

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS  
ACTION AGENDA SUMMARY

DEPT: Public Works

*[Handwritten Signature]*

BOARD AGENDA # \*C-1

Urgent

Routine

AGENDA DATE September 29, 2015

CEO Concurs with Recommendation YES  NO   
(Information Attached)

4/5 Vote Required YES  NO

SUBJECT:

Approval of Amendments to the Professional Design Services Master Agreements with ENGEO, Inc. and Wallace-Kuhl & Associates for On-Call Material Testing Services

STAFF RECOMMENDATIONS:

1. Approve Amendment No. 1 to the Professional Design Services Master Agreement with ENGEO, Inc. in the amount of \$250,000 and extend the Agreement for an additional 24 months to expire on October 21, 2017.
2. Approve Amendment No. 1 to the Professional Design Services Master Agreement with Wallace-Kuhl & Associates in the amount of \$250,000 and extend the Agreement for an additional 24 months to expire on October 21, 2017.
3. Authorize the Public Works Director to sign the amendments.

FISCAL IMPACT:

The upcoming Public Works Department construction schedule for the next two years yields an estimated materials testing cost of approximately \$500,000. Each separate project will individually fund their share of testing. Funds for testing services will be authorized and transferred at the project's Board approval or award phase of the construction contract. These funds shall not exceed the maximum \$250,000 budgeted for each individual agreement over the twenty-four month period or through October 2017.

BOARD ACTION AS FOLLOWS:

No. 2015-459

On motion of Supervisor Chiesa, Seconded by Supervisor Monteith  
and approved by the following vote,

Ayes: Supervisors: O'Brien, Chiesa, Monteith, DeMartini, and Chairman Withrow

Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

1) X Approved as recommended

2) \_\_\_\_\_ Denied

3) \_\_\_\_\_ Approved as amended

4) \_\_\_\_\_ Other:

MOTION:

*[Handwritten Signature: Christine Ferraro]*

ATTEST: CHRISTINE FERRARO TALLMAN, Clerk

File No.

Approval of Amendments to the Professional Design Services Master Agreements with ENGEO, Inc. and Wallace-Kuhl & Associates for On-Call Material Testing Services

**DISCUSSION:**

Material testing on roadwork construction is an integral portion of the project. It ensures the contractor is providing construction results and product at the standard required by the approved plans and specifications.

The use of two different firms for testing services for all County projects, instead of individual firms for each project, ensures a consistent line of communication between the County construction managers and the testing firms. This communication and familiarity of field personnel creates an integrated team focused on project quality. Additionally, this dual approach of two on-call testing firms ensures timely responses for field visits, sampling, and testing if one firm were to be backed up with other non-County projects.

In anticipation of construction projects planned in Fiscal Years spanning from 2012 to 2015, the Public Works Department issued a Request for Proposal (RFP) for material testing services in April 2012 to several material testing firms in the area. On October 22, 2012, the Board of Supervisors approved the two Professional Design Services Master Agreements. These Agreements will expire on October 21, 2015. Both Agreements have an option for a 24-month extension. Public Works staff has experienced successful working relationships with both firms and has received quality service over the last three years. To maintain seamless delivery of quality projects in the field, staff recommends extending the terms of the agreements for an additional two years, per the amendment documents.

**POLICY ISSUES:**

The recommended actions support the Board's priorities of providing A Safe Community, A Healthy Community and A Well-Planned Infrastructure System by ensuring quality materials and workmanship are utilized on Public Works Projects.

**STAFFING IMPACT:**

Existing Public Works staff will manage and oversee the services of each testing firm.

**CONTACT PERSON:**

Matt Machado, Public Works Director. Telephone: (209) 525-4153.

**ATTACHMENTS:**

1. Amendment No. 1 - ENGEO, Inc.
2. Amendment No. 1 - Wallace-Kuhl & Associates

**AMENDMENT NO. 1**  
To Professional Design Services Master Agreement between  
County of Stanislaus and ENGEIO Incorporated

This Amendment is made and entered into this 29th day of September, 2015, in the City of Modesto, State of California, by and between the County of Stanislaus ("County") and ENGEIO Incorporated, ("Consultant"), for and in consideration of the promises, and the mutual promises, covenants, terms, and conditions, hereinafter contained.

WHEREAS, on August 7, 2012, the Stanislaus County Board of Supervisors awarded a Professional Design Services Master Agreement ("Agreement") to Consultant, in the amount of Three Hundred Seventy-Five Thousand Dollars (\$375,000), for on-call materials testing services for Public Works construction projects;

WHEREAS, the Agreement will expire on October 21, 2015;

WHEREAS, the term of the Agreement may be extended for an additional twenty-four months as stated in the Agreement, Section 4.1-Term; and,

WHEREAS, the Public Works Director has determined that additional on-call materials testing services are needed for an additional two years;

WHEREAS, an increase in the maximum amount of the Agreement is necessary to cover additional on-call materials testing services.

\$375,000	Original Agreement
<u>+250,000</u>	Amendment No. 1
\$575,000	Revised

NOW THEREFORE, the parties agree as follows:

1. Section 2.1 of the Agreement is amended to read as follows:

Compensation. Consultant shall be paid in accordance with the Fee Schedule attached hereto and made a part of the Agreement. Consultant's compensation shall in no case exceed One Hundred Twenty-Five Thousand Dollars (\$125,000) annually.

2. Section 4.1 of the Agreement is amended to read as follows:

Term. This Agreement shall continue for an additional period of twenty-four (24) months, beginning October 21, 2015 and ending on October 21, 2017, unless previously terminated as provided herein or as otherwise agreed to in writing by the parties.

