

CITY OF PORTSMOUTH
School Department

Testing and Special Inspections for the Middle School

REQUEST FOR PROPOSAL

Sealed proposals, plainly marked, RFP # 06-11 Testing and Special Inspections for the Middle School shall be addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, New Hampshire, 03801. **Proposals will be accepted until July 9, 2010 at 2:00 p.m.**

The City of Portsmouth is asking qualified Inspection and Testing Firms to prepare Proposals for the following services at the Middle School and Granite Street sites:

Special Inspections and Testing services to ensure design and materials adhere to construction specifications and industry standards, including structural steel inspection and testing, welding inspection, high-strength bolts inspection, concrete, masonry, soils (site prep, materials and lift thickness, compaction compliance) inspection, inspection and testing of piles and piers, fireproofing, and seismic and/or wind resistance.

This Request for Proposal may be obtained from the Finance/Purchasing Department on the third floor at the above address, by calling the Purchasing Coordinator at 603-610-7227, or from our website www.cityofportsmouth.com. Questions may be directed to the Purchasing Coordinator. Addenda to this document, if any, including written answers to questions, will be posted on the City of Portsmouth website at <http://www.cityofportsmouth.com/finance/purchasing.htm> under the proper heading. Addenda and updates will NOT be sent directly to vendors.

The City of Portsmouth reserves the right to reject any or all proposals, to waive technical or legal deficiencies, and to accept any proposal that it may deem to be in the best interest of the City.

REQUEST FOR PROPOSALS
for
Testing and Special Inspections for the Middle School

I
Purpose

The City of Portsmouth is asking qualified Inspection and Testing Firms to prepare Proposals for the following services:

Testing and special inspections services on work related to the renovation and addition to the Middle School on Parrott Ave, including work at the Granite Street Softball Field. Contractor will ensure design and materials adhere to construction specifications and industry standards, including construction inspection services, structural steel inspection and testing, welding inspection, high-strength bolts inspection, concrete, masonry, soils (site prep, materials and lift thickness, compaction compliance) inspection, inspection and testing of piles and piers, Fireproofing, and Seismic and/or Wind Resistance.

Testing and special inspections for this project will be required at two sites. The first site is located at 25 Granite Street where a softball field and concession stand will be constructed. This work will take place during the summer and fall of this year. The major portion of the services will be required at the Portsmouth Middle School, on Parrot Ave. Work will include major renovation of the existing 85,000 square foot facility as well as a construction of a 51,000 square foot addition. Construction will be done in three phases while the building is occupied and is anticipated to start in January 2011, completed by August 2013.

II
Scope of Work

The work shall consist of the following items:

- 1) Periodic field nuclear density testing. Contractor shall provide a technician certified in the operation of nuclear density equipment.
- 2) Concrete testing to include the services of a technician on site to determine slump, air content and density of fresh concrete, prepare test cylinders, check cleanliness of forms and observe the arrangement of reinforcing steel against standards outlined in ACI 318 and ASTM A 706.
- 3) Laboratory analyses of site materials. Contractor shall provide various reports relating to sieve analyses and proctor determinations.

The following tests and inspections as required by IBC (2000), Chapter 17:

- 4) Structural steel inspections: Contractor shall inspect steel frame to verify compliance with the details shown on the approved construction documents, including “bracing, stiffening, member locations and proper application of joint details at each connection”. Inspectors **must be** certified as a CWI, MT, and UT at a minimum. Uncertified personnel will not be allowed to work on our projects.

- 5) Welding inspections.
- 6) Inspections of high-strength bolts: periodic inspection of installation and tightening according to product or design specs.
- 7) Masonry construction:
 - a) Verify periodically
 - i) Proportions of site-prepared mortar.
 - ii) Compliance of construction of mortar joints.
 - iii) Compliance of location of reinforcement and connectors.
 - b) Inspect periodically to verify:
 - i) Size and location of structural elements.
 - ii) Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction.
 - iii) Specified size, grade and type of reinforcement.
 - iv) Temperature protection of masonry.
 - c) Inspect periodically to verify:
 - i) Welding of reinforcing bars.
 - d) Prior to grouting, periodically verify
 - i) Cleanliness of grout space.
 - ii) Placement of reinforcement and connectors.
 - iii) Proportions of site-produced grout.
 - iv) Construction of mortar joints.
 - v) Compliance with required inspection provisions of construction documents and approved submittals.
 - e) And provide continuous inspection of grout placement to ensure compliance with code and construction document provisions.
- 8) Soils compliance
 - a. Site soil conditions: Contractor to determine that the site has been prepared in accordance with the approved soils report.
 - b. During fill placement: Contractor to determine the material being used and the maximum lift thickness comply with the approved report.
 - c. Evaluation of in-place density: Contractor shall determine, at the approved frequency that the in-place dry density of the compacted fill complies with the approved report.
- 9) Pile foundations: Contractor shall be present when installed and during tests. Contractor shall submit a record of each installation and result of load tests. Records shall include the cutoff and tip elevation of each pile relative to a permanent reference.
- 10) Pier foundations: Contractor shall inspect pier foundations when building assigned to Seismic Design category C, D, E, or F.

