

**AGREEMENT WITH SMITH EMERY SAN FRANCISCO
FOR PROFESSIONAL CONSULTANT SERVICES
FOR
CONSTRUCTION SPECIAL INSPECTION SERVICES FOR THE CLEAN WATER PROGRAM**

This agreement, made and entered into this day of _____, by and between the **CITY OF SAN MATEO**, a municipal corporation existing under the laws of the State of California, hereinafter referred to as "CITY", and Smith Emery San Francisco, a corporation with offices at 1940 Oakdale Avenue, San Francisco, CA, hereinafter referred to as "CONSULTANT":

RECITALS:

A. CITY desires certain professional services Construction Special Inspection Services hereinafter described.

B. CITY desires to engage CONSULTANT to provide these professional services Construction Special Inspection Services, by reason of its qualifications and experience for performing such services and CONSULTANT has offered to provide the required services on the terms and in the manner set forth herein.

NOW, THEREFORE, IT IS AGREED as follows:

SECTION 1 - SCOPE OF PROJECT

The scope of services to be performed by CONSULTANT under this Agreement is described in Exhibit A, Scope of Services, attached and incorporated by reference.

SECTION 2 - RELIANCE UPON PROFESSIONAL SKILL OF CONSULTANT

It is mutually understood and agreed by and between the parties hereto that CONSULTANT is skilled in the professional calling necessary to perform the work agreed to be done under this Agreement and that CITY relies upon the skill of CONSULTANT to do and perform the work in the most skillful manner, and CONSULTANT agrees to thus perform the work. The acceptance of CONSULTANT's work by CITY does not operate as a release of CONSULTANT from said obligation.

SECTION 3 - PROJECT COORDINATION/STAFFING

3.1 CITY

Azalea Mitch, PUBLIC WORKS DIRECTOR, will be the representative of CITY for all purposes under this Agreement. Thomas Ruark is hereby designated as the PROJECT MANAGER and shall supervise the day-to-day progress and execution of this Agreement.

3.2 CONSULTANT

CONSULTANT's services are unique and personal. CONSULTANT shall not assign or transfer its interest or obligation under this Agreement without the CITY's written consent. CONSULTANT shall not subcontract its duties under this Agreement without the CITY's written consent.

CONSULTANT shall assign a single PROJECT DIRECTOR to have overall responsibility for the progress and execution of this Agreement for CONSULTANT. James E. Partridge is hereby designated as the PROJECT DIRECTOR for CONSULTANT.

CONSULTANT shall assign a PROJECT COORDINATOR to represent CONSULTANT during the day-to-day work on the Project. Patrick Morrison is hereby designated as the PROJECT COORDINATOR for CONSULTANT.

CONSULTANT shall assign additional key personnel as follows:

James E. Partridge, President
Carl Eklund, Project Engineer
Alfreda Lee, Administrative Manager

In addition, CONSULTANT is specifically authorized to subcontract with the following subconsultant firms to assist in providing the services required by this Agreement:

None

CONSULTANT shall be responsible for employing or engaging all sub-consultants necessary for performance of the CONSULTANT's scope of work. CONSULTANT shall manage, evaluate, and incorporate sub-consultants work into the project as necessary.

All work on this project shall be accomplished by the above-named CONSULTANT's personnel and subconsultants. CONSULTANT shall not substitute personnel or subconsultants without the CITY's written consent.

SECTION 4 - INDEPENDENT CONTRACTOR

It is expressly agreed that in the performance of the professional services required under this Agreement, CONSULTANT shall at all times be considered an independent contractor as defined in Labor Code Section 3353, under control of the CITY as to the result of the work but not the means by which the result is accomplished. Nothing herein shall be construed to make CONSULTANT an agent or employee of CITY while providing services under this Agreement.

SECTION 5 - DUTIES OF CONSULTANT

CONSULTANT's Services shall be furnished as described below and as more particularly described in Exhibit A, Scope of Services. Any changes in the Scope of Services must be approved in advance, in writing, by the Public Works Director.

CONSULTANT shall be responsible for the professional quality, technical accuracy and coordination of all studies, reports, designs, drawings, specifications, and other items furnished by CONSULTANT under this Agreement. CONSULTANT shall, without additional compensation, correct or revise any errors or deficiencies in its studies, reports, designs, drawings, specifications, and other items.

CONSULTANT represents that it is qualified to furnish the services described under this Agreement.

All documents, drawings and specifications relating the project prepared by CONSULTANT or CONSULTANT's approved sub-consultants shall be approved, signed, and sealed by professional engineers duly registered in the State of California for each required discipline. The Contract Documents prepared by CONSULTANT shall provide for a completed project that conforms to all applicable national, state and local construction codes and ordinances, building, fire, electrical, plumbing and occupancy codes and standards.

CONSULTANT shall be responsible for employing or engaging all persons necessary to perform the services of CONSULTANT. No subconsultant of CONSULTANT will be recognized by CITY as such; rather, all subconsultants are deemed to be the agents of CONSULTANT, and CONSULTANT agrees to be responsible for their performance. CONSULTANT shall give its personal attention to the fulfillment of the provisions of this Agreement by all of its employees and subconsultants, if any, and shall keep the work under its control. If any employee or subconsultant of CONSULTANT fails or refuses to carry out the provisions of this Agreement or appears to be incompetent or to act in a disorderly or improper manner, he or she shall be discharged immediately from the work under this Agreement on demand of CITY.

CONSULTANT agrees to comply with the City's minimum wage ordinance as codified in Municipal Code Chapter 5.92, which differs from the state minimum wage and includes a Consumer Price Index escalator.

CONSULTANT shall furnish CITY with every reasonable opportunity for CITY to ascertain that the services of CONSULTANT are being performed in accordance with the requirement and intentions of this Agreement.

SECTION 6 - DUTIES OF CITY

CITY shall provide pertinent information regarding its requirements for the project.

CITY shall examine all documents submitted by CONSULTANT and shall render decisions pertaining thereto promptly to avoid unreasonable delay in the progress of CONSULTANT's work.

SECTION 7 - TERM, PROGRESS AND COMPLETION

The services to be performed under this Agreement shall commence and be completed as set forth in Exhibit B, Project Schedule.

It is understood and agreed that time is of the essence of this Agreement. CONSULTANT agrees to perform the services within the time limits set forth in Exhibit B.

CITY agrees to exercise due diligence in performing its tasks to implement the CONSULTANT's timetable.

SECTION 8 - PAYMENT

Payment shall be made by the CITY only for services rendered and upon submission of a payment request upon completion and CITY approval of the work performed. In consideration for the full performances of the services and any reimbursable expenses set forth in this Agreement, CITY agrees to pay CONSULTANT a fee based on verified time and materials not to exceed \$1,500,000. Requests for payments shall be itemized and correspond to the various items of work described in Exhibit A and shall be based on the rate and cost schedule set forth in Exhibit C.

Payment for extra work or changes in the work will not be made unless for work authorized in advance in writing by the PUBLIC WORKS DIRECTOR. Prior to commencing such extra work or changes, CONSULTANT and CITY shall agree upon an estimated not to exceed cost for such extra work. In no event shall CONSULTANT be paid for additional work that is necessary because of CONSULTANT's errors or oversights.

CONSULTANT shall maintain complete and accurate records as to the number of hours worked by persons and the direct costs incurred during each phase under this Agreement. All such records shall be maintained on a generally accepted accounting basis and shall be clearly identified and readily accessible. CONSULTANT shall provide free access to such books and records to the CITY at all times, shall permit the CITY to examine and audit those books and records, shall permit the CITY to make copies of those books and records, and shall permit the CITY to inspect all work data, documents, proceedings, and activities related to this Agreement for a period of three (3) years from the date of final payment under this Agreement. All accounting records shall provide an understandable breakdown of costs charged to this Agreement. All records encompassed by this subparagraph, as well as supporting documentation, shall be kept separate from other CONSULTANT documents and records and shall be maintained by CONSULTANT for three (3) years after CONSULTANT's receipt of final payment under this Agreement.

