



AGENDA REPORT

Meeting Date: June 21, 2016

Item Number: E-31

To: Honorable Mayor & City Council

From: Mark Cuneo, City Engineer *MC*
Vincent Chee, Project Manager

Subject: AMENDMENT NO. 3 TO AN AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND HAZEN AND SAWYER TO PROVIDE THE CITY OF BEVERLY HILLS WITH WATER TREATMENT OPERATIONS SYSTEMS AND PROCESSES CONSULTING SERVICES; AND

APPROVAL TO INCREASE THE PURCHASE ORDER TO HAZEN AND SAWYER FOR PROFESSIONAL SERVICES IN THE AMOUNT OF \$103,370

Attachments:

1. Agreement No. 358-14
2. Amendment No. 1 to Agreement No. 358-14
3. Amendment No. 2 to Agreement No. 358-14
4. Amendment No. 3 to Agreement No. 358-14

RECOMMENDATION

Staff recommends that the City Council move to approve Amendment No. 3 to Agreement No. 358-14 with Hazen and Sawyer to provide the City of Beverly Hills with water treatment operations systems and processes consulting services; and approve an increase to the purchase order with H&S in the amount of \$103,370.

INTRODUCTION

This report is a request for City Council approval of an amendment to an agreement between the City of Beverly Hills and Hazen and Sawyer (H&S) for consulting services to integrate the water produced by the water wells at 342 Foothill Road into the City water supply system.

DISCUSSION

The original Agreement No. 358-14, dated July 14, 2014, between the City of Beverly Hills and H&S for reviewing the City's water treatment plant operations and processes was in the amount of \$41,000. This agreement was amended on February 17, 2015, and again on January 5, 2016, for additional professional services required to optimize the operations of the water treatment plant.

The City desires to expand the use of groundwater by developing additional municipal water supply wells. Two water wells were recently completed at 342 Foothill Road and each well has an anticipated production capacity of 250 gallons per minute (gpm). Staff recommends that H&S provide consulting services to develop sampling and monitoring plans to facilitate the approval of this water source by the State Water Resources Control Board, Division of Drinking Water (DDW). H&S will evaluate the water quality of the new wells and identify the need for additional treatment, if applicable. H&S will develop modifications on the process, control and operation of the existing water treatment plant for the integration of the new groundwater supply. It is anticipated the services under Amendment No. 3 will be completed by September 30, 2017.

Amendment No. 3 to H&S's original agreement is in the amount of \$103,370 and includes a detailed scope of work and associated cost/fee for integration of the new water wells into the City's water supply system. H&S's total contract, including this amendment, will be an amount not to exceed \$452,333.

FISCAL IMPACT

Funds in the amount of \$103,370 for professional services required to integrate the new water wells into the City's water supply system are budgeted in the capital improvement program as follows:

ACCOUNT NUMBER	FUND DESCRIPTION	AMOUNT
80006002-850000-0916	Water Enterprise Fund	\$ 103,370.00


George Chavez
Approved By

ATTACHMENT 1

AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND HAZEN
AND SAWYER TO PROVIDE THE CITY OF BEVERLY HILLS WITH
WATER TREATMENT OPERATIONS SYSTEMS AND PROCESSES
CONSULTING SERVICES

NAME OF CONSULTANT: HAZEN AND SAWYER

RESPONSIBLE PRINCIPAL OF CONSULTANT: LYNN GRIJALVA, Vice President

CONSULTANT'S ADDRESS: Hazen and Sawyer 1149
South Hill Street, Suite 450
Los Angeles, CA 90015
Attention: LYNN GRIJALVA,
Vice President

CITY'S ADDRESS: City of Beverly Hills
345 Foothill Road
Beverly Hills, CA 90210
Attention: GEORGE CHAVEZ,
Director of Public Works Services

COMMENCEMENT DATE: July 14, 2014

TERMINATION DATE: July 14, 2015

CONSIDERATION: Not to exceed \$ 41,000.00

AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND HAZEN AND SAWYER FOR TO PROVIDE THE CITY OF BEVERLY HILLS WITH WATER TREATMENT OPERATIONS SYSTEMS AND PROCESSES CONSULTING SERVICES

THIS AGREEMENT is made by and between the City of Beverly Hills (hereinafter called "CITY"), and HAZEN AND SAWYER (hereinafter called "CONSULTANT").

RECITALS

A. CITY desires to have certain services and/or goods provided as set forth in Exhibit A (the "Scope of Work"), attached hereto and incorporated herein.

B. CONSULTANT represents that it is qualified and able to perform the Scope of Works.

NOW, THEREFORE, the parties agree as follows:

Section 1. CONSULTANT's Scope of Work. CONSULTANT shall perform the Scope of Work described in Exhibit A in a manner satisfactory to CITY and consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. CITY shall have the right to order, in writing, changes in the Scope of Work. Any changes in the Scope of Work by CONSULTANT must be made in writing and approved by both parties. The cost of any change in the Scope of Work must be agreed to by both parties in writing.

Section 2. Time of Performance.

CONSULTANT shall commence its services under this Agreement upon the Commencement Date or upon a written receipt of a notice to proceed from CITY. CONSULTANT shall complete the performance of services by the Termination Date set forth above and/or in conformance with the project timeline established by the City Manager or his designee.

Section 3. Compensation.

(a) Compensation

CITY agrees to compensate CONSULTANT for the services and/or goods provides under this Agreement, and CONSULTANT agrees to accept in full satisfaction for such services, a sum not to exceed the Consideration set forth above and more particularly described in Exhibit B, attached hereto and incorporated herein.

(b) Expenses

The amount set forth in paragraph A shall include reimbursement for all actual and necessary expenditures reasonably incurred in the performance of this Agreement (including,

but not limited to, all labor, materials, delivery, tax, assembly, and installation, as applicable). There shall be no claims for additional compensation for reimbursable expenses.

(c) Additional Services. CITY may from time to time require CONSULTANT to perform additional services not included in the Scope of Services. Such requests for additional services shall be made by CITY in writing and agreed upon by both parties in writing.

Section 4. Method of Payment. Unless otherwise provided for herein, CONSULTANT shall submit to CITY a detailed invoice, on a monthly basis or less frequently, for the services performed pursuant to this Agreement. Each invoice shall itemize the services rendered during the billing period and the amount due. Within 30 days of receipt of each invoice, CITY shall pay all undisputed amounts included on the invoice. CITY shall pay CONSULTANT said Consideration in accordance with the schedule of payment set forth in Exhibit B.

Section 5. Independent Contractor. CONSULTANT is and shall at all times remain, as to CITY, a wholly independent contractor. Neither CITY nor any of its agents shall have control over the conduct of CONSULTANT or any of CONSULTANT's employees, except as herein set forth. CONSULTANT shall not, at any time, or in any manner, represent that it or any of its agents or employees are in any manner agents or employees of CITY.

Section 6. Assignment. This Agreement shall not be assigned in whole or in part, by CONSULTANT without the prior written approval of CITY. Any attempt by CONSULTANT to so assign this Agreement or any rights, duties or obligations arising hereunder shall be void and of no effect.

Section 7. Responsible Principal(s)

(a) CONSULTANT's Responsible Principal set forth above shall be principally responsible for CONSULTANT's obligations under this Agreement and shall serve as principal liaison between CITY and CONSULTANT. Designation of another Responsible by CONSULTANT shall not be made without prior written consent of CITY.

(b) CITY's Responsible Principal shall be the City Manager or his designee set forth above who shall administer the terms of the Agreement on behalf of CITY.

Section 8. Personnel. CONSULTANT represents that it has, or shall secure at its own expense, all personnel required to perform CONSULTANT's Scope of Work under this Agreement. All personnel engaged in the work shall be qualified to perform such Scope of Work.

Section 9. Permits and Licenses. CONSULTANT shall obtain and maintain during the Agreement term all necessary licenses, permits and certificates required by law for the provision of services under this Agreement, including a business license.

Section 10. Interests of Consultant. CONSULTANT affirms that it presently has no interest and shall not have any interest, direct or indirect, which would conflict in any manner with the performance of the Scope of Work contemplated by this Agreement. No person having any such interest shall be employed by or be associated with CONSULTANT.

Section 11. Insurance.

(a) CONSULTANT shall at all times during the term of this Agreement carry, maintain, and keep in full force and effect, insurance as follows:

(1) A policy or policies of Comprehensive General Liability Insurance, with minimum limits of Two Million Dollars (\$2,000,000) for each occurrence, combined single limit, against any personal injury, death, loss or damage resulting from the wrongful or negligent acts by CONSULTANT.

(2) A policy or policies of Comprehensive Vehicle Liability Insurance covering personal injury and property damage, with minimum limits of One Million Dollars (\$1,000,000) per occurrence combined single limit, covering any vehicle utilized by CONSULTANT in performing the Scope of Work required by this Agreement.

(3) Workers' compensation insurance as required by the State of California.

(4) Professional Liability Insurance.

A policy or policies of Professional Liability Insurance (errors and omissions) with minimum limits of One Million Dollars (\$1,000,000) per claim and in the aggregate. Any deductibles or self-insured retentions attached to such policy or policies must be declared to and be approved by CITY. Further, CONSULTANT agrees to maintain in full force and effect such insurance for one year after performance of work under this Agreement is completed.

(b) CONSULTANT shall require each of its sub-consultants to maintain insurance coverage which meets all of the requirements of this Agreement.

