



# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** Matt Loesch

**SUBJECT:** SEE BELOW

**DATE:** August 7, 2023

Approved

Date

8/16/23

**SUBJECT: MASTER CONSULTANT AGREEMENT WITH ADS CORP. AND V&A CONSULTING ENGINEERS, INC. FOR CITYWIDE SANITARY AND STORM SEWER FLOW MONITORING SERVICES**

## RECOMMENDATION

Approve the Master Consultant Agreements for Citywide sanitary and storm sewer flow monitoring services with the following firms:

- (a) ADS Corp. from the date of execution to December 31, 2026, in an amount not to exceed \$1,500,000; and
- (b) V&A Consulting Engineers from the date of execution to December 31, 2026, in an amount not to exceed \$750,000.

## SUMMARY AND OUTCOME

Award of the Consultant Master Agreements will enable the City of San José (City) to obtain the services of two consulting firms to conduct sanitary and storm sewer flow monitoring services. Approval of the agreement will allow the City to maintain its current long-term sanitary flow monitoring and rain gauge program, as well as provide temporary flow monitoring as needed by the City.

The data provided will be used to refine and improve confidence in the City's sanitary and storm sewer models. The models in turn are used to support other teams such as: identifying sewer capacity needs and evaluating planning-level solutions for the Capital Improvement Program; determining available capacity for Development Services; and assisting the Department of Transportation with investigating current problems within the sewer system.

## **BACKGROUND**

In 1998, the City initiated a sanitary sewer flow monitoring program which lasted through 2001. The program consisted of 39 permanent flow meters, five pump station meters and 21 rain gauges. Staff used data from that program to estimate sewer flow characteristics in the City for a sanitary sewer computer model, which would serve as the basis of analysis for the report entitled, *Sanitary Sewer Master Plan Capacity Assessment for the South, Central, and North Areas* (Master Plan).

Between 2007-2008 the City conducted another flow monitoring program. This one included 130 flow meters and 22 rain gauges over a four-month period and was used for an expansion of the sanitary sewer model to include the entire City. The Master Plan used the updated model for a new report, *Sanitary Sewer Master Plan Capacity Assessment Phase II and Update of Phase I*.

The flow metering was done under master agreements with consulting firms specializing in flow monitoring. Consultants assisted with selecting monitoring sites, provided the monitoring equipment, installed, calibrated, and maintained the equipment; and quality controlled the data output. Since 2007, the Master Plan has maintained a continuous flow monitoring program; reissuing master agreements again in 2011, 2013, 2017, and 2021.

As of the last agreement, the sanitary flow monitoring program consists of 36 permanent sites and 16 rain gauges. This data provides continuity to past flow meter efforts and is meant to help identify changing sewer flow throughout the City. Additionally, the master agreements allow for new temporary meter installations which have been used for validating the sewer model in general, especially areas with identified sewer capacity needs.

In addition to the modeling effort for the sanitary sewer system, storm system flow monitoring has been in place since 2013. This data is used for the Storm Sewer Master Plan project which is currently underway and expected to be completed by June 2024. Flow monitoring data was collected for model calibration; however, the efforts to date represent only a small percentage of modeled conveyance systems and drainage areas. Additional flow monitoring for the storm program will be needed to verify and update design storms, analyze performance and hydraulic impacts of large-trash-capture devices, and continue to refine computer model and recommended capacity improvement projects.

## **ANALYSIS**

A Request for Qualifications for citywide storm and sanitary flow monitor consulting services was advertised on February 22, 2023. The City received Statements of Qualifications from three firms by the March 23, 2023 deadline. Public Works staff conducted a selection process for consulting services in accordance with the City's Capital Improvement Program Consultant Procurement Manual. A Technical Evaluation Panel consisting of three representatives from the Master Plan Section evaluated the submittals based on the firm's expertise, experience,

approach, and Local/Small Business Enterprise status. The three firms were ranked by the Technical Evaluation Panel as follows:

Consultant	Evaluation Categories				Overall Score
	Expertise	Experience	Approach	Local/Small Business Preference	
ADS Corp. (Huntsville, AL)	24	31	29	0	84
Utility Systems Science & Software, Inc. (Santa Ana, CA)	20	19.5	16	5	60.5
V&A Consulting Engineers, Inc. (Oakland, CA)	22.67	29.67	26	0	78.34

City staff recommends the approval to execute two master agreements with both ADS Corp. (ADS) and V&A Consulting Engineers, Inc. (V&A). ADS scored the highest in every category, with V&A in second. Both consultants have experience with several projects for other Bay Area agencies which met or exceeded the anticipated scope for this contract. Additionally, both ADS and V&A have worked on City flow monitoring programs in the past.

The two master agreements will be administered with individual services orders. Each service order will specify the scope of services that ADS and V&A must perform and the compensation to which the consultant would be entitled upon delivery of all specified services.

