



DATE: May 4, 2021

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT Adopt Resolutions Approving Addendum No. 1 and Awarding a Contract to California Trenchless, Inc., for the Sanitary Sewer Main Replacement at Alameda County Transit Maintenance Facility Project, Project No. 07781, in an Amount Not-to-Exceed \$627,600, and Approving the Transfer of Funds in an Amount of \$747,600 for the Contract and Additional Inspection and Administration Expenses

RECOMMENDATION

That Council adopts the attached resolutions (Attachments II and III):

1. Approving Addendum No. 1 and awarding a contract to California Trenchless, Inc., for the Sanitary Sewer Main Replacement at Alameda County Transit Maintenance Facility Project, Project No. 07781, in an Amount Not-to-Exceed \$627,600; and
1. 2. Authorizing a transfer in the amount of \$747,600 for the contract and additional inspection and administrative expenses from the Sewer Line Replacement Project, Project No. 07694 to the Sanitary Sewer Main Replacement at Alameda County Transit Maintenance Facility Project, Project No. 07781.

SUMMARY

The Utilities Division of the Department of Public Works & Utilities replaces the City’s undersized or structurally damaged sewer mains through annual capital improvement program projects. This project will replace approximately 660 linear feet of 12-inch asbestos cement (AC) sanitary sewer pipe with 12-inch polyvinyl chloride (PVC) pipe by traditional open-cut trenching method along a sewer easement located at the Alameda County Transit (AC Transit) Maintenance Facility at 1758 Sabre Street and an adjacent business property at 1842 Sabre Street.

On April 13, 2021, twelve (12) bids were received. The low bid was \$542,600, which is \$272,400 below the Engineer’s estimate of \$815,000. Staff is requesting Council’s approval of Addendum No. 1, which provided minor revisions to clarify the specifications, and awarding the contract to the lowest bidder, California Trenchless, Inc., in the amount not-to-exceed \$627,600, which includes an additional \$85,000 for construction contingencies.

Furthermore, staff is requesting the transfer of funds from the FY20 Sewer Line Replacement Project, Project No. 07694, in the amount of \$747,600 for the contract and additional inspection and construction administration expenses to the Sanitary Sewer Main Replacement at AC Transit Maintenance Facility Project, Project No. 07781. The replacement of the sanitary sewer main at AC Transit Maintenance Facility was originally included as part of Project No. 07694, but it was removed due to unforeseen field conditions and advertised separately.

BACKGROUND

The City's current Capital Improvement Program includes funding to replace the City's undersized and/or structurally damaged sewer mains through annual sewer line replacement projects.

The Utilities Division staff perform regular sewer main cleaning and have an ongoing program to monitor and inspect the condition of the City's sanitary sewer collection system using closed circuit television (CCTV) technology. The inspection is performed by placing a camera, mounted on tracks, inside a sewer pipe and remotely guiding it through the length of the pipe. As the camera moves forward, it sends back video to a TV monitor that enables the staff to inspect the condition of the pipe in real time. These inspections are used to identify structurally damaged sewer mains for repair or replacement.

This project consists of replacing approximately 660 linear feet of existing 12-inch asbestos cement (AC) sewer pipe, constructed in 1967, with 12-inch polyvinyl chloride (PVC) pipe along the sanitary sewer line easement at the Alameda County Transit Maintenance Facility at 1758 Sabre Street and at an adjacent business property at 1842 Sabre Street.

This sanitary sewer line segment was originally included in the FY20 Sewer Line Replacement Project, Project No. 07694. The original design specified rehabilitating the sewer main by a trenchless pipe replacement technique known as cured-in-place pipe (CIPP). CIPP involves inserting a resin-impregnated flexible tube into the pipe, inflating, and curing it with hot water or steam forming a structurally sound, watertight new pipe within the existing pipe. The CIPP would have all the structural properties of a stand-alone pipe.

However, the condition of the sanitary sewer pipe severely deteriorated between the initial inspection and start of construction. The City's contractor assessed the condition of the sewer main through CCTV prior to performing CIPP and encountered several holes and heavy grease rails. In order to proceed with the CIPP, the grease rails required removal through hydro jetting to fully insert, inflate, and cure the liner. Due to the poor condition of the sewer main, cleaning the heavy grease rails by hydro jetting further exacerbated the pipe's poor condition and exposed more holes and structural defects. Emergency spot repairs were performed to keep the sewer main in service. This sewer main has exceeded its service life, and the unforeseen structural defects and grease rails prohibited the use of CIPP. As a result, this sewer main was removed from the FY20 Sewer Line Replacement Project and was advertised as a separate bid package.

