

# **John R. Byerly**

**I N C O R P O R A T E D**

September 2, 2022

Silver Valley Unified School District  
P.O. Box 847  
35320 Daggett-Yermo Road  
Yermo, California 92398

File No.: C-1012  
I.D. No.: 092203

Attention: Mr. Robert Saffel, Sr. Director of Technology, Maintenance and Operations

Project: Yermo Middle School, New Gymnasium Building, 38280 Gleason Street, Yermo, California

Subject: Proposal for Geotechnical Investigation, Geologic Hazards Assessment and Percolation Testing

Reference: e-mail re: Request for Proposal, Yermo Middle Gym, Frick, Frick & Jette Architects, August 17, 2022 with Attached Plans (Yermo Middle School Site Study Expansion and Upgrades, and Plumbing Site Plan)

Ladies and Gentlemen:

We were pleased to be contacted regarding a geotechnical investigation and geologic hazards assessment for the subject project. To assist in the preparation of this proposal, we performed a site reconnaissance on September 1, 2022, and have reviewed the referenced plans. The existing Yermo Middle School is located north of the intersection of Gleason Street and McCormick Street in the community of Yermo. We understand that planned improvements will consist of the construction of a new gymnasium building that will have a footprint area of 7,644 square feet. The new structure will be located in the southeast quadrant of the school property. It will be a wood-frame building with interior steel columns, and will incorporate a concrete slab-on-grade floor. It is anticipated that the structure will exert moderate foundation loads on the underlying soils. The portion of the site to be developed is occupied by unpaved play areas that are surrounded by fencing. The site for the new gymnasium building appears to be at the approximate desired grade, so no significant additional cuts and fills seem likely. Slope and retaining wall construction is not anticipated. A parking lot extension paved with asphalt concrete will be constructed to the east of an existing parking lot and south of the proposed gymnasium. A fire lane paved with asphalt concrete will extend along the south side

**GEOTECHNICAL ENGINEERS • TESTING AND INSPECTION**

2257 South Lilac Ave., Bloomington, CA 92316-2907  
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of the new parking lot and to the east of the new gymnasium. The project is in the conceptual design stage at this time.

It may be necessary to install additional seepage pits and a larger septic tank on the site to accommodate the effluent from the new gymnasium if the existing system does not have the required capacity. If needed, the new seepage pits would be located in a relatively unimproved desert area to the east of existing relocatable classroom buildings in the northeastern part of the property. This area contains an existing effluent disposal system for the school.

Required at this time is a proposal for a geotechnical investigation and a geologic hazard assessment. The purpose of these investigations would be to evaluate the soil and geologic conditions associated with the site so that recommendations can be prepared for safe and economical foundation types, vertical and lateral bearing values, liquefaction and/or seismic settlement potential, support of concrete slabs-on-grade, asphalt concrete pavement design, and site preparation. The geologic conditions associated with this site would be evaluated by our consulting engineering geologist, Terra Geosciences. The geologic hazard assessment would conform to the requirements of the California Geologic Survey (CGS) as outlined in their Note 48. The seismic design parameters as required by the 2019 edition of the California Building Code and ASCE Standard 7-16 would be presented. If necessary, percolation testing would be conducted to assist in the design of the new seepage pits. Percolation testing is presented as an option in this proposal. An assessment of environmental concerns is not included in the scope of services.

For the geotechnical portion of the investigation, we propose to explore the soils underlying the new gymnasium building by a total of three test borings excavated with a limited-access track-mounted flight-auger. One of the borings would be drilled to a depth of at least 50 feet or refusal, whichever occurs first. The other borings in the structure area would extend to a depth of about 20 feet. Standard penetration tests would be performed as the deep boring is advanced to assist in the evaluation of the soils for the potential for liquefaction and/or seismically induced settlement. Two borings would be drilled to a depth of about 5 feet in the

vicinity of the new parking lot and fire lane. The soils encountered in the explorations would be examined and visually classified by one of our field engineers. Relatively undisturbed samples would be obtained at selected levels within the test borings and, together with bulk samples of typical soil types, delivered to our laboratory for testing and evaluation.

Included in our laboratory testing would be moisture/density determinations on all undisturbed samples. Optimum moisture content/maximum dry density relationships would be established for typical soil types so that the relative compaction of the subsoils could be computed. Consolidation testing may be conducted on selected samples to determine their compressibility characteristics. Samples of anticipated subgrade soils would be tested for sand equivalent, gradation and "R" value for pavement design purposes. A representative soil sample would also be tested for corrosion potential and the need for sulfate-resistant concrete.

If required, for the percolation testing portion of the investigation, three test borings would be drilled with a truck-mounted flight-auger in the vicinity of the seepage pits to a maximum depth of 40 feet or until refusal occurs, whichever is less. The number of borings is based on "favorable" soil conditions and a maximum septic tank capacity of 6,000 gallons. Prior to withdrawal of the auger, perforated pipe would be inserted into the hollow stem of the auger. On removal of the auger, the annular space between the perforated pipe and the boring sidewalls would be backfilled with clean gravel. Clear water would be introduced and the soils allowed to soak overnight prior to percolation testing. Percolation testing would be performed following procedures required by the San Bernardino County Department of Environmental Health and the California Regional Water Quality Control Board, Lahontan Region. Based on our field test data, an engineering report would be prepared providing recommendations for seepage pit design. This report would be independent of the geotechnical investigation report.

