

PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement ("Agreement") is dated May 17, 2016 ("Effective Date") and is between the City of Manhattan Beach, a California municipal corporation ("City") and MWH Americas, Inc. a California corporation ("Contractor"). City and Contractor are sometimes referred to herein as the "Parties", and individually as a "Party".

RECITALS

A. City issued Request for Proposals No. 1061-16 on December 30, 2015, seeking proposals for the provision of engineering design services for the Peck Reservoir Replacement Project.

B. Contractor submitted a proposal dated February 10, 2016 in response to the RFP.

C. City desires to utilize the services of Contractor as an independent contractor to provide engineering design services for the Peck Reservoir Replacement Project.

D. Contractor represents that it is fully qualified to perform such services by virtue of its experience and the training, education and expertise of its principals and employees.

E. City desires to retain Contractor and Contractor desires to serve City to perform these services in accordance with the terms and conditions of this Agreement.

The Parties therefore agree as follows:

1. Contractor's Services.

A. Scope of Services. Contractor shall perform the services described in the Scope of Services (the "Services"), attached as **Exhibit A**. City may request, in writing, changes in the Scope of Services to be performed. Any changes mutually agreed upon by the Parties, and any increase or decrease in compensation, shall be incorporated by written amendments to this Agreement.

B. Party Representatives. For the purposes of this Agreement, the City Representative shall be the City Manager, or such other person designated in writing by the City Manager (the "City Representative"). For the purposes of this Agreement, the Contractor Representative shall be Miko Aivazian, Principal Civil Engineer (the "Contractor Representative"). The Contractor Representative shall directly manage Contractor's Services under this Agreement. Contractor shall not change the Contractor Representative without City's prior written consent.

C. Time for Performance. Contractor shall commence the Services on the Effective Date and shall perform all Services in conformance with the project timeline, attached hereto as **Exhibit C**.

D. Standard of Performance. Contractor shall perform all Services under this Agreement in accordance with the standard of care generally exercised by like professionals under similar circumstances and in a manner reasonably satisfactory to City.

E. Personnel. Contractor has, or will secure at its own expense, all personnel required to perform the Services required under this Agreement. All of the Services required under this Agreement shall be performed by Contractor or under its supervision, and all personnel engaged in the work shall be qualified to perform such Services.

F. Compliance with Laws. Contractor shall comply with all applicable federal, state and local laws, ordinances, codes, regulations and requirements.

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

H. Prevailing Wages. This Agreement calls for services that, in whole or in part, constitute "public works" as defined in the California Labor Code. Therefore, as to those services that are "public works", Contractor shall comply in all respects with all applicable provisions of the California Labor Code, including those set forth in **Exhibit D** hereto.

I. Special Provisions. City shall furnish to Contractor all applicable information and technical data in City's possession or control reasonably required for the proper performance of the Services. Contractor shall be entitled to reasonably rely upon the information and data provided by City or obtained from generally acceptable sources within the industry without independent verification except to the extent such verification is expressly included in the Services.

The Contractor shall not have responsibility for or guarantee the performance of the construction work by the construction contractors, or the acts of construction subcontractors or suppliers. Contractor shall have no control over or charge of, and shall not be responsible for, construction means, methods, techniques, sequences or procedures, health or safety, except to the extent expressly included in the Services.

2. Term of Agreement. The term of this Agreement shall be from the Effective Date through May 17, 2018, unless sooner terminated as provided in Section 12 of this Agreement or extended.

3. Compensation.

A. Compensation. As full compensation for Contractor's Services provided under this Agreement, City shall pay Contractor the total sum of One Million, Three Hundred Fifty Eight Thousand, Six Hundred Forty Dollars (\$1,358,640) (the "Maximum Compensation"), as set forth in the Approved Fee Schedule attached hereto as **Exhibit B**.

B. Expenses. The amount set forth in paragraph 3.A. above shall include reimbursement for all actual and necessary expenditures reasonably incurred in the performance of this Agreement.

C. Additional Services. City shall not allow any claims for additional Services performed by Contractor, unless the City Council or City Representative, if applicable, and the Contractor Representative authorize the additional Services in writing prior to Contractor's performance of the additional Services or incurrence of additional expenses. Any additional Services or expenses authorized by the City Council or City Representative shall be compensated at the rates set forth in **Exhibit B**, or, if not specified, at a rate mutually agreed to by the Parties. City shall make payment for additional Services and expenses in accordance with Section 4 of this Agreement.

4. Method of Payment.

A. Invoices. Contractor shall submit to City an invoice, on a monthly basis for the Services performed pursuant to this Agreement. Each invoice shall itemize the Services rendered during the billing period, hourly rates charged, if applicable, and the amount due. City shall review each invoice and notify Contractor in writing within ten (10) business days of receipt of any disputed invoice amounts.

B. Payment. City shall pay all undisputed invoice amounts within thirty (30) calendar days after receipt up to the maximum compensation set forth in Section 3 of this Agreement. City does not pay interest on past due amounts. City shall not withhold federal payroll, state payroll or other taxes, or other similar deductions, from payments made to Contractor.

C. Audit of Records. Contractor shall make all records, invoices, time cards, cost control sheets and other records maintained by Contractor in connection with this Agreement available during Contractor's regular working hours to City for review and audit by City.

5. Independent Contractor. Contractor is, and shall at all times remain as to City, a wholly independent contractor. Contractor shall have no power to incur any debt, obligation, or liability on behalf of City. Neither City nor any of its agents shall have control over the conduct of Contractor or any of Contractor's employees, except as set forth in this Agreement. Contractor shall not, at any time, or in any manner, represent that it or any of its officers, agents or employees are in any manner employees of City.

6. Information and Documents.

A. Contractor covenants that all data, reports, documents, discussion, or other information (collectively "Data") developed or received by Contractor or provided for performance of this Agreement are deemed confidential and shall not be disclosed or released by Contractor without prior written authorization by City. City shall grant such authorization if applicable law requires disclosure. Contractor, its officers, employees, agents, or subcontractors shall not without written authorization from the City Manager or unless requested in writing by the City Attorney, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this Agreement or relating to any project or property located within the City. Response to a subpoena or court order shall not be considered "voluntary," provided Contractor gives City notice of such court order or subpoena.

B. Contractor shall promptly notify City should Contractor, its officers, employees, agents or subcontractors be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the work performed thereunder or with respect to any project or property located within the City. City may, but has no obligation to, represent Contractor or be present at any deposition, hearing or similar proceeding. Contractor agrees to cooperate fully with City and to provide City with the opportunity to review any response to discovery requests provided by Contractor. However, City's right to review any such response does not imply or mean the right by City to control, direct or rewrite the response.

C. All Data required to be furnished to City in connection with this Agreement shall become City's property, and City may use all or any portion of the Data submitted by Contractor as City deems appropriate. Upon completion of, or in the event of termination or suspension of this Agreement, all original documents, designs, drawings, maps, models, computer files containing data generated for the Services, surveys, notes, and other documents prepared in the course of providing the Services shall become City's sole property and may be used, reused or otherwise disposed of by City without Contractor's permission. Contractor may take and retain copies of the written products as desired, but the written products shall not be the subject of a copyright application by Contractor.

D. Contractor's covenants under this Section 6 shall survive the expiration or termination of this Agreement.

7. Conflicts of Interest. Contractor and its officers, employees, associates and subcontractors, if any, shall comply with all conflict of interest statutes of the State of California applicable to Contractor's Services under this Agreement, including the Political Reform Act (Gov. Code § 81000, *et seq.*) and Government Code Section 1090. During the term of this Agreement, Contractor may perform similar Services for other clients, but Contractor and its officers, employees, associates and subcontractors shall not, without the City Representative's prior written approval, perform work for another person or entity for whom Contractor is not currently performing work that would require

Contractor or one of its officers, employees, associates or subcontractors to abstain from a decision under this Agreement pursuant to a conflict of interest statute. Contractor shall incorporate a clause substantially similar to this Section 7 into any subcontract that Contractor executes in connection with the performance of this Agreement.

8. Indemnification.

A. Indemnity for Design Professional Services. To the fullest extent permitted by law, Contractor shall, at its sole cost and expense, protect, indemnify, and hold harmless City and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those City agents serving as independent contractors in the role of City officials (collectively "Indemnitees"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith, and reimbursement of attorney's fees and costs of defense (collectively "Liabilities"), whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to, in whole or in part, the negligence, recklessness or willful misconduct of Contractor, its officers, agents, servants, employees, subcontractors, material men, contractors or their officers, agents, servants or employees (or any entity or individual that Contractor shall bear the legal liability thereof) in the performance of design professional services under this Agreement by a "design professional," as the term is defined under California Civil Code Section 2782.8(c)(2).

B. Other Indemnities.

1) Other than in the performance of design professional services, and to the fullest extent permitted by law, Contractor shall, at its sole cost and expense, defend, hold harmless and indemnify the Indemnitees from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith and the payment of all consequential damages (collectively "Claims"), in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of Contractor, its officers, agents, servants, employees, subcontractors, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that Contractor shall bear the legal liability thereof) in the performance of this Agreement, including the Indemnitees' active or passive negligence, except for Claims arising from the sole negligence or willful misconduct of the Indemnitees, as determined by final arbitration or court decision or by the agreement of the Parties. Contractor shall defend the Indemnitees in any action or actions filed in connection with any Claim with counsel of the Indemnitees' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. Contractor shall reimburse the Indemnitees

for any and all legal expenses and costs incurred by the Indemnitees in connection therewith.

2) Contractor shall pay all required taxes on amounts paid to Contractor under this Agreement, and indemnify and hold City harmless from any and all taxes, assessments, penalties, and interest asserted against City by reason of the independent contractor relationship created by this Agreement. Contractor shall fully comply with the workers' compensation law regarding Contractor and Contractor's employees. Contractor shall indemnify and hold City harmless from any failure of Contractor to comply with applicable workers' compensation laws. City may offset against the amount of any fees due to Contractor under this Agreement any amount due to City from Contractor as a result of Contractor's failure to promptly pay to City any reimbursement or indemnification arising under this Subparagraph B. 2).

3) Contractor shall obtain executed indemnity agreements with provisions identical to those in this Section 8 from each and every subcontractor or any other person or entity involved by, for, with or on behalf of Contractor in the performance of this Agreement. If Contractor fails to obtain such indemnities, Contractor shall be fully responsible and indemnify, hold harmless and defend the Indemnitees from and against any and all Claims in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of Contractor's subcontractor, its officers, agents, servants, employees, subcontractors, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that Contractor's subcontractor shall bear the legal liability thereof) in the performance of this Agreement, including the Indemnitees' active or passive negligence, except for Claims arising from the sole negligence or willful misconduct of the Indemnitees, as determined by final arbitration or court decision or by the agreement of the Parties.

