COUNCIL AGENDA: 11/19/19
FILE: 19-1067
ITEM: 7.5

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 28, 2019

Approved D·DSyL

Date 11/6/19

SUBJECT: REPORT ON BIDS AND AWARD OF CONSTRUCTION CONTRACT FOR 9002 – 96-INCH AND 87-INCH SETTLED SEWAGE PIPE REHABILITATION PROJECT AT THE SAN JOSE-SANTA CLARA REGIONAL WASTEWATER FACILITY

RECOMMENDATION

Report on bids and award of construction contract to the low bidder, Michels Corporation DBA Michels Pipeline Construction ("Michels"), in the amount of $4,796,571, for the 9002 – 96-inch and 87-inch Settled Sewage Pipe Rehabilitation Project and approve a fifteen percent construction contingency in the amount of $719,486.

OUTCOME

Award of the construction contract to Michels will allow for construction and completion of the 96-inch and 87-inch Settled Sewage Pipe Rehabilitation Project (Project) at the San José-Santa Clara Regional Wastewater Facility (RWF). Rehabilitation of the pipelines will reduce the risk of pipe failure and extend their remaining useful life. Approval of a 15 percent contingency will provide funding for unanticipated work that is necessary for the proper completion of the Project.

BACKGROUND

The RWF has over 300,000 linear feet (LF) of piping, 67,000 LF of which are wastewater process pipes. Seventy percent of the piping is more than 25 years old. The City completed a desktop study of the RWF's process pipes, which identified sixteen pipe segments, totaling 21,000 LF, as high priority for pipe rehabilitation. Two of these high priority pipe segments are the 96-inch and 87-inch by 136-inch settled sewage pipes. These pipes carry primary effluent (also referred to as settled sewage) to the settled sewage pump station where the flow is distributed to the secondary treatment process for further treatment. Both segments are critical to the operations at the RWF for the treatment process.

During the condition assessment performed in summer 2018, severe crown corrosion was observed in both pipes. The Project will rehabilitate approximately 530 LF of the 96-Inch settled sewage pipe using Cured-in-Place-Pipe liner and 380 LF of the 87-inch by 136-inch pipe using Concrete-Crown-Repair with epoxy coating. The Notice To Proceed is scheduled to be issued in January 2020 and the actual construction will start on May 15, 2020 with substantial completion in October 2020.

Council Resolution No. 71816, adopted on November 4, 2003, identifies factors to be considered for prequalifying bidders, including project cost, project complexity, budget and time constraints, and number and quality of contractors. The Project involves the rehabilitation of large diameter pipes with irregular shape, time constraints, and specialty construction required. Based on these factors, staff conducted a pre-qualification process in July 2019. Six general contractors submitted Pre-Qualification Submittals. Staff evaluated the submittals and determined that three general contractors met the pre-qualification requirements. Of the three pre-qualified contractors invited to bid on the Project, two submitted the bids.

ANALYSIS

Bids were opened on August 22, 2019, with the following results:

Contractor	Bid Amount	Variance Amount	Over/(Under) Percent
Engineer's Estimate	**$3,381,583**	--	--
Michels Corporation DBA Michels Pipeline Construction (Salem, OR)	$4,796,571	$1,414,988	42
SAK Construction, LLC (O'Fallon, MO)	$5,976,565	$2,594,982	77

A total of two bids were received and both bids were higher than the Engineer's Estimate.

The variance from the Engineer's Estimate is due to several reasons:

1. Two Rehabilitation Methods: The Project involves two rehabilitation methods (Cured-in-Place-Pipe and Concrete-Crown-Repair) for the pipelines. The general contractors were each only able to self-perform one rehabilitation method and needed a subcontractor to perform the other rehabilitation method, which increased the costs due to markups and additional supervision. This resulted in higher bids than if the work was entirely self-performed by the general contractor.
2. Dissolved Air Flotation Thickener Liquid Effluent System Scope Increase: This project will use a Dissolved Air Flotation Thickener Liquid Effluent reroute system during construction to divert flow from the 87-inch by 136-inch settled sewage pipe. During the

bid period, staff issued an addendum to increase the scope of the Dissolved Air Flotation Thickener Liquid Effluent work. The original Engineer's Estimate did not account for this additional scope. If it had been, the lowest bid would have been 38% over the Engineer's Estimate rather than 42%.