(c) The policy or policies required by this Agreement shall be issued by an insurer admitted in the State of California and with a rating of at least a B+;VII in the latest edition of Best's Insurance Guide.

(d) CONSULTANT agrees that if it does not keep the aforesaid insurance in full force and effect CITY may either immediately terminate this Agreement or, if insurance is available at a reasonable cost, CITY may take out the necessary insurance and pay, at CONSULTANT's expense, the premium thereon.

(e) At all times during the term of this Agreement, CONSULTANT shall maintain on file with the City Clerk a certificate or certificates of insurance on the form set forth in Exhibit C, attached hereto and incorporated herein, showing that the aforesaid policies are in effect in the required amounts. CONSULTANT shall, prior to commencement of work under this Agreement, file with the City Clerk such certificate or certificates. The general liability insurance shall contain an endorsement naming the CITY as an additional insured. All of the policies required under this Agreement shall contain an endorsement providing that the policies cannot be canceled or reduced except on thirty (30) days prior written notice to CITY, and specifically stating that the coverage contained in the policies affords insurance pursuant to the terms and conditions as set forth in this Agreement.

(f) The insurance provided by CONSULTANT shall be primary to any coverage available to CITY. The policies of insurance required by this Agreement shall include provisions for waiver of subrogation.

(g) Any deductibles or self-insured retentions must be declared to and approved by CITY. At the option of CITY, CONSULTANT shall either reduce or eliminate the deductibles or self-insured retentions with respect to CITY, or CONSULTANT shall procure a bond guaranteeing payment of losses and expenses.

Section 12. Indemnification.

(a) Indemnity for Design Professional Services. In connection with its design professional services, CONSULTANT agrees to indemnify, hold harmless and defend CITY, City Council and each member thereof, and every officer, employee and agent of CITY, from any claim, liability or financial loss (including, without limitation, attorney's fees and costs) arising from any intentional, reckless, negligent, or otherwise wrongful acts, errors or omissions of CONSULTANT or any person employed by CONSULTANT in the performance of this Agreement.

(b) Other Indemnities. In connection with any and all claims, demands, damages, liabilities, losses, costs or expenses, including attorneys' fees and costs of defense (collectively, "Damages" hereinafter) not covered by Section 12(a), CONSULTANT shall defend, hold harmless and indemnify the Indemnities with respect to any and all Damages, including but not limited to, Damages relating to death or injury to any person and injury to any property, which arise out of, pertain to, or relate to the acts or omissions of CONSULTANT or any of its officers, employees, subcontractors, or agents in the performance of this Agreement, except for such loss or damage arising from the sole negligence or willful misconduct of the CITY, as determined by final arbitration or court decision or by the agreement of the parties. CONSULTANT shall defend Indemnities in any action or actions filed in connection with any such Damages with counsel of CITY's choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. CONSULTANT's duty to defend pursuant to this Section 12(b) shall apply independent of any prior, concurrent or subsequent misconduct, negligent acts, errors or omissions of Indemnities.

Section 13. Termination.

(a) CITY shall have the right to terminate this Agreement for any reason or for no reason upon five calendar days' written notice to CONSULTANT. CONSULTANT agrees to cease all work under this Agreement on or before the effective date of such notice.

(b) In the event of termination or cancellation of this Agreement by CITY, due to no fault or failure of performance by CONSULTANT, CONSULTANT shall be paid based on the percentage of work satisfactorily performed at the time of termination. In no event shall CONSULTANT be entitled to receive more than the amount that would be paid to CONSULTANT for the full performance of the services required by this Agreement. CONSULTANT shall have no other claim against CITY by reason of such termination, including any claim for compensation.

Section 14. CITY's Responsibility. CITY shall provide CONSULTANT with all pertinent data, documents, and other requested information as is available for the proper performance of CONSULTANT's Scope of Work.

Section 15. Information and Documents. All data, information, documents and drawings prepared for CITY and required to be furnished to CITY in connection with this Agreement shall

become the property of CITY, and CITY may use all or any portion of the work submitted by CONSULTANT and compensated by CITY pursuant to this Agreement as CITY deems appropriate.

Section 16. Records and Inspections. CONSULTANT shall maintain full and accurate records with respect to all matters covered under this Agreement for a period of 1 year. CITY shall have access, without charge, during normal business hours to such records, and the right to examine and audit the same and to make copies and transcripts therefrom, and to inspect all program data, documents, proceedings and activities.

Section 17. Changes in the Scope of Work. CITY shall have the right to order, in writing, changes in the scope of work or the services to be performed. Any changes in the scope of work requested by CONSULTANT must be made in writing and approved by both parties.

Section 18. Notice. Any notices, bills, invoices, etc. required by this Agreement shall be deemed received on (a) the day of delivery if delivered by hand during the receiving party's regular business hours or by facsimile before or during the receiving party's regular business hours; or (b) on the second business day following deposit in the United States mail, postage prepaid to the addresses set forth above, or to such other addresses as the parties may, from time to time, designate in writing pursuant to this section.

Section 19. Attorney's Fees. In the event that either party commences any legal action or proceeding to enforce or interpret the provisions of this Agreement, the prevailing party in such action shall be entitled to reasonable attorney's fees, costs and necessary disbursements, in addition to such other relief as may be sought and awarded.

Section 20. Entire Agreement. This Agreement represents the entire integrated agreement between CITY and CONSULTANT, and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by a written instrument signed by both CITY and CONSULTANT.

Section 21. Exhibits; Precedence. All documents referenced as exhibits in this Agreement are hereby incorporated in this Agreement. In the event of any material discrepancy between the express provisions of this Agreement and the provisions of any document incorporated herein by reference, the provisions of this Agreement shall prevail.

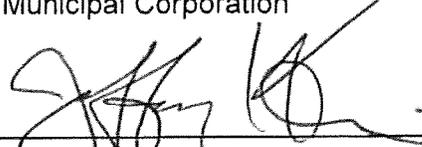
Section 22. Governing Law. The interpretation and implementation of this Agreement shall be governed by the domestic law of the State of California.

Section 23. CITY Not Obligated to Third Parties. CITY shall not be obligated or liable under this Agreement to any party other than CONSULTANT.

Section 24. Severability. Invalidation of any provision contained herein or the application thereof to any person or entity by judgment or court order shall in no way affect any of the other covenants, conditions, restrictions, or provisions hereof, or the application thereof to any other person or entity, and the same shall remain in full force and effect.

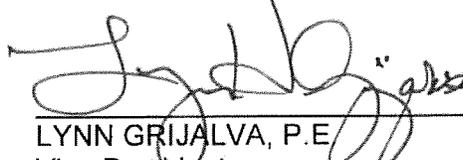
EXECUTED the 18th day of July 2014, at Beverly Hills, California.

CITY OF BEVERLY HILLS
A Municipal Corporation

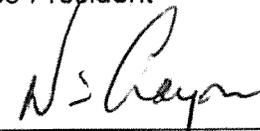


JEFFREY KOLIN *MM*
City Manager

CONSULTANT: HAZEN AND SAWYER



LYNN GRIJALVA, P.E.
Vice President



WILLIAM CRAYON
Controller

APPROVED AS TO CONTENT:



GEORGE CHAVEZ
Director of Public Works Services



KARL KIRKMAN
Risk Manager

EXHIBIT A

SCOPE OF WORK

CONTRACTOR shall perform the following services:

Phase I – Baseline Review

CONTRACTOR shall conduct a baseline review of operations at the facility. This review will cover existing systems and processes, risks and bottlenecks to performance, opportunities for improvement and will identify gaps that need to be addressed. This review will include:

- A review of current plant targets and performance against those targets (focusing on production, water quality, and regulatory reporting).
- A review of plant process performance.
- A review of current documented systems and processes.
- Interviews with operations staff and operations management.
- A review of communication practices and protocols.
- A review of operator knowledge/training gaps.
- Based on our initial discussions of June 25, we suggest a focus on the key elements of:

CONTRACTOR shall focus on the following areas during this baseline review:

- Roles and responsibilities – mapping of roles and responsibilities of the team – and identifying any conflicts or gaps.
- Operational monitoring and reporting – review of current monitoring and reporting, both internally and particularly external reporting requirements.
- Non conformances and corrective actions – review how non-conformances are identified, reported and dealt with. A key focus will be on how to capture lessons and learn from past problems.
- Operating Interfaces – a review on communication between elements of the organization (for example treatment to distribution) and how communication operates between different shifts.
- Operating Procedures – A review on what is documented and how. Our experience has shown that operator engagement in the development of operating procedures is key to ownership of the process and empowerment in operation.
- Operator skills and training. – Understand the level of knowledge and confidence in operations staff. We can identify gaps to help develop a targeted training approach to plug the gaps and enhance operator empowerment.

The deliverable output from this phase I will be a report to operations management on all findings, including a gap analysis of needs and a recommended prioritization of actions.

During this phase, CONTRACTOR will work with CITY to identify improvements to implement in Phase II. These may include the following:

- Develop/improve operational logs/monitoring reports.
- Develop a high level dashboard report
- Provide specific training to operations staff.
- Provide modifications to necessary operating procedures, or create interim draft procedures where required

Phase II – Develop Priorities and Plans

CONTRACTOR shall work with CITY operations staff and management in the Department of Public Work Services to develop an action plan to address the key findings of phase I. This phase will include both working with operations management, and a workshop with various operations staff. This workshop will provide both feedback to Phase I, and work to engage the operations team as a part of the process.