CONSULTANT shall bill the CITY within thirty (30) days for all compensable activity on the project.

CITY shall pay CONSULTANT within thirty (30) days of receipt of billings. If CITY disagrees with any portion of a billing, the CITY shall promptly notify CONSULTANT of the disagreement, and the CITY and the CONSULTANT shall attempt to resolve the disagreement. CITY's payment of any amounts shall not constitute a waiver of any disagreement.

SECTION 9 - CHANGES IN WORK

CITY may order changes in scope or character of work, either decreasing or increasing the amount of CONSULTANT's services by amending this Agreement. In the event that such changes are ordered, CONSULTANT shall be entitled to full compensation for all work performed prior to receipt of notice of change. In no event shall CITY be liable for payment unless the amount of such extra compensation shall first have been agreed to in writing by CITY.

In the event that changes are ordered pursuant to this section, the schedule for progress and completion in Section 7 of this Agreement and compensation in Section 8 of this Agreement shall be adjusted by negotiation between CONSULTANT and CITY, subject to approval, if necessary, by the San Mateo City Council.

SECTION 10 - CONFLICT OF INTEREST

CONSULTANT understands that its professional responsibility is solely to CITY. CONSULTANT covenants that it presently has no interest, and will not acquire any interest, direct or indirect, financial or otherwise, which would conflict in any manner or degree with the performance of the services under this Agreement. CONSULTANT shall not knowingly, and shall take reasonable steps to ensure that, it does not employ a person having such an interest in the performance of this Agreement. If after employment of a person, CONSULTANT discovers that it has employed a person with a direct or indirect interest that would conflict with its performance of this Agreement, CONSULTANT shall promptly sever the employment relationship.

SECTION 11 - TERMINATION

A. Without limitation to such rights or remedies as CITY shall otherwise have by law, CITY may, by ten days written notice to CONSULTANT, terminate this Agreement in whole or in part at any time, either for CITY'S convenience or because of the failure of CONSULTANT to fulfill its agreement obligations. Upon receipt and within ten days of such notice CONSULTANT shall:

1. Immediately discontinue all services affected (unless the notice directs otherwise); and

2. Deliver to CITY all data, documents, reports, estimates, summaries and such other information and materials as may have been accumulated by CONSULTANT in performing this Agreement, whether completed or in progress.

B. If the termination is for the convenience of CITY, CONSULTANT shall be compensated for all authorized work performed prior to notification of termination but no amount shall be allowed for anticipated profit on unperformed services.

C. If, after any notice of termination for failure to fulfill agreement obligations, it is determined by a court or other arbitrator that CONSULTANT had not so failed, the termination shall be deemed to have been effected for the convenience of CITY. In such event, adjustment in the agreement price shall be made as provided in paragraph (B) of this section.

D. CONSULTANT may terminate this Agreement or suspend work on the project upon sixty (60) days written notice to CITY, but only in the event of substantial failure of performance by CITY or in the event CITY abandons or indefinitely postpones the Project.

E. Upon termination of this Agreement or suspension of work on the project by either CITY or CONSULTANT, all duties of CITY and CONSULTANT as set forth in Sections 5 and 6 herein above shall terminate.

SECTION 12 - STATUS OF REPORTS

All documents prepared by CONSULTANT in the performance of this Agreement, although instruments of professional service, are and shall be the property of the CITY, whether the project for which they are made is executed or not. All documents furnished to CONSULTANT by the CITY and all reports and supportive data prepared by the CONSULTANT in connection with the performance of this Agreement are the CITY's property and shall be delivered to the CITY upon the completion of CONSULTANT's services or at the CITY's written request. All reports, information, data, and exhibits prepared or assembled by CONSULTANT in connection with the performance of its services pursuant to this Agreement are confidential until released by the CITY to the public, and the CONSULTANT shall not make any of these documents or information available to any individual or organization not employed by the CONSULTANT or the CITY without the written consent of the CITY before any such release.

SECTION 13 - INSURANCE

CONSULTANT shall procure and maintain for the duration of the contract and three years thereafter (five years for building or major improvements) the insurance specified in Exhibit D to this Agreement.

SECTION 14 - NONASSIGNABILITY

Both parties hereto recognize that this Agreement is for the personal services of CONSULTANT and cannot be transferred, assigned, or subcontracted by CONSULTANT without the prior written consent of CITY.

SECTION 15 - INDEMNITY

CONSULTANT agrees to hold harmless and indemnify City of San Mateo and the Estero Municipal Improvement District, their elected and appointed officials, employees, and agents, from and against any alleged claims, loss, liability, damage, and expense arising out of CONSULTANT's performance of this Agreement, except those claims arising out of CITY's active negligence or willful misconduct. CONSULTANT agrees to defend CITY of San Mateo and the Estero Municipal Improvement District, their elected and appointed officials, employees, and, against any such claims.

SECTION 16 - WAIVERS

The waiver by either party of any breach or violation of any term, covenant, or condition of this Agreement or of any provisions of any ordinance or law shall not be deemed to be a waiver of such term, covenant, condition, ordinance or law or of any subsequent breach or violation of the same or of any other term, condition, ordinance, or law. The subsequent acceptance by either party of any fee or other money which may become due hereunder shall not be deemed to be a waiver of any preceding breach or violation by the other party of any term, covenant, or condition of this Agreement or of any applicable law or ordinance.

SECTION 17 - COSTS AND ATTORNEYS FEES

Attorney fees in an amount not exceeding \$85 per hour per attorney, and in total amount not exceeding \$5000, shall be recoverable as costs (by the filing of a cost bill) by the prevailing party in any action or actions to enforce the provisions of this Agreement. The above \$5000 limit is the total of attorney fees recoverable whether in the trial court, appellate court, or otherwise, and regardless of the number of attorneys, trials, appeals, or actions. It is the intent of this Agreement that neither party shall have to pay the other more than \$5000 for attorney's fees arising out of an action, or actions to enforce the provisions of this Agreement.

SECTION 18 - NONDISCRIMINATION

CONSULTANT warrants that it is an Equal Opportunity Employer and shall comply with applicable regulations governing equal employment opportunity. Neither CONSULTANT nor any of its subconsultants shall discriminate in the employment of any person because of race, color, national origin, ancestry, physical handicap, medical condition, marital status, sex, or age, unless based upon a bona fide occupational qualification pursuant to the California Fair Employment and Housing Act.

SECTION 19 - MEDIATION

Should any dispute arise out of this Agreement, any party may request that it be submitted to mediation. The parties shall meet in mediation within 30 days of a request. The mediator shall be agreed to by the mediating parties; in the absence of an agreement, the parties shall each submit one name from mediators listed by either the American Arbitration Association, the California State Board of Mediation and Conciliation, or other agreed upon service. The mediator shall be selected by a blind draw.

The cost of mediation shall be borne equally by the parties. Neither party shall be deemed the prevailing party. No party shall be permitted to file a legal action without first meeting in mediation and making a good faith attempt to reach a mediated settlement. The mediation process, once commenced by a meeting with the mediator, shall last until agreement is reached by the parties but not more than 60 days, unless the maximum time is extended by the parties.

SECTION 20 - LITIGATION

CONSULTANT shall testify at CITY's request if litigation is brought against CITY in connection with CONSULTANT's services under this Agreement. Unless the action is brought by CONSULTANT, or is based upon CONSULTANT's wrongdoing, CITY shall compensate CONSULTANT for preparation for testimony, testimony, and travel at CONSULTANT's standard hourly rates at the time of actual testimony.

SECTION 21 - NOTICES

All notices hereunder shall be given in writing and mailed, postage prepaid, addressed as follows:

To CITY:	Thomas Ruark
	City of San Mateo
	2050 Detroit Drive
	San Mateo, CA 94404

To CONSULTANT: Smith Emery San Francisco
 Attn: James E. Partridge
 1940 Oakdale Avenue
 San Francisco, CA 94124

SECTION 22 - AGREEMENT CONTAINS ALL UNDERSTANDINGS; AMENDMENTS

This document represents the entire and integrated agreement between CITY and CONSULTANT and supersedes all prior negotiations, representations, and agreements, either written or oral.