3. All other terms and conditions of the Agreement shall remain in full force and effect.

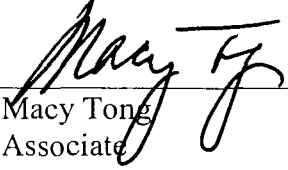
(Signatures on Following Page)

IN WITNESS WHEREOF, the parties have executed this First Amendment effective on the date written above.

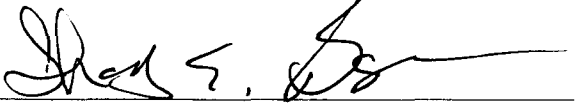
COUNTY OF STANISLAUS

ENGEO INCORPORATED

By: \_\_\_\_\_  
Matt Machado, Director  
Department of Public Works

By:  \_\_\_\_\_  
Macy Tong  
Associate

APPROVED AS TO FORM  
John P. Doering  
County Counsel

By:  \_\_\_\_\_  
Thomas E. Boze  
Assistant County Counsel

**REQUEST FOR PROPOSAL  
MATERIALS TESTING & INSPECTION SERVICES  
RFP WORKSHEET FOR TESTING & INSPECTION SERVICES**

Testing & Inspection services may include, but not be limited to the following items:

TEST NO.	TESTING /INSPECTION SERVICE DESCRIPTION	PRICE PER TEST (\$)	TURN AROUND TIME (DAYS)
1	HOURLY RATE FOR SOIL TECHNICIAN CALTRANS I.A. CERTIFIED WITH NUCLEAR DENSITY GAUGE.	\$150.00	Same Day
2	HOURLY RATE FOR A.C.I. FIELD TESTING TECHNICIAN- GRADE 1	\$151.00	Same Day
3	HOURLY RATE FOR ASPHALT TECHNICIAN CALTRANS I.A. CERTIFIED	\$150.00	Same Day
4	HOURLY RATE FOR I.C.B.O./A.W.S.SPECIAL INSPECTOR (CONCRETE/MASONRY/WELDING)	\$166.00	Same Day
5	FIELD COMPACTION TESTS USING CALIFORNIA 231 TEST METHOD (NUCLEAR GAGE TESTING WITH MINIMUM OF 3 NUCLEAR SHOTS PER TEST INCLUDING MOISTURE - ROAD WORK) (INCLUDED IN HOURLY RATE)	\$0.00	1
6	LABORATORY COMPACTION TEST USING CALIFORNIA 216 TEST METHOD (PART II MAX WET DENSITY & PERCENT RELATIVE COMPACTION)	\$250.00	3
7	AGGREGATE TESTING USING CALIFORNIA 202 METHOD OF TESTS FOR SIEVE ANALYSIS OF FINE AND COURSE AGGREGATES.	\$150.00	4
8	AGGREGATE TESTING USING CALIFORNIA 205 METHOD FOR DETERMINING PERCENTAGE OF CRUSHED PARTICLES.	\$150.00	3
9	SAND EQUIVALENT USING CALIFORNIA 217 TEST METHOD.	\$175.00	3
10	BULK SPECIFIC GRAVITY & DENSITY OF BITUMINOUS MIXTURES USING CALIFORNIA 308 TEST METHOD.	\$525.00	2
11	DETERMINATION OF ASPHALT BINDER CONTENT OF BITUMINOUS PAVING MIXTURES BY THE IGNITION METHOD USING CALIFORNIA 382 TEST METHOD.	\$300.00	2
12	RESISTANCE "R" VALUE OF TREATED AND UNTREATED BASES, SUBBASES, AND BASEMENT SOILS BY THE STABILOMETER TEST USING CALIFORNIA 301 TEST METHOD.	\$400.00	6
13	GRAB BAG SOIL SAMPLING PICKUP (UP TO 75 POUNDS) WITHIN STANISLAUS COUNTY - PER SITE (EACH).	\$141.00	Same Day

14	COMPRESSIVE STRENGTH OF MOLDED CONCRETE CYLINDERS USING CALIFORNIA 521 TEST METHOD (per cylinder)	\$35.00	per break schedule
15	ASTM D6938-08,"STANDARD TEST METHOD FOR IN-PLACE DENSITY & WATER CONTENT OF SOIL & SOIL-AGGREGATE BY NUCLEAR METHODS". (INCLUDED IN HOURLY RATE)	\$0.00	1
16	ASTM D1557-07, "STANDARD TEST METHODS FOR LABORATORY COMPACTION CHARACTERISTICS OF SOIL USING MODIFIED EFFORT".	\$320.00	5
17	SAMPLING FRESH CONCRETE USING CALIFORNIA 539 TEST METHOD; AND MAKING HANDLING, AND STORING CONCRETE COMPRESSIVE TEST SPECIMENS IN THE FIELD USING CALIFORNIA 540 TEST METHOD. (INCLUDED IN HOURLY RATE)	\$0.00	1
18	CONCRETE CYLINDER PICKUP PER SET OF CYLINDERS WITHIN STANISLAUS COUNTY (EACH)	\$141.00	1
19	CALTRANS TEST METHOD 366, "STABILOMETER VALUE" (If performed without CT 308 Max Density)	\$750.00	1
19a	CALTRANS TEST METHOD 366, "STABILOMETER VALUE" (Additional fee if performed with CT308)	\$250.00	1
20	CALTRANS TEST METHOD 367, "OPTIMUM BITUMEN CONTENT"	\$1,175.00	2
21	CALTRANS TEST METHOD 370, "MOISTURE CONTENT OF BITUMINOUS MIXTURES OR GRADED MINERALS AGGREGATES USING MICROWAVE OVENS"	\$100.00	1
22	CALTRANS TEST 375, "RELATIVE COMPACTION OF ASPHALT CONCRETE IN PLACE". (INCLUDED IN HOURLY RATE)	\$0.00	Same Day
23	CALTRANS TEST 202, "SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES"	\$150.00	4
24	ASTM D4318, "PLASTICITY INDEX"	\$190.00	3
25	ASTM D422,"SIEVE ANALYSIS OF SOIL ASTM D422"	\$150.00	4
26	CALTRANS TEST METHOD 382,"ASPHALT DETERMINATION OF ASPHALT BINDER CONTENT OF BITUMINOUS PAVING MIXTURES BY THE IGNITION METHOD"	\$300.00	2
27	CHEMICAL TESTING OF TREATED AND UNTREATED SOILS AND AGGREGATE BASES, ASTM TEST METHOD D. 2170, "KINEMATIC VISCOSITY", ASTM TEST METHOD 2171, "ABSOLUTE VISCOSITY"; AND ASTM D5, "PENETRATION"	\$250.00	6
28	PERCOLATION TESTING TO DETERMINE SOIL'S PERCOLATION RATE. (FOR TRENCH AND BED PERCOLATION) (BASED ON STAND-PIPE INSTALLATION METHOD)	\$2,200.00	2