The deliverable output from Phase II will be to develop an agreed prioritized action plan for development/enhancement of the operating framework, including a schedule for implementation. The key focus will be to identify the most urgent areas for improvement balanced with a set of modest early goals to help demonstrate meaningful progress and keep the process energized.

EXHIBIT B

SCHEDULE OF PAYMENT AND RATES

RATES:

Phase 1 - Baseline Review					
	Lynn Grijalva	Troy Walker	Silvana Ghiu	Kenny Chau	Total
	\$287	\$256	\$180	\$105	
A review of current plant targets and performance against those targets (focusing on production, water quality, and regulatory reporting).		8			\$2,048
A review of plant process performance.			16		\$2,880
A review of current documented systems and processes.		16		16	\$5,770
Interviews with operations staff and operations management.		8			\$2,048
A review of communication practices and protocols.		8			\$2,048
A review of operator knowledge/training gaps.		8		8	\$2,885
Report		16			\$4,096
QA/QC	8				\$2,296
	8	64	16	24	
Labor	\$2,296	\$16,384	\$2,880	\$2,511	\$24,071
Expenses (Airfares and Accommodation)					\$1,929
Task Total					\$26,000

RATES:

Phase 2 - Agree on Priorities and Develop an Action Plan					
	Lynn Grijalva	Troy Walker	Silvana Ghiu	Kenny Chau	Total
	\$287	\$256	\$180	\$105	
Planning with operation management		8			\$2,048
Workshop		8		8	\$2,885
Action Plan Development		32			\$8,192
QA/QC	4				\$1,148
	4	48	0	8	
Labor	\$1,148	\$12,288	\$0	\$837	\$14,273
Expenses					\$727
Task Total					\$15,000

SCHEDULE:

CONTRACTOR shall submit an itemized statement to CITY for services performed, which shall include documentation setting forth in detail a description of the services rendered. CITY shall pay CONTRACTOR the amount of such billing within thirty (30) days of receipt of same.

CITY shall compensate CONTRACTOR for the satisfactory performance of the work described in Exhibit A, in an amount not to exceed Forty-One Thousand Dollars (\$41,000.00).

EXHIBIT C

CERTIFICATE OF INSURANCE

This is to certify that the following endorsement is part of the policy(ies) described below :

NAMED INSURED

COMPANIES AFFORDING COVERAGE

ADDRESS

- A.
- B.
- C.

COMPANY (A.B.C.)	COVERAGE	POLICY NUMBER	EXPIRATION DATE	B.I.	LIMITS P.D.	AGGREGATE
	<input type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> GENERAL LIABILITY <input type="checkbox"/> PRODUCTS/COMPLETED OPERATIONS <input type="checkbox"/> BLANKET CONTRACTUAL <input type="checkbox"/> CONTRACTOR'S PROTECTIVE <input type="checkbox"/> PERSONAL INJURY <input type="checkbox"/> EXCESS LIABILITY <input type="checkbox"/> WORKER'S COMPENSATION					

It is hereby understood and agreed that the City of Beverly Hills, its City Council and each member thereof and every officer and employee of the City shall be named as joint and several assureds with respect to claims arising out of the following project or agreement:

It is further agreed that the following indemnity agreement between the City of Beverly Hills and the named insured is covered under the policy: Contractor agrees to indemnify, hold harmless and defend City, its City Council and each member thereof and every officer and employee of City from any and all liability or financial loss resulting from any suits, claims, losses or actions brought against and from all costs and expenses of litigation brought against City, its City Council and each member thereof and any officer or employee of City which results directly or indirectly from the wrongful or negligent actions of contractor's officers, employees, agents or others employed by Contractor while engaged by Contractor in the (performance of this agreement) construction of this project.

It is further agreed that the inclusion of more than one assured shall not operate to increase the limit of the company's liability and that insurer waives any right of contribution with insurance which may be available to the City of Beverly Hills.

In the event of cancellation or material change in the above coverage, the company will give 30 days written notice of cancellation or material change to the certificate holder.

Except to certify that the policy(ies) described above have the above endorsement attached, this certificate or verification of insurance is not an insurance policy and does not amend, extend or alter the coverage afforded by the policies listed herein. Notwithstanding any requirement, term, or condition of any contract or other document with respect to which this certificate or verification of insurance may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

DATE : _____ BY : _____

 Authorized Insurance Representative

TITLE : _____
 AGENCY : _____ Address : _____

ATTACHMENT 2

AMENDMENT NO. 1 TO AN AGREEMENT BETWEEN THE CITY OF
BEVERLY HILLS AND HAZEN AND SAWYER TO PROVIDE THE CITY
OF BEVERLY HILLS WITH WATER TREATMENT OPERATIONS
SYSTEMS AND PROCESSES CONSULTING SERVICES

NAME OF CONSULTANT: HAZEN AND SAWYER

RESPONSIBLE PRINCIPAL OF
CONSULTANT: Lynn Grijalva, P.E.,
Vice President

CONSULTANT'S ADDRESS: Hazen and Sawyer
1149 South Hill St., Suite 450
Los Angeles, CA 90015
Attention: Lynn Grijalva, P.E.
Vice President

CITY'S ADDRESS: City of Beverly Hills
455 N. Rexford Drive
Beverly Hills, CA 90210
Attention: George Chavez,
Director of Public Works Services

COMMENCEMENT DATE: July 14, 2014

TERMINATION DATE: February 28, 2016

CONSIDERATION: Original Amount: Not to exceed \$41,000
Amendment No. 1: Not to exceed \$229,000
Total: Not to exceed \$270,000.00, and more
particularly described in Exhibit B

AMENDMENT NO. 1 TO AN AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND HAZEN AND SAWYER TO PROVIDE THE CITY OF BEVERLY HILLS WITH WATER TREATMENT OPERATIONS SYSTEMS AND PROCESSES CONSULTING SERVICES

This Amendment No. 1 is to that certain Agreement between the City of Beverly Hills (hereinafter called "CITY"), and Hazen and Sawyer (hereinafter called "CONSULTANT") dated July 18, 2014 and identified as Contract No. 358-14 ("Agreement").

RECITALS

A. CITY entered into w written agreement with CONSULTANT for water treatment operations and processes consulting services.

B. CITY and CONSULTANT desire to amend the Agreement to extend its term, add services and increase the compensation for such services.

NOW, THEREFORE, the parties agree as follows:

Section 1. The TERMINATION DATE shall be amended as set forth above.

Section 2. The CONSIDERATION shall be amended as set forth above.

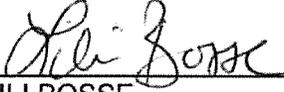
Section 3. Exhibit A, "Scope of Work," shall be amended as attached hereto and incorporated herein.

Section 4. Exhibit B, "Schedule of Payment and Rates," shall be amended as attached hereto and incorporated herein.

Section 5. Except as specifically amended by this Amendment No. 1, the remaining provisions of the Agreement shall remain in full force and effect.

EXECUTED the 17th day of February 2015, at Beverly Hills, California.

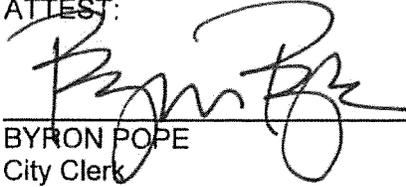
CITY OF BEVERLY HILLS
A Municipal Corporation



LILI BOSSE

Mayor of the City of Beverly Hills, California

ATTEST:

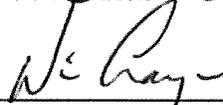


BYRON POPE
City Clerk

HAZEN AND SAWYER



LYNN GRIJALVA, P.E.
Vice President



WILLIAM CRAYON
Controller

[Signatures continue]

APPROVED AS TO FORM:



LAURENCE S. WIENER
City Attorney

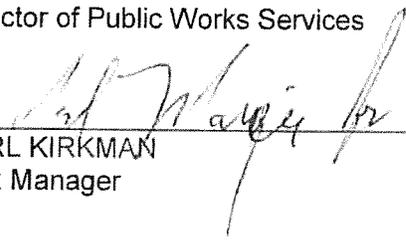
APPROVED AS TO CONTENT



MAHDI ALUZRI
Interim City Manager



GEORGE CHAVEZ
Director of Public Works Services



KARL KIRKMAN
Risk Manager

EXHIBIT A

SCOPE OF WORK

SCOPE OF WORK AS OUTLINED IN ORIGINAL AGREEMENT:

Phase I – Baseline Review

CONSULTANT shall conduct a baseline review of operations at the CITY's water treatment facility. This review will cover existing systems and processes, risks and bottlenecks to performance, opportunities for improvement and will identify gaps that need to be addressed. This review will include:

- A review of current plant targets and performance against those targets (focusing on production, water quality, and regulatory reporting).
- A review of plant process performance.
- A review of current documented systems and processes.
- Interviews with operations staff and operations management.
- A review of communication practices and protocols.
- A review of operator knowledge/training gaps.
- Based on our initial discussions of June 25, we suggest a focus on the key elements of:

CONSULTANT shall focus on the following areas during this baseline review:

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- Provide modifications to necessary operating procedures, or create interim draft procedures where required

Phase II – Develop Priorities and Plans

CONSULTANT shall work with CITY operations staff and management in the Department of Public Work Services to develop an action plan to address the key findings of phase I. This phase will include both working with operations management, and a workshop with various operations staff. This workshop will provide both feedback to Phase I, and work to engage the operations team as a part of the process.

