

March 23, 2015

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DSA File No. 57-11 DSA App. No. 02-114122 LEA No. 116

George Parker
Davis Joint Unified School District
526 B Street
Davis, California 95616
gparker@djusd.net

Cost Proposal - Testing and Inspection Services - Revised
CESAR CHAVEZ ES RELOCATABLE CLASSROOM REPLACEMENTS
1221 Anderson Road
Davis, California

Wallace-Kuhl and Associates (WKA) is pleased to submit this proposal to provide testing and inspection services during construction of the Cesar Chavez Elementary School Relocatable Classroom Replacement project. The project consists of removal of existing classrooms, site preparation, installation of new modular classroom buildings and minor utility site work at the existing campus.

WKA prepared the *Geotechnical Engineering Report* (WKA No. 10267.01P; dated December 8, 2014) for this project. Geotechnical testing and observation during construction is considered a continuation of our geotechnical engineering investigation. Our firm is very familiar with the soil conditions at this campus and has the knowledge and experience to provide rapid assessment and recommendations if unexpected soil conditions are encountered during construction – potentially saving the District time and money.

Our budget estimate is based on review of the construction documents and discussions with project personnel. We understand our scope of work would include inspection and testing of earthwork; foundation concrete and rebar; and concrete anchors as required by the project documents, as well as preparation of the Division of the State Architect (DSA) required documentation.

We discussed the project schedule and off-site fabrication with the contractor. We understand the modular buildings will be manufactured by Project Frog under the DSA pre-check program, and that they provide in-house welding inspection for the relatively minor welding needed for this project. Rebar sampling and testing is not required based on the CBC and the project specifications. In addition, Project Specifications Section 07 25 00 indicates relative humidity testing (ASTM F2170) of the floor slabs prior to flooring installation will be performed by the IOR or the owner's testing lab. Our firm is experienced with this test method and would be available to perform this testing if requested. We have indicated the cost for this testing as a separate line item on the attached budget estimate - not included in the total shown below.

Based on our experience and the scope of work described in the attached Budget Estimate, we estimate that our fee for the special inspection and testing services required for this project (based on the DSA 103 form) would be approximately \$15,716. Billing would be only for work performed and determined based on the attached 2015P Schedules of Fees. Please be aware that we bill for our hourly services on a portal-to-portal basis from our West Sacramento office. Also, the construction schedule and the contractor's efficiency affect the number of site visits - and the cost - required for our services. Our representatives would work with the Project Inspector to perform our work in a timely and efficient manner.

To assure that all parties fully understand the limitations of our role in your project, we emphasize that our representative will not act as supervisor of construction, nor will they direct construction operations. The various sub-contractors should be informed that neither the presence of our representative nor the testing by our firm shall excuse them from defects discovered in their work. Job and site safety of the contractor's personnel will be the sole responsibility of the contractor.

Our standard agreement for this work is attached to this proposal. If this proposal is acceptable, please sign the agreement and return it to us as our written authorization to proceed. We will return a fully executed copy of the agreement to you for your files. Please inform us if wet signed copies of the agreement are required. If that is the case, please print sign and return two copies of the agreement to our office. We will then return a fully executed copy by US mail for your files.

Thank you for the opportunity to submit this proposal and please contact me with any questions.

