

STAFF REPORT



ITEM NO. 8
CITY OF OCEANSIDE

DATE: March 4, 2009

TO: Honorable Mayor and City Councilmembers

FROM: Development Services Department

SUBJECT: APPROVAL OF AMENDMENT 3 IN THE AMOUNT OF \$55,050 TO THE PROFESSIONAL SERVICES AGREEMENT WITH RICK ENGINEERING COMPANY FOR FINAL PLANS AND SPECIFICATIONS FOR THE LOMA ALTA CREEK DETENTION BASIN AT EL CAMINO REAL AND AUTHORIZATION FOR THE CITY MANAGER TO EXECUTE THE AMENDMENT

SYNOPSIS

Staff recommends that the City Council approve Amendment 3 in the amount of \$55,050 to the professional services agreement with Rick Engineering Company for final plans and specifications for the Loma Alta Creek Detention Basin at El Camino Real for additional survey, hydrology, and coordination due to the construction of the Sprinter Rail line; and authorize the City Manager to execute the amendment.

BACKGROUND

The Loma Alta Creek Detention Basin, which will be east of El Camino Real and south of Oceanside Boulevard, is one of three basins planned to alleviate downstream flooding along Loma Alta Creek. Completion of all three basins will remove the flood insurance requirements from many residences downstream.

The first basin, along Garrison Creek at the southeast corner of Mesa Drive and Oceanside Boulevard, was completed in February 2006. Portions of the two detention basins at El Camino Real and Rancho del Oro Drive parallel to the Sprinter Rail were completed in April 2006. During the design process, it was determined that due to the construction of the Sprinter Rail, it would be best for the City of Oceanside to pay North County Transit District (NCTD) to construct those portions of the detention basin walls that are parallel to the Sprinter Rail. At a later date, the City of Oceanside would complete the remaining basin walls.

ANALYSIS

Rick Engineering Company, in conjunction with its sub-consultant Simon Wong Engineering, is very familiar with the needs and constraints of this project.

They have prepared all of the hydraulics plans and calculations for the Loma Alta Creek, both with and without the basins, and have successfully obtained approval from FEMA for the detention basin concept. Rick Engineering Company and Simon Wong Engineering also designed the Garrison Creek detention basin, and they are the NCTD consultants for design of the retaining walls along the Sprinter Rail project. Rick Engineering was the only firm that submitted a proposal.

- The original Professional Services Agreement (Exhibit A) in the amount of \$116,100 was approved by the Council on March 3, 2004.
- Amendment 1 (Exhibit B) in the amount of \$10,000 was approved administratively in May 2006 for additional geotechnical data needed for the design of the walls.
- Amendment 2 (Exhibit C) in the amount of \$30,600 was approved by Council on July 12, 2006, to cover costs to design additional retaining walls at the Superior Ready Mix site, re-design a box culvert and re-design a portion of the detention basin wall due to right-of-way restrictions.
- Proposed Amendment 3 (Exhibit D) in the amount of \$55,050 will be to cover costs for additional survey, hydrology, structure redesign of culvert, and coordination due to the construction of the Sprinter Rail. The final design plans are anticipated to be completed in March 2009 and this project is scheduled to begin construction in October 2009. This amendment would bring the total contract amount to \$211,750.

FISCAL IMPACT

This amendment would bring the total contract amount to \$211,750. The current balance in the FY 2008-09 Capital Improvement Program for the Loma Alta Creek Detention Basin at El Camino Real (520.817451) has an approximate balance of \$2.9 million. Sufficient funds are available for this project.

INSURANCE REQUIREMENTS

The City's standard insurance requirements have been met and are currently in effect.

COMMISSION OR COMMITTEE REPORT

The Drainage Subcommittee of the Utilities Commission has been advised of the detention basin, most recently on January 13, 2004, and Amendment 3 does not affect the original approved design.

CITY ATTORNEY'S ANALYSIS

The referenced documents have been reviewed by the City Attorney and approved as to form.

RECOMMENDATION

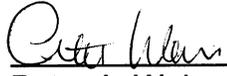
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PREPARED BY:



Abraham Chen
Associate Engineer

SUBMITTED BY:



Peter A. Weiss
City Manager

REVIEWED BY:

Michelle Skaggs Lawrence, Deputy City Manager

George Buell, Development Services Director

Scott Smith, City Engineer

Teri Ferro, Financial Services Director









Attachments:

- Exhibit A PSA March 3, 2004
- Exhibit B Amendment 1
- Exhibit C Amendment 2
- Exhibit D Amendment 3

CITY OF OCEANSIDE

PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is made and entered into this 3rd day of March, 2004, by and between the CITY OF OCEANSIDE, a municipal corporation, hereinafter designated as "CITY", and RICK ENGINEERING COMPANY, hereinafter designated as "CONSULTANT".

RECITALS

- A. CITY desires to obtain professional engineering services from an independent contractor for the above named project.
- B. CONSULTANT has submitted a proposal to provide engineering services for the CITY in accordance with the terms set forth in this Agreement.
- C. CITY desires to contract with CONSULTANT as an independent contractor and CONSULTANT desires to provide services to CITY as an independent contractor.
- D. CONSULTANT has demonstrated its competence and professional qualifications necessary for the satisfactory performance of the services designated herein by virtue of its experience, training, education and expertise.

NOW, THEREFORE, THE PARTIES MUTUALLY AGREE AS FOLLOWS:**1.0 SCOPE OF WORK.** The project is more particularly described as follows:

- A. El Camino Real and Garrison Creek Detention Basins
The Garrison Creek Detention Basin plans will be unchanged, but will be reformatted into the overall plan set (i.e., sheet numbers, cross-referencing, reformatting title and detail sheets, etc.).
- B. Water Resources Engineering
 - 1. CONSULTANT will update the detention volumes and the HEC-1 detention analyses to reflect the finalized wall locations (anticipated to be constructed by NCTD) with the NCTD right-of-way, as well as the finalized wall locations proposed by the detention basin projects to determine the 10-, 50-, 100-, and 500-year discharges, detention volumes, and ponded water surface elevations for each of the detention basins. The proposed wall adjacent to the Superior Ready Mix property does not directly impact the detention volumes within the El Camino Real detention basin.

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2. CONSULTANT will update the HEC-2 analysis of Loma Alta Creek from approximately cross section 108 to cross-section 169 (included in the existing CLOMR) to reflect the construction of the NCTD Sprinter Rail Project as well as the construction of the detention facilities and the wall adjacent to the Superior Ready Mix property. The updated HEC-2 will be needed to finalize the required wall elevations and water surface elevations.

