

T Transportation Committee
For the Metropolitan Council meeting of April 23, 2007

ADVISORY INFORMATION

Date Prepared: April 15, 2008

Subject: Central Corridor Light Rail Transit - Washington Avenue Bridge Evaluation

Proposed Action:

That the Metropolitan Council authorize the Regional Administrator to negotiate and execute a contract amendment with URS in an amount not to exceed \$200,000 for conducting additional analysis of the Washington Avenue Bridge.

Summary of Committee Discussion / Questions:

Wolter said ahead of time that he would abstain from the voting. Discussion/questions about timing of the analysis and the need for it to be available to compare with the results of the U of M Northern Alignment study was stated. Also discussion occurred whether the money should be spent if the Northern Alignment alternative becomes the preferred alternative. Staff indicated the Council's direction to date has been for the at-grade Washington Avenue alignment. This contract amendment authorizes further structural evaluation of the bridge and refinement of the cost estimate.

Motion by Leppik, seconded by Hilker. Passed with Steffen voting NO, and Wolter abstaining.

T Transportation Committee

Meeting date: April 14, 2008

For Metropolitan Council Meeting: April 23, 2008

ADVISORY INFORMATION	
Date:	April 7, 2008
Subject:	Central Corridor Light Rail Transit – Washington Avenue Bridge Evaluation
District(s), Member(s):	District 7: Annette Meeks 612-341-8168 District 8: Lynnette Wittsack 612-788-1235 District 13: Richard Aguilar 651-665-0633 District 14: Kirstin Sersland Beach 651-224-8334
Policy/Legal Reference:	Procurement of Professional Services
Staff Prepared/Presented:	Brian Lamb, General Manager 612-349-7510 Mark Fuhrmann, Deputy General Manager 651-602-1942 Rich Rovang, AGM – Transit Systems Development 651-602-1941 Jim Alexander, Manager – Transitways Design 651-602-1937
Division/Department:	Metro Transit / Central Corridor Project Office

Proposed Action

That the Metropolitan Council authorize the Regional Administrator to negotiate and execute a contract amendment with URS in an amount not to exceed \$200,000 for conducting additional analysis of the Washington Avenue Bridge.

Background

The Council contracted with URS (contract 07P052) on April 30, 2007 to assess the feasibility of using the bridge for the Central Corridor Light Rail Transit (CCLRT). The original scope of work had two tasks. The first task was to determine if the bridge can support LRT, vehicle traffic, and pedestrian loads. The second task entailed providing recommended modifications and developing associated cost estimates which would be reviewed and implemented during Preliminary Engineering (PE). The amount of the initial contract was \$99,929.

During the evaluation, a determination was made that the bridge girders do not meet current design code and that they may not be sufficient to carry certain load conditions. URS' contract was amended on August 27, 2007 to conduct a finite element analysis (FEA) to determine the structural capacity. The amount of the amendment was \$39,300.

Upon review of the FEA findings by Central Corridor Project Office (CCPO), DMJM Harris, Minnesota Department of Transportation (Mn/DOT), and industry experts, and due to the uniqueness of the bridge in both design and type of steel used in construction, further analysis to develop additional 3-D models to analyze the effects of loads and load combinations is recommended. The analysis will evaluate the bridge with CCLRT and without CCLRT.

Rationale

Determination of the capacity of the bridge and the modifications has the potential to impact both the project schedule and budget. A thorough understanding of loads and load combinations provides the ground work for engineering modifications that may be required. This analysis will provide additional confidence in the safety of the bridge for LRT operations and could potentially reduce the cost of any modifications to the bridge.

Funding

Funding for the current contract (\$139,229) and for this amendment (\$200,000) is available in Project 65701. Until July 2008, Minnesota state bond funds are available. After July 2008, a new federal appropriation in the 2008 budget in the amount of \$10.192 million will be available for the Central Corridor LRT.

Known Support / Opposition

CCPO has been working with Hennepin County, Mn/DOT, University of Minnesota, and industry experts to reach a consensus on the appropriate parameters for this additional analysis to support Preliminary Engineering.