

#### PURCHASING DEPARTMENT

#### **SECTION 4**

#### **EVENT # 3604**

#### **CONSTRUCTION TESTING**

#### SPECIFIC SPECIFICATIONS AND SPECIAL CONDITIONS

4.0 These specifications will describe requirements for construction testing services to be used by various City of Savannah departments.

To submit pricing electronically for this event, enter pricing for each line item shown under the lines tab on the event summary. To enter pricing manually, complete the attached bid proposal form. Bids must be submitted on the bid proposal forms contained in these specifications in order to be considered. Partial bids will be accepted. Sections for which the bidder does not want to be considered should be left blank.

A pre-bid conference has been scheduled to be conducted at the Purchasing Office, third floor, City Hall, 2 East Bay Street, Savannah, GA. This meeting will allow contractors to discuss the specifications and resolve any questions and/or misunderstandings that may arise with City staff. You are invited to attend.

#### 4.1 Qualifications

Bidder shall submit the following information with itsbid. The City shall review the qualifications of the firms submitting bids in accordance with the requirements listed herein and shall be the sole judge as to the acceptability of these qualifications.

- 4.1.1 The testing firm shall operate in accordance with ASTM E 329 and D3740. The firm shall have on staff, within a 30-minute drive from any City construction site, a minimum of three (3) technicians with the proper training and certification to serve the City's testing needs. The work shall be supervised by a qualified Georgia registered professional engineer. The supervising engineer must also be located within a 30 minute drive of any City construction site.
- 4.1.2 Each bidder shall submit qualifications, experience, and licensing of engineers and technicians who would be assigned to this work. Technician certifications can be submitted on a resume or copies of their certification certificates can be submitted by the bidder.
- 4.1.3 Each bidder shall submit a description of local facilities and equipment indicating capabilities as well as response time from those local facilities. The testing laboratory shall be located in Chatham County. Also, if appropriate, include a description of facilities and equipment that the company may have access to through other offices or partnerships. Facilities shall also have a resident professional engineer on staff located at the laboratory site.

- 4.1.4 Each bidder shall submit a description of at least five (5) previous projects, preferably from local clients, on which the firm has performed testing services similar to those required in this bid. Names and telephone numbers for appropriate contacts regarding these projects shall be submitted with the bid.
- 4.1.5 Each bidder shall submit their capabilities with hazardous materials or contamination testing and reporting, including asbestos and lead testing in existing facilities, underground storage tank contamination, testing for vertical or lateral migration of methane gases, and polychlorinated biphenyl (PCB) testing of transformers. The bidder shall indicate standard turn-around time for these test results and any additional charge to the City for expedited responses, per the next paragraph. Costs for these tests shall include the cost of sampling.

In Appendix A, the Environmental Testing and Industrial Hygiene sections have additional columns to account for turnaround time, expedited time, and expedited cost for certain tests. The column labeled "Time" has been added for standard turn-around time in days. One day will be equivalent to eight (8) hours. Columns for additional expenses ("Expedited Cost") and quicker response times ("Expedited Time") have been added. The expedited price will be the total cost for the expatiated test including the cost of sampling.

4.2 The fee schedule shall list unit prices for the individual tests as designated. These unit prices shall include furnishing all applicable material, labor, and equipment to perform the designated tests as well as all costs associated with producing and delivering the test results to the City. These prices shall also include all applicable taxes, office overhead costs, and transportation costs. It can be assumed by the testing firm that all of our construction sites will be in Chatham County, Georgia. The unit price for each test or set of tests shall include all costs for other referenced tests which are required to complete the test procedure even if these additional tests are listed elsewhere on the fee schedule. There will be no additional costs to the City.

A separate fee schedule is included in Appendix A is for testing that is not frequently used. These fees will not be used in the bid tabulations. Fees for these tests should be calculated as per the previous paragraph. Bidders will be required to fill out the corresponding tables in Appendix A for each portion of the project that they are bidding. There is not a special inspection portion in Appendix A.

- 4.3 Quantities shown on the bid proposal form are estimates based on planned projects which the City will be constructing and are in no way binding to the City as minimum quantities of tests that must be ordered.
- 4.4 The testing firm shall respond to a construction jobsite to perform required tests within 24 hours of notice from the authorized City representative, or an authorized contractor's representative. For tests performed on an infrequent basis which may require specialized equipment not immediately available, the testing firm shall respond to a jobsite within 48 hours notice from an authorized person.
- 4.5 Waiting Time

The testing firm shall consider that, any time it is called to a jobsite, its technician may be delayed from administering any tests as much as an hour without any extra compensation to the testing firm. Any time the City requires testing services on a given day, for example during a continuous pouring operation or continuous fill or compaction operation, the waiting time between test shall be considered an extra charge if the time between tests exceeds 30 minutes. Such extra charges shall be recorded in quarter-hour increments. When invoicing, charges for delays and cancelled inspections shall have a separate item on the invoice. The time for performing the test will not be part of the waiting time.

4.6 General Procedures for Reporting Testing Results

For each construction project, the vendor will be furnished a copy of the project's construction drawings and technical specifications at the pre-construction conference which the vendor must attend. The construction contractor will provide 24-hour notice (48-hour notice for specialized testing) to the vendor (i.e., testing laboratory) before each test is performed. The vendor will distribute the testing results as follows:

#### 4.6.1 Field Test Results

Immediately after testing, the vendor's field technician will relay the field test data and any preliminary pass/fail determinations to the construction contractor and to the designated City construction inspector on site, if present. The vendor shall also mail results or email in portable document format (PDF) file, that has been signed and sealed by a Georgia registered professional engineer, to the designated City project manager within 24 hours after testing.

When a field test indicates a failure to meet project specifications, the vendor shall prominently mark the following words on the results report after they are given to the construction contractor: "FAILED TEST" and e-mail the report (PDF file), or a preliminary report, to the designated City project manager and the construction contractor on the same day that the failed test was conducted. The vendor will be responsible for verifying that the City project manager or the City construction inspector receives the notification on the same day that the failed test results occur.

#### 4.6.2 Laboratory Test Results

The vendor shall furnish a paper copy or provide a printable PDF file of laboratory test results, signed and sealed by a Georgia registered professional engineer, to the designated City project manager within 24 hours after testing.

When a field test indicates a failure to meet project specifications, the vendor shall prominently mark the following words on the results report after they are given to the construction contractor: "FAILED TEST" and e-mail the report (PDF file), or a preliminary report, to the designated City project manager and the construction contractor on the same day that the failed test was conducted. The vendor will be responsible for verifying that the City project manager or the City construction inspector receives the notification on the same day that the failed test results occur.

- 4.6.3 The vendor shall also furnish to the City, original test result reports that have been stamped, signed, and dated by the engineer, along with the invoices for the test reports. Vendor will be required to also attach to invoices the time records and logs which will back up any separate charges for engineer or inspection technician time which are being billed at an hourly rate.
- 4.6.4 The Vendor shall email the PDF file final test results to the construction contractor, City project manager, the design professional, and to any others as requested.
- 4.6.5 At the conclusion of a project, the vendor shall provide a summary of all inspections/tests/verifications completed for the project, including special inspections, broken down by material/type of test/locations.
- 4.6.6 All reports shall have clear, specific and consistent descriptions of locations and extents of work/material being tested or inspected.
- 4.6.7 When possible and practical to do, the test results should be identified by a numeric identifier (example: #023) and in the case of failing tests the re-test results shall be identified by the same number with an added letter following the number to indicate that the test was necessary due to a previous test failure (in same example: #023A). In the event that re-tests also fail then the letter should be changed sequentially. For example if #023A also fails, then its re-test will be identified as #023B, and so on.
- 4.7 The testing firm shall provide all necessary on-site personnel and equipment to handle and protect materials being tested.

