

PROFESSIONAL SERVICES AGREEMENT NO. 47439B

Subject: Professional, Technical, and Engineering Consulting Services

Company Name: AECOM Technical Services, Inc.

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AGREEMENT NUMBER 47439B

BETWEEN THE CITY OF LOS ANGELES DEPARTMENT OF WATER AND POWER AND

AECOM TECHNICAL SERVICES, INC.

THIS AGREEMENT is made and entered into by and between the City of Los Angeles acting by and through its Department of Water and Power, a municipal corporation, (hereinafter "LADWP") and AECOM Technical Services, Inc., a California Corporation, (hereinafter the "Consultant" or "Contractor"). Individually, LADWP and Consultant are referred to under this Agreement as a "Party" and collectively as the "Parties."

RECITALS

WHEREAS, the LADWP proposes to enter into Agreement Nos. 47439A, 47439B, 47439C, 47439D, 47439E, and 47439F (Agreements) with WorleyParsons Group, Inc. (WorleyParsons); AECOM Technical Services, Inc. (AECOM); Black & Veatch Corporation (Black&Veatch); HDR Engineering, Inc. (HDR); Integrated Engineers & Contractors Corporation (IEC); and Stantec Consulting Services, Inc. (Stantec), respectively, for Professional, Technical, and Engineering Consulting Services for a term of five (5) years; and

WHEREAS, LADWP has evaluated, contacted references, and found WorleyParsons, AECOM, Black&Veatch, HDR, IEC, and Stantec the most qualified to provide as-needed professional, technical, engineering, training, and support services; and

WHEREAS, WorleyParsons, AECOM, Black&Veatch, HDR, IEC, and Stantec have reviewed the services to be provided and incorporated in the Agreements and represent that they have the qualities, expertise, skills and abilities to perform such work; and

NOW, THEREFORE, in consideration of the mutual covenants of the parties as set forth below, the parties hereby agree as follows:

ARTICLE I: PARTIES AND NOTICE

1.1 Parties to the Agreement

The Parties to this Agreement are:

Los Angeles Department of Water and Power (LADWP)
111 North Hope Street
Los Angeles, California 90012

and

AECOM Technical Services, Inc. One California Plaza 300 South Grand Avenue Los Angeles, CA 90071

1.2 Service of Notices

All notices, demands and communications regarding the interpretation of the terms of this Agreement or changes thereto shall be made in writing and may be effected by personal delivery or by certified mail, overnight carrier, or confirmed facsimile and shall be deemed communicated as of the date of delivery or the date of mailing, whichever is applicable, or in the case of a facsimile or email, upon receipt if transmitted during the receiving Party's normal business hours, otherwise on the first business day following receipt.

If the name or address of the person(s) designated to receive notices, demands or communications, is changed, or additional persons are added to receive notices, demands or communications, written notice shall be given to the other Party, in accord with this article, of said change.

The authorized representatives to receive said notices shall be:

Authorized representatives of LADWP:

Mr. Mukhlesur Bhuiyan
Contract Administrator
Power System Planning and Development
111 N Hope St, Room 921
Los Angeles, California 90012
(213) 367-2532
Mukhlesur.Bhuiyan@ladwp.com

and

Mr. Simon Zewdu
Power Engineering Manager
Power System Planning and Development
111 N Hope St, Room 921
Los Angeles, California 90012
(213) 367-2525
Simon Zewdu@ladwp.com

Authorized representatives of the Consultant:

Dennis Dudzik, PE
Program Manager
One California Plaza
300 South Grand Ave.
Los Angeles, CA 90071
(213) 996-2214
Dennis.Dudzik@aecom.com

and

Dale Gauthier, PE
Vice-President, Principal-in-Charge
One California Plaza
300 South Grand Ave.
Los Angeles, CA 90071
(760) 318-5164
Dale.Gauthier@aecom.com

1.3 Execution of Task Orders and Contract Administration

The LADWP authorized representatives identified in Article 1.2 above are authorized to execute Task Orders, and perform Contract Administration duties such as issue Change Order Notices, formally approve Deliverables, review invoices submitted for payment, etc.

ARTICLE II: TERM OF THE AGREEMENT

The term of this Agreement shall commence upon execution of this Agreement by all Parties hereto and shall terminate five (5) years thereafter, subject to the termination provisions herein. Performance shall not begin until the Consultant has obtained LADWP approval of insurance required herein.

ARTICLE III: TIME

LADWP and the Consultant understand and agree that "Time is of the Essence" in performance of this Agreement.

ARTICLE IV: COMPENSATION AND PAYMENT

4.1 Compensation

4.1.1 Not-to-Exceed Amount

The total compensation that may be paid to the Consultant by LADWP for complete and satisfactory performance of services under this Agreement along with the other five Agreements numbered 47439A, 47439C, 47439D, 47439E, and 47439F shall not exceed cumulatively Seventy-Eight Million and Three Hundred Sixty Thousand dollars (\$78,360,000).

4.1.2 Authorized Expenditures

Of the total amount of compensation included in Article 4.1.1 above, LADWP shall pay the Consultant for services performed, tasks implemented, and deliverables provided as specified in individual Task Orders executed in accordance with Article 4.2, Allowable Fees and Costs, and Article VI, Task Order Development and Approval, of this Agreement. LADWP shall not be liable for payment of monies unless there is a written Task Order approved by LADWP's authorized representative(s) identified in Article 1.2 of this Agreement. Therefore, there is no guarantee that the Consultant shall receive any amount of work during the term of this Agreement.

4.2 Allowable Fees and Costs

LADWP shall pay for services established in a Task Order executed in accordance with Article VI, Task Order Development and Approval, of this Agreement and based upon the Consultant and Subconsultant labor rates established in Exhibit C, Fee Schedule, which is attached hereto and made a part hereof. Such labor rates are inclusive of salary, employee benefits, overhead, profit, general office expenses, administrative services, invoice preparation and processing, routine telecommunications, internet, personal computer, facsimile, routine postage, individual shipping charges of less than ten dollars (\$10.00), incidental copying, one hard copy of deliverables, and one electronic copy of deliverables costs.

4.2.1 Payment of Subconsultant Costs

LADWP shall pay for Subconsultant expenses at the actual amount to be paid by the Consultant to the Subconsultant, consistent with the Subconsultant labor rates and fees established in Exhibit C, Fee Schedule, or the Subconsultant rates established in an authorized Task Order for services provided in accordance with this Agreement. In the event of a conflict between the Subconsultant rates established in Exhibit C, Fee Schedule, and an authorized Task Order, Subconsultant costs shall be paid at the lowest rate.

The Consultant may invoice for direct services in the management, oversight, and administration of Subconsultants, including the Consultant's reviewing and processing of Subconsultant invoices. No markup of any kind by the Consultant or Subconsultant for Subconsultant services of any tier shall be allowed.

4.2.2 Reimbursement of Travel Expenses

Travel expenses necessary to perform required work for LADWP pursuant to an authorized Task Order must be pre-approved by LADWP. LADWP approved travel expenses shall be paid at the actual cost of such expenses, consistent with **Exhibit D**, **Allowable Travel Expenses**, which is attached hereto and made a part hereof. No markup of any kind by the Consultant or Subconsultant of any tier for travel expenses shall be allowed.

4.2.3 Other Reimbursable Expenses

Other reimbursable expenses include purchase of special equipment, necessary field supplies and facilities, testing and laboratory services, individual shipping charges in excess of ten dollars (\$10.00), materials, supplies used in the work performed for LADWP pursuant to an authorized Task Order. Reimbursable expenses shall be paid by LADWP at the actual cost of such expenses, the expense rates established in **Exhibit C**, **Fee Schedule**, or the expense rates established in an authorized Task Order, as applicable. In the event of a conflict between the expense rates established in **Exhibit C**, **Fee Schedule**, and an authorized Task Order, expenses shall be reimbursed at the lowest rate. No markup of any kind by the Consultant, subconsultant of any tier, or supplier for other reimbursable expenses shall be allowed.

Any items purchased at the request of LADWP to accomplish the work shall become the property of LADWP upon purchase and shall be delivered to LADWP, upon request or at the conclusion of the work. Any other items purchased by the Consultant for performance of services pursuant to an authorized Task Order shall be the property of the Consultant, shall not be charged to LADWP, and shall not be reimbursed by LADWP.

4.2.4 Conditions for Payment for Overtime

Any work required by an individual in excess of eight (8) hours a day, or on a weekend, holiday, or any other instance in which payment of an

overtime or labor rate premium could be applicable shall be based on the labor rates established in **Exhibit C, Fee Schedule**. In special circumstances, an overtime or labor rate premium may be allowed at the sole option of LADWP, with prior written approval by an LADWP authorized representative designated in Article 1.2 of this Agreement. The overtime billing rate shall be calculated based upon the employee's salary rather than the entire fully loaded billing rate.

4.3 Method of Payment

Payment for Consultant services shall be made in accordance with authorized Task Orders. The Consultant shall submit invoices to LADWP in accordance with authorized Task Orders, with the billings against each individual Task Order tracked separately. Each invoice shall be accompanied by a statement detailing the services performed, tasks completed and the deliverables provided for which payment is requested, supporting documentation, and the LADWP Monthly Subcontractor Utilization Form, or its successor reporting format.

4.3.1 Required Invoice Information

A hard copy of the invoice shall be submitted to Accounts Payable Section, Department of Water and Power, City of Los Angeles, PO Box 51211, Room 424, Los Angeles, CA 90051-5511. An electronic copy of the invoice must be concurrently submitted and emailed to DWPAgreementInvoices@ladwp.com, and invoices shall be submitted to:

Mr. Mukhlesur Bhuiyan Contract Administrator Power System Planning and Development 111 N Hope St, Room 921 Los Angeles, California 90012

The following information shall be included in each invoice submitted by the Consultant to LADWP:

- 1. Consultant name, address, and vendor code number as registered on LADWP vendor database
- 2. City of Los Angeles Business Tax Registration Number
- 3. Internal Revenue Service ID Number
- 4. Date of invoice
- Invoice number
- 6. Contract number
- 7. Summary of individual Task Orders, including amount of current invoice, total invoiced to date, total authorized Task Order

- amount, Task Order percent complete, and percent of authorized Task Order cost invoiced to date, and the end date of the Task Order
- 8. Description of services and deliverables provided related to each individual Task Order and associated costs
- Supporting documentation for all costs and expenses, in a format acceptable to LADWP
- 10. Following certification statement signed by the Consultant: "I hereby certify, under penalty of perjury, that the services rendered and billings reflected in this invoice are true, accurate and in conformance with the terms of this Agreement, including but not limited to the Living Wage Ordinance, Los Angeles Administrative Code Section 10.37 et. Seq."
- 11. Taxes
- 12. Total amount of invoice
- 13. Approval signature blocks for LADWP project manager and LADWP authorized representative(s) identified in Article 1.1, Parties to the Agreement and Service of Notices, of this Agreement
- 14. An accompanying LADWP Subcontractor Utilization Form, or its successor reporting format, identifying the amounts paid to each authorized Subconsultant for both the current invoice and total invoiced to date. The Consultant shall explain any deviations from the anticipated Subconsultant percentages identified in Exhibit E, List of Subconsultants, attached hereto and made a part hereof, and recommendations for recovering any shortfalls in Subconsultant utilization
- 15. The following specific language in the invoices/bills is acceptable: "Consultant certifies that all work performed for which this invoice/bill is submitted which required access to critical facilities as designated by LADWP was conducted by an individual(s) and for whom no disqualifying information (including felonies, offenses or moral turpitude, and other disqualifying criteria, if any, as specified in the Agreement between the Consultant and LADWP) has been found."

Consultant's failure to submit accurate and all required information shall result in LADWP's rejection of the invoice and non-payment.

4.3.2 Time and Material Task Order Invoices

1".1

For Task Orders specifying a time and materials method of payment, the Consultant shall invoice LADWP on a monthly basis for costs and

expenses. The Consultant shall provide documents supporting costs and expenses, including original receipts or invoices for expenses in excess of \$25.00, summary of total hours worked by specified individual Consultant employees and the applicable hourly rate, and time sheets or payroll records as appropriate to support individual employee hours worked, with each monthly invoice. Payment shall be made within forty-five (45) calendar days of receipt of the Consultant's invoice prepared in accordance with the requirements of Article 4.3.1 of this Agreement.

4.3.3 Fixed Price Task Order Invoices

For Task Orders specifying a fixed price method of payment, payment shall be made within forty-five (45) calendar days after review and approval of the deliverable by LADWP or receipt of the Consultant's invoice prepared in accordance with the requirements of Article 4.3.1, whichever is later.

4.3.4 Notice of Items Not Approved for Payment

LADWP's project manager will review the Consultant invoice within fifteen (15) working days and notify the Consultant in writing of any missing or required additional documents, questioned costs, inaccuracies, or concerns.

In the event that any deliverables, labor, or reimbursable expenses invoiced by the Consultant are not approved for payment, LADWP shall provide the Consultant with detailed comments addressing the shortfalls or costs of concern and shall meet with the Consultant to discuss such issues. Any disputes between LADWP and the Consultant regarding invoices costs and expenses shall be resolved in accordance with Article XI, Disputes, of this Agreement. LADWP shall pay undisputed invoice amounts.

4.3.5 Notification of Status of Task Order Expenditures

The Consultant shall notify LADWP in writing when costs reach 50 and 75 percent of the authorized Task Order amount. Such notice shall include an assessment of whether or not the tasks assigned in the Task Order can be completed within the authorized expenditure amount, and if not the Consultant shall propose suggested modifications to the Task Order for consideration by LADWP. Failure of the Consultant to provide such written notification may result in late payment of invoices by LADWP.

The notice shall state the estimated amount of additional funds required to continue performance for the period specified in the Schedule. At the time of the Notice, the Consultant shall notify the Authorized Representative in writing of the estimated amount of additional funds, if any, required to continue timely performance under the Task Order, and when the funds will be required.

If, after notification, additional funds are not approved by the end of the Task Order period or another agreed-upon date, upon the Consultant's written request the LADWP Authorized Representative may in its sole discretion terminate the Task Order.

4.3.6 Timely Invoicing

All charges related to the performance of the Consultant's work or services for any Task Order, including Subconsultant and other reimbursable expenses, shall be invoiced by the Consultant to LADWP within six (6) months of the cost or expenses being incurred by the Consultant or Subconsultant. LADWP shall not reimburse the Consultant for any costs, expenses, work, or services invoiced to LADWP six (6) months after the date the costs were incurred by the Consultant or Subconsultant.

4.3.7 Maximum Authorized Amount

Notwithstanding any other provision of this Agreement, any changes or additions hereto that would increase LADWP's total obligation above the maximum authorized amount set forth in Article 4.1.1 of this Agreement shall be subject to prior approval by the Board of Water and Power Commissioners. LADWP shall not be obligated to pay for work performed by the Consultant for any such changes made in violation of this Agreement.

4.4 Labor Rate Adjustment

The labor rates in Exhibit C, Fee Schedule, shall be firm for the first year following the effective date of the Agreement. The Consultant may submit a written request to LADWP for only labor rate adjustment per annum thereafter, at least 30 days before the anniversary of the effective date of this Agreement. If the request is not received 30 calendar days prior to the anniversary date, if approved, the request will be effective 30 calendar days after LADWP receives Consultant's written request.

LADWP will review the rate adjustment request and may change it, upward or downward, by written mutual agreement between the Consultant and LADWP. Rate adjustment shall not exceed the prior year's average Consumer Price Index calculated by using the "annual" averages column data for the United States (U.S.) Department of Labor, Bureau of Labor Statistics Consumer Price Index, U.S. city average for Urban Wage Earners and Clerical Workers, All Items."

ARTICLE V: PROVISION OF SERVICES

5.1 Services to be Provided by the Consultant

During the term of this Agreement, the Consultant shall provide the services, tasks, and deliverables identified in the **Statement of Work (Exhibit H)** included herein, authorized by LADWP in this Agreement, and as set forth and agreed to by the Parties in individual Task Orders.

5.1.1 Description of Consultant Services

Consultant shall provide the services described in **Exhibit H**, and as set forth and agreed to by the Parties in individual Task Orders.

Notwithstanding any other provision of this Agreement, the Consultant shall perform such other work and deliver such other items as are necessary to ensure that the services and deliverables provided under this Agreement meet the requirements set forth in this Agreement, including all Exhibits and attachments.

5.1.2 LADWP Approval of Work

All services, work, tasks, and deliverables are subject to LADWP approval, which approval shall not be unreasonably withheld. Failure to receive approval may result in withholding compensation for such services, work, tasks, and deliverables pursuant to Article IV, Compensation and Payment, of this Agreement.

LADWP reserves the right to contract separately with other consultants to review the Consultant's deliverables and other work products produced in accordance with the terms of this Agreement. If LADWP contracts separately with other consultants to assist LADWP in reviewing the Consultant's deliverables and other work products, the Consultant agrees to cooperate fully and coordinate with such other consultants.

The Consultant shall provide access and make available to LADWP the Consultant's internal documents, reports, and reviews directly related to

the work being performed pursuant to this Agreement, such as Project Schedule related documents and performance and project management audits.

5.1.3 Industry Standard of Care

The Consultant shall perform the work described herein in accordance with industry standards of care and shall reflect competent professional knowledge and judgment.

5.2 Consultant Personnel

5.2.1. Key Consultant Personnel

Key Consultant personnel to be assigned to this Agreement are identified in the List of Key Consultant Personnel set forth in Exhibit F. Key Consultant Personnel shall be available to perform under the terms and conditions of this Agreement immediately upon commencement of the term of this Agreement.

The Consultant shall not reassign any key personnel without LADWP's prior written consent. LADWP shall review and approve or disapprove any personnel who are designated as key personnel in **Exhibit F** for any reason at its sole discretion. LADWP shall act reasonably in exercising its discretion to approve or disapprove any key personnel.

5.2.2 Unavailability of Key Personnel

In the event individual key personnel listed in **Exhibit F** are terminated either with or without cause, or if individual key personnel are otherwise unavailable to perform services for the Consultant, the Consultant shall provide to LADWP written notification detailing the circumstances of the unavailability. The written notification shall designate replacement personnel prior to the effective date of individual key personnel termination or unavailability date, to the maximum extent feasible, but no later than five (5) business days after the effective date of the individual key personnel termination or unavailability. The Consultant shall propose replacement personnel who have a level of experience and expertise equivalent to the unavailable individual key personnel for LADWP review and approval.

The Consultant recognizes and agrees that early notification of the unavailability of key Consultant personnel and proposed replacement

personnel is essential to avoiding delays in completing the services, work, tasks, and deliverables established in this Agreement or authorized Task Orders since the award of this agreement was predicated upon the competency of the Key Personnel provided.

5.2.3 Removal of Consultant Personnel

LADWP shall have the right, in its absolute discretion, to require the removal of Consultant's personnel at any level assigned to the performance of the Services or Work, if LADWP considers such removal necessary in the best interests of the Program and requests such removal in writing. Such personnel shall be promptly removed from the Project by the Consultant at no cost or expense to LADWP. Further, an employee who is removed from the Project for any reason shall not be re-employed on the Project.

5.3 Consultant Use of Subconsultants

Subconsultants, including but not limited to individuals, contract employees, sole proprietors, firms, and corporations, designated to perform work under this Agreement are identified in **Exhibit E, List of Subconsultants**. **Exhibit E, List of Subconsultants**, also contains a description of the service, task responsibilities, and anticipated participation (percentage of overall cost of services) of each Subconsultant identified in **Exhibit E**.

Notwithstanding the fact that the Consultant is utilizing Subconsultants, the Consultant shall remain responsible for performing all aspects of this Agreement and for ensuring that all services, work, and tasks are performed in accordance with the terms and conditions of this Agreement and authorized Task Orders.

LADWP has no obligation to any Subconsultant and nothing herein is intended to create any privity between LADWP and the Consultant's Subconsultant.

5.3.1 LADWP Pre-Approval of Subconsultants

LADWP shall pre-approve, in writing, any reduction, addition or substitution to the Subconsultants listed in Exhibit E, List of Subconsultants, in accordance with Exhibit B, Special Provision, Subcontractor Substitution, Reduction, or Addition, under SP-5. This applies to individuals, contract employees, sole proprietors, firms, and corporations.

5.3.2 Subconsultant Subcontracting

Subconsultants may not subcontract or delegate assigned work unless approved in writing by LADWP.

5.3.3 Agreement Provisions Applicable to Subconsultants

Consultant shall require any subcontract entered into pursuant to this Agreement to be subject to Articles 5.3.2, the provisions of Article VII, Ownership, and Article VIII, Confidentiality and Restrictions on Disclosure of this Agreement.

The Consultant is solely responsible for ensuring that all subcontracts comply with the provisions and the terms of this Agreement, as applicable.

5.3.4 Copies of Consultant Subconsultant Contracts

Upon request, Consultant shall provide LADWP with copies of Consultant Subconsultant contracts associated with the performance of this Agreement.

ARTICLE VI: TASK ORDER DEVELOPMENT AND APPROVAL

6.1 Task Order Request for Proposal (TORP)

During the term of this Agreement, LADWP shall have the right to request submittal of a Task Order Proposal within the general scope of work contemplated by this Agreement and consistent with **Exhibit C**, **Fee Schedule**. Task Orders may be based either upon a fixed price or a time and materials basis. For each task requested, LADWP shall prepare and transmit a TORP to the Consultant which will include the following elements.

- 1. Task order number
- 2. Task name or title
- 3. Purpose and Objective of the task assignment
- 4. Prerequisites to Consultant's performance
- 5. Scope of Work
- 6. Premises (assumptions, conditions, restrictions, project location, etc.)

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- 7. References (from past projects for similar work)
- 8. Key Consultant and Subconsultant personnel required for the task
- Anticipated SBE/DVBE/MBE/WBE subcontractor participation
- 10. Method of compensation (fixed price or time-and-materials basis)

- 11. Estimated total expenditures, including not-to-exceed cost or mutually established fixed price costs, to be paid to the Consultant to perform the task assignment
- 12. Detailed cost estimate with work breakdown, personnel or labor category, labor hours, labor rates, and expenditures as basis for the amount in Item 11
- 13. Applicable Consultant and Subconsultant Labor Rates and Fees, if not included in **Exhibit C, Fee Schedule** of the Agreement
- 14. Schedule, including expected progress reports and expected completion date
- 15. LADWP's designated Task Order Authorized Representative(s) as identified in the TORP.
- 16. Deliverables
- 17. The methodology for evaluation of the successful task order proposal.

6.2 Task Order Proposal

Upon receipt of LADWP's written TORP, the Consultant, at its own expense, shall prepare and deliver to LADWP a written response within ten (10) calendar days or as otherwise requested by LADWP. The Consultant's written response shall be in the form of a Task Order Proposal.

The Consultant may suggest to LADWP that changes be made to the work and services contemplated in the TORP. As part of the Task Order Proposal, the Consultant shall provide LADWP with a detailed cost estimate proposal, including identification of all required personnel, rates, and hours of effort.

In the event that Consultant personnel, Subconsultants, or expenses not included in Exhibit E, List of Subconsultants, or Exhibit C, Fee Schedule, are required by the Consultant to complete the task, the Task Order Proposal shall specifically include such additions to the appropriate Agreement Exhibits for approval and authorization by LADWP.

The Consultant shall comply with Article 5.3.1 of this Agreement and provide a summary of overall Subconsultant utilization for the Task Order and the Agreement as whole, and explain any deviations from the anticipated Subconsultant participation identified in Exhibit E, List of Subconsultants, and recommendations for recovering any shortfalls in Subconsultant utilization.

6.3 Evaluation of Task Order Proposal

LADWP will review and evaluate the Task Order Proposal for completeness, clarity, Consultant's ability to perform the work and services, schedule, and proposed use of Subconsultants and Consultant personnel.

During the review of the Consultant's Task Order Proposal, LADWP and the Consultant shall cooperatively work to develop a Task Order. To that end, informal exchanges between the Consultant and LADWP Task Order administrator or project manager are encouraged to aid in the development of the Task Order.

Any particular Task Order may be performed either on a time-and-materials basis with a not-to-exceed amount established for each Task Order, or upon a lump-sum basis, or a combination thereof. The particular method of compensation for each Task Order shall be determined by the Parties during its development. LADWP and the Consultant shall select the method of compensation that is most compatible with the particular Task Order, provides the least cost to LADWP, and assures the Consultant adequate compensation consistent with this fee schedule in **Exhibit C**.

LADWP and the Consultant agree to make a good faith effort to reach a mutually agreed upon fixed price or time and materials Task Order for services based upon the Consultant labor rates established in **Exhibit C**, **Fee Schedule**. Failure to agree on the price of such Task Orders shall be treated as a dispute and subject to the provisions of Article XI, Disputes, of this Agreement.

Upon agreement over the final form of a Task Order, the Consultant shall transmit the Task Order, signed by the Consultant's Authorized Representative, to LADWP.

6.4 Task Order Approval and Authorization

Upon LADWP's acceptance of an executed Task Order, the LADWP's Authorized Representative(s) as identified in Article 1.2 of this Agreement, or their designee established in writing, shall provide written authorization to the Consultant to commence the work described in the Task Order. A Task Order authorization letter executed by LADWP's Authorized Representative shall be transmitted to the Consultant to document all Task Orders.

The Task Order authorization letter shall describe the full and complete agreement among the Parties regarding the work and services contemplated in the Task Order. LADWP shall not be liable for payment for Consultant services, work, task, deliverables, or costs that are performed outside an authorized Task Order.

6.5 Task Order Modifications

LADWP or Consultant may seek modifications to an authorized Task Order to address needed services, work, tasks, subtasks, deliverables, schedules, or costs

associated with the authorized Task Order or to address changed conditions. Such Task Order modifications shall be processed in accordance with the Task Order development procedures established in this Article VI, Task Order Development and Approval.

ARTICLE VII: OWNERSHIP

7.1 Ownership Rights

It is understood and agreed that the deliverables are being developed by the Consultant for the sole and exclusive use of LADWP and that LADWP shall be deemed the sole and exclusive owner of all right, title, and interest therein, including all copyright and proprietary rights relating thereto. All work performed by the Consultant on deliverables and any supporting documentation therefor shall be considered as "Works-Made-for-Hire" (as such are defined under the U.S. Copyright Laws and international treaties) and, as such, shall be owned by and for the benefit of LADWP. LADWP owns any and all trademarks, patents, copyrights, and any other intellectual property rights for any and all deliverables generated as a result of this Agreement, regardless of the state of completion of said deliverables.

In the event it should be determined that any such deliverables or supporting documentation, or parts thereof, do not qualify as a "Works-Made-for-Hire," the Consultant shall and hereby does transfer and assign to LADWP for no additional consideration, all rights, title, and interest that it may possess in such deliverables and documentation including, but not limited to, all copyrights to the work and all rights comprised therein, and all proprietary rights relating thereto. Upon request, the Consultant shall take such steps as are reasonably necessary to enable LADWP to record such assignment. Further, the Consultant shall contractually require all persons performing under this Agreement, including all Subconsultants, to assign to LADWP all rights, title, and interest, including copyrights to all such "Works-Made-for-Hire."

7.1.1 Use of Deliverables

LADWP has the right to use or not use the deliverables and to use, reproduce, re-use, alter, modify, edit, or change the deliverables as it sees fit and for any purpose. If LADWP determines that a deliverable, or any part thereof, requires correction prior to LADWP approval, LADWP has the absolute right to use the deliverable until such time as the Consultant can remedy the identified deficiency.

In the event deliverables are altered by LADWP or used for a purpose other than the purpose for which it was intended, LADWP agrees to

indemnify and hold the Consultant harmless from losses, damages and claims brought against the Consultant resulting from such alteration or reuse.

7.1.2 Execution of Ownership Documents

The Consultant shall sign, upon request, any documents needed to confirm that the deliverables or any portion thereof are "Works-Made-for-Hire" and to effectuate the assignment of its rights to LADWP.

7.2 Warranty Against Infringement

The Consultant warrants that the performance of the services by the Consultant or its Subconsultants of any tier, pursuant to this Agreement, shall not in any manner constitute an infringement or other violation of any trademark, copyright, patent and/or trade secret of any third party.

7.3 Survival of Provisions

The provisions of this Article VII, Ownership, shall survive termination and expiration of this Agreement.

ARTICLE VIII; CONFIDENTIALITY AND RESTRICTIONS ON DISCLOSURE

8.1 Confidentiality

All documents, records, and information provided by LADWP to the Consultant, or accessed or reviewed by the Consultant, during performance of this Agreement shall remain the property of LADWP. All documents, records and information provided by LADWP to the Consultant, or accessed or reviewed by the Consultant during performance of this Agreement, are deemed confidential. The Consultant agrees not to provide these documents and records, nor disclose their content or any information contained in them, either orally or in writing, to any other person or entity. The Consultant agrees that all documents, records, or other information used or reviewed in connection with the Consultant's work for LADWP shall be used only for the purpose of carrying out LADWP business and cannot be used for any other purpose. The Consultant shall be responsible for protecting the confidentiality and maintaining the security of LADWP documents, records, and information in its possession. The provisions of this Article VIII, Confidentiality and Restrictions on Disclosure shall survive termination and expiration of this Agreement.