3. Limited Number of Bidders: Cured-in-Place-Pipe is performed by specialty contractors, and there is a limited number of contractors who can perform large diameter rehabilitation work (over 60 inches). The City received only two bids, which reflected a less competitive bid environment. In these cases, it is typical to see bids higher than would otherwise have been expected in a more competitive bid environment.
4. Constrained Construction Schedule: The construction period for the Project is limited to the dry weather season (mid-May to mid-October). This schedule constraint likely added additional risk to the bidders and resulted in higher bids.

Given these reasons for the variance, staff considers the low bid acceptable for the work involved in the Project.

Council Policy provides for a standard contingency of fifteen percent on public works projects involving renovation projects. The standard contingency is appropriate for this project to account for the challenge of maintaining continuous operations at the RWF during construction, in addition to complex project interfaces with rerouting primary effluent to the secondary treatment process, potential utility conflicts, and other concurrent capital improvement projects.

Project Labor Agreement Applicability

The Director of Public Works determined that a project labor agreement is not applicable to this project due to the work consisting of repair to existing infrastructure.

CONCLUSION

Based on staff's evaluation of the bids, staff considers the low bid acceptable and recommends awarding the construction contract for the Project to the contractor, Michels.

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 Council on a semiannual basis. Monthly progress reports of the RWF Capital Improvement Program will also be submitted to the Treatment Plant Advisory Committee and posted on the City's website.

CLIMATE SMART SAN JOSE

The recommendation in this memo has no effect on Climate Smart San José energy, water, or mobility goals.

POLICY ALTERNATIVES

Alternative 1: Direct City staff to reject all bids and re-bid the Project.
Pros: Re-bidding the Project may result in lower bid proposals.
Cons: Re-bidding will delay the construction schedule to summer of 2021 since the rehabilitation of both pipelines can only occur in the dry weather season. A bid delay will increase project delivery costs and may well result in higher bids.
Reason for not recommending: If the Project were to be re-bid, it does not assure lower bid proposals would be received. If this alternative is adopted, the construction schedule would be delayed for at least one year, as the repair work may only be performed during the dry weather season. The project delivery costs would increase from additional staff activities during the re-bidding process.

PUBLIC OUTREACH

The Project was advertised on Biddingo.com on July 17, 2019 and advertised in the *San José Post Record.* This memorandum will be posted on the City's Council Agenda website for the November 19, 2019 City Council Meeting.

COORDINATION

This Project and memorandum have been coordinated with the Departments of Planning, Building and Code Enforcement, Fire, Finance, the City Manager's Budget Office, and the City Attorney's Office. This memorandum will be presented at the November 14, 2019 Treatment Plant Advisory Committee meeting for consideration.

COMMISSION RECOMMENDATION/INPUT

A supplemental memo with Treatment Plant Advisory Committee recommendation will be included in the amended November 19, 2019 City Council meeting agenda.

FISCAL/POLICY ALIGNMENT

This Project is consistent with the City Council-approved budget strategy to focus on rehabilitating aging RWF infrastructure, improve efficiency, and reduce 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/COST OF PROJECT: $4,796,571

Project Delivery*	$3,160,255
Construction	$4,796,571
Contingency (15%)	$719,486
Total Project Costs	$8,676,312
Prior Year Expenditures	$1,025,487
REMAINING PROJECT COSTS	**$7,650,825**

** Project delivery includes $67,192 for project management during feasibility/development, $697,831 for project management during design, $188,944 for bid and award, $1,955,882 for construction management, and $250,406 for post-construction and project closeout. The estimated project delivery cost is 66% of the construction cost, which is in line with project delivery costs for capital projects at other wastewater facilities.*

2. COST ELEMENTS OF AGREEMENT/CONTRACT:

This is a lump sum contract. $4,796,571

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

4. FISCAL IMPACT: The Project will have no additional impact on the San José-Santa Clara Treatment Plant Operating Fund (Fund 513) or the General Fund.

