

**Request for Qualifications (RFQ)
For
Materials Engineering and Testing
Services Contracts**

**Submittal Date
Monday, March 24, 2008**

**City of Houston
General Services Department
Design & Construction Division**

**REQUEST FOR QUALIFICATIONS (RFQ)
FOR
MATERIALS ENGINEERING AND TESTING SERVICES CONTRACTS**

I. PURPOSE

The City of Houston's General Services Department (GSD) invites the submittal of Statements of Qualification (SOQs) from firms interested in providing materials engineering and testing services for GSD construction projects.

The materials engineering and testing team will provide all services necessary to perform on-site and off-site testing of soils, concrete, asphalt, steel and other materials during facility construction projects. The materials engineering and testing services will be utilized on a task order basis.

II. PRE-SUBMITTAL MEETING

A pre-submittal meeting will be held at 2:00 p.m. on Thursday, March 6, 2008, at City Hall Annex (900 Bagby, Second Floor Conference Room), to discuss the solicitation. Attendance is not mandatory.

Before the pre-submittal meeting date, the City will welcome any written questions submitted, faxed, or emailed to:

Phil Golembiewski, P.E.
City Engineer
General Services Department
900 Bagby, Second Floor
Houston, Texas 77002
Fax: 713-437-6859
Philip.Golembiewski@cityofhouston.net

- The City will not be bound by any information conveyed verbally. The City will provide, in writing, any clarifications, changes and/or other information deemed to be necessary as addenda to this RFQ.
- Addenda will only be provided to pre-submittal meeting attendees and known RFQ holders registered with GSD.
- No Addendum will be issued later than noon on Tuesday before the Submittal Date except Addenda with minor clarifications, withdrawing RFQ, or postponing the Submittal Date.

III. OBJECTIVE

GSD proposes to retain up to 12 highly qualified testing firms, or joint ventures, to provide the services described herein. Testing firms and team members with significant experience in materials engineering and in testing projects with similar characteristics will be given prime consideration. Those firms or joint ventures that participate in this RFQ process will be referred to as "Respondents". "Respondent" and its subconsultants shall be referred to collectively as the "Team". The successful firm or joint venture will be referred to, in the RFQ, as the "Testing Laboratory".

IV. SCOPE OF WORK

The following services will be required:

Ability to perform a variety of laboratory tests such as, but not limited to, concrete, fly ash, aggregate, asphalt, asphalt cement, soil, soil stabilizers, reinforcing steel, welded specimens, tension tests, built up roofing, drilling services, geotechnical investigation, foundation recommendations and non-destructive testing.

V. REQUIRED QUALIFICATIONS AND SELECTION CRITERIA

The City is seeking highly qualified testing laboratories experienced in providing materials engineering and testing services outlined in the **Scope of Work**. The required qualifications may be demonstrated in the experience of the Respondent's team members. A Selection Committee, composed of representatives from GSD and Client Departments, will review the SOQs. The criteria used to evaluate SOQs will include the following:

Minimum Qualifications Requirement:

Registered Professional Engineer on staff to evaluate and recommend construction materials, to manage testing and inspection activities, and to sign test reports.

Evaluation Criteria:

- Professional qualifications, education, experience and technical competence of the laboratory's proposed key members as evidenced by resumes and experience record. Certified Engineering Technicians and Inspectors by accredited institutions and technical societies to perform materials sampling, testing and inspection. (maximum 20 points)
- American Association of Laboratory Accreditation (A2LA), which will be required for the performance of all materials tests as required by the City of Houston. (maximum 15 points)

- Specialized experience, years in business as a firm, and technical competence of proposed team members as partners or sub-contractors in the type of work required. Professional qualifications necessary for all segments of project requirements and the ability to satisfactorily perform the required services. (maximum 15 points)
- Past experience and satisfactory performance of the laboratory on contracts with the City of Houston and/or other agencies in term of cost control, quality of work, and compliance with performance schedules and timely submittals of reports and test results. Demonstrated track record of meeting deadlines and ability to accomplish the work in the required time from resources within the individual firm. (maximum 15 points)
- Specific detail with respect to the qualifications, experience, and capability of any subcontractor's designated laboratory(s). Particular concerns are the laboratory's ability to conform to applicable requirements, turn around time for final reports, standards, and the adequacy and sufficiency of laboratory staffing and equipment for expeditious performance of all required materials testing and reporting. (maximum 20 points)
- The laboratory's Quality Assurance, Quality Control (QA/QC), electronic communication program, and current laboratory equipment Calibration Stickers and Records. Capacity for performing materials tests and inspection services. (maximum 15 points)