The geologic hazards study would include a review of available published and unpublished geologic reports and maps, a review of historic aerial photographs of the site area, and a site reconnaissance. Based on our field and laboratory test data, and the findings of the geologic hazards report, an engineering report would be prepared providing recommendations as outlined above.

Our fees are predicated on time consumption computed at the rates shown on the enclosed Schedule of Fees. Our fees accommodate prevailing wage rates required by the State of California. An itemization of the anticipated fees is presented below.

FIELD EXPLORATION – GEOTECHNICAL INVESTIGATION

<b>Service</b>	<b>Quantity</b>	<b>Unit Rate/Hr.</b>	<b>Total</b>
Limited-access track-mounted drill rig	6 hours	510.00	3,060.00
Drill rig (mob/demob)	1 day	600.00	600.00
Field engineer	10 hours	130.00	1,300.00
Boring stakeout, proposal time	10 hours	130.00	1,300.00
Total:			\$6,260.00

LABORATORY TESTING

<b>Service</b>	<b>Quantity</b>	<b>Unit Rate/Hr.</b>	<b>Total</b>
Moisture/density tests	2 hours	85.00	170.00
Maximum density determinations	3 tests	200.00	600.00
Consolidation tests	4 tests	210.00	840.00
Expansion index tests	1 test	175.00	175.00
Gradation	2 tests	150.00	300.00
Sand equivalent test	2 tests	130.00	260.00
“R” value test	1 test	290.00	290.00
Corrosion and sulfate analyses	1 test	270.00	270.00
Total:			\$2,905.00

ENGINEERING (GEOTECHNICAL INVESTIGATION)

<b>Service</b>	<b>Quantity</b>	<b>Unit Rate/Hr.</b>	<b>Total</b>
Drafting	1 hour	130.00	130.00
Staff engineer	8 hours	130.00	1,040.00
Project engineer	2 hours	175.00	350.00
Principal engineer	1 hour	200.00	200.00
Geologic hazards report	1	6,000.00	6,000.00
Total:			\$7,720.00

Grand Total: \$16,885.00

FIELD EXPLORATION – PERCOLATION TESTING (OPTIONAL)

<b>Service</b>	<b>Quantity</b>	<b>Unit Rate/Hr.</b>	<b>Total</b>
Truck-mounted drill rig	5 hours	480.00	2,400.00
Drill rig (mob/demob)	1 day	600.00	600.00
Field engineer (drill and presoak)	8 hours	130.00	1,040.00
Field engineer (percolation testing)	12 hours	130.00	1,560.00
PVC pipe for percolation testing	120 feet	2.40	288.00
Gravel backfill around PVC pipes	1	270.00	270.00
Total:			\$6,158.00

ENGINEERING – PERCOLATION TESTING (OPTIONAL)

<b>Service</b>	<b>Quantity</b>	<b>Unit Rate/Hr.</b>	<b>Total</b>
Drafting	1 hour	130.00	130.00
Staff engineer	2 hours	130.00	260.00
Project engineer	2 hours	175.00	350.00
Principal engineer	1 hour	200.00	200.00
Total:			\$940.00

The estimated grand total presented above does not include percolation testing.

The estimated fee presented above assumes that the field portion of the geotechnical investigation would be performed on a weekday during normal business hours. Not including percolation testing, we would consider \$16,885 a maximum figure not to be exceeded without the client's express permission.

If percolation testing is required, an extra \$7,098 should be anticipated. We would then consider \$23,983 a maximum figure for the geotechnical investigation and percolation testing not to be exceeded without the client's express permission. These cost estimates are valid for 90 days subsequent to the date of this proposal.

Prior to conducting the field investigation, a meeting would be coordinated with Underground Service Alert and a representative of the District Maintenance Department to locate underground utility lines that may be in the vicinity of our exploratory borings. We cannot proceed with our field exploration until a representative of the District Maintenance Department has verified that our boring locations are clear of buried utilities. Our firm would not be responsible for damage to underground utilities not identified by Underground Service Alert or the District Maintenance Department. The fee estimate presented above does not include time for our firm to locate existing utilities. The cost estimate includes a trip to the site to stake or mark our test boring locations, and to coordinate the boring locations with a representative of the district, and another trip to perform the actual exploration operations.

It is assumed access would be provided for the field equipment through all gates on the site. If percolation testing is required, it is assumed our firm would have access to a water source on the school property.

Enclosed you will find two copies of our standard Agreement. If the scope of services and fee estimate are satisfactory, please sign one copy of the Agreement and return that copy to this office. If preferable, you may forward your purchase order or consultant retention agreement for our signature. Your initials in the space provided in the agreement will authorize percolation testing services.

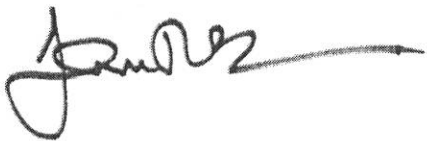
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We appreciate the opportunity to provide you with this proposal. Should there be questions, please feel free to contact this office.