Wallage - Kuhl & Associates

David A. Redford, PE Senior Engineer

Attachments: Budget Estimate

Construction Testing Agreement

Schedule of Fees 2015P



## Budget Estimate

### CESAR CHAVEZ ES RELOCATABLE REPLACEMENTS

Davis, California Page 1

	Unit		Cost (\$) Per Unit	Estimated Quantity		Total
	Offic			scanney	naviousuus	TOTAL
OILS TESTING AND INSPECTION						
Soil Treatment Testing/Observation	hour	\$	95.00	12	\$	1,140.00
Shallow Foundation Inspection	hour	\$	95.00	6	\$	570.00
Underground Utility Trench Backfill T&I	hour	\$	95.00	24	\$	2,280.00
Pavement Subgrade T&I	hour	\$	95.00	6	\$	570.00
Pavement Aggregate Base T&I	hour	\$	95.00	6	\$	570.00
Flatwork Subgrade T&I	hour	\$	95.00	6	\$	570.00
Flatwork Aggregate Base T&I	hour	\$	96.00	6	\$	576.00
Laboratory Testing		,		•	*	0, 0.00
ASTM D1557 Curve	each	\$	240.00	3	\$	720.00
ROJECT ADMINISTRATION, REVIEW & REPORTS						
Project Related Meetings	hour	\$	95.00	2	\$	190.00
Supervising Technician	hour	\$	95.00	2	\$	190.00
Senior Engineer	hour	\$	160.00	4	\$	640.00
	S	OIL:	S TOTAL	***************************************	\$	8,016.00
					*	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
ONCRETE TESTING AND INSPECTION						
Concrete Mix Design Review by Senior Engineer	each	\$	160.00	2	\$	320.00
Reinforcing Steel Sampling and Tagging	hour	\$	90.00	0	\$	prec .
Batch Plant Inspection	hour	\$	95.00	5	\$	475.00
Concrete Placement T&I					*	
Continuous and Spread Footings	hour	\$	90.00	10	\$	900.00
Slab-on-Grade	hour	\$	90.00	8	\$	720.00
Miscellaneous	hour	\$	90.00	6	\$	540.00
Retrieve Test Samples	hour	\$	90.00	6	\$	540.00
Laboratory Testing		*	00.00	G	Ψ	040.00
Concrete Test Cylinders - 8 sets of 4	each	\$	25.00	32	\$	800.00
	CONCE		E TOTAL	HOLD TO THE SERVICE CONTRACTOR OF THE SERVICE	\$	4,295.00
OOD PRODUCTS SPECIAL INSPECTION						
Wood Products Inspection provided by subconsultant		**************	***************************************	**************************************	\$	1,000.00
	WOOD PRODU	JCT	S TOTAL	79899000000+600000 <del>000000000000000000000000</del>	\$	1,000.00
OST-INSTALLED CONCRETE ANCHORS TESTING AN	ID INSPECTION					·
Concrete Anchor Proof Load Testing	hour	\$	120.00	6	ď	700.00
To read the second seco			R TOTAL	V	\$ <b>\$</b>	720.00 <b>720.00</b>
	, (110		is isotmu		Ψ	120.00
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TRUCTURAL STEEL TESTING AND INSPECTION						
Shop Welding Inspection - Santa Rosa, CA	hour	\$	95.00	8	\$	760.00



## Budget Estimate CESAR CHAVEZ ES RELOCATABLE REPLACEMENTS

Davis, California Page 2

	Unit		ost (\$) er Unit	Estimated Quantity	undoutspanensous in	Total
PROJECT ADMINISTRATION, REVIEW & REPORTS						
Project Administration	hour	\$	95.00	3	\$	285.00
Senior Engineer - Report Review / Closeout Documentation	hour	\$	160.00	4	\$	640.00
PROJECT AD	MINISTRA	TION	TOTAL	nind di selepah melejah di selepah di selepah di selepah sebagai di sebagai di sebagai di sebagai di sebagai d	\$	925.00
PROJECT TOTAL BASED ON DSA 103 FORM	tille konskrivesta å til storret en provinsionen som sitt skindsstade skildensstade i CITT/SIA6000 KONSKRIVEN SKINDSSTADE SKINDSSTADE SKILDEN SKINDSSTADE SKILDEN SKILDEN SKILDEN SKILDEN SKILDEN SK	Senti i an a na an a		ARCHAOTER MICHAEL MARCHATACH THE COMMAN THE COMMAN THE SEASON SEE STATE AND MELTICAL THE COMMAN THE	\$	15,716.00
ADDITIONAL TESTING IF REQUESTED	iddaaani kainannaan oo oo suuruu suuruu suuruu saa saa saa saa saa saa saa saa saa s	#TOKA KATANISMA			uww.etomorous	
RELATIVE HUMIDITY TESTING						
Relative Humidity Testing	hour	\$	120.00	8	\$	960.00
RELA	TIVE HUMI	DIT	TOTAL		\$	960.00





# CONSTRUCTION TESTING AGREEMENT

CESAR CHAVEZ RELOCATABLE CLASSROOM REPLACEMENTS
Davis, California

DAVIS JOINT UNIFIED SCHOOL DISTRICT ("CLIENT") and River City Geoprofessionals, Inc. dba WALLACE - KUHL & ASSOCIATES ("WKA") agree:

- 1. PROFESSIONAL SERVICES. WKA will perform professional services and will receive compensation pursuant to the terms and conditions of the attached proposal letter dated March 23, 2015, which is incorporated herein by reference. In performing professional services, WKA shall use that degree of care and skill ordinarily exercised, under similar circumstances, by reputable members of the engineering profession practicing under similar conditions at the same time and in the same or similar locality. CLIENT understands and acknowledges the inherent risks connected with construction and agrees that no warranty, either express or implied, is included in this Agreement or in any drawing, specification, report or opinion produced pursuant to this Agreement.
- 2. PAYMENT. WKA will submit invoices for services rendered on a periodic basis, provided, however, said invoices shall not be submitted more frequently than once every 30 days. Invoices shall be due upon receipt, but shall not be considered delinquent if paid on or before the expiration of 30 days from date of mailing. If payment is not so made, a late payment charge shall be due on the invoice amount at the rate of one and one-half percent (1½%) per month on the unpaid balance from the date of the invoice until paid. In the event of delinquency, CLIENT shall pay the actual cost of collection including, without limitation, reasonable attorneys' fees.
- 3. JOB SITE, WKA will not act as supervisor of construction operations, nor will WKA direct or exert any control over such operations. The construction contractor(s) shall be informed that neither the presence of WKA on the job site, nor the testing by WKA shall excuse the contractor(s) for defects in any contractor's work or any contractor's non-compliance with the project plans, specifications or applicable laws, ordinances, regulations or standards, whether such defect or non-compliance is discovered during or after construction. CLIENT agrees that the construction contractor(s) will be required by CLIENT to assume sole and complete responsibility for job conditions during construction, including safety of persons and property.
- 4. REPORTS. Reports, plans and other work prepared by WKA remain the property of WKA. CLIENT agrees that all reports and other work furnished to the CLIENT and his agents not paid for will be returned upon demand, and will not be used for licensing, permits, design and/or construction.
- 5. LIABILITY, CLIENT agrees to indemnify and hold WKA harmless from any and all liability in connection with the performance of work during construction of this project, except liability arising directly from the gross negligence or willful misconduct of WKA. WKA carries workers' compensation insurance and public liability insurance for bodily injury and property damage that may be suffered by third parties and members of the public who are not covered by the limitation of liability set forth below in Paragraph 6. Certificates of coverage will be furnished to CLIENT upon written request. WKA assumes the risk of damage caused by its personnel to its supplies and equipment. In the event CLIENT desires greater insurance coverage and directs WKA to take out additional insurance, WKA shall procure and maintain additional insurance, if procurable, at CLIENT's expense; provided, however, WKA shall not be responsible for property damage and bodily injury resulting from any cause, including fire and explosion, beyond the amount and coverage of WKA's insurance.
- 6. LIMITATION OF LIABILITY. WKA's liability for damages due to alleged negligent professional acts, errors and omissions will be limited to a sum not to exceed \$50,000 or WKA's total fee, whichever is greater. Notwithstanding any other provision herein to the contrary, WKA shall not be responsible or held liable for any special, indirect or consequential damages resulting in any way from WKA's performance under this Agreement.
- 7. GOVERNING LAW; DISPUTES. This Agreement shall be governed by the laws of the State of California. Should either party hereto bring suit in court to enforce any term of this Agreement, it is agreed that each party shall pay their own legal costs, expenses and attorneys' fees.

DAVIS JOINT UNIFIED SCHOOL DISTRICT	WALLACE KUHI & ASSOCIATES				
Signature	Signature				
Name printed or typed Title  Date	David A. Redford, Senior Engineer Name/Title CA Registered CE No. 51122, expires 9/30/15				
Company Address	March 23, 2015				

