



NORTH SAN MATEO COUNTY SANITATION DISTRICT

a subsidiary of the City of Daly City

333 – 90TH STREET, DALY CITY, CALIFORNIA 94015-1895

(650) 991-8127



REGULAR MEETING – BOARD OF DIRECTORS

Monday, April 27, 2020 - 6:45 PM
City Hall Council Chambers – 2nd Floor
333 – 90th Street, Daly City, CA 94015

AGENDA

Visit NORTH SAN MATEO COUNTY SANITATION DISTRICT virtual meeting website to watch the livestream of the meeting and submit comment on agenda items, all in one place online:

<https://bit.ly/dalycityapr27>

Please note, the virtual meeting website will only be available during the meeting on
Date: April 27, 2020

COVID-19 ANNOUNCEMENT - PUBLIC MEETINGS

Pursuant to Governor Newsom's Executive Order N-25-20, members of the Daly City Board and staff will participate in this meeting via a teleconference. Members of the public are encouraged to watch the meeting via Livestream at <https://bit.ly/dalycityapr27> and to submit comments through the livestream website and/or submit public comments via email to cityclerk@dalycity.org prior to the public meeting.

To submit a comment in writing, please email cityclerk@dalycity.org and write "Public Comment" in the subject line. In the body of the email, include the item number and/or title of the item as well as your comments. All comments received by 4:00 pm will be emailed to the Board members and included as an "Add to Packet" on the City's website prior to the meeting. Those comments received after 4:00 pm will be added to the record and shared with the Board members for the public meeting.

Persons with disabilities who require auxiliary aids or services in attending or participating in this meeting should call the office of the City Clerk at 991-8078. *We will need **FIVE (5) WORKING DAYS BEFORE ANY FUTURE MEETINGS** to make any necessary accommodations.*

CALL TO ORDER:

ROLL CALL:

APPROVAL OF AGENDA:

"AVAILABILITY OF PUBLIC RECORDS. All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at the City Clerk's Office, City Hall located at 333 90th Street, Daly City, CA during normal business hours, at the same time that the public records are distributed or made available to the legislative body."

CONSENT AGENDA

All items listed on the Consent Agenda are considered to be routine and may be approved by one roll call vote of the Board of Directors. There shall be no separate discussion of the matters on the Consent Agenda unless requested by a member of the Board. If discussion is required, that item will be removed from the Consent Agenda and will be considered separately at the end of the Agenda.

Minutes:

1. Regular Meeting of February 24, 2020

Action Items:

2. Approval of Amendment #5 to Professional Services Agreement with McMillen/Jacobs Associates for the Vista Grande Drainage Basin Improvement Project

END OF CONSENT AGENDA

PUBLIC APPEARANCES/ORAL COMMUNICATIONS:

NOTE: Speakers are limited to two minutes, unless modified by the Chair. The District cannot take action on any matter raised under this item.

REPORTS:

3. Board of Directors
4. Staff

ADJOURNMENT:

REGULAR MEETING - BOARD OF DIRECTORS

MINUTES

February 24, 2020

The Board of Directors of the North San Mateo County Sanitation District convened in a Regular Meeting on February 24, 2020, in the City Council Chamber, City Hall, 333 - 90th Street, Daly City, California.

The meeting was called to order by Chairman Glenn Sylvester at 6:47 p.m.

ROLL CALL:

Present: DiGiovanni, Daus-Magbual, Buenaventura, Sylvester

Absent: Manalo

Staff Present: General Manager Shawna Maltbie, District Counsel Rose Zimmerman, Director of Water and Wastewater Resources Thomas Piccolotti, Plant and Equipment Maintenance Manager Joshua Cosgrove, Chief of Operations Greg Krauss, Collections System Manager Kevin McCarthy, Director of Finance and Administrative Services Todd High, and Office Assistant II Gillian Chow as Recording Secretary.

APPROVAL OF AGENDA:

Motion was made, seconded (DiGiovanni/Daus-Magbual) and unanimously approved.