C. Workers' Compensation Acts not Limiting. Contractor's obligations under this Section 8, or any other provision of this Agreement, shall not be limited by the provisions of any workers' compensation act or similar act. Contractor expressly waives its statutory immunity under such statutes or laws as to City, its officers, agents, employees and volunteers.

D. Insurance Requirements not Limiting. City does not, and shall not, waive any rights that it may possess against Contractor because of the acceptance by City, or the deposit with City, of any insurance policy or certificate required pursuant to this Agreement. This hold harmless and indemnification provisions in this Section 8 shall apply regardless of whether or not any insurance policies are determined to be applicable to the Liabilities, Claims, tax, assessment, penalty or interest asserted against City.

E. Survival of Terms. The indemnification in this Section 8 shall survive the expiration or termination of this Agreement.

9. Insurance.

A. Minimum Scope and Limits of Insurance. Contractor shall procure and at all times during the term of this Agreement carry, maintain, and keep in full force and effect, insurance as follows:

1) Commercial General Liability Insurance with a minimum limit of Two Million Dollars (\$2,000,000) per occurrence for bodily injury, personal injury and property damage and a general aggregate limit of Two Million Dollars (\$2,000,000) per project or location. If Contractor is a limited liability company, the commercial general liability coverage shall be amended so that Contractor and its managers, affiliates, employees, agents and other persons necessary or incidental to its operation are insureds.

2) Automobile Liability Insurance for any owned, non-owned or hired vehicle used in connection with the performance of this Agreement with a combined single limit of Two Million Dollars (\$2,000,000) per accident for bodily injury and property damage. If Contractor does not use any owned, non-owned or hired vehicles in the performance of Services under this Agreement, Contractor shall obtain a non-owned auto endorsement to the Commercial General Liability policy required under subparagraph A. 1) of this Section 9.

3) Workers' Compensation Insurance as required by the State of California and Employer's Liability Insurance with a minimum limit of One Million Dollars (\$1,000,000) per accident for bodily injury or disease. If Contractor has no employees while performing Services under this Agreement, workers' compensation policy is not required, but Contractor shall execute a declaration that it has no employees.

4) Professional Liability Insurance with minimum limits of Two Million Dollars (\$2,000,000) per claim and in aggregate.

B. Acceptability of Insurers. The insurance policies required under this Section 9 shall be issued by an insurer admitted to write insurance in the State of California with a rating of A:VII or better in the latest edition of the A.M. Best Insurance Rating Guide. Self insurance shall not be considered to comply with the insurance requirements under this Section 9.

C. Additional Insured. The commercial general and automobile liability policies shall contain an endorsement naming City, its officers, employees, agents and volunteers as additional insureds.

D. Primary and Non-Contributing. The insurance policies required under this Section 9 shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance available to City. Any insurance or self-insurance maintained by City, its officers, employees, agents or volunteers, shall be in excess of Contractor's insurance and shall not contribute with it.

E. Contractor's Waiver of Subrogation. The insurance policies required under this Section 9 shall not prohibit Contractor and Contractor's employees, agents or

subcontractors from waiving the right of subrogation prior to a loss. Contractor hereby waives all rights of subrogation against City.

F. Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by City. At City's option, Contractor shall either reduce or eliminate the deductibles or self-insured retentions with respect to City, or Contractor shall procure a bond guaranteeing payment of losses and expenses.

G. Cancellations or Modifications to Coverage. Contractor shall not cancel, reduce or otherwise modify the insurance policies required by this Section 9 during the term of this Agreement. The commercial general and automobile liability policies required under this Agreement shall be endorsed to state that should the issuing insurer cancel the policy before the expiration date, the issuing insurer will endeavor to mail thirty (30) days' prior written notice to City. If any insurance policy required under this Section 9 is canceled or reduced in coverage or limits, Contractor shall, within two (2) business days of notice from the insurer, phone, fax or notify City via certified mail, return receipt requested, of the cancellation of or changes to the policy.

H. City Remedy for Noncompliance. If Contractor does not maintain the policies of insurance required under this Section 9 in full force and effect during the term of this Agreement, or in the event any of Contractor's policies do not comply with the requirements under this Section 9, City may either immediately terminate this Agreement or, if insurance is available at a reasonable cost, City may, but has no duty to, take out the necessary insurance and pay, at Contractor's expense, the premium thereon. Contractor shall promptly reimburse City for any premium paid by City or City may withhold amounts sufficient to pay the premiums from payments due to Contractor.

I. Evidence of Insurance. Prior to the performance of Services under this Agreement, Contractor shall furnish City's Risk Manager with a certificate or certificates of insurance and all original endorsements evidencing and effecting the coverages required under this Section 9. The endorsements are subject to City's approval. Contractor may provide complete, certified copies of all required insurance policies to City. Contractor shall maintain current endorsements on file with City's Risk Manager. Contractor shall provide proof to City's Risk Manager that insurance policies expiring during the term of this Agreement have been renewed or replaced with other policies providing at least the same coverage. Contractor shall furnish such proof at least two (2) weeks prior to the expiration of the coverages.

J. Indemnity Requirements not Limiting. Procurement of insurance by Contractor shall not be construed as a limitation of Contractor's liability or as full performance of Contractor's duty to indemnify City under Section 8 of this Agreement.

K. Subcontractor Insurance Requirements. Contractor shall require each of its subcontractors that perform Services under this Agreement to maintain insurance coverage that meets all of the requirements of this Section 9.

10. Mutual Cooperation.

A. City's Cooperation. City shall provide Contractor with all pertinent Data, documents and other requested information as is reasonably available for Contractor's proper performance of the Services required under this Agreement.

B. Contractor's Cooperation. In the event any claim or action is brought against City relating to Contractor's performance of Services rendered under this Agreement, Contractor shall render any reasonable assistance that City requires.

11. Records and Inspections. Contractor shall maintain complete and accurate records with respect to costs, expenses, receipts and other such information required by City that relate to the performance of the Services. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Contractor shall provide free access to City, its designees and representatives at reasonable times, and shall allow City to examine and audit the books and records, to make transcripts therefrom as necessary, and to inspect all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a period of three (3) years after receipt of final payment.

12. Termination of Agreement.

A. Right to Terminate. City may terminate this Agreement at any time, at will, for any reason or no reason, after giving written notice to Contractor at least five (5) calendar days before the termination is to be effective. Contractor may terminate this Agreement at any time, at will, for any reason or no reason, after giving written notice to City at least sixty (60) calendar days before the termination is to be effective.

B. Obligations upon Termination. Contractor shall cease all work under this Agreement on or before the effective date of termination specified in the notice of termination. In the event of City's termination of this Agreement due to no fault or failure of performance by Contractor, City shall pay Contractor based on the percentage of work satisfactorily performed up to the effective date of termination. In no event shall Contractor be entitled to receive more than the amount that would be paid to Contractor for the full performance of the Services required by this Agreement. Contractor shall have no other claim against City by reason of such termination, including any claim for compensation.

13. Force Majeure. Contractor shall not be liable for any failure to perform its obligations under this Agreement if Contractor presents acceptable evidence, in City's sole judgment, that such failure was due to strikes, lockouts, labor disputes, embargoes, acts of God, inability to obtain labor or materials or reasonable substitutes for labor or materials, governmental restrictions, governmental regulations, governmental controls, judicial orders, enemy or hostile governmental action, civil commotion, fire or other casualty, or other causes beyond Contractor's reasonable control and not due to any act by Contractor.

14. Default.

A. Contractor's failure to comply with the provisions of this Agreement shall constitute a default. In the event that Contractor is in default for cause under the terms of this Agreement, City shall have no obligation or duty to continue compensating Contractor for any work performed after the date of default.

B. If the City Manager or his delegate determines that Contractor is in default in the performance of any of the terms or conditions of this Agreement, City shall serve Contractor with written notice of the default. Contractor shall have ten (10) calendar days after service upon it of the notice in which to cure the default by rendering a satisfactory performance. In the event that Contractor fails to cure its default within such period of time, City may, notwithstanding any other provision of this Agreement, terminate this Agreement without further notice and without prejudice to any other remedy to which it may be entitled at law, in equity or under this Agreement.

15. Notices. Any notice, consent, request, demand, bill, invoice, report or other communication required or permitted under this Agreement shall be in writing and conclusively deemed effective: (a) on personal delivery, (b) on confirmed delivery by courier service during Contractor's and City's regular business hours, or (c) three business days after deposit in the United States mail, by first class mail, postage prepaid, and addressed to the Party to be notified as set forth below:

If to City:

Attn: Michael A. Guerrero
City of Manhattan Beach
1400 Highland Avenue
Manhattan Beach, California 90266
Telephone: (310) 802-5355
Email: mguerrero@citymb.info

If to Contractor:

Attn: Eric Mills
MWH Americas, Inc.
300 N. Lake Avenue, Suite 400
Pasadena, CA 91101
Telephone: (626) 568-6269
Email: eric.m.mills@mwhglobal.com

With a courtesy copy to:

Quinn M. Barrow, City Attorney
1400 Highland Avenue
Manhattan Beach, CA 90266
Telephone: (213) 626-8484
Email: qbarrow@citymb.info

16. Non-Discrimination and Equal Employment Opportunity. In the performance of this Agreement, Contractor shall not discriminate against any employee, subcontractor or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation or other basis prohibited by law. Contractor will take affirmative action to ensure that subcontractors and applicants are employed, and that employees are treated during employment, without regard to their race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry,

age, physical disability, mental disability, medical condition, genetic information or sexual orientation.

17. Prohibition of Assignment and Delegation. Contractor shall not assign any of its rights or delegate any of its duties under this Agreement, either in whole or in part, without City's prior written consent. City's consent to an assignment of rights under this Agreement shall not release Contractor from any of its obligations or alter any of its primary obligations to be performed under this Agreement. Any attempted assignment or delegation in violation of this Section 17 shall be void and of no effect and shall entitle City to terminate this Agreement. As used in this Section 17, "assignment" and "delegation" means any sale, gift, pledge, hypothecation, encumbrance or other transfer of all or any portion of the rights, obligations, or liabilities in or arising from this Agreement to any person or entity, whether by operation of law or otherwise, and regardless of the legal form of the transaction in which the attempted transfer occurs.

18. No Third Party Beneficiaries Intended. This Agreement is made solely for the benefit of the Parties to this Agreement and their respective successors and assigns, and no other person or entity may have or acquire a right by virtue of this Agreement.

19. Waiver. No delay or omission to exercise any right, power or remedy accruing to City under this Agreement shall impair any right, power or remedy of City, nor shall it be construed as a waiver of, or consent to, any breach or default. No waiver of any breach, any failure of a condition, or any right or remedy under this Agreement shall be (1) effective unless it is in writing and signed by the Party making the waiver, (2) deemed to be a waiver of, or consent to, any other breach, failure of a condition, or right or remedy, or (3) deemed to constitute a continuing waiver unless the writing expressly so states.