4.8 The testing firm shall provide skilled technicians who are fully trained with the testing equipment and procedures required for each test. The testing firm must also submit calibration certificates for all testing equipment used to perform the tests required for this contract.

#### 4.9 Damage

- 4.9.1 Any damages caused to a construction contractor resulting from failure of a testing technician to appear and perform as required (by the contract) will be back-charged to the testing firm. The vendor will also pay the contractor for any damages that may result from an incorrect test report. The testing firm will also perform any and all confirmatory testing that may be needed to isolate failing materials as a result of an incorrect report at no cost to the City.
- 4.9.2 The testing firm shall continuously maintain adequate protection of all work from damage, and shall take all reasonable precautions to protect the City's property from injury or loss arising in connection with this contract. The testing firm shall adequately protect adjacent private and public property, as provided by law and contract documents.
- 4.9.3 The testing firm shall so conduct its operations as not to damage existing structures, the site, property, or work installed. In case of any such damage resulting from the testing firm's own operations, the testing firm shall repair and make good as new the damaged portions at the testing firms own expense.
- 4.9.4 The testing firm shall take all responsibility for the work done under this contract. The testing shall assume the defense of all claims arising out of injury or damage to persons, corporations, or property, whether said claims arise out of negligence or not, or whether said claims are for unavoidable damage or not, and from all claims relating to labor and materials furnished for the work and from all expenses incurred in defending or settling such claims, including reasonable attorney's fees.
- 4.9.5 In the event that the City or its contractors find it necessary to repair damage caused by the testing firm, the cost of those repairs will be back charged to the testing firm.
- 4.9.6 The testing firm shall request and receive permission from the City before parking any heavy equipment on property owned by the City of Savannah.
- All asphalt density testing shall include the cost of patching pavement where specimens were taken. The patch performed must be completed per current City standards as follows. Filling asphalt core holes with hot mix asphalt (HMA) is the preferred method. If HMA is not feasible, cold patch or fiber reinforced concrete may be used. The thickness of the core shall be reported to the requesting project manager.

All core holes should be filled with hot asphalt conforming to part 1.03 of Section 02600 of the City of Savannah specifications or 4,000 psi fiber reinforced ready mix concrete painted black by the end of the next work day. Before filling, ensure the holes are clean and dry and tack them with AC-20 or AC-30 asphalt cement conforming to part 1.02 B. Properly compact the asphalt concrete used for filling the hole and leave it flush with pavement.

When possible and practical to do, the test results should be identified by a numeric identifier as specified in Section 4.6.7.

Note: The City's policy is to back charge the contractor for failed tests.

4.11 The City reserves the right to award this project to multiple bidders based upon the subtotal of each section: Soil Testing, Pavement Testing, Structural Concrete Testing, Industrial Hygiene, Environmental Testing, and Special Inspections. The City may award a primary and a secondary contractor for each subsection. The City reserves the right to seek competitive proposals for any and all projects as it deems appropriate. In the event that a contractor hired testing firm and the City's testing firm have differing results, the City reserves the right to hire a third party testing firm.

#### 4.12 Staff Certifications

The testing firm to be awarded this contract must have the following staff certifications.

#### 4.12.1 Soils Testing

- Nuclear training certification
- Georgia licensed professional engineers and geologists with local experience and knowledge and are present working day to day in local office

#### 4.12.2 Pavement Testing

- Nuclear training certification
- Georgia licensed professional engineers with local experience and knowledge and are present working day to day in local office

#### 4.12.3 Structural Concrete

- American Concrete Institute (ACI) Laboratory Technician certification
- ACI Level I Field Testing Technician certification
- ACI Concrete Special Inspector certification
- Georgia licensed professional engineers with local experience and knowledge and are present working day to day in local office

#### 4.12.4 Industrial Hygiene

- Asbestos inspector training with current refresher course
- Certified lead inspector

#### 4.12.5 Environmental Testing

- Must be able to meet all Environmental Protection Agency (EPA)/Environmental Protection Division (EPD) testing requirements
- Georgia licensed professional engineers and geologists with local environmental experience and are present working day to day in local office

#### 4.12.6 Special Inspections

- Independent Concrete Cutting (ICC) Masonry Special Inspector certification
- Georgia Concrete Products Association Structural Masonry Inspector certification
- Certified Welding Inspector (CWI)
- ACI Concrete Special Inspector certification
- ICC Concrete Special Inspector certification
- Georgia licensed professional engineers with local experience and knowledge and are present working day to day in local office
- Certifications per Appendix B

#### 4.13 Lab Certifications

The testing firm to be awarded this contract must have the following lab certifications:

#### 4.13.1 Soils Testing

- National Institute for Certification in Engineering Technologies (NICET) Level, I, II certification
- American Society for Testing and Materials (ASTM) E 329 in soils certification
- In-house Quality Systems Laboratory Manual / Procedures
- In-house Project Quality Report Review Manual / Procedures
- 40 hour Occupational Safety and Health Administration (OSHA) training certification

#### 4.13.2 Pavement Testing

- NICET Level, I, II certification
- ASTM E 329 in aggregates
- American Association of State Highway and Transportation Officials (AASHTO) R18 Accreditation
- In-house Quality Systems Laboratory Manual / Procedures

- In-house Project Quality Report Review Manual / Procedures
- 40 hour OSHA training certification

#### 4.13.3 Structural Concrete

- NICET Level, I, II certification
- ASTM E 329 in concrete certification
- ASTM E 329 in aggregates
- AASHTO R18 Accreditation
- In-house Quality Systems Laboratory Manual / Procedures
- In-house Project Quality Report Review Manual / Procedures
- 40 hour OSHA training certification

#### 4.13.4 Industrial Hygiene

- In-house Quality Systems Laboratory Manual / Procedures
- In-house Project Quality Report Review Manual / Procedures
- 40 hour OSHA training certification

#### 4.13.5 Environmental

- In-house Quality Systems Laboratory Manual / Procedures
- In-house Project Quality Report Review Manual / Procedures
- 40 hour OSHA training certification

#### 4.13.6 Special Inspections

- NICET Level, I, II certification
- ASTM E 329 in concrete certification
- In-house Quality Systems Laboratory Manual / Procedures
- In-house Project Quality Report Review Manual / Procedures
- 40 hour OSHA training certification
- Certifications per Appendix B
- 4.14 The technician hourly rate is to be used for technician time outside of the individual line items listed in the testing equipment. The technician cost shall be part of the individual test. For example, for concrete testing, the price should include the cost of the technician to do the slump, air, temperature tests, make the cylinders, and pick up and transport the cylinders to the lab, along with the lab cost to break the cylinders and make the report.
- 4.15 Industrial Hygiene and Environmental Sections

Building types vary within the city. The tests may be used on buildings the City owns or on buildings the City may purchase in the future. Building projects include both renovations and demolition and some buildings are HUD child occupied.

#### 4.16 Special Inspections

The vendor shall perform the special inspector's responsibilities as outlined in American Council of Engineering Companies (ACEC)/Structural Engineers Association of Georgia's (SEAOG) 2012 Georgia Special Inspections Guidelines.

In the course of a construction project, the vendor shall monitor construction progress against the construction documents and test/inspection results, to identify any necessary verifications, tests, retests, inspections, and re-inspections that have been overlooked by the construction contractor, i.e. not called in by the contractor when needed, and shall notify the City project manager immediately of any such omissions as time is of the essence.