C. Design Surveys

CONSULTANT will conduct design surveys in the areas of the proposed detention basin walls. These surveys will validate the existing aerial topography so that footings for the proposed detention basin wall can be designed. Included in this scope will be one day of surveying for any required potholing and locating of existing utilities.

D. Final Engineering

1. CONSULTANT will prepare and process through the City of Oceanside, 1"=40' grading, wall and erosion control plans for the construction of the El Camino Real and Garrison Creek detention basins as one set of plans. These plans will include inlet/outlet works hydraulic design, storm drain relocation and grading design at the basin walls where required. The proposed grading as shown on the preliminary set of plans will be the basis for design.
2. Simon Wong Engineering will prepare the retaining wall plan and profiles for structural calculations for the proposed detention basin walls. The walls will be concrete and masonry block design. Culvert transition structural calculations and details will be prepared for both basins.
3. CONSULTANT will prepare and include traffic control plans for the wall construction and storm drain relocations in the plan set.
4. CONSULTANT will prepare project specifications and opinion of probable cost estimates. The Green Book will be the basis of the specifications. The City will prepare the bid documents incorporating the estimate into the document and adding the technical specifications provisions into the City's Special Provisions section.
5. CONSULTANT will prepare hydraulic and hydrologic calculations for inlet/outlet works, rip rap design, and weir openings based upon the available hydrology information.
6. SWPPPs and SWSAS
 - a. CONSULTANT will prepare SWPPP and SWSAS for the project along with a Notice of Intent (NOI) to utilize the general storm

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water discharge permit. These will be prepared in accordance with the National Water Quality Control Board System (NPDES) and the Regional Water Quality Control Board regulations.

- b. The SWSAS will identify sampling locations and requirements. This scope does not include collection and analysis of storm water samples.

E. Meetings and Coordination

1. The City of Oceanside processing is assumed to be 24 hours on a time-and-materials basis. All materials will be delivered to the City for disbursement to the appropriate plan checkers. Materials to be delivered will include one (1) reproducible plan set, one (1) set of specifications (hardcopy and on disk), and three (3) sets of any calculations.
2. CONSULTANT will attend team and coordination meetings with project consultants on an as-needed basis. The estimate for this task is assumed to be 24 hours on a time-and-materials basis.
3. CONSULTANT will attend project management and coordination meetings with project consultants on an as-needed basis. The estimate for this task is assumed to be 24 hours on a time-and-materials basis.

F. As-Built Preparation

CONSULTANT will prepare and process as-built drawings with the City of Oceanside. As the complexity of the as-built drawings has not been established, 40 hours are included on a time-and-materials basis.

G. Bid Support

CONSULTANT will provide bid support services. This will include addressing RFI's (Requests for Information) and general City support. This task is estimated to be 50 hours on a time-and-materials basis.

H. Construction Support

CONSULTANT will provide construction support services such as consultation services, review of construction shop drawings and review of contractor change orders. This task is estimated to be 50 hours on a time-and-materials basis.

- 1.1 **PROFESSIONAL SERVICES PROVIDED BY CONSULTANT.** The professional services to be performed by CONSULTANT shall consist of, but not be limited to, the following:

- 1.1.1 Work closely with the City Engineer in performing work in accordance with this Agreement in order to receive clarification as to the result which the CITY expects to be accomplished by CONSULTANT. The City Engineer, under the authority of the City

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Manager, shall be the CITY'S authorized representative in the interpretation and enforcement of all work performed in connection with this Agreement. The City Engineer may delegate authority in connection with this Agreement to the City Engineer's designees. For the purposes of directing the CONSULTANT'S performance in accordance with this Agreement, the City Engineer delegates authority to Jeanette Peck, Senior Civil Engineer.

- 1.1.2 In compliance with Government Code Section 7550, the CONSULTANT shall include a separate section in the proposal prepared pursuant to this Agreement, which contains a list of all the subcontractors and dollar amounts of all contracts and subcontracts required for the preparation of work described in this Agreement.
- 1.1.3 Visit and carefully examine the location of the project as often as necessary to become acquainted with all conditions which are visible or could reasonably be discovered, and which might have an impact upon the construction of the project.
- 1.1.4 Design, prepare and submit to the City Engineer, plans and specifications for the construction of the project as described in the Scope of Work, and in the time and manner set forth in this Agreement.
- 1.1.5 Prepare and submit to the City Engineer, concurrently with the design plans, the following:
 - a. A written estimate of probable construction costs.
 - b. A written list of submittals, which the construction contractor will be required to provide during the construction phase of the project.
- 1.1.6 Upon completion of construction, prepare, approve and sign a set of As-Built record drawings.
- 1.1.7 Provide office and field assistance to the City during the bidding and construction periods upon request by City Engineer to include the services listed below:
 - a. Provide consultation and advice to the City during construction of the project.
 - b. Review and comment on detailed construction drawings, shop and erection drawings submitted by the contractor, subcontractors and suppliers for compliance with the construction contract documents.
 - c. Review and comment on laboratory, shop and mill test reports on materials and equipment.
 - d. Review and make recommendations on all construction contract change orders and requests for clarification from the contractor.

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- e. Prepare engineering cost estimates.
- f. Prepare design changes and clarifications to the plans and specifications.
- g. Prepare needed reports and notices.
- h. Provide periodic visits to the site to monitor construction.
- i. Attend meetings with the City Engineer or his designees.

1.2 **SERVICES PROVIDED BY CITY.** The CITY shall perform the following services:

- 1.2.1 Provide access to all public improvement plans and records and furnish one copy of drawings and reports requested.
- 1.2.2 Obtain all necessary permits from other regulatory agencies and other Departments. CONSULTANT shall participate in the completion of such forms but CITY will submit these and pay for any applicable fees.
- 1.2.3 Provide sample of title block for the plans and standard form Public Works Construction Contract Documents to be used with the General Provisions (Specifications).
- 1.2.4 Upon request, verify the location of existing CITY owned utilities.
- 1.2.5 Provide all legal advertising mailings and postings required.
- 1.2.6 Duplicate all final plans and specifications.
- 1.2.7 Provide all necessary surveying and testing required for design, including geotechnical engineering services if required during construction.
- 1.2.8 Provide overall project management.
- 1.2.9 Provide coordination of all inquiries from prospective bidders during the bidding period.

2.0 **TIMING REQUIREMENTS**

- 2.1 Time is of the essence in the performance of work under this Agreement and the following timing requirements shall be strictly adhered to unless otherwise modified in writing as set forth in Section 2.6. Failure by CONSULTANT to strictly adhere to these timing requirements may result in termination of this Agreement by the CITY and the assessment of damages against the CONSULTANT for delays.
- 2.2 **Preliminary Engineering (30% Stage).** CONSULTANT shall prepare and deliver a reproducible of the 30% preliminary design plans to the City Engineer within 35 working days of the execution of this Agreement. No work shall be performed by

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CONSULTANT beyond the Preliminary Engineering stage until the City Engineer has given written approval of the preliminary design and authorization to perform Final Design.

