



County of El Dorado

330 Fair Lane, Building A
Placerville, California
530 621-5390
FAX 622-3645
www.edcgov.us/bos/

Legislation Details (With Text)

File #: 19-0049 **Version:** 1

Type: Agenda Item **Status:** Approved

File created: 1/3/2019 **In control:** Board of Supervisors

On agenda: 3/5/2019 **Final action:** 3/5/2019

Title: Department of Transportation recommending the Board consider the following pertaining to the Diamond Springs Parkway - Phase 1A - SR-49 Realignment Project, CIP 72375 / 36104025, Contract 2720:

- 1) Award Schedule A of the Construction Contract to Granite Construction Company who was determined to be the lowest, responsive, responsible bidder;
- 2) Approve and authorize the Chair to sign the Construction Contract, subject to review and approval by County Counsel and Risk Management;
- 3) Authorize the Director of Transportation to sign an Escrow Agreement, if requested by the Contractor and in accordance with Public Contract Code Section 22300, for the purpose of holding Contract retention funds; and
- 4) Reject Schedule B of the Construction Contract to Granite Construction Company who was determined to be the lowest, responsive, responsible bidder.

FUNDING: Schedule A Funding - Tribe Funds (82%), Utility Agencies (<1%), Traffic Impact Mitigation Fees (5%), Master Circulation and Funding Plan (5%), State Highway Operation and Protection Program (7%), and Road Fund (<1%). (Local and State Funds). Schedule B - No current funding allocated at this time.

Sponsors:

Indexes:

Code sections:

Attachments: 1. A - Exhibit A, 2. B - Addendum 1, 3. C - Addendum 2, 4. D - Bid Summary, 5. Executed Agreement 2720, 6. Public Comment Rcvd 3-5-19 BOS 3-5-19, 7. Public Comment Rcvd 3-4-19 BOS 3-5-19, 8. Supervisor Parlin's Handout

Date	Ver.	Action By	Action	Result
3/5/2019	1	Board of Supervisors	Not Approved (See Minutes)	
3/5/2019	1	Board of Supervisors	Approved	Pass

Department of Transportation recommending the Board consider the following pertaining to the Diamond Springs Parkway - Phase 1A - SR-49 Realignment Project, CIP 72375 / 36104025, Contract 2720:

- 1) Award Schedule A of the Construction Contract to Granite Construction Company who was determined to be the lowest, responsive, responsible bidder;
- 2) Approve and authorize the Chair to sign the Construction Contract, subject to review and approval by County Counsel and Risk Management;
- 3) Authorize the Director of Transportation to sign an Escrow Agreement, if requested by the Contractor and in accordance with Public Contract Code Section 22300, for the purpose of holding Contract retention funds; and
- 4) Reject Schedule B of the Construction Contract to Granite Construction Company who was determined to be the lowest, responsive, responsible bidder.

FUNDING: Schedule A Funding - Tribe Funds (82%), Utility Agencies (<1%), Traffic Impact

Mitigation Fees (5%), Master Circulation and Funding Plan (5%), State Highway Operation and Protection Program (7%), and Road Fund (<1%). (Local and State Funds). Schedule B - No current funding allocated at this time.

DISCUSSION / BACKGROUND

Award and Sign Construction Contract with Lowest Responsive, Responsible Bidder:

The Department of Transportation (Transportation) received sealed bids for the Diamond Springs Parkway - Phase 1A - SR-49 Realignment Project (Project) on Thursday, February 14, 2019 at 2:00 p.m. Transportation opened and read all bids received in conformance with contract bidding requirements.

This Project was bid as a Base Bid (Schedule A) and Additive Alternate Bid (Schedule B). The low bidder was determined from the Schedule A total only. The bid results are as shown in the following table:

	Granite Const. Co.	McGuire & Hester
Schedule A	\$9,444,023.08	\$11,761,631.34
Schedule B	\$311,025.00	\$220,545.00
Total (Schedules A + B)	\$9,755,048.08	\$11,982,176.34

Granite Construction Company (Granite) submitted the lowest, responsive, responsible bid, meeting all bidding requirements. Transportation issued the all bidders letter on Thursday, February 14, 2019 with the bid protest period ending Friday, February 22, 2019, with no protests received. Transportation recommends award of the Construction Contract to Granite.