This document may be amended only by written instrument, signed by both CITY and CONSULTANT.

SECTION 23 - AUTHORITY TO ENTER INTO AGREEMENT

CONSULTANT has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and to bind each respective party.

SECTION 24 - SEVERABILITY

If any term or portion of this Agreement is held to be invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions of this Agreement shall continue in full force and effect.

SECTION 25 - GOVERNING LAW

This Agreement shall be governed by the laws of the State of California.

SECTION 26 - VENUE

In the event of litigation, venue will be in the County of San Mateo.

[SIGNATURES PAGE FOLLOWS]

IN WITNESS WHEREOF, this agreement between the CITY OF SAN MATEO and Signet Testing Laboratories, Inc has been duly executed by the parties hereinabove named, as of the day and year first above written.

CITY OF SAN MATEO

CONTRACTOR

Azalea Mitch
Public Works Director

Date

James E. Partridge Its Authorized Agent President	Date
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APPROVED AS TO FORM

Linh Nguyen
Assistant City Attorney

Date

Attachments:

Exhibit A:	Scope of Work
Exhibit B:	Project Schedule
Exhibit C:	Cost Schedule
Exhibit D:	Insurance Requirements

EXHIBIT A

SCOPE OF SERVICES

The Contractor will provide special inspections, observations, and testing services for projects as requested by the City and as required by the Contract specifications and drawings for projects under the Clean Water Program for the City of San Mateo.

1. Detailed Scope of Work

The scope of services will be executed by individual project Task Order and may include:

- Cooperate and coordinate with the Engineer (designer) of Record, the Contractor, the Construction Manager and Representatives for the City of San Mateo Clean Water Program in performance of services/duties, including testing, special inspections, and reporting of results and findings.
- Laboratory Materials Testing Analysis of concrete compression tests
- Concrete reinforcement and formwork inspection
- Concrete placement, inspection, compression, sampling and testing
- Structural masonry inspection and testing
- Structural steel inspection and testing
- Structural steel hoisting
- Inspection and testing of reinforced steel
- Anchor Bolt testing
- Rebar doweling
- Structural Steel for centrifuge hoist
- Field and visual weld inspection and testing
- Field bolt inspection and testing
- X-ray of welds inspection and testing
- Soils Compaction testing and inspection
- Geotechnical inspection and testing
- Subgrade inspection and testing
- Asphalt pavement inspection and testing
- Rebar doweling inspection
- Factory and supplier inspection and testing
- Others required per Contract specifications and drawings

This work shall be done by certified employees experienced in executing all aspects of field sampling, testing, laboratory testing, and reporting in accordance with industry standards and best practices for the type of work performed.

Special Inspectors will refer to the approved Contract specifications and drawings for detailed

special inspection requirements. Any additional tests and inspections required by the approved specifications and drawings will also be performed.

All specialty inspections are to be performed to meet Contract specifications for Special Inspection, Observations, and Testing (section 01451) or/and others applicable

Frequency of testing and inspections will be directed by the City to comply with the requirements of the Contract specifications and drawings.

2. Duties and responsibilities of the Special Inspector

- **Observe Work:** The Special Inspector shall observe the work for conformance with approved (stamped) design drawings and specifications and applicable workmanship provisions of the CBC. Architect/Engineer -reviewed shop drawings and /or placing drawings may be used only as an aid to inspection. Special inspections may be performed on a continuous or periodic basis, depending on the specific inspection required and field conditions. The Contractor and the City will agree on the appropriate level of effort at the time of each individual request for the inspection services.
- **Report Nonconforming Items:** The Special Inspector shall bring nonconforming items to the immediate attention of the City and note all such items in the daily report. If any item is not resolved in a timely manner or is about to be incorporated in the work, the Special inspector shall immediately notify the City by telephone or in person, notify the engineer or architect, and post a discrepancy notice.

3. Technical Deliverables

The Contractor shall submit all technical deliverables identified below to the City

- Daily Inspection report
- Daily time records
- Detailed test and /or laboratory reports within a time period agreed to by the City and contractor at the time of each request for inspection services.
- Weekly summary reports of inspection activity if deemed necessary by the City
- **Furnish Daily Reports:** Each Special Inspector shall complete and sign both the special inspection record and the daily report form for each day's inspection to remain at the jobsite for review by the City
- **Furnish Weekly Reports:** The special Inspector or inspection agency shall furnish weekly reports of tests and inspections directly to the City. These reports must include the following:
 - Description of daily inspections and tests made with applicable locations.
 - Listing of all nonconforming items

- Reports on how nonconforming items were resolved or unresolved, as applicable, and
 - Itemized changes authorized by the architect, engineer, and Construction Manager/Owner
- Furnish Final Report: The Special Inspector or inspection agency shall submit a final signed report to the City. the report shall state that all items requiring special inspections and testing were completed and included on the report. in addition, the Special Inspector shall state that, to the best of his/her knowledge, the inspected/tested items are in conformance with the approved design drawings and specifications, approved change orders and the applicable workmanship provisions of the CBC. Items not in conformance, unresolved items, or any discrepancies in inspection coverage, (i.e., missed inspections, periodic inspection when continuous was required, etc0 shall be specifically itemized in this report.

4. Project Requirements: - City Responsibilities

- Notify the Special Inspector: the city is responsible for notifying the Special Inspector or agency regarding individual inspections that are required. 24 hours advance request for dispatch shall be provided so that the Special Inspector has time to become familiar with the project.
- Provide Access to Approved Plans: the City is responsible for providing the Special Inspector access to the approved plans at the jobsite.
- Retain Special Inspection Records: The City shall be responsible for retaining at the jobsite all special inspection records submitted by the Special Inspector.

End of Scope of Work

Exhibit B

Project Schedule

Contract for services will begin on March 1, 2022 and will end on February 28, 2024. In addition, three (3) one-year options for continuing these service at the discretion of the City exist.

EXHIBIT C

Cost Schedule

The cost for the based contract shall be on a time and materials basis in accordance with the attached Schedule of Fees and Services for a cost not to exceed \$1,500,000.00 (one million five hundred thousand dollars). Three (3) one-year options shall be on a time and material basis not to exceed \$250,000.00 (two hundred and fifty thousand dollars per year per option). Options to be issued at the discretion of the City.

Attached: Smith Emery Inspection Services Fee Schedule 21 Pages)



INSPECTION SERVICES

Smith-Emery Company is Signatory to an Agreement with the International Union of Operating Engineers, Local 3, AFL-CIO, covering inspectors. The price quoted below for inspection services are firm to June 30, 2022. On July 1st, prices will be adjusted by the increase resulting from our union contract plus increase in our liability insurance if any.

Activity

Geotechnical Consulting/Testing

Preliminary Investigations	By Quote
Foundation Recommendations	By Quote
On-Site Testing	\$136.02
Environmental Assessment Studies	By Quote

2401 Concrete Inspection

\$135.94

Concrete/Epoxy Injection
Shoring, per hour
Foundations
Walls/Columns
Slabs on Grade
Elevated Slabs
Slabs-Metal Deck
Precast Plant
Guniting/Shotcrete
Prestress/Post-Tension

1119 Batch Plant	\$119.40
1817 Combination Concrete/Soils	\$141.27
7210 General Technician	\$119.40
Project Inspector	\$141.27
1613 Fiberwrap	\$135.94
2014 Dowels/Anchors/Torque	\$119.40
9311 Epoxy Dowels/Anchors	\$119.40
9312 Expansion Anchors	\$119.40
9313 Grouting of Baseplate	\$119.40

