

CONSULTANT AGREEMENT CITY OF SANTA ANA

THIS AGREEMENT is made and entered into on this 21st day of March, 2023 by and between ECORP Consulting, Inc. ("Consultant"), and the City of Santa Ana, a charter city and municipal corporation organized and existing under the Constitution and laws of the State of California ("City").

RECITALS

- A. On September 23, 2021 the City issued a Request for Proposal ("RFP") No. 21-105, by which it desired to retain a consultant having special skill and knowledge in the field of Environmental Services on an "on-call" basis for the City's Public Works Agency.
- B. Consultant submitted a responsive proposal that was among those selected by the city. Consultant represents that it is able and willing to provide such services described in the scope of work that was included in the RFP No. 21-105.
- C. In undertaking the performance of this Agreement, Consultant represents that it is knowledgeable in its field and that any services performed by Consultant under this Agreement will be performed in compliance with such standards as may reasonably be expected from a professional consulting firm in the field.

NOW THEREFORE, in consideration of the mutual and respective promises, and subject to the terms and conditions hereinafter set forth, the parties agree as follows:

1. SCOPE OF SERVICES

During the term of this Agreement, Consultant shall perform all tasks, services, and obligations described in the scope of work section included within RFP No. 21-105, including providing all labor, materials, tools, equipment, and incidental customary work required to fully and adequately complete the services described and set forth in the "**Scope of Services**", which was included in RFP 21-105 and is attached hereto and fully incorporated herein by this reference as **Exhibit A**.

2. COMPENSATION

- a. City neither warrants nor guarantees any minimum or maximum compensation to Consultant under this Agreement. Consultant shall be paid only for actual services performed under this Agreement at the rates and charges identified in Consultant's Fee Proposal, which is attached hereto and fully incorporated herein by this reference as **Exhibit B**. Consultant is one of three (3) separate consultants selected to provide services on an on-call basis under RFP 21-105. The total compensation for services provided by all consultants selected under RFP 21-105 shall not exceed the shared aggregate amount of \$1,500,000.00 during the term of this Agreement, including any extension periods as set forth in Section 3, below.

- b. Payment by City shall be made within forty-five (45) days following receipt of proper invoice evidencing work performed, subject to City accounting procedures. Payment need not be made for work which fails to meet the standards of performance set forth in the Recitals which may reasonably be expected by City.

3. TERM

This Agreement shall commence on March 21, 2023 for a three (3) year term and end on March 20, 2026, with the option for the City to grant up to two (2), 1-year extensions, exercisable by a writing by the City Manager and the City Attorney, unless terminated earlier in accordance with Section 15, below.

4. INDEPENDENT CONTRACTOR

Consultant shall, during the entire term of this Agreement, be construed to be an independent contractor and not an employee of the City. This Agreement is not intended nor shall it be construed to create an employer-employee relationship, a joint venture relationship, or to allow the City to exercise discretion or control over the professional manner in which Consultant performs the services which are the subject matter of this Agreement; however, the services to be provided by Consultant shall be provided in a manner consistent with all applicable standards and regulations governing such services. Consultant shall pay all salaries and wages, employer's social security taxes, unemployment insurance and similar taxes relating to employees and shall be responsible for all applicable withholding taxes.

5. OWNERSHIP OF MATERIALS

This Agreement creates a non-exclusive and perpetual license for City to copy, use, modify, reuse, or sublicense any and all copyrights, designs, and other intellectual property embodied in plans, specifications, studies, drawings, estimates, and other documents or works of authorship fixed in any tangible medium of expression, including but not limited to, physical drawings or data magnetically or otherwise recorded on computer diskettes, which are prepared or caused to be prepared by Consultant under this Agreement ("Documents & Data"). Consultant shall require all subcontractors to agree in writing that City is granted a non-exclusive and perpetual license for any Documents & Data the subcontractor prepares under this Agreement. Consultant represents and warrants that Consultant has the legal right to license any and all Documents & Data. Consultant makes no such representation and warranty in regard to Documents & Data which were provided to Consultant by the City. City shall not be limited in any way in its use of the Documents and Data at any time, provided that any such use not within the purposes intended by this Agreement shall be at City's sole risk.

