



STAFF REPORT

AGENDA NO: 8d

MEETING DATE: September 16, 2019

To: Honorable Mayor and City Council

Date: September 16, 2019

From: Syed Murtuza, Director of Public Works – (650) 558-7230

Subject: Adoption of a Resolution Approving a Professional Services Agreement for \$483,100 with Carollo Engineers, Inc. for the FY 2019-20 Wastewater Collection System Master Plan Update, City Project No. 85820, and Authorizing the City Manager to Execute the Same

RECOMMENDATION

Staff recommends that the City Council adopt the attached resolution approving a professional services agreement with Carollo Engineers, Inc. (Carollo) in the amount of \$483,100 for the preparation of the FY 2019-20 Wastewater Collection System Master Plan Update, City Project No. 85820, and authorizing the City Manager to execute the same.

BACKGROUND

The last update to the City's Wastewater Collection Master Plan was done in FY 2009-10. This project includes a condition assessment of the system and an update of the Master Plan. The Master Plan update will provide a measure of the City's sewer collection system performance, identify current problem areas in the sewer collection system, identify the improvements required, and develop a 10-year Capital Improvement Program. This project will also analyze the sewer collection system projects that were completed in the past 10 years that resulted in compliance with the San Francisco Bay Keeper Consent Decree (Consent Decree) and will identify new projects that need to be completed.

As part of the flow monitoring process, sewage flows from Hillsborough and Burlingame Hills that enter into Burlingame's collection system will be analyzed to determine their impact to the City's collection system and the Wastewater Treatment Plant.

In addition, hydraulic modeling evaluations will be performed to evaluate the sewer collection system performance during the dry season when the system experiences normal flows, and during the rainy season when the flows are high. Furthermore, the overall system will be evaluated for capacity requirements to serve future planned growth in the city that may occur as per the updated General Plan.

These evaluations will identify deficiencies that need to be addressed to improve the system performance and system operations. The end result of this task will be a list of capital improvements projects to address deficiencies and improve the system.

Moreover, preliminary structural and mechanical evaluations of sewage pump stations will be performed as part of this project. This evaluation will determine the conditions of pump stations and any improvements required. Based on the recommendations of the Master Plan to implement identified improvements, a sewer rate study will be performed that will advise the City regarding the future sewer rates.

In summary, the Wastewater Collection System Master Plan is a tactical exercise to identify the sewer system deficiencies and measures to mitigate them, as well as to develop cost estimates and an implementation plan.

DISCUSSION

Staff issued a Request for Proposals (RFP) for professional services for this project on June 17, 2019 and received six proposals by the July 22, 2019 submission deadline. After reviewing the proposals, staff interviewed four consultants on August 15, 2019. Carollo submitted a very comprehensive and thorough proposal, and performed well during the interview. Based on the results of the interview and qualifications of the firms, Carollo was selected as the top qualified firm for this project. Staff negotiated the following scope of services with Carollo Engineers in the amount of \$483,100, which is described in detail in Exhibit A of the attached Professional Services Agreement:

- Conduct data collection and an initial assessment of the City's collection system.
- Develop and conduct a temporary flow monitoring program consisting of 23 temporary flow monitoring sites, seven lift station loggers, and three rain gauge locations for a period of two months.
- Work with the City to review and evaluate hydraulic modeling software, build the hydraulic model from the City's GIS system, calibrate the model to dry and wet weather flow conditions, develop the selected design storms, and develop a model construction and calibration technical memorandum.
- Develop evaluation criteria, analysis of the existing system capacity, perform analysis of the impact of future flows on the existing collection system, and the development of projects to mitigate those deficiencies.
- Develop a Capital Improvement Program that includes capital improvement costs, proposed project phasing, existing and future user cost allocations, and annual capital costs expenditures.
- Develop draft and final Master Plan Report.
- Perform project management, including managing the project team, coordinating with sub consultants, managing the scope of work, and project meetings.

- Develop a technical memorandum that summarizes the construction and calibration of the City's hydraulic model and conduct a project workshop to educate City staff on the model and its functionality.
- Conduct an evaluation of the City's six pump stations. The evaluation will include a physical condition assessment of each of the pump stations. This task will include a Pre-Inspection Workshop, condition assessments, and the development of a Pump Station Assessment Report.

The consultant fee of \$483,100 is approximately 0.60% of the preliminarily estimated \$83M of overall backlog of work in the Wastewater Collection System, and is reasonable given the scope and complexity of work.

The project is tentatively scheduled to begin in October 2019 and is anticipated to be completed by October 2020.

FISCAL IMPACT

Estimated Project Expenditures

The following are the estimated project expenditures:

Professional Services Agreement	\$483,100
Construction Contingency (15%)	\$72,500
Contract Administration	\$27,800
Total	\$583,400

Funding Availability

There are adequate funds available in the Sewer Capital Improvement Program to complete the project.

Exhibits:

- Resolution
- Professional Services Agreement
- FY 2009-10 Wastewater Collection System Master Plan