PROFESSIONAL SERVICES			
Principal Engineer / Geologist		\$160.00	per hour
Senior Engineer / Geologist		\$160.00	per hour
Senior Environmental Scientist		\$160.00	per hour
Project Engineer / Geologist		\$135.00	per hour
Project Environmental Scientist		\$135.00	per hour
Senior Staff Engineer / Geologist		\$125.00	per hour
Senior Staff Environmental Scientist		\$125.00	per hour
Staff Engineer / Geologist		\$120.00	per hour
Staff Environmental Scientist		\$120.00	per hour
Senior Environmental Technician		\$95.00	per hour
Senior / Supervising Technician		\$95.00	per hour
Draftsperson / GIS Technician		\$90.00	per hour
Administrative Assistant		\$70.00	per hour
FIELD INVESTIGATION TESTING			
Seismic Refraction Survey		\$160.00	per hour
Thermal Resistivity Testing		\$160.00	per hour
Electrical Resistivity Survey		\$160.00	per hour
Hand Augering/Sampling - Engineer		\$145.00	per hour
Photoionization Detector		\$160.00	per hour
LITIGATION			
Data Review/Consultation		\$230.00	per hour
Depositions/Expert Witness Testimony		\$340.00	per hour
EXPENSES			
Vehicle Charges (Subject to periodic adjustment due to fuel cost)		\$0.75	per mile
Subsistence		\$55.00	per day
Lodging		Cost	
Services by Associate Firms and other outside services		Cost	plus 20%
Equipment rental, freight, special materials  Extra Report Copies		Cost	plus 20%
Black and white versions		\$21.00	each
Color photography versions		\$32.00	each
color photography voiciono		ψ02.00	eacii
PREMIUM CHARGES			
Overtime and Saturdays	hourly rate plus	40	percent
Sunday and Holidays	hourly rate plus	75	percent

