

City of Garden Grove

INTER-DEPARTMENT MEMORANDUM

To: Matthew J. Fertal  
Dept: City Manager  
Subject: RECOMMENDATION TO AWARD  
CONTRACT FOR PROFESSIONAL  
ENGINEERING SERVICES FOR WELL 31  
EQUIPPING PROJECT

From: Keith G. Jones  
Dept: Public Works  
Date: August 10, 2010

OBJECTIVE

To recommend that the City Council award a contract for professional engineering services for the Well 31 Equipping Project to AKM Consulting Engineers for the amount of \$398,316.00.

BACKGROUND

The City awarded a drilling construction contract for Well 31 at its Lampson Reservoir site on June 22, 2010. The project schedule requires design for the equipping of Well 31 during the actual drilling of Well 31. Equipping will provide the well with pump/motor, piping, building enclosure, and miscellaneous electronics required to operate the well. It is anticipated that final equipping construction documents will be completed in February 2011, about the same time that the drilling phase of Well 31 is to be completed.

DISCUSSION

Staff requested proposals from six (6) firms to provide professional engineering services. Out of those six (6), only two (2) consultants responded, AKM Consulting Engineers and Psomas. Four engineering firms: Black & Veatch Corporation, Carollo Engineers, Camp Dresser & McKee, Inc., and MWH Americas, Inc. declined to propose due to personnel commitments on other ongoing projects.

Four staff members rated the proposals on the basis of knowledge, project team experience, innovation, schedule and references. The two engineering firms that proposed were further interviewed to clarify hours of service and scope of contract drawings. They were invited to submit revised proposals, which were then evaluated. Based on evaluation results, AKM Consulting Engineers rated highest on its ability to provide professional engineering services for this project.

RECOMMENDATION TO AWARD CONTRACT FOR PROFESSIONAL  
ENGINEERING SERVICES FOR WELL 31 EQUIPPING PROJECT  
August 10, 2010  
Page 2

The following is a summary of the ratings with the highest total being the most qualified:

	<b>AKM Consulting Engineers Irvine, CA</b>	<b>Psomas Santa Ana, CA</b>
<i>Rater A</i>	165	147.5
<i>Rater B</i>	170.5	156.5
<i>Rater C</i>	141.5	120
<i>Rater D</i>	163	156.5
<b>Totals</b>	<b>640.0</b>	<b>580.5</b>

Upon selection of the most qualified firm, Water Services staff interviewed AKM Consulting Engineers and negotiated an agreement for its services.

FINANCIAL IMPACT


Water Funds were appropriated for the FY 2010/11 Budget for this project. There is no impact to the General Fund.

RECOMMENDATION

It is recommended that the City Council:

- Award the contract for professional engineering services to AKM Consulting Engineers for the Well 31 Equipping Project;
- Authorize the City Manager to sign and execute the professional service agreement with AKM Consulting Engineers for engineering services for the Well 31 Equipping Project in the amount of \$398,316.00.

  
KEITH G. JONES  
Public Works Director

  
By: David E. Entsminger  
Water Services Manager

Attachment No. 1: Professional Services Agreement  
Attachment No. 2: Panel Rating Sheets

**Recommended for Approval**

  
**Matthew Fertal**  
City Manager

## PROFESSIONAL SERVICES AGREEMENT

THIS PROFESSIONAL SERVICES AGREEMENT is made and entered into, to be effective the 18<sup>th</sup> day of August, 2010, by and between the CITY OF GARDEN GROVE, a municipal corporation, hereinafter referred to as "City," and AKM Consulting Engineers, a California Corporation, hereinafter referred to as "Consultant." City and Consultant are sometimes hereinafter individually referred to as "Party" and hereinafter collectively referred to as the "Parties."

### RECITALS

WHEREAS, City has determined that there is a need for Research & Data Collection, Permitting, Engineering, Bidding Assistance, Construction Assistance, O&M Manual & Training and Warrantee Assistance services for the Well No. 31 Equipping Project (the "Project");

WHEREAS, City desires to retain Consultant to provide such services; and

WHEREAS, Consultant is qualified by virtue of experience, training, education, and expertise to perform the professional services required by this Agreement and has agreed to provide such services.

NOW, THEREFORE, in consideration of the promises and mutual benefits which will result to the Parties in carrying out the terms of this Agreement, it is mutually agreed as follows:

### AGREEMENT

#### I. SCOPE OF WORK

City agrees to retain Consultant, and Consultant agrees to perform the services set forth in the Scope of Services described in Exhibit "A", attached hereto and by reference made a part of this Agreement (hereinafter the "Services"). Consultant agrees that its provision of Services under this Agreement shall be within accepted standards within the profession, and its specialized services shall be in accordance with customary and usual practices in Consultant's profession. By executing this Agreement, Consultant warrants that it has carefully considered how the work should be performed and fully understands the facilities, difficulties, and restrictions attending performance of the work under this Agreement.

## II. TERM

This Agreement shall be effective as of the date first set forth above. This Agreement shall commence upon the effective date of this Agreement, and shall remain and continue in effect until tasks described herein are completed unless otherwise terminated prior to this date pursuant to the provisions of this Agreement.

## III. FEES

### A. Accounting Records

Consultant shall keep complete, accurate, and detailed accounts of all time, costs, expenses, and expenditures pertaining in any way to this Agreement. Upon request of City, Consultant shall provide City with all records pertaining to this Agreement.

### B. Total Payment

The Parties agree that Consultant shall bill for the Services provided by Consultant to City on an hourly basis and in accordance with the charges and fee schedule attached as Exhibit "B," except as otherwise set forth herein, provided compensation under this Agreement shall not exceed \$398,316.

### C. Monthly Payment

1. City agrees to pay Consultant monthly, in accordance with the payment rates and terms and the schedule of payment, as set forth in Exhibit "B," attached hereto based upon actual time spent providing the services outlined in this Agreement. Consultant shall submit to City monthly or periodic statements requesting payment. Such requests shall be based upon the amount and value of the Services performed by Consultant under this Agreement and shall be prepared by Consultant and accompanied by such reporting data including a detailed breakdown of all costs incurred and tasks performed during the period covered by the statement, as may be required by City. Invoices shall be submitted on or about the first business day of each month, for Services provided the prior month. City shall use reasonable efforts to make payment to Consultant within forty-five (45) days after the date of the invoice or as soon thereafter as reasonably practicable. If City determines that the approved written Scope of Work under this Agreement or any specified task hereunder is incomplete, the City Manager, or his or her designee, shall notify Consultant and may withhold the payment amount for the unfinished work accordingly.

2. Consultant shall not be compensated for any services rendered in connection with its performance of this Agreement, which are in addition to those set forth herein, unless such additional services are authorized in advance and in writing by the City Manager.

#### **IV. TERMINATION**

City may terminate this Agreement for its convenience at any time, with or without cause, in whole or in part, upon giving Consultant thirty (30) days written notice. Upon said notice, City shall pay Consultant its allowable costs incurred to date of termination and those allowable costs determined by City to be reasonably necessary to effect such termination. Upon receipt of said notice, Consultant shall immediately cease all work under this Agreement, unless the notice provides otherwise. If City terminates a portion of this Agreement, such termination shall not make void or invalidate the remainder of this Agreement. Thereafter, Consultant shall have no further claims against City under this Agreement. Upon termination of the Agreement pursuant to this Section, Consultant will submit an invoice to City pursuant to Section 3. Consultant may terminate this Agreement, with or without cause, upon thirty (30) days written notice to City.

#### **V. DEFAULT OF CONSULTANT**

A. Consultant's failure to comply with the provisions of this Agreement shall constitute a default. In the event Consultant is in default, except as provided for in Section XXI, City shall have no obligation or duty to continue compensating Consultant for any work performed after the date of default and can terminate the Agreement immediately upon written notice to Consultant.

B. If the City Manager, or his/her designee, determines that Consultant is in default in the performance of any of the terms or conditions of this Agreement, it shall notify Consultant in writing of such default. Consultant shall have ten (10) days to cure the default by rendering a satisfactory performance. In the event Consultant fails to cure its default within such period of time, City shall have the right, notwithstanding any other provision of this Agreement, to terminate this Agreement without further notice and without prejudice of any remedy to which City may be entitled at law, in equity or under this Agreement. Consultant shall be liable for any and all reasonable costs incurred by City as a result of such default including, but not limited to, procurement costs of the same or similar services defaulted by Consultant under this Agreement.

#### **VI. LEGAL RELATIONSHIP BETWEEN THE PARTIES**

A. The legal relationship between the Parties hereto is that of an independent contractor, and nothing herein shall be deemed to make Consultant a City employee. During the performance of this Agreement, Consultant and its officers, employees, and agents shall act in an independent capacity and shall not act as City officers, employees, or agents. The personnel performing the Services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Neither City nor any of its officers, employees, or agents shall have control over the conduct of Consultant or any of its officers, employees, or agents, except as set

forth in this Agreement. Consultant, its officers, employees, or agents shall not maintain an office or any other type of fixed business location at City's offices.

B. Consultant shall not incur or have the power to incur any debt, obligation, or liability against City, or bind City in any manner.

C. No City benefits shall be available to Consultant, its officers, employees, or agents in connection with any performance under this Agreement. Except for fees paid to Consultant as provided for in this Agreement, City shall not pay salaries, wages, or other compensation to Consultant for the performance of Services under this Agreement. City shall not be liable for compensation or indemnification to Consultant, its officers, employees, or agents for injury or sickness arising out of performing Services hereunder. If for any reason, any court or governmental agency determines that City has financial obligations, other than pursuant to Section III herein, of any nature related to salary, taxes, or benefits of Consultant's officers, employees, servants, representatives, subcontractors, or agents, Consultant shall indemnify City for all such financial obligations.

## **VII. MODIFICATIONS AND AMENDMENTS TO AGREEMENT**

No modification or amendment of this Agreement or any of the provisions hereof shall be effective for any purpose unless set forth in writing signed by duly authorized representatives of both Parties.