6. INSURANCE

- a. Consultant shall not commence work for the City until it has provided evidence satisfactory to the City it has secured all insurance required under this Section. In addition, Consultant shall not allow any subconsultant to commence work on any subcontract until it has secured all insurance required under this Section.

b. Insurance coverage shall be at least as broad as:

- (i) Commercial General Liability (CGL): Insurance Services Office Form CG 00 01 covering CGL on an “occurrence” basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than \$1,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
- (ii) Automobile Liability: Insurance Services Office Form Number CA 0001 covering, Code 1 (any auto), or if Consultant has no owned autos, Code 8 (hired) and 9 (non-owned), with limit no less than \$1,000,000 per accident for bodily injury and property damage.
- (iii) Workers’ Compensation insurance as required by the State of California, with Statutory Limits, and Employer’s Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
- (iv) Professional Liability (Errors and Omissions) Insurance appropriate to the Consultant’s profession, with limit no less than \$2,000,000 per occurrence or claim, \$2,000,000 aggregate.
- (v) If the Consultant maintains broader coverage and/or higher limits than the minimums shown above, the Entity requires and shall be entitled to the broader coverage and/or the higher limits maintained by the Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the Entity.

c. Other Insurance Provisions. The insurance policies are to contain, or be endorsed to contain, the following provisions:

- (i) **Additional Insured Status.** The Entity, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Consultant including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Consultant’s insurance (at least as broad as ISO Form CG 20 10 11 85 or both CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37 forms if later revisions used).

- (ii) **Primary Coverage.** For any claims related to this contract, the Consultant's insurance coverage shall be primary insurance primary coverage at least as broad as ISO CG 20 01 04 13 as respects the Entity, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the Entity, its officers, officials, employees, or volunteers shall be excess of the Consultant's insurance and shall not contribute with it.
- (iii) **Notice of Cancellation.** Each insurance policy required above shall state that coverage shall not be canceled, except with notice to the Entity.
- (iv) **Waiver of Subrogation.** Consultant hereby grants to Entity a waiver of any right to subrogation which any insurer of said Consultant may acquire against the Entity by virtue of the payment of any loss under such insurance. Consultant agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the Entity has received a waiver of subrogation endorsement from the insurer.
- (v) **Self-Insured Retentions.** Self-insured retentions must be declared to and approved by the Entity. The Entity may require the Consultant to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or Entity.
- (vi) **Acceptability of Insurers.** Insurance is to be placed with insurers authorized to conduct business in the state with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the Entity.
- (vii) **Claims Made Policies.** If any of the required policies provide coverage on a claims-made basis:
- The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
 - Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work.
 - If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the Consultant must purchase "extended reporting" coverage for a minimum of five (5) years after completion of contract work.

- (viii) **Verification of Coverage.** Consultant shall furnish the Entity with original Certificates of Insurance including all required amendatory endorsements (or copies of the applicable policy language effecting coverage required by this clause) and a copy of the Declarations and Endorsement Page of the CGL policy listing all policy endorsements to Entity before work begins. However, failure to obtain the required documents prior to the work beginning shall not waive the Consultant's obligation to provide them. The Entity reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.
- (ix) **Subcontractors.** Consultant shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Consultant shall ensure that Entity is an additional insured on insurance required from subcontractors.
- (x) **Special Risks or Circumstances.** Entity reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

7. INDEMNIFICATION

Consultant agrees to defend, and shall indemnify and hold harmless the City, its officers, agents, employees, contractors, special counsel, and representatives from liability: (1) for personal injury, damages, just compensation, restitution, judicial or equitable relief arising out of claims for personal injury, including death, and claims for property damage, which may arise from the negligent operations of the Consultant, its subcontractors, agents, employees, or other persons acting on its behalf which relates to the services described in section 1 of this Agreement; and (2) from any claim that personal injury, damages, just compensation, restitution, judicial or equitable relief is due by reason of the terms of or effects arising from this Agreement. This indemnity and hold harmless agreement applies to all claims for damages, just compensation, restitution, judicial or equitable relief suffered, or alleged to have been suffered, by reason of the events referred to in this Section or by reason of the terms of, or effects, arising from this Agreement. The Consultant further agrees to indemnify, hold harmless, and pay all costs for the defense of the City, including fees and costs for special counsel to be selected by the City, regarding any action by a third party challenging the validity of this Agreement, or asserting that personal injury, damages, just compensation, restitution, judicial or equitable relief due to personal or property rights arises by reason of the terms of, or effects arising from this Agreement. City may make all reasonable decisions with respect to its representation in any legal proceeding. Notwithstanding the foregoing, to the extent Consultant's services are subject to Civil Code Section 2782.8, the above indemnity shall be limited, to the extent required by Civil Code Section 2782.8, to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant.

