

SAN JOSÉ/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE

CHUCK REED, CHAIR
JOSE ESTEVES, MEMBER
PAT KOLSTAD, MEMBER
JAMIE MATTHEWS, MEMBER
MADISON NGUYEN, MEMBER

CHUCK PAGE, MEMBER
JOHN GATTO, MEMBER
ED SHIKADA, MEMBER
KANSEN CHU, MEMBER

**AMENDED
AGENDA/TPAC**

4:30 p.m.

September 12, 2013

Room 1734

1. **ROLL CALL**

2. **APPROVAL OF MINUTES**

A. August 15, 2013

3. **UNFINISHED BUSINESS/REQUEST FOR DEFERRALS**

4. **DIRECTOR'S REPORT** (verbal)

A. **Directors Verbal Report**

B. **CIP Financing Status Report**

5. **AGREEMENTS/ACTION ITEMS**

A. **Consultant Agreement for Digester and Thickener Facilities Upgrade Project**

Staff Recommendation: Approve a consultant agreement with Brown and Caldwell to provide engineering services for the Digester and Thickener Facilities Upgrade Project at the San Jose-Santa Clara Regional Wastewater Facility (formerly known as the San Jose/Santa Clara Water Pollution Control Plant). This agreement will be effective from the date of execution to December 31, 2019, for total amount not to exceed \$12,017,526.

The Consultant Agreement for Digester and Thickener Facilities Upgrade Project is scheduled for Council Consideration on September 24, 2013

B. **Program Management Consultant Agreement**

Staff Recommendation:

(a) Approve a Master Services Agreement with MWH Americas, Inc. for Program Management Consultant Services at the San José-Santa Clara Regional Wastewater Facility, (formerly known as the San Jose/Santa Clara Water Pollution Control Plant), for a term beginning from the date of execution through September 30, 2018, including up to two, one-year

extension options, in an initial amount not to exceed \$7,295,000, and a maximum agreement amount not to exceed \$39 million, subject to the appropriation of funds.

- (b) Adopt a resolution authorizing the City Manager to exercise the City's option to extend the agreement for up to two, one-year terms, subject to the appropriation of funds.
- (c) Adopt the following 2013-2014 Appropriation Ordinance Amendments in the San José-Santa Clara Treatment Plant Capital Fund:
 - (1) Decrease the Ending Fund Balance in the amount of \$4,372,000; and
 - (2) Increase the Program Management appropriation to the Environmental Services Department in the amount of \$4,372,000.

The Program Management Consultant Agreement is scheduled for Council Consideration on September 17, 2013

6. **OTHER BUSINESS/CORRESPONDENCE**

7. **STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC**

A. Annual Insurance Renewal Policy

Staff Recommendation: Accept the informational memo.

The Annual Insurance Renewal Policy will be considered by the San Jose City Council on September 24, 2013

B. First Amendment to Master Agreement with ERM-West, Inc., for Environmental Health and Safety Consulting Services

Staff Recommendation: Approve the First amendment to the Master Agreement with ERM-West Inc. for environmental health and safety consulting services to increase the total compensation by \$300,000 for a maximum not to exceed amount of \$550,000.

The First Amendment to Master Agreement with ERM-West, Inc., for environmental Health and Safety Consulting Services was approved by the San Jose City Council on August 20, 2013

C. First Amendment to the Zero Waste Project Ground Lease by and between the City of San Jose and Zero Waste Energy Development Company, LLC

Staff Recommendation: Authorize the City Manager to execute the First Amendment to the Zero Waste Project Ground Lease by and between the City of San Jose and Zero Waste Energy Development Company, LLC, permitting the

tenant to sublease certain portions of the ground lease area for parking at the discretion of the City Manager.

Deferred from June 13, 2013

The First Amendment to the Zero Waste Project Ground Lease by and between the City of San Jose and Zero Waste Energy Development Company, LLC was approved by the San Jose City Council on August 20, 2013.

D. Regional Wastewater Facility Master Agreements Audit Report

Staff Recommendation: Accept the Regional Wastewater Facility Master Agreements Audit Report and recommend for Council consideration on August 20, 2013.

The Regional Wastewater Facility Master Agreements Audit Report is scheduled to be approved by the San Jose City Council on September 10, 2013.

E. Status Report on Agreement with Telstar to Provide Temporary Staffing at the San Jose/Santa Clara Regional Wastewater Facility

Staff Recommendation: Adopt a resolution to authorize the City Manager to execute the first one-year option to extend the Agreement for August 17, 2013, through August 16, 2014 for a maximum compensation not to exceed \$1,670,000, and to execute up to three one-year options through August 16, 2017, to extend the Agreement, subject to the appropriation of funds.

The Status Report on Agreement with Telstar to Provide Temporary Staffing at the San Jose/Santa Clara Regional Wastewater Facility was approved by the San Jose City Council on August 27, 2013.

San Jose/Santa Clara Regional Wastewater Facility Staffing Status Report

Staff Recommendation: Accept this status report on the staffing situation at the San Jose/Santa Clara Regional Wastewater Facility.

The San Jose/Santa Clara Regional Wastewater Facility Staffing Status Report was approved by the San Jose City Council on August 13, 2013

8. **REPORTS**

A. Open Purchase Orders Greater Than \$100,000

The attached monthly Procurement and Contract Activity Report summarizes the purchase and contracting of goods with an estimated value between \$100,000 and \$1.08 million and of services between \$100,000 and \$270,000.

9. **MISCELLANEOUS**

- A. The next TPAC meeting is October 10, 2013, at 4:30 p.m. City Hall, City Manager's Office, 17th Floor, Room 1734.

10. **OPEN FORUM**

11. **ADJOURNMENT**

NOTE: If you have any changes or questions, please contact Jennifer Hade, Environmental Services, 408-975-2515.

To request an accommodation or alternative format for City-sponsored meetings, events or printed materials, please call Jennifer Hade at (408) 975-2515 or (408) 294-9337 (TTY) as soon as possible, but at least three business days before the meeting/event.

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 San Jose City Hall, 200 East Santa Clara Street, 10th Floor, Environmental Services at the same time that the public records are distributed or made available to the legislative body.

**MINUTES OF THE
SAN JOSE/SANTA CLARA
TREATMENT PLANT ADVISORY COMMITTEE**
City Hall, City Manager's Office, 17th Floor, Room 1734
Thursday, August 15, 2013 at 4:30 p.m.

1. ROLL CALL

Minutes of the Treatment Plant Advisory Committee convened this date at 4:30 p.m. Roll call was then taken, with the following members in attendance:

Committee members: Jose Esteves, John Gatto, Kansen Chu, Pat Kolstad, Patricia Mahan, Madison Nguyen, Chuck Reed, Ed Shikada

2. APPROVAL OF MINUTES

A. **June 13, 2013**
Item 2.A was approved 7 – 1 (1 abstention).

3. UNFINISHED BUSINESS/REQUEST FOR DEFERRALS

4. DIRECTORS REPORT

A. Directors Verbal Report:
Ashwini Kantak, Assistant Director of the Environmental Services Department and Dave Sykes, Director of Public Works, gave a presentation entitled "San Jose-Santa Clara Regional Wastewater Facility Capital Improvement Program: Program and Project Delivery".

Committee member Gatto requested that future program management overviews include end results.

Committee member Chu would like future reports to include descriptions of how program elements fit together.

Committee member Shikada requested that Public Works return to TPAC with an update on benchmarking, program oversight, and checks and balances.

Committee member Esteves requested a separate section describing funding in future reports on program management.

5. **AGREEMENTS/ACTION ITEMS**

A. **Annual Insurance Renewal Policy**

Staff Recommendation: Accept the informational memo.

The Annual Insurance Renewal Policy will be considered by the San Jose City Council on September 24, 2013

Motion by Committee Member Nguyen, second by Committee Member Mahan to approve item 5.A. Item 5.A. was approved unanimously.

B. **First Amendment to Master Agreement with ERM-West, Inc., for Environmental Health and Safety Consulting Services**

Staff Recommendation: Approve the First amendment to the Master Agreement with ERM-West Inc. for environmental health and safety consulting services to increase the total compensation by \$300,000 for a maximum not to exceed amount of \$550,000.

The First Amendment to Master Agreement with ERM-West, Inc., for environmental Health and Safety Consulting Services will be considered by the San Jose City Council on August 20, 2013

David Wall, public, spoke on this item.

Motion by Committee Member Mahan, second by Committee Member Nguyen to approve item 5.B. Item 5.B. was approved unanimously.

C. **First Amendment to the Zero Waste Project Ground Lease by and between the City of San Jose and Zero Waste Energy Development Company, LLC**

Staff Recommendation: Authorize the City Manager to execute the First Amendment to the Zero Waste Project Ground Lease by and between the City of San Jose and Zero Waste Energy Development Company, LLC, permitting the tenant to sublease certain portions of the ground lease area for parking at the discretion of the City Manager.

Deferred from June 13, 2013

The First Amendment to the Zero Waste Project Ground Lease by and between the City of San Jose and Zero Waste Energy Development Company, LLC will be considered by the San Jose City Council on August 20, 2013.

David Wall, public, spoke on this item.

Motion by Committee Member Esteves, second by Committee Member Mahan to approve item 5.C. Item 5.C. was approved unanimously.

D. Regional Wastewater Facility Master Agreements Audit Report

Staff Recommendation: Accept the Regional Wastewater Facility Master Agreements Audit Report and recommend for Council consideration on August 20, 2013.

The Regional Wastewater Facility Master Agreements Audit Report will be considered by the San Jose City Council on September 10, 2013.

David Wall, public, spoke on this item.

Motion by Committee Member Mahan, second by Committee Member Nguyen to approve item 5.D. Item 5.D. was approved unanimously.

E. Status Report on Agreement with Telstar to Provide Temporary Staffing at the San Jose/Santa Clara Regional Wastewater Facility

Staff Recommendation: Adopt a resolution to authorize the City Manager to execute the first one-year option to extend the Agreement for August 17, 2013, through August 16, 2014 for a maximum compensation not to exceed \$1,670,000, and to execute up to three one-year options through August 16, 2017, to extend the Agreement, subject to the appropriation of funds.

The Status Report on Agreement with Telstar to Provide Temporary Staffing at the San Jose/Santa Clara Regional Wastewater Facility will be considered by the San Jose City Council on August 27, 2013.

David Wall, Public, spoke on this item.

Motion by Committee Member Nguyen, second by Committee Member Gatto to approve item 5.E. Item 5.E. was approved unanimously.

6. OTHER BUSINESS/CORRESPONDENCE

A. Nomination/Election of the Treatment Plant Advisory Committee Chair for Fiscal Year 2013-14

The Treatment Plan Advisory Committee nominated and elected Mayor Chuck Reed to continue as Committee Chair for Fiscal year 2013-14.

7. **STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC**

A. **Proposed Ordinance to Amend the San Jose/Santa Clara Water Pollution Control Plant Receiving Station Use Permit and Sewer Use Regulations**

Staff Recommendation: Approve an ordinance to amend Parts 1 and 9 of Chapter 9.08 of Title 9 of the San Jose Municipal Code to update the receiving station use permit regulations; and to amend Parts 2 and 3 of Chapter 15.14 of Title 15 of the San Jose Municipal Code to add new definitions, modify permitting and reporting requirements for certain industrial dischargers, and make other technical and conforming changes to the sewer use regulations.

The Proposed Ordinance to Amend the San Jose/Santa Clara Water Pollution Control Plant Receiving Station Use Permit and Sewer Use Regulations was considered by the San Jose City Council on June 18, 2013.

B. **First Amendment to the Zero Waste Project Ground Lease by and between the City of San Jose and Zero Waste Energy Development Company, LLC**

Staff Recommendation: Authorize the City Manager to execute the First Amendment to the Zero Waste Project Ground Lease by and between the City of San Jose and Zero Waste Energy Development Company, LLC, permitting the tenant to sublease certain portions of the ground lease area for passenger vehicle parking at the discretion of the City Manager.

Item Deferred to the August 2013 Treatment Plant Advisory Committee Meeting

C. **Distributed Control System Upgrade at the San Jose/Santa Clara Regional Wastewater Facility**

Staff Recommendation:

1. Approval of an agreement with ABB Inc. for a Distributed Control System Upgrade at the San Jose/Santa Clara Regional Wastewater Facility, formerly referred to as the San Jose/Santa Clara Water Pollution Control Plant, for a term beginning from the date of execution through December 31, 2015, for a total amount not to exceed \$1,814,785 for all hardware, software, professional services, and training, and;
2. Approve a 10% contingency in the amount of \$181,479 to cover unanticipated expense during the term of the agreement.

The Approval of the Distributed Control System Upgrade at the San Jose/Santa Clara Regional Wastewater Facility was heard by the San Jose City Council on June 18, 2013.

D. Report on Bids and Award of Contract for the 7086-WPCP Street Treatment Phase II Project

Staff Recommendation:

1. Award the construction contract for the WPCP Street Treatment Phase II Project to the low bidder, Wattis Construction, Inc., in the amount of \$279,598; and
2. Approve a 10% contingency in the amount of \$28,000.

The Approval of the Report on Bids and Award of Contract for the 7086-WPCP Street Treatment Phase II Project was heard by the San Jose City Council on June 18, 2013.

E. Report on Bids and Award of Contract for the 6835-Handrail Replacement – Phase V Project

Staff Recommendation: Report on bids and award of construction contract for 6835-Handrail Replacement – Phase V Project to the lowest responsive bidder, Rodan Builders, in the amount of \$1,254,630 and approval of a 10% contingency in the amount of \$125,463.

The Approval of the Report on Bids and Award of Contract for the 6835-Handrail Replacement – Phase V Project was heard by the San Jose City Council on June 18, 2013.

F. Report on Bids and Award of Contract for the 6927-DCS Fiber Optics Network Expansion Project

Staff Recommendation:

1. Award the construction contract for the CDS Fiber Optics Network Expansion Project to the lowest responsive bidder, Terry Hanson Electric, in the amount of \$589,000; and
2. Approve a 10% contingency in the amount of \$58,900.

The Approval of the Report on Bids and Award of Contract for the 6927-DCS Fiber Optics Network Expansion Project was heard by the San Jose City Council on June 18, 2013.

G. Plant Master Plan Update – June 2013

Staff Recommendation: Accept this progress report highlighting activities since November 2012 on the Draft Plant Master Plan for the Regional Wastewater Facility.

The Approval of the Plant Master Plan Update – June 2013 is scheduled to be considered by the San Jose City Council on August 13, 2013.

H. Execute a Purchase Order with Tucker Construction

Staff Recommendation: Authorize the City Manager to:

1. Exercise the second of four one-year options to renew an Open Purchase Order with Tucker Construction (San Jose, CA) for the period July 1, 2013 through June 30, 2014, with total compensation not to exceed \$300,000 for tank and walkway/concrete repair services at the San Jose-Santa Clara Regional Wastewater Facility ("Plant").
2. Increase funding as required based on City facility needs and availability of funding consistent with the scope of the purchase order.
3. Exercise the remaining options to renew the purchase order subject to the appropriation of funds.

Desired Outcome: Repair of expansion joints and associated concrete at the Plant.

The Approval of the Execution of Purchase Order with Tucker Construction was heard by the San Jose City Council on June 18, 2013.

Items 7 A-H were approved to note and file.

8. REPORTS

A. Open Purchase Orders Greater Than \$100,000

The attached monthly Procurement and Contract Activity Report summarizes the purchase and contracting of goods with an estimated value between \$100,000 and \$1.08 million and of services between \$100,000 and \$270,000.

Item 8.A was approved to note and file.

9. MISCELLANEOUS

The next TPAC meeting is September 12, 2013, at 4:30 p.m. City Hall, City Manager's Office, 17th Floor, Room 1734

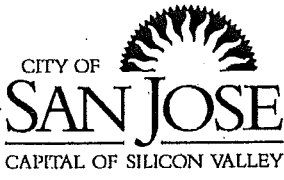
10. PUBLIC COMMENT

David Wall presented a speaker card on various topics.

11. ADJOURNMENT

- A. The Treatment Plant Advisory Committee adjourned at 5:00 p.m.

Chuck Reed, Chair
Treatment Plant Advisory Committee



Memorandum

TO: HONORABLE MAYOR AND
CITY COUNCIL

FROM: Kerrie Romanow

SUBJECT: SEE BELOW

DATE: August 26, 2013

Approved 

Date 9/9/13

SUBJECT: AGREEMENT WITH BROWN AND CALDWELL FOR ENGINEERING SERVICES FOR THE DIGESTER AND THICKENER FACILITIES UPGRADE PROJECT AT THE SAN JOSÉ-SANTA CLARA REGIONAL WASTEWATER FACILITY

RECOMMENDATION

Approval of a consultant agreement with Brown and Caldwell to provide engineering services for the Digester and Thickener Facilities Upgrade Project at the San José-Santa Clara Regional Wastewater Facility (formerly known as the San José/Santa Clara Water Pollution Control Plant). This agreement will be effective from the date of execution to December 31, 2019, for a total amount not to exceed \$12,017,526.

OUTCOME

Approval of this recommendation provides the City with professional engineering services needed for the design of the Digester and Thickener Facilities Upgrade Project at the San José-Santa Clara Regional Wastewater Facility (Facility). The first phase of the Digester and Thickener Facilities Upgrade Project (Project) will rehabilitate four digesters, including new covers and mixing systems; heating system and gas collection and conveyance system upgrades; structural and seismic retrofits; electrical, instrumentation and control systems upgrades; and Dissolved Air Flotation Thickeners (DAFTs) modifications to allow for sludge co-thickening including new odor control treatment. Completion of this project will refurbish Digesters 5, 6, 7 and 8 to allow them to be put back in service for the next 20 years; replace the inefficient gas mixing and heating systems resulting in improved digester gas production; and, bring the gas conveyance system into compliance with current National Fire Protection Association (NFPA) and National Electrical Code (NEC) standards.

EXECUTIVE SUMMARY

City staff recommends approval of an agreement with Brown and Caldwell for a total amount not to exceed \$12,017,526 to provide professional engineering services for the Digester and

HONORABLE MAYOR AND CITY COUNCIL

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Subject: Agreement for the Digester and Thickener Facilities Upgrade Project

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Thickener Facilities Upgrade Project, which will upgrade four digesters, upgrade the digester gas pipeline, and retrofit the existing DAFT to operate as a co-thickening facility.

BACKGROUND

Description of Existing Digestion System

The Facility has 16 anaerobic digesters of varying ages constructed between 1956 and 1983. Of the sixteen digesters installed, six are currently out of service due to structural damage or other mechanical failures. The remaining ten digesters are operational (though all are nearing the end of their useful life), with a minimum of eight and up to ten being operated at any given time. The digesters receive primary sludge (i.e., solids) from the primary clarifiers and thickened waste activated sludge from the DAFTs. Sludge is retained in the digester tanks for up to 30 days to allow the digestion process to reduce volatile solids and destroy pathogens. The digested sludge is then pumped and stored in open air storage lagoons (a 3-year process) and drying beds (a 6-month process) for further stabilization and conversion to high quality Class A biosolids. The dried biosolids are eventually trucked to the nearby Newby Island landfill for use as alternate daily cover.

A by-product of the biological digestion process is digester gas (i.e. methane gas) which is captured for re-use to help meet the Facility's energy needs. Digester gas is conveyed via a main manifold to two existing gas holders, waste gas flares, and a compressor facility. Most of the produced gas is compressed and blended with natural gas (or landfill gas, if available) and used as fuel for the Facility's cogeneration engines and engine-driven blowers. Any excess gas is burned by the waste gas flares.

History of the Digester and Thickener Upgrade Project

An Infrastructure Condition Assessment (ICA) report completed in 2007 by CH2M Hill identified a number of potential improvements to the anaerobic digesters and gas conveyance and collection systems. Rehabilitation of the anaerobic digesters and digester gas systems was identified as high priority project ranking in the top ten amongst the 70 potential capital improvement projects identified by the ICA report. The report further recommended that high priority projects be implemented within a 5-to-10 year period.

Following on the ICA report recommendations, a detailed condition assessment and technology evaluation study was commissioned in July 2010. The study was performed by Brown and Caldwell under City direction. Tasks performed under this effort included performing market research and a business case evaluation for potentially accepting Fats, Oils, and Grease (FOG) at the Facility as well as adding a new sludge co-thickening process; a planning level evaluation of flow and loading rates; a condition assessment of the structural integrity of the existing digesters to accept new covers; a technology review of different types of digester covers and mixing systems; a condition assessment of the digester tunnels and options for bringing them into compliance with current NFPA standards; an evaluation of the existing condition of the existing heating system and pilot testing considerations for operating the digesters at higher temperatures;

a condition assessment of the existing electrical systems; and a review of the existing struvite formation issue at the Facility and mitigation alternatives. The study was completed in June 2011.

The study provided staff with information necessary for City staff decision making and informing the scope of the Project for design advertisement. Key decisions resulting from the detailed condition assessment and technology evaluation study included:

- Selection of Digesters 5, 6, 7 and 8 for rehabilitation
- Selection of submerged fixed concrete covers
- Identification of four different mixing system technologies two of which have been selected for further verification during detailed design
- Identification of two different options for bringing the digester tunnels and gas piping into compliance with current codes; one option will be selected during detailed design
- Proceeding with additional detailed evaluation and testing of the heating system capacities to confirm the capability of operating the digesters at a higher temperature for production of Class A biosolids; this work is to be completed as an early activity during detailed design
- Confirmation of the existing condition of electrical and instrumentation/control system to be further developed during detailed design
- Proceeding with in-house bench scale testing of ferric chloride for struvite control
- Proceeding with sludge co-thickening in the DAFTs

Detailed Project Description

The project scope includes upgrades to four existing anaerobic digesters (Digesters 5, 6, 7 and 8), upgrades to the digester gas pipeline, and retrofits to the existing DAFT to operate as a co-thickening facility.

All elements associated with the digesters will be upgraded, including covers, mixing and heating systems, electrical and instrumentation components, and associated equipment. All existing digester gas piping, associated appurtenances, and instrumentation will be upgraded to meet future gas production needs, including the potential addition of alternative feed sources to the digesters (i.e., fat, oil and grease or food waste). The upgraded pipe will be designed in accordance with current standards and regulations, addressing current reliability and safety issues at the Facility.

The City is also in the process of replacing one of the digester gas holders and upgrading the gas compressor facility due to mechanical failures. The new digester gas piping will be connected to these new facilities and provisions will be made to ensure an integrated operation of the whole system. Upgrades to the DAFT units will allow for co-thickening of combined primary and waste activated sludge. Improvements will include modifications to existing piping, tanks, associated equipment, and electrical and instrumentation components to allow for the new operation scheme. The upgraded tanks will be provided with covers and odor control system.

August 26, 2013

Subject: Agreement for the Digester and Thickener Facilities Upgrade Project

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ANALYSIS

The City issued a Request for Qualifications (RFQ) on February 25, 2013 seeking engineering design, construction support, testing and commission services for the Digester and Thickener Facilities Upgrade Project.

A pre-proposal site tour was completed on March 5, 2013, with a total of 30 people in attendance. Brown and Caldwell was the sole proposer submitting a Statement of Qualifications by the March 18, 2013 submittal deadline. Although this procurement was discussed at an outreach workshop in November 2012 where more than 100 consultants, contractors and suppliers were in attendance; the lower than expected response can be attributed to some firms choosing to instead submit for the Program Management Services RFQ which was advertised on March 28, 2013. Any firm selected to for the digester rehabilitation project would have been conflicted out of the Program Management Services RFQ.

A panel consisting of representatives from the Environmental Services Department Engineering and Operations and Maintenance divisions evaluated the Statement of Qualification. The panel determined that Brown and Caldwell met the minimum qualifications and experience requirements set forth in the RFQ. Staff has confirmed through discussions with the City Attorney's Office that Brown and Caldwell's preparation of the condition assessment and technology evaluation study completed in June 2011 (which study was included as a part of the RFQ issued on February 25, 2013) does not appear to present any disqualifying conflict of interest or unfair competitive advantage.

Evaluation of the Statement of Qualifications was based on the following criteria:

- Proposal Responsiveness
- Experience
- Expertise
- Project Understanding & Approach
- City's Local and Small Business Preference Policy

Brown and Caldwell is nationally recognized for their expertise and experience in the anaerobic digestion and biosolids processing field. As part of their proposal, Brown and Caldwell presented the City with an abundance of projects similar in size and scope to the planned Facility project that confirmed their extensive design experience in anaerobic digestion and DAFT upgrades.

Brown and Caldwell is currently the designer for the digester upgrades for East Bay Municipal Utilities District (EBMUD) and City and County of San Francisco Public Utilities Commission (SFPUC). In particular, the EBMUD digester rehabilitation project is similar in scope and magnitude to the project envisioned for the Facility, with both plants' original digesters designed by the same consultant and constructed at the same time. Brown and Caldwell has already completed the design and construction of EBMUD's project, bringing an understanding of potential issues that could be encountered and previous experience that could provide possible savings in time and money to the City.

August 26, 2013

Subject: Agreement for the Digester and Thickener Facilities Upgrade Project

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Staff, along with the Executive Program Advisor, conducted extensive negotiations with Brown & Caldwell to arrive at a level of effort estimate and fee structure for the project. The final negotiated fee reflects a reduction of over \$1.2 million from the consultant's proposal. Professional services to be provided under this contract include project administration, preliminary engineering and design development, and support services during bidding, construction, start up and commissioning phases.

The total negotiated fee (not including optional services) represents 19.5% of the estimated project construction cost of \$50 million. In addition to design, bidding and construction support services, the negotiated fee includes commissioning and training support services to ensure optimal functioning of the equipment and systems. In addition, optional services in the amount of \$2,236,429 (or 4.5% of estimated construction costs) may be exercised at City's sole discretion for City directed design modifications, detailed instrumentation and control wiring drawings, and any other additional services that may be required. Staff benchmarked the negotiated fees with other similar projects and found the negotiated fee to be reasonable for a project of this size and complexity.

Staff also anticipates bringing forward a recommendation for program management services to Council in September 2013. The program management firm will provide third party design and constructability reviews and cost validation for this project and will ensure coordination of this project with the overall CIP program.

In summary, compensation for the consultant's services will be for a total agreement amount not-to-exceed \$12,017,526. This amount includes \$2,236,429 in optional services to be authorized by the Environmental Services Department Director at the City's sole option. The term of agreement will be from the date of execution through December 31, 2019. The project schedule assumes 18 months for design, 6 months for bidding including contractor pre-qualification, 30 months for construction and start-up, and 12 months for post-substantial completion operations training and engineering support.

EVALUATION AND FOLLOW-UP

Progress and performance on delivery of this CIP project will be reported to Council through the semi-annual updates to the Transportation and Environment Committee. In addition, project progress will be reported to the Technical Advisory Committee and the Treatment Plant Advisory Committee through monthly progress reports.

POLICY ALTERNATIVES

Alternative # 1: Direct City Staff to provide the required services with in-house resources.

Pros: None.

Cons: A lack of existing capacity and expertise will result in significant delays initiating this project and subsequently create delays to other pending capital projects.

Reason for not recommending: The complexity of implementing a project of this size requires the use of specialized expertise and experience in the anaerobic digestion and biosolids processing field.

PUBLIC OUTREACH

- ✓ **Criterion 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**
- Criterion 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criterion 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

This memorandum will be posted on the City's website for the September 24, 2013 City Council Agenda.

COORDINATION

This project and memorandum have been coordinated with Risk Management, Equality Assurance, the City Manager's Budget Office, and the City Attorney's Office. This item is schedule to be heard at the September 12, 2013 Treatment Plant Advisory Committee meeting.

FISCAL/POLICY ALIGNMENT

This agreement is consistent with the Council-approved Budget Strategy to focus on rehabilitating aging Plant infrastructure, improve efficiency, and reduce operating costs. This agreement is also consistent with the budget strategy principle of focusing on protecting our vital core services.

COST SUMMARY/ IMPLICATIONS

1. AMOUNT OF RECOMMENDATION: \$12,017,526
2. COST ELEMENTS OF AGREEMENT:

Project Administration	\$ 553,816
Preliminary Engineering	929,486
Design Development	5,608,560
Support Services During Bidding & Construction	\$2,351,152
Commissioning & Training Services	338,083
Optional Services	2,236,429
TOTAL AGREEMENT AMOUNT	\$12,017,526
3. SOURCE OF FUNDING: 512 – San Jose/Santa-Clara Treatment Plant Capital Fund.
4. FISCAL IMPACT: The consultant agreement has been reviewed and was determined that it will have no significant adverse impact on the General Fund operating budget.

BUDGET REFERENCE

The table below identifies the fund and appropriation proposed to fund the agreement

Fund #	Appn. #	Appn. Name	RC #	Total Appn.	Amt. for Contract	2013-2014 Proposed Capital Budget*	Last Budget Action (Date, Ord. No.)
Remaining Project Costs				\$12,216,196			
Remaining Funding Available				\$12,441,222			
Total Current Funding Available							
512	4127	Digester Rehabilitation	171620	\$12,445,000	\$12,017,526	V-185	06/18/2013 Ord. 29271
Total Funding for Project				\$12,445,000	\$12,017,526		

*The City Council approved the 2013-2014 Capital Budget on June 18, 2013.

CEQA

Statutorily Exempt, File No. PP10-066 (d), CEQA Guidelines Section 15262, Feasibility and Planning Studies.

/s/

KERRIE ROMANOW
Director, Environmental Services Department

For questions, please contact Ashwini Kantak, Assistant Director, Environmental Services Department, at (408) 975-2553.

Consultant Agreement

(CPMS Contract No. 7091)

This Agreement is between the City of San Jose, a municipal corporation ("City"), and Brown and Caldwell, a California corporation ("Consultant").

This Agreement is made and entered into this ____ day of _____ 20__
("Contract Date")

THE CITY AND CONSULTANT AGREE AS FOLLOWS:

1. AGREEMENT SCOPE

1.1 General: This Agreement sets forth the terms and conditions under which the Consultant will provide professional consulting services to the City for the following project:

Project Name: Digester and Thickener Facilities Upgrade Project
("Project")

Project Location: San Jose – Santa Clara Regional Wastewater Facility

1.2 Exhibits: This Agreement consists of this agreement form and the following exhibits, which are incorporated herein by reference:

Exhibit A: Scope of Services and Schedule of Performance

Exhibit B: Compensation

Exhibit C: Insurance Requirements

1.3 Director: "Director" means the Director of the Environmental Services Department ("ESD Director") or the Director's designee.