The deliverable output from Phase II will be to develop an agreed prioritized action plan for development/enhancement of the operating framework, including a schedule for implementation. The key focus will be to identify the most urgent areas for improvement balanced with a set of modest early goals to help demonstrate meaningful progress and keep the process energized.

AMENDMENT 1: ADDITIONAL SCOPE OF WORK

CITY and CONSULTANT have identified the following four fixed items of high priority:

- Reverse Osmosis (“RO”) Optimization Strategy, Concentrate Minimization Strategy and Valve Specification
- Operator Process Training
- Operating Performance Monitoring Improvements
- Standard Operating Procedure (SOP) Development

CONSULTANT shall perform the following additional services:

I. RO Optimization Strategy

This task aims to provide options for improved operational efficiency for the RO unit. It focuses on a number of areas including:

- Reduced flow operations.

Lower yields from the plant supply wells have reduced the available feed water to the plant. As noted in CONSULTANT's report, dated 10/31/2014, this has impacted the water treatment plant bypass/RO permeate blending strategy which impacts water stability management due to a change from the originally intended blend strategy. RO units are essentially constant flow devices, with very little ability for turn down in flow production on a per unit basis, due to important membrane hydraulic operation considerations.

This work will involve review options for reducing flow rate through the unit on a long term basis and consider options such as isolation of pressure vessels, review of feed pump and control impacts, and RO system design selections.

- Concentrate minimization strategy

This task will focus on optimizing the current RO unit recovery, based an assessment of feed water chemistry (and blending ranges given multiple well feeds), pH management and antiscalant selection. It was noted in CONSULTANT's report that the recovery of the RO has been reduced significantly since the original plant design (below 70% as compared with an initial value of 78%). Also included will be a review of likely concentrate flow based on CONSULTANT's assessment of a reduced RO flow rate overall (as noted above).

In addition, a high level discussion of options for further increased concentrate minimization beyond the optimum RO recovery will be provided for your consideration (such as alternative concentrate recovery strategies).

- Concentrate Valve Specification

The current concentrate valve is out of service, and there is difficulty in procuring an exact replacement. CONSULTANT will develop a design specification for a replacement RO valve and actuator to provide CITY some flexibility in procurement of a replacement valve and spares from alternative suppliers.

- Stripping Tower Operation Optimization

The current shut down and restart of the stripping towers creates operational difficulty as material that accumulates on the stripping towers during evening and weekend shut down periods sloughs into the treated water causing high turbidity peaks and aesthetic quality issues. A review of design and operation will be conducted with recommendations to minimize this impact and increase operational flexibility.

The work products of this task are a brief options report and specification for the RO concentrate valve. The estimated cost is not to exceed **\$35,000**, as more fully described in Exhibit B.

II. Operator Training

CONSULTANT shall provide operator training. Operator training is a critical part of operations success. Several training areas were identified in the baseline review as follows:

Topic Area	
Permits and Regulations	Operating Permit Environmental Permits Other regulatory requirements.
Water Quality Sampling and Testing	Types of samples Proper sampling technique Labelling requirements Chains of custody Sample locations Sample frequency Process v Regulatory Sampling and Testing Process Control Testing Procedures Instrument Use
Safety	Safety (OSHA) requirements Identify safety hazards Emergency Management Incident reporting and investigation City safety policies
Instrumentation	Read/record values from gauges and displays Understanding Units of measure Standardization/calibration/verification
Equipment and Maintenance	Identify/describe components of equipment Start/stop procedures Identify normal operation Understanding of standard operating procedures
SCADA	Navigate screens Identify/acknowledge alarms Generate/select graphs and interpret results Start/Stop a process or entire facility for planned or emergency shutdown.
Process Technology	Process and Plant Overview Chemical dosing and handling Reverse Osmosis and Pretreatment Water chemistry and impacts to process H ₂ S Stripping Air Scrubbing Final chlorination

The initial set of training modules will be on Process Technology to provide a better understanding of the treatment processes.

- Process and Plant overview
- Chemical Dosing and Handling
- Reverse osmosis and Pretreatment
- Water Chemistry and post treatment including H₂S stripping, air scrubbing and final chlorination.
- Post treatment including H₂S Stripping, Air Scrubbing and final chlorination

CONSULTANT estimates the cost of not to exceed **\$20,000** for tailoring the training sessions, and conducting four half-day sessions at CITY. The work product will be bound sets of session notes and materials for all participants.

III. Operating Performance Monitoring Improvement

One of the significant challenges in managing processes within a treatment facility is to monitor performance using the abundant data collected by Supervisory Control and Data Acquisition ("SCADA") and Human Machine Interface ("HMI") systems.

This proposed task is to improve the operational performance monitoring of the plant and distribution systems with the development of the following:

- A clear definition of performance targets. It is important to know clearly what CITY is aiming for in operations so that CITY can measure its success in getting there, and identify any barriers to achieving it. CONSULTANT proposes to work with CITY to develop a set of operational performance targets that CONSULTANT can measure and track performance against. These will be developed at the overall plant level, and also at individual process unit level.

For example, at the plant level, targets will be identified such as daily throughput, water quality, chemical consumption, energy consumption, 100% of samples taken correctly, 100% of SWRCB reports on time, 100% permit compliance. (Note that water quality targets may be in addition to permit requirements, to protect water treatment plant infrastructure or provide buffer for the permit target).

At the process level, targets will be identified to ensure the process systems are operating properly to meet overall targets or safeguard equipment. For example, performance targets for RO permeate quality, stripping tower treated water quality.

- Development of dashboard reports. Dashboard reports are useful to provide a quick overview of plant or system performance. They are usually a set of simple graphs, dials or red/yellow/green shaded squares that provide a quick review of performance against high level targets. These are extremely valuable both for management review, but also in communication to the team on overall performance.

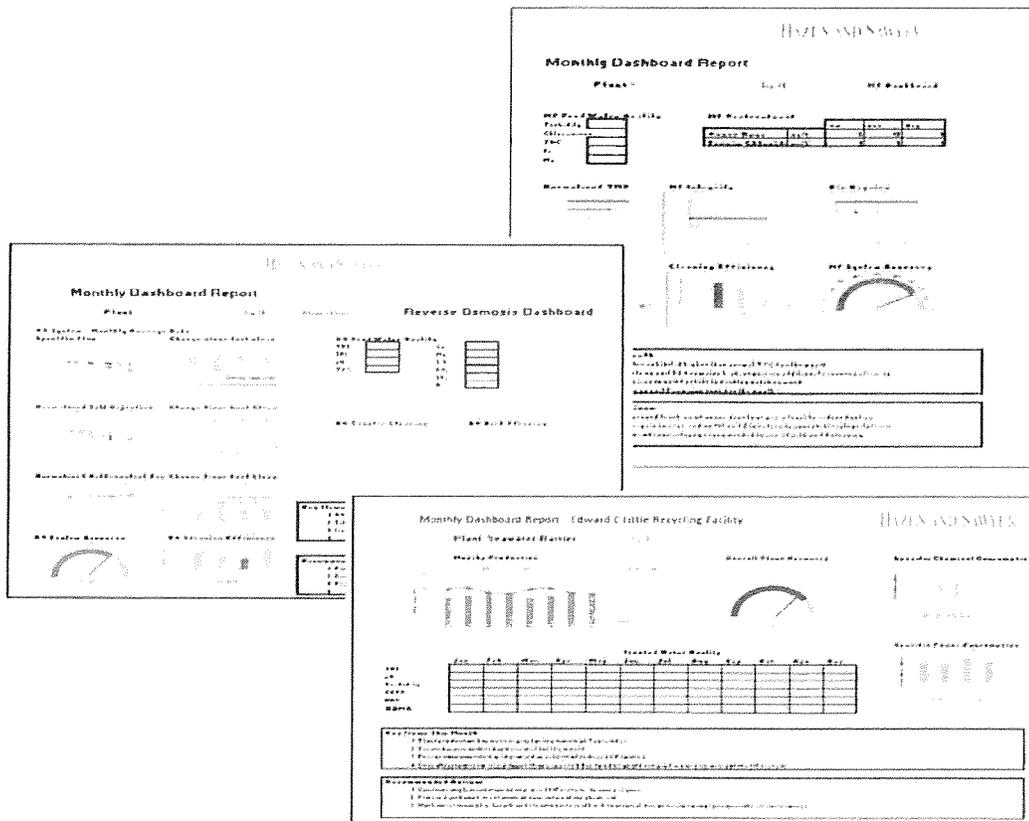


Figure 1 - Example dashboard reports

- Review and improvement of SCADA/HMI trending. The HMI already has a number of valuable trends that are useful, however it is capable of much more. CONSULTANT will work closely with the SCADA engineer to help develop a more detailed set of standard trends, with the understanding of what the current system is capable of. This will cover key process operation and performance parameters.
- Reverse Osmosis System Normalization. Normalization of reverse osmosis data is very important to ensure that the performance of the membranes can be accurately reviewed. Normalization software has been provided for the site, CONSULTANT will help populate this software, and begin important normalization trends for the RO system. As a further improvement, CONSULTANT will work to provide an automatic download of data from the SCADA/HMI system direct to a normalization tool to enable easier review of data by CITY operations staff.
- Review and establishment of preferred operator log sheets. This item is a follow up to work conducted in the baseline review. This will be a final review of the improvements made to standard trends further developed on the HMI.

