

SOLANO COMMUNITY COLLEGE DISTRICT
GOVERNING BOARD AGENDA ITEM

TO: Members of the Governing Board

SUBJECT: CONTRACT AWARD TO TWINING, INC. FOR
MATERIAL TESTING AND SPECIAL INSPECTION
SERVICES FOR THE SAND VOLLEYBALL COURTS
PROJECT

REQUESTED ACTION:

☐ Information OR ☒ Approval
☐ Consent OR ☒ Non-Consent

SUMMARY:

Board approval is requested to award a professional services contract to Twining, Inc. for Division of State Architect (DSA) Material Testing and Special Inspection Services for the Sand Volleyball Courts Project on the Fairfield Campus. The scope of work of this contract includes providing all offsite/onsite material testing and special inspections as required by DSA for all construction activities for the Project.

CONTINUED ON THE NEXT PAGE

STUDENT SUCCESS IMPACT:

- ☐ Help our students achieve their educational, professional and personal goals
☐ Basic skills education
☐ Workforce development and training
☐ Transfer-level education
☒ Other: Renovate instructional space and update equipment.

Ed. Code: NA Board Policy: NA Estimated Fiscal Impact: \$13,471.50 Measure Q Funds

SUPERINTENDENT'S RECOMMENDATION:

☒ APPROVAL ☐ DISAPPROVAL
☐ NOT REQUIRED ☐ TABLE

Lucky Lofton
V.P., Facilities and Executive Bonds Manager

PRESENTER'S NAME

4000 Suisun Valley Road
Fairfield, CA 94534

ADDRESS

(707) 863-7260

TELEPHONE NUMBER

Lucky Lofton
V.P., Facilities and Executive Bonds Manager

VICE PRESIDENT APPROVAL

June 6, 2025

**DATE SUBMITTED TO
SUPERINTENDENT-PRESIDENT**

Kellie Sims Butler, Ph.D.
Superintendent-President

June 18, 2025

**DATE APPROVED BY
SUPERINTENDENT-PRESIDENT**

**SOLANO COMMUNITY COLLEGE DISTRICT
GOVERNING BOARD AGENDA ITEM**

TO: Members of the Governing Board

**SUBJECT: CONTRACT AWARD TO TWINING, INC., FOR
MATERIAL TESTING AND SPECIAL INSPECTION
SERVICES FOR THE SAND VOLLEYBALL COURTS
PROJECT**

SUMMARY:

CONTINUED FROM THE PREVIOUS PAGE

Proposals were solicited from all firms in the Board Approved Pool of Material Testing and Special Inspections firms. The District received a total of one (1) proposal for this service.

Based upon qualifications and the proposed scope of work, Twining, Inc's. proposal is considered to be the best value for this Project.

The Board is asked to approve a professional services contract to Twining, Inc. in the amount not to exceed \$13,471.50.

The agreement is available online at: <https://welcome.solano.edu/measureq/approved-contracts/>

**INDEPENDENT CONSULTANT AGREEMENT FOR PROFESSIONAL SERVICES
MATERIAL TESTING AND SPECIAL INSPECTIONS**

This Independent Consultant Agreement for Professional Services ("Agreement") is made and entered into as of the **18th day of June, 2025** by and between the **Solano Community College District**, ("District") and **Twining, Inc.** ("Consultant"), (together, "Parties").

NOW, THEREFORE, the Parties agree as follows:

1. **Services.** The Consultant shall provide **Material Testing and Special Inspections Services** for the **FF Sand Volleyball Courts Project** as further described in **Exhibit "A"**, attached hereto and incorporated herein by this reference ("Services").
2. **Term.** Consultant shall commence providing services under this Agreement on July 7, 2025, and will diligently perform as required and complete performance by December 31, 2025, unless this Agreement is terminated and/or otherwise cancelled prior to that time.
3. **Submittal of Documents.** The Consultant shall not commence the Services under this Agreement until the Consultant has submitted and the District has approved the certificate(s) and affidavit(s), and the endorsement(s) of insurance required as indicated below:

<u> X </u>	Signed Agreement
<u> X </u>	Workers' Compensation Certification
<u> X </u>	Insurance Certificates and Endorsements
<u> X </u>	W-9 Form
<u> </u>	Other: _____

4. **Compensation.** District agrees to pay the Consultant for services satisfactorily rendered pursuant to this Agreement a total fee not to exceed **THIRTEEN THOUSAND, FOUR HUNDRED SEVENTY-ONE DOLLARS AND FIFTY CENTS (\$13,471.50)**. District shall pay Consultant according to the following terms and conditions:
 - 4.1. Payment for the Work shall be made for all undisputed amounts based upon the delivery of the work product as determined by the District. Payment shall be made within thirty (30) days after the Consultant submits an invoice to the District for Work actually completed and after the District's written approval of the Work, or the portion of the Work for which payment is to be made.
 - 4.2. The schedule of deliverable Services to be produced is as follows:

4.2.1.1.	Site Construction (Soil, Nuclear Gauge, Density):	\$3,696.00
4.2.1.2.	Concrete (Reinforced, Cylinders & Tests):	\$4,047.75
4.2.1.3.	Metal (Shop & Field Fabrication):	\$5,727.75
 - 4.3. Consultant shall only be paid for the time and effort need to complete the actual scope of services required for this project, which may be less than the total amount noted in Section 4. Compensation. If the total amount noted is not needed to complete the scope of services, any remaining balance shall be retained by the District.
 - 4.4. Billing Rates are listed in **Exhibit "B"**, in case that additional services are requested by the District.

5. **Expenses.** District shall not be liable to Consultant for any costs or expenses paid or incurred by Consultant in performing services for District, except as follows:
- 5.1. Reimbursable expenses will not be allowed and such expenses should be incorporated into billing rates.
6. **Independent Contractor.** Consultant, in the performance of this Agreement, shall be and act as an independent contractor. Consultant understands and agrees that it and all of its employees shall not be considered officers, employees, agents, partner, or joint venture of the District, and are not entitled to benefits of any kind or nature normally provided employees of the District and/or to which District's employees are normally entitled, including, but not limited to, State Unemployment Compensation or Worker's Compensation. Consultant shall assume full responsibility for payment of all federal, state and local taxes or contributions, including unemployment insurance, social security and income taxes with respect to Consultant's employees. In the performance of the work herein contemplated, Consultant is an independent contractor or business entity, with the sole authority for controlling and directing the performance of the details of the work, District being interested only in the results obtained.
7. **Materials.** Consultant shall furnish, at its own expense, all labor, materials, equipment, supplies and other items necessary to complete the services to be provided pursuant to this Agreement.
8. **Performance of Services.**
- 8.1. **Standard of Care.** Consultant represents that Consultant has the qualifications and ability to perform the Services in a professional manner, without the advice, control or supervision of District. Consultant's services will be performed, findings obtained, reports and recommendations prepared in accordance with generally and currently accepted principles and practices of its profession for services to California community college districts.
- Consultant shall carefully study and compare all documents, findings, and other instructions and shall at once report to District, in writing, any error, inconsistency, or omission that Consultant or its employees may discover. Consultant shall have responsibility for discovery of errors, inconsistencies, or omissions.
- 8.2. **Meetings.** Consultant and District agree to participate in regular meetings on at least a monthly basis to discuss strategies, timetables, implementations of services, and any other issues deemed relevant to the operation of Consultant's performance of Services.
- 8.3. **District Approval.** The work completed herein must meet the approval of the District and shall be subject to the District's general right of inspection and supervision to secure the satisfactory completion thereof.
- 8.4. **New Project Approval.** Consultant and District recognize that Consultant's Services may include working on various projects for District. Consultant shall obtain the approval of District prior to the commencement of a new project.
9. **Originality of Services.** Except as to standard generic details, Consultant agrees that all technologies, formulae, procedures, processes, methods, writings, ideas, dialogue, compositions, recordings, teleplays and video productions prepared for, written for, or submitted to the District and/or used in connection with this Agreement, shall be wholly original to Consultant and shall not be copied in whole or in part from any other source, except that submitted to Consultant by District as a basis for such services.

