

STAFF REPORT

Date: June 12, 2024

To: Mayor and City Council

Through: Doug Thornley, City Manager

Subject: Staff Report (For Possible Action): Award of Contract to F.W. Carson Co. for the Evans Creek Drive Culvert Rehabilitation B2698 Project in the amount of \$453,426.61. (Sewer Fund)

From: Christopher Holman, Senior Civil Engineer

Department: Utility Services

Summary:

A partial replacement of the Evans Creek Drive Culvert (Bridge B2968) over Evans Creek is necessary to maintain the structural integrity of the culvert and Evans Creek Drive roadway. Staff recommends Council award the contract to F.W. Carson Co. for the Evans Creek Drive Culvert Repair B2698 in an amount not to exceed \$453,426.62 for the base bid and project force account (Sewer Fund).

Consent Review	Yes	No
1. Is this item an annual or standard item that comes before Council for regular approval?		X
2. Is this item an agreement required based on an item previously approved by Council?	X	
3. Is this item included in the current budget approved and adopted by Council?	X	
Other Considerations		
What percent of the total City budget does this item represent?	0.05%	

Alignment with Strategic Plan:

Infrastructure, Climate Change, and Environmental Sustainability

Previous Council Action:

January 9, 2019 – Council approved a consultant agreement with WSP (formerly Louis Berger, U.S.), for engineering design services for the Evans Creek Drive Culvert Rehabilitation.

Background:

Evans Creek Drive crosses Evans Creek just south of Ridgeview Drive in South Reno and is identified as Bridge B2698. The single cell arched culvert is a bottomless culvert built on footings and was constructed in the early 1990s as part of the Evans Creek Estates development. The bridge spans approximately 72 feet under Evans Creek Drive and consists of nine (9) arch segments, each measuring 25 feet wide by nine (9) feet high by eight (8) feet long. Figure 1 below shows the crossing location and Figure 2 shows a photo of the west elevation.

The Nevada Department of Transportation (NDOT), in accordance with the National Bridge Inventory Program, inspects all bridges in the state of Nevada, regardless of ownership, and provides annual inspection reports to the City that document the overall condition of the City's bridges. NDOT's 2018 annual inspection report initially identified a 1/8" crack that has continued to widen, now measuring 3/16" wide in the Evans Creek Bridge Arch Segment No. 8 (of 9), and indicates structural failure of the segment. This project includes the replacement of Arch Segment No. 8.

In 2004, the annual NDOT inspection report identified a structural failure of Arch Segment No. 7, which led to its replacement. All remaining 7 Arch Segments are identified to be structurally sound.