To develop the best outcome for CITY, CONSULTANT will engage closely with CITY staff, and collaboratively develop operations monitoring material. Additionally it will be necessary to coordinate and work with CITY's preferred SCADA/HMI engineer (for which we have not included costs). CONSULTANT recommends a monthly review of progress, at which CITY and

CONSULTANT will make continuous improvements and assess if additional effort may be required from either CONSULTANT or CITY. The schedule can be developed to work in alignment with water treatment plant upgrade, with early development of those items not affected by the water treatment upgrade. CONSULTANT's estimate assumes approximately one day per week over a nine month period, which will be dependent on plant upgrade progress.

The work products of this task will be:

- Monitoring Improvement Progress List to be updated monthly for a nine month period
- Performance Targets
- Dashboard Reports
- HMI/SCADA Trending Tools
- RO Normalization Tools
- Revised Operator Log Sheets

The estimated cost for this task is not to exceed **\$51,000**, as more particularly described in Exhibit B.

IV. SOP Development

It is recommended that key standard operating procedures ("SOPs") be developed to supplement SOPs already identified by CITY, and to include additional SOPs as identified as a result of the upgrade works planning.

In this proposed scope CONSULTANT has separated the development of SOPs as a separate scope item to CONSULTANT's recommended Operations and Maintenance Management Plan ("OMMP") development. The OMMP development, rather, is listed as an ongoing support item. It is nonetheless important to optimize the effort involved, that the OMMP and SOPs are both updated in conjunction with the planned plant modifications that will be taking place this year. It is recommended that the work on updating of the standard operating procedures begins soon, and work in conjunction with these changes as they take place. This will ensure that SOPs are up to date with the system upgrade.

The recommended scope and approach for this task are as follows:

- **Water quality monitoring and reporting plan update**

As acknowledged in CONSULTANT's baseline report, the Water Quality Sampling Plan has taken great strides in capturing requirements for water quality monitoring at the plant. This task will include adding water quality regulatory requirements, process water quality monitoring, instrument calibration and verification to develop a comprehensive water quality management plan. This plan may or may not be later included in the OMMP.

- **Develop schedule for SOP development.**

This task will include developing an agreed schedule of SOPs for the plant with a

schedule for completion of each SOP. As for the OMMP, for each SOP, a nominated CONSULTANT staff member along with a CITY staff member will be identified to support each area, along with a targeted completion date. As for the OMMP, CONSULTANT will work to prioritize based on the schedule of the water treatment plant upgrade.

- **Develop SOPs**

This task will include development of SOPs in conjunction with CITY staff. Monthly status review will be included for this task as progress will rely on CITY staff availability and upgrade progress.

The work products of this task are:

- Water Quality Monitoring and Reporting Plan Update – draft and final
- Standard Operating Procedures – draft and final for each individual SOP

These products will be submitted in electronic versions as pdf for formal record and in editable form for flexible updates in the future. The estimated cost for this task is not to exceed **\$63,000**, as detailed in Exhibit B.

V. Ongoing Support – Monthly Not-To-Exceed Rate

A number of the recommendations that have been made for operational improvement will take time, and be reliant on timing and availability of CITY staff and other contractors. Importantly, many of the improvement steps that have been recommended must be scheduled such that they co-ordinate well with the water treatment plant upgrade, to ensure there is no unnecessary re-work.

It is important that the OMMP is completed to reflect equipment and operations following the water treatment plant and equipment upgrade.

By working to a monthly not-to-exceed rate, it is possible to address the requirements of the CITY in a timely manner, with flexibility to adjust to the requirements of the upgrade works and other CITY staffing demands. It will also be possible to tailor the development of operational systems to fit with this schedule, to take advantage of the time available during the upgrade.

For the ongoing support, CONSULTANT shall propose to include the OMMP update as an ongoing support item.

The ongoing support shall include additional scope items to support the CITY during the upgrade phase which shall include:

- CITY representation/technical support for the upgrade works currently underway by GHD.
- Conduct and attend an Optimization Prioritization Meeting (estimated to be 3 days) to work through the proposed upgrade schedule, set priorities for the City and align schedules for operational components (OMMP, SOPs, monitoring).

- Determine plant availability based on current configuration and determine process/equipment bottlenecks.
- Assist with the development of additional training for CITY, for non-process items (as noted above).

A. Update Operations Maintenance and Monitoring Plan (OMMP)

The OMMP is a critically important document for operations, and should contain the key documented elements to operate the plant safely and reliably to meet production, water quality and other regulatory targets. The OMMP is an explicit requirement of the water treatment plant permit, and it must be kept current as a compliance requirement.

The current OMMP appears to not be up to date and incomplete in some sections. It is recommended that the OMMP undergo a thorough overhaul and update to bring it into line with current operation and regulatory requirements.

In performing this scope of work, it is important to strike a balance providing a sufficient level of detail to inform operations and satisfy regulatory requirements, while at the same time providing sufficient flexibility for operations to ensure that any minor alterations to operating instructions or processes may be implemented without wholesale changes required. For example, some standard operating procedures, sampling planning documents and other items may be referenced by the OMMP, but not specifically included within it.

Recognizing that the plant will undergo refurbishments in the coming months, it is recommended that a schedule of OMMP update be developed to best match with the upgrade schedule and incorporate plant and operational changes. This item is now separate from SOP development, however both tasks should be coordinated for best efficiency.

The recommended scope and approach for this task are as follows:

- **Content and Schedule Planning for OMMP Update**

This will be in the form of a workshop with key operations staff, to agree on OMMP table of contents, sections for updated and a schedule for updating those sections based on the plant upgrade schedule. For each chapter, select CONSULTANT staff along with CITY staff will be identified to support each area, along with a targeted completion date.

- **OMMP Update**

This task will include the updating of the OMMP, as discussed in the above schedule plan. It will include support from CONSULTANT in conjunction with nominated plant staffing. Regular status review will be included for this task as progress will rely on CITY staff availability and upgrade progress.

The work product for this task is:

- OMMP Update, individual draft sections, complete draft and final

B. Client Representation/Technical Support for the Upgrade Works Currently Underway by GHD.

It is understood that the upgrade scope for the water treatment plant now includes a number of process and operational items to be modified. As experts in reverse osmosis water treatment, CONSULTANT will provide technical assistance and support in the role client technical reviewer. This will provide a check that modifications considered are consistent with industry practices and importantly consider operational aspects, keeping consistent with recommendations for operational improvement. This task will consist of regular plant site discussions, discussions with the upgrade contractor (with and on CITY's behalf).

As a starting point for this work, CONSULTANT will conduct an Optimization Prioritization Meeting (est 2 days) to work through the proposed upgrade schedule, set priorities for the City and align schedules for operational components (OMMP, SOPs, monitoring).

This work will ensure consistency between the work conducted by Hazen and Sawyer and other contractors.

The work products for this task include:

- A 2 day optimization prioritization meeting.
- Regular meetings with other contractors with and on CITY's behalf.
- Regular review of plant upgrade progress.

Assist with the Development of Additional Training

This task includes the co-ordination and development of additional training for non-process related items as identified in CONSULTANT's recommendations report. This will include development of training packages by CONSULTANT staff, by CITY with CONSULTANT support, and if required co-ordination of external training support if required (and as agreed by the CITY). This will ensure that CITY operations staff have a complete training package to support operations.

Additional scope items may be included, or existing scope items modified by CITY in writing if approved by the Director of Public Works Services on an ongoing basis. It is anticipated that new or modified scope items would be generated collaboratively by CITY operations staff and CONSULTANT, and submitted to Public Works Services Management for written authorization.

CONSULTANT's estimate for this work will cost approximately **\$40,000** per month, based on an estimate of the above scope items over a 9 - 12 month period, as detailed in Exhibit B. This is a not-to-exceed amount, and the CITY will only be billed for that work which is agreed to in advance in writing for each monthly period.

VI. Summary

In summary, the tasks are as follows:

1. RO Optimization Strategy, Concentrate Minimization Strategy and Valve Specification – not to exceed \$35,000.
2. Operations Training – Process Technology Training Sessions – not to exceed \$20,000.