20. Final Payment Acceptance Constitutes Release. The acceptance by Contractor of the final payment made under this Agreement shall operate as and be a release of City from all claims and liabilities for compensation to Contractor for anything done, furnished or relating to Contractor's work or services. Acceptance of payment shall be any negotiation of City's check or the failure to make a written extra compensation claim within ten (10) calendar days of the receipt of that check. However, approval or payment by City shall not constitute, nor be deemed, a release of the responsibility and liability of Contractor, its employees, sub-contractors and agents for the accuracy and competency of the information provided and/or work performed; nor shall such approval or payment be deemed to be an assumption of such responsibility or liability by City for any defect or error in the work prepared by Contractor, its employees, sub-contractors and agents.

21. Corrections. In addition to the above indemnification obligations, Contractor shall correct, at its expense, all errors in the work which may be disclosed during City's review of Contractor's report or plans. Should Contractor fail to make such correction in a reasonably timely manner, such correction may be made by City, and the cost thereof shall be charged to Contractor. In addition to all other available remedies, City may deduct the cost of such correction from any retention amount held by City or may

withhold payment otherwise owed Contractor under this Agreement up to the amount of the cost of correction.

22. Non-Appropriation of Funds. Payments to be made to Contractor by City for services performed within the current fiscal year are within the current fiscal budget and within an available, unexhausted fund. In the event that City does not appropriate sufficient funds for payment of Contractor's services beyond the current fiscal year, the Agreement shall cover payment for Contractor's services only to the conclusion of the last fiscal year in which City appropriates sufficient funds and shall automatically terminate at the conclusion of such fiscal year.

23. Exhibits. Exhibits A, B, C and D constitute a part of this Agreement and are incorporated into this Agreement by this reference. If any inconsistency exists or arises between a provision of this Agreement and a provision of any exhibit, or between a provision of this Agreement and a provision of Contractor's proposal, the provisions of this Agreement shall control.

24. Entire Agreement and Modification of Agreement. This Agreement and all exhibits referred to in this Agreement constitute the final, complete and exclusive statement of the terms of the agreement between the Parties pertaining to the subject matter of this Agreement and supersede all other prior or contemporaneous oral or written understandings and agreements of the Parties. No Party has been induced to enter into this Agreement by, nor is any Party relying on, any representation or warranty except those expressly set forth in this Agreement. This Agreement may not be amended, nor any provision or breach hereof waived, except in a writing signed by both Parties.

25. Headings. The headings in this Agreement are included solely for convenience of reference and shall not affect the interpretation of any provision of this Agreement or any of the rights or obligations of the Parties to this Agreement.

26. Word Usage. Unless the context clearly requires otherwise, (a) the words "shall," "will" and "agrees" are mandatory and "may" is permissive; (b) "or" is not exclusive; and (c) "includes" or "including" are not limiting.

27. Time of the Essence. Time is of the essence in respect to all provisions of this Agreement that specify a time for performance; provided, however, that the foregoing shall not be construed to limit or deprive a Party of the benefits of any grace or use period allowed in this Agreement.

28. Governing Law and Choice of Forum. This Agreement, and any dispute arising from the relationship between the Parties to this Agreement, shall be governed by and construed in accordance with the laws of the State of California, except that any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be applied in interpreting this Agreement. Any dispute that arises under or relates to this Agreement (whether contract, tort or both) shall be resolved in a

municipal, superior or federal court with geographic jurisdiction over the City of Manhattan Beach.

29. Attorneys' Fees. In any litigation or other proceeding by which a Party seeks to enforce its rights under this Agreement (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this Agreement, the prevailing Party shall be awarded actual attorneys' fees together with any costs and expenses in addition to all other relief to which that Party may be entitled.

30. Severability. If a court of competent jurisdiction holds any provision of this Agreement to be illegal, invalid or unenforceable for any reason, the validity of and enforceability of the remaining provisions of this Agreement shall not be affected and continue in full force and effect.

31. Counterparts. This Agreement may be executed in multiple counterparts, all of which shall be deemed an original, and all of which will constitute one and the same instrument.

32. Corporate Authority. The persons executing this Agreement on behalf of the Parties warrant that they are duly authorized to execute this Agreement on behalf of the Parties and that by their execution, the Parties are formally bound to the provision of this Agreement.

[SIGNATURE PAGE FOLLOWS]

The Parties, through their duly authorized representatives are signing this Agreement on the date stated in the introductory clause.

City:

City of Manhattan Beach,
a California municipal corporation

By: _____
Name: _____
Title: _____

Contractor:

MWH Americas, Inc,
a California Corporation

By:  _____
Name: Eric M. Mills
Title: Vice President

ATTEST:

By: _____
Name: Liza Tamura
Title: City Clerk

APPROVED AS TO FORM:

By: _____
Name: Quinn M. Barrow
Title: City Attorney

APPROVED AS TO CONTENT:

By: _____
Name: Tony Olmos
Title: Public Works Director

EXHIBIT A
SCOPE OF SERVICES



2.0 Scope of Services

MWH will provide geotechnical, land surveying, civil, structural, mechanical, and electrical/instrumentation engineering services for the design of the Peck Reservoir and Pump Station Replacement Project and will take the project from inception to commissioning of the new reservoir and pump station.

The scope of work below is based on the City's requested services in the RFP and our best understanding of the project, including the review of available documents. We have detailed below Scope of Work necessary to deliver a successful project.

2.1 Scope of Work

Task 1 – Project Management and Meetings

Task 1.1 – Project Kick-off Meeting: Prior to beginning the work, MWH will coordinate and participate in a project kick-off meeting with the City staff. MWH will prepare the meeting agenda and meeting minutes for the kick-off meeting. The Kick-off meeting will be attended by the MWH Project Manager, Project Engineer, and key subconsultants as necessary.

Task 1.2 – Monthly Coordination Meetings: MWH will attend regularly scheduled meetings with the City staff to review the work in progress, report issues and concerns, and receive comments on the engineering report/study documents as needed. MWH will prepare all meeting agenda and minutes and will submit to the City on a timely manner. All meeting minutes will be distributed within two working days of the meeting. Design coordination meetings will consist of five (5) monthly coordination meetings during the preparation of the Basis of Design Report and nine (9) meetings during the final phase of design. We anticipate a total of fourteen (14) meetings for estimating purposes. The MWH Project Manager will attend each monthly coordination meeting and other MWH staff and key subconsultants will attend as determined to be necessary by the MWH Project Manager.

Task 1.3 – Weekly Project Updates: Our project manager, will provide project status updates via email to the City's designated project manager on a weekly basis. This weekly status update will be used to confirm work progress, identify critical information needs, and where appropriate alert the City to any potential issues which may impact the project scope, schedule or budget. These weekly project status updates will be supplemented with monthly project status reports that will be prepared and distributed along with MWH's invoices.

Task 1.4 – Quality Assurance and Quality Control Program: MWH will provide quality assurance and quality control (QA/QC) reviews through the course of the project consistent with City's policies. Our QA/QC and quality management procedures establish and maintain a structure for providing reviews of all work products and adherence to industry design standards. Specific efforts for this project will include:

- Development of a Project Management Plan, which defines the project scope, approach, deliverables, schedule, budget and provides a basis for QA/QC and technical reviews
- Conformance to City's drafting and design standards, guide specifications and standard details
- Internal constructability review prior to each submittal
- Review of all calculations by appropriate reviewers independent of the project design team prior to each submittal

All work product deliverables, including detailed checking of work by in-house staff will be reviewed prior to submittal to the City. Technical reviews will include reviews for code compliance, safety, operability, constructability, bid-ability, errors/omissions and clarity.

Task 1.5 – Monthly Progress Reports: MWH will attend monthly progress meetings with the City staff. MWH will prepare and submit monthly progress reports as work is performed. The progress reports will include major accomplishments for the



reported period, significant problems and proposed solutions, pending issues, budget, schedule, and any issues with contractual requirements. MWH will provide one (1) hard copy and one (1) electronic copy.

MWH will prepare and distribute all meeting agendas prior to each meeting. MWH will also prepare and distribute all meeting minutes within two days after each meeting.

All meetings will be held at the City offices.

Deliverables: *Deliverables for Task 1 include:*

1. *Meeting agendas*
2. *Meeting minutes (upon demand)*
3. *Project schedule updates*

Task 2 – Basis of Design Report

Task 2.1 – Basis of Design Report (BODR): MWH will prepare a single Basis of Design Report (BODR) which evaluates cost-benefit alternatives for replacement of the existing Peck Reservoir. The BODR will include a detailed study of the Distribution system including water demand, water quality, operational requirements, and system storage needs. The result of the BODR will be to identify a practical and cost-effective reservoir replacement to be carried to final design phase. MWH will confirm BODR findings with City staff and define the proposed project improvements and system operation. The BODR will also determine operational storage for water system supply/demand and water age criteria.

MWH will analyze system storage requirements for typical operational storage, emergency storage, and fire suppression storage conditions, and determine the effect to the system for alternative reservoir capacity scenarios. MWH will determine a storage capacity that reflects a balanced approach to the system storage requirements. Reservoir storage capacity evaluations will take into account recommended operational storage at the site. Reservoir storage capacity of the site may be configured in order to provide flexibility of operations for varying water system needs.

Task 2.2 – Analyze City's Existing Water System Use: MWH will analyze the City's existing water system to determine appropriate design criteria for system water supply, water use, and water storage. The results of the analysis will be used in determination of the storage requirements.

Task 2.3 – Analyze System Storage Requirements and Effects: MWH will analyze system storage requirements for typical operational storage, emergency storage, and fire suppression storage conditions, and determine the effect to the system for alternative reservoir capacity scenarios. MWH will determine a storage capacity that reflects a balanced approach to the system storage requirements. Reservoir storage capacity evaluations will take into account recommended operational storage at the site. Reservoir storage capacity of the site may be configured in order to provide flexibility of operations for varying water system needs.

Task 2.4 – Confirm BODR's Findings with the City and Define Improvements: Based on the findings of the BODR, MWH will meet with the City during a workshop meeting and will present the recommended improvements and will assist the City to make decisions on the type and level of these improvements to the existing system.

Deliverables: *Deliverables for Task 2 include:*

1. *Five (5) hard copies of the BODR*
2. *One electronic copy of BODR in PDF format*
3. *One electronic copy of calculations*



Task 3 – Public Outreach Support

Task 3.1 – Community Outreach Meeting Presentations: MWH will assist the City during the project by attending meetings and making presentations. We anticipate attending up to five (5) community outreach meetings to be held in the evening time. The first community outreach meeting should be considered after MWH and City agree on the scope of the project and the critical project elements are determined. The subsequent community outreach meetings would be held during design development and when the plans are at 90% completion level.

