Department: Utilities
Cost Center: 6002
For Agenda of: 10/19/2021
Placement: Consent
Estimated Time: N/A

FROM: Aaron Floyd, Utilities Director

Prepared By: Jennifer Metz, Utilities Project Manager

SUBJECT: AUTHORIZE ADVERTISEMENT OF CALLE JOAQUIN SIPHON AND

SEWER LIFT STATION REPLACEMENT PROJECT, SPEC. NO. 91118A

RECOMMENDATION

1. Approve the plans and specifications for the Calle Joaquin Siphon and Sewer Lift Station Replacement Project (Project), Specification No. 91118A; and

- 2. Authorize staff to advertise the Project for bids; and
- 3. Adopt a Resolution entitled "A Resolution of the City Council of the City of San Luis Obispo, California, authorizing use of Sewer Fund Unreserved Working Capital for Construction of the Calle Joaquin Siphon and Lift Station Replacement Project, Specification No. 91118A and authorizing the return of previously approved general fund funding for silt removal from the project account to General Fund Capital Reserves"; and
- 4. Authorize the City Manager to award the construction contract for the Project if the lowest responsible bid is within available project funding.

DISCUSSION

Background

Wastewater collection systems function primarily by gravity, flowing from higher to lower elevations throughout the City until wastewater ultimately reaches the Water Resource Recovery Facility (WRRF) for treatment. To maintain adequate elevations, sewer lift stations are constructed to "lift" the wastewater to higher elevations, where it can again be conveyed by gravity. The Calle Joaquin Sewer Lift Station was put into service in 1967 making it the oldest of eight sewer lift stations operated by the City. The Lift Station serves properties in the southern portion of the City on both the east and west sides of US 101, including the Froom Ranch project.

Sewer siphons are designed to carry wastewater for short distances under pressure, typically when the wastewater collection system needs to cross a creek or other low elevation site that would impede gravity flow. The sewer siphon under San Luis Obispo Creek and the gravity sewer main across US 101 were installed in the early 1970s to direct wastewater to the Calle Joaquin lift station.

The existing Calle Joaquin siphon was identified for replacement as it is exposed across San Luis Creek posing a significant failure risk. The existing Calle Joaquin sewer lift station was identified for replacement due to its age and condition. The lift station site has flooded in the past making it inaccessible. For the replacement of the lift station, the wet well rim elevation is higher than the current station and equipment (generator, electrical panel, etc.) is located above the known flood elevation. The project also includes installation of a new siphon under San Luis Obispo Creek via horizontal directional drilling, and replacement of the sewer crossing of US 101 via jack and bore.

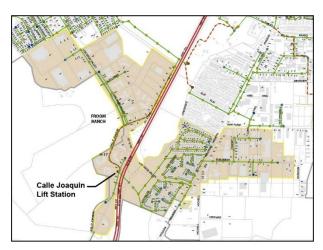
Original Project Bid and Resultant Rejection

On January 12, 2021, the City Council approved the advertisement of the Calle Joaquin Lift Station Replacement project (Specification No. 91118) and adopted Resolution 11204 (2021 Series) with a total budget of \$5.4 million including construction, construction management, and construction contingencies (Attachment D). Project funding sources included \$100,000 from the General Fund Reserves for silt removal from San Luis Obispo Creek with the balance from the Sewer Fund, including \$2.9 million from Sewer Fund Unreserved Working Capital. The Project was advertised on January 21, 2021 and staff conducted outreach to both general and subcontractors with experience on recent similar projects. Five general contractors attended a mandatory pre-bid conference on February 11, 2021. On February 25, 2021, two bids were received; both bids exceeded the engineer's estimate. The low bid was \$6,585,867, approximately 88 percent higher than the engineer's estimate.

As the low bid exceeded the available budget, staff recommended that the City Manager reject all bids for the project and for staff to return to the City Council with a recommendation to rebid the project in late 2021. The City Manager Report to reject all bids was approved on March 10, 2021.

Current Project Modified Scope of Work in Response to Feedback and Reassessment

Replacement of this existing infrastructure is still a high priority due to its age, condition, and immediate proximity to San Luis Obispo Creek. In March 2021 the existing siphon blocked causing a sanitary sewer overflow and on May 30, 2021 both pumps at the lift station failed due to a PG&E transformer failure/electrical surge.



Based on feedback the contractors who bid the original project and the various permitting agencies, staff worked with an engineering consultant to revise the plans, specifications, and construction cost estimate. Items eliminated from the project include diversion of San Luis Obispo Creek, removal of the existing siphon, removal of invasive species (Giant Reed or *Arundo*) and silt from the creek, modified access to the siphon/freeway crossing tie-in point to the US 101/Los Osos Valley Road offramp and added working days to accommodate procurement time. The gravity sewer line south of the lift station is now identified as an additive alternate, meaning this component would only move forward to construction if it can be funded from the available project budget. These changes in scope are intended to present a more straightforward project for bidders. Due to federal permitting challenges, silt and invasive species removal will be accomplished separately. Consistent with Municipal Code section 12.08.100 (Exceptions to Discharge), the City has applied for necessary permits from the Regional Water Quality Control Board for project dewatering.