3. Operating Performance Monitoring Improvements – not to exceed \$51,000.
4. Standard Operating Procedure (SOP) Development – not to exceed \$63,000.
5. Ongoing Support – not to exceed \$25,500/month for 9 to 12 months including
 - A. OMMP Development
 - B. Client Representation/Technical Support for Current Upgrades
 - C. Assist with Additional Operations Training
 - D. Additional Tasks as Authorized in writing by the Director of Public Works Services

EXHIBIT B

SCHEDULE OF PAYMENT AND RATES

SCHEDULE OF PAYMENT AND RATES AS OUTLINED IN ORIGINAL AGREEMENT:

RATES:

Phase 1 - Baseline Review					
	Lynn Grijalva	Troy Walker	Silvana Ghiu	Kenny Chau	Total
	\$287	\$256	\$180	\$105	Not to Exceed
A review of current plant targets and performance against those targets (focusing on production, water quality, and regulatory reporting).		8			\$2,048
A review of plant process performance.			16		\$2,880
A review of current documented systems and processes.		16		16	\$5,770
Interviews with operations staff and operations management.		8			\$2,048
A review of communication practices and protocols.		8			\$2,048
A review of operator knowledge/training gaps.		8		8	\$2,885
Report		16			\$4,096
QA/QC	8				\$2,296
	8	64	16	24	
Labor	\$2,296	\$16,384	\$2,880	\$2,511	\$24,071
Expenses (Airlines and Accommodation)					\$1,929
Task Total					\$26,000

RATES:

Phase 2 - Agree on Priorities and Develop an Action Plan					
	Lynn Grijalva	Troy Walker	Silvana Ghiu	Kenny Chau	Total
	\$287	\$256	\$180	\$105	
Planning with operation management		8			\$2,048
Workshop		8		8	\$2,885
Action Plan Development		32			\$8,192
QA/QC	4				\$1,148
	4	48	0	8	
Labor	\$1,148	\$12,288	\$0	\$837	\$14,273
Expenses					\$727
Task Total					\$15,000

SCHEDULE OF PAYMENT AND RATES AS OUTLINED IN AMENDMENT NO.1:

CITY shall compensate CONSULTANT for the services required by this Agreement in accordance with the cost breakdown, Attachment 1 to this Exhibit.

In no event shall the total cost for the additional services exceed \$229,000, as more fully detailed in Attachment 1 to this Exhibit.

SCHEDULE:

CONSULTANT shall submit an itemized statement to CITY for services performed, which shall include documentation setting forth in detail a description of the services rendered and the hours of service. CITY shall pay CONSULTANT the amount of such undisputed billing within thirty (30) days of receipt of same.

CITY shall compensate CONSULTANT for the satisfactory performance of all the work described in Exhibit A, in an amount not to exceed Two Hundred Seventy Thousand Dollars (\$270,000).

ATTACHMENT 1 TO EXHIBIT B

Task No.	Description	Lynn Grijalva Principal In Charge	Troy Walker Project Manager	Silvana Ghu Principal Scientist	Kenny Chau Assistant Engineer	Brad Reisinger Associate	Kevin Alexander QA/QC	Labor Hours
FIXED FEE ITEMS								
1	Operations Training							
	Permits and Regulations (Preparation)							0
	Permits and Regulations (Training)							0
	Water Quality Sampling and testing (Preparation)							0
	Water Quality Sampling and testing (Training)							0
	Safety (Preparation)							0
	Safety (Training)							0
	Instrumentation (Preparation)							0
	Instrumentation (Training)							0
	Equipment and Maintenance (Preparation)							0
	Equipment and Maintenance (Training)							0
	SCADA (Preparation)							0
	SCADA (Training)							0
	Process Technology (Preparation, includes all processes)		16	24				40
	Process Technology (Training)		24	16				40
	QA/QC						4	4
		0	40	40	0	0	4	0
		\$0	\$10,240	\$7,200	\$0	\$0	\$1,200	\$18,640
	Expenses		\$1,500					\$1,500
	Task Total							\$20,140
2	RO Unit Operation Options and Concentrate Minimization Strategy							
	Options for operating the RO unit efficiently at a reduced flow rate.			40		16		56
	Concentrate minimization strategy			40				40
	Concentrate valve specification					24		24
	RO Stripper performance improvements			40		20		60
							8	0
								8
	QA/QC							0
		0	0	120	0	60	8	188
		\$0	\$0	\$21,600	\$0	\$10,500	\$2,400	\$34,500
	Expenses							\$0

Task Total							\$34,500
3	Operational Performance Monitoring						
	Definition of Performance Targets with Beverly Hills Staff	16					16
	Development of Key Dashboard Reports	8		24			32
	Review and Improvement of HMI Trending	8	24	40			72
	RO system normalization development (manual normalization)	0	16	16			32
	RO system normalization development (automated from SCADA)				80		80
	Review and modification of log sheets	4		8			12
	Reporting Development	4	16	16			16
	QA/QC					8	16
		0	40	56	104	80	292
	Hazen and Sawyer Labor	\$0	\$10,240	\$10,080	\$10,879	\$14,000	\$47,599
	Expenses (accom for troy + 2 return airfar)		\$2,500	\$300	\$100	\$500	\$3,400
Task Total							\$50,999
4	SOP Development						
	Review and agreement of format and content for new OMMP						0
	Re-draft of OMMP						0
	Water Quality Monitoring and Reporting Improvements	24					24
	Develop schedule for SOP Development	16	16				32
	SOP Development	80	80	80			240
	QA/QC					16	16
		0	120	96	80	0	312
	Expenses	\$0	\$30,720	\$17,280	\$8,369	\$0	\$61,169
			\$1,125	\$150	\$50	\$50	\$1,375
Task Total							\$62,544
5	Additional As-Needed Support - Subject to City approval prior to commencement of work						\$60,000.00
	Items may include and not limited to the following:						
	a OMMP Development						
	b Client Representation/Technical Support for Current Upgrades						
	c Assist with Additional Operations Training						
	d Additional Tasks as Authorized						
	Amendment 1 Scope of Work Not to Exceed Total \$229,000						

ATTACHMENT 3

AMENDMENT NO. 2 TO AN AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND HAZEN AND SAWYER TO PROVIDE THE CITY OF BEVERLY HILLS WITH WATER TREATMENT OPERATIONS SYSTEMS AND PROCESSES CONSULTING SERVICES

NAME OF CONSULTANT: HAZEN AND SAWYER

RESPONSIBLE PRINCIPAL OF CONSULTANT: Lynn Grijalva, P.E.,
Vice President

CONSULTANT'S ADDRESS: Hazen and Sawyer
1149 South Hill St., Suite 450
Los Angeles, CA 90015
Attention: Lynn Grijalva, P.E.
Vice President

CITY'S ADDRESS: City of Beverly Hills
455 N. Rexford Drive
Beverly Hills, CA 90210
Attention: George Chavez,
Director of Public Works Services

COMMENCEMENT DATE: July 14, 2014

TERMINATION DATE: September 30, 2016

CONSIDERATION: Original Amount: Not to exceed \$41,000
Amendment No. 1: Not to exceed \$229,000
Amendment No. 2: Not to exceed \$78,963, as more particularly described in Exhibit B
Total: Not to exceed \$348,963

AMENDMENT NO. 2 TO AN AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND HAZEN AND SAWYER TO PROVIDE THE CITY OF BEVERLY HILLS WITH WATER TREATMENT OPERATIONS SYSTEMS AND PROCESSES CONSULTING SERVICES

This Amendment No. 2 is to that certain Agreement between the City of Beverly Hills (hereinafter called "CITY"), and Hazen and Sawyer (hereinafter called "CONSULTANT") dated July 18, 2014 and identified as Contract No. 358-14, and amended by Amendment No. 1 dated February 17, 2015 and identified as Contract No. 57-15 (collectively, "Agreement").

RECITALS

A. CITY entered into a written agreement with CONSULTANT for water treatment operations and processes consulting services, which was previously amended.

B. CITY and CONSULTANT desire to further amend the Agreement to extend its term, add additional services and increase the compensation for such services.

C. These additional services include preparation of a water quality assessment and monitoring plan and a water treatment and distribution system emergency response plan.

NOW, THEREFORE, the parties agree as follows:

Section 1. The TERMINATION DATE shall be amended as set forth above.

Section 2. The CONSIDERATION shall be amended as set forth above.

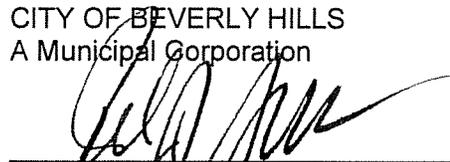
Section 3. Exhibit A-1, "Additional Scope of Work," shall be added to Exhibit A as attached hereto and incorporated herein.

Section 4. Exhibit B-1, "Schedule of Payment and Rates," shall be added to Exhibit B as attached hereto and incorporated herein.

Section 5. Except as specifically amended by Sections 3 and 4 of Amendment No. 1 and by this Amendment No. 2, the remaining provisions of the Agreement shall remain in full force and effect.

EXECUTED the 5th day of January 2016, at Beverly Hills, California.

CITY OF BEVERLY HILLS
A Municipal Corporation



JULIAN A. GOLD, M.D.
Mayor of the City of Beverly Hills, California

ATTEST:

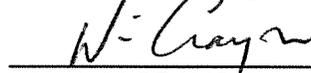


BYRON FOFE
City Clerk

HAZEN AND SAWYER



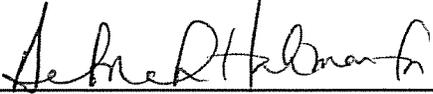
LYNN GRIJALVA, P.E.
Vice President



WILLIAM CRAYON
Controller

[Signatures continue]

APPROVED AS TO FORM:



DAVID M. SNOW
Interim City Attorney

APPROVED AS TO CONTENT



MAHDI ALUZRI
City Manager



GEORGE CHAVEZ
Director of Public Works Services



KARL KIRIKMAN
Risk Manager

EXHIBIT A-1

ADDITIONAL SCOPE OF WORK

CONSULTANT shall perform the following services:

Task 1

CONSULTANT shall prepare a Water Quality Assessment and Monitoring Plan (WQAMP) for CITY. The report shall meet the requirements of the Division of Drinking Water (DDW). If preferred by CITY, CONSULTANT shall communicate with DDW on behalf of CITY to ensure the WQAMP meets DDW's expectations. CONSULTANT has worked with DDW on behalf of many utilities. A draft WQAMP shall be provided to CITY for review and comments before it is finalized. The WQAMP shall include the following sections:

- Background
- Water Source Assessment and Monitoring
- Treatment Processes and Monitoring
- Distribution System Monitoring
- Reservoir Monitoring and Maintenance
- Water Quality Control Programs
- Distribution System Maintenance
- References

CONSULTANT shall use CITY's current Drinking Water Quality Monitoring Manual as a baseline, which describes the current water quality monitoring for the wells, treatment processes and the distribution system. CONSULTANT shall review the Manual and ensure all regulatory required monitoring is included and up-to-date, including but not limited to Title 22, Primary Drinking Water Standards, Secondary Drinking Water Standards, Stage 1 and 2 Disinfectants and Disinfection Byproducts Rules, Lead and Copper Rule, Total Coliform Rule. In addition, non-regulatory water quality monitoring such as nitrification monitoring (if nitrification is an issue) will also be reviewed and included in the WQAMP with CITY's approval.