2402 Masonry Inspection

\$135.94

Retaining Walls
Structural Walls
Stair Shaft
Veneer
Grouting
Repointing

Activity

2405 Steel Shop - Visual Inspection.....	\$141.27
Visual	
Material I.D.	
Quantity Verification	
Procedure Qualification	
Welder Qualification	
Other	
WPS Review	\$193.11
2406 Steel Shop-Non-Destructive Testing	\$141.27
Ultrasonic	
Magnetic Particle	
Dye Penetrant	
2403 Steel Field-Visual Inspection	\$141.27
Weld-Frame	
Weld-Deck	
Weld-Rebar	
Weld-Shoring	
Weld-Miscellaneous	
High Strength Bolts	
Curtain Wall	
Procedure Qualification	
Welder Qualification	
Steel Field Precast Panel	
2408 Waterproofing Inspection	\$135.94
Material I.D.	
Laydown	
Material Sampling	
2409 Shear Diaphragms	\$135.94
Shear Nailing	
Nailing Inspection	
Hold-Down Hardware, Include Dowels	
Woodframe Inspection	
2407 Fireproofing Inspection	\$135.94
Fireproofing Technician	
Thickness Evaluation	
Density Sampling	
Repair Application	
Adhesion/Cohesion	
Firestopping	

Activity

550 Roofing Inspection	\$135.94
Material I.D.	
Laydown	
Material Sampling	
2410 Finishing Inspection	\$135.94
Drywall Fastening	
Electrical	
H.V.A.C.	
Plumbing	
Fire Sprinkler	
Ceramic Tile	
Waterproofing	
Curtain Wall	
Miscellaneous Finishing	
Radiography	
Radiographic Technician, Level II with Helper & Field Film Processing Equip., per hour	
2404 Steel Field-Non-Destructive Testing	\$141.27
Ultrasonic	
Magnetic Particle	
Dye Penetrant	
2510 Reinforcing Steel Inspection (Rebar)	\$135.94
Reinforcing Steel Inspection	\$135.94
2511 Sample Rebar At Shop	\$119.40
2512 Tagged Rebar At Shop	\$119.40
9312 Expansion Anchors	\$119.40
9313 Grouting of Baseplate	\$119.40
Special Services	
9602 Registered Engineer Support, per hour	\$193.11
9110 Reports, each	\$5.00
9106 Administrative Support for Special Projects	
3097 Ground Penetrating Radar, (4 hr min) per hour	\$272.45
4416 Rental Equipment	
2444 Outside Services	
9704 Schmidt Hammer	\$195.69
3110 Pachometer	\$195.69
9702 Outside Coring Services	
2018 Seismic Evaluation	
Senior Special Inspector	\$202.24
2410 Digital/Video Film Documentation, per hour	\$220.20
4420 Digital/Video Film - 60 Min. Tape	
9310 Quality Control	

CONCRETE

Activity

Cylinder Pick-up (within 40 mile radius from Laboratory)

5000 6:30 a.m. to 4:00 p.m., Monday through Friday, per sample	\$ 7.70
5001 Before 6:30 a.m. and after 4:00 p.m. and Saturday, per sample	\$ 27.50
5002 Sunday and Holidays, per sample	\$ 82.50
5003 Minimum Pick-Up Charge	\$ 38.50

Cylinders, Beams & Cores

4300 Compression Test, 6" x 12" Cylinders, Including Hold, ASTM C 39, each	\$ 54.29
Cylinder Mold, 6"x 12" Diameter	\$ -
4303 Weight Per Cubic Foot of Lightweight Concrete Cylinders, each	\$ 86.27
4211 Compression Test, 2" - 4" - 6" Cores, ASTM C 42, each	\$ 54.29
4215 Base Plate Grout Comp-Cube	\$ 54.29
4312 Core Cutting, In Laboratory, each	\$ 109.32
4313 Core Cutting Away, One Man Lab	\$ 112.61
4311 Core Compression Test	\$ 54.29
4304 Flexure Test, 6" x 6" Beams, ASTM C 78, each	\$ 213.68
5021 Pick Up of Flexural Test Beams, (within 40 mile radius of Laboratory), each	\$ 80.95
4305 Splitting Tensile, 6" x 12" Cylinders, ASTM C 496, each	\$ 78.59
4306 Modulus of Elasticity Test - Static, ASTM C 469, each	\$ 393.62
Slab Moisture Determination Test (Calcium Chloride), each	\$ 86.27
Deliver Flexural Beam Mold, per trip	\$ 86.27
Pick Up/Deliver Air Entrainment/Unit Weight Equipment	\$ 86.27
Compression Test, 6" x 12" Cylinder, Extra Over Contract Specification or Made by Others Than SE Inspectors, each	\$ 104.69
Laboratory Trial Batch	\$ -
Laboratory Trial Batch, Including Test Cylinders, ASTM C 192, each	\$ 885.38
Pick Up Aggregate or Cement, each	\$ 148.09

Shrinkage

4307 Length Change (3 bars, 4 readings, up to 90 days), ASTM C 157 Modified	\$ 667.01
Length Change Report Charge	\$ 54.57
4308 Additional Reading, per SCI of 3 bars	\$ 54.57
4302 Storage Over 90 Days, per set of 3 bars, per month	\$ 106.72
5020 Pick-Up/Delivery Shrinkage Molds/Samples (within 40 mile radius from Laboratory), per set	\$ 90.59
Pick-Up/Delivery Shrinkage Molds/Samples, Saturday & Sunday, per set of 3 bars	\$ 235.81

Mix Design

Aggregate Tests for Concrete Mix Designs Only, Including Sieve Analysis, Specific Gravity, No. 200 Wash, Organic Impurities, Weight per Cubic Foot, per aggregate size	\$ 306.92
9500 Mix Design, Determination of Proportions, each	\$ 263.02
9504 Mix Design, Review	\$ 225.52
Amend or Retype Existing Mix Designs, Not Involving Calculations, each	\$ 102.03
Sampling Aggregate for Mix Design and/or Laboratory Batch, (within 40-mile Radius of Laboratory), per trip	\$ 263.02

AGGREGATES

Activity

Basic Tests

7549 Sieve Analysis, Processed (each size), ASTM C 136, each	\$ 127.05
7016 Sieve Analysis, Fine (including wash), ASTM C 137, C 177, each	\$ 144.38
Sieve Analysis, Pit Run, each	\$ 144.38
7013 Specific Gravity, Bulk SSD Coarse, ASTM C 127, C 117, each	\$ 132.83
7014 Specific Gravity, Bulk SSD Fine, ASTM C 128, C 117, each	\$ 132.83
7000 Absorption, Coarse, ASTM C 127, each	\$ 86.63
7001 Absorption, Fine, ASTM C 128, each	\$ 86.63
7017 Unit Weight Per Cubic Foot, ASTM C 29, each	\$ 75.08

Deleterious Materials

7115 Organic Impurities, ASTM C 40, each	\$ 103.95
7101 Clay Lumps and Friable Particles, ASTM C 142, each	\$ 98.18
Material Finer than No. 200 Sieve, ASTM C 117, each	\$ 86.63
Coal and Lignite, ASTM C 123, each	\$ 239.95
Soft Particles, ASTM C 235, each	\$ 163.11
Acid Solubility, each	\$ 101.64

Physical Properties

7012 Sodium Soundness, Fine, 5 Cycles, ASTM C 88, each	\$ 288.75
7047 Sodium Soundness, Coarse, 5 Cycles, ASTM C 88, each	\$ 288.75
7048 Magnesium Soundness, Fine, 5 Cycles, ASTM C 88, each	\$ 288.75
7049 Magnesium Soundness, Coarse, 5 Cycles, ASTM C 88, each	\$ 288.75
Abrasion (L.A. Rattler 100 & 500 Cycles), ASTM 131, each	\$ 259.88
7551 Potential Reactivity (Chemical Method 3 Determinations), ASTM C 289, each	\$ 992.95
Potential Reactivity (Mortar Bar Method), ASTM C 227, each	\$ 1,146.62
7010 Percent Flat or Elongated Particles, CRD C 119, each	\$ 121.28
7131 Percent Crushed Particles, Calif. 205, each	\$ 121.28

