То:	Honorable Mayor and City Council
From:	Maria D'Andrea, Director of Public Works
Subject:	Recommendation to Approve a Construction Contract with Taylor Kohrs, LLC for the Chambers Road Bridge Widening Project, Project No. 2015-02-PW
Date:	August 15, 2016

Item:	Award of Construction Contract
Contractor:	Taylor Kohrs, LLC
Contract Amount:	\$416,701.82

Project Description

The 2015 Capital Improvement Program included a project to construct a soft surface trail on the west side of Chambers Road from the commercial development north of 104th Avenue to a point of connection at Heartland Drive, on the east side of Chambers Road. A pedestrian crossing and a Rapid Rectangular Flashing Beacon (RRFB) system would also be installed for pedestrian safety to cross Chambers Road, south of Heartland Drive. \$315,000 was budgeted for this project. This is a high priority for the City as concerns have been raised about pedestrian safety and Council continues to receive numerous inquiries from citizens.

The critical piece of the project is providing infrastructure to cross Second Creek. Atkins North America, an engineering consultant, prepared a technical evaluation of the possible options and costs. In summary, three options were considered including:

- Option 1: Cantilever a sidewalk off of the existing bridge
- Option 2: Widen the existing bridge, or
- Option 3: Install a pre-fabricated bridge

Option 2 involves widening the bridge by extending the existing bridge wing walls to support a sidewalk extension. Option 2 was recommended by Atkins on the basis of cost, ease of construction, and the elimination of the hydraulic analysis required with a standalone, pre-fabricated bridge and the associated permitting requirements through the



Corps of Engineers. Also, the improvements would not be "throw away" as the bridge widening completed under this project would advance the ultimate bridge widening required when Chambers Road is widened to a 4-lane roadway.

A summary of this direction was provided in the October 26, 2015 City Manager's Update. At that time, the plan was to design the project over the winter and bid it in spring 2016 for summer construction.

The project has been bid three times in 2016. A summary of the bid results is shown below:

Bid Date	3/8/16	4/15/16	7/11/16**
Engineer's Estimate	\$250,623	\$250,623	\$223,820
KECI Colorado	\$669,623	\$604,573	
Taylor Kohrs*	\$72,897,288		\$416,702
Consolidated Resource		\$506,543	
Myers and Sons Construction			\$646,350

*-contained math errors on initial bid

**After the second bid, staff analyzed the costs and recommended using City staff to install a shoulder along the planned route to be used as a trail for pedestrians. The plans issued for bid the third time, eliminated the trail portion of the project and modified the Engineer's Estimate to reflect only the bridge portion of the work.

The original project budget was \$315,000 leaving a net shortfall of \$183,000, as shown below.

Original Project Budget	\$315,000
Design/Engineering	\$39,528
Easement*	\$0
Construction-bridge widening	\$416,702



Construction-trail (by City)	\$0 (direct costs)
5% Contingency	\$20,835
Inspection/Testing (5%)	\$20,000
Total Estimated Cost (rounded)	\$498,000
Net	(\$183,000)

*donated by Shea

Due to the high bid prices, staff worked with Atkins to identify an alternate estimated project cost and schedule to construct the stand-alone, pre-fabricated bridge, adjacent to the existing bridge. Under this scenario, there would be approximately \$77,000 in design costs to design the pre-fabricated bridge and would require permits from the Corps of Engineers and coordination with the Urban Drainage Flood Control District and Colorado Department of Health and Environment (CDPHE) for potential wetland impacts. The bridge would be fabricated off-site and set in place on abutments that were constructed in the field. The area would be graded and a trail built down to connect the ends of the new bridge to 104th Avenue. Staff would still construct the majority of the trail, adjacent to 104th Avenue.

Original Project Budget	\$315,000
Design/Engineering (previous)	\$39,528
Design/Engineering (new)	\$75,000
Easement*	\$0
Construction-bridge widening	\$325,150
Construction-trail (by City)	\$0 (direct costs)
20% Contingency	\$65,030
Inspection/Testing (5%)	\$20,000
Total Estimated Cost (rounded)	\$525,000
Net	(\$210,000)

*donated by Shea



The contract allows for a 70-day construction time period. If the contract is awarded to Taylor Kohrs, construction would likely be completed by November 2016. If the City proceeded with the design of a stand-alone bridge, the estimated time to complete that work as well as obtain the necessary permits is approximately 3 months. Assuming a 60-day construction period and winter weather, construction would not be completed until April 2017.

Given that the overall project cost for the bridge widening (\$498,000) is relatively the same as the stand-alone bridge (\$525,000), the deciding factor would become the time frame for completion of the project. The bridge widening would result in a quicker construction completion (November 2016) versus the stand-alone bridge (April 2017) therefore staff recommended that the project budget be increased by \$183,000 to cover the additional costs of the bid.

Bidding & Selection Process

- Plans and specifications were prepared by Atkins North America.
- Bids were solicited through a formal bidding process, which was advertised on the City website and the Rocky Mountain E-Purchasing website beginning on June 17, 2016.
- Bids were opened and read publicly at 3:00 p.m. on July 11, 2016.
- One addendum was issued during the bid phase of the project.
- The City received two (2) bids, shown below.

	Total Bid Price
Myers & Sons Construction, Inc.	\$646,350.00
Taylor Kohrs, LLC	\$416,701.82
Engineer's Estimate	\$223,819.49

• There were no local Commerce City contractors who submitted a bid.



<u>Schedule</u>

A Notice to Proceed is anticipated to be issued on or about August 29, 2016. Weather permitting, all work should be completed in November 2016.

<u>Financial Impact</u> Funding for the project will come from the CIP Fund and General Fund.

Staff Recommendation:

Staff recommends acceptance of the bids and awarding a contract to Taylor Kohrs, LLC in the amount of \$416,701.82 for this work.