Any deviations in test/inspection-results from the requirements in the construction documents, approved and communicated verbally by the engineer of record to the vendor, shall be confirmed in writing by the same. These written approvals may be obtained by the City project manager, or directly from the engineer of record, and shall accompany the reports (an approval that is applicable for several tests/inspections need only be submitted once and thereafter referenced). If written

approval cannot be obtained, the City project manager shall be notified.

In addition to providing the test results with each pay request, the testing firm will be required to submit an updated schedule of special inspections indicating which tests are completed, any failed tests, and the tests that are in progress.

Required forms and detailed instructions can be found in publication ACEC/SEAOG SI GL 01-2012 or the Georgia Special Inspections Guidelines at <a href="https://www.acecga.org">www.acecga.org</a>.

The following are general requirements and instructions for processing the special inspection program forms. Timely completion of the final report of special inspections will be required. Failure to complete the final report in a timely manner will result in a delay in the issuance of the project's Certificate of Occupancy (CO).

#### Overview

The program consists of three primary forms which must be filled out and submitted to contractor, design professional, and the City. The *Statement of Special Inspections* and the *Schedule of Special Inspections Services* will be provided to the testing firm for each project. The *Final Report of Special Inspections* is submitted at the completion of construction. Several other forms that may be utilized can be found at <a href="https://www.acecga.org">www.acecga.org</a>

#### **Statement of Special Inspections**

This form provides the general project information. It identifies the project location, the project architect, the project structural engineer, and the registered design professional in responsible charge, referred to in the forms and hereafter as the design professional. The firm or company names are sufficient (individuals need not be listed). Depending on the project organization, the design professional could be the project architect, a project engineer, or an independent third party representing the City. In accordance with Section 1704.2 of the *Building Code*, the design professional is responsible for preparation of the special inspection program and would complete the "Prepared by" section of this form.

This form establishes the frequency that interim reports should be furnished. For complex projects, the design professional, contractor or City may attach a separate schedule listing the required report frequency. Additionally, the contractor or City can request reports at a greater frequency than the design professional.

#### Schedule of Special Inspection Services

This form provides an itemized list of which special inspection activities are required for the specific project and which individuals, firm, or agency will be performing the special inspection services associated with each required task. The project title should be inserted at the top of the form. The form lists the various tasks required by Chapter 17 of the *Building Code* and provides a column for the design professional to identify with a "yes" or "no" which items apply to the specific project.

The "Extent" column is where the design professional can provide additional information or detail regarding the scope of the special inspections. This column identifies which items require continuous inspection and which require periodic inspection as defined by the *Building Code*. For periodic inspections, the frequency of inspection can be identified here. Exceptions to a special inspection task may be noted in this column. Special instructions regarding how to perform inspections may also be included here. For more complex projects, this may be addressed by referring to another project document, such as the project specifications.

The only column not filled in on the schedule at the time it is submitted should be the "Completed" column. When an individual special inspection task in the schedule is completed for the last time on the project and the special inspector performed their final review, inspection, or test of that item for the project, the special inspector should initial and date the cell in the "Completed" column adjacent to the task. At the conclusion of the project, a copy of the *Schedule of Special Inspection Services* form with the initials and date in the "Completed" column for each task relevant to the project shall be submitted to the contractor, the City, and design professional with the *Final Report of Special Inspections*.

Minimum qualifications for each type of inspection and test are included in Appendix B of these guidelines.

Projects requiring special Requirements for Seismic and/or Wind Resistance should be identified at the end of the form for cross reference to the Statement of Special Inspections.

A commentary with specific requirements for each *Material/Activity* in the *Schedule* is included for assistance in completing the inspection program.

#### Final Report of Special Inspections

This form is submitted when all the special inspection requirements for a project have been fulfilled. Each special inspector corresponding to an agent number in the *Schedule of Special Inspection Services* will be required to complete a copy of this for submittal to the design professional, contractor, and the City for their scope of work. The special inspection program will not be considered complete until all forms are submitted and received.

4.17 Acknowledge the following disclaimer: Any and all documentation provided by the City shall be field verified by the consultant. The City neither certifies nor claims that the information shown represents the existing site conditions. The information shown shall not be used without field verification. In no event shall the City be liable for any direct, special, or consequential damages from the use of the drawings.

#### 5.0 General Specifications

- 5.1 The bid response must include the following documents in this order:
  - Bid Proposal Form (as a cover sheet)
  - Exception Sheet
  - Non-Discrimination Statement
  - Proposed Schedule of MWBE Participation
  - Other requested submittals as stated

All referenced documents must be completed and returned in its entirety to constitute a complete bid.

- 5.2 All bids must be submitted in duplicate.
- 5.3 Original invoices should be sent to:

City of Savannah Accounts Payable P.O. Box 1027 Savannah, GA 31402

- 5.4 The vendor is responsible for determining and acknowledging any addenda issued in connection with this bid solicitation. All addenda issued in connection with this event must be acknowledged in the bidder's response in order for the bid to be considered.
- This is an annual contract and prices are to be held firm for a period of one (1) year (twelve (12) months). This agreement may be renewed for up to two (2) additional twelve (12) month periods, if all contracting parties so agree and services provided by the vendor have been satisfactory.
- Bids may be submitted manually to the address listed in the bid documents or electronically via the supplier portal in sufficient time to ensure receipt by the Purchasing Department on or before 1:30 P.M. on the date specified in the web page listing for this event. Requested documentation may be attached to the bidder's response. A supplier guide for assistance in submitting responses can be found by clicking on the Important Documents tab of the Purchasing SavEPro webpage at: http://savannahga.gov/DocumentCenter/View/2065
- 5.7 Bidder acknowledges that by submitting a bid for the specified event, it is waiving any right to insist upon the inclusion of any exculpatory provisions in the parties' contract. The City will not enter into any contract that contains exculpatory provisions in favor of the bidder.

#### 6.0 Insurance and Certificate of Insurance Requirements:

#### The Mayor and Aldermen of the City of Savannah should be a CERTIFICATE HOLDER

#### Commercial General Liability:

Limits (or higher):

General Aggregate: \$2,000,000
Products Completed Operations Aggregate: \$2,000,000
Each Occurrence Limit: \$1,000,000
Personal Injury Limit: \$1,000,000

Damage to Premises Rented to You \$1,000,000 Any One Event Medical Expenses \$5,000 Any One Person

#### Required Endorsements and Certificate of Insurance:

- This policy provides a Waiver of Subrogation endorsement in favor of Mayor and Aldermen of the City of Savannah its agents and/or employees and must be attached to the Certificate of Insurance.
- This policy provides a thirty (30) day cancellation endorsement in favor of Mayor and Aldermen of the City of Savannah its agents and / or employees and must be attached to the Certificate of Insurance.
- No exclusions for subcontractors
- Includes current operations, ongoing operations and completed operations (no exclusions of these)

#### Commercial Auto:

Limits: \$1,000,000 per Occurrence & Aggregate (Minimum)

#### Required Endorsements and Certificate of Insurance:

- This policy provides a Waiver of Subrogation endorsement in favor of Mayor and Aldermen of the City of Savannah its agents and/or employees and must be attached to the Certificate of Insurance.
- This policy provides a thirty (30) day cancellation endorsement in favor of Mayor and Aldermen of the City of Savannah its agents and/or employees and must be attached to the Certificate of Insurance.

