** for **Water Pipeline Crossings on Pedestrian Bridges over Amazon Creek**.

Board Meeting Date: September 4, 2018

Project Name/Contract#: Water Pipeline Crossings on Pedestrian Bridges over Amazon Creek/ IGA 18-0003

Primary Contact: Mel Damewood Ext. 7145

Purchasing Contact: Collin Logan Ext. 7486

Contract Amount:

Original Contract Amount: \$190,000

Additional \$ Previously Approved: \$0

Invoices over last approval: \$0

Percentage over last approval: 0 %

Amount this Request: \$170,000

Resulting Cumulative Total: \$360,000

Contracting Method:

Method of Solicitation: Intergovernmental Agreement

If applicable, basis for exemption: n/a

Term of Agreement: **One-Time Purchase**

Option to Renew? No

Approval for purchases "as needed" for the life of the contract No

Proposals/Bids Received (Range): _____

Selection Basis: _____

Narrative:

This project will replace three existing pipeline crossings currently installed under Amazon Creek with two new pipelines to be attached underneath the City's new pedestrian bridges at Dillard Road and 37th Street. Since the original pipes were installed, the creek bed has eroded significantly. EWEB's pipelines are now exposed, posing a risk to infrastructure integrity. EWEB investigated possible solutions, including boring new pipelines under Amazon Creek or constructing pipe bridges. Both of these options are subject to substantial construction costs (design engineering, materials, labor, and permits).

EWEB contacted the City of Eugene to explore the possibility of partnering on their planned pedestrian bridge crossings. By partnering with the City of Eugene on this project, EWEB is able to significantly reduce the costs to replace our at-risk pipelines across Amazon Creek as well as reduce construction impacts to the community. The new pipelines and bridges are designed and will be built to resist seismic forces. EWEB will reimburse the City for the installation of two new pipelines attached to the bridges spanning Amazon Creek. Eventually, EWEB will abandon all three of the old, exposed pipelines.

Staff developed an Inter-Governmental Agreement collaboratively with the City and was approved and signed by the City Manager on May 16, 2018. EWEB's drawings and specifications was included with the City's solicitation in August 2018 and bids for the first bridge crossing were received. If this IGA is approved and the bids are within the Not to Exceed amount of \$360,000, EWEB will amend the existing signed IGA and approve awarding the work to the City's contractor.

ACTION REQUESTED:

Management requests the Board approve an Intergovernmental Agreement with **the City of Eugene** for **Water Pipeline Crossings on Pedestrian Bridges over Amazon Creek**. This work will be completed under the type 1 capital water budget in 2019, which totals approximately \$5 Million.

SIGNATURES:

Project Coordinator: _____

Manager: _____

Purchasing Supervisor: _____

Executive Officer: _____

Board Approval Date: _____