



COLORADO
Department of Transportation
Office of the Chief Engineer

TO: SHOSHANA M. LEW, EXECUTIVE DIRECTOR
FROM: MARKO ATAMO, PE, CMA BRANCH MANAGER
CC: JOSHUA LAIPPLY, PE, CHIEF ENGINEER
DATE: 7/19/2019
SUBJECT: AWARD TO LOW RESPONSIVE BIDDER C.R.S. 43-1-113 (16)
PROJECT: STR 141A-040 (20680) REGION 5 BRIDGE PREVENTIVE MAINTENANCE

Pursuant to C.R.S. 43-1-113(16), it has been determined that it's in the best financial and economic interest of the State to award Region 5's project STR 141A-040 (20680) to the low bidder American Civil Constructors, LLC ("ACC").

Project Description: This Region 5 project is at various locations on SH 151, US 160 and US 550 in La Plata and Archuleta Counties for completing bridge preventive maintenance on multiple structures. The project work includes removing and replacing asphalt and concrete, installing waterproofing membrane, sealing concrete with polyester concrete overlay, removing and replacing bridge expansion devices, other miscellaneous repairs, re-striping, and traffic control. The project was solicited under a design bid build (low bid) project delivery method where only two bids were received with ACC being the lowest responsive bidder.

Financial Impact: ACC's bid proposal totaled \$2,647,688.00 compared to the CDOT engineer's estimate of \$1,961,295.00. The project risks rejection by Statute since there were only two bidders and their proposals are 135% and 174.46% of the engineer's estimate. Region 5's received Transportation Commission approval for additional funding needed to award the project.

Cost Analysis: An analysis of the bid schedule revealed that four of the bid line items identified below were significantly higher than the CDOT engineer's estimate.

Bid Item Description	QTY	Unit	Unit Price Low Bid & Eng. Est.		Total Cost Difference	% Over Eng. Estimate
Place Thin Bonded Overlay	1,631	SY	\$175.00	\$70.00	\$171,255.00	250%
Furnish Thin Bonded Overlay	1,156	CF	\$197.00	\$130.00	\$77,452.00	151.54%
Hot Mix Asphalt for Patching	360	TON	\$550.00	\$300.00	\$90,000.00	183.33%
Temporary Concrete Barrier	1,390	LF	\$100.00	\$40.00	\$83,400.00	250%

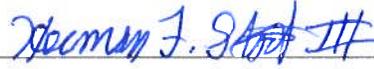
For the above bid items the engineer's estimate used historical data from similar projects with comparable quantities. In verifying ACC's bid offer, research revealed that the bridge structures located in six different remote locations requiring multiple phases of work significantly increased the overall cost for completing project. ACC commented on the challenges of transporting materials, equipment and personnel to the various job sites affecting their bid pricing due to the different remote work locations and work phases. ACC also mentioned it being difficult to get subcontractor bids due to shortages in available subcontractors that can perform asphalt patching work. As a result, the subcontractor pricing for that bid item reflects higher costs associated with current market conditions. Based on the cost analysis, EEMA and Region 5 consider ACC's proposed prices to be fair and reasonable, and recommends proceeding with the award to them.

Staff Review & Recommendation: Given the over project's dynamics mentioned above and ACC's bid being \$774,066.00 lower than the only other bidder, re-advertisement of the project is unlikely to result in more competition or reduced pricing. The Region 5 Project Management Team's analysis and recommendation to award the project is provided in the attached memorandum to this request. Staff recommends that the project's award be authorized.

- I recommend award
- I do not recommend award

 Date 7/22/19
Markos Atamo, PE, CMA Branch Manager

- I authorize award of the referenced project
- I do not authorize award of the referenced project

for  Date 8-1-19
Shoshana M. Lew, Executive Director

cc: Jerad Esquibel, Director, Division of Project Support
Randy Jensen, Federal Highways Administration
RB Simmons, Engineering Contracts
Central Files



COLORADO
Department of Transportation
Region 5

3803 N. Main Avenue
Durango, CO 81301-4034

MEMORANDUM

Date: July 18, 2019
FROM: Kevin Curry, Region 5 Program Engineer
TO: Stephen Bokros
CC: Josh Laipply, Chief Engineer; Mike McVaugh, RTD
RE: 20680 Region 5 Bridge Preventative Maintenance: ABR Region Support Justification

This memorandum provides specific information and consideration from an engineering perspective and program related reasons for awarding project 20680 / STR 141A-040 Region 5 Bridge Preventative Maintenance.

This project will correct a number of issues on six different bridges throughout Region 5. Safety will be improved on all the structures due to the various repairs and improvements including better skid resistance, improved drainage and reduced deterioration at the bridge joints.

However, one bridge being addressed (P-05-S US 160 Bridge over the Animas River in Durango) has an ongoing maintenance and safety concern. The south approach slab has experienced significant settlement resulting in a substantial differential between the approach slab and the bridge. Currently the settlement is being mitigated by a wedge of asphalt placed by Region 5 maintenance forces. This wedge has to be replaced regularly as it is not a long term solution. Region 5 currently has warning signs of road damage and cautioning motorcyclists approaching this bump. This project will replace the approach slab, expansion joint, adjacent concrete paving and barrier rail in order to provide a permanent solution to this safety and maintenance issue. See current condition below with warning signs:





The varied nature of the work (possibly requiring several specialty subcontractors), remote location (Region 5 does not have local bridge specialty contractors), and proximity of each bridge location to one another are all contributing factors to only receiving two bids for this project. It is highly likely that a re-bid will yield the same results.

It is also believed that due to the project constraints, multiple mobilizations, small quantities, and two items included on the project that are specialty items, (which represent almost \$250,000.00 of the low-bid cost) contributed to the above average bid prices. These prices are not likely to change significantly with a re-bid.

The project schedule has been structured in consideration of Durango and Pagosa Springs tourist season, environmental restrictions, and winter/cold weather limitations from the specifications. If this project were to be postponed as a result of a re-bid process, Region 5 would either (1) construct some sites in the spring with a shutdown throughout the summer and restarting back in September or (2) postpone starting the project until September 2020; neither of which are preferable.

On Thursday July 18th, the Transportation Commission approved Region 5's request for supplemental funding from the Region 5 Bridge Asset funds.

Given the above safety considerations and schedule requirements it is requested that this project be approved for construction.