ENGEO complies with all applicable local and state labor laws, including prevailing wage.

**PREFERRED CLIENT FEE SCHEDULE  
PROFESSIONAL SERVICES  
Effective April 2015**

President.....	\$295.00 per hour
Principal Engineer/Geologist.....	\$240.00 per hour
Associate Engineer/Geologist.....	\$220.00 per hour
Senior Engineer/Geologist.....	\$195.00 per hour
Project Engineer/Geologist/Manager.....	\$175.00 per hour
Environmental Scientist.....	\$170.00 per hour
Staff Engineer/Geologist.....	\$155.00 per hour
Assistant Engineer.....	\$130.00 per hour
Construction Services Manager.....	\$155.00 per hour
Senior Field Representative II.....	\$140.00 per hour*/**
Senior Field Representative I.....	\$125.00 per hour*/**
Field Representative.....	\$115.00 per hour*/**
Environmental Technician.....	\$120.00 per hour*/**
Senior Laboratory Technician.....	\$140.00 per hour
Laboratory Technician.....	\$125.00 per hour
CAD Specialist.....	\$125.00 per hour
Network Administrator.....	\$175.00 per hour
Project Assistant.....	\$110.00 per hour

- \* Two-hour minimum portal to portal. Travel time, pick-up and delivery will be billed based on normal hourly rates, portal to portal.
- \* **OVERTIME RATES:** Rates increased by factor of 1.5 for all hours worked in excess of eight (8) Monday through Friday, and the first eight (8) hours worked on Saturday. Rates increased by factor of 2.0 for all hours worked in excess of twelve (12) Monday through Friday, all hours worked in excess of eight (8) on Saturday and all hours worked on Sunday and holidays.
- \*\* For Prevailing Wage projects, increase the hourly rate by \$15.
- \*\* Rates increased by factor of 1.25 for night shift hours (hours commencing after 4:00 p.m. or before 4:00 a.m.); rates increased by factor of 1.875 (an additional factor of 1.5) for all night shift hours in excess of eight (8).

**ADDITIONAL SERVICES OFFERED**

In addition to our core services of geotechnical, hydrologic and environmental engineering, including construction-phase testing and observation, ENGEO provides clients with services for establishment and management of Geologic Hazard Abatement Districts (GHAD) and for Entitlement and Permitting Support (EPS). For more information about these services and associated pricing, please contact ENGEO at (925) 866-9000.

**OTHER FEES**

- Equipment and materials will be charged in addition to the above hourly rates.
- Outside Consultants, Subcontracted Services and Equipment Rental .....Cost plus 20%
- Deposition, Mediation, Arbitration, or Court Appearance (Minimum Charge).....\$2,000.00 half day, \$4,000.00 full day

**TERMS**

Invoices will be submitted at completion of work or at approximately four week intervals and are due and payable upon receipt. Statements will be issued at monthly intervals. Charges not paid within 30 days of invoice date will accrue a late charge at a rate of 1.5 percent per month. In the event it becomes necessary to commence suit to collect amount due, Client agrees to pay attorney's fees and costs, as the court may deem reasonable until amount is paid. Fees will be applicable for one year from the effective date above; thereafter, fees will be adjusted annually. Our fees will be billed using an invoice format produced by a standardized accounting software package. A more customized itemization of charges and backup data will be provided upon Client's requests, but at additional fees. Final reports may be withheld until outstanding invoices are paid in full.

Many risks potentially affect ENGEO by virtue of entering into this agreement to perform services on behalf of client. A principal risk is the potential for human error by ENGEO. For client to obtain the benefit of a fee that includes a nominal allowance for dealing with our liability, client agree to limit ENGEO's liability to Client and all other parties for claims arising out of our performance of the services described in the agreement. The aggregate liability will not exceed \$50,000 (or ENGEO's fee, whichever is greater, but not more than \$1,000,000) for professional acts, errors, or omissions, including attorney's fees and costs that may be awarded to the prevailing party and client agrees to indemnify and hold harmless ENGEO from and against all liabilities in excess of the monetary limit established above.