VI. SUBMITTALS

Six copies of sealed submittals are required. **Submittals shall be delivered to City Secretary** of the City of Houston, in the Margaret Westerman Building (a.k.a. City Hall Annex, **Public Level**, 900 Bagby Street, Houston, TX 77002), at or before 2:00 p.m., local time, **Monday, March 24, 2008**. Late submittals will not be accepted for any reason. All submittals must be provided in a sealed box clearly labeled on the outside with the Respondent's name, name of this RFQ, and General Services Department.

To enable the City to efficiently evaluate the SOQs, Respondents are urged to strictly follow the required format in preparing their SOQ.

Each copy of the SOQ shall be bound using GBC or other semi-permanent binding method, to ensure that pages are not lost. Each copy shall be no more than one-half inch thick. Pages shall be no larger than letter-size (8 ½" x 11") or, if folded to that dimension, twice letter size (11" x 17"). Each section (defined below) shall be separated by a tabbed divider. Elaborate covers, binding, dividers, and the like are not required nor wanted. **NOTE:** One of the copies submitted shall be labeled "ORIGINAL" on the outside cover and shall contain original documents where specified below.

Each SOQ shall be organized in the following order:

- A. **Outside Cover and/or first page:** Shall contain the name of the SOQ ("Statement of Qualifications for Materials Engineering and Testing Services"), the name of the Respondent, and the submittal date. Remember to label the one copy, with original documents in it, "ORIGINAL" on the cover.
- B. **Table of Contents:**
- C. **Section 1 Divider (Letters)**
 1. *Transmittal Letter:* The first page following the divider shall be a one-page letter transmitting the SOQ to Phil Golembiewski, P.E., City Engineer, General Services Department. The transmittal letter shall say that the signer of the document is authorized by the Respondent to sign the document. The transmittal letter shall contain the names of all firms proposed for the Team. At least one copy of the transmittal letter shall contain the original signature of a partner, principal, or officer of the Respondent.
 2. *MWBE Letter (s):* Following the transmittal letter shall be a one-page letter from each City-certified MWBE firm included on the Team indicating that firm's desire to be included on the Team, and indicating a general statement of the scope of services that firm will perform if the Team is selected. **NOTE:** The scope of services proposed by the firm must match the service for which that firm is certified by the City. At least one copy of each of these letters shall contain the original signature of a partner, principal, or officer of the MWBE firm.
- D. **Section 2 Divider (Team Organization & Experience)**
 1. *List of Team Members:* On one page, list the Team member firms along with the primary responsibilities (e.g. Civil Engineer, Geotechnical Engineer, etc.) they will have on the Team. Please indicate the lead firm. It is a requirement of the City that all submittals will indicate the lead firm proposed for the project, and that firm must agree to maintain a Houston office during the term of the Contract.
 2. *Organization Chart:* The next page shall be a simple organization chart of the Team, showing the reporting structure of the people proposed to do the work.
 3. *SF-255, Architect-Engineer and Related Services Questionnaire for Specific Projects:* Include a completed SF-255 for the proposed Team. Include all

Team members under Block 6, and include a completed SF-254 for each Team member. Under Block 9, list all work performed for any government agency.

4. *Project Brief:* The Respondent shall select three projects from Block 8 of the SF-255, to highlight, that best represents the Teams project experience, and provide a briefing sheet for each one. Each of the three briefing sheets shall be a one-page, one-sided, and should contain information which shows the capability of the proposed Team to provide the range of services that are required by this project. The work described must have been performed within the past eight years. At least one of the projects shall be for \$3 million, or more, in construction cost.

E. Section 3 Divider (Narrative)

1. *Narrative:* The Respondent shall provide no more than three pages of narrative that describes:
 - Team's track record of meeting deadlines and working within a budget.
 - Team's systems and processes for insuring quality and timely performance on projects.
 - Team's understanding of the City's needs and Team's approach to this project.
 - Team's working relationship.