1.4 Business Days: "Business Day" and "Business Days" means the day(s) on which City Hall is open to conduct business.

1.5 Entire Agreement: This Agreement is the final, complete and exclusive understanding of the parties as to the matters contained herein. It supersedes all prior communications and understandings regarding such matters.

1.6 Amendments: This Agreement may be modified only by a written amendment executed by the parties.

2. AGREEMENT TERM

- 2.1 **Term:** The Agreement term is from the Contract Date to December 31, 2019, inclusive, unless terminated earlier pursuant to Section 19 below.

3. SCOPE OF SERVICES

- 3.1 **Basic Services:** "Basic Services" means the services set forth in **Exhibit A**. The Consultant must perform the all services under this Agreement to the ESD Director's satisfaction subject, however, to applicable professional standards of performance.
- 3.2 **Additional Services:** "Additional Services" means the following: (a) services that are included in the Basic Services but: i) exceed the specified level of the Basic Services, or ii) are identified in **Exhibit A** as optional, or otherwise requiring the written authorization of the ESD Director, or (b) services that relate to the Project but are not included in the Basic Services.
- 3.2.1 **Authorization:** The Consultant can not perform any Additional Services without the ESD Director's prior written authorization.
- 3.2.2 **Director's Authorization:** The ESD Director may authorize the Consultant to perform Additional Services up to the cumulative, maximum amount set forth in **Exhibit B** for such services. The ESD Director must authorize the Consultant to perform Additional Services through a written notice to proceed executed by both parties. The written notice to proceed must set forth the scope of the Additional Services, the schedule for completing such services, and the amount and method of compensating the Consultant for such services. The ESD Director is authorized to execute the notice to proceed for Additional Services for the City.

4. DESIGN SERVICE REQUIREMENTS

- 4.1 **General:** This Section applies to any design services the Consultant performs under this Agreement.
- 4.2 **Standard Documents:** The Consultant is, or will become, familiar with the City of San Jose, Department of Public Works, Standard Specifications, dated July 1992 (and any amendments thereto), the City of San Jose, Department of Public Works, Standard Details, dated July 1992 (and any amendments thereto), and any other standard documents the City uses to design and implement its capital projects (collectively "Standard Project Documents").
- 4.3 **Use of Standard Documents:** Unless the Director provides prior written approval to the contrary, the final design documents prepared by the Consultant must be based on, and must incorporate, the Standard Project Documents.

5. CITY'S PROJECT MANAGER

The City's project manager for this Agreement is:

Name: Mariana Chavez-Vazquez	Phone No.: 408-945-3063
Department: Environmental Services	E-mail: mariana.chavez-vazquez@sanjoseca.gov
Address: 700 Los Esteros Road, San Jose, CA 95134	

The ESD Director can change the above project manager by giving the Consultant written notice.

6. CONSULTANT'S STAFFING

6.1 Consultant's Project Manager and Other Staffing: Identified below are the following: (a) the Consultant's project manager, and (b) the Consultant(s) and/or employee(s) of the Consultant who will be principally responsible for providing the Basic Services. If any individual identified below is required to file a Statement of Economic Interests, Form 700 ("Form 700"), the Consultant must comply with the requirements of Subsection 17.2 below.

		<u>Required to File Form 700?</u>	
		Yes	No
<u>Consultant's Project Manager</u>			
Name: Lloyd Slezak	Phone No.: 925-210-2295	XX	
Address: 201 N. Civic Drive, Suite 115, Walnut Creek, CA 94596	E-mail: lslezak@brwncald.com		
<u>Other Staffing</u>			
<u>Name:</u>	<u>Assignment:</u>		
1. Grace Chow	Principal in Charge	XX	
2. Adam Ross	Project Engineer	XX	
3. Steve Krugel	Technical Director	XX	

4. Perry Schafer	Technical Advisor	XX	
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6.2 Project Manager's Authority: The Consultant's project manager is authorized to act on behalf of the Consultant.

6.3 Staffing Changes: The Director's prior written approval is required for the Consultant to remove, replace or add to any of its staffing identified in this provision.

7. USE OF SUBCONSULTANTS

7.1 Authority to Use: The Consultant will use the following subconsultants for the specified areas of work. The Consultant can not remove, replace or add to any of the subconsultants identified in this provision without the Director's prior written approval:

Subconsultant's Name	Area of Work
1. Black & Veatch	gas pipeline
2. ESA	environmental review assistance
3. Allied Engineering	site surveying
4. Furgo West	geotechnical
5. Scientific Construction Laboratories, Inc.	specialty structural inspection
6. Forensic Analytical	hazardous materials investigations
7. KSN Inc.	3D laser scanning
8. Eichleay Engineers, Inc.	project process hazard analysis

7.2 Subconsultant Work: The Consultant shall be responsible for all services and deliverables provided by any subconsultants it uses, and represents that each such subconsultant is specially trained, experienced, and competent to perform its portion of the work.

8. INDEPENDENT CONTRACTOR

- 8.1 General:** The Consultant has complete control over its operations and employees, and is an independent contractor. The Consultant is not an agent or employee of the City, and shall not represent or act as the City's agent or employee. The Consultant does not have any rights to retirement benefits or other benefits accruing to City employees, and expressly waives any claim it may have to any such rights.
- 8.2 Subcontractors:** As an independent contractor, the Consultant has complete control over its subconsultants, subcontractors, suppliers, agents and any other person or entity with whom the Consultant contracts in furtherance of this Agreement (collectively "Subcontractors"). Subject to the requirements of Section 7 of this Agreement, the Consultant is solely responsible for selecting, managing and compensating its Subcontractors, and for ensuring they comply with this Agreement.
- 8.3 Indemnity:** The Consultant shall place in each Subcontractor agreement indemnity obligations in favor of the City in the exact form and substance of those contained in Section 11 below.

9. STANDARD OF PERFORMANCE

The Consultant represents that it, and its Subcontractors, possess all necessary training, licenses and permits needed to perform all services under this Agreement. The Consultant represents that its, and its Subcontractors', performance of all services under this Agreement will conform to the standard of practice of a professional that specializes in performing professional services of a like nature and complexity.

10. COMPENSATION

- 10.1 Maximum Total Compensation:** The maximum amount the City will pay the Consultant for all professional fees, costs, charges and expenses related to performing Basic Services and any Additional Services is **\$12,017,526.00** ("Maximum Total Compensation"). Consultant shall complete all services described in **Exhibit A** for the Maximum Compensation Amount.
- 10.2 Exhibit B - Compensation:** The City will pay the Consultant up to the Maximum Total Compensation in accordance with **Exhibit B**. **Exhibit B** contains a compensation table that sets forth how the City will pay the Maximum Total Compensation to the Consultant.
- 10.3 Tax Forms Required:** The following are conditions on the City's obligation to process any payment pursuant to this Agreement:
- 10.3.1 U.S. Based Person or Entity:** If the Consultant is a U.S. based person or entity, the Consultant acknowledges and agrees that the Consultant is required to provide the City with a properly completed Internal Revenue Service Form W-9 before the City will process payment. If the Consultant

is a U.S. based person or entity, but has neither a permanent place of business in California nor is registered with the California Secretary of State to do business in California, the Consultant acknowledges and agrees that the Consultant is required to provide the City with a properly completed California Franchise Tax Board form related to nonresident withholding of California source income.

10.3.2 Non-U.S. Based Person or Entity: If the Consultant is not a U.S. based person or entity, the Consultant acknowledges and agrees that the Consultant is required to provide the City with the applicable Internal Revenue Service form related to its foreign status and a California Franchise Tax Board form related to nonresident withholding before the City will process payment.

11. INDEMNIFICATION

- 11.1 Obligation:** The Consultant shall defend, indemnify and hold harmless the City and its officers, employees and agents against all claims, losses, damages, injuries, expenses or liabilities that – directly or indirectly, or in whole or in part - arise out of, pertain to, or relate to any of the following:
- The Consultant's negligent performance of all or any part of the Basic Services and any Additional Services; or
 - Any negligent act or omission, recklessness or willful misconduct of the Consultant, any of its Subcontractors, anyone directly or indirectly employed by either the Consultant or any of its Subcontractors, or anyone that they legally liable for; or
 - Any infringement of the patent rights, copyright, trade secret, trade name, trademark, service mark or any other proprietary right of any person(s) caused by the City's use of any services, deliverables or other items provided by the Consultant pursuant to the requirements of this Agreement; or
 - Any breach of this Agreement by the Consultant or any Subcontractors.
- 11.2 Limitation on Obligation:** The obligation in Subsection 11.1 above shall not apply to the extent that any claim, loss, damage, injury, expense or liability results from the sole negligence or willful misconduct of the City or its officers, employees or agents.
- 11.3 Duty to Defend:** The Consultant's obligation in Subsection 11.1 above applies to the maximum extent allowed by law and includes defending the City as set forth in Section 2778 of the California Civil Code. Upon the City's written request, the Consultant, at its own expense, shall defend any suit or action that is subject to the obligation in Subsection 11.1 above.
- 11.4 Insurance:** The City's acceptance of any insurance in accordance with Section 12 does not relieve the Consultant from its obligations under this Section 11.

The Consultant's obligations under this Section 11 apply whether or not the insurance required by the Agreement covers any damages or claims for damages.

- 11.5 Survival:** The Consultant's obligations under this Section 11 survive the expiration or earlier termination of the Agreement.

12. INSURANCE REQUIREMENTS

- 12.1 General:** The Consultant shall comply with the insurance requirements set forth in **Exhibit C** for the Agreement term.
- 12.2 Documentation:** Before performing any services, the Consultant must submit to the City's designated risk manager ("Risk Manager"), for the Risk Manager's written approval, all documents demonstrating compliance with the requirements of **Exhibit C**.
- 12.3 Changes:** The Risk Manager may amend or waive, in writing, any of the requirements contained in **Exhibit C**.

13. OWNERSHIP OF WORK PRODUCT

- 13.1 Ownership:** The City owns all rights in and to any of the following work product (including electronic equivalents) immediately when and as created by the Consultant or any of its Subcontractors pursuant to this Agreement: drawings, plans, elevations, sections, details, schedules, diagrams, specifications, studies, reports, surveys, data, information, models, sketches, and other similar documents and materials (collectively "Work Product").
- 13.2 Copyright:** To the extent permitted by Title 17 of the United States Code, the Work Product is deemed a work for hire and all copyrights in such Work Product are the property of the City. In the event it is ever determined that any Work Product is not a work for hire under United States law, the Consultant hereby assigns to the City all copyrights to such works when and as created.
- 13.3 City's Reuse:** The City's reuse of any Work Product is subject to California Business and Professions Code Sections 5536.25, 6735, 6735.3, 6735.4 or 8761.2, whichever is applicable.
- 13.4 Consultant's Reuse:** With the Director's prior written consent, the Consultant may retain and use copies of the Work Product for reference and as documentation of experience and capabilities.

14. DISCLOSURE OF WORK PRODUCT

- 14.1 Prohibition:** Except as authorized by the Director or as otherwise required by law, the Consultant shall not disclose any of the following to a third party: (a) Work Product, (b) discussions between the City and Consultant, or (c) information prepared, developed or received by the Consultant or any of its Subcontractors in the course of performing services pursuant to this Agreement.

- 14.2 Notification:** The Consultant will immediately notify the Director if it is requested by a third party to disclose any Work Product, discussions or information that the Consultant is otherwise prohibited from disclosing.
- 14.3 Limit on Prohibition:** The prohibition in Subsection 14.1 above does not apply to disclosures between the Consultant and its Subcontractors that are needed to perform the Basic Services.
- 14.4 Survival:** This Section 14 survives the expiration or earlier termination of this Agreement.

15. AUDIT/INSPECTION OF RECORDS

- 15.1 Retention Period:** The Consultant shall retain the following records (collectively "Records") for a minimum of 3 years from the date of the City's final payment to the Consultant under this Agreement or for any longer period required by law:
- All ledgers, books of accounts, invoices, vouchers, canceled checks, and other records relating to the Consultant's charges for performing services, or to the Consultant's expenditures and disbursements charged to the City; and
 - All Work Product and other records evidencing Consultant's performance.
- 15.2 Producing Records:** At any time during the Agreement term or during the period of time that the Consultant is required to retain the Records, the City Manager, the ESD Director, the City Attorney, the City Auditor, or a designated representative of any of these officers may request, in writing, production of all or a portion of the Records. The Consultant shall produce the requested Records at City Hall during normal business hours, or at any other location and time mutually agreed upon by the parties. The Consultant shall produce the requested Records at no cost to the City.
- 15.3 State Auditor:** In accordance with Government Code Section 8546.7, the Consultant may be subject to audit by the California State Auditor with regard to the Consultant's performance of this Agreement if the compensation under this Agreement exceeds \$10,000.

16. NON-DISCRIMINATION/NON-PREFERENCE

- 16.1 Prohibition:** The Consultant shall not discriminate against, or grant preferential treatment to, any person on the basis of race, sex, color, age, religion, sexual orientation, actual or perceived gender identity, disability, ethnicity or national origin. This prohibition applies to recruiting, hiring, demotion, layoff, termination, compensation, fringe benefits, advancement, training, apprenticeship and other terms, conditions, or privileges of employment, subcontracting and purchasing.
- 16.2 Reasonable Accommodation:** The prohibition in Subsection 16.1 above is not intended to preclude the Consultant from providing a reasonable accommodation to a person with a disability.

- 16.3 Compliance Reports:** The City's "Compliance Officer", as defined in Section 4.08.020 of the San José Municipal Code, is responsible for administering this Section 16. The Compliance Officer may require the Consultant to file, and cause any Subcontractor to file, reports demonstrating compliance with this Section 16. Any such reports shall be filed in the form and at such times as the Compliance Officer designates. They shall contain such information, data and/or records as the Compliance Officer determines is needed to show compliance with this provision.
- 16.4 Violation:** A violation of the prohibition in Subsection 16.1 above or any part of this Section 16 constitutes the following: (a) a material breach of this Agreement, (b) a misdemeanor violation of Chapter 4.08 of the San José Municipal Code and (c) a ground for debarment in accordance with Chapter 4.10 of the San José Municipal Code.
- 16.5 Subcontracts:** The Consultant shall include Subsections 16.1 through 16.4, inclusive, of this Agreement in each subcontract that it enters into in furtherance of this Agreement.
- 16.6 Waiver:** The Compliance Officer may waive any of the requirements of this provision if the Compliance Officer determines that the Consultant has its own nondiscrimination/nonpreference requirements or is bound in the performance of this Agreement by the nondiscrimination/nonpreference requirements of another governmental agency, and the nondiscrimination/nonpreference provisions of the Consultant or other governmental agency are substantially the same as those imposed by the City.

17. CONFLICT OF INTEREST

- 17.1 General:** The Consultant represents that it is familiar with the local and state conflict of interest laws, and agrees to comply with those laws in performing this Agreement. The Consultant certifies that, as of the Contract Date, it was unaware of any facts constituting a conflict of interest or creating an appearance of a conflict of interest. The Consultant shall avoid all conflicts of interest or appearances of conflicts of interest in performing this Agreement. The Consultant has the obligation of determining if the manner in which it performs any part of this Agreement results in a conflict of interest or an appearance of a conflict of interest, and shall immediately notify the City in writing if it becomes aware of any facts giving rise to a conflict of interest or the appearance of a conflict of interest.
- 17.2 Filing Form 700:** In accordance with the California Political Reform Act (Government Code Sections 8311-83116), the Consultant shall cause each person identified in Attachment B of an Approved Service Order as having to file a Form 700 to do each of the following:

- Disclose the categories of economic interests in Form 700 as required by the Director;
- Complete and file the Form 700 no later than 30 calendar days after the date the Consultant executes the Approved Service Order; and
- File the original Form 700 with the City's Clerk with a copy submitted to the Director.

17.3 Future Services: The Consultant acknowledges each of the following with regard to performing future services for the City:

- The Consultant's performance of the services required by this Agreement may create an actual or apparent conflict of interest with regard to the Consultant performing or participating in the performance of some related **future** services, particularly if the services required by this Agreement comprise one element or aspect of a multi-phase process or project;
- Such an actual or apparent conflict of interest would be a ground for the City to disqualify the Consultant from performing or participating in the performance of such future services; and
- The Consultant is solely responsible for considering what potential conflicts of interest, if any, performing the services required by this Agreement might have on its ability to obtain contracts to perform future services.

18. ENVIRONMENTALLY PREFERABLE PROCUREMENT POLICY

18.1 General: The Consultant shall perform its obligations under the Agreement in conformance with City Council Policy 1-19, entitled "Prohibition of City Funding for Purchase of Single serving Bottled Water," and City Council Policy 4-6, entitled "Environmentally Preferable Procurement Policy."

18.2 Prohibition of City Funding for Purchase of Single Serving Bottled Water: The City's policy is that City funds should not be used for the purchase of single-serving bottled water except for any of the following:

- Public safety emergencies, investigations and extended deployments or activation of the Office of Emergency Services;
- Situations where there is a high risk of cross-contamination with non-potable water; or
- Situations where there are no reasonable alternatives to bottled water, such as large public events and when large quantities of water need to be distributed for health and safety reasons.

An invoice seeking reimbursement from City for the cost of single-serving bottled water under one of the above exceptions must be accompanied by a waiver form provided by the City and signed by the Director.

18.3 Environmentally Preferable Procurement Policy: The Environmentally Preferable Procurement Policy, along with a brief policy description, is located on the City's website at the following link: <http://www.sanjoseca.gov/esd/natural-energy-resources/epp.htm>. Environmental procurement policies and activities related to the completion of Consultant's work will include, whenever practicable, but are not limited to:

- The use of recycled and/or recyclable products in daily operations (i.e. 30%, 50%, 100% PCW paper, chlorine process free, triclosan free hand cleaner, etc.);
- The use of Energy-Star Compliant equipment;
- The use of alternative fuel and hybrid vehicles, and implementation of protocols aimed at increasing the efficiency of vehicle operation;
- The implementation of internal waste reduction and reuse protocol(s); and
- Water and resource conservation activities within facilities, including bans on individual serving bottled water and the use of compostable food service products.

19. TERMINATION

19.1 For Convenience: The ESD Director may terminate this Agreement at any time and for any reason by giving the Consultant written notice of the termination. The written notice must set forth the effective date of the termination, which must be at least 7 Business Days' after the date of the written notice.

19.2 For Cause: The ESD Director may terminate this Agreement immediately upon written notice for any material breach by the Consultant. If the ESD Director terminates the Agreement for cause and obtains the same services from another consultant at a greater cost, the Consultant is responsible for such excess cost in addition to any other remedies available to the City.

19.3 Delivery of Work: If the ESD Director terminates the Agreement – whether for convenience or for cause – the ESD Director has the option of requiring the Consultant to provide to the City any finished or unfinished Work Product prepared by the Consultant up to the date of Consultant's receipt of the written notice of termination.

19.4 Compensation: The City will pay the Consultant the reasonable value of services satisfactorily rendered by the Consultant to the City up to the date of Consultant's receipt of the written notice of termination. For services to be "satisfactorily rendered," the ESD Director must determine that the Consultant provided them in accordance with the terms and conditions of this Agreement.

The ESD Director will determine the reasonable value of satisfactorily rendered services based on the Compensation Table and any Schedule of Rates and Charges attached to this Agreement.

- 19.5 Receipt of Notice:** For purposes of this provision, the Consultant's receipt of the written notice of termination will be determined based on the date of actual receipt or based on Subsection 20.2 below, whichever occurs first.

20. NOTICES

- 20.1 Manner of Giving Notice:** All notices and other communications required by this Agreement must be in writing, and must be made via e-mail, personal service or United States mail, postage prepaid.
- 20.2 When Effective:** A notice or other communication that is e-mailed is effective when sent. A notice or other communication that is personally serviced is effective when personally delivered. A notice or other communication that is mailed is effective 3 calendar days after deposit in the United States mail.
- 20.3 To Whom Given:** All notices and other communications between the parties regarding the Agreement must be given to the individuals identified below using the appropriate contact information for giving notice:

To the City: City of San José
Environmental Services Department,
Attn: Mariana Chavez-Vazquez
700 Los Esteros Road
San Jose, CA 95134
408-945-3063
mariana.chavez-vazquez@sanjoseca.gov

To the Consultant: Brown and Caldwell
Attn: Lloyd Slezak
201 North Civic Drive
Suite 115
Walnut Creek, CA 94596
925-210-2295
lslezak@brwnald.com

- 20.4 Changing Contact Information:** Either party may change its contact information for receiving written notices and communications regarding the Agreement by providing notice of such change to the other party pursuant to this Section 20.

21. MISCELLANEOUS

- 21.1 Gifts Prohibited:** The Consultant represents that it is familiar with Chapter 12.08 of the San José Municipal Code, which generally prohibits a City officer or designated employee from accepting any gift. The Consultant shall not offer any

City officer or designated employee any gift prohibited by Chapter 12.08. The Consultant's violation of this Subsection 21.1 is a material breach.

- 21.2 Disqualification of Former Employees:** The Consultant represents that it is familiar with Chapter 12.10 of the City's Municipal Code, which generally prohibits a former City officer and designated employee from providing services to the City connected with his/her former duties or official responsibilities. The Consultant shall not use either directly or indirectly any officer, employee or agent to perform any services if doing so would violate Chapter 12.10. The Consultant's violation of this Subsection 21.2 is a material breach.
- 21.3 Waiver of a Violation:** The City's waiver of any violation of this Agreement by the Consultant is not a waiver of any other violation by the Consultant.
- 21.4 Acceptance of Services Not a Waiver:** The City's acceptance of any service or deliverable is not a waiver or release of any professional duty of care applicable to such service or deliverable, or of any right of indemnification, any insurance requirements, or any other term or condition of this Agreement.
- 21.5 Compliance with Laws:** The Consultant shall perform all services consistent with all applicable federal, state and local laws, ordinances, codes and regulations. This obligation is not limited in any way by the Consultant's obligation to comply with any specific law, ordinance, code or regulation set forth elsewhere in this Agreement.
- 21.6 Business Tax:** The Consultant represents and warrants that it currently has a City business tax certificate or exemption, if qualified, and will maintain such certificate or exemption for the Agreement term.
- 21.7 Assignability:** Except to the extent this Agreement authorizes the Consultant to use subconsultants, the Consultant shall not assign any part of this Agreement without the ESD Director's prior written consent. The ESD Director, at the ESD Director's discretion, may void this Agreement if a violation of this provision occurs.
- 21.8 Governing Law:** California law governs the construction and performance of this Agreement.
- 21.9 Disputes:** Any litigation resulting from this Agreement will be filed and resolved by a federal or state court in California.
- 21.10 Survival of Provisions:** If a court finds any part of this Agreement unenforceable, all other parts shall remain enforceable.
- 21.11 Headings:** The section and exhibit headings are for convenience only and are not to be used in its construction.

IN WITNESS WHEREOF, the City and Consultant have caused this Agreement to be executed by their respective duly authorized representatives as follows.

NOTE: The Consultant must make one of the following representations by placing its initials in the space provided. The City will not process this Agreement unless the Consultant has initialed one of the provisions.

The Consultant certifies that the Consultant has a permanent place of business in California or is registered with the California Secretary of State to do business in California. The Consultant will file a California tax return and withhold on payments of California source income to nonresidents when required. If the Consultant ceases to have a permanent place of business in California or ceases to do any of the above, the Consultant will promptly notify the City at the address specified in Subsection 22.3 of this Agreement.

Or

If the Consultant is unable to make the above certification, the Consultant acknowledges and agrees to provide the City with the applicable tax forms issued by the Internal Revenue Service and California Franchise Tax Board, as applicable, as specified in Section 10.8 of this Agreement.

City of San José

Consultant

By _____

By _____

Name: Toni Taber CMC Date
Title: Acting City Clerk

Name: Jay N. Patil Date
Title: Senior Vice President

By _____

Name: Robert D. Goodson Date
Title: Secretary

Approval as to Form (City Attorney):

Approved as to Form:

Kenneth D. Johnson Date
Sr. Deputy City Attorney

EXHIBIT A: SCOPE OF SERVICES AND SCHEDULE OF PERFORMANCE

DIGESTER AND THICKENER FACILITIES UPGRADES PROJECT

Generally Applicable Provisions:

Consultant shall provide all services and deliverables as set forth in this Exhibit A, according to the schedule set forth herein.

Consultant shall provide all services and deliverables required by this Exhibit A to the satisfaction of the ESD Director subject, however, to applicable professional standards of performance. Consultant shall receive final direction from the ESD Director, in writing, who shall resolve any conflicting direction from other groups, departments or agencies. Until further written notice from the ESD Director, all direction from, and other authority of, the ESD Director under this Agreement shall be provided or exercised by City's project manager, Mariana Chavez-Vazquez ("City's Project Manager"), except that the City's Project Manager shall not have authority to: i) reallocate Task Maximum Payable amounts between or within tasks, ii) authorize Additional Services in excess of \$100,000.00 per notice to proceed, or iii) terminate or approve assignments of this Agreement.

All of the services and deliverables furnished by (or through) the Consultant under this Agreement shall be of the professional standards and quality which currently prevail among engineering professionals of similar advanced experience and expertise in the area of waste water treatment in general and digesters, thickening facilities and gas pipelines in particular.

All documentation prepared by Consultant shall provide for a completed Project that conforms to all applicable codes, rules, regulations, and guidelines which are in effect at the time such documentation is prepared.

Overview of Project:

The Project will include modifications to four (4) of the existing anaerobic digesters, replacement of the digester gas pipeline and upgrades to the dissolved air flotation thickeners ("DAFTs") at the San Jose-Santa Clara Regional Wastewater Facility ("Plant"). The digester modifications include upgrades to Plant digester nos. 5, 6, 7, and 8 to like-new condition, and DAFT systems will be upgraded to improve digester and DAFT capacity, safety, and performance. The Project preliminary construction budget, excluding compensation to Consultant, is \$50,000,000.00.

The following specific elements are included in the Project:

- **Digester Cover and Mixing Upgrades** – This element includes new digester covers and mixers, replacement of the existing lateral piping, construction of redundant pressure relief valve (“PRV”) and flame arrester assemblies, and installation of new condensate tanks. The Project scope presently does not include any modification to the current mesophilic Class B digestion process employed at the Plant, although an evaluation of alternatives thereto is presently being performed by Consultant under Master Agreement Service Order #4 (“Digester Process Evaluation”).
- **Digester Gas Pipeline Relocation** – This element includes upgrades and/or relocation of existing digester gas piping in tunnels.
- **DAFT Upgrades** – This element includes DAFT upgrades to allow for co-thickening of primary and secondary sludge. Six of the existing DAFT units will be upgraded including odor containment and treatment. The thickening modifications will include new DAFT feed pumps, new float pumps, new polymer system, saturation system upgrades, and piping modifications associated with all upgrades. The work includes evaluation of primary sludge storage/equalization and primary and secondary sludge blending and assumes design of retrofit of one existing DAFT tank for a storage/equalization/blend tank system. The existing sludge distribution piping system will be modified as determined appropriate to convey co-thickened sludge to the rehabilitated and other existing digesters. Modifications to the existing primary sludge and waste activated sludge pumping systems from their sources are not presently included in the Project.
- **Digester Heating Upgrades** – This element includes piping, equipment and control modifications to the individual upgraded, and operationally parallel, digester heat supply systems.
- **Digester Tunnel Ventilation Improvements** – This element includes modifications to supply and exhaust ventilation equipment and insertion of separation walls as necessary to conform to National Fire Protection Association (“NFPA”) guidelines.

The specific goals of the completed Project are to rehabilitate the Plant digester and thickening facilities to a condition necessary to meet current and presently contemplated future operational needs of the Plant for a period of thirty (30) years following completion, with minimal need for additional repairs during such thirty-year period, taking into consideration all other presently contemplated rehabilitation or other modification of Plant systems or processes, which process of rehabilitation shall maintain ongoing Plant operational capacities.

Overview of Services: The overall scope of Consultant's services for the Project includes conceptual design, preliminary design, detailed design, bidding assistance, design services during construction and services during testing and commissioning.

Overview of Task-Based Compensation Limits: As set forth in the compensation table attached as a part of Exhibit B, for each task and sub-task described below there is a corresponding "Task Maximum Payable". Subject only to such limitations and assumptions as are expressly set forth in this Exhibit A, Consultant agrees to complete each task and sub-task for a total compensation not to exceed the applicable Task Maximum Payable.

Detailed Specification of Services:

Task 1 - Project Management and Communication with City

1.1 Project Management. Consultant shall assemble a Project team to provide services as described herein. The Consultant's Project Manager shall manage the efforts of the Consultant's Project team members and subconsultants so as to achieve completion of the scope of work within established Project budget, schedule, and recognized industry standards of care. All work included in this scope of work will be conducted by the Consultant or its subconsultants unless otherwise approved by the City. All coordination between the Consultant's and City's team shall be via the City's and Consultant's Project Manager or their written designees. The Consultant shall provide overall coordination for keeping Project participants informed of progress, technical issues, planned activities and events. The primary focus of the Project management activities is to ensure that all of the related Project elements proceed per the Project work plan.

1.2 Project Management Plan. Consultant shall prepare a "Project Management Plan" for review and approval by the City. The Project Management Plan is intended to lay the groundwork for efficient execution of the services under this scope. The Project Management Plan shall include, as a minimum, the following components:

1.2.1 Project setup, including Project team organization and responsibilities, shall be identified. All contact information for key team members as well as a list of tasks and corresponding staff and budget should also be included.

1.2.2 Progress monitoring, including cost and schedule tracking procedures;

Project coordination; procedures to coordinate all work and communication between Consultant and City staff. Including details on

Digester/DAFT Project
Exhibit A Scope of Services
September 4, 2013

the procedures for requesting information, reference materials, completing site visits, receiving input from City, conducting Project meetings, submitting deliverables and receiving comments from City, etc. Communication procedures shall detail points of contact for communication as well as how all communication shall be documented, including conference calls, e-mails, transmission of files (both paper and electronic), etc.

1.2.3 Document control and management; including filing procedures, software versions to be used for work, content and format to be used in all communication, including technical memoranda, calculations, reports, etc. Templates to be used by Project team for all correspondence shall be included.