## <u>Workers Compensation & Employers Liability:</u> (includes coverage for all employees, volunteers and others under your direction and supervision)

Limits:

Part A: Workers Compensation: Statutory (include State of Georgia)

Part B: Bodily Injury by Accident: \$500,000 Each Accident Bodily Injury by Disease: \$500,000 Policy Limit Bodily Injury by Disease: \$500,000 Each Employee

#### Required Endorsements and Certificate of Insurance:

- This policy provides a Waiver of Subrogation endorsement in favor of Mayor and Aldermen of the City of Savannah its agents and / or employees and must be attached to the Certificate of Insurance.
- This policy provides a thirty (30) day cancellation endorsement in favor of Mayor and Aldermen of the City of Savannah its agents and / or employees and must be attached to the Certificate of Insurance.

#### Commercial Umbrella:

Limits: \$5,000,000 per Occurrence & Aggregate (Minimum)

#### Required Endorsements and Certificate of Insurance:

• This policy provides a Waiver of Subrogation endorsement in favor of Mayor and Aldermen of the City of Savannah its agents and / or employees and must be attached to

- the Certificate of Insurance.
- This policy provides a thirty (30) day cancellation endorsement in favor of Mayor and Aldermen of the City of Savannah its agents and / or employees and must be attached to the Certificate of Insurance.
- This umbrella covers over Commercial General Liability, Commercial Auto and Employers Liability (Part B of Workers Compensation)

#### **Professional Liability:**

Limit: \$1Million per Project

Required Endorsements and Certificate of Insurance:

- This policy provides a Waiver of Subrogation endorsement in favor of Mayor and Aldermen of the City of Savannah its agents and / or employees and must be attached to the Certificate of Insurance.
- This policy provides a thirty (30) day cancellation endorsement in favor of Mayor and Aldermen of the City of Savannah its agents and / or employees and must be attached to the Certificate of Insurance.

#### Other Items Required:

- No exclusions for subcontractors. The Owner recommends the contractor obtain certificates of insurance from sub-consultants, however, the Contractor will ultimately be responsible for any gap in coverage or lack thereof.
- All insurance carriers in the policy / COI are required to have an AM Best Rating of A-, IX
  or better
- The City of Savannah is not responsible for any of the property used in or owned by consultant
- All deductibles in the coverage are the responsibility of Named Insured on policy
- Any modifications to specifications must be approved by the City.
- This contract requires the consultant to indemnify and hold harmless the City in all
  consulting work, projects and services provided. The consultant also agrees to indemnify
  for costs of preparing and defending lawsuits from consulting work, projects and services
  provided.

## **EXCEPTION SHEET**

If the commodity(ies) and/or services proposed in the response to this bid is in anyway different from that contained in this proposal or bid, the bidder is responsible to clearly identify by specification section number, all such differences in the space provided below. Otherwise, it will be assumed that bidder's offer is in total compliance with all aspects of the proposal or bid.

Below are the exceptions to the stated specifications:				
Date	Signature			
	Company			
	Title			

## **BID PROPOSAL FORM**

## (SUBMIT AS THE COVER SHEET)

#### (SUBMIT A MINIMUM OF TWO COPIES)

City of Savannah Purchasing Dept.	EVENT #: 3604
3rd Floor, City Hall P. O. Box 1027	Business Leasting (Check One)
	Business Location: (Check One)
Savannah, GA 31402 ATTN: Purchasing Director	Chatham County
ATTN: Purchasing Director	City of Savannah Other
	Other
Name of Bidder:	<del></del>
Street Address:	<del></del>
City, State, Zip Code:	
Phone: Fax:	
Email:	
DO YOU HAVE A BUSINESS TAX CERTIFICATE IS YES: NO:	SUED IN THE STATE OF GEORGIA? (CHECK ONE)
FROM WHAT CITY/COUNTY	
FROM WHAT CITY/COUNTY FED TAX ID	#:
INDICATE LEGAL FORM OF OWNERSHIP OF BID	DER (STATISTICAL PURPOSES ONLY): CHECK ONE:
CORPORATION	PARTNERSHIP
CORPORATIONINDIVIDUAL	OTHER (SPECIFY:)
INDICATE OWNERSHIP STATUS OF BIDDER (CHECK ONE):	
NON-MINORITY OWNED	ASIAN AMERICAN
AFRICAN AMERICAN	AMERICAN INDIAN
HISPANIC	OTHER
	MINORITY (describe)
WOMAN (non-minority)	·
Do you plan to subcontract any portion of this If yes, please complete the attached schedule you will be using any MWBE suppliers.	project? Yes No of MWBE participation. Also complete the schedule if
	IE FOLLOWING ITEMS IN STRICT CONFORMANCE TO THE SUED BY THE CITY OF SAVANNAH FOR THIS BID. ANY

ITEM NO	Soil Testing	EST. QUANT	UNIT	UNIT PRICE	TOTAL
1	Soil Classification, ASTM D2487	60	Each		\$

**EXCEPTIONS ARE CLEARLY MARKED IN THE ATTACHED COPY OF BID SPECIFICATIONS:** 

				-
2	Standard Proctor, ASTM D698	50	Each	\$ -
3	In-Place Soil Density/Moisture Content, Nuclear Method (3 test set)	1300	Set	\$ -
4	Atterburg Limits, ASTM D4318	50	Each	\$ -
5	Soil Investigation and Sampling by Auger Boring, ASTM D1452	1	Linear Foot	\$ -
6	Modified Proctor, ASTM D1557	1	Each	\$ -
7	Proof Roll	1	Hour	\$ -
8	Waiting Time, Technician	300	Hour	\$ -
9	Staff Engineer/Geologist/Environmental Scientist	1	Hour	\$ -
10	Senior Registered Professional Engineer/Geologist - GA	1	Hour	\$ -
11	Field Inspector/Technician	1	Hour	\$ -
	Subtotal			

ITEM NO	Pavement Testing	EST. QUANT	UNIT	UNIT PRICE	TOTAL
1	Compressive Strength of Concrete Cylinders, ASTM C39, one set of five cylinders (six cylinders if using the smaller mold) molded at jobsite. One at seven days and three to be tested at 28 days with one held in reserve in case a later break is needed. A concrete Slump Test (ASTM C143), an Air Content Test (ASTM C231), and a Temperature Test (ASTM C1064) shall be taken whenever cylinders are made and their costs shall be included in these prices	1200	Set		\$ -
2	Asphalt Density: Saturated Surface-Dry Specimens Method, ASTM D2726, Set of 3 specimens cut from pavement in field. Price shall include patching of pavement where cores were taken.	50	Set		\$
3	Asphalt Density: Nuclear Method, ASTM D2950, set of 5 tests.  Price shall include calibration and confirming tests required.	50	Set		\$ -
4	Asphalt Density: Paraffin Coated Specimens Method, ASTM D1188, set of 3 specimens cut from pavement in field. Price shall include patching of pavement where specimens where taken.	1	Set		\$
5	Compressive Strength of Concrete, Drilled Cores, ASTM C42	1	Each		\$
6	Concrete cylinders, ASTM C39, additional cylinders fabricated after a set of six cylinders are molded.	1	Each		\$ -
7	Standard Test Method for Infiltration Rate of In Place Pervious Concrete ASTM C1701 / C1701M	1	Each		\$ -
8	Standard Test Method for Density and Void Content of Freshly Mixed Pervious Concrete ASTM C1688 / C1688M	1	Each		\$ -
9	Set rolling pattern for Hot Mix Asphalt	1	Each		\$

				-
10	Asphalt cores (no density) set of 3 specimens cut from pavement in field to verify depth. Price shall include patching of pavement where specimens where taken.	1	Set	
11	Hand auger borings for base and subbase below pavement	1	Linear Foot	
12	Waiting Time, Pavement Testing Technician	300	Hour	\$ -
13	Technician, Pavement Testing	1	Hour	\$ -
14	Field I Project Engineer (i.e., report writing and field investigation).	1	Hour	\$ -
15	Senior Registered Professional Engineer	1	Hour	\$
	Subtotal			