8. INTELLECTUAL PROPERTY INDEMNIFICATION

Consultant shall defend and indemnify the City, its officers, agents, representatives, and employees against any and all liability, including costs, for infringement of any United States'

letters patent, trademark, or copyright infringement, including costs, contained in the work product or documents provided by Consultant to the City pursuant to this Agreement.

9. RECORDS

Consultant shall keep records and invoices in connection with the work to be performed under this Agreement. Consultant shall maintain complete and accurate records with respect to the costs incurred under this Agreement and any services, expenditures, and disbursements charged to the City for a minimum period of three (3) years, or for any longer period required by law, from the date of final payment to Consultant under this Agreement. All such records and invoices shall be clearly identifiable. Consultant shall allow a representative of the City to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement during regular business hours. Consultant shall allow inspection of all work, data, documents, proceedings, and activities related to this Agreement for a period of three (3) years from the date of final payment to Consultant under this Agreement.

10. CONFIDENTIALITY

If Consultant receives from the City information which due to the nature of such information is reasonably understood to be confidential and/or proprietary, Consultant agrees that it shall not use or disclose such information except in the performance of this Agreement, and further agrees to exercise the same degree of care it uses to protect its own information of like importance, but in no event less than reasonable care. "Confidential Information" shall include all nonpublic information. Confidential information includes not only written information, but also information transferred orally, visually, electronically, or by other means. Confidential information disclosed to either party by any subsidiary and/or agent of the other party is covered by this Agreement. The foregoing obligations of non-use and nondisclosure shall not apply to any information that (a) has been disclosed in publicly available sources; (b) is, through no fault of the Consultant disclosed in a publicly available source; (c) is in rightful possession of the Consultant without an obligation of confidentiality; (d) is required to be disclosed by operation of law; or (e) is independently developed by the Consultant without reference to information disclosed by the City.

11. CONFLICT OF INTEREST CLAUSE

Consultant covenants that it presently has no interests and shall not have interests, direct or indirect, which would conflict in any manner with performance of services specified under this Agreement.

12. NON-DISCRIMINATION

Consultant shall not discriminate because of race, color, creed, religion, sex, marital status, sexual orientation, gender identity, gender expression, gender, medical conditions, genetic information, or military and veteran status, age, national origin, ancestry, or disability, as defined and prohibited by applicable law, in the recruitment, selection, teaching, training, utilization, promotion, termination or other employment related activities or any services provided under this

Agreement. Consultant affirms that it is an equal opportunity employer and shall comply with all applicable federal, state and local laws and regulations.

13. EXCLUSIVITY AND AMENDMENT

This Agreement represents the complete and exclusive statement between the City and Consultant, and supersedes any and all other agreements, oral or written, between the parties. In the event of a conflict between the terms of this Agreement and any attachments hereto, the terms of this Agreement shall prevail. This Agreement may not be modified except by written instrument signed by the City and by an authorized representative of Consultant. The parties agree that any terms or conditions of any purchase order or other instrument that are inconsistent with, or in addition to, the terms and conditions hereof, shall not bind or obligate Consultant or the City. Each party to this Agreement acknowledges that no representations, inducements, promises or agreements, orally or otherwise, have been made by any party, or anyone acting on behalf of any party, which is not embodied herein.

14. ASSIGNMENT

Inasmuch as this Agreement is intended to secure the specialized services of Consultant, Consultant may not assign, transfer, delegate, or subcontract any interest herein without the prior written consent of the City and any such assignment, transfer, delegation or subcontract without the City's prior written consent shall be considered null and void. Nothing in this Agreement shall be construed to limit the City's ability to have any of the services which are the subject to this Agreement performed by City personnel or by other consultants retained by City.