F. Section 4 Divider (Quality of Service)

1. *Testimonials:* Respondents may include no more than three one-page letters from clients and/or general contractors that they have worked with on previous projects. At least one copy of these letters shall contain the original signature of the person writing the letter. Letters should comment on budget and/or scheduling experiences and qualitative matters related to services received from the Respondent or Team members.

VII. ADDITIONAL INSTRUCTIONS, NOTIFICATIONS AND INFORMATION

- A. Respondents shall not offer any gratuities, favors, or anything of monetary value to any official or employee of the City for the purposes of influencing this selection. Any attempt by the Respondent to influence the selection process by any means, other than disclosure of qualifications and credentials through the proper channels, shall be grounds for exclusion from the selection process.
- B. Respondents who provide false or misleading information, whether intentional or not, in any documents presented to the City for consideration in the selection

process shall be excluded. Any false or misleading information in these documents would, in effect, render the entire document suspect and therefore useless.

- C. INTERVIEWS – After the screening of SOQs, Respondents will be notified, in writing, of their status in the selection process. If interviews are needed, short-listed Respondents may be given additional information for the interviews. These interviews will relate less to the past experience and qualifications already detailed in the submittal, and more to the identification of the Respondent's program approach and to an appraisal of the people who would be directly involved in the project.
- D. INQUIRIES – Please do not contact the City during the selection process to make inquiries about the progress of the selection process. Respondents will be contacted when it is appropriate to do so.
- E. COST OF SOQS – The City will not be responsible for costs incurred by anyone in the submittal of qualifications, or for any costs incurred prior to the execution of a formal contract.
- F. CONTRACT NEGOTIATIONS – This RFQ is not to be construed as a contract or as a commitment of any kind. If this RFQ results in a contract offer by the City, a specific scope of work, fees, insurance coverages, and other contractual matters will be determined during contract negotiations. To ensure that the appropriate staff is assigned to the project, the City may make the inclusion of a "key persons clause" as part of the contract negotiations.
- G. CONFIDENTIAL INFORMATION – All responses shall be held confidential by the City to the extent allowable by law until after the selection process is completed. Respondents should be aware that at the completion of the selection process the contents of their SOQs are subject to the provisions of the Texas Public Information Act and may be made public. CONFIDENTIAL or SENSITIVE information should not be included in the SOQ.
- H. CITY POLICIES & ORDINANCES – Respondents should be aware of and familiar with all pertinent City of Houston Ordinances and policies which will relate to contracting with the City. The following is a partial list of relevant subjects:
 - 1. Equal Employment Opportunity
 - 2. MWBE Goal of 24% participation
 - 3. City of Houston Fair Campaign Ordinance
 - 4. Mayor's Drug Detection and Deterrence Policy and Procedures

5. City Contracts and Indebtedness to Taxing Authorities
 6. Insurance requirements
 7. Conflict of Interest Questionnaire
 8. Pay or Play (POP) Program
- I. The City of Houston reserves the right to (1) evaluate the qualifications submitted; (2) waive any irregularities therein; (3) select Respondents for the submittal of more detailed information; (4) accept any submittal or portion of a submittal; and/or (5) reject any or all Respondents submitting qualifications, should it be deemed in the City's best interest.

VIII. FEE SCHEDULE AND GENERAL NOTES (ATTACHED)

The Fee Schedule for all the services provided by the Testing Laboratories or their subcontractors for any contract subsequently negotiated with the City shall be the same as the existing approved March 18, 2002 City of Houston unit rates for Construction Materials Engineering and Inspection Services (used currently by the Department of Public Works and Engineering).