ITEM NO	Structural Concrete Testing	EST. QUANT	UNIT	UNIT PRICE	TOTAL
1	Compressive strength of grout, ASTM C109, set of six 2" x 2" x 2" cubes molded at jobsite. Cubes will be tested at 7 days (2), 28 days (2) and 56 days (2).	20	Set		\$ -
2	Standard Test Method for Sampling and Testing Grout ASTM C1019; set of six (6)	20	Set		\$ -
3	Compressive Strength of Concrete Cylinders, ASTM C39, one set of five cylinders (six cylinders if using the smaller mold) molded at jobsite. One at seven days and three to be tested at 28 days with one held in reserve in case a later break is needed. A concrete Slump Test (ASTM C143), an Air Content Test (ASTM C231), and a Temperature Test (ASTM C1064) shall be taken whenever cylinders are made and their costs shall be included in these prices	1200	Set		\$ -
4	Compressive Strength of Concrete, Drilled Cores, ASTM C42	1	Each		\$ -
5	Concrete cylinders, ASTM C39, additional cylinders fabricated after a set of six cylinders are molded.	1	Each		\$ -
6	Rebound number of hardened concrete (a.k.a. rebound hammer test) in accordance with ASTM C 805	1	Each		\$ -
7	Field Inspection of reinforcing steel	1	Hour		\$ -
8	Waiting Time, Structural Concrete Technician	300	Hour		\$ -
9	Field Inspector/Technician for Structural Concrete Testing	1	Hour		\$ -
10	Field I Project Engineer	1	Hour		\$ -
11	Senior Registered Professional Engineer GA	1	Hour		\$ -
	Subtotal				

ITEM		EST.		UNIT	
NO	Environmental Testing	QUANT	UNIT	PRICE	TOTAL

	Closure Report for Underground Storage Tank Removal as per			
	Georgia Environmental Protection Divisions Rules and			\$
1	Regulations (per facility, not including sampling analysis).	1	Each	-
	Phase I Environmental Assessments ASTM E1527-05 (per			\$
2	site/report)	1	Each	-
				\$
3	Technician for environmental testing	1	Hour	-
				\$
4	Staff Engineer/Geologist/Environmental Scientist	1	Hour	-
				\$
5	Senior Registered Professional Engineer/Geologist - GA	1	Hour	-
	Subtotal			

ITEM NO	Industrial Hygiene	EST. QUANT	UNIT	UNIT PRICE	TOTAL
		,			\$
1	Asbestos Survey Field Services	1	Hour		-
					\$
2	Asbestos Samples	1	Each		-
					\$
3	Asbestos Survey Reporting	1	Each		-
					\$
4	Lead Survey Field Services	1	Hour		-
					\$
5	Lead Samples	1	Each		-
					\$
6	Lead Survey Reporting	1	Each		-
					\$
7	Industrial Hygiene Technician	1	Hour		-
					\$
8	Staff Engineer/Industrial Hygienist/Environmental Scientist	1	Hour		
	Subtotal				

ITEM	Special Inspections per the 2012 International	EST.		UNIT	
NO	Building Code	QUANT	UNIT	PRICE	TOTAL
					\$
1	Shop and field inspections of structural steel welding	1	Hour		-
	Shop and field inspections of steel frame joint details,				\$
2	including bolting.	1	Hour		-
					\$
3	Field verification of embedments	1	Hour		-
					\$
4	Field and in plant review of prestressing steel installation	1	Hour		-
					\$
5	Field and in plant review of prestressed concrete	1	Hour		-
	Field inspection of anchor bolts to be installed in concrete				
	prior to and during placement of concrete where strength				\$
6	design is used.	1	Hour		-
	Field inspection of anchor bolts to be installed in concrete				
	prior to and during placement of concrete where allowable				\$
7	loads are increased or where strength design is used.	1	Hour		-
					\$
8	Field inspection of mortar joints and mortar proportions.	1	Hour		-

	Field inspection of reinforcing bars and welding of			\$
9	reinforcement bars	1	Hour	-
				\$
10	Field inspection of placement of masonry units	1	Hour	_
	Field inspection of type, size and location of structural			\$
11	masonry elements and anchors	1	Hour	_
	masoni y elements and antinors	-	Tioui	\$
4.2	Field in an estimated many transport and annual relationship	_		ا ۶
12	Field inspection of grout space and grout placement	1	Hour	-
	Field inspection of concrete placement for proper			\$
13	application techniques	1	Hour	-
	Field inspection for maintenance of specified curing			\$
14	temperature and techniques	1	Hour	-
				\$
15	Field Inspection of erection of precast concrete members	1	Hour	_
	Field Inspection of formwork for shape, lines, location and	_		\$
16	dimensions	1	Hour	
16		1	Hour	-
	Field inspection of wood trusses over 60ft in span, and			\$
17	associated bracing	1	Hour	-
	Verification of excavations, preparation of subgrade, use of			\$
18	proper fills, densities, and lift thicknesses	1	Hour	-
	Field verify sprayed fire-resistant materials This includes			\$
19	mastic and intumescent fire resistant coatings	1	Hour	_
	Field testing and inspection of fire-resistant joint systems	_	11041	\$
20	and penetrations of fire-stop systems per section 1705.16	1	Hour	٦
20	and penetrations of fire-stop systems per section 1705.10	-	Tioui	-
24	Field testing of smaller control materials and a series 4705 47	_		\$
21	Field testing of smoke control systems per section 1705.17	1	Hour	-
	Field Inspection of Exterior Insulation and Finish systems			\$
22	(EIFS).	1	Hour	-
	Shop or Field Inspections for Seismic Resistance. Sections			
	1705.11 through 1705.12 and 1708.1 through 1708.6 in			\$
23	accordance with the Georgia Special Inspections Guidelines.	1	Hour	-
	Shop or Field Inspections for Wind Resistance. Section			
	1705.10 in accordance with the Georgia Special Inspections			\$
24	Guidelines.	1	Hour	-
	Field Verify installation of driven deep foundations, cast-in-			\$
25	place deep foundations, helical pile foundations	1	Hour	-
	place acep roundations, hencal plie roundations	-	1.001	\$
26	Field inspection (inspector)	1	Have	۶
26	Field inspection (inspector)	1	Hour	-
	Field I Project Engineer (i.e. Report writing and field			\$
27	investigation).	1	Hour	-
				\$
28	Senior Registered Professional Engineer GA	1	Hour	-
	Subtotal			

## **Subtotals**

Soils Testing	\$
Pavement Testing	\$
Structural Concrete	÷\$
Industrial Hygiene	\$
Environmental	\$
Special Inspections	\$\$

	то	OTAL BID \$	
_	ASE CHECK ONE AND FILL IN BLANKing days must be allowed for discou		award)
Less%D	ays Prompt Payment Discount (if of	fered)	
		(	)
Net - 30 Days (n	o discount offered)		- 0 -
	тс	OTAL NET BID \$	
CAN YOU MEET THE IN	ISURANCE REQUIREMENTS AS STAT	ED IN THESE SPECIFICATIO	NS? 
HAVE YOU INCLUDED APPENDIX A MUST BE	APPENDIX A IN YOUR RESPONSE? _ SUBMITTED ALONG WITH ALL OTH	ER REQUIRED DOCUMENTS	FOR THIS EVENT
ADDENDUM	ANY ADDENDA ISSUED FOR THIS BI	D:	
	ies with the General and Specific Sp narked in the attached copy.	pecifications and Condition	s issued by the
Please Print Name	Authorization Signature	Date	