10. **Copyright/Trademark/Patent.** Consultant understands and agrees that all matters produced under this Agreement shall become the property of District and cannot be used without District's express written permission. District shall have all right, title and interest in said matters, including the right to secure and maintain the copyright, trademark and/or patent of said matter in the name of the District. Consultant consents to use of Consultant's name in conjunction with the sale, use, performance and distribution of the matters, for any purpose and in any medium.

11. **Audit.** Consultant shall establish and maintain books, records, and systems of account, in accordance with generally accepted accounting principles, reflecting all business operations of Consultant transacted under this Agreement. Consultant shall retain these books, records, and systems of account during the Term of this Agreement and for five (5) years thereafter. Consultant shall permit the District, its agent, other representatives, or an independent auditor to audit, examine, and make excerpts, copies, and transcripts from all books and records, and to make audit(s) of all billing statements, invoices, records, and other data related to the Services covered by this Agreement. Audit(s) may be performed at any time, provided that the District shall give reasonable prior notice to Consultant and shall conduct audit(s) during Consultant's normal business hours, unless Consultant otherwise consents.

12. **Termination.**

12.1. **For Convenience by District.** District may, at any time, with or without reason, terminate this Agreement and compensate Consultant only for services satisfactorily rendered to the date of termination. Written notice by District shall be sufficient to stop further performance of services by Consultant. Notice shall be deemed given when received by the Consultant or no later than three days after the day of mailing, whichever is sooner.

12.2. **For Cause by District.** District may terminate this Agreement upon giving of written notice of intention to terminate for cause. Cause shall include:

12.2.1. material violation of this Agreement by the Consultant; or

12.2.2. any act by Consultant exposing the District to liability to others for personal injury or property damage; or

12.2.3. Consultant is adjudged a bankrupt, Consultant makes a general assignment for the benefit of creditors or a receiver is appointed on account of Consultant's insolvency.

Written notice by District shall contain the reasons for such intention to terminate and unless within three (3) calendar days after that notice the condition or violation shall cease, or satisfactory arrangements for the correction thereof be made, this Agreement shall upon the expiration of the three (3) calendar days cease and terminate. In the event of this termination, the District may secure the required services from another Consultant. If the expense, fees, and/or costs to the District exceed the cost of providing the service pursuant to this Agreement, the Consultant shall immediately pay the excess expense, fees, and/or costs to the District upon the receipt of the District's notice of these expense, fees, and/or costs. The foregoing provisions are in addition to and not a limitation of any other rights or remedies available to District.

13. **Indemnification.** To the furthest extent permitted by California law, Contractor shall defend, indemnify, and hold harmless the District, its Governing Board, agents, representatives, officers, consultants, employees, trustees, and volunteers (the "indemnified parties") from any and all claims arising out of, pertaining to, or relating to the negligence, recklessness, or willful misconduct of the Contractor. The District shall have the right to accept or reject any legal representation that Contractor proposes to defend the indemnified parties.

14. **Insurance.**

14.1. The Consultant shall procure and maintain at all times it performs any portion of the Services the following insurance with minimum limits equal to the amount indicated below.

Type of Coverage	Minimum Requirement
Commercial General Liability Insurance , including Bodily Injury, Personal Injury, Property Damage, Advertising Injury, and Medical Payments Each Occurrence General Aggregate	 \$ 1,000,000 \$ 2,000,000
Automobile Liability Insurance - Any Auto Each Occurrence General Aggregate	 \$ 1,000,000 \$ 2,000,000
Professional Liability	\$ 1,000,000
Workers Compensation	Statutory Limits
Employer's Liability	\$ 1,000,000

14.1.1. **Commercial General Liability and Automobile Liability Insurance.** Commercial General Liability Insurance and Any Auto Automobile Liability Insurance that shall protect the Consultant, the District, and the State from all claims of bodily injury, property damage, personal injury, death, advertising injury, and medical payments arising performing any portion of the Services. (Form CG 0001 and CA 0001, or forms substantially similar, if approved by the District.)

14.1.2. **Workers' Compensation and Employers' Liability Insurance.** Workers' Compensation Insurance and Employers' Liability Insurance for all of its employees performing any portion of the Services. In accordance with provisions of section 3700 of the California Labor Code, the Consultant shall be required to secure workers' compensation coverage for its employees. If any class of employee or employees engaged in performing any portion of the Services under this Agreement are not protected under the Workers' Compensation Statute, adequate insurance coverage for the protection of any employee(s) not otherwise protected must be obtained before any of those employee(s) commence performing any portion of the Services.

14.1.3. **Professional Liability (Errors and Omissions).** Professional Liability Insurance as appropriate to the Consultant's profession, coverage to continue through completion of construction plus two (2) years thereafter.

14.2. **Proof of Carriage of Insurance.** The Consultant shall not commence performing any portion of the Services until all required insurance has been obtained and certificates indicating the required coverage have been delivered in duplicate to the District and approved by the District. Certificates and insurance policies shall include the following:

14.2.1. A clause stating: "This policy shall not be canceled or reduced in required limits of liability or amounts of insurance until notice has been mailed to the District, stating date of cancellation or reduction. Date of cancellation or reduction shall not be less than thirty (30) days after date of mailing notice."

14.2.2. Language stating in particular those insured, extent of insurance, location and operation to which insurance applies, expiration date, to whom cancellation and reduction notice will be sent, and length of notice period.

14.2.3. An endorsement stating that the District and its Governing Board, agents, representatives, employees, trustees, officers, consultants, and volunteers are named additional insured under all policies except Workers' Compensation Insurance, Professional Liability, and Employers' Liability Insurance. An endorsement shall also state that Consultant's insurance policies shall be primary to any insurance or self-insurance maintained by District. An endorsement shall also state that there shall be a waiver of any subrogation.

14.2.4. All policies except the Professional Liability, Workers' Compensation Insurance, and Employers' Liability Insurance Policies shall be written on an occurrence form.

14.3. **Acceptability of Insurers.** Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the District.

15. **Assignment.** The obligations of the Consultant pursuant to this Agreement shall not be assigned by the Consultant.

16. **Compliance with Laws.** Consultant shall observe and comply with all rules and regulations of the governing board of the District and all federal, state, and local laws, ordinances and regulations. Consultant shall give all notices required by any law, ordinance, rule and regulation bearing on conduct of the Work as indicated or specified. If Consultant observes that any of the Work required by this Contract is at variance with any such laws, ordinance, rules or regulations, Consultant shall notify the District, in writing, and, at the sole option of the District, any necessary changes to the scope of the Work shall be made and this Contract shall be appropriately amended in writing, or this Contract shall be terminated effective upon Consultant's receipt of a written termination notice from the District. If Consultant performs any work that is in violation of any laws, ordinances, rules or regulations, without first notifying the District of the violation, Consultant shall bear all costs arising therefrom.

17. **Certificates/Permits/Licenses.** Consultant and all Consultant's employees or agents shall secure and maintain in force such certificates, permits and licenses as are required by law in connection with the furnishing of Services pursuant to this Agreement.

18. **Employment with Public Agency.** Consultant, if an employee of another public agency, agrees that Consultant will not receive salary or remuneration, other than vacation pay, as an employee of another public agency for the actual time in which services are actually being performed pursuant to this Agreement.