Task 3.2 – City Council Meeting Presentations: MWH will attend up to three (3) City Council meetings and will assist the City in presenting the project and answer questions related to the improvements. The City Council presentation will occur during the 60% and 100% stages.

Task 3.3 – Presentation Materials: MWH will provide costs for attending, preparing materials, and presenting the project at public outreach and City Council meetings. For fee estimating purposes, we have included a fee for preparing the material which is limited to poster boards, building elevations, and other material. We have included an optional Task 20 for preparing additional renderings for public outreach and City Council meeting presentations.

Task 3.4 – Website and Hosting: MWH will work with City to setup a project website for the Peck Reservoir that will be linked with the City of Manhattan Beach website. Frequent postings will be placed into the website during the design phase of the project to inform the public of the project status and information sharing. MWH will host the website during the design phase of the project for a period from the start of the final design to completion of final design phase (9 months).

***Deliverables:** Deliverables for Task 3 include:*

1. *Presentation handouts*
2. *Summary of meeting comments and outcomes*
3. *Prepare presentation drawings, renderings (optional task)*

Task 4 – Environmental Compliance and Permitting

Task 4.1 – Environmental Assessment to Comply with CEQA: MWH will conduct an environmental assessment for the project and prepare documentation, including Initial Study (IS) and public hearings as required to comply with the California Environmental Quality Act (CEQA). At this time, the City is uncertain as to what the appropriate environmental determination might be. Environmental determination will likely be a Mitigated Negative Declaration (MND). Our proposed fee does not include biological and cultural reports.

Task 4.2 – Permitting Documents: MWH will prepare documentation required to obtain permits from agencies having jurisdiction over this project. MWH will assist the City in filling out the applications required for these permits. The City will pay all permit fees.

***Deliverables:** Deliverables for Task 4 include:*

1. *Notes, document logs, permit applications*

Task 5 – Background Research

Task 5.1 – Research Available Water System Records: MWH will research and obtain available water system records and studies, as-built plans, construction records, topographic survey, survey ties, City benchmarks, basis for bearings and



stationing, existing right-of-way, existing utilities, City standards, and improvements within and adjacent to the project area. MWH will maintain a log of all documents obtained for the project.

Task 5.2 – Field Investigations to Identify Field Conditions: MWH will conduct field investigation and site visits to identify existing facilities and site opportunities and constraints. MWH will visit the site to field verify the locations of the existing features, equipment, valves, etc. We anticipate two (2) site visits as a minimum to be required for this effort.

***Deliverables:** Deliverables for Task 5 include:*

1. *Field notes, document logs, benchmarks and bearings (upon demand)*

Task 6 – Drinking Water Permit Amendment

Task 6.1 – Document Preparation: MWH will provide assistance to the City by preparing all documentation to apply for a California State Water Resources Control Board drinking water permit amendment, which is required if significant alterations are made to the existing water system. MWH will prepare the documentation for City review and submittal. The City will pay for all permit fees.

***Deliverables:** Deliverables for Task 6 include:*

1. *Notes and application documents*

Task 7 – Water Quality

Task 7.1 – Review of City's 2010 Water Master Plan: For this task, MWH will review the City's 2010 Water Master Plan. The 2010 Water Master Plan will provide information for sizing of the Peck and Block 35 reservoirs.

MWH will incorporate the relevant data of those documents into the City's hydraulic model to design a new Peck Reservoir that will operate in conjunction with the planned Block 35 Reservoir to optimize a system wide disinfection residual which will assure compliance with the Stage 2 Disinfectant and Disinfection Byproduct Rule, Total Coliform Rule and Groundwater Rule.

Task 7.2 – Update City's Hydraulic Model: MWH will review the study titled "Disinfectant Residual Stability and Regulatory Compliance". MWH will incorporate the relevant data from these documents into the City's hydraulic model to design a new Peck Reservoir that will operate in conjunction with the planned Block 35 Reservoir to optimize a system wide disinfection residual which will assure compliance with the Stage 2 Disinfectant and Disinfection Byproduct Rule, Total Coliform Rule and Groundwater Rule.

***Deliverables:** Deliverables for Task 7 include:*

1. *Updated hydraulic model and results*

Task 8 – Water Blending

Task 8.1 – Optimization of Blending Process: The City's groundwater wells contain manganese at levels that exceed the Title 22 Maximum Contaminant Level Secondary Standards (MCL). Groundwater is currently blended at Peck Reservoir with imported water from the Metropolitan Water District of Southern California to reduce the manganese concentration of the finished water below the MCL. MWH will propose a design that will optimize the water blending process and will recommended action may include restrictions to well production in order to meet MCL standards. MWH will consider a footprint on the existing Peck Ground



Level Reservoir site to be taken into consideration during the design of the Peck Reservoir replacement for construction of the future Iron/Manganese Treatment System.

Task 9 – Water System Operations Plan During Construction

Task 9.1 – Analyze/Update Operations Plan: When Peck Reservoir is in construction and therefore unavailable to the system, alternative water system operations will be necessary to supply water during peak demands. MWH will analyze the water system supply and demand in order to determine required system operation during reservoir construction. Analysis will include various operational scenarios including maximum day demand and maximum day demand plus fire flow. MWH will determine the capability of the water system to provide water supply and demand pressure without the availability of Peck Reservoir. MWH will also plan the construction of the new reservoir such that the reservoir will not be taken out of service for more than one summer where the demands are high.

Task 10 – Utility Coordination

Task 10.1 – Utility Research: MWH will prepare and mail preliminary utility notices on City letterhead at the beginning of the project to obtain utility maps and other documents to identify existing utility locations on the plans. MWH will coordinate with affected utility companies to depict any necessary utility modifications. MWH will also prepare and mail final utility notices in the same manner upon completion of the draft 100% plans. It may be assumed that the detailed design for new or relocated utilities will be prepared by the utilities, and construction of the same will be the responsibility of the affected utility. The City will provide contact information for affected utilities if available.

Deliverables: Deliverables for Task 10 include:

1. Utility notices
2. Utility maps and documents (upon demand)

Task 11 – Geotechnical Engineering Services

Task 11.1 – Geotechnical Engineering Report: MWH's subconsultant, Fugro Consultants, will prepare a geotechnical report for this project. The geotechnical scope of work will include field borings, laboratory testing, and a detailed design report. The geotechnical services on this project include but are not limited to:

- Preliminary evaluations to assist in site analysis and to define the bearing capacities for proposed locations
- Studies for ground modification/improvement/stabilization to facilitate construction or reduce costs
- Detailed analysis to determine site seismic class
- Evaluations for excavation shoring, support and underpinning, if needed
- Assessment of corrosive effects of soils on facility elements
- Studies to evaluate excessive settlement due to subsoil conditions

We propose a subsurface exploration program for the planned reservoir improvements that will consist of drilling and logging 4 hollow-stem-auger drill holes. The proposed explorations will be performed using a standard truck-mounted drilling rig and will be drilled in areas accessible from the surrounding streets and walkways. We note that we will not be able to drive equipment up the reservoir side slopes through the access gates mentioned above to perform subsurface exploration. The drill holes are anticipated to extend to depths of between 60 and 80 feet below the existing ground surface or to about Elevation 15 feet.

Deliverables: Deliverables for Task 11 include:

1. Geotechnical study report



Task 12 – Surveying and Existing Site Conditions

Task 12.1 – Topographic and Land Survey: MWH's subconsultant, The Prizm Group, will provide all topographic and land surveying services to identify all features, objects and critical control points required to prepare the construction plans and other documents for this Project. The surveying work will include sufficient adjacent areas as needed to join or match existing conditions.

Deliverables: *Deliverables for Task 12 include:*

1. *Field and topographic survey plans*

Task 13 – Draft Construction Plans and Specifications

After approval of the Basis of Design Report (BODR), MWH will begin preparing the plans and specifications for the selected improvements for bidding by the City. MWH will use City CAD standards (provided by the City). MWH will prepare all technical specifications required for the project. The bidding documents (front-end specifications) will be provided by the City. MWH will prepare the Bid List and Bid Descriptions. We estimate a total of approximately 97 drawings will be required for the improvements which will be mainly structural, architectural, civil/piping, mechanical, electrical, and instrumentation. Table 1-1 in the following pages is a preliminary list of the anticipated drawings for this project.

Task 13.1 – 30% Plans and Specifications: MWH will submit a 30% design review package upon completion of the BODR. The plans and specifications will reflect all past City input in the BODR. As a minimum, the 30% design submittal shall consist of the following:

- Design drawings and a draft of the technical sections of the specifications
- Calculations
- Catalog sheets
- Operation and control philosophy
- Design conditions/criteria
- City design details
- Utility research

Task 13.2 – 60% Plans and Specifications:

Upon receiving the 30% review comments from the City, MWH will continue the work to prepare the 60% plans and specifications for the recommended project. The 60% plans deliverables will include the following items:

- Design drawings (General, Civil, Structural, Mechanical, Electrical, Instrumentation, Architectural, and Landscaping plans)
- Project specifications (technical sections)
- Calculations (all disciplines)

Task 13.3 – 90% Plans and Specifications: The 90% design shall be a complete set of checked plans and specifications. The plans and specifications shall be fully checked and be ready to 100% completion level. They shall reflect all past City input and they shall include the contractual language and designs required to implement the controlling agency permit requirements during construction. The 90% package shall be as complete as 100% and shall include the entire project details.



Task 13.4 – 100% Plans and Specifications:

Upon receiving the 90% review comments from the City, MWH will complete the design of the project and will submit a 100% level draft set of plans and specifications for a final review by the City prior to bidding of the project.

***Deliverables:** Deliverables for Task 13 include:*

1. Ten (10) hard copies of half size plans at each submittal level
2. Ten (10) hard copies of the specifications at 60, 90, and 100% level submittals
3. One (1) electronic copy of all deliverables in PDF format
4. One (1) electronic copy of all deliverables in original format (AutoCAD, MS Word, Excel, etc.)

Task 14 – Final Construction Bidding Documents Including Plans and Specifications

Task 14.1 – Final 100% Plans and Specifications Package: Upon review and submittal of final corrections by the City, the MWH will prepare a final PS&E package, including full size plans on mylar with engineer's signatures and stamps. Project specifications will be signed and stamped by the engineer of record.

***Deliverables:** Deliverables for Task 14 include:*

1. One (1) signed and stamped copy of the plans (mylar, full size)
2. One (1) hard copy of the specifications signed and stamped
3. One (1) electronic copy of all deliverables in PDF format (plans and specifications)
4. One (1) electronic copy of all deliverables in original format (AutoCAD, MS Word 2010, Excel, etc.)