## **VIII. ASSIGNMENTS AND SUBCONTRACTING**

The experience, knowledge, capability, and reputation of Consultant, its principals and employees were a substantial inducement for City to enter into this Agreement. Consultant may not assign the performance of this Agreement, nor any part thereof, nor any monies due hereunder, voluntarily or by operation of law, without the prior written approval of City. Except as otherwise expressly provided in the Scope of Services (Exhibit "A"), Consultant shall not contract with any other person or entity to perform the Services required without written approval of City. If Consultant is permitted to subcontract any part of this Agreement by City, Consultant shall be responsible to City for the acts and omissions of its subcontractor as it is for persons directly employed. Nothing contained in this Agreement shall create any contractual relationships between any subcontractor and City. All persons engaged in the work will be considered employees of Consultant. City will deal directly with and will make all payments to Consultant as provided for in Section III.

## **IX. SUCCESSORS IN INTEREST**

This Agreement shall be binding upon and inure to the benefit of the Parties' successors and assignees.

**X. THIRD PARTY BENEFICIARY**

Except as may be specifically provided for herein, nothing contained in this Agreement is intended to confer, nor shall this Agreement be construed as conferring, any rights, including, without limitation, any rights as third-party beneficiary or otherwise, upon any entity or person not a party hereto.

**XI. INSURANCE**

**A. Insurance Required**

Consultant shall procure and maintain the insurance described herein for the duration of this Agreement, or as otherwise specified herein, against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by Consultant, its agents, representatives, or employees. Insurance required herein shall be provided by a reputable insurance company in good standing with the State of California and having a minimum A.M. Best's Guide Rating of A-, Class VII or better. City will require Consultant to substitute any insurer whose rating drops below the levels specified herein. Such substitution shall occur within twenty (20) days of written notice to Consultant by City.

Consultant shall provide to City certificates of insurance in a form acceptable to City indicating the deductible or self-retention amounts and the expiration date of the policy, and shall provide renewal certificates not less than ten (10) days prior to the expiration of each policy term. The certificates of insurance shall specifically identify this Agreement and shall contain express conditions that City is to be given at least thirty (30) days advance written notice of any material modification in or termination of insurance. Such insurance shall be primary to and not contributing with any other insurance maintained by City and shall name the City of Garden Grove and its officers, councilmembers, officials, employees, agents and volunteers as additional insureds by endorsement to the insurance policies. Except as expressly authorized herein, all insurance shall be on an occurrence basis.

**1. Errors and Omissions Insurance**

Consultant shall maintain in full force and effect throughout the term of this Agreement, standard industry form professional negligence errors and omissions insurance coverage in an amount of not less than One Million Dollars (\$1,000,000.00) per claim or occurrence, in accordance with the provisions of this Section. If the policy of insurance is written on a "claims made" basis, the policy shall be continued in full force and effect at all times during the term of this Agreement, and for a period of three (3) years from the date of the completion of the Services provided hereunder. In the event of termination of the policy during this period, Consultant shall obtain continuing insurance coverage for the prior acts or omissions of Consultant during the course of performing Services under the terms of this Agreement. The coverage shall be

evidenced by either a new policy evidencing no gap in coverage, or by obtaining separate extended "tail" coverage with the present or new carrier.

In the event the policy of insurance is written on an "occurrence" basis, the policy shall be continued in full force and effect during the term of this Agreement, or until completion of the Services provided for in this Agreement, whichever is later. In the event of termination of the policy during this period, new coverage shall be obtained for the required period to ensure coverage for the prior acts of Consultant during the course of performing the Services under the terms of this Agreement.

2. Workers' Compensation

Consultant shall obtain and maintain, during the term of this Agreement, Workers' Compensation Employer's Liability Insurance in the statutory amount as required by state law. Such worker's compensation insurance shall be endorsed to provide for a waiver of subrogation against City.

**B. Minimum Limits of Insurance**

Consultant shall maintain limits no less than:

1. General Liability:

\$1,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

2. Automobile Liability:

\$1,000,000 per accident for bodily injury and property damage.

3. Employer Liability:

\$1,000,000 per accident for bodily injury or disease.

**C. Deductibles and Self-Insured Retentions**

Any deductibles or self-insured retentions must be declared to and approved by the City Manager. At the option of the City Manager, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City and its councilmembers, officials, officers, employees, agents or volunteers, or Consultant shall procure a bond guaranteeing payment of losses and related



investigations, claim administration and defense expenses, or Consultant shall otherwise provide an alternative satisfactory to the City Manager.

**D. Other Insurance Provisions**

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Garden Grove and its councilmembers, officers, officials, employees, agents and volunteers are to be covered as insureds with respect to: liability arising out of activities performed by or on behalf of Consultant; products and completed operations of Consultant; premises owned occupied or used by Consultant; or automobiles owned, leased, hired, or borrowed by Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the Garden Grove Sanitary District, the City of Garden Grove, the Garden Grove Agency for Community Development and their respective councilmembers, board members, officers, officials, employees, agents, or volunteers.

2. For any claims related to this Agreement, Consultant's coverage shall be primary insurance as respects the City and its councilmembers, officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by Garden Grove Sanitary District, the City of Garden Grove, the Garden Grove Agency for Community Development and their respective councilmembers, board members, officers, officials, employees, agents, and volunteers shall be in excess of Consultant's insurance and shall not contribute with it.

3. Any failure to comply with reporting or other provisions of the policies, including breaches of warranties shall not affect coverage provided to the City and its respective councilmembers, board members, officers, officials, employees, agents, and volunteers.

4. Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought except with respect to the limits of the insurer's liability.

5. Each insurance policy required by this Section shall be endorsed to state that coverage shall not be suspended, voided, cancelled by either party, reduced in coverage or in limits, except after thirty (30) days prior written notice by certified mail, return receipt requested, has been provided to City.

6. Consultant agrees to ensure that subcontractors, and any other parties involved with the project who are brought onto or involved in the project by Consultant, provide the same minimum insurance coverage required of Consultant. Consultant agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this Section. Consultant agrees that upon request, all agreements with subcontractors and others engaged in the project will be submitted to City for review.

**E. Verification of Coverage**

Consultant shall furnish City with original endorsements effecting coverage required by this Agreement. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. All endorsements are to be received and approved by City before work commences.

**XII. INDEMNITY**

**A. Indemnification**

To the fullest extent permitted by law, Consultant shall indemnify, defend (at Consultant's sole cost and expense), protect and hold harmless the City of Garden Grove and its councilmembers, officers, officials, employees, agents, and volunteers, (individually "Indemnified Party"; collectively "Indemnified Parties") against any and all liability, claims, judgments, costs, and demands (collectively, "Claims"), including Claims arising from injuries or death of persons (Consultant's employees included) and damage to property, which Claims arise out of, pertain to, or are related to the negligence, recklessness or willful misconduct of Consultant, its agents, employees, or subcontractors, or arise from Consultant's negligent, reckless or willful performance of or failure to perform any term, provision, covenant or condition of this Agreement ("Indemnified Claims"), but Consultant's liability for Indemnified Claims shall be reduced to the extent such Claims arise from the negligence, recklessness or willful misconduct of the City of Garden Grove and its councilmembers, officers, directors, officials, employees, or agents.

Consultant shall reimburse the Indemnified Parties for any reasonable expenditures, including reasonable attorneys' fees, expert fees, litigation costs and expenses that each Indemnified Party may incur by reason of Indemnified Claims. Upon request by an Indemnified Party, Consultant will defend with legal counsel reasonably acceptable to the Indemnified Party all Claims against the Indemnified Party that may arise out of, pertain to, or relate to Indemnified Claims, whether or not Consultant is named as a party to the Claim proceeding. The determination whether a Claim may "arise out of, pertain to, or relate to" Indemnified Claims shall be based on the allegations made in the Claim and the facts known or subsequently discovered by the parties. In the event a final judgment, arbitration award, order, settlement, or other final resolution expressly determines that Claims did not arise out of, pertain to, nor relate to the negligence, recklessness or willful misconduct of Consultant to any extent, then City will reimburse Consultant for the reasonable costs of defending the Indemnified Parties against such Claims, except City shall not reimburse Consultant for attorneys' fees, expert fees, litigation costs and expenses as were incurred defending Consultant or any parties other than Indemnified Parties against such Claims.

Consultant's liability for indemnification hereunder is in addition to any liability Consultant may have to City for a breach by Consultant of any of the provisions of this Agreement. Under no circumstances shall the insurance requirements and limits

set forth in this Agreement be construed to limit Consultant's indemnification obligation or other liability hereunder. The terms of this Agreement are contractual and the result of negotiation between the parties hereto. Accordingly, any rule of construction of contracts (including, without limitation, California Civil Code Section 1654) that ambiguities are to be construed against the drafting party, shall not be employed in the interpretation of this Agreement.

Consultant's indemnification obligation hereunder shall survive the expiration or earlier termination of this Agreement until all actions against the Indemnified Parties for such matters indemnified hereunder are fully and finally barred by the applicable statute of limitations or, if an action is timely filed, until such action is final. This provision is intended for the benefit of third party Indemnified Parties not otherwise a party to this Agreement.

### **XIII. COMPLIANCE WITH LAW**

A. Consultant certifies by the execution of this Agreement the following: that it pays employees not less than the minimum wage as defined by law and that it does not discriminate in its employment with regard to race, color, religion, sex, age, marital status, ancestry, or national origin; that Consultant is in compliance with all federal and state laws, local directives, and executive orders regarding non-discrimination in employment; and that Consultant agrees to demonstrate positively and aggressively the principle of equal opportunity in employment.

B. Consultant shall keep itself informed of State and Federal laws and regulations, which in any manner affect those employed by it or in any way affect the performance of its Services pursuant to this Agreement. Consultant shall at all times observe and comply with all such laws and regulations. The City of Garden Grove and its councilmembers, officers, employees, and agents shall not be liable at law or in equity for Consultant's failure to comply with such laws and regulations.