Phil Golembiewski, P.E.
City Engineer
General Services Department

Date: 02-18-08

**CITY OF HOUSTON
SCHEDULE OF FEES
CONSTRUCTION MATERIALS ENGINEERING
TESTING AND INSPECTION SERVICES CONTRACT**

PERSONNEL

UNIT PRICES

1	Principal *	\$	143.00/Hr
2	Sr. Engineer, PE (10 years Exp.)	\$	105.00/Hr
3	Project Engineer, PE	\$	82.00/Hr
4	Staff Engineer, EIT	\$	65.00/Hr
5	Graduate Engineer, CMT Manager	\$	58.00/Hr
6	Technician NICET IV	\$	53.00/Hr
7	Technician NICET III, HMA II	\$	48.00/Hr
8	Technician NICET II HMA - 1A	\$	43.00/Hr
9	Technician ACI - I, II	\$	36.00/Hr
10	Technician HMA - IB	\$	38.00/Hr
11	Technician, Non-Certified	\$	32.00/Hr
12	Welding Inspector (CWI)	\$	67.00/Hr
13	Welding Inspector (Associate CWI)	\$	48.00/Hr
14	NDT Inspector (ASNT Level II)	\$	48.00/Hr
15	NDT Inspector (ASNT Level III)	\$	52.00/Hr
16	NDT Inspector Level II with asst (2 - man crew)	\$	86.00/Hr
17	Support Personnel * (Drafting, Word Processing)	\$	31.00/Hr
18	Vehicle Charge (Max 8 hrs/Day)	\$	5.50/Hr
19	Traffic Control	\$	Cost + 10%

* Services of these personnel must be authorized by the Director in advance.

MATERIAL TESTING:

100 Concrete Aggregates:

101	Screen or Sieve Analysis (ASTM C-136)	\$	39.00/Each
102	Specific Gravity (ASTM C-127 or C-128)	\$	39.00/Each
103	Unit Weight (ASTM C-29)	\$	28.00/Each
104	Absorption (ASTM C-127 or C-128)	\$	33.00/Each
105	Finer than 200 Mesh (ASTM C-117)	\$	36.00/Each
106	Organic Impurities (ASTM C-40)	\$	35.00/Each
107	Scratch Hardness (ASTM C-851)	\$	31.00/Each
108	L A Abrasion (ASTM C-131 or C-535)	\$	153.00/Each
109	Clay Lumps (ASTM C-142)	\$	40.00/Each
110	Light Weight Pieces (ASTM C-123)	\$	47.00/Each
111	Sand Equivalent (ASTM C-2419)	\$	48.00/Each
112	Sodium Magnesium Sulfate Soundness (5 Cycles)	\$	260.00/Each
113	Sodium Magnesium Sulfate Soundness Additional Cycles	\$	150.00/Each
114	Petrographic Examination of Concrete Aggregates (ASTM C-295)	\$	By Quotation

200	Concrete Mix Design Inspection and Testing		
201	Mix Design Review (ACI-214): (Using previously determined aggregate Properties and other design factors) Excluding Test Costs	\$	115.00/Each
202	Trial Batch Tests (ASTM C-192)(Using aggregate admixtures and cement proposed for use in the project); each batch or each curve point	\$	200.00/Each
203	Cylinder Test (ASTM C-39) or Hold, Each	\$	13.00/Each
204	Beam Test (ASTM C-78, C-293) or Hold, Each	\$	20.00/Each
205	Concrete Coring (4" Dia Up to 6" Thickness) ASTM C-42 includes Personnel, Vehicle and Patching holes	\$	72.00/Each
206	Measuring Thickness of Concrete Cores(ASTM C-174)	\$	9.50/Each
207	Additional Thickness (6" to 12")	\$	6.75/Inch
208	Additional Thickness (Over 12")	\$	12.00/Inch
209	Concrete Coring, Minimum Charge (Min. 3 Cores)	\$	275.00/LS
210	Preparation of Cores, Capping & Test (ASTM C42, C-39)	\$.57.00/Each
211	Cement Compressive Strength, one age (ASTM C-109)	\$	104.00/SET
212	Cement Compressive Strength, two age (ASTM C-109)	\$	127.00/SET
213	Mortar/Grout Compressive Strength Cubes (ASTM C-109)	\$	17.00/Each
214	Mortar/Grout Compressive Strength 3" x 6" (ASTM C- 495)	\$	17.00/Each
215	Mortar/Grout Compressive Strength (ASTM C-1019)	\$	17.00/Each
216	Structural Coring	\$	By Quotation
217	Windsor Probes (ASTM C-803)	\$	68.00/SET
218	Bar Linear Shrinkage	\$	235.00/SET
219	Unit Weight of Lightweight Cylinders	\$	25.00/SET
220	Split Tensile Strength including preparation (ASTM C-496)	\$	80.00/Each
221	Petrographic Examination of Hardened Concrete (ASTM C-856)	\$	By Quotation
222	Concrete Shrinkage Test (ASTM C-157, C-490)	\$	125.00/TEST
300	Brick:		
	All brick tests will be performed in accordance with ASTM C-67 (Minimum 5 bricks)		
301	Compressive Strength (ASTM C-67)	\$	24.00/Each
302	Absorption - five hours boiling (ASTM C-67)	\$	52.00/Each
303	Absorption - 24 hours boiling (ASTM C-67)	\$	53.00/Each
400	Reinforcing Steel: (ASTM A-370 & ASTM A-675)		
401	Tension Test (size #11 and under)	\$	36.00/Each
402	Tension Test (over size #11)	\$	48.00/Each
403	Bend Test (size #6 and under)	\$	29.00/Each
404	Bend Test (over size #6)	\$	35.00/Each
405	Deformation Examination	\$	21.00/Each
406	Bolt Tensile Test (ASTM A-325)	\$	42.00/Each
500	Welded Specimens:		
501	Welding Coupons (ASTM A-370)	\$	Cost + 10%