**EQUIPMENT AND MATERIALS CHARGES**



DESCRIPTION	COST PER UNIT (\$)	UNIT
Air Content Meter	7.00	hour
All-Terrain Vehicle (Mule)	25.00	hour
Bailers (Disposable)	8.00	each
Camera - Video	10.00	hour
Concrete Crack Monitor	20.00	each
Coring Machine	25.00	hour
Electronic Water Level Indicator	5.00	hour
Engineering Analysis Software	20.00	hour
Equipment Transport(er)	100.00	hour
Exploration Equipment (Percussion Penetrometer)	50.00	hour
Floor Flatness/Floor Level Equipment	20.00	hour
Generator	15.00	hour
GPS Hand Held (Garmin)	5.00	hour
GPS Survey Grade (Trimble)	90.00	hour
Hand Auger and Soil Sampler	15.00	hour
Hydraulic Pull-Test Equipment	15.00	hour
Interface Probe	2.00	hour
Magnetic Particle Test Equipment	8.00	hour
Moisture Content Test Equipment	6.00	hour
Multi-Parameter Water Meter	15.00	hour
pH Meter/Turbidity Meter	10.00	hour
Photo Ionization Detector	15.00	hour
R Meter (Pachometer)	15.00	hour
Sampling Tubes	10.00	each
Sand Cone Equipment and Material	5.00	hour
Schmidt Hammer	20.00	hour
Skidmore Wilhelm Bolt Tension Calib.	10.00	hour
Slope Inclinometer/Settlement Indicator/VW Readout	50.00	hour
Torque Wrench	12.00	hour
Transfer Pump	3.00	hour
Ultrasonic Equipment	25.00	hour
Vapor Emission Test Kit	25.00	kit
Vector Conversion	60.00	conversion
Vehicle, mileage, nuclear gauge, misc. equipment, wireless communication	20.00	hour
Vehicle, mileage, misc. equipment, wireless communication	11.00	hour
Water Sampling Pumps	20.00	hour
Bridge Toll	actual	actual
Mileage	.78	mile
Parking	actual	actual
Trailer	15.00	hour
AutoCAD, Terramodel (Hardware & Software)	20.00	hour
Photocopies Black & White	0.25	each
Photocopies Color 11 x 17	1.50	each
Photocopies Color 8½ x 11	1.00	each
Plot - Black & White	3.00	square foot
Plot - Color	4.00	square foot
Postage	actual	actual
Scan - Black & White	1.50	each
Scan - Color	3.75	each
Telephone	0.50	minute





— Expect Excellence —

GEOTECHNICAL  
ENVIRONMENTAL  
WATER RESOURCES  
CONSTRUCTION SERVICES

**SUMMARY OF LABORATORY FEES**

Effective April 2015

Our Laboratories are accredited by AASHTO, CCRL, Caltrans, DSA, and the US Army Corps of Engineers

Lab Code	Test Specification	Standard Turnaround (Business Days)	Standard Pricing	Rush Turnaround (Business Days)	Rush Pricing
<b>SOIL AND ROCK</b>					
880	Caltrans Relative Compaction, CT216	3	\$250	1	\$500
910	Clay Lumps and Friable Particles, ASTM C142	3	\$100	2	\$200
913	Cleanness Value, CT 227 each	5	\$150	3	\$300
965	Collapse Test, ASTM D5333-03	10	\$250	3-7	\$500
831B	Compaction Point, AASHTO T272	5	\$310	3	\$620
831	Compaction, ASTM D1557 (A-C)	5	\$320	3	\$640
831C	Compaction, ASTM-1557 (A-D) or ASTM-D698 with Correction	5	\$385	3	\$770
831M	Compaction, ASTM 1557 (A - D), Same Day Preliminary Results	1	\$640	N/A	N/A
831N	Compaction, ASTM-1557 or ASTM-D698, Same Day with Correction	1	\$770	N/A	N/A
831V	Compaction, ASTM D4253, Vibratory Table	5	\$350	3	\$700
822	Consolidation – Incremental Loading ASTM D2435, Method A	32	\$475	16 Dependent on material type (without Unload-Reload cycles)	\$950
822A	Consolidation – Incremental Loading ASTM D2435, Method B	32	\$400	16 Dependent on material type (with Unload-Reload cycles)	\$800
823	Consolidation, ASTM D2435 Unload – Reload Cycle	4	\$40	2	\$80
841	Consolidation – CRS, ASTM D4186	5	\$510	4 Dependent on material type	\$1,020
845	Direct Shear – CD, Residual (3-points, 3-cycles per point) ASTM D3080 Modified	25	\$1,260	20 Dependent on material type	\$2,520
820A	Direct Shear – CD, Slow Additional Cycles (each) ASTM D3080	2	\$110	N/A	N/A
820B	Direct Shear – CD, (2-points) ASTM D3080	8	\$420	5 Dependent on material type	\$840
820C	Direct Shear – CD, (3-points) ASTM D3080	12	\$630	8 Dependent on material type	\$1,260
820D	Direct Shear – CD, (4-points) ASTM D3080	16	\$840	12 Dependent on material type	\$1,680
890	Durability Index, CT229	4	\$210	2	\$420
832	Expansion Index, ASTM D4829	8	\$300	4	\$600