5. PROJECT COST ALLOCATION: In accordance with the recommendations set forth in the Capital Project Cost Allocations Technical Memo (Carollo Engineers, March 2016), this project is allocated between the four billable parameters relative to the rolling weighted average distribution of all RWF assets.

BUDGET REFERENCE

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

Fund #	Appn #	Appn. Name	Total Appn	Amt. for Contract	2019-2020 Adopted Capital Budget Page	Last Budget Action (Date, Ord. No.)
Remaining Project Costs			**$7,650,825**			
Remaining Funding Available						
512	7396	Yard Piping and Road Improvements	$20,724,000	$4,796,571	V-144	06/18/2019 Ord. No. 30286
Total Current Funding Available			**$20,724,000**			

CEQA

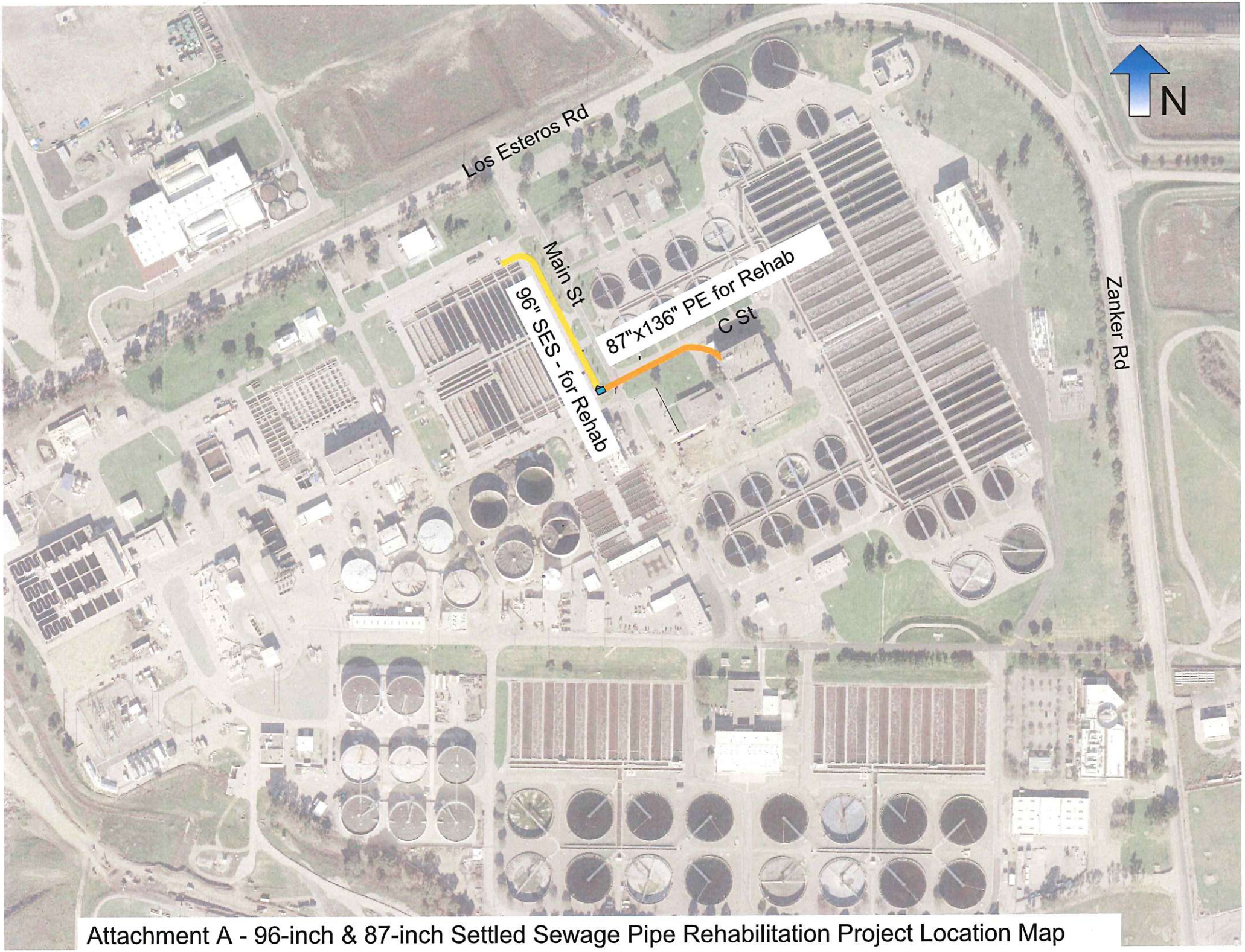
Statutorily Exempt, File No. ER19-027, CEQA Guidelines Section 15269(b), Emergency Projects.