State Tests

7004 Cleanness Value, Calif. 227, each	
7551 Durability Index, Coarse, Calif. 229, each	
7551 Durability Index, Fine, Calif. 229, each	
7123 Sand Equivalent (average of 3), Calif. 217, each	
Clay by Hydrometer Methods, ASTM D 422, each	

REINFORCEMENT

Activity

4600 Tensile Test, No. 11 Bar or Smaller, each	\$ 51.98
4601 Bend Test, No. 11 Bar or Smaller, each	\$ 51.98
4602 Tensile Test, No. 14 Bar, each	\$ 86.63
Sampling and Tagging at Fabricators Plant (40-mile radius from Laboratory):	
6:30 a.m. to 5:00 p.m., Monday through Friday, per sample	\$ 120.87
5008 Minimum Sample Charge, per trip	\$ 86.63
5005 Pick up Rebar Samples at Jobsite, per sample	\$ 51.98
Reinforcing Steel Sampling Technician	\$ 120.87
High Strength Steel Bar Tensile Test	\$ 288.75

Weld Specimens

4604 Tensile Test, Welded, No. 11 Bar or Smaller, each	\$ 127.05
4605 Tensile Test, Welded, No. 14 Bar or Smaller, each	\$ 155.93
4607 Tensile Test, Welded, No. 18 Bar, each	\$ 288.75
4612 Tensile Test, Mechanically Spliced Bar, each	\$ 155.93

Prestress

4609 Tensile Test and Elongation in 24" for Prestress Strand, ASTM A 416, each	\$ 282.98
4610 Tensile Test and Elongation in 10" for Prestress Wire, ASTM A 421, each	\$ 155.93
4611 Modulus of Elasticity (Prestressing Wire), each	\$ 317.63
5025 Pick Up Post Tension Cables, per sample	\$ 51.98

Note: Attachments to be furnished by client

CONSTRUCTION MATERIALS

Activity

Brick ASTM C 67

4201 Modulus of Rupture (flexure), each	\$ 101.64
4200 Compressive Strength, each	\$ 101.64
4205 Absorption, 5 Hour or 24 Hour, each	\$ 86.27
4206 Boil 1, 2, or 5 Hour, each	\$ 70.91
4204 Initial Rate of Absorption, each	\$ 86.27
4207 Efflorescence, each	\$ 101.64
4202 Dimensions, Overall Coring Shell and Web Thickness, per brick	\$ 78.59
4203 Coefficient of Friction (slip test), each	\$ 439.72
5009 Pick up Brick Samples, each	\$ 47.85

Concrete Block ASTM C 140

4311 Cores, Compression Test, each	\$ 86.63
Cores, Shear, 6" and 8" Diameter, 2 Faces, per core	\$ 144.38
4211 Moisture Content as Received, each	\$ 51.98
4212 Absorption, each	\$ 40.43
4210 Compression, each	\$ 86.63
Tension, each	\$ 109.73
Shrinkage, Rapid, CMU, each	\$ 173.25
Shrinkage, Modified British, ASTM C 426, each	\$ 173.25
4221 Compression, 4" - 6" - 8" Cores, each	\$ 54.29
5010 Pick up Block Samples, each	\$ 40.43

Masonry Prisms ASTM E 447

4218 Compression Test, Grouted Prisms, each	\$ 288.75
4219 Cutting Prisms, when requested	By Quote
5013 Pick up Prisms (within a 25-mile radius of Laboratory), each	\$ 86.63

Mortar & Grout

Compression, 2" x 4" Mortar Cylinder, each	\$ 54.29
4216 Compression, 3" x 6" Grout Prisms, each	\$ 54.29
Compression Test, 2" x 4" 3" x 6", each	\$ 54.29
Cylinder Molds, 2" x 4" 3" x 6", each	\$ 0.55
5011 Pick Up Mortar Samples, each	\$ 8.09
5012 Pick Up Grout Samples, each	\$ 8.09
5015 Pick Up Grout Cubes, each	\$ 8.09

Activity**Gypsum Roof Fill ASTM C 495**

Compression Test, each	\$ 101.64
Density, each	\$ 124.69

Gunitite & Shotcrete

4314 Compression, 2" 4" 6" Cores, ASTM C 42, each	\$ 77.39
Compression, 12" x 12" Panel (3 cores), each	\$ 288.75
Compression, 18" x 18" Panel (3 cores), each	\$ 340.73
5017 Pick up Gunitite Field Sample, 12" x 12" Panel, (within 40-mile radius from Laboratory), each	\$ 55.00
Pick up Gunitite Field Sample, 18" x 18" Panel, (within 40-mile radius from Laboratory), each	\$ 85.00
5018 Pick up Gunitite Field Sample, More than 100 lbs., (within 40-mile radius from Laboratory), each	\$ 125.00
5016 Pick Up Shotcrete Cores	\$ 8.09

Roofing Tile

4702 Roofing Tile Breaking Strength per UBC, each	\$ 132.38
4700 Roofing Tile Absorption, each	\$ 124.69
4701 Roofing Tile Additional/Special Tests	

Fireproofing Tests

Laboratory Technician Field Sampling, per hour	\$ 184.23
4350 Fireproofing Density	\$ 136.34
Oven Dry Density, per sample	\$ 132.38
Displacement Method, per sample	\$ 155.13
5014 Pick-Up Fireproofing Samples (within a 40 mile range of Laboratory)	\$ 41.37

Roofing Tests

Unit Weight of Sample, each	\$ 132.38
Quantitative Analysis, ASTM D-2829, each	\$ 578.03
Standard Quantitative Analysis, each	\$ 263.00

GENERAL LABORATORY

Activity

Laboratory Manpower

3011 Registered Professional Engineer, Laboratory, per hour	\$ 207.86
Senior Engineer, per hour	\$ 207.86
3015 Staff Engineer, per hour	\$ 207.86
3012 Laboratory Supervisor, per hour	\$ 207.86
3013 Test Technicians - Laboratory Regular Time, per hour	\$ 124.15
3014 Test Technicians - Away from Laboratory, Regular Time, per hour	\$ 124.15
Test Technicians - Away from Laboratory, Regular Time, per mile	\$ 124.15
Add for Equipment Used Away From Laboratory, per hour	By Quote

Unreinforced Masonry Building Tests

4809 In-Place Shear (Push) Tests, Two Man Crew, per hour	\$ 349.88
4815 15 Degree Core Shear Tests	By Quote
4816 Wall Anchors	By Quote
4827 Flat Bar Test (Tensile), per test	\$ 311.96
Site Evaluation By Staff Engineer, per hour	\$ 225.28

Concrete Coring

3710 One Man, Including Equipment, Portal to Portal, per hour	\$ 194.50
3720 Two Men, Including Equipment, Portal to Portal, per hour	\$ 319.50
95% Epoxy Injection/Penetration, per core	\$ 297.58
Surface Penetration of PCC Sealant, per core	\$ 297.58

Testing Machines

Testing Machines with Operator in Laboratory, per hour 200k	\$ 250.62
Testing Machines with Operator in Laboratory, per hour 300k	\$ 250.62
Testing Machines with Operator in Laboratory, per hour 400k	\$ 250.62

Wire Rope

4426 Wire Rope, 0" Through 1" Diameter, each	\$ 144.57
4427 Wire Rope, 1" Through 2" Diameter, each	\$ 151.22
2248 Wire Rope, Over 2" Diameter, each	By Quote
Note: Sockets furnished by client	

Calibration of Torque Wrench

4403 Calibration of Skidmore-Wilhelm Device, In Laboratory, each bolt size	\$ 191.93
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Activity**Calibration of Hydraulic Jacks, Chart Included**

4452 Calibrate Jack to 0-99 Tons	\$ 658.69
4453 Calibrate Jack to 100-199 Tons	\$ 785.49
4454 Calibrate Jack to 200-299 Tons	\$ 885.38
4466 Calibrate Jack to 300-399 Tons	\$ 1,115.89
Calibrate Jack to 400 + Tons	\$ 1,346.40
Expedited/Next Day Service/Same Day Service	
Note: Extra handling charges will be made on any ram or pump to heavy or bulky for one man to lift	
Note: All equipment must be delivered in good working order	