Lab Code	Test Specification	Standard Turnaround (Business Days)	Standard Pricing	Rush Turnaround (Business Days)	Rush Pricing
832A	Expansion Index, ASTM D4829 - Lime Treated in Lab	Dependent on cure time	\$400	Dependent on cure time	\$800
963	Fine Aggregate Angularity Percentage, CT 234, AASHTO T304 – Method A	2	\$150 Based on prior completion of Sieve Analysis	2	\$300 Based on prior completion of Sieve Analysis
899	Laboratory Miniature Vane Shear, ASTM D4648	2	\$75	2	\$150
897	Lime-Treated R-Value, CT301	8	\$500	4	\$1,000
816	Moisture Content & Unit Weight, ASTM D7263	4	\$55	2	\$110
814	Moisture Only, ASTM D2216, CT 226	4	\$30	2	\$60
815	Moisture Only, ASTM D4643, CT 370 (By Microwave oven)	2	\$100	1	\$200
959	Organic Content of Soil ASTM D2974	4	\$125	2	\$250
909	Organic Impurities, ASTM C40	4	\$75	2	\$150
912	Percent Crushed Particles, CT205	2	\$150 Based on prior completion of Sieve Analysis	1	\$300 Based on prior completion of Sieve Analysis
911	Percent Flat or Elongated Particles, ASTM D4791, CT 235	2	\$150 Based on prior completion of Sieve Analysis	1	\$300 Based on prior completion of Sieve Analysis
898	Soil pH, percent Lime for Stabilization, ASTM D6276 (Eades and Grimm)	4	\$225	2	\$450
804	Permeability, Falling Head or Constant Head, ASTM D5084, D2434	8	\$400	4 Dependent on material type	\$800
887	Soil pH, ASTM D4972, CT 643	2	\$75	1	\$150
819	Plasticity Index, Dry Method - ASTM D4318	5	\$190	3	\$380
819A	Plasticity Index, Wet Method - ASTM D4318 (ASTM Default method)	5	\$225	3	\$450
851	Rock Core Unconfined Compressive Strength, ASTM D7012	2	\$250	1	\$500
829	R-Value, ASTM 2844, CT301	6	\$400	3	\$800
828	Sand Equivalent, CT 217, ASTM D2419	3	\$175	2	\$350
826A	Dry Sieve, ASTM D1140, C117	4	\$90	2	\$180
826B	#200 Wash, ASTM D1140, C117	4	\$85	2	\$170
826C	Sieve & #200 Wash, ASTM D422, C136, CT202	4	\$150	2	\$300
826D	Sieve & Hydrometer, ASTM D422	5	\$230	3	\$460
853	Special Testing/Sample Description (ASTM D2487)	2	\$120	1 hour	\$240
825	Specific Gravity, ASTM C127 or C128 or D854	4	\$125	2	\$250
866	Specimen Remolding and/or Lab Mixing (per test)	Varies	\$110	Dependent on the type of remolding	\$220
907	Sulfate Soundness, CT 214, ASTM C88	6	\$185/ Fraction	1-5 Dependent on the number of fractions requested	\$370/ Fraction
811	Sulfate Testing in Soils CT417	4	\$70	2	\$140
811A	Sulfate Testing in Soils ASTM C1580	4	\$180	3	\$360

Lab Code	Test Specification	Standard Turnaround (Business Days)	Standard Pricing	Rush Turnaround (Business Days)	Rush Pricing
850	Swell Test B, ASTM D4546	4	\$180	3	\$360
835	Isotropic Triaxial Compression – CU, Single Specimen, Multistage Test ASTM D4767 - Modified	Varies	\$400/Stage	Dependent on the number of stages and material type	\$800/Stage
834	Isotropic Triaxial Compression – CU (1 point ) ASTM D4767	5	\$475	4 Dependent on material type	\$950
834A	Isotropic Triaxial Compression – CU (2- points) ASTM D4767, USACE	9	\$950	4 Dependent on material type	\$1,900
834B	Isotropic Triaxial Compression – CU (3- points) ASTM D4767, USACE	14	\$1,425	4 Dependent on material type	\$2,850
834C	Isotropic Triaxial Compression – CU (4- points) ASTM D4767, USACE	18	\$1,900	4 Dependent on material type	\$3,800
833	Isotropic Triaxial Compression – UU (per point) ASTM D2850, USACE	4	\$175	2 Without saturation	\$350
833A	Triaxial UU back pressure saturation per point	4	\$100	1-2	\$200
818	Unconfined Compression - Soils, ASTM D2166	4	\$110	2	\$220
818A	Unconfined Compression, Lime/Cement-Treated Soil ASTM D1633	18	\$325 First point	9 Dependent on requested curing period	\$650 First point?
818B	Unconfined Compression, Lime/Cement-Treated Soil CTM 373	18	\$900 First point	9 Dependent on requested curing period	\$1,800 First point
818C	Unconfined Compression, Lime/Cement -Treated Soil, Additional points	18	\$50	9 Dependent on requested curing period	\$100
849	Swell Test A, ASTM D4546	8	\$275	4	\$550
<b>CONCRETE</b>					
922	Absorption, ASTM C642	6	\$450	3	\$900
901	Compression Test, Cores, ASTM C42	2	\$65	1	\$130
932	Compression Test, per 6" x 12" cylinder, ASTM C39	2	\$35	1	\$70
933	Compression Test, per 4" x 8" cylinder ASTM C39	2	\$30	1	\$60
927	Compression, Shotcrete Panel, (5 Cores/Panel) ASTM C42	2	\$350	1	\$700
934	Compressive Strength of Lightweight Insulating Concrete (ASTM C495)	2	\$120	1	\$240
902	Core Trimming, In Laboratory	2	\$50	1	\$100
906	Laboratory Trial Batch, ASTM C192, Including Test Cylinders	2	\$650	1 Two personnel	\$1,300
908	Length Change (3 bars, 4 readings, up to 90 days), ASTM C157 modified	28-90	\$415	28-90 Dependent on specification	\$830
905	Slab Moisture Determination Test Kit	4	\$30	2	\$60
900	Unit Weight of Lightweight Concrete Cylinders (ASTM C495)	3	\$45	2	\$90