15. TERMINATION

This Agreement may be terminated by the City upon thirty (30) days written notice of termination. In such event, Consultant shall be entitled to receive and the City shall pay Consultant compensation for all services performed by Consultant prior to receipt of such notice of termination, subject to the following conditions:

- a. As a condition of such payment, the Executive Director may require Consultant to deliver to the City all work product(s) completed as of such date, and in such case such work product shall be the property of the City unless prohibited by law, and Consultant consents to the City's use thereof for such purposes as the City deems appropriate.
- b. Payment need not be made for work which fails to meet the standard of performance specified in the Recitals of this Agreement.

16. WAIVER

No waiver of breach, failure of any condition, or any right or remedy contained in or granted by the provisions of this Agreement shall be effective unless it is in writing and signed by the party waiving the breach, failure, right or remedy. No waiver of any breach, failure or right, or remedy shall be deemed a waiver of any other breach, failure, right or remedy, whether or not

similar, nor shall any waiver constitute a continuing waiver unless the writing so specifies.

17. JURISDICTION - VENUE

This Agreement has been executed and delivered in the State of California and the validity, interpretation, performance, and enforcement of any of the clauses of this Agreement shall be determined and governed by the laws of the State of California. Both parties further agree that Orange County, California, shall be the venue for any action or proceeding that may be brought or arise out of, in connection with or by reason of this Agreement.

18. PROFESSIONAL LICENSES

Consultant shall, throughout the term of this Agreement, maintain all necessary licenses, permits, approvals, waivers, and exemptions necessary for the provision of the services hereunder and required by the laws and regulations of the United States, the State of California, the City of Santa Ana and all other governmental agencies. Consultant shall notify the City immediately and in writing of its inability to obtain or maintain such permits, licenses, approvals, waivers, and exemptions. Said inability shall be cause for termination of this Agreement.

19. NOTICE

Any notice, tender, demand, delivery, or other communication pursuant to this Agreement shall be in writing and shall be deemed to be properly given if delivered in person or mailed by first class or certified mail, postage prepaid, or sent by fax or other telegraphic communication in the manner provided in this Section, to the following persons:

To City:

Jennifer L. Hall
Clerk of the City Council
City of Santa Ana
20 Civic Center Plaza (M-30)
P.O. Box 1988
Santa Ana, CA 92702-1988
Fax: 714- 647-6956

With courtesy copies to:

Nabil Saba
Executive Director, Public Works Agency
City of Santa Ana
20 Civic Center Plaza
P.O. Box 1988
Santa Ana, California 92702

To Consultant:

Brant Brechbiel
Vice President & Chief Contracting Officer
ECORP Consulting, Inc.,
2861 Pullman St.
Santa Ana, CA 92705
Fax: (714) 648-0630

A party may change its address by giving notice in writing to the other party. Thereafter, any communication shall be addressed and transmitted to the new address. If sent by mail, communication shall be effective or deemed to have been given three (3) days after it has been deposited in the United States mail, duly registered or certified, with postage prepaid, and addressed as set forth above. If sent by fax, communication shall be effective or deemed to have been given twenty-four (24) hours after the time set forth on the transmission report issued by the transmitting facsimile machine, addressed as set forth above. For purposes of calculating these time frames, weekends, federal, state, County or City holidays shall be excluded.

20. MISCELLANEOUS PROVISIONS

- a. Each undersigned represents and warrants that its signature herein below has the power, authority and right to bind their respective parties to each of the terms of this Agreement, and shall indemnify City fully, including reasonable costs and attorney's fees, for any injuries or damages to City in the event that such authority or power is not, in fact, held by the signatory or is withdrawn.
- b. All Exhibits referenced herein and attached hereto shall be incorporated as if fully set forth in the body of this Agreement.

[SIGNATURES ON FOLLOWING PAGE]

SIGNATURE PAGE FOR PROFESSIONAL SERVICES AGREEMENT
BETWEEN CITY OF SANTA ANA AND ECORP CONSULTING, INC.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the date and year first
above written.

ATTEST:

CITY OF SANTA ANA


Jennifer L. Hall
Clerk of the Council

Kristine Ridge
City Manager

APPROVED AS TO FORM:

SONIA R. CARVALHO
City Attorney

CONSULTANT:

By: 

Jonathan T. Martinez
Assistant City Attorney



Brant Brechbiel
Vice President & Chief Contracting Officer
ECORP Consulting, Inc.