#### NON-DISCRIMINATION STATEMENT

The prime contractor/bidder certifies that:

- (1) No person shall be excluded from participation in, denied the benefit of, or otherwise discriminated against on the basis of race, color, national origin, or gender in connection with any bid submitted to the City of Savannah or the performance of any contract resulting therefrom;
- (2) That it is and shall be the policy of this Company to provide equal opportunity to all business persons seeking to contract or otherwise interested in contracting with this Company, including those companies owned and controlled by racial minorities, cultural minorities, and women;
- (3) In connection herewith, we acknowledge and warrant that this Company has been made aware of, understands and agrees to take affirmative action to provide such companies with the maximum practicable opportunities to do business with this Company;
- (4) That this promise of non-discrimination as made and set forth herein shall be continuing in nature and shall remain in full force and effect without interruption;
- (5) That the promises of non-discrimination as made and set forth herein shall be and are hereby deemed to be made as part of and incorporated by reference into any contract or portion thereof which this Company may hereafter obtain and;
- (6) That the failure of this Company to satisfactorily discharge any of the promises of non-discrimination as made and set forth herein shall constitute a material breach of contract entitling the City of Savannah to declare the contract in default and to exercise any and all applicable rights and remedies including but not limited to cancellation of the contract, termination of the contract, suspension and debarment from future contracting opportunities, and withholding and or forfeiture of compensation due and owing on a contract.

Signature	Title

#### PROPOSED SCHEDULE OF M/WBE PARTICIPATION

All M/WBEs listed **must be certified as a <u>minority-owned or women-owned</u> business** by the City of Savannah or a federally-recognized or state-level certifying agency (such as USDOT, State DOT, SBA 8(a) or GMSDC) that utilizes certification standards comparable to the City of Savannah <u>prior</u> to the due date of this bid. <u>Other business certifications that do not specify majority woman or minority ownership may not be substituted</u>. Proof of M/WBE certification from the certifying agency is required to accompany the bid. A firm that has submitted an application for M/WBE certification but has <u>not</u> been certified is <u>not</u> qualified as a certified M/WBE and will not be recognized as such during the City's evaluation process. To expedite verification, please provide accurate phone numbers for all M/WBEs listed and ensure firms understand contact will be made following bid submittal.

Proj	ect Title:		nnah M/MPE Drogge			ent No. 3		ior all
firms listed	_	gii tile City oi Sava	nnah M/WBE Progra	am, <u>proor or wiy wi</u>	be certificatio	ii iiiust k	ie attacheu i	Of all
Name of M/WBE Participant	Name of Majority Owner	Telephone	Address (City, State)	Type of Work Sub- Contracted	Estimate d Sub- contract Value	MBE or WBE	Certified ? (Y or N)	Certifying Agency? (City of Sav. or Other)
					%			
					%			
					%			
					%			
					%			
					%			
The unders	igned will enter in	ito a formal agree	pation Value: ment with the M/V uting a contract with	VBE Subcontractor	•	dentified	d herein for	

The undersigned will enter into a formal agreement with the M/WBE Subcontractors/Proposers identified herein for work listed in this schedule, conditioned upon executing a contract with the Mayor and Aldermen of the City of Savannah. The Prime's subcontractor that subcontracts work must enter into a formal agreement with the tier subcontractor identified herein for work listed in this schedule. The Prime may count toward the goal any tier of M/WBE subcontractors and/or suppliers that will be utilized in the contract work. However, when an M/WBE subcontracts part of the work, the value of the subcontracted work may only be counted toward the goal if the tier subcontractor is an M/WBE. Any work an M/WBE firm subcontracts to a non-M/WBE firm will not count toward the M/WBE goal. It is the responsibility of the Prime contractor to advise all M/WBEs of this requirement and to ensure compliance by subcontractors.

#### **Joint Venture Disclosure**

If the prime bidder is a joint venture, please describe the nature of the joint venture, the level of work and the financial participation to be provided by the Minority/Female joint venture firm in the space provided below.

paratipation to the provinces by the	mieriej, i emiere jeme remeare miere epidee prome	
Joint Venture Firms	Level of Work	Financial Participation
Printed name (company officer or re	presentative):	
Signature:	Date	
Title:	Er	mail:
Telephone:	Fax:	

The Minority/Women Owned Business Office is available to assist with identifying certified M/WBEs. Please contact the M/WBE Office at (912) 652-3582. The City of Savannah's certified M/WBE registry is posted on its website @ www.savannahga.gov.

## **Developing a Strong M/WBE Participation Plan**

Key facts every bidder/proposer needs to know <u>prior</u> to developing their M/WBE Participation Plan:

- All bidders/proposers must submit a "Proposed Schedule of M/WBE Participation" which identifies the minority and/or woman-owned companies that have agreed to participate in the project if awarded. All companies listed on the form must be <u>certified</u> as either <u>minority</u>-owned and controlled or <u>woman</u>-owned and controlled. The City does <u>not</u> accept a company's "self-identification" as minority or woman-owned.
- 2. <u>Proof</u> of M/WBE certification from the certifying agency is <u>required to accompany the bid</u>; and certification must have been completed by the City of Savannah, a federally-recognized or a state-level certifying agency (USDOT, State DOT, SBA 8(a) or GMSDC) <u>utilizing certification standards comparable to</u> the City of Savannah.
- 3. The certification must have been approved <u>prior</u> to the due date of this bid. A firm that has submitted an application for certification but has **not** been certified will not be counted toward the M/WBE goal.
- 4. The M/WBE Office <u>will be contacting all M/WBE firms</u> included in the bidder's M/WBE Plan to confirm each: a) was contacted by the bidder/proposer; b) performs the type of work listed; and c) agreed to participate.
- 5. To expedite the verification process, bidders/proposers need to: provide accurate phone numbers for all M/WBEs listed; ensure M/WBEs know to expect to be contacted by phone and email; request M/WBEs be accessible during the critical period before bid-opening; and advise M/WBEs that City staff <u>must</u> receive the M/WBE's confirmation that the firm agreed to participate in the bid/proposal in order for the prime contractor to receive credit toward their proposed M/WBE participation goals.
- 6. If a proposed M/WBE cannot be confirmed as certified, performing the type of work described <u>or</u> agreeing to participate, the bidder/proposer will be notified and given a pre-determined period to submit a correction. If an M/WBE still cannot be confirmed or replaced, the proposed percentage of participation associated with the unverified M/WBE firm will <u>not</u> <u>be counted</u> and <u>will be deducted</u> from the overall proposed M/WBE goal.
- 7. <u>Any tier</u> of M/WBE subcontractors or suppliers that will be utilized in the contract work may count toward the MBE and WBE goal <u>as long as the tier subcontractors/suppliers are certified M/WBEs</u>. Work that an M/WBE subcontracts to a non-M/WBE firm does <u>not</u> count toward the M/WBE goal.
- 8. M/WBEs must perform a "commercially useful function" which is the provision of <u>real and actual work or products</u>, or performing a distinct element of work for which the business has the skills, qualifications and expertise, and the responsibility for the actual management and supervision of the work contracted.
- 9. Per the *Proposed Schedule of M/WBE Participation* "the undersigned (bidder/proposer) will enter into a formal agreement with the M/WBE Subcontractors/Proposers identified herein for work listed in this schedule, conditioned upon executing a contract with the Mayor and Aldermen of the City of Savannah." This signed commitment is taken seriously by the City, so do <u>not</u> list M/WBEs you do not plan to utilize. Any proposed changes must be pre-approved by the M/WBE Office, be based on legitimate business-related reasons, and still meet the M/WBE participation goals per the City's contract.
- 10. A bidder who is a certified M/WBE may count toward the goal <u>the portion of work or services</u> on a City contract that is <u>actually performed by the M/WBE</u>, including: the cost of supplies/materials purchased or equipment leased for contract work, fees for bona fide services such as professional or technical services, or for providing bonds or insurance specifically required for the performance of a City contract.
- 11. If awarded the contract, the MWBE Office <u>will be reviewing your company's subcontracts, invoices and payment records</u> to substantiate the completion of work and payment of M/WBEs. If the prime contractor is an M/WBE that is being included in its M/WBE goal, the prime contractor must maintain records <u>that will be inspected</u> to prove the portion of work performed, cost of work, and payments to the prime company.
- 12. Most bids for goods and materials do not have specific MWBE goals established for the contract. If no goals are include in the scope of work or General Specifications, you are not required to submit MWBE participation but encouraged to do so when the opportunity is available. The City maintains this information for statistical purposes only and it is not reflected in the award decision.

