COUNCIL AGENDA: 10/23/18
FILE: 18-1413
ITEM: 7.1

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Kerrie Romanow
Matt Cano

SUBJECT: SEE BELOW

DATE: October 2, 2018

Approved [signature] Date 10-2-18

SUBJECT: REPORT ON BIDS AND AWARD OF CONSTRUCTION CONTRACT FOR 8073 – BLOWER IMPROVEMENTS PROJECT AT THE SAN JOSE-SANTA CLARA REGIONAL WASTEWATER FACILITY

RECOMMENDATION

(a) Report on bids and award of a construction contract for the 8073 - Blower Improvements Project to the low bidder, Monterey Mechanical Company, for the base bid and Add Alternate No. 1, in the amount of $29,498,000, and approval of a contingency in the amount of $4,425,000.

(b) Adopt a resolution authorizing the Director of Public Works to negotiate and execute any single and/or multiple change orders in excess of $100,000, up to the amount of the contingency of $4,425,000

OUTCOME

Award of the construction contract to Monterey Mechanical Company, will allow for the construction and completion of the Blower Improvements Project (Project), which will improve operational reliability and efficiency at the San José-Santa Clara Regional Wastewater Facility (RWF). Approval of a 15 percent construction contingency will provide funding for unanticipated work necessary for the proper and timely completion of the Project. Adoption of a resolution authorizing the Director of Public Works to negotiate and execute change orders up to the contingency amount will allow for implementation of any changes required in the Project for completion.

BACKGROUND

The RWF secondary treatment process consists of two separate biological nutrient removal (BNR) systems, BNR-1 and BNR-2. These systems include a biological treatment process that removes organics from the incoming primary effluent. The main system components include the blowers and aeration tanks' air headers and diffusers. The air provided by the blowers is used to accelerate the biodegradation of organic material in the biological nutrient removal process.

BNR-1 and BNR-2 were originally constructed in 1961 and 1975, respectively. The blowers that serve the secondary treatment system are in good condition due to good maintenance, but their auxiliary systems have aged beyond their useful lives and require rehabilitation to ensure long-term operations and to minimize future maintenance requirements. The 14 aeration blowers are located throughout the RWF in three separate buildings: the Blower and Generator Building (Building 40); the Secondary Blower Building (SBB); and the Tertiary Blower Building (TBB), as shown in Attachment A – Blower Improvements Project Map.

The project includes the installation of new motors, new variable frequency drives/reduced voltage soft starters, and new instrumentation and controls for ten existing blowers, as well as the decommissioning and demolition of four SBB blowers. This will result in increased reliability, efficiency, and redundancy for the entire biological treatment process using modern controls and instrumentation upgrades. Construction is scheduled to begin in January 2019 and be completed by December 2021.

Council Resolution No. 71816, adopted on November 4, 2003, requires pre-qualification of contractors on all public works projects for which the Engineer's Estimate exceeds $10 million. The Engineer's Estimate for this project's base bid is $29.4 million, and the project will be delivered using the conventional design-bid-build process. Accordingly, staff conducted a pre-qualification process in March 2018. Five general contractors submitted pre-qualification packages. Staff evaluated the packages and determined that all five general contractors met the pre-qualification requirements. Of the five pre-qualified contractors invited to bid on the Project, four contractors submitted responsive bids.

ANALYSIS

Bids were opened on August 16, 2018 with the following results:

Contractor	Base Bid Amount	Add Alt 1 Total	Total Bid	Variance Amount	Over/ (Under) Percent
Monterey Mechanical Company (Oakland)	$28,736,000	$762,000	$29,498,000	($1,702,000)	(5)
GSE Construction Company Inc. (Livermore)	$29,211,000	$320,000	$29,531,000	($1,669,000)	(5)

Engineer's Estimate	**$29,400,000**	**$1,800,000**	**$31,200,000**	---	---
Shimmick Construction Company, Inc. (Oakland)	$31,197,000[(a)]	$745,000	$31,942,000	$742,000	2
Flatiron West Inc. (Benicia)	$32,518,000	$1,600,000	$34,118,000	$2,918,000	9

[(a)]Submitted amount contained a math error. Value is revised to show the corrected amount.