### **XIV. LICENSES AND QUALIFICATIONS**

Consultant represents and warrants to City that it has obtained all licenses, permits, qualifications, and approvals of whatever nature that is legally required to practice its profession. Consultant represents and warrants to City that Consultant shall, at its sole cost and expense, keep in effect at all times during the term of this Agreement, any license, permit, or approval, which is legally required for Consultant to perform Services under this Agreement.

### **XV. CONFIDENTIALITY AND OWNERSHIP OF DOCUMENTS**

A. All information gained by Consultant in the performance of this Agreement shall be considered confidential and shall not be released by Consultant without City's prior written authorization. Consultant, its officers, employees, agents or subcontractors

shall not without written authorization from the City Manager or unless requested by City's Attorney, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories, or other information concerning the Services performed under this Agreement or relating to any project or property location within City. Response to a subpoena or court order shall not be considered "voluntary" for the purposes of this Section, provided Consultant gives City proper notice of such subpoena or court order. Consultant shall properly notify City of any summons, complaints, subpoenas, notice of deposition, request for documents, interrogatories, requests for admissions or other discovery requests received by Consultant, its officers, employees, agents or subcontractors, related to Services performed pursuant to this Agreement. City retains the right, but has no obligation, to represent Consultant and/or be present at any deposition, hearing, or similar proceeding, the cost of which shall be borne by City. Consultant agrees to cooperate fully with City and to provide City with an opportunity to review and respond to discovery requests provided by Consultant, arising out of Services performed pursuant to this Agreement. However, City's right to review any such request or response does not imply or mean City has the right to control, direct, write or rewrite said response.

B. The documents and study materials for this project shall become the property of City upon the termination or completion of the work. Consultant agrees to furnish to City copies of all memoranda, correspondence, computation, and study materials in its files pertaining to the work described in this Agreement, which is requested in writing by City.

#### **XVI. INTERPRETED UNDER LAWS OF THE STATE OF CALIFORNIA**

This Agreement and any dispute arising hereunder shall be governed and interpreted in accordance with the laws of the State of California. This Agreement shall be construed as a whole according to its fair language and common meaning to achieve the objectives and purposes of the parties hereto, and the rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be employed in interpreting this Agreement, all parties having been represented by counsel in the negotiation and preparation hereof. Venue for any litigation concerning this Agreement shall be in the Superior Court for the County of Orange, California.

#### **XVII. ATTORNEYS' FEES**

If any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, the prevailing Party shall be entitled to reasonable attorneys' fees, costs, and necessary disbursements in addition to any other relief to which they may be entitled.

**XVIII. WAIVER**

No waiver of any provision of this Agreement shall be effective unless in writing and signed by a duly authorized representative of the Party against whom enforcement of a waiver is sought. Any waiver by the Parties of any default or breach of any covenant, condition, or term contained in this Agreement, shall not be construed to be a waiver of any subsequent or other default or breach, nor shall failure by the Parties to require exact, full, and complete compliance with any of the covenants, conditions, or terms contained in this Agreement be construed as changing the terms of this Agreement in any manner or preventing the Parties from enforcing the full provisions hereof.

**XIX. NOTICES**

All notices or other communications required or permitted hereunder shall be in writing and shall be personally delivered, sent by registered or certified mail, postage prepaid, return receipt requested, or delivered or sent by electronic transmission, and shall be deemed received upon the earlier of: (i) the date of delivery to the address of the person to receive such notice if delivered personally or by messenger or overnight courier; (ii) three (3) business days after the date of posting by the United States Post Office if by mail; or (iii) when sent if given by electronic transmission. Any notice, request, demand, direction, or other communication sent by electronic transmission must be confirmed within forty-eight (48) hours by letter mailed or delivered. Notices or other communications shall be addressed as follows:

To City: City of Garden Grove  
13802 Newhope Street  
Garden Grove, CA 92843  
Attention: Water Services Manager

To Consultant: AKM Consulting Engineers  
553 Wald  
Irvine, CA 92618  
Attention: Mr. Zeki Kayiran

Either Party may, by written notice to the other, designate a different address, which shall be substituted for that specified above.

**XX. ENTIRE AGREEMENT**

This Agreement constitutes the entire agreement between the parties and supersedes all prior negotiations, arrangements, representations, and understandings, if any, made by or among the parties with respect to the subject matter hereof. No amendments or other modifications of this Agreement shall be binding unless executed in writing by both parties hereto, or their respective successors, assigns, or grantees.

**XXI. FORCE MAJEURE**

If either party shall be delayed or prevented from the performance of any service under this Agreement by reason of acts of God, strikes, lockouts, labor troubles, restrictive governmental laws or regulations or other cause, without fault and beyond the reasonable control of the party obligated (financial inability excepted), performance of such act shall be excused for the period of delay, and the period for performance of any such act shall be extended for a period equivalent to the period of such delay.

**XXII. TIME IS OF THE ESSENCE**

The Parties agree that time is of the essence of this Agreement with respect to the deadlines set forth herein.

**XXIII. SEVERABILITY**

Whenever possible, each provision of this Agreement shall be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be invalid under the applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of that provision, or the remaining provisions of this Agreement.

**XXIV. PROHIBITED INTERESTS**

Consultant covenants that, for the term of this Agreement, no Board Member, official, officer or employee of City during his/her tenure in office/employment, or for one (1) year thereafter, shall have any interest, direct or indirect, in this Agreement or the proceeds thereof. Consultant warrants that it has not given or paid and will not give or pay any third party money or other consideration for obtaining this Agreement.

**XXV. SCOPE CHANGES**

In the event of a change in the scope of the proposed project, as requested by City, the Parties hereto shall execute an addendum to this Agreement, setting forth, with particularity, all terms of the new Agreement, including but not limited to any additional Consultant's fees.

**XXVI. NON-LIABILITY OF CITY OFFICERS AND EMPLOYEES**

No officer or employee of the City shall be personally liable to the Consultant, or any successor in interest, in the event of any default or breach by the City or for any amount which may become due to the Consultant or its successor, or for breach of any obligation of the terms of this Agreement.

**XXVII. AGREEMENT EXECUTION AUTHORIZATION**

Each of the undersigned represents and warrants that he or she is duly authorized to execute and deliver this Agreement and that such execution is binding upon the entity for which he or she is executing this Agreement.

**XXVIII. RECITALS**

The Recitals above are hereby incorporated into this section as though fully set forth herein and each party acknowledges and agrees that such Party is bound, for purposes of this Agreement, by the same.

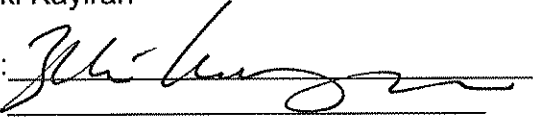
IN WITNESS WHEREOF, this Agreement has been executed in the name of City, by its officers thereunto duly authorized, and Consultant as of the day and year first above written.

CITY OF GARDEN GROVE

By: \_\_\_\_\_  
Matthew J. Fertal  
City Manager

ATTEST:

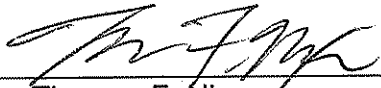
By: \_\_\_\_\_  
Kathleen Bailor  
City Clerk

Zeki Kayiran  
By:   
Principal

If CONTRACTOR is a corporation, a Corporate Resolution and/or Corporate Seal is required. If a Partnership, Statement of Partnership must be submitted to CITY.

APPROVED AS TO FORM:

Woodruff, Spradlin & Smart

By:   
\_\_\_\_\_  
Thomas F. Nixon,  
City Attorney



**EXHIBIT A**

**SCOPE OF SERVICES**

## ***SECTION 4 Project Understanding/Project Approach***

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### **PROJECT UNDERSTANDING**

#### **Groundwater Production**

The City of Garden Grove's Lampson Reservoir Site consists of two (2) 4 million gallon reservoirs, two (2) wells (Well 23 and Well 28), and a booster pumping plant with five (5) pumps conveying water into the City's East Pressure Zone with an approximate hydraulic grade elevation of 220 feet.

Well 23 was constructed in 1977 using cable tool. Its original capacity of 2600 gpm has dropped down to approximately 2,050 gpm.

Well 28 was constructed in 1989 in the shallow Talbert aquifer primarily to remove high concentration of nitrates present in the groundwater basin. Well 28 has a constant speed motor, and its capacity is approximately 4000 gpm. High nitrate concentrations have ranged from 54.3 mg/l to 70.4 mg/l.

Production of the two wells was blended to bring the nitrate concentration to below the MCL of 45 mg/l. The City had to throttle a valve on the discharge of Well 28 to accomplish proper blending, which required significantly higher energy than would have been necessary if the pump speed could have been adjusted. Because of this inefficiency, the City discontinued the use of Well 28.

