RAMM Engineering + Testing

Geo-Technical Engineering and Materials Testing

Geo-technical engineering firms may be asked to provide services related to new construction projects, for site work or to test for an identify soils or materials problems unrelated to a construction project. For new construction, the selected firm typically will provide the initial soils sampling, geo-technical report and recommendations to the project's engineers, and then become responsible for construction observation and testing of materials placed into, or processes used in, the project based upon your recommendations.

General Description and Experience

Experience in and ability to provide typical materials testing services, including soils, paving materials and base, concrete, masonry and grout, steel including welds and fireproofing, etc. Indicate which materials and tests your firm provides, along with whether they are done by in-house staff or sub-contracted to another firm (ultrasonic or visual weld inspection, for example, provided by a subcontracted firm).

Ability to provide field investigation, including drilling cores, seepage pits, etc., and then provide soils reports and recommendation to MCCD or their consultants, including properly registered engineers on staff

Optional Areas of Additional Expertise

a. Other related areas of testing or consulting that your firm provides, such as roofing evaluation, Phase I Environmental reports, etc., along with examples and qualifications of personnel. If these areas are the same as other specialty areas requested in this Request for Proposals, you also should respond in that/those areas separately if you have an interest in being selected as a primary provider of those services.

Firm selections will fall into three firm size categories to match project sizes/scopes:

- Large firms (21 or more PE's + Lab techs + field techs)
- Medium firms (10 to 20 PE's + Lab techs + field techs)
- Small firms (9 or less PE's + Lab techs + field techs)

Proposed 2022 rate increases in red

Unit Cost Schedule for Geotechnical Engineering and Material Testing:

A. Hourly rates and unit testing costs

1. Field Explorations

Field Technician	$ 50 hour	60
Drill Rig and Crew	$ 145 hour	160
Vehicle	$ 0.75 mile	0.85
Project Engineer	$ 100 hour	125

2. Laboratory Testing

Minus No. 200 Sieve and Plasticity Index	$ 160 each	175
Sieve Analysis and Plasticity Index	$ 200 each	225
Swell Potential	$ 80 each	95
Moisture Content and Dry Density on Rings	$ 15 each	
Standard Proctor	$ 120 each	125
Compression	$ 160 each	170
Direct Shear (three points)	$ 180 each	200
R-Value	$ 450 each	475
pH/Resistivity	$ 120 each	150
Soluble Salts, Sulfates/Chlorides	$ 75 each	

3. Engineering Analysis and Report

Project Engineer	$ 100 hour	125
Clerical	$ 40 hour	45
Reproduction	NC page	

Use the following as a guideline only for estimating field testing and report. Actual geotechnical investigation and report costs will be determined for each project.

Typical drilling time	1.0 hours/core
Typical cost for percolation test	$ 600 each 700
Typical cost to prepare a:	
'simple' report and analysis	$ 2000 each 2250
'moderate' report and analysis	$ 3000 each 3250
'complicated' report and analysis	$ 4000 each 4250

B. Construction Materials Testing Unit Rates

1. Field Sampling and Testing

Technician: Observation and Testing	
Soil, concrete and asphaltic concrete	$ 46 hour 50
Special structural or foundation inspection	$ 70 hour 80
Inspection of fire proofing	$ 70 hour 80
Other materials sampling	$ 46 hour 50
Technician: Other	
Minimum charge per site visit	2.0 (# of) hour(s)
Standby charge	$ 46 hour 50
Travel	$ 46 hour 50
Overtime rate (e.g., 1.25)	56 x hourly rate 60
Overtime is considered (define hours/days):	No OT for weekday calls
Welding/Bolting Inspection (ICBO Certified)	
Visual welding inspection	$ 70 hour 80
Ultrasonic weld inspection	$ 70 hour 80
Bolt torque inspection/testing	$ 70 hour 80
Engineer: Field inspections and consulting	$ 100 hour 125
Coring equipment	$ 25 hour 30
Vehicle cost	$ 0.75 mile 0.85

C. Trip Charges for geo-technical testing

For each project, a trip charge will be used for billing purposes. Please provide a calculated mid-2010 trip charge to each of the following college locations. The trip charge should include all charges for travel time, mileage, etc. For work at other locations, the trip charge will be calculated from the information above. All references to trip charges throughout the RFP should refer to a total, ROUND-TRIP, price, from your lab or your dispatch location to the site and back.

CHANDLER GILBERT COMMUNITY COLLEGE — $ 60 trip 65
Pecos Campus
2626 East Pecos Road
Chandler, Arizona 85225

CHANDLER GILBERT COMMUNITY COLLEGE — $ 85 trip 100
Williams Campus
(at the former Williams Air Force Base)
6001 South Power Road
Mesa, Arizona 85206

ESTRELLA MOUNTAIN COMMUNITY COLLEGE — $ 85 trip 100
3000 North Dysart Road
Avondale, Arizona 85340

GATEWAY COMMUNITY COLLEGE
108 North 40th Street
Phoenix, Arizona 85034

$ 30 trip 35

GLENDALE COMMUNITY COLLEGE
6000 West Olive Avenue
Glendale, Arizona 85302

$ 90 trip 110

MESA COMMUNITY COLLEGE
1833 West Southern Avenue
Mesa, Arizona 85202

$ 30 trip 35

PARADISE VALLEY COMMUNITY COLLEGE
18401 North 32nd Street
Phoenix, Arizona 85032

$ 80 trip 90

PHOENIX COLLEGE
1202 West Thomas Road
Phoenix, Arizona 85013

$ 50 trip 55

RIO SALADO COMMUNITY COLLEGE
and DISTRICT SUPPORT SERVICES CENTER
2323 and 2411 W. 14th St.
Tempe, Arizona 85281

$ 15 trip 15

MESA COMMUNITY COLLEGE
Red Mountain Campus
7110 East McKellips Road
Mesa, Arizona 85207

$ 65 trip 80

SCOTTSDALE COMMUNITY COLLEGE
9000 East Chaparral Rd.
Scottsdale, Arizona 85250

$ 40 trip 45

SOUTH MOUNTAIN COMMUNITY COLLEGE
7050 South 24th Street
Phoenix, Arizona 85040

$ 30 trip 35

GLENDALE COMMUNITY COLLEGE NORTH
South Side of Happy Valley Road,
between 57th Ave. and 61st Ave.

$ 120 trip 140

MARICOPA SKILL CENTER
1245 East Buckeye Road
Phoenix, Arizona 85034

$ 30 trip 35

PARADISE VALLEY COMMUNITY COLLEGE
Desert Foothills/North Site.
56th Street and Carefree Highway
Scottsdale, Arizona 85382

$ 120 trip 135

D. Laboratory Testing

NOTE: The unit cost for the following tests should include the cost of the technician or engineer's time necessary to take, handle and test the material requested..

Concrete, mortar and grout:

Curing, capping and testing specimens, including cost of molds, per four cylinder set	$ 60 set	72
Block		
Ungrouted prisms	$ 510 per SIX prism set	600
Grouted prisms	$ 630 per SIX prism set	750

Asphalt

Marshall density (3-point)	$ 130 each	140
Bitumen extraction & aggregate Gradation	$ 140 each	150
Core density and thickness	$ 50 each	60

Soil and Aggregate

Proctor density ASTM D-698	$ 120 each	125
Swell potential	$ 80 each	90
Plasticity Index	$ 100 each	125
Sieve analysis	$ 100 each	105

3. Other outside services

Mark-up on costs for additional outside services- cost + 10%