In addition to the base bid scope of work, there is one Add Alternate bid item as follows:

Add Alternate No. 1: Demolition of SBB Blowers A-1, A-2 and A-3 and all associated appurtenances

The low bid submitted by Monterey Mechanical Company is five percent below the Engineer's Estimate. Staff considers the low bid acceptable for the work involved in the Project and recommends awarding a construction contract to the low bidder. Monterey Mechanical Company specializes in complex water/wastewater projects and has completed several projects at the RWF. Add Alternate No. 1 is recommended for award since there is sufficient project budget to accommodate this addition to the Project and it is competitively priced as compared to the Engineer's Estimate.

Council Policy provides for a standard contingency of fifteen percent on Public Works projects involving building renovation projects. The standard contingency is appropriate for this project to account for the challenge of maintaining continuous operations at the RWF during construction, complex project interfaces with existing electrical and process control facilities, potential utility conflicts, access constraints, and the potential for conflicts with other concurrent capital improvement and maintenance projects.

Staff also recommends delegating authority to the Public Works Director to execute one or more change orders in excess of $100,000 for the duration of the Project, for a total not to exceed the contingency approved for the Project, and subject to other applicable limitations on the authority of the Director in the San José Municipal Code. Approval of these recommendations will provide funding for any unanticipated work necessary for the proper and timely completion of the Project.

EVALUATION AND FOLLOW-UP

No follow-up action with City Council is expected at this time. A progress report on this and other RWF capital projects will be made to the Transportation and Environment Committee and the City Council on a semiannual basis. Monthly progress reports of the RWF Capital Improvement Program (CIP) will also be submitted to the Treatment Plant Advisory Committee (TPAC) and posted on the City's website.

PUBLIC OUTREACH

This project was advertised on BidSync.com on June 20, 2018 and advertised in the San José Post Record. This memorandum will be posted on the City's Council Agenda website for the October 23, 2018, City Council meeting.

COORDINATION

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

COMMISSION RECOMMENDATION/INPUT

This item is scheduled to be heard at the October 11, 2018, TPAC meeting. A supplemental memo with the committee's recommendation will be included in the amended October 23, 2018, City Council meeting agenda.

FISCAL/POLICY ALIGNMENT

This Project is consistent with the Council-approved focus on rehabilitating aging RWF infrastructure, improving efficiency, and reducing operating costs. This Project is also consistent with the budget strategy principle of focusing on protecting our vital core services.

COST SUMMARY/IMPLICATIONS

1.	AMOUNT OF RECOMMENDATION:	$ 29,498,000
2.	COST OF PROJECT:	
	Project Delivery	$ 11,854,000*
	Construction	$ 29,498,000
	Contingency (15%)	$ 4,425,000
	Total Project Costs	**$ 45,777,000**
	Prior Year Expenditures	$ 5,107,761
	Remaining Project Costs	**$ 40,669,239**

** Project delivery estimate includes: $5,233,000 for consultant design and construction support services (feasibility/development, design, and engineering services during bid and award, construction and post construction phases); $60,000 for project management during feasibility and development phase; $1,233,000 for*

project management during the design phase; $240,000 for project management during bid and award phase; $4,754,000 for construction management (including special inspections; and $334,000 for project management during post construction and project closeout phase.

The estimated project delivery cost is 40% of the construction cost, which is in line with project delivery costs for capital projects at the RWF and other wastewater facilities.

3. COST ELEMENTS OF CONTRACT:
This is a lump sum contract. $ 29,498,000

4. SOURCE OF FUNDING: Fund 512 – San José-Santa Clara Treatment Plant Capital Fund

5. OPERATING COSTS: The annual costs to operate and maintain the upgraded facilities are not anticipated to impact the San José-Santa Clara Treatment Plant Operating Fund as this is an equipment replacement project, and therefore there will be no additional annual operations and maintenance costs.

6. PROJECT COST ALLOCATION: In accordance with the recommendations set forth in the Capital Project Cost Allocations Technical Memorandum (Carollo Engineers, March 2016), this project is allocated 20 percent to flow, 60 percent to biochemical oxygen demand (BOD), and 20 percent to ammonia (NH_3).

BUDGET REFERENCE

The table below identifies the fund and appropriations proposed to fund the contract recommended as part of this memorandum and remaining project costs, including project delivery, construction, and contingency costs.

Fund #	Appn #	Appn Name	Current Total Appn	Amt for Contract	2018-2019 Adopted Capital Budget Page	Last Budget Action (Date, Ord. No.)
Remaining Project Costs			**$40,669,239**			
Remaining Funding Available						
512	7677	Aeration Tanks and Blower Rehabilitation	$54,112,000	$29,498,000	V-138	06/19/2018, Ord. No. 30124

CEQA

Exempt, File No. PP16-124, CEQA Guidelines Section 15301, Existing Facilities.