RECOMMENDED FOR APPROVAL:

Nabil Saba
Executive Director,
Public Works Agency

EXHIBIT A

SCOPE OF SERVICES

**Appendix
ATTACHMENT 1
SCOPE OF WORK**

**CITY OF SANTA ANA
REQUEST FOR PROPOSALS
FOR
ON-CALL ENVIRONMENTAL CONSULTING SERVICES
RFP NO. 21-105**

INTRODUCTION/PROJECT BACKGROUND

The City of Santa Ana is issuing this Request for Proposals (RFP) to qualified Environmental Consulting firms to provide Environmental Services for the City of Santa Ana Public Works Agency on an as-needed basis. From the proposals received, it is the City's goal to select up to three (3) firms. The City will enter into separate agreements with each firm for an aggregate not to exceed amount of \$2,000,000. Work will be assigned by Contract Task Order (CTO). As tasks are identified, they will be distributed amount the firms based upon their ability to perform the required work within the project schedule and budget constraints.

DESCRIPTION OF WORK

The Consultant shall provide services under the direction of City staff. The Consultant will be expected to provide an experienced, educated and professional team, who's Project Manager and staff shall be responsive and maintain excellent working relationships with City staff. The Consultant shall be committed to provide adequate staffing levels at all times in order to adhere to established schedules. The Consultant shall be knowledgeable and up-to-date with federal, state and local regulations, policies and procedures as they pertain to CEQA and NEPA services provided.

Consultant services will include preparation, distribution and filing of environmental noticing, documents, preparation of studies and technical reports, including but not limited to the following:

• Initial Study	• Noise Impact Study
• Notice of Exemptions	• Biological Studies
• Negative Declaration	• Cultural Resources Study
• Mitigated Negative Declaration	• Geological/Soil Study
• Notice of Preparation	• Hydrology/Water Quality Study
• Notice of Intent	• Water Assessment Study
• Notice of Availability	• Mineral Resources Study
• Notice of Determination	• Utility/Sewer Study
• Environmental Impact Report	• Traffic Study
• Environmental Assessment	• Mitigation Monitoring Program
• Environmental Impact Statement	• Preparation of Response to Comments
• Categorical Exclusion	• Preparation of Statement of

	Overriding Considerations
• Preliminary Environmental Study	• FAA and ALUC Required
• Historic Records Search	• Public Outreach
• Environmental Certification Form	• Preliminary Engineering as required to support environmental analyses.
• Air Quality Study	• On-call staff consulting

Consultant services will also include attendance at appropriate City Commission, City Council, community, and other designated meetings as deemed necessary.

PAYMENT AND INVOICING:

Selected Consultant shall invoice the City Based on time and material according to the City's standard invoice template. Tasks and hours shall be clearly identified and all rates must match those included in the approved agreement. City shall retain ten percent (10%) of the invoice amount from each payment until completed Project has been accepted by the City.

SPECIAL REQUIREMENTS (ATTACHMENT 4)

This project may utilize California Department of Transportation (Caltrans) funds and shall therefore comply with all state and federal requirements. The below referenced forms included in Attachment 4 (Additional Provisions) of the Appendix must be completed in their entirety and submitted with your proposal:

- LAPM Exhibit 10-H: Sample Cost Proposal
- LAPM Exhibit 10-O1: Consultant Proposal DBE Commitment
- LAPM Exhibit 10-O2: Consultant Contract DBE Commitment (include within Fee Proposal hard copy package)

Please reference Caltrans Local Assistance Procedure Manual, Consultant Selection, Chapter 10, for further instructions and guidelines pertaining to the completion of these forms: <https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/lapm/ch10.pdf>

COMPLIANCE WITH REQUIREMENTS OF FUNDING AGENCY:

This agreement may be funded with state and/or federal grant funds administered by Caltrans. Proposer shall comply with all requirements as they pertain to the use of these funds. Refer to Attachment 4 for Caltrans required forms, including **Exhibit 10-H – Sample Cost Proposal** (H2 for On-Call Contracts) in the Appendix of this RFP.

DISADVANTAGED BUSINESS ENTERPRISES (DBE) GOAL:

The Agency has established a DBE goal for this Contract. Proposers are encouraged to obtain DBE participation for this contract. Refer to **Exhibit 10-I – Notice to Proposers DBE Information** included in the Appendix of this RFP. Proposers must submit **Exhibits 10-O1 & 10-O2 – Consultant Proposal & Contract DBE Commitment** to demonstrate compliance with Agency's DBE goal.

