



Geotechnical & Environmental Sciences Consultants

May 14, 2019  
Proposal No. 04-02395

Mr. Michael Otavka  
Director of Facilities  
William S. Hart Union High School District  
21380 Centre Pointe Parkway  
Santa Clarita, California 91350

Subject: Proposal for Materials Testing and Inspection Services  
Arroyo Seco Junior High School – Original Building Column Repairs  
27171 Vista Delgado Drive  
Valencia, California  
Division of the State Architect (DSA) Application No. Not Applicable

Reference: WSHUHSD, 2019, Electronic Mail from Mr. Michael Otavka to Mr. Rajindra Handapangoda, Arroyo Seco JHS Column Repair Project, dated May 6.

Dear Mr. Otavka:

Ninyo & Moore is pleased to submit this proposal for materials testing and specialty inspection services for the Arroyo Seco Junior High School (JHS) Original Building Column Repairs project located at 27171 Vista Delgado Drive in Valencia, California. We have prepared our proposal based on our review of the referenced e-mail correspondence, the project plans, and our experience on similar projects. It is our understanding that this is not a DSA project. Consequently, there is no Statement of Structural Tests and Inspection (DSA-103) form or a project inspector (PI) for this project.

We understand that the project consists of structural repairs to existing building columns. Eighteen repair locations have been selected at eight buildings, as indicated on Sheet S1 of the project plans. The repairs generally consist of removal/demolition of loose/defective/spalling concrete, removal of corroded reinforcement, installation of new reinforcement/hairpins, and application of patching concrete (SikaGrout). Our anticipated scope of services will include inspection and testing during placement of new ties and epoxy, placement of Sika Grout, and laboratory compressive strength testing of Sika Grout.

## SCOPE OF SERVICES

Our services will be performed in general accordance with the California Code of Regulations Title 24. Based on our understanding of the proposed construction and our experience with similar projects, we propose to provide the following scope of services:

- Project coordination, technical support, and management, including review of the project plans, distribution of test reports, and work scheduling.

- Regular distribution of tests and reports in accordance with 2016 California Administrative Code.
- Attendance at pre-construction meetings and as-needed field meetings.
- Continuous specialty inspection services during placement of new reinforcing steel and epoxy.
- Continuous masonry inspection services during Sika grout application, including inspection of substrate material for conformance with project drawings, grout placement, and sampling of grout.
- Preparation of progress reports and field memoranda to document the items inspected.
- Laboratory testing, including compressive strength testing of grout sampled in the field.

## ASSUMPTIONS

Based on our experience with similar projects, the following assumptions have been made in the preparation of our scope of services:

- Our services are subject to prevailing wage requirements.
- Our services will be scheduled and coordinated by the District representative and/or construction management and inspection team on an as-needed basis.
- Our estimated fee does not include stand-by time or costs associated with retesting or reinspecting materials that were found not to be in compliance with the project plans or specifications. Our services will depend on the construction schedule and the contractor's operations. Hours spent that exceed those in the attached tables will be billed on a time-and-materials basis.

## ESTIMATED FEE

We propose to provide materials testing and inspection services on a time-and-materials basis in accordance with the attached Schedule of Fees and Schedule of Fees for Laboratory Testing. Our estimated fee is presented in the attached Table 1.

Ninyo & Moore appreciates the opportunity to provide services on this project and we look forward to working with you.

Respectfully submitted,  
**NINYO & MOORE**



Rajindra S. Handapangoda, PE, GE  
Senior Engineer

RAH/GMS/sc



Garreth M. Saiki, PE, GE  
Principal Engineer

Attachments: Table 1 – Breakdown of Estimated Fee  
Schedule of Fees

Distribution: (1) Addressee (via e-mail)