19. **Anti-Discrimination.** It is the policy of the District that in connection with all work performed under Contracts there be no discrimination against any employee engaged in the work because of race, color, ancestry, national origin, religious creed, physical disability, medical condition, marital status, sexual orientation, gender, or age and therefore the Consultant agrees to comply with applicable Federal and California laws including, but not limited to the California Fair Employment and Housing Act beginning with Government Code Section 12900 and Labor Code Section 1735 and District policy. In addition, the Consultant agrees to require like compliance by all of its subcontractor(s).
20. **Disabled Veteran Business Enterprises.** Pursuant to Education Code section 71028 and Public Contract Code section 10115, the District may have a participation goal for disabled veteran business enterprises (DVBES) of at least three percent (3%) per year of funds expended each year by the District on projects that use funds California Community College Chancellor's Office. In accordance therewith, the Consultant must submit, upon request by the District, appropriate documentation to the District identifying the good faith efforts the Consultant has taken to solicit DVBE participation in conjunction with this Agreement, if applicable.
21. **No Rights in Third Parties.** This Agreement does not create any rights in, or inure to the benefit of, any third party except as expressly provided herein.
22. **District's Evaluation of Consultant and Consultant's Employees and/or Subcontractors.** The District may evaluate the Consultant in any way the District is entitled pursuant to applicable law. The District's evaluation may include, without limitation:
- 22.1. Requesting that District employee(s) evaluate the Consultant and the Consultant's employees and subcontractors and each of their performance.
- 22.2. Announced and unannounced observance of Consultant, Consultant's employee(s), and/or subcontractor(s).
23. **Limitation of District Liability.** Other than as provided in this Agreement, District's financial obligations under this Agreement shall be limited to the payment of the compensation provided in this Agreement. Notwithstanding any other provision of this Agreement, in no event, shall District be liable, regardless of whether any claim is based on contract or tort, for any special, consequential, indirect or incidental damages, including, but not limited to, lost profits or revenue, arising out of or in connection with this Agreement for the services performed in connection with this Agreement.
24. **Confidentiality.** The Consultant and all Consultant's agents, personnel, employee(s), and/or subcontractor(s) shall maintain the confidentiality of all information received in the course of performing the Services. Consultant understands that student records are confidential and agrees to comply with all state and federal laws concerning the maintenance and disclosure of student records. This requirement to maintain confidentiality shall extend beyond the termination of this Agreement.
25. **Notice.** Any notice required or permitted to be given under this Agreement shall be deemed to have been given, served, and received if given in writing and either personally delivered or deposited in the United States mail, registered or certified mail, postage prepaid, return receipt required, or sent by overnight delivery service, or facsimile transmission, addressed as follows:

District:

Solano Community College District
C/O Kitchell CEM
4000 Suisun Valley Road
Fairfield, California 94534

ATTN: Tony Velasco
Email: Tony.Velasco@solano.edu

Consultant:

Twining, Inc.
4811 Airport Plaza, Suite 220
Long Beach, CA 90815

ATTN: Julie Thome
Email: JThome@twininginc.com

Any notice personally given or sent by facsimile transmission shall be effective upon receipt. Any notice sent by overnight delivery service shall be effective the business day next following delivery thereof to the overnight delivery service. Any notice given by mail shall be effective three (3) days after deposit in the United States mail.

26. **Integration/Entire Agreement of Parties.** This Agreement constitutes the entire agreement between the Parties and supersedes all prior discussions, negotiations, and agreements, whether oral or written. This Agreement may be amended or modified only by a written instrument executed by both Parties.
27. **California Law.** This Agreement shall be governed by and the rights, duties and obligations of the Parties shall be determined and enforced in accordance with the laws of the State of California. The Parties further agree that any action or proceeding brought to enforce the terms and conditions of this Agreement shall be maintained in the county in which the District's administrative offices are located.
28. **Waiver.** The waiver by either party of any breach of any term, covenant, or condition herein contained shall not be deemed to be a waiver of such term, covenant, condition, or any subsequent breach of the same or any other term, covenant, or condition herein contained.
29. **Severability.** If any term, condition or provision of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will nevertheless continue in full force and effect, and shall not be affected, impaired or invalidated in any way.
30. **Provisions Required By Law Deemed Inserted.** Each and every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein and this Contract shall be read and enforced as though it were included therein.
31. **Authority to Bind Parties.** Neither party in the performance of any and all duties under this Agreement, except as otherwise provided in this Agreement, has any authority to bind the other to any agreements or undertakings.
32. **Attorney Fees/Costs.** Should litigation be necessary to enforce any terms or provisions of this Agreement, then each party shall bear its own litigation and collection expenses, witness fees, court costs and attorney's fees.
33. **Captions and Interpretations.** Paragraph headings in this Agreement are used solely for convenience, and shall be wholly disregarded in the construction of this Agreement. No provision of this Agreement shall be interpreted for or against a party because that party or its legal representative drafted such provision, and this Agreement shall be construed as if jointly prepared by the Parties.

34. **Calculation of Time.** For the purposes of this Agreement, "days" refers to calendar days unless otherwise specified.
35. **Signature Authority.** Each party has the full power and authority to enter into and perform this Agreement, and the person signing this Agreement on behalf of each Party has been properly authority and empowered to enter into this Agreement.
36. **Counterparts.** This Agreement and all amendments and supplements to it may be executed in counterparts, and all counterparts together shall be construed as one document.
37. **Incorporation of Recitals and Exhibits.** The Recitals and each exhibit attached hereto are hereby incorporated herein by reference.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the date indicated below.

Dated: _____, 2025

Dated: _____, 2025

Solano Community College District

Ninyo & Moore

By: _____

By: _____

Print Name: Lucky Lofton

Print Name: _____

Print Title: Vice President, Facilities and
Executive Bonds Manager

Print Title: _____

Information regarding Consultant:

License No.: _____

_____:

Address:

Employer Identification and/or
Social Security Number

Telephone:

Facsimile:

E-Mail:

Type of Business Entity:

- ☐ Individual
☐ Sole Proprietorship
☐ Partnership
☐ Limited Partnership
☐ Corporation, State: _____
☐ Limited Liability Company
☐ Other: _____

NOTE: Section 6041 of the Internal Revenue Code (26 U.S.C. 6041) and Section 1.6041-1 of Title 26 of the Code of Federal Regulations (26 C.F.R. 1.6041-1) requires the recipients of \$600.00 or more to furnish their taxpayer information to the payer. In order to comply with these requirements, the District requires the Contractor to furnish the information requested in this section.

WORKERS' COMPENSATION CERTIFICATION

Labor Code Section 3700 in relevant part provides:

Every employer except the State shall secure the payment of compensation in one or more of the following ways:

- By being insured against liability to pay compensation by one or more insurers duly authorized to write compensation insurance in this State.
- By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing satisfactory proof to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to its employees.

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

Date: _____

Name of Consultant: _____

Signature: _____

Print Name and Title: _____

(In accordance with Article 5 – commencing at Section 1860, Chapter 1, part 7, Division 2 of the Labor Code, the above certificate must be signed and filed with the District prior to performing any Work under this Contract.)

END OF DOCUMENT

EXHIBIT "A"
DESCRIPTION OF SERVICES TO BE PERFORMED BY CONSULTANT

- 1.1. Special Testing and Inspection services to verify compliance with the DSA approved plans and specifications for this project. Basic services shall include, but are not necessarily limited to, the following:
 - 1.1.1.1. Provide all Material Testing and Special Inspections listed in DSA-103.
 - 1.1.1.2. Provide and coordinate onsite and offsite inspections and material testing and report to District, PM, CM and DSA Project Inspector.
 - 1.1.1.3. Provide semi-monthly reports to DSA, DSA PI, A/E, CM, PM and District.
 - 1.1.1.4. Review progress of work as needed with the PI, A/E, CM, PM and District.
 - 1.1.1.5. Review and provide input as needed for Requests for Information (RFI) and submittals.
 - 1.1.1.6. Review and provide input as needed on proposed contractor change orders for any work with Material Testing and Special Inspection ramifications.
 - 1.1.1.7. Provide monthly budget assessment for inspection services indicating current budget allocations, projected allocations, and remaining budget.
 - 1.1.1.8. Provide all necessary DSA closeout forms at the completion of the project, with copies to IOR, District, PM, CM and A/E.
- 1.2. Consultant shall maintain such personal contact with the Project as is necessary to assure themselves of compliance, in every material respect, with the DSA-approved construction documents. Personal contact shall include visits to the project site by the Consultant or its qualified representative to observe construction.