With the silt removal eliminated from the Project, Recommendation 3 is to return \$100,000 to the General Fund Capital Reserves account. The City completed plans and specifications for the Project (Attachments A and B) and recommends the City Council authorize advertisement of the Project for construction.

Previous Council or Advisory Body Action

On January 12, 2021, the City Council adopted Resolution 11204 (2021 Series) approving the advertisement of the Calle Joaquin Siphon and Sewer Lift Station Replacement project (Specification No. 91118). A City Manager Report to reject all bids was approved on March 10, 2021. Since that time, the project has been modified as described above.

Policy Context

Per the City's General Plan Water and Wastewater Management Element, 2019 Sewer System Management Plan, and 2015 Wastewater Collection System Infrastructure Renewal Strategy, the City replaces wastewater infrastructure to ensure delivery of reliable service, minimize sanitary sewer overflows, and provide adequate capacity to serve future development.

Public Engagement

The Calle Joaquin Siphon and Lift Station Replacement Project has been identified as a priority project in the Financial Plan Capital Improvement Plan since 2011. As construction proceeds, updates will be provided on the City's Public Works Department website at:

www.slocity.org/government/department-directory/public-works/construction-and-traffic-updates

¹ Invasive species (Giant Reed or *Arundo*) removal from San Luis Obispo Creek is being coordinated by the City Biologist.

CONCURRENCE

Utilities staff, the City Biologist, and Public Works Department staff (City Engineer and Construction Manager) have worked cooperatively on the delivery of this Project. Those staff concur with the recommendations in this report.

ENVIRONMENTAL REVIEW

The City Council approved a Mitigated Negative Declaration of Environmental Impact for the Project in 2016 by Resolution 10718 (Council Reading File, Attachment E). An addendum was prepared in 2021 to align the project description with the current project which has reduced impacts due to eliminating the work which required the San Luis Obispo Creek diversion.

FISCAL IMPACT

Budgeted: Yes Budget Year: 2021-23

Funding Identified: Yes

The construction cost estimate for the project is now \$6 million. Other project costs of \$876,000 are outlined in the table below. Contingencies are included at 20 percent of the budget to address potential changes in scope that may arise during construction. Due to COVID-19, material cost and procurement times have both increased (especially electrical components and pipe material). The estimated total project cost is \$8,251,200 with only \$5,217,238 in currently approved project funding. Staff is recommending the City Council approve a Resolution (Attachment C) to utilize \$3,033,692 from Sewer Fund, Unreserved Working Capital.

The approximate current balance in Sewer Fund unreserved working capital is \$35 million. With the modification including elimination of the silt removal component, no funding from the General Fund is proposed.

Estimated Construction Cost		
Construction Cost Estimate	\$6,000,000	
Construction Management/Inspection	\$500,000	
Engineering Construction Phase Support/Record Drawings	\$200,000	
Biological Monitoring, Storm Water Pollution Prevention, Permit Fees,	\$76,000	
Specialty Inspection, Materials Testing, Printing, Recording, Misc. Costs		
Utility Service and Relocations (PG&E, Gas, AT&T, Charter Cable)	\$100,000	
Subtotal	\$6,876,000	
Contingency (20%)	\$1,375,200	
Total Project Cost ²	\$8,251,200	

² Excludes operating costs.

Project Funding	
Sewer Fund, FY 2017-19 Funding (91118, carryover)	\$2,600,000
Sewer Fund, FY 2019-20 Funding (100087)	\$700,000
Sewer Fund, Unreserved Working Capital (Approved January 12, 2021)	2,900,000
Expenditures and Commitments to Date	- \$982,762
Available Funding	\$5,217,238
Sewer Fund, Unreserved Working Capital	\$3,033,962
Project Funding	\$8,251,200

Fiscal Analysis:

Funding Sources	Total Budget Available	Current Funding Request	Remaining Balance	Annual Ongoing Cost
General Fund	\$ 0	\$0	\$0	\$0
Other: Sewer Fund	\$5,217,238	\$5,217,238	\$0	\$15,000
Other: Sewer				
Fund, Unreserved	\$35,000,000	\$3,033,962	\$31,966,038	\$0
Working Capital				
Total	\$40,217,238	\$8,251,200	\$31,966,038	\$15,000

Annual staffing, maintenance, equipment, and energy cost for the existing Calle Joaquin Lift Station is budgeted at \$15,000 annually. This cost is not expected to increase with the replacement of the siphon and lift station. Funding for the Project's on-going operational costs was approved as part of the 2021-2023 Financial Plan in the Sewer Fund, Wastewater Collection section operating budget.

ALTERNATIVES

Deny or defer approval to advertise. The City Council may choose to deny or defer the approval to advertise this project. Staff does not recommend this alternative as the existing siphon and lift station will continue to deteriorate, increasing the likelihood of failure, which could result in the discharge of untreated wastewater directly into San Luis Obispo Creek.

ATTACHMENTS

- A Project Plans for 91118A
- B Project Specifications for 91118A
- C Draft Resolution authorizing funding for the Calle Joaquin Siphon and Lift Station Replacement Project
- D January 12, 2021 Council Agenda Report