

**Date:** May 24, 2017

**To:** Board of Directors

**From:** Neil McFarlane 

**Subject:** **RESOLUTION 17-05-45 OF THE TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT OF OREGON (TRIMET) AUTHORIZING A MODIFICATION TO THE CONTRACT WITH CH2M HILL, INC. FOR DESIGN SERVICES FOR THE STEEL BRIDGE TRANSIT IMPROVEMENTS PROJECT**

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**1. Purpose of Item**

The purpose of this item is to request that the TriMet Board of Directors (Board) authorize the General Manager to execute a modification to the contract with CH2M Hill, Inc. (CH2M) for Design Services for the Steel Bridge Transit Improvements Project (Project).

**2. Type of Agenda Item**

- Initial Contract  
 Contract Modification  
 Other \_\_\_\_\_

**3. Reason for Board Action**

Board authorization is required because the proposed modification increases the contract amount beyond the amount previously authorized by the Board.

**4. Type of Action**

- Resolution  
 Ordinance 1<sup>st</sup> Reading  
 Ordinance 2<sup>nd</sup> Reading  
 Other \_\_\_\_\_

**5. Background**

The Steel Bridge is a critical transportation component for TriMet's system, and also for the City of Portland in general. It carries TriMet's Blue, Red, Yellow, and Green light rail lines, as well as freight rail, automobile, bicycle and pedestrian traffic across the river. Given the age of the bridge and its high use by all types of traffic, maintenance and urgent repairs of the rail-related features are frequently needed, but difficult to perform, and create delays throughout TriMet's system.

At its January 27, 2016 meeting, the Board approved Resolution 16-01-08, authorizing TriMet to execute a contract with CH2M to begin the process of performing an assessment for short and long-term light rail related improvements in and around the Steel Bridge, the goal of which is to increase reliability and maximize the potential future capacity of the

bridge. CH2M's design work under the contract currently has two components: first, to improve rail system reliability for TriMet's riders by assisting TriMet in assessing the current trackway conditions across and adjoining the Steel Bridge, recommending cost-effective improvements, and creating the required construction documents for short term rail improvements; and second, developing long-term feasible concepts for future capacity improvements that include looking at a range of scenarios for extending the life of the bridge or assessing the viability of a future replacement bridge.

When the contract was executed, TriMet anticipated that CH2M would perform a total of five design tasks. Three were for short-term improvements, one was for long-term concept analysis, and one was for design services during construction. Regarding the short-term rail improvement work, the original negotiated scope of work and consultant's fee was limited to replacement at the lift joints and minor track replacement, which would be developed into one set of construction documents. However, once design and the concurrent investigation of the existing condition of the Steel Bridge and its trackway began, it became apparent that the trackway and the rail joints were at the end of their useful life and in need of full replacement, and that drainage issues were contributing to signal reliability problems and needed to be addressed. In addition, TriMet has come to believe that full track turnout and switch replacements on each bridge approach are needed in addition to drainage modifications around the Rose Quarter area in order to address maintenance and signal reliability issues. The magnitude of this investigative work was significantly more than originally anticipated, and so was the design work required to address the newly discovered issues. In addition, expansion of the scope of necessary work required phasing the short term improvements into three different construction document packages over several years in order to minimize impacts to revenue service. In short, unexpected conditions caused a significant increase in the amount of design work that is required to improve maintainability, reliability, and functionality of the trackway in the near term.

Furthermore, the long term capacity analysis work also expanded over what was originally anticipated, as the four potential concepts for long term improvements noted in the RFP became 22 options that CH2M and TriMet need to narrow down into a reasonable range of alternatives for further study of the long-term future of the bridge. The original negotiated scope of work and consultant's fee for the long term improvements was half that effort. TriMet supported and encouraged CH2M to consider all reasonable long-term options in order to fully develop the range of solutions and investigate the potential of each. However, a comprehensive approach such as this has caused the need for an increase in CH2M's contract amount.

To date, CH2M has completed the 30 percent design for the short-term improvements and will advance construction documents to final design with the assistance of the CM/GC contractor that will reconstruct the trackway over the Steel Bridge in a phased approach during August 2018 and August 2019. Also, as noted above CH2M has performed significant work on the long-term analysis of the bridge.

Because of these challenges and the expansion of the scope of work, more time has been invested on both the short and long-term design tasks than was originally expected. The combination of unexpected challenges and the added work scope has resulted in a need to increase the contract amount from \$800,000 to \$1,620,000. CH2M has performed strong work thus far while maintaining authorized task order budgets and keeping TriMet apprised of the potential increases in overall project scope and costs to complete. CH2M has worked well with TriMet to solve issues as they have arisen and continues to be flexible with the scope changes requested by TriMet.

**6. Procurement Process**

The contract was procured via a competitive Request for Proposals process.

**7. Diversity**

CH2M indicated that it expected to achieve at least 15 percent Minority/Women/Emerging Small Business/Service Disabled Veteran Business Enterprise (M/W/ESB/SDVBE) participation on the Project at the time of award. Thus far, CH2M is achieving 15 percent participation and expects to exceed that with the additional anticipated task orders.

**8. Financial/Budget Impact**

TriMet has budgeted in advance for this work and the Project is included in the FY2017 and FY2018 Capital Program Budgets. Initial cost estimates for the scope of work done in 2015 showed a need for \$1,400,000 to perform the anticipated work. However, TriMet elected to proceed cautiously and initially funded only a portion of the anticipated work scope in order to allow for full development and a comprehensive understanding of the Project's needs. Therefore, the increased contract amount is within TriMet's budget for the Project.

**9. Impact if Not Approved**

TriMet's alternative would be to procure another design consultant to complete the work begun by CH2M. This would delay the completion of the design and make it difficult to meet the schedule for the short-term improvement work. Furthermore, CH2M's performance to date has been excellent. Hiring another design consultant to complete the work would be unlikely to lead to cost savings due to increased inefficiency, including the need to bring a new design firm up to speed with work completed to date and the potential for duplicative work.

**RESOLUTION 17-05-45**

**RESOLUTION OF THE TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT OF OREGON (TRIMET) AUTHORIZING A MODIFICATION TO THE CONTRACT WITH CH2M HILL, INC. FOR DESIGN SERVICES FOR THE STEEL BRIDGE TRANSIT IMPROVEMENTS PROJECT**

**WHEREAS**, TriMet has authority under ORS 267.200 to enter into a contract modification with CH2M Hill, Inc. for Design Services for the Steel Bridge Transit Improvements Project (Modification); and

**WHEREAS**, the total amount of the Modification shall exceed the contract amount originally authorized by the TriMet Board of Directors (Board); and

**WHEREAS**, the Board, by Resolution dated November 25, 2009, adopted a Statement of Policies requiring the Board to approve personal services contracts obligating TriMet to pay in excess of \$150,000;

**NOW, THEREFORE, BE IT RESOLVED:**

1. That the Modification shall be in conformance with applicable laws.
2. That the General Manager or his designee is authorized to execute the Modification.

Dated: May 24, 2017

Attest:

\_\_\_\_\_  
Presiding Officer

\_\_\_\_\_  
Recording Secretary

Approved as to Legal Sufficiency:

  
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Legal Department