Respectfully submitted,

**JOHN R. BYERLY, INC.**

A handwritten signature in black ink, appearing to read "John R. Byerly", with a long horizontal flourish extending to the right.

John R. Byerly, P.E.  
President

JRB:GSF:jet

Enclosures: Schedule of Fees  
Agreement



## **AGREEMENT**

John R. Byerly, Inc., hereinafter referred to as "Geotechnical Engineer" and Silver Valley Unified School District, hereinafter referred to as "District".

District agrees to retain the services of the Geotechnical Engineer in connection with the property described in the attached proposal letter and Geotechnical Engineer agrees to the retention of its services by District upon the following terms and conditions:

1. Geotechnical Engineer will render such services as are described in the proposal letter attached with this agreement and such additional work as may be described in addendum proposal letters by the Geotechnical Engineer.
2. District agrees to pay the Geotechnical Engineer for said services on a time consumption basis as shown on the attached Schedule of Fees.

## **TERMINATION**

In the event that District requests termination of the work prior to completion, Geotechnical Engineer reserves the right to complete such analysis and records as are necessary to place files in order, to dispose of samples, put equipment in order, and where considered necessary to protect his professional reputation, to complete a report of the work performed to date. Therefore, in addition to those charges incurred up to the date of termination, a termination charge to cover the cost of the additional necessary work performed after the request to terminate has been received shall be made, not to exceed 30% of all charges incurred to date of the stoppage of the work.

## **TERMS OF PAYMENT**

Geotechnical Engineer, after the end of each calendar month, or at completion of any phase of the work, shall submit to District, in duplicate, an itemized bill for services rendered and costs incurred. Said bill shall be due and payable when rendered. District agrees to pay court and reasonable attorney's fees should suit be commenced in court to collect any portion of the account.

## **SCOPE OF SERVICES TO BE PERFORMED**

### **1. Scheduling**

Work will be scheduled as soon as practicable and such scheduling will be contingent upon unavoidable delays in performance beyond the Geotechnical Engineer's reasonable control, or delays caused by failure of District or District's agents to furnish information or to approve or disapprove Geotechnical Engineer's work properly, or due to late or slow, or faulty performance by District, contractors, or governmental agencies, the performance of whose work is precedent to or concurrent with the performance with the Geotechnical Engineer's work. The Geotechnical Engineer shall not be responsible for damage due to the



aforementioned delays. In the event of occurrence of such delays, an unreasonable delay resulting from such cause, District shall have the right to declare this contract terminated, thereby discharging both parties herein, as to any remaining obligations hereunder. In the event District exercises its rights pursuant to this paragraph, District shall notify the Geotechnical Engineer in writing of such act and agree to pay the Geotechnical Engineer, pursuant to the fee schedule, for all work and services actually performed by the Geotechnical Engineer, in accordance with the Termination Clause.

## **2. Subcontracting**

Normal subcontracting may be for drilling or other excavation equipment, but may also include the following: computer services; furnishing and driving test piling; special testing, e.g. agronomical, corrosion, x-ray; geological or other consulting services; and aerial surveys.

## **GENERAL TERMS**

### **1. Project Understanding**

District shall make available all information to the Geotechnical Engineer regarding existing and proposed conditions of the site. The information shall consist of, but not limited to, plot plan, locations of structures, building plans, grading plans, topographic data, previous soil data including borings, field or laboratory testing and written reports. Any changes in plans or additional information that might become available affecting the Geotechnical Engineer and noted by the District or its agents shall be submitted to the Geotechnical Engineer as they become available. It will be the responsibility of the District to notify the Geotechnical Engineer of any changes in the concept of the project. Where drawings, data, and other information are provided to the Geotechnical Engineer, he will rely upon such information to the extent intended by the District. District agrees to indemnify and hold harmless the Geotechnical Engineer from injury or death of persons or damage to property as a result of such reliance.

### **2. Safety**

District agrees to provide a safe place for the Geotechnical Engineer's employees to perform their duties in furnishing the services provided for under this contract.

### **3. Claims**

In the event the District makes a claim against the Geotechnical Engineer or at law or otherwise for any alleged error or omissions or other acts arising out of performance of the professional services, and the District fails to prove such claims, the District shall pay all costs and attorney's fees incurred by the Geotechnical Engineer in defending itself against the claim. In the event District proves an error or omission or other wrongdoing arising out of the performance of the Geotechnical Engineer's professional services, the Geotechnical Engineer shall pay all costs and attorney's fees incurred by District regarding such claim.

**4. Access to Site**

District agrees to give or obtain permission and any permits necessary to allow the Geotechnical Engineer access to the site for all necessary equipment and personnel, at no charge to the Geotechnical Engineer.

**5. Waiver of Contract Provisions**

None of the provision of this contract shall be considered waived by the Geotechnical Engineer unless such waiver is given in writing by the Geotechnical Engineer. No such waiver shall be a waiver of any part of future defaults, breach or modifications of any of the terms, provisions, conditions or covenants of this contract unless expressly set forth in such waiver. Any failure of the Geotechnical Engineer at any time to enforce or require the strict keeping and performance of any of the terms or conditions of this contract shall not constitute a waiver of such terms or conditions and shall not affect or impair such items or conditions in any way or the right of the Geotechnical Engineer at any time to avail itself of such remedies as it may have for any breach or breaches of such terms or conditions.