CONSULTANT shall attach the following appendices to the WQAMP. CITY indicated all the information is available except that Drinking Water Source Assessment and Protection (DWSAP) documentation (available but need an update) and the Damaged Fire Hydrant Form. CONSULTANT shall gather the documents and attach them to the WQAMP, assuming only minor updates to the DWSAP document.

- Domestic Water System Map
- System Schematic Diagram
- Drinking Water Source Assessment and Protection (DWSAP) Documentation
- Bacteriological Sample Siting Plan
- Nitrification Monitoring, Prevention and Control Plan
- Emergency Chlorination Plan
- HAA Results
- Lead and Copper Monitoring Results
- TTHM Monitoring Sites and Results
- Guidelines for Reservoir Sampling, Chlorinating and Dechlorinating
- Reservoir Maintenance Database, Reservoir Maintenance Schedule
- Complaint Summary Sheet
- Cross Connection Control Program

- Flushing and Valve Maintenance Program
- Dead End Locations List
- Flushing Log Worksheet
- Damaged Fire Hydrant Form
- Disaster Response Form
- Emergency Notification Plan
- Specifications for Water and Sewer Separation Requirements
- DRS Approval for Nitrate
- Typical Well Site Piping

As part of the preparation of the WQAMP, CONSULTANT shall help CITY review the whole water system from water source to distribution system with regards to water quality, and identify the potential areas that need improvements for better water quality control. CONSULTANT shall work with CITY and prepare water quality monitoring sheets which are tailored for CITY for more efficient data management and reporting.

Task 2

CONSULTANT shall prepare an Emergency Response Plan (ERP) for CITY's Domestic Water Treatment and Distribution System. The ERP will incorporate the wells, distribution system, reservoirs/tanks and Reverse Osmosis (RO) Treatment System. Tasks will include the following:

- Review Current Regulations: The most recent regulations shall be reviewed to ensure that the ERP meets the most recent requirements. As a minimum, review shall include but not be limited to
 - California Government Code Section 8607.2 for Public Water System Plans
 - United States Public Law 107-188 Public Health Security and Bioterrorism Preparedness and Response Act of 2002
 - California Health and Safety Code
 - California Water Works Standards
- Meetings: CONSULTANT shall meet with CITY staff to obtain the information necessary for preparation of the Vulnerability Assessment (VA), meet with CITY staff to review comments on the VA draft, and meet upon completion of the draft ERP. 3 meetings are anticipated.
- Prepare Vulnerability Assessment (VA): CONSULTANT shall prepare the VA using the existing VA prepared in December 2013. CONSULTANT shall submit the revised VA to CITY for review and the final VA will be submitted to the Environmental Protection Agency (EPA) prior to the submittal of the ERP. The pertinent information will be incorporated into the ERP. At a minimum, the VA will include the following items:
 - Description of the water system, missions and objectives
 - Identification and prioritization of adverse consequences to avoid
 - Identification of critical assets that may be subject to vandalism that could result in undesired consequences
 - Analysis of current risk and development of a prioritized plan for risk reduction
- Prepare Emergency Response Plan: CONSULTANT shall prepare ERP that focuses on the actions needed to reduce impacts and respond in a timely manner in the event of natural disasters such as earthquakes, waterborne diseases and floods, as well as events caused by human activities, including vandalism, terrorism, cross connections, construction accidents, chemical spills, power outages, and fires. It is anticipated the ERP will have the following sections:

- Section 1: Introduction
- Section 2: Emergency Planning Process
- Section 3: Water System Information
- Section 4: SEMS/ICS Integration and Organization
- Section 5: Concept of Operations
- Section 6: Communication Procedures
- Section 7: Restoration and Recovery
- Section 8: Emergency Response Training

**EXHIBIT B-1
ADDITIONAL SCHEDULE OF PAYMENT AND RATES**

CONSULTANT shall submit an itemized statement to CITY for services performed, which shall include documentation setting forth in detail a description of the services rendered. CITY shall pay CONSULTANT the amount of such billing within thirty (30) days of receipt of same.

CITY shall compensate CONSULTANT for the satisfactory performance of the work described in Exhibit A, in an amount not to exceed Seventy Eight Thousand Nine Hundred Sixty Three Dollars (\$78,963), as set forth below.

	Principal in Charge QA/QC	Project Manager	QA/QC	Senior Associate	Senior Principal	Engineer	Assistant Engineer	Total
	\$287	\$256	\$256	\$195	\$175	\$120	\$105	
Task 1 – Preparation of a Water Quality Assessment and Monitoring Plan (WQAMP)								
1. Project Management		3						\$768
2. Background		2					8	\$1,349
3. Monitoring Schedule					8	32	8	\$6,077
4. Treatment Processes		2			10		20	\$4,354
5. Distribution System Monitoring					16	16	8	\$5,557
6. Water Quality Control Programs		2			16	16	8	\$6,069
7. Distribution System Maintenance					16	16	8	\$4,290
8. Report Preparation and Review		14			32	40	40	\$18,168
9. Quality Assurance/Quality Control	2		14					\$4,158
TASK 1 SUB-TOTAL	\$574	\$5,376	\$3,584	-	\$15,750	\$13,440	\$11,298	\$50,022
Task 2 – Preparation of Emergency Response Plan								
1. Review Current Regulations				8			16	\$3,234
2. Meetings		12		12			12	\$6,667
3. Vulnerability Assessment	2	6		8			16	\$5,344
4. Emergency Response Plan	8	16		24			56	\$16,930
TASK 2 SUB-TOTAL	\$2,870	\$8,704	-	\$8,580	-	-	\$8,787	\$28,941
TOTAL	\$3,444	\$14,080	\$3,584	\$8,580	\$15,750	\$13,440	\$20,085	\$78,963

ATTACHMENT 4

AMENDMENT NO. 3 TO AN AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND HAZEN AND SAWYER TO PROVIDE THE CITY OF BEVERLY HILLS WITH WATER TREATMENT OPERATIONS SYSTEMS AND PROCESSES CONSULTING SERVICES

NAME OF CONSULTANT: HAZEN AND SAWYER

RESPONSIBLE PRINCIPAL OF CONSULTANT: Lynn Grijalva, P.E.,
Vice President

CONSULTANT'S ADDRESS: Hazen and Sawyer
1149 South Hill St., Suite 450
Los Angeles, CA 90015
Attention: Lynn Grijalva, P.E.
Vice President

CITY'S ADDRESS: City of Beverly Hills
455 N. Rexford Drive
Beverly Hills, CA 90210
Attention: George Chavez,
Assistant City Manager/Director of Public Works Services

COMMENCEMENT DATE: July 14, 2014

TERMINATION DATE: September 30, 2017

CONSIDERATION: Original Amount: Not to exceed \$41,000
Amendment No. 1: Not to exceed \$229,000
Amendment No. 2: Not to exceed \$348,963
Amendment No. 3: Not to exceed \$103,370; as more particularly
described in Exhibits B-2
Total: Not to exceed \$452,333

AMENDMENT NO. 3 TO AN AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND HAZEN AND SAWYER TO PROVIDE THE CITY OF BEVERLY HILLS WITH WATER TREATMENT OPERATIONS SYSTEMS AND PROCESSES CONSULTING SERVICES

This Amendment No. 3 is to that certain Agreement between the City of Beverly Hills (hereinafter called "CITY"), and Hazen and Sawyer (hereinafter called "CONSULTANT") dated July 18, 2014 and identified as Agreement No. 358-14, and amended by Amendment No. 1 dated February 17, 2015 and identified as Agreement No. 57-15 and amended by Amendment No. 2 dated January 5, 2016 and identified as Agreement No. 03-16 (collectively, "Agreement").

RECITALS

A. CITY entered into a written agreement with CONSULTANT for water treatment operations and processes consulting services, which was previously amended.

B. CITY and CONSULTANT desire to further amend the Agreement to extend its term, add additional services and increase the compensation for such services.

C. These additional services include preparation of a water quality assessment and monitoring plan and a water treatment and distribution system emergency response plan.

NOW, THEREFORE, the parties agree as follows:

Section 1. The TERMINATION DATE shall be amended as set forth above.

Section 2. The CONSIDERATION shall be amended as set forth above.