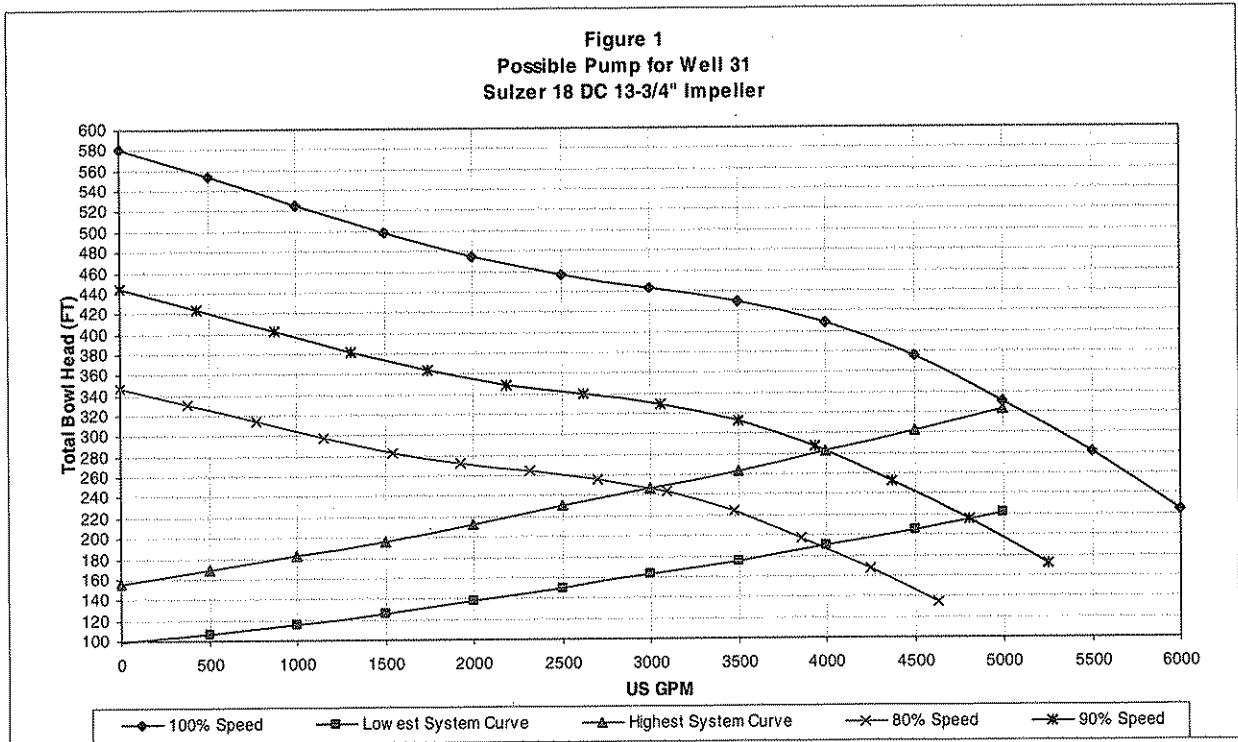
Well 23 has a limited remaining useful life. As its capacity continues to decline, the City is not able to make the full use of Lampson Reservoir site. In order to properly use this very important facility, the City decided to drill Well 31 into the deeper aquifer with very low expected nitrate levels, and equip it with an approximately 4000 gpm capacity pump, which will allow the utilization of the full capacity of Well 28, even with the highest nitrate concentrations that have been experienced.

A Preliminary Design Report (PDR) was prepared in May 2010 to lay out the road map for the improvements at the Lampson Reservoir Site. The PDR recommended replacing the Well 28 motor with an inverter duty motor, and replacing its solid state soft starter with a variable frequency drive. Because Well 31 will pump into the Lampson Reservoirs, and the groundwater levels are known to vary significantly in the area, the preliminary the PDR recommended that Well 31 be equipped with a variable frequency drive operated pump that can provide the desired flow under all expected conditions. Figure 1 shows a possible pump that can be used, along with the system curves utilizing the historical groundwater levels and expected drawdown. As is evident from this figure, the total dynamic head at the desired flow of 4000 gpm can vary from about 190 feet when the groundwater level is high, to 280 feet when the groundwater level is low. The impeller can be trimmed to bring it closer to the actual operating conditions, which will be determined following the step drawdown and constant rate pump tests are completed.

A new nitrate monitoring system with four sensors (Well 23/31 discharge pipe, Well 28 discharge pipe, blended groundwater downstream of the static mixer prior to entry into the reservoirs, and pump station discharge pump) was also recommended to control the operation of the wells and the pump station so that the nitrate concentration does not exceed 36 mg/l (80% of the MCL)

## Project Understanding/Project Approach

The Contract documents were developed for drilling of Well 31, modifications to Well 28, construction of the nitrate monitoring system, and controls/SCADA modifications so that Well 28 can be used efficiently along with Well 23, until Well 31 is completed. Well 31 is planned to discharge into the Well 23 discharge pipe, which is 14-inch in diameter. Because of the relatively small discharge pipe size, and the expected large capacity of Well 31, these two wells will not need to be operated simultaneously. Following equipping of Well 31, it is anticipated that the facility will operate with Well 31 and Well 28 primarily, and with Well 23 and 28 when needed.



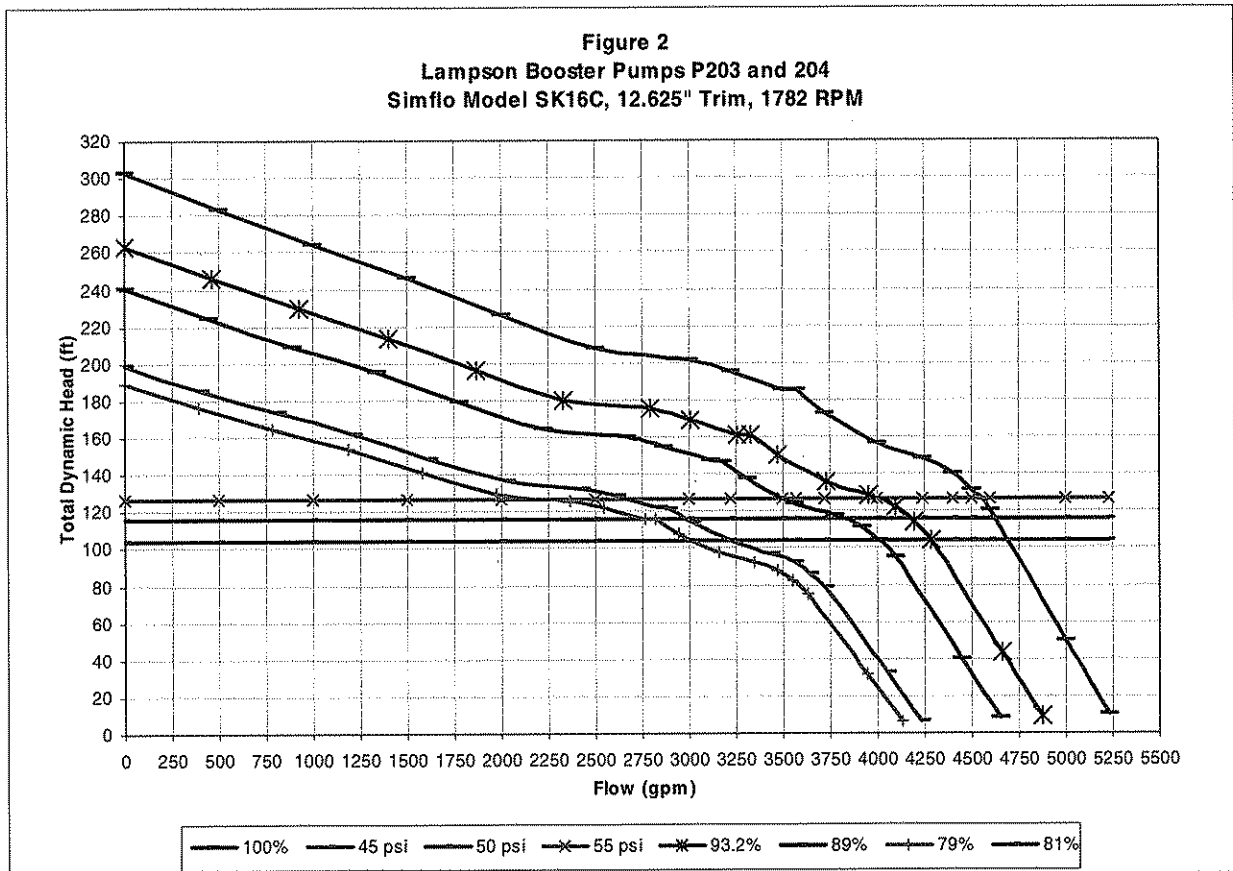
The project will start in August 2010, and will be completed by mid January 2011. At that time, Well 28 and Well 23 can be utilized to supply the system.

### Booster Pumping

Lampson Booster Pump Station takes suction from the two 4 mg reservoirs (overflow elevation of approximately 110 feet above mean sea level), and pumps into the closed East Zone. The pump station has two (2) 4000 gpm capacity natural gas engine driven pumps, two (2) 4000 gpm capacity constant speed pumps, and one 1000 gpm capacity jockey pump. The pressures in the discharge side of the pump station vary between 45 psi and 55 psi.

## Project Understanding/Project Approach

All four large pumps are Simflo SK16C pumps with 12.625 inch impellers. It is operationally difficult to utilize the constant speed pumps, as illustrated on Figure 2. This figure shows the pump curves at full speed and several reduced speeds, as well as the system pressures at 45 psi, 50 psi, and 55 psi. Each pump would deliver in excess of 4500 gpm, and if the demand decreased, part of the flow would be relived back into the reservoirs.



The pumps are oversized for the intended capacity. Additionally, at full speed and the pump manufacturer's information, the break horsepower is nearly 200. With 200 HP constant speed motors at approximately 95% efficiency, the motors may be operating into the service factor. To overcome the operational constraints and also to address the power requirements, the City desires to replace the existing starters (autotransformer and solid state soft start) with VFDs. We anticipate replacing the existing motors with inverter duty motors.

In order to deliver 4000 gpm, these pumps need not operate at greater than 93.2 percent of full speed even with a discharge pressure of 55 psi. The required horsepower would then be within acceptable levels for the existing motors, and also allow 200 HP VFD's to be used. It is pointed out that these pumps should not be operated at less than 81 percent of full speed as they will be in a flat part of the pump curve, resulting in erratic operations and thrust problems.

## ***Project Understanding/Project Approach***

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The existing MCC has 26-1/2 inch wide cabinet for Pump 204, and a 19 inch wide cabinet for Pump 203. The smallest 200 HP VFD (6 pulse with line reactor) available is 18.9 inches wide, and will not fit in the existing Pump 203 cabinet. It may be necessary to move the Pump 205 cabinet easterly, and provide a new, wider cabinet for Pump 203. Alternately, both of these cabinets may be replaced with new ones. In either case, the existing electrical equipment for Pump 205 will be used. We will review all the alternatives available, discuss them with the City staff, and recommend a system that will provide the desired service, and allow maintenance of the facility.