CONSENT AGENDA:

1. Minutes of Regular Meeting of January 27, 2020
2. Sewer Service Charge Appeals – FY 2019/20
3. Purchase of New Barscreen and Screenings Wash Press for Headworks 2 at the Wastewater Treatment Plant

Motion was made, seconded (Buenaventura/Daus-Magbual) and unanimously carried to adopt the Consent Agenda.

NEW BUSINESS:

4. Recertification of Updated Sewer System Management Plan (SSMP)

Collections System Manager Kevin McCarthy recommended that the District Board approve and recertify the recommended updates to its Sewer System Management Plan (SSMP). The regulations are mandated by the California State Water Resources Control Board and require local legislative review and recertification every five years. The primary revisions made to the document were: updated long- and short-term Capital Improvement Projects based on the hydraulic model and condition assessment, Overflow Emergency Response Plan, and Water Quality Monitoring Program.

Motion was made, seconded (Daus-Magbual/DiGiovanni) and unanimously carried to adopt the Resolution 20-SD-02 for "Recertification of Updated Sewer System Management Plan (SSMP)".

REPORTS:

5. Board of Directors

Councilmembers brought up the topic in regards to email complaints from residents due to the smell coming from the treatment plant. Director of Water and Wastewater Resources Thomas Piccolotti explained that this is part of the plant digester rehabilitation project. It has been several years overdue. Chief of Operations Greg Krauss explained that because we can't just put the new digester online right away, it is a process that can't be rushed. First, they need to feed it then give it a break before feeding it some more. But the health of the digester

is good, and the project is going well. Director Thomas Piccolotti also added that we are in full compliance (Water & Air). There are no harmful effects from the hydrogen sulfide gas. The next step after the digester project is to upgrade the scrubber system which will be part of the next budget cycle.

6. Staff

None.

ADJOURNMENT:

At 7:00 p.m., call of adjournment of Regular Meeting by Chairman Glenn Sylvester.



North San Mateo County Sanitation District

a subsidiary of the City of Daly City

Meeting Date: April 27, 2020

Subject: Approval of Amendment #5 to Professional Services Agreement with McMillen/Jacobs Associates for the Vista Grande Drainage Basin Improvement Project

Recommended Action

Authorize the execution of Amendment #5 to the existing Professional Services Agreement with McMillen/Jacobs Associates of Walnut Creek, CA in the amount of \$543,770. This action will address increased work scope and projected budget needs to complete additional engineering and technical assistance of the 100% design for the Vista Grande Drainage Basin Improvement Project.

Background/Discussion

McMillen/Jacobs Associates (MJA) has been the lead engineering firm associated with the Vista Grande Drainage Basin Improvement Project since the Board's original authorization of work June 27, 2011. MJA has assembled a project team consisting of Brown and Caldwell (B&C), and Moffat Nichols (MN) to address final 100% design elements associated with the project. The total contract cost to date is \$10,899,634 and this amendment will increase the total cost to \$11,443,404. Sanitation Funds expended to date for design are reimbursable through the overall project cost. This amount represents approximately 9.27% of the estimated total Project cost of \$123,313,450.00 which is in line with projects of this size and scope.

The items below are a summary of the additional design effort required to complete 100% plans and specifications and included are the specific costs associated with each item:

- Flow Monitoring – \$27,205.
- Effluent Sewer Line Modification – \$32,467.
- Utility Coordination – \$66,859.
- Diversion Structure/Gross Solids Removal Device – \$48,068.
- Outfall/Geotechnical – \$65,604.
- Specifications – \$21,300.
- Coastal Development Permit – \$48,420.
- Management of Final Effluent & Stormwater Discharge – as required \$108,285.
- Post 100% Design Support & Project Management – as required \$125,562

Fiscal Impact

Sufficient funds in the amount of \$543,770 are available from Sanitation District Fund Balance to process the Amendment #5 request. Staff is available to answer any questions or to provide additional information to the members of the NSMCSD Board.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "T. Piccolotti".