Lab Code	Test Specification	Standard Turnaround (Business Days)	Standard Pricing	Rush Turnaround (Business Days)	Rush Pricing
<b>CONCRETE BLOCK</b>					
916	Compression, ASTM C140	2	\$80	1	\$160
918	Compression, Cores, ASTM C42	2	\$65	1	\$130
914	Moisture Content as Received, Absorption ASTM C140	3	\$80	2	\$160
<b>MASONRY PRISMS</b>					
919	Compression Test, Grouted Prisms, ASTM C1314	2	\$155	2	\$310
921	Masonry Core Shear Test (CBC Title 24, 2105A.4)	2	\$90	2	\$180
920	Trimming Grouted Prisms	2	\$45	2	\$90
<b>MORTAR &amp; GROUT</b>					
925	Compression Test 2" Mortar Cubes, ASTM C109	2	\$31	2	\$62
924	Compression, Grout Prisms, ASTM C39	2	\$40	2	\$80
923	Compression, Mortar Cylinder, ASTM C39	2	\$31	2	\$62
<b>ASPHALTIC CONCRETE</b>					
801	AC Correction Factor, ASTM D6307, CT 382	N/A	N/A	3	\$525
802	RAP Aggregate Gradation Correlation Factor, Caltrans LP-9	N/A	N/A	3	\$2,850
807	AC Maximum Density (Avg. of 5 Briquettes) D1188, CT308	N/A	N/A	2	\$525
807A	AC Maximum Density (Avg. of 5 Briquettes) D1188, CT 308 (S-Value is performed prior to LTMD)	N/A	N/A	2	\$413
809	AC Maximum Theoretical Unit Weight ASTM D2041, CT 309 (Rice Specific Gravity)	N/A	N/A	1	\$330
946	Asphalt Core Density (4" Core), ASTM D1188, CT308	N/A	N/A	1	\$120
946A	Asphalt Core Density (6" Core), ASTM D1188, CT 308	N/A	N/A	1	\$150
853C	Extraction by Centrifuge ASTM 2172	N/A	N/A	4	\$375
853B	Extraction by Ignition Oven, ASTM D6307, CT 382	N/A	N/A	4	\$300
853D	Extraction by Reflux Extractor, ASTM D2172 – Method B	N/A	N/A	2	\$675
805	Stability Test (Avg. of 3 Briquettes), ASTM D1560, CT 366, (w/o Max. Density test)	N/A	N/A	2	\$750
<b>VOLUMETRIC PROPERTIES OF HMA</b>					
966	Absorbed Asphalt Binder CT 367	N/A	N/A	2	\$200
960	Air Void Content	N/A	N/A	2	\$200
967	Bulk Specific Gravity – Admixture Blend CT 367	N/A	N/A	2	\$200
964	Dust Proportions, CT 367, Caltrans LP-4	N/A	N/A	2	\$200
968	Effective Asphalt Binder of Volume, CT 367	N/A	N/A	2	\$200
969	Effective Binder Content, CT 367	N/A	N/A	2	\$200
958	Effective Specific Gravity of Aggregate-Admixture Blend, CT 367	N/A	N/A	2	\$200
962	Void Filled With Asphalt CT 367, LP-3	N/A	N/A	2	\$200
961	Voids in Mineral Aggregate CT 367, LP-2	N/A	N/A	2	\$200
<b>Note: Lab fees for volumetric properties of HMA per CT 367 are based on tests CT 202, CT 308, CT 309, and CT 382 have been completed.</b>					
<b>HIGH STRENGTH BOLT TESTS</b>					
980	Bolt Proof and Ultimate Load	2	\$110	1	\$220
981	Nut Proof Load	2	\$70	1	\$140
982	Hardness (bolts, nuts, washers, each)	2	\$45	1	\$90

Lab Code	Test Specification	Standard Turnaround (Business Days)	Standard Pricing	Rush Turnaround (Business Days)	Rush Pricing
<b>FIREPROOFING</b>					
999	Oven Dry Density, Fireproofing, per sample	4	\$65	2	\$130

- Add three days to the estimated test duration for soil testing that requires remolded specimens.
- The above fees are reviewed annually and are subject to change. Additional tests are available upon request.
- Prices exclude field collection and transportation to the laboratory.
- Supplemental fees for laboratory preparation of specimens are charged on an hourly basis.
- Test duration implies the amount of time required to perform the test once started. Test start times are dependent on available labor and equipment.
- Testing fees and the test durations listed reflect standard business hours required to perform the test. Samples requiring premium handling will incur additional hourly personnel charges in accordance with the Laboratory Technician Rate presented on our Fee Schedule.
- Where tests are to be run on an immediate need basis (tests to be initiated out of order received and regardless of status of other previously received samples) the expediting fee is 100% of the listed unit rate.
- Sample storage is \$20 per month per cubic yard of storage space.
- There is a 3 pm cut-off time for sample delivery/test start time.

**AMENDMENT NO. 1**  
To Professional Design Services Master Agreement between  
County of Stanislaus and Wallace-Kuhl & Associates

This Amendment is made and entered into this 29th day of September, 2015, in the City of Modesto, State of California, by and between the County of Stanislaus (“County”) and Wallace-Kuhl & Associates, (“Consultant”), for and in consideration of the promises, and the mutual promises, covenants, terms, and conditions, hereinafter contained.

WHEREAS, on August 7, 2012, the Stanislaus County Board of Supervisors awarded a Professional Design Services Master Agreement (“Agreement”) to Consultant, in the amount of Three Hundred Seventy-Five Thousand Dollars (\$375,000), for on-call materials testing services for Public Works construction projects;

WHEREAS, the Agreement will expire on October 21, 2015;

WHEREAS, the term of the Agreement may be extended for an additional twenty-four months as stated in the Agreement, Section 4.1-Term; and,

WHEREAS, the Public Works Director has determined that additional on-call materials testing services are needed for an additional two years;

WHEREAS, an increase in the maximum amount of the Agreement is necessary to cover additional on-call materials testing services.