Authorize the Director of Transportation (Director) to Sign Escrow Agreement:

Pursuant to Special Provisions Section 9-1.16F, "Retentions", Transportation will retain five percent (5%) of the value of work done from each Contractor payment (excluding mobilization payments) as security for the fulfillment of the Contract. Alternatively, Public Contract Code Section 22300 provides that the Contractor may request that payment of retentions held be made directly to an Escrow Agent. The Contractor will receive the interest earned on the investment.

In accordance with these provisions, the Contractor may request in writing that the County make payment of retention funds directly into an escrow account, which would necessitate an Escrow Agreement. To help expedite this process, if requested by the Contractor, Transportation requests that the Board authorize the Director to execute the Escrow Agreement. Upon satisfactory completion of portions of the Contract and upon written notification from the Director, the Contractor will receive incremental releases from the Escrow Agent paid into the account and any interest earned thereon. A portion of the retention and interest will be retained in the escrow account until thirty-five (35) days after the recordation of the Notice of Acceptance of the Contract at which time, upon written notification, these funds will be released to the Contractor.

Contract Change Orders (CCOs):

In any contract there is a need to be able to make changes and the CCO process facilitates the ability to make necessary changes when needed within a contract.

Supplemental CCOs

Certain types of work are necessary to complete the Project which cannot be estimated accurately because they require a variable effort to complete. These items are referred to as supplemental items and are identified in the Contract Documents as CCO work to be performed and paid for on a time and material basis, using California Department of Transportation (Caltrans) standard force account billing procedures. The work is authorized by issuance of a CCO, which also encumbers the funds anticipated to be needed for each of the planned supplemental items of work and is billed against as the work progresses. The amount of each CCO is based on an evaluation by Transportation staff of the Project components, area, and time frame. Supplemental items in this contract include Traffic Control and Storm Water totaling 5% of the original Contract value. Because this work is anticipated and budgeted for separately, supplemental CCOs are not included in the 10% cap normally associated with contingency CCOs.

Contingency CCOs

With construction contracts, there is an expectation that unanticipated changes will be encountered once construction begins. To prepare for this, a 10% contingency budget is set aside. PCC Section 20142 and Resolution 102-2012 authorize the Director to execute individual CCOs, the maximum value of which is based on the original contract amount with a not-to-exceed limit. This authority is also for a cumulative total of contingency CCOs not to exceed 10% of the original Contract value.

The supplemental and contingency budgets for both Schedule A and Schedules A+B are summarized in the following table:

	Schedule A	Schedule A+B
Supplemental (5%)	\$472,201.15	\$487,752.40
Contingency (10%)	\$944,402.31	\$975,504.81
Individual CCO Limit	\$210,000.00	\$210,000.00

The Project is necessary for Transportation to construct the realignment and widening of State Route 49 (SR-49) between Pleasant Valley Road and Bradley Road. The Project includes roadway improvements on SR-49; roadway excavation; HMA paving and dike; concrete curb, gutter, and sidewalk; signing and striping; permanent and temporary fence removal and construction; drainage improvements; signal modifications; retaining wall; and, underground utility construction.

Approximately 23,000 cubic yards of material will need to be excavated in order to lower the profile of Lime Kiln Road approximately 15 feet to conform to the widened section of SR-49. As a result, Lime Kiln Road will be closed for up to ten (10) weeks for reconstruction. Transportation will stockpile a portion of the excavated soil on two nearby County owned parcels, APNs 327-270-04 and 327-250-37, for use on future CIP projects.

This Project is a two hundred and fifty (250) working day contract. Lime Kiln Road will be fully closed to traffic for seventy (70) calendar days from Lime Plant Road to SR-49 (approximately 500 linear feet of road closure) in each direction of travel. Access for local residents and visitors, as well as emergency personnel and law enforcement, will be via detour to China Garden Road per the Project Detour Plan.

Transportation staff notified emergency response services, as well as other agencies and County departments, in accordance with Transportation established procedures for a road closure

authorization. Additionally, local businesses and community groups were included in this notification. No objections or comments were received from those notified. The Road Closure Authorization and Special Event Permit were executed under County Ordinance 5048 and signed by the Director on January 23, 2018.