When VFD's are installed on these pumps, there will not be a need to maintain the existing ball valves and their numerous appurtenances. They should be replaced with lever and spring check valves. Due to the proximity of the check valves to the existing flow meters, it may be desirable to replace the propeller meters with magnetic flow meters, which do not require the same straight length of pipe up and downstream of the meters. Flow signals will then be sent to the control system not only to monitor flow and pump performance, but also to control the sodium hypochlorite injection into the discharge pipe based on total flow and possibly based on flow and chlorine concentration. We will discuss all the possibilities with City staff, and select the sodium hypochlorite injection system based on staff's input and desires. This will be documented in the Preliminary Design Report that will be updated as part of this project.

### **Lampson Reservoir Power Requirements**

The existing facility has a 2000 amp 480 volt service. The existing and proposed loads are illustrated on Figure 3. Assuming that a 400 HP motor will be required for Well 31, the total connected load will be 1730 amps, including Well 23. Adding 25% of the maximum load (477 amps for Well 31) would bring the total to 1850 amps, which is less than the existing service rating. Additionally, as mentioned earlier, the possibility or need to operate Well 23 simultaneously with Well 31 is very low. However, we will verify all the available information, interview staff, and provide recommendations on the electric service.

### **Update Preliminary Design Report**

The Preliminary Design Report will be updated to make it current with all the new information. Some of the work items that will be revised from the original PDR include the addition of a bypass soft start contactor to Well 31 VFD, automating discharge to waste cycle for the well that can be programmed on a time versus water quality, and making any revisions to the nitrate monitoring plan. We suggest adding a reporting section in the PDR, which will describe secondary sample collection, testing, and reporting plan to obtain approval from the California Department of Public Health.

PDR will document all hydraulic, electric, HVAC, and noise/insulation calculations. It will incorporate the final Well 31 capacity recommendations following the completion of the step drawdown and long term aquifer pumping tests.



## ***Project Understanding/Project Approach***

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### **Tree Removal**

The City desire to remove a large pine tree located in the south east corner of the Lampson Reservoir property, west of the pump station building, and south of the storage building. There is an existing 4-inch diameter sewer line in this vicinity that extends from the pump station building easterly, then northerly. Tree removal will be a relatively straightforward task. Garden Grove Sanitary District will CCTV inspect the sewer line to assess if there is any root damage. If the sewer line is damaged, GGSD staff will undertake the repair project.

### **PROJECT APPROACH**

The City of Garden Grove has developed a detailed scope of work for the project. We acknowledge the scope of work in its entirety. In this section, we will describe our approach to accomplishing these tasks.

#### **1. PROJECT MANAGEMENT**

This task is acknowledged in its entirety. Upon award of contract and refinement of the scope of work, we will update the schedule provided in our proposal, and utilize it as one of our project management tools. We will update it prior to all status review meetings. We will also prepare and submit monthly status reports, addressing each task.

We will meet with City as required by the project, but no less than once monthly during the design phase, and bi-weekly during the construction phase.

#### **2. UPDATE PRELIMINARY DESIGN REPORT**

This task will involve updating the existing Preliminary Design Report completed by AKM and Richard Slade & Associates in May 2010. The goal of this step will be to document all the project requirements, and criteria to guide the preparation of the final plans, specifications, and estimates, and to obtain approval of the nitrate blending plan from California Department of Public Health.

We will update all calculations based upon the final Well 31 design recommendations by Richard Slade & Associates for operation of Well 28 with Well 31, and Well 23. The nitrate blending plan will be updated based upon this information.

We have made a preliminary selection of one pump for Well 31, which will be finalized based on the step drawdown and long term aquifer testing results. We will update the well facility layout to determine the building footprint, discharge to waste (first flush) facilities and the yard facilities, as well as preliminary building elevations based upon information from Roll-Apart building supplier. We will review the sound attenuation requirements, as well as the ventilation needs for the electrical equipment and the motor. The layout will include the revisions to the electrical work, which will incorporate a solid state soft start bypass to the VFD for Well 31, as well as a programmable automated discharge to waste system. We will submit the layout along

## ***Project Understanding/Project Approach***

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with a summary report for review and comments by the City. We will address the comments and finalize the layout, which will form the basis of the subsequent well equipping design work.

We will document the work that will be done at the booster pump station in a separate section. This will address the hydraulic issues, which were described in Project Understanding, as well as replacement of the ball valves and flow meters. We will develop the desired facility layout in close coordination with the City. This work will also include the modifications to or replacement of the existing Pump 203 and 204 cabinets, and replacing the existing starters with VFD's. Included in this section will be the modifications to the NaOCl injection into the common discharge pipe. The injection pumps can be paced based total flow being pumped into the system, or a combination of flow and concentration. The second alternative will require a compound loop and adjust stroke as well. We will discuss the alternatives with City staff, and include the selected alternative in the PDR.

We will coordinate the SCADA work with Alice Choi.

As requested, we will submit copies of the draft PDR for review and comments. We address all comments and finalize the PDR.

### **3. FINAL CONSTRUCTION DOCUMENTS**

This task will involve preparing final plans, specifications, and estimates for all elements of the project. We will survey the north east corner of the site where Well 31 will be drilled, and utilize the existing Lampson Reservoir plans to develop the base sheets for Well 31 and discharge pipe connection to Well 23 discharge pipe. We will utilize the existing Lampson Reservoir plans for depicting the conduit that will be constructed from the existing MCC to the new well site. We propose to drill one boring near Well 31 to develop recommendations for building and well foundations, as well as trench shoring and backfill.

We estimate developing approximately 31 sheets of plans for the project, as listed below:

1. Title Sheet
2. General Notes, Symbols and Abbreviations
3. Site Grading and Paving, Yard Piping
4. Site Details and Sections, including Tree Removal
5. Discharge Pipe Plan, Profile, and Details
6. Well Drain Line Plan, Profile, and Details
7. Roll Apart Building Elevations
8. Foundation Plan and Details
9. Roll Apart Building Details
10. Well Mechanical Plan
11. Well Mechanical Sections
12. Well Head Details and Sections
13. Lampson Pump Station Removals
14. Lampson Pump Station Mechanical Plan



## ***Project Understanding/Project Approach***

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15. Lampson Pump Station Mechanical Sections
16. Sodium Hypochlorite Pumping and Injection System
17. Mechanical Details
18. Mechanical Details
19. Electrical Symbols and Abbreviations
20. Single Line Diagram and MCC Elevations
21. Electrical Site Plan
22. Conduit Plan and Lighting Plan
23. VFD Control Diagram Well 31
24. I/O to Existing PLC
25. VFD Control Diagram Pumps 203 and 204
26. Control Diagram for NaOCl injection System
27. Grounding Plan and Details
28. Electrical Details
29. Electrical Details
30. P&ID
31. P&ID

Plans will be submitted to the City at 60, 99, and 100 percent stages. We will address comments at each stage, and finalize the plans.

Technical specifications will fully describe the project materials, equipment, processes, and installation requirements. We will submit the specifications at 99 and 100 percent stages, addressing the City's comment at each stage. Specifications will describe the for SCADA reprogramming services that will be completed by Alice Choi.

With each plan submittal we will prepare construction cost estimates utilizing our in-house database of construction costs for our projects, and projects designed by others for our client agencies, as well as vendor quotes for equipment, and our senior staff's experience. Our recent estimates have been very close to the low bids.

### **4. BIDDING SERVICES**

Our scope of work for this task includes attending the pre-bid meeting, responding to contractor questions, preparing addenda, reviewing the bids for completeness and accuracy, and assisting the City with contract award.

### **5. CONSTRUCTION MANAGEMENT**

- **General** - The Project Engineer will be responsible for the management of all inspection services to be provided under the contract. Associate engineering staff and office support functions will be provided, as necessary, to assist the Project Engineer in this effort. All correspondence on the project will be routed through the Construction Manager for response or for routing to the appropriate

## ***Project Understanding/Project Approach***

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support staff or Agency personnel. The Construction Manager will be responsible for verifying all documents delivered to the City are appropriate and in conformance with the project's contract requirements.

- **Pre-Construction Meeting** - The Construction Manager will schedule a pre-construction meeting for the work. Invitees will include the City, Project Engineer, Fire and Police Department Representatives, Geotechnical Engineer, and any other affected parties. The purpose of the meeting will be to introduce project participants, review project procedures, and address any comments or concerns regarding the proposed work.
- **Schedule Review** - Contractor project schedules will be reviewed on a monthly basis by the Construction Manager. It will be the Construction Manager's duty to identify errors in the schedule, and anticipate upcoming construction issues. Project elements which may impact the local community will also be preemptively identified and addressed through a cooperative effort with the City.
- **Monthly Meetings with the City** - The Project Engineer and the Construction Manager will meet with the City on a monthly basis to present construction progress, review the upcoming construction schedule, discuss future work, and resolve outstanding issues related to the project.
- **Construction Meetings** - The Construction Manager will conduct a regularly scheduled construction progress meeting to define and review existing construction problems, and to coordinate project elements. In general, the meeting will address the following:
  - Work completed the previous week
  - Schedule of work elements to be completed in the next two weeks
  - Schedule review, as-built plan review
  - Future items requiring coordination
  - Submittal status
  - Materials and equipment delivered
  - Safety

The meeting will be conducted by the Construction Manager at the construction site, or other mutually agreed upon location. Minutes will be prepared and distributed to all meeting participants and interested parties. It is assumed that construction meetings will be held every 2 weeks throughout the entire project duration.