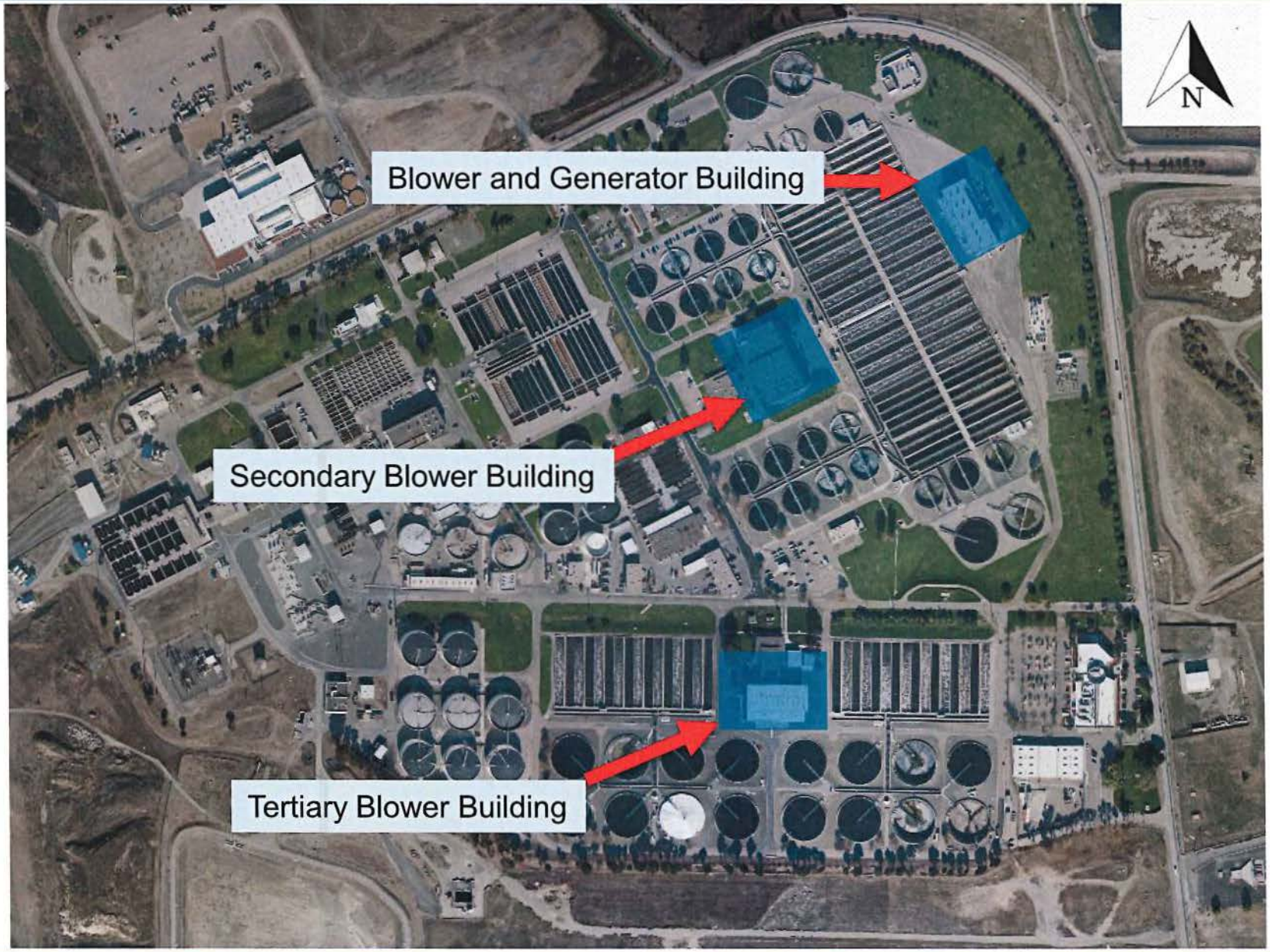
/s/
KERRIE ROMANOW
Director,
Environmental Services Department

/s/
MATT CANO
Director,
Public Works Department

For questions, please contact Napp Fukuda, Assistant Director, Environmental Services Department at (408) 793-5353

Attachment A – Blower Improvements Project Map

Attachment A
8073 – Blower Improvements Project
Location Map



San José-Santa Clara Regional Wastewater Facility