The actual dates of the closure are to be determined and are anticipated for summer or fall of 2019. Further notification will be given at least one week in advance of the closure once the construction schedule is known. Transportation will also notify the public of this road closure at least one week in advance via the County website, press release, and portable changeable message signs.

Due to State and local funding, only CEQA compliance is required. A CEQA Notice of Determination was filed on May 25, 2011. An Environmental Impact Report was prepared for the Project and the Board approved the Project on May 24, 2011.

All necessary regulatory agency permits have been issued, including a Section 401 Water Quality Certification, California Department of Fish and Wildlife Section 1600 Streambed Alteration Agreement, and Section 404 verification under Nationwide Permit 14 from the Army Corps of Engineers. All necessary mitigation as part of these regulatory permits has also been completed.

All required right of way for this Project has been acquired.

Utility agreements with Pacific Gas & Electric Company (PG&E), El Dorado Irrigation District (EID), and Pacific Bell Telephone Company dba AT&T California (AT&T) are required for this Project. Utility work coordination requirements are included in the Contract Documents. EID work that is required of the Project contractor is shown in the Plans and must comply with Caltrans Standard Specifications. All utility agreements for this Project are fully executed.

Relocation of existing overhead utilities, including PG&E, AT&T, and Comcast will be performed during construction of the Project. Funding for the PG&E and AT&T underground relocations will be covered under the Electric Rule 20 and Telecommunications Rule 32 tariff programs. The total cost of this work is estimated at \$1,738,569, of which an estimated \$1,209,284 of Rule 20A credits will be used. Comcast is responsible for the remaining \$529,285 for cable utility relocations.

Due to no federal funding on the Project, the current Caltrans Disadvantaged Business Enterprise (DBE) requirements do not apply. Transportation encourages the use of DBE subcontractors when opportunities exist.

Broadband Shadow Conduit

In response to the Board's direction given on December 18, 2018, Transportation looked into ways to include broadband conduit as part of the project in accordance with the J-4 Broadband Infrastructure Installation Policy adopted by the Board on December 4, 2018, Item 24, Legistar #18-1612. PG&E is the lead on the new underground utility joint trench and Transportation consulted with them regarding additional broadband conduits in their trench for this Project. PG&E's response is that it would require revising their completed joint trench plans, bid package, a cost sharing agreement with the County, and a two month delay to their start of construction. Transportation revised the bid documents to include an Add Alternate Bid (Schedule B) for the installation of approximately 1,885 linear feet of communication conduit as part of project construction. Transportation revised the Notice to Bidders and contract documents to allow the Board the option of including additional broadband

conduits in the construction contract after receiving the bids and during the award.

The lowest responsive, responsible bidder estimates the cost of the conduit installation at \$117 per foot plus 10% contingency and 15% for construction management. This brings the total cost per foot to \$146. The bid price, therefore, is \$331,000 plus \$33,000 in contingency, plus \$50,000 for construction management, for a total cost of \$414,000.

The high cost of this bid price is due the additional work associated with a trench at the site that would be necessary only for the installation of conduit. There are typically two methods of undergrounding conduit. The first is boring, which is done from above with a machine that travels underground. This process is faster and usually most efficient on rural winding roads. The second is trenching, which is done from above ground, typically in areas where there are many utilities and hard ground surfaces. It is typically more expensive but considered safer in the event of a break in an adjacent utility. The most advantageous method for a given project is decided at the discretion of the engineer.

The ground material in the project area is composed mostly of blue granite, which makes boring underground difficult. There are also many utilities along this corridor which must be avoided. Due to these factors, bids for the project included trenching for conduit in their estimates.

Transportation is recommending the Board reject Schedule B due to the high cost and the opportunity for Broadband connectivity in adjacent corridors. The construction of conduit for the Missouri Flats Signals Project already includes a trench and conduit as part of the project to provide communication in between the signals. Therefore the placement of one more shadow conduit into that trench is very cost effective. The Missouri Flat route runs parallel to the US 49 project, and the placement of shadow conduit at that location would provide similar connectivity to the region. Additionally, AT&T has their own existing underground utility duct bank that contains an array of fifteen conduits, with only a small percent currently occupied. AT&T expressed that they have enough capacity and are not installing new conduits on Highway 49. Transportation has provided Exhibit A (Attachment A) of both existing and proposed communication conduits along the corridors of Missouri Flat Road and State Route 49 for reference. In addition, Exhibit A includes potential shallow conduit routes suggested by NEO Connect, as part of the Broadband Roadmap Report prepared for the County in June 2018.