# Appendix A Fee Schedule for Less Frequent Tests

ITEM NO	DESCRIPTION	EST. QUANT	UNIT	UNIT PRICE	TOTAL	
	Soil Testing					
	In-Place Soil Density:					
1	a. Sand-Cone Method, ASTM D1556	1	Each		\$	-
2	b. Rapid Method, ASTM D5080 (3 test set)	1	Set		\$	-
3	c. Drive Cyl. Mthd., ASTM D2937	1	Each		\$	-
	<b>Moisture Content of Soil:</b>					
4	a. Direct Heating Method, ASTM D4959	1	Each		\$	-
5	b. Laboratory Method, ASTM D2216	1	Each		\$	-
6	c. Microwave Oven Method, ASTM D4643	1	Each		\$	-

	<b>Structural Concrete Testing</b>	EST. QUANT	UNIT	UNIT PRICE	TOTAL
	Flexural Strength of Beams:				
1	a. Three Point Loading, ASTM C78	1	Set		<b>\$</b> -
2	b. Center Point Loading, ASTM C293	1	Set		<b>\$</b> -
3	Flexural Strength of Concrete, Sawed Beams, ASTM C42	1	Each		<b>\$</b> -
4	Air Content of Concrete: ASTM C231 (Pressure Method)	1	Each		\$ -
	Crack gauge:				
5	a. Placement and setup of gauge	1	Each		<b>\$</b> -
6	b. Monitoring	1	HR		<b>\$</b> -

	Environmental Testing	EST.		UNIT		TIME	Expedited	Expedited Time
		QUANT	UNIT	PRICE	TOTAL	(Days)	Price Total	(Days)
	Phase II Environmental Site Assessments							
	per ASTM E1903-11 (per site/report, not				\$			
1	including drilling or analytical costs)	1	HR		-			
					\$			
2	Hand Auger Borings	1	LF		-			
					\$			
3	Direct Push Borings	1	LF		-			
					\$			
4	Hollow Stem Auger Borings	1	LF		-			
	2" Groundwater Monitoring Well				\$			
5	Installation	1	LF		-			
	Monitoring Well Completion (well pads				\$			
6	and flush mounts covers)	1	Each		-			

	Soil Contamination Testing (in					
	accordance with EPA requirements)					
	a. Volatile Organic Compounds (USEPA			\$	\$	
7	Method 8260B)	1	Each	-	_	
<del>                                     </del>	b. Benzene, Toluene, Ethylbenzene, and	-	Lacii	\$	\$	
8	Total Xylenes (USPEA Method 8260B)	1	Each	ب -	,	
•	c. Semi-volatile Organic Compounds	-	Eacii	\$	\$	
9	(USEPA Method 8270C)	1	Each	ې -	3	
9	•	1	Each		-	
10	d. Polycyclic Aromatic Hydrocarbons		Faab	\$	\$	
10	(USEPA Method 8270C)	1	Each	-	-	
	e. Total Petroleum Hydrocarbons –				\$	
	Gasoline Range Organics (USEPA Method			\$	-	
11	8015B)	1	Each			
l	f. Total Petroleum Hydrocarbons – Diesel			\$	\$	
12	Range Organics (USEPA Method 8015B)	1	Each	<u>-                                      </u>	-	
	g. RCRA Metals (including Mercury)			\$	\$	
13	(USEPA Method 6010B)	1	Each	<u>-                                      </u>	-	
[	h. Pesticides (USEPA Method 8081A)		l	\$	\$	
14	, , , , , , , , , , , , , , , , , , , ,	1	Each	-	-	
	i. Herbicides (USEPA Method 8151)		l	\$	\$	
15		1	Each		-	
	j. Polychlorinated Biphenyls (USEPA			\$	\$	
16	Method 8082)	1	Each	-	-	
	k. Toxicity Characteristic Leaching			\$	\$	
17	Procedure – Metals	1	Each	-	-	
	I. Toxicity Characteristic Leaching			\$	\$	
18	Procedure – Volatiles	1	Each	-	-	
	m. Toxicity Characteristic Leaching			\$	\$	
19	Procedure – Semi-volatiles	1	Each	-	-	
	Groundwater Sample Analysis					
1	a. Volatile Organic Compounds (USEPA			\$	\$	
20	Method 8260B)	1	Each	-	-	
	b. Benzene, Toluene, Ethylbenzene, and			\$	\$	
21	Total Xylenes (USPEA Method 8260B)	1	Each		-	
	c. Semi-volatile Organic Compounds			\$	\$	
22	(USEPA Method 8270C)	1	Each	-	-	
	d. Polycyclic Aromatic Hydrocarbons			\$	 \$	
23	(USEPA Method 8270C)	1	Each	-	 -	
	e. RCRA Metals (including Mercury)			\$	 \$	
24	(USEPA Method 6010B)	1	Each	-	-	
	f. Pesticides (USEPA Method 8081A)			\$	\$	
25	i. resticides (USEPA METROD 8081A)	1	Each	<u>-</u>		
	a Harbicidas (HSEDA Mark - 4 0454)			\$	\$	
26	g. Herbicides (USEPA Method 8151)	1	Each			
	Polychlorinated Biphenyls (USEPA			\$	\$	
27	Method 8082)	1	Each	-	-	
	Equipment Rates					
	Photoionization Detector/Organic Vapor			\$		
28	Analyzer	1	Day	-		
	-			\$		
29	Methane Gas Detector	1	Day	-		
				\$		
30	Bailers	1	Each	-		
				\$		
31	Peristaltic Pump	1	Day	-		
<u> </u>						

	Industrial Hygiene	EST. QUANT	UNIT	UNIT PRICE	TOTAL	TIME (Days)	Expedited Price Total	Expedited Time (Days)
					\$		\$	
1	Baseline Testing for Indoor Air Quality	1	Each		-		-	
2	Mold Survey Field Services (Visual)	1	HR		\$ -			
3	Mold sampling (Air samples - spore tests) by methods recommended by the American Industrial Hygiene Association (AIHA), the American Conference of Governmental Industrial Hygienists. (ACGIH)	1	Each		\$ -		\$ -	
4	Mold Swab Testing (Surface or culture)	1	Each		\$ -		\$ -	
5	Mold bulk sample	1	Each		\$ -		\$ -	
6	Mold water sample	1	Each		\$ -		\$ -	
7	Mold sample report (Lab report from AIHA lab)	1	Each		\$		\$	
8	Sick Building Syndrome Field Services (Walkthrough)	1	HR		\$ -			
9	Sick Building Syndrome Biological Testing	1	HR		\$ -			
10	Sick Building Syndrome Chemical Testing	1	HR		\$ -			
11	Sick Building Syndrome Air Testing	1	HR		\$ -			
12	Sick Building Syndrome Report	1	Each		\$ -			
13	Radon Testing (Short-term test)	1	Each		\$ -		\$ -	
14	Radon Testing (Long-term test)	1	Each		\$ -		\$ -	
15	XRF Testing	1	Each		\$-		\$ -	
16	Roof Patching	1	SF		\$-			