1.2.4 Project decision log, the Consultant shall maintain a Project decision log that documents how design decisions were made

1.2.5 Billing, including procedures to submit invoices as well as format and content of monthly progress reports included with invoices.

1.3 Monthly Reports. Consultant shall submit monthly progress reports accompanying all monthly invoices for the duration of the Project. The progress report shall include a summary of the work achievements during the past month, issues requiring action and proposed solutions, work planned and important milestones for the upcoming month, and a decision log showing significant decisions approved during that time frame. Project performance status will be conveyed with updated cumulative 'earned value' graphical charts developed in accordance with the Earned Value Project Management technique. Earned value (EV) for each task is calculated as the product of the estimated percent complete and the budget for the task. Cumulative EV to date (summed for all tasks) will be presented on a time based chart that includes the projected cumulative Planned Value (PV) for the life of the Project and the cumulative actual costs (AC) to date for the Project. The report shall identify any issues or scope changes that may affect overall cost and/or schedule of the design phases.

1.4 Project Management Kick Off, Monthly Progress Meetings and Additional Meetings.

1.4.1 Kickoff Meeting. Consultant's Project Manager and up to four (4) task/ discipline leaders, shall meet with the City's Project Manager and other City staff in an initial Project management kick-off meeting to review tasks, milestones, roles, communication and coordination procedures with the extended team. The Project Management Plan will be discussed at this meeting. The Task Maximum Payable applicable to this sub-task is based on

preparation, attendance of a four (4) hour meeting and preparation of minutes for each meeting.

1.4.2 Monthly Progress Meetings. Consultant's Project Manager and up to two (2) selected task or discipline leaders at the discretion of the City's Project Manager shall meet with the City's Project Manager and any other City's designated staff at monthly review meetings to keep the City apprised of the Consultant's performance of the work under this Agreement, current and projected budget and schedule performance, proposed changes in the scope of services, and to resolve issues relating to the Project, including but not limited to technical coordination, resources, schedule constraints, and subconsultant issues. The Task Maximum Payable applicable to this sub-task, is based on preparation, attendance at monthly four (4) hour meetings for the duration of the Project and preparation of minutes for each meeting.

1.4.3 Additional Meetings. As an Additional Service, Consultant shall attend additional meetings as requested by the City. These meetings may include meetings with City executive staff, Plant tributary agencies, City Council or committee members, peer reviewers, etc. The scope includes the coordination, chairing and preparation of agendas, presentations, materials and minutes of these meetings. An allowance of up to five hundred (500) hours and \$25,000.00 of subconsultant fees is contained within the applicable Task Maximum Payable for this sub-task. Such portion of the applicable Task Maximum Payable constitutes a maximum allowance, as opposed to a guarantee of a particular package of services for a maximum price.

Task 1 Deliverables:

1. Project Management Plan. Twelve (12) bound hard copies and one (1) copy of the original MS Office files and one (1) electronic PDF file
2. Monthly Progress Reports to accompany each invoice
3. Monthly Invoices.
4. Monthly updated Project Decision Log to accompany each invoice.
5. Agenda, Meeting Materials and Meeting Minutes for the Project Management Kickoff Meeting within two (2) weeks of date of meeting/presentation workshop.
6. Agenda, Meeting Materials and Meeting Minutes for the Monthly Progress Meetings within two (2) weeks of date of meeting/presentation workshop.

7. Agenda, Meeting Materials and Meeting Minutes Additional Meetings within two (2) weeks of date of meeting/presentation workshop.

In addition to hard copies, all deliverables, including but not limited to drawings, graphics, schedules, reports and technical memoranda, shall be provided in digital format in their original software version (Excel, Word, AutoCAD, Power Point, etc.) in addition to a PDF version.

Task 2 - Project Support Services. Consultant understands that most elements of the Plant which are the subject of the Project were initially constructed many decades ago and have been the subject of numerous modifications since initial construction, and that City does not have accurate or up-to-date plans or specifications of those elements or comprehensive records of site conditions which may affect the Project. Accordingly, City is relying upon Consultant to undertake such investigations regarding the condition of the Project site as Consultant determines advisable in order to allow for a successful Project. To further assist Consultant in determining the scope of such investigation, City shall provide Consultant with such additional access to Plant records as Consultant may reasonably require. However, based upon Consultant's due diligence to date, such investigations shall include the following identified in Tasks 2.1 through 2.5 as a part of the Basic Services, each of which shall be completed for the applicable Task Maximum Payable. Notwithstanding the generality of the foregoing, except as otherwise specifically provided hereinbelow to the contrary, the present scope of Consultant's responsibilities does not include investigating underground features which are not disclosed on existing Plant records, and Consultant will be entitled to rely on the completeness and accuracy of such records with respect thereto. However, as Consultant's work progresses and design details are developed, Consultant shall inform City of any additional investigations of underground features that it determines are advisable, which investigations City may or may not elect to pursue, whether as additional services from Consultant or otherwise .

2.1 Site Survey. Consultant will provide professional land surveyor services including the preparation of detailed survey of work areas for the Project. The survey results will be used to prepare site mapping drawings, using vertical datum and horizontal control coordinate systems that correspond to the most recent coordinate systems approved by the City, to support description of the Project work in contract drawings.

2.2 Laser Scanning Survey. Consultant will provide, via subconsultant specialist, 3D laser scanning surveying services to document the interior equipment and piping locations in the DAFT Gallery and Digester Tunnels. The laser scanning survey will be processed and adjusted onto the plant's mapping coordinate system and vertical datum. The point cloud data that is developed as part of the survey will be used to model the interior spaces, major piping, and

design relevant appurtenances, for use in detailed design modifications. This scope of work assumes that surveying and mapping will be necessary in the DAFT Gallery and Digester Tunnels 5-8, and that the remaining Digester Tunnels will be surveyed, but not mapped.

Subconsultant specialist will use 3D Laser Scanning Technology to document the interior equipment and piping locations in the DAFT Gallery and Digester Tunnels. As part of this task, specialist will establish a survey control network in the DAFT Gallery and Digester Tunnels utilizing survey control established by others on monuments at the plant.

After establishing a survey control network in the work areas, subconsultant specialist will collect a series of images and 3D laser scans in the DAFT Gallery and Digester Tunnels. Upon completion of the fieldwork, subconsultant specialist will register the scan setups into a comprehensive point cloud data set that's based on the Project coordinate system and vertical datum. The final registered point cloud will be used to prepare mapping of the site.

After completion of the point cloud registration, subconsultant specialist will prepare Leica TruView files for all of the surveyed areas including the DAFT Gallery, Digester Tunnels 5-8, and remaining Digester Tunnels. The TruView files will be usable by anyone with a computer to view the Project site from the perspective the scanner, giving the end-user the ability to take measurements and make markups without the need to be at the site.

Prior to the commencement of mapping the point cloud data, subconsultant specialist will meet with the design team to review the point cloud data and TruView files. The intent of the meeting will be to clarify the site mapping areas and content to be included in the 3D mapping to assist with the Project design. Based on the meeting and data review, specialist will then utilize Leica Cyclone and AutoCAD Civil 3D to prepare 3D mapping of the DAFT Gallery and Digester Tunnels 5-8. Mapping workproduct will conform with CADD Plan and Manual developed for the Project. This scope of work assumes that 3D mapping will include piping approximately 6" in diameter or larger, site structures including ceilings, floors, wall, and other major structural details as may be applicable to the design. It is not anticipated that all conduits, hangers, wiring, and miscellaneous items be mapped. Information that is not mapped will be available for future mapping if desired and can be accessed using TruView files if necessary. No mapping is anticipated in the remaining Digester Tunnels.

2.3 Geotechnical Investigation. A licensed geotechnical engineer will perform a geotechnical investigation of the site surrounding Digesters 5, 6, 7, and 8. Consultant shall satisfy the Santa Clara Valley Water District permitting requirements for exploratory boring work 45' or deeper within Santa Clara County, including, but not limited to, specific notification and contractor licensing requirements for performing the work. Five (5) 85-foot deep borings will be drilled

in these areas to develop geotechnical parameters for detailed design. Location of the borings and scope of testing and analyses will be determined by the Consultant to be sufficient for preparation of the contract documents in accordance with the applicable codes and requirements of the authorities having jurisdiction. A draft and final geotechnical report will be prepared to summarize the findings and recommendations related to the structural modifications for Digesters 5, 6, 7 and 8. Consultant shall be responsible for proper disposal of all waste material generated as a result of such investigation; provided, however, that City shall sign all regulatory paperwork, including all waste manifests or bills of lading.

2.4 Specialty Structural Inspection Services. Certified specialty structural inspectors will be utilized by the Consultant, on an as needed basis and as determined by the Consultant to provide specialized investigations and reports on specific features of the existing digesters required to integrate the new design for a submerged fixed cover system. Such services may include, but not be limited to detailed concrete strength testing, inspection of each of Digester Nos. 5, 6, 7, and 8 to identify and document specific repair requirements for construction documents, evaluation and/or x-ray analysis of existing tension rod arrangements in the structures in locations of new digester openings or penetrations larger than rod spacing.

2.5 Hazardous Materials Investigations. The Project design documents will require identification of existing locations of asbestos, lead paint, and other materials in the existing facilities that can impact the safe demolition and modification activities that a Contractor may undertake. This investigation and report will be prepared by the Consultant or its subconsultant(s). Consultant will include the results of such investigations into the contract documents for reference, along with specified procedures for managing the existence, safe removal, and/or disposal of such materials. Consultant shall be responsible for proper disposal of all waste material generated as a result of such investigations; provided, however, that City shall sign all regulatory paperwork, including all waste manifests or bills of lading.

Consultant shall provide the following Basic Services in overall support of the Project, each of which shall be completed for the applicable Task Maximum Payable:

2.6 Permit Assistance. Consultant shall be responsible for identification of permits required for the Project, preparation of the support documentation needed for the permitting process and coordination with the permitting agencies involved except support documents for those permits specifically required to be obtained by the construction contractor. In addition, the Consultant will assist the City in procuring any permits necessary to execute the Project on an as needed basis. Permits anticipated include, but are not limited to building, fire protection,

air quality, storm water management, and geotechnical investigation boreholes. All permit application fees will be paid by the City.

2.7 CADD Plan and Manual. Consultant shall prepare and provide to the City a Computer Aided Drafting and Design (CADD) Plan and Manual for this Project, and for the subsequent use by City and other consultants on other City projects, to define drawing layering, numbering, and other drawing conventions and formats, standards, and protocols. The CADD manual will describe and use the City's standard for equipment and valve numbering. Consultant will use and modify Consultant's standard CADD protocols for this manual where available and appropriate for this Project; where not available from Consultant standards, but where required for successful completion of this Project, Consultant will use City standards or develop Project specific standards. The final form of CADD Plan and Manual shall be subject to approval by the City for use on this Project. The City will be allowed to modify and will be responsible for modification of the manual for use on other projects, including updates and additions to include specific requirements for other projects. The CADD Manual shall require the use of and describe all commercially available documents, tools, and software released in the latest CADD, spreadsheet, and text formats.

2.8 Controls System Standards for Project. Consultant shall document existing and de facto instrumentation and control system standards that are applicable to the Project.

2.8.1 Collect and review existing City instrumentation and control system documentation including City standard documents, construction documents, or as-built documents for the following document types:

- a. Drawings:
 - i. I&C symbol sheets
 - ii. PCS network overview
 - iii. Instrument loop diagram
 - iv. Motor elementary schematics
 - v. Panel layout drawing
 - vi. Termination diagrams
- b. Schedules:
 - i. I&C standard equipment list
 - ii. PCS I/O and alarm schedules
 - iii. Instrument schedules
- c. Specifications
- d. PCS control strategies
- e. PCS control logic programming standards
- f. Operator graphic display standards

- g. Control system administration authorities, responsibilities, processes, and procedures

2.8.2 Conduct a structured interview with up to 6 City staff to discuss existing control system interactions, discuss what information or interaction they would like to have with an ideal control system, and identify the gap between what exists today and what is desired.

2.8.3 Conduct one 4-hr workshop to review findings and prioritize and focus Consultant's standards development efforts.

2.8.4 Develop and submit draft instrumentation and control system standards for high priority items that are identified in the workshop. The following list of high priority items is assumed:

- a. PCS programming including standards for:
 - i. I/O list
 - ii. Control program documentation standards
 - iii. Control module standards
 - iv. HMI graphics standards
 - v. Control strategy standards
- b. I&C hardware and software standardized equipment list
- c. PCS network overview
- d. Instrument loop diagram
- a. Motor elementary schematics
- e. Panel layout drawing
- f. Updates to I&C specification standards for spec sections required for the Project.

2.8.5 Conduct one 4-hr workshop to review draft I&C standards

2.8.6 Incorporate City review comments and workshop decisions into final instrumentation and control system standards.

2.9 Environmental Review Assistance. Consultant shall assist the City with preparation of all environmental documentation required for the as well as support documentation needed for the environmental review/approval process. The environmental review and report will be prepared by the City. The Consultant will include the results of the environmental review by others into the contract documents for reference. Consultant assistance to support development of the environmental documentation will continue to be provided on an as requested basis as the requirements for environmental documentation are identified through the Project.

2.10 Project Process Hazard Analysis. Consultant shall provide, via Subconsultant specialist, a Process Hazard Analysis (PHA) for the processes that are affected by the Project including modified digesters and supporting subsystems and modified dissolved air flotation and supporting subsystems. Preparation of the PHA shall include review of Project documentation, preparation for PHA study, facilitation and scribe of PHA study, and preparation of draft and final PHA study reports. The PHA will be conducted using the HAZOP methodology. Consultant will conduct a HAZOP workshop with plant staff and process designers to facilitate inclusion of the appropriate findings of the PHA, and appropriate mitigations, into the Project design and operations practices.

Task 2 Deliverables:

1. Site Survey Report and data as part of drawings
2. Laser Scanning Survey Work Products - Survey control exhibit and point data in comma delimited text format (point number, northing, easting, elevation and description); Leica TruView files with TruView utility software; AutoCAD Civil 3D drawings of modeled areas; Point cloud data in X,Y,Z format; and PDF files of the survey stamped and signed by a California Licensed Land Surveyor.
3. Geotechnical Report
4. Specialty Structural Inspection Results as part of the 10 Percent Design Report
5. CADD Plan and Manual
6. Instrumentation and control workshop meeting minutes
7. Draft instrument and control system standards
8. Final instrument and control system standards
9. Draft and Final Hazardous Materials Investigation report.
10. Permit Support Documentation
11. Environmental Support Documentation
12. Draft PHA Study Report
13. Final PHA Study Report

Ten (10) complete copies of each draft deliverable shall be submitted for City's review and a consolidated electronic document (in CADD application designated by CADD Standards, MS Word, MS Project, and PDF formats) of each draft deliverable shall be provided. Consultant shall submit one (1) complete copy of each final deliverable and a consolidated electronic document (in CADD application designated by CADD Standards, MS Word, MS Project, and PDF formats) of each final deliverable for City's records.

Overview of Tasks 3 through 7

Consultant will prepare final plans and specifications for the Project for soliciting bids for construction and for obtaining the necessary site and building permits, all

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compatible and consistent with the City's Standard Project Documents. Ten, thirty, sixty, ninety percent and final (100 percent) drawings and specifications along with calculations and cost estimates developed at the appropriate level of completeness will be prepared and submitted by Consultant to City for review as part of the design phase. Consultant shall schedule and coordinate a design review meeting two weeks after the design review submission for ten percent deliverable submission and three weeks after thirty, sixty and ninety percent deliverables submission to allow the City time to complete its review of each deliverable. During each two or three week design submittal review period, as applicable, the Consultant may proceed, but only at its own cost risk with design of any Project components that are subject to review.

To complete the design phase of the work, the Consultant will prepare design drawings and specifications for appropriate disciplines as shown in Attachments 1 - 3 and as described herein below.

Each of Tasks 3 through 7 shall be completed for the applicable Task Maximum Payable.

Task 3 – Conceptual Design Development (10% Design)

The purpose of this task is to advance the design process for the Project to the 10% level of completion and to produce a Conceptual Design Report that defines the Project, finalizes outstanding fundamental design decisions and design criteria, develops conceptual system schematics and layouts, and sets the standards and conventions that will drive the design activities for the remainder of the design effort for the Project.

3.1 Technical Kick-Off Workshop. A four (4) hour technical kickoff workshop will be conducted with City staff and up to six (6) Consultant staff. The purpose of the meeting is to review the technical work already completed to-date, background information for the Project, confirm the assumptions to be used for the design criteria that will define the basis of design of the Project, discuss the direction of the design elements such as covers, mixer selection, etc., identify outstanding issues and decisions, and agree upon the process for solving those issues/decisions. Consultant shall prepare the meeting agenda and summary notes.

3.2 Digester and Thickener Facilities Upgrade Conceptual Design Development. The purpose of this task is to develop the primary definitions of all facility improvement components including piping, mechanical, electrical, instrumentation, and support equipment that will be included in the Project. The emphasis of this task is to gather all alternatives for consideration, recommend preferred alternatives and confirm with City staff the Project direction prior to proceeding with the detailed design.

Activities to be considered during this task, include, but are not limited, to the following:

- Review and confirmation of the existing site conditions and background information. As part of this conceptual design development scope, Consultant shall evaluate the applicable existing plant conditions and limitations, such as properties of sludge, digester gas, scum, grit, rags, and other special conditions and requirements that may affect performance of the Plant processes, facilities, and equipment.
- Develop design criteria to clearly define the basis of the detailed design for the Project.
- Develop conceptual schematics, conceptual process flow diagrams (PFDs) showing piping, equipment and all primary control elements, conceptual site arrangements and control philosophies.
- The Consultant will identify remaining design decisions that must be made for subsequent design development phases to proceed and will assist the City in making a determination on such decisions.
- The Consultant shall provide information and estimates to the City with respect to capital, operation, and maintenance costs of new facilities, systems, and equipment. The City will decide on selection of Project systems and components based in part on this information. All cost estimates shall be prepared to a level of accuracy consistent with the standards for the American Association of Cost Engineers.

Guidelines to the various engineering discipline design activities for all Project features described above required in the phase are listed in Attachment 3.

The anticipated Project elements that will require further development and elaboration in the 10% Complete task are preliminarily described below:

3.2.1 Digesters Upgrades. For this Project, four (4) digesters, (Digesters 5, 6, 7, and 8) will be upgraded to like-new condition, including, but are not limited to, the following:

- Replacement of existing floating covers with concrete, submerged fixed covers;
- Complete all structural changes to the existing digesters to allow for the installation of new concrete submerged fixed covers, including repairs of damaged concrete surfaces and application of internal coating. It is expected that micropiles to support columns and foundation will be required;

- New mixing system to provide adequate mixing to the full contents of the digesters. Because of the long-term occurrence of struvite at the Plant, the mixing system selection should take this issue into consideration. As part of this task, mixing system options shall be evaluated and one type of mixing system shall be recommended for implementation;
- Replacement of all existing gas lateral piping with stainless steel lateral piping, with manual isolation valve, from center of digester to connect to the new gas manifold;
- All necessary equipment, materials, piping, valves, hatches, instruments, appurtenances and specialty items, required for the complete upgrade to Digester 5, 6, 7, and 8. Elements include, but are not limited to, dedicated feed pumps (duty, standby), isolation valves, feed flow meters, redundant PRV and flame arrester assemblies, etc.
- Digester over pressure/overflow protection such as emergency overflow and hatch
- Install new condensate tanks;
- Heating improvements to Digesters 5, 6, 7 and 8 and to operational digesters that will not be upgraded but will continue to operate in parallel with Digesters 5, 6, 7 and 8, including all necessary equipment and piping. These improvements will provide adequate capacity to operate under design conditions, including future average and peak loads and required temperature. As part of this task, existing system conditions and options to provide adequate capacity shall be evaluated and a preferred alternative shall be recommended for implementation. Evaluation shall take into account how the system will integrate with potential future changes in operation for the digester complex, such as thermophilic operation, potential sludge pretreatment, etc.

Heating modifications to non-upgraded digesters primarily include:

- Install individual flow controllers at each digester load circuit;
 - Remove flow restriction orifices in the common pipes of each load circuit;
 - Replace the hydronic distribution pumps to match flow and head requirements
-
- Replacement of the existing digester electrical components (including field devices, conduits and supports. New 4160-480 Outdoor Loadcenters should be provided, as required. The double-end Loadcenters shall be supplied from the Plant's existing 4,160V distribution switchgears. New feeders from the new Loadcenters will be designed for the new loads. The new controls will be integrated with Plant's existing Distributed Control System (DCS) system.

- Building and supporting facilities design for an electrical equipment building to support new electric switchgear and controls related enclosures.
- Upgrades/replacement of all instrumentation and control systems as required. The controls of all equipment should be Manual (Local and Remote) as well and automatic with the provision of controlling and monitoring through main Plant DCS.
- Replacement of existing digester gas collection manifold. Existing manifold is in tunnels and previous analysis recommended the replacement manifold to be located outside of the occupied spaces in the tunnels. Consultant will evaluate any additional questions that City poses on this recommendation and adjust the design concept in accordance with the resolution of those questions. The replacement manifold will be modified to provide capacity for future average and peak digester gas production. Potential flexibility for future changes in gas production, such as the addition of FOG, should be evaluated and the results of the evaluation should be included as part of the design. All piping (including lateral to digesters and main manifold) shall be sized accordingly. The upgraded pipe will connect the digesters to the new compressors (new compressors to be subject of a separate project), to the new gas storage (new gas storage to be subject of a separate project) and to the flares. The integration of all of these components to operate as a single system should be included in the design.

Items include, but are not limited to, the following:

- Upgrades to existing lateral piping for all operational digesters.
- All elements associated with the piping system such as PRV, flame arresters, isolation valves, sediment traps, condensation collection systems, flowmeters and instrumentation. Upgrades to main digester gas manifold to accommodate future digester gas production. Manifold piping shall be sized to minimize pressure loss and eliminate pressure gradients between system components. Upgrades to the existing digester tunnels to be in compliance with NFPA 820. During conceptual design a detailed evaluation of the requirements, associated costs and constructability implications of options available to declassify these tunnels shall be further evaluated.
- Integration of the gas compressors and gas holder with the digester gas piping system to work as a whole.

- Evaluation and potentially upgrades required to the existing gas flares
- Tunnel ventilation improvements to bring digester tunnels and DAFT gallery area into appropriate conformance with NFPA 820 and other environmental objectives that the City may elect to achieve. Evaluation will include a comparison of providing ventilation improvements with natural gas and fuel oil piping left in the tunnels or a more simplified ventilation scheme associated with rerouting natural gas and fuel oil piping to routes outside of the tunnel. Corresponding provision of ventilation and other building mechanical requirements for any new occupied structures, such as new electric distribution equipment building, that are required to support the Project.

3.2.2 DAFT Co-Thickening Upgrades. The existing DAFTs will be modified to allow for co- thickening of combined primary sludge and waste activated sludge to a minimum of 5.5% solids as described in previous analysis. These modifications will include features to deliver primary sludge to the DAFTs at a more or less uniform rate and upgraded thickened sludge conveyance equipment to transfer thickened, blended sludge from the dissolved air flotation thickening area to the anaerobic digesters. The DAFT units will be upgraded to like-new condition, including, but not limited to, the following:

- Modifications to existing DAFT units to handle future design primary and secondary sludge flows. Based on these design requirements, the number of units to be retrofitted shall be confirmed and the units to be modified shall be identified. The proposed plan to modify the DAFT units shall also take into account how to minimize the impact of construction on the operation of the facilities.
- A condition assessment of all existing DAFT units shall be completed to identify the extent of the modifications required to accommodate the required upgrades. All upgrades/repairs to structural and mechanical components of the DAFT units required to have functional as-new equipment shall be included in the design. The modified tanks should allow for installation of covers for odor control.
- Evaluation of requirement for primary sludge equalization/storage alternatives and primary and secondary sludge pre-DAFT blending alternatives. The potential use of one of the existing DAFT tanks as equalization tank should be considered in the evaluation but if not feasible a new sludge blending tank will be required.

- Modifications required to convey primary sludge to the DAFTs process area, including all piping and equipment.
- Evaluation of operational conditions of the WAS pumping system conveying WAS to the DAFT units to confirm they would be adequate to operate under the new proposed configuration. Modifications to pumps and piping to be included if required.
- New feed pumps to DAFT units to be installed downstream of the primary equalization/blend tank to service the retrofitted units.
- Evaluation of requirements to provide a consistent feed of thickened sludge to the anaerobic digesters (including rehabilitated and existing units) and modifications required for this purpose, including ass pumps and piping.
- Evaluation of need to provide primary sludge degritting should be completed
- New polymer system
- New covers for upgraded DAFT units to allow odor control. Type of cover could include aluminum covers or other alternatives to be discussed as part of this task.
- All other necessary equipment, materials, piping, valves, hatches, instruments, appurtenances and specialty items, as required for complete and fully functional DAFT upgrades.
- New odor control system, including fans, foul air ducting and treatment unit. Treatment technology options shall be evaluated, including biofilters, bioscrubbers, and other applicable technologies. A preferred technology shall be selected and carried forward for implementation.
- The existing DAFT electrical components (including field devices, conduits and supports) should be replaced. New 4160-480 Outdoor Loadcenters should be provided, as required. The double-end Loadcenters shall be supplied from the Plant's existing 4,160V distribution switchgears. New feeders from the new Loadcenters will be designed for the new loads. The new controls will be integrated with Plant's existing DCS system.
- Upgrades/replacement of all instrumentation and control systems as required. The controls of all equipment should be Manual (Local and Remote) as well and automatic with the provision of controlling and monitoring through main Plant DCS.

3.3 Conceptual Design QA/QC Review. The purpose of this task is to provide a general design concepts review of the information developed for the

10% Complete work products. The requirements for quality assurance/quality control at different phases of Project development are outlined in Attachment 2.

3.4 Conceptual Design Report and Technical Workshop #1. The Consultant will compile work products from the Conceptual Design Development effort as a draft Conceptual Design Report that shall be submitted and presented to the City for review and discussions at a workshop that will be facilitated by the Consultant.

The Conceptual Design Report shall include as a minimum the following information:

1. Summary of Background information
2. Design basis
3. Design concepts by process area (i.e. Digesters, DAFTs, Gas line)
4. Control philosophies for the system.
5. Operational issues and concerns
6. Construction strategy envisioned, including constructability challenges
7. Opinion of probable cost at conceptual level, including operational and maintenance costs
8. Half-size conceptual drawings, including conceptual layouts, process flow diagrams, etc.

Consultant shall organize and facilitate a review workshop with Plant operations, maintenance and engineering staff, managers and other applicable staff as designated by City to present the conceptual design of the Project within two (2) weeks of submittal of the Draft Conceptual Design Report. The purpose of this workshop will be to present the conceptual design of the Project to City staff, and to gain clear direction on Project elements that need further definition, as well as document any operational preferences or concerns to be addressed during design. The Task Maximum Payable applicable to this sub-task anticipates that this workshop will include up to fifteen (15) City staff members and will last up to eight (8) hours. Consultant's Project Manager and up to five (5) Project engineers shall attend Design Workshop #1.

The Consultant will compile meeting minutes from the workshop and include action items for the ensuing next phase of design development. The Consultant will also receive and respond to a formal, organized list of written City comments/questions that have been reviewed and filtered by the City's Project Manager as appropriate for the Consultant to respond to. The attached schedule of performance is based on receipt of City comments within four (4) weeks of submittal.

Consultant shall address and appropriately incorporate City's comments as well as input to the design received during Workshop #1 into a final version of the Conceptual Design Report prior to preparation of the Preliminary Design Report.

Task 3 Deliverables:

1. Agenda, Meeting Materials and Meeting Minutes for the Digester Process Executive Evaluation Kickoff Meeting within two (2) weeks of date of meeting/presentation workshop.
2. Draft Digester Process Executive Evaluation TM - twelve (12) bound hard copies and one (1) electronic PDF file
3. Agenda, Meeting Materials and Meeting Minutes for Digester Process Executive Evaluation Workshop within two (2) weeks of date of meeting/presentation workshop.
4. Final Digester Process Executive Evaluation TM - twelve (12) bound hard copies, one (1) electronic copy of original MS Office files, and one (1) electronic PDF file
5. Agenda, Meeting Materials and Meeting Minutes for the Technical Kickoff Workshop within two (2) weeks of date of meeting/presentation workshop.
6. Draft Conceptual Design Report- twelve (12) bound hard copies and one (1) electronic PDF file
7. Agenda, Meeting Materials and Meeting Minutes for Design Workshop #1 within two (2) weeks of date of meeting/presentation workshop.
8. Final Conceptual Design Report - twelve (12) bound hard copies, one (1) electronic copy of original MS Office files, and one (1) electronic PDF file

Task 4 – Preliminary Design Development (30% Complete Design)

The purpose of the Preliminary Design Development (30% Complete Design) task is to begin and advance the development of the drawings and specifications that will form the contract documents for construction of the Project. Phased development of the drawings and specifications supports the practice of each engineering discipline developing their contributions to the design effort in an orderly fashion that facilitates the logical and efficient development of contributions from all other disciplines.

Consultant shall continue developing the design based on the conceptual design approved by City and shall prepare a comprehensive preliminary design report, which shall provide the basis and details for the final detailed design and construction of the proposed facilities.

4.1 Digester and Thickener Facilities Upgrades Preliminary Design Development. The purpose of this task is to continue developing the design based on the conceptual design approved by the City.

Activities during this phase include, but are not limited, to the following:

1. Field investigation reports, including topographical surveys, geotechnical reports, specialty structural inspection services, hazardous materials investigations and any other investigation required for the Project.
2. Review of design alternatives and if necessary, preparation of technical memoranda on major Project issues prior to preparing pre-design report.
3. Selection of major equipment, including sizing and identification of at least three (3) acceptable manufacturers, whenever possible. The Consultant shall discuss with City staff their preferences for equipment selection.
4. Prepare construction phasing, identifying the provision of temporary systems to maintain Plant operations during construction. Include pre-design of the demolition and decommissioning work required.
5. Prepare preliminary process and instrumentation diagrams (P&IDs) and define control system architecture and integration with existing system.
6. Prepare preliminary drawings, including site plans, structural drawings, process diagrams, floor plan/sections, HVAC, Instrumentation and Control drawings, etc.
7. Prepare preliminary equipment list in consultation with City. Ensure that the selected equipment/system can be fully automated.
8. Prepare a preliminary schedule for detailed design, construction, commissioning and post-construction services of the Project. Prepare a preliminary construction cost estimate for all facilities included in the Project. Cost estimates will be prepared to a level of accuracy consistent with the standards of the American Association of Cost Engineers.