Thomas J. Piccolotti, Director
Department of Water and Wastewater Resources

Attachments: (1) MJA Formal Request, Vista Grande Amendment Request, & Budget Summary



March 2, 2020

Thomas Piccolotti
Director of Water and Wastewater Resources
City of Daly City
North San Mateo County Sanitation District
650-991-8200 ext. 8201

Subject: Vista Grande Drainage Basin Improvements Project
Re: Request for Amendment for Additional Services

Dear Mr Piccolotti:

McMillen Jacobs Associates (MJA) has prepared this Request for Amendment to support our efforts in finalizing the 100 percent design documents for the City of Daly City (City) Vista Grande Drainage Basin Improvements Project. The following sections provide justification for this request. This revised letter includes modifications and additional detail requested by Daly City following a meeting on January 31, 2020.

Project Background

The City issued to MJA Contract Amendment No. 3 on January 29, 2019 for authorization to proceed with 100 percent design.

MJA and Brown and Caldwell (BC) developed the scope of work and budget for Amendment No. 3 following extensive discussions and negotiations with the City, specifically predicated on known conditions at the time of negotiation which occurred in late 2018. Currently the design team is working towards the 100 percent design submittal, and has recently submitted the Draft 100 percent design package. As this design has progressed, it has become apparent that the Amendment No. 3 budget is not adequate to complete the design due to changed conditions and additional project complexities not known at the time of negotiation for Amendment No. 3 and that are described herein. We have proceeded with this work to date to furnish the services and advance the aggressive project schedule to complete 100 percent design.

Additional Scope Work

We have identified several items of additional work that increased our scope after the 100 percent design was established and that have resulted in additional design effort:

1. An additional flow monitoring site was added at the request of San Francisco Public Utilities Commission (SFPUC) (comment numbers 15 and 112 received after the 100 percent design

proposal was submitted), including development of a brief memo justifying the selected meter technology. (Item 1).

2. A redesign of a portion of the effluent sewer alignment was required to address comments received after the 90 percent design submittal was returned to avoid tree removal and Vista Grande Canal impacts near the Olympic Club. These comments were received after we had finalized our scope and budget for the 100 percent design. The redesign of approximately 1,200 feet of the 3,583-foot effluent sewer included a change from open-cut design to cured-in-place pipe (CIPP) design. The new CIPP portion design required updates to the existing drawings, new calculations, a new CIPP specification, and additional hydraulic model runs to test the corresponding operational scenario with the reduced pipe diameter due to insertion of the liner into the existing pipe. This redesign has multiple benefits to the City, including: avoiding potential damage to the canal due to proximity to proposed open-cut construction; saving approximately 20 trees from removal; and construction cost savings of approximately \$500,000 by rehabilitating the existing effluent sewer rather than constructing a new pipe with open-cut. (Item 2).

Additional Project Complexities and Challenges

Project development has also been impacted by complexities and challenges that were not, and could not reasonably have been known when we developed and negotiated our scope of work:

3. We have performed extensive utility coordination activities (internal and external meetings, calls, site visits, preliminary designs) with SFPUC, PG&E, and AT&T, including delayed or no responses to inquiries, multiple assigned reps (four PG&E reps to date) and multiple site visits; requests by PG&E and AT&T to lay out new utility alignments (drawings) for their use in their design of the relocated utility. AT&T utility had poor documentation of facilities (location and ownership) requiring multiple site visits and calls to coordinate. We did not receive input from SFPUC in a timely manner; then, following a meeting, SFPUC requested that BC include design of the trench for their water facility relocation, within the Vista Grande construction documents. The new National Park Service Power Drop at Fort Funston required a separate application and a separate rep at the request of PG&E. Utility coordination efforts have required over twice as much work and schedule duration (4 months vs. 8 months) as envisioned and budgeted when we developed this scope of work. We estimate that the allocation overage percentage per agency is roughly 50% PG&E, 30% AT&T, and 20% SFPUC. (Item 3).
4. At the final design initiation, BC met with the Gross Solids Removal Device (GSRD) vendor to discuss reevaluation of operation and maintenance provisions at the diversion structure due to anticipated operational challenges with the proposed design, which was developed with input from City staff. Little to no design guidance existed for the proposed GSRD size on this project and BC was concerned with the City's proposed design approach that was discussed in workshops at the 60- and 90-percent design levels. Following this meeting with the GSRD vendor, BC identified and developed mechanisms for improved maintenance access and safety for the benefit of the City's maintenance team that will be tasked with maintaining this facility.