**6. Conflicts**

Conflicts between specifications, drawings, data, codes, laws, ordinances, regulations, bylaws, and the like, applicable to the work must be resolved to the satisfaction of the Geotechnical Engineer. District shall, in writing, notify the Geotechnical Engineer or his field superintendent of any conflict. The Geotechnical Engineer shall not work on the affected item or items until the conflict has been resolved.

**7. Warranty**

The District recognizes the inherent risk connected with construction. In performing their professional services, the Geotechnical Engineer will use the degree of care and skill ordinarily exercised under similar circumstances, by reputable members of their profession practicing in the same or similar localities.

**8. Ownership of Documents**

All reports, field exploration logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by the Geotechnical Engineer, as instruments of service, shall remain the property of the Geotechnical Engineer.

**9. Liens**

Geotechnical Engineer shall at all times indemnify and save District harmless against all liability for claims and liens for labor performed or materials used or to be furnished to be used on the job in connection with Geotechnical Engineer's performance of this contract, including any costs and expenses for attorney's fees and all incidental or consequential damages resulting to District from such claims or liens. Further, in case suit on such claim is brought, Geotechnical Engineer shall defend said suit at its own cost and expense, and will pay and satisfy any such lien or judgment as may be established by the decision of the court in said suit. Geotechnical Engineer agrees within ten days after written demand to cause the effect of any suit or lien to be removed from the premises, and in the event Geotechnical Engineer shall fail to do so, District is authorized to use whatever means in its

discretion it may deem appropriate to cause said lien or suit to be removed or dismissed and the cost thereof, together with reasonable attorney's fees, shall be immediately due and payable to District by Geotechnical Engineer. It is understood and agreed that the full and faithful performance of this agreement on the part of Geotechnical Engineer (including the payment of any obligations due from Geotechnical Engineer to District, and any amounts due to labor or material men furnishing labor or materials for said work) is a condition precedent to Geotechnical Engineer's right to receive payment for the work performed, and any monies paid by District to Geotechnical Engineer under the terms of this agreement shall be impressed with the trust in favor of those furnishing labor and/or material to Geotechnical Engineer on the work herein described.

**10. Assignment of Contract**

Geotechnical Engineer shall not, without notifying District, assign, transfer, nor sublet any portion or part of the work required by this agreement nor assign any payments hereunder to others. District may assign or transfer the whole or part of this agreement, and its rights hereunder, to any corporation, individual, or partnership. Geotechnical Engineer shall be responsible to District for the performance of engineers, subcontractors, and consultants who render services on District projects.

This contract contains all of the agreements of the parties and there are no other agreements, oral or written, between the District and the Geotechnical Engineer.

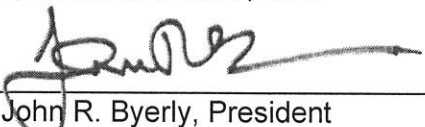
I have read and understand the above and hereby authorize the Geotechnical Engineer to proceed with the work in terms of this contract. I further acknowledge by my signature that I have power to act for District and to authorize this work.

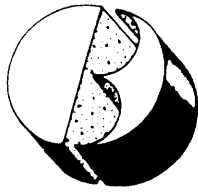
**SILVER VALLEY UNIFIED SCHOOL DISTRICT**

Date: \_\_\_\_\_ By: \_\_\_\_\_  
Authorized Signature

Date: \_\_\_\_\_ By: \_\_\_\_\_  
Authorized Signature

**JOHN R. BYERLY, INC.**

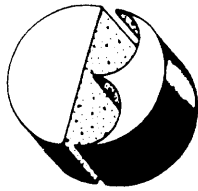
Date: September 2, 2022 By:   
John R. Byerly, President



**John R. Byerly**  
I N C O R P O R A T E D

**SCHEDULE OF FEES**

**JUNE 1, 2022**



# **John R. Byerly**

I N C O R P O R A T E D

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**SCHEDULE OF FEES FOR GEOTECHNICAL SERVICES**

**PROFESSIONAL PERSONNEL**

		<u>Regular Rate</u>	<u>Prevailing Wage Rate</u>
Principal Engineer .....	Per Hr. ....	\$ 200.00	
Project Engineer .....	Per Hr. ....	175.00	
Project Geologist .....	Per Hr. ....	175.00	
Staff Engineer .....	Per Hr. ....	130.00	
Staff Geologist .....	Per Hr. ....	130.00	
Expert Witness Preparation .....	Per Hr. ....	250.00	
Expert Witness Testimony (at trial or deposition) .....	Per Hr. ....	300.00	

**FIELD PERSONNEL**

Field Technician (including density testing) .....	Per Hr. ....	95.00	120.00
Supervising Field Technician .....	Per Hr. ....	130.00	
Field Engineer .....	Per Hr. ....	130.00	
Field Exploration Equipment .....		Local Prevailing Rate + 20%	
Subsistence .....		Quotation	

**GEOTECHNICAL LABORATORY TESTING**

Laboratory Technician .....	Per Hr. ....	\$ 85.00
Supervising Laboratory Technician .....	Per Hr. ....	100.00
Atterberg Limits		
Liquid Limit .....	Each .....	85.00
Plastic Limit .....	Each .....	95.00
Shrinkage Limit .....	Each .....	110.00
Plasticity Index .....	Each .....	180.00
California Bearing Ratio - CBR		
(at specified moisture content - does not include optimum		
moisture content and maximum dry density determination) .....		
	Each .....	475.00