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8.2 Reference Background Checks

To the extent permitted by applicable law, LADWP may conduct reference checks on the Consultant, its employees, agents, and Subconsultants who shall have, or may have, access to LADWP customer, employee, power system, or water system information and data during performance of this Agreement. The Consultant recognizes the highly sensitive nature of such information and data and agrees to cooperate with LADWP and provide, to the extent permitted by applicable law, whatever information LADWP requires in order to conduct reference checks. LADWP may request changes to Consultant personnel pursuant to Article 5.2.1 of this Agreement in response to reference check information, and the Consultant shall accommodate such request for personnel changes.

ARTICLE IX: TERMINATION AND SUSPENSION

9.1 Termination for Convenience

9.1.1 Notice of Termination

LADWP may terminate this Agreement, or any Task Order, for its convenience upon giving at least thirty (30) calendar days written notice to the Consultant prior to the effective date of such termination, which date shall be specified in such notice.

9.1.2 Receipt of Notice of Termination

After receipt of a notice of termination and except as otherwise directed by LADWP, the Consultant shall:

- A. Stop work under the Agreement or Task Order on the termination effective date and to the extent specified in the notice of termination.
- B. Place no further orders with Subconsultants for any work except as may be necessary for completion of such portions of the services or work expressly excluded from the Notice of Termination.
- C. Communicate any Notice of Termination to the affected Subconsultants at any tier.
- D. Terminate all orders and contracts with subconsultants that relate to the performance of the services or work.

- E. Settle outstanding liabilities and claims arising out of such termination of orders and contracts with subconsultants, with the acceptance of LADWP if required (which acceptance will be for the final purposes of this Article).
- F. Deliver to LADWP, within ten (10) calendar days after termination, any and all data, reports, other documents, and deliverables, or portions thereof, if any, prepared pursuant to this Agreement, but not already delivered.
- G. Transfer title to LADWP (to the extent that title has not already been transferred) in the manner and at the times and to the extent directed by LADWP, the work in process, completed work, and other material produced as part of or required in respect to performance of this Agreement.
- H. Comply with any other requirements of LADWP as may be specified in the Notice of Termination.

9.1.3 Amount Due

The amount due the Consultant by reason of termination for LADWP's convenience shall be determined as follows:

- A. The Consultant shall be paid on the basis of work completed as set forth in authorized Task Orders after LADWP reviews and approves of the work.
- B. The Consultant shall also be compensated by LADWP on a percentage completed basis of the applicable Deliverables for work in process, when appropriate, in compliance with authorized Task Orders after LADWP review and approval of the work.

9.2. Termination for Cause

LADWP may terminate this Agreement for cause by giving the Consultant a written notice of breach. The Consultant shall have ten (10) calendar days from the date of LADWP's notice of breach to cure, or diligently commence to cure such breach. LADWP's notice of breach shall include a time and location for the individuals identified in Article 1.2 of this Agreement to meet and discuss the notice of the breach. Such meeting shall be scheduled within ten (10) calendar days of the date of the notice of breach. If the Consultant is unable or unwilling to cure, or diligently commence to cure, such breach, or meet within the ten (10)

day timeframe, LADWP may terminate this Agreement anytime thereafter upon providing the Consultant written notice.

If this Agreement is terminated for cause, the Consultant shall comply with Article 9.1.2, above. LADWP shall pay for LADWP accepted deliverables, less the amount of any damages incurred as a result of the Consultant's failure to perform its responsibilities under this Agreement.

9.3 Suspension of Work

Upon written notice, LADWP may direct the Consultant to suspend, and to subsequently resume performance of all or any of the work. In the event that LADWP suspends work, the authorized Task Order schedule and budget shall be adjusted as appropriate in accordance with the provisions of Article 6.5 of this Agreement.

9.4 Termination Transition

When a replacement Consultant has been identified, the Consultant shall provide reasonable cooperation in the transition of its responsibilities to the replacement Consultant selected by LADWP to perform the tasks described in the scope of work and formerly performed by the Consultant for this Agreement during the fifteen (15) calendar day period prior to termination of the Agreement. The Consultant for this Agreement shall accept no additional tasks with respect to the scope of work after the effective date of the termination.

ARTICLE X: AMENDMENTS AND ADMINISTRATIVE CHANGES TO THE AGREEMENT

10.1 Amendments

10.1.1 Request for Amendment

During the term of this Agreement, LADWP shall have the right to request an Amendment to change the terms of this Agreement, including changes in the services to be performed by the Consultant, extension of the term, and any increase or decrease in the amount of compensation authorized in Article 4.1 of this Agreement. LADWP shall make a formal written request with respect to the Amendment.

10.1.2 Development of Amendments

Within ten (10) calendar days following the Consultant's receipt of LADWP's written request for an Amendment, the Consultant, at its own

expense, shall prepare and deliver to LADWP a detailed written statement regarding the implementation and impact of the Amendment.

Upon LADWP's review of the Consultant's written response to the request for an Amendment, LADWP and Consultant shall cooperatively work to develop an Amendment to the Agreement. To that end, informal exchanges between the Consultant and LADWP are encouraged.

10.1.3 Approval and Authorization of Amendments

Amendments shall be incorporated into this Agreement by a written approval properly executed and signed by the Board of Water and Power Commissioners and the person(s) authorized to bind the Consultant thereto. LADWP shall deliver the fully executed Amendment.

Amendments that result in an Agreement term of greater than three (3) years in the aggregate may require City Council approval pursuant to Section 373 of the Charter of the City of Los Angeles (hereinafter "City Charter").

10.2 Administrative Changes

10.2.1 Request for Administrative Changes

During the term of this Agreement, LADWP or the Consultant shall have the right to request changes to the work within the Agreement that are administrative in nature, including but not limited to changes to the authorized representatives, key Consultant or Subconsultant personnel, reporting documentation, and/or the implementation of pre-approved cost of living adjustments in fee schedules. LADWP or the Consultant shall make a formal written request with respect to each administrative change it desires to make.

10.2.2 Development of Administrative Changes

When a change is requested by either Party, the receiving Party will review the implementation and impact of the administrative change. Within ten (10) calendar days following the receipt of the written administrative change request, LADWP or the Consultant, at its own expense, shall prepare and deliver to the originating Party a detailed written statement regarding the implementation and impact of the administrative change.

Upon review of the written response to the administrative change request, LADWP and Consultant shall cooperatively work to develop an Administrative Change to the Agreement. To that end, informal exchanges between the Consultant and LADWP are encouraged.

10.2.3 Approval and Authorization of Administrative Changes

Upon approval of the Administrative Change to the Agreement prepared pursuant to Article 10.2.2, LADWP's authorized representatives as identified in Article 1.2, of this Agreement, or their designee established in writing, shall deliver to the Consultant an Administrative Change authorization to the Agreement (hereinafter "Notice of Administrative Change") for execution, consistent with Article 1.3 of this Agreement.

10.3 Order of Precedence

In the event of any conflict between the terms of this Agreement and the terms of any exhibit, the terms of the exhibit shall control. In the event of any conflict between the following documents, all of which are hereby incorporated by reference into this Agreement, the order of precedence shall be as follows:

- Latest Amendment
- Agreement
- Latest Administrative Change
- Task Order Assignment
- Other reference documents
- Proposal response dated November 1, 2016
- Request for Proposal No. 90370 dated May 20, 2016 and any amendments thereto.

Except as otherwise specified, in the event of any conflict between the Special Provisions and the General Conditions contained herein, the Special Provisions will control.

ARTICLE XI: DISPUTES

11.1 Disputes

11.1.1 Dispute Resolution

The parties shall use their best efforts to resolve disputes under this Agreement. If a settlement cannot be reached, or in the event of default

that could result in termination of this Agreement, LADWP and the Consultant shall schedule a meeting of the individuals identified in Article 1.2 in a good faith attempt to resolve the issues in dispute. Such a Dispute Resolution meeting shall be scheduled and held within ten (10) business days of written request by either party. The meeting shall allow for a detailed presentation of each Party's views on the issues and potential solutions to the dispute or default. If possible, the meeting should result in an agreed upon course of action to resolve the dispute or default.

11.1.2 Continued Work

The Consultant and LADWP shall continue to perform work under the Agreement during any dispute.

11.1.3 Claim Procedures

The provisions of Sections 5.169 and 5.170 (Div. 5, Ch. 10, Art. 1) of the Los Angeles Administrative Code and Section 350 of the City Charter shall govern the procedure and rights of the Parties with regard to claims arising from this Agreement. Nothing herein shall be construed as a waiver of the claim requirements set forth in Government Code 900 et. seq.

ARTICLE XII: ENTIRE AGREEMENT

12.1 Complete Agreement

This Agreement together with the Exhibits hereto completely and exclusively states the agreement of the parties regarding its subject matter and its terms govern, all prior proposals, agreements, or other communications between the parties, oral or written, regarding such subject matter. No verbal, or written agreement nor conversation with any officer or employee of either Party nor any or all prior proposals shall affect or modify any of the terms and conditions of this Agreement. This Agreement shall not be modified except as provided by Article X, Amendments and Administrative Changes to the Agreement, signed on behalf of LADWP and Consultant and by their duly authorized representatives. Any purported oral amendment to this Agreement shall have no effect.

12.2 Number of Pages and Attachments

This Agreement is executed in two (2) duplicate originals, each of which is deemed to be an original. This Agreement includes twenty-six (26) pages and

eleven (11) Exhibits, which constitute the complete understanding among the Parties.

12.3 Represented by Counsel

Each Party acknowledges that it was represented by counsel in the negotiation and execution of this Agreement.

[Signature page follows.]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives.

DEPARTMENT OF WATER AND POWER OF THE CITY OF LOS ANGELES BY BOARD OF WATER AND POWER COMMISSIONERS

AECOM Technical Services, Inc. (Must be signed by two executives or officers of firm)

Ву:		By: Development / VP
	DAVID H. WRIGHT	Chairman of Board of Directors,
	General Manager	President or Vice President
	,	4
Date: _	,	Date: May 22, 2017
And:	·	87.
	BARBARA E. MOSCHOS	Act Corporate Secretary or
	Secretary	Chief Financial Officer
		Date: 5/22/2017
		THE DRIVE TORNEY

AECOM Technical Services, Inc. Vendor Code: 058175040

City Business Tax Registration Certificate Number: 0000050695-0001-5

Internal Revenue Service ID Number: 95-2661922

Agreement No. 47439B

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GC-1 Construction of Provisions and Titles Herein

All titles or subtitles appearing herein have been inserted for convenience and shall not be deemed to affect the meaning or construction of any of the terms or provisions hereof. The language of this Agreement shall be construed according to its fair meaning and not strictly against LADWP or the Consultant. The word "Consultant" herein and in any amendment hereto means the Party or Parties identified in this Agreement wherein this Exhibit is incorporated by reference; the singular shall include the plural; if there shall be more than one Consultant herein, unless expressly stated otherwise, their obligations and liabilities hereunder shall be joint and several; use of feminine, masculine, or neutral gender shall be deemed to include the genders not used.

GC-2 Applicable Law, Interpretation, Enforcement and Severability

Each Party's performance hereunder shall comply with all applicable laws of the United States of America, the State of California, and the City of Los Angeles, including but not limited to laws regarding health and safety, labor employment, wage and hours, workers compensation, and licensing laws which affect employees. Consultant shall comply with new, amended, or revised laws, regulations, and/or procedures that apply to the performance of this Agreement. This Agreement was made and entered into in the City of Los Angeles and shall be governed by, interpreted and enforced in accordance with the laws of the State of California and the City of Los Angeles, without regard to conflicts of laws principles. All litigation arising out of, or relating to, this Agreement shall be brought in a State or Federal court in the County of Los Angeles in the State of California. The Parties irrevocably agree to submit to the exclusive jurisdiction of such courts in the State of California and waive any defense of forum non conveniens. If any part, term or provision of this Agreement shall be held invalid, void, illegal, unenforceable, or in conflict with any law of a federal, state or local government having jurisdiction over this Agreement, the validity of the remaining parts, terms or provisions shall not be affected or impaired thereby.

The provisions of this article shall survive the expiration or termination of this Agreement.

GC-3 Time of Effectiveness

Unless otherwise provided, this Agreement shall take effect when all of the following events have occurred:

A. This Agreement has been signed on behalf of the Consultant by the person(s) authorized to bind the Consultant hereto.

- B. This Agreement has been approved by the City Council or by the Board, inclusive of City Council review period, officer, or employee authorized to give such approval.
- C. The Office of the City Attorney has indicated in writing its approval of this Agreement as to form and legality.
- D. This Agreement has been signed on behalf of LADWP by the person designated by the Board, officer or employee authorized to enter into this Agreement.

GC-4 Integrated Agreement

This Agreement sets forth all of the rights and duties of the Parties with respect to the subject matter hereof, and replaces any and all previous agreements and understandings, whether written or verbal, relating hereto. This Agreement may be amended only as provided for in Article X of this Agreement.

GC-5 Force Majeure

If either Party is unable to perform its obligations because of strikes, lockouts, labor disputes, embargos, acts of God, governmental regulations, judicial orders, enemy or hostile governmental action beyond the reasonable control of the Consultant or its Authorized Subconsultants ("Force Majeure"), and such event continues, or is expected to continue, for more than thirty (30) days, either Party may suspend unperformed services upon notice to the other party in writing, and such party's performance shall be suspended for the period equal to the period of time of such cause for suspension of performance. Both parties shall use reasonable efforts to mitigate the effect of a force majeure event. This section does not excuse either party's obligation to pay for services provided.

GC-6 Waiver

A waiver of a default of any part, term, or provision of this Agreement shall not be construed as a waiver of any succeeding default or as a waiver of the part, term or provision itself. A Party's performance after the other Party's default shall not be construed as a waiver of that default.

GC-7 Independent Consultant

The Consultant is acting hereunder as an independent Consultant and not as an agent or employee of LADWP or the City of Los Angeles, and all of the terms and conditions of this Agreement shall be interpreted in light of that relationship. The Consultant, including Consultant's Subconsultants, suppliers, employees, and agents, shall not represent or otherwise hold out itself or any of its directors, officers, partners, employees, or agents to be an agent or

employee of LADWP for any purpose whatsoever. The Consultant shall not be entitled to any LADWP or City of Los Angeles benefits, including but not limited to, vacation, sick leave, Workers' Compensation, or pension.

GC-8 Prohibition Against Assignment or Delegation

The Consultant may not, unless it has first obtained the written permission of LADWP:

- A. Assign or otherwise alienate any of its rights hereunder, including the right to payment; or
- B. Delegate, subcontract, or otherwise transfer any of its duties hereunder.

Such permission may be withheld at LADWP's sole discretion for any reason or no reason at all since the award of this Agreement was based upon the personal services to be provided by the Consultant.

GC-9 Licenses and Certifications

The Consultant and its officers, agents, and employees shall obtain and maintain all licenses, permits, certifications and other documents necessary for the Consultant's performance hereunder and shall pay any fees required therefore. Such licenses, permits, certifications shall be specific to the State of California or regional regulatory agencies, as applicable to Consultant's services, work, task, and deliverables pursuant to this Agreement. Consultant agrees to immediately notify LADWP of any suspension, termination, lapse, non-renewal, or restriction of such licenses, permits, certifications, or other documents.

GC-10 Non Discrimination/Equal Employment Practices/Affirmative Action

A. Non Discrimination and Equal Employment Practices

The Agreement shall comply with the provisions of Los Angeles Administrative Code Section 10.8.3, Equal Employment Practices. By affixing its signatures on the Agreement that is subject to the Equal Employment Practices Provisions, the Consultant shall agree to adhere to the provisions in the Equal Employment Practices Provisions for the duration of the Agreement.

Furthermore, the Consultant shall include similar provisions in all subcontracts awarded for work to be performed under the Agreement with LADWP and shall impose the same obligations. The contract with the subcontractor that contains similar language shall be made available to LADWP upon request.

B. Affirmative Action Program

The Agreement shall comply with the provisions of Los Angeles Administrative Code 10.8.4, Affirmative Action Program. By affixing its signature on the Agreement that is subject to the Affirmative Action Program provisions, the Consultant shall agree to adhere to the provisions in the Affirmative Action Program for the duration of the Agreement.

Furthermore, the Consultant shall include similar provisions in all subcontracts awarded for work to be performed under the Agreement with LADWP and shall impose the same obligations. The contract with the subcontractor that contends similar language shall be made available to LADWP.

GC-11 Claims for Labor and Materials

The Consultant shall promptly pay, when due, all amounts payable for labor and materials furnished in the performance of this Agreement so as to prevent any lien or other claim under any provision of law from arising against LADWP or City of Los Angeles or any of their respective property (including reports, documents, and other tangible matter produced by the Consultant hereunder), against the Consultant's rights to payments hereunder, and shall pay all amounts due under the Unemployment Insurance Act with respect to such labor.

GC-12 Los Angeles City Business Tax Registration Certificate Required

The Consultant represents that it has obtained and presently holds a Business Tax Registration Certificate(s) required by the City of Los Angeles Business Tax Ordinance (Article 1, Chapter II, Article 21.00 and following, of the Los Angeles Municipal Code). For the term covered by this Agreement, the Consultant shall maintain, or obtain as necessary, all such Certificates required under said ordinance and shall not allow any such Certificate to be revoked or suspended.

GC-13 Indemnification Provisions

General Indemnification

The Consultant undertakes and agrees to indemnify and hold harmless the City of Los Angeles, the Department of Water and Power, the Board of Water and Power Commissioners of the City of Los Angeles, and all of their officers and employees, and, at the option of LADWP, defend LADWP and any and all of its Board, officers, agents, representatives, employees, assigns and successors in interest from and against any and all suits and causes of action, claims, charges, damages, demands, judgments, civil fines and penalties, or losses of any kind or nature whatsoever, for death, bodily injury or personal injury to any person, including Consultant's employees and agents, or damage or destruction to any property of either party hereto, or

third persons in any manner caused by the acts, errors, or omissions incident to the performance of this contract on the part of the consultant, or the Consultant's officers, agents, employees, or sub-consultants of any tier, except for the sole negligence or willful misconduct of LADWP, its Board, officers, agents, or employees.

Intellectual Property Indemnity

Consultant will indemnify, defend at its expense and hold harmless LADWP against any loss, cost, expense, liability, and damages paid by LADWP as a result of any judgment or settlement as a consequence of any infringement claim, demand, proceeding, suit or action (hereinafter "Action") against LADWP, its officers, directors, agents, employees, or affiliates for any infringement or violation, actual or alleged, direct or contributory, intentional or otherwise, of any intellectual property rights, including patents, copyrights, trade secrets, trademarks, service marks, and other proprietary information or rights (collectively "Intellectual Property Rights" hereinafter), (1) on or in any design, medium, matter, plant, article, process, method, application, equipment, device, instrumentation, software, hardware, or firmware used by the Consultant in the construction of the work under this Agreement; or (2) as a result of LADWP's actual or intended use under the specifications contained herein by LADWP of any product furnished by Consultant (hereinafter "Consultant Product"). Consultant Product herein includes, without limitation, any hardware, software, firmware, equipment, device, instrumentation, design, medium, matter, plant, article, process, method, and application. Consultant, however, shall have no liability to LADWP herein with respect to any claim of infringement which is based upon the combination or utilization of the Consultant Product with machines or devices not reasonably anticipated hereunder; or based upon a modification by LADWP of the Consultant Product furnished hereunder.

In Consultant's defense of LADWP, negotiation, compromise, and settlement of any such infringement action, LADWP shall retain discretion in and control of the litigation, negotiation, compromise, settlement, and appeals therefrom, as required by the City Charter, particularly Article II, Sections 271, 272 and 273 thereof.

In addition, if any part of the Consultant Product (a) becomes the subject of an action, (b) is adjudicated as infringing any Intellectual Property right, or (c) has its use enjoined or license terminated, Consultant shall, with LADWP's consent, do one of the following immediately at its expense: i) procure for LADWP the right to continue using said infringing part of the product; ii) replace the product with a functionally equivalent, non-infringing product; or iii) modify the product so it becomes non-infringing.

Exercise of any of the above-mentioned options shall not cause undue business interruption to LADWP or diminish the intended benefits and use of the Consultant Product by LADWP under the specifications herein. If Consultant proves, to LADWP's satisfaction, that none of the

options (i), (ii), or (iii) are feasible, Consultant shall instead refund the full purchase price of the product.

Rights and remedies available to LADWP hereinabove shall survive the expiration or other termination of this Agreement. Further, the rights and remedies are cumulative of those provided for elsewhere in this Agreement and those allowed under the laws of the United States, the State of California, and the City of Los Angeles.

This Condition shall survive the expiration or other termination of this Agreement.

GC-14 insurance

A. General Statement

Acceptable evidence of required insurance, from insurers acceptable to LADWP, is required to be submitted by the Consultant and must be maintained current by the Consultant throughout the term of this Agreement. Said evidence of insurance must be on file with the Risk Management Section in order to receive payment under any agreement for services rendered, and in order to commence work under this Agreement.

B. Applicable Terms and Conditions

(1) Additional Insured Status Required

Consultant shall procure at its own expense, and keep in effect at all times during the term of this Agreement, the types and amounts of insurance specified on the attached Contract Insurance Requirements page. The specified insurance shall by use of City's own endorsement form or by other endorsement(s) attached to such policies, include the City of Los Angeles, LADWP, the Board, and all of their respective officers, employees and agents, their successors and assigns, as additional insureds against the area of risk described herein as respects Consultant's acts, errors, or omissions in its performance of this Agreement, hereunder or other related functions as agreed upon by the parties and performed by or on behalf of Consultant. Such insurance shall not limit or qualify the liabilities and obligations of the Consultant assumed under this Agreement.

(2) Severability of Interests and Cross Liability Required

Each specified insurance policy, as applicable, shall contain a Severability of Interest and Cross Liability clause and shall apply separately to each insured against whom a claim is made or suit is brought and a Contractual Liability Endorsement.

(3) Primary and Non-Contributory Insurance Required

All such insurance shall be Primary and Noncontributing with any other insurance held by LADWP where liability arises out of, or results from, the acts, errors, or omissions of Consultant, its agents, employees, officers, assigns, or any person or entity acting for or on behalf of Consultant. Any insurance carried by LADWP which may be applicable shall be deemed to be excess insurance and the Consultant's insurance is primary for all purposes despite any conflicting provision in the Consultant's policies to the contrary.

(4) Proof of Insurance for Renewal or Extension Required

Within ten (10) days after the expiration date of any of the policies required on the attached Contract Requirement page, Consultant shall provide documentation showing that the insurance coverage has been renewed or extended to LADWP.

(5) Submission of Acceptable Proof of Insurance and Notice of Cancellation

Consultant shall provide proof to the Risk Manager of all specified insurance and related requirements either by use of LADWP's own endorsement form(s), by other written evidence of insurance acceptable to the Risk Manager, but always in a form acceptable to the Risk Manager. The documents evidencing all specified coverage shall be filed with LADWP prior to Consultant beginning operations hereunder. Said proof shall contain at a minimum, the applicable policy number, the inclusive dates of policy coverage, the date the protection begins for LADWP, and the insurance carrier's name. It shall provide that such insurance shall not be subject to cancellation, material reduction in coverage or non-renewal except after written notice by certified mail, return receipt requested, to the Risk Management Section at least thirty (30) calendar days prior to the effective date thereof. The notification shall be sent by electronic means or registered mail to: The Risk Management Section, Financial Service Organization, Post Office Box 51111, JFB Room 465, Los Angeles, California 90051-0100.

(6) Claims-Made Insurance Conditions

Should any portion of the required insurance be on a "Claims Made" policy, the Consultant shall, at the policy inception date following each renewal year, provide evidence that the "Claims Made" policy has been renewed with a retro-active or extended discovery period at a minimum to the policy in place as of the effective date of this agreement with the same limits, terms and conditions of the expiring policy.

(7) Failure to Maintain and Provide as Cause for Termination

Failure to maintain and provide acceptable evidence of the required insurance for the required period of coverage shall constitute a breach of contract, upon which LADWP may immediately terminate or suspend this Agreement.

(8) Specific Insurance Requirements

See Exhibit G, Contract Insurance Requirements-LADWP.

GC-15 Child Support Policy

The Consultant and any Subconsultant(s) must fully comply with all applicable State and Federal employment reporting requirements for the Consultant's and any Subconsultant(s)' employees. The Consultant and any Subconsultant(s) must fully comply with all lawfully served Wage and Earnings Assignment Orders and Notices of Assignment in accordance with the California Family Code. The Consultant and any Subconsultant(s) must certify that the principal owner(s) thereof (any person who owns an interest of 10 percent or more) are in compliance with any Wage and Earnings Assignment Orders or Notices of Assignment applicable to them personally. The Consultant and any Subconsultant(s) must certify that such compliance will be maintained throughout the term of this Agreement.

Failure of the Consultant and/or any Subconsultant(s) to fully comply with all applicable reporting requirements or to implement lawfully served Wage and Earnings Assignments or Notices of Assignment or failure of the principal owner(s) to comply with any Wage and Earnings Assignments or Notices of Assignment applicable to them personally shall constitute a default under this Agreement. Failure of the Consultant and/or any Subconsultant(s) or principal owner(s) thereof to cure the default within ninety (90) calendar days of notice of such default by LADWP shall subject this Agreement to termination.

The Consultant will contractually require all Subconsultants performing services under this Agreement to comply with the provisions of this section.

GC-16 Service Contract Worker Retention Ordinance and Living Wage Policy

Unless otherwise exempt in accordance with the provisions of this Ordinance, this contract is subject to the applicable provisions of the Living Wage Ordinance (LWO), Section 10.37 et seq. of the Los Angeles Administrative Code, as amended from time to time, and the Service Contractor Worker Retention Ordinance (SCWRO), Section 10.36 et seq., of the Los Angeles Administrative Code, as amended from time to time.

- A. Consultant assures payment of a minimum initial wage rate to employees as defined in the LWO and as may be adjusted each July 1 and provision of benefits as defined in the LWO.
- B. Consultant further pledges that it will comply with federal law proscribing retaliation for union organizing and will not retaliate for activities related to the LWO. Consultant shall require each of its Subcontractors within the meaning of the LWO to pledge to comply with the terms of federal law proscribing retaliation for union organizing. Consultant shall receive and retain on file the executed pledges from each such Subcontractor within ninety (90) days of the execution of the Subcontract. Consultant's evidence of executed pledges from each such Subcontractor shall fully discharge the obligation of the Consultant to comply with the provision in the LWO contained in Section 10.37.6(c) concerning compliance with such federal law.
- C. The Consultant, whether an employer, as defined in the LWO, or any other person employing individuals, shall not discharge, reduce in compensation, or otherwise discriminate against any employee for complaining to the City with regard to the employer's compliance or anticipated compliance with the LWO, for opposing any practice proscribed by the LWO, for participating in proceedings related to the LWO, for seeking to enforce his or her rights under the LWO by any lawful means, or otherwise asserting rights under the LWO. Consultant shall post the Notice of Prohibition Against Retaliation provided by the City.
- D. Any Subcontract entered into by the Consultant relating to this Agreement, to the extent allowed hereunder, shall be subject to the provisions of LWO and the SCWRO, and shall incorporate the LWO and SCWRO.
- E. Consultant shall comply with all rules, regulations and policies promulgated by the designated administrative agency, which may be amended from time to time.

Under the provisions of Section 10.36.3(c) and Section 10.37.5(c) of the Los Angeles

Administrative Code, the City shall have the authority, under appropriate circumstances, to terminate this contract and otherwise pursue legal remedies that may be available if the City determines that the subject Consultant has violated provisions of the LWO and the SCWRO or both.

Where under the LWO Section 10.37.6(d), the designated administrative agency has determined (a) that the Consultant is in violation of the LWO in having failed to pay some or all of the living wage, and (b) that such violation has gone uncured, the awarding authority in such circumstances may impound monies otherwise due the Consultant in accordance with the following procedures. Impoundment shall mean that from monies due the Consultant the awarding authority may deduct the amount determined to be due and owing by the Consultant to its employees. Such monies shall be placed in the holding account referred to in LWO Section 10.37.6(d)(3) and disposed of under procedures there described through final and binding arbitration. Whether the Consultant is to continue work following an impoundment shall remain in the unfettered discretion of the awarding authority. The Consultant may not elect to discontinue work either because there has been an impoundment or because of the ultimate disposition of the impoundment by the arbitrator.

Earned Income Tax Credit

This contract is subject to the provisions of Section 10.37.4 of the Los Angeles Administrative Code, requiring employers to inform employees making less than Twelve Dollars (\$12.00) per hour of their possible right to the federal Earned Income Tax Credit (EITC). Employers must further make available to employees the forms required to secure advance EITC payments from employers.