- 2.3 Final Design (65% Stage). CONSULTANT shall prepare and deliver a reproducible of the 65% design plans and specifications, plats and legal descriptions, hydrology and hydraulic calculations, and landscape plans to the City Engineer within 50 working days of the approval of the preliminary engineering drawings. No work shall be performed by CONSULTANT beyond the 65% stage until the City Engineer has given authorization to perform the Final Design 100% stage.
- 2.4 Final Design (100% Stage). CONSULTANT shall prepare and deliver a reproducible of the 100% design plans and specifications to the City Engineer within 15 working days of the City Engineer's written authorization to perform this stage of work.
- 2.5 Final Design (Mylar Submittal). CONSULTANT shall prepare and deliver mylars of the 100% design plans and a reproducible copy of the specifications to the City Engineer within 5 working days of the City Engineer's written authorization to perform this stage of work.
- 2.6 As-Built Drawing Preparation. CONSULTANT shall prepare and deliver the final As-Built plans for record drawings to the City Engineer within 30 calendar days after the completion of the project and the City Engineer's written request.
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2.7 CONSULTANT shall submit all requests for extensions of time for performance in writing to the City engineer no later than ten (10) calendar days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. The City Engineer shall review all such requests and may grant reasonable time extensions for unforeseeable delays which are beyond CONSULTANT'S control.
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2.8 For all time periods not specifically set forth herein, the CONSULTANT shall respond in the most expedient and appropriate manner under the circumstances, by either telephone, fax, hand delivery or mail.
- 3.0 **DESIGN CRITERIA AND STANDARDS**. All work shall be performed in accordance with applicable CITY, state and federal codes and criteria. In the performance of its professional services, CONSULTANT shall use the degree of care and skill ordinarily exercised by CONSULTANT under similar conditions.

All plans shall be ink drawn on standard mylar sheets available from the CITY at no cost to CONSULTANT. Contract specifications shall conform to the CITY'S specification procedures and the format of the CITY'S standard form Contract Documents for Public Works Construction.

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4.0 **INDEPENDENT CONTRACTOR.** CONSULTANT’S relationship to the CITY shall be that of an independent contractor. CONSULTANT shall have no authority, express or implied, to act on behalf of the CITY as an agent, or to bind the CITY to any obligation whatsoever, unless specifically authorized in writing by the City Engineer. The CONSULTANT shall not be authorized to communicate directly with, nor in any way direct the actions of, any bidder or the construction contractor for this project without the prior written authorization by the City Engineer. CONSULTANT shall be solely responsible for the performance of any of its employees, agents or subcontractors under this agreement.

CONSULTANT shall report to the CITY any and all employees, agents and consultants performing work in connection with this project, and all shall be subject to the approval of the CITY.

5.0 **CITY BUSINESS LICENSE.** Prior to the commencement of any work under this agreement, the CONSULTANT shall obtain and present a copy of an Oceanside City Business License to the City Engineer.

6.0 **WORKERS’ COMPENSATION.** Pursuant to Labor Code section 1861, the CONSULTANT hereby certifies that the CONSULTANT is 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 the CONSULTANT will comply with such provisions and provide certification of such compliance as a part of these Award Documents. The certification shall be in accordance with Subsections 7.3 through 7.8 of this Agreement.

7.0 **LIABILITY INSURANCE.**

7.1 CONSULTANT shall, throughout the duration of this Agreement, maintain comprehensive general liability and property damage insurance, or commercial general liability insurance, covering all operations of CONSULTANT, its agents and employees, performed in connection with this Agreement including, but not limited to, premises and automobile.

7.2.1 CONSULTANT shall maintain liability insurance in the following minimum limits:

Comprehensive General Liability Insurance
(bodily injury and property damage)

Combined Single Limit Per Occurrence	\$ 1,000,000
General Aggregate	\$ 2,000,000*

Commercial General Liability Insurance
(bodily injury and property damage)

General limit per occurrence	\$ 1,000,000
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General limit project specific \$ 2,000,000

Automobile Liability Insurance \$ 1,000,000

*General aggregate per year, or part thereof, with respect to losses or other acts or omissions of CONSULTANT under this Agreement.

- 7.2.2 If coverage is provided through a Commercial General Liability Insurance policy, a minimum of 50% of each of the aggregate limits shall remain available at all times. If over 50% of any aggregate limit has been paid or reserved, the CITY may require additional coverage to be purchased by the CONSULTANT to restore the required limits. The CONSULTANT shall also notify the CITY'S Project Manager promptly of all losses or claims over \$25,000 resulting from work performed under this contract, or any loss or claim against the CONSULTANT resulting from any of the CONSULTANT'S work.
- 7.3 All insurance companies affording coverage to the CONSULTANT for the purposes of this Section shall add the City of Oceanside as "additional insured" under the designated insurance policy for all work performed under this Agreement. Insurance coverage provided to the CITY as an additional insured shall be primary insurance and other insurance maintained by the CITY, its officers, agents and employees shall be excess only and not contributing with insurance provided pursuant to this Section.
- 7.4 All insurance companies affording coverage to the CONSULTANT pursuant to this Agreement shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact business of insurance in the state or be rated as A-X or higher by A.M. Best.
- 7.5 All insurance companies affording coverage shall provide thirty (30) days written notice to the CITY should the policy be cancelled before the expiration date. For the purposes of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation.
- 7.6 CONSULTANT shall provide evidence of compliance with the insurance requirements listed above by providing a Certificate of Insurance, in a form satisfactory to the City Attorney, concurrently with the submittal of this Agreement.
- 7.7 CONSULTANT shall provide a substitute Certificate of Insurance no later than thirty (30) days prior to the policy expiration date. Failure by the CONSULTANT to provide such a substitution and extend the policy expiration date shall be considered a default by CONSULTANT and may subject the CONSULTANT to a suspension or termination of work under the Agreement.
- 7.8 Maintenance of insurance by the CONSULTANT as specified in this Agreement shall in no way be interpreted as relieving the CONSULTANT of any responsibility whatsoever and the CONSULTANT may carry, at its own expense, such additional insurance as it deems necessary.

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- 8.0 **PROFESSIONAL ERRORS AND OMISSIONS INSURANCE.** Throughout the duration of this agreement and four (4) years thereafter, the CONSULTANT shall maintain professional errors and omissions insurance for work performed in connection with this Agreement in the minimum amount of five hundred thousand dollars (\$500,000).