Anticipated Inspections:

Division 2: Site Construction

- (a) Soils Technician
- (b) Nuclear Gauge
- (c) Max Density Testing
- (d) Administrative

Division 3: Concrete

- (a)** ICC Special Insp – Reinforced Concrete
- (b)** Concrete QC
- (c)** Standard Samples – Concrete Cylinders
- (d)** Compression Strength testing
- (e)** Administrative

Division 5: Metal

- (a) Welding Inspection, shop & field
- (b) Brinnel and Rockwell Hardness Testing
- (c) Administrative

Project Management

- (a) Attend project meetings, project coordination, monitoring and administration including review and distribution of reports with laboratory test data and daily field inspection and testing reports, prepare weekly progress, and cost summaries report with invoices.
- (b) Prepare daily field reports documenting items inspected and reports of laboratory testing to be submitted to the project team via DSA box.
- (c) Prepare interim and final verified report (DSA 291) at the conclusion of the project.

EXHIBIT "B"

BILLING RATES

Task Code	Engineering And Consulting Personnel	Rate
10026	Senior Principal Advisor/Consultant	\$ 390.00
10001	Principal Engineer/Geologist	\$ 280.00
10017	Metallurgical Engineer	\$ 390.00
70000	Registered Geotechnical Engineer	\$ 280.00
10010	Technical Advisor	\$ 260.00
10011	Material Scientist, Welding/NDT Consultant	\$ 275.00
70003	Registered Geologist/Certified Engineering Geologist	\$ 275.00
10003	Senior Engineer/Geologist	\$ 250.00
10009	Registered Civil Engineer	\$ 240.00
60003	Roofing/Waterproofing Consultant	\$ 265.00
10013	Project Engineer/Manager	\$ 180.00
30000	Quality Control Manager	\$ 235.00
10005	Senior Staff Engineer/Geologist	\$ 220.00
10007	Staff Engineer/Geologist	\$ 205.00
10015	Quality Control Administrator	\$ 205.00
10019	Metallurgical Technician	\$ 175.00
90001	CADD Operator/Draftsperson	\$ 160.00
95103	Administrative Support	\$ 105.00
70107	Field Supervisor	\$ 195.00
91030	Safety Supervisor	\$ 195.00
20000	Laboratory Manager	\$ 180.00
98000	Laboratory Technician	\$ 155.00
90005	Expert Witness Testimony	\$ 630.00
91010	Qualified SWPPP Developer	\$ 220.00
91000	Qualified SWPPP Practitioner	\$ 205.00
30001	Vibration Engineer	\$ 240.00

Task Code	Field Inspection Personnel	Rate
10101	Concrete/Reinforced Steel Inspector	\$ 145.00
10103	Prestressed/Post Tensioned Inspector	\$ 145.00
10105	Concrete ICC Inspector	\$ 145.00
10109	Drilled-In-Anchor Inspector	\$ 145.00
10111	Gunite/Shotcrete Inspector	\$ 145.00
10113	Masonry Inspector	\$ 145.00
10201	Structural Steel/Welding Inspector	\$ 145.00
10203	AWS Certified Welding Inspector	\$ 115.00
10207	Fireproofing Inspector	\$ 145.00
10501	Lead Inspector	\$ 148.00
10115	Firestop Special Inspector - IFC Premier	\$ 205.00
10117	Firestop Special Inspector - IQP	\$ 225.00
75001	Asphalt Field and Plant Inspector/Technician	\$ 145.00
70103	Pile Driving Inspector	\$ 145.00
70101	Soils Technician	\$ 115.00
10107	Concrete Quality Control (ACI/Caltrans Technician)	\$ 115.00
10122	Wood Framing Inspector	\$ 145.00
60001	Roofing/Waterproofing Inspector	Quotation
10500	Public Works Inspector	Quotation
10515	Mechanical Inspector	\$ 195.00
10519	Electrical Inspector	\$ 195.00
10521	Plumbing Inspector	\$ 195.00
10523	Building Inspector	\$ 195.00
30002	Vibration Monitoring Technician	\$ 165.00
50003	Field Engineering Technician	\$ 145.00

Task Code	Shop Inspection Personnel	Rate
10301	Structural Steel Fabrication Inspector	\$ 147.00
10309	Batch Plant Quality Control Technician/Inspector	\$ 147.00
10325	Glue-Laminated Fabrication Inspector	Quotation
10328	Pre-Cast Concrete/Pipe Fabrication Inspector	\$ 147.00

Task Code	Nondestructive Testing Personnel	Rate
10401	NDE Ultrasonic Testing Technician	\$ 150.00
10403	NDE Magnetic Particle Testing Technician	\$ 150.00
10405	NDE Dye Penetrant Testing Technician	\$ 150.00
10305	Combination NDE Technician/Welding Inspector	\$ 150.00
10409	Radiographic Testing (Crew Of 2)	Quotation
10020	NDE Engineer	\$ 255.00

Task Code	Equipment Usage (Daily Unless Otherwise Noted)	Rate
95318	Skidmore	\$ 51.00
95309	Torque Wrench, Small	\$ 21.00
95312	Torque Wrench, Large	\$ 32.00
95315	Torque Multiplier	\$ 48.00

Task Code	Equipment Usage (Daily Unless Otherwise Noted), Continued	Rate
95321	Air Meter	\$ 37.00
95322	Unit Weight Bucket	\$ 28.00
95323	Field Concrete Scale	\$ 37.00
95324	2" x 2" x 2" Mold	\$ 26.00
95343	Nuclear Gauge (Per Hour)	\$ 13.00
95319	Sand Cone Density Test Equipment	\$ 60.00
95333	Pull Test Equipment	\$ 74.00
95348	Concrete/Asphalt Coring Equipment	\$ 720.00
95336	Floor Flatness (Dipstick)	\$ 63.00
95330	Schmidt Hammer	\$ 48.00
95341	Vapor Emission Test Kits	\$ 58.00
95342	Relative Humidity Probe	\$ 90.00
95339	UPV (Ultrasonic Pulse Velocity) Meter	\$ 420.00
95351	Fireproofing Adhesion/Cohesion (Per Test)	\$ 42.00
95300	A Scan Ultrasonic Equipment And Consumables	\$ 100.00
95303	Magnetic Particle Equipment And Consumables	\$ 53.00
95306	Liquid Penetrant Consumables	\$ 48.00
95307	Phased Array Ultrasonic Equipment (Per Hour)	\$ 105.00
95347	Ground Penetrating Radar	\$ 399.00
95345	Impact Echo	\$ 405.00
95362	Ultrasonic Tomography	\$ 525.00
95349	Inertial Profiler (Per Hour)	Quotation
95352	Borescope	\$ 315.00
95356	Infrared Camera	\$ 105.00
95357	Project Dedicated Vehicle	\$ 189.00
95364	Roller Compacted Concrete Vibrating Hammer/Tamping Plate	\$ 84.00
95367	Half-Cell Potential Equipment Set	\$ 405.00
95368	Concrete Electrical Resistivity Meter	\$ 189.00
95369	Field Hardness (Steel)	\$ 116.00
95370	Coating Thickness Gauge	\$ 116.00
95373	Curing Box (Not Temperature Controlled, One-Time Fee/Per Box)	\$ 788.00
95371	Temperature Control Curing Box (Per Month)	\$ 525.00
95372	Temperature Matching Curing Box (Per Month)	\$ 599.00

Task Code	Specimen Pick-Up	Rate
20100	Soil/Aggregate Sample (Each)	\$ 55.00
20102	Standard Sample: Concrete Cylinders (Each)	\$ 15.00
20101	Standard Sample: Mortar/Grout Cubes And Cores, Fireproofing, Rebar, And Epoxy Prisms (Each)	\$ 33.00
20103	Oversize Sample: Masonry Prisms And Shotcrete Panels (Each)	\$ 77.00
20104	Oversize Sample: Flexural Beams (Each)	\$ 77.00
20107	Technician For Specimen Pick-Up Not Listed Above (Per Hour, 2-Hour Minimum)	\$ 132.00
20109	Technician For Specimen Pick-Up Before 5:00 a.m. Or After 5:00 p.m. Monday Thru Friday, Or All Day Saturday (Per Hour, 2-Hour Minimum Plus Mileage)	\$ 143.00

Task Code	Jobsite Trailer, Mobile Or On-site Laboratory	Rate
95360	Portable Or Mobile Laboratory Unit	Quotation
95374	Jobsite Trailer, Conex, Or Equipment Storage Box	Quotation