GC-17 Americans with Disabilities Act

The Consultant hereby certifies that it will comply with the Americans with Disabilities Act 42, U.S.C. Section 12101 et seq., and its implementing regulations. The Consultant will provide reasonable accommodations to allow qualified individuals with disabilities to have access to and to participate in its programs, services and activities in accordance with the provisions of the Americans with Disabilities Act. The Consultant will not discriminate against persons with disabilities or against persons due to their relationship or association with a person with a disability. Any subcontract entered into by the Consultant, relating to this Agreement, to the extent allowed hereunder, shall be subject to the provisions of this paragraph.

GC-18 Retention of Records, Audit, and Reports

Consultant shall maintain, and shall cause Consultant's Subconsultants and suppliers as applicable to maintain all records pertaining to the management of this Agreement and, related

subcontracts, and performance of services pursuant to this Agreement, in their original form, including but not limited to, reports, documents, deliverables, employee time sheets, accounting procedures and practices, records of financial transactions, and other evidence, regardless of form (e.g., machine readable media such as disk, tape, etc.) or type (e.g., databases, applications software, database management software, utilities, etc.), sufficient to properly reflect all costs claimed to have been incurred and services performed pursuant to this Agreement. If the Consultant, the Consultant's Subconsultants and/or suppliers are required to submit cost or pricing data in connection with this Agreement, the Consultant must maintain all records and documents necessary to permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections used. All records shall be retained, and shall be subject to examination and audit by LADWP personnel or by LADWP's agents (herein after "Authorized Auditors"), for a period of not less than four (4) years following final payment made by LADWP hereunder or the expiration date of this Agreement, whichever is later. The Consultant shall make said records or to the extent accepted by the Authorized Auditors, photographs, micro-photographs, etc. or other authentic reproductions thereof, available to the Authorized Auditors at the Consultant's offices at all reasonable times and without charge. The Authorized Auditors will have the right to reproduce, photocopy, download, transcribe, and the like any such records. Any information provided by the Consultant on machine-readable media shall be provided in a format accessible and readable by the Authorized Auditors. The Consultant shall not, however, be required to furnish the Authorized Auditors with commonly available software.

Consultant, and the Consultant's Subconsultants and suppliers, as applicable to the services provided under this Agreement, shall be subject at any time with fourteen (14) calendar days prior written notice to audits or examinations by Authorized Auditors, relating to all billings and to verify compliance with all Agreement requirements relative to practices, methods, procedures, performance, compensation, and documentation.

Examinations and audits will be performed using generally accepted auditing practices and principles and applicable City, State and Federal government audit standards. For Consultants that utilize or are subject to FAR, Part 30 and 31, et seq. accounting procedures, or a portion thereof, examinations and audits will utilize such information.

To the extent that the Authorized Auditor's examination or audit reveals inaccurate, incomplete or non-current records, or records are unavailable, the records shall be considered defective.

Consistent with standard auditing procedures, the Consultant will be provided fifteen (15) calendar days to review the Authorized Auditor's examination results or audit and respond to LADWP prior to the examination's or audit's finalization and public release. If the Authorized Auditor's examination or audit indicates the Consultant has been overpaid under a previous payment application, the identified overpayment amount shall be paid by the

Consultant to LADWP within fifteen (15) calendar days of notice to the Consultant of the identified overpayment.

The Consultant shall contractually require all Subconsultants performing services under this Agreement to comply with the provisions of this section by inserting this provision GC-18 in each Subconsultant contract and by contractually requiring each Subconsultant to insert this provision GC-18 in any of its Subconsultant contracts related to services under this Agreement. In addition, Consultant and Subconsultants shall also include the following language in each Subconsultant contract:

"LADWP is a third party beneficiary of the foregoing audit provision. The benefits of the audit provision shall inure solely for the benefit of LADWP. The designation of LADWP as a third party beneficiary of the audit provision shall not confer any rights or privileges on the Consultant, Subconsultant or any other person/entity."

If an examination or audit undertaken pursuant to the Retention of Records, Audit, and Reports provision of the General Conditions GC-18 for LADWP Professional Service Contracts reveals that LADWP overpayment to the Consultant is more than 5% of the billings reviewed, the Consultant shall pay all expenses and costs incurred by the Authorized Auditors arising out of or related to the examination or audit. Such examination or audit expenses and costs shall be paid by the Consultant to LADWP within fifteen (15) calendar days of notice to the Consultant of the costs and expenses.

The provisions of this section shall survive expiration or termination of this Agreement.

GC-19 LADWP's Recycling Policy

The Consultant shall submit all written documents on paper with a minimum of thirty (30) percent post-consumer recycled content. Existing company/corporate letterhead/stationery that accompanies these documents is exempt from this requirement. Documents of two or more pages in length shall be duplex-copied (double-sided pages). Neon or fluorescent paper shall not be used in any written documents submitted to LADWP.

GC-20 Taxpayer Identification Number (TIN)

The Consultant represents that it has obtained and presently has a Tax Identification Number (TIN). For the term covered by this Agreement, the Consultant shall maintain, or obtain as necessary, a TIN. No payment will be made under this Agreement without a valid TIN number.

GC-21 Beneficiaries

This Agreement is intended only for the benefit of the Parties hereto and does not, nor shall be interpreted, to create any rights in any nonsignatory to this Agreement.

GC-22 Consultant's Successors and Assigns

All indemnifications and warranties provided by the Consultant pursuant to this Agreement will be assumed by and binding upon the Consultant's successors and assigns. The provisions of this paragraph shall survive expiration or termination of this Agreement.

GC-23 Attorney's Fees and Costs

Both Parties hereto agree that in any action to enforce the terms of this Agreement, each Party shall be responsible for its own attorneys' fees and costs. The provisions of this paragraph shall survive expiration or termination of this Agreement.

GC-24 Equal Benefits Ordinance

Unless otherwise exempted in accordance with the provisions of this Ordinance, this Contract is subject to the applicable provisions of the Equal Benefits Ordinance (EBO) Section 10.8.2.1 of the Los Angeles Administrative Code, as amended from time to time.

A. During the performance of the Contract, the Contractor certifies and represents that the Contractor will comply with the EBO. The Contractor agrees to post the following statement in conspicuous places at its place of business available to employees and applicants for employment:

"During the performance of a Contract with the City of Los Angeles, the CONTRACTOR will provide equal benefits to employees with spouses and its employees with domestic partners. Additional information about the City of Los Angeles' Equal Benefits Ordinance may be obtained from the Department of Public Works, Bureau of Contract Administration, Office of Contract Compliance at (213) 847-1922."

- B. The failure of the Contractor to comply with the EBO may be deemed to be a material breach of the Contract by the Awarding Authority.
- C. If the Contractor falls to comply with the EBO, the Awarding Authority may cancel, terminate or suspend the Contract, in whole or in part and all monies due

or to become due under the Contract may be retained by the City. The City may also pursue any and all other remedies at law or in equity for any breach.

- D. Failure to comply with the EBO may be used as evidence against the Contractor in actions taken pursuant to the provisions of Los Angeles Administrative Code Section 10.40 et seq., Contractor Responsibility Ordinance.
- E. If the Bureau of Contract Administration determines that a Contractor has set up or used its Contracting entity for the purpose of evading the intent of the EBO, the Awarding Authority may terminate the Contract on behalf of the City. Violation of this provision may be used as evidence against the Contractor in actions taken pursuant to the provisions of Los Angeles Administrative Code Section 10.40 et seq., Contractor Responsibility Ordinance.

GC-25 Contractor Responsibility Program

Unless otherwise exempt in accordance with the provisions of the Ordinance, this Contract is subject to the provisions of the Contractor Responsibility Ordinance, Section 10.40 et seq., of the Los Angeles Administrative Code, which requires Contractor to update its responses to the responsibility questionnaire within thirty calendar days after any change to the responses previously provided if such change would affect Contractor's fitness and ability to continue performing the contract. In accordance with the provisions of this Ordinance, by signing this Contract, Contractor pledges, under penalty of perjury, to comply with all applicable federal, state and local laws in the performance of this contract, including but not limited to, laws regarding health and safety, labor and employment, wages and hours, and licensing laws which affect employees. Violations of the Contractor Responsibility Ordinance shall constitute a material breach of this Agreement and entitle the LADWP to terminate this Agreement and otherwise pursue legal remedies that may be available.

The Contractor further agrees to:

- A. Notify the awarding authority within thirty calendar days after receiving notification that any government agency has initiated an investigation which may result in a finding that the Contractor is not in compliance with all applicable federal, state and local laws in performance of this contract;
- B. Notify the awarding authority within thirty calendar days of all findings by a government agency or court of competent jurisdiction that the Contractor has violated the provisions of Section 10.40.3(a) of the Ordinance;
- C. Ensure that its subcontractor(s), as defined in the Ordinance, submit a Pledge of Compliance to awarding authorities; and

D. Ensure that its subcontractor(s), as defined in the Ordinance, comply with the requirements of the Pledge of Compliance and the requirement to notify Awarding Authorities within thirty calendar days after any government agency or court of competent jurisdiction has initiated an investigation or has found that the subcontractor has violated Section 10.40.3(a) of the Ordinance in performance of the subcontract.

GC-26 Bidder Campaign Contribution and Fundraising Restrictions

In accordance with the City of Los Angeles Charter Section 470(c)(12) and related ordinances, bidders may not make campaign contributions to and or engage in fundraising for certain elected City officials or candidates for elected City office from the time they submit a bid to LADWP until either the contract is awarded or, for successful bidders, 12 months after the contract is executed. The bidder's principals and subcontractors performing \$100,000 or more in work on the contract, as well as the principals of those subcontractors, are also subject to the same limitations on campaign contributions and fundraising.

The Consultant shall comply with the City Ethics Commission's "CEC Form 55" (3 pages) affidavit. The affidavit requires bidders to identify their principals, their subcontractors performing \$100,000 or more in work on the contract, and the principals of those subcontractors. Consultants shall also notify their principals and subcontractors in writing of the restrictions and include the notice in contracts with subcontractors. Consultants who fail to comply with City law may be subject to penalties, termination of contract, and debarment. Additional information regarding these restrictions and requirements may be obtained from the City Ethics Commission at (213) 978-1960 or ethics.lacity.org.

GC-27 Municipal Lobbying Ordinance

The City of Los Angeles Municipal Code Section 48.01 et seq. requires certain individuals and entities to register with the City Ethics Commission and requires public disclosure of certain lobbying activities, including money received and spent. Therefore all bidders for all construction contracts, public leases, or licenses of any value and duration and bidders for goods or service contracts with a value of more than \$25,000 and a term of at least 3 months, shall comply with the City Ethics Commission's "CEC Form 50" (1 page) affidavit. A copy of the City of Los Angeles Municipal Lobbying Ordinance is available for download on the City Ethics Commission's website at http://ethics.lacity.org/PDF/laws/law_mlo.pdf. Additional information regarding the Municipal Lobbying Ordinance may be obtained from the City Ethics Commission at (213) 978-1960 or ethics.lacity.org.

GC-28 Iran Contracting Act of 2010

In accordance with California Public Contract Code Sections 2200-2208, all Consultants entering into, or renewing contracts with LADWP for goods and services estimated at one million dollars (\$1,000,000) or more shall complete, sign, and submit the "Iran Contracting Act of 2010 Compliance Affidavit."

GC-29 Contractor Performance Evaluation

LADWP will evaluate and record the Contractor's overall performance to determine whether the Contractor is fulfilling its obligations on the current contract and to assess the Contractor's suitability to perform work for LADWP in the future. Contractors are required to meet critical contract provisions including, but not limited to, timely shipment and delivery of goods, completeness of delivered goods, quality of delivered goods, accuracy of billing, and conformance to the terms and conditions of the contract. If such conditions are breached, consistent with the terms of the contract, the Director of Supply Chain Services may terminate the contract for poor performance and may also debar the Contractor from doing business with LADWP for a period up to five years.

GC-30 Errors and Omissions

Notwithstanding any other provisions of this Agreement, approval by LADWP of any task or deliverable, or any requested design changes by LADWP, or any part thereof, shall not relieve the Consultant of the responsibility to meet all of the requirements as set forth in this Agreement. The Consultant shall have no claim for additional costs due to correction of its errors or omissions in said previously approved deliverables or any other action that may be necessary to comply with this Agreement, including all Exhibits, and authorized Task Orders.

GC-31 Safety

The Consultant shall arrange facility visits with LADWP who shall advise the Consultant of appropriate safety and security rules. The Consultant shall adhere to the restrictions and instructions of LADWP personnel when visiting any facility.

The Consultant shall do everything reasonable to protect the life, safety, and health of persons at the construction site. The Consultant shall furnish and use safety devices and safeguards and shall adopt and use practices, means, methods, operations, and processes which are reasonably adequate to render safe and healthful employment. The Consultant shall be responsible for ensuring that each of the Consultant's Subconsultants meets the standards of this Article.

GC-32 Non-Interference

The Consultant's performance of the work under this Agreement shall not interfere unnecessarily with the operation of LADWP or any other City department.

END OF GENERAL CONDITIONS

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SP-1 Definitions

DER: Distributed Energy Resources

FERC: Federal Energy Regulatory Commission

IEEE: Institute of Electrical and Electronics Engineers

NEC: National Electrical Code

NERC North American Electric Reliability Corporation

PSRP: Power System Reliability Program

SBA: Small Business Administration

SBE: Small Business Enterprise

TORP: Task Order Request for Proposal

WECC: The Western Electricity Coordinating Council

SP-2 Construction/Design Contracts

The Consultant shall employ value engineering practices and reviews in development of engineering and architectural designs.

SP-3 Drawings

- A. Drawings produced by the Consultant shall conform to the best standards of the profession. Information shall be organized in a logical, systematic manner with as much information on a single drawing as can be done without impairing clarity and quality.
- B. Drawings shall be positive and right reading. They shall not be folded and shall be sufficiently legible to make 35 mm microfilm negatives which can be read clearly when enlarged 14.5 times. Drawings shall incorporate LADWP's title block, legends and numbering system. When requested by LADWP, drawings shall be made on LADWP-furnished sheets. Final drawings shall be furnished either on Mylar sheets or on vellum sheets accompanied by electronic data suitable for LADWP's automated drafting system.

- C. Drawings shall fully demonstrate the work to be done and the materials required. Dimensions, diagrams, descriptions, cross sections, and details shall demonstrate adequacy of design. Upon request by LADWP engineering calculations which demonstrate the adequacy of the design shall be provided to LADWP.
- D. Drawings shall be composed using an automated drafting system in a manner which shall facilitate revisions on LADWP's system. This includes layering of information and the attachment of data files to the drawings as appropriate and where requested. Drawings shall identify field conditions against as-built drawings.
- E. Drawings, specifications, and reports shall be signed and sealed by professional engineers and architects with appropriate legal registration.

SP-4 Warranty and Responsibility of Consultant

Consultant warrants that the work performed hereunder shall be completed in a manner consistent with professional standards practiced among those firms within the Consultants profession, doing the same or similar work under the same or similar circumstances.

SP-5 Commitment to Diversity: Small Business Enterprise (SBE) / Disabled Veteran Business Enterprise (DVBE) Participation Program

It is the policy of LADWP to provide SBEs, DVBEs, Emerging Business Enterprises (EBEs), Women-Owned Business Enterprises (WBEs), Minority-Owned Business Enterprises (MBEs), Disadvantaged Business Enterprises (DBEs), and Other Business Enterprises (OBEs) an equal opportunity to participate in the performance of all LADWP contracts.

The Contractor shall ensure that all Small Business Enterprise (SBE) and Disabled Veteran Business Enterprise (DVBE) requirements specified in the Contract have been met, and acknowledges an SBE commitment of (20.9%) and a DVBE commitment of (1%) of the total contract amount.

Achievement of the goal shall be measured by SBE/DVBE work completion and compensation.

During the term of the Agreement, the Consultant shall utilize each listed Subconsultant in Exhibit E at the committed level and track the amounts paid to each listed Subconsultant. Exhibit E, List of Subconsultants is attached hereto and is made part of the Agreement.

Post-Award Documentation: The Consultant or Contractor shall complete and submit to LADWP, a form titled "Monthly Subcontractor Utilization Report" with its invoice listing all Subcontractors utilized during the reporting period including SBEs and DVBEs. The form titled "Monthly Subcontractor Utilization Report" will be provided by the Contract Administrator.

The Contractor shall cooperate with LADWP personnel in providing such information as requested in order to ensure compliance.

LADWP will not process or pay the Contractor's subsequent invoices if Subcontractor Utilization Reports are not submitted in a timely manner or if the Consultant fails to cooperate with LADWP personnel by promptly providing any and all information related to Subcontractor participation as requested by LADWP.

As part of its "final invoice" the Contractor shall submit an overall project Subcontractor utilization report indicating that committed subcontracting levels are achieved. Final payment will not be processed without the overall project Subcontractor Utilization Report.

Subcontractor Substitution, Reduction, or Addition: The Consultant shall notify LADWP Contract Administrator in writing of any proposal to substitute a Subconsultant in place of a Subconsultant listed in the Consultant's Qualification/Proposal. Prior to such substitution, the Consultant shall secure the acceptance of LADWP. The Consultant shall submit the following information in a form similar to that contained in the Consultant's original Qualification/Proposal.

- Name of Subconconsultant
- B. Location and Phone Number of Place of Business
- C. Contact Person
- D. Subconsultant's License(s) number and expiration date (if applicable)
- E. Current Certification Status (if applicable)
- F. The portion of the Services that will be performed by each Subconsultant

LADWP will promptly initiate a review of the information submitted on each Subconsultant and transmit written notification to the Consultant concerning its decision.

LADWP shall not be responsible for delays incurred by the Consultant because of a timely disapproval by LADWP of a Subconsultant proposed by the Consultant, or for the late submittal for acceptance of a Subconsultant to LADWP, or because of a Subconsultant's removal from the

performance of the Work.

Falsification of Subcontractor Agreement: Falsification or misrepresentation as to company name, contract amount, or actual work to be done by the Subcontractor will result in sanctions as set forth in applicable local, state, and federal laws.

Penalties: A Consultant violating any provision(s) of this program shall, subject to prior notice of the alleged violation(s), and an opportunity to be heard and to present evidence in its own defense, be deemed in violation of the Contract, and LADWP may:

- A. Terminate the contract; or
- B. Assess the Consultant a penalty of not more than 10% of the amount of the Subcontract(s) involved.

SP-6 RESERVED

SP-7 Materials Furnished by LADWP

LADWP will furnish the materials listed below:

- A. Existing tracking documents for reporting
- Access to LADWP shared drive for reporting

The Consultant shall give LADWP a written notice not less than 15 calendar days prior to the date the Consultant desires to take delivery of LADWP-furnished materials. Failure to submit such notice will relieve LADWP of responsibility to deliver materials in conformity with the Consultant's construction schedule.

The Consultant shall furnish all materials other than those specified in this Article which may be required to complete the work as set forth in this Agreement.

SP-8 Materials Furnished by the Consultant

All materials and work shall comply with these Agreement Documents. All materials and equipment furnished shall be new and unused, but this requirement shall not preclude the use of recycled materials in the manufacturing processes. All work shall be done by qualified workers in a thorough and workmanlike manner. Materials or quality of work not definitely specified, but incidental to and necessary for the work, shall conform to the best commercial practice for the type of work in question. Equipment or materials furnished by the Consultant which are not in accordance with the Agreement Documents shall be removed and replaced at the Consultant's expense.

SP-9 Value Engineering

- A. General-Reserved
- Value Engineering Change Proposal (VECP)
 Consultant may submit a VECP to reduce any of the following:
 - (1) Total cost of construction
 - (2) Construction activity duration
 - (3) Traffic congestion

Before preparing a VECP, Consultant meets with the Engineer to discuss:

- (1) Proposal concept
- (2) Permit issues
- (3) Impact on other projects
- (4) Project impacts, including traffic, schedule, and later stages
- (5) Peer reviews
- (6) Overall proposal merits
- (7) Review times required by LADWP and other agencies

The VECP must not impair the project's essential functions or characteristics, including:

- (1) Service life
- (2) Operation economy
- (3) Maintenance ease
- (4) Desired appearance
- (5) Design and safety

The VECP must include:

- (1) Description of the Contract specifications and drawing details for performing the work and the proposed changes.
- (2) Itemization of Contract specifications and plan details that would be changed.
- (3) Detailed cost estimate for performing the work under the existing Contract and under the proposed change.
- (4) Deadline for the Engineer to decide on the changes.
- (5) Bid items affected and resulting quantity changes.

LADWP is not required to consider a VECP. If a VECP is similar to a change in the plans or specifications being considered by LADWP at the time the

proposal is submitted or if the proposal is based on or similar to plans or specifications adopted by LADWP before Contract award, LADWP does not accept the VECP and may make these changes without VECP payments.

If LADWP does not approve the change proposal before the deadline stated in the VECP or other date the Consultant subsequently stated in writing, the VECP is rejected. LADWP does not adjust time or payment for a rejected VECP.

LADWP decides whether to accept a VECP and the estimated net construction-cost savings from adopting the VECP or parts of it.

LADWP may require the Consultant to accept a share of the investigation cost as a condition of reviewing a VECP. After written acceptance, LADWP considers the VECP and deducts the agreed cost,

If LADWP accepts the VECP or parts of it, LADWP issues a written approval that:

- (1) Incorporates changes in the Contract necessary to implement the VECP or the parts adopted
- (2) Includes LADWP 's acceptance conditions
- (3) States the estimated net construction-cost savings resulting from the VECP
- (4) Obligates LADWP to pay the Consultant 50 percent of the estimated net savings

In determining the estimated net construction-cost savings, LADWP excludes the Consultant's VECP preparation cost and LADWP's VECP investigation cost, including parts paid by the Consultant.

If a VECP providing for a reduction in working days is accepted by LADWP, 50 percent of the reduction is deducted from Contract time.

If a VECP providing for a reduction in traffic congestion or avoiding traffic congestion is accepted by LADWP, LADWP pays 60 percent of the estimated net savings in construction costs attributable to the VECP. Submit detailed traffic handling comparisons between the existing Contract and the proposed change, including estimates of the traffic volumes and congestion.

LADWP may apply an accepted VECP for general use on other contracts.

If an accepted VECP is adopted for general use, LADWP pays only the Consultant who first submitted the VECP and only to the contracts awarded to that Consultant before the submission of the accepted VECP.

If LADWP does not adopt a general-use VECP, an identical or similar submitted proposal is eligible for acceptance.

SP-10 Labor Laws

The successful proposer and the proposer's agents, employees, and subcontractors shall comply with all applicable provisions of the Labor Code and all federal, state, and local laws and regulations which affect the hours of work, wages, and other compensation of employees, nondiscrimination, and other conduct of the work.

Workers shall be paid not less than prevailing wages pursuant to determinations of the Director of Industrial Relations, where applicable. To get the most current information on effective determination rates, the proposer shall contact:

DEPARTMENT OF INDUSTRIAL RELATIONS

DIVISION OF LABOR STATISTICS AND RESEARCH

P.O. BOX 420603

SAN FRANCISCO CA 94142-0603

Telephone (Division Office): (415) 703-4780

Telephone (Prevailing Wage Unit): (415) 703-4774

Web: http://www.dir.ca.gov/dlsr/DPreWageDetermination.htm

Penalties prescribed by the Labor Code for violations shall be forfeited to LADWP.

SP-11 Contractor and Listed Subcontractors Registration Requirement

In accordance with California Senate Bill 854 (SB 854), effective March 1, 2015, all proposers and their listed subcontractors submitting proposals or performing work that is subject to the payment of prevailing wages shall be registered with the State of California Department of Industrial Relations (DIR). Proposers and their listed subcontractors may register with the DIR at http://www.dir.ca.gov/Public-Works-html. Proposers and their listed subcontractors that are subject to prevailing wages are solely responsible for keeping apprised of this requirement by utilizing the DIR website identified above.

SP-12 Indemnification for Design Professionals Relating to Construction Contracts Relative to California Civil Code Section 2782

Except for the sole negligence or willful misconduct of LADWP, the Consultant undertakes and agrees to defend, indemnify and hold harmless LADWP, the City of Los

Angeles, including but not limited to any of its boards, commissioners, officers, agents, employees, assigns and successors in interest (hereinafter, collectively, "Indemnitees") from and against any and all suits and causes of action, claims, losses, demands, penalties, judgments, costs, expenses and disbursements of any kind or nature whatsoever, including but not limited to attorney's fees (including allocated costs of internal counsel) and costs of litigation, damage, obligation or liability of any kind or nature whatsoever, in any manner arising by reason of, incident to, or connected in any manner to negligence, recklessness or willful misconduct of the Consultant, or negligent non-performance, or negligent breach of this Agreement, including but not limited to any such negligent act, error or omission or recklessness, or willful misconduct by or of the Consultant or Consultant's officers, employees, agents or Subconsultants of any tier, that results in death or injury to any person, or damage or destruction to property of any kind, or loss of use (hereinafter, collectively, "Indemnified Liabilities"). The provisions of this paragraph shall survive expiration or termination of this Agreement, and shall be in addition to, and not exclusive of, any other rights or remedies which Indemnitees have at law, in equity, under this Agreement or otherwise. To the extent that the undertakings to defend, indemnify, pay and hold harmless set forth in this subsection may be unenforceable in whole or in part, Consultant shall contribute the maximum portion that it is permitted to pay and satisfy under applicable law to the payment and satisfaction of all Indemnified Liabilities incurred by Indemnitees or any of them.

SP-13 Conflicts of Interest

Consultant will not accept any employment during the term of the Agreement from any other party if such employment is, could represent, or could lead to a conflict of interest between LADWP, Consultant, or the other party.

Any subcontract entered into pursuant to the terms of this Agreement shall be subject to, and shall incorporate, the provisions of this Article.

SP-14 RESERVED

SP-15 Background Check Certification Requirement

The Consultant shall (1) perform the required background checks of all designated principals, employees and/or Subconsultants of the Consultant; and (2) not assign principals, employees and/or Subconsultants of the Consultant convicted of any felony or offense of moral turpitude, or for whom other derogatory information has been found pursuant to criteria set forth in this Agreement or any attachment hereto (including, without limitation, Background Check Certification) shall result in irreparable harm to LADWP and, at LADWP's option, the immediate termination for breach of contract without opportunity to cure, without liability on the part of LADWP.

Los Angeles Department of Water and Power - AECOM Technical Services, inc. Agreement No. 47439B Professional, Technical, and Engineering Consulting Services Exhibit B – Special Provisions

Consultant agrees to submit a statement along with any invoices or billing associated with this Agreement which certifies that all work performed under this Agreement at critical facilities as designated by LADWP to Consultant was conducted by persons for whom background checks have been conducted and who do not have disqualifying background information in their histories pursuant to this section.

Consultant is advised that submission of a false claim for payment to LADWP may subject Consultant to liability under the California False Claims Act (Cal. Gov't Code Sec. 12650 et seq.). In addition, any failure to comply with the background procedures as required by this section may be considered in connection with future contracting opportunities with LADWP. The following specific language in the invoices/bills is acceptable: "Consultant certifies that all work performed for which this invoice/bill is submitted which required access to critical facilities as designated by LADWP was performed by persons for whom background checks have been conducted, and for whom no disqualifying information (including felonies, offenses of moral turpitude, and other disqualifying criteria, if any, as specified in the Agreement between Consultant and LADWP) has been found."

None of the remedies available to LADWP under this section shall preclude LADWP from any other remedies available in law or equity to compensate it for damages caused by the Consultant's failure to comply with this section.

SP-16 Confidentiality

All documents, records, and information provided by LADWP to the Consultant, or accessed or reviewed by the Consultant, during performance of this Agreement shall remain the property of LADWP. All documents, records and information provided by LADWP to the Consultant, or accessed or reviewed by the Consultant during performance of this Agreement, are deemed confidential. The Consultant agrees not to provide these documents and records, nor disclose their content or any information contained in them, either orally or in writing, to any other person or entity. The Consultant agrees that all documents, records, or other information used or reviewed in connection with the Consultant's work for LADWP shall be used only for the purpose of carrying out LADWP business and cannot be used for any other purpose. The Consultant shall be responsible for protecting the confidentiality and maintaining the security of LADWP documents, records, and information in its possession.

Any reports, findings, deliverables, analyses, studies, notes, information or data generated as a result of this Agreement are to be considered confidential. The Consultant shall not make such information available to any individual, agency, or organization except as provided for in this Agreement or as required by law.

Notwithstanding the foregoing, the Consultant may reference its work under this Agreement in general terms in presentations and proposals, provided that in doing so, the Consultant does not disclose any non-public information. The Consultant may not release any information, whether or not such information is public information, to the media without prior written approval from the LADWP.