Project funds currently budgeted for Schedule A of the Construction Contract are allocated for transportation improvement features and related construction management. The optional Schedule B features are for potential future broadband service and will require allocation of additional County discretionary funds prior to award of Schedule B. If the Board chooses to award Schedule B, Transportation recommends allocating additional County Economic Development - Transient Occupancy Tax funds, General Funds, or non-Transportation funds for the work items included in Schedule B.

The Board approved this Project for advertisement on December 18, 2018, Item 22, Legistar #18-0672.

ALTERNATIVES

- 1) The Board could choose to not award the contract and direct Transportation to re-advertise for construction bids.
- 2) The Board could choose to cancel the Project. Note: The Board has approved the Project

previously.

3) The Board could choose to award Schedule B to install Broadband conduit as part of the Project, and direct staff to return to the Board with a budget transfer to allocate funding to this portion of the project. Additional costs are \$388,781.25 for Alternate Bid (Schedule B) which includes a 10% contingency and 15% for construction management.

4) The Board could choose to delay the Project in order to establish a cost sharing agreement between PG&E and County for the utility trench, revise the joint trench plans and bid package. It should be noted that this alternative would cause a six month delay to the start of construction. The cost of the project delay is estimated at \$175,000, plus the cost of installing the conduit, which is unknown at this time.

PRIOR BOARD ACTION

The Board adopted Resolution 008-2014 on February 4, 2014, Item 23, Legistar 13-0981, which created an Underground Utility District as part of the Project. On May 9, 2017, Item 22, Legistar 17-0361, the Board authorized the purchase of Floodplain Riparian Habitat credits as necessary mitigation for the construction of the Project. On September 25, 2018, Item 24, Legistar 18-0436, the Board signed Agreement for Services 3285 with Ghirardelli Associates, Inc., to provide construction management and support services for the Project.

OTHER DEPARTMENT / AGENCY INVOLVEMENT

County Counsel and Risk Management have reviewed and approved the Contract Documents.

CAO RECOMMENDATION / COMMENTS

It is recommended that the Board approve staff's recommendation. It is not recommended that the Board approve the installation of Broadband conduit in Schedule B, given the bid results for the shadow conduit. Rather, the CAO recommends that Transportation continue to work with the Chief Administrative Office and NeoConnect to explore options for connectivity routes where feasible, and/or work with Broadband providers to purchase or lease, an entire conduit, space in the conduit, or excess fiber.

FINANCIAL IMPACT

The estimate for the construction phase of the Project for the Schedule A is \$12,309,230.00 and includes a bid of \$9,444,023.08; construction management, survey, materials testing and design support during construction totaling \$1,416,603.46; supplemental items of work totaling \$472,201.15; contingency of \$944,402.31; and, agency-furnished materials totaling \$32,000.00. The cost of the Schedule B work items is estimated at \$311,025.00 plus \$77,756.25 for contingency and construction management, for a total of \$388,781.25, which is not included in the Schedule A estimate. The total construction phase budget as included in the approved 2018 Capital Improvement Program (CIP) is \$11,656,900. The remaining amount of \$652,330 necessary for the estimated construction phase will be included in future fiscal year budgets as part of the upcoming CIP annual update.

CLERK OF THE BOARD FOLLOW UP ACTIONS

- 1) Upon approval by County Counsel and Risk Management, Transportation will forward two (2) originals of the Construction Contract, with the required bonds and the approved Contract Routing Sheet, to the Clerk for securing the Chair's signature.
- 2) Clerk will forward one (1) fully executed Construction Contract to Transportation, attention of Brian Franklin, Office Engineer, for further processing.

STRATEGIC PLAN COMPONENT

Infrastructure

CONTACT

Rafael Martinez, Director
Department of Transportation