CONSULTANT shall provide evidence of compliance with these insurance requirements by providing a Certificate of Insurance.

- 9.0 **CONSULTANT'S INDEMNIFICATION OF CITY.** CONSULTANT shall indemnify and hold harmless the CITY and its officers, agents and employees against all claims or lawsuits for damages to persons or property arising out of the conduct, negligent acts, errors, omissions or wrongful acts of conduct of the CONSULTANT or its employees, agents, subcontractors or others in connection with the execution of the work covered by this Agreement, except for those claims arising from the willful misconduct, sole negligence or active negligence of the CITY, its officers, agents or employees. CONSULTANT'S indemnification shall include any and all costs, expenses, expert fees, attorneys' fees and liability assessed against or incurred by the CITY, its officers, agents or employees in defending against such claims or lawsuits, whether the same proceed to judgment or not. Further, CONSULTANT, at its own expense, shall, upon written request by the CITY, defend any such suit or action brought against the CITY, its officers, agents or employees resulting or arising from the tortuous acts or omissions of the CONSULTANT.

CONSULTANT'S indemnification of CITY shall not be limited by any prior or subsequent declaration by the CONSULTANT.

- 10.0 **ERRORS AND OMISSIONS.** In the event that the City Engineer determines that the CONSULTANT'S negligence, misconduct, errors or omissions in the performance of work under this Agreement has resulted in expense to CITY greater than would have resulted if there were no such negligence, errors or omissions in the plans or contract specifications, CONSULTANT shall reimburse CITY for the additional expenses incurred by the CITY, including engineering, construction and/or restoration expense. Nothing herein is intended to limit CITY'S rights under Sections 7, 8 or 9.

- 11.0 **NO CONFLICT OF INTEREST.** The CONSULTANT shall not be financially interested in any other CITY contract for this project. For the limited purposes of interpreting this section, the CONSULTANT shall be deemed a "City officer or employee", and this Section shall be interpreted in accordance with Government Code section 1090. In the event that the CONSULTANT becomes financially interested in any other CITY contract for this project, that other contract shall be void. The CONSULTANT shall indemnify and hold harmless the CITY, under Section 9 above, for any claims for damages resulting from the CONSULTANT'S violation of this Section.

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12.0 **OWNERSHIP OF DOCUMENTS.** All plans and specifications, including details, computations and other documents, prepared or provided by the CONSULTANT under this Agreement shall be the property of the CITY. The CITY agrees to hold the CONSULTANT free and harmless from any claim arising from any use, other than the purpose intended, of the plans and specifications and all preliminary sketches, schematics, preliminary plans, architectural perspective renderings, working drawings, including details, computation and other documents, prepared or provided by the CONSULTANT. CONSULTANT may retain a copy of all material produced under this Agreement for the purpose of documenting their participation in this project.

13.0 **COMPENSATION.**

13.1 For work performed by CONSULTANT in accordance with this Agreement, CITY shall pay CONSULTANT in accordance with the schedule of billing rates set forth in Exhibit "A", attached hereto and incorporated herein by reference. No rate changes shall be made during the term of this Agreement without prior written approval of the City Engineer. CONSULTANT'S compensation for all work performed in accordance with this Agreement shall not exceed the total contract price of one hundred sixteen thousand one hundred dollars and no cents (\$116,100.00).

No work shall be performed by CONSULTANT in excess of the total contract price without prior written approval of the City Engineer. CONSULTANT shall obtain approval by the City Engineer prior to performing any work which results in incidental expenses to CITY as set forth in Section 13.2.2.

13.2 CONSULTANT shall maintain accounting records including the following information:

13.2.1 Names and titles of employees or agents, types of work performed and times and dates of all work performed in connection with this Agreement which is billed on an hourly basis.

13.2.2 All incidental expenses including reproductions, computer printing, postage, mileage and subsistence.

13.3 CONSULTANT'S accounting records shall be made available to the City Engineer for verification of billings, within a reasonable time of the City Engineer's request for inspection.

13.4 CONSULTANT shall submit monthly invoices to CITY. CITY shall make partial payments to CONSULTANT not to exceed the total contract price within thirty (30) days of receipt of invoice, subject to the approval of the City engineer

13.4.1 Final payment shall be made to CONSULTANT upon CONSULTANT's preparation of As-Built plans for record drawings to the satisfaction of the City Engineer.

14.0 **TERMINATION OF AGREEMENT.** Either party may terminate this Agreement by providing thirty (30) days written notice to the other party.

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If any portion of the work is terminated or abandoned by the CITY, then the CITY shall pay CONSULTANT for any work completed up to and including the date of termination or abandonment of this Agreement, in accordance with Section 13. The CITY shall be required to compensate CONSULTANT only for work performed in accordance with the Agreement up to and including the date of termination.

- 15.0 **ASSIGNMENT AND DELEGATION.** This Agreement and any portion thereof shall not be assigned or transferred, nor shall any of the CONSULTANT'S duties be delegated, without the express written consent of the CITY. Any attempt to assign or delegate this Agreement without the express written consent of the CITY shall be void and of no force or effect. A consent by the CITY to one assignment shall not be deemed to be a consent to any subsequent assignment.

This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

- 16.0 **ENTIRE AGREEMENT.** This Agreement comprises the entire integrated understanding between CITY and CONSULTANT concerning the work to be performed for this project and supersedes all prior negotiations, representations or agreements.

- 17.0 **INTERPRETATION OF THE AGREEMENT.** The interpretation, validity and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. The Agreement does not limit any other rights or remedies available to CITY.

The CONSULTANT shall be responsible for complying with all local, state and federal laws whether or not said laws are expressly stated or referred to herein.

Should any provision herein be found or deemed to be invalid, the Agreement shall be construed as not containing such provision and all other provisions, which are otherwise lawful, shall remain in full force and effect, and to this end the provisions of this Agreement are severable.

- 18.0 **AGREEMENT MODIFICATION.** This Agreement may not be modified orally or in any manner other than by an Agreement in writing, signed by the parties hereto.

- 19.0 **DISPUTE RESOLUTION.**

- a. Any controversy or claim arising out of or relating to this Agreement, or concerning the breach or interpretation thereof, shall be first submitted to mediation, the cost of which shall be borne equally by the parties.
- b. No suit shall be brought on this contract unless all statutory claims filing requirements have been met.