Document Access/Control

- A. The Consultant shall make the confidential information provided by LADWP to the Consultant, or accessed or reviewed by the Consultant during performance of this Agreement, available to its employees, agents and /or Subconsultants, only on a need-to-know basis. Further, the Consultant shall provide written instructions to all of its employees, agents and Subconsultants with access to the confidential information about the penalties for its unauthorized use or disclosure.
- B. The Consultant shall store and process confidential information in an electronic format in such a way that unauthorized persons cannot retrieve the information by computer, remote terminal or other means.
- C. The Consultant shall not remove documents, records, or information used or reviewed in connection with the Consultant's work for LADWP from LADWP facilities without prior approval from LADWP. The Consultant shall not use, other than in direct performance of work required pursuant to the Agreement, or make notes of any home address or home telephone numbers contained in personnel or customer files, confidential information, documents, or records provided by LADWP that are reviewed during work on this Agreement.
- D. With prior written approval from LADWP, the Consultant may make copies of such documents, written materials, notes, documents, confidential information, or other information, as necessary to perform its duties under this Agreement.
- E. The Consultant shall document and immediately report to LADWP any unauthorized use or disclosure of confidential information as defined in Article 8.1.
- F. The Consultant shall require that all its employees, agents, and subconsultants who shall, or may, review, be provided, or have access to LADWP data, information, personnel or customer files, confidential information, documents, or records during the performance of this

Agreement, execute a confidentiality agreement that incorporates the provisions of this Article VII, Confidentiality and Restrictions on Disclosure prior to performing work under this Agreement.

G. The provisions of this Article VIII, Confidentiality and Restrictions on Disclosure shall survive termination and expiration of this Agreement.

SP-17 Security Policy and Requirements

The Consultant is required to adhere to all physical and cyber-related security policies, standards, requirements and procedures (collectively, "Security Requirements"), applicable to the project. All Consultant personnel, equipment, products, services, and sub-contractors involved with the work must adhere to all applicable Security Requirements throughout the duration of the Agreement or any extensions or amendments thereof. Security Requirements may be imposed by LADWP policy, or by Federal, State or Local laws, regulations or industry practices, including, without limitation, requirements that may be imposed by the Federal Energy Regulatory Commission (FERC), the North American Electric Reliability Corporation (NERC), the Western Electricity Coordinating Council (WECC) the Department of Energy (DOE), the Environmental Protection Agency (EPA), and the Department of Homeland Security (DHS).

Inability to meet the Security Requirements may be considered when evaluating the Consultant for consideration and award, including extensions or amendments to existing agreements. As security regulations and practices change over time, amendments and extensions to existing agreements may include additional Security Requirements not present in earlier agreements.

SP-18 American Iron and Steel Requirement (EPA Funded – Buy America)

The Contractor acknowledges to and for the benefit of LADWP and the State of California (the "State") that it understands the goods and services under this Contract are being funded with monies made available by the Safe Drinking Water State Revolving Fund that have statutory requirements commonly known as "American Iron and Steel;" that requires all of the iron and steel products used in the project to be produced in the United States ("American Iron and Steel Requirement") including iron and steel products provided by the Contractor pursuant to this Contract. The term "iron and steel products" means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials. The Contractor hereby represents and warrants to and for the benefit of LADWP and the State that (a) the Contractor has reviewed and

understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, and, (c) the Contractor will provide any further verified information, certification or assurance of compliance as may be requested by LADWP or State. Notwithstanding any other provisions of this Contract, any failure to comply with this paragraph by the Contractor shall permit LADWP or the State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by LADWP or the State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by LADWP). While the Consultant has no direct contractual privity with the State, as a lender to LADWP for funding of its project, LADWP and the Consultant agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Contract necessary to give this paragraph force or effect) shall be amended or waived without prior written consent of the State. Additional information on the State Revolving Fund American Iron and Steel Requirement provision can be found at: http://water.epa.gov/grants_funding/aisrequirement.cfm.

SP-19 Safety Compliance Certificate

The successful Consultant(s) will be required to execute and submit the form titled, "Safety Compliance Certificate" in Exhibit K of this Agreement. The form certifies that the Consultant has:

- A. An effective Injury and Illness Prevention Program, which meets the requirements of all applicable laws and regulations, including but not limited to, California Labor Code Section 6401.7;
- B. Consultant agrees that it is fully responsible for the acts and omissions of its subcontractors and all persons either directly or indirectly employed by the Proposer.

Such certification shall be made by the person with the authority and responsibility for implementing and administering Consultant's Injury and Illness Prevention Program.

SP-20 Return of All Documents to the LADWP

The Consultant shall, at the conclusion of this Agreement or at the request of LADWP, promptly return any and all written materials, notes, documents, records, confidential information, or other information obtained by the Consultant during the course of work under this Agreement to LADWP, and all paper and electronic copies thereof provided. However, the Consultant may retain duplicates and originals, as appropriate, of

Consultant's administrative communications, records, files, and working papers relating to the services provided by the Consultant pursuant to this Agreement. Consultant shall under no circumstances retain any copies of LADWP financial or LADWP employee or customer confidential data or information.

END OF SPECIAL PROVISIONS

RFP No. / Agreement No.:	90370 / Agreement 47439B		
Consultant:	AECOM Technical Services, Inc.		
Consultant's Address:	One California Plaza		
Olisanant s rida; 055,	300 South Grand Avenue		
	Los Angeles, CA 90071		
Direct Labor – AECOM Technica	l Services, Inc.		
<u>Name</u>	<u>Title</u>	Hourly Rate	
William Abolt*	Smart Grids	\$245	
Michael Adams	Project Engineer	\$150	
Andrew Agopian*	Project Manager	\$225	
Jennifer Ansay*	Supervisory Piping Designer	\$170	
Ram Arunachalam	Supervisory Electrical Engineer	\$220	
Louis Barani*	Physical Security Specialist	\$220	
Larry Bennett	Senior Structural Engineer	\$175	
Arnel Bicol*	Principal Geotechnical Engineer	\$235	
George Bowman	Senior Construction Manager	\$185	
Ken Braunstein	Senior Process Engineer	\$195	
Stephan Brezina*	Project Manager – HVDC	\$235	
Matt Brown	Senior Electrical Engineer	\$225	
Rich Bucci	HVDC Engineer	\$225	
Steven Bultemeier	Senior Mechanical Engineer	\$225	
Miro Cerha	Performance Specialist	\$225	
Tenzin Chokteng	Civil Engineer	\$115	
Kimberly Choy	Electrical Engineer	\$150	
Dennis Cirrone*	Transmission Planner	\$265	
Angela Clark*	Principal Environmental Compliance Manager	\$245	
Linda Collier	Supervisor Electrical Engineer	\$175	
Ajoy Das	HVDC Engineer	\$225	
Ethan Dawson	Senior Engineer	\$210	
Bernard Din	I & C Engineer	\$195	
Marilyn Duarte	CADD/Microstation Designer II	\$125	
Dennis Dudzik*	Senior Program Manager	\$250	
Terry Edge*	Power Plant Start-Up Manager	\$165	
Eric Elson	Electrical Engineer	\$175	
Richard Fasano	Senior 1 & C Designer	\$170	
Michael Ferguson*	Project Manager	\$195	
David Ferraro*	Start-Up Engineer	\$185	
		4.55	

Construction Manager

Environmental Planner

Rachel Fish

Hallie Fitzpatrick

\$150.

\$105

^{*}Consultant's key personnel

<u>Name</u>	<u>Title</u>	<u>Hourly Rate</u>
Thomas Flanigan	Supervisory Mechanical Engineer	\$225
Jerry Flores	Senior Environmental Planner	\$165
Josh Gallo	Project Engineer – Renewables	\$165
Keri Gannon*	Hydrology Engineer	\$160
Dale Gauthier*	Principal in Charge	\$300
Christopher Goetz*	Principal Engineering Geologist	\$185
Ron Gordon	Civil Designer	\$140
Dean Goward*	Lead Senior Electrical Engineer	\$230
Yvonne Hanson	Electrical Designer	\$ 95
Pamela Harrison	Electrical Engineer	\$140
Travis Hasselhorst	Electrical Engineer	\$145
John Hoffner	Renewal Energy Lead	\$180
David Holstein	Project Manager	\$235
Mark Holter*	Supervisory Structural Engineer	\$245
Chris Hooper	Noise Engineer	\$145
Larry Jaffe*	NERC Cyber Security Specialist	\$220
Neal Janusz	Senior I & C Engineer	\$215
James Jenkins	Senior Electrical Engineer	\$255
Johnny Johnson*	Advanced Technology Manager	\$280
Marcus Jordan*	NERC Cyber Security Specialist	\$210
Elizabeth Kane	Electrical Designer	\$ 95
Ezzat Khalafalla	HVDC Engineer	\$225
Shabad Khalsa*	Senior Power and Controls Engineer	\$220
Purna Kharel*	Senior Project Manager – Transmission	\$220
Fareeha Kibriya	Environmental Planner III	\$180
Marc Knight*	NERC Cyber Security Specialist	\$220
Michael Krizmanic	Electrical Engineer	\$140
Garry Lay*	Supervisory Geotechnical Engineer	\$280
Shannon Ledet	Senior Environmental Planner	\$135
Eugene Licari	HV Electrical Engineer	\$225
Joanie Lobban	Piping Designer	\$135
Jeff Lowe*	Relay/Protection Engineer	\$191
Jason Mann	Senior Civil Engineer	\$160
Mo Massoudi*	Supervisory Performance Specialist	\$305
Sunil Mital*	Supervisory Structural Engineer	\$205
Farshad Mohseninejad*	Senior Electrical Engineer	\$230
Lida Moussavian	Air Quality Lead	\$190
Craig Nelson	Mechanical Engineer	\$130
Audrey Newberg	Electrical Designer	\$155

^{*}Consultant's key personnel

<u>Name</u>	<u>Title</u>	Hourly Rate
Kelly Newman	Senior Electrical Designer	\$185
Nesa Nesarahah*	Principal Geotechnical Engineer	\$215
Matthew Nowka*	Project Engineer Manager	\$235
Jason Paukovits	Senior Air Quality Specialist	\$155
Steven Petto*	Project Director	\$285
Stephanie Rath-Schwarz	Supervisory Noise Engineer	\$160
Thomas Rich	Supervisory Structure Engineer	\$195
Jorge Rodriguez*	Air Quality Lead	\$190
Richard Robinson*	Project Manager	\$210
Ken Rose	Project Controls	\$165
Fred Rosse	Supervisory Process Engineer	\$235
Rob Rouse	Microgrids	\$210
Michael Sacks	Lead Substation Engineer	\$165
Richard Schultz*	Architect	\$184
Lou Scotto	Senior Performance Specialist	\$190
Tyler Searle	Estimator	\$145
Ross Sheely*	Estimating Manager	\$235
Dale Shileikis	Director, Environmental Assessment	\$285
Andrew Smith**	Electrical Engineer	\$135
Don Smith	Supervisory I & C Engineer	\$230
Mark Storm*	Senior Noise Engineer	\$195
Mitchell Spain	Senior Piping Designer	\$185
Frank Tagge*	Principal Fire Protection Engineer	\$215
Bob Tang	Director	\$344
Ratnam Tharmendira	Project Engineer	\$150
David Thompson	Commissioning Support	\$190
Anne-Sophie Van der Waart	Process Specialist	\$155
John Vanlishout	Structural Engineer	\$130
Ray Walters*	Senior Project Manager	\$245
Jim Weir	Quality Engineer	\$190
Ivan Welander	Electrical Engineer	\$135
Lucy Whalen	Business Manager	\$120
Bill Wilcox	Senior Structural Designer	\$195
Sheila Williams	Project Controls Manager	\$165
Alexander Zec	Environmental Compliance Manager	\$135

^{*}Consultant's key personnel

Subconsultant - DNV GL		
Name	Title	Hourly Rate
Alex Byrne	Senior 2	\$265
Olof Bystrom**	Senior Principal	\$390
Ellen Crivella**	Principal 1	\$300
Andrew Dorman**	Principal 1	\$300
Phil Dutton	Principal 2	\$330
Ken Elser	Principal 1	\$300
David Erickson**	Principal 2	\$330
Farnaz Farzan	Senior 1	\$230
Emily Fertig	Professional 2	\$190
Johnathan Flinn	Professional 2	\$190
Wiley Gustafson	Senior 2	\$265
Ray Harold	Senior 1	\$230
Marion Hill	Principal 1	\$300
Neeraj Karnik	Senior 1	\$230
Michael Kleinberg	Senior 1	\$230
John Masiello	Principal 1	\$300
Niloufar Mirhosseini	Professional 1	\$160
Satish Natti	Senior 1	\$230
Hamed Khalili Nia	Professional 1	\$160
Dilan Novosad	Professional 1	\$160
Colleen O'Brien	Principal 1	\$300
Nitin Prakash	Professional 1	\$160
Michael Roberge	Professional 1	\$160
Aditya Rohilla	Professional 2	\$190
Ramon Saenz	Principal 1	\$300
Mandhir Sahni**	Senior 2	\$265
Kevin Smith**	Senior Principal	\$390
Sunil Talati**	Senior Principal	\$390
Nellie Tong**	Senior 1	\$230

Subconsultant – D. R. McNatty & Associates, Inc.		
Name	Title	Hourly Rate
Brian Criss**	Management	\$225
Rudy Ising	Management	\$205
Ben Lee	Specialist	\$175
Dave Madding	Management	\$225
Bill Owczarczak	Specialist	\$175
Pam Powrie	Specialist	\$175

^{**}Subconsultant's key personnel

Name	Title	Hourly Rate
Josh Adrian	SME	\$390
Andrew Art**	Key Personnel	\$390
Matt Bly	SME	\$310
Kristin Connolly McCullough	Key Personnel	\$390
Harry Dupre	Paralegal	\$175
Derek Dyson	SME	\$390
Lias Gasf	SME	\$390
Jeff Genzer	SME	\$390
Jason Gray	Key Personnel	\$390
Eli Eilbott	SME	\$390
Greg Jones	SME	\$310
Tabitha Latimer	Paralegal	\$175
Tyler Mansholt	SME	\$350
Kathleen Mazure	SME	\$390
Bhaveeta Mody**	Key Personnel	\$390
Sean Neal**	Key Personnel	\$390
Mike Postar	SME	\$390
Theju Prasad	Regulatory	\$215
Matt Randolphi	SME	\$390
Tom Rudebusch	SME	\$390
Pete Scanion**	Key Personnel	\$390
Bob Weinberg	SME	\$390

Subconsultant – Edward F.	McCarthy & Associates	ŧ
Name	Title	Hourly Rate
Edward McCarthy**	Task Manager	\$155

Subconsultant - EETS, Inc.			
Name	Title	Hourly Rate	
Michael Bregar**	Principal Electrical	\$175	
John Guillory**	Senior Electrical	\$160	
Koosha Toofan**	Senior Electrical	\$160	

^{**}Subconsultant's key personnel

Subconsultant – Energeia USA		
Name	Title	Hourly Rate
Ezra Beeman**	Managing Director	\$250
Mick Fell	Consulting Director	\$235
Jacob Karoufeh	Senior analyst	\$200
Ryan Kerin	Analyst	\$175
Melanie Koerner	Consulting Director	\$235
Hannah Krovetz	Associate	\$150
Rich Metz**	General Manager	\$225
Christian Molina	Associate	\$150
Roseline Tayeh	Analyst	\$175

Subconsultant - Habr Econo	omics	
Name	Title	Hourly Rate
David S. Habr**	Principal	\$150

Name	Title	Hourly Rate
Bill Addington**	CIP Compliance Lead	\$240
Dana Caswell	Cyber Security Specialist	\$210
Kevin Conway**	Lead Compliance Consultant	\$240
Molly Elliott	Communications and Training Manager	\$165
Linda Kay Erickson	President of Project Planning	\$210
Gail Golden	Cyber Security Field Consultant	\$210
Debbie Hatcher	QA Specialist	\$165
Greg Lange	Sr. Compliance Process Specialist	\$210
Doug Newbauer**	Physical Security Specialist	\$210

Subconsultant - John Undrill LLC		
Name	Title	Hourly Rate
John Undrill**	Principal	\$365

^{**}Subconsultant's key personnel

Subconsultant – Kewo Engineering Corporation		
Name	Title	Hourly Rate
Lynn Aing	Design Drafter	\$125
Brian Kewo**	Senior Electrical Engineer	\$180
John Osborne	Electrical Engineer	\$160
Austin Nutt	Electrical Engineer Associate	\$140
Wondwessen Tesema	Electrical Engineer Associate	\$140
Anh Thu Doan	Electrical Engineer	\$160
Solomon Yitagesu	Electrical Engineer Associate	\$140

Subconsultant – MasTek, Inc.		
Name	Title	Hourly Rate
Lynette Aquino	Senior Electrical Engineer	\$175
Margaret Beaver	Technical Writer	\$135
Terrance Chau	Electrical Engineer	\$145
Neha Chawla	Electrical Engineer	\$145
Ivan Gude	Electrical Engineer	\$145
Samvel Hacopian**	Network Engineer	\$155
Norelia Jacinto	Software Engineer	\$165
CJ Kaira	Senior Electrical Engineer	\$175
Roshan Lakde	Electrical Engineer	\$145
Faviola Medina**	Project Manager	\$175
Carlos Mendizabal**	Principal	\$205
Christine Pavo	Business Administration	\$175
Jaikumar Pettikkattil	Electrical Engineer	\$145
Anh Pham**	Substation Engineer	\$180
Benjamin Rock	Electrical Engineer	\$145
Martin Soto	Field Technician	\$125
Miguel Soto**	Electrical/Power Engineer	\$205
David Sweeney**	Principal Electrical Engineer	\$205
Dr. Taufik	Doctoral Electrical Engineer	\$205

^{**}Subconsultant's key personnel

Name	Title	Hourly Rate
Andrew Kinross	Director	\$344
David Laporte	Senior Consultant	\$216
Dave Larsen**	Director	\$344
Stephanie Lee	Consultant	\$164
Ken Lotterhos	Managing Director	\$426
Jay Luboff	Associate Director	\$300
Chris Luras**	Director	\$344
Paul Maxwell**	Director	\$344
Joe Meier	Associate Director	\$300
Matt Moore	Managing Consultant	\$248
Don Morrow**	Managing Director	\$428
David Oliver	Managing Consultant	\$248
Eric Olsen	Associate Director	\$300
Ed O'Toole	Managing Consultant	\$248
Jay Paidipati**	Director	\$344
Gordon Pickering	Director	\$344
Dale Probasco**	Managing Director	\$428
Andy Rea**	Managing Director	\$428
Larry Riegle**	Director	\$344
Zach Gill Sanford	Managing Consultant	\$248
Keshav Sarin	Associate Director	\$300
Roger Schiffman	Director	\$344
Eugene Shlatz**	Director	\$344
Parag Soni	Director	\$344
Radha Sooyra	Associate Director	\$300
Matt Stacjar	Senior Consultant	\$216
Kristina Stanford	Senior Consultant	\$216
Dan Stathos	Associate Director	\$300
Dwayne Stradford	Associate Director	\$300
Ken Swain	Managing Consultant	\$248
Matt Tanner	Associate Director	\$300
Charles Tooman	Director	\$344
Jeff Van Horne	Managing Consultant	\$248
Don Wagenet	Associate Director	\$300
Greg Wickler	Director	\$344

^{**}Subconsultant's key personnel

Name	Title	Hourly Rate
Gina Baxter	Senior Consultant	\$180
Matthew Beale	Analyst	\$120
Maxwell Bernt	Senior Consultant	\$160
Scott Burnham	Executive Consultant	\$220
Tony Georgis**	Director	\$245
Nancy Heller Hughes**	Director	\$265
Derek Klingerman	Staff Consultant	\$140
Joseph Mancinelli**	President	\$295
*Grant Rabon	Executive Consultant	\$210
Andrew Reger	Senior Consultant	\$160
Jill Sangster	Senior Consultant	\$180
Michael Sommerdorf	Analyst	\$120
Laurie Tomczyk**	Director	\$220
Fred Wellington* *	Vice President	\$245
Zak Wright	Staff Consultant	\$140

Name	Title	Hourly Rate
Pallavi Borah	Senior Consultant	\$275
Sean Croup	Senior Consultant	\$275
Bob Davis**	Executive Consultant	\$285
Fred Haddad**	Executive Consultant	\$285
Brad Kushner	Executive Consultant	\$285
Donald LeMaster	Executive Consultant	\$285
Debbie McDonough	Consultant	\$245
Joey Riveira	Analyst	\$190
Donna Painter**	Executive Consultant	\$285
John Painter**	Executive Consultant	\$325
Jessica Platt	Consultant	\$245
Steven Stein	Executive Consultant	\$325
Garrett Swank	Senior Consultant	\$275
Jennifer Tripp**	Executive Consultant	\$325
Tom Washburn**	Executive Consultant	\$285

^{**}Subconsultant's key personnel

Subconsultant – PMCM Consulting Engineers		
Name	Title	Hourly Rate
Wayne Bamossy	Construction Manager	\$160
Megha Bhalwalker	Office Engineer	\$ 95
Ron Campos	Senior Structural Engineer	\$170
Marcos Ferreira	Senior Structural Engineer	\$160
Michael Johnson	Project Controls	\$150
John Ohlot	Construction Inspector	\$120
Rod Opland**	High Voltage Engineer	\$170
Obioma Osuji	Office Engineer	\$ 95
Ann Pham	Substation Engineer	\$180
Sathvik Rao	Office Engineer	\$ 95
Tammy Tran**	Senior Electrical Engineer	\$170
Tuan Van Le**	HVAC/DC Engineer	\$170
Bina Vantanpour**	Senior Power Engineer	\$205

Subconsultant – Power Services Inc.		
Name	Title	Hourly Rate
Valerie Baird	Project Manager	\$200
Peter Brown	Senior Consultant	\$200
John Kutzer	Senior Consultant	\$200
Trevoe MacCrae**	Senior Consultant	\$200
Jeff York	Consultant	\$200

Subconsultant – Smart Utility Systems		
Name	Title	Hourly Rate
Nancy Arakaki-Chodosh	Energy Engineer	\$185
Ali Mazloomzadeh	Technical Lead	\$190
Nu D. Pho	Director, Product Delivery	\$200
Michael Peter Richardson	Business Consultant	\$190
Derek Sheridan	Business Analyst	\$185

^{**}Subconsultant's key personnel

Subconsultant – TRL System	ns, Inc.	
Name	Title	Hourly Rate
Brian Santillo	Physical Access Control System Specialist	\$215
Jaime Villasenor	Physical Access Control System Specialist	\$215

Subonsultant – Utility System Eff	iciencles, Inc.	
Name	Title	Hourly Rate
R. Peter Mackin**	Executive Engineer Consultant	\$275

Subonsultant – W. A. Vachon & Associates, Inc.		
Name	Title	Hourly Rate
William A Vachon**	Wind Consultant	\$250

^{**}Subconsultant's key personnel

Subconsultant – ABC Liovin Drilling, Inc.					!
Hollow Stem Auger Drilling Rates					
DESCRIPTION	CME-75	MOU	CME-85	LAR	AIR KNIFE
Mobilization/Demobilization - within a 20 mile radius of downtown Los Angeles	\$400	lump sum	\$600	\$600	\$1750/Day
Mobilization/Demobilization - over a 20 mile radius of downtown Los Angeles	Call		Cali	Call	
Drilling, sampling, traveling between holes, grouting, installing geotechnical instrumentation, traveling between jobsites after arriving at first location, and other related drilling activities	\$200	per hour	\$300	\$250	
Weekend regular rate	\$260	per hour	\$360	\$310	
Prevailing Wage regular hourly rate	\$260	per hour	\$360	\$310	
Prevailing Wage weekend hourly rate	\$320	per hour	\$420	\$370	
Prevailing Wage mob/demob rate- within a 20 mile radius of downtown Los Angeles	\$400	lump sum	\$600	\$600	
Standby time	\$200	per hour	\$300	\$250	
Additional man (2-man crew is assumed for rates above)	\$60	per hour	\$60	\$60	
Additional man Prevailing Wage (2-man crew is assumed for rates above)	\$90	per hour	\$90	\$90	

DESCRIPTION	CME-75	UOM	CME-85	LAR	AIR KNIFE
4-hour minimum charge	\$800	per day	\$1,200	\$1,000	
4-hour minimum charge - weekend	\$1,040	per day	\$1,440	\$1,240	
4-hour minimum charge - prevailing wage	\$1,040	per day	\$1,440	\$1,240	
4-hour minimum charge - prevailing wage weekend	\$1,280	per day	\$1,680	\$1,480	
Cancellation fee (if less than 24-hour notice)	\$1,000	lump	\$1,000	\$1,000	\$1,
Orange Fencing Health & Safety Plan	\$250 \$150	Day Job/Day	\$250 \$150	\$250 \$150	
Traffic Control		Day	\$800	\$800	\$
Level C and D	\$500	Day	\$500	\$500	\$
Blower Fans	\$250		\$250	\$250	T

Hollow Stem Auger Drilling Rates (Per Foot Rates)

Under 50 linear ft of drilling DESCRIPTION CME-75 UOM CME-85 LAR Mobilization/Demobilization - within a 20 mile \$300 lump \$400 \$600 radius of downtown Los Angeles Mobilization/Demobilization - over a 20 mile Call Call Call radius of downtown Los Angeles Drill, sample and grout borings. Assuming \$28 \$30 \$24 Foot sampling every 5 ft. Additional Cost for Continuous Soil Sampling \$12 \$16 \$18 Foot Drill, sample and install 2" PVC Wells. \$36 Foot \$40 \$42 Assuming sampling every 5 ft. Drill, sample and install 2" PVC Wells. \$35 Foot \$39 \$41 Assuming sampling every 10 ft. Drill and install 2" PVC Wells. Assuming no soil \$34 \$38 \$40 Foot Drill and install 4" PVC Wells. Assuming no soil \$38 \$42 \$44 Foot sampling. Drill, sample and install 4" PVC Wells. \$46 \$48 \$42 Foot Assuming sampling every 5 ft. Drill, sample and install 4" PVC Wells. \$40 \$44 \$46 Foot Assuming sampling every 10 ft.

Cost for well installation includes PVC blank and screen, bentonite seal, sand, and traffic box installation.

Additional Minimum Charge Applies for project under 50 linear ft of drilling.

ABC provides enough decontaminated augers for one full day of drilling.

Above costs includes steam cleaning augers.

Hollow Stem Auger Drilling Rates (Per Foot Rates)					
Between 50 and 100 linear ft of drilling					
DESCRIPTION	CME-75	UOM	CME-85	LAR	
Drill, sample and grout borings. Assuming sampling every 5 ft.	\$22	Foot	\$26	\$2	
Additional Cost for Continuous Soil Sampling (5 ft barrel)	\$10	Foot	\$14	\$1	
Drill, sample and install 2" PVC Wells. Assuming sampling every 5 ft.	\$34	Foot	\$38	\$4	
Drill, sample and install 2" PVC Wells. Assuming sampling every 10 ft.	\$33	Foot	\$37	\$3	
Drill and install 2" PVC Wells. Assuming no soil sampling.	\$32	Foot	\$36	\$3	
Drill and install 4" PVC Wells. Assuming no soil sampling.	\$36	Foot	\$40	\$4	
Drill, sample and install 4" PVC Wells. Assuming sampling every 5 ft.	\$40	Foot	\$44	\$4	
Drill, sample and install 4" PVC Wells. Assuming sampling every 10 ft.	\$38	Foot	\$42	\$4	
Drill, sample and install 4" PVC Wells. Assuming sampling every 5 ft.	\$42	Foot	\$46	\$4	
Drill, sample and install 4" PVC Wells. Assuming sampling every 10 ft.	\$40	Foot	\$44	\$4	

Cost for well installation includes PVC blank and screen, bentonite seal, sand, and traffic box installation ABC provides enough decontaminated augers for one full day of drilling.

Above costs includes steam cleaning augers.

Hollow Stem Auger Drill	Hollow Stem Auger Drilling Rates (Per Foot Rates)				
Over 100 linear ft of drilling					
DESCRIPTION	CME-75	NOM	CME-85	LAR	
Drill, sample and grout borings. Assuming sampling every 5 ft.	\$18	Foot	\$22	\$24	
Additional Cost for Continuous Soil Sampling (5 ft barrel)	\$8	Foot	\$12	\$14	
Drill, sample and install 2" PVC Wells. Assuming sampling every 5 ft.	\$32	Foot	\$36	538	
Drill, sample and install 2" PVC Wells. Assuming sampling every 10 ft.	\$30	Foot	\$34	\$36	
Drill and install 2" PVC Wells. Assuming no soil sampling.	\$28	Foot	\$32	\$34	
Drill and install 4" PVC Wells. Assuming no soil sampling.	\$32	Foot	\$36	\$38	
Drill, sample and install 4" PVC Wells. Assuming sampling every 5 ft.	\$36	Foot	\$40	\$42	
Drill, sample and install 4" PVC Wells. Assuming sampling every 10 ft.	\$34	Foot	\$38	\$40	

Cost for well installation includes PVC blank and screen, bentonite seal, sand, and traffic box installation ABC provides enough decontaminated augers for one full day of drilling. Above costs includes steam cleaning augers.