### NOTE:

Premium Charges also apply to Field Services shown on Page 2



CONCRETE & REINFORCING STEEL		SOILS & ASPHALT CONCRETE	
Ball Penetration (Kelly Ball)	\$120.00 /hr.	Asphalt Concrete Inspection / Testing	\$95.00 /hr.
Batch Plant Inspection	\$90.00 /hr.	Asphalt Concrete Materials Sampling	\$95.00 /hr.
CaCl Moisture Emission Test Kit	\$30.00 /kit	Building Pad Special Inspection / Testing	\$95.00 /hr.
CaCl Moisture Emission Testing	\$85.00 /hr.	Deep Foundation Inspection	\$95.00 /hr.
CLSM/CDF/Slurry Testing	\$85.00 /hr.	Flatwork AB Inspection / Testing	\$95.00 /hr.
Concrete Mix Design Review	\$160.00 /hr.	Flatwork Subgrade Inspection / Testing	\$95.00 /hr.
Concrete Placement Obs/Cast Cylinder	\$90.00 /hr.	Grading Inspection / Testing	\$95.00 /hr.
Concrete Rebound Number Testing	\$120.00 /hr.	Hand Augering and Sampling	\$120.00 /hr.
Concrete Trial Batch	\$90.00 /hr.	Pavement AB Inspection / Testing	\$95.00 /hr.
Floor Flatness Testing	\$120.00 /hr.	Pavement Subgrade Inspection / Testing	\$95.00 /hr.
High Strength Grout Sampling / Testing	\$90.00 /hr.	Proof Rolling Observation	\$95.00 /hr.
Rebar / Post Tension Special Inspection	\$95.00 /hr.	Shallow Foundation Inspection	\$95.00 /hr.
Rebar Location / Pachometer	\$120.00 /hr.	Slab Subgrade Soil Moisture Tests	\$95.00 /hr.
Rebar Placement Inspection	\$95.00 /hr.	Soil / Aggregate Sampling	\$95.00 /hr.
Reinforcing Steel Sampling/Tagging	\$90.00 /hr.	Soil Treatment Testing / Observation	\$95.00 /hr.
Relative Humidity Testing	\$120.00 /hr.	Structure Backfill Inspection / Testing	\$95.00 /hr.
Shotcrete Special Inspection	\$90.00 /hr.	Subgrade Stabilization Observation	\$95.00 /hr.
Transport Cylinders / Samples to Lab	\$90.00 /hr.	Utility Trench Backfill Testing	\$95.00 /hr.
		WKA Drill Rig (including operator)	\$260.00 /hr.
CORING		WKA Drill Rig (helper)	\$95.00 /hr.
Coring (Technician + equipment)	\$120.00 /hr.	( · · · · · · · · · · · · · · · · · · ·	<b>400.00</b>
Coring (Technician assistant)	\$90.00 /hr.	SPECIALIZED SERVICES	
		Coefficient of Friction Testing	\$120.00 /hr.
POST-INSTALLED ANCHORS		Existing Building Evaluation / Demo	\$90.00 /hr.
Concrete Anchor Installation Inspection	\$90.00 /hr.	Existing Building Evaluation / Document	\$90.00 /hr.
Canarata Anahar Draaf Land Tasting	\$120.00 /hr.		\$90.00 /hr.
Concrete Anchor Proof Load Testing	\$ 120.00 /Hr.	Existing Building Evaluation / Repair	ΨΟΟ.ΟΟ / Ι ΙΙ .
Concrete Anchor Torque Testing  Concrete Anchor Torque Testing	\$95.00 /hr.	• •	
		Field Investigate Support FRP Installation Inspection	\$90.00 /hr.
Concrete Anchor Torque Testing	\$95.00 /hr.	Field Investigate Support	
Concrete Anchor Torque Testing Suspended Ceiling Inspection / Testing STRUCTURAL STEEL	\$95.00 /hr.	Field Investigate Support FRP Installation Inspection	\$90.00 /hr. \$90.00 /hr.
Concrete Anchor Torque Testing Suspended Ceiling Inspection / Testing  STRUCTURAL STEEL Fireproofing Special Inspection / Testing	\$95.00 /hr.	Field Investigate Support FRP Installation Inspection GFRC Inspection / Testing Soil Elect. Resitivity Testing - Technician	\$90.00 /hr. \$90.00 /hr. \$90.00 /hr.
Concrete Anchor Torque Testing Suspended Ceiling Inspection / Testing STRUCTURAL STEEL	\$95.00 /hr. \$120.00 /hr.	Field Investigate Support FRP Installation Inspection GFRC Inspection / Testing Soil Elect. Resitivity Testing - Technician Prestress Framing Installation	\$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$120.00 /hr.
Concrete Anchor Torque Testing Suspended Ceiling Inspection / Testing  STRUCTURAL STEEL Fireproofing Special Inspection / Testing	\$95.00 /hr. \$120.00 /hr. \$90.00 /hr.	Field Investigate Support FRP Installation Inspection GFRC Inspection / Testing Soil Elect. Resitivity Testing - Technician	\$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$120.00 /hr. \$90.00 /hr.
Concrete Anchor Torque Testing Suspended Ceiling Inspection / Testing  STRUCTURAL STEEL Fireproofing Special Inspection / Testing High Strength Bolt Special Inspection	\$95.00 /hr. \$120.00 /hr. \$90.00 /hr. \$95.00 /hr.	Field Investigate Support FRP Installation Inspection GFRC Inspection / Testing Soil Elect. Resitivity Testing - Technician Prestress Framing Installation Proto Wall Inspection / Testing	\$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$120.00 /hr. \$90.00 /hr. \$90.00 /hr.
Concrete Anchor Torque Testing Suspended Ceiling Inspection / Testing  STRUCTURAL STEEL Fireproofing Special Inspection / Testing High Strength Bolt Special Inspection Non-Destructive Testing - UT/MT/PT	\$95.00 /hr. \$120.00 /hr. \$90.00 /hr. \$95.00 /hr. \$105.00 /hr.	Field Investigate Support FRP Installation Inspection GFRC Inspection / Testing Soil Elect. Resitivity Testing - Technician Prestress Framing Installation Proto Wall Inspection / Testing Roofing Inspection	\$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$120.00 /hr. \$90.00 /hr. \$90.00 /hr.
Concrete Anchor Torque Testing Suspended Ceiling Inspection / Testing  STRUCTURAL STEEL  Fireproofing Special Inspection / Testing High Strength Bolt Special Inspection Non-Destructive Testing - UT/MT/PT Welding Special Inspection - Field	\$95.00 /hr. \$120.00 /hr. \$90.00 /hr. \$95.00 /hr. \$105.00 /hr. \$95.00 /hr.	Field Investigate Support FRP Installation Inspection GFRC Inspection / Testing Soil Elect. Resitivity Testing - Technician Prestress Framing Installation Proto Wall Inspection / Testing Roofing Inspection Shear Nailing Inspection	\$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$120.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr.