These proposed betterments will reduce the risk of injury to City employees and reduce the amount of time and effort required to perform regular maintenance activities. These design changes were communicated to the City at the design progress meeting on July 25, 2019 and documented in the meeting minutes. (Item 4).

5. MJA's final design proposal reasonably assumed that the existing wastewater effluent outfall piers on the beach would be reused and that new piers would not be required. Upon initiation of the final design contract, the project team conducted an inspection of the existing outfall, which was now uncovered from sand due to winter storms. In 2018, it was covered for the entire year, preventing inspection. After conducting the inspection and discussing internally, we determined that the design of several new piers would be required between the existing single outfall pipe and the proposed beach outlet structure because the configuration of the existing piers in this location could not facilitate the proposed design. Our out of scope work included the design of new piers west of the new outlet structure. This also required unanticipated geotechnical analyses including L-Pile analysis, wave loading, bearing pressures and skin friction determination. This effort also required an additional five months of time beyond what was anticipated in the original schedule. During negotiations for 100% design the design team reduced their budget for the outlet works by \$21,067 under the assumption of no pier design. However this did not capture the additional geotechnical work for L-Pile analysis, wave loading, bearing pressures and skin friction. (Item 5).
6. We have spent more time developing Division 0 and 1 specifications than what was reasonably anticipated. In our 100 percent scope we had assumed that we would provide assistance to The City to modify existing general and special conditions (Div 0 and 1 specs). Subsequently we found that The City's existing specifications were inadequate for a project of Vista Grande's scope and size, and spent considerable effort in developing new Division 1 specifications which should provide clearer requirement to the construction contract and reduce the chance of uncertainty with those requirements. Additional funds will cover time already spent on the specifications, as well as 40 hours of time by a staff engineer, and 20 hours each by Shawn Spreng and John Kaplin to assist Daly City to complete the specifications. (Item 6)
7. The project team continues to provide additional support to The City on the Coastal Permit application process. We are currently working within planned budget; however we anticipate that prolonged discussions with the California Coastal Commission will exceed our existing budget. MJA added budget for this additional coordination under Contract Amendment No. 4 based on assumptions made in September of 2019. A total of \$18,801 was added to MJA's budget as a result of Amendment No. 4. However, it has become apparent over the last three months that additional effort, including for BC and Moffat Nichols (MN), will be required to develop a Coastal Permit application and support the application process through additional correspondence and meetings. We have assumed a level of effort to complete the current coastal processes summary letter and prepare for and attend 2 four hour meetings with the Coastal Commission. This includes 50 hours for Bill Faisst and 10 hours for Chris Peters for a total of approximately \$18,000 for BC; 68 hours for Mads Jorgensen for a total of approximately \$15,000 for MN, and 60 hours for Shawn Spreng for a total of \$14,100 for MJA. (Item 7).

Final design revisions and modifications have the need to develop 20 new drawings and 11 new technical specifications to support the additional scope of work and design modifications required due to additional project complexities and challenges that changed after our 100 percent scope was established with the City.