Subconsultant - ABC Liovin Drilling, Inc. (Continued) Hollow Stem Auger Drilling Rates Additional Material and Equipment Cost Breakdown DESCRIPTION CME-75 UOM Brass or Stainless Steel Liners (2.0" x 6.0") \$6 Each Teflon Squares for Sample Liners Each \$1 Basket Retainers for loose soil sampling \$10 Each Install 6" Monument Casing \$200 Each Install 8" Monument Casing \$250 Each Removal of 8" Traffic Rated Well Boxes \$100 Each Removal of 12" Traffic Rated Well Boxes \$150 Each Collect Hydropunch Water Sample \$250 Each Delivery of additional materials or equipment to jobsite \$200 Lump Well Development \$1,750 Day Additional Man Onsite for non-prevailing wage jobs (per man) \$75 Hour \$90 Additional Man Onsite for prevailing wage jobs (per man) Hour Asphalt patch \$1d per borehole Concrete patch \$25 per borehole Rapid Set Concrete Patch \$50 per borehole Concrete cuts \$200 per cut 55 Gallon Drums \$50 per drum Additional material cost for bentonite grout \$6 per foot Backfill borings with bentonite chips \$10 per foot Collect water sample thru augers \$150 per sample Steam Cleaner Onsite \$250 per day Service Truck \$250 per day Generator Rental \$150 per day Pressure Washer Rental \$250 per day Night Lights \$250 per night

Subconsultant's Address:	833 Parfet Street, Lakewo	ood, CO 80215	
Tel/Fax:	303-232-8308 / 303-232-	1579	
Classification Tests			
Test Des	cription	Method	Price
Moisture Content & Density		ASTM D 2216 & 2937	\$25.00
Chunk Density, modified for ro	ock	ASTM D 4531	\$64.00
Calculate Porosity From Specif		ISRM Part 1	\$20.00
Specific Gravity, modified for re		ASTM D854	\$76.00
Specific Gravity & Absorption (ASTMC 127	\$56.00
Specific Gravity & Absorption(ASTM C 128	\$64.00
Atterberg limits, modified for r		ASTM D 4318	\$137.00
Slake Durabitiy Test		ASTM 0 4644	\$122.00
Jar Slake		Wood, Deo, Santi method	\$68.00
Freeze Thaw (35 cycles)		ASTM 05312	\$411.00
Wet Orv (80 cycles)		ASTM 05313	\$548.00
Strength Tests			
Test Des	scription	Method	Price
Direct Shear - Intact, Sawcut o	r Natural Joint	ASTM 05607	\$510.00
(Per sample up to 3 residual p	points)		
Direct Shear - Intact, Sawcut o		ASTM 05607	\$444.00
(single point, peak & residual)			
Unconfined Compressive Strength, peak load only		ASTM D 7012, Method C	\$137.00
Unconfined Compressive Strength with stress-strain		ASTM D 7012, Method D	\$305.00
curve, Young's Modulus & Poi			
Unconfined Compressive Strength - Young's Modulus only		ASTM D 7012, Method D	\$259.00
Static Modulus of Elasticity an	d Poisson's Ratio of Concrete	ASTM C 469	\$384.00
in Compression			
Triaxial Compressive Strength, peak bad only		ASTM D 7012, Method A	\$251.00
Triaxial Compressive Strength		ASTM D 7012, Method B	\$510.00
Youn's Modulus & Poisson's R Triaxial Compressive Strength		ASTM D 7012, Method B	\$427.00
Indirect Splitting Tensil Streng		ASTM 0 3967	\$122.00
Brazilian Disk Method (per sp Direct Tensile Strength	ecanen)	ASTM D 2936	\$259.00
	-1		\$25.00
Point Load Test (per specimen)		ASTM 0 5731	
Sonic Velocities, unstressed of	•	ASTM D 2845	\$296.00
Young's Modulus and Poisson		ACTM O 2045	\$406.00
Sonic Velocities, unstressed or Young's Modulus and Poisson		ASTM 0 2845	\$496.00
Creep of Hard Rock in Uniaxi		ASTM D 7070, Method A	
- First week	ai compression	ASTINI D 7070, INTERTION A	\$3,382.0
- Per week for duration	· · · · · · · · · · · · · · · · · · ·		\$5,382.0
Creep of Hard Rock in Uniaxi		ASTM D 7070 Mathed A	3.805.6
	ai compression	ASTM D 7070, Method A	60.073.0
- First week		<u> </u>	\$3,877.0
 Per week for duration 		<u> </u>	\$6,46.0

Subconsultant – Advanced Terra Testing (Continue	ed)	
Test Description .	Method	Price
Rock Hardness by Rebound Hammer	ASTM 0 5873	\$128.00
Schmidt Rebound Hardness	ASTM C 805	\$128.00
Large Scale Performance Tests		
Geostatic Point Stress	ATT-GP-23	\$745.00
Heap Leach – Percolation Rate Including agglomeration	ATT-GP-23	\$2,440.00
Mineral Identification and Hardness Tests Loading only (no rebound)	ASTM D2435, Modified	\$711.00
Mineral Identification and Hardness Tests		
Punch Penetration Index Test	A\$TM D7625	\$265.00
CERCHAR Abrasivity Index Test		\$191.00
Mohs' Scale of Hardness		\$74.00
Petrographic Analysis Microscopic thin section/X-ray powder diffraction		\$296.00
Permeability Tests	Tacta in again	
Permeability by Flowing Air Test	ASTM D4525	\$556.00
Back Pressure Permeability Test, Tx/Pbp, By Flow Pump, modified for rock	ASTM D5084	\$556.00
Dimension Stone Test		
Modulus of Rupture	ASTM C99	\$259.00
Absorption and Bulk Specific Gravity	ASTM C97	\$271.00
Compressive Strength	ASTM C170	\$271.00

Subconsultant's Address:	1502 E. Opp St., Wilt	mington, CA 90744	
Tel/Fax:	310-522-1168 / 310-	310-522-1168 / 310-522-0474	
Service	e/Equipment	Ra	
Roll offs			
Roll off trucks/ Rocket Laur	cher	\$102.00 Per hour	
Single or double bins			
Bin Rental	· · · · · · · · · · · · · · · · · · ·		
10,18,20 CY Bins		\$17.00 Per day	
40 CY Bins		\$22.00 Per day	
25 Cy Water Tight Dewater	ing Bins	\$47.00 Per day	
Mud Bins	-	\$39.00 Per day	
Bin Liners		\$22.00 Per liner	

Subconsultant – American Integrated Services, Inc. (con	
Service/Equipment	Rate
Vacuum Truck / Operated	
42 BBI Vacuum	\$102.00 Per hour
70 BB1 Vacuum	\$102.00 Per hour
120 BBI Vacuum	\$102.00 Per hour
Stainless Steel/Coated	\$128.00 Per hour
Guzzier w/ cyclone	\$270.00 Per hour
Mini-Guzzler (Hydro Excavator – Spoils Vac)	\$157.00 Per hour
Stake Bed (drum) Truck/Operated	
20 Ft. stake bed Truck w/ lift gate	\$102.00 Per hour
End Dumps	
18 Wheel end-dump truck w/ pull tarp	\$114.00 Per hour
Dump Trucks/ Operated	
Five yard dump truck	\$102.00 Per hour
Ten wheel dump truck	\$102.00 Per hour
Flatbed Trucks	
45 Foot flatbed	\$102.00 Per hour
3 Ton stake bed	\$102.00 Per hour
ARTICULATED HAULERS	
30 Ton Capacity	\$1258 Per day
Corrosive Resistant, High Density, Crosslink Polyethyler	ne, Upright Cylindrical Tanks
Tank Size	
4,000 Gallon corrosive resistant	\$36.20 Per day
4,000 Gallon total drain – easy clean	\$38.40 Per day
6,500 Gallon corrosive resistant	\$36.20 Per day
6,500 Gallon total drain- easy clean	\$38.40 Per day
20,000 Gallon T-Tank	\$63.45 Per day
Move in /move out fee	\$150.00 Per hour
Delivery of tanks	\$150.00 Per hour
Berms	\$38.00 Per Day
Berm Set-up	\$435.00 Per Event
There is a four-hour minimum on all deliveries and pick	c ups.
Heavy Equipment/ Operated & Maintained	
JD 410C Backhoe Loader (18K lb or equiv.)	\$141.00 Per hour
Case 590M Backhoe/Extenda hoe (18K lb or equiv.)	\$148.00 Per hour
Case M-590SL 4x4 Backhoe Loader (20K lb or equiv)	\$157.00 Per hour
Vibratory Compactor	\$245.00 Per Day
750lb Breaker	\$265.00 Per Day
2000lb Breaker	\$318.00 Per Day
Compaction Wheels 18" or 24"	\$135.00 Per Day

Service/Equipment	Rate
Case CX47 Mini Excavator 10k lb	\$157.00 Per hour
Case CX75 Excavator	\$165.00 Per hour
Case 9030B Excavator 50K lb or equiv. w/ thumb	\$160.00 Per hour
Case 9040B Excavator 55K lb or equiv. w/ thumb	\$175.00 Per hour
Case CX240 Excavator 60K lb or equiv.	\$180.00 Per hour
Case 9050B Excavator 75K lb or equiv.	\$195.00 Per hour
Case 800 Excavator 190K lb or equiv.	\$295.00 Per hour
4,500 lb Class Breaker	\$750.00 Per Day
10,000 lb Class Breaker	\$1280.00 Per Day
Compaction Wheels	\$275.00 Per Day
Speed Shoring per unit by day	\$ 10.00/unit/Day
Speed Shoring per unit by week	\$ 40.00/unit/Week
Speed Shoring per unit month	\$130.00/unit/Month
Tramac Mod 429 Vibratory Hammer	\$1500.00 Per Day
Concrete Pulverizer	\$1375.00 Per Day
Ripper/Shear (plus \$500 plumbing set-up)	\$3500.00 Per Wk
Case 721C Rubber Tire Loader (42K lb or equiv.)	\$143.00 Per hour
Case 921 Rubber Tire Loader (5-6 cy bucket)	\$183.00 Per hour
Heavy Equipment/ Operated & Maintained	
Cat D-6 Dozer	\$157.00 Per hour
Cat 977L Track Loader with 4:1	\$178.00 Per hour
Cat 963 Track Loader with 4:1	\$191.00 Per hour
Cat 613 Scrapper (11-13CY) or equivalent	\$222.00 Per hour
Cat 615 Scrapper (15 CY) or equivalent	\$264.00 Per hour
Cat 623 Scrapper (23 CY) or equivalent	\$275.00 Per hour
Cat 931B Track Loader	\$150.00 Per hour
54" vibrator (tow behind)	\$460.00 Per day
853 Bobcat with operator	\$110.00 Per hour
Skip Loader 4x4	\$145.00 Per hour
Skip Loader 4x4 w/ laser	\$172.00 Per hour
Motor Grader Cat 14G (Blade)	\$172.00 Per hour
Motor Grader w/ laser	\$195.00 Per hour
Drum tipping Attachment (360 degree rotation)	\$390.00 Per Day
8,000lb Fork Lift	\$114.00 Per hour
Drum Crusher (trailer Mounted)	\$96.00 Per hour
Compressor	\$258.00Per Day
Towable Light Tower	\$75.00Per Day
Submersible Pump/2" -Trash Pump	\$50.00Per Day
185 cc. ft. min. diesel. Roto gear	\$49.50 Per hour

Service/Equipment	Rate	
Portable Restroom and Trailer	\$300.00 Per Month	
40' Scissor Lift	\$140.00 Per hour	
20' Scissor Lift	\$110.00 Per hour	
15' Mini Scissor Lift	\$ 87.00 Per hour	
Mob/Demob of Heavy Equipment (per machine)	\$ 105.00 Per hour	
(excludes permit fees)		
Water Trucks		
2,000 Gallon	\$92.00 Per hour	
4,000 Gallon	\$115.00 Per hour	
Street Sweeper (4-hr minimum)	\$226.00 Per Hour	
Pressure Washer/ Operated		
(all machines are diesel driven and trailer mounted)	-	
500 Gallon., 2 hose reels	\$261.00 Per hour	
Skid mounted, self-contained Landa Washer	\$261.00 Per hour	
Drums		
Reconditioned drums are \$45.00 per drum		
Soil and Liquid 1-10 drums 11-24 drums 25-	50 drums	
Los Angeles County \$ 175.00 \$155.00 \$ 135.0	<u></u>	
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Subconsultant's Address:	9765 Fton Ave	Chatsworth CA 91311
Tel/Fax:		
		RILLING AND SOIL GAS FEE SCHEDULE
Line Item	Marie Barrer (1985) Marie Barrer (1986) Marie Barrer (1986)	Price
Mobile Lab – One (1) GC/MS, Soil/Water/Vapor ⁽¹⁾	EPA 8260B,	\$1600 /Up to 9 Hrs / Up to 16 samples
Mobile Lab -Two (2) GC/MS, E Soil/Water/Vapor Day ⁽¹⁾	EPA 8260,	\$2100 / Up to 9 Hrs / Up to 30 samples
Mobile Lab - Single GC/MS, E Vapor ⁽¹⁾	PA TO-15/TO-3,	\$2200 / Up to 9 Hrs / Up to 14 samples
Mobile Lab - Two (2) GC/MS, EPA 8260, Soil/Water/Vapor ⁽¹	EPA TO-15/TO-3,	\$2300 / Up to 9 Hrs / Up to 14 samples
Additional Analysis: Fixed Gas CO2, CO) by ASTM 1946 GC/ Sulfide (H2S) by GC/FPD		\$500/ Up to 15 samples
Geoprobe Drill Rig - Up to 8 H	rs	.\$1350 / 9 Hrs
Limited Access Drill Rig - Up to	o 8 Hrs	\$1350 / 9 Hrs
Two Rigs: Limited Access Dri Drill Rig - 8 Hrs	Il Rig & Geoprobe	\$1550 / 9 Hrs
Mob/Demob		\$75 / Hr
Additional Field Technician		\$65 / Hr
Additional Chemist		\$85/Hr
Cancellation Fee		50%, if within 24 hours

Soil = \$10/Sample; Groundwater = \$15/Sample; Soil Vapor = \$14/Sample, 5035 VOA Vial Kits = \$12 Each

The actual number of samples analyzed in the mobile laboratory depends on several key variables. Examples of such variables are:

- The rate of sample production by the client is such that no time is lost between analysis
- Sample contaminant level and matrix interferences that may require sample analytical reruns in order to comply with method QA/QC requirements

Subconsultant: American Analytics (continued)

ORGANICS :		The Control of the Co
GAS CHROMATOGRAPHY (GC)		Price (\$)
Purgeable		
Purgeable Aromatics	EPA 602/80218	35.00
Dissolved Methane in Water	RSK-175 GC/FID	60.00
Dissolved Methane, Ethane, Ethene in water	RSK-175 GC/FID	70.00
Dissolved Carbon Dioxide in Water	RSK-175 GC/TCD	65.00
Dissolved Carbon Dioxide in Water (Low Level, MRL = 1 mg/L)	RSK-175 GC/MS	75,00
Extractable	KSIETTO OGIMO	. 5.55
	EDA ages	55,00
PCBs (soit or water) Organochlorine Pesticides	EPA 3082	85.00
9 ·	EPA 8081	95.00
PCBs & Pesticides	EPA 8081/8082	95,00
Fuel Related Analyses		
TPHG/BTEX/MTBE	EPA 8015 mod. /8021B/MTBE	35.00
TPHG Gasoline Range Organics (GRO)	EPA 8015 mod.	35,00
TPHD Diesei Range Organics (DRO)	EPA 8015 mod.	49.00
Carbon Chain Characterization	EPA 8015 mod.	50.00
Methanol and Ethanol	EPA 8015M	70.00
GAS CHROMATOGRAPHY MASS SPECTROMETRY (GC/MS)		
TPHG/BTEX/Oxygenates by GC/MS	EDA goenb	65.00
,,,	EPA 8260B	65.00
BTEX and Oxygenates * by GC/MS	EPA 8260B	
BTEX, Oxygenates *, EDB, EDC by GC/MS	EPA 8260B	65.00
Volatile Organics (VOCs Full List) by GC/MS	EPA 624/8260B	80,00
VOCs and Oxygenates* by GC/MS	EPA 8260B	75.00
TPHG/VOCs by GC/MS	EPA 8260B	80.00
1,2,3-Trichloropropane (1,2,3-TCP) by GC/MS	SRL-524M-TCP	85.00
1,4-Dioxane by Purge & Trap GC/MS	EPA 8260B	85.00
EDB/EDC by GC/MS	EPA 8260B	65.00
Extractable Organics by GC/MS	EPA8270C	175.00
1,4-Dioxane by Extraction GC/MS (Low Level, MRL = 2 µg/L)	EPA 8270C	95.00
Polynuclear Aromatic Hydrocarbons (PAHs) (Low Level, MRL = 0.2 µg/L)	EPA 8270C Selected (on Monitoring (SIM)	110.00
Low Level Vinyl Chloride in High Concentrations of PCE, TCE	GC/MS Cryofocus	250.00
* Oxygenates include: MTBE, TAME, TBA, ETBE, and DIPE		
*EPA 5035 sample preparation		15.00
HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC)		
Polynuclear Aromatic Hydrocarbons (PAHs)	EPA 8310	130.00
METALS		1524
		Price (\$)
Individual Metals - (GFAA Atomic Absorption, ICP Atomic Emission S	pectroscopy)	
Single metal (Includes digestion)		14.00
Each additional element per sample		10.00
Elements of Choice Include; B.Ca,Mg,Na,K,SI,Sb,AI,As,Ba,Be,Cd,Co,Cr,Cr	ı,Fe,Pb,Mn,Mo,Ni,Se,Ag,Ti,Sn,V,Zn	
Mercury (Hg)	EPA 245,1/245,5/7471/7470	35.00
Filtration for Dissolved Metals Determination		10.00
TCLP – Extraction Only	EPA 1311	35.00
CAL WET (Waste Extraction Test) – Extraction Only	22CCR66261	35,00
Hexavalent Chromium (Cr VI) – water samples	EPA 7196	40.00
Hexavalent Chromium (Cr VI) - soil samples	EPA 7196	60.00
Hexavalent Chromium (Cr VI) (Low Level, MRL = 0.3 µg/L)	EPA 218.6/7199	75.00
Package Metals - (GFAA Atomic Absorption, ICP Atomic Emission Sp	nectroscopy	
Title 22 metals w/o Cr VI (CAM 17)	EPA 6010/7000	85.00
Priority Pollutant Metals (13)	EPA 6010/7000	85,00
RCRA Metals (8)	EPA 6010/7000	75.00
Individual Metals – (ICP/MS)		
Single metal (includes digestion)	EPA 6020/200.8	18.00
Each additional element per sample	EPA 6020/200.8	10,00
Elements of Choice Include: B,Ca,Mg,Na,K,Si,Sb,As,Ba,Be,Cd,Co,Cr,Cu,F		, 5, 55
Package Metals – (ICP/MS)		
Title 22 metals W/O CrVI (CAM 17)	EPA 6020/200.8/7000 (Hg)	95.00

Subconsultant: American Analytics

AIR TOXICS (soil gas, vapors, etc.)

		<u> Price (\$)</u>
TO-15 Low Level (0.005 to 3 ppbV) Linear/SIM Scan	GC/MS	150,00
TO-15 Subset Low Level (0,005 to 0.020 ppbV) SIM Scan	GC/MS	150.00
TO-15 (0.5 to 3 ppbV) Linear Scan	GC/MS	150.00
TO-15 Mid-Level Soll Gas (2 to 5 ppbV) Linear Scan	GC/MS	150.00
TO-14	GC/MS	150,00
TO-17 (Full List)	GC/MS	150.00
TO-17 (Naphthálena)	GC/MS	120.00
TQ-3, GRO/BTEX	GC/MS	85.00
TO-15 and TO-3 (GRO) Combination on Same Sample	GC/MS	190.00
1,4L SUMMA Canister Batch Certified		20.00
6L SUMMA Canister Batch Certified		30.00
*Individual Canister or Flow Controller Certification (Additional Cost)		40.00
Flow Controller and Gauge Assembly 200 ml/min		10.00
Sorbent Tube (TO-17)		20.00
Fixed Gases (Oxygen, Nitrogen, Carbon monoxide, Carbon dioxide, Methane)		75.00
Methane	GC/FID	75.00
Light Hydrocarbon Gases C1 to C6	GC/FID	75.00
Hydrogen Sulfide (H2S)	GC/FPD	120.00
Total Reduced Sulfur Compounds Incl. H₂S	ASTM D5504	230.00
Volatile Organic Compounds (Full List)	EPA 8260M (GC/MS)	85.00
Total Volatile Petroleum Hydrocarbons (GRO), BTEX, and Oxygenates	EPA 8260M (GC/MS)	85.00
Total Volatile Petroleum Hydrocarbons & BTEX	EPA 8021M GC/PID/FID	70.00

^{*} The indicated price for individual canister certification remains in effect only if the canister is returned to AA for chemical analysis. If the canister is returned to AA and analysis is not requested, the canister certification will be charged at the above specified TO-15 analysis cost of \$135.00.

Note: Indicated prices do not include the cost of the Tedlar® bag. Tedlar® bags provided by AA will be billed at \$12.00 each

GENERAL CHEMISTRY

		Price (S)
Alkalinity	SM2320B	15.00
Biochemical Oxygen Demand (BOD5)	SM52108	50,00
Bromide	EPA 300.0	12.00
Chemical Oxygen Demand (COD) (colorimetric)	EPA 410.4, SM5220D	15.00
Chloride (ion chromatography)	EPA 300.0	12.00
Chlorine `	SM4500-Cl G	20.00
Conductance (EC, aqueous)	EPA 120.1, SM2510B	12.00
Conductance (EC, non-agueous)	EPA 9050	15,00
Corrosivity (pH, aqueous) (electrometric)	SM4500-H+B	8.00
Corrosivity (pH, non-aqueous) (electrometric)	EPA 9045C, 9040B	10.00
Cyanide, total and amenable	SM4500-CN E&G	55.00
Cyanide, total (spectrophotometric)	EPA 335.4, SM4500-CN E	45,00
Cyanide, total (Low Level, MRL = 5 µg/L)	SM4500-CN E	65,00
Flashpoint	EPA 1010	50,00
Fluoride	EPA 300.0	12.00
Hardness	SM2340 B or C	15.00
Nitrogen, Ammonia	SM4500-NH3 D or E	15, 0 0
Nitrogen, Nitrate	EPA 300.0	12.00
Nitrogen, Nitrite	EPA 300.0	12,00
Oil & Grease (Gravimetric)	EPA 1664A, SM5520B, 413.1	50.00

Ortho-Phosphate	EPA 300.0	12.00
Oxygen, Dissolved	SM4500-OG	20.00
Permanganate	Colorimetric	35.00
Perchlorate	EPA 314.0	70.00
Solids, Total Suspended	SM2540 D	15.00
Solids, Total Settleable	SM2540 F	15.00
Solids, Total Dissolved	EPA 160.1,SM2540 C	15.00
Residue, Total	SM2540 B	15.0€
Residue, Volatile	EPA 160.4	20.00
Sulfate	EPA 300.0	12,00
Sulfide	SM4500-S=D	. 20.00
Temperature	EPA 170;1	8.00
TOC (Aqueous)	SM5310 B	45.00
TRPH (Infrared)	EPA 418.1, SM 5520 C&F	45.00
Ferrous Iron	SM 3500 (Colorimetric)	30.00
Oxidation Reduction Potential	Electrometric	30,00
Turbidity	EPA 180.1, SM2130B	12.00
General Minerals:	·	
TDS, pH, Alkalinity (OH, CO ₃ ² , HCO ₃), Hardness, Conductance, MBAS, Antons: Ca, Mg, Na, K, Fe, Mn, Zn, Cations: Cl', NO ₃ ', NO ₂ ', SO ₄ ² , F', and Anton/Cation Balance.	Various	180.00

Subconsultant: BC2 Environ	mental		• •
Subconsultant's Address:	9765 Eton Ave, Chatsworth, CA 913	11	
Tel/Fax:	818-998-5547 / 818-998-7258		
•	<u>Description</u>	<u>Unit</u>	Unit Price
Mobilization/Demobilization -	Drill Rigs and Air Vac Equipment	· · · · · · · · · · · · · · · · · · ·	
Mobilization/Demobilization	on - Up to 25 miles	Trip	\$275.00
Mobilization/Demobilization	on - 26 to 75 miles	Trip	\$325.00
Mobilization/Demobilization	on - 75 to 120 miles	Trip	\$525.00
Mobilization/Demobilization	on - Over 120 miles	Trip Trip	\$525.00 + \$5/mile
Drill Rig Rates - Up To 8 hrs Or	Site - 2-Man Crews		
Hollow-Stem Auger Drill R	g Daily Rate	Day	\$2,140.00
Hollow-Stem Auger Drill R	g Half Day Rate Up to 4 hrs On Site	Half Day	\$1,900.00
Hollow-Stem Auger Drill R	g Overtime Rate - Over 8 hrs	Hour	\$340.00
LAR/Track Mount Drill Rig	Daily Rate	Day	\$2,750.00
LAR/Track Mount Drill Rig	Half Day Rate Up to 4 hrs On Site	Half Day	\$2,200.00
LAR/Track Mount Drill Rig	Overtime Rate - Over 8 Hours On Site	Hour	\$400.00
Direct Push Rig Daily Rate		Day	\$2,200.00
Direct Push Rig Half Day R	ate Up to 4 hrs On Site	Half Day	\$1,400.00
Direct Push Rig Overtime I	Rate - Over 8 Hours	Hour	\$250.00
Air-Vacuum Excavation Rig	g Daily Rate	Day	\$1,700.00
Air-Vacuum Excavation Rig	g Half Day Rate Up to 4 hrs On Site	Half Day	\$1,000.00
Air-Vacuum Excavation Ri	g Overtime Rate - Over 8 Hours On Site	Hour	\$225.00
Additional Laborer - Up to	8 hrs Onsite	Day	\$500.00
Additional Laborer - Up to	4 hrs Onsite	Half-Day	\$250.00
Smeal 5T Development Ri	g - 1 Man Crew Portal to Portal	Hour	\$145.00
Smeal 5T Development Ri	g - 2 Man Crew Portal to Portal	Hour	\$210.00

Subconsultant: BC2 Environmental (continued)		
Description	Unit	Unit Price
Rental Equipment and Miscellaneous		
Asphalt or Concrete Coring Up To 18" Diameter	Hour	\$155.00
Forklift And Hopper - 1st Day	Day	\$625.00
Forklift And Hopper - Additional Days	Day	\$325.00
Liftgate Truck & Decontamination Trailer	Day	\$150.00
Grout Backfill - Up to 8in Diameter Borehole	Foot	\$3.00
2-inch SCH 40 PVC Wells Casing/Screen & Annular Material	Foot	\$15.00
4-inch SCH 40 PVC Wells - Casing/Screen & Annular Material	Foot	\$19.00
8-inch EMCO Well Box & Concrete	Each	\$105.00
12-inch EMCO Well Box & Concrete	Each	\$165.00
Containment Drums	Each	\$50.00
Bentonite Chips (est)	Bag	\$17.00
Ready Mix Concrete	Bag	\$5.00
Rapid Set Concrete	Bag	\$15.00
Asphait Patch	Bag	\$10.00
2.5" X 1" Brass Rings	Each	\$3.00
2.5" X 6" Brass Rings	Each	\$6.00
2.5" X 6" Plastic Cans for Rings	Each .	\$4.00
3" X 30" Shelby Tubes	Each	\$28.00
2" x 3" Stainless Steel Liners	Each	\$4.00
2" x 6" Stainless Steel Liners	Each	\$6.00
Cardboard Core Boxes	Each	\$15.00
Wood Plugs	Each	\$18.00
4 1/4" ID Auger Bit Wear and Repair	Each	\$175.00
6 mil Visqueen	Roll	\$120.00

Subconsultant: Eurofins Calscience		
Classification	Cost	
EPA 8015B/D(M)- same day	\$165.00	
EPA 8015B/D(M)- 24 hrs	\$110.00	
EPA 8015B/D(M)- 48 hrs	\$82.50	
EPA 8015B/D(M)- 72 hrs	\$68.75	
EPA 8015B/D(M)- 96 hrs	\$68.75	
EPA 8015B/D(M)- 120 hrs	\$55.00	
EPA 8015B/D(M)- weekend	\$165.00	
EPA 8015B/D(M)- holiday	\$165.00	
EPA 6010B/C & 7470A or 7471A- same day	\$240.00	
EPA 6010B/C & 7470A or 7471A- 24 hrs	\$160.00	
EPA 6010B/C & 7470A or 7471A- 48 hrs	\$120.00	
EPA 6010B/C & 7470A or 7471A- 72 hrs	\$100.00	
EPA 6010B/C & 7470A or 7471A- 96 hrs	\$100.00	