## Appendix B

TABLE 1704.2 MINIMUM S	PECIAL INSPECTOR (	OLIALIEICATIONS	
TABLE 1704.2 WHATWOW S	1		
	Minimum C	Qualifications (refe	er to key at end of Table)
Category of Testing and Inspection	Shop Testing or Inspection	Field Testing or Inspection	Review Testing, Certification, & Lab Reports
1704.2.5 Inspection of Fabricators			
Pre-cast concrete	A, C, E		
Structural steel construction	C, F, G		
Wood construction	Α		
Cold formed metal construction	Α		
1705.2, 1705.10, 1705.11& 1705.12 Steel Construction			1
Verification of welding consumables, filler metals,			
procedure, specifications, procedure qualification records			C, F
and personnel performance qualification records		•	
Nondestructive testing of welding	G	G	
Inspection of welding Verification of fabricator and erector documents as listed	C, F	C, F	
in AISC 360, 14th edition, chapter N, paragraph 3.2			A, C
Material verification of weld filler materials			C, F
Inspection of high strength bolting and steel frame joint			C, 1
details		A, C	
Inspection of embedments and erection of fabricated steel		4.6.5	
and steel frame elements		A, C, F	
Inspection of steel elements of composite construction		A, C, F	
Verification of reinforcing steel, cold formed steel deck and			A, C, F
truss materials			7,, 6, 1
Inspection of reinforcing steel, cold formed steel deck and		A	
trusses			
1705.3 & 1705.12 Concrete Construction  Reinforcing placement, cast-in-place bolts, post installed			
anchors concrete and shotcrete placement and curing			
operations. Inspection of formwork for shape, location and		A, C, H	
dimensions			
Pre-stressing steel installation		A, C, D, E	
Erection of pre-cast concrete members		A, C, H	
Concrete field sampling and testing		A, J	
Review certified mill reports			A, C
Verify use of required design mix		A, I, J, H, C	
Pre-stressed (pre-tensioned) concrete force application	A, C, E		
Post-tensioned concrete force application		A, C, D	
Review of in-situ concrete strength, prior to stressing of		1	
tendons in post-tensioned concrete and prior to removal		A, C, D, H	
of shores and forms from beams and structural slabs		-	
Reinforcing steel weldability, reinforcing welding, weld filler material		C, F	
Testing of welding of reinforcing steel		G	
1705.4 Masonry		_	
Verification of f'm and f'AAC		A, C, L, M	
Mortar joint construction, grout protection and placement,			
materials proportion, type/size/location of reinforcement,		A, C, K	
structural elements, anchorage, and connectors		1	
Sampling/testing of grout/mortar specimens		A, C, L, M	
Observe preparation of masonry prisms for testing of			
compressive strength of masonry, f'm and f'AAC		A, C, K, L, M	
Inspection of welding of reinforcing steel		C, F	
Testing of welding of reinforcing steel		G	
	tinued on next page,	)	

TABLE 1704.2 MINIMUM SPECIAL INSPECT	OR QUALIFICATION	ONS (continued)			
Minimum Qualifications (refer to key at end					
Category of Testing and Inspection	Shop Testing or Inspection	Field Testing or Inspection	Review Testing, Certification, & Lab Reports		
1705.6 & 1804 Soils					
Observe site preparation, fill placement testing of compaction for compliance with the construction documents for the project		A, C, I, N			
Observe test bearing materials below shallow foundations for ability to achieve design bearing capacity		A, C, N, I (Level III)			
Review compaction testing for compliance with the construction documents for the project			A		
1705.5, 1705.10, 1705.11 & 1705.12 Wood Construction					
Observe structural panel sheathing, size of framing members, nail or staple diameter and length, number of fastener lines, and spacing of fastener lines and fasteners for compliance with construction documents for the project		A			
Observe temporary and permanent truss member restraint/bracing, field gluing of elements. Observe bolting, anchoring or other fastening of: shear walls, diaphragms, drag struts, braces and hold-downs.		A			
1705.7, 1705.8, 1705.9 & 1810 Pile and Pier Foundations					
Observe installation		A, N			
Observe load tests		А			
1705.13 Sprayed Fire-Resistant Materials					
Observe surface conditions, application, average thickness and density of applied material, and cohesive/adhesive bond		А, С			
1705.14 Mastic and intumescent fire-resistant coatings					
Observe application compliance with AWCI 12-B		A, C			
1705.15 Exterior Insulation and Finish Systems					
Inspect EIFS systems		A, B, C, O			
1705.1 Special Cases					
Work of unusual or special nature		A, B, O			
1705.16 Fire-Resistant Penetrations and Joints	See Requireme 17016.2	ents of IBC Sec	tions 1705.16.1 and		
1705.17 Smoke Control	See Requireme	ents of IBC Sec	tion 1705.17.2		
1705.10, 1705.11, 1705.12, Seismic and Wind Resistance					
Periodic inspection of fabrication, installation and/or anchorage of building systems and components		А			
(Table Continued on	next page)				

#### **TABLE 1704.2 MINIMUM SPECIAL INSPECTOR QUALIFICATIONS** (continued)

#### KEY:

- A. Georgia Professional Engineer (GA PE) competent in the specific task area or graduate of accredited engineering/engineering technology program under the direct supervision of a GA PE.
- B. Georgia Registered Architect (GA RA) or graduate of accredited architecture/architecture technology program under the direction of a GA RA.
- C. International Code Council (ICC) Special Inspector Certification specific to the particular material and testing methodology applicable to each Category of Testing and Inspection listed in the table.
- D. Post-tensioning Institute (PTI) Certification, Level 2, bonded or unbonded as applicable.
- E. Pre-stressed Concrete Institute (PCI) Certified Inspector.
- F. American Welding Society (AWS) Certified Welding Inspector (CWI) or AWS Certified Associate Welding Inspector working under the
- direct on-site supervision of a CWI.
- G. American Society for Nondestructive Testing (ASNT) Level II certification, or a Level III certification if previously certified as a Level II in

the particular material and testing methodology applicable to each Category of Testing and Inspection listed in the table.

- H. American Concrete Institute (ACI) Concrete Construction Special Inspector.
- I. National Institute for Certification in Engineering Technologies (NICET) Level II or higher certification specific to the particular material and testing methodology applicable to each Category of Testing and Inspection listed in the table.
- J. ACI Concrete Field Testing Technician with Grade 1 certification.
- K. Georgia Concrete and Products Association (GC&PA) Masonry Association of Georgia (MAG) Masonry Construction Inspector Certification.
- L. National Concrete Masonry Association (NCMA) Concrete Masonry Testing Procedures certification.
- M. GC&PA MAG Masonry Testing Technician certification.
- N. NICET Certified Engineering Technologist (CT).
- O. Other Qualified Special Inspector as approved by the Building Official.

#### Notes:

- 1. The Special Inspector shall meet one of the minimum qualifications listed for the applicable Category of Testing and Inspection.
- 2. Testing Agency meeting the requirements of IBC Section 1703 and ASTM E 329.