600	Tension Tests (ASTM A-370):		
601	Without use of Extensometer	\$	38.00/Each
602	Without use of Extensometer (with curves)	\$	67.00/Each
603	Steel Strand Cable	\$	94.00/Each
700	Nondestructive Testing (Steel):		
701	Radiographic Films (ASTM E-142)	\$	Cost + 10%
702	Radiographic Source, Iridium (E-1114)	\$	91.00/Each
703	Radiographic Source, Cobalt 60	\$	104.00/Each
704	Ultrasonic Equipment (AWS D11)	\$	67.00/Each
800	Asphalt Concrete Mix Design & Inspection:		
801	Mix Design Review (using previously determined aggregates properties and other design factors) Excluding Test Costs	\$	160.00/Each
802	Trial Batch Test (up to 5 curve points)	\$	1200.00/Each
803	Additional Curve Points for item 802, Per Point	\$	173.00/Each
804	Extraction & Gradation Test (ASTM D-2172, ASTM C-136 or TEX - 210F)	\$	149.00/Each
805	Specific Gravity (ASTM D-2041, TEX 201F)	\$	53.00/Each
806	Stability: Hveem (3 Per Set)(ASTM D-1560 or TEX208F), Marshall (3 Per Set) (ASTM D-1559)	\$	70.00/Set
807	Bulk Density of Lab Molded or Field Specimen(Core), (TEX - 207F), 3 Per Set	\$	39.00/Set
808	Molding Specimens (3 Per Set) for 806 & 807 (ASTM D-1560, TEX -208F)	\$	46.00/Set
809	Penetration (ASTM D-5)	\$	63.00/Each
810	Ductility (ASTM D-113)	\$	85.00/Each
811	Viscosity (ASTM D-2170)	\$	70.00/Each
812	Asphalt Coring (4" Dia Up to 6" Thickness) includes Personnel, Vehicle and Patching Holes	\$	68.00/Each
813	Asphalt Coring Minimum Charge	\$	250.00 LS
814	Additional Thickness over 6"	\$	6.00/Inch
815	Abson Recovery (TEX - 211F)	\$	240.00/Each
816	Measuring Thickness of Asphalt Cores	\$	7.00/Each
817	Maximum Theoretical Specific Gravity (TEX 227F)	\$	67.00/Each
818	Hot Mix In-Place Asphalt Design	\$	1600.00/Each
819	Apparent Specific Gravity (TEX - 202F)	\$	50.00/Each
820	Moisture Susceptibility Test (TEX 531 - C)	\$	350.00/Each
821	PMA Extraction/Gradation (ASTM D-2172)	\$	200.00/Each
822	PMA Extraction/Gradation by Ignition (ASTM D-6307)	\$	124.00/Each
900	Build-up Roof and Roof Fill:		
901	Cut Out Roofing Sample Evaluation/Analysis (ASTM D -2928)	\$	259.00/Each
902	Dry Density Test and 28-Day Compressive Strength Tests (ASTM C - 495)	\$	58.00/Each
903	Laboratory Preparation of Sample for Testing		Applicable Tech Rate