Task 15 – Construction Cost Estimate

Task 15.1 – Construction Cost Estimate Prior to 100% Final Design: MWH will prepare an itemized construction cost estimate in MS Excel format pursuant to the 100% and final design. The estimates will include a breakdown for each element of the work, with separate line items categorized by similar work components and summarized for the entire project. Construction cost estimate line items will correspond to the project's bid items in the project Specifications.

***Deliverables:** Deliverables for Task 15 include:*

1. One (1) hard copy of the 100% cost estimate
2. One (1) electronic copy of the 100% cost estimate in Excel format

Task 16 – Design Schedule and Estimated Construction Schedule

Task 16.1 – Prepare and Maintain a Detailed Design Schedule: MWH will prepare a detailed design CPM schedule based on project tasks and will include Milestone Dates for project deliverables. MWH will update the Design Schedule based on the actual project progress.

Task 16.2 – Prepare and Maintain a Detailed Construction Schedule: MWH will prepare a detailed construction schedule during the final design phase of the project. MWH will update the Construction Schedule based on the actual project progress. MWH will coordinate with the City, the anticipated construction durations.

***Deliverables:** Deliverables for Task 16 include:*

1. One (1) hard copy of the design CPM schedule
2. One (1) hard copy of the estimated construction schedule
3. One (1) electronic copy of the design CPM schedule and estimated construction schedule



Task 17 – As Built Plans

Task 17.1 – Prepare As Built Plans: MWH will provide As-Built plans that describe the final constructed project pursuant to modifications made at the time of construction. Red-line mark-ups of Final Construction Plans will be provided by the City from the Construction Manager/Inspection Consultant to MWH. The As-Built plans will also include modifications to the original plans due to responses to RFIs.

Deliverables: Deliverables for Task 17 include:

1. One (1) hard copy of the as built plans (mylar)
2. One (1) electronic copy of the as built plans in AutoCAD format
3. One (1) electronic copy of the as built plans in PDF format

Task 18 – Construction Assistance

Task 18.1 – Review and Respond to Submittals: MWH will review submittals and shop drawings submitted by the contractor and will ensure all submittals meet the requirements of the final plans and specifications. We have estimated a total of fifty (50) submittals and resubmittals for fee estimating purposes. MWH will maintain a log for submittals with the received/responded dates.

Task 18.2 – Review and Respond to RFIs: MWH will provide written responses to contractor's questions. All RFIs will be responded in writing. We have estimated a total of thirty (30) RFIs will be responded for fee estimation purposes. MWH will maintain a log for RFIs with the received/responded dates.

Deliverables: Deliverables for Task 18 include:

1. Written response to RFIs
2. Cut sheet approvals

Table 1-1 Preliminary List of Drawings

SHEET No.	Drawing Title	Total No. of Drawings
	GENERAL	8
G-1	TITLE SHEET	1
G-2	LOCATION AND VICINITY MAPS AND DRAWING INDEX	1
G-3	GENERAL NOTES, SYMBOLS AND ABBREVIATION	1
G-4	SURVEY CONTROL	1
G-5	OVERALL PROJECT SITE PLAN	1
G-6	OVERALL DEMOLITION PLAN	1
G-7	TEMPORARY SHORING PLAN	1
G-8	HYDRAULIC PROFILE	1
	CIVIL	22
GC-1	STANDARD CIVIL GENERAL NOTES AND DETAILS - 1	1
GC-2	STANDARD CIVIL DETAILS - 2	1
GC-3	STANDARD CIVIL DETAILS - 3	1
GC-4	STANDARD CIVIL DETAILS - 4	1
GC-5	MISCELLANEOUS DETAILS-1	1



SHEET No.	Drawing Title	Total No. of Drawings
GC-6	MISCELLANEOUS DETAILS-2	1
C-1	OVERALL SITE PLAN	1
C-2	DEMOLITION PLAN-1	1
C-3	DEMOLITION PLAN-2	1
C-4	GRADING AND PAVING PLAN – 1	1
C-5	GRADING AND PAVING PLAN - 2	1
C-6	YARD PIPING PLAN-1	1
C-7	YARD PIPING PLAN-2	1
C-8	YARD PIPING PROFILES-1	1
C-9	YARD PIPING PROFILES-2	1
C-10	SITE SECTIONS-1	1
C-11	SITE SECTIONS-2	1
C-12	RESERVOIR UNDERDRAIN PLAN AND DETAILS	1
C-13	WALL PROFILE-1	1
C-14	WALL PROFILE-2	1
C-15	INLET CONTROL VALVES VAULT PLAN AND SECTIONS	1
C-16	BYPASS AUTOMATIC CONTROL VALVE VAULT PLAN AND SECTIONS	1
	STRUCTURAL	25
GS-1	STRUCTURAL GENERAL NOTES AND STANDARD DETAILS - 1	1
GS-2	STRUCTURAL STANDARD DETAILS - 2	1
GS-3	STRUCTURAL STANDARD DETAILS - 3	1
GS-4	STRUCTURAL STANDARD DETAILS - 4	1
GS-5	STRUCTURAL STANDARD DETAILS - 5	1
GS-6	STRUCTURAL STANDARD DETAILS - 6	1
S-1	RESERVOIR OVERALL FOUNDATION PLAN	1
S-2	RESERVOIR FOUNDATION PLAN-1	1
S-3	RESERVOIR FOUNDATION PLAN-2	1
S-4	RESERVOIR ROOF PLAN-1	1
S-5	RESERVOIR ROOF PLAN-2	1
S-6	RESERVOIR SECTIONS	1
S-7	RESERVOIR WALL SECTION AND INTERIOR COLUMN ELEVATION	1
S-8	RESERVOIR OVERFLOW PLAN AND SECTION	1
S-9	RESEVOIR DRAIN SUMP PLAN, SECTIONS, AND DETAILS	1
S-10	RESERVOIR ACCESS STAIR PLAN AND SECTION	1
S-11	RESERVOIR INLET/OUTLET PIPE PLAN AND SECTIONS	1
S-12	PUMP STATION FOUNDATION AND FLOOR PLAN	1
S-13	PUMP STATION ROOF PLAN	1



SHEET No.	Drawing Title	Total No. of Drawings
S-14	PUMP STATION SECTIONS AND DETAILS	1
S-15	ELECTRICAL BUILDING AND OFFICE FLOOR PLAN	1
S-16	ELECTRICAL BUILDING AND OFFICE ROOF PLAN	1
S-17	ELECTRICAL BUILDING AND OFFICE SECTIONS	1
S-18	MISCELLANEOUS DETAILS-1	1
S-19	MISCELLANEOUS DETAILS-1	1
	ARCHITECTURAL	4
A-1	PUMP STATION FLOOR PLAN	1
A-2	PUMP STATION EXTERIOR ELEVATIONS	1
A-3	SCHEDULES AND DETAILS	1
A-4	DETAILS	1
	MECHANICAL	12
GM-1	MECHANICAL GENERAL NOTES AND STANDARD DETAILS - 1	1
GM-2	MECHANICAL STANDARD DETAILS - 2	1
GM-3	MECHANICAL STANDARD DETAILS - 3	1
GM-4	MECHANICAL STANDARD DETAILS - 4	1
M-1	FLOW DIAGRAM	1
M-2	PUMP STATION PLAN	1
M-3	PUMP STATION SECTIONS	1
M-4	PUMP STATION DETAILS-1	1
M-5	PUMP STATION DETAILS-2	1
M-6	DISINFECTION EQUIPMENT PLAN AND SECTION	1
M-7	PUMP STATION VENTILATION PLAN, SECTION AND DETAILS	1
M-8	RESERVOIR VENTILATION PLAN SECTION AND DETAILS	1
	ELECTRICAL	15
GE-1	GENERAL ELECTRICAL NOTES, LEGEND, AND ABBREVIATIONS	1
GE-2	ELECTRICAL STANDARD DETAILS - 1	1
GE-3	ELECTRICAL STANDARD DETAILS - 2	1
GE-4	ELECTRICAL STANDARD DETAILS - 3	1
GE-5	ELECTRICAL STANDARD DETAILS - 4	1
GE-6	SCHEDULES	1
E-1	ELECTRICAL OVERALL SITE PLAN	1
E-2	ELECTRICAL SINGLE LINE DIAGRAMS	1
E-3	PUMP STATION AND OFFICE ELECTRICAL PLANS	1
E-4	PUMP STATION ELECTRICAL LIGHTING AND POWER PLANS	1
E-5	DISINFECTION FACILITIES POWER PLAN	1
E-6	GENERATOR PLAN, SECTION AND DETAILS	1



SHEET No.	Drawing Title	Total No. of Drawings
E-7	INLET CONTROL VALVES VAULT ELECTRICAL PLAN AND SECTIONS	1
E-8	BYPASS AUTOMATIC CONTROL VALVE VAULT PLAN AND SECTIONS	1
E-9	SCHEMIATICS	1
	INSTRUMENTATION	5
GI-1	INSTRUMENTATION SYMBOLS, LEGEND, AND GENERAL NOTES	1
GI-2	INSTRUMENTATION STANDARD DETAILS - 1	1
I-1	PROCESS AND INSTRUMENTATION DIAGRAMS - 1	1
I-2	PROCESS AND INSTRUMENTATION DIAGRAMS - 2	1
I-3	PROCESS AND INSTRUMENTATION DIAGRAMS - 3	1
	LANDSCAPING	6
L-1	IRRIGATION PLAN	1
L-2	IRRIGATION LEGEND AND NOTES	1
L-3	IRRIGATION DETAILS	1
L-4	PLANTING PLAN	1
L-5	PLANTING LEGEND AND NOTES	1
L-6	LANDSCAPE SPECIFICATIONS	1
	Total Number of Drawings	97

Additional Optional Tasks

In addition to the scope of services requested in the RFP, MWH recommends the following additional optional tasks in case it becomes necessary in the future. MWH will not proceed with the work on the optional tasks unless written notice to proceed is given by the City to perform the work. The following is a list of additional optional scope or work:

Task 19 – Construction Meetings

Task 19.1 – Construction Meetings: Upon request by the City, MWH will attend two additional meeting:

- One (1) prebid meeting during the bid phase
- One (1) pre construction meeting prior to start of construction

Attending monthly construction meetings is not included in this task. MWH will provide a separate proposal to attend regular monthly meetings during construction if requested by the City.

Task 20 – Presentation Renderings

Task 20.1 – Presentation Renderings: MWH will prepare public presentation renderings for the public and City Council meetings if needed. We have included a total of five (5) renderings as an optional task. Other presentation materials such as plans and drawings are included under Task 3.