General description of the various engineering discipline design activities required in the phase are listed in Attachment 3.

4.2 Preliminary Design QA/QC Reviews. The purpose of this task is to provide QA / QC reviews that are appropriate to the level of completion of the design, as defined in Attachment 2.

4.3 Preliminary Design Report and Design Workshop #2. The Consultant will compile work products from the Preliminary Design Development (30% Complete Design) effort as a draft Preliminary Design Report that shall be submitted and presented to the City for review and discussions at a workshop that will be facilitated by the Consultant. This task shall be considered a 30% Design submittal.

Consultant shall submit a report outline to City for approval prior to commencement of the report. The final preliminary design report must be signed and sealed by a Professional Engineer registered in California. The Preliminary Design Report shall include as a minimum the following components:

1. Executive Summary
2. Project Description
 - a. Background information
 - b. Project objectives and vision
 - c. Pre-design scope and an overview of the overall approach to the pre-design
3. Process Design Criteria—summary of the design criteria (i.e. design loadings and other applicable parameters) and redundancy considerations in design. Document rationale for selection of design criteria used.
4. Regulatory and Agency Requirements—outlines the regulatory and agency requirements and approval process required for the work to be performed.
 - a. Permit Assistance – identifies permits required for the Project and preparation of the support documentation needed for permitting process.
 - b. Environmental review assistance – assist City with environmental documentation required for the Project and preparation of the support documentation needed for the environmental review/approval process.
5. Related and Supporting Studies—provides a brief overview of the related and supporting studies available for reference.
6. Facility Design
 - a. Description

- b. Summary of Design Basis, including number, type and capacity of equipment, tanks sizes, etc.
 - c. Equipment list and data sheet for major equipment, including product information
 - d. Process Control Strategies
 - e. Standard Operation Procedures
7. Conceptual Layout
- a. Preliminary layout plans
 - b. Identify all process and piping modifications required to accommodate new systems. Develop pre-design of necessary modifications as required.
 - c. Equipment location and orientation including, but not limited to, equipment control panels, new odor control system, polymer system, and digester heating system
8. Site Civil
- a. Demolition and removals requirements
 - b. Site grading
 - c. Construction access and staging areas, fencing and access gate
 - d. Storm water management and sedimentation and erosion control
9. Architectural (If needed)
10. Electrical System
- a. Electrical Load Requirements
 - b. Source of Electrical Power Supply and its usage in the Project. Identify areas where additional power supply is required and how it is accomplished. Prepare a site plan showing locations of supply and usage.
 - c. Site power distribution using a site plan
 - d. Lighting schedule of the Facility
11. Instrumentation and Control
- a. Prepare preliminary process and instrumentation diagrams (P&IDs) and define control system architecture and integration with the existing Distributed Control System (DCS).

12. Heating and Ventilation
13. Ancillary Systems
 - a. Plant water requirement list, frequency of use, flows and pressures
 - b. Plant Potable water requirements including a list showing frequency of use, flows, pressures and temperatures
 - c. Fire protection system requirements, including areas to be supplied with sprinklers, hydrants, fire doors, etc. Where wet protection systems are applicable, identify capacity requirements and source of water.
14. Fire Alarm – A description of the new fire alarm system, including a schematic illustrating the new system and its integration with the existing.
15. Emergency standby power – Identify if emergency standby power is required to meet the Project objectives. Identify whether standby power needs can be met by existing systems or if new sources of standby power are needed.
16. Cost Estimates—summarizes the pre-design capital and annual O&M cost estimates for the new works.
17. Constructability
 - a. Identify the provision of temporary systems to maintain Plant operations during construction
 - b. Address coordination of the construction in recognition of other construction projects underway or proposed at the Plant, noting potential interferences, construction issues, etc.
 - c. Include pre-design of the demolition and decommissioning work required
18. Schedule
 - a. Prepare a preliminary schedule for final design, construction, commissioning and post-construction services of the Project. Incorporate reasonable timelines into the schedule, addressing approvals requirements and City public bidding award requirements.

- b. Propose design sequence with particular consideration to sequence of construction required to minimize disruption to Plant operations.

19. Appendices – Include the equipment list, equipment catalogue cuts, summary of basic design data, interim deliverables (technical memoranda, workshops agendas and minutes), pre-design cost opinion, vendor quotations, and any other reference documents.

20. Reduced Drawings – Provide reduced drawings with the preliminary design report for all disciplines, including site plans, civil, structural, architectural, process mechanical, electrical, HVAC, Instrumentation and Control, etc.

Consultant shall organize and facilitate a review workshop with Plant operations, maintenance and engineering staff, managers and other applicable staff as designated by City to present the preliminary design of the Project within two (2) weeks of submittal of the Draft Preliminary Design Report. The purpose of this workshop will be to present the preliminary design of the Project to City staff, identify preferred alternatives (i.e. type of equipment, maintenance requirements, etc.) as well as document any operational preferences or concerns to be addressed during detailed design.

The Task Maximum Payable applicable to this sub-task anticipates that this workshop will include up to fifteen (15) City staff members and will last up to eight (8) hours. Consultant's Project Manager and up to five (5) Project engineers shall attend Design Workshop #2.

The Consultant will compile meeting minutes from the workshop and include action items for the ensuing next phase of design development. The Consultant will also receive and respond to a formal, organized list of written City comments/questions that have been reviewed and filtered by the City's Project Manager as appropriate for the Consultant to respond to. The attached schedule of performance is based on receipt of City comments within four (4) weeks of submittal.

Consultant shall address and appropriately incorporate City's comments as well as input to the design received during Workshop #2 into a final version of the Preliminary Design Report. Upon approval of the preliminary design report by City, changes to the design will not be permitted unless authorized in writing by City's Project Manager.

Consultant shall participate in a Process Hazard Analysis Meeting facilitated by Subconsultant described herein. The Task Maximum Payable applicable to this sub-task anticipates that this meeting will include up to three (3) Consultant's staff and will last up to three (3) days.

Task 4 Deliverables:

1. Draft Preliminary Design Report- twelve (12) bound hard copies and one (1) electronic PDF file
2. Agenda, Meeting Materials and Meeting Minutes for Design Workshop #2 within two (2) weeks of date of meeting/presentation workshop.
3. Final Conceptual Design Report - twelve (12) bound hard copies, one (1) electronic copy of original MS Office files, and one (1) electronic PDF file
4. Final Preliminary Design Drawings twelve (12) bound hard copies, one (1) electronic copy of original CAD files, and one (1) electronic PDF file

Task 5 - 60% Complete Design Development

5.1 60% Complete Digester and Thickener Facilities Upgrade Design Development. The purpose of this task is to advance the design process for the Digester/ Facilities Upgrades to the 60% complete level with appropriate coordination between design disciplines. Consultant shall prepare construction drawings and specifications suitable for public bidding and construction by general contractors for the Project elements identified and described in the Preliminary Design Report. At this point, all major design decisions shall be documented clearly and agreed by City and all outstanding issues from the Preliminary Design Report must be resolved.

Activities to be considered during this phase include, but are not limited, to the following:

1. Prepare Technical specifications to 60% effort level.
2. Prepare Technical Drawings to 60% effort level
3. Continuing development of equipment List, including acceptable manufacturers, sizes, etc.
4. Continuing development of instrument List including acceptable manufacturers, instrument ranges, etc.
5. Prepare Draft Process Control Narratives to cover the entire operation of the systems.

6. Construction cost estimate for all facilities included in the Project. This cost is expected to be consistent with the standards of the American Association of Cost Estimators.

General description of the various engineering discipline design activities required in the phase are listed in Attachment 3.

Consultant shall develop construction drawings using CADD Manual developed as part of Task 2.7.

City's Standard Project Documents shall be used as a point of reference for this Project. Consultant shall provide technical specifications for those Project elements for which City does not maintain its own updated version. Consultant's Masterformat 2010 specification utilized and formatted to the extent practicable to conform into a unified document which is consistent and compatible with City's Standard Project Documents.

5.2 60% Complete QA/QC Reviews. The purpose of this task is to provide QA / QC reviews that are appropriate to the level of completion of the design, as defined in Attachment 2.

5.3 60% Complete Cost Estimate and Schedule Development. The purpose of this task is to provide a construction manager's review of the progressing design documents to determine an initial detailed construction cost estimate and the primary sequencing constraints that will drive the construction schedule for the Project.

60% Complete Cost Estimate – Based upon the 60% Complete design work products, the Consultant will produce a detailed estimate of probable construction cost, following the work breakdown structure from the Project and traditional trades cost categorization. A companion Basis of Cost Estimate report will be provided with the detailed cost estimate to describe all cost estimating definitions and assumptions.

Construction Sequencing Analysis – The Consultant will assign a construction management specialist from its internal Quality Assurance/Quality Control Board to review the 60% Complete design work products and to consult with the design leaders to develop a report describing the key sequencing constraints for the Project. This report will support development of a preliminary construction schedule for the Project to be conducted in the following phase.

5.4 60% Complete Design Documents and Design Workshop #3. The Consultant will compile work products from the 60% Complete design effort as a review package for the City that shall be submitted and presented to the City for review and discussions at a workshop that will be facilitated by the Consultant.

Consultant shall organize and facilitate a review workshop with Plant operations, maintenance and engineering staff, managers and other applicable staff as designated by City to present the 60% design effort within two (2) weeks of submittal of the review package. The purpose of this workshop will be to present key elements of the design, operational requirements/changes to current practices, maintenance requirements, construction sequence, impact of construction on operation, etc. The Task Maximum Payable applicable to this sub-task anticipates that this workshop will include up to fifteen (15) City staff members and will last up to eight (8) hours. Consultant's Project Manager and up to five (5) Project engineers shall attend Design Workshop #3.

The Consultant will compile meeting minutes from the workshop and include action items for the ensuing next phase of design development. The Consultant will also receive and respond to a formal, organized list of written City comments/questions that have been reviewed and filtered by the City's Project Manager as appropriate for the Consultant to respond to. The attached schedule of performance is based on receipt of City comments within four (4) weeks of submittal.

Consultant shall address and appropriately incorporate City's comments as well as input to the design received during Workshop #3 into the 90% review package.

Task 5 Deliverables:

1. Agenda, Meeting Materials and Meeting Minutes for Design Workshop #3 within two (2) weeks of date of meeting/presentation workshop.
2. 60 % Drawings (12) bound hard copies half size, one (1) electronic copy of original CADD files, and one (1) electronic PDF file
3. 60% Specifications (12) bound hard copies, one (1) electronic copy of original MS files, and one (1) electronic PDF file
4. Construction Sequencing Analysis Technical Memorandum (12) bound hard copies, one (1) electronic copy of original MS files, and one (1) electronic PDF file
5. 60 % Construction Cost Estimate
6. 60% Complete Project Schedule
60% Design Calculations (those calculations that are appropriate for the 60% Design Stage)
7. Final equipment List one (1) electronic copy of original MS files, and one (1) electronic PDF file

8. Final instrument List one (1) electronic copy of original MS files, and one (1) electronic PDF file
9. Draft Process Control Narratives to cover the entire operation of the systems, five (5) bound hard copies, one (1) electronic copy of original MS files, and one (1) electronic PDF file

Task 6 - 90% Complete Design Development

6.1 90% Complete Digester/Thickening Facilities Upgrades Project Design Development. The purpose of this task is to advance all of the design disciplines to functional completion of the design documents such that they are ready for final review by all interested parties and will need only minor corrective adjustments prior to bidding.

Activities to be considered during this phase include, but are not limited, to the following:

1. Prepare Technical specifications to 90% effort level.
2. Prepare Technical Drawings to 90% effort level
3. Prepare instrumentation memo providing a table of instrument ranges, set point, process minimum and maximums, signal scaling and alarm limits for review by the City.
4. Prepare Final Process Control Narratives to cover the entire operation of the systems.
5. Identify performance and equipment test requirements that will be imposed on the general contractor.
6. Construction cost estimate for all facilities included in the Project. This cost will be used as a pre-bid estimate and its accuracy is expected to be consistent with the standards of the American Association of Cost Estimators.
7. Assist City in making decisions if pre-qualification of general contractors will be necessary, and if so, prepare Pre-qualification package as an optional service described in Task 8.

General description of the various engineering discipline design activities required in the 90% complete phase of the Project are listed in Attachment 3.

6.2 90% Complete QA/QC Reviews. The purpose of this task is to provide QA / QC reviews that are appropriate to the level of completion of the design, as defined in Attachment 2.

6.3 Final Cost Estimate and Schedule Development. The purpose of this task is to provide a detailed construction cost estimate and the primary sequencing constraints that will drive the construction schedule for the Project.

Final Cost Estimate – Based upon the 90% Complete design work products, the Consultant will produce a detailed final estimate of probable construction cost, following the work breakdown structure from the Project and traditional trades cost categorization. A companion Basis of Cost Estimate report will be provided with the detailed cost estimate to describe all cost estimating definitions and assumptions.

Final Construction Schedule – The Consultant will produce a final construction and work breakdown schedule for the Project in Gantt chart form.

6.4 90% Complete Design Documents and Design Workshop #4. The Consultant will compile work products from the 90% Complete design effort as a review package for the City that shall be submitted and presented to the City for review and discussions at a workshop that will be facilitated by the Consultant.

Consultant shall organize and facilitate a review workshop with Plant operations, maintenance and engineering staff, managers and other applicable staff as designated by City to present the 90% design effort within two (2) weeks of submittal of the review package. The purpose of this workshop will be to present key elements of the final design, anticipated construction sequence, impact of construction on operation, etc. The Task Maximum Payable applicable to this sub-task anticipates that this workshop will include up to fifteen (15) City staff members and will last up to eight (8) hours. Consultant's Project Manager and up to five (5) Project engineers shall attend Design Workshop #3.

The Consultant will compile meeting minutes from the workshop and include action items for the ensuing next phase of design development. The Consultant will also receive and respond to a formal, organized list of written City comments/questions that have been reviewed and filtered by the City's Project Manager as appropriate for the Consultant to respond to. The attached schedule of performance is based on receipt of City comments within four (4) weeks of submittal.

Consultant shall address and appropriately incorporate City's comments as well as input to the design received during Design Workshop #4 into the 100% review package.

Task 6 deliverables shall include:

1. Agenda, Meeting Materials and Meeting Minutes for Design Workshop #4 within two (2) weeks of date of meeting/presentation workshop.
2. 90 % Drawings (12) bound hard copies half size, one (1) electronic copy of original CADD files, and one (1) electronic PDF file
3. 90% Specifications (12) bound hard copies, one (1) electronic copy of original MS files, and one (1) electronic PDF file
4. Final Construction Cost Estimate
5. Final Complete Project Schedule
6. Final Process Control Narratives to cover the entire operation of the systems, five (5) bound hard copies, one (1) electronic copy of original MS files, and one (1) electronic PDF file
7. 90% design calculations (calculation packages to support authority reviews)
8. All supporting documents related to design of the Project including but not limited to engineering calculations, equipment or catalog cut sheets and back up for engineer's cost estimate shall be documented and submitted by Consultant to the City as a bound document and cataloged per appropriate engineering discipline.

Task 7 - 100% Complete Design Development

7.1 Finalize Digester/Thickening Facilities Upgrades Project Documents.

This task includes the remaining work to complete the Project construction documents. The final design submittal will be sealed and signed by the responsible engineer/architect and signed by California PE or architect as appropriate, and will comprise complete biddable construction document originals. The City will print and distribute the construction documents for bidding.

Activities to be considered during this phase include, but are not limited, to the following:

1. Finalize Technical specification.
2. Finalize Technical Drawings.

7.2 Finalize Construction Cost Estimate and Schedule. This task includes finalizing the construction cost estimate and schedule.

Task 7 Deliverables:

1. 100 % Stamped Drawings and Specifications. One (1) signed and stamped full sized set of original drawings, two (2) full sized sets for record keeping, and twelve (12) sets of half sized reproductions, digital files in CADD application designated by CADD Standards, and PDF formats.

- Specifications - twelve (12) bound hard copies, one (1) copy of original MS Office files, and 1 electronic PDF file
2. Addendum to the Final Construction Cost Estimate (if required) and Schedule in MS Project format.

Printing and distribution of bid documents is not included; this will be done by the City.

Task 8 Optional Design Services

Upon written authorization of the ESD Director, Consultant shall perform the following Additional Services:

- 8.1 Major Design Modifications and Miscellaneous Additional Services.**
During the course of design and further design inspections of the existing digesters it may be found that major modifications or repairs are required other than those contemplated in Tasks 3 through 7 that at present are unknown, or City may request major design changes after the completion of 30 percent design development, or City may desire Additional Services not presently within the scope of this Exhibit A. Consultant shall be required to provide such services following specific written scope and budget authorization from the ESD Director. The Task Maximum Payable for these Additional Services constitutes a maximum allowance, as opposed to a guarantee of a particular package of services for a maximum price.
- 8.2 Digester Heat Exchanger Capacity Test.** The purpose of this task is to test for the full heat transfer capacity of the existing digester heat exchangers while operating with 180 degree Fahrenheit hot water supply. Theoretical analysis has indicated the existing heat exchangers should have enough capacity to meet peak heating requirements with hot water temperatures increased from 160 degrees Fahrenheit to 180 degrees Fahrenheit; however the analysis did not indicate much safety factor and testing for the exchange capacity was recommended before basing a modifications design that would rely on the existing heat exchangers. The Consultant will develop a test plan and conduct these tests with as needed assistance from the City. The Consultant will advise the City on design test conditions and measurements and any additional measuring points or equipment added to the tested heat exchangers in order to accurately measure the heat exchange capacity. Consultant will prepare a summary report of the testing effort. Work product is the summary report and a meeting summary discussing elements to be included in the design as a consequence of the test results. All of such services shall be completed for the applicable Task Maximum Payable.

- 8.3 Design Additional Digester Heat Exchangers.** If heat exchanger tests in Task 8.2 result in the need for additional heat exchanger units to supply heat to digesters 5, 6, 7, and 8, this task would incorporate the design into all levels of the design development discussed above. All of such services shall be completed for the applicable Task Maximum Payable. The Task Maximum Payable for this task assumes that City will decide to incorporate additional heat exchanger units before 10 percent design development is complete.
- 8.4 Separate Design Package for Digester Gas Pipeline and Existing Digester Connections.** Above scope assumes development of a stand-alone contract document set for the Project elements described above. This task is to separate these documents into separate contract document if the City decides to execute two contracts, and to supplement the services under Tasks 9, 10, 11 and 13 in order to provide such services with respect to both such contracts, all of which shall be completed for the applicable Task Maximum Payable. The Task Maximum Payable for this task assumes that City will decide on final contract packaging after 30 percent design development is complete.
- 8.5 Class A Digestion Planning and Design.** The Digester Process Evaluation may lead to City's decision to build Class A Digestion facilities as a part of the Project, instead of Class B mesophilic process digesters. Consultant shall establish revised phasing plan for implementation of Class A digestion system. Consultant will add to the design production activities for the Project to include the additional components necessary to achieve the Class A Digestion facilities contemplated as a result of the Digester Process Evaluation. All of such services shall be completed for the applicable Task Maximum Payable. The Task Maximum Payable for this task assumes that City will decide to build Class A Digestion facilities before 10 percent design development is complete.
- 8.6 Detailed Instrumentation and Control Wiring Diagrams.** Consultant shall generate instrumentation and control detailed wiring diagrams during development of the digester design for inclusion in the digester bid package. The detailed design drawings will identify instrument wiring terminations, fieldbus network segmentation, and instrument loop drawing details. This detailed information identifies details for wiring the control system to the field instrumentation and equipment. This service is to provide additional detailed design drawings that the contractor can use as the basis of documenting the system, with only final details needing to be added by the contractor. The contractor would provide red line markups of the original contract drawings or their submittal drawings as the starting point for as-built documentation development. The final termination information (or changes for specific vendors) would then be included in the

record drawings set that would be updated by Consultant. All of such services shall be completed for the applicable Task Maximum Payable.

Tasks:

1. Provide additional design drawings/details to the termination level.
2. Field verify design and/or contractor submittal drawings.
3. Update design and contractor submittal drawings in AutoCAD.

Deliverables:

1. Additional design drawings/Details to include:
 - a. Instrument loop diagrams
 - b. Instrument network diagrams
 - c. Motor elementary diagrams
 - d. Control system network diagrams
2. Update the record drawing set with specific instrumentation and control system documentation including:
 - a. Instrument loop diagrams
 - b. Instrument network diagrams
 - c. Motor elementary diagrams
 - d. Control system network diagrams
3. As-built control strategies
4. As-built standard operating procedures

8.7 Contractor Pre-Qualification Process. Working with the City, Consultant shall prepare a Request for Interest and Qualifications (RFIQ) for interested contractors. The RFIQ will consist of a questionnaire that requires interested contractors to provide information about their Contractor's license; permanent employees; financial status (current financial profile, bankruptcies, loans, bonding); proposed personnel and resources (project manager, superintendent, project engineers, safety managers, and management resources); experience on projects of similar size, process type, and complexity, as well as timely completion; experience with partnering, QA/QC, and safety programs; legal proceedings (arbitration and mediation, lawsuits, and other proceedings); and references from banks, suppliers and subcontractors, and clients. All of such services shall be completed for the applicable Task Maximum Payable.

Task 9 - Services During Bidding

Consultant shall answer bid-period questions and attend up to two (2) pre-bid meetings and walk-through with City. Pre-bid meeting, walk-through, bid opening, and bid review will be conducted by City. Advertisement, printing, and mailing of construction documents and addenda will be also be conducted by the City. All of such services shall be completed for the applicable Task Maximum Payable.

9.1 Pre-Bid Construction Conference. Consultant will assist the City staff as requested by City in preparation for up to two (2) pre-bid construction conferences prior to the City receiving construction bids, and on dates to be established by the City.

9.2 Bid Phase Design Clarifications. Consultant will respond in writing to questions from bidders forwarded to the Consultant by City. When required, prepare details or other drawing or specification revisions to address bidder questions as requested by the City. The Task Maximum Payable for this sub-task assumes that up to four (4) addenda would be prepared during the bid phase. Maximum turnaround time for Consultant responses shall be five (5) Business Days.

Task 9 Deliverables:

1. Written response to bid-questions, as needed and directed by City.
2. Revised drawings and specifications for inclusion in addenda to be issued by City as required to clarify Project design.

Task 10 – Design Services During Construction

Consultant shall provide engineering services during the construction period. Services provided by the Consultant shall include, but are not limited to, the following, all of which services shall be completed for the applicable Task Maximum Payable:

1. Review the proposed construction schedule submitted by the contractor and comment on the procedures, methods and sequence of work that may have conflict with operation.
2. Review and respond requests for information (RFIs) from contractor forwarded by City. In responding to the RFIs, Consultant shall issue interpretations and clarifications to the contract documents. The Task Maximum Payable for this sub-task assumes that up to five hundred thirteen (513) RFIs shall be included as part of this task, assuming 5.26 hours of Consultant labor per RFI and \$78,000.00 of total subconsultant effort. Maximum turnaround time for Consultant responses shall be five (5) Business Days.
3. Review selected shop drawing and other submittals from contractor forwarded by City for compliance with the design requirements. Submittals shall be reviewed and marked-up in accordance with the contract documents. Marked-up submittals will be returned to City for processing and distribution to contractor and other parties. The Task Maximum Payable for this sub-task assumes that up to four hundred fifty-six (456) submittals shall be included as part of this task, assuming 8.77 hours of Consultant labor per submittal and \$100,000.00 of total subconsultant

- effort. Maximum turnaround time for Consultant responses shall be fifteen (15) Business Days.
4. Prepare design clarifications to explain and/or change the intent of the contract documents, as well as advise City on any impact thereof to the Project. In preparing the design clarification, Consultant shall issue revised specifications, drawings, and/or sketches, if necessary, to clarify and/or change the intent of the contract documents. The Task Maximum Payable for this sub-task assumes that up to seventy (70) design clarifications shall be included as part of this task, assuming 20.9 hours of Consultant labor per design clarification and \$37,500.00 of total subconsultant effort.
 5. Visit the site at intervals appropriate to the stage of construction, approximately two (2) per month as required by construction; to become familiar with and to keep City informed about the progress and quality of the portion of the work completed; to guard City against defects and deficiencies in the work; and to determine in general if the work is being performed in a manner indicating that the work, when fully completed, will be in accordance with the contract documents. The Task Maximum Payable for this sub-task assumes a maximum of sixty (60) site visits.
 6. Review Operations and Maintenance Manuals provided by the contractor for each construction contract
 7. Contractor and City shall maintain a current set of marked-up contract documents detailing field changes. Consultant shall keep track of record drawings. Following contract closeout, Consultant shall prepare one (1) set of full-sized reproducible set of record drawings reflecting field changes noted by the contractor and City.

Task 10 Deliverables:

1. Respond to Requests for Information (RFI) as needed and directed by City.
2. Provide marked-up shop drawing submittals as needed and directed by City.
3. Prepare design clarifications and issue revised specifications, drawings or sketches as required and directed by City.
4. Record drawings – ten (10) half size copies, one (1) full size copy, one (1) electronic PDF file and one (1) CAD file

Task 11 – Inspection/Start-Up and Commissioning Assistance For Contractor’s Substantial Completion

Consultant shall assist City in performing inspections and provide start-up and commissioning assistance before final acceptance. Services provided by Consultant shall include, but not limited to, the following, all of which services shall be completed for the applicable Task Maximum Payable:

1. As Additional Services, Consultant shall perform five (5) specialty inspection site visits in any of the following discipline areas: civil, structural, mechanical, corrosion, coating, electrical and instrumentation. In addition, Consultant shall provided as-requested specialty inspection services concerning general subgrade confirmation for new facilities and field observation. The Task Maximum Payable for these Additional Services constitutes a maximum allowance, as opposed to a guarantee of a particular package of services for a maximum price.
2. Consultant shall witness selected functional tests, including equipment installation, instrument calibration, control loop, DCS and HVAC verifications for the purpose of providing assistance to City staff in training and commissioning operation of the Project.
3. Consultant shall provide one (1) week start-up assistance to City during start-up of the new facilities. Consultant's Operations Specialists shall be available to review contractor's proposed start-up plan and schedules, resolve, startup and process setting adjustment issues and provide general consultation regarding equipment installation issues.
4. Consultant shall review the proposed commissioning plans and schedule submitted by the Contractor.
5. Consultant shall provide assistance to City during contractor's commissioning (wet testing and performance testing).
6. Consultant shall assist City in performing a final Project "walk-through" inspection in preparing a final punch list of outstanding items to be completed by the contractor to achieve final acceptance.
7. Consultant shall develop and provide Operations and Maintenance Manuals, in a format agreed upon by the City. The Operations and Maintenance Manual shall describe as a minimum a description of the system, all standard operation procedures, trouble shooting and emergency shutdown processes, etc.

Task 11 Deliverables:

1. Final punch list – one (1) hard copy and one (1) copy of original MS Office file and one (1) electronic PDF file
2. Operations and Maintenance manual – four (4) bound hard copies and one (1) copy of original MS Office files and one (1) electronic PDF file

Task 12 – Controls Configuration and Documentation Assistance

As an Additional Service, to be provided upon written authorization of the ESD Director, Consultant shall assist City to provide programming or program documentation support to the City programming team charged with automating the new processes. Consultant will provide one full-time, onsite programmer for two years to supplement City programming staff in completion of the ABB I/O database, control logic, HMI displays, supervisory reports, and alarm

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management. The Task Maximum Payable for these Additional Services constitutes a maximum allowance, as opposed to a guarantee of a particular package of services for a maximum price.

Task 12 Deliverables:

1. Control system programs
2. Control system program documentation

Task 13 – Post Substantial Completion Commissioning Services

Consultant shall assist the City with commissioning and training activities for the DAFTs and Digesters. In this context, commissioning follows contractor performance testing, operational testing and substantial completion. During commissioning, DAFTs and Digesters will begin operation in their intended purpose and, through a series of exercises over a defined period, facilities features will be demonstrated and validated so as to increase staff familiarity with new systems and to solicit staff sign-off on satisfactory performance.

The services under sub-tasks 13.1 and 13.2 shall each be completed for the applicable Task Maximum Payable. The services under sub-tasks 13.3.2 and 13.3.3 are Additional Services. Allowances of up to one hundred (100) and five hundred (500) hours, respectively, are contained within the applicable Task Maximum Payable for the sub-task 13.3; such portions of the Task Maximum Payable constitute maximum allowances, as opposed to a guarantee of a particular package of services for a maximum price. The services under sub-task 13.3.1 shall be performed for the remainder of the Task Maximum Payable for sub-task 13.3.

13.1 Operations Training. Consultant shall provide City operations staff with classroom training on major Project elements related to operations. Classroom training of each major Project element will precede its commissioning. Therefore, Task 13.1 and Task 13.2 will overlap. The Task Maximum Payable for this sub-task assumes that Consultant shall provide 6 training sessions for City operations staff and that each training session shall last 4 hours. Training will provide an overview of Project elements, design intent, and operational set points.

13.2 Post Substantial Completion Commissioning Verification and Training Services

13.2.1 Commissioning Plan. Consultant shall provide a commissioning plan document that provides a list of team members and responsibilities; list of activities and associated schedule; process control targets; and verification log. After each Project element has been commissioned, City operations staff will sign off on individual Project elements in the verification log.

13.2.2 Commissioning Activities. Consultant shall lead a commissioning team to execute commissioning plan. Consultant shall provide operations and/or engineering specialist(s) to work with City operations staff on site throughout the commissioning phase. Commissioning support shall be directed at complex areas of the Project elements and major trains of process equipment, where input from the Consultant will be most beneficial. Consultant shall maintain commissioning verification log. The Task Maximum Payable for this sub-task assumes that the commissioning period will last no longer than eight months, that fifteen meetings will occur during this time, and that two Consultant team members will attend each meeting.