\$375,000	Original Agreement
<u>+250,000</u>	Amendment No. 1
\$575,000	Revised

NOW THEREFORE, the parties agree as follows:

1. Section 2.1 of the Agreement is amended to read as follows:

Compensation. Consultant shall be paid in accordance with the Fee Schedule attached hereto and made a part of the Agreement. Consultant’s compensation shall in no case exceed One Hundred Twenty-Five Thousand Dollars (\$125,000) annually.

2. Section 4.1 of the Agreement is amended to read as follows:

Term. This Agreement shall continue for an additional period of twenty-four (24) months, beginning October 21, 2015 and ending on October 21, 2017, unless previously terminated as provided herein or as otherwise agreed to in writing by the parties.

3. All other terms and conditions of the Agreement shall remain in full force and effect.


(Signatures on Following Page)

IN WITNESS WHEREOF, the parties have executed this First Amendment effective on the date written above.

COUNTY OF STANISLAUS

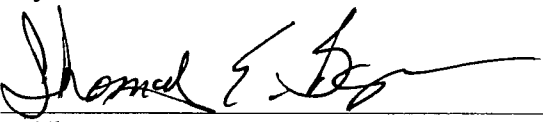
WALLACE-KUHL & ASSOCIATES

By: \_\_\_\_\_  
Matt Machado, Director  
Department of Public Works

By:  \_\_\_\_\_  
David Gius, Jr.  
President

APPROVED AS TO FORM

John P. Doering  
County Counsel

By:  \_\_\_\_\_  
Thomas E. Boze  
Assistant County Counsel

PROFESSIONAL SERVICES

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 ( <i>Subject to periodic adjustment due to fuel cost</i> )	\$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	Cost	plus 20%
Extra Report Copies		
Black and white versions	\$21.00	each
Color photography versions	\$32.00	each

PREMIUM CHARGES

Overtime and Saturdays	hourly rate plus	40	percent
Sunday and Holidays	hourly rate plus	75	percent

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.





**FIELD SERVICES**

**CONCRETE & REINFORCING STEEL**

Ball Penetration (Kelly Ball)	\$120.00 /hr.
Batch Plant Inspection	\$90.00 /hr.
CaCl Moisture Emission Test Kit	\$30.00 /kit
CaCl Moisture Emission Testing	\$85.00 /hr.
CLSM/CDF/Slurry Testing	\$85.00 /hr.
Concrete Mix Design Review	\$160.00 /hr.
Concrete Placement Obs/Cast Cylinder	\$90.00 /hr.
Concrete Rebound Number Testing	\$120.00 /hr.
Concrete Trial Batch	\$90.00 /hr.
Floor Flatness Testing	\$120.00 /hr.
High Strength Grout Sampling / Testing	\$90.00 /hr.
Rebar / Post Tension Special Inspection	\$95.00 /hr.
Rebar Location / GPR	\$275.00 /hr.
Rebar Location / Pachometer	\$120.00 /hr.
Rebar Placement Inspection	\$95.00 /hr.
Reinforcing Steel Sampling/Tagging	\$90.00 /hr.
Relative Humidity Testing	\$120.00 /hr.
Shotcrete Special Inspection	\$90.00 /hr.
Transport Cylinders / Samples to Lab	\$90.00 /hr.

**SOILS & ASPHALT CONCRETE**

Asphalt Concrete Inspection / Testing	\$95.00 /hr.
Asphalt Concrete Materials Sampling	\$95.00 /hr.
Building Pad Special Inspection / Testing	\$95.00 /hr.
Deep Foundation Inspection	\$95.00 /hr.
Flatwork AB Inspection / Testing	\$95.00 /hr.
Flatwork Subgrade Inspection / Testing	\$95.00 /hr.
Grading Inspection / Testing	\$95.00 /hr.
Hand Augering and Sampling	\$120.00 /hr.
Pavement AB Inspection / Testing	\$95.00 /hr.
Pavement Subgrade Inspection / Testing	\$95.00 /hr.
Proof Rolling Observation	\$95.00 /hr.
Shallow Foundation Inspection	\$95.00 /hr.
Slab Subgrade Soil Moisture Tests	\$95.00 /hr.
Soil / Aggregate Sampling	\$95.00 /hr.
Soil Treatment Testing / Observation	\$95.00 /hr.
Structure Backfill Inspection / Testing	\$95.00 /hr.
Subgrade Stabilization Observation	\$95.00 /hr.
Utility Trench Backfill Testing	\$95.00 /hr.
WKA Drill Rig (including operator)	\$260.00 /hr.
WKA Drill Rig (helper)	\$95.00 /hr.

**CORING**

Coring (Technician + equipment)	\$120.00 /hr.
Coring (Technician assistant)	\$90.00 /hr.