- **Construction Contract Administration**

- **Inspection Services** - AKM will provide full time inspection to ensure conformance of the constructed work with the contract documents and specifications, and to verify that the quality of work is equal to or better than industry standards. Duties of the Construction Manager/Inspector will include the following:

## ***Project Understanding/Project Approach***

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- ✓ Review of Initial and Updated Schedules
  - ✓ Monitor Construction Progress
  - ✓ Monitor Conformance with the Contract Documents
  - ✓ Prepare Daily Construction Reports and Photographs
  - ✓ Attend Construction Meetings
  - ✓ Review Progress Pay Estimate – Provide Recommendations for Payment
  - ✓ Review Contractor Construction Change Order Requests
  - ✓ Schedule Compaction and Material Testing
  - ✓ Prepare a Punch List and Follow it to Completion
  - ✓ Coordinate Project Start-Up
  - ✓ Schedule Special Inspections as required
  - ✓ Coordinate Water System Shutdowns with the City
  - ✓ Maintain As-Built Drawings for the Project – Verify Contractor As-Built Drawings
  - ✓ Prepare Project Close-Out Documents, including Project Final Report
- **Response to Requests for Information** - All requests for information will be forwarded to the Construction Manager. Response to issues pertaining solely to construction activities will generally be addressed by the Construction Management Team in consultation with the City. Issues pertaining to project design will be forwarded to the Project's Design Engineer for review and response.
  - **Sketches and Details** - Sketches and details which relate to minor field revisions will be prepared as determined appropriate to resolve construction issues. Those issues which are larger or more complex in nature will be forwarded to the Project Design Engineer for review and resolution.
  - **Change Orders** - Potential change orders will be brought to the immediate attention of the City by the Construction Manager. Change order proposals will be received by the Construction Manager, and will be reviewed for merit and reasonableness of cost. If determined to be appropriate, the change order will be forwarded to the City and Design Engineer for review and comment. Change orders approved by the City will be processed by the Construction Manager, with the appropriate direction provided to the Contractor. AKM will not authorize work by the Contractor without prior written approval by the City.
  - **Daily Inspection Reports** - Project inspector will maintain daily inspection reports of the construction activities. The reports will summarize; Contractor manpower and equipment on site; weather conditions; details of completed work; directives given to the Contractor; and all construction issues which may have been identified.

## ***Project Understanding/Project Approach***

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Daily reports will be submitted to the City every month, along with a written and photographic summary of the construction progress.

- **Photos and Details** - A photo log, with captions, will be maintained and provided to the City every two weeks, and at the completion of the project. Electronic files of the photos will also be furnished to the City.
- **Compliance Documents** - AKM will provide compliance documentation and support as required for all permits and by outside agencies.
- **Shop Drawing Review** - A list of required shop drawings will be prepared by the Construction Manager and furnished to the Contractor, City and Design Engineer for use during the project. All shop drawing submittals will be received by the Construction Manager, and reviewed for completeness and conformity with the contract requirements for shop drawing submittals.
- Shop drawings found to be incomplete will be immediately returned to the Contractor for corrections.
- Shop drawing submissions found to be acceptable will be forwarded to the Design Engineer for review.

Shop drawings reviewed will be returned to the Contractor with the required action noted. The Construction Manager will maintain a shop drawing log which will list all submittals, status, and required action. It will be the Construction Manager's responsibility to ensure timely submission of all required shop drawings by the Contractor, and prompt reviews by the Design Engineer. The Construction Manager will also make the City aware of any equipment substitutions, and will obtain concurrence from the City prior to approval. Two copies of all approved shop drawings and material tests will be forwarded to the City.

- **Materials Testing** – Compaction, concrete, and other testing services will be provided by the City's on-call consultant. Compaction testing will be ordered by the Construction Manager to verify that trench backfill, structure subgrade, pavement subgrade and pavement installation, meet the requirements of the contract documents. Concrete testing will be performed for all pours. Compressive strength and slump testing will be requested.
- **Start-Up Testing** - Prior to commencing start-up, the Project Engineer and Construction Manager will conduct an inspection of the facility and verify that all required work has been completed, calibrated, and pre-tested by the Contractor before conducting start-up testing of the facility. The project specifications will require the Contractor to submit the procedures for conducting start-up testing for review by the Project Engineer. The Construction Manager will also ensure that the Contractor has the required equipment and manufacturer support staff present during testing. The results of the start-up testing will be summarized in a report and furnished to the City.

## ***Project Understanding/Project Approach***

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Start-up testing will then be scheduled and conducted to ensure that all systems function as designed. Items requiring further corrective action will be determined, and AKM will oversee the completion of the corrective action and retesting, if necessary. A report will be prepared and submitted to the City summarizing the results.

- **Project Close-out** - Project close-out will consist of claim/stop notice resolution, final contract quantities and change orders, preparation of the Final Closeout Agreement and Release of Claims, and preparation of the Notice of Completion.

As part of this work, we will prepare the Amended Permit and submit it to the CDPH.

- **As-Built Drawing Preparation** - The project specifications will require that the Contractor maintain redline as constructed drawings daily. These will be reviewed every week by AKM. Up to date as-constructed redline drawings will be a requirement for progress payments. Concurrently, AKM inspection staff will maintain a set of as-constructed drawings as part of progress monitoring. We will review the Contractor and AKM redline drawings and use them for preparation of as-constructed and record drawings.
- **Summary of Well Construction Report** - At the completion of the project, we will prepare the Final Summary of Well Completion Report.

## **6. OPERATION AND MAINTENANCE MANUALS AND TRAINING**

### **○ Operation and Maintenance Manuals**

Requirements for preparation of the Operation and Maintenance Manuals will be included in the specifications. They will be provided for personnel training and maintenance of the equipment supplied under the Contract. These manuals will include:

- Introduction, with owner, address, contact information, and purpose
- Description of the facility, including all design parameters
- Approved Shop Drawings
- Safety
- Startup procedure
- Preventative and corrective maintenance procedures
- Emergency shut down procedures
- Cutaway views of equipment with parts list
- Reproductions of nameplates
- List of supplied and recommended spare parts list
- List of equipment suppliers and contact information for replacements, spare parts, and service, detailing the part number, cost, and normal availability of these parts

## ***Project Understanding/Project Approach***

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- Complete installation, operation, and maintenance instructions including troubleshooting guides, lubrication guides and or charts, equipment performance curves and performance test results
- Manufacturer's warranty and warranty claim information showing name, address, and telephone number of the manufacturer, local parts and service provider information of the source of replacement parts and service nearest to the project site will also be provided. This will include name, address, telephone number, business hours, and emergency after hours telephone numbers.

These manuals will be provided in 8-1/2" x 11 inch form with job specific marking, with larger prints provided in suitable protective covers.

The Operation and Maintenance Manuals will be prepared by the Contractor, and reviewed for completeness and accuracy by AKM. Operation and Maintenance Manual acceptance will be a condition for final payment and release of retention.

### **○ Training**

AKM will prepare training procedures and submit it to the City for review and comments. They will then be finalized, and included in the specifications. It will be updated at the completion of the project, incorporating and additional requirements determined to be desirable during the construction.

We will then prepare an agenda for training, and ascertain that operation and maintenance training is provided to each shift identified by the City.