Concrete Anchor Torque Testing Suspended Ceiling Inspection / Testing  STRUCTURAL STEEL  Fireproofing Special Inspection / Testing High Strength Bolt Special Inspection Non-Destructive Testing - UT/MT/PT Welding Special Inspection - Field	\$95.00 /hr. \$120.00 /hr. \$90.00 /hr. \$95.00 /hr. \$105.00 /hr. \$95.00 /hr.	Field Investigate Support FRP Installation Inspection GFRC Inspection / Testing Soil Elect. Resitivity Testing - Technician Prestress Framing Installation Proto Wall Inspection / Testing Roofing Inspection Shear Nailing Inspection Thickness Testing - Coating / Steel	\$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$120.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr.
Concrete Anchor Torque Testing Suspended Ceiling Inspection / Testing  STRUCTURAL STEEL Fireproofing Special Inspection / Testing High Strength Bolt Special Inspection Non-Destructive Testing - UT/MT/PT Welding Special Inspection - Field Welding Special Inspection - Shop  MASONRY In-Place Masonry Flatjack Testing	\$95.00 /hr. \$120.00 /hr. \$90.00 /hr. \$95.00 /hr. \$105.00 /hr. \$95.00 /hr.	Field Investigate Support FRP Installation Inspection GFRC Inspection / Testing Soil Elect. Resitivity Testing - Technician Prestress Framing Installation Proto Wall Inspection / Testing Roofing Inspection Shear Nailing Inspection Thickness Testing - Coating / Steel Timber Framing / Hardware Inspection	\$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$120.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr.
Concrete Anchor Torque Testing Suspended Ceiling Inspection / Testing  STRUCTURAL STEEL Fireproofing Special Inspection / Testing High Strength Bolt Special Inspection Non-Destructive Testing - UT/MT/PT Welding Special Inspection - Field Welding Special Inspection - Shop  MASONRY In-Place Masonry Flatjack Testing In-Place Masonry Shear Testing	\$95.00 /hr. \$120.00 /hr. \$90.00 /hr. \$95.00 /hr. \$105.00 /hr. \$95.00 /hr. \$95.00 /hr.	Field Investigate Support FRP Installation Inspection GFRC Inspection / Testing Soil Elect. Resitivity Testing - Technician Prestress Framing Installation Proto Wall Inspection / Testing Roofing Inspection Shear Nailing Inspection Thickness Testing - Coating / Steel Timber Framing / Hardware Inspection Vapor Barrier Inspection	\$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$120.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr.
Concrete Anchor Torque Testing Suspended Ceiling Inspection / Testing  STRUCTURAL STEEL  Fireproofing Special Inspection / Testing High Strength Bolt Special Inspection Non-Destructive Testing - UT/MT/PT Welding Special Inspection - Field Welding Special Inspection - Shop  MASONRY  In-Place Masonry Flatjack Testing In-Place Masonry Shear Testing Masonry Materials Sampling / Testing	\$95.00 /hr. \$120.00 /hr. \$90.00 /hr. \$95.00 /hr. \$105.00 /hr. \$95.00 /hr. \$95.00 /hr.	Field Investigate Support FRP Installation Inspection GFRC Inspection / Testing Soil Elect. Resitivity Testing - Technician Prestress Framing Installation Proto Wall Inspection / Testing Roofing Inspection Shear Nailing Inspection Thickness Testing - Coating / Steel Timber Framing / Hardware Inspection Vapor Barrier Inspection	\$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$120.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr.
Concrete Anchor Torque Testing Suspended Ceiling Inspection / Testing  STRUCTURAL STEEL  Fireproofing Special Inspection / Testing High Strength Bolt Special Inspection Non-Destructive Testing - UT/MT/PT Welding Special Inspection - Field Welding Special Inspection - Shop  MASONRY  In-Place Masonry Flatjack Testing In-Place Masonry Shear Testing Masonry Materials Sampling / Testing Masonry Special Inspection	\$95.00 /hr. \$120.00 /hr. \$90.00 /hr. \$95.00 /hr. \$105.00 /hr. \$95.00 /hr. \$145.00 /hr. \$120.00 /hr. \$90.00 /hr. \$90.00 /hr.	Field Investigate Support FRP Installation Inspection GFRC Inspection / Testing Soil Elect. Resitivity Testing - Technician Prestress Framing Installation Proto Wall Inspection / Testing Roofing Inspection Shear Nailing Inspection Thickness Testing - Coating / Steel Timber Framing / Hardware Inspection Vapor Barrier Inspection	\$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$120.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr.
Concrete Anchor Torque Testing Suspended Ceiling Inspection / Testing  STRUCTURAL STEEL  Fireproofing Special Inspection / Testing High Strength Bolt Special Inspection Non-Destructive Testing - UT/MT/PT Welding Special Inspection - Field Welding Special Inspection - Shop  MASONRY  In-Place Masonry Flatjack Testing In-Place Masonry Shear Testing Masonry Materials Sampling / Testing	\$95.00 /hr. \$120.00 /hr. \$90.00 /hr. \$95.00 /hr. \$105.00 /hr. \$95.00 /hr. \$95.00 /hr. \$145.00 /hr. \$120.00 /hr. \$90.00 /hr. \$90.00 /hr.	Field Investigate Support FRP Installation Inspection GFRC Inspection / Testing Soil Elect. Resitivity Testing - Technician Prestress Framing Installation Proto Wall Inspection / Testing Roofing Inspection Shear Nailing Inspection Thickness Testing - Coating / Steel Timber Framing / Hardware Inspection Vapor Barrier Inspection  GENERAL Inspection / Testing Cancelled	\$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$120.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr. \$90.00 /hr.