<b><u>Geotechnical Laboratory Testing (continued)</u></b>		<b>Regular Rate</b>	<b>Prevailing Wage Rate</b>
Consolidation Testing (without time rate).....	Each .....	\$ 210.00	
Add one time rate .....	Each .....	100.00	
<b>Corrosion Tests</b>			
pH.....	Each .....	50.00	
Minimum Resistivity.....	Each .....	50.00	
Sulfate .....	Each .....	50.00	
Chloride .....	Each .....	50.00	
Redox Potential .....	Each .....	50.00	
Sulfide .....	Each .....	50.00	
Corrosion Series.....	Each .....	270.00	
Direct Shear Tests (3-point) .....	Each .....	270.00	
Direct Shear Tests - Residual (per point).....	Point .....	150.00	
Expansion Index.....	Each .....	175.00	
Expansion Study (3 points remolded) (maximum density not included) .....	Each .....	350.00	
<b>Grain Size Analysis (Gradation)</b>			
Sieve Analysis (including wash passing No. 200 sieve) .....	Each .....	150.00	
Sieve Analysis Plus Hydrometer .....	Each .....	275.00	
% Passing No. 200 Sieve.....	Each .....	75.00	
<b>Optimum Moisture and Maximum Dry Density</b>			
Lab Max – (4-inch mold) .....	Each .....	200.00	
Lab Max – (6-inch mold) .....	Each .....	220.00	
Lab Max – California 216 Method .....	Each .....	220.00	
Organic Content .....	Each .....	65.00	
Moisture Content.....	Each .....	35.00	
Moisture/Density Determination – Tube Sample .....	Each .....	50.00	
<b>“R” Value</b>			
Untreated Material.....	Each .....	290.00	
Lime or Cement Treated Material .....	Each .....	315.00	
Sand Equivalent (average of 4).....	Each .....	130.00	



**SPECIAL INSPECTION SERVICES****INSPECTION FEES**

		<b>Regular Rate</b>	<b>Prevailing Wage Rate</b>
Aggregate, Plant Sampling .....	Hour .....	\$ 95.00	\$ 120.00
Asphalt, Paving .....	Hour .....	95.00	120.00
Asphalt, Batch Plant .....	Hour .....	95.00	120.00
Commercial Building (Wood Framing, ICC) .....	Hour .....	95.00	120.00
Concrete, Batch Plant .....	Hour .....	95.00	-
Concrete, Placing .....	Hour .....	95.00	120.00
Concrete, Placing Pre-Stress .....	Hour .....	95.00	120.00
Concrete, Pre and Post-Tensioning .....	Hour .....	95.00	120.00
Drilled Piers or Piles .....	Hour .....	95.00	120.00
Driven Piles .....	Hour .....	95.00	120.00
Field Welding, Structural Steel (AWS-CWI, AWS-ACWI and ICC) .....	Hour .....	100.00	120.00
Fireproofing .....	Hour .....	95.00	120.00
Ground Rod .....	Hour .....	105.00	135.00
Gunite, Placing .....	Hour .....	95.00	120.00
Hi-Tensile Bolting .....	Hour .....	95.00	120.00
Magnetic Particle Testing .....	Hour .....	125.00	150.00
Masonry Placing .....	Hour .....	95.00	120.00
Pachometer Meter Reinforcing Steel Locator .....	Hour .....	120.00	140.00
Pull Tests of Anchor Bolts/Dowels .....	Hour .....	95.00	140.00
Reinforcing Steel, Placing .....	Hour .....	95.00	120.00
Schmidt Concrete Hammer .....	Hour .....	120.00	140.00
Shop Welding Fabrication (AWS-CWI, AWS-ACWI and ICC) .....	Hour .....	100.00	-
Skidmore Testing .....	Hour .....	150.00	200.00
Special Inspector .....	Hour .....	95.00	120.00
Tag, Identify, and Sample Rebar or Structural Steel .....	Hour .....	100.00	120.00
Torque Testing of High Strength Bolts .....	Hour .....	115.00	135.00
Ultrasonic Testing .....	Hour .....	125.00	150.00
Witness Installation of High Strength Bolts .....	Hour .....	95.00	120.00

**MATERIALS TESTING SERVICES****AGGREGATE TEST**

Absorption .....	Each .....	\$ 50.00
Clay Lumps and Friable Particles .....	Each .....	80.00
Cleanness Value (Fine or Coarse) .....	Each .....	130.00
Decantation (No. 200) .....	Each .....	40.00
Deleterious Substances Determination .....	Each .....	120.00
Durability Test (Fine or Coarse) * .....	Each .....	170.00
Fineness Modulus (Including Sieve Analysis) .....	Each .....	135.00
Flat and Elongated Pieces (Per Size Fraction) .....	Each .....	110.00
Fractured Faces (Per Size Fraction) .....	Each .....	110.00
Light Weight Particles .....	Each .....	140.00