CONSULTANT AUDIT AND REVIEW PROCESS:

The selected Consultant(s) shall complete **Exhibit 10-K – Consultant Annual Certification of Indirect Costs and Financial Management System** for all prime and sub-consultants in the Appendix of this RFP.

To independently download any of the Caltrans Exhibits required per this RFP, visit:
<https://dot.ca.gov/programs/local-assistance/forms/local-assistance-procedures-manual-forms>

EXHIBIT B

COMPENSATION

Consultant's Fee Proposal

Schedule of Fees for Laboratory Testing

SOILS

Atterberg Limits, D 4318, CT 204	\$ 170
California Bearing Ratio (CBR), D 1883	\$ 550
Chloride and Sulfate Content, CT 417 & CT 422	\$ 175
Consolidation, D 2435, CT 219	\$ 300
Consolidation, Hydro-Collapse only, D 2435	\$ 150
Consolidation – Time Rate, D 2435, CT 219	\$ 200
Direct Shear – Remolded, D 3080	\$ 350
Direct Shear – Undisturbed, D 3080	\$ 300
Durability Index, CT 229	\$ 175
Expansion Index, D 4829, IBC 18-3	\$ 190
Expansion Potential (Method A), D 4546	\$ 170
Geofabric Tensile and Elongation Test, D 4632	\$ 200
Hydraulic Conductivity, D 5084	\$ 350
Hydrometer Analysis, D 6913, CT 203	\$ 220
Moisture, Ash, & Organic Matter of Peat/Organic Soils	\$ 120
Moisture Only, D 2216, CT 226	\$ 35
Moisture and Density, D 2937	\$ 45
Permeability, CH, D 2434, CT 220	\$ 300
pH and Resistivity, CT 643	\$ 175
Proctor Density D1557, D 698, CT 216, AASHTO T-180	\$ 220
Proctor Density with Rock Correction D 1557	\$ 340
R-value, D 2844, CT 301	\$ 375
Sand Equivalent, D 2419, CT 217	\$ 125
Sieve Analysis, D 6913, CT 202	\$ 145
Sieve Analysis, 200 Wash, D 1140, CT 202	\$ 100
Specific Gravity, D 854	\$ 125
Thermal Resistivity (ASTM 5334, IEEE 442)	\$ 925
Triaxial Shear, C.D., D 4767, T 297	\$ 550
Triaxial Shear, C.U., w/pore pressure, D 4767, T 2297 per pt	\$ 450
Triaxial Shear, C.U., w/o pore pressure, D 4767, T 2297 per pt	\$ 350
Triaxial Shear, U.U., D 2850	\$ 250
Unconfined Compression, D 2166, T 208	\$ 180

MASONRY

Brick Absorption, 24-hour submersion, 5-hr boiling, 7-day, C 67	\$ 70
Brick Compression Test, C 67	\$ 55
Brick Efflorescence, C 67	\$ 55
Brick Modulus of Rupture, C 67	\$ 50
Brick Moisture as received, C 67	\$ 45
Brick Saturation Coefficient, C 67	\$ 60
Concrete Block Compression Test, 8x8x16, C 140	\$ 70
Concrete Block Conformance Package, C 90	\$ 500
Concrete Block Linear Shrinkage, C 426	\$ 200
Concrete Block Unit Weight and Absorption, C 140	\$ 70
Cores, Compression or Shear Bond, CA Code	\$ 70
Masonry Grout, 3x3x6 prism compression, C 39	\$ 45
Masonry Mortar, 2x4 cylinder compression, C 109	\$ 35
Masonry Prism, half size, compression, C 1019	\$ 120
Masonry Prism, Full size, compression, C 1019	\$ 200

REINFORCING AND STRUCTURAL STEEL

Chemical Analysis, A 36, A 615	\$ 135
Fireproofing Density Test, UBC 7-6	\$ 90
Hardness Test, Rockwell, A 370	\$ 80
High Strength Bolt, Nut & Washer Conformance, per assembly, A 325	\$ 150
Mechanically Spliced Reinforcing Tensile Test, ACI	\$ 175
Pre-Stress Strand (7 wire), A 416	\$ 170
Reinforcing Tensile or Bend up to No. 11, A 615 & A 706	\$ 75
Structural Steel Tensile Test: Up to 200,000 lbs., A 370	\$ 90
Welded Reinforcing Tensile Test: Up to No. 11 bars, ACI	\$ 80