13.3 Project One-Year Process Monitoring, Warranty Assistance, and Engineering Support

13.3.1 One Year Process Monitoring. Consultant shall provide assistance and engineering analysis during the first year of operation. Consultant shall make quarterly visits during the first year of operation to assess the performance of the DAFTs and digesters. A technical memorandum will be provided at the end of each quarter to summarize results and findings. The Consultant shall:

1. Prepare Draft Process Review Plan for City to review.
2. Revise Draft Process Review Plan and incorporate City comments.
3. Prepare four quarterly reports on the process review. City to perform testing according to schedule in the process review plan and provide results to Consultant. Consultant will analyze results for:
 - a) Verification of operability of the constructed facility;
 - b) Modification, if necessary, of previously approved performance standards;
 - c) Determination if performance standards violations are significant; and,
 - d) If appropriate, initiation of development of the Corrective Action Report (CAR)
4. Provide on-call technical assistance to City during the first year of facility operation.

City will provide plant operations data, permit compliance data, and testing results in Microsoft Excel format on a monthly basis.

13.3.2 Warranty Assistance. Consultant shall assist the City with potential warranty issues for major equipment items. Work completed under this task will be performed on a Task Directive basis. City will issue a notice to proceed for necessary assistance.

13.3.3 Year One Engineering Support. Consultant shall provide as-needed engineering support during the first year of operation of the DAFTs and digesters. Work completed under this task will be done under a Task Directive basis. City will issue a notice to proceed for necessary assistance.

Task 13 Deliverables:

1. Operations training materials which includes classroom slides (in powerpoint format).
2. Draft and final commissioning plan document.
3. Field notes and memoranda identifying corrective actions for problems or deficiencies noted during commissioning.
4. Final commissioning verification log with operations sign-off. Quarterly Technical Memorandums on first year operations
5. Draft Process Review Plan
6. Final Process Review Plan, addressing City comments on draft document.
7. Warranty and engineering support issue deliverables as defined by task orders.

ATTACHMENT 1

DEFINITION OF Project DESIGN COMPONENTS

Project Design Components - To complete the design phase of the work, the Consultant will prepare design drawings and specifications for appropriate disciplines and perform quality control/quality assurance and cost estimating as follows:

- **General/Civil Design – General/Civil design** includes work necessary for completion of site and civil design drawings and specifications, up to and including final documents, suitable for inclusion in the contract documents for public bidding of the Project. Civil drawings will be based on survey information, engineering calculations, applicable code and regulations governing site development and stormwater management, and existing geotechnical and other information collected and generated as part of this Agreement. This also includes design of pavement improvements immediately surrounding the digesters and DAFTs. This subtask also includes preparation of standard civil details and drafting of applicable survey information.
- **Mechanical and Process Design** - Mechanical and Process design includes work necessary for completion of mechanical and process design drawings and specifications, up to and including final documents, suitable for inclusion in the contract documents for public bidding of the Project. Mechanical drawings will include P&IDs, plan views, sections, and details of areas where mechanical equipment, piping, and plumbing are installed.
- **Structural Design and Demolition Drawings** - This task includes work necessary for completion of structural design drawings and demolition drawings, up to and including final drawings, suitable for inclusion in the contract documents for public bidding of the Project. Structural drawings will be based on structural calculations and any existing and new geotechnical information collected as part of this agreement. The controlling code will be the California Structural Specialty Code (Based on 2006 IBC) or the latest additions required by law at the time of the final 100% submission. Structural drawings will be prepared for walls, footings, beams slabs, structural steel, concrete reinforcement, standard details and specification for typical anchor bolt installations, bracing, miscellaneous metals and other structural aspects for any new facilities associated with the Project. Structural supports, seismic restraint systems, and thermal restraint systems for process piping 12 inch diameter and smaller will not be designed by Consultant. Consultant will prepare specifications requiring contractor to retain professional engineering services for the detailed design, review, and installation inspection for

Digester/DAFT Project
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these systems. Demolition drawings will be developed by scanning existing drawings and information gained from laser scanning models.

- **Electrical Design** – Electrical design includes all work necessary for completion of electrical design drawings and specifications up to and including final documents, suitable for inclusion in the contract documents for public bidding for the Project. This includes preparation of electrical diagrams, schematics, plans, sections, and details of areas where new equipment instruments, wiring, control panels, and appurtenances are to be installed. Electrical design drawings shall include electrical plans, one-line diagrams, lighting and receptacles, and electrical construction details. Specific activities include the following:
 1. Interconnections and revisions to existing medium voltage distribution system including provision for new unit substation
 2. Design of new electrical building, including line-up for motor control centers
 3. Identification of electrical and instrument loads on the plan drawings
 4. Preparation of one-line schematics and panel schedules. Electrical drawings will not show detailed routing of cabling and wiring but will show starting and ending locations as identified on the one-line documents and identify general conduit routes and preferences (underground, tunnel, overhead) to interconnect electrical and instrumentation devices.
 5. Preparation of conduit and cable schedules
 6. Preparation of control diagrams including motor control schematics and connection diagrams for electrically powered equipment

The scope does not include a formal short circuit study, protective device coordination study, or arc-flash study. These will be specified to be conducted by the construction contractor. Necessary plant electrical information required to perform these analyses will be provided by the Consultant for all new electrical loads from Digesters 5, 6, 7, and 8 and the upgraded DAFTS and will be provided by the City for all other plant loads required for the evaluation. The City shall provide the Consultant with short circuit current, upstream protective devices and settings, and the modeling results from power system configurations such as utility only, generators only, utility plus generators, etc.

- **Instrumentation and Controls Design** – Instrumentation and Control design includes work necessary for completion of instrumentation and control design drawings and specifications up to and including final

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drawings and specifications suitable for inclusion in the contract documents for public bidding. The design shall include instrumentation system control overview diagrams showing electric power and control system arrangements for this Project, typical MCC control diagrams, typical instrument loop drawings, control loop descriptions, integration with existing fire and security alarms and gas monitoring systems, I/O cabinet general layouts, instrument schedule and I/O schedule. This approach assumes that the general contractor will furnish and install all instrumentation and control equipment and wiring and the City, or its designated agent, will be the PLC and DCS programmer for the facility during the construction phase of the Project. Instrumentation and Control design will be designed in accordance with the Instrumentation and Control Standards developed in Task 2.

All systems shall be designed for partially manned operation (8 hours out of 24) with provisions for "fail-safe" operation to continue operation or safely shutdown and limited potential for manned response.

Specific activities are as follows:

1. Development of control and instrumentation interlock requirements.
2. Preparation of narrative descriptions of control strategies and sequences for each control loop.
3. Specification of sensors and instruments to be.
4. Investigation of requirements and performance specification for integration with existing fire, gas monitoring, and security alarm systems.
5. Complete drafting of instrumentation and control system drawings included in the design, including symbol and detail sheets.
6. Preparation of instrumentation and control specifications, including control system hardware requirements.
7. Assistance to process discipline in development of the P&IDs.

The preparation of detailed loop/termination drawings are included as an Additional Service.

- **Specifications** - Specification preparation includes work necessary for completion of final design specifications, suitable for inclusion in the contract documents for public bidding of the Project. Front End specifications Divisions 0 and 1 will be provided by the City and modified by the Consultant to accommodate the specific requirements of this

Project. The Consultant will prepare all Division 2 through 44 specifications in CSI format, encompassing all written requirements, coordinated with the design drawings for Civil, Mechanical, Structural, Electrical, and Instrumentation and Control completion of the Project. The Consultant will use and modify City standard and special specifications where available and appropriate and where not available will use and modify Consultant standard Division 2 through 44 specifications to be consistent with the requirements of the Project and the City-provided specifications. Consultant will use modifications to Master Format that have been proposed by the Environmental Engineers Coalition for Master Specifications Formatting.

- **Cost Estimates** – Construction cost estimates will be prepared and updated at each stage of Project delivery. Cost estimates at the 10 and 30 percent levels will be updates of preliminary estimates prepared for the predesign Implementation Plan based on additions and deletions of scope items. A new estimate will be prepared at the 60% level based on formal detailed take offs from drawings and specifications available at that time and this will be updated and finalized following the 90 level of design. Each cost estimate shall be accompanied by a written Basis of Estimate including of all cost estimating assumptions that shall be updated at each stage of Project delivery. If necessary, an addendum to the cost estimate will be prepared following the 100% design if additional items are added to the design following the 90%.

ATTACHMENT 2

QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) REQUIREMENTS AT DIFFERENT PHASES OF Project DEVELOPMENT

Quality Assurance/Quality Control (QA/QC) includes quality assurance and quality control functions of the design team. These include the following:

1. Consultant's Project Manager shall establish an internal QA/QC Board that shall include 3-5 senior level professionals with specific expertise in the relevant Project components/disciplines engaged in reviews of all Project deliverables shall not be directly involved in the routine execution of the Project. Members of the QA/QC Board will be identified in the Project Management Plan and Consultant shall submit qualifications of these individuals for approval by the City prior to start of their work. These individuals will review and provide comments/sign-off on the work products and to provide a report of critical commentary and discussion of appropriate re-direction where called for.
2. Preparation for, attendance at, and response to comments from design reviews with the City.
3. Preparation for, attendance at, and response to comments from internal design reviews.
4. Discipline checks throughout the course of design by the lead area/discipline leaders, task managers, design manager, and by the project manager.
5. Task managers and project manager quality control checks throughout the course of design.
6. Formal calculation checks and assembly of final calculations for submission to the City. Calculations appropriate to the level of submittal shall be provided at each stage of the Project delivery in a format that will allow City staff to perform review and validation either manually or using readily available commercial software. If Consultant uses any proprietary software tools (i.e. customized spreadsheets or software), Consultant shall provide these tools to the City for its limited and exclusive use to perform the review and validation of Consultant's calculations for this Project. If Consultant uses any commercially available, but specialized and expensive software tools or models that are not owned by the City, the City and Consultant may mutually agree, on case-by-case basis, that the City staff would validate the calculations in the Consultant's office by witnessing model or calculation runs by the Consultant staff for a period of

not more than 4 hours per discipline. Consultant will not purchase commercially available software to provide to the City. City's review of Consultant's calculations will be on a spot check, cursory basis and, in no way, shall release or reduce Consultant's liability for completeness and accuracy of all calculations and other engineering work provided by Consultant.

7. Final coordinating cross check and formal QA/QC sign off of all deliverables.

The following QA/QC requirements shall be satisfied by the Consultant to assure the technical appropriateness, accuracy, thoroughness and coordination of the Consultant's and its subconsultants' work.

1. **10% Complete(Conceptual) Design Stage**

The Consultant will assign two senior level engineers from its QA/QC Board with specific experience and expertise in the field that have not been involved with the 10% Complete design effort to review the Consultant's work products. These individuals will review and provide comments/sign-off on the 10% Complete work products and provide a report of critical commentary and discussion of appropriate re-direction where necessary.

2. **30% Complete(Preliminary) Design Stage**

Design Concept Development Review - The Consultant will assign two senior level engineers from their internal Quality Assurance/Quality Control Board with specific experience and expertise in the field from the firm that have not been involved with the 30% Complete design effort to review the Consultant's work products.

Process Mechanical Discipline Review -The Consultant will assign a senior process mechanical discipline engineer from its QA/QC Board to provide comprehensive checking of calculations, equipment selections, arrangements, and control narratives.

Controls Strategy Discipline Review - The Consultant will assign a senior controls system engineer from its QA/QC Board to review initial control narratives from process / mechanical designers for advice on adjustments to suit standardized capabilities of existing DCS system.

Constructability Review - The Consultant will assign a senior engineer that specializes in construction from its QA/QC Board to complete a constructability review.

Operability Review – The Consultant will assign a certified operator from its QA/QC Board to complete an operability review.

3. **60% Complete Design Stage**

General Design Production Review – The Consultant will assign a senior design engineer from its QA/QC Board to provide a review and commentary report on the organization and conventions of the design documents at the 60% Complete level.

Civil Discipline Review – The Consultant will assign a senior Civil discipline from its QA/QC Board to review civil design conventions, strategies, calculations, arrangements, and other Civil discipline related design products.

Process Mechanical Discipline Review - The Consultant will assign a senior process mechanical discipline engineer from its QA/QC Board to provide comprehensive additional checking of further calculations, equipment selections, arrangements, specifications, and control narratives.

Structural Discipline Review – The Consultant will assign a senior structural engineer from its QA/QC Board to provide comprehensive checking of structural calculations, progressing specifications, and progressing structural systems development.

4. **90% Complete Design Stage**

Discipline Reviews – The Consultant will assign senior engineering discipline reviewers from its QA/QC Board to perform final checks on all design work products for Civil, Process / Mechanical, Structural, Electrical, and Controls Disciplines.

Design Production Coordination Cross Check – The Consultant will assign 2 senior designers from its QA/QC Board to perform a comprehensive coordination cross check of the design drawings and specifications to ensure completeness of documents .

Constructability Review – The Consultant will assign a construction manager from its QA/QC Board to provide a contractor's perspective review of the practical constructability of the facilities described by the drawings and specifications.

ATTACHMENT 3

GENERAL DESCRIPTION OF REQUIRED DESIGN

ACTIVITIES AT 10%, 30%, 60%, AND 90% COMPLETE PHASES OF DESIGN

DEVELOPMENT

General description of the various engineering discipline design activities required, as a minimum, at different phases of design development are presented below. Consultant shall be required to demonstrate to the City compliance with the requirements listed below and to provide all deliverables, as stipulated in the Scope of Services for this Project.

1: 10% Complete (Conceptual Design) Phase of the Project:

Fundamental Design Decisions and Design Criteria

- The purpose of this activity is to advance the design process from the Digester Planning Study to fundamental definition of all facility improvement components including piping, mechanical, electrical, instrumentation, and support equipment.
- The Consultant will develop detailed criteria, conceptual control narratives, design data, concept schematics and conceptual process and instrumentation diagrams (P&IDs) showing piping, equipment and all primary control elements, conceptual site arrangements, to more clearly define the basis of the detailed design for the ensuing Project.
- The Consultant will identify remaining design decisions that must be made for subsequent design development phases to proceed and will assist the City in making a determination on such decisions.
- The Consultant shall provide information and estimates to the City with respect to capital, operation, and maintenance costs of new facilities, systems, and equipment. The City will decide on selection of Project systems and components based in part on this information. During detailed design of these selected facilities, Consultant will work with City staff toward the goal of minimizing time required for housekeeping, maintenance, and equipment and process adjustments of upgraded facilities, downstream processes, and equipment.

Discipline Design Guidelines

- In addition to defining and clarifying the Project specific elements described above, the Consultant will define engineering discipline design guidelines that are necessary for developing the details of this Project. Discipline design guidelines include such components as prevailing codes and guidelines such as building and electrical codes; site-specific design parameters; City desired materials of construction and equipment types; acceptable products for commodity equipment such as piping, valves, wiring; and instrumentation and control

nomenclature. The discipline design guidelines will be published in summary report format by Consultant to serve as reference for designers during the remainder of design development.

Special Construction Requirements and Constraints

- Describing in concept special construction requirements and constraints required to minimize the impacts of construction on continuous and safe operation of existing facilities, as applicable to the 10% design Project development phase.

Estimate of Construction Costs

- Conceptual construction cost estimates for all facilities covered in the design package and required for the complete and operable construction of the entire system.

2. 30% Complete (Preliminary Design) Phase of the Project:

Process and Equipment Sizing

- Detailed sizing and number of all facility improvement components including piping, mechanical, electrical, instrumentation, and support equipment including listing of the manufacturers and model numbers of equipment, manufacturers' cut sheets and performance curves for all major pieces of equipment.

General / Civil

- Survey control plan with vertical datum description, horizontal control coordinate description, monuments, benchmarks, and other site control related information
- General process schematics
- Standard civil details
- General drainage strategy
- Site plan showing structures, roads, and access along with existing topography
- Preliminary plan and profile of major pipe runs
- Contractor mobilization area(s) and construction traffic routing

Process / Mechanical

- Standard mechanical details
- Preliminary Process and Instrumentation Diagrams
- Preliminary Equipment List
- General equipment arrangement plans and major sections
- Major facility dimensions
- Preliminary drafts of major specifications
- Preliminary control strategy narratives
- NFPA 820 Guidelines review for Project specifics

Structural/Demolition

- Standard structural details
- Structural foundation plans and sections
- Final structural design criteria
- Structural general notes and standard details
- General demolition plans
- Specification index and boilerplate specification section drafts

Building Mechanical

- Air flow schematics

Electric Power

- Review of site power system and City standards for electric power systems
- Preliminary site power plans
- Preliminary facility single line power diagrams

Controls

- Control system architecture and integration with existing system.
- Primary instruments on process and instrumentation diagrams

Special Construction Requirements and Constraints

- Describing in detail special construction requirements and constraints required to minimize the impacts of construction on continuous and safe operation of existing facilities.
- Develop construction sequence plan and including this as a separate specification section.

Estimate of Construction Costs

- Preliminary construction cost estimates for all facilities covered in the design package and required for the complete and operable construction of the entire system.

3. 60% Complete Phase of the Project:

General / Civil

- Site Layout
- Yard Piping and Duct Bank plans and profiles
- Paving & Grading
- Details & Sections
- All sheets are started.

Process / Mechanical

- Complete Process and Instrumentation Diagrams
- Demolition Drawings
- Progressing equipment arrangement plans, sections and details
- Progressing specifications for Vendor review

Structural/Demolition

- Progressing structural plans, sections and details
- Progressing demolition plans, sections and details
- Preliminary rebar detailing
- Progressing specifications

Building Mechanical

- HVAC Equipment space plans
- Final airflow schematics
- Plumbing sheets
- Progressing specifications

Electric Power

- Plant power single line drawings
- Progressing process area single line drawings
 - Progressing electrical room plans and equipment sections.
 - Progressing schematic site power plans.
- Progressing specifications

Controls

- DCS system architecture and integration with existing system.
- DCS I/O on process and instrumentation diagrams
- Progressing control schematics
- Progressing I/O index
- Control strategies and loop descriptions
- Progressing specifications

4. 90% Complete Phase of the Project:

General / Civil

- Draft Final Site Layout
- Draft Final Yard Piping
- Draft Final Plan and Profiles
- Draft Final Paving and Grading
- Draft Final Details and Sections

- Draft Final Specifications (including integration of City approved General Requirements and General Conditions sections).

Process / Mechanical

- Draft Final Process and Instrumentation Diagrams
- Draft Final Demolition Drawings
- Draft Final Equipment and Piping Plans, Sections and Details
- Draft Final Specifications

Structural/Demolition

- Draft Final Demolition Drawings
- Draft Final Structural Plans, Sections, and Details
- Draft Final Specifications

Electric Power

- Draft Final Plant Power Single Lines
- Draft Final Process Area Single Lines
- Draft Final Site Power and Lighting Plans
- Draft Final Process Area Power, Communication, and Lighting Plans
- Draft Final Electrical Building and Equipment Elevations
- Draft Final Specifications

Controls

- Draft Final DCS Architecture
- Draft Final Control Diagrams
- Draft Final Control Single Line Diagrams
- Draft Final Control Strategies
- Draft Final Specifications

SCHEDULE OF PERFORMANCE

Task Item:	Scheduled Finish, based on Calendar Days after Effective Date (ED):
Task 1 – Project Management and Communication with City	From ED through end of construction
Task 2 – Project Support Services	231
Task 3 – Conceptual Design Development	126
Task 4 – Preliminary Design Development	231
Task 5 – 60 % Complete Design Development	350
Task 6 – 90% Complete Design Development	462
Task 7 – 100% Complete Design Development	510
Task 8 – Optional Design Services	To be determined at time of authorization by City
Task 9 – Services During Bidding	620
Task 10 – Design Services During Construction	In accordance with contractor construction schedule
Task 11 – Inspection/Start-up and Commissioning Assistance for Contractor's Substantial Completion	In accordance with contractor construction schedule
Task 12 – Controls Configuration and Documentation Assistance (optional service)	To be determined at time of authorization by City
Task 13 – Post Substantial Completion Commissioning Services	On-going for one year after substantial completion by construction contractor

Exhibit B: Compensation

COMPENSATION for services provided in Exhibit A, Scope of Services and Schedule of Performance, shall be in accordance with the methods and specific amounts described in this Exhibit.

1. City shall pay Consultant only the actual costs incurred, subject to the applicable Task Maximum Payables and Maximum Total Compensation set forth in the attached compensation table. Consultant certifies that the cost and pricing information used herein are complete, current and accurate.
2. Compensation for Consultant services authorized shall be on a cost reimbursement basis and includes direct labor, indirect costs, subconsultant services, other direct costs (consisting of "associated project costs" or "APC", and limited non-local travel costs), and a professional fee. Costs to be paid comprise the following:

2.1 Direct Labor

City shall pay Consultant its direct labor costs, which shall be the total number of hours worked on the job by each Consultant principal or employee times the actual hourly rate paid by Consultant for such individual's labor. Labor rates shall be based on a normal 8-hour day, 40-hour week (i.e. no overtime, holidays or weekend rates, or rates reflecting bonuses or other profit-sharing, shall be paid).

2.2 Indirect Costs

City shall pay Consultant an overhead expense equal to 194 percent of direct labor costs billed and approved by City. Consultant acknowledges and agrees that this overhead compensation is in lieu of itemized payments for indirect and overhead expenses which includes, but is not limited to:

- indirect labor
- outside accounting and legal services
- occupancy costs
- office supplies
- depreciation costs
- insurance
- taxes
- local travel
- miscellaneous expenses

The above items are illustrative, rather than exhaustive.

2.3 Subconsultant Services

City shall reimburse Consultant for approved subconsultant services, which shall be billed at cost, plus a 5 percent markup.

2.4 Other Direct Costs (APC and limited non-local travel costs)

Other direct costs shall be billed and paid as follows:

- APC of \$8.00 per hour of Consultant's direct labor billed and approved by City to cover network infrastructure and information systems support, CAD and computer usage, in-house reproduction services including graphics and photocopying, printing, long distance telephone calls including cell phone charges, facsimile, postage, overnight delivery, courier services and other miscellaneous direct costs, other than those travel-related costs noted below.

The following other direct costs, not included in the items above, shall be approved by City in advance in writing, and shall be billed at cost, without markup. These costs include only the following, as they are incurred in connection with travel of Consultant's principals and employees from their resident offices located greater than 50 miles from the Plant:

1. Personal automobile expenses at current allowable Internal Revenue Service rate per mile.
2. Other necessary and reasonable travel expenses provided that:
 - Each expense is separately identified and documented (air fare, hotel, rental car) with an amount and date incurred.
 - Air travel is coach or economy rate for refundable tickets. Business and first class rates will not be reimbursed.
 - Lodging accommodations are moderately priced.
 - Meal charges at current General Services Administration per diem rates.
 - Taxis or shuttles are used rather than rental cars whenever cost effective.
 - Rental cars are intermediate or compact class only.

2.5 Professional Fee

City shall pay a professional fee equal to eleven and fifty-six one-hundredths percent (11.56%) of direct labor costs and indirect costs (or 34 percent of direct labor costs alone) billed and approved by City.

2.6 Reduction of Multiplier

Notwithstanding the foregoing, the combined multipliers for indirect costs and professional fees shall be reduced from 3.28 to 3.24 for tasks 9 through 13 on the condition that services associated with tasks 1 – 8 are executed successfully with fair and reasonable treatment of Consultant's business concerns by City. Consultant reserves the right, in its sole discretion, to rescind the multiplier reduction at any time prior to commencement of tasks 9 - 13. Consultant will provide written notification of such rescission to City with an explanation of the reasons causing Consultant's action. Consultant's rescission shall cause the multiplier for tasks 9 - 13 remain at 3.28.

2.7 Task Maximum Payable Amounts

If the Task Maximum Payable is reached for any particular task, Consultant shall complete the agreed-upon work for the Task Maximum Payable. Task Maximum Payable amounts may be reallocated within or between the tasks without renegotiation of this Agreement with written approval from the ESD Director in their sole and absolute discretion. In no event shall the Maximum Total Compensation be increased unless there is a written amendment of this Agreement.

2.8 Billing and Payment

Consultant shall invoice City monthly based upon the actual costs incurred during the previous month. Actual costs shall be invoiced by task as described in Exhibit A, and shall be formatted to delineate the sum of: i) total direct labor hours, multiplied by x) the applicable hourly rate of pay and y) 3.28 (i.e. the combined multipliers for indirect costs and professional fees), plus ii) subconsultant costs, plus iii) APCs and other direct costs. Invoices shall also contain a breakdown by task setting forth a description of the actual costs incurred and the services performed, the date the services were performed and the amount of time spent rounded to the nearest quarterly hour increment (.25) on each date services were performed and by whom. Supporting documentation for the invoice shall be organized to clearly identify the task charged and shall be supported by such copies of invoices, payroll records, and other documents as may be required by City to authenticate invoiced costs. Copies of all invoices from any subconsultant(s) and outside service(s) shall be attached. Where Consultant is required by law to pay prevailing wage rates, supporting documentation for such work shall be in accordance with guidelines set forth below and shall include certified payroll reports. City shall pay Consultant within thirty (30) days, upon receipt of a proper Consultant invoice, provided that all invoices are accompanied by sufficient cost

documentation to allow the determination of the reasonableness and accuracy of said invoice.

2.9 Prevailing Wages.

Consultant acknowledges that portions of the services required by this Agreement are a public work, subject to the provisions of Section 1771 of the California Labor Code. Consultant shall pay, or cause to be paid, prevailing wages, as set forth in the California Labor Code Section 1770 et. seq., for but not limited to, inspection, surveying, labor, drilling, trenching and excavation. Consultant shall include in all agreements for such labor, a requirement that the employer provide all workers with written notice prevailing wages apply.

Consultant shall maintain, or cause to be maintained, all records documenting the payment of prevailing wages as required by the State prevailing wage law. Consultant shall maintain these records for a minimum period of three (3) years, or for any longer period required by law, from the date of final payment to Consultant under this Agreement. Consultant shall provide to the City, at no cost to the City, a copy of all such records within ten (10) working days of a request for such records by the City's Office of Equality Assurance.

Consultant expressly agrees that the compensation agreed to between the parties includes all payment necessary to meet State prevailing wage law requirements. Consultant shall indemnify, defend and hold the City harmless from and against any claims, costs or expenses arising as a result of Consultant's failure to pay, or cause to be paid, prevailing wages.

CPMS Contract No.: 7091
 Consultant: Brown and Caldwell
 September 9, 2013

San Jose, City of (CA) - Digester Final Design and O&M

001	2,950	435,295	16,400	0	93,448	0	0	0	0	93,448	0	0	0	553,816
001	846	182,986	6768	0	38,448	0	0	0	0	38,448	0	0	0	230,135
002	88	18,096	704	0	0	0	0	0	0	0	0	0	0	18,800
003	184	29,123	1472	0	0	0	0	0	0	0	0	0	0	30,595
004	932	209,080	7456	0	55,000	0	0	0	0	55,000	0	0	0	274,286
002	1,886	335,848	15,088	27,000	41,000	210,000	9,000	85,000	139,000	30,000	241,000	10,500	929,486	
001	80	11,918	640	27,000	0	0	0	0	139,000	0	27,000	0	40,908	
002	208	32,790	1664	0	0	0	0	0	85,000	0	139,000	0	180,404	
003	40	8,908	320	0	0	0	8	85,000	0	0	139,000	0	95,478	
004	28	6,555	224	0	0	0	0	0	30,000	0	30,000	0	38,279	
005	24	5,487	192	0	0	0	9,000	0	0	0	9,000	0	16,129	
006	100	21,187	800	0	0	0	0	0	0	0	0	0	21,987	
007	334	58,028	2672	0	0	0	0	0	0	0	0	0	60,700	
008	912	155,359	7296	0	0	0	0	0	0	0	0	0	173,165	
009	100	23,014	800	0	0	210,000	0	0	0	0	210,000	0	244,314	
010	60	12,602	480	0	41,000	0	0	0	0	0	41,000	0	56,132	
003	3,287	872,035	25,239	0	162,434	0	0	0	0	0	162,434	0	770,985	
001	104	25,137	832	0	8,866	0	0	0	0	0	8,866	0	36,433	
002	2,743	454,778	21944	0	125,000	0	0	0	0	0	125,000	0	607,972	
003	98	22,864	784	0	0	0	0	0	0	0	0	0	23,648	
004	342	69,255	2736	0	29,468	0	0	0	0	0	29,468	0	102,932	
004	4,781	853,080	38,248	0	239,204	0	0	0	0	0	239,204	0	1,142,492	
001	4,312	752,226	34486	0	215,000	0	0	0	0	0	215,000	0	1,012,472	
002	132	30,310	1056	0	0	0	0	0	0	0	0	0	31,366	
003	337	70,544	2896	0	24,204	0	0	0	0	0	24,204	0	98,654	
005	9,173	1,823,133	73,384	0	243,300	0	0	0	0	0	243,300	3,600	1,866,482	
001	8,063	1,296,635	64,504	0	225,000	0	0	0	0	0	225,000	0	1,687,189	
002	280	66,026	2240	0	0	0	0	0	0	0	0	0	68,266	
003	614	112,114	4912	0	0	0	0	0	0	0	0	0	117,026	
004	218	48,557	1728	0	18,300	0	0	0	0	0	18,300	3,500	73,000	
006	7,997	1,332,341	63,376	0	238,732	0	0	0	0	0	238,732	3,600	1,830,488	
001	6,889	1,104,604	55,112	0	220,000	0	0	0	0	0	220,000	0	1,390,716	
002	326	75,621	2608	0	0	0	0	0	0	0	0	0	78,229	
003	580	107,486	4720	0	0	0	0	0	0	0	0	0	112,216	
004	192	44,621	1636	0	18,732	0	0	0	0	0	18,732	3,500	66,325	
007	874	169,323	7,792	0	20,000	0	0	0	0	0	20,000	0	189,115	
001	903	146,903	7224	0	20,000	0	0	0	0	0	20,000	0	174,827	
002	71	13,720	568	0	0	0	0	0	0	0	0	0	14,288	
009	320	56,899	2,560	0	25,000	0	0	0	0	0	25,000	0	86,819	
001	16	3,840	128	0	0	0	0	0	0	0	0	0	3,877	
002	304	52,960	2432	0	25,000	0	0	0	0	0	25,000	0	81,642	

CPMS Contract No.: 7091
 Consultant: Brown and Caldwell
 September 9, 2013

San Jose, City of (CA) - Digester Final Design and O&M																	
Phase	Task	Hours	Rate	Amount	ASU	ASU	ASU	ASU	ASU	ASU	ASU	ASU	ASU	Task Maximum Payable			
					ASU	ASU	ASU	ASU	ASU	ASU	ASU	ASU	ASU				
010	Design Svcs During Construction	9,586	1,756,804	16,828	0	0	0	0	0	0	0	0	0	2,092,867			
001	Respond to RFIs	2,700	500,628	21,600	0	0	0	0	0	0	0	0	0	604,128			
002	Respond to Submittals	4,000	794,820	32,000	0	0	0	0	0	0	0	0	0	871,820			
003	Technical Info for Change Orders	1,464	277,492	11,712	0	0	0	0	0	0	0	0	0	328,579			
004	Record Drawings	942	149,069	7,536	0	0	0	0	0	0	0	0	0	179,705			
005	Site Visits	480	94,795	3,840	0	0	0	0	0	0	0	0	0	98,635			
011	Inspect Startup & Commission Asst	768	131,897	6,144	0	0	0	0	0	0	0	0	0	182,668			
001	Specialty Inspection Visits	72	14,635	576	0	0	0	0	0	0	0	0	0	17,836			
002	Witness Functional Tests	80	14,269	640	0	0	0	0	0	0	0	0	0	18,429			
003	One Week Startup Assistance	56	9,749	448	0	0	0	0	0	0	0	0	0	11,697			
004	Review Contractor Commission Plans	32	5,872	256	0	0	0	0	0	0	0	0	0	5,928			
005	Asst City Contractor Commissioning	80	13,591	640	0	0	0	0	0	0	0	0	0	15,731			
006	Asst City Final Contractor Walkthru	12	2,039	96	0	0	0	0	0	0	0	0	0	2,635			
007	Operations Manual	436	71,921	3,488	0	0	0	0	0	0	0	0	0	110,409			
013	Post Substantial Completion CS	1,510	283,503	12,080	0	0	0	0	0	0	0	0	0	338,083			
001	Operations Training	62	10,944	496	0	0	0	0	0	0	0	0	0	12,840			
002	Commissioning Verif & Training Svcs	608	111,168	4,864	0	0	0	0	0	0	0	0	0	136,532			
003	One-Year Process Monitoring	840	161,390	6,720	0	0	0	0	0	0	0	0	0	188,810			
SUBTOTAL				42,332	7,445,067	338,656	27,000	1,264,118	41,000	210,000	9,000	85,000	139,000	30,000	1,805,118	102,000	9,781,086
008	Opt Design Services	6,322	1,096,866	50,578	0	0	0	0	0	0	0	0	0	2,547,688	0	3,144,951	
001	Major Design Modifications	1,463	288,252	11,704	0	0	0	0	0	0	0	0	0	299,956	0	299,956	
002	Digester Heat Exchgr Capacity Test	112	17,361	896	0	0	0	0	0	0	0	0	0	18,257	0	18,257	
003	Design Addtl Digester Heat Exchgr	176	28,818	1,408	0	0	0	0	0	0	0	0	0	30,226	0	30,226	
004	Separate Dgn Plg for Digester GP	489	84,966	3,812	0	0	0	0	0	0	0	0	0	254,788	0	356,025	
005	Class A Planning and Design	1,584	303,400	12,872	0	0	0	0	0	0	0	0	0	316,072	0	316,072	
006	Detailed Instru & Control Wiring	2,430	359,711	19,440	0	0	0	0	0	0	0	0	0	379,151	0	379,151	
007	Contractor Pre-qual Process	68	14,730	544	0	0	0	0	0	0	0	0	0	15,274	0	15,274	
012	Opt Controls Config & Doc Asst	4,000	714,468	32,000	0	0	0	0	0	0	0	0	0	76,900	0	821,468	
OPTIONAL SUBTOTAL				10,322	1,811,326	82,576	0	254,788	0	0	0	0	0	0	254,788	15,000	2,236,429
MAXIMUM TOTAL COMPENSATION				52,654	9,256,393	421,232	27,000	1,518,906	41,000	210,000	9,000	85,000	139,000	30,000	2,069,906	177,000	12,017,626

CPMS Contract No.: 7091
Consultant: Brown and Caldwell
September 9, 2013

B-7

T-26444

EXHIBIT C: INSURANCE REQUIREMENTS

Consultant, at Consultant's sole cost and expense, shall procure and maintain for the duration of this Agreement, insurance against claims for injuries to persons or damages to property which may arise from, or in connection with, the performance of the services hereunder by the Consultant, its agents, representatives, employees or subcontractors or suppliers.