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20. **NOTICES.** All notices, demands, requests, consents or other communications which this Agreement contemplates or authorizes, or requires or permits either party to give to the other, shall be in writing and shall be personally delivered or mailed to the respective party as follows:

TO CITY:

City of Oceanside
City Engineer
300 North Coast Highway
Oceanside, CA 92054

TO CONSULTANT:

Rick Engineering Company
Mr. Tim Gabrielson
5620 Friars Road
San Diego, CA 92110-2596

Either party may change its address by notice to the other party as provided herein.

Communications shall be deemed to have been given and received on the first to occur:

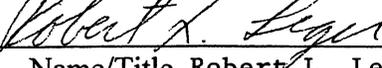
- a. Actual receipt at the offices of the party to whom the communication is to be sent, as designated above, or
- b. Three (3) working days following the deposit in the United States mail of registered or certified mail, postage prepaid, return receipt requested, addressed to the offices of the party to whom the communication is to be sent, as designated above.

21.0 **SIGNATURES.** The individuals executing this Agreement represent and warrant that they have the right, power, legal capacity and authority to enter into and to execute this Agreement on behalf of the respective legal entities of the CONSULTANT and the CITY.

IN WITNESS WHEREOF the parties hereto for themselves, their heirs, executors, administrators, successors and assigns do hereby agree to the full performance of the covenants herein contained and have caused this Professional Services Agreement to be executed by setting hereunto their signatures:

RICK ENGINEERING COMPANY

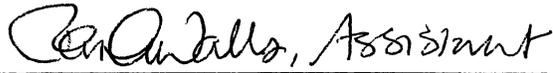
By: 
Name/Title Dennis C. Bowling
Vice President

By: 
Name/Title Robert L. Leger
Secretary

95-1859899
Employer ID No.

CITY OF OCEANSIDE

By: 
Steven R. Jepsen, City Manager

APPROVED AS TO FORM:

City Attorney

NOTARY ACKNOWLEDGMENTS OF CONSULTANT MUST BE ATTACHED.

EXHIBIT B

**AMENDMENT TO:
ENGINEERING SERVICES FOR
LOMA ALTA CREEK DETENTION BASIN – 520.817451**

CITY OF OCEANSIDE

**AMENDMENT TO
PROFESSIONAL SERVICES AGREEMENT**

PROJECT: AMENDMENT TO THE LOMA ALTA CREEK DETENTION BASIN AT EL CAMINO REAL PROFESSIONAL SERVICES AGREEMENT – 520.817451

This AMENDMENT NO. 1 TO THE PROFESSIONAL SERVICES AGREEMENT is made and entered into this 18th day of MAY, 2006, by and between the CITY OF OCEANSIDE, a municipal corporation, hereinafter designated as "CITY", and RICK ENGINEERING COMPANY, hereinafter designated as "CONSULTANT."

RECITALS

WHEREAS CITY and CONSULTANT entered into a professional services agreement (the "Agreement") whereby CONSULTANT was to provide engineering services for the proposed Loma Alta Creek Detention Basin Project at El Camino Real.

NOW, THEREFORE, IN CONSIDERATION OF THE COVENANTS AND CONDITIONS CONTAINED HEREIN, THE PARTIES HERETO AGREE AS FOLLOWS:

The Professional Services Agreement shall be amended as follows:

A. SECTION 1, **SCOPE OF WORK**, IS HEREBY AMENDED TO INCLUDE THE FOLLOWING ADDITIONAL WORK DESCRIBED HEREIN:

I. Geotechnical Investigation

1. Review published geologic maps, aerial photographs and other literature pertaining to the site to aid in evaluating geologic conditions that may be present.
2. Drill three small diameter borings to a depth of approximately 10 feet to examine and sample the prevailing soil conditions.
3. Perform laboratory tests on selected soil samples to evaluate in situ density, shear strength, compaction, grain size, permeability and expansion characteristics of the prevailing soils conditions encountered.

**AMENDMENT TO:
ENGINEERING SERVICES FOR
LOMA ALTA CREEK DETENTION BASIN – 520.817451**

4. Prepare a written report presenting findings and conclusions and recommendations regarding the geotechnical aspects of designing and constructing the proposed walls. Recommended grading specifications, retaining wall criteria including earth pressures, hydrostatic pressures, uplift forces and flow characteristics, excavation characteristics and remedial grading measures will be included in the report.

5. Review and Sign Final Plans

B. SECTION 2, TIMING REQUIREMENT, IS HEREBY AMENDED BY ADDING THE FOLLOWING ADDITIONAL TIMING REQUIREMENTS FOR THE ADDITIONAL WORK:

2.8 CONSULTANT shall provide the following deliverables per the schedule outlined below:

- Written report presenting findings and conclusions and recommendations regarding the geotechnical aspects of designing and constructing the proposed walls as well as recommended grading specifications, retaining wall criteria including earth pressures, hydrostatic pressures, uplift forces and flow characteristics, excavation characteristics and remedial grading measures within 30 calendar days of signing Amendment #1.

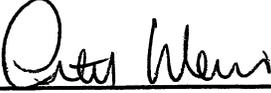
C. SECTION 13, COMPENSATION, IS HEREBY AMENDED BY ADDING A LUMP SUM FIXED FEE AMOUNT NOT TO EXCEED \$10,000 FOR THE ADDITIONAL WORK FOR A TOTAL CONTRACT AMOUNT NOT TO EXCEED \$126,100.

D. ALL OTHER TERMS, CONDITIONS, COVENANTS AND PROVISIONS OF THIS AGREEMENT SHALL REMAIN IN FULL FORCE AND EFFECT. IN THE EVENT OF ANY CONFLICT BETWEEN THE TERMS OF THE ORIGINAL AGREEMENT AND THIS AMENDMENT, THE TERMS OF THIS AMENDMENT SHALL CONTROL.

**AMENDMENT TO:
ENGINEERING SERVICES FOR
LOMA ALTA CREEK DETENTION BASIN – 520.817451**

IN WITNESS THEREOF of parties hereto for themselves, their heirs, executors, administrators, successors, and assigns do herein agree to the performance of this Amendment.

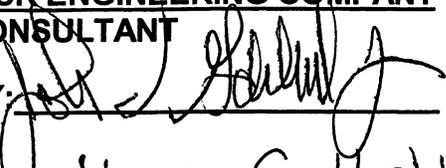
CITY OF OCEANSIDE

BY: 
PETER A. WEISS, PUBLIC WORKS DIRECTOR

APPROVED AS TO FORM:

BY: , DCA
CITY ATTORNEY

**RICK ENGINEERING COMPANY
CONSULTANT**

BY: 
NAME: John D. Goddard Jr.
TITLE: Associate Principal

NOTARY ACKNOWLEDGMENTS OF CONSULTANT MUST BE ATTACHED.