Task 21 – Computational Fluid Dynamic Modelling (CFD)

Task 21.1 – Prepare CFD model: In order to ensure proper water circulation and avoiding the dead zones within the reservoir and to improve water quality, MWH recommends a CFD model to be prepared for the proposed reservoir. We have successfully prepared the CFD models for our previous similar projects and have obtained successful results.

Task 22 – Well Water Quality Analysis

Task 22.1 Additional Water Quality Analysis: MWH will investigate all the available water quality data related to well 11A and well 15. Of a particular interest would be recent measurements for manganese, TOC and ammonia, and variability of these parameters since 2014. Wells 11A and 15 (Tasks 2.1 and 2.2, respectively) will be sampled for general water quality which will include iron, manganese, ammonia, TOC, HPCs and total coliform. Additionally, well 11A will be tested for disinfection byproducts (DBPs) formation potential for several scenarios, governed by the measured concentration of ammonia in the water. Historical ammonia concentrations for well 11A (approx. 1.4 mg/L) indicated that formation of chloramines with natural ammonia is not a viable option at the wellhead. DBPs bench testing will be performed for breakpoint chlorination at wellhead as well as various blends with MWD water using natural ammonia. Should the ammonia concentration in well 15 exceed the previous measured values (0.6 mg/L), DBPs bench testing will be also performed for this well. Otherwise, results from the testing performed by Hazen in December 2014 will be used for the analysis.

The results from water quality samples and the bench testing performed under Task 2 (Basis of Design Report) will be tabulated in Excel file and analyzed for further recommendations. Comparison with historical data will also be performed in this task.

Recommendations for addressing the water quality issues identified in Task 2 (Basis of Design Report) will be presented in a technical memorandum which can be integrated into the BODR. Recommendations will include wellhead treatment for the two wells, optimizing the ranges of blending ratio with MWD water, and improvements to the disinfection strategy.

Deliverables: Deliverables for Task 23 include:

1. Draft Technical Memorandum
2. Final Technical Memorandum

Task 23 – Future Manganese Treatment

Task 23.1 Evaluation of Future Manganese Treatment into BODR: MWH will investigate the potential for providing space for Manganese treatment for the groundwater wells. The process system will potentially use “Green Sand Filter” system for removal of Manganese. MWH will incorporate a preliminary layout of this treatment system into the BODR.

Task 23.2 Implement Future Manganese Treatment into Final Design: If the City decides to include Manganese treatment into the final design, MWH will prepare additional plans and specifications for this process. MWH incorporate the treatment system as part of the construction documents and will include the cost of this facility into the overall construction cost estimate.

Task 24 – Potential Community Improvements

Task 24.1 – Evaluation of Community Improvements in BODR: MWH will evaluate and include the potential community improvements requested either above the reservoir roof or adjacent to the reservoir within the project site. These improvements may include playing field facilities, gym, solar panels, restrooms, or others. The BODR will evaluate the options as recommended during the public meetings and will recommend the option that best meets the public needs and the City. The City will then decide to include the recommended option in the Final Design. Optional Task 24.2 below describes the Scope of Work that may be included in the Final Design.

Task 24.2 – Modifications to Final Design to Implement Community Improvements: MWH will incorporate the design of the facilities recommended by the City and Public. For this task, MWH will prepare additional construction plans and specifications



for the recommended facilities. This work may include additional Civil, Structural, Mechanical, Architectural, and Landscaping design.

Task 24.3 – Additional Project Management to Implement Community Improvements: For this task, MWH will provide additional management activities required for the implementation of the community improvements in the Final Design. MWH will attend up to six (6) coordination meetings with the City to discuss the proposed improvements.

Task 24.4 – Additional Public Outreach to Implement Community Improvements: MWH will attend additional public meetings related to the public community improvements as required to present the recommended improvements. MWH will prepare presentation material and renderings for these meetings. MWH will prepare up to three (3) renderings for this task.

EXHIBIT B
APPROVED FEE SCHEDULE

Fee Breakdown Schedule

Activity No.	ACTIVITY DESCRIPTION	MWH/Hazen and Sawyer - Project Engineering and Management Personnel										Total ODCs	Miscellaneous Subconsultants	Subconsultants		SUBCONSULTANTS SUBTOTAL	TOTAL PROJECT COST	
		\$270	\$250	\$240	\$225	\$175	\$155	\$130	\$115	\$110	TOTAL HOURS (Project Engineering / Management)			LABOR FEE (Project Engineering / Management)	Geotechnical-Fugro			Surveying-The Prizm Group
		Company Officer	Project Manager	Principal Professional II	Principal Professional I	Supervising Professional	Senior Professional	Project Professional	Associate Professional	Administrative Assistant								
1.0	Project Management	2	76	32	28	26	0	0	0	6	170	\$ 38,730	\$ 2,900	\$ -	\$ -	\$ -	\$ -	\$ 41,630
1.1	Project Kickoff Meeting		4	2	2					1	9	\$ 2,040					\$ -	\$ 2,040
1.2	Monthly Coordination Meetings (14 meetings)		32	14	14	14				1	75	\$ 17,070	\$ 1,500				\$ -	\$ 18,570
1.3	Weekly Project Updates		16							2	18	\$ 4,220	\$ 400				\$ -	\$ 4,620
1.5	Quality Assurance and Quality Control Program	2	16	16	12	12				1	59	\$ 13,290	\$ 600				\$ -	\$ 13,890
1.6	Monthly Progress Reports		8							1	9	\$ 2,110	\$ 400				\$ -	\$ 2,510
2.0	Basis of Design Report (BODR)	2	28	56	56	132	32	0	0	4	310	\$ 62,080	\$ 1,600	\$ -	\$ -	\$ -	\$ -	\$ 63,680
2.1	Prepare a Basis of Design Report	2	16	24	40	80	24			1	187	\$ 37,130	\$ 1,200				\$ -	\$ 38,330
2.2	Analyze City's Existing Water System Use/Storage		6	16		32	8			1	63	\$ 12,290	\$ 200				\$ -	\$ 12,490
2.3	Analyze System Storage Requirements/Effects		4	8	16	16				1	45	\$ 9,430	\$ 200				\$ -	\$ 9,630
2.4	Confirm BODR findings with the City and Define Improvements		2	8		4				1	15	\$ 3,230					\$ -	\$ 3,230
3.0	Public Outreach	0	72	56	8	8	4	0	60	7	215	\$ 42,930	\$ 2,800	\$ 20,000	\$ -	\$ -	\$ 20,000	\$ 65,730
3.1	Presentations at Five (5) Community Outreach Meetings		32	32						2	66	\$ 15,900	\$ 600				\$ -	\$ 16,500
3.2	Presentations at Three (3) City Council Meetings		24	24						2	50	\$ 11,980	\$ 600				\$ -	\$ 12,580
3.3	Prepare Presenation Materials		8			8			60	2	78	\$ 10,520	\$ 1,200				\$ -	\$ 11,720
3.4	Setup a Project Website and Host for nine (9) months		8		8		4			1	21	\$ 4,530	\$ 400	\$ 20,000			\$ 20,000	\$ 24,930
4.0	Environmental Compliance and Permitting	0	16	60	8	116	40	0	0	2	242	\$ 46,920	\$ 2,200	\$ -	\$ -	\$ -	\$ -	\$ 49,120
4.1	Conduct Environmental Assessment to Comply with CEQA Act		12	60		80	40			1	193	\$ 37,710	\$ 2,000				\$ -	\$ 39,710
4.2	Prepare Required Permit Documents, Meetings, Etc.		4		8	36				1	49	\$ 9,210	\$ 200				\$ -	\$ 9,410
5.0	Background Research	0	6	4	0	16	28	0	0	3	57	\$ 9,930	\$ 600	\$ -	\$ -	\$ -	\$ -	\$ 10,530
5.1	Research and Obtain Available Documents, Record, Surveys, Etc.		2			12	24			2	40	\$ 6,540	\$ 400				\$ -	\$ 6,940
5.2	Field Investigations to Identify Field Conditions and Site Opportunities		4	4		4	4			1	17	\$ 3,390	\$ 200				\$ -	\$ 3,590
6.0	Drinking Water Permit Amendment	0	4	0	0	16	0	0	0	1	21	\$ 3,910	\$ 200	\$ -	\$ -	\$ -	\$ -	\$ 4,110
6.1	Provide Assistance to Prepare Documentation to Apply for a California State Water Resources Control Board Drinking Water Permit Amendment		4			16				1	21	\$ 3,910	\$ 200				\$ -	\$ 4,110
7.0	Water Quality	0	6	28	4	0	40	0	0	2	80	\$ 15,540	\$ 400	\$ -	\$ -	\$ -	\$ -	\$ 15,940
7.1	Review City's 2010 Water Master Plan and Disinfectant Residual Stability and Regulatory Compliance		4	4	4					1	13	\$ 2,970					\$ -	\$ 2,970
7.2	Incorporate Data into City's Hydraulic Model for a System wide Improved Disinfection System Compliant with Stage 2 Disinfectant and Disinfection Byproduct Rule, Total Coliform Rule, and Groundwater Rule		2	24			40			1	67	\$ 12,570	\$ 400				\$ -	\$ 12,970
8.0	Water Blending	0	4	8	8	8	0	0	0	1	29	\$ 6,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,230
8.1	Optimization of Blending Process /Future Iron and Manganese's Treatment System Considerations		4	8	8	8				1	29	\$ 6,230					\$ -	\$ 6,230
9.0	Water System Operations Plan During Construction	0	4	4	4	0	0	0	0	1	13	\$ 2,970	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,970
9.1	Analyze Water System Supply and Demand to Determine the Required System Operation During Reservoir Construction		4	4	4					1	13	\$ 2,970			\$ 32,000		\$ 32,000	\$ 34,470
10.0	Utility Coordination	0	2	0	0	0	8	0	30	1	41	\$ 5,300	\$ 200	\$ -	\$ -	\$ -	\$ -	\$ 5,500
10.1	Provide Utility Research by Sending Notices to Utility Agencies		2				8		30	1	41	\$ 5,300	\$ 200				\$ -	\$ 5,500
11.0	Geotechnical Engineering Services	0	2	4	4	0	0	0	0	1	11	\$ 2,470	\$ -	\$ -	\$ 32,000	\$ -	\$ 32,000	\$ 34,470
11.1	Prepare a complete Geotechnical Investigation Report		2	4	4					1	11	\$ 2,470			\$ 32,000		\$ 32,000	\$ 34,470
12.0	Surveying and Existing Site Conditions	0	2	0	8	0	8	0	8	1	27	\$ 4,570	\$ -	\$ -	\$ -	\$ 10,000	\$ 10,000	\$ 14,570
12.1	Provide Topographic and Land Surveying Services Required to Identify Site Features Required for Preparation of Construction Documents		2		8		8		8	1	27	\$ 4,570				\$ 10,000	\$ 10,000	\$ 14,570
13.0	Draft Construction Plans and Specifications	0	128	318	240	396	320	0	1840	44	3286	\$ 497,660	\$ 4,500	\$ -	\$ -	\$ -	\$ -	\$ 502,160
13.1	Prepare Draft Design Drawings and Specifications at 30% Level of Completion		40	86	48	160	80		600	12	1026	\$ 152,160	\$ 1,000				\$ -	\$ 153,160
13.2	Prepare Draft Design Drawings and Specifications at 60% Level of Completion		32	80	60	100	100		600	12	984	\$ 144,020	\$ 1,000				\$ -	\$ 145,020
13.3	Prepare Draft Design Drawings and Specifications at 90% Level of Completion		32	120	100	80	100		520	12	964	\$ 149,920	\$ 1,000				\$ -	\$ 150,920
13.4	Prepare Draft Design Drawings and Specifications at 100% Level of Completion		24	32	32	56	40		120	8	312	\$ 51,560	\$ 1,500				\$ -	\$ 53,060
14.0	Final Construction Bidding Documents Including Plans and Specifications	0	4	4	0	0	24	0	0	2	34	\$ 5,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,900
14.1	Prepare Final PS&E Package Including Final Signed and Stamped Plans and Specifications		4	4			24			2	34	\$ 5,900					\$ -	\$ 5,900
15.0	Construction Cost Estimate	0	4	8	32	0	0	0	0	1	45	\$ 10,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,230
15.1	Prepare and Submit a Construction Cost Estimate Prior to 100% Final Design		4	8	32					1	45	\$ 10,230					\$ -	\$ 10,230
16.0	Design Schedule and Estimated Construction Schedule	0	14	8	0	0	24	0	0	2	48	\$ 9,360	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,360
16.1	Prepare and Maintain a Detailed Design Schedule		6				12			1	19	\$ 3,470					\$ -	\$ 3,470
16.2	Prepare and Maintain a Detailed Construction Schedule		8	8			12			1	29	\$ 5,890					\$ -	\$ 5,890
17.0	As-Built Plans	0	4	0	0	0	0	0	200	2	206	\$ 24,220	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,220
17.1	Prepare As-Built Plans That Describe the Final Constructed Project		4						200	2	206	\$ 24,220					\$ -	\$ 24,220
18.0	Construction Assistance	0	32	16	0	152	160	0	0	8	368	\$ 64,120	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 64,120
18.1	Review and Respond to Submittals/Shop Drawings (Assume 50 Submittals and Resubmittals)		16			120	120			4	260	\$ 44,040					\$ -	\$ 44,040
18.2	Review and Respond to RFIs During Construction (Assume 30 RFIs)		16	16		32	40			4	108	\$ 20,080					\$ -	\$ 20,080
TOTAL TASKS 1-18		4	408	606	400	870	688	0	2,138	89	5,203	\$ 853,070	\$ 15,400	\$ 20,000	\$ 32,000	\$ 10,000	\$ 62,000	\$ 930,470