CONCRETE

Compression Tests, 6x12 Cylinder, C 39	\$ 35
Concrete Mix Design Review, Job Spec	\$ 300
Concrete Mix Design, per Trial Batch, 6 cylinder, ACI	\$ 850
Concrete Cores, Compression (excludes sampling), C 42	\$ 120
Drying Shrinkage, C 157	\$ 400
Flexural Test, C 78	\$ 85
Flexural Test, C 293	\$ 85
Flexural Test, CT 523	\$ 95
Gunite/Shotcrete, Panels, 3 cut cores per panel and test, ACI	\$ 275
Lightweight Concrete Fill, Compression, C 495	\$ 80
Petrographic Analysis, C 856	\$ 2,000
Restrained Expansion of Shrinkage Compensation	\$ 450
Splitting Tensile Strength, C 496	\$ 100
3x6 Grout, (CLSM), C 39	\$ 55
2x2x2 Non-Shrink Grout, C 109	\$ 55

ASPHALT

Air Voids, T 269	\$ 85
Asphalt Mix Design, Caltrans (incl. Aggregate Quality)	\$ 4,500
Asphalt Mix Design Review, Job Spec	\$ 180
Dust Proportioning, CT LP-4	\$ 85
Extraction, % Asphalt, including Gradation, D 2172, CT 382	\$ 250
Extraction, % Asphalt without Gradation, D 2172, CT 382	\$ 150
Film Stripping, CT 302	\$ 120
Hveem Stability and Unit Weight D 1560, T 246, CT 366	\$ 225
Marshall Stability, Flow and Unit Weight, T 245	\$ 240
Maximum Theoretical Unit Weight, D 2041, CT 309	\$ 150
Moisture Content, CT 370	\$ 95
Moisture Susceptibility and Tensile Stress Ratio, T 238, CT 371	\$ 1,000
Slurry Wet Track Abrasion, D 3910	\$ 150
Superpave, Asphalt Mix Verification (incl. Aggregate Quality)	\$ 4,900
Superpave, Gyration Unit Wt., T 312	\$ 100
Superpave, Hamburg Wheel, 20,000 passes, T 324	\$ 1,000
Unit Weight sample or core, D 2726, CT 308	\$ 100
Voids in Mineral Aggregate, (VMA) CT LP-2	\$ 90
Voids filled with Asphalt, (VFA) CT LP-3	\$ 90
Wax Density, D 1188	\$ 140

AGGREGATES

Clay Lumps and Friable Particles, C 142	\$ 180
Cleaness Value, CT 227	\$ 180
Crushed Particles, CT 205	\$ 175
Durability, Coarse or Fine, CT 229	\$ 205
Fine Aggregate Angularity, ASTM C 1252, T 304, CT 234	\$ 180
Flat and Elongated Particle, D 4791	\$ 220
Lightweight Particles, C 123	\$ 180
Los Angeles Abrasion, C 131 or C 535	\$ 200
Material Finer than No. 200 Sieve by Washing, C 117	\$ 90
Organic Impurities, C 40	\$ 90
Potential Alkali Reactivity, Mortar Bar Method, Coarse, C 1260	\$ 1,250
Potential Alkali Reactivity, Mortar Bar Method, Fine, C 1260	\$ 950
Potential Reactivity of Aggregate (Chemical Method), C 289	\$ 475
Sand Equivalent, T 176, CT 217	\$ 125
Sieve Analysis, Coarse Aggregate, T 27, C 136	\$ 120
Sieve Analysis, Fine Aggregate (including wash), T 27, C 136	\$ 145
Sodium Sulfate Soundness, C 88	\$ 450
Specific Gravity and Absorption, Coarse, C 127, CT 206	\$ 115
Specific Gravity and Absorption, Fine, C 128, CT 207	\$ 175

ROOFING

Roofing Tile Absorption, (set of 5), C 67	\$ 250
Roofing Tile Strength Test, (set of 5), C 67	\$ 250

Special preparation of standard test specimens will be charged at the technician's hourly rate.
Ninyo & Moore is accredited to perform the AASHTO equivalent of many ASTM test procedures.