**EXHIBIT B**

**SCHEDULE OF PAYMENT**

**FEE PROPOSAL**  
**Engineering Consulting Services for Equipping of Garden Grove Well No. 31**

Task	Project Manager	Project Engineer	Senior Engineer	Associate Engineer	CADD	Clerical	Construction Manager	Total Hours	Labor Cost	Sub Consultant	Expenses	Total Cost
<b>1 PROJECT MANAGEMENT</b>												
A Project Schedule and Status Reports		24				12		36	\$4,752			\$4,752
B Meetings	20	20				12		52	\$7,692			\$7,692
C Deliverables								0	\$0			\$0
<b>Subtotal Hours</b>								<b>88</b>	<b>\$12,444</b>		<b>\$300</b>	<b>\$12,744</b>
<b>Cost Task 1</b>	<b>3600</b>	<b>7260</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1584</b>	<b>0</b>					
<b>2 UPDATE PRELIMINARY DESIGN REPORT</b>												
A Data Collection		8						16	\$2,520		\$300	\$2,820
Surveying		4						4	\$660	\$4,000		\$4,660
Geotechnical Investigation		4						4	\$660	\$7,700		\$8,360
Interview Staff	8	8						20	\$3,360			\$3,360
B Well 31 Equipping	4	16						28	\$4,300			\$4,300
Evaluate Electrical Requirements	4	4						16	\$2,320			\$2,320
Booster Pump 203 and 204 Improvements	4	8						28	\$3,660			\$3,660
Replace Ball Valves with Check Valves	4	4						4	\$340			\$340
NaOCl Injection Modifications	4	4						8	\$1,380			\$1,380
SCADA Improvements	4	4						8	\$1,260			\$1,260
Remove Tree and Site Improvements	4	4						4	\$660			\$660
C Deliverables		8						16	\$1,924		\$700	\$2,624
<b>Subtotal Hours</b>	<b>24</b>	<b>72</b>	<b>28</b>	<b>0</b>	<b>28</b>	<b>4</b>	<b>0</b>	<b>156</b>	<b>\$23,044</b>	<b>\$11,700</b>	<b>\$1,000</b>	<b>\$35,480</b>
<b>Cost Task 2</b>	<b>\$4,320</b>	<b>\$11,880</b>	<b>\$4,200</b>	<b>\$0</b>	<b>\$2,380</b>							
<b>3 FINAL CONSTRUCTION DOCUMENTS</b>												
A Plans (60%, 99%, 100%)	36	216	108	288	540	32		1188	\$137,340			\$137,340
Specifications	8	32	8			4		80	\$10,032			\$10,032
B Deliverables		4						4	\$1,324		\$2,000	\$3,324
Estimates	2	4	8					22	\$3,140			\$3,140
<b>Subtotal Hours</b>	<b>46</b>	<b>256</b>	<b>124</b>	<b>296</b>	<b>540</b>	<b>36</b>	<b>4</b>	<b>1302</b>	<b>\$151,936</b>		<b>\$2,000</b>	<b>\$153,936</b>
<b>Cost Task 3</b>	<b>\$8,280</b>	<b>\$42,240</b>	<b>\$18,600</b>	<b>\$34,040</b>	<b>\$45,900</b>	<b>\$2,376</b>	<b>\$400</b>					
<b>4 BIDDING SERVICES</b>												
Bidding Services		8				8		16	\$1,848			\$1,848
Contract Award		8						8	\$1,320			\$1,320
<b>Subtotal Hours</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>24</b>				<b>\$3,168</b>
<b>Cost Task 4</b>	<b>\$0</b>	<b>\$2,640</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$528</b>	<b>\$0</b>					
<b>5 CONSTRUCTION MANAGEMENT</b>												
A Construction Management and Inspection		60	24			4		1124	\$117,500		\$2,600	\$120,100
Pre-Construction Meeting		4						4	\$1,324			\$1,324
Construction Progress Meetings	8	40						24	\$10,440			\$10,440
Respond to RFIs		32						56	\$7,680			\$7,680
Respond to Change Order Requests		24						24	\$6,360			\$6,360
Project Start-up		8	8					12	\$3,720			\$3,720
Project Close-out		8						24	\$3,720			\$3,720
B Deliverables								0	\$0			\$0
Shop Drawings		40	24	100				164	\$21,700		\$1,000	\$22,700
Daily Reports, Digital Photos		16						16	\$1,600		\$1,000	\$2,600
Final Summary of Well Construction Report		16						24	\$5,040			\$5,040
As-constructed Drawings				8	40			48	\$4,320		\$1,000	\$5,320
<b>Subtotal Hours</b>	<b>8</b>	<b>232</b>	<b>56</b>	<b>108</b>	<b>40</b>	<b>4</b>	<b>1192</b>	<b>1640</b>			<b>\$5,600</b>	<b>\$183,404</b>
<b>Cost Task 5</b>	<b>\$1,440</b>	<b>\$39,280</b>	<b>\$8,400</b>	<b>\$12,420</b>	<b>\$3,400</b>	<b>\$264</b>	<b>\$119,200</b>					
<b>6 O&amp;M MANUAL TRAINING</b>												
A O&M Manuals		8	8			4		44	\$5,184			\$5,184
B Training		8						12	\$2,520			\$2,520
C Warranty Period Services		12						12	\$1,980			\$1,980
<b>Subtotal Hours</b>	<b>0</b>	<b>28</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>36</b>	<b>76</b>				<b>\$9,684</b>
<b>Cost Task 6</b>	<b>\$0</b>	<b>\$4,620</b>	<b>\$1,200</b>	<b>\$0</b>	<b>\$0</b>	<b>\$264</b>	<b>\$3,600</b>					
<b>TOTAL</b>												<b>\$399,316</b>
Hourly Rates	\$180	\$165	\$150	\$175	\$85	\$66	\$100					



**AKM CONSULTING ENGINEERS  
HOURLY FEE SCHEDULE  
January 2010**

<u>Labor Classification</u>	<u>Hourly Rate</u>
1. Principal	\$198.00
2. Principal Engineer	\$189.00
3. Project Manager	\$180.00
4. Associate	\$170.00
5. Project Engineer	\$165.00
6. Senior Engineer	\$150.00
7. Associate Engineer	\$115.00
8. Financial Analyst	\$95.00
9. Construction Manager	\$100.00
10. Inspector	\$90.00
11. Assistant Engineer	\$87.00
12. Senior Designer/Senior CADD Technician	\$90.00
13. Designer/CADD Technician	\$85.00
14. Engineering Technician	\$80.00
15. Engineering Aide	\$55.00
16. Data or Word Processing	\$66.00
17. Office Support	\$60.00

Out of pocket expenses (blueprinting, reproduction and printing, delivery, etc.) will be invoiced at cost plus 12%. Subcontracted services will be marked up 12% in order to cover costs associated with administration, coordination and management of subcontractors. Mileage will be invoiced at \$0.50/mile. This schedule of rates is in effect until June 30, 2011, at which time it may be adjusted.

# PROPOSAL EVALUATION FORM

ATTACHMENT 2

Consultant AKM CONSULTING ENGINEERS Date 7/22/10  
 (Engineering Services)  
 Project Well No. 31 Project#                     

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
<b>INTRODUCTION (Proposal)</b> o Comprehension of the RFP	2.0	8	16	PROGRESS MTG FREQUENCY DIFF. THAN RFP VALVE LANGUAGE ON JOLLEY PUMP VALVE TITLES USED IN DESC VS. PROB TEAM
<b>QUALIFICATIONS (Proposal)</b> A. Experience of the firm and subcontractors on similar projects	1.5	9	13.5	HAVE COMPLETED 15 WELLS A VERY COMPLEX NITRATE BLENDING PLANT SEVERAL YEARS OF RELATED EXPERIENCE COMPANY IS KNOWN FOR ITS PRINCIPALS BEING HANDS ON.
B. Qualifications & Experience of Personnel	2.0	9	18	
<b>WORK PLAN (Proposal)</b> o Knowledge of project	2.0	9	18	PROPOSAL WAS WELL PRESENTED & INNOVATIVE. VARIED OVERALL PWR REQUIREMENTS DON'T NEED TO BE INCREASED W/ SINGLE LINE DIAGRAM AND SHOWED PUMP REQUIREMENTS W/ PUMP CURVES, HOURS FIT BETTER THAN PSOMAS  *
o Knowledge of existing conditions & how it may affect the project	2.0	9	18	
o Initiative & Creativity	1.5	9	13.5	
o Hours req'd vs. coverage of work	1.5	8	12	
o Availability of team members	1.0	10	10	
o Quality Assurance & Supervision	2.0	8	16	
<b>SCHEDULE (Proposal)</b> o Timeliness to target dates in the Scope of Work	1.0	10	10	SCH MATCHES REQUIREMENTS & GREAT REFERENCES INSTILL CONFIDENCE THAT IT WILL BE KEPT.
<b>REFERENCES</b> o The firm's past record of performance on similar projects	2.0	10	20	NO EXTRAS ASKED FOR UNLESS CLIENT(S) CHANGE SCOPE. VERY GOOD QUALITY OF DESIGN & CONST MGMT.
<b>A. TOTAL (Proposal)</b>			165	

\* SEE ATTACHED COMMENTS

Signature David E. Entin

# PROPOSAL EVALUATION FORM

Consultant PSOMAS  
 (Engineering Services)  
 Project Well No. 31 Project# 7393

Date 7/22/10

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
<b>INTRODUCTION (Proposal)</b> o Comprehension of the RFP	2.0	9	18	MIXED UP WELLS 23 w/ HIGH NITRATES
<b>QUALIFICATIONS (Proposal)</b> A. Experience of the firm and subcontractors on similar projects	1.5	8	12	EXTENSIVE EXPERIENCE FOR SEVERAL TYPES OF WATER PROJECTS, HOWEVER, NOT EXTENSIVE FOR WELL EQUIPPING & NITRATE BLENDING PROJECTS. DOES NOT COMPARE FAVORABLE TO AKM'S SCOPE OF WORK RELATED EXPERIENCE.
B. Qualifications & Experience of Personnel	2.0	8	16	
<b>WORK PLAN (Proposal)</b> o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision	2.0 2.0 1.5 1.5 1.0 2.0	9 8 8 7 8 8	18 16 12 10.5 8 16	PROPOSAL WAS WELL WRITTEN GOT SOME THINGS TO BE ON THE LOOKOUT FOR DURING DESIGN, HRS & NO. OF DRAWINGS ARE TOO FEW FOR THIS PROJECT, WE EXPERIENCED A SIMILAR SITUATION W/ PSOMAS ON OUR CHLORINE CONVERSION PROJECT, *
<b>SCHEDULE (Proposal)</b> o Timeliness to target dates in the Scope of Work	1.0	9	9	SCHEDULE MATCHES RFP REQUIREMENTS MAY HAVE PROBLEM W/ HOURS THAT COULD IMPACT SCHEDULE
<b>REFERENCES</b> o The firm's past record of performance on similar projects	2.0	6	12	OUTSIDE REFERENCES WERE NOT AS ENTHUSIASTIC AS THEY WERE W/ AKM  CHLORINE CONVERSION PROJECT FOR US WAS NOT WELL HANDLED BY PSOMAS, THEY BUDGETED TO FEW HOURS W/ CONST. MGMT & DIDN'T AS THE HOURS THEY HAD WISEL
<b>A. TOTAL (Proposal)</b>			147.5	LEFT US WITH PARTIAL \$/OR NO INSPECTION AT END OF PROJECT WHEN WE REFUSED TO PAY EXTRAS

\* SEE ATTACHED COMMENTS

Signature David E. Estanberry

Well 31 Equipping – Consultant Evaluation

July 22, 2010

Added commentary – Psomas and AKM Consulting Engineers

Under the Work Plan Section, I required additional space to add in comments to the above referenced engineering firms proposals.

As background, six firms were invited to propose on the well equipping design work. AKM and Psomas were the only respondents. Their proposals were due on June 30<sup>th</sup> and evaluated by a panel of four. The initial proposals were closely matched except in a few areas that are explained in the proposal evaluation forms. There were some questions that the panel had of the initial proposals and therefore an unplanned interview was conducted with both firms to address these questions. The consultants were both given an opportunity to submit revised proposals due at the close of business on July 21<sup>st</sup>.

The questions posed to the consultants mainly focused on the drawings and hours of work proposed to complete the project. The panel was also concerned with the way the Chlorine Conversion project was conducted by Psomas during the construction management phase. Several hours had been exhausted unnecessarily at the beginning of the construction work and staff had the choice to extend Psomas's budget or finish the work themselves.