The work described above constitutes additional work over what was originally anticipated during negotiation of the 100 percent design contract. During contract negotiation MJA and BC reduced our design costs by a significant amount at the request of Daly City. We reduced costs by cutting design contingency for unknown factors and making the assumption that there would be not significant design changes during 100 percent design development. Specifically, the following two assumptions were stated in our Scope of Work for the 100 percent design:

- Any substantive design comments from stakeholder agencies (SFPUC, California Coastal Commission, or others) for the 90% or final design submittals requiring significant redesign will not be addressed as part of this Scope of Services. These comments will be handled as part of a future design amendment, if needed.
- Effluent pipeline replacement design and construction will re-use the existing outfall piers and integrate them into the project design. The design team will not design new piers; the outside diameter for the new pipe will match that of the existing pipe. Engineering services during construction will address any defects in the existing piers, after the Contractor exposes them and completes supplemental geotechnical work.

Specifically, the design work excluded by these two assumptions was in fact required for the 100 percent design.

Compensation for Additional Scope of Work and Unanticipated Project Complexities and Challenges

Considerable effort beyond what was originally anticipated for 100% design has been expended and is forecast to be required to complete the 100% design. Due to the additional scope of work and project complexities and challenges described herein, this contract amendment requests an additional fee of \$309,923. The items described herein only represent those project elements that were beyond our originally scope or constituted additional complexity than was originally anticipated. The project team has and will continue to expend additional funds that will not be asked for. This includes extensive design and coordination between the teams during 100% design for elements that were known and should have been accounted for at the time of 100% preparation. The team expects to write off approximately \$300,000 in unrequested funds. Table 1 below summarizes the dollar amounts requested for each firm and item described above. Additional backup information of project cost for MJA and BC is provided in tables 2, 3, and 4 below.

Table 1: Cost Summary

Item	MJA Labor Hours	MJA Total	BC labor Hours	BC Total	MN Labor Hours	MN Total	TOTAL
1. Flow Monitoring	50	\$11,864	66	\$15,341			\$27,205
2. Effluent Sewer	50	\$10,912	84	\$21,555			\$32,467
3. Utility coordination	80	\$18,533	210	\$48,326			\$66,859
4. Diversion Structure/ Gross Solids Removal Device	60	\$13,291	184	\$34,777			\$48,068
5. Outfall/ Geotechnical	60	\$15,312	212	\$50,292			\$65,604
6. Specifications	100	\$21,300	0	\$0			\$21,300
7. Coastal Permit	60	\$15,420	60	\$18,000	68	\$15,000	\$48,420
Total	460	\$106,632	816	\$188,291	68	\$15,000	\$309,923

We have identified the following tasks to complete the design and provide continued support to the Vista Grande project. The first two tasks are directly related to completing the 100% design package. They are storm and effluent handling during construction, for a total cost of \$108,285. We estimate a total duration of 6 weeks to complete this work, with final submittal of 100% documents 6 weeks after Notice to Proceed. These tasks are inclusive of project management and Support to Daly City during this extended project period. Details are provided below.

The remaining tasks - Utility Coordination, Support to Daly City, and Project Management - are intended to bridge the gap between our 100% submittal 6 weeks after Notice to Proceed, and the expected revised bid date of October 2020. We expect that the project will not shut down after 100% submittal, and we want to be available to Daly City to provide continued support. This would include coordination with PG&E on utility relocations (for example within the OC that we just learned about a few weeks ago), additional permitting support, regulatory meetings, and other tasks as requested by the City, as well as continued project management during this time. The total for these additional post 100% tasks is \$125,562. As the scope is not well defined, we have provided assumed hours in the details below.

Additional Tasks for Storm/Effluent Bypass

Effluent bypass hydraulic analysis

The project team will assess the pump station and force main hydraulic capacity based on pump curve and forcemain record drawing information provided by the City. We will identify low-cost mitigative measures (i.e. pump impeller changes, new pumps and motors, an intermediate booster pump station, and up to two additional concepts or alternatives that may be developed while working with City staff), that may allow the City to pump up to 19 mgd through the Olympic Club forcemain. We will update the contract front-end documents with directions for additional construction.