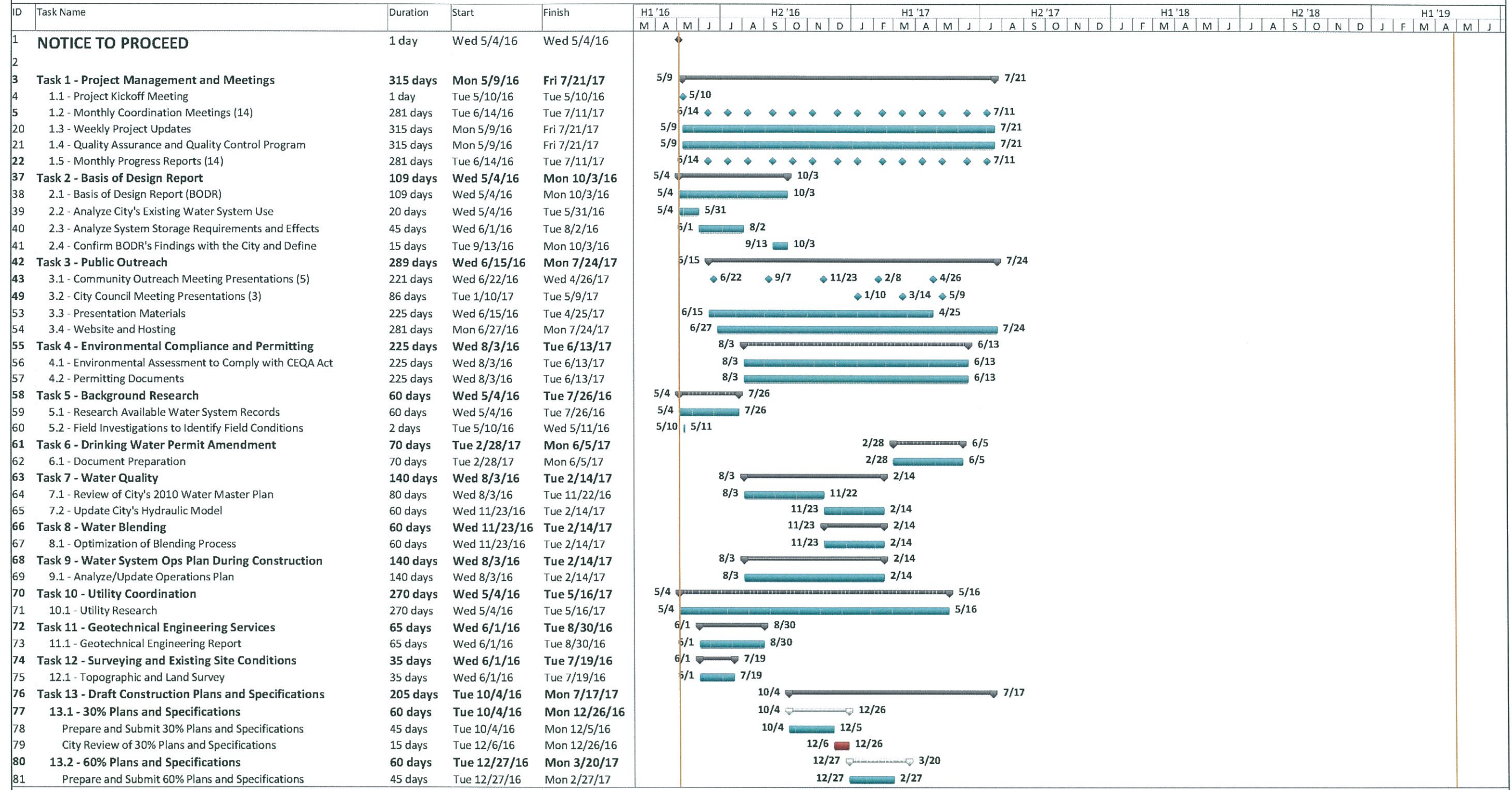
Fee Breakdown Schedule

OPTIONAL TASKS																	
19.0	Construction Meetings	0	2	12	12	0	0	0	0	1	27	\$ 6,190	\$ -	\$ -	\$ -	\$ -	\$ 6,190
19.1	Attend a Pre-Bid and Pre-Construction Meeting		2	12	12					1	27	\$ 6,190				\$ -	\$ 6,190
20.0	Prepare Presentation Renderings	0	4	0	0	60	0	0	0	1	65	\$ 11,610	\$ -	\$ 12,000	\$ -	\$ -	\$ 23,610
20.1	Prepare Renderings for Public Outreach Meetings		4			60				1	65	\$ 11,610	\$ 12,000			\$ 12,000	\$ 23,610
21.0	CFD Modeling	0	2	0	40	0	0	0	0	0	42	\$ 9,500	\$ -	\$ -	\$ -	\$ -	\$ 9,500
21.1	Prepare a CFD Model for the Reservoir		2		40						42	\$ 9,500				\$ -	\$ 9,500
22.0	Water Quality Analysis	0	12	24	40	0	40	40	0	2	158	\$ 29,380	\$ 1,000	\$ 15,000	\$ -	\$ -	\$ 45,380
22.1	Additional Water Quality Analysis for the Wells and Groundwater		12	24	40		40	40		2	158	\$ 29,380	\$ 1,000	\$ 15,000			\$ 45,380
23.0	Future Manganese Treatment	0	28	112	112	0	40	104	280	2	678	\$ 111,220	\$ 2,000	\$ -	\$ -	\$ -	\$ 113,220
23.1	Evaluation of Future Manganese Treatment into BODR		12	32	32			24	40	2	142	\$ 25,820	\$ 800			\$ -	\$ 26,620
23.2	Implement Future Manganese Treatment into Final Design		16	80	80		40	80	240		536	\$ 85,400	\$ 1,200			\$ -	\$ 86,600
24.0	Potential Community Improvements	0	132	164	144	40	120	160	540	11	1311	\$ 214,470	\$ 3,800	\$ 12,000	\$ -	\$ -	\$ 230,270
24.1	Evaluate Community Improvements into BODR		8	20	40	40			80	1	189	\$ 32,110	\$ 1,000			\$ -	\$ 33,110
24.2	Modifications to Final Design to Implement Community Improvements		60	80	80		120	120	400	4	864	\$ 132,840	\$ 1,200			\$ -	\$ 134,040
24.3	Additional Project Management to Implement Community Improvements (Includes QA/QC)		40	40	24					4	108	\$ 25,440	\$ 600			\$ -	\$ 26,040
24.4	Additional Public Outreach Including Preparing Renderings to Implement Community Improvements		24	24				40	60	2	150	\$ 24,080	\$ 1,000	\$ 12,000			\$ 37,080
TOTAL OPTIONAL TASKS 19-24		0	180	312	348	100	200	304	820	17	2,281	\$ 382,370	\$ 6,800	\$ 39,000	\$ -	\$ -	\$ 428,170
TOTAL TASKS 1-24		4	588	918	748	970	888	304	2,958	106	7,484	\$ 1,235,440	\$ 22,200	\$ 59,000	\$ 32,000	\$ 10,000	\$ 1,358,640
OPTIONAL TASKS 19-23		0	48	148	204	60	80	144	280	6	970	\$ 167,900	\$ 3,000	\$ 27,000	\$ -	\$ -	\$ 197,900
TOTAL TASKS 1-23		4	456	754	604	930	768	144	2,418	95	6,173	\$ 1,020,970	\$ 18,400	\$ 47,000	\$ 32,000	\$ 10,000	\$ 1,128,370

EXHIBIT C
PROJECT TIMELINE

City of Manhattan Beach

Request for Proposal for Engineering Design Services for the Peck Ground Level Reservoir Replacement Project (RFP No. 1061-16)



for the Peck Ground Level Reservoir Replacement Project (RFP No. 1061-16)