Figure 1. Location Map

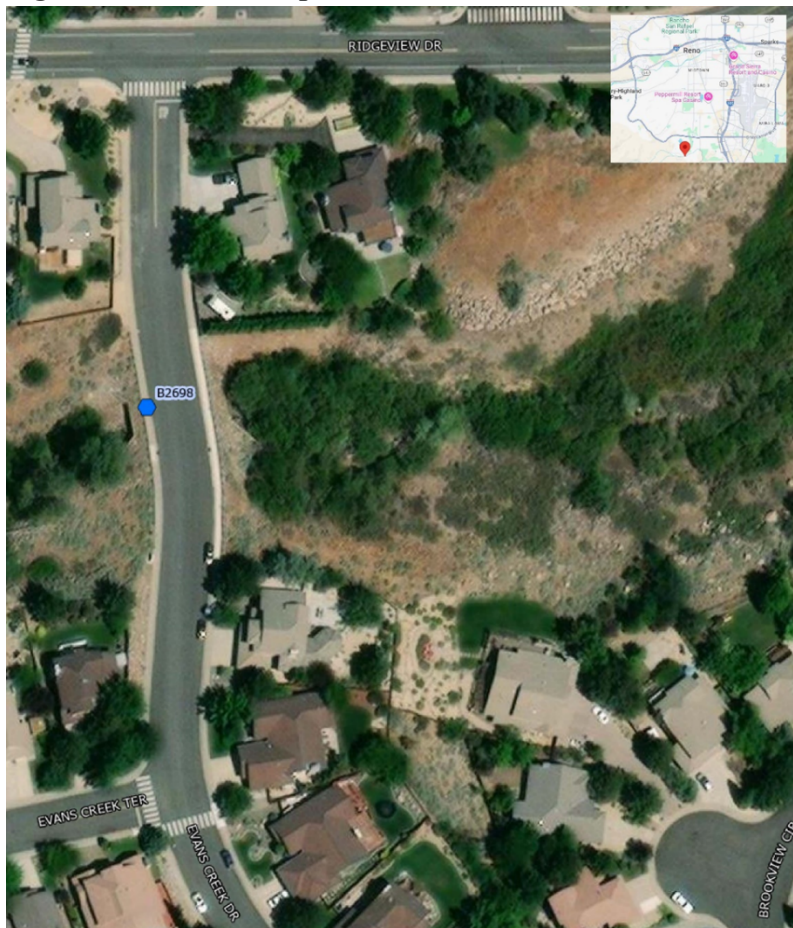


Figure 2. West Elevation of B2698



Discussion:

Evans Creek Drive Culvert (Bridge B2968) over Evans Creek requires replacement of Arch Segment No. 8 due to a flexure crack located at the top of the arch segment. The City of Reno monitors the culvert and observed the cracks expanding. The flexure cracking in Segment No. 8, initially noted in the NDOT 2018 inspection report as a 1/8" crack, has continued to widen, now measuring 3/16" wide. Additionally, Segment No. 8 shows a noticeable sag in the top or crown of the arch. Figures 3 and 4 below depict evident distresses in Arch Segment No. 8. Removal of the distressed arch and replacement with a new prefabricated arch is necessary to maintain the structural integrity of the bridge and Evans Creek Drive.

Figure 3. Sag evident in Arch Segment No. 8



Figure 4. Flexure cracking in crown of Arch Segment No. 8



Staff received and opened three bids for the Evans Creek Drive Culvert Repair B2698 Project on May 16, 2024. Table 1 below summarizes the bid results.

Table 1. Bid Summary

	Evans Creek Drive Culvert Repair B2698 Project Bidders	Total Bid
1	F.W. Carson Co.	\$ 411,426.62
2	Gerhardt & Berry Construction Inc.	\$ 469,162.00
3	Sierra Nevada Construction, Inc.	\$ 589,007.00
Engineer Estimate		\$ \$441,440.00

Table 2. Recommended Bid Award

Evans Creek Drive Culvert Repair B2698 Project – Base Bid	\$ 411,426.62
Force Account	\$ 42,000
Bid Award	\$ 453,426.62

Further deterioration of Arch Segment No. 8 and eventual failure of the segment, along with Evans Creek Drive roadway shoulder are the likely consequences if this project is not awarded today, increasing risk to the City.

Also on today’s agenda for Council consideration is the agreement for construction services with WSP USA, Inc. as a separate but related item.

Financial Implications:

The current fiscal year’s Capital Improvement Program (CIP) includes this project and budget is available in the Sewer Fund.

Legal Implications:

This contract was competitively bid in accordance with Chapter 338 of the Nevada Revised Statutes (NRS). Furthermore, NRS 338.147 provides that a local government shall award a contract for a public work for which the estimated cost exceeds \$250,000 to the contractor who submits the best bid pursuant to the requirements of the chapter. F.W. Carson Co. maintains the proper licenses to construct the project and submitted the best bid pursuant to City procedures and Nevada law.

Recommendation:

Staff recommends Council award the contract to F.W. Carson Co. in the amount of \$453,426.62 (Sewer Fund) and authorize the Mayor to Sign.

Proposed Motion:

I move to approve staff recommendation.

Attachments:

F.W. Carson Co – Evans Creek Contract