Assumptions:

- Pump curves and record drawing information to be provided by the City.
- Structural and electrical assessment is not included.
- We will not perform any on-site inspection or condition assessment of facilities or confined space entry.
- Design activities are limited to analysis and development of language for the front-end documents. We will not develop any additional design drawings.
- MJA's effort will be limited to 64 hours. BC's effort on this subtask will be limited to 176 hours.
 - Hours are inclusive of project management and meetings with Daly City and agencies

Deliverables:

- Brief draft and final technical memorandum (TM (3 to 5 pages) documenting the results of the hydraulic assessment. Final TM will incorporate comments from City on the draft TM

Wet Weather Flow Management

During the risk management exercise, wet weather flow management was identified as a more significant project risk than was originally identified in the project scope. Hydraulic analyses performed during 100% design indicate that the 1-year dry season storm has a rainfall of 0.5 inches, and produces a peak flow of 200 cfs off the basin. Daly City has indicated that they would like the contractor's design to accommodate a 5 or 10 year storm. Additional modeling is needed to refine the storm recurrence intervals and flow rates throughout the dry season. We will provide additional stormwater hydraulic modeling and update the contract front-end documents for the contractor to use to develop their stormwater handling plan.

Assumptions:

- MJA's efforts will be limited to 64 hours. BC's effort on this subtask will be limited to 136 hours.
 - Hours are inclusive of project management and meetings with Daly City and agencies

Deliverables:

- Hydraulic model run summaries for up to two storm events
- Contract language for inclusion into front end documents

Post 100% Submittal Support

Utility Coordination

The project team will continue to provide support in existing, ongoing utility coordination and relocation activities after 100% documents have been submitted. This includes calls, meetings, site visits, and response to other requests for information as initiated by PG&E, AT&T, and SFPUC.

Assumptions:

- MJA's effort will be limited to 60 hours. BC's hours are limited to 120 hours.

Project Management

Project managers from both MJA and BC will continue to manage staff and subconsultants. We will prepare and submit monthly invoices with summary reports or work accomplished at the end of each billing month.

Assumptions:

- This task will extend the Final Design Project Management for an additional 5 months after submittal of 100% design.
- MJA's effort will be limited to 64 hours. BC's hours are limited to 48 hours.

Deliverables:

- 10 additional monthly invoices and progress reports.

Support to Daly City

The project team will continue to provide support to Daly City in preparing for, and participating in public meetings, City Council meetings, permit applications, grant applications, and other tasks as requested by the City.

Assumptions:

- This task will extend the Final Design Project Management for an additional 5 months after submittal of 100% design.
- MJA's effort will be limited to 124 hours. BC's hours are limited to 120 hours.

Deliverables:

- Presentations and meeting minutes as needed

• **Table 2: Cost Summary**

Item	MJA Labor Hours	MJA Total	Sub Markup	MJA Total	BC Total	TOTAL
Storm/Effluent Bypass - Effluent Bypass Task	64	\$14,000	\$1,760	\$15,760	\$43,991	\$59,751
Storm/Effluent Bypass - Wet Weather Flow Management Task	64	\$14,000	\$1,328	\$15,328	\$33,206	\$48,534
Post 100% Submittal Support - Utility Coordination Task	60	\$11,700	\$1,090	\$12,790	\$27,248	\$40,038
Post 100% Submittal Support – Additional Project Management Task	64	\$15,200	\$442	\$15,642	\$11,053	\$26,695
Post 100% Submittal Support – Additional Support to Daly City Task	124	\$25,700	\$1,274	\$26,974	\$31,855	\$58,829
Totals	376	\$80,600	\$5,894	\$86,494	\$147,353	\$233,847

Should you have any questions or require additional information, please contact me at 925.705.4129. We look forward to continuing our successful relationship with you through this important community project.

Shawn Spreng
Lead Associate

cc: John Kaplin, McMillen Jacobs Associates