Task Code	Concrete Tests (Field Made Specimens)	Rate
20201	6" x 12" Cylinder Compression Strength (ASTM C39)	\$ 30.00
20202	4" x 8" Cylinder Compression Strength (ASTM C39)	\$ 30.00
20203	Density Of Structural Lightweight Concrete Equilibrium Oven Dry Method (ASTM C567)	\$ 107.00
20205	Core Compression Including Trimming (ASTM C42)	\$ 91.00
20207	6" x 6" x 18" Flexural Beams Not Exceeding Referenced Size (ASTM C78, C293 or CTM 523)	\$ 118.00
20209	Splitting Tensile Strength (ASTM C496)	\$ 118.00
20211	Modulus Of Elasticity Test (ASTM C469)	\$ 348.00
80003	Rapid Chloride Permeability Test: Cylinders Or Cores (ASTM C1202)	\$ 626.00
80006	Density, Absorption, And Voids In Hardened Concrete (ASTM C642)	\$ 632.00
40005	Flexural Toughness (ASTM C1609, Formerly ASTM C1018)	\$ 1,017.00
40006	Double Punch Strength Of Fiber Reinforced Concrete	\$ 642.00
40009	Coefficient Of Thermal Expansion Of Concrete (CRD 39, AASHTO T336)	\$ 642.00
40012	Bulk Electrical Resistivity (One Age Of Testing, ASTM C1876)	\$ 161.00
80013	Flexural Tensile Strength Of Metallic Fiber Reinforced Concrete Beam (EN 14651)	\$ 1,124.00

Task Code	Concrete Specimen Preparation	Rate
20151	Sawing Of Specimens (Each)	\$ 49.00
20157	Coring Of Specimens In Lab (Each)	\$ 49.00
20159	Grinding Of Concrete Below 6000 psi Strength (Each)	\$ 70.00
20160	Grinding Of Concrete 6000 psi Strength And Above (Each)	\$ 105.00

Task Code	Laboratory Trial Batch: Concrete, Cement And Mortar	Rate
30216	Compression Test 4" x 8" Cylinders Made And Tested In Laboratory (ASTM C192, C35)	\$ 67.00
30217	Compression Test 6" x 12" Cylinders Made And Tested In Laboratory (ASTM C192, C35)	\$ 80.00
30219	6" x 6" x 18" Flexural Beams Made And Tested In Laboratory (ASTM C192, C78)	\$ 124.00
30223	Splitting Tensile Strength Cylinders Made And Tested In Laboratory (ASTM C192, C496)	\$ 140.00
30225	Modulus Of Elasticity Test Cylinders Made And Tested In Laboratory (ASTM C192, C469)	\$ 364.00
30227	Density Of Structural Lightweight Concrete Made In Laboratory, Equilibrium Or Oven Dry Method (ASTM C567)	\$ 129.00
30237	Bulk Electrical Resistivity (ASTM C1876)	\$ 188.00
30201	Laboratory Trial Batch (ASTM C192/Lab Procedure Performance)	\$ 626.00
30203	Concrete Mixture Design For Preconstruction Evaluation And Backup Data Development	\$ 295.00
30205	Drying Shrinkage Up To 28 Days, Three 3" x 3" Or 4" x 4" Bars, Five Readings Up To 28 Dry Days (ASTM C157)	\$ 610.00
30230	Additional Reading, Per Set Of Three Bars	\$ 63.00
30231	Storage Over Ninety (90) Days, Per Set Of Three Bars, Per Month	\$ 49.00
30207	Setting Time Up To 7 Hours (ASTM C403)	\$ 193.00
30209	Bleeding (ASTM C232)	\$ 193.00
30229	Concrete Restrained Expansion (ASTM C878)	\$ 696.00
30211	Mix, Make and Test Mortar or Grout Specimens for Compressive Strength: Set of 6 (ASTM C878)	\$ 642.00
20263	Non-Shrink Grout: Height Change After Final Set (ASTM C1090)	\$ 626.00
20265	Non-Shrink Grout: Height Change At Early Age (ASTM C827)	\$ 1,017.00
30232	Cracking Resistance, Set Of Three Rings, Laboratory Trial Batching, Test Until Cracking Or Up To 28 Days (ASTM 1581)	\$ 6,634.00
30233	Evaluation Of Pre-Packaged Masonry Mortars (ASTM C270)	\$ 1,391.00
30234	Creep (ASTM C512) (One Age Of Loading, 12 Months Duration Of Testing)	\$ 10,005.00
80198	Laboratory Development Of Strength-Maturity Curve Without Establishing Datum Temperature (Up To 5 Testing Ages, ASTM C1074)	\$ 3,424.00
80199	Laboratory Development Of Strength-Maturity Curve With Establishing Datum Temperature (Up To 5 Testing Ages, ASTM C1074)	\$ 5,564.00

Task Code	Evaluation of Mixing Water for Concrete	Rate
80246	Evaluation Of Mixing Water For Concrete Per The Requirements Of ASTM C1602, Table 1 (Physical Properties Of Mortar), Per Sample	\$ 1,070.00
80248	Evaluation Of Mixing Water For Concrete Per The Requirements Of Caltrans, Section 90, Per Sample	\$ 1,284.00

Task Code	Concrete - Chemical Analysis, Transport Properties, Service Life Modeling, Petrographic Examination	Rate
80123	Acid-Soluble Chloride Analysis (ASTM C1152) Includes Sample Prep)	\$ 321.00
80126	Water-Soluble Chloride Analysis (ASTM C1218) (Includes Sample Prep)	\$ 204.00
80193	Chloride Diffusion Coefficient Of Cementitious Mixtures By Bulk Diffusion (ASTM C1556)	\$ 3,103.00
80159	Bulk Resistivity (ASTM C1876) And Formation Factor	\$ 696.00
80204	Chloride Binding Isotherm	\$ 910.00
80206	Analytical And Experimental (ASTM C1556) Modeling Of Service Life Of Concrete Per Life-365 Model, Per Mixture Design	\$ 8,560.00
80208	Analytical And Experimental (NordTest) Modeling Of Service Life Of Concrete Per FIB Model Code 34, Per Mixture Design	\$ 8,560.00
80210	Non-Steady State Chloride Migration Coefficient, NordTest 492	\$ 669.00
80212	Petrographic Examination Of Hardened Concrete, Level I (ASTM C856) (Excludes Thin Section), Per Sample	\$ 1,750.00
80129	Petrographic Examination Of Hardened Concrete, Level II (ASTM C856) Includes Thin Section, Per Sample	\$ 2,250.00
80218	Petrographic Examination Of Hardened Concrete, Level III (ASTM C856/C1723) (Thin Section And SEM/EDX), Per Sample	\$ 3,500.00
80222	W/CM Determination (NordTest Build 361)	\$ 1,338.00
80224	Examination Of Volumetric Proportions Of Hardened Concrete (ASTM C457), Per Sample	\$ 535.00
80228	Air Void Analysis Of Hardened Concrete (ASTM C457), Per Sample	\$ 750.00
80232	Electron Microscopy (ASTM C1723)	\$ 803.00
80234	Paste Carbonation Analysis, Per Sample	\$ 268.00
80238	Insoluble Residue Analysis (ASTM C1324)	Quotation
80240	Alkali-Silica - Damage Rating Index (DRI), Per Sample	\$ 1,338.00

Task Code	Qualification Of Cements	Rate
80100	Chemical Analysis Of Portland Cement Per Standard Requirements (ASTM C150)	\$ 803.00
80103	Physical Testing Of Portland Cement Per Standard Requirements (ASTM C150)	\$ 803.00
80194	Physical Testing Of Type K Cement, Mortar Expansion (ASTM C806)	\$ 803.00
80195	Physical Testing And Chemical Analysis Of Portland Cement Per Standard Requirements (ASTM C150)	\$ 1,498.00
80106	Partial Analysis Or Specific Physical Tests	Quotation
80110	Sulfates Resistance Of Hydraulic Cement (ASTM C1012), 6 Months	\$ 3,210.00
80111	Sulfates Resistance Of Hydraulic Cement (ASTM C1012), 12 months	\$ 3,531.00
80149	Type 1L Cement (ASTM C595; Excludes Special Properties)	\$ 1,498.00
80151	Clinker Microscopy, Per Sample	\$ 910.00