Section 3. Exhibit A-2, "Additional Scope of Work," shall be added to Exhibit A as attached hereto and incorporated herein.

Section 4. Exhibit B-2, "Schedule of Payment and Rates," shall be added to Exhibit B as attached hereto and incorporated herein.

Section 5. Except as specifically amended by Sections 3 and 4 of Amendment No. 1 and No. 2 and by this Amendment No. 3, the remaining provisions of the Agreement shall remain in full force and effect.

EXECUTED the ____ day of _____ 20____, at Beverly Hills, California.

CITY OF BEVERLY HILLS
A Municipal Corporation

JOHN A. MIRISCH
Mayor of the City of Beverly Hills, California

ATTEST:

BYRON POPE
City Clerk

HAZEN AND SAWYER



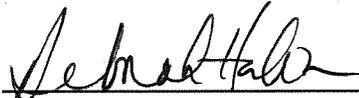
LYNN GRIJALVA, P.E.
Vice President



WILLIAM CRAYON
Controller

[Signatures continue]

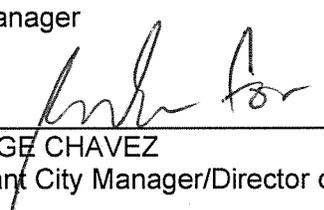
APPROVED AS TO FORM:



LAURENCE S. WIENER
City Attorney

APPROVED AS TO CONTENT

MAHDI ALUZRI
City Manager



GEORGE CHAVEZ
Assistant City Manager/Director of Public Works Services



KARL KIRKMAN
Risk Manager

EXHIBIT A-2

ADDITIONAL SCOPE OF WORK

CONSULTANT shall perform the following services:

INTRODUCTION

As part of CITY's plan to expand reliable local water supplies, CITY has drilled and tested a new set of potable water wells, known as the Maple Yard Wells. CITY is now embarking on the design of infrastructure to connect and integrate the Maple Yard Wells into the potable water supply system.

PURPOSE

The purpose of the Owner's Engineer services is to provide professional advice and review related to water quality, regulatory compliance, treatment, blending and system controls.

Task 1 Regulatory Alignment

Compile and review water quality data and work with CITY staff to develop a strategy for treatment, disinfection and blending. Consider the water quality differences with the current groundwater supplies and the compatibility with the existing treatment process with particular attention to the reverse osmosis unit, reverse osmosis pretreatment chemistry, the hydrogen sulfide stripping unit, and the disinfection requirements. Based on the preliminary testing results, it is anticipated that the new supply will require disinfection and blending with other supplies, but may not require treatment.

- Develop a sampling and monitoring plan to facilitate approval to introduce the Shallow Well water into the distribution system as early as possible.
- Review the well monitoring data for up to a 12-month period
- Evaluate potential point(s) in the existing process for connecting the Shallow Well water. Attend up to 4 meetings with the California Division of Drinking Water (DDW) to discuss the connecting point(s) and blending plan, the monitoring plan, the data collected and the interpretations, all with the purpose to align CITY's plans and DDW's requirements.
- Identify any process, control or operational modifications required for the integration of the new well supply. This will review any impacts of Reverse Osmosis (RO) unit pretreatment chemistry, RO hydraulic design, RO capacity and recovery, impacts to post treatment processes including air stripping, water stability management and chlorine disinfection.
- Evaluate the anticipated impact of the new well water quality on the existing treatment plant performance (not including field testing)
- Evaluate the anticipated impact on existing chlorination, ammonia feed, fluoridation and caustic soda feed facilities and recommend the need to modify the system capacity if applicable.
- Evaluate the impact of the new wells on the 4-log virus inactivation credit.
- Identify need for additional treatment for the Shallow Wells if applicable.

Deliverables – Sampling plan at the beginning of Task 1 and one technical memorandum at the conclusion of Task 1.

Optional services if needed would include:

- Feasibility analysis of additional treatment alternatives

- Engineering report for DDW permit

Task 2 Design Requirements

Develop scope of work requirements for the Maple Yard Wells infrastructure Design Consultant. It is anticipated that these would include:

- Connection points for the wells to the treatment facility,
- Permanent sampling and monitoring locations,
- Integration strategy so that the Design Consultant can incorporate into the hydraulic and control design for the Maple Well pumps.
- Incorporate process modification, operational and control modifications into a technical memo to include in requirements for the infrastructure designer.

CONSULTANT shall participate in one design meeting with CITY and the Design Consultant. Deliverable is a brief technical memorandum describing the design intent. It will be the Design Consultant's responsibility to perform the hydraulic, control and flow calculations and diagrams to meet the design intent.

Task 3 Design Submittal Review

Review the design consultant submittals at the following stages

- Design Kick Off
- 50% Design Drawings
- 90% Design Drawings and Specifications
- One additional design meeting if requested by CITY

Attend one review meeting with CITY and the Design Consultant at each of the stages. Review by CONSULTANT does not take on any of the responsibility or professional liability of the Design Consultant.

CONSULTANT shall participate in up to 4 meetings with CITY and the Design Consultant.

Task 4 On-Going Operational Support

CONSULTANT shall provide operations support tasks as authorized by CITY.

BUDGET

Services will be compensated on a time and materials basis, with a budget for Tasks 1, 2, 3 and 4 not to exceed \$103,370 without prior authorization of CITY as more particularly detailed in Exhibit B-2. The approximate distribution among the tasks is as follows:

Not to exceed:

- Task 1 \$23,794
- Task 2 \$18,462
- Task 3 \$21,114
- Task 4 \$40,000

The budget for the optional services can be provided upon request and after preliminary review of water quality data for the new wells.

SCHEDULE

Services will commence upon notice to proceed, and are anticipated to be completed by September 30, 2017, assuming the well monitoring starts in June 2016 and completes in June 2017. If well monitoring is postponed, this project schedule will be adjusted accordingly.

Project milestones include:

- Sampling and monitoring plan for the new wells that will be submitted to CITY for review in one month following notice to proceed
- First meeting with DDW that is anticipated to be two months following the start of well monitoring
- Recommendation on the connection point(s) for the wells to the potable water treatment, disinfection and storage infrastructure upon consent from DDW

EXHIBIT B-2

ADDITIONAL SCHEDULE OF PAYMENT AND RATES

City of Beverly Hills
 Project Fee Estimate - Owner's Engineer for Maple Yard Well Integration
 Hazen and Sawyer May 2016

TASK No	Task Description	Personnel Hours							Labor and Non-Labor Costs				
		Lynn Grijalva	Nicole Blute	Troy Walker	Mei Mei Dong	Ying Wu	Nathan Boyle	Project Assistant / Engineering Aide	Total Hours	Total Hazen & Sawyer Labor	Travel	Direct Expenses	Total
	Hourly Rates	\$285	\$255	\$245	\$135	\$165	\$125	\$90					
TASK 1	REGULATORY ALIGNMENT												
1.1	Sampling and Monitoring Plan for New Wells	1		2		24	8		35	\$ 5,735			\$ 5,735
1.2	Data Analysis	1		1	24	8	8		42	\$ 6,091			\$ 6,091
1.3	DDW Communication and Negotiation			1		8	8		17	\$ 2,566	\$ 250	\$ 50	\$ 2,866
1.4	Technical Memorandum	1		2	8	24	8		43	\$ 6,815			\$ 6,815
1.4	QA/QC	1	2						3	\$ 795			\$ 795
1.5	Project Management			2			8		10	\$ 1,492			\$ 1,492
	Total Task 1 - Regulatory Alignment	4	2	8	32	64	40	-	150	\$ 23,484	\$ 250	\$ 50	\$ 23,784
TASK 2	DESIGN REQUIREMENTS												
2.1	Connection Requirements	1		2		8	24		35	\$ 5,101			\$ 5,101
2.2	Blending Strategy			2		8	36		46	\$ 6,320			\$ 6,320
2.3	Meeting	2		2		2	2		8	\$ 1,640		\$ 50	\$ 1,690
2.4	Technical Memorandum	1		4			24		29	\$ 4,271	\$ 250	\$ 50	\$ 4,571
2.5	QA/QC	1							1	\$ 285			\$ 285
2.6	Project Management			1			2		3	\$ 495			\$ 495
	Total Task 2 - Design Requirements	5	-	11	-	18	88	-	122	\$ 18,112	\$ 250	\$ 100	\$ 18,462
TASK 3	DESIGN SUBMITTAL REVIEW												
3.1	Preliminary Design Review	1		8		8	8		25	\$ 4,565	\$ 250	\$ 50	\$ 4,865
3.2	30% Design Review	1		8		8	12		29	\$ 5,066	\$ 250	\$ 50	\$ 5,366
3.3	60% Design Review	1		8		8	16		25	\$ 4,248	\$ 250	\$ 50	\$ 4,548
3.4	90% Design Review	1		8			16		25	\$ 4,248	\$ 250	\$ 50	\$ 4,548
3.5	QA/QC	1	2						3	\$ 795			\$ 795
3.6	Project Management			2			4		6	\$ 991			\$ 991
	Total Task 3 - Design Submittal Review	5	2	34	-	16	56	-	113	\$ 19,914	\$ 1,000	\$ 200	\$ 21,114
TASK 4	Continued As-Needed Operational Support												
	Total Task 4 - Continued As-Needed Ops Support												\$ 40,000
Totals		14	4	53	32	98	184	-	385	61,520	1,500	350	103,370