I. Minimum Scope and Limit of Insurance

There shall be no endorsements reducing the scope of coverage required below unless approved by the City's Risk Manager.

Type of Insurance	Minimum Limit
<p>1. Commercial General Liability</p> <p>The coverage provided by Insurance Services Office "occurrence" form CG 0001, including coverages for contractual liability, personal injury, broadform property damage, independent contractors, products and completed operations.</p>	<p>\$2,000,000 per occurrence for bodily injury, personal injury and property damage, including \$4,000,000 annual aggregate.</p>
<p>2. Automobile Liability</p> <p>The coverage provided by Insurance Services Office form number CA 0001. Coverage shall be included for all owned, non-owned and hired automobiles.</p>	<p>\$1,000,000 combined single limit per accident for bodily injury and property damage.</p>
<p>3. Workers' Compensation and Employer Liability</p> <p>As required by the Labor Code of the State of California.</p>	<p>\$1,000,000 combined single limit per accident for bodily injury and property damage.</p>

4. Other

Type of Insurance	Minimum Limit
4a. Professional Liability/Errors and Omissions Including coverages for negligent acts, errors or omissions arising from professional services provided under this contract, with any deductible not to exceed \$250,000 each claim	Not less than \$2,000,000 each claim and annual aggregate
4b. Environmental & Pollution Liability Including coverages for sudden and accidental pollution, gradual pollution, transportation and disposal of hazardous materials and cleanup costs, with any deductible not to exceed \$250,000 each claim	Not less than \$2,000,000 each claim

II. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to, and approved by, the City's Risk Manager. At the option of the City, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officials, employees, agents and contractors; or the Consultant shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses in an amount specified by the City's Risk Manager.

III. Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability Coverages

- a. The City, its officials, employees, and agents are to be covered as additional insureds as respects: liability arising out of activities performed by, or on behalf of, the Consultant; products and completed operations of the Consultant; premises owned, leased or used by the Consultant; or automobiles owned, leased, hired or borrowed by the Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officials, employees, and agents.
- b. The Consultant's insurance coverage shall be primary insurance as respects the City, its officials, employees, and agents. Any insurance or self-insurance maintained by the City, its officials, employees, and agents shall be excess of the contractor's insurance and shall not contribute with it.
- c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the City, its officials, employees, or agents.
- d. Coverage shall state that the Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- e. Coverage shall contain a waiver of subrogation in favor of the City, its officials, employees, and agents.

2. Workers' Compensation and Employers Liability

Coverage shall be endorsed to state carrier waives its rights of subrogation against the City, its officials, and agents.

3. All coverages

Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days' prior written notice has been given to the City; except that ten (10) days' prior written notice shall apply in the event of cancellation for non-payment of premium.

IV. Acceptability of Insurance

Insurance is to be placed with insurers acceptable to the City's Risk Manager.

V. Verification of Coverage

Consultant shall furnish the City with certificates of insurance and with original endorsements affecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

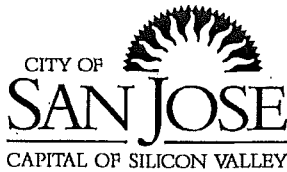
Copies of all the required ENDORSEMENTS shall be attached to the CERTIFICATE OF INSURANCE which shall be provided by the Consultant's insurance company as evidence of the stipulated coverages.

Proof of insurance shall be either emailed in pdf format to: Riskmgmt@sanjoseca.gov, or mailed to the following postal address (or any subsequent email or postal address as may be directed in writing by the Risk Manager):

City of San Jose – Finance Department
Risk & Insurance
200 East Santa Clara St., 14th Floor
San Jose, CA 95113-1905

VI. Subcontractors

Consultants shall include all Subcontractors as insureds under its policies or shall obtain separate certificates and endorsements for each Subcontractor.



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Kerrie Romanow
David Sykes
Jennifer A. Maguire

SUBJECT: SEE BELOW

DATE: August 26, 2013

Approved

Date

8/30/13

SUBJECT: AGREEMENT FOR PROGRAM MANAGEMENT CONSULTANT SERVICES TO SUPPORT IMPLEMENTATION OF THE SAN JOSÉ-SANTA CLARA REGIONAL WASTEWATER FACILITY CAPITAL IMPROVEMENT PROGRAM

RECOMMENDATION

- (a) Approve a Master Services Agreement with MWH Americas, Inc. for Program Management Consultant Services at the San José-Santa Clara Regional Wastewater Facility, (formerly known as the San Jose/Santa Clara Water Pollution Control Plant), for a term beginning from the date of execution through September 30, 2018, including up to two, one-year extension options, in an initial amount not to exceed \$7,295,000, and a maximum agreement amount not to exceed \$39 million, subject to the appropriation of funds.
- (b) Adopt a resolution authorizing the City Manager to exercise the City's option to extend the agreement for up to two, one-year terms, subject to the appropriation of funds.
- (c) Adopt the following 2013-2014 Appropriation Ordinance Amendments in the San José-Santa Clara Treatment Plant Capital Fund:
 - (1) Decrease the Ending Fund Balance in the amount of \$4,372,000; and
 - (2) Increase the Program Management appropriation to the Environmental Services Department in the amount of \$4,372,000.

OUTCOME

Approval of the recommendations will provide consultant resources and expertise to enable the Environmental Services Department to manage implementation of the Regional Wastewater Facility Capital Improvement Program (CIP), in alignment with the Program Management Strategy previously discussed with Council in April, 2013.

EXECUTIVE SUMMARY

The San José-Santa Clara Regional Wastewater Facility (Facility) is in need of significant rehabilitation and modernization. The Adopted CIP includes more than \$725 million in projected expenditures over the next five years. The City is seeking a program management consultant to assist with overall setup and management of a program that has more than doubled in size over the last adopted budget. The City went through a Request For Qualifications (RFQ) process and selected MWH Americas, Inc. as the highest ranked consultant. Negotiations have resulted in the agreement recommended for approval under this Council action. Additional recommendations authorize the City Manager to extend the agreement if necessary, and provide the appropriation actions necessary to fund this agreement for the remainder of this fiscal year.

BACKGROUND

Most of the infrastructure within the Facility is more than 50 years old and has exceeded its useful life, with repairs needed to every process area and facility. In 2007, the Facility completed an Infrastructure Condition Assessment report that identified nearly \$1 billion in needed projects to refurbish the aging electrical, mechanical, and structural assets. Since the assessment report focused only on existing condition deficiencies, a master planning effort was subsequently initiated to include a broader scope including the relationship between the different treatment processes, impacts of future regulations, changes to flow and loads, risks from rising sea level, and opportunities for implementing new technology or process optimization. The master planning process spanned a three-year period and extensively engaged the community, staff, and elected officials from San Jose, Santa Clara and the tributary agencies. In April 2011, a Preferred Alternative for the Draft Plant Master Plan was recommended by the Treatment Plant Advisory Committee (TPAC) and approved by Council. The Draft Master Plan recommends over 100 projects to be implemented over a 30-year planning period, at an estimated investment level of \$2 billion, with approximately \$1 billion to be invested over the next 10 years.

The Adopted 2014-2018 CIP includes \$725 million for funding capital improvements at the Facility. Significant projects include new emergency backup generators, energy cogeneration facilities, biosolids process transition, digester rehabilitation, headworks enhancements, primary rehabilitation, clarifier rehabilitation and odor control. The Adopted CIP will require capital expenditures well in excess of \$100 million annually, a significant increase over recent annual spending levels.

Management of the Facility Capital Improvement Program is led by the Environmental Services Department, in partnership with the Department of Public Works. The Program Management Strategy involves a mix of City staff and external resources to provide sufficient capacity and unique technical experience. To that end, an Executive Program Advisor and Technical Coordinator consultants have been retained to provide critical advice to guide the development of the program implementation and organizational strategy necessary for the City to effectively deliver a CIP of this magnitude.

Public Works routinely partners with other City departments as they build their capital improvement programs. The successful delivery of the Parks, Library and Public Safety Bond Programs, the Airport Program, City Hall and the Convention Center Expansion are recent examples of the effectiveness of this partnership. The City has gained significant project delivery experience and utilizes best practices for managing large programs, especially in the areas of oversight and reporting systems, robust program controls, improved communications and coordination with Operations and Maintenance staff, program management team co-location, and consultant assistance in negotiating and drafting complex contracts. In August 2012, the City Auditor issued a report entitled "Environmental Services: A Department at a Critical juncture". The Auditor's recommendations confirm and reinforce the planned partnership and best-practices approach.

ANALYSIS

Managing a CIP of this size will require a depth and breadth of resources not currently available within existing City staff. Similar to other wastewater programs of this size, the City is seeking a Program Management Consultant (PMC) to provide a broad array of services and program tools that will be necessary to effectively manage the program. These include program support services to initiate, plan, execute, monitor, control, commission and close out projects. A significant outreach effort took place to develop interest in the program and encourage a highly competitive procurement. A vendor open house was conducted to announce the upcoming RFQ, and a pre-proposal conference was held to provide details about the solicitation. Both were well-attended by the consulting community.

The City issued a Request for Qualifications on March 28, 2013, seeking a variety of program support services including program administration and controls, planning and engineering support and construction administration. Five Statements of Qualifications (SOQs) were received by the May 7, 2013 submittal deadline. All five SOQs were thorough, detailed and of a high quality, demonstrating that any of the five firms were highly qualified to provide the City with the services being sought. All five firms were invited to participate in oral board interviews which were conducted on May 30 and 31, 2013. The 7-member interview board consisted of Directors and Assistant Directors from Environmental Services, Public Works, Finance, and the City of Santa Clara, a Deputy Director from the San Francisco Public Utilities Commission, and the City's consultant Executive Program Advisor.

Evaluation of the Statements of Qualifications and the interview were based on the following criteria:

- Qualifications/expertise of the key personnel and the firms comprising the Project Team;
- Experience providing program management support services for water/wastewater programs of similar size, complexity and scope;
- Staffing plan and organizational structure involving the integration of owner's staff with those of the PMC to form an effective, cohesive team;

- Approach to managing resources and consultants, managing complex and large wastewater capital improvement programs, integrating owner and consultant staff, and identifying operational and project delivery efficiencies;
- City's Local and Small Business Preference Ordinance.

At the conclusion of the interviews, the top three ranked firms were invited to a follow-up interview, held on June 10, 2013, with only their proposed Program Manager and one other firm representative in attendance. This gave the board an opportunity to ask some focused, clarifying questions that were not asked at the first interview due to time constraints. At the conclusion of the follow-up interview, the board ranked the firms as follows:

Rank	Firm(s)
1	MWH Americas / Carollo
2	CH2M Hill / HDR
3	Parsons / Greeley and Hansen / Kennedy Jenks
4	AECOM / CDM Smith
5	URS Corporation

Four of the five firms qualified as Local Business Enterprises under the City's Local Business and Small Business Preference Ordinance. The fifth firm would likely have qualified as a Local Business, however they failed to submit the Certification Form. The rankings would not have been affected had they qualified. None of the five firms qualified for the Small Business Preference.

The board ranked MWH Americas / Carollo first because of the quality of their SOQ, their outstanding interview presentation and their responses to interview questions. MWH also articulated a solid approach to integrating resources and a plan for transitioning program management functions to City staff prior to completion of the PMC contract. Upon release of the final rankings and passage of the protest period, City staff began negotiations with MWH, resulting in the attached agreement, scope of services and fee structure.

The Consultant's services will be provided through a Master Services Agreement, with specific services authorized by task order, as they are required. The general services MWH will provide under the agreement are summarized below:

- Overall program management and administration, program startup and establishing the Program Management Office;
- Program schedule and budget controls, document controls, design and construction standards, quality assurance and quality control, health and safety plans;
- Project management, project validation, planning, design management, construction administration;
- Operations and maintenance input and coordination, asset management and knowledge transfer; and

- Supplemental Services such as studies, assessments, modeling, and technology evaluations.

The amount of the agreement is a not-to-exceed estimate of the level of service required to perform the requested services. The program management structure is being set up to form an integrated team that will involve significant consultant resources during the startup and early implementation phases, then tapering off as program systems are established, appropriate City staffing levels are established to support ongoing work, and internal expertise is gained. The consultant's resources will augment and support Environmental Services and Public Works staff in a co-located Program Management Office located on-site at the Facility. This integrated approach will rely heavily on City staff to perform most aspects of program and project management, with the consultant filling in the gaps. An integrated approach also allows for better communication, coordination and knowledge transfer and will present significant opportunities for professional growth and career development for City staff as consultant involvement tapers off and the program transitions entirely to City staff.

The nature of the Facility CIP necessitates a multi-year agreement for the proposed services, therefore the term of the agreement is proposed at five years, with two, one-year options. The level of funding for the proposed agreement has been set at a level of effort required to perform the necessary functions, and is consistent with numerous other wastewater programs of similar size and complexity. Staff recommends an initial amount of funding at \$7,295,000 for 2013-2014, with a 5-year agreement total not to exceed \$39 million, subject to the annual appropriation of funds. At this time, staff does not anticipate any increase to the overall Adopted FY 13-18 CIP due to this agreement.

The program management consultant staff will develop organizational and program knowledge as they work with the City staff in the integrated organization. As the program develops, it may be in the City's best interest to achieve efficiency by maintaining continuity of program staff for a longer duration. Including this flexibility in the agreement, through optional extension terms, avoids procurement costs and schedule delays, and allows for rapid deployment of resources as shifts in the program occur. If options are exercised, it will be reported to Council in the semi-annual report on the Facility CIP.

A key component of the program start-up phase will be to validate existing and proposed projects in the CIP to develop a clear scope, schedule and budget. This work involves identifying the drivers and goals for each project, and the related projects and process changes that will affect the project's delivery strategy and timing. This work is essential for rapidly and efficiently moving the program forward. It is also expected that program validation will package and sequence projects in an optimal manner to gain efficiencies through value engineering, resulting in lower overall program costs and faster implementation.

The program start-up phase will also be critical for identifying gaps and strategies for addressing issues such as asset management, odor control, energy efficiencies, warehousing, facility (buildings) improvements and construction management services. Identifying and developing these strategies are included in the current agreement scope, however, implementing them is not.

These services will be evaluated in the future for implementation by the most appropriate combination of City staff, outside consultants, and the Program Management Consultant. Any future involvement by the PMC that requires amending the agreement to add scope and compensation will be brought back to Council for approval.

EVALUATION AND FOLLOW-UP

Progress and performance on the delivery of the Facility CIP will be reported to TPAC on a monthly basis, and to Council through semi-annual updates to the Transportation and Environment Committee. Annual appropriations for Program Management services beyond 2013-2014 will be proposed and approved through the Budget process. A status report of the Program Management services received under the Master Agreement will be presented to TPAC on a quarterly basis. All Service Orders issued related to this Master Agreement will be reported to TPAC on the monthly summary of procurement and contract activity.

POLICY ALTERNATIVES

Alternative # 1: Direct City Staff to provide the required services with in-house resources.

Pros: Increased work options for City staff

Cons: A lack of existing capacity and expertise will result in significant delays initiating the program. As the more complex design-build projects get underway, the lack of flexibility to scale resources will cause delays in implementation of the projects.

Reason for not recommending: The complexity of implementing a program of this size, and the use of alternative project delivery methods requires the use of specialized expertise and experience in technical program management areas that currently does not exist within current City staff. The use of a program management consultant also results in fresh and innovative ideas being applied to the projects along with the flexibility required to meet changing staffing needs.

Alternative # 2: Reduce agreement scope and funding.

Pros: Lower expenditures for the program management agreement

Cons: The scope of services and the not to exceed funding for the master agreement would not be commensurate with the needs of the program as currently envisioned and would not be in alignment with those of other similar wastewater programs.

Reason for not recommending: A program of this size and complexity will require a significant amount of expertise and resources that do not currently exist within the City. The scope of services and the percentage of funds allocated to the master agreement are in alignment with those of other similar programs, and compared to some programs, are significantly lower. Reducing the scope and funding would either force staff to conduct other procurements for those services or to come back with an amendment to the master agreement to reflect a higher scope and funding level.

PUBLIC OUTREACH/INTEREST

- Criterion 1:** Requires Council action on the use of public funds equal to \$1,000,000 or greater. **(Required: Website Posting)**
- Criterion 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criterion 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

The RFQ was advertised in the *San José Post Record*, and was posted on BidSync, the City's Internet procurement posting site. This procurement was discussed at a vendor workshop held in November 2012 where more than 100 consultants, contractors and suppliers were in attendance. More than 50 people representing over 40 firms attended a pre-proposal conference held on April 11, 2013. This memorandum will be posted on the City's website for the September 17, 2013 City Council Agenda.

COORDINATION

This solicitation, agreement and memo have been coordinated with the Finance Department and the City Attorney's Office and will be presented to the Treatment Plant Advisory Committee (TPAC) at its September 12, 2013 meeting.

FISCAL/POLICY ALIGNMENT

This project is consistent with the Council approved Budget Strategy to focus on rehabilitating aging Plant infrastructure, improve efficiency, and reduce operating costs, and with the Environment and Utility Service Area policy outcomes of reliable utility infrastructure and healthy streams, rivers, marsh and bay.

Securing program management consultant services to establish project controls, reporting, auditing and coordination protocols responds directly to numerous recommendations contained in the City Auditor's August 2012 report "Environmental Services: A Department at a Critical Juncture".

COST SUMMARY/IMPLICATIONS

1. AMOUNT OF RECOMMENDATION: \$7,295,000

2. COST ELEMENTS OF AGREEMENT:

Professional Services	Per Task Order
Reimbursable Expenses	Per Task Order
Labor Rates	<u>See Agreement</u>
TOTAL AGREEMENT AMOUNT (Not to Exceed)	\$39,000,000

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

4. OPERATING COSTS: The consultant contract has been reviewed and was determined that it will have no significant adverse impact on the General Fund operating budget.

BUDGET REFERENCE

The table below identifies the fund and appropriation proposed to fund the contract recommended as part of this memorandum.

Fund #	Appn #/ RC#	Appn. Name	Current Appn.	Recommended Budget Action	Amount for Contract	2013-2014 Proposed Budget* (Page)	Last Budget Action (Date, Ord. No.)
512	7481/ 171620	Program Management	\$4,498,000	\$4,372,000	\$7,295,000	V-201	06/18/2013 Ord. No. 29271
512	8999	Ending Fund Balance	\$51,245,157	-\$4,372,000	N/A	V-201	06/18/2013 Ord. No. 29271
Totals			\$55,743,157	\$0	\$7,295,000		

*The City Council approved the 2013-2014 Capital Budget on June 18, 2013.

HONORABLE MAYOR AND CITY COUNCIL

August 26, 2013

Subject: Agreement for Program Management for the Regional Wastewater Facility CIP

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CEQA

Not a Project, File No. PP10-066(e), Services that involve no physical changes to the environment.

/s/

KERRIE ROMANOW
Director of Environmental Services

/s/

DAVID SYKES
Director of Public Works



JENNIFER A. MAGUIRE
Budget Director

For questions please contact Ashwini Kantak, Assistant Director, at (408) 975-2553.

Master Consultant Agreement

(CPMS Contract No. 7353)

This Master Agreement is between the City of San Jose, a municipal corporation ("City"), and MWH Americas, Inc, a corporation ("Consultant").

This Master Agreement is made and entered into this ___ day of _____ 20__ ("Contract Date").

THE CITY AND CONSULTANT AGREE AS FOLLOWS:

1. AGREEMENT SCOPE

- 1.1 General:** The Consultant will provide professional consulting services to the City on an as-needed basis pursuant to individual service orders issued in accordance with the terms and conditions of this Master Agreement. The type of professional consulting services the Consultant will provide can be described generally as Program Management Services and are more particularly described in Exhibit D.
- 1.2 Exhibits:** This Master Agreement consists of this agreement form, all Approved Service Orders (defined in Subsection 3.2 below), and the following exhibits, which are incorporated herein by reference:
- Exhibit A:** Service Order Form
 - Exhibit B:** Schedule of Rates and Charges
 - Exhibit C:** Insurance Requirements
 - Exhibit D:** Scope of Services
 - Exhibit E:** Notice of Exercise of Option to Extend Agreement
- 1.3 "Director":** "Director" means the Director of Environmental Services or the Director's designee.
- 1.4 Business Days:** "Business Day" and "Business Days" means the day(s) on which City Hall is open to conduct regular business with the public.
- 1.5 Entire Agreement:** This Master Agreement is the final, complete and exclusive understanding of the parties as to the matters contained herein. It supersedes all prior communications and understandings regarding such matters.
- 1.6 Amendments:** This Master Agreement may be modified only by a written amendment executed by the parties.

2. AGREEMENT TERM

The term of this Master Agreement is from the Contract Date to September 30, 2018, inclusive, unless terminated earlier pursuant to Section 19 below. Up to two (2) additional one (1) year terms may be authorized by the City, at the City's sole discretion, upon thirty (30) days written notice in accordance with Exhibit E.

3. SERVICE ORDERS

- 3.1 **General:** The Consultant will provide professional services to the City pursuant to individual service orders. Each service order will describe the services and deliverables (collectively "Work") the Consultant must provide, the time limit within which the Consultant must complete the Work and the compensation for the Work.
- 3.2 **Approved Service Order:** The Consultant can not start performing any Work until the Director has executed the service order for such Work ("Approved Service Order").
- 3.3 **Obligation to Issue:** The City has no obligation to issue any Approved Service Orders under this Master Agreement. The City may issue any number of Approved Service Orders provided that the sum of the maximum compensation of all Approved Service Orders can not exceed the Maximum Total Compensation (defined in Subsection 10.1 below).
- 3.4 **Preparation:** Each Approved Service Order will be in substantially the form specified in **Exhibit A**. Subject to the terms and conditions of this Master Agreement, the Consultant and the City will negotiate the specific requirements of each Approved Service Order.
- 3.4.1 **Director's Request to Prepare Proposal:** The Director will request the Consultant to prepare a written service order proposal. The Director will either request the Consultant to include a draft scope of Work in its proposal, or provide the Consultant with a draft scope of Work upon which the Consultant must base its proposal.
- 3.4.2 **Meeting/Site Inspection:** As part of the Director's request for the Consultant to prepare a service order, the Director may require the Consultant to meet to discuss the scope and location of the Work, the schedule of performance, and any other relevant details. The Director may also require the Consultant to conduct a site inspection for the purpose of identifying any issues that may need to be included in the scope of Work.
- 3.4.3 **Consultant Proposal:** The Consultant will prepare a written service order proposal in accordance with the Director's request. The Consultant will provide the proposal in both paper and electronic form. The proposal must include, but is not limited to, the following:
- The proposed scope of Work;
 - The name and assignment of each of Consultant's professional employees who will be principally responsible for performing the Work;
 - The names of any subconsultants the Consultant would use and the portion of Work they would perform;
 - A time schedule and cost for providing the Work;
 - A statement of proposed costs associated with Consultant's preparation of the service order proposal. If compensation for the preparation of the service order is to be provided; and
 - Any other information requested by the Director.
- 3.4.4 **Compensation for Preparing Service Order:** The City may compensate the Consultant for preparing a service order proposal **only if** the proposal is used to prepare an Approved Service Order. The City will not compensate the Consultant for preparing a service order proposal that is not used to prepare an Approved Service Order. If the

Consultant is entitled to compensation for preparing a service order proposal, the City and Consultant will negotiate a lump-sum amount as compensation and include such amount in the Approved Service Order.

- 3.4.5 Final Service Order:** Once the Consultant and the Director agree on the terms and conditions of the proposed service order, the City will prepare the final service order.
- 3.5 Incorporation of Terms and Conditions:** Each Approved Service Order incorporates the terms and conditions of this Master Agreement, and becomes a part of this Master Agreement.
- 3.5.1 No Conflicts:** An Approved Service Order must be consistent with – and cannot alter – the terms and conditions of this Master Agreement.
- 3.5.2 Agreement Controls:** The terms and conditions of this Master Agreement control over the terms and conditions contained in an Approved Service Order – even if the Approved Service Order expressly states that it is intended to control. Any conflicting terms and conditions in an Approved Service Order are invalid and unenforceable.
- 3.6 Performance:** Subject to Subsection 3.5 above, the Consultant must perform the Work in accordance with the specific requirements of the Approved Service Order. The Consultant must coordinate and cooperate with City staff, consultants and contractors in performing the Work, and must perform the Work to the Director's reasonable satisfaction.

4. DESIGN SERVICE REQUIREMENTS

- 4.1 General:** This Section applies to any design services the Consultant performs as part of an Approved Service Order.
- 4.2 Standard Documents:** The Consultant is, or will become, familiar with the City of San Jose, Department of Public Works, Standard Specifications, dated July 1992 (and any amendments thereto), the City of San Jose, Department of Public Works, Standard Details, dated July 1992 (and any amendments thereto), and any other standard documents the City uses to design and implement its capital projects (collectively "Standard Project Documents").
- 4.3 Use of Standard Documents:** Unless the Director provides prior written approval to the contrary, the final design documents prepared by the Consultant must be based on, and must incorporate, the Standard Project Documents.

5. CITY'S PROJECT MANAGER

Attachment B of each Approved Service Order will identify the City's project manager. The City can change its project manager by providing the Consultant with written notice.

6. CONSULTANT'S STAFFING

- 6.1 Consultant's Project Manager and Other Staffing:** Attachment B of each Approved Service Order will identify the following:
- The Consultant's project manager, and
 - The Consultant(s) and/or employee(s) of the Consultant *principally responsible* for providing the Work.

Attachment B will also indicate whether any of the identified persons are required to file a Statement of Economic Interests, Form 700 ("Form 700"). Anyone required to file a Form 700 must do so in accordance with the requirements of Subsection 17.2 below.

- 6.2 **Project Manager's Authority:** The Consultant's project manager must be authorized to act on behalf of the Consultant for purposes of decisions regarding the Approved Service Order.
- 6.3 **Staffing Changes:** The Director's prior written approval is required for the Consultant to remove, replace or add to any of its key staff identified in Attachment B of an Approved Service Order. Such approval shall not be unreasonably withheld.