#### **MINIMUM CHARGES**

A two hour minimum charge will apply to field technician services with the following exceptions:

- a) Single trip pickup and delivery services, where a one hour minimum will apply.
- b) Saturday, Sunday and holidays, where a four hour minimum charge will apply.

### SHIFT DIFFERENTIAL

A 25 percent shift differential surcharge will be added to the hourly rate of personnel involved in scheduled testing work between the hours of 6 P.M. and 5 A.M., as well as a four hour minimum.



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SOIL			ACCOUNT OF THE PARTY OF THE PAR
Atterberg Limits (LL/PI)	ASTM D4318	\$150.00	each
CLSM/CDF/Soil Cement Compression Test	ASTM D4832	\$50.00	
Compaction Characteristics	ASTM D698	\$240.00	
Compaction Characteristics	ASTM D1557	\$240.00	
Compaction Characteristics	CTM 216		
Expansion Index	ASTM D4829	\$240.00	
Hydraulic Conductivity, Flexible Wall Permeability	ASTM D5084	\$175.00	
Moisture Content	ASTM D3084 ASTM D2216	\$400.00	
Organic Content	ASTM D2210 ASTM D2974	\$20.00	
Resistance "R" Value - Untreated		\$90.00	
Resistance "R" Value - Laboratory Lime-Treated	ASTM D2844, CTM 301	\$245.00	each
Sieve Analysis - Sieve only (Coarse or Fine)	ASTM D2844, CTM 301	\$300.00	each
Sieve Analysis - Passing No. 200 only	ASTM C136/D1140	\$100.00	each
	ASTM D1140	\$90.00	each
Sieve Analysis - Sieve & Hydrometer	ASTM D422	\$160.00	each
Specific Gravity of Soils	ASTM D854	\$125.00	each
Triaxial Compression Test, 1 point - Undisturbed	ASTM D4767	\$250.00	each
Triaxial Compression Test, 3 Pt Staged - Undisturbed	ASTM D4767	\$295.00	each
Triaxial Compression Test, 1 point - Remolded	ASTM D4767	\$325.00	each
Triaxial Compression Test, 3 Pt Staged - Remolded	ASTM D4767	\$375.00	each
Unconfined Compression Test	ASTM D2166	\$100.00	each
Unit Weight/Moisture Content - Tube Sample	ASTM D2937/D2216	\$30.00	each
Consolidation (8 loads + 1 rebound)	ASTM D2435	\$450.00	each
Consolidation (additional loads)	ASTM D2435	\$50.00	each
Thermal Resistivity	ASTM D5334	\$50.00	each
AGGREGATE			
Aggregate Unit Weight	ASTM C29	\$50.00	oooh
Clay Lumps and Friable Particles	ASTM C142		each
Cleanness Value	CTM 227	\$155.00	per size
Durability Index (Coarse or Fine)	CTM 227 CTM 229	\$160.00	each
Flat and Elongated Particles in Coarse Aggregate		\$155.00	each
Fractured/Crushed Particles	ASTM DEPOT		per size
Organic Impurities in Fine Aggregates	ASTM 042		per size
Resistance "R" Value	ASTM C40	\$55.00	each
	CTM 301	\$290.00	each
Sand Equivalent, 1 point	CTM 217	\$85.00	each
Sand Equivalent, 3 points	CTM 217	\$125.00	each
Sieve Analysis - Coarse or Fine	ASTM C136, CTM 202	\$100.00	each
Sieve Analysis - Passing No. 200 only	ASTM C117	\$90.00	each
Sodium Sulfate Soundness	ASTM C88, CTM 214	\$120.00	per size
Specific Gravity and Absorption (Coarse or Fine)	ASTM C127, C128	\$120.00	each
ASPHALT CONCRETE			
Asphalt Content (Ignition Oven)	ASTM D6307, CTM 382	\$240.00	each
Hveem Compacted Unit Weight, 1 point	ASTM D1560/D2726	Ψ240.00	Gacii
Troom compacted of it weight, I point	CTM 304/308	ድስፍ ሰሰ	ooob
Laboratory Test Maximum Density (LTMD), 5 points	CTM 375	\$95.00	each
Marshall Compacted Unit Weight, 1 point	ASTM D6926/D2726	\$350.00	each
Sieve Analysis of AC Aggregate (Coarse and Fine)		\$90.00	each
Stabilometer Value, 1 point	ASTM D5444, CTM 202	\$165.00	each
Theoretical Maximum Density	CTM 366	\$125.00	each
· · · · · · · · · · · · · · · · · · ·	ASTM D2041, CTM 309	\$150.00	each
Thickness of AC Cores	ASTM D3549	\$10.00	each
Unit Weight of AC Cores	ASTM D2726, D1188, CTM 308	\$50.00	each

