



Request for City Council Committee Action from the Department of Public Works

Date: March 18, 2014
To: Honorable Kevin Reich, Chair Transportation & Public Works Committee
Subject: **Contract amendment for South Minneapolis Signal Retiming Project**

Recommendation:

Authorize City Officers to amend the total amount of contract C-31093 with Kimley-Horn and Associates by \$110,360 for a new total of \$859,850.00 and extend the contract termination date from May 31, 2014 to August 31, 2014. No additional appropriation will be required.

Previous Directives:

- December 7, 2012 - Council authorization of City officers to amend the termination date of Professional Services Contract C-31093 with Kimley-Horn and Associates, Inc. from January 31, 2013 to May 31, 2014, to coincide with the installation of the new central traffic signal control system.
- May 27, 2011 - Council approved authorization of City officers to negotiate and enter into a contract with Kimley-Horn and Associates, Inc. for retiming of traffic signals located in south Minneapolis, authorization of City officials to execute the agency agreement with the State of Minnesota Department of Transportation allowing the state to act as the City's agent in accepting federal funds, passage of the accompanying resolution appointing the Commissioner of Transportation as the City's agent in accepting federal aid funds; and passage of the accompanying resolution increasing the appropriation and revenue for the project.
- December 13, 2010 - 2011 Public Works Transportation Capital Improvement Fund TR010 (Traffic Management Systems)
- December 7, 2009 - 2010 Public Works Transportation Capital Improvement Fund TR010 (Traffic Management Systems)

Department Information:

Prepared by: Nickolas VanGunst, P.E., PTOE, Professional Engineer, 673-2172

Approved by: _____
Steven A. Kotke, P.E., Director of Public Works

Presenters in Committee: Nickolas VanGunst

Financial Impact

- No financial impact. Project has sufficient appropriation for the contract amendment.

Community Impact

- Neighborhood Notification: Not Applicable
- City Goals: An appropriately designed and well maintained City infrastructure will promote safe and efficient movement of our Police, Fire and Emergency units as well as the safe and efficient movement of our residents and traveling public.

Preserve and enhance our natural and historic environment and promote a clean, sustainable Minneapolis by preserving the ability to provide coordinated traffic flow thus continuing to reduce CO and hydrocarbon production.

- Comprehensive Plan: Not applicable
- Zoning Code: Not applicable

Supporting Information

In August 2007, the City of Minneapolis submitted a number of applications for Federal ISTEA funding to be available in 2011. The Congestion Mitigation Air Quality (CMAQ) grant funding applications submitted by the Public Works Traffic and Parking Services were successfully funded to retime all the traffic signals located in Minneapolis. The CMAQ goals for these projects are to reduce vehicle delay and fuel consumption by developing and implementing new traffic signal timing plans. The federal funding covers 80% of the project costs with the remaining 20% coming from various sources. The funding for these projects was identified in our five-year Capital Improvement Project program.

The City hired Kimley-Horn and Associates, Inc. to complete the traffic signal retiming for the south Minneapolis area. It was anticipated at the start of the project that new signal timing plans would be implemented by the end of January, 2013. The project schedule was modified after the start of the project to coincide with the installation of the new central traffic signal control system. This approach will help reduce the number of hours that would be spent going to each traffic signal cabinet to enter the new signal timing plans. This approach also eliminates the need to enter new signal timing plans into the existing central traffic signal control system that is being replaced.

Contract Term

This project is approximately 90% complete. Kimley Horn & Associates, Inc. still needs to complete travel times runs and a report that will document the benefits of this project. Some of the remaining work will take place after the current contract termination date of 5/31/14. Therefore, Public Works is requesting Council to authorize City officers to amend the termination date of the Professional Service Contract C-31093 with Kimley-Horn and Associates, Inc. for the retiming of the traffic signals located in south Minneapolis. The termination date should be revised from 5/31/14 to 8/31/14.

The total cost for this project was estimated at \$749,490. This estimate was based on a project scope and schedule that was initially projected to last 17 months. During the course of the project, a number of scope and schedule changes have occurred that have impacted the project effort and budget. The following table is a summary of the scope and schedule changes and the associated increase in cost for each project task.

Task	Summary of changes	Increase in Cost
Task 1 – Project Management, Team Coordination, Communications	The project schedule expanded from 17 months to approximately 32 months to coincide with the installation of the new central traffic signal control system. As a result, an increase in time necessary for team coordination, scheduling, and invoicing over a longer timeline was required.	\$1,300
Task 2 – Traffic	Subtask 2.2 - Formatting of pedestrian and bicycle counts by	\$7,500

Turning Movement and Volume Counts	<p>the sub-consultant were different than anticipated and required reformatting of all pedestrian and bicycle count volumes for 345 intersections. The reformatting of the counts was required so that the counts could be uploaded onto the city's traffic count website.</p> <p>Subtask 2.4 - Metro Transit provided raw, rather than post-processed, bus route and on-time performance data. This data had to be reviewed and interpreted to produce transit travel times for key transit routes. This effort required additional staff time to complete.</p>	
Task 3 – Timing Plan Development	<p>Subtask 3.2 – The existing Synchro models and timing plans that were provided by the city required substantially greater level of effort to create the existing conditions models than was expected. This was due to a large number of inconsistencies and quality of data received for existing timings, summary timing spreadsheets, controller timing/phasing sheets, and existing Synchro models provided by the City.</p> <p>Subtask 3.4 – Due to the lengthened schedule of the project, a number of other city signal and intersection upgrade projects that had later or longer times were completed before the new signal timings were implemented and therefore new geometrics and/or signal phasing had to be incorporated into all three proposed timing plans. This caused a recalculation of timing splits and offsets on several key corridors. In addition, over the course of the project the city requested additional analysis or input on a number of intersection and corridor operational issues as part of other projects or elected official requests.</p> <p>Subtask 3.6 – During the field implementation process, some inefficiency occurred due to a variety of scheduling related issues. The original schedule called for signal timing implementation and fine-tuning to occur in a two-month block in September and October 2012, which would have allowed some additional flexibility and efficiency since the fine-tuning effort would occur continuously over a two month period rather than in 1 to 2 week blocks over a 4 to 5 month period. This effort required additional in-the-field time by the implementation teams.</p>	\$90,000
Additional Tasks	During the summer of 2012, the city directed an analysis of the conversion of Park Avenue and Portland Avenue from three-lane one-way roadways to two-lane one-way roadways. This analysis was not part of the initial project scope.	\$11,560
Amendment Amount Requested		\$110,360

Public Works staff determined that the scope and schedules changes were essential to the project delivery and end product. Therefore, Public Works is requesting Council to authorize City officers to amend the contract total. The contract total should be revised from \$749,490 to \$859,850. No additional appropriation will be required.

Cc: Don Elwood, Public Works