DISCUSSION

On March 16, 2021, Council approved the plans and specifications for the project and called for bids to be received on April 13, 2021.

On April 13, 2021, the City received twelve (12) bids for the project, ranging from \$542,600 to \$998,550. California Trenchless, Inc., submitted the low bid in the amount of \$542,600, which is approximately 33% below the Engineer's estimate of \$815,000. The average of the twelve (12) bids received was \$733,266, which is approximately 10% below the Engineer's estimate. The Engineer's estimate included additional contingency to cover unforeseen conditions. In addition, the Engineer's estimate accounted for volatility in concrete supply costs, which have fluctuated because of fly ash shortages due to COVID-19 related supply chain impacts. The concrete restoration accounts for a significant portion of the overall construction cost. An additional \$85,000 (or 15% of the contract amount) is included for administrative change orders in the event additional funds are needed for unforeseen conditions and changes during construction for a total contract amount of \$627,600. Several of the pipe segments are in challenging areas, including close proximity to the AC Transit bus wash station, PG&E transformer, and other utilities. Given the complexity and unforeseen nature of underground sewer improvements, the administrative change order budget will also cover contingencies to address uncertain field conditions.

Staff has reviewed the bid documents and licenses and they are all in order. Staff recommends award of contract to the low bidder, California Trenchless, Inc., in the amount of \$627,600, which includes construction contingencies.

ECONOMIC IMPACT

Replacing the sewer main and appurtenances are part of an effort to, pursuant to Council direction, modernize and upgrade existing infrastructure. The project will reduce operations and maintenance costs associated with servicing the structurally defective sewer main and structures. The community will enjoy the benefits of the project, including the continued operability and serviceability of the sewer collection system. Furthermore, robust and reliable sewer infrastructure can help foster economic development and viability in the City.

FISCAL IMPACT

The estimated costs for the Sanitary Sewer Main Replacement at Alameda County Transit Maintenance Facility Project are as follows:

Construction Contract	\$542,600
Administrative Construction Contingency	\$85,000
Total Construction Contract	<u>\$627,600</u>
Construction Administration – City Staff	\$95,000
Inspection & Testing	<u>\$25,000</u>
Total Project Budget	\$747,600

The sanitary sewer main replacement at the AC Transit Maintenance Facility was originally part of the FY20 Sewer Line Replacement Project, Project No. 07694. However, staff determined that it would be more appropriate to remove this section of the sewer main from Project 07694 due to the additional repairs and work needed and advertise as a new project, Project 07781.

Staff anticipates an estimated amount of \$820,000 remaining available from Project 07694 after project closeout in May 2021. Staff is requesting the transfer in the amount of \$747,600 from the remaining funds in Project 07694 to Project 07781. Remaining available funds from Project 07694 will be returned to the fund balance. There will be no impact to the General Fund as the project budget will come from the Sewer enterprise funds.

STRATEGIC ROADMAP

This agenda item supports the Strategic Priority of Improve Infrastructure. Specifically, this item relates to the implementation of the following project:

Project 15: Upgrade sewer collection system by replacing 3-4 miles of sewer lines annually.

SUSTAINABILITY FEATURES

The repair and replacement of deteriorating sewer lines reduces the risk of sewer overflows, which can cause untreated wastewater to flow into public waterways.

PUBLIC CONTACT

This project is statutorily exempt from environmental review under the California Environmental Quality Act (CEQA) Section 15282(k), which allows for the repair and restoration of an existing subsurface pipeline, provided the project does not exceed one mile in length.

During construction, notices will be provided to affected residents, property, and business owners to inform them of the nature and purpose of the work, potential impacts, work schedule and City contact for additional information.

NEXT STEPS

The following schedule has been developed for this project:

Award of Construction Contract	May 4, 2021
Notice to Proceed	June 1, 2021
Construction Completion	December 2021

Prepared by: Karla Castro, Assistant Civil Engineer

Reviewed by: Tay Nguyen, Senior Utilities Engineer

Recommended by: Alex Ameri, Director of Public Works

Approved by:

A handwritten signature in black ink, appearing to read "K. McAdoo". The signature is fluid and cursive, with a large initial "K" and a stylized "McAdoo".

Kelly McAdoo, City Manager