Task Code	Physical Testing Of Chemical Admixtures For Concrete	Rate
80196	Qualification Of Admixture (ASTM C494)	Quotation

Task Code	Evaluation Of Pozzolans And Slag Cement	Rate
80140	Chemical Analysis Of Fly Ash Per Standard Requirements (ASTM C618)	\$ 803.00
80143	Physical Testing Of Fly Ash Per Standard Requirements (ASTM C618)	\$ 803.00
80146	Partial Analysis Or Specific Physical Tests	Quotation
80147	Chemical Analysis And Physical Testing Of Fly Ash Per Standard Requirements (ASTM C1618)	\$ 1,498.00
80250	Qualification Of Silica Fume Per Standard Requirements (ASTM C1240)	\$ 1,498.00
80252	Qualification Of Slag Cement Per Standard Requirements (ASTM C989)	\$ 1,498.00
80254	Effectiveness Of Pozzolans & Slag Cement In Mitigating Expansion Due To ASR (ASTM C441)	\$ 1,498.00

Task Code	Mass Concrete - Engineering And Testing Services	Rate
80256	Thermal Control Plan (Without Cooling Pipes) Per A Unique Type Of Placement Of Similar Group Of Placements, Each Plan	\$ 9,000.00
80258	Thermal Control Plan (With Cooling Pipes), Per A Unique Type Of Placement Of Similar Group Of Placements, Each Plan	\$ 10,500.00
80260	Performance Based Maximum Temperature Difference Laboratory & Analytical Studies, One Concrete Mixture Design	\$ 6,000.00

Task Code	Rock And Concrete Aggregates - Petrographic Examination & Special USACE & CRD Tests	Rate
80262	Rock Type Description, Per Sample (Rock Core Or Rock Chunk)	\$ 1,000.00
80263	Rock Type Description + XRD Including Clay Analysis, Per Sample	\$ 1,500.00
80266	Natural Aggregates - Petrographic Examination (Gravel And Natural Sand Consisting Of Single Rock Type ASTM C295) Each, One Sample	\$ 2,750.00
80268	Crushed Aggregates - Petrographic Examination (Crushed Rock And Manufactured Sand Consisting Of Single Rock Type ASTM C295), Each, One Sample	\$ 27,520.00
80270	Coarse Aggregate Certification For Deleterious Materials Per Specifications Of USACE, Materials Coarser Than 0.75-Inch Each, One Sample, 200 lb.	\$ 6,500.00
80272	Coarse Aggregate Certification For Deleterious Materials Per Specifications Of USACE, 0.75-Inch And Finer Material, Each, One Sample, 25 lb.	\$ 5,500.00
80274	Fine Aggregate Certification For Deleterious Materials Per Specifications Of USACE, Each, One Sample	\$ 2,750.00
80276	Aggregate, Scratch Hardness (CRD-C 130), Each, One Sample, 25 lb.	\$ 500.00

Task Code	Soils And Aggregate Tests	Rate
30503	Abrasion: LA Rattler (ASTM C131)	\$ 248.00
30505	Abrasion: LA Rattler (ASTM C535)	\$ 258.00
70301	Atterberg Limits/Plasticity Index (ASTM D4318, CTM 204)	\$ 206.00
70303	California Bearing Ratio Excluding Maximum Density (ASTM D1883) Soil	\$ 670.00
70304	California Bearing Ratio Excluding Maximum Density (ASTM D1883) Cement-Treated Soil	\$ 824.00
70344	Cement-Treated Soil/Base Mix Design: Includes Three Trial Cement Contents With Three Unconfined Compressive Strength Specimens Per Cement Content	\$ 4,223.00
70305	Chloride And Sulfate Content (CTM 417, CTM 422)	\$ 230.00
30403	Clay Lumps And Friable Particles (ASTM C142)	\$ 260.00
30321	Cleaness Value 1" x #4 (CTM 227)	\$ 220.00
30322	Cleaness Value 1.5" x .75" (CTM 227)	\$ 340.00
70393	Collapse Potential/Index (ASTM D5333)	\$ 279.00

Task Code	Soils And Aggregate Tests, Continued	Rate
70396	Compressive Strength Of Molded Soil-Cement Cylinders (ASTM D1633)	\$ 129.00
70309	Consolidation Test Full Cycle (ASTM 2435, CTM 219)	\$ 235.00
70311	Consolidation Test Time Rate Per Load Increment (ASTM D2435, CTM 219)	\$ 62.00
70313	Corrosivity Series Sulfate, Cl, pH, Resistivity (CTM 643, 417, and 422)	\$ 309.00
70315	Crushed/Fractured Particles (ASTM D5821, CTM 205)	\$ 225.00
70317	Direct Shear Test Remolded And/Or Residual (ASTM D3080)	\$ 300.00
70319	Direct Shear Test Undisturbed - Slow [CD] (ASTM D3080)	\$ 280.00
70321	Direct Shear Test Undisturbed - Fast [CU] (ASTM D3080)	\$ 235.00
70378	Durability Index Per Method - A,B,C, or D (ASTM D3744, CTM 229)	\$ 260.00
70325	Expansion Index (ASTM D4829, UBC 18-2)	\$ 225.00
75004	Fine Aggregate Angularity (ASTM C1252, CTM 234, AASHTO T304)	\$ 205.00
30507	Flat And Elongated Particle (ASTM D4791)	\$ 280.00
30508	Flat Or Elongated Particle (ASTM D4791)	\$ 260.00
70331	Maximum Density Methods A/B/C (ASTM D1557, D698, CTM 216)	\$ 200.00
70333	Maximum Density Check Point (ASTM D1557, D698)	\$ 90.00
70335	Maximum Density AASHTO C [Modified] (AASHTO T-180)	\$ 235.00
70336	Maximum Index Density Vibratory Table (ASTM D4253)	\$ 435.00
70337	Moisture Content (ASTM D2216, CTM 226)	\$ 40.00
70339	Moisture and Density Ring Sample (ASTM D2937)	\$ 45.00
70341	Moisture and Density Shelby Tube Sample (ASTM D2937)	\$ 50.00
70340	Moisture-Density Relations Of Soil-Cement Mixtures Premixed In The Field (ASTM D558)	\$ 340.00
70342	Moisture-Density Relations Of Soil-Cement Mixtures Mixed In The Lab (ASTM D558)	\$ 340.00
70328	pH Of Soils (ASTM D4972)	\$ 65.00
70330	Organic Content Of Soils (ASTM D2974, Method A Only)	\$ 95.00
30401	Organic Impurities (ASTM C40, CTM 213)	\$ 115.00
70343	Permeability (ASTM D5084)	Quotation
80001	Potential Reactivity Chemical Method (ASTM C289 - Discontinued Method)	\$ 685.00
		\$ 1,035.00
70394	Potential Reactivity Mortar Bar Expansion Method, 14-Day Exposure (ASTM C1260)	\$ 1,092.00
70391	Potential Reactivity Mortar Bar Expansion Method, 28-Day Exposure (ASTM C1260)	\$ 3,345.00
70398	Potential Reactivity Concrete Bar Expansion Method (ASTM C1293), 12 month	\$ 3,640.00
70399	Potential Reactivity Concrete Bar Expansion Method (ASTM C1293), 24 month	\$ 1,285.00
70397	Potential Reactivity Of Aggregate Combination, Non-Standard Method; 14-Day Exposure, Mortar (After ASTM C1567)	\$ 1,285.00
70392	Potential Reactivity Of Aggregate Combination, Non-Standard Method; 28-Day Exposure, Mortar (After ASTM C1567)	\$ 1,240.00
70345	R-Value Soil (ASTM 2844, CTM 301)	\$ 536.00
70347	R-Value Aggregate Base (ASTM D2844, CTM 301)	\$ 588.00
70349	Sand Equivalent (ASTM D2419, CTM 217)	\$ 160.00
70351	Sieve #200 Wash Only (ASTM D1140, CTM 202)	\$ 114.00
70353	Sieve With Hydrometer 3/4" Gravel To Clay (ASTM D422, D7928, CTM 203)	\$ 309.00
70355	Sieve With Hydrometer Sand To Clay (ASTM D422, D7928, CTM 203)	\$ 294.00
70357	Sieve Analysis Including Wash (ASTM C136, CTM 202)	\$ 186.00
70359	Sieve Analysis Without Wash (ASTM C136, CTM 202)	\$ 155.00
70360	Sieve Analysis Split Sieve (ASTM C136, CTM 202)	\$ 295.00
70361	Sieve Analysis Without Wash With Cobbles (ASTM C136, CTM 202)	\$ 290.00
70363	Soundness Sodium Or Magnesium Sulfate, 5 Cycles (ASTM C88)	\$ 232.00
70365	Specific Gravity And Absorption Coarse (ASTM C127, CTM 206)	\$ 125.00
70367	Specific Gravity and Absorption Fine (ASTM C128, CTM 207)	\$ 206.00
70369	Swell/Settlement Potential One Dimensional (ASTM D4546)	\$ 186.00
70371	Triaxial	Quotation
70373	Unconfined Compression (ASTM D2166, CTM 221)	\$ 237.00
30317	Unit Weight Per Cubic Foot (ASTM C29, CTM 212)	\$ 160.00
30319	Void In Aggregate With Known Specific Gravity (ASTM C29, CTM 212)	\$ 160.00
30411	Lightweight Particles Coarse, with Two Solutions (ASTM C123)	\$ 519.00
30412	Lightweight Particles Fine, with One Solution (ASTM C123)	\$ 258.00
20807	Method of Test for Relative Mortar Strength of Portland Cement Concrete Sand (CT 515)	\$ 1,400.00