Subconsultant: Eurofins Calscience (continued)	
Classification	<u>Cost</u>
EPA 6010B/C & 7470A or 7471A- 120 hrs	\$80.00
EPA 6010B/C & 7470A or 7471A- holiday	\$240.00
EPA 6010B/C & 7470A or 7471A- weekend	\$240.00
EPA 8082/8082A or 608- same day	\$150.00
EPA 8082/8082A or 608- 24 hrs	\$120.00
EPA 8082/8082A or 608- 48 hrs	\$90.00
EPA 8082/8082A or 608- 72 hrs	\$75.00
EPA 8082/8082A or 608- 96 hrs	\$75.00
EPA 8082/8082A or 608- 120 hrs	\$60.00
EPA 8082/8082A or 608- weekend	\$180.00
EPA 8082/8082A or 608- holiday	\$180.00
EPA 8270C/D or 625- same day	N/A
EPA 8270C/D or 625- 24 hrs	\$320.00
EPA 8270C/D or 625- 48 hrs	\$240.00
EPA 8270C/D or 625- 72 hrs	\$200.00
EPA 8270C/D or 625- 96 hrs	\$200.00
EPA 8270C/D or 625- 120 hrs	\$160.00
EPA 8270C/D or 625- weekend	N/A
EPA 8270C/D or 625- holiday	N/A
EPA 8260B/C or 624- same day	\$240.00
EPA 8260B/C or 624- 24 hrs	\$160.00
EPA 8260B/C or 624- 48 hrs	\$120.00
EPA 8260B/C or 624- 72 hrs	\$100.00
EPA 8260B/C or 624- 96 hrs	\$100.00
EPA 8260B/C or 624- 120 hrs	\$80.00
EPA 8260B/C or 624- weekend	\$240.00
EPA 8260B/C or 624- holiday	\$240.00
EPA 8141A- same day	N/A
EPA 8141A- 24 hrs	N/A
EPA 8141A- 48 hrs	N/A
EPA 8141A- 72 hrs	\$195.00
EPA 8141A- 96	\$195,00
EPA 8141A- 120 hrs	\$156.00
EPA 8141A- weekend	N/A
EPA 8141A- holiday	N/A
EPA 8151A- same day	N/A
EPA 8151A- 24 hrs	N/A
EPA 8151A- 48 hrs	N/A
EPA 8151A- 72 hrs	\$253.50
EPA 8151A- 96 hrs	\$253.50

Subconsultant: Eurofins Calscience (continued)	· · · · · · · · · · · · · · · · · · ·
Classification	Cost
EPA 8151A- 120 hrs	\$169.00
EPA 8151A- weekend	N/A
EPA 8151A- holiday	N/A
EPA 8270C/D- same day	N/A
EPA 8270C/D- 24 hrs	\$320.00
EPA 8270C/D- 48 hrs	\$240.00
EPA 8270C/D- 72 hrs	\$200.00
EPA 8270C/D- 96 hrs	\$200.00
EPA 8270C/D- 120 hrs	\$160.00
EPA 8270C/D- weekend	N/A
EPA 8270C/D- holiday	N/A
EPA 3010A/3020A/3050B- same day	\$30.00
EPA 3010A/3020A/3050B- 24 hrs	\$20.00
EPA 3010A/3020A/3050B- 48 hrs	\$15.00
EPA 3010A/3020A/3050B- 72 hrs	\$12.50
EPA 3010A/3020A/3050B- 96 hrs	\$12.50
EPA 3010A/3020A/3050B- 120 hrs	\$10.00
EPA 3010A/3020A/3050B- weekend	\$30.00
EPA 3010A/3020A/3050B- holiday	\$30.00
EPA 1311/1312- same day	N/A
EPA 1311/1312- 24 hrs	N/A
EPA 1311/1312- 48 hrs	\$52.50
EPA 1311/1312- 72 hrs	\$43.75
EPA 1311/1312- 96 hrs	\$43.75
EPA 1311/1312- 120 hrs	\$35.00
EPA 1311/1312- weekend	N/A
EPA 1311/1312- holiday	N/A
CAC,Ttl 22, §66261.126,App.II-same day	N/A
CAC,Ttl 22, §66261.126,App.II-24 hrs	N/A
CAC,Ttl 22, §66261.126,App.II-48 hrs	N/A
CAC,Ttl 22, §66261.126,App.II-72 hrs	\$43.75
CAC,Ttl 22, §66261.126,App.II-96 hrs	\$43.75
CAC,Ttl 22, §66261.126,App.II-120 hrs	\$35.00
CAC,Ttl 22, §66261.126,App.II-weekend	N/A
CAC,Ttl 22, §66261.126,App.II-holiday	N/A
EPA 6010B/C or 200.7- same day	\$24.00
EPA 6010B/C or 200.7- 24 hrs	\$16.00
EPA 6010B/C or 200.7- 48 hrs	\$12.00
EPA 6010B/C or 200.7- 72 hrs	\$10.00
EPA 6010B/C or 200.7- 96 hrs	\$10.00

Classification	Cost
EPA 6010B/C or 200.7- 120 hrs	\$8.00
EPA 6010B/C or 200.7- weekend	\$24.00
EPA 6010B/C or 200.7- holiday	\$24.00
SM2510B- same day.	\$21.00
SM2510B- 24 hrs	\$14.00
SM2510B- 48 hrs	\$10.50
SM2510B- 72 hrs	\$8.75
SM25108- 96 hrs	\$8.75
SM2510B- 120 hrs	\$7.00
SM2510B- weekend	\$21.00
SM2510B- holiday	\$21.00
SM2540G or ASTM D2216- same day	\$36.00
SM2540G or ASTM D2216- 24 hrs	\$24.00
SM2540G or ASTM D2216- 48 hrs	\$18.00
SM2540G or ASTM D2216- 72 hrs	\$15.00
SM2540G or ASTM D2216- 96 hrs	\$15.00
SM2540G or ASTM D2216- 120 hrs	\$12.00
SM2540G or ASTM D2216- weekend	\$36.00
SM2540G or ASTM D2216- holiday	\$36.00
EPA 314.0- same day	\$150.00
EPA 314.0- 24 hrs	\$100.00
EPA 314.0- 48 hrs	\$75.00
EPA 314.0- 72 hrs	\$62.50
EPA 314.0- 96 hrs	\$62.50
EPA 314.0- 120 hrs	\$50.00
EPA 314.0- weekend	\$150.00
EPA 314.0- holiday	\$150.00
SM4500 H+B or EPA 9045C- same day	\$21.00
SM4500 H+B or EPA 9045C- 24 hrs	\$14.0
SM4500 H+B or EPA 9045C- 48 hrs	\$10.5
SM4500 H+B or EPA 9045C- 72 hrs	\$8.7
SM4500 H+B or EPA 9045C- 96 hrs	\$8.7
SM4500 H+B or EPA 9045C- 120 hrs	\$7.0
SM4500 H+B or EPA 9045C- weekend	\$21.0
SM4500 H+B or EPA 9045C- holiday	\$21.0
SM2540-C (EPA 160.1)- same day	\$36.0
SM2540-C (EPA 160.1)- 24 hrs	\$24.0
SM2540-C (EPA 160.1)- 48 hrs	\$18.0
SM2540-C (EPA 160.1)- 72 hrs	\$15.0
SM2540-C (EPA 160.1)- 96 hrs	\$15.0

Classification	Cost
SM2540-C (EPA 160.1)- 120 hrs	\$12.00
SM2540-C (EPA 160.1)- weekend	\$36.00
SM2540-C (EPA 160.1)- holiday	\$36.00
EPA 9060A- same day	\$210.00
EPA 9060A- 24 hrs	\$140.00
EPA 9060A- 48 hrs	\$105.00
EPA 9060A- 72 hrs	\$87.50
EPA 9060A- 96 hrs	\$87.50
EPA 9060A- 120 hrs	\$70.00
EPA 9060A- weekend	\$210.00
EPA 9060A- holiday	\$210.00
5035 Sampling Kit- same day	\$13.00
5035 Sampling Kit- 24 hrs	\$13.00
5035 Sampling Kit- 48 hrs	\$13.00
5035 Sampling Kit- 72 hrs	\$13.00
5035 Sampling Kit- 96 hrs	\$13.00
5035 Sampling Kit- 120 hrs	\$13.00
5035 Sampling Kit- weekend	\$13.00
5035 Sampling Kit- holiday	\$13.00
Exception Unit- Subcontractor (surcharge for outside	·
subcontracting; applies to work not performed by	0%
Eurofins Calscience)	
Exception Unit- Other (discount off Fee Schedule for	00/
methods not listed)	0%
EPA Method 8081A for OCPs- Same Day	N/A
EPA Method 8081A for OCPs- 24 hrs	\$160.00
EPA Method 8081A for OCPs- 48 hrs	\$120.00
EPA Method 8081A for OCPs- 72 hrs	\$100.00
EPA Method 8081A for OCPs- 96 hrs	\$90.00
EPA Method 8081A for OCPs- 120 hrs	\$80.00
EPA Method 8081A for OCPs- weekend	\$240.00
EPA Method 8081A for OCPs- holiday	\$240.00
Sample Composting- same day	\$8.00
Sample Composting- 24 hrs	\$4.00
Sample Composting- 48 hrs	\$4.00
Sample Composting- 72 hrs	\$4.00
Sample Composting- 96 hrs	\$4.00
Sample Composting- 120 hrs	\$4.00
Sample Composting- weekend	\$8.00
Sample Composting- holiday	\$8.00

Subconsultant: GeoVision		
Subconsultant's Address:	1124 Olympic Drive, Corona, CA 92881	
Tel/Fax:	951-549-1234 / 951-549-1236	
	Geophysical Services Time and Materials/Fixed Price	
Labor		
Principal		\$185.00
Senior Geophysicist		\$150.00
Project Manager		\$120.00
CADD Operator		\$110.00
Senior Project Geophysicist		\$95.00
Project Geophysicist		\$85.00
Senior Staff Geophysicist		\$80.00
Staff Geophysicist		\$75.00
Senior Geophysical Technician		\$80.00
Geophysical Technician I		\$75.00
Geophysical Technician II		\$60.00

Notes

- 1. Overtime hours for professional staff will be charged at straight time rates.
- 2. Preapproved travel, transportation, and lodging expenses will be charged in accordance with the Prime Agreement.
- 3. Reproduction and printing costs for reports, drawings, and other project records, excluding those forinternal use or check prints and one hard-copy original, will be reimbursed at cost.
- 4. Preapproved express deliveries (such as FedEx) in excess of \$10 will be reimbursed at cost.
- 5. Fee schedule is valid for one year from the date of execution of Prime Agreement, at which time [rate adjustments +/- shall be] will be negotiated in accordance with the Prime Agreement.

Subconsultant: GeoVision (Continued)

Equipment Fees

Equipment Item (qty if more than 1)	Day	Week	Month
Geonics EM-31DL Terrain Conductivity Meter w/data logger (2)	90	450	1,350
Geonics EM-61 High Sensitivity Digital Metal Detector w/data logger (2)	90	450	1,350
Geonics EM-61MK2A High Sensitivity Digital Metal Detector w/data logger	125	6 25	1,875
Geometrics G-858 Cesium Magnetometer	135	675	2,035
Gem GSM-19 Walking Magnetometer	50	350	750
GSSI SIR2, 2000, 3000 Ground Penetrating Radar Unit (5)	105	525	1,575
GSSI SIR10, 20 Ground Penetrating Radar Unit (4)	300	1500	4,500
GSSI GPR Antenna (1.5 GHz, 900, 500, 400, 300, 200 MHz - ground coupled)	50	250	750
Oyo DAS-1 48 Channel Seismograph w/ 48 Channel Expansion Module	250	1250	3,750
Geometrics Geode 24-channel Seismograph (4)	115	575	1,725
Twenty-five 8 to 40 Hz Geophones with Muller or Kooter takeouts (350)	50	250	750
Twenty-Five 4.5 Hz Geophones (80)	100	500	1,500
Instantel Minimate Plus seismograph for vibration monitoring - add \$50 "Cal Fee" first use	50	250	750
Instantel Minimate Plus seismograph – with stainless steel enclosure, battery and charger	85	425	1,275
IVI T15000 MiniVib Seismic Reflection System including MiniVib	1,500	7,500	22,500
Horizontally Polarized Shear-Wave Vibrator seismic Source (MicroVib)	900	4.500	13,500
Seismic Refraction/Reflection Cable, 24-ch, including adapters (25)	25	125	37 5
Input/Output RLS240M Roll Box with cable adapters	25	125	375
Betsy Downhole Percussion Firing Rod without shells	20	100	300
Accelerated Weight Drop (AWD) PEG40Kg (3) and Geometrics AWD 80Kg (1)	120	600	1,800
Kinemetrics Ranger or Oyo Geospace 1Hz Seismometer (8)	20	100	300
Kinemetrics Episensor Accelerometer (2)	20	100	300
Geostuff Triax BHG-3 Borehole Geophone	50	300	900
Metrotech/RadioDetection/Dynatel/Ditchwitch Utility Locator (8)	35	175	- 525
Fisher TW-6 Metal Detector (6)	15	75	225
Schonstedt GA72Cd Magnetic Locator (5)	10	50	150
IEI Impulse Echo System	200	1000	3,000
HP Spectrum Analyzer	150	750	2,250
GeoVISION Nano NTSC borehole camera	450	2,250	6,750
Sokkia Axis3 or Trimble Pro XR GPS Unit (2)	80	400	1,200
Nikon AP-7 or Sokkia C300 Automatic Level (2)	10	50	150
Nikon NPL-362 Total Station	75	300	900
General 210 Motorized Auger	10	50	150
Honda EX650 or EU2000i generator (3)	10	50	150
Polaris Ranger/Quad with Trailer, or Truck/Van (10)	100	500	1,500

Subconsultant's Address:	onsultant's Address: 2726 Walnut Ave, Signal Hill, CA 90755		
Tel/Fax:	562-427-6899 / 562-427-3314		
	Prevailing W	age Rate	
Equipme	ent and Labor	Rates	<u>Units</u>
Cone Penetration Test Rig, 2	2-man crew	\$375.00	hour
Mud Rotary rig, two man cr		\$350.00	hour
Fraste FS400/Gefco Rotary	Rig, 3-man crew	\$455.00	hour
Sonic Drill Rig, 3-man crew		\$750.00	hour
Truck/Track-Mounted Auge	r rig, 2man crew	\$305.00	hour
CME 95/850 Auger rig, 3-ma	an crew	\$380.00	hour
Air Vacuum Excavation, 2-m		\$235.00	hour
Truck Mounted Direct Push	Rig, 1-man crew	\$205.00	day
Water Truck Rig Tender		\$400.00	day
Service Truck, CPT Support	Truck	\$200.00	day
Mud System		\$250.00	day
Grout Pump/Steam Cleaner		\$150.00	hour
Service Runs		\$100.00	hour
Front-End Loader/Bobcat/Forklift		\$300.00	day
Fork Lift Delivery/Pickup		\$75.00	hour
Additional Crew Member		\$85.00	mn/hr
Premium Time -> 8 hours		\$35.00	mn/hr
Per Diem		\$190.00	day
LIF-UVOST		\$1,750.00	day
Saphire Window		\$150.00	each
Ventilation Equipment, blower, 150' hose		\$175.00	day
Pump Rig - 1-man crew		\$205.00	hour
Submersible Pump		\$175.00	day
Portable Water Trailer		\$150.00	day
Horiba Meter		\$115.00	day
N	<u>laterials</u>	Rates	<u>Units</u>
55-gallon Drum		\$50.00	each
1/4" or 1/2" Polyethelyne Tubing		\$1.00	foot
Disposable Tips		\$35.00	each
Disposable Bailers		\$15.00	each
SS Vapor Probes		\$45.00	each
PVC Vapor Probes		\$12.00	each
Sample Rings		\$8.00	each

<u>Materials</u>	Rates	<u>Units</u>
Macro Core Tubes	\$8.00	each
2" Blank PVC Sch 40	\$5.00	foot
2" Slotted PVC Sch 40	\$8.00	foot
4" Blank PVC Sch 40	\$10.00	foot _
4" Slotted PVC Sch 40	\$15.00	foot
2" Fittings - Threaded	\$10.00	each
2" Fittings - Slip	\$5.00	each
4" Fittings - Threaded	\$20.00	each
4" Fittings - Slip	\$10.00	each
2" Locking Cap - Star Cap	\$55.00	each
4" Locking Cap - Star Cap	\$65.00	each
2" Locking Cap - Morrisons	\$15.00	each
4" Locking Cap - Morrisons	\$25.00	each
3/4" PVC Blank	\$3.50	foot
3/4" PVC Slotted	\$5.00	foot
3/4" Fittings	\$5.00	each
Filter Sand - 50 lbs	\$15.00	bag
Bentonite Chips	\$16.00	each
Bentonite Pellets TR-30 (5 gal. pail)	\$85.00	each
Bentonite Pellets Reg (5 gal. pail)	\$52.00	each
Bentonite Drill Mud	\$20.00	bag
Bentonite Grout	\$30.00	bag
Portland Cement	\$15.00	bag
Ready Mix Concrete	\$10.00	bag
Quick Set Concrete	\$20.00	bag
Monitoring Well Box	\$150.00	each
Anodized Stand Pipe	\$250.00	each
Bollards	\$55.00	each
Wood Plugs	\$20.00	each
Core Box - Wood - HQ, NQ	\$45.00	each
Core Box - Cardboard HQ, NQ, PQ	\$20.00	each
Level C PPE	\$75.00	mn/dy
Traffic Cones	\$28.00	each
Concrete Core < 8" dia, 6" thick max	\$75.00	each
Concrete Core 10" - 14", 6" thick max	\$125.00	each

Subconsultant - Kehoe Testing & Engineering	
<u>Description</u>	Rates
CONE PENETRATION TESTING (CPT) SERVICES/PRICING:	
CPT Soundings w/ CPT Rig (up to 8 hrs)	\$2,950.00/day
CPT Soundings w/ CPT Rig (up to 6 hrs)	\$2,250.00/day
CPT Soundings w/ CPT Rig (up to 4 hrs)	\$1,475.00/day
CPT Soundings w/ Direct Push, Limited or Track Rig (up to 8 hrs)	\$2,950.00/day
CPT Soundings w/ Direct Push, Limited or Track Rig (up to 6 hrs)	\$2,250.00/day
CPT Soundings w/ Direct Push, Limited or Track Rig (up to 4 hrs)	\$1,475.00/day
CPT SERVICES/PRICING INCL. PREVAILING WAGE:	
CPT Soundings w/ CPT Rig (up to 8 hrs)	\$3,650.00/day
CPT Soundings w/ CPT Rig (up to 6 hrs)	\$2,800.00/day
CPT Soundings w/ CPT Rig (up to 4 hrs)	\$1,825.00/day
CPT Soundings w/ Direct Push, Limited or Track Rig (up to 8 hrs)	\$3,650.00/day
CPT Soundings w/ Direct Push, Limited or Track Rig (up to 6 hrs)	\$2,800.00/day
CPT Soundings w/ Direct Push, Limited or Track Rig (up to 4 hrs)	\$1,825.00/day
OTHER SERVICES/PRICING:	
Additional Man for Hand Augering to Pre-Clear Each Location	\$300.00/day
Additional Man for Hand Augering to Pre-Clear Each Location (incl.	\$350.00/day
Prevailing Wage)	
Seismic Shear Wave Measurements	\$30.00/ea
Pore Pressure Dissipation Testing w/ CPT Rig (applies w/ footage rate)	\$370.00/hour
Pore Pressure Dissipation Testing w/ CPT Rig (applies w/ footage rate,	\$450.00/hour
incl. Prevailing Wage)	
Concrete Coring (up to 8" thick)	\$85.00/core
Mob/Demob	(location)
Mob/Demob (incl. Prevailing Wage)	(location)
Per Diem - (\$60 meals + \$157 lodging)/person/day	-
MATERIALS:	
Bentonite Granules	\$15.00/ea
Bentonite Grout	\$30.00/ea
Portland Cement	\$15.00/ea
Concrete	\$15.00/ea
Sand	\$15.00/ea
Asphalt Patch	\$15.00/ea
Waste Drum (55 gallon)	\$50.00/ea
Other Materials	At Cost
STANDBY TIME/ADDITIONAL HOURS:	
CPT Rig, Direct Push, Limited or Track Rig	\$370.00/hour
CPT Rig, Direct Push, Limited or Track Rig (incl. Prevailing Wage)	\$450.00/hour

Subconsultant – Lettis Consultants International, Inc.		
Name	<u>Title</u>	Hourly Rate
TBD	Engineer, Senior Principal II	\$295
TBD	Engineer, Senior Principal I	\$240
TBD	Engineer, Principal	\$215
TBD	Engineer, Senior	\$195
TBD	Engineer, Senior Project	\$155
TBD	Engineer, Project	\$140
TBD	Geologist, Senior Principal II	\$295
TBD	Geologist, Senior Principal I	\$235
TBD	Geologist, Principal	\$200
TBD	Geologist, Senior	\$170
TBD	Geologist, Senior Project	\$140
TBD	Geologist, Project	\$125
TBD	Geologist, Senior Staff	\$110
TBD	Geologist, Staff	\$95
TBD	GIS Principal	\$200
TBD	GIS Senior	\$170
TBD	GIS Senior Project	\$140
TBD	GIS Project	\$125
TBD	GIS Senior Staff	\$110
TBD	GIS Staff	\$95
TBD	QA Manager	\$170
TBD	QA Specialist	\$115
TBD	Technician	\$60
TBD	Seismologists, Principal I	\$235
TBD	Seismologists, Senior Project	\$155
Outside services, other	direct expenses and equipment rental items	At Cost

<u>Description</u>	Footage Cost
Minimum 100 ft. Borehole depth	
Soil Boring Environmental	_\$22.00
Grout Borings	\$9.00
2" Groundwater wells	\$40.00
4" Groundwater wells	\$44.00
Thirdman on all installation 480.00 Day	\$480.00
Thirdman on all installation 480.00 Day PW	\$720.00
well Abandonment Drill Out - 2" well	\$22.00
well Abandonment Drill Out - 4" well	\$26.00

Description Foot		
Well Abandonment Pressure Grout with top 5' Drill out 2" well	Footage Cost \$19.00	
Well Abandonment Pressure Grout with top 5' Drill out 4" well	\$21.00	
Well Development Per Hour Portal to Portal	\$185.00	
Continuous Core- Additional Per Foot	\$8.00	
Continous Core 5 ft Barell Hourly	\$250.00	
Continuous Core-Rental Truck & Water Tank	\$850-\$1,000	
Wooden Core Boxes	\$85.00	
Wax Paper Pam & Rags Per Week	\$150.00	
MTA Day Rate PW	\$3,520.00	
MTA Day Rate PW Night & Saturday	\$4,320.00	
MTA Sunday PW	\$7,040.00	
MTA Regular PLA	\$4,500.00	
MTA PLA Night & Saturday	\$6,750.00	
MTA PLA Sunday	\$9,000.00	
Mob/Demob (Los Angeles)	\$540-\$720	
Mob/Demob (Orange County)	\$540	
Mob/Demob (San Bernardino)	\$540-\$990	
Mob/Demob (Riverside County)	\$540-\$1,080	
Mob/Demob (San Diego County)	\$720-\$1,080	
Mob/Demob (Ventura County)	\$990-\$1,080	
Cookie cut Asphalt & 8",12" well box Installation	\$250-\$350	
Steam Cleaner (Per Day)	\$150.00	
Service Truck (Per Day)	\$300.00	
55 Gallon Dot Drums ea	\$70-\$75	
Traffic Control Arrow Board Rental (Per Day)	\$1,000.00	
Brass Liners & caps ea	\$18.00	
Stainless Steal Liners	\$9.00	
Calmod Liners Cups & Caps	\$27.00	
Shelby Tubes & Caps	\$48.00	
Asphalt, concrete, sand, Gravel or chips ea	\$20-\$37	
Pvc 2"	\$10.00	
Pvc 4"	\$13.00	
Pvc Bottom And Locking Cap	\$35-\$4	
Geotechnical Boring Hourly Portal to Portal	\$185.0	
Prevailing Wage Drilling Onsite	\$350.0	
Prevailing Wage Drilling Onsite Sat or Nite	\$450-\$52	
Geotechnical Borings Plus Mobe Charge Min 100ft	\$18.5	

Subconsultant – Martini Drilling Corporation (continued)		
Description	Footage Cost	
Vac master 4000 185.00	\$185.00	
Vac master 4000 Pw	\$350.00	
Travel for vac master	\$185.00	
Concrete Coring up to 18" core Each	\$90-\$275	
Saw Cutting up to 10" Each	\$90-\$275	
Geoprobe 6600 Reg. Rate Day	\$2,200	
Geoprobe 6600 Reg. Rate Day pw	\$3,520	
Poly tube for Soil Sample ea. Geoprobe	\$8.5	
Training Fee Per Man Hour	\$0.8	
LCP Tracker	\$120	
All Footage Rate for Prevailing Wages for environmental add:		
2-man crew, day	\$1,320	
3-man crew, day	\$2,100	

<u>Name</u>	<u>Title</u>	Hourly Rate
Eduardo Hernandez, PE	Forensic Engineer / Principal Engineer	\$300
Victor Medina, PE	Forensic Engineer (Finite Element Analysis)	\$250
Ernesto Padilla	Forensic Engineer (Corrosion investigations)	\$250
Josh Yanes	Forensic Engineer (Accident Reconstruction/Arson)	\$250
TBD	Senior Corrosion Engineer	\$200
TBD	Project Manager	\$175
TBD	Corrosion Engineer / CP Specialist	\$150
TBD	Corrosion Field Technician	\$110
TBD	Machining - Pipe Cutting	\$100
TBD	Metallography- Failure Analysis	\$225
TBD	NACE Coating Inspector	\$100
TBD	Drafting	\$100
TBD	Technician	\$75
Microbiologically Induced	d Corrosion Testing (MIC) \$450 per s	ample received
Corrosion lab and field se	rvices: maximum 5-day turn-around-time	
	Minimum Resistivity, Sulfate, Chloride, Sulfide, Redox, pH, Ammo only signed and stamped by a licensed California Professional Er	

Subconsultant – Project X Corrosion Engineering (continued)

AWWA C105 10-point System Steel & Iron Package:

\$120/soil sample

Samples are tested for Resistivity, pH, Sulfide, Redox to determine the AWWA C105 point with data presented in a letter report of results only.

Soil Corrosivity and Corrosion Evaluation report

\$1,200 per site or alignment

with corrosion control recommendations and estimated corrosion rates of materials

Wenner 4-pin Soil Resistivity Tests

(2, 5, 10, 25, 50 ft. spans) \$300 per location + travel to perform North-South and East-West line readings for sites without existing asphalt or underground utilities. (Includes data report with map). If asphalt or existing utilities exist, additional \$200 fee "for hole drilling per line" and \$200 fee for Underground Services (USA) research.

Soil Thermal Resistivity Tests

\$200 for first point

\$100 each additional point for dry outcurve. Require at least four (4) points for Dry Out Curve. \$50 remolding charge if needed using client specified optimal Moisture Content and Maximum Dry density. Minimum 4inches tall, 2 inch diameter undisturbed sample rings. (includes data report)

In field soil thermal resistivity testing, in trench also possible.

\$200/reading + travel

Anode Testing (Anode Wire continuity test)

\$425 fixed fee per 10 anodes

\$200 per additional 10 anodes. All anode wires should be disconnected before we arrive. Includes PE Stamped letter report.