Mechanical Testing Services

Tensile Test - No Strain Measurement, Yield by Halt of Dial:

Up to 100,000 lb., each	\$ 109.32
100,001 to 200,000 lb., each	By Quote
Over 200,000 lb., each	By Quote
Tensile Test - Mechanical Non-Printout Extensometer for Strain, each	\$ 86.27
Tensile Test - Electronic Extensometer with Recorded Printout, One Test, each	\$ 147.74
More than One Test	By Quote
6907 Load Tests, Flexural, Bend, Impact, Axial Racking	By Quote
Strain Gauge Testing	By Quote
6900 Bend Test, each	\$ 78.59
Tensile Test with Slippage Test (Coupler), per hour	\$ 301.42

Salt Spray

Set up	\$ 209.21
4407 24 Hours, per panel	\$ 86.27

Special Testing

Adhesion Test, Bond Determination of PCC/Mortar, each (includes report)	\$ 501.19
Stone Anchorage Systems Test; Shear/Tensile	By Quote
3097 Ground Penetrating Radar	\$ 303.13

METALLURGICAL

Activity

Weld Procedure Qualification and Welder Qualification

Weld Tensile Test, each	\$ 124.69
Weld Bend Test, Side, Face, Root, each	\$ 78.59
Machining for Weld Test, 1/2" and Less Thickness	#VALUE!
Machining for Weld Test, Over 1/2" Thickness	#VALUE!
Weld-Macro Etch, each	\$ 124.69
Weld-Fracture Test, each	\$ 78.59
Weld-Radiographic	#VALUE!
Welder Qualification	\$ 578.03
Weld Procedure Qualification	\$ 716.34
Weld Procedure Review	\$ 235.81

Metallurgical Services

6905 Hardness Tests Brinell Rockwell (Standard or Superficial), Set (Nut, Bolt, Washer)

Sample Preparation, per hour	\$ 155.43
Special Preparation	By Quote
Photomicrographs, 2/50x - 2000x, each	\$ 63.22
With Negative, each	\$ 78.59
Photomicrographs 1x - 14x, each	\$ 63.22
With Negative, each	\$ 78.59

6933 Metallurgical Engineer, per hour

\$ 249.09

6919 Metallurgical Technician, per hour

\$ 151.30

Charpy Impact - Ambient Temperatures, each	\$ 47.85
Charpy Impact - Reduced Temperatures, each	\$ 78.59
Load Tests (Proof Load, Flexural, Stress-Corrosion, etc.)	By Quote
Photocopy and Enlarging	By Quote
Metallurgical Mount, each	\$ 124.69
Microscopic Plating Thickness, each	\$ 132.38
Metallurgical Outside Laboratory	By Quote
Microhardness Survey	By Quote
Court Appearance, 1/2 Day	\$ 1,618.90
Court Appearance, Full Day	\$ 3,228.82
Mileage, per mile	\$ 11.91
Heat Treatment to 1 hour	\$ 96.80
Heat Treatment, Additional Hours, per hour	\$ 52.89

CURTAIN WALL AND WINDOW WALL SERVICES

Window and Door Testing 10 ft. X 20 ft. Maximum Size. (San Francisco Facility)

Activity

Hourly Fees

Chief Project Engineer	\$ 255.37
Window Wall Manager	\$ 223.69
Field Technician	\$ 173.00
Special Testing	\$ 223.69
Reports	\$ 10.00

Tests Performed in San Francisco Laboratory

8104 *Air Infiltration, per window	\$ 2,497.04
8102 *Water Infiltration, per window	\$ 2,497.04
8106 *Structural Performance, per window	\$ 2,497.04
Force Entry, per window	\$ 1,179.83
Thermo, per window	\$ 2,789.75
Expenses	By Quote

*Above Tests performed in field or manufacturer's facilities at special quoted rates

Mock-up Performance Testing - 70 ft. Wide x 45 ft. High Maximum Size, (Los Angeles Facility)

Inspection and Testing

Special Curtain Wall Evaluation, per hour	
Curtain Wall Attachment, per hour	
Exterior Skin from Swing Stage, 2 Men, per hour	
Caulking, Sealants, Adhesives, per hour	
Coatings, Paint	By Quote
Chemical Analysis	By Quote
Materials Evaluation	By Quote
Glass, Granite, Metal Cladding, Caulking, Paint Coatings, Adhesive Bond	By Quote
Field Water Test, AAMA 501.2, per hour	\$ 268.04
Static Water Infiltration, ASTM E 331	By Quote
Static Air Infiltration, ASTM E 283	By Quote
8122 Seismic Structural Loading	By Quote
8106 Structural Performance, ASTM E 330	By Quote
8109 Concentrated Load Testing (window washer, etc)	By Quote
Stress and Rupture - Stone and Granite	By Quote
8103 Dynamic Water Infiltration	By Quote
8105 Water Penetration By Cyclic Air Pressure, ASTM E 547	By Quote

SPECIAL TESTING

Activity

Multi-Channel Computer Aided Data Acquisition of:

4946	Acceleration	By Quote
4430	Vibration	By Quote
4947	Movements (1.0001 inch)	By Quote
4948	Pressure	By Quote
4468	Machine Control Movement	By Quote
4469	Temperature	By Quote
4418	Strain Gauge	By Quote
4949	Stress Analysis	By Quote

GEOSERVICES

Soils - Foundation - Geology

Activity**Foundation/Geological Investigations/Environmental Assessments**

7308 Field Exploration	By Quote
7306 Site Assessments Phase I & II	By Quote

Professional Staff

7201 Senior Principal, per hour	
7202 Principal Professional, per hour	\$ 203.11
7203 Senior Professional, per hour	\$ 203.11
7204 Project Professional, per hour	\$ 203.11
7206 Staff Professional, per hour	\$ 203.11
7200 Expert Witness Testimony	\$ 314.75

Technical Staff

7214 Supervising Technician (Laboratory & Field), per hour	\$ 203.11
7211 Senior Technician (Laboratory & Field), per hour	\$ 141.27
7240 Environmental Technician (Laboratory & Field), per hour	\$ 141.27
7212 Technician (Laboratory & Field), per hour	\$ 141.27
7414 Soils Inspection/ Soil Sampling	\$ 141.27
Administration, Supervision & Reports	By Quote
Field Nuclear Gauge Testing Equipment (Work performed on Federal Land Project)	

Professional Support Services

7208 Illustrator, per hour	\$ 147.66
7219 Word Processor, per hour	\$ 122.32
7209 Office Support, per hour	\$ 109.65
7215 Pick up/Delivery, per hour	\$ 109.65
Outside Service	Cost + 20%

Administrative Charges

Vehicle, per hour	\$ 23.62
1101 Mileage, per mile	\$ 0.58
7300 Contracted Services	By Quote

Minimums

2110 Show up time, no work performed, 2-minimum charge
For Field service calls, 4 and 8 hour minimum charge

Travel Time

1102 Charged at appropriate hourly rate. No vehicle hourly charge.
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Time and One-Half

7222 Over 8-hour per day - All day Saturday

Double Time

7232 Over 12-hour M-F, Over 8-hour Sat, Sundays and Holidays.

GEOSERVICES- LABORATORY TESTS

Activity

Soils

Sieve Analysis, Fine or Coarse, ASTM C 136, each	\$ 127.05
7110 ASTM C 117/D1140 Material Finer than #200 sieve, each	\$ 144.38
Hydrometer Analysis, ASTM D 422, each	\$ 173.25
7127 Specific Gravity for Soils, ASTM D 854, each	\$ 132.83
7100 Atterberg Limits, ASTM D 4318	\$ 167.48
7114 Moisture-Density relations of Soils, ASTM D 1557	\$ 340.73
7102 Consolidation Test, ASTM D 2435	\$ 578.03
7103 Consolidation time/rate curves, each	\$ 101.64
7129 Unconfined Compression Test, ASTM D 2166	\$ 132.83
7108 Expansion Index, UBC-29-2, ASTM D 4829	\$ 332.15
Direct Shear Test, ASTM D 3080	\$ -
7105 Unconsolidated, Undrained, 1 Point	\$ 201.53
7106 Consolidated, Undrained, 1 Point	\$ 301.42
7107 Consolidated, Drained, 1 Point	\$ 362.89
7116 Permeability, Constant Head, ASTM D 2434	\$ 516.56
7117 Permeability, Falling Head, ASTM D 5084, Cal 220	\$ 639.50
Index Test, Not Listed	By Quote
Plate Bearing Test, ASTM D1195, each	By Quote
Unit Weight, ASTM C29, each	\$ 75.08
Sulfate Content, each	\$ 65.00