Task Code	Asphalt Concrete Tests	Rate
75031	HMA Mixing And Preparation	\$ 160.00
75032	HMA Mixing And Preparation With Aggregate Treatment	\$ 232.00
75033	Bulk Specific Gravity Of Compacted Sample Or Core SSD (ASTM D2726, CTM 308C)	\$ 73.00
75036	Bulk Specific Gravity Of Compacted Sample Or Core Paraffin Coated (ASTM D1188 and CTM 308A)	\$ 103.00

Task Code	Asphalt Concrete Tests, Continued	Rate
75040	Emulsion Residue, Evaporation (ASTM D244)	\$ 195.00
75024	Extraction % Bitumen (ASTM D6307, CTM 382)	\$ 195.00
75027	Extraction % Bitumen And Gradation (ASTM D5444, D6307, CTM 202, 382)	\$ 270.00
75028	Extraction % Bitumen, Correction Factor (ASTM D6307, CTM 382)	\$ 440.00
75030	Chemical Extraction % Bitumen And Sieve Analysis (ASTM D2172 Method A or B, ASTM D5444)	\$ 305.00
75042	Lab Tested Maximum Density Hveem, 3 Briquettes (ASTM D1561, D1188, CTM 304, 308)	\$ 270.00
75057	Hveem Stabilometer Test, Premixed, 3 Briquettes (ASTM D1560, D1561, CTM 304, 366)	\$ 270.00
75048	Lab Tested Maximum Density Marshall, 3 Briquettes (ASTM D6926, D2726)	\$ 260.00
75049	Lab Tested Maximum Density Marshall 6" Specimen, 3 Briquettes (ASTM D5581, D2726)	\$ 270.00
75050	Lab Tested Maximum Density Superpave Gyratory Compacted Briquette, SSD, 1 Briquette (ASTM D6925, D2726)	\$ 115.00
75052	Lab Tested Maximum Density Superpave Gyratory Compacted Briquette, Paraffin, 1 Briquette (ASTM D1188, D6925)	\$ 115.00
75051	Maximum Theoretical Specific Gravity [RICE] (ASTM D2041, CTM 309)	\$ 200.00
75066	Marshall Stability And Flow, Cored Sample, Each (ASTM D6927)	\$ 100.00
75069	Marshall Stability And Flow, Premixed, 3 Briquettes (ASTM D6926, D6927)	\$ 280.00
75106	Marshall Stability And Flow, Gyratory Compacted Specimen Pre-Mixed, 3 Briquettes (ASTM D5581, D6925)	\$ 290.00
75107	Marshall Stability And Flow 6" Specimen, Premixed, 3 Briquettes (ASTM D5581)	\$ 290.00
75063	Moisture Content (CTM 370)	\$ 110.00
75005	Wet Track Abrasion Test (ASTM D3910)	\$ 205.00
75093	Hveem Mix Design (Excluding Aggregate Quality Tests)	\$ 5,740.00
75096	Hveem Mix Design, With RAP (Excluding Aggregate Quality Tests, RAP Qualification)	\$ 6,230.00
75099	Hveem Mix Design, With Lime (Excluding Aggregate Quality Tests)	\$ 6,590.00
75094	Hveem Mix Design Caltrans Untreated Mix (Including Aggregate Quality Tests)	\$ 6,850.00
75095	Hveem Mix Design Caltrans Lime Treated Mix (Including Aggregate Quality Tests)	\$ 7,830.00
75084	Marshall Mix Design (Excluding Aggregate Quality Tests)	\$ 5,740.00
75087	Marshall Mix Design With RAP (Excluding Aggregate Quality Tests)	\$ 6,230.00
75090	Marshall Mix Design With Lime (Excluding Aggregate Quality Tests)	\$ 6,840.00
75083	Open Grade Asphalt Concrete Mix Design (ASTM D7064, CTM 368)	\$ 3,310.00
75109	Superpave Mix Design (Excluding Aggregate Quality Tests)	\$ 11,695.00
75113	Superpave Mix Design, With RAP (Excluding Aggregate Quality Tests)	\$ 12,355.00
75114	Superpave Mix Design With Rubber (Excluding Aggregate Quality Tests)	\$ 12,355.00
75115	Superpave Mix Design With Additives (Excluding Aggregate Quality Tests)	\$ 12,690.00
75075	Effect Of Moisture On Asphalt Paving Mixtures, Pre-Mixed (ASTM D4867, AASHTO T283)	\$ 1,235.00
75111	Hamburg Wheel Track Test, 20,000 Passes, 4 Briquettes (AASHTO T324)	\$ 1,340.00
75039	Raveling Test Of Cold Mixed Emulsified Asphalt (ASTM D7196)	\$ 250.00
75067	Marshall Stability, Wet Set, 3 Replicates (AASHTO T245)	\$ 440.00
75068	Marshall Stability, Dry Set, 3 Replicates (AASHTO T245)	\$ 376.00
75070	Cold Recycled Asphalt Mix Design 2 Gradings Each, 3 Emulsion Content (Caltrans LP-8)	\$ 11,590.00

Task Code	Mortar And Stucco - Petrographic Examination	Rate
80282	Stucco, One-Coat (ASTM C856), Includes Thin Section), Per Sample	\$ 2,250.00
80286	Stucco, Two-Coat (ASTM C856), Includes Thin Section), Per Sample	\$ 2,500.00
80290	Stucco, Three-Coat (ASTM C856), Includes Thin Section), Per Sample	\$ 3,000.00
80294	Mortar (ASTM C1324, Petrographic Examination And Chemical Analysis), Per Sample	\$ 3,250.00

Task Code	Brick Masonry Tests, ASTM C67	Rate
20301	Modulus Of Rupture Flexural	\$ 118.00
20303	Compression Strength	\$ 81.00
20305	Absorption 5 Hour or 24 Hour	\$ 86.00
20307	Absorption (Boil) 1, 2 Or 5 Hours	\$ 118.00
20309	Initial Rate Of Absorption	\$ 75.00
20311	Efflorescence	\$ 91.00
20313	Cores Compression	\$ 97.00
20315	Shear Test On Brick Cores 2 Faces	\$ 118.00

Task Code	Concrete Block, ASTM C140	Rate
20321	Compression	\$ 102.00
20323	Absorption/Moisture Content/Oven Dry Density	\$ 102.00
20327	Linear Shrinkage (ASTM C426)	\$ 295.00
20335	Web And Face Shell Measurements	\$ 59.00
20329	Tension Test	\$ 188.00
20331	Core Compression	\$ 97.00
20333	Shear Test Of Masonry Cores 2 Faces	\$ 118.00
20339	Efflorescence Tests	\$ 91.00