<u>Method</u>	<u>Parameter</u>	<u>Rate</u>
SM 2310 B	Acidity Acidity (Total as CaCO ₃)	\$25.00
SM 2320 B	Bicarbonate (Total as CaCO ₃)	\$25.00
SM 2320 B	Alkalinity (Total as CaCO ₃)	\$25.00
SM 4500-NH ₃	Ammonia – Nessler (NH ₃ -N)	\$25.00
HACH 830	Ammonia – Salicylate (NH ₃ -N)	\$25.00
ASTM D 512B	Chloride (CL–)	\$20.00
AASHTO T 291	Chloride (CL)	\$20.00
Caltrans CTM 422	Chloride (CL-)	\$20.00
SM 2510 B	Conductivity (mS/cm)	\$25.00
AASHTO T 288	Minimum Resistivity (ohm-cm)	\$40.00
Caltrans CTM 643	Minimum Resistivity (ohm-cm)	\$40.00
ASTM D 2216	Moisture Content & Density	\$20.00
SM 4500-NO ₃	Nitrate – Cadmium Reduc. (NO ₃ – -N)	\$25.00
HACH 835	Nitrate – Dimethylphenol (NO ₃ – -N)	\$25.00
ASTM G 51	pH (H ⁺)	\$20.00
AASHTO T 289	pH (H ⁺)	\$20.00
Caltrans CTM 643	рн (H ⁺)	\$20.00
SM 2580 B	Redox Potential (mV)	\$25.00

<u>Method</u>	Parameter	<u>Rate</u>
ASTM G 57 [4 pin method]	Resistivity - As Received & Saturated (ohm-cm)	\$40.00
ASTM G 187 [2 pin method]	Resistivity – As Received & Saturated (ohm-cm)	\$40.00
ASTM D516	Sulfate (SO ₄ ²⁻)	\$20.00
AASHTO T 290	Sulfate (SO ₄ ²⁻)	\$20.00
Caltrans CTM 417	Sulfate (SO ₄ ²⁻)	\$20.00
SM 4500-S ²	Sulfide (S ²⁻)	\$35.00
ASTM D 5334, IEEE 442-1981	Thermal Resistivity Dry-Out Curve (Three points = \$200+\$100+\$100) at Optimum Moisture%, ~50%, 0% moisture. \$100 per additional point. For Undisturbed samples; 4"(IEEE) or 8"(ASTM) height total needed, 2" minimum diameter.	\$400.00
ASTM D 698, D2216, D 2937	Soil remolding at optimum moisture and density	\$50.00
ASTM D-1126 HACH 8030	Calcium (Ca ⁺⁺)	\$20.00
ASTM D-1126 or HACH 8030	Total Hardness in Water	\$30.00
ASTM D5907	Total Dissolved Solids (TDS)	\$20.00
HACH 8033	Lead (Pb)	\$30.00
Water Corrosivity Report	Langelier (LSI), Ryzner (RSI), & Puckorius (PSI) Scaling Index results with interpretation	\$100.00

Subconsultant – Southwest Geophysics, Inc.	
General Geophysical Studies	
Ground Penetrating Radar, Electromagnetics, Magnetics, Line Ta	racer
Half Day	\$1,300
Full Day	
Hourly Rate	
(A Mob/Demob charge of \$300 applies to all projects billed	on hourly rates.)
Seismic Refraction, Sting Resistivity	
Half Day	\$1,550
Full Day	
Hourly Rate	
(A Mob/Demob charge of \$450 applies to all projects billed	on hourly rates.)
Borehole and Corehole Utility/Rebar Locating**	
Per Hour Rate	
Mob/Demob	\$300
Hourly Rate	
Full Day Discount Rate	
Per Borehole Rate	• •
Mob/Demob	\$300
Per Borehole Rate	
All rates include a two-man crew. ** Fee will be based on either whichever is less.	

DESCRIPTION	UNIT PRICE	
Rates for 2-man Crew:		
Canterra 450: Air Percussion/Air Rotary*	\$440.00/Hour	
Canterra 450: Mud Rotary*	\$440.00/Hour	
Canterra 450: Auger*	\$415.00/Hour	
CME 75 High Torque Auger/ Air/ Mud Rotary/ Coring*	\$295.00/Hour	
Mobile B-24 Limited Access Rig Auger/ Air Percussion*	\$270.00/Hour	
SIMCO 4000 Auger / Direct Push / Air Percussion / Mud Rotary / Coring*	\$270.00/Hour	
Diedrich D-120 All Terrain High Torque ATV Rig / Auger / Air Percussion/Mud Rotary /Coring*	\$410.00/Hour	
Diedrich D-120 High Torque Rig / Auger / Air Percussion / Mud Rotary / Coring*	\$330.00/Hou	
Horizontal Drilling Rig*	\$400.00/Hou	
All Terrain Rubber Track mounted Rig / Auger / Air Percussion / Mud Rotary / Direct Push/Coring*	\$305.00/Hou	
Helicopter Portable Drilling Rig	\$425.00/Hou	
Additional Crew member (3rd man)	\$55.00/Hou	
Water Truck (without driver)	\$345.00/Day	
Smeal 5T Development Rig*	\$250.00/Hou	
Service Truck/ Flatbed with Liftgate	\$185.00/Da	
Solids Control System (for mud rotary drilling)	\$575.00/Da	
ASV-RC100 Multi Terrain Track Loader or Bobcat – Move On/Move Off (San Diego County)	\$390.00/Eac	
Bobcat Rental with Operator and digging bucket (3-hour minimum)	\$200.00/Hou	
Bobcat Rental & digging bucket without Operator	\$290.00/Da	
ASV-RC100 Rental with Operator and digging bucket(4-hour minimum)	\$235.00/Hou	
ASV-RC100 Rental & digging bucket without Operator	\$440.00/Da	
ASV-RC100 or Bobcat Attachments: Backhoe, Brush Cutter, Forklift	\$220.00/Da	
Continuous Sampler (5' barrel)	\$220.00/Da	
Steam Cleaner or Pressure Washer	\$220.00/Da	
Submersible Pump (2" or 4") up to 75 gpm	\$210.00/Da	
(Other Pump up to 400 gpm – P.O.R.)	3210.00/Day	
HQ Wireline or NX Rock Coring System - 5' Barrel (does not include bit charge)	\$240.00/Da	
HQ Bit Wear	\$7.00/F	

DESCRIPTION	UNIT PRICE
Grout Mixing & Pumping Unit	\$220.00/Day
HSA Bit Rebuild	\$340.00/Each
Generator (up to 5 kw)	\$110.00/Day
Air Compressor Rental – (375 cfm)	\$720.00/Day
Air Compressor Rental – (750 cfm)	\$900.00/Day
Concrete Cores 6", 8" and 11" diameter, up to 8" deep	\$400.00/Each
Concrete Sawcut, 3' x 3' x 4" deep	\$450.00/Each
Cardboard Core Boxes	\$21.00/Each
Wood Core Boxes	\$51.00/Each
Inclinometer Pipe 2.75" x 10'	\$96.00/Each
Inclinometer Bottom Cap	\$14.00/Each
Crash Posts 4" x 5'	\$85.00
Bentonite Grout/sk	\$22.00
Bentonite Chips/sk	\$16.00
Bentonite Pellets/Pail	\$60.00
Bentonite Coated Pellets/Pail	\$92.00
Filter Sand #50 sk	\$18.00
Special Blend Filter Sand #50 sk	\$22.00
Portland Cement #94 sk	\$31.00
Drilling Fluid Additives (up to 8" diameter borings/ft)	\$3.00/Ft
2" Sch 40 PVC Casing	\$3.50/Ft
2" Sch 40 PVC Slotted Screen	\$6.00/Ft
2" Sch 40 PVC End Cap	\$11.00
2" Sch 40 PVC Locking Plug	\$23.00
4" Sch 40 PVC Casing	\$9.00/Ft
4" Sch 40 PVC Screen	\$12.00/Ft
4" Sch 40 PVC End Cap	\$19.00/Each
4" Sch 40 PVC Locking Plug	\$25.00/Each
Rapidset Concrete #50	\$20.00
A.C. Patch #50	\$9.00
12" Fl. Mnt. Vaults	\$105.00/Each
6" Monument	\$275.00/Each
8" Monument	\$285.00/Each
10" Monument	\$300.00/Each
1.5" x 6" S.S. Sample Tubes	\$4.00/Each

Subconsultant – Tri-County Drilling, Inc. (continued)	
DESCRIPTION	UNIT PRICE
2.5" x 6" S.S. Sample Tubes	\$5.00/Each
1.5" & 2.5" S.S. Sample Tubes End Caps	\$0.25/Each
55 Gallon Drums	\$75.00/Each
2" Water Pump	\$150.00/Day
Moyno Pump	\$200.00/Day
Duplex Piston Pump	\$400.00/Day
Tandem Axle Transport Vehicle	\$140.00/Hr
Portable Hydraulic Power Unit	\$190.00/Day
Light Stand w/ Generator	\$175.00/Day
Portable Welding Machine	\$220.00/Day
5 Ton 2 Axle Dump Trailer	\$140.00/Day
Flow Meter (3/4" – 2")	\$60.00/Day
Water Level Meter	\$75.00/Day
Air Percussion Bits - Up to 6" Diameter	\$ 3.50/Ft
Air Percussion Bits – Up to 12" Diameter	\$7.00/Ft
Drill teeth (Bullet)	\$21.00/Each
Steam cleaning @ yard	\$100.00/Hr
Plastic Core Boxes with Dividers	\$14.00/Each
DWR Reporting	\$80.00/Hr
Cancellation Fee	4-Hour Minimum
(cancellation occurring less than 48 hours prior to drill date)	4-nour wiimimum
Packer Test Equipment Rental	\$450/day

^{*4-}Hour Minimum Charge

<u>Classification Description</u>	<u>Hourly Rate</u>
Principal Engineer/Surveyor	\$250
Senior Project Manager	\$220
Project Manager	\$190
Office Surveyor	\$150
ROW/Survey Technician III	\$140
ROW/Survey Technician II	\$125
ROW/Survey Technician I	\$115

Classification Description	Hourly Rate
Engineer/Planner III	\$140
Engineer/Planner III	\$125
Engineer/Planner III	\$115
CADD/Designer III	\$115
CADD/Designer III	\$100
CADD/Designer III	\$75
Research/Expeditor	\$115
Field Survey: 3-Person Party	\$325
Field Survey: 2-Person Party	\$250
Field Survey: 1-Person Party/Robotics	\$185
Survey Supervisor	\$200
Expert Witness	\$350

Subconsultant - Woodward Drilling		
<u>Item Description</u>	Cost	
Mob/Demob Drill rig	\$7,800.00	
Mob/Demob Skid rig	\$9,360.00	
2 person Skid rig travel / hr	\$414.00	
2 person Auger Rig travel / hr	\$414.00	
2 person Auger rig operating w/ crew - onsite	\$414.00	
2 person Core & Mud Rotary to 6" dia travel / hr	\$414.00	
2 person Auger/Core/Mud/Skid rig standby w/ crew - onsite	\$414.00	
Drill rig standby w/o crew / hr	\$414.00	
Extra person / hr	\$130.00	
Safety Day stand down / per person	\$208.00	
2 person Mud Rotary over 6" dia travel / hr	\$414.00	
2 person Mud Rotary > 6" operating w/ crew - onsite	\$414.00	
2 person Mud Rotary > 6" standby w/ crew - onsite	\$414.00	
2 person Air Rotary Rig Travel / hr	\$572.00	
2 person Air Rotary operating w/ crew - onsite	\$572.00	
2 person Air Rotary standby w/ crew - onsite	\$572.00	
Mud/Air Rotary Standby w/o crew	\$414.00	
2 person weekend mob/demob / hr	\$1,040.00	
3 person weekend mob/demob / hr	\$1,560.00	
Air Knife Vac Mob/Demob / hr	\$260.00	
Air knife vac / hr	. \$364.00	
Dev Rig Mob - 1 man / hr	\$260.00	
Dev Rig - 1 man / hr	\$312.00	

Item Description	Cost
Dev Rig Mob - 2 men / hr	\$260.00
Dev Rig - 2 men / hr	\$364.00
3/8" dev tubing /100' roll	\$115.00
2" - 12v Development Pump / day	\$73.00
2" - Grundfos Development pump / day	\$130.00
4" = 20 gpm Development Pump / day	\$172.00
U22 Turbidity Meter / day	\$229.00
U22 Turbidity meter / week	\$2,080.00
Subsistence / per person / day	\$156.00
Drill Vessel - day w/ 3 person crew	\$1,040.00
Drill Support Vessel - day	\$520.00
5" x 10' floating oil boom / set of 4	\$234.00
8" x 10' floating oil boom / set of 4	\$260.00
Forklift Deliver/pickup / ea way	\$468.00
forklift / day	\$338.00
Gradall forklift / delivery/pickup / ea way	\$260.00
Gradall forklift / weekly rental	\$3,952.00
Gradall forklift / monthly rental	\$6,500.00
Bobcat 750 / delivery/pickup / ea	\$260.00
Bobcat 750 / weekly rental	\$3,120.00
Bobcat 750 / monthly rental	\$6,240.00
2000 gallon water truck / delivery/pickup / ea way	\$520.00
2000 gallon water truck / weekly rental	\$1,872.00
2000 gallon water truck / monthly rental	\$4,990.0
Dump Trailer / wk	\$780.0
Dump Trailer / month	\$1,664.0
Self dumping hopper / wk	\$260.0
Self dumping hopper / month	\$728.0
300 gal Mud separator/shaker / wk	\$1,040.0
300 gal Mud separator/shaker / month	\$2,288.0
2000 gal Mud separator/shaker / wk	\$1,560.0
2000 gal Mud separator/shaker / month	\$3,432.0
3/4" x 5' screen Sch 40	\$37.0
3/4" x 10' screen Sch 40	\$36.0
3/4" x 10' blank Sch 40	\$23.0
3/4"threaded Bottom cap	\$9.0
3/4" slip cap	\$1.0
1" x 5' screen Sch 40	\$28.0
1" x 10' screen Sch 40	\$40.0
1" x 10' blank \$ch 40	\$25.0
1" threaded Bottom cap sch 40	\$12.0
1" slip cap	\$2.0
1" Torq Plug / ea	\$16.0

<u>Item Description</u>	Cost
1" x 5' screen Sch 80 / ea	\$42.00
1" x 10' screen Sch 80 / ea	\$63.00
1" x 10' blank casing Sch 80 / ea	\$43.00
1" Threaded Bottom Plug sch 80	\$19.00
2" x 5' screen Sch 40	\$34.00
2" x 10' screen Sch 40	\$46.00
2" x 10' blank Sch 40	\$34.00
2" Threaded Bottom Cap	\$14.00
2" Slip Cap	\$4.00
2" Locking Cap	\$36.00
4" x 5' Screen Sch 40	\$86.00
4" x 10' Screen .010 PVC Sch 40	\$114.00
4" x 5' PVC Blank Riser Sch 40	\$77.00
4" x 10' PVC Blank Riser Sch 40	\$92.00
4" Bottom Threaded Plug Sch 40 PVC	\$23.00
4" Locking Cap w/ lock	\$42.00
8" flush mount traffic rated well cover	\$120.00
12" flush mount traffic rated well cover	\$166.00
18" flush mount traffic rated well cover	\$281.00
24" flush mount traffic rated well cover	\$380.00
2" well - Above Ground Well Cover	\$260.00
4" well - Above Ground Weil Cover	. \$286.00
Bollards 4" x 7' / ea	\$140.00
Sand #3, 2/12, 2/16 - 49# bag	. \$14.00
Bentonite Chips - 50# bag	\$25.00
Coated Bentonite Pellets - 50# pail 1/4"	\$115.00
Benseal Granular Bentonite / bag	\$21.00
Bentonite Gel 50 lbs.	\$16.00
47# Portland Cement / bag	\$14.00
47# Portland Cement / bag NSF 61	\$19.00
Asphalt Patch / 50# / bag	\$21.00
Volclay Grout / bag	\$31.00
Fast Set Concrete 60 lbs	\$21.00
Sample Sleeves 1-1/2" x 6"	\$5.00
Sample Sleeves 2" x 6"	\$7.00
Sample Sleeves 2-1/2" x 6"	\$9.00
Plastic Liner 4' x 1.5"	\$9.00
Shelby Tubes 3" x 30'	\$47.00
55 gallon drum / ea	\$62.00
Plastic Core Boxes f/ 10' core	\$26.00
Wooden Core Boxes f/ 15' core	\$67.00
Core Bit / replacement	\$1,560.00
Auger Bit / repair	\$312.00

Item Description	Cost
Traffic Cones if client requests to be left onsite	\$21.00
Delineator if client requests to be left onsite	\$36.00
Bailer - Disposable	\$12.00
Mud enhancer - Rel Pac / bag	\$42.00
Mud enhancer - Accu Vis - 44# bucket	\$447.00
Mud enhancer - EZE Mud - 5 gallon pail	\$187.00
Mud enhancer - Drispak - 50# Bag	\$322.00
Cutting Torch 5' / day	\$52.00
Wood Plug F/ 3-1/4" 1.D. 6" O.D. augers	\$18.00
Wood Plug F/ 4-1/4" I.D. 8" O.D. augers	\$21.00
Wood Plug F/ 6-5/8" I.D. 10" O.D. augers	\$23.00
Wood Plug F/ 8-1/4" I.D. 12" O.D. augers	\$23.00
Wood plug f/ 12" I.D. 18" O.D. augers	\$47.00
Wood Plug W/ Steel Bit F/ 3-1/4" I.D. 6" O.D. Augers	\$104.00
Wood Plug W/ Steel Bit F/ 4-1/4" I.D. 8" O.D. Augers	\$125.00
Wood Plug W/ Steel Bit F/ 6-5/8" I.D. 10" O.D. augers	\$167.00
Wood Plug W/ Steel Bit F/ 8-1/4" I.D. 12" O.D. augers	\$208.00
Wood Plug W/ Steel Bit F/ 10" I.D. 15" O.D. augers	\$208.00
Plastic Sheeting / box	\$208.00
Fabric Matting 4' x 4'	\$62.00
Replacement HQ & PQ rods / ea	\$338.00
DWR reports / ea	\$78.00

EXHIBIT D Allowable Travel Expenses

[NOTE: These rates are as of January 1, 2017]

Expenses for transportation, lodging, subsistence and related items incurred by consultants employed by the Los Angeles Department of Water and Power will be subject to the "50-mile" rule. Under this rule, travel reimbursements will be made only if the destination is farther than 50 miles from the Consultant personnel's field or office location to the LADWP work site. Any such travel shall be pre-approved by LADWP and shall be in accordance with the guidelines of this Exhibit E.

All expenditures over \$25 require documentation in the form of an original detailed receipt with the exception of per diem meals. However, receipts for expenditures under \$25 may be requested by the City Controller. No additional mark-up on contractor or subcontractor expenses will be allowed.

LADWP will reimburse the Consultant for expenses that include, but not limited to:

1.0 Airfare:

Airfare is limited to coach class only. An itinerary is not acceptable in and of itself. Original receipts for airfare must be submitted. Purchase of a refundable ticket, which is usually more expensive than a non-refundable ticket, must be approved by the LADWP Contract Administrator identified in the Agreement.

2.0 Car Rental:

Car rental is limited to mid-size or smaller car. The expense of navigation and insurance will not be reimbursed. Original receipts for car rental and fuel costs must be submitted. Travelers shall fill the gas tank before returning car to avoid fuel surcharges that are not reimbursable.

3.0 Per Diem Allowances - Meals:

- 3.1 A meal allowance rate is established for domestic travel and will include incidental expenses.
- 3.2 The meal allowance rate for domestic travel is \$64 per day for a full day of travel, which includes taxes and reasonable and customary gratuities not to exceed 15 per cent. On the first and last day of travel flight itinerary will be required if the full meal rate is requested.
- 3.3 Meal and incidental allowance will be prorated at 75% (\$48) of the daily allowance as follows:

EXHIBIT D

Allowable Travel Expenses

- 3.3.1 On the first and last day of travel depending on departure/arrival time:
 - 3.3.1.1 The partial meal rate will be paid on the first day of travel for departure times after 2 pm.
 - 3.3.1.2 The partial meal rate will be paid on last day of travel for arrival times prior to 2pm.
 - 3.3.1.3 When some meals are provided as part of the conference/event.

(NOTE: No meal allowance will be provided when all meals are provided throughout the day by the host or as part of an event/conference.)

3.4 Meal Receipts

3.4.1 Meal receipts are no longer required when claiming the meal allowance. If receipts are provided, the actual amount if less than allowance will be reimbursed.

EXCEPTIONS:

- Receipts are required for grant funded travel where the grantor requires complete documentation of travel expenses; and
- Receipts are required of single meals that cost more than \$25.

4.0 Per Diem Allowance - Hotel/Lodging:

- 4.1 Since the expense limit varies by county, the expense limit shall be pre-approved by the LADWP Contract Administrator identified in the Agreement for travel by the Consultant to an approved worksite outside of Los Angeles County.
- 4.2 Zero balance receipt is required. The receipt must include the preprinted hotel name and address. Lodging expenses up to a maximum limit of \$158.00 per day (Los Angeles County). This should include taxes and tips. Tips and gratuities shall not exceed 15%, where reasonable and customary.

EXHIBIT D

Allowable Travel Expenses

4.3 Meals and lodging are reimbursable only on working days as reported on timesheets, and payments are subject to the approval of the LADWP Contract Administrator identified in the Agreement.

5.0 Mileage:

Mileage for non-rental car travel will be paid at the standard mileage rate established by the Internal Revenue Service in effect at the time of travel. A Map Quest or similar routing tool is required to document miles driven. The mileage will be calculated using the shortest route. As of January 1, 2017, the reimbursement rate is fifty-seven and one-half cents (\$0.535) per mile.

EXHIBIT E List of Subconsultants

The following Subconsultants are authorized to work on the Project:

Name	Special Expertise of Firm	Anticipated Service/Task Responsibilities	Location	Firm Type (SBE/DVBE)	Anticipated Compensation*
DRMcNatty & Associates, Inc.	Project Staffing	Professional IT Consulting	Mission Viejo, CA	DVBE	TBD
KEMA Inc. dba DNV GL	Systems Engineering	Renewal Energy and Transmission and distribution Consultants	Burlington, MA	Other	TBD
Duncan, Weinberg Genzer & Pembroke, P.C.	Regulatory Transmission Organization	Regulatory Transmission Consulting	Washington, DC	Other	TBD
Edward F. McCarthy & Associates	Meteorology	Technical/Managerial Services	Martinez, CA	Other	TBD
EETS, Inc.	Substation Engineering	Electrical Engineering Design	Citrus Heights, CA	SBE	TBD
Energeia USA	Distributed Resource Planning	Distributed Resource Planning	Davis, CA	SBE	TBD
David S. Habr dba Habr Economics	Utility Engineering	Utility Rate of Return and Related Economic/Financial Issues	Nipomo, CA	Other	TBD
Intellibind Technologies LLC	NERC CIP	NERC Compliance Consulting Services	Houston,TX	SBE	TBD
John Undrill, LLC	WECC Generation Testing	Consulting Engineer	Sedona, AZ	Other	TBD
Kewo Engineering Corporation	Substation Engineering	Engineering Consulting and General Engineering Contract Services	Eastvale, CA	SBE	TBD
MasTek Inc.	Physical/Cyber Security, Substation Engineering	Engineering Services	Commerce, CA	SBE	TBD
Navigant Consulting, Inc.	Resources and Transmission Planning	Multiple Category A (Resource Development Services) and B (Power System Services) Related Tasks	Chicago, IL	Other	TBD
NewGen Strategies & Solutions, LLC	Financial Planning and Reporting	Professional Consulting Services	Sammamish, WA	Other	TBD
nFront Consulting LLC	Power Rate Forecasting	Consulting Services	Oviedo, FL	Other	TBD

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EXHIBIT E List of Subconsultants

Name	Special Expertise of Firm	Anticipated Service/Task Responsibilities	Location	Firm Type (SBE/DVBE)	Anticipated Compensation*
PMCM Consulting Engineers	High Voltage AC/DC Engineering	High-Voltage AC/DC Engineering	Los Angeles, CA	SBE	TBD
PowerServices, Inc.	NERC CIP	NERC Compliance and Cybersecurity	Raleigh, NC	Other	TBD
Smart Utility Systems	Demand Response	Demand Response	Irvine, CA	SBE	TBD
TRL Systems, Inc.	Physical Access, Control Systems	Physical Access and Control Systems	Manchester, MA	Other	TBD
Utility Systems Efficiencies, Inc	Transmission Planning/ Compliance	Transmission Planning, Compliance	Carmichael, CA	SBE	TBD
W.A. Vachon & Associates	Wind Energy Technicians, O&M	Wind Energy Consulting, Forecasting Services	Cucamonga, CA	Other	TBD
ABC Liovin Drilling, Inc.	Geotechnical (Drilling, Laboratories, etc.)	Environmental and Geotechnical Drilling	Signal Hill, CA	SBE	TBD
Advanced Terra Testing, Inc.	Geotechnical (Drilling, Laboratories, etc.)	Laboratory Testing	Lakewood, CO	Other	TBD
American Analytics	Geotechnical (Drilling, Laboratories, etc.)	Laboratory Chemical Analysis Services, Fixed and Mobile Laboratories, Field Sampling Services	Wilmington, CA	SBE	TBD
American Integrated Services, Inc.	Geotechnical (Drilling, Laboratories, etc.)	Environmental Remediation and Waste Management	Chatsworth, CA	Other	TBD
BEKS Acquisition Inc. dba BC2 Environmental	Geotechnical (Drilling, Laboratories, etc.)	Environmental and Geotechnical Drilling	Orange, CA	SBE	TBD
Eurofins Calscience, Inc.	Geotechnical (Drilling, Laboratories, etc.)	Testing Laboratories	Garden Grove, CA	Other	TBD
GEOVision	Geotechnical (Drilling, Laboratories, etc.)	Geophysical Services	Corona, CA	SBE	TBD
Gregg Drilling	Geotechnical (Drilling, Laboratories, etc.)	Site Investigation Services: Drilling, Sampling, CPT	Signal Hill, CA	SBE	TBD
Kehoe Testing & Engineering, Inc.	Geotechnical (Drilling, Laboratories, etc.)	Cone Penetration Testing	Huntington	SBE	TBD
Lettis Consultants International, Inc.	Geotechnical (Drilling, Laboratories, etc.)	Geologic, Seismic, and Geotechnical Engineering	Valencía, CA	SBE	TBD

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Name	Special Expertise of Firm	Anticipated Service/Task Responsibilities	Location	Firm Type (SBE/DVBE)	Anticipated Compensation*
Martini Drilling	Geotechnical (Drilling, Laboratories, etc.)	Drilling Services	Huntington	SBE	TBD
Project X Engineers Inc. dba Project X Corrosion Engineering	Geotechnical (Drilling, Laboratories, etc.)	Corrosion Consulting, Corrosion Control Design	Murrieta, CA	SBE	TBD
Southwest Geophysics	Geotechnical (Drilling, Laboratories, etc.)	Geophysical Survey and Mapping	San Diego, CA	SBE	TBD
Tri-County Drilling	Geotechnical (Drilling, Laboratories, etc.)	Environmental and Geotechnical Drilling Services	San Diego, CA	SBE	TBD
Wagner Engineering & Survey, Inc.	Geotechnical (Drilling, Laboratories, etc.)	Survey, Mapping, and Right of Way Engineering	Northridge, CA	SBE	TBD
Woodward Drilling	Geotechnical (Drilling, Laboratories, etc.)	Environmental and Geotechnical Drilling Services	Rio Vista, CA	SBE	TBD

Subconsultant participation is estimated (To-Be-Determined/TBD) and may be modified to reflect actual services requested.