7. USE OF SUBCONSULTANTS

- 7.1 **Authority to Use:** Attachment B of each Approved Service Order will state whether or not the Consultant can use subconsultants to provide any part of the Work. If Attachment B does not authorize the Consultant to use subconsultants, then the Director's prior written approval is required for the Consultant to use a subconsultant to perform any part of the Work.
- 7.2 **Use of Subconsultants:** If Attachment B of an Approved Service Order authorizes the use of one or more subconsultants, then it will identify the name of each such subconsultant and the portion of Work each such subconsultant will perform. The Director's prior written consent is required for the Consultant to remove, replace or add to the subconsultants identified in Attachment B.
- 7.3 **Subconsultant Work:** The Consultant warrants all services and deliverables provided by any subconsultant it uses shall meet the Standard of Performance set forth in Section 9 of this Agreement. Consultant represents that each such subconsultant is specially trained, experienced, and competent to perform its portion of the Work.

8. INDEPENDENT CONTRACTOR

- 8.1 **General:** The Consultant has control over its operations and employees, and is an independent contractor. The Consultant is not an agent or employee of the City, and does not represent or act as the City's agent or employee. The Consultant does not have any rights to retirement benefits or other benefits accruing to City employees, and expressly waives any claim it may have to any such rights.
- 8.2 **Subcontractors:** As an independent contractor, the Consultant has complete control over its subconsultants, subcontractors, suppliers, agents and any other person or entity with whom the Consultant contracts in furtherance of this Master Agreement and/or any Approved Service Order (collectively "Subcontractors"). Subject to the requirements of Section 7 above, the Consultant is solely responsible for selecting, managing and compensating its Subcontractors, and for ensuring they comply with this Master Agreement.
- 8.3 **Indemnity:** The Consultant shall place in each Subcontractor agreement indemnity obligations in favor of the City in the exact form and substance of those contained in Section 11 below.

9. STANDARD OF PERFORMANCE

The Consultant represents that it will only perform Work for which it possesses all necessary training, licenses and permits. The Consultant represents that its performance of all such Work will conform to the standard of practice of a professional that specializes in performing professional services of a like nature and complexity.

10. COMPENSATION

- 10.1 Maximum Total Compensation:** The maximum total compensation the City will pay the Consultant for all Approved Service Orders issued under this Master Agreement shall not exceed \$39,000,000 ("Maximum Total Compensation"). Except in the event of Consultant's failure to complete a deliverable under an existing Service Order in accordance with Section 9, Consultant shall have no obligation to continue performance of the Work upon invoicing the City for the Maximum Total Compensation amount.
- 10.2 Maximum Service Order Compensation:** The cover page of each Approved Service Order will specify the maximum amount payable to the Consultant for all professional fees, costs and expenses related to the Consultant providing the Work ("Maximum Service Order Compensation"). The Consultant shall complete all Work required by the Approved Service Order for no more than the Maximum Service Order Compensation.
- 10.3 Compensation Table:** Attachment C of each Approved Service Order is a compensation table setting forth the manner in which the City will pay the Maximum Service Order Compensation ("Compensation Table"). Each Compensation Table is subject to the terms and conditions set forth herein.
- 10.4 Compensation Table – Part 1:** Part 1 of the Compensation Table addresses compensation for the various tasks performed in accordance with the Approved Service Order. The following terms and conditions apply to Part 1 of the Compensation Table.
- 10.4.1 Task Numbers (Column 1):** Column 1 sets forth the task number(s) for which the City will compensate the Consultant. Each task number corresponds to the same task number in Attachment A of the Approved Service Order. If a task number included in Attachment A is not included in the Compensation Table, then the City will not compensate the Consultant separately for that task, and payment for such task is deemed included in the other task(s) for which the Consultant is receiving compensation.
- 10.4.2 Basis of Compensation (Column 2):** Column 2 identifies whether the City will pay the Consultant for the task(s) on a time-and-materials basis or on a fixed-fee (or lump-sum) basis.
- 10.4.3 Invoice Period (Column 3):** Column 3 identifies when the Consultant must submit its invoice for payment. If invoicing is monthly, the Consultant must submit its invoice to the City by the 10th Business Day of each month for Work completed during the previous month. If invoicing is upon the completion of a task or group of tasks, the Consultant must submit its invoice to the Director within 20 Business Days following completion of the task(s) to the Director's satisfaction. If invoicing is upon the completion of all Work, the Consultant must submit its invoice to the Director within 20 Business Days following completion of all Work to the Director's satisfaction.
- 10.4.3.1 Invoice:** Each invoice must include sufficient information and supporting documents to establish to the Director's satisfaction that the Consultant is entitled to the payment requested. The City will pay the undisputed portion of the invoice amount within 20 Business Days of the Director's approval of such undisputed amount. Consultant may suspend performance of the Work in the event any undisputed amount remains unpaid for more than sixty (60) days from the City's receipt of Consultant's invoice.
- 10.4.3.2 Invoices Based on Time and Materials:** If time and materials is the basis of compensation, then the Consultant will base its invoice on the hours, professional fees, costs, and charges associated with the Work completed

during the invoice period. If the Consultant is entitled to reimbursable expenses and/or separate payment for subconsultant costs, the invoice will include such expenses and/or costs associated with the Work completed during the invoice period. The City will compensate the Consultant in accordance with the Schedule of Rates and Charges attached to this Master Agreement as **Exhibit B**.

10.4.3.3 Monthly Invoices Based on Fixed Fee: If the Consultant invoices monthly for a "fixed fee," then the Consultant will base its monthly invoice on the percentage of Work completed during the previous month. If the task(s) completed the previous month involve the Consultant performing construction administration services, the percentage of work completed during the previous month will be measured based on the percentage of construction completed during the previous month. If the Consultant is entitled to reimbursable expenses and/or separate payment for subconsultant costs, the invoice will include such expenses and/or costs incurred during the previous month.

10.4.4 Compensation (Column 4): Column 4 sets forth the total compensation the City will pay the Consultant for completing the task(s).

10.4.4.1 Time & Materials: If time and materials is the basis of compensation, then the amount in Column 4 is a "not-to-exceed" or maximum amount. Any hours worked for which payment would result in a total exceeding the amount in Column 4 is at no cost to the City. If the Consultant completes the task(s) for less than the amount set forth in Column 4, the Director (in the Director's sole discretion) *may* use the cost savings to increase the budget of another task. The Director must authorize such reallocation of cost savings in writing.

10.4.4.2 Fixed Fee: If "fixed fee" is the basis of compensation, then the Consultant must complete the task(s) for the amount set forth in Column 4. Any hours worked for which payment would result in a total exceeding the amount in Column 4 are at no cost to the City.

10.5 Compensation Table – Part 2: Part 2 of the Compensation Table indicates whether or not the City will reimburse the Consultant separately for expenses incurred in providing the Work. The following terms and conditions apply if the City reimburses the Consultant separately for expenses.

10.5.1 Subconsultants: The cost of subconsultants is not treated as a reimbursable expense. Subsection 10.6 below addresses payment for the cost of subconsultants.

10.5.2 Maximum Amount of Reimbursable Expenses: The City will reimburse the Consultant for expenses up to the maximum amount set forth in the last column of Part 2. Any expenses that the Consultant incurs in excess of the stated maximum are at no cost to the City.

10.5.3 Expenses That Are Reimbursable: The City will reimburse the Consultant for only the expenses set forth below in the Reimbursable Expense Schedule. The City will reimburse these expenses at actual cost plus the specified markup. In no event shall the markup for a reimbursable expense exceed 10 percent.

Reimbursable Expense Schedule		Mark Up
1.	The cost of mailing, shipping and/or delivery of any documents or materials.	As specified, not to exceed 10%
2.	The cost of photographing, printing, reproducing and/or copying any documents or materials.	As specified, not to exceed 10%
3.	Telephone and facsimile transmission charges.	As specified, not to exceed 10%
4.	The rental of any specialized equipment to the extent the City's project manager has preapproved, in writing, the cost of such rental.	As specified, not to exceed 10%
5.	With the written pre-authorization of the City's project manager, mileage and other travel-related expenses to the same extent that the City reimburses its employees pursuant to the Employee Travel Policy (City Policy Manual, Sections 1.8.2 and 1.8.3). The Consultant acknowledges that it has received a copy of Sections 1.8.2 and 1.8.3 and is familiar with these sections of the Employee Travel Policy.	As specified, not to exceed 5%
6.	Any expenses expressly identified as being reimbursable in the Schedule of Rates and Charges or in an Approved Service Order.	As specified, not to exceed 10%

10.6 Compensation Table – Part 3: Part 3 indicates whether the City will compensate the Consultant separately for subconsultant costs incurred in providing any part of the Work. If the City will compensate the Consultant for subconsultant costs, the City will do so in accordance with the following terms and conditions:

10.6.1 Actual Costs: The Consultant can invoice the City for no more than the actual cost of each subconsultant plus up to a 5 percent markup.

10.6.2 Schedule of Rates and Charges: Any subconsultant rates and charges set forth in the Schedule of Rates and Charges must be the subconsultant's actual rates and charges exclusive of any markup. The City will compensate the Consultant in accordance with those rates and charges.

10.6.3 Maximum Amount: For each Approved Service Order, the City will compensate the Consultant for all subconsultants in a total amount not to exceed the amount set forth in the last column of Part 3. Any additional subconsultant costs that the Consultant incurs in excess of the specified maximum amount are at no cost to the City.

10.7 Compensation Table – Part 4: Part 4 sets forth the lump-sum amount the City will pay the Consultant for preparing the Approved Service Order. The City will pay the Consultant the lump-sum amount within 20 Business Days after the Director executes the Approved Service Order.

10.8 Schedule of Rates and Charges: The Schedule of Rates and Charges attached as **Exhibit B** will be used to pay for Work provided on a time-and-materials basis. The Schedule of Rates and Charges is subject to the following requirements.

10.8.1 Premium Pay: "Premium Pay" is any higher or additional charge for performing any Work because of activities such as, but not limited to, expediting performance, working over 8 hours per day, working on Saturdays, Sundays or holidays, or working a swing or graveyard shift. The City will pay Premium Pay only in the following circumstances: (a) the Schedule of Rates and Charges provides for the payment of Premium Pay, and (b) the Consultant obtains the Director's prior written consent to perform work in a manner that would require Premium Pay.

10.8.2 No Rate Increases: The City will not increase the Schedule of Rates and Charges during the Master Agreement term.

10.8.3 Conflict: In the event of a discrepancy between this Section and the Schedule of Rates and Charges, this Section governs.

10.9 Tax Forms Required: The following are conditions on the City's obligation to process any payment under the Master Agreement or any Approved Service Order:

10.9.1 U.S. Based Person or Entity: If the Consultant is a U.S. based person or entity, the Consultant acknowledges and agrees that the Consultant is required to provide the City with a properly completed Internal Revenue Service Form W-9 before the City will process payment. If the Consultant is a U.S. based person or entity, but has neither a permanent place of business in California nor is registered with the California Secretary of State to do business in California, the Consultant acknowledges and agrees that the Consultant is required to provide the City with a properly completed California Franchise Tax Board form related to nonresident withholding of California source income.

10.9.2 Non-U.S. Based Person or Entity: If the Consultant is not a U.S. based person or entity, the Consultant acknowledges and agrees that the Consultant is required to provide the City with the applicable Internal Revenue Service form related to its foreign status and a California Franchise Tax Board form related to nonresident withholding before the City will process payment.

11. INDEMNIFICATION

11.1 Obligation: The Consultant shall defend, indemnify and hold harmless the City and its officers, employees and agents against all claims, losses, damages, injuries, expenses or liabilities that – directly or indirectly, or in whole or in part - arise out of, pertain to, or relate to any of the following:

- The Consultant's negligent performance of all or any part of the services or deliverables provided pursuant to an Approved Service Order; or
- Any negligent act or omission, recklessness or willful misconduct of the Consultant, any of its Subcontractors, anyone directly or indirectly employed by either the Consultant or any of its Subcontractors, or anyone that they control; or
- Any infringement of the patent rights, copyright, trade secret, trade name, trademark, service mark or any other proprietary right of any person(s) caused by the City's use of any services, deliverables or other items provided by the Consultant pursuant to an Approved Service Order; or

- Any breach of this Master Agreement by the Consultant or any Subcontractor.
- 11.2 **Limitation on Obligation:** The obligation in Subsection 11.1 above does not apply to the extent that any claim, loss, damage, injury, expense or liability results from the sole negligence or willful misconduct of the City or its officers, employees or agents.
- 11.3 **Duty to Defend:** The Consultant's obligation in Subsection 11.1 above applies to the maximum extent allowed by law and includes defending the City as set forth in Sections 2778 and 2782.8 of the California Civil Code. Upon the City's written request, the Consultant, at its own expense, shall defend any suit or action that is subject to the obligation in Subsection 11.1 above.
- 11.4 **Insurance:** The City's acceptance of any insurance in accordance with Section 12 below does not relieve the Consultant from its obligations under this Section 11. The Consultant's obligations under this Section 11 apply whether or not the insurance required by the Master Agreement covers any damages or claims for damages.
- 11.5 **Survival:** The Consultant's obligations under this Section 11 survive the expiration or earlier termination of the Master Agreement.
- 11.6 **Third Parties:** Due to the nature of the program management relationship between the parties, the City shall include a provision in all construction phase contracts entered into by the City relating to the program management services to be provided by the Consultant requiring that each contractor defend, indemnify and hold Consultant harmless to the same extent that the contractor is obligated to defend, indemnify and hold City harmless relating to those contracts. City shall also include a provision in the construction phase contracts requiring each contractor to name Consultant as an additional insured on the contractor's commercial general liability and auto liability insurance policies applicable to the program. This Section 11.6 shall only apply to new agreements entered into after the Contract Date and shall not apply to existing City contracts or to procurements that are pending prior to the Contract Date.

12. INSURANCE REQUIREMENTS

- 12.1 **General:** The Consultant shall comply with the insurance requirements set forth in Exhibit C for the Master Agreement term.
- 12.2 **Documentation:** Before performing any services, the Consultant must submit to the City's designated risk manager ("Risk Manager"), for the Risk Manager's written approval, all documents demonstrating compliance with the requirements of Exhibit C.
- 12.3 **Changes:** The Risk Manager may amend or waive, in writing, any of the requirements contained in Exhibit C.

13. OWNERSHIP OF WORK PRODUCT

- 13.1 **Ownership:** Except for the Software Tools as defined in Section 13.5 below, the City owns all rights in and to any of the following work product (including electronic equivalents) immediately when and as created by the Consultant or any of its Subcontractors pursuant to an Approved Service Order: drawings, plans, elevations, sections, details, schedules, diagrams, specifications, studies, reports, surveys, data, information, models, sketches, and other similar documents and materials (collectively "Work Product"). Consultant shall not use, market, or otherwise disseminate the Work Product without the City's express written consent.
- For purposes of this Master Agreement only, Work Product shall not include any pre-existing figures, drawings, analytical methods and know-how, or any new or improved analytical

methods or know-how developed by Consultant in the course of creating the Work Product ("Consultant Materials"). The City shall retain a perpetual, non-transferable and royalty-free license to use Consultant Materials which are embodied or contained in the Work Product.

- 13.2 **Copyright:** To the extent permitted by Title 17 of the United States Code, the Work Product is deemed a work for hire and all copyrights in such Work Product are the property of the City. In the event it is ever determined that any Work Product is not a work for hire under United States law, the Consultant hereby assigns to the City all copyrights to such works when and as created.
- 13.3 **City's Reuse:** The City's reuse of any Work Product is subject to California Business and Professions Code Sections 5536.25, 6735, 6735.3, 6735.4 or 8761.2, whichever is applicable.
- 13.4 **Consultant's Reuse:** With the Director's prior written consent, the Consultant may retain and use copies of the Work Product for reference and as documentation of experience and capabilities.
- 13.5 **Ownership of Software Tools:** Consultant will retain all right, title and interest in and to any and all software tools, web parts, processes, and modeling tools (whether developed by Consultant or licensed by Consultant from any third party), ("Software Tools") used, developed, configured or modified by Consultant in performance of the Work or preparation of the Work Product. City shall retain a perpetual, non-transferable and royalty-free license to use Software Tools, for the purposes set forth in this Agreement. Any modification or reuse of the Software Tools without written verification or adaptation by Consultant for the specific purpose intended will be at the City's sole risk and without liability or legal exposure to Consultant or to Consultant's subcontractors and subconsultants.

14. DISCLOSURE OF WORK PRODUCT

- 14.1 **Prohibition:** Except as authorized by the Director or as otherwise required by law, the Consultant shall not disclose any of the following to a third party: (a) Work Product, (b) discussions between the City and Consultant, or (c) information prepared, developed or received by the Consultant or any of its Subcontractors in the course of performing any Work.
- 14.2 **Notification:** The Consultant will immediately notify the Director if it is requested by a third party to disclose any Work Product, discussions or information that the Consultant is otherwise prohibited from disclosing.
- 14.3 **Limit on Prohibition:** The prohibition in Subsection 14.1 above does not apply to disclosures by and between the Consultant and its Subcontractors that are needed to perform any Work.
- 14.4 **Survival:** This Section 14 survives the expiration or earlier termination of this Master Agreement.

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15. AUDIT/INSPECTION OF RECORDS

- 15.1 **Retention Period:** The Consultant shall retain the following records (collectively "Records") for a minimum of 3 years from the date of the City's final payment to the Consultant under this Master Agreement or for any longer period required by law:
- All ledgers, books of accounts, invoices, vouchers, canceled checks, and other records relating to the Consultant's charges for performing services, or to the Consultant's expenditures and disbursements charged to the City; and
 - All Work Product and other records evidencing Consultant's performance.
- 15.2 **Producing Records:** At any time during the Master Agreement term or during the period of time that the Consultant is required to retain the Records, the City Manager, the Director, the City Attorney, the City Auditor, or a designated representative of any of these officers may request, in writing, production of all or a portion of the Records. The Consultant shall produce the requested Records at City Hall during normal business hours, or at any other location and time mutually agreed upon by the parties. The Consultant shall produce the requested Records at no cost to the City.
- 15.3 **State Auditor:** In accordance with Government Code Section 8546.7, the Consultant may be subject to audit by the California State Auditor with regard to the Consultant's performance of this Master Agreement if the compensation if the Maximum Total Compensation exceeds \$10,000.

16. NONDISCRIMINATION/NON-PREFERENCE

- 16.1 **Prohibition:** The Consultant shall not discriminate against or grant preferential treatment to any person on the basis of race, sex, color, age, religion, sexual orientation, actual or perceived gender identity, disability, ethnicity or national origin. This prohibition applies to recruiting, hiring, demotion, layoff, termination, compensation, fringe benefits, advancement, training, apprenticeship and other terms, conditions, or privileges of employment, subcontracting and purchasing.
- 16.2 **Reasonable Accommodation:** The prohibition in Subsection 16.1 above is not intended to preclude the Consultant from providing a reasonable accommodation to a person with a disability.
- 16.3 **Compliance Reports:** The City's "Compliance Officer", as defined in Section 4.08.020 of the San José Municipal Code, is responsible for administering this Section 16. The Compliance Officer may require the Consultant to file, and cause any Subcontractor to file, reports demonstrating compliance with this Section 16. Any such reports shall be filed in the form and at such times as the Compliance Officer designates. They shall contain such information, data and/or records as the Compliance Officer determines is needed to show compliance with this provision.
- 16.4 **Violation:** A violation of the prohibition in Subsection 16.1 above or any part of this Section 16 constitutes the following: (a) a material breach of this Master Agreement; (b) a misdemeanor violation of Chapter 4.08 of the San José Municipal Code; and (c) a ground for debarment in accordance with Chapter 4.10 of the San José Municipal Code.
- 16.5 **Subcontracts:** The Consultant shall include the above Subsections 16.1 through 16.4, inclusive, in each subcontract that it enters into in furtherance of this Master Agreement.

- 16.6 **Waiver:** The Compliance Officer may waive any of the requirements of this provision if the Compliance Officer determines that the Consultant has its own nondiscrimination/nonpreference requirements or is bound in the performance of this Master Agreement by the nondiscrimination/nonpreference requirements of another governmental agency, and the nondiscrimination/nonpreference provisions of the Consultant or other governmental agency are substantially the same as those imposed by the City.

17. CONFLICT OF INTEREST

- 17.1 **General:** The Consultant represents that it is familiar with the local and state conflict of interest laws, and agrees to comply with those laws in performing this Master Agreement. The Consultant certifies that, as of the Contract Date, it was unaware of any facts constituting a conflict of interest or creating an appearance of a conflict of interest. The Consultant shall avoid all conflicts of interest and shall make reasonable efforts to avoid appearances of conflicts of interest in performing this Master Agreement. The Consultant has the obligation of determining if the manner in which it performs any part of this Master Agreement results in a conflict of interest or an appearance of a conflict of interest, and shall immediately notify the City in writing if it becomes aware of any facts giving rise to a conflict of interest or the appearance of a conflict of interest.
- 17.2 **Filing Form 700:** In accordance with the California Political Reform Act (Government Code Sections 8311-83116), the Consultant shall cause each person identified in Attachment B of an Approved Service Order as having to file a Form 700 to do each of the following:
- Disclose the categories of economic interests in Form 700 as required by the Director;
 - Complete and file the Form 700 no later than 30 calendar days after the date the Consultant executes the Approved Service Order; and
 - File the original Form 700 with the City's Clerk with a copy submitted to the Director.
- 17.3 **Future Services:** The Consultant acknowledges each of the following with regard to performing future services for the City:
- The Consultant's performance of Work in an Approved Service Order may create an actual or apparent conflict of interest with regard to the Consultant performing or participating in the performance of some related *future* services, particularly when the Work in an Approved Service Order comprises one element or aspect of a multi-phase process or project;
 - Such an actual or apparent conflict of interest would be a ground for the City to disqualify the Consultant from performing or participating in the performance of such future services; and
 - The Consultant is solely responsible for considering what potential conflicts of interest, if any, performing Work in an Approved Service Order might have on its ability to obtain contracts to perform future services.
- 17.4 **Violations:** The Consultant's violation of Subsections 17.1 or 17.2 above is a material breach.

18. ENVIRONMENTALLY PREFERABLE PROCUREMENT POLICY

- 18.1 **General:** The Consultant shall perform its obligations under this Master Agreement in conformance with City Council Policy 1-19, entitled "Prohibition of City Funding for Purchase of

Single Serving Bottled Water," and City Council Policy 4-6, entitled "Environmentally Preferable Procurement Policy."

18.2 Prohibition of City Funding for Purchase of Single Serving Bottled Water: The City's policy is that City funds should not be used for the purchase of single-serving bottled water except for any of the following:

- Public safety emergencies, investigations and extended deployments or activation of the Office of Emergency Services;
- Situations where there is a high risk of cross-contamination with non-potable water; or
- Situations where there are no reasonable alternatives to bottled water, such as large public events and when large quantities of water need to be distributed for health and safety reasons.

An invoice seeking reimbursement from City for the cost of single-serving bottled water under one of the above exceptions must be accompanied by a waiver form provided by the City and signed by the Director.

18.3 Environmentally Preferable Procurement Policy: The Environmentally Preferable Procurement Policy, along with a brief policy description, is located on the City's website at the following link: <http://www.sanjoseca.gov/DocumentCenter/View/3862>. Environmental procurement policies and activities related to the completion of any Work will include, whenever practicable, but are not limited to:

- The use of recycled and/or recyclable products in daily operations (i.e. 30%, 50%, 100% PCW paper, chlorine process free, triclosan free hand cleaner, etc.);
- The use of energy-star compliant equipment;
- The use of alternative fuel and hybrid vehicles, and implementation of protocols aimed at increasing the efficiency of vehicle operation;
- The implementation of internal waste reduction and reuse protocol(s); and
- Water and resource conservation activities within facilities, including bans on individual serving bottled water and the use of compostable food service products.

19. TERMINATION

19.1 For Convenience: The Director may terminate this Master Agreement and/or any Approved Service Order(s) at any time and for any reason by giving the Consultant written notice of the termination. The written notice must set forth the effective date of the termination, which must be at least 7 Business Days after the date of the written notice.

19.2 For Cause: The Director may terminate this Master Agreement and/or any Approved Service Order(s) immediately upon written notice for any material breach by the Consultant. If the Director terminates the Master Agreement and/or any Approved Service Order(s) for cause and obtains the same services from another consultant at a greater cost, the Consultant is responsible for such excess cost in addition to any other remedies available to the City.

19.3 Delivery of Work: If the Director terminates the Master Agreement and/or any Approved Service Order(s) – whether for convenience or for cause – the Director has the option of requiring the

Consultant to provide to the City any finished or unfinished Work Product prepared by the Consultant up to the date of Consultant's receipt of the written notice of termination.

- 19.4 **Compensation:** The City will pay the Consultant the actual value of Work satisfactorily rendered by the Consultant to the City up to the date of Consultant's receipt of the written notice of termination. For Work to be "satisfactorily rendered," the Director must determine that the Consultant provided the Work in accordance with the terms and conditions of this Master Agreement and/or any applicable Approved Service Order. The parties will agree upon the actual value of satisfactorily rendered Work based on the Schedule of Rates and Charges and the Compensation Table attached to the appropriate Approved Service Order.
- 19.5 **Receipt of Notice:** For purposes of this provision, the Consultant's receipt of the written notice of termination will be determined based on the date of actual receipt or based on Subsection 20.2 below, whichever occurs first.

20. NOTICES

- 20.1 **Manner of Giving Notice:** All notices and other communications required by this Master Agreement must be in writing, and must be made via e-mail, personal service or United States mail, postage prepaid.
- 20.2 **When Effective:** A notice or other communication that is e-mailed is effective when sent. A notice or other communication that is personally served is effective when personally delivered. A notice or other communication that is mailed is effective 3 Business Days after deposit in the United States mail.
- 20.3 **To Whom Given:** All notices and other communications between the parties regarding a specific Approved Service Order must be given to the project managers identified in the Approved Service Order. All notices and other communications between the parties regarding the Master Agreement must be given to the individuals identified below using the appropriate contact information for giving notice:

To the City: City of San José
Environmental Services Department
Attn: Ashwini Kantak
200 E. Santa Clara Street, 10th Floor
San Jose, CA 95113
(408) 975-2553
Ashwini.Kantak@sanjoseca.gov

To the Consultant: MWH Americas, Inc.
Attn: JaNell Cook
2121 N. California Blvd., Suite 600
Walnut Creek, CA 94596
(408) 954-7321
JaNell.Cook@mwhglobal.com

- 20.4 **Changing Contact Information:** Either party may change its contact information for receiving written notices and communications regarding the Master Agreement by providing notice of such change to the other party pursuant to this Section 20.

21. MISCELLANEOUS

- 21.1 **Gifts Prohibited:** The Consultant represents that it is familiar with Chapter 12.08 of the San José Municipal Code, which generally prohibits a City officer or designated employee from

- accepting any gift. The Consultant shall not offer any City officer or designated employee any gift prohibited by Chapter 12.08. The Consultant's violation of this Subsection 21.1 is a material breach.
- 21.2 Disqualification of Former Employees:** The Consultant represents that it is familiar with Chapter 12.10 of the City's Municipal Code, which generally prohibits a former City officer and designated employee from providing services to the City connected with his/her former duties or official responsibilities. The Consultant shall not use either directly or indirectly any officer, employee or agent to perform any services if doing so would violate Chapter 12.10. The Consultant's violation of this Subsection 21.2 is a material breach.
- 21.3 Waiver of a Violation:** The City's waiver of any violation of this Master Agreement by the Consultant is not a waiver of any other violation by the Consultant.
- 21.4 Acceptance of Services Not a Waiver:** The City's acceptance of any service or deliverable is not a waiver or release of any professional duty of care applicable to such service or deliverable, or of any right of indemnification, any insurance requirements, or any other term or condition of this Master Agreement.
- 21.5 Compliance with Laws:** The Consultant shall perform all services consistent with all applicable federal, state and local laws, ordinances, codes and regulations. This obligation is not limited in any way by the Consultant's obligation to comply with any specific law, ordinance, code or regulation set forth elsewhere in this Master Agreement.
- 21.6 Business Tax:** The Consultant represents and warrants that it currently has a City business tax certificate or exemption, if qualified, and will maintain such certificate or exemption for the Master Agreement term.
- 21.7 Assignability:** Except to the extent this Master Agreement authorizes the Consultant to use Subcontractors, the Consultant shall not assign any part of this Master Agreement without the Director's prior written consent. The Director, at the Director's discretion, may terminate this Master Agreement if a violation of this provision occurs.
- 21.8 Governing Law:** California law governs the construction and enforcement of this Master Agreement.
- 21.9 Disputes:** Any litigation resulting from this Master Agreement will be filed in and resolved by a federal or state court in California.
- 21.10 Survival of Provisions:** If a court finds any part of this Master Agreement unenforceable, all other parts shall remain enforceable.
- 21.11 Headings:** The section and exhibit headings are for convenience only and are not to be used in its construction.

IN WITNESS WHEREOF, the City and Consultant have caused this Master Agreement to be executed by their respective duly authorized representatives as follows.

NOTE: The Consultant must make one of the following representations by placing its initials in the space provided. The City will not process the Master Agreement unless the Consultant has initialed one of the provisions.

_____ The Consultant certifies that the Consultant has a permanent place of business in California or is registered with the California Secretary of State to do business in California. The Consultant will file a California tax return and withhold on payments of California source income to nonresidents

when required. If the Consultant ceases to have a permanent place of business in California or ceases to do any of the above, the Consultant will promptly notify the City at the address specified in Subsection 20.3 of this Master Agreement.

Or

_____ If the Consultant is unable to make the above certification, the Consultant acknowledges and agrees to provide the City with the applicable tax forms issued by the Internal Revenue Service and California Franchise Tax Board, as applicable, as specified in Section 10.9 of this Master Agreement.

City of San José

Consultant

By _____
Name: _____ Date _____
Title: _____

By _____
Name _____ Date _____
Title: _____

Approval as to Form (City Attorney):

Master Agreement Form Approved by the Office of the City Attorney
(Maximum Total Compensation is \$100,000 or less, and standard provisions of the Master Agreement form are not altered.)

By _____
Name: _____ Date _____
Title: _____

Approved as to Form:

Sr. Deputy City Attorney Date _____

EXHIBIT A

City of San José
Master Consultant Agreement – Approved Service Order
Cover Page

1a. CPMS Contract No.: [Insert CPMS No.] 1b. AC Contract No.: [Insert AC No.]