11) Fireproofing: Contractor shall:

- a) Material Specifications: Monitor materials used for conformance with Construction Documents.
- b) Laboratory-tested Fire Resistance Design: Review the compliance of materials, preparation, and application for fire resistance design as prescribed in the Construction Documents.
- c) Surface Preparation: Monitor the preparation of structural surfaces to receive (spray or other) fireproofing. Surface preparation must be in accordance with fire-resistance design. Review prior to application of fire-resistant material.
- d) Application: Review materials used and compliance with fire-resistant design. Monitor substrate temperature before and after application for compliance with manufacturer's approved written instructions. Verify ventilation during and after applications per manufacturer's instructions.
- e) Curing and Ambient Condition: Monitor substrate temperature before and after application for compliance with manufacturer's approved written instructions. Verify ventilation during and after applications per manufacturer's instructions.
- f) Thickness: Verify that average thickness of (sprayed or other) fire-resistant materials applied is not less than that required by design and schedule of thickness.
- g) Density: Verify the density of each application is in accordance with the approved fire-resistant design and ASTM E 605. Samples and testing for structural systems should be selected per 1704.11.3.1 and 1704.11.3.2 (if/where applicable).
- h) Bond Strength (if/where applicable): test and monitor the cohesive/adhesive bond strength of the cured material... Bond strength shall not be less than 150 psf. Determine bond strength in accordance with ASTM E 736 and testing per 1704.11.5.1 and 1704.11.5.2.

12) QA's for Seismic and/or Wind Resistance: Contractor to provide QA plan for seismic requirements according to category of building AND/OR a plan for wind resistance, again, according to category of building, if required.

All equipment, samples, testing and laboratory methods shall be accordance with methods prescribed by the available pertinent publication of AASHTO, ASTM or FSS. Maximum density determination will be made as specified in AASHTO T 99 (Standard Proctor Test). In-place density determination will be made by AASHTO T 238 & T 239 (Nuclear Method).

All per diem and test prices to include transportation of personnel, all incidental laboratory charges, field equipment charges, administrative fees and reports *unless otherwise indicated*.

Contractor shall be required to obtain a Dig Safe number before digging or drilling operations commence.

III Proposal

The proposal shall include the following:

1. A Statement of Qualifications of the submitting firms and subcontractors including (3) three references for similar recent projects including current contact name and phone numbers.
2. The firm submitting the proposal shall employ a Registered Professional Engineer in the State of New Hampshire and such engineer or engineers shall be identified in the Statement of Qualifications.
3. Proposals shall include a brief resume of municipal building work, and a breakdown of work such as field work, office work, etc.
4. Contractor shall price various tasks as outlined in the Scope of Work and Pricing Sheet.

By submitting a proposal, the firm consents to the City undertaking such investigation as it deems in its best interest to investigate the firm's qualifications. The submitting firm assumes all responsibility for any costs it incurs in preparing a response to this Request for Proposal.

IV Selection Criteria and Award of Contract

The firms will be ranked on the following criteria: qualifications, including experience, staffing and reputation, as well as price. The City will enter into contract negotiations with the first- ranked firm. If the City cannot reach agreement with the first-ranked firm, the City will proceed to the next highest ranked firm. It is the City's intention that contract negotiations will be completed by July 22, 2010 for work to commence immediately.

Firms may assume for purposes or pricing that the selected Contractor will be required to maintain insurance throughout the period of the contract in sufficient amounts as to protect the Contractor from all claims and liabilities for damages for bodily injury, including accidental death, and for property damage, which may arise from operations under this Contract whether such operation by himself or by anyone directly or indirectly employed by him. The following amounts of insurance are anticipated:

- A. Comprehensive General Liability:
Bodily Injury or Property Damage - \$2,000,000
- B. Automobile and Truck Liability:
Bodily Injury or Property Damage - \$2,000,000
- C. Professional Liability:
Errors and Omissions - \$1,000,000
- D. Workers Comprehensive Insurance coverage for all people employed by the Contractor to perform work on this project.

NOTE: The City of Portsmouth, JCJ Architecture and Gilbane Building Company must be named as Additional Insured.

V

Reservation of Rights

The City of Portsmouth reserves the right to reject any and all proposals, to waive technical or legal deficiencies, and to accept any proposals that are deemed to