/s/
KERRIE ROMANOW
Director, Environmental Services Department

/s/
MATT CANO
Director of Public Works

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

Attachment A – 96-inch & 87-inch Settled Sewage Pipe Rehabilitation Project Location Map
Attachment B – Statement of Exemption – CEQA Exemption



Attachment A - 96-inch & 87-inch Settled Sewage Pipe Rehabilitation Project Location Map

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Attachment B

Planning, Building and Code Enforcement
ROSALYNN HUGHEY, DIRECTOR

STATEMENT OF EXEMPTION

FILE NO.	ER19-027
LOCATION OF PROPERTY	700 Los Esteros Road (Regional Wastewater Facility Main Campus)
PROJECT DESCRIPTION	Public Project Exemption for the rehabilitation of two sewage pipelines with a total length of approximately 920 feet, located within the developed and fenced area of the Regional Wastewater Facility, to address severe corrosion of the pipelines. Cross sectional dimension of the pipes are 96-inch diameter (circular) and 87-inch x 136-inch (elliptical). The length of the 96-inch pipeline is approximately 540 feet and the length of the 87-inch x 136-inch pipeline is approximately 380 feet. The objective of this project is to reduce the risk of failure of the critical pipelines and to extend the remaining useful life of the pipelines at a major wastewater facility with a service population of approximately 2 million people.

CERTIFICATION
Under the provisions of Section 15269(b) of the State Guidelines for Implementation of the California Environmental Quality Act (CEQA) as stated below, this project is found to be exempt from the environmental review requirements of Title 21 of the San José Municipal Code, implementing the California Environmental Quality Act of 1970, as amended.

(b) Emergency repairs to publicly or privately owned service facilities necessary to maintain service essential to the public health, safety or welfare. Emergency repairs include those that require a reasonable amount of planning to address an anticipated emergency.

Analysis:

The project falls under Section 15269(b) in that both pipelines are critical to the operations of a major wastewater facility, with a service population of approximately 2 million people, and failure of the pipelines would cause a major disruption in services.

The pipelines are the main channels that carry primary effluent to the settled sewage pump station where the sewage flow is distributed to the secondary treatment process for additional treatment. The 96-inch pipe flows into the 87-inch x136-inch elliptical pipe. Both pipelines are critical to the operations of the Facility and would cause a major disruption to operations if any part is down for a considerable period of time.

Both pipelines were constructed in 1961, and have been exposed to similar conditions over the past 57 years. The pipes are in use beyond the life of the pipelines. The results of an inspection in 2018 showed severe crown corrosion in the highest internal surface of the pipes due to hydrogen sulfide exposure. In some cases, the crown corrosion had completely corroded the structural reinforcing steel.

According to experts' estimation, the probability of failure of the interior of the pipelines is 80 to 100 percent with a remaining service life rating of 0 to 12 years and the probability of failure of the exterior of the pipelines is 40 to 60 percent with a remaining service life of 24 to 36 years.

Attachment B

The project construction would take place during the six-month dry season (April 15 to October 15). The construction is estimated to take place between April 16 and September 17, 2020, and the pipeline should be commissioned and ready for service by October 2020.

An Initial Study prepared for the project demonstrated no significant impact will occur due to the project.

Sanhita Ghosal
Environmental Project Manager

Rosalynn Hughey, Director
Planning, Building and Code Enforcement

Date 4-30-2019

Deputy

Attachment:

Initial Study