**AMENDMENT TO:
ENGINEERING SERVICES FOR
LOMA ALTA CREEK DETENTION BASIN – 520.817451**

CITY OF OCEANSIDE

**AMENDMENT TO
PROFESSIONAL SERVICES AGREEMENT**

PROJECT: AMENDMENT TO THE LOMA ALTA CREEK DETENTION BASIN AT EL CAMINO REAL PROFESSIONAL SERVICES AGREEMENT – 520.817451

This AMENDMENT NO. 2 TO THE PROFESSIONAL SERVICES AGREEMENT is made and entered into this 12th day of July, 2006, by and between the CITY OF OCEANSIDE, a municipal corporation, hereinafter designated as "CITY", and RICK ENGINEERING COMPANY, hereinafter designated as "CONSULTANT."

RECITALS

WHEREAS CITY and CONSULTANT entered into a professional services agreement (the "Agreement") whereby CONSULTANT was to provide engineering services for the proposed Loma Alta Creek Detention Basin Project at El Camino Real.

NOW, THEREFORE, IN CONSIDERATION OF THE COVENANTS AND CONDITIONS CONTAINED HEREIN, THE PARTIES HERETO AGREE AS FOLLOWS:

The Professional Services Agreement shall be amended as follows:

- A. SECTION 1, SCOPE OF WORK, IS HEREBY AMENDED TO INCLUDE THE FOLLOWING ADDITIONAL WORK DESCRIBED HEREIN:**

Amendment #2 expands the scope of the basic services under the contract to include the design of additional retaining walls at the Superior Ready Mix site, re-design of a box culvert due to an alternative to be used and re-design of a portion of the detention basin wall due to right-of-way restrictions and additional site conditions.

A detailed description of the Amendment, **Exhibit A**, is attached hereto and incorporated herein by this reference.

- B. SECTION 2, TIMING REQUIREMENT, IS HEREBY AMENDED BY ADDING THE FOLLOWING ADDITIONAL TIMING REQUIREMENTS FOR THE ADDITIONAL WORK:**

**AMENDMENT TO:
ENGINEERING SERVICES FOR
LOMA ALTA CREEK DETENTION BASIN – 520.817451**

- 2.8 CONSULTANT shall provide the following deliverables per the schedule outlined below:
- Final construction documents within 30 calendar days of receiving the geotechnical report from Geocon, Inc. which will present findings, conclusions and recommendations regarding design and construction of the proposed walls.
- C. SECTION 13, **COMPENSATION**, IS HEREBY AMENDED BY ADDING A LUMP SUM FIXED FEE AMOUNT NOT TO EXCEED \$30,600 FOR THE ADDITIONAL WORK FOR A TOTAL CONTRACT AMOUNT NOT TO EXCEED \$156,700.
- D. ALL OTHER TERMS, CONDITIONS, COVENANTS AND PROVISIONS OF THIS AGREEMENT SHALL REMAIN IN FULL FORCE AND EFFECT. IN THE EVENT OF ANY CONFLICT BETWEEN THE TERMS OF THE ORIGINAL AGREEMENT AND THIS AMENDMENT, THE TERMS OF THIS AMENDMENT SHALL CONTROL.

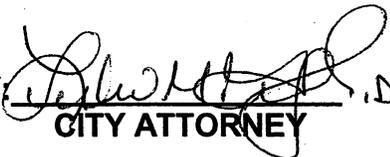
IN WITNESS THEREOF of parties hereto for themselves, their heirs, executors, administrators, successors, and assigns do herein agree to the performance of this Amendment.

CITY OF OCEANSIDE

BY: 

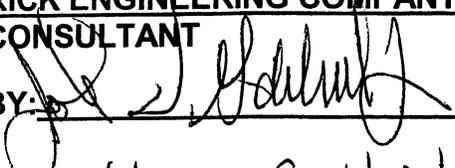
~~PETER A. WEISS, PUBLIC WORKS DIRECTOR~~
BARRY E. MARTIN, INTERIM CITY MANAGER

APPROVED AS TO FORM:

BY: 

~~DCA~~
CITY ATTORNEY

RICK ENGINEERING COMPANY
CONSULTANT

BY: 

NAME: John D. Goddard Jr

TITLE: Associate Principal

NOTARY ACKNOWLEDGMENTS OF CONSULTANT MUST BE ATTACHED.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

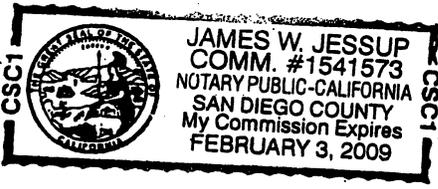
State of California

County of San Diego

On 4-27-06 before me, James W Jessup Notary Public
Date Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared John D Goddard Jr.
Name(s) of Signer(s)

personally known to me - OR - proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

[Signature]
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

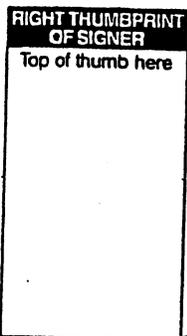
Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

- Individual
- Corporate Officer
Title(s): _____
- Partner — Limited General
- Attorney-in-Fact
- Trustee
- Guardian or Conservator
- Other: _____

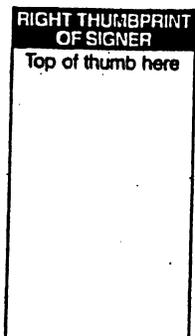
Signer Is Representing:



Signer's Name: _____

- Individual
- Corporate Officer
Title(s): _____
- Partner — Limited General
- Attorney-in-Fact
- Trustee
- Guardian or Conservator
- Other: _____

Signer Is Representing:





Contract Addendum

Rick Engineering Company Job No. 14604
March 16, 2006
Revised: April 17, 2006
Addendum No. 1
Page 1 of 4

Ms. Jeanette Peck
City of Oceanside
300 North Coast Highway
Oceanside, California 92054

JOB DESCRIPTION: LOMA ALTA CREEK DETENTION BASIN

By signing below as indicated, Rick Engineering Company is authorized to expend an additional \$41,100.00, bringing the total amount authorized as of this date to \$146,700.00, to perform work in conjunction with our contract dated February 4, 2004.

Additional Scope of Work:**A. Simon Wong Engineering****1. Retaining Wall Type Selection along the Ready-Mix Property**

Beginning in 2004 and continuing through 2005, several alignment options were studied along with various types of retaining walls and footing configurations in order to best accommodate the operations at the Ready-Mix concrete plant. Existing site walls were also analyzed for potential incorporation into the final design. During the course of this lengthy coordination process, our multiple evaluations and site visits resulted in \$3,900.00 in out-of-scope work. That work did not include the final design of these walls.