**SPECIALIZED SERVICES**

Coefficient of Friction Testing	\$120.00 /hr.
Crack Monitoring	**
Existing Building Evaluation / Demo	\$90.00 /hr.
Existing Building Evaluation / Document	\$90.00 /hr.
Existing Building Evaluation / Repair	\$90.00 /hr.
Field Investigate Support	\$90.00 /hr.
FRP Installation Inspection	\$90.00 /hr.
GFRC Inspection / Testing	\$90.00 /hr.
Soil Elect. Resistivity Testing - Technician	\$120.00 /hr.
Prestress Framing Installation	\$90.00 /hr.
Proto Wall Inspection / Testing	\$90.00 /hr.
Roofing Inspection	\$90.00 /hr.
Shear Nailing Inspection	\$90.00 /hr.
Thickness Testing - Coating / Steel	\$90.00 /hr.
Timber Framing / Hardware Inspection	\$90.00 /hr.
Vapor Barrier Inspection	\$90.00 /hr.
Vibration Monitoring	**

**POST-INSTALLED ANCHORS**

Concrete Anchor Installation Inspection	\$90.00 /hr.
Concrete Anchor Proof Load Testing	\$120.00 /hr.
Concrete Anchor Torque Testing	\$95.00 /hr.
Suspended Ceiling Inspection / Testing	\$120.00 /hr.

**STRUCTURAL STEEL**

Fireproofing Special Inspection / Testing	\$90.00 /hr.
High Strength Bolt Special Inspection	\$95.00 /hr.
Non-Destructive Testing - UT/MT/PT	\$105.00 /hr.
Welding Special Inspection - Field	\$95.00 /hr.
Welding Special Inspection - Shop	\$95.00 /hr.

**MASONRY**

In-Place Masonry Flatjack Testing	\$145.00 /hr.
In-Place Masonry Shear Testing	\$120.00 /hr.
Masonry Materials Sampling / Testing	\$90.00 /hr.
Masonry Special Inspection	\$90.00 /hr.
Masonry Special Inspection DSA Certified	\$100.00 /hr.

**GENERAL**

Inspection / Testing Cancelled	*
Reinspection / Retesting	*
Stand-by Time	*

\* Based on hourly rate of Inspection or Testing scheduled

\*\* Based on Staff Classification

**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.



**LABORATORY SERVICES**

**SOIL**

Atterberg Limits (LL/PI)	ASTM D4318	\$150.00	each
CLSM/CDF/Soil Cement Compression Test	ASTM D4832	\$50.00	each
Compaction Characteristics	ASTM D698	\$240.00	each
Compaction Characteristics	ASTM D1557	\$240.00	each
Compaction Characteristics	CTM 216	\$240.00	each
Expansion Index	ASTM D4829	\$175.00	each
Hydraulic Conductivity, Flexible Wall Permeability	ASTM D5084	\$400.00	each
Moisture Content	ASTM D2216	\$20.00	each
Organic Content	ASTM D2974	\$90.00	each
Resistance "R" Value - Untreated	ASTM D2844, CTM 301	\$245.00	each
Resistance "R" Value - Laboratory Lime-Treated	ASTM D2844, CTM 301	\$300.00	each
Sieve Analysis - Sieve only (Coarse or Fine)	ASTM C136/D1140	\$100.00	each
Sieve Analysis - Passing No. 200 only	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	each
Clay Lumps and Friable Particles	ASTM C142	\$155.00	per size
Cleanness Value	CTM 227	\$160.00	each
Durability Index (Coarse or Fine)	CTM 229	\$155.00	each
Flat and Elongated Particles in Coarse Aggregate	ASTM D4791	\$115.00	per size
Fractured/Crushed Particles	ASTM D5821, CTM 205	\$115.00	per size
Organic Impurities in Fine Aggregates	ASTM C40	\$55.00	each
Resistance "R" Value	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		
	CTM 304/308	\$95.00	each
Laboratory Test Maximum Density (LTMD), 5 points	CTM 375	\$350.00	each
Marshall Compacted Unit Weight, 1 point	ASTM D6926/D2726	\$90.00	each
Sieve Analysis of AC Aggregate (Coarse and Fine)	ASTM D5444, CTM 202	\$165.00	each
Stabilometer Value, 1 point	CTM 366	\$125.00	each
Theoretical Maximum Density	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



**LABORATORY SERVICES**

**CONCRETE**

Compression Test, Concrete Cylinder	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**

<b>Brick</b>			
Compression Test	ASTM C67	\$60.00	each
Modulus of Rupture	ASTM C67	\$70.00	each
Absorption	ASTM C67	\$85.00	each
<b>Concrete Masonry Unit</b>			
Compression Test	ASTM C140	\$70.00	each
Absorption & Moisture Content	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
Masonry Core Compression Test	CBC Section 2105A	\$70.00	each

**STEEL**

Anchor Bolt Tensile Test	ASTM F606	\$95.00	each
Fireproofing Density Test	ASTM E605	\$65.00	each
<b>High Strength Bolt Assembly Laboratory Testing</b>			
Bolt - Wedge Tension Test	ASTM F606	\$70.00	each
Bolt - Proof Load Test	ASTM F606	\$70.00	each
Bolt - Hardness Test	ASTM E18	\$25.00	each
Nut - Proof Load Test	ASTM F606	\$70.00	each
Nut - Hardness Test	ASTM E18	\$25.00	each
Washer - Hardness Test	ASTM E18	\$25.00	each
Prestressing Steel Strand Tensile Test	ASTM A416/A1061	\$125.00	each
<b>Reinforcing Steel (Rebar) Tensile Test</b>			
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
<b>Structural Steel Tensile Test</b>			
Up to 3/4"	ASTM A370	\$70.00	each
Sizes Larger Than 3/4"	ASTM A370	\$95.00	each
Machining of Test Specimens		cost plus %20	
Structural Steel Hardness Testing	ASTM E18	\$75.00	each
Weld Assembly, Guided Bend/Macroetch/T-Bend Test	AWS D1.1, ASTM E190	\$75.00	per test
Welder Qualification Test Inspection		\$80.00	per hour
Welder Qualification Test Record		\$95.00	each

**TESTING SERVICES**

Laboratory Technician	\$75.00 per hour
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