**Aggregate Test (continued)**

		<b>Regular Rate</b>	<b>Prevailing Wage Rate</b>
Los Angeles Rattler .....	Each .....	\$ 245.00	
Moisture .....	Each .....	35.00	
Organic Impurities .....	Each .....	60.00	
Percent Clay in Sands by Hydrometer .....	Each .....	195.00	
Percent Passing No. 200 Sieve .....	Each .....	60.00	
Percent Shale .....	Each .....	105.00	
Permeability of Granular Soil (ASTM D 2434) .....	Each .....	245.00	
Potential Reactivity (Chemical Method) .....	Each .....	Quotation	
Sand Equivalent .....	Each .....	125.00	
Sieve Analysis (Fine or Coarse - Processed) .....	Each .....	85.00	
Sieve Analysis (Pit Run) .....	Each .....	135.00	
Soft Particles .....	Each .....	100.00	
Soundness of Sodium Sulfate (Fine or Coarse) .....	Each .....	345.00	
Specific Gravity (Fine or Coarse) .....	Each .....	85.00	
Voids .....	Each .....	75.00	
Weight Per Cubic Foot .....	Each .....	85.00	
Deposit Evaluation .....	Each .....	Quotation	

\* Lightweight aggregate also requires Specific Gravity and Absorption Testing

**ASPHALT PAVING MATERIALS**

Asphalt Paving Inspection .....	Hour .....	\$ 95.00	\$ 120.00
Plant Control during Operations .....	Hour .....	95.00	-
Coring with Diamond Bit (Includes Bit Charge) (Contractor to provide access) .....	Hour .....	145.00	165.00
Density of Cores .....	Each .....	50.00	
Film Stripping .....	Each .....	85.00	
Los Angeles Rattler .....	Each .....	245.00	
Laboratory Standard Density (Marshall) .....	Each .....	205.00	
Laboratory Standard Density (Hveem) .....	Each .....	205.00	
Moisture Vapor Susceptibility .....		Quotation	
Mix Design-Asphalt .....	Each .....	200.00	
Mix Design Studies (Marshall or Hveem) .....	Each .....	500.00	
Pavement Evaluation .....		Quotation	
Plant Sample - % Asphalt, Ignition Oven .....	Each .....	150.00	
Plant Sample - % Asphalt and Gradation, Ignition Oven .....	Each .....	245.00	
Ignition Oven Aggregate Correction .....	Each .....	195.00	
Sand Equivalent .....	Each .....	125.00	
Sieve Analysis .....	Each .....	85.00	
Soundness Test (Sodium Sulfate) (Fine or Coarse) .....	Each .....	335.00	
Stability Test - "S" Value (Hveem Method) .....	Each .....	255.00	
Stability Test (Marshall Method - Set of 3) .....	Each .....	255.00	
Theoretical Maximum Specific Gravity (Rice) .....	Each .....	155.00	
Thickness of Pavement .....	Each .....	20.00	

**CONCRETE**

		<b>Regular Rate</b>	<b>Prevailing Wage Rate</b>
Absorption – Concrete Pipe or Tile (ASTM C497) .....	Each .....	\$ 35.00	
Batch Plant Inspection.....	Hour .....	95.00	-
Concrete Placing Inspection .....	Hour .....	95.00	120.00
Coring (Includes Bit Charge).....	Hour .....	145.00	165.00
Coring Assistant (Required for Work from Ladder or Scaffolding).....	Hour .....	95.00	120.00
Field Technician .....	Hour .....	95.00	120.00
Molding Cylinders and Beams .....	Hour .....	95.00	120.00
Pachometer Reinforcing Steel Locator .....	Hour .....	120.00	140.00
Pick up Cylinders.....	Hour .....	85.00	-
Pre-Stress and Post-Tensioning Inspection.....	Hour .....	95.00	120.00
Schmidt (Rebound) Hammer .....	Hour .....	120.00	140.00
Compression Test – Concrete Cylinders .....	Each .....	30.00	
Compression Test – Mortar or Grout Cylinders .....	Each .....	35.00	
Hold Cylinders (Not Tested).....	Each .....	17.50	
Compression Test – Concrete or Shotcrete Cores 8" Maximum Diameter .....	Each .....	45.00	
Compression Test – Shotcrete - Cylinders .....	Each .....	40.00	
Compression Test – Gypsum Cylinders.....	Each .....	35.00	
Gypsum Cylinders – Dried to Constant Weight .....	Each .....	30.00	
Mix Design-Concrete (Exclusive of Aggregate Tests)	Each .....	200.00	
Review of Concrete Mix Design .....	Each .....	150.00	
Modulus of Elasticity – 6"x12" Cylinders .....	Each .....	130.00	
Modulus of Rupture (Flexure) – 6"x6" Beams .....	Each .....	85.00	
Moisture Vapor Kit.....	Each .....	35.00	
Saw-Cutting Samples for Testing (If Required) .....	Each .....	10.00	
Shrinkage Test (Set of 3) .....	Each .....	455.00	
Slump Cone (Refundable upon Return of Cone) .....	Deposit .....	60.00	
Splitting Tensile Test.....	Each .....	55.00	
Trial Batch in Laboratory (Including Air Content, Unit Weight Water Demand, Slump and Strength Determinations (1 at 7 days and 2 at 28 days).....	Each .....	455.00	
Unit Weight of Cylinders.....	Each .....	30.00	

**FIREPROOFING TESTS**

Compression .....	Each .....	\$ 50.00	
Cohesion/Adhesion .....	Each .....	50.00	
Density .....	Each .....	45.00	
Dry Film Fireproofing Testing.....	Hour .....	125.00	\$ 145.00
Fireproofing Inspection.....	Hour .....	95.00	120.00

**CONCRETE MASONRY UNIT (CMU) AND BRICK**

		<b>Regular Rate</b>	<b>Prevailing Wage Rate</b>
Coring (Includes Bit Charge) .....	Hour .....	\$ 145.00	\$ 165.00
Coring Assistant (Required for Work from Ladder or Scaffolding) .....	Hour .....	95.00	120.00
In-Place Shear Testing .....	Hour .....	95.00	120.00
Masonry Placing Inspection .....	Hour .....	95.00	120.00
Molding Grout and Mortar .....	Hour .....	95.00	120.00
Pickup Grout and Mortar Samples .....	Hour .....	85.00	
Sample Masonry Units .....	Hour .....	95.00	
CMU, Compression .....	Each .....	50.00	
CMU, 24-Hour Absorption .....	Each .....	45.00	
CMU, Moisture Content .....	Each .....	45.00	
CMU, Density (Unit Weight) .....	Each .....	35.00	
CMU, Lineal Shrinkage (Rapid Method) .....	Each .....	95.00	
CMU, Dimensions .....	Each .....	25.00	
CMU, C140 Complete Testing .....	Each .....	655.00	
Brick, Compression .....	Each .....	40.00	
Brick, 24-Hour Absorption .....	Each .....	45.00	
Brick, 5-Hour Absorption .....	Each .....	45.00	
Brick, Modulus of Rupture .....	Each .....	40.00	
Grouted Masonry Prism Compression .....	Each .....	180.00	
Hydraulic Conductivity (Permeability) (ASTM D 5084) .....	Each .....	355.00	
Mortar and Grout Specimens, Compression .....	Each .....	35.00	
Masonry Cores, Compression 8" Maximum Diameter .....	Each .....	55.00	
Masonry Cores, Shear 8" Maximum Diameter .....	Each .....	75.00	
Tensile Test – CMA Method .....	Each .....	165.00	
Saw-Cutting Samples for Testing (If Required) .....	Each .....	10.00	
Unit Weight of Units .....	Each .....	30.00	
Mortar Cement Permeable Voids (ASTM C642) .....	Each .....	80.00	

**REINFORCING AND STRUCTURAL STEEL**

Anchor Bolts .....		Quotation	
Bolt – Hardness Only .....	Each .....	\$ 40.00	
Bolt – Wedge Tensile (Up to 100,000 lbf) .....	Each .....	100.00	
Hi-Strength Bolting .....	Hour .....	90.00	\$ 120.00
Field Welding Inspection (AWS-CWI, (AWS-ACWI), and ICC) .....	Hour .....	90.00	120.00
Magnetic Particle Testing .....	Hour .....	125.00	150.00
Nut – Hardness (Proof Load Under 100,000 lbf) .....	Each .....	60.00	
Nut – Hardness (Proof Load Between 100,000 – 150,000 lbf) .....	Each .....	75.00	
Shop Welding (AWS-CWI, AWS-ACWI, and ICC) .....	Hour .....	100.00	
Skidmore Testing .....	Hour .....	150.00	200.00
Tag, Identify, and Sample Reinforcing Steel .....	Hour .....	95.00	120.00
Tag and Identify Structural Steel .....	Hour .....	100.00	120.00

**Reinforcing and Structural Steel (continued)**

		<b>Regular Rate</b>	<b>Prevailing Wage Rate</b>
<b>Tension and Elongation (Reinforcing Steel)</b>			
No. 11 or Smaller .....	Each .....	65.00	
No. 14 .....	Each .....	125.00	
No. 18 (Proof Test) .....	Each .....	125.00	
Ultrasonic Testing .....	Hour .....	\$ 125.00	\$ 150.00
Washer - Hardness .....	Each .....	45.00	
Welder's Qualification Test – AWS and ASME Procedures .....		Quotation	
Bend Test (Reinforcing Steel) .....	Each .....	65.00	
Welded Wire Mesh Bend Test .....	Each .....	65.00	
Welded Wire Mesh Shear Test .....	Each .....	65.00	
Tension (Structural Steel) .....	Each .....	65.00	
Bend Test (Structural Steel) .....	Each .....	65.00	
Torque Testing of High Strength Bolts .....	Hour .....	95.00	120.00
Witness Installation of High Strength Bolts .....	Hour .....	95.00	120.00
Machining Coupons for Test (Tensile or Bend) .....		Quotation	

**ROOF TILE**

Sample Roof Tile .....	Hour .....	\$ 85.00	
Strength .....	Each .....	55.00	
Absorption .....	Each .....	55.00	
Permeability .....	Each .....	75.00	

**TESTING MACHINE - 400,000 LB. UNIVERSAL**

Machine with Operator .....	Hour .....	\$ 300.00	
Additional Technician .....	Hour .....	95.00	

**MISCELLANEOUS**

Expert Witness Testimony .....	Hour .....	\$ 300.00	
Expert Witness Preparation .....	Hour .....	250.00	
Modular Construction, Inspection and Certification .....	Hour .....	95.00	\$ 120.00
Roof Tests and Inspection .....	Hour .....	95.00	120.00
Structural Failure Investigation .....		Quotation	
Verification of Fabricator's Quality Control Capabilities .....		Quotation	
Welder Qualification Test .....		Quotation	
Glue Laminated Structural Lumber .....	Local Prevailing Rate + 20%		

**ALL REPORTS ARE REVIEWED BY REGISTERED CIVIL ENGINEERS APPROVED BY  
THE STATE OF CALIFORNIA, DIVISION OF STATE ARCHITECTURE**

**CONDITIONS AND WORKING HOURS**

<b><u>Minimum Charges</u></b>	There will be no minimum charges for inspection services. Other than late cancellation fees, client will be charged only for time spent on-site plus applicable travel time
<b><u>Travel Time</u></b>	Travel time from Bloomington to site of work and return will be charged at applicable hourly rate.
<b><u>Clerical Time</u></b>	Clerical time for report preparation is included in the hourly and unit rates for inspectors and testing. There will be no additional charge for clerical preparation of reports.
<b><u>Regular Time</u></b>	First 8 hours, Monday through Friday between 6 a.m. and 5 p.m.
<b><u>Time and One-Half</u></b>	First 12 hours on Saturday Monday through Friday after first 8 hours through 12 hours of shift or for hours worked between 5 p.m. and 6 a.m.
<b><u>Double Time</u></b>	All day Sunday and after first 12 hours Monday through Saturday. Holidays: New Year's, Memorial, Independence, Labor, Veterans, Thanksgiving, Day after Thanksgiving, Christmas Day.
<b><u>Prevailing Wage Projects</u></b>	Separate rates are provided for those projects where SB 1999 prevailing wage requirements are applicable. Our prevailing wage rates will increase in consistence with predetermined increases mandated by the California Department of Industrial Relations.
<b><u>Parking</u></b>	When not furnished for Inspector, parking will be charged as paid by the Inspector.
<b><u>Agency Approval of Special Inspectors</u></b>	Agency (e.g. Building and Safety Department) fees for approval or registration of special inspectors for a specific job will be charged to the client with no mark-up. Inspector's time to submit qualifications for agency approval will be charged at straight time rate.
<b><u>Subsistence</u></b>	On remote jobs, subsistence, when not furnished for Inspector, will be charged by Quotation.
<b><u>Completion</u></b>	Inspector will remain on job until discharged by competent authority.
<b><u>Cancellation</u></b>	No charge if made before 3:00 p.m. of the preceding day. If cancellation is received after 3:00 p.m. of the previous day, a late cancellation fee equivalent to 2 hours of requested inspection service may be charged.
<b><u>Terms of Payment</u></b>	Fees charged are for professional and technical services and are due on presentation. If not paid within 30 days from date of invoice, they are considered past due and a finance charge of 1-1/2% per month will be added to the unpaid balance (APR 18%). Any invoice under \$100.00 will be C.O.D.  All invoice errors or necessary corrections shall be brought to the attention of the company within fifteen (15) days of receipt of invoice; thereafter customer acknowledges invoices are correct and valid. John R. Byerly, Inc. reserves the right to terminate its services to a customer without notice if all invoices are not current. Upon such termination of services, the entire amount accrued for all services performed shall immediately become due and payable. Customer waives any and all claims against John R. Byerly, Inc., its subsidiaries, affiliates, servants and agents, for termination of work on account of these terms.

**Terms of Payment**  
**Continued**

Should it be necessary to refer a past-due account to an attorney, to file suit for collection, or to file suit to collect mechanics lien, customer agrees to pay all reasonable expenses and costs incurred thereby, including reasonable attorney fees and costs. Jurisdiction and venue shall be in San Bernardino County, State of California.

**Limitation of Liability**

It is agreed that Client will limit any and all liability, claims for damages, costs of defense, or expenses to be levied against the Geotechnical Engineer on account of any design defects, errors or omissions of professional negligence to a sum not to exceed \$75,000.00 or the amount of their fee, whichever is greater. Client agrees to notify any contractors or subcontractors who may perform work in connection with any design, reports or studies prepared by Geotechnical Engineer of such limitation of liability for design, defects, errors, omissions or professional negligence and requires as a condition precedent to their performing the work a like limitation of liability on their part as against the Geotechnical Engineer. In the event Client fails to obtain a like limitation of liability provision as to design defects, errors, omissions or professional negligence, any liability of the Client and the Geotechnical Engineer to such contracts or subcontracts arising out of an alleged defect, error or omission or professional negligence shall be allocated between the Client and the Geotechnical Engineer in such a manner that the aggregate liability for damages for such design defects to all parties, including the Client, shall not exceed \$75,000.00 or the amount of the Geotechnical Engineer's fee, whichever is greater.

**REPORTS**

Minimum charge for all special testing. ....	\$ 125.00
Minimum charge for all special research .....	50.00
Added charge for reproduction and mailing services for the report covering the research .....	.20 per sheet
Blueprints or other outside services .....	Cost + 20%

Principal engineer time will be charged for preparation of each report.