2. Box Culvert Transition Structure Design

After partial completion of our initial design of the transition structure, additional information provided by DMJM+Harris on the Sprinter design team revealed that the box culvert proposed by Rick Engineering Company was not directly compatible with the dual 54-inch RCP's proposed by DMJM+Harris. Hydraulic coordination with Rick Engineering Company enabled us to find a suitable box culvert alternative of different dimensions to accommodate the RCP's, but during the process we performed \$1,700.00 in out-of-scope work.

Ms. Jeanette Peck
March 16, 2006
Revised: April 17, 2006
Page 2 of 4

3. Realignment & Shortening of Wall C-1

Subsequent to our design and profile detailing of Wall C-1 along El Camino Real, this wall was truncated and realigned at the north end due to right-of-way restrictions, resulting in restationing along the entire length of Wall C-1. We incurred \$800.00 in out-of-scope costs to accommodate this change.

4. Final Design of Walls along the Ready-Mix Property

The conclusion of the type selection process described above for the retaining walls along the Ready-Mix property was that the wall most appropriate for the site is a cantilevered wall containing a spread footing projecting solely on the basin-side of the stem (no footing heel). Because this wall is of a different type than the other walls in this basin, separate analyses will be required for each design height. This work is outside our original scope of work, and we estimate the additional cost to design these walls to be \$4,800.00.

5. Redesign of Other Walls for Seepage

We understand that relevant information pertaining to a seepage (flow net) analysis was not included in the geotechnical report, and that analysis of potential uplift forces is currently underway by others. These uplift forces will need to be incorporated into the analysis of Walls C-1 and C-2 which we have already designed for El Camino Real. If the uplift forces cause wall stability or strength to fall below acceptable factors of safety, those walls will need to be redesigned and/or additional measures such as cut-off walls will need to be incorporated into the geotechnical design of the foundation. Due to the level of geotechnical coordination and analysis related to this issue, we estimate the additional cost of work to be approximately \$13,400.00. This fee does not include design of subgrade structures such as cut-off walls or sheet piling intended to reduce seepage below the walls.

Prior to continuing with our work, we will require updated and verified geotechnical information providing seepage uplift forces below the walls. This design information is necessary for Walls C-1, C-2 and the Ready-Mix wall.

Ms. Jeanette Peck
March 16, 2006
Revised: April 17, 2006
Page 3 of 4

B. Rick Engineering Company

1. Additional consultation to coordinate with the City of Oceanside consultants and property owners adjacent the project. The additional fee to provide this service is \$3,500.00
2. Additional design survey required to detail existing retaining wall configuration adjacent to the Ready-Mix property. The additional fee to provide this service was \$2,500.00

C. Geocon, Inc.

We understand that three walls are proposed:

- Wall C-1 will extend along the east side of El Camino Real north of Loma Alta Creek and connect to the NCTD Sprint Wall.
- Wall C-2 will extend in the north-south direction near the middle of the basin to split it into two parts.
- The third wall extends along the southern edge of the existing batch plant at the east end of the project.

We understand that the walls will be designed to retain water and soil; therefore, hydrostatic pressures, earth pressures and uplift pressure associated with groundwater flow will need to be incorporated into the design. Based on investigations in the area, the site is underlain by undocumented fill and alluvium.

Based on the above discussion and our understanding of the project, we recommend that the scope of the limited geotechnical investigation consists of the following:

- Review published geologic maps, aerial photographs and other literature pertaining to the site to aid in evaluating geologic conditions that may be present.
- Drill three small diameter borings to a depth of approximately 10 feet to examine and sample the prevailing soil conditions.
- Perform laboratory tests on selected soil samples to evaluate in situ density, shear strength, compaction, grain size, permeability and expansion characteristics of the prevailing soil conditions encountered.

Ms. Jeanette Peck
March 16, 2006
Revised: April 17, 2006
Page 4 of 4

- Prepare a written report presenting out findings and our conclusions and recommendations regarding the geotechnical aspects of designing and constructing the proposed walls. Recommended grading specifications, retaining wall criteria including earth pressures, hydrostatic pressures, uplift forces and flow characteristics, excavation characteristics and remedial grading measures would be included in the report.

(Fee: \$10,000.00)

All other provisions of the original contract are to remain unchanged.

Authorized by:
RICK ENGINEERING COMPANY

Date: April 17, 2006

Signature: _____
John D. Goddard, Jr.

Title: Associate Principal

Approved by:
CITY OF OCEANSIDE

Date: _____

Signature: _____

Title: _____

Please sign and return a copy to RICK ENGINEERING COMPANY



April 26, 2006

Mr. Kiel Koger
City of Oceanside
300 North Coast Highway
Oceanside, California 92054

SUBJECT: PROJECT NO. 520.817451
LOMA ALTA CREEK DETENTION BASIN
RICK ENGINEERING COMPANY JOB NUMBER 14604

Dear Mr. Koger:

Per your request, John D. Goddard, Associate Principal of Rick Engineering Company, is designated as the project manager and is authorized to sign task orders, contracts, letters and other documents.

Rick Engineering Company also designates the following individuals as authorized to sign contracts, letters and other documents on this project as part of the executive branch:

Roger L. Ball, President
Houshmand Aftahi, First Vice President
Kai E. Ramer, Vice President

In addition, Dennis C. Bowling, Secretary and Deborah Ragione, Chief Financial Officer of Rick Engineering Company are authorized to sign as part of the management team.

If there is any further information or documentation required, please contact the undersigned.

Sincerely,

RICK ENGINEERING COMPANY

A handwritten signature in black ink that reads "Roger L. Ball". The signature is written in a cursive style with a large initial "R".

Roger L. Ball
President

RLB/cs

CITY OF OCEANSIDE

**AMENDMENT #3 TO
PROFESSIONAL SERVICES AGREEMENT**

PROJECT: AMENDMENT #3 TO THE LOMA ALTA CREEK DETENTION BASIN AT EL CAMINO REAL PROFESSIONAL SERVICES AGREEMENT - 520.817451

This AMENDMENT NO. 3 TO THE PROFESSIONAL SERVICES AGREEMENT, dated February 18, 2009 for identification purposes, is made and entered into by and between the CITY OF OCEANSIDE, a municipal corporation, hereinafter designated as "CITY", and RICK ENGINEERING COMPANY, hereinafter designated as "CONSULTANT."

RECITALS

WHEREAS CITY and CONSULTANT entered into a professional services agreement (the "Agreement") whereby CONSULTANT was to provide engineering services for the proposed Loma Alta Creek Detention Basin Project at El Camino Real.