Task Code	Masonry Prisms, ASTM C1314	Rate
20341	Compression Test, Composite Masonry Prisms Up To 8" x 16"	\$ 241.00
20343	Compression Test, Composite Masonry Prisms > 8" x 16"	\$ 321.00
20346	Prism Cord Modulus Of Elasticity	\$ 685.00
20347	Prism Cord Modulus Of Elasticity With Transverse Strain (For Double-Wythe Specimen)	\$ 846.00

Task Code	Mortar And Grout	Rate
20351	Compression 2" x 4" Mortar Cylinders (ASTM C780)	\$ 70.00
20353	Compression 3" x 3" x 6" Grout Prisms, Includes Trimming (ASTM C1019)	\$ 59.00
20355	Compression 2" Cubes (ASTM C109)	\$ 75.00
20357	Compression Cores Includes Trimming (ASTM C42)	\$ 86.00

Task Code	Masonry Specimen Preparation	Rate
20155	Cutting Of Cubes Or Prisms	\$ 91.00

Task Code	Fireproofing Tests	Rate
20401	Oven Dry Density (ASTM E605)	\$ 86.00

Task Code	Guniting And Shotcrete Tests	Rate
20361	Core Compression Including Trimming (ASTM C42)	\$ 86.00
20365	Compression Cubes (Includes Saw Cutting)	\$ 113.00

Task Code	Concrete Roof Fill: Gypsum, Vermiculite, Perlite, Lightweight Insulating Concrete, Etc.	Rate
20371	Compression Test (ASTM C495 and C472)	\$ 81.00
20373	Air Dry Density (ASTM C472)	\$ 59.00
20379	Oven Dry Density (ASTM C495)	\$ 86.00

Task Code	Reinforcing Steel, ASTM A615, A706	Rate
20501	Tensile Test #11 Or Smaller	\$ 81.00
20503	Bend Test #11 Or Smaller	\$ 75.00
20504	Bend Test #14 Or #18	\$ 428.00
20505	Tensile Test #14	\$ 321.00
20507	Tensile Test #18	\$ 423.00

Task Code	Reinforcing Steel - Welded Or Coupled Specimens	Rate
20521	Tensile Test Welded/Coupled #11 And Smaller	\$ 91.00
20523	Tensile Test Welded/Coupled #14	\$ 311.00
20525	Tensile Test Welded/Coupled #18	\$ 471.00
20529	Weld Macroetch	\$ 102.00
20531	Slippage Test - Caltrans (CTM 670)	\$ 257.00
20532	Tensile Test Welded Hoops #11 And Smaller	\$ 188.00

Task Code	Metal and Steel Testing	Rate
20601	Tensile Strength Up To 100K Pounds (Each)	\$ 91.00
20603	Tensile Strength Up To 200K Pounds (Each)	\$ 102.00
20605	Tensile Strength Up To 300K Pounds (Each)	\$ 129.00
20607	Tensile Strength Up To 400K Pounds (Each)	\$ 188.00
20609	Tensile Strength 400K To 600K Pounds (Each)	\$ 428.00
20611	Tensile Strength Stress-Strain Percent Offset	\$ 268.00
20545	Weld Macroetch	\$ 102.00
20547	Weld Fracture	\$ 54.00
20615	Bend Test	\$ 81.00
20617	Flattening Test	\$ 91.00

Task Code	Metal and Steel Testing, Continued	Rate
20619	Hardness Test (ASTM E18)	\$ 95.00
20630	Bolt Axial Tensile Test (Up To 7/8" Diameter)	\$ 70.00
20631	Bolt Wedge Tensile Test (Up To 7/8" Diameter)	\$ 86.00
20632	Bolt Axial Tensile Test (Greater Than 7/8" Up To 1" diameter)	\$ 91.00
20633	Bolt Wedge Tensile Test (Greater Than 7/8" Up To 1" Diameter)	\$ 118.00
20634	Bolt Axial Tensile Test (Greater Than 1" Diameter)	\$ 140.00
20635	Bolt Wedge Tensile Test (Greater Than 1" Diameter)	\$ 150.00
20636	Bolt Proof Load Test (Up To 7/8")	\$ 107.00
20637	Bolt Proof Load Test (Greater Than 7/8" Up To 1" Diameter)	\$ 129.00
20638	Bolt Proof Load Test (Greater Than 1")	\$ 145.00
20639	Nut Proof Load Test (Up To 7/8")	\$ 75.00
20640	Nut Proof Load Test (Greater Than 7/8" Up To 1" Diameter)	\$ 102.00
20641	Nut Proof Load Test (Greater Than 1")	\$ 113.00

Task Code	Chemical Testing Of Metal And Steel	Rate
80170	Steel Chemical Analysis	\$ 209.00
80173	Weight Of Galvanized Coating (ASTM A90)	\$ 107.00
80176	Epoxy Coating Thickness	\$ 107.00
80177	Coating Thickness	\$ 107.00

Task Code	Machining And Preparation Of Tensile And Bend Sample: Carbon Steel	Rate
20751	Machinist Initial Preparation From Mock-Up, Etc. (Per Hour)	\$ 156.00
20753	Sawcut To Overall Width (Per 0.5" Thickness Or Fraction Thereof)	\$ 70.00
20755	Machine To Test Configuration Milled Specimens	\$ 102.00
20757	Machine To Test Configuration Turned Specimens (Per 0.5" Thickness Or Fraction Thereof)	\$ 182.00
20759	Prepare Subsize Specimens (Per 0.5" Thickness Or Fraction Thereof)	\$ 124.00

Task Code	Charpy Impact	Rate
20621	Charpy Impact Ambient Temperature	\$ 113.00
20623	Charpy Impact Reduced Temperature	\$ 150.00

Task Code	Machining Of Charpy Samples: Carbon Steel	Rate
20780	Cutting And Milling (Per 0.5" Or Fraction Thereof)	\$ 102.00
20783	Final Machining To Sample Configuration	\$ 124.00

Task Code	Prestressing Wires And Tendons, (ASTM A416)	Rate
20701	Stress-Strain Analysis Wire Or Strands (Including Chart And Percent Offset)	\$ 273.00
20703	Tensile Test Only	\$ 204.00
20705	Tendons	Quotation

Task Code	Polymer Matrix Composite Materials (Fiberwrap)	Rate
20706	Tensile Strength - Set of 5 Specimens/Batch/Direction (ASTM D3039)	\$ 1,712.00
20707	Tensile Strength - Additional Specimens (ASTM D3039) (ASTM D3039)	\$ 321.00
20708	Heating Chamber Time - Per 24 Hr. Period	\$ 134.00

Task Code	Calibration Services And Universal Machine Usage	Rate
20801	Calibration/Verification Services	Quotation
20803	Universal Test Machine Usage (Per Hour)	\$ 482.00

Specialty Testing
- Cyclic And Fatigue Testing Programs On Special Products/Parts
- Engineering And Technical Supports/Design Of Prototypes And Special Test Set-Up
- Fastener/Coupling Full Testing Program Per New Regulations: Tension, Tension/Bend, Shear, Double Shear, 8 Compressions
- Fiberglass/Composite Materials Field Testing Program (ASTM D1143 D1242, D2584, D4065, D4476, D4923, D7901, D7921, and D732)
- Field Testing Of Structures And Structural Elements
- In-Place Shear Testing
- Materials And/Or Product Evaluation Per Specifications
- Structural Dynamic Testing And Durability Analysis

General Conditions

NOTE: Field inspection work conditions are established by contract with Operating Engineers, Local 3.

NOTE: A minimum of 24 hours notice is required for testing and inspection services.

NOTE: For projects subject to a Project Labor Agreement (PLA), if terms/conditions of the PLA are more restrictive those terms/conditions will apply.

NOTE: Rates will be adjusted annually each July 1st to reflect increased costs.

Administrative Fees

All administrative fees, except as noted below, including report distribution and Twining Construction Hive system are billed at the following percentage of the monthly invoice

total: 5%