The following people are designated as Consultant's Key Personnel:

Name	Project Position	Labor Category	Location	Special Expertise	No. of Years Employed by Consultant/ Experience
William Abolt	Power System Services	Smart Grids	Chicago, IL	Energy, Sustainability, and Resilient Urban Infrastructure, LEED	1/30
Andrew Agopian	Resource Development Services	Project Manager	Los Angeles. CA	Project Management, General Contracting, Production and Facility Management for Solar and Other Advanced Technologies	6/27
Jennifer Ansay	Power System Services	Supervisory Piping Designer	Greenwood Village, CO	Piping Design and Software Engineering	10/23
Louis Barani	Resource Development and Power System Services (Technical Lead), and Owner Representative Services	Physical Security Specialist	Germantown, MD	Physical and Cyber Security, NERC CIP Assessments	2/ 29
Arnel Bicol	Power System Services	Principal Geotechnical Engineer	Los Angeles. CA	Site Explorations & Investigations, Laboratory Testing, Site Characterization, Field Instrumentation, Site Improvements, and Construction QA	32/32
Stephan Brezina	Resource Development, Power System Services, and Owner Representative Services	Project Manager - HVDC	White Plains, NY	Program/Project Management, Electric Power, Smart Cities. Engineering, Operations, R&D, Construction	1/34
Dennis Cirrone	Technical Lead	Transmission Planner	Sacramento, CA	Electrical Transmission Lines	10/41
Angela Clark	Resource Development , Power System, and Owner Representative Services	Principal Environmental Compliance Manager	San Diego, CA	Environmental	23/25

EXHIBIT F
List of Key Consultant Personnel

Name	Project Position	Labor Category	Location	Special Expertise	No. of Years Employed by Consultant/ Experience
Dennis Dudzik	Program Manager for Resource Development, Power System, and Owner Representative Services	Senior Program Manager	Los Angeles, CA	Project/Program Management	20/40
Terry Edge	Owner Representative Services (Technical Lead)	Power Plant Start Up Manager	Austin, TX	Start-Up for Combined Cycle, Co- Generation and Bio-Mass Power Plants	1.5/26
Michael Ferguson	Owner Representative Services (Technical Lead)	Project Manager	Redlands, CA	Construction Management	36/36
David Ferraro	Owner Representative Services (Technical Lead)	Start-up Engineer	Redlands, CA	Construction Management, Field Engineering, Testing, and Maintenance of Power Generating Plants	16/17
Keri Gannon	Power System Services (Technical Lead)	Hydrology Engineer	San Diego, CA	Technical Studies, Hydraulic Analyses, Stormwater Management	8/14
Dale Gauthier	Resource Development , Power System, and Owner Representative Services	Principal in Charge	San Diego, CA	Development and Design Expertise for Utility and Distributed Renewable Projects and Fossil Fuel Projects	11/34
Christopher Goetz	Power System Services	Principal Engineering Geologist	Orange, CA	Engineering Geology and geologic Hazards, Relative to Siting, Permitting, Design and Construction of Civil Works	27/32
Dean Goward	Resource Development, Power System, and Owner Representative Services	Lead Senior Electrical Engineer	Oakland, CA	Transmission and Distribution Engineering	8/9
Mark Holter	Resource Development, Power System, and Owner Representative Services	Supervisory Structural Engineer	La Jolia, CA	Structural and Civil Engineering and Project Management	10/34

Name	Project Position	Labor Category	Location	Special Expertise	No. of Years Employed by Consultant/ Experience
Larry Jaffe	Resource Development, Power System, and Owner Representative Services	NERC Cyber Security Specialist	Arlington, VA	Network Design, IT Security, Audiovisual Systems, WAN and LAN Technologies, Windows and Unix Platforms, Physical Security	13/28
Johnny Johnson	Resource Development, Power System, and Owner Representative Services	Advanced Technology Manager	Greenwood Village, CO	Strategic business and technology development initiatives	35/48
Shabad Khalsa	Resource Development and Power System (Technical Lead), and Owner Representative Services	Senior Power & Controls Engineer	Sacramento, CA	Power control system design	21/39
Purna Kharel	Resource Development and Power System Services, (Technical Lead), and Owner Representative Services	Senior Project Manager - Transmission	Denver, CO	Electrical engineering and substation design	2/ 15
Marc Knight	Resource Development and Power System Services, (Technical Lead), and Owner Representative Services	NERC Cyber Security Specialist	Germantown, MD	Security	<1/16
Garry Lay	Resource Development and Power System Services, (Technical Lead), and Owner Representative Services	Supervisory Geotechnical Engineer	Los Angeles, CA	Geotechnical	22/38
Jeff Lowe	Resource Development, Power System Services, and Owner Representative Services	Relay/Protection Engineer	Oakland, CA	Instrumentation and Controls	<1/28
Mo Massoudi	Resource Development, Power System Services, and Owner Representative Services	Supervisory Performance Specialist	Princeton, NJ	Engineering Design and Construction of Energy and Combustion Technologies	30/31

Name	Project Position	Labor Category	Location	Special Expertise	No. of Years Employed by Consultant/ Experience
Farshad Mohseninejad	Resource Development, Power System Services, and Owner Representative Services	Senior Electrical Engineer	Orange, CA	Design of Physical. Automation, And Protection for Multi- Disciplinary Engineering, Procurement, and Construction High-Voltage Projects	1/19
Nesa Nesarahah	Power System Services	Principal Geotechnical Engineer	Los Angeles, CA	Geo-Technical and Earthquake Engineering	18/19
Matthew Nowka	Resource Development, Power System Services, and Owner Representative Services	Project Engineering Manager & Supervisory Civil Engineer	Greenwood Village, CO	Site Improvements at Government, Industrial, and Commercial Facilities	19/20
Steven Petto	Resource Development, Power System Services, and Owner Representative Services	Project Director	Oakland, CA	Natural Gas and Other Energy- Related Engineering Design and Construction Related Engineering Design and Construction	11/37
Richard Robinson	Resource Development, Power System Services, and Owner Representative Services	Project Manager	Chicago, IL	Management of Design and Development of Large Energy Projects	4/37
Jorge Rodriguez	Resource Development, Power System Services, and Owner Representative Services	Air Quality Lead	Orange, CA	Air Quality Permitting, Dispersion Modeling, Health Risk Assessments, Greenhouse Gas Emissions Inventories and Reporting, and Regulatory Assessments	12/14
Richard Schultz	Technical Lead	Architect	Orange, CA	Planning, Design, Construction Administration of Water Pump Houses For Water Tanks and Pump Houses for Large Scale Underground Fuel Tanks and Distribution, Electrical Buildings and Central Plants	22/38

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Exhibit F – List of Key Consultant Personnel

Name	Project Position	Labor Category	Location	Special Expertise	No. of Years Employed by Consultant/ Experience
Ross Sheely	Resource Development, Power System Services, and Owner Representative Services	Estimating Manager	Greenwood Village, CO	Estimating, Project Controls, Scheduling	25/26
Mark Storm	Resource Development, Power System Services, and Owner Representative Services	Senior Noise Engineer	San Diego, CA	Acoustics and Noise Control Engineering	10/ 26
Frank Tagge	Owner Representative Services (Technical Lead)	Principal Fire Protection Engineer	Greenwood Village, CO	Fire Protection, Suppression, and Detection	36/38
Ray Walters	Technical Lead for Resource Development and Power System Services, and Owner Representative Services	Senior Project Manager	Greenwood Village, CO	Power Plant Engineering, Project Management, Administration, Including Combustion Turbine Power Plants	12/40
Olof Bystrom* (DNV-GL)	Resource Development and Power System Services (Technical Lead)	Senior Principal	Oakland, CA	Markets and Policy	3/16
Ellen Crivella* (DNV-GL)	Resource Development and Power System Services	Principal 1	Portland, OR	Regulatory & Environmental	10/10
Andrew Dorman* (DNV-GL)	Resource Development and Power System Services	Principal 1	Oakland, CA	Electrical Engineering	5/18
David Erickson* (DNV-GL)	Resource Development and Power System Services	Principal 2	Chalfont. PA	DER	1/16
Mandhir Sahni* (DNV-GL)	Resource Development and Power System Services, (Technical Lead)	Senior 2	Dallas, TX	Transmission Planning	12/15
Kevin Smith* (DNV-GL)	Resource Development and Power System Services,	Senior Principal	Seattle, WA	Wind Asset Management and Technologies	17/26
Sunil Talati* (DNV-GL)	Resource Development and Power System Services, (Technical Lead)	Senior Principal	Dallas, TX	Transmission Planning and Project Management	15/30

^{*}Subconsultant's key personnel

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Exhibit F -- List of Key Consultant Personnel

Name	Project Position	Labor Category	Location	Speciał Expertise	No. of Years Employed by Consultant/ Experience
Nellie.Tong* (DNV-GL)	Resource Development and Power System Services	Senior 1	Oakland, CA	Markets and Policy	13/13
Brian Criss* (DRMcNatty)	Power System Services and Owner's Representative Services	Management	Mission Viejo, CA	Primavera Expertise	11/16
Andrew Art (Duncan)	Resource Development and Power System Services	Key Personnel	Washington, DC	Emerging Energy and Environmental Matters	0.8/17
Bhaveeta Mody* (Duncan)	Resource Development and Power System Services	Key Personnel	Washington , DC	Emerging Energy and Environmental Matters	12/16
Sean Neal* (Duncan)	Resource Development and Power System Services	Key Personnel	Washington, DC	Emerging Energy and Environmental Matters	18/18
Pete Scanlon* (Duncan)	Resource Development and Power System Services	Key Personnel	Washington, DC	Emerging Energy and Environmental Matters	15/26
Michael Bregar* (EETS)	Power System Services	Principal Electrical	Sacramento, CA	Power and Controls	31/41
John Guillory* (EETS)	Power System Services	Senior Electrical	Sacramento, CA	SCADA	11/14
Koosha Toofan* (EETS)	Power System Services	Senior Electrical	Sacramento, CA	Engineering Studies	10/10
Ezra .Beeman* (Energeia)	Resource Development and Power System Services	Managing Director	Davis, CA	Power Sector Consulting and Research	7/18
Rich Metz* (Energeia)	Resource Development and Power System Services	General Manager	Davis, CA	Energy and Business Consulting	0.5/30
David S. Habr* (Habr)	Resource Development and Power System Services	Principal	Nipomo, CA	Rate of Return	7.5/35
Bill Add ington* (Intellibind)	Power System Services	CIP Compliance Lead	Houston, TX	NERC Cyber Security Compliance	8/30
Kevin Conway* (Intellibind)	Power System Services	Lead Compliance Consultant	Spokane, WA	NERC Compliance	8/32

^{*}Subconsultant's key personnel

Los Angeles Department of Water and Power - AECOM Technical Services, Inc. Agreement No. 47439B
Professional, Technical, and Engineering Consulting Services
Exhibit F – List of Key Consultant Personnel

Name	Project Position	Labor Category	Location	Special Expertise	No. of Years Employed by Consultant/ Experience
Doug Newbauer* (Intellibind)	Power System Services	Physical Security Specialist	Brookville, OH	NERC Compliance and Physical	5/25
John Undrill* (John Undrill)	Power System Services	Principal	Sedona, AZ	Power System and Power Plant Control Engineering	10/50
Brian Kewo* (Kewo)	Power System Services and Owner's Representative Services	Senior Electrical Engineer	Eastvale, CA	Electrical, Civil, and Mechanical Engineering	2/8
Samvel Hacopian* (Mastek)	Resource Development and Power System Services	Network Engineer	Commerce, CA	Computer Information Systems	1/9
Faviola Medina* (Mastek)	Resource Development and Power System Services	Project Manager	Commerce, CA	Telecommunications Management	6/15
Carlos Mendizabal* (Mastek)	Resource Development and Power System Services	Principal	Commerce, CA	Business Process Engineering, NERC CIP compliance	8/30
Anh Pham* (Mastek)	Resource Development and Power System Services	Substation Engineer	Commerce, CA	Electrical Engineering	0/20
Miguel Soto* (Mastek)	Resource Development and Power System Services	Electrical/Power Engineer	Commerce, CA	Electrical Engineering	8/30
David Sweeney* (Mastek)	Resource Development and Power System Services	Principal Electrical Engineer	Commerce, CA	Electrical Engineering	3/40
Dave Larsen* (Navigant)	Resource Development and Power System Services	Director	Folsom, CA	Transmission System Assessment	30/44
Chris Luras* (Navigant)	Resource Development and Power System Services	Director	Salt Lake City, UT	NERC Compliance	2/12
Paul Maxwel* (Navigant)	Resource Development and Power System Services	Director	Folsom. CA	Renewables and Conventional Generation Feasibility	18/25
Don Morrow* (Navigant)	Resource Development and Power System Services	Managing Director	Washington. DC	Transmission System Assessment	1/34
Jay Paidipati* (Navigant)	Resource Development and Power System Services	Director	Boulder. CO	Distributed Resources Planning	10/13

^{*}Subconsultant's key personnel

Los Angeles Department of Water and Power - AECOM Technical Services, Inc. Agreement No. 47439B
Professional, Technical, and Engineering Consulting Services
Exhibit F – List of Key Consultant Personnel

Name	Project Position	Labor Category	Location	Special Expertise	No. of Years Employed by Consultant/ Experience
Andy Rea* (Navigant)	Resource Development and Power System Services	Managing Director	Los Angeles, CA	Public Utility Management	3/30
Larry Riegle* (Navigant)	Resource Development and Power System Services	Director	Folsom. CA	Rates And Regulatory	17/22
Eugene Shlatz* (Navigant)	Resource Development and Power System Services	Director	Burlington. MA	Electrical Engineering	16/35
Dale Probasco* (Navigant)	Resource Development and Power System Services	Managing Director	Chicago, IL	Utility plant operational performance measurement	26/36
Tony Georgis* (NewGen)	Resource Development and Power System Services	Director	Lakewood. CO	Cost of Service, Rate Design, Strategic Planning	4/15
Nancy Heller Hughes* (NewGen)	Resource Development and Power System Services	Director	Seattle. WA	Depreciation, Valuation, Expert Witness	4/39
Joseph Mancinelli* (NewGen)	Resource Development and Power System Services	President	Lakewood, CO	Cost of Service, Rate Design, Expert Witness	4/28
Grant Rabon* (NewGen)	Resource Development and Power System Services	Executive Consultant	Austin, TX	Cost of Service, Depreciation, Valuation	3/10
Laurie Tomczyk* (NewGen)	Resource Development and Power System Services	Director	Lapeer, MI	Cost of Service, Rate Design, Expert Witness	2/25
Fred Wellington* (NewGen)	Resource Development and Power System Services	Vice President	Walnut Creek, CA	Resource Planning	>1/17
Bob Davis* (nFront)	Resource Development and Power System Services	Executive Consultant	Orlando, FL	Integrated Resource Planning and Risk Analysis, Demand Response, Renewables, Expert Witness	4/32
Fred Haddad* (nFront)	Resource Development and Power System Services	Executive Consultant	Orlando, FL	Integrated Resource Planning And Risk Analysis, Renewables, Power System Operations and Management of Capital Programs, Energy Contracts	4/36

^{*}Subconsultant's key personnel

Name	Project Position	Labor Category	Location	Special Expertise	No. of Years Employed by Consultant/ Experience
Donna Painter* (nFront)	Resource Development and Power System Services	Executive Consultant	Orlando, FL	Cost of Service and Rate Design, Transmission Tariff Support, Energy Contracts, Expert witness	4/31
John Painter* (nFront)	Resource Development and Power System Services	Executive Consultant	Orlando, FL	Cost of Service and Rate Design, Integrated Resource Planning, Demand Response, Energy Contracts, Expert Witness	4/25
Jennifer Tripp* (nFront)	Resource Development and Power System Services	Executive Consultant	Denver, CO	Integration Tests, Transmission Modeling and Risk Analysis, Transmission Planning And Tariff Support. Integration of Renewables	3/26
Tom Washburn* (nFront)	Resource Development and Power System Services	Executive Consultant	Denver, CO	Transmission Operations And Planning, Transmission Tariff Support. Power System Operations and Generation System	2/41
Rod Opland* (PMCM)	Owner Representative Services	High Voltage Engineer	Los Angeles, CA	Multiple 500 kV and 230 kV Transmission Line Projects. Receiving Station Bypass Projects, Renewable Energy Projects, Project Manager. Design Engineer, Field Engineer. Construction Manager	<2/33
Tammy Tran* (PMCM)	Owner Representative Services	Senior Electrical Engineer	Los Angeles, CA	Power Systems Planning	<2/32
Tuan Van Le* (PMCM)	Owner Representative Services	HVAC/DC Engineer	Los Angeles, CA	Substations	<2/34

^{*}Subconsultant's key personnel

Name	Project Position	Labor Category	Location	Special Expertise	No. of Years Employed by Consultant/ Experience
Bina Vantanpour* (PMCM)	Owner Representative Services	Senior Power Engineer	Los Angeles, CA	Project Management, Electrical Equipment Testing & Maintenance Certificate, Power Transformers Certificate, Transformer Concepts Certificate, Grounding	<2/33
Trevor MacCrae* (Power Services)	NERC Compliance and Cyber Security	Senior Consultant	Birmingham, AL	Regulatory Compliance, Policy Development, Process & and Procedure Development, CISSP, CISM	2.5/13
R. Peter Mackin* (Utility System)	Power System Services	Executive Engineer Consultant	Carmichael, CA	Transmission Planning and Operations Engineering	10/31
William A . Vachon* (W.A. Vachon)	Resource Development Services	Wind Consultant	Manchester, MA	Wind Energy Project and Wind Turbine Generator Assessments	32/38

^{*}Subconsultant's key personnel

EXHIBIT G Contract Insurance Requirements

CONTRACT INSURANCE REQUIRMENTS - DEPARTMENT OF WATER AND POWER For Contractors, Service Providers, Vendors, and Tenants

Term of Agraement: Contract Administrator and Phone: Buyer and Phone Number: B	OURRENCE LIMIT (\$1,000,000.00 Vorkers) (\$1,000,000,00
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Insurance Req (06/21/16-1,C)

() ASBESTOS LIABLITY: () Additional Insured

() Other: _

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1.0 Scope of Work

This Agreement is for professional, technical, training, and engineering consulting services to support the successful planning, development, and implementation of Power System projects; projects to bring the LADWP Power System into compliance with new FERC, NERC, and WECC reliability standards while maintaining compliance with existing standards; projects to comply with enacted state legislation; Power System Reliability Program (PSRP) projects to renew aged infrastructure to industry standards; and efforts to introduce best industry practices to power system planning, design, maintenance, and operations. The Contractor is required to transfer their expert knowledge and industry-specific experience.

The Contractor shall provide professional engineering, technical, and consulting services on an asneeded basis. The Contractor must be proficient and competent in all subject areas listed in this section. The Contractor may demonstrate proficiency through either the use of Contractor resources or through subcontractors.

The Contractor's staff would normally work from their local home office or, depending on assignment, may be required to work at the John Ferraro Building (JFB), 111 North Hope Street, Los Angeles, California 90012 or at any other LADWP facility or work site.

The services to be provided by the Contractor will be managed in accordance with LADWP's established Task Order Development and Approval Procedure, Article VI of this Agreement, which will include the following steps:

Step 1 - Task Order Request for Proposal

Step 2 - Task Order Proposal

Step 3 - Evaluation of Task Order Proposal

Step 4 – Task Order Approval and Authorization

Step 5 - Task Order Modification

The Contractor shall provide comprehensive and wide ranging technical, planning, engineering, development, project management, and consulting services including but not limited to:

A. Resource Development Services

- 1. Perform investigative, exploratory, feasibility, and planning studies.
- 2. Perform renewable resource portfolio studies and impact assessment.
- 3. Qualitative and quantitative evaluation of renewable resources and their impact on system reliability and costs associated with the integration.
- 4. Assessments of potential renewable energy and conventional energy projects and technologies.

- 5. Studies, analytical support, and industry expertise services for adequacy of existing resources, resource plans to expand or replace existing resources, opportunities to acquire lower cost resources, rules and emerging policies that affect power supply, and best practices for the management of LADWP's the power supply portfolio.
- 6. Review and evaluation of technical and commercial offerings of proposed equipment.
- 7. Review prospective project designs, approach to construction, and milestone schedules.
- 8. Development of least-cost, best-fit evaluation and selection criteria for renewable projects.
- Assist in the preparation, evaluation, and contract negotiations of proposals and/or offers.
- 10. Engineering services for conventional generation, renewable energy, and renewable energy enabling and supporting projects including support in all aspects of civil, electrical, mechanical, structural, and geotechnical engineering.
- 11. Assist with various aspects of equipment and material procurement, design, drafting, and engineering services for transmission lines and substations.
- 12. Development of operational strategies to incorporate renewable resources.
- 13. Assist in the integration, operation, maintenance, and management of a newly acquired generation facility.
- 14. Perform financial analysis for various potential projects and project upgrades/betterments.

B. Power System Services

- 1. Transmission Planning studies, interconnection studies, modeling, and analysis.
- 2. HVDC studies, including contingency arming and HVAC/HVDC and HVDC/HVAC conversion.
- 3. Study of impact of potential coal and fossil fuel replacement projects.

- 4. Studies required to comply with WECC, NERC and FERC Regulatory Standards, and associated strategies.
- 5. Reactive power requirements and reactive power management.
- 6. Modeling and optimum integration of renewable resource facilities.
- 7. Conduct and report on WECC Generator Model validation testing.
- 8. Assess generating unit reliability and provide recommendations for system improvements and training on the task(s) performed.
- Comprehensive Renewable Portfolio Standard (RPS) certification, accounting, and maintenance services.
- 10. Energy contracts, cost of service, rate impact, and energy market impact studies.
- 11. Economic analysis and evaluation of alternative engineering projects.
- Distributed Energy Resources planning studies, engineering, implementation, and maintenance.
- 13. Studies on behind-the-meter services and stranded investment cost recovery options/mechanisms.
- 14. Studies, evaluations, and recommendations on power system operations and management of capital programs.
- 15. Consulting services for construction, maintenance, safety, quality assurance, testing, and commissioning.
- 16. Asset management and life extension/end of life assessments.
- 17. Assist with various aspects of specifications/Request-for-Proposal/Request-for-Offer development, equipment and material procurement, evaluation and contract negotiations, design, drafting, and engineering services.
- 18. Real estate studies, permitting, right of way, and related consulting services for power projects.
- 19. Provide transmission and distribution performance metrics benchmarking services and best practices for comparable utilities/systems.
- 20. Repowering, relicensing, and licensing project consulting services.

- 21. Demand Response studies, including analysis, data management, outreach, and implementation services.
- 22. Comprehensive root cause analysis studies and assessment of LADWP's Power System Reliability Program.
- 23. Overhead and underground transmission engineering and project management services.
- 24. Station engineering, system protection, and related project management services.
- 25. Sub-transmission and distribution planning studies, modeling, analysis, and engineering services including integration of micro-grids and smart metering/smart grid.
- 26. Engineering and consulting services including all aspects of civil, electrical, mechanical, architectural, structural, seismic, hydrology, cyber security, physical security, and geotechnical engineering.

C. Owner's Representative Services

- Engineering, technical, project management, and consulting services to support Power System projects including but not limited to generating station projects, electric substation projects, HVAC/HVDC converter station projects, utility-built solar projects, security projects, critical infrastructure protection and cyber security compliance projects, distributed energy resources projects, Feed-In Tariff solar projects, Solar Incentive Program and Net Energy Metering (NEM) projects.
- 2. Construction engineering and management services.

The Contractor shall also provide knowledge transfer and training, including knowledge transfer in general, methods and documentation to be used, knowledge resources that will be available to LADWP representative(s)/task managers, and the costs and conditions associated with knowledge transfer. Upon request, the Contractor shall provide specialized knowledge and expertise to LADWP staff in order to facilitate effective knowledge transfer.

The Contractor shall use applicable LADWP Power System standards. In addition to LADWP Power System standards, all work shall conform to all applicable codes and regulations of governing agencies. All documents, drawings, and electronic files produced shall become the property of the LADWP.

2.0 Detailed Technical Requirements (Contractor Requirements) and Contract Deliverables

Detailed technical requirements shall be specified in each task order proposal from the Contractor per the Task Order Development and Approval and Authorization process stated in Article VI of this Agreement.

A. Location of the Firm Services

For ease of communication with the LADWP, the Contractor shall have an office in the greater Los Angeles area with staff available to work on site at LADWP's facilities when necessary.

B. LADWP-Furnished Property

LADWP may require that the Contractor and/or its Subcontractor(s) perform work at LADWP office in a specific Task Assignment. In such cases, LADWP will furnish the Contractor with office space facilities, material support, and general office equipment.

Land-line telephone(s) and Internet service will be provided upon request. Cellular and/or other wireless services will not be provided.

3.0 Reporting

The Contractor shall provide the Contract Administrator with written monthly progress updates of its activities. The monthly progress updates shall include, but not be limited to, status of each task (including the percentage of each task that has been completed), expenditures for each task, balance remaining for each task, and the level of SBE/DVBE participation for each task.

Additionally, at the end of each task, as well as at the end of the Agreement, the Contractor shall provide the Contract Administrator with a written report detailing the summary of the most significant work completed, expenditures for the work completed, timeline, and levels of SBE/DVBE participation. Included in the report should be the benefits of the services rendered realized by LADWP.

EXHIBIT I Background Check Certification

BACKGROUND CHECK CERTIFICATION

On behalf of _		(name of w	endor),	(name of
			med background checks the following components	
1.	Administration (not b. Provides independe	based on issu a work eligibil ent address hi nymercial datai	ance data published by th	7 years; sources
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Person Perform	ling Screening Services	Date		
Executive Mana	agement of Company	Date	Name of the Compa	ny

EXHIBIT J Confidentiality Agreement for LADWP Proprietary Information

Confidentiality Agreement for LADWP Proprietary Information

A. Confidentiality

All documents, records, and information provided by LADWP to the Contractor, or accessed or reviewed by the Contractor, during performance of this Agreement shall remain the property of LADWP. All documents, records and information provided by LADWP to the Contractor, or accessed or reviewed by the Contractor during performance of this Agreement, are deemed confidential. The Contractor agrees not to provide these documents and records, nor disclose their content or any information contained in them, either orally or in writing, to any other person or entity. The Contractor agrees that all documents, records, or other information used or reviewed in connection with the Contractor's work for LADWP shall be used only for the purpose of carrying out LADWP business and cannot be used for any other purpose. The Contractor shall be responsible for protecting the confidentiality and maintaining the security of LADWP documents, records, and information in its possession.

B. Document Access/Control

- 1. The Contractor shall make the confidential information provided by LADWP to the Contractor, or accessed or reviewed by the Contractor during performance of this Agreement, available to its employees, agents and for subcontractors, only on a need to know basis. Further, the Contractor shall provide written instructions to all of its employees, agents and subcontractors, with access to the confidential information about the penalties for its unauthorized use or disclosure.
- The Contractor shall store and process confidential information in an electronic format in such a way that unauthorized persons cannot retrieve the information by computer, remote terminal or other means.
- 3. The Contractor shall not remove documents, records, or information used or reviewed in connection with the Contractor's work for LADWP from LADWP facilities without prior approval from LADWP. The Contractor shall not use, other than in direct performance of work required pursuant to the Agreement, or make notes of any home address or home telephone numbers contained in personnel or customer files, confidential information, documents, or records provided by LADWP that are reviewed during work on this Agreement.
- 4. The Contractor shall not make or retain copies of any such documents, written and electronic materials, notes, documents, confidential information, records, or other information. Provided however, with prior written approval from LADWP, the Contractor may make copies of such documents, written materials, notes, documents, confidential information, or other information, as necessary to perform its duties under this Agreement.
- The Contractor shall document and immediately report to LADWP any unauthorized use or disclosure of confidential information of which the Contractor becomes aware.

EXHIBIT J Confidentiality Agreement for LADWP Proprietary Information

6. The Contractor shall require that all its employees, agents, and subcontractors who shall, or may, review, be provided, or have access to LADWP data, information, personnel or customer files, confidential information, documents, or records during the performance of this Agreement, execute a confidentiality agreement that incorporates the provisions of this Confidentiality Agreement, prior to performing work under this Agreement.

C. Return of All Documents to LADWP

The Contractor shall, at the conclusion of this Agreement or at the request of LADWP, promptly return any and all written materials, notes, documents, records, confidential information, or other information obtained by the Contractor during the course of work under this Agreement to LADWP, and all paper and electronic copies thereof. Provided however, the Contractor may retain duplicates and originals, as appropriate, of Contractor's administrative communications, records, files, and working papers relating to the services provided by the Contractor pursuant to this Agreement.

D. Work Product and Deliverable Confidentiality

Any reports, findings, deliverables, analyses, studies, notes, information or data generated as a result of this Agreement are to be considered confidential. The Contractor shall not make such information available to any individual, agency, or organization except as provided for in this Agreement or as required by law. Notwithstanding the foregoing, the Contractor may reference its work under this Agreement in general terms in presentations and proposals, provided that in doing so, the Contractor does not disclose any non-public information. The Contractor may not release any information, whether or not such information is public information, to the media without prior written approval from LADVVP.

Subcontractors Subject to the Confidentiality Agreement

Any subcontract entered into pursuant to the terms of this Agreement shall be subject to, and shall incorporate, the provisions of this Confidentiality Agreement.

Bidder has caused their duly authorized representative to execute this Agreement as follows:

Date: October 13, 2018

Signature:

Date Gauthier, FE

Firm: AECOM Technical Services, Inc.

Title: Vice President

EXHIBIT K Safety Compliance Certificate

APPENDIX T SAFETY COMPLIANCE CERTIFICATE

. Г \£.	- Carolina DE	** h* #			
j Dan	e Gauthier, PE (Print Company Representative Name)	the undersigned.			
Virs		#			
ti dae.	(Print Company Representative Title)	of			
<u> </u>	COM Technical Services, Inc.	* s			
, nev	(Print Company Name)	hereby certify the			
information contained herein and that undersigned is duly authorized to certify that:					
A.	A. Contractor has an effective Injury and illness Prevention Program which meets the requirements of all applicable laws and regulations, including, but not limited to, California Labor Code Section 6401.7. (This section does not apply if Contractor does not perform any work under this agreement within the State of California.) and				
	http://www.leginfo.ca.gov/csi-bin/displaycode?section= 07000&file=6400-6413.5	-lab&group=06001-			
8.	Contractor agrees that it is fully responsible for the acts and omissions of its subcontractors and all persons either directly or indirectly employed by Contractor.				
C.	The above-named person has the authority and responsibility for implementing and administering Contractor's injury and filness Prevention Program.				
,	ESS WHEREOF, the undersigned has executed this Safety Co e penalty of perjury of the laws of the State of California or				
Signed:					
Print Name: Dale Gauthier, PE					
Date:	October 13, 2016				