NOW, THEREFORE, In consideration of the covenants and conditions contained herein, the parties hereto agree as follows:

The Professional Services Agreement shall be amended as follows:

- A. SECTION 1, SCOPE OF WORK,** is hereby amended to include the following additional work:
- Amendment #3 expands the scope of the basic services under the contract to include the additional survey, hydrology, summary letter to FEMA and design due to construction of Sprinter Rail.
- A detailed description of the additional scope of work is attached hereto as Exhibit A and incorporated herein by this reference.
- B. SECTION 13, COMPENSATION,** is hereby amended by adding an amount not to exceed \$55,050 for the additional work, for a total contract amount not to exceed \$211,750.
- C.** All other terms, conditions, covenants and provisions of this agreement shall remain in full force and effect. In the event of any conflict between the terms of the original agreement and this amendment, the terms of this amendment shall control.

**AMENDMENT #3 TO
ENGINEERING SERVICES FOR
LOMA ALTA CREEK DETENTION BASIN – 520.817451**

IN WITNESS WHEREOF, the parties hereto for themselves, their heirs, executors, administrators, successors, and assigns do herein agree to the performance of this Amendment.

CITY OF OCEANSIDE

APPROVED AS TO FORM:

BY: _____
PETER A. WEISS, CITY MANAGER

BY: *Paula D. Hamilton*, A.B.S.T.
CITY ATTORNEY

**RICK ENGINEERING COMPANY
CONSULTANT**

BY: *Ball*

NAME: *Tim Gabrielson*

TITLE: *Associate*

NOTARY ACKNOWLEDGMENTS OF CONSULTANT MUST BE ATTACHED.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of San Diego }

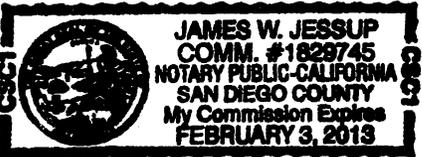
On 2-9-09 before me, James W Jessup Notary Public
Date Here Insert Name and Title of the Officer

personally appeared TIM GABRIELSON
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/~~she~~~~they~~ executed the same in his/~~her~~~~their~~ authorized capacity(ies), and that by his/~~her~~~~their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Place Notary Seal Above

Signature _____
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

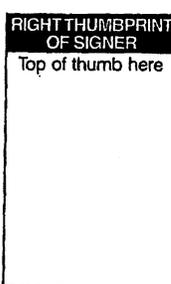
Capacity(ies) Claimed by Signer(s)

- Signer's Name: _____
- Individual
 - Corporate Officer — Title(s): _____
 - Partner — Limited General
 - Attorney in Fact
 - Trustee
 - Guardian or Conservator
 - Other: _____



Signer Is Representing: _____

- Signer's Name: _____
- Individual
 - Corporate Officer — Title(s): _____
 - Partner — Limited General
 - Attorney in Fact
 - Trustee
 - Guardian or Conservator
 - Other: _____



Signer Is Representing: _____

Exhibit "A"

Job No. 14604
Addendum No. 3 Revision #3
February 18, 2009
Page 1 of 2

Additional Scope of Work:

New Scope of Work includes an update hydraulic run and topography between Stations 267+00 and 290+00 and revise civil plans, structural design as a result of revised NCTD wall aerial topography.

1. Fly one foot contour interval topography at a scale of 1" = 40', covering an area of 60 acres. Limits of topography is from 50 feet westerly of El Camino Real on the west, to the centerline of Oceanside Blvd. to the north, to NCTD Sprinter Station 290+00 on the east, and to 50 feet south of the southerly track. (\$11,000.00)
2. Obtain supplemental field survey information for ground topography in the area of dense vegetation adjacent to the Superior Ready Mix Site. It is limited to two and one half days of survey time to supplement the cross sections collected from the aerial topography, at a cost of \$1,700.00 per day, including office support time. (\$4,000.00)
3. Update the hydrologic calculations for the El Camino Real Detention Basin to reflect the change in base topographic data obtained from the new topography above. The storage volume versus the elevation relationship within the basins at El Camino Real has changed due to the new topography. Revise the outlet structure in Wall C-2 to reflect the 1.5 foot elevation difference in the outlet flowline elevation, add a 24" diameter orifice in the wall, and update the differential head calculations needed to determine the appropriate wall opening geometry to maintain a 100-year detained ponded water surface elevation in the basin at or below the preliminary design elevation. Determine the maximum differential head anticipated between the upper and lower El Camino Real basins, for sizing riprap at the outlets of the upper basin. (\$2,500.00)
4. Update the HEC-RAS cross-section geometry between El Camino Real and the upstream side of the Superior Ready Mix property, to reflect the new topo above. Add two additional cross sections adjacent to the Superior Ready Mix Site to model the updated topography and survey data. Size Riprap Slope Protection to determine the limits of riprap needed at the openings within the C-2 wall. Prepare Preliminary HEC-RAS models to determine if excavation within the channel between the Sprinter Wall and the Superior Ready Mix site could eliminate the need for the Superior Wall in the Future. (\$2,800.00)
5. Attend one field meeting with the resource agencies to assist the City with the permit applications for the construction of the Superior Ready Mix Wall. Additional as-requested coordination with the City of Oceanside, Simon Wong, Recon, etc, related to the history of the Loma Alta Creek detention basin project, and the finalization of the plan documents. (\$1,200.00)

6. Prepare a letter report summarizing the results of the revised hydraulic calculations. (\$2,500.00)
7. Update plans to reflect the deletion of the Superior Ready Mix wall and the new water surface elevations and hydrologic information determined above. (\$9,500.00)
8. Meetings and Coordination related to changed conditions due to NCTD graded conditions. (\$3,500.00)
9. Miscellaneous services for project start-up and environmental coordination. (\$3,500.00)
10. Additional processing of revised plans through the City of Oceanside. (\$2,000.00)
11. Revisions to wall structural sections by Simon Wong Engineering to accommodate changes from above topographic survey and revisions to project hydraulic analysis, including revising the weir opening on wall C-2, adding a 24" opening to wall C-2, removing wall C-3 on the Superior Ready Mix property, revising the sheet pile specifications, and addressing potential changes in footing step elevations along both the C-1 and C-2 walls. (\$2,600.00)
12. Revise Hydraulic Design of the Loma Alta Creek Detention Basin at El Camino Real due to updated and revised NCTD offsite flows. In particular are the two 54" RCP piped confluence at the box culvert. (\$4,750.00)
13. Revise culvert geometry and coordinate with Simon Wong due to new hydraulic design. (\$1,300.00)
14. Structural redesign and plan revisions of the box culvert due to the revised culvert geometry (see attached scope of work for Simon Wong.) (\$3,900.00)