Aggregate Base & Asphalt

7000 Absorption, Coarse, ASTM C 127, each	\$ 86.63
7001 Fine, ASTM C 128, each	\$ 86.63
7007 Specific Gravity, Bulk SSD Coarse, ASTM C 127, C 117, each	\$ 132.83
7014 Fine, ASTM C 128, each	\$ 132.83
7004 Cleanness Value, Calif. 227, each	\$ 109.73
8516 Sand equivalent (average of 3) Calif., ASTM D 2419, each	\$ 121.28
7005 Durability factor, Calif. 229 - Coarse, each	\$ 109.73
7006 Durability factor, Calif. 229 - Fine, each	\$ 109.73
7012 Sodium or Magnesium soundness, (5 cycles) ASTM C 88, each	\$ 288.75
Abrasion (Los Angeles Rattler) ASTM C 131/C535, each	\$ 259.88
7119 "R" (Resistance) Value, Calif 301, ASTM D 2844, each	\$ 352.28
"R" (Resistance) Value, lime treated or requiring recombining, each	\$ 577.50
CA. Bearing Ratio, ASTM D 1833, each	\$ 924.00
7010 Percent Flat/Elongated C119, ASTM D 4791	\$ 121.28

Activity**Asphaltic Concrete**

4101 Stability Tests: Hveem, Pre-mixed, Calif. 304/366, each	\$ 439.72
4100 Stability Tests: Hveem, Lab-mixed, Calif. 304/366, each	\$ 716.34
4103 Stability Tests: Marshall, Pre-mixed, ASTM D 1559, each	\$ 439.72
4102 Stability Tests: Marshall, Lab-mixed, ASTM D 1559, each	\$ 716.34
4105 Maximum Density: Hveem, Pre-mixed, Calif. 304/308, each	\$ 516.56
4104 Maximum Density: Hveem, Lab-mixed, Calif. 304/308, each	\$ 716.34
4107 Maximum Density: Marshall, Pre-mixed, ASTM D 1559, each	\$ 362.89
4106 Maximum Density Marshall, Lab-mixed, ASTM D 1559, each	\$ 516.56
4108 Gradation on extracted sample (including wash), Calif. 202/ASTM D 5444, each	\$ 239.95
4120 Maximum Theoretical Specific Gravity, ASTM 2041, each	\$ 239.95
4119 Complete Asphalt Concrete Mix Design (Hveem or Marshall), each	By Quote
4110 Extraction, % Asphalt, Excluding Ash Correction, ASTM D 2172 (Method A/B) or Calif. 310, each	\$ -
	\$ 186.16
4109 Penetration, ASTM D 5, each	\$ 186.16
4112 Asphalt Core Density, each	\$ 86.27
Hveem Swell Test, Calif. 305	\$ 301.42
Percent Air Void in Paving Mixture	\$ 578.03

Coring

Technician and Equipment, Asphalt Cores Only, per hour (includes travel); 4 and 8 hour minimums	\$ 219.73
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Professional Staff

Consultant, per hour	\$ 203.11
7202 Principal, per hour	\$ 203.11
Senior Engineer/Geologist, per hour	\$ 203.11
Project Engineer/Geologist, per hour	\$ 203.11
Staff Engineer/Geologist, per hour	\$ 203.11

Technical Staff

7240 Environmental Technician, Laboratory and Field, per hour	\$ 141.27
7213 Soil Technician with Nuclear Equipment	\$ 141.27
7414 Soils Inspection/ Soil Sampling	\$ 141.27

Activity**Support Equipment**

7216 Air Monitoring Equipment, per day	\$ 295.67
7309 Magnetometer Equipment, per day	\$ 287.06
7311 Water Pump and Generator, per day	\$ 426.10
Health Safety Equipment	
7227 Level A, per person/per day	By Quote
7228 Level B, per person/per day	\$ 287.06
7229 Level C, per person/per day	\$ 213.89
Level D, per person/per day	\$ 89.48
Water Monitoring Equipment, per day	\$ 148.03
Drilling and Well Installation	By Quote
Coring Equipment	By Quote
Supplies	By Quote

Professional Support Services

7208 Illustrator, per hour	\$ 151.43
7219 Word Processor, per hour	\$ 123.55
7209 Office Support, per hour	\$ 123.55
7215 Pick up/Delivery, per hour	\$ 123.55
Outside Services	By Quote

Travel Time

1102 Charged at appropriate hourly rate.

CERAMIC TILE

Activity

Ceramic Tests

C.T.I. 64-1 Initial Test on Mortar (\$120.00), Chemical Analysis CTI on Mortar (\$465.00)	\$ 1,300.30
C.T.I. 64-2 Initial Test On Organic Adhesive, each	\$ 1,415.55
C.T.I. 64-3, 64-8 Initial Test on Grout (\$425.00), Chemical Analysis CTI Grout (\$465.00)	\$ 2,007.19
C.T.I. 64-1 Check Test, each	\$ 870.01
C.T.I. 64-2 Check Test, each	\$ 301.42
C.T.I. 64-3 Check Test Grout (\$195.00), Chemical Analysis CTI Grout (\$465.00), each	\$ 1,469.34
C.T.I. 85-8 Check Test Grout (\$425.00), Chemical Analysis CTI Grout (\$465.00), each	\$ 2,007.19
4930 Autoclave (3 required), each	\$ 992.95
Skinning and Open Time, each	\$ 301.42
Compression, 2" Cubes, each	\$ 93.96
4925 Shear Tests, 1 to 5 Incl., each	\$ 78.59
Shear Tests, 6 to 10 Incl., each	\$ 70.91
Shear Tests, 11 to 15 Incl., each	\$ 70.91
Shear Tests, 16 and Over, each	\$ 55.54
4927 Water Immersion Processing for Shear Tests, each	\$ 32.49
4932 Oven Processing for Shear Tests, each	\$ 32.49
Low Temperature Processing for Shear Tests, each	\$ 40.17
Initial Setting Time, each	\$ 201.53
Drop-off Test, each	\$ 232.26
4922 Reflectance Test, each	\$ 124.69

Activity

Test In Accordance With A.S.T.M.