1000 Soils Tests:	
1001	Liquid and Plastic Limits: (Atterberg Limits) (ASTM D-4318) \$ 45.00/Each
1002	Moisture Content Only (ASTM D-2216) \$ 6.00/Each
1003	Mechanical Sieve Analysis, Through #200 Sieve (ASTM D-422) \$ 42.00/Each
1004	Percent Passing #200 Sieve (ASTM D-1120) \$ 35.00/Each
1005	Specific Gravity (ASTM D-854 & D-204) \$ 44.00/Each
1006	OMD Standard Compaction (ASTM D-698) \$ 150.00/Each
1007	OMD Modified Compaction (ASTM D-1557) \$ 160.00/Each
1008	OMD Lime or Cement Stabilized Soil (ASTM D-698, D-558, D-1557) . . \$ 165.00/Each
1009	California Bearing Ratio (ASTM D-1883) \$ 158.00/Each
1010	Percent Solids in Lime Slurry (ASTM D-2216) \$ 32.00/Test
1011	Four Point Lime Content Recommendation Series (PI) \$ 178.00/Test
1012	Cement Content of Freshly Mixed CSS Mixture (ASTM D-806) \$ 230.00/Each
1013	Nuclear Density Equipment Rental (Maximum 8.00 hrs/Day) \$ 8.00/Hr
1014	Compressive Strength of CSS Sample, Including Molding (ASTM D-1632, ASTM D-1633) \$ 52.00/Each
1015	Maximum & Minimum Density (Sands) (ASTM D-4254) \$ 156.00/Test
1016	Density and Moisture of Soil Sample \$ 19.00/Each
1017	Unconfined Compression (ASTM D-2166) \$ 33.00/Each
1018	Unconsolidated Undrained (ASTM D-2850) \$ 46.00/Each
1019	Consolidation (One cycle) (ASTM D-2435) \$ 265.00/Each
1020	Consolidation - Additional Increments \$ 38.00/Each
1021	Ph of Soil (ASTM D-4972) \$ 13.00/Each
1022	Optimum Lime Content Ph Method \$ 173.00/Each
1023	Sieve Analysis - Base Materials (ASTM C-136) \$ 70.00/Each
1024	Compressive Strength of Cement Stabilized Base Materials, (TEX-120E, ASTM D-2166) \$ 190.00/Each
1025	Soil Shrinkage Factor (ASTM D-427) \$ 46.00/Each
1026	One Dimensional Swell Cohesive Soils \$ 215.00/Each
1027	Triaxial Testing \$ By Quotation
1028	Permeability Test, Constant Head Method (ASTM D-2434) \$ 170.00/Test
1029	Pinhole Test \$ 210.00/Test
1030	Crumb Test (ASTM D-4647) \$ 28.00/Each
1031	Double Hydrometer (ASTM D-4221) \$ 130.00/Each
1032	Free Swell (FHA) \$ 75.00/Each
1033	Soil Suction - Filter Paper Method \$ 42.00/Each
1100 Subsurface Field Investigation:	
1101	Intermittent 3-Inch Diameter (0-50FT) \$ 13.50/Ft
1102	Intermittent 3-Inch Diameter (51FT - 1.00FT) \$ 15.00/Ft
1103	Continuous 3-Inch Diameter (0 - 20FT) \$ 15.00 Ft
1104	Boring over 1.00 Ft Additional Surcharge \$ 5.00/Ft
1105	Wash Boring \$ 7.00/Ft
1106	Auger Boring \$ 8.00/Ft
1107	Undisturbed or Split Spoon Sample in Wash or Auger Borings \$ 29.00/Each
1108	Grouting of Completed Bore Holes \$ 4.00 Ft
1109	Boring Not Accessible By Truck Mounted Equipment, Surcharge \$ 5.00 Ft
1110	Minimum Charge (to be used when charges are less than \$575.00) \$ 575.00 LS
1111	Mobilization/Demobilization \$ 250.00/Project

1112	Piezometer Installation	\$	By Quotation
1113	THD Cone Penetration Test	\$	20.00/Each
1114	ATV Mobilization Surcharge	\$	100.00 LS
1115	Portable Rig Drilling (Crew of two)	\$	132.00/Hr
1116	Stand by (Crew of two)	\$	125.00/Hr
1117	Materials	\$	Cost + 10%