### **PSOMAS**

Psomas initially proposed to have 32 drawings that were vaguely described (the panel did not know what the City was getting or if extras dollars would be asked for to complete the set later in design). The panel asked Psomas for clarification on the drawings. In the revised proposal, Psomas increased the number of drawings to 35 and added descriptions. The panel was also concerned over the disparity of hours committed by both firms. Psomas initially committed to 3,005 work hours including 155 working days for construction management. Their revised proposal accounts for 3,446 work hours including 165 working days for construction management. Their overall hours include Southern California Edison upgrades if required.

### **AKM**

AKM initially proposed to have 40 drawings that were adequately described. The panel asked AKM if all the drawings were necessary and what if any could be combined for better efficiency and use of the budget. Their revised proposal eliminated drawings and combined others to have a total of 31 drawings. AKM's initial proposal had 4,210 hours committed with an overall commitment of 180 working days for construction management. Their revised proposal accounts for 3,370 work hours including 180 working days for construction management. It is noted that AKM has stated that no Southern California Edison upgrades will be necessary and if for some reason services are determined to be required that these services would be free of charge. Psomas has budgeted hours for this contingency in their revised hours.

### **SUMMARY**

Hours and drawings are very closely matched from two very professional firms. AKM's project team experience is more favorable than that of Psomas due to having much greater experience with well equipping and nitrate blending. It is also to noted that AKM teamed with Richard C. Slade (prime consultant) during the drilling design phase and will be able to devote less time on the preliminary design report and more time and dollars towards the final engineering out of their budget whereas Psomas has devoted more of their budget towards the Preliminary design report and less time on the final engineering.

## PROPOSAL EVALUATION FORM

Consultant AKM Date 7-22-2010  
 (Engineering Services)  
 Project Well No. 31 Project# \_\_\_\_\_

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
<b>INTRODUCTION (Proposal)</b> o Comprehension of the RFP	2.0	9.5	19	In detail RFP Was Complete
<b>QUALIFICATIONS (Proposal)</b> A. Experience of the firm and subcontractors on similar projects  B. Qualifications & Experience of Personnel	1.5  2.0	9  9	13.5  18	AKM - And sub have completed projects on Time.  AKM has years of expertise in the waterfield.
<b>WORK PLAN (Proposal)</b> o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision	2.0 2.0 1.5 1.5 1.0 2.0	9 9 9 9 9 9	18 18 13.5 13.5 9 18	AKM has expertise in Nitrate Blending.  AKM is familiar with our system
<b>SCHEDULE (Proposal)</b> o Timeliness to target dates in the Scope of Work	1.0	10	10	There timeline for completion is right on.
<b>REFERENCES</b> o The firm's past record of performance on similar projects	2.0	10	20	AKM References from other agencies were outstanding.
<b>A. TOTAL (Proposal)</b>			170.5	

Signature 

## PROPOSAL EVALUATION FORM

Consultant PSOMAS Date 7-22-2010  
 (Engineering Services)  
 Project Well No. 31 Project# 7393

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
<b>INTRODUCTION</b> (Proposal) <ul style="list-style-type: none"> <li>o Comprehension of the RFP</li> </ul>	2.0	8	18	Water wells were identify wrong 23-28
<b>QUALIFICATIONS</b> (Proposal) <ul style="list-style-type: none"> <li>A. Experience of the firm and subcontractors on similar projects</li> <li>B. Qualifications &amp; Experience of Personnel</li> </ul>	1.5	8	12	Extensive well experience limited Nitrate Blending
	2.0	8	16	
<b>WORK PLAN</b> (Proposal) <ul style="list-style-type: none"> <li>o Knowledge of project</li> <li>o Knowledge of existing conditions &amp; how it may affect the project</li> <li>o Initiative &amp; Creativity</li> <li>o Hours req'd vs. coverage of work</li> <li>o Availability of team members</li> <li>o Quality Assurance &amp; Supervision</li> </ul>	2.0	9	18	Covered all areas of RFP
	2.0	9	18	
	1.5	9	13.5	
	1.5	8	12.0	
	1.0	9	9	
	2.0	8	16	
<b>SCHEDULE</b> (Proposal) <ul style="list-style-type: none"> <li>o Timeliness to target dates in the Scope of Work</li> </ul>	1.0	10	10	Meets RFP Requirements
<b>REFERENCES</b> <ul style="list-style-type: none"> <li>o The firm's past record of performance on similar projects</li> </ul>	2.0	7	14	C&Z Projects were not all completed
<b>A. TOTAL</b> (Proposal)			156.5	

Signature Z. Baird

## PROPOSAL EVALUATION FORM

Consultant AKM Date 7-22-10  
 (Engineering Services)  
 Project Well No. 31 Project# 7393

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
<b>INTRODUCTION</b> (Proposal) <ul style="list-style-type: none"> <li>o Comprehension of the RFP</li> </ul>	2.0	8	16	Followed the RFP
<b>QUALIFICATIONS</b> (Proposal) <ul style="list-style-type: none"> <li>A. Experience of the firm and subcontractors on similar projects</li> <li>B. Qualifications &amp; Experience of Personnel</li> </ul>	1.5	8	12	Project related experience, better than Psmas
	2.0	8	16	
<b>WORK PLAN</b> (Proposal) <ul style="list-style-type: none"> <li>o Knowledge of project</li> <li>o Knowledge of existing conditions &amp; how it may affect the project</li> <li>o Initiative &amp; Creativity</li> <li>o Hours req'd vs. coverage of work</li> <li>o Availability of team members</li> <li>o Quality Assurance &amp; Supervision</li> </ul>	2.0	8	16	AKM had a good Proposal. Hours looked ok.
	2.0	8	16	
	1.5	8	12	
	1.5	7	10.5	
	1.0	7	7	
	2.0	7	14	
<b>SCHEDULE</b> (Proposal) <ul style="list-style-type: none"> <li>o Timeliness to target dates in the Scope of Work</li> </ul>	1.0	8	8	Schedule matches RFP.
<b>REFERENCES</b> <ul style="list-style-type: none"> <li>o The firm's past record of performance on similar projects</li> </ul>	2.0	7	14	Did ak with Drilling design part of this Project
<b>A. TOTAL</b> (Proposal)			141.5	

Signature Chris Vener

# PROPOSAL EVALUATION FORM

Consultant Psomas Date 7-22-10  
 (Engineering Services)  
 Project Well No. 31 Project# 7393

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
<b>INTRODUCTION</b> (Proposal) o Comprehension of the RFP	2.0	8	16	Followed the RFP
<b>QUALIFICATIONS</b> (Proposal) A. Experience of the firm and subcontractors on similar projects	1.5	7	10.5	Experience not as good as that of AKM
B. Qualifications & Experience of Personnel	2.0	7	14	
<b>WORK PLAN</b> (Proposal) o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision	2.0 2.0 1.5 1.5 1.0 2.0	7 7 6 5 5 5	14 14 9 7.5 5 10	Psomas underperformed with construction management during the Chlorine Conversion Project.
<b>SCHEDULE</b> (Proposal) o Timeliness to target dates in the Scope of Work	1.0	8	8	Schedule matches RFP, but have confidence issues with past underperformance
<b>REFERENCES</b> o The firm's past record of performance on similar projects	2.0	6	12	Poor management of their hours on our Chlorine Conversion project left us without inspection at the end of this project.
<b>A. TOTAL</b> (Proposal)			120	

Signature Chris Veres



## PROPOSAL EVALUATION FORM

Consultant AKM Date 7-22-10  
 (Engineering Services)  
 Project Well No. 31 Project# \_\_\_\_\_

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
<b>INTRODUCTION (Proposal)</b> o Comprehension of the RFP	2.0	9	18	Covered all sections in the RFP
<b>QUALIFICATIONS (Proposal)</b> A. Experience of the firm and subcontractors on similar projects	1.5	9	13.5	Proposal listed 5 well construction & equipping projects
B. Qualifications & Experience of Personnel	2.0	9	18	
<b>WORK PLAN (Proposal)</b> o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision	2.0 2.0 1.5 1.5 1.0 2.0	9 9 8 9 9 8	18 18 12 13.5 9 16	Proposal was thoroughly covered all aspects of the RFP
<b>SCHEDULE (Proposal)</b> o Timeliness to target dates in the Scope of Work	1.0	9	9	
<b>REFERENCES</b> o The firm's past record of performance on similar projects	2.0	9	18	City of Justin well project received an award from APWA
<b>A. TOTAL (Proposal)</b>			163	

Signature 

# PROPOSAL EVALUATION FORM

Consultant PSOMAS Date 7-22-10  
 (Engineering Services)  
 Project Well No. 31 Project# \_\_\_\_\_

CRITERION	(a) Weight	(b) Score (0-10)	(a) x (b) Weighted Score	comments
<b>INTRODUCTION</b> (Proposal) o Comprehension of the RFP	2.0	8	16	Proposal labeled well 23 instead of well 28 as having high nitrate levels
<b>QUALIFICATIONS</b> (Proposal) A. Experience of the firm and subcontractors on similar projects	1.5	9	13.5	Resident engineer lacks well construction on resume
B. Qualifications & Experience of Personnel	2.0	8	16	
<b>WORK PLAN</b> (Proposal) o Knowledge of project o Knowledge of existing conditions & how it may affect the project o Initiative & Creativity o Hours req'd vs. coverage of work o Availability of team members o Quality Assurance & Supervision	2.0 2.0 1.5 1.5 1.0 2.0	8 9 9 9 9 8	16 18 13.5 13.5 9 16	Proposal covered all areas of RFP.
<b>SCHEDULE</b> (Proposal) o Timeliness to target dates in the Scope of Work	1.0	9	9	
<b>REFERENCES</b> o The firm's past record of performance on similar projects	2.0	8	16	Construction sources for CL2 project were lacking as project came to completion
<b>A. TOTAL</b> (Proposal)			156.5	

Signature 