4900 Thickness, (ANSI requires 80), ASTM C 499, each	\$ 24.80
4901 Facial Dim, (ANSI requires 80), ASTM C 499, each	\$ 24.80
4916 Modulus of Rupture, (3 required), ASTM C 133, each	\$ 86.27
4917 Moisture Expansion, (5 required), ASTM C 370, each	\$ 155.43
Thermal Expansion, ASTM C 372, (5) per set	\$ 1,415.55
4905 Water Absorption, (5 required), ASTM C 373, each	\$ 78.59
4909 Crazing, (10 required), ASTM C 424, each	\$ 201.53
4910 ANSI Crazing Requirement, per set	\$ 562.66
4906 Bond Strength (Shear Test), (5 required), ASTM C 482, each	\$ 124.69
4911 Thermal Shock, (3 required), ASTM C 484, each	\$ 201.53
4902 Warpage, (80 required), ASTM C 485, each	\$ 32.49
4908 Abrasive Wear Index (4 required), ASTM C 501, each	\$ 239.95
4903 Wedging, (80 required), ASTM C 502, each	\$ 32.49
Floor Installation Performance Level ASTM C 627-76:	
4918 First Panel - Not including Tile	\$ 5,388.02
4919 Second or More on Same Purchase Order	\$ 3,697.60
4907 Breaking Strength, (10 required), ASTM C 648, each	\$ 47.85

4913 Chemical Resistance, ASTM C 650	\$ 301.42
4914 Freeze-Thaw Resistance (10) 15 cycles, ASTM C1026, per set	\$ 2,160.87
4916 Additional Cycles, per cycle/tile	\$ 32.49
Visible Abrasion Resistance, ASTM C 1027	By Quote
Coefficient of Friction, ASTM C 1028, per tile	\$ 455.09
Coefficient of Friction Report Charge	\$ 55.54
4923 Mohs Hardness, (3) per set	\$ 55.54
4920 Impact, (15) per set	\$ 439.72
Edge Configuration (Faces), each	\$ 132.38
4924 Tensile Tests in Laboratory, (5) each	\$ 101.64
3013 Ceramic Tile Lab Technician RT, per hour (In Field \$52.00)	\$ 132.38
4956 Ceramic Tile Material Purchase	By Quote
4929 Ceramic Tile Miscellaneous	By Quote
4921 C.T.I. Stain Resistance (8 required) Set CTI T72	\$ 232.26
5019 Pick Up Sample, (within 40 mile radius from Laboratory), per hour	\$ 147.74

PLASTICS AND PLUMBING

Activity

Plumbing Product Services

Surface Test, each	\$ 362.89
Subsurface Test, each	\$ 224.58
Drain Fitting Connection, each	\$ 239.95
Load Tests, each	\$ 508.88
Point Impact Tests, each	\$ 239.95
Water Resistance, each	\$ 716.34
Water Absorption, each	\$ 101.64
Stain Resistance, each	\$ 501.19
Cleanability and Wear, each	\$ 578.03
Fire Tests, each	\$ 301.42
Barcol Hardness, each	\$ 86.27
Cracking and Crazeing, each	\$ 178.48
Gel Coat Thickness, each	\$ 132.38
Cigarette Test, each	\$ 132.38
Bond Strength Tests, set of 5	\$ 362.89
Color Fastness 200 hr. Weatherometer, each	\$ 1,699.85
Miscellaneous Tests	By Quote
Water Resistance Tests	\$ 716.34
Chemical Resistance	\$ 447.41

Plumbing Pipe Services

Tensile Tests, each	\$ 101.64
Flexural Tests, each	\$ 124.69
Pipe Dimensions, each	\$ 93.96
Pipe Dimensions, Fittings, each	\$ 301.42
Pipe Stiffness, Deflection Load, Crush Resist, each	\$ 93.96

Hydrostatic Burst	\$ 119.00
Chemical Resistance, each	\$ 93.96
Water Resistance, each	\$ 78.59
4601 Flattening Tests, each	\$ 93.96
Impact Tests (Ambient Temperatures), each	\$ 47.85
Impact Tests (Reduced Temperatures), each	\$ 55.54
Joint Tightness, each	\$ 101.64
Sustained Pressure	\$ 123.00
Acetone Test	\$ 255.31
Pipe Miscellaneous Tests	By Quote
Environmental Stress Cracking, each	\$ 155.43

SPECIAL and ADMINISTRATIVE SERVICE CHARGES

Activity

Engineer Services

Registered Engineer, Consulting, per hour	\$ 339.60
Senior Engineer	\$ 311.72
Staff Engineer, per hour	\$ 242.03
Inspection Supervisor, per hour	\$ 221.12
Away from Laboratory	\$ 178.00
Expert Witness Testimony	By Quote
Preparation for Court, Consultations, per hour	\$ 409.29
Court Appearance, per day	\$ 2,667.35
Court Appearance, per half day	\$ 1,301.37
Plus Actual Expenses When Out-of-Town	

Administrative Services

4443 Administrative Support	7% of Invoice
3078 Report Copy Charge, per sheet	\$ 5.50
3082 Processing Certificates, Affidavits & Notary Services, each	\$ 52.89
File Research	\$ 140.71
3080 File Retrieval, Storage, per job file (25 reports)	\$ 82.17
File Copying, Archives, per job file (25 reports)	\$ 126.07
3084 Shipping Charges	By Quote
3081 Insurance, Extra Charges as Ordered by Client	By Quote
Minimum Report Charge	\$ 123.98
Report Review/Stamped by Registered Civil Engineer, each	\$ 212.42
9004 Final Letter, File Research and Report Verification, per hour	\$ 212.42
Budget Analysis, per hour	\$ 204.47
Certified Payrolls, Job Only, First Man, each week	\$ 277.65
Certified Payrolls, Job Only, Per Added Man, each week	\$ 50.80

Certified Payrolls, S.F. Office, each week	\$ 819.17
Certified Payrolls, Monthly Recaps	By Quote
Lien Release, weekly	\$ 52.89
Subcontractor Affidavit, weekly	\$ 82.17
Bundled Invoices Monthly	\$ 118.75
Bundled Invoices Monthly With Recap	\$ 191.93
Bundled Invoices Monthly With Budget Comparison	\$ 294.38
Bundled Invoices Monthly With Lien Release	\$ 52.89
Bundled Invoices Monthly With Subcontractor Affidavit	\$ 89.48

All Reports are based on a 10 working day turnaround time; 1 to 5 working day turnaround time, add a surcharge of \$150.00 to \$500.00 depending on the size off the project.

Activity

Engineering Review for Code Compliance and Lab Affidavit

1 to 3 mos. <\$5,000	\$ 265.11
4 to 6 mos. <\$20,000	\$ 360.24
7 to 10 mos. <\$50,000	\$ 557.82
11 to 14 moa. <\$75,000	\$ 945.66
Over 14 mos. <\$75,000	\$ 1,260.33
Resolution of Non-compliance Items for Lab Affidavit, per hour	\$ 236.80

Outside Services (Cost + 20%)

4408 Sample Preparation	By Quote
Machining Coupons	By Quote
Socketing	By Quote
4417 Outside Laboratory	By Quote
4416 Rental of Equipment	By Quote
4406 Materials Purchased	By Quote

EXHIBIT D

INSURANCE REQUIREMENTS

MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office (ISO) Form CG 00 01 12 07 covering CGL on an “occurrence” basis, including products-completed operations, personal & advertising injury, with limits no less than **\$2,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability:** ISO Form Number CA 00 01 covering any auto (Code 1), or if CONSULTANT has no owned autos, hired, (Code 8) and non-owned autos (Code 9), with limit no less than **\$1,000,000** per accident for bodily injury and property damage.
3. **Workers’ Compensation:** 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.
4. **Professional Liability (Errors and Omissions):** Insurance appropriate to the CONSULTANT’s profession, with limit no less than **\$1,000,000** per occurrence or claim, **\$2,000,000** aggregate

If the CONSULTANT maintains higher limits than the minimums shown above, the City requires and shall be entitled to coverage for the higher limits maintained by the CONSULTANT.

Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions:

Additional Insured Status

The City, its elected and appointed officials, employees, and agents are to be covered as insureds on the auto policy for liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the CONSULTANT; and 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 and CG 20 37 forms if later revisions used).

Primary Coverage

For any claims related to this contract, the **CONSULTANT's insurance coverage shall be primary** insurance as respects the City, its elected and appointed officials, employees, and agents. Any insurance or self-insurance maintained by the City, its elected and appointed officials, employees, or agents shall be excess of the CONSULTANT's insurance and shall not contribute with it.

Notice of Cancellation

Each insurance policy required above shall provide that **coverage shall not be canceled, except after thirty (30) days' prior written notice** (10 days for non-payment) has been given to the City.

Waiver of Subrogation

CONSULTANT hereby grants to City a waiver of any right to subrogation which any insurer of said CONSULTANT may acquire against the City by virtue of the payment of any loss under such insurance. CONSULTANT agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the City. The City may require the CONSULTANT to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

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 City.

Verification of Coverage

CONSULTANT shall furnish the City with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the CONSULTANT's obligation to provide them. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.