**Table 1 – Breakdown of Estimated Fee****Field Services**

Reinforcing Steel Inspector	54 hours @ \$ 98.00 /hour	\$ 5,292.00
Masonry Inspector	54 hours @ \$ 98.00 /hour	\$ 5,292.00
Sample Pick-up	18 hours @ \$ 92.00 /hour	\$ 1,656.00
Vehicle and Equipment Usage	126 hours @ \$ 15.00 /hour	\$ 1,890.00
<b>Subtotal</b>		<b>\$ 14,130.00</b>

**Laboratory Analyses**

Compressive Strength (Grout)	36 tests @ \$ 45.00 /test	\$ 1,620.00
<b>Subtotal</b>		<b>\$ 1,620.00</b>

**Project Coordination and Management**

Senior Project Engineer/Geologist/Environmental Scientist	12 hours @ \$ 163.00 /hour	\$ 1,956.00
<b>Subtotal</b>		<b>\$ 1,956.00</b>

<b>TOTAL ESTIMATED FEE</b>		<b>\$ 17,706.00</b>
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## Schedule of Fees

### Hourly Charges for Personnel

#### Professional Staff

Principal Engineer/Geologist/Environmental Scientist/Certified Industrial Hygienist .....	\$ 178
Senior Engineer/Geologist/Environmental Scientist .....	\$ 168
Senior Project Engineer/Geologist/Environmental Scientist .....	\$ 163
Project Engineer/Geologist/Environmental Scientist .....	\$ 156
Senior Staff Engineer/Geologist/Environmental Scientist .....	\$ 142
Staff Engineer/Geologist/Environmental Scientist .....	\$ 126
GIS Analyst .....	\$ 116
Technical Illustrator/CAD Operator .....	\$ 92

#### Field Staff

Certified Asbestos/Lead Technician .....	\$ 163
Field Operations Manager .....	\$ 112
Nondestructive Examination Technician (UT, MT, LP) .....	\$ 108
Supervisory Technician .....	\$ 98
Special Inspector (Concrete, Masonry, Structural Steel, Welding, and Fireproofing) .....	\$ 98
Senior Technician .....	\$ 97
Technician .....	\$ 92

#### Administrative Staff

Information Specialist .....	\$ 78
Geotechnical/Environmental/Laboratory Assistant .....	\$ 76
Data Processor .....	\$ 73

#### Other Charges

Concrete Coring Equipment (includes technician) .....	\$ 190/hr
Anchor Load Test Equipment (includes technician) .....	\$ 190/hr
GPR Equipment .....	\$ 180/hr
Inclinometer .....	\$ 100/hr
Hand Auger Equipment .....	\$ 80/hr
Rebar Locator (Pachometer) .....	\$ 25/hr
Vapor Emission Kit .....	\$ 65/kit
Nuclear Density Gauge .....	\$ 12/hr
X-Ray Fluorescence .....	\$ 70/hr
PID/FID .....	\$ 25/hr
Air Sampling Pump .....	\$ 10/hr
Field Vehicle .....	\$ 15/hr
Expert Witness Testimony .....	\$ 450/hr
Direct Expenses .....	Cost plus 15 %
Special equipment charges will be provided upon request.	

#### Notes

For field and laboratory technicians and special inspectors, overtime rates at 1.5 times the regular rates will be charged for work performed in excess of 8 hours in one day Monday through Friday and all day on Saturday. Rates at twice the regular rates will be charged for all work in excess of 12 hours in one day, all day Sunday and on holidays.

Field technician and special inspection hours are charged at a 4-hour minimum, and 8-hour minimum for hours exceeding 4 hours.

Invoices are payable upon receipt. A service charge of 1.5 percent per month may be charged on accounts not paid within 30 days.

Our rates will be adjusted in conjunction with the increase in the Prevailing Wage Determination during the life of the project, as applicable.

The terms and conditions are included in Ninyo & Moore's Work Authorization and Agreement form.

## Schedule of Fees for Laboratory Testing

### SOILS

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

### MASONRY

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

### REINFORCING AND STRUCTURAL STEEL

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

### CONCRETE

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

### ASPHALT

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

### AGGREGATES

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

### ROOFING

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

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