2. Approved Service Order No. [Insert Number]

3. Consultant's Name: [Insert Consultant's Legal Name as it Appears on the Master Agreement]

4. Project Name: [Insert Name of Project for which Consultant will provide services] ("Project")

5. Project Location: [Insert the location of the Project]

6. The Consultant and the City will implement this Approved Service Order in accordance with the Master Agreement, this cover page and Attachments "A" (Tasks), "B" (Terms and Conditions) and "C" (Compensation Table), which are incorporated herein by references.

7. Budget/Fiscal:

a. Current unencumbered amount in Master Agreement:

\$

b. Maximum Service Order Compensation for this Approved Service Order:

\$

c. New unencumbered balance in Master Agreement (7.a – 7.b):

\$

d. **Appropriation Certification:** I certify that an unexpended appropriation in the amount of the Maximum Service Order Compensation is available in the following fund(s) and that such fund(s) will be encumbered to pay for this Approved Service Order.

Fund: _____ Appn: _____ RC: _____ Amount: \$ _____

Fund: _____ Appn: _____ RC: _____ Amount: \$ _____

Authorized Signature: _____ Date: _____

8. Division Analyst Approval: _____ Date: _____

9. Consultant Approval: _____ Date: _____

10. Approval as to Form (City Attorney):

Service Order Form Approved by the Office of the City Attorney

(Maximum Service Order Compensation is \$100,000 or less, and the provisions of the service order form are not altered.)

Approved as to Form: _____ Date: _____

(Sr.) Dept. City Attorney

11. City Director Approval: _____ Date: _____

S
H
R

EXHIBIT A

Attachment A: Tasks

The Consultant shall provide the services and deliverables set forth in this **Attachment A**. The Consultant shall provide all services and deliverables required by this **Attachment A** to the satisfaction of the City's project manager.

General Description of Project for which Consultant will Provide Services: [Optional provision. Insert a general project description if you believe it would help understand the tasks. Otherwise delete.]

Task No. 1: [Insert title of task.]

- A. **Services:** [Insert a description of the services.]
- B. **Deliverables:** [Insert a description of the deliverables.]
- C. **Completion Time:** The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:
 - On or before the following date: _____.
 - On or before ____ Business Days from _____.

Task No. 2: [Insert title of task.]

- A. **Services:** [Insert a description of the services.]
- B. **Deliverables:** [Insert a description of the deliverables.]
- C. **Completion Time:** The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:
 - On or before the following date: _____.
 - On or before ____ Business Days from _____.

Task No. 3: [Insert title of task.]

- A. **Services:** [Insert a description of the services.]
- B. **Deliverables:** [Insert a description of the deliverables.]
- C. **Completion Time:** The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:
 - On or before the following date: _____.
 - On or before ____ Business Days from _____.

EXHIBIT A

Attachment B: Terms and Conditions

1. **City's Project Manager:** The City's project manager for this Approved Service Order is:

Name:	Phone No.:
Department:	E-mail:
Address:	

2. **Consultant's Project Manager and Other Staffing:** Identified below are the following: (a) the Consultant's project manager for this Approved Service Order, and (b) the Consultant(s) and/or employee(s) of the Consultant who will be principally responsible for providing the services and deliverables. *If an individual identified below is required to file a Form 700, the Consultant must comply with the requirements of Subsection 17.2 of the Master Agreement, entitled "Filing Form 700."*

		<u>Required to File Form 700?</u>	
<u>Consultant's Project Manager</u>		Yes	No
Name:	Phone No.:		
Address:	E-mail:		
<u>Other Staffing</u>			
<u>Name:</u>	<u>Assignment:</u>		
1.			
2.			
3.			
4.			
5.			

DRAFT--Contact the Office of the City Clerk at (408) 535-1260 or CityClerk@sanjoseca.gov for final document.

EXHIBIT A

3. **Subconsultants:** Whichever of the following is marked applies to this Approved Service Order:

- The Consultant can *not* use any subconsultants.
- The Consultant can use the following subconsultants to assist in providing the required services and deliverables:

<u>Subconsultant's Name</u>	<u>Area of Work</u>
1.	
2.	
3.	

4. **Reimbursable Expenses:** If the Compensation Table set forth in **Attachment C** of this Approved Service Order states that the City will reimburse the Consultant for expenses, then only the expenses identified in Subsection 10.5.3 of the Master Agreement are Reimbursable Expenses unless the following box is marked and additional reimbursable expenses are set forth:

- In addition to the expenses identified in Subsection 10.5.3 of the Master Agreement, the following expenses are Reimbursable Expenses:

<u>Additional Reimbursable Expense(s)</u>	<u>Mark-up</u>
1. _____	_____
2. _____	_____
3. _____	_____

Notwithstanding the foregoing, any additional reimbursable expense(s) set forth in the above table will be disregarded if the Compensation Table states that the City will *not* reimburse the Consultant for any expenses.

EXHIBIT A

Attachment C: Compensation Table

The City will compensate the Consultant for providing the services and deliverables set forth in Attachment A in accordance with this Compensation Table. This Compensation Table is subject to the terms and conditions set forth in the Master Agreement, including without limitation Section 10 of the Master Agreement.

Part 1 – Compensation for Services and Deliverables			
Column 1	Column 2	Column 3	Column 4
Task Nos. from Attachment A	Basis of Compensation	Invoice Period	Compensation
	<input type="checkbox"/> Time & Materials <input type="checkbox"/> Fixed Fee	<input type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s)	<input type="checkbox"/> Completion of Work \$
	<input type="checkbox"/> Time & Materials <input type="checkbox"/> Fixed Fee	<input type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s)	<input type="checkbox"/> Completion of Work \$
	<input type="checkbox"/> Time & Materials <input type="checkbox"/> Fixed Fee	<input type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s)	<input type="checkbox"/> Completion of Work \$
	<input type="checkbox"/> Time & Materials <input type="checkbox"/> Fixed Fee	<input type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s)	<input type="checkbox"/> Completion of Work \$
Part 2 – Reimbursable Expenses			
No expenses are separately reimbursable. The amount(s) in Column 4 of Part 1 include(s) payment for all expenses.		<input type="checkbox"/> Expenses are separately reimbursable in the maximum amount of: \$	
Part 3 – Subconsultant Costs			
Subconsultant costs are <i>not</i> separately compensable. The amount(s) in Column 4 of Part 1 include(s) subconsultant costs.		<input type="checkbox"/> Subconsultant costs are separately compensable in the maximum amount of: \$	
Part 4 – Compensation for Preparation of Approved Service Order			
The lump-sum compensation the City will pay the Consultant for preparing the Approved Service Order is:		\$	
		Maximum Service Order Compensation (sum of Parts 1 through 4): \$	

DRAFT--Contact the Office of the City Clerk at (408) 535-1260 or CityClerk@sanjoseca.gov for final document.

CPMS Contract No.: 7353
Consultant: MWH Americas, Inc.

EXHIBIT A

CALCULATION OF COMPENSATION AMOUNT

DRAFT--Contact the Office of the City Clerk at (408) 535-1260 or CityClerk@sanjoseca.gov for final document.

City Order - Attachment C
Form Approved by the Office of the City Attorney
Revised: February 28, 2013

C-2 of ___

444234-3 / T-12798

EXHIBIT B SCHEDULE OF RATES AND CHARGES

This Exhibit describes the compensation to be paid to Consultant for labor and reimbursable expenses. It also describes the methodologies used to calculate the basis for compensation (e.g., Time & Materials and/or Fixed Fee) and the Maximum Total Compensation.

SECTION 1 - Consultant Billing Rates

1.1 Labor Rates:

- Consultant's labor rates shall be based on "actual hourly salary rates" times a multiplier as outlined in the Billing Rate Factors listed in Table B-1. The multiplier shall be the only markup applied to the employee's or individual's actual hourly salary rate and includes all indirect labor and related fringe benefits, payroll taxes, insurance costs, occupancy costs, and related expenses, as well as, general and administrative (G&A) costs. G&A costs are all of the Consultant's (the entire legal entity as a whole), general management and administration costs which include, but are not limited to, Consultant's home office allocations, professional consulting (legal, accounting, and consulting), services, bidding and proposal costs, professional and general liability insurance, and any and all taxes incurred by or to be paid by the Consultant. The multiplier also includes the Consultant's profit.
- "Actual hourly salary rates" means the hourly rate the Consultant or its subconsultants pays their respective employees. Actual hourly salary rates shall be substantiated by the most current audit of the Consultant's and subconsultant's payroll and financial records, or mutually agreed upon best available financial information, if a current audit is not available. The City retains the right to conduct a financial audit of the Consultant or any of its subconsultants. If requested by the City, the requested payroll information and financial records for the Consultant's home office, all branch offices, and all subconsultants shall be made available to the City in accordance with Section 15.2 of the Agreement.
- Unless otherwise required under applicable law, including, but not limited to, the California Public Records Act, the City shall not disclose Consultant's payroll information to third parties without the prior written consent of Consultant.
- Consultant shall limit its billings to the City for work performed by the Consultant or the subconsultant's staff to 40 hours per work week, unless overtime is authorized in advance by the Director.

- Exempt staff actual hourly salary rates shall be calculated by dividing the actual annual salary (less bonuses, profit sharing and other benefits) by 2080.
- Consultant shall bill the City for overtime and holiday work for non-exempt Consultant or subconsultant staff working in the City's Program Management Office (PMO) located at the San Jose-Santa Clara Regional Wastewater Facility for longer than 180 consecutive calendar days, only upon advance written approval by the Director, and in accordance with the rates set forth in an approved Service Order.

1.2 Associated Project Costs (APC): The APC rate allocates certain project support pooled costs to contracts using a direct labor-hours base. The support costs include computer costs, routine in-house photocopying (convenience copy machines), postage, IT networks and telecommunications expense. APC costs are billed for each labor-hour worked and will be billed separately from labor.

Table B-1: Billing Rate Factors

	Salary	Multiplier	APC
Offsite Staff	Hourly Salary	3.08	\$9.50/labor-hour
Onsite Staff	Hourly Salary	2.83	\$5.35/labor-hour

1.3 Onsite Staff Hourly Multiplier and APC Rates

The multiplier shown in Table B-1 for Onsite Staff shall be applied to the Consultant's staff that are dedicated to the program and are based full-time at the PMO for a duration exceeding 180 consecutive calendar days. The multiplier has been adjusted based on the City providing the following office support infrastructure for Consultant staff housed at the PMO:

- Work space and office furniture
- Computers and associated equipment
- Printing, postage and photocopying
- Utilities and landline phones
- Network access and City computer support
- Parking at City facilities

Additionally, as shown in Table B-1, the APC rate is discounted for Onsite Staff for whom the City provides a portion of these services.

1.4 Offsite Staff Hourly Multiplier and APC Rates

All other Consultant and Subconsultant staff shall have their office support infrastructure provided by their employer which is included in the multiplier for Offsite Staff.

SECTION 2 - Reimbursable Expenses

The City will reimburse the Consultant for Work-related expenses as described below. Each service order will specify the maximum amount of expenses the City will reimburse the Consultant. Reimbursement shall be based on sufficient backup documentation including receipts, travel itineraries, invoices, etc.

2.1 Travel Expenses

If approved in advance in writing by the Director, the City shall reimburse Consultant for travel expenses reasonably incurred in connection with the performance of the Work, all without duplication, under this Agreement. These costs include travel fares, hotel accommodations, subsistence or field living allowance, car rentals or other local transportation, which are necessary for travel by Consultant's personnel to and/or away from their regular place of residence and shall be in accordance with Consultant's personnel policies. Travel expenses shall be reimbursed subject to the following:

- Consultant's onsite staff who have relocated to the PMO shall not be eligible for reimbursement of travel expenses or travel time as described herein, with the exception of Consultant's staff who are required to travel to or from a non-City location for a direct Work-related purpose. In the event that travel is required under these circumstances, Consultant's staff shall be eligible for reimbursement of mileage to/from a non-City location provided that any vehicles purchased or leased by the Consultant for the Work are not otherwise available for use. Mileage reimbursement shall be at the applicable IRS approved rate at the time of travel.
- Consultant staff not working full time at the PMO shall be eligible for mileage reimbursement at the IRS approved rate, if driving over 65 miles from their home office to the PMO.
- City shall reimburse consultant for the cost of coach class airfare only. The City shall not reimburse the Consultant for Business Class or First Class travel costs exceeding the coach class fare.
- Meals and incidental expenses shall be reimbursed at the per diem rate based on the U.S. General Services Administration Government published rates.
- The maximum allowable lodging rate shall be one-hundred seventy-five dollars (\$175) per night exclusive of taxes. City may increase this amount if Consultant submits written verifiable justification and approval is granted by

Director prior to the commencement of travel. In the event of assignments longer than one month, monthly corporate apartments, including utilities and services may be utilized provided the cost is less than a comparable hotel/motel;

- The maximum allowable rate for rental car expenses, including applicable taxes, fees and fuel, shall be eighty-five dollars (\$85) per day.

2.2 Vehicles for Work Use

Consultant may lease vehicles for the use of Consultant Offsite staff working at the PMO in lieu of using rental vehicles, if approved in advance by the Director. Reimbursement will be through a monthly vehicle fee that includes all actual vehicle operation and maintenance costs, including lease payments, maintenance, insurance and fuel.

2.3 Mobilization and Relocation

The City shall reimburse Consultant for mobilization and relocation expenses reasonably incurred in connection with the performance of the Work by Consultant's staff if approved in advance by the Director in writing, or as specified in an approved service order.

2.4 Non-reimbursable Expenses

The following expenses are NOT reimbursable:

- Alcoholic Beverages;
- Meals and incidentals for on-site Consultant and subconsultant staff assigned to the PMO;
- Meals and incidentals for off-site Consultant and subconsultant staff at their home office location;
- Entertainment.

EXHIBIT C INSURANCE REQUIREMENTS

CONSULTANT, at CONSULTANT'S sole cost and expense, shall procure and maintain for the duration of this AGREEMENT, insurance against claims for injuries to persons or damages to property which may arise from, or in connection with, the performance of the services hereunder by the CONSULTANT, its agents, representatives, employees or suppliers.

I. Minimum Scope of Insurance

Coverage shall be at least as broad as:

1. The coverage provided by Insurance Services Office Commercial General Liability coverage "occurrence" form CG 0001; and
2. The coverage provided by Insurance Services Office form number CA 0001 covering Automobile Liability. Coverage shall be included for all owned, non-owned and hired automobiles; and
3. Workers' Compensation insurance as required by the Labor Code of the State of California and Employers Liability insurance.
4. Professional Liability Errors and Omissions insurance for all professional services.

There shall be no endorsements reducing the scope of coverage required above unless approved by the City's Risk Manager.

II. Minimum Limits of Insurance

Consultant shall maintain limits no less than:

1. Commercial General Liability: \$5,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.
3. Workers' Compensation and Employers Liability: Workers' Compensation limits as required by the Labor Code of the State of California and Employers Liability limits of \$1,000,000 per accident.

4. Professional Liability Errors and Omissions \$10,000,000 per claim / Aggregate Limit.

III. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to, and approved by, the City. At the option of the City, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officials, employees, agents and consultants; or the Consultant shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses in an amount specified by the City.

IV. Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability Coverages
 - a. The City, its officials, employees, agents and consultants are to be covered as additional insureds as respects: liability arising out of activities performed by, or on behalf of, the Consultant; products and completed operations of the Consultant; premises owned, leased or used by the Consultant; or automobiles owned, leased, hired or borrowed by the Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officials, employees, agents and consultants.
 - b. The Consultant's insurance coverage shall be primary insurance as respects the City, its officials, employees, agents and consultants. Any insurance or self-insurance maintained by the City, its officials, employees, agents or consultants shall be excess of the consultant's insurance and shall not contribute with it.
 - c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the City, its officials, employees, agents, or consultants.
 - d. Coverage shall state that the Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
 - e. Coverage shall contain a waiver of subrogation in favor of the City, its officials, employees, agents and consultants.
2. Workers' Compensation and Employers Liability

Coverage shall be endorsed to state carrier waives its rights of subrogation against the City, its officials, agents and consultants.

3. All Coverages

Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days' prior written notice has been given to the City; except that ten (10) days' prior written notice shall apply in the event of cancellation for non-payment of premium.

V. Acceptability of Insurance

Insurance is to be placed with insurers acceptable to the City's Risk Manager.

VI. Verification of Coverage

Consultant shall furnish the City with certificates of insurance and with original endorsements affecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

Copies of all the required ENDORSEMENTS shall be attached to the CERTIFICATE OF INSURANCE which shall be provided by the Consultant's insurance company as evidence of the stipulated coverages.

Proof of insurance shall be either emailed in pdf format to: Riskmgmt@sanjoseca.gov, or mailed to the following postal address (or any subsequent email or postal address as may be directed in writing by the Risk Manager):

City of San Jose – Finance Department
Risk & Insurance
200 East Santa Clara St., 14th Floor
San Jose, CA 95113-1905

VII. Subcontractors

Consultant shall include all subcontractors as insured under its policies or shall obtain separate certificates and endorsements for each subcontractor.

EXHIBIT D SCOPE OF SERVICES

This Exhibit D summarizes the 13 tasks comprising the Agreement Scope of Services. Each approved service order will include some or all of these tasks. Also included in each task is a list of assumptions that was used to develop the total compensation amount specified in Section 10.1 of the Agreement and a description of Consultant's staff who will be performing the services unless otherwise described in an approved service order.

1. Program Management / Administration

The Program will require general management and administration to support the defined total scope of services. A majority of this effort supports all the scope tasks to some degree and as such constitutes a single, consolidated management and administrative task. This task will continue for the life of Consultant's involvement. Subtasks include but are not limited to:

- 1.1. Establish and Maintain Program Management Office (PMO)
- 1.2. Manage Consultant (MWH) Staff
- 1.3. Conduct Progress and Coordination Meetings
- 1.4. Define Governance (Decision-Making Process)
- 1.5. Assist in Communications and Public Outreach
- 1.6. Transition at Contract Completion

This task includes the Consultant Program Manager and two Consultant administrative assistants, one of whom is a senior administrator. No allowance has been included at this time for office trailers.

2. Program Start-up

Program start up involves tasks to establish the primary elements of program management. This task will complete the transition of the Program Team to a fully functioning program management office.

This task also involves the validation of the CIP projects, to allow the City to confirm and/or revise the CIP before advancing projects to implementation.

It is anticipated that this task will last for approximately four months. Subtasks include but are not limited to:

- 2.1. Develop the Program Execution Plan
- 2.2. Develop Governance Structure
- 2.3. Define Implementation Procedures
- 2.4. Establish the Systems and Tools for Delivery of the overall program
- 2.5. Validate Projects
 - 2.5.1. Review and Confirm Projects
 - 2.5.2. Identify Project Gaps
 - 2.5.3. Package Projects and Estimate Costs
 - 2.5.4. Sequence Packages and Develop Schedule
 - 2.5.5. Analyze and Recommend Project Delivery Approaches
 - 2.5.6. Prepare Ten Year Capital Improvement Program (CIP)
 - 2.5.7. Establish CIP Budget
- 2.6. Develop Asset Management Strategy
- 2.7. Develop Knowledge Transfer Management Strategy
- 2.8. Assess Efficiency Opportunities within the Program

This task includes Consultant staff comprising the Start-up Team above and beyond the core team members included in the other tasks. The Start-up team consists of a full-time Start-up Manager leading a team of Consultant staff, including both program systems and tools set-up and project validation staff. The current schedule is for a four to six month start-up period, after which the Start-up Team is dispensed.

3. Program Controls

The program controls tools and processes are set up during the Start-up Task. In this task, Consultant will maintain and update all systems and tools needed to effectively manage program costs, schedule, and reporting functions for the duration of the program. Subtasks include but are not limited to:

- 3.1. Prepare and Maintain Master Program Schedule and Budget
- 3.2. Monitor and Forecast Cash Flow
- 3.3. Prepare Independent Project Cost Estimates
- 3.4. Prepare Program Status Reports (dashboard and key performance indicators (KPIs))
- 3.5. Evaluate and Implement Program Systems and Tools
- 3.6. Manage Program Documentation

- 3.7. Provide Procurement Support and Contract Administration
- 3.8. Implement Value Management
- 3.9. Implement Risk Management
- 3.10. Implement Change Management
- 3.11. Implement Stage Gate Governance
- 3.12. Analyze Financing Alternatives

This task includes the following Consultant staff: one Program Controls Manager, two schedulers, one reporting lead, one accounting/finance lead, and one risk manager/stage gate lead. It is assumed that the City will provide two controls staff for the duration of the Agreement. It is also assumed that two of the Consultant controls team staff will be replaced by two City controls staff for the final three years of the Agreement.

4. Quality Assurance / Quality Control (QA/QC)

All staff responsible for preparing deliverables (e.g., final designers) will be responsible for "quality control" of their deliverables. Consultant will be responsible for seeing that this quality control is implemented, which is referred to as "quality assurance."

Subtasks include but are not limited to:

- 4.1. Implement Program-Activity Quality Assurance / Quality Control Plan
- 4.2. Prepare QA/QC Plan Guidelines and Monitor Implementation
- 4.3. Conduct Internal (within the Program) Audits
- 4.4. Respond to Other Audits (as required)

This task includes one senior-level Consultant person, half-time. The majority of this task will be conducted by City forces with oversight, guidance and compliance audits by Consultant.

5. Health and Safety

Consultant will be responsible for overseeing the health and safety of the Program Team (in conjunction with the City), and for providing guidance to others working on the program (e.g., final designers, construction contractors, etc.) as they oversee the health and safety of their employees and construction sites. Subtasks include but are not limited to:

- 5.1. Implement Program-Staff Health and Safety Plan
- 5.2. Prepare Health and Safety Plan Guidelines and Monitor Implementation

This task includes one senior-level Consultant person, half-time. The majority of this task will be conducted by City forces with oversight, guidance and compliance audits by Consultant. Input will also be needed from the City's Health and Safety group.

6. Project Management

The Program Team will contain a group of project managers, currently divided into Package 1 and Package 2 groups. Each of those project managers will be responsible for managing their assigned projects from inception to completion. Overarching guidance and input for the project managers' work is provided under other tasks below. Subtasks include but are not limited to:

- 6.1. Manage Project Scope, Schedule, and Budget
- 6.2. Manage Detailed Design and/or Alternative Delivery Consultants
- 6.3. Participate in Value Management Activities
- 6.4. Manage any Third-Party Construction Management Consultants
- 6.5. Manage Construction Contractors

The exact number of project managers will be dependent on the number and grouping of projects, which is yet to be defined in detail. For budgeting purposes, it was estimated there would be a total of six project managers—three supplied by the City and three by Consultant.

7. Pre-Project Planning

This task covers all of the advance work done to define projects to the level suitable for handover to the Project Managers. Subtasks include but are not limited to:

- 7.1. Revisit Start-up Validation as required
- 7.2. Conduct Technology Assessments and Related Pilot Studies
- 7.3. Implement Program-wide Tasks, which could include, but are not limited to:
 - 7.3.1. Prepare Surveying and Mapping
 - 7.3.2. As-built mapping of all yard piping
 - 7.3.3. Perform condition assessment of yard piping
 - 7.3.4. Coordinate Overall Utility / Agency Permitting
 - 7.3.5. Prepare Asset Condition Assessment

This task includes one Consultant person at a minimum level (0.25 full time equivalent (FTE)). After further definition, it may be necessary to increase staffing levels for this task.

8. Design of Conventional Projects

During the validation step, each project will be designated for a delivery method—either conventional delivery (design-bid-build), or alternative delivery (e.g. design-build, design-build-operate, Construction Manager At Risk, etc.). This task covers oversight of conventional projects; the next task addresses alternative delivery.

For conventional projects, Consultant will complete design concepts, assist the City in hiring final designers, and monitor and coordinate the activities of the final designers. (Note that the Project Managers will participate extensively in this work; this task covers the activities by other program team members to guide and/or supplement the PM efforts.) Subtasks include, but are not limited to:

- 8.1. Prepare Design Guidelines
- 8.2. Complete Design Concepts
- 8.3. Assist in Hiring Final Designers
- 8.4. Conduct Design Technical Reviews
- 8.5. Conduct Value Engineering Activities

This task includes one senior-level, half-time Consultant person providing oversight and input. (The other half of this person's time is in Task 9.) It also includes an estimate of \$1,500,000 for developing design requirements for approximately \$100,000,000 of construction (assuming design requirements costs 1.5% of construction cost). This reflects the removal of the biosolids and cogeneration projects from any conceptual design consideration. (The \$100,000,000 may include some potential alternative delivery projects (Task 9); if so, some of this budget may need to be shifted to Task 9 in the future.)

9. Alternative Delivery

For alternative delivery projects, Consultant will prepare procurement solicitations including requests for qualifications (RFQs) and requests for proposal (RFPs), assist the City in hiring alternative delivery firms, and monitor and coordinate their subsequent activities. The RFPs will contain design requirements completed to the level needed for the selected alternative delivery method. Subtasks include but are not limited to:

- 9.1. Prepare Alternative Delivery Guidelines
- 9.2. Complete Design Requirements
- 9.3. Prepare Alternative Delivery RFQs and RFPs
- 9.4. Assist in Hiring Alternative Delivery Firms
- 9.5. Monitor and Review Alternative Delivery Activities

This task includes one senior-level, half-time Consultant person providing oversight and input. The role of the program manager versus that of the Owner's representative remains to be defined; this estimate may have to be increased if additional Consultant input is desired.

10. Construction Administration

In order to confirm that a consistent approach is employed program-wide, the Program Team will provide oversight of all construction management (CM) to be provided for individual projects. CM services will be provided by the Program Team, City of San Jose inspection staff and third party CM firms. Subtasks include but are not limited to:

- 10.1. Develop Construction Management Guidelines
- 10.2. Conduct Constructability Reviews of Designs
- 10.3. Support Construction Contract Award
- 10.4. Assist with Procurement of Third-Party CMs
- 10.5. Provide Oversight of Third-Party CMs
- 10.6. Monitor project schedules and budgets
- 10.7. Manage schedule recoveries
- 10.8. Provide CM Services (if no third-party CM)
- 10.9. Coordinate Claims Resolution
- 10.10. Conduct Partnering
- 10.11. Coordinate Project Close-out

This task includes one senior-level, full-time Consultant person to provide oversight and input. It also includes an allowance of \$500,000 for Consultant to conduct constructability reviews. It does not include an estimate for Consultant to perform actual construction management.

11. O&M Input and Coordination

Input from and coordination with the Facility operations and maintenance (O&M) staff is critical to the success of the program. O&M staff will provide input during all phases of planning and design, participate in training and testing during construction, and take over operation of new facilities during commissioning. Subtasks include, but are not limited to:

- 11.1. Prepare O&M Guidance Document
- 11.2. Coordinate Development of Facility Testing and Commissioning Plans

- 11.3. Coordinate O&M Training
- 11.4. Prepare Overall Operating Plan for New Facilities
- 11.5. Provide O&M support (as required)

This task includes one half-time Consultant person. It is anticipated that this person will work full time during the first one to two years of the program, and then ramp down for an overall average of 0.5 FTE. The City will assign one full time operations and one full time maintenance person to the program.

12. Asset Management and Knowledge Transfer

A key goal of the program is to increase the level of captured knowledge of Facility assets, and transfer that knowledge to Facility staff. Subtasks include, but are not limited to:

- 12.1. Inventory Existing Assets with City staff
- 12.2. Prepare Asset Management Strategy and Guidelines
- 12.3. Provide Training and Skills Transfer
- 12.4. Close Out the Consultant Program Contract
- 12.5. Transition Consultant Responsibilities to City Personnel

As part of the Start-up task (Task 2), Consultant will prepare an Asset Management strategy document. An estimate has been included in this task to develop an implementation plan for that strategy. Actual implementation of asset management efforts is not included in the estimate.

13. Supplemental Services

Over the course of the program, additional activities may arise for the City to implement. The City may, at its discretion, ask Consultant to participate in completing those activities. Examples include:

- 13.1. Monitor and Report on EIR-Required Mitigation
- 13.2. Prepare Hydraulic Modeling of the Facility
- 13.3. Other Studies, Modeling Efforts, or Analyses (as required)
- 13.4. I & C/SCADA master plan

EXHIBIT E
NOTICE OF EXERCISE OF OPTION TO EXTEND AGREEMENT

AGREEMENT TITLE and DATE:	
CONSULTANT: Name and Address:	
DATE:	

(Date the notice is sent must be consistent with the time for exercise set forth in Agreement)

Pursuant to Section 2 of the Agreement referenced above, the City of San José hereby exercises its option to extend the term under the following provisions:

OPTION NO.	
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NEW OPTION TERM

Begin date:	
End date:	

MAXIMUM COMPENSATION for New Option Term:	
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For the option term exercised by this Notice, the City shall pay the Consultant an amount not to exceed the amount set forth above for Consultant's services and reimbursable expenses, if any. The undersigned signing on behalf of the City of San José hereby certifies that an unexpended appropriation is available for the term exercised by this Notice, and that funds are available as of the date of this signature.

City of San José, a municipal corporation
By _____
Name:
Title: City Manager
Date:

City Manager's Contract Approval Summary
For Procurement and Contract Activity between \$100,000 and \$1.08 Million for Goods and \$100,000 and \$270,000 for Services

AUGUST 1 - AUGUST 31, 2013

Description of Contract Activity ¹	Fiscal Year	Req# RFP#	PO#	Vendor/Consultant	Original \$ Amount	Start Date	End Date	Additional \$ Amount	Total \$ Amount	Comments
NEW:										
REPAIR OF LEVEE	FY13-14	17689	48883	RJ GORDON CONSTRUCTION INC	\$75,000	8/1/13	7/31/14	\$55,000	\$130,000	
ONGOING:										
CONFINED SPACE RESCUE TEAM	FY13-14	18067		VEOLA ENVIRONMENTAL SERVICES	\$250,000	9/15/13	9/14/14			
LIQUID SODIUM HYPOCHLORITE 12.5%	FY13-14	18106		SIERRA CHEMICAL CO	\$995,000	10/1/13	9/30/14			
SANDBLASTING & PAINTING	FY13-14	18108		JEFFCO PAINTING & COATING	\$400,000	11/1/13	10/31/14			

¹ This report captures in process contract activity (Requisition Number or RFP Number) and completed contract activity (Purchase Order Number, Contract Term, and Contract Amount)