1200 Sliplining and Manhole Rehabilitation:

1201	Micro Silica Content (Petrographic Analysis)	\$	By Quotation
1202	Coring/Drilling of Manhole Grout	\$	45.00/Hole
1203	Coring of Gunite Panels(including compressive strength)	\$	90.00/Core
1204	Thickness of Liner Materials (ASTM D-2122)???		Applicable Tech Rate
1205	Flexural Strength/Modulus of Elasticity of Liner Material	\$	20.00/Coupon
1206	Holiday Testing Equipment Rental	\$	70.00/Trip
1207	Compressive Strength 3x6 cyls (Elastizel) (ASTMD-790)	\$	200.00/Set

1300 Reimbursable Expenses :

1300	Reimbursable Expenses Including Outside Testing, Equipment and Supplies	\$	Cost + 10%
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GENERAL NOTES:

Reimbursement for personnel performing sampling, testing and inspection services shall be as stated above and shall include reasonable travel time, as agreed to by the Director, between Consultant's facility and the subject City of Houston (COH) project. The billing rates inclusive of all tools, equipment and consumable supplies and all else needed to perform the subject services; except as specifically noted in this Attachment.

Consultant shall document hours of service for each visit to the City of Houston project including sample pick-up. The document shall contain the following:

- 1 Project GFS No. and Project Name.
- 2 Personnel name and classification typed or printed legibly.
- 3 Time of departure from Consultant's facility.
- 4 Time of arrival at City of Houston project.
- 5 Standby time, if any.
- 6 Work requested and performed.
- 7 Time of departure from City of Houston project.
- 8 Time of arrival at Consultant's facility.
- 9 Overtime hours, if any.
- 10 Signature of reviewing Engineer.

Construction materials engineering, testing and inspection reports shall be reviewed and signed by a Licensed Professional Engineer. The Licensed Professional Engineer does not need to sign sample pick-ups or project cancellation reports. All test results and inspection reports must be received within 10 calendar days of the original test date.

All services on an hourly basis (Items 6 -16) will be charged at the applicable rate, from the time the technician/inspector leaves the Laboratory until he or she returns to the laboratory from the assignment. Hourly personnel overtime rates, of 1-1/2 times the regular hourly rate, will be charged for the hours worked over eight (8) hours on Monday through Friday and all hours worked on Saturdays, Sundays and Holidays. Hourly services shall be invoiced to the nearest 1/4 hour.

Only certified engineering technicians (NICET level 2 or above in related field, ACI - 1 for concrete and HMA I or II for asphalt work), with the exception of concrete sample pickup, are allowed on assigned projects. A non-certified technician may be allowed to assist a certified technician (Aviation Department's Projects are excluded) on a project site provided two or more technicians are required. The technicians should carry their certification wallet cards with them on project site.

A minimum four (4) hours personnel time will be allowed for each site visit for observations or testing except for sample pick-ups. If a technician/inspector is assigned to more than one City of Houston project in one day, his or her actual time on both projects will be charged (i.e. No minimum charge for both projects), provided the total time exceeds four (4) hours. A minimum of 30 minute lunch must be taken for work of eight (8) hours or more.

Sample pick-ups, (example: cylinder, beam, soils, liner coupons, aggregates, etc), whenever possible, will be performed as a part of a scheduled field trip. If a separate trip for the sample pick-up is required, only the actual personnel time and vehicle charge will be paid. A non-certified technician rate will be paid for concrete sample pick-ups (cylinders, beams and grout cubes), with the exception of the full time technician assigned to the project. If a technician has departed for the site, prior to receipt of a cancellation notice, a maximum of two (2.0) hours will be paid for scheduled site activities.

All hours invoiced must be supported by copies of test reports and an original signed time-sheet or daily activity report sheets, signed by inspector or contractor which contains the name of the personnel and their classification.

All reimbursable expenses shall have the prior approval of and shall be supported by documentation acceptable to the Director.

The fees stated for laboratory tests are all inclusive. No other charges shall be levied for personnel services and/or materials related to such testing, except as specifically noted in this Attachment.

APPROVED: DEPARTMENT OF PUBLIC WORKS AND ENGINEERING



Jon C. Vanden Bosch, P.E.
Director

3/15/01
Date