ADS is a national firm with more resources. It was responsible for the City’s long-term flow monitoring program in the 2021 to 2023 agreement and will continue to assist the City with its long-term flow monitoring program. Currently, the City maintains 38 long-term meters and 16 rain gauges. Continuance of these sites would cost approximately \$1,426,000 over the three-year agreement and would include: flow meter and rain gauge equipment rental, maintenance and operation of equipment, and data quality control and reporting. Staff anticipates adding four additional meters to the program, accounting for \$64,000. As such, the master agreement with ADS will have a not-to exceed amount of \$1,500,000.

V&A is a small firm and will primarily assist the City on an as-needed basis. For as-needed temporary flow monitoring, staff anticipates conducting one to two programs every year. Staff has budgeted approximately \$120,000 per program. Therefore, the master agreement with V&A will have a not-to-exceed amount of \$750,000.

***Policy Alternatives***

**Alternative #1: Award one master agreement to the top firm instead of top two.**

**Pros:** Administration would be simpler with only one agreement.

**Cons:** A single consultant may not have enough resources to support the City’s flow monitoring needs.

**Reason for not recommending:** Meter and/or installation crew availability can be an issue, especially for time-sensitive programs such as capturing storm events or investigating field changes to sewer flow. Having multiple consultants will provide backup options to minimize the risk of missing data collection.

**Alternative #2: Do not award the master agreements and direct City staff to provide required services.**

**Pros:** City would have more flexibility with the meters and would likely save money in the long-term.

**Cons:** City currently lacks expertise, equipment, and capacity to directly run its own flow monitor program.

**Reason for not recommending:** Flow monitoring devices require specialized training for installation, calibration, and analysis. Without proper expertise, there is the risk that data would be incorrect and thus unusable. The City would need to procure the flow meter devices and specialized parts for repair.

## **EVALUATION AND FOLLOW-UP**

Service orders under the master agreement will be approved by the Director of Public Works. No additional follow-up action with the City Council is expected at this time.

## **COST SUMMARY/IMPLICATIONS**

This is a three-year agreement to be funded by 469 Storm Sewer Capital Fund, 540 Sanitary Sewer Connection Fee Fund and 545 Sewer Service and Use Charge Capital Improvement Fund. Costs are anticipated to be evenly split among all three years; \$500,000 per year for ADS and \$250,000 per year for V&A. There are no cost implications to the General Fund as a result of this action.

1. TOTAL COST OF AGREEMENT	
Agreement with ADS (not to exceed)	\$1,500,000
Agreement with V&A (not to exceed)	\$750,000
Project Delivery (Contract Administration)	\$225,000
<b>TOTAL</b>	<b>\$2,475,000</b>

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2. COST ELEMENTS OF AGREEMENT AS RECOMMENDED AS PART OF THE MEMORANDUM (estimated):

Maintaining Long-Term Flow Monitors	\$1,100,000
Maintaining Rain Gauges	\$317,000
New Long-Term Flow Monitors	\$83,000
Temporary Flow Monitors	\$750,000
Project Delivery (Contract Administration)	\$225,000
<b>TOTAL</b>	<b>\$2,475,000</b>

**BUDGET REFERENCE**

The table below identifies the fund and appropriations to fund the contracts recommended as part of this memorandum.

Fund #	Appn #	Appn. Name	Total Appn	Amt. for Contract*	2023-2024 Proposed Capital Budget Page**	Last Budget Action (Date, Ord. No.)
469	5867	Flow Monitoring Program	\$363,000	\$250,000	217	6/20/23, Ord. No. 30933
540	4696	Flow Monitoring Program (Master Planning)	\$100,000	\$250,000	174	6/20/23, Ord. No. 30933
545	4696	Flow Monitoring Program (Master Planning)	\$560,000	\$1,750,000	174	6/20/23, Ord. No. 30933

\* The contracts included in this master agreement span three fiscal years and associated costs are expected to remain within annual appropriation totals.

\*\* The 2023-2024 Proposed Capital Budget was approved on June 13, 2023 and adopted on June 20, 2023 by City Council.

**COORDINATION**

This Project and memorandum have been coordinated with the City Attorney’s Office, the City Manager's Budget Office, and the Department of Planning, Building and Code Enforcement.

**PUBLIC OUTREACH**

This memorandum will be posted on the City’s Council Agenda website for the August 29, 2023 City Council meeting.

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**COMMISSION RECOMMENDATION AND INPUT**

No commission recommendation or input is associated with this action.

**CEQA**

Not a Project, File No. PP17-002, Consultant services for design, study, inspection, or other professional services with no commitment to future action.

**PUBLIC SUBSIDY REPORTING**

This item does not include a public subsidy as defined in section 53083 or 53083.1 of the California Government Code or the City's Open Government Resolution.

/s/  
MATT LOESCH  
Director of Public Works

For questions, please contact Mathew Nguyen, Public Works Deputy Director, at Mathew.Nguyen@sanjoseca.gov or (408) 535-8300.