ID	Task Name	Duration	Start	Finish	H1 '16 M A M J J A S O N D	H2 '16 J F M A M J J A S O N D	H1 '17 J F M A M J J A S O N D	H2 '17 J F M A M J J A S O N D	H1 '18 J F M A M J J A S O N D	H2 '18 J F M A S O N D	H1 '19 J F M A M J
82	City Review of 60% Plans and Specifications	15 days	Tue 2/28/17	Mon 3/20/17			2/28	3/20			
83	13.3 - 90% Plans and Specifications	60 days	Tue 3/21/17	Mon 6/12/17			3/21	6/12			
84	Prepare and Submit 90% Plans and Specifications	40 days	Tue 3/21/17	Mon 5/15/17			3/21	5/15			
85	City Review of 90% Plans and Specifications	20 days	Tue 5/16/17	Mon 6/12/17			5/16	6/12			
86	13.4 - 100% Plans and Specifications	25 days	Tue 6/13/17	Mon 7/17/17							
87	Prepare and Submit 100% Plans and Specifications	15 days	Tue 6/13/17	Mon 7/3/17			6/13	7/3			
88	City Review of 100% Plans and Specifications	10 days	Tue 7/4/17	Mon 7/17/17			7/4	7/17			
89	Task 14 - Final Construction Bidding Documents	5 days	Tue 7/18/17	Mon 7/24/17			7/18	7/24			
90	14.1 - Final PS&E Package	5 days	Tue 7/18/17	Mon 7/24/17			7/18	7/24			
91	Task 15 - Construction Cost Estimate	30 days	Tue 6/13/17	Mon 7/24/17			6/13	7/24			
92	15.1 - Construction Cost Est. Prior to 100% and Final Design	30 days	Tue 6/13/17	Mon 7/24/17			6/13	7/24			
93	Task 16 - Design Schedule and Est. Construction Schedule	319 days	Wed 5/4/16	Mon 7/24/17	5/4		5/4	7/24			
94	16.1 - Prepare and Maintain a Detailed Design Schedule	265 days	Wed 5/4/16	Tue 5/9/17	5/4		5/9				
95	16.2 - Prepare a Detailed Construction Schedule	25 days	Tue 6/20/17	Mon 7/24/17			6/20	7/24			
96	Task 17 - As Built Plans	30 days	Mon 3/18/19	Fri 4/26/19					3/18	4/26	
97	17.1 - Prepare As Built Plans	30 days	Mon 3/18/19	Fri 4/26/19					3/18	4/26	
98	Task 18 - Construction Assistance	380 days	Mon 11/13/17	Fri 4/26/19					11/13	4/26	
99	18.1 - Review and Respond to Submittals	380 days	Mon 11/13/17	Fri 4/26/19					11/13	4/26	
100	18.2 - Review and Respond to RFIs	380 days	Mon 11/13/17	Fri 4/26/19					11/13	4/26	
101											
102	OPTIONAL TASKS										
103											
104	Task 19 - Construction Meetings (2)	46 days	Wed 9/20/17	Wed 11/22/17				9/20	11/22		
105	19.1 - Construction Meetings	46 days	Wed 9/20/17	Wed 11/22/17				9/20	11/22		
108	Task 20 - Presentation Renderings	225 days	Wed 6/15/16	Tue 4/25/17	6/15		4/25				
109	20.1 - Presentation Renderings	225 days	Wed 6/15/16	Tue 4/25/17	6/15		4/25				
110	Task 21 - Computational Fluid Dynamic Modeling (CFD)	64 days	Wed 11/23/16	Mon 2/20/17			11/23	2/20			
111	21.1 - Prepare CFD Model	64 days	Wed 11/23/16	Mon 2/20/17			11/23	2/20			
112	Task 22 - Wells Water Quality Analysis	60 days	Wed 5/25/16	Tue 8/16/16	5/25		8/16				
113	22.1 - Additional Water Quality Analysis	60 days	Wed 5/25/16	Tue 8/16/16	5/25		8/16				
114	Task 23 - Future Manganese Treatment	299 days	Wed 6/1/16	Mon 7/24/17	6/1		7/24				
115	23.1 - Evaluate Future Manganese Treatment in BODR	89 days	Wed 6/1/16	Mon 10/3/16	6/1		10/3				
116	23.2 - Implement Future Manganese Treatment into Final Design	210 days	Tue 10/4/16	Mon 7/24/17			10/4	7/24			
117	Task 24 - Potential Community Improvements	280 days	Tue 6/28/16	Mon 7/24/17	6/28		7/24				
118	24.1 - Evaluation of Community Improvements in BODR	70 days	Tue 6/28/16	Mon 10/3/16	6/28		10/3				
119	24.2 - Modify Final Design to Implement Improvements	210 days	Tue 10/4/16	Mon 7/24/17			10/4	7/24			
120	24.3 - Additional Project Management	280 days	Tue 6/28/16	Mon 7/24/17	6/28		7/24				
121	24.4 - Additional Public Outreach	280 days	Tue 6/28/16	Mon 7/24/17	6/28		7/24				

EXHIBIT D
TERMS FOR COMPLIANCE WITH CALIFORNIA LABOR LAW REQUIREMENTS

1. This Agreement calls for services that, in whole or in part, constitute "public works" as defined in Division 2, Part 7, Chapter 1 (commencing with Section 1720) of the California Labor Code ("Chapter 1"). Further, Contractor acknowledges that this Agreement is subject to (a) Chapter 1 and (b) the rules and regulations established by the Department of Industrial Relations ("DIR") implementing such statutes. Therefore, as to those Services that are "public works", Contractor shall comply with and be bound by all the terms, rules and regulations described in 1(a) and 1(b) as though set forth in full herein.

2. California law requires the inclusion of specific Labor Code provisions in certain contracts. The inclusion of such specific provisions below, whether or not required by California law, does not alter the meaning or scope of Section 1 above.

3. Contractor shall be registered with the Department of Industrial Relations in accordance with California Labor Code Section 1725.5, and has provided proof of registration to City prior to the Effective Date of this Agreement. Contractor shall not perform work with any subcontractor that is not registered with DIR pursuant to Section 1725.5. Contractor and subcontractors shall maintain their registration with the DIR in effect throughout the duration of this Agreement. If the Contractor or any subcontractor cease to be registered with DIR at any time during the duration of the project, Contractor shall immediately notify City.

4. Pursuant to Labor Code Section 1771.4, Contractor's Services are subject to compliance monitoring and enforcement by DIR. Contractor shall post job site notices, as prescribed by DIR regulations.

5. Pursuant to Labor Code Section 1773.2, copies of the prevailing rate of per diem wages for each craft, classification, or type of worker needed to perform the Agreement are on file at City Hall and will be made available to any interested party on request. Contractor acknowledges receipt of a copy of the DIR determination of such prevailing rate of per diem wages, and Contractor shall post such rates at each job site covered by this Agreement.

6. Contractor shall comply with and be bound by the provisions of Labor Code Sections 1774 and 1775 concerning the payment of prevailing rates of wages to workers and the penalties for failure to pay prevailing wages. The Contractor shall, as a penalty to City, forfeit two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the prevailing rates as determined by the DIR for the work or craft in which the worker is employed for any public work done pursuant to this Agreement by Contractor or by any subcontractor.

7. Contractor shall comply with and be bound by the provisions of Labor Code Section 1776, which requires Contractor and each subcontractor to: keep accurate payroll records and verify such records in writing under penalty of perjury, as

specified in Section 1776; certify and make such payroll records available for inspection as provided by Section 1776; and inform City of the location of the records.

8. Contractor shall comply with and be bound by the provisions of Labor Code Sections 1777.5, 1777.6 and 1777.7 and California Administrative Code title 8, section 200 *et seq.* concerning the employment of apprentices on public works projects. Contractor shall be responsible for compliance with these aforementioned Sections for all apprenticeable occupations. Prior to commencing work under this Agreement, Contractor shall provide City with a copy of the information submitted to any applicable apprenticeship program. Within sixty (60) days after concluding work pursuant to this Agreement, Contractor and each of its subcontractors shall submit to City a verified statement of the journeyman and apprentice hours performed under this Agreement.

9. The Contractor shall not perform Work with any Subcontractor that has been debarred or suspended pursuant to California Labor Code Section 1777.1 or any other federal or state law providing for the debarment of contractors from public works. The Contractor and Subcontractors shall not be debarred or suspended throughout the duration of this Contract pursuant to Labor Code Section 1777.1 or any other federal or state law providing for the debarment of contractors from public works. If the Contractor or any subcontractor becomes debarred or suspended during the duration of the project, the Contractor shall immediately notify City.

10. Contractor acknowledges that eight (8) hours labor constitutes a legal day's work. Contractor shall comply with and be bound by Labor Code Section 1810. Contractor shall comply with and be bound by the provisions of Labor Code Section 1813 concerning penalties for workers who work excess hours. The Contractor shall, as a penalty to City, forfeit twenty-five dollars (\$25) for each worker employed in the performance of this Agreement by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any one (1) calendar day and forty (40) hours in any one calendar week in violation of the provisions of Division 2, Part 7, Chapter 1, Article 3 of the Labor Code. Pursuant to Labor Code section 1815, work performed by employees of Contractor in excess of eight (8) hours per day, and forty (40) hours during any one week shall be permitted upon public work upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half (1-1/2) times the basic rate of pay.

11. California Labor Code Sections 1860 and 3700 provide that every employer will be required to secure the payment of compensation to its employees. In accordance with the provisions of California Labor Code Section 1861, Contractor hereby certifies as follows:

"I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract."

12. For every subcontractor who will perform work on the project, Contractor shall be responsible for such subcontractor's compliance with Chapter 1 and Labor Code Sections 1860 and 3700, and Contractor shall include in the written contract between it and each subcontractor a copy of those statutory provisions and a requirement that each subcontractor shall comply with those statutory provisions. Contractor shall be required to take all actions necessary to enforce such contractual provisions and ensure subcontractor's compliance, including without limitation, conducting a periodic review of the certified payroll records of the subcontractor and upon becoming aware of the failure of the subcontractor to pay his or her workers the specified prevailing rate of wages. Contractor shall diligently take corrective action to halt or rectify any failure.

13. To the maximum extent permitted by law, Contractor shall indemnify, hold harmless and defend (at Contractor's expense with counsel reasonably acceptable to City) City, its officials, officers, employees, agents and independent contractors serving in the role of City officials, and volunteers from and against any demand or claim for damages, compensation, fines, penalties or other amounts arising out of or incidental to any acts or omissions listed above by any person or entity (including Contractor, its subcontractors, and each of their officials, officers, employees and agents) in connection with any work undertaken or in connection with the Agreement, including without limitation the payment of all consequential damages, attorneys' fees, and other related costs and expenses. All duties of Contractor under this Section shall survive the termination of the Agreement.