CONCRETE			
Compression Test, Concrete Cylinder	A CTRA COO		
	ASTM C39	\$25.00	each
Compression Test, Concrete Cylinder - Hold	ASTM C39	\$20.00	each
Compression Test, Concrete Core	ASTM C42, C39	\$70.00	each
Compression Test, Shotcrete Core	ASTM C42, C39	\$70.00	each
Compression Test, High Strength Grout	ASTM C1107/C109	\$35.00	each
Concrete Cylinder Mold		\$4.00	each
Density / Unit Weight of Concrete	ASTM C567, C642	\$50.00	each
Flexural Strength Test, Concrete Beam	ASTM C78	\$95.00	each
Laboratory Drying Shrinkage Test, per beam	ASTM C157	\$175.00	each
Splitting Tensile Test, Concrete Cylinder	ASTM C496	\$75.00	each
MASONRY			
Brick			
Compression Test	ASTM C67	<b>\$60.00</b>	000h
Modulus of Rupture	ASTM C67	\$60.00	each
Absorption		\$70.00	each
Concrete Masonry Unit	ASTM C67	\$85.00	each
Compression Test	A CTB # O4 40		
Absorption & Moisture Content	ASTM C140	\$70.00	each
	ASTM C140	\$70.00	each
Linear Drying Shrinkage	ASTM C426	\$175.00	each
Compression Test, Composite Masonry Prism	ASTM C1314	\$95.00	each
Compression Test, Masonry Grout	ASTM C1019	\$35.00	each
Compression Test, Mortar	ASTM C780	\$30.00	each
Core Shear Test	CBC Section 2105A	\$80.00	each
STEEL			
Anchor Bolt Tensile Test	ASTM F606	\$95.00	each
Fireproofing Density Test	ASTM E605	\$65.00	each
High Strength Bolt Assembly Laboratory Testing	NOTIVI E000	φ05.00	each
Bolt - Wedge Tension Test	ASTM F606	¢70.00	
Bolt - Proof Load Test	ASTM F606	\$70.00	each
Bolt - Hardness Test		\$70.00	each
Nut - Proof Load Test	ASTM ESOS	\$25.00	each
Nut - Hardness Test	ASTM F606	\$70.00	each
Washer - Hardness Test	ASTM E18	\$25.00	each
	ASTM E18	\$25.00	each
Prestressing Steel Strand Tensile Test	ASTM A416/A1061	\$125.00	each
Reinforcing Steel (Rebar) Tensile Test			
Up to No. 7	ASTM A615, A706/A370	\$70.00	each
From No. 8 through No. 14	ASTM A615, A706/A370	\$95.00	each
Reinforcing Steel (Rebar) Bend Test	ASTM A615, A706/A370	\$35.00	each
Structural Steel Tensile Test			
Up to 3/4"	ASTM A370	\$70.00	each
Sizes Larger Than 3/4"	ASTM A370	\$95.00	each
Machining of Test Specimens			us %20
Structural Steel Hardness Testing	ASTM E18	\$75.00	each
Weld Assembly, Guided Bend/Macroetch/T-Bend Test	AWS D1.1, ASTM E190		per test
Welder Qualification Test Inspection		\$80.00 p	
Welder Qualification Test Record		\$95.00	each
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**TESTING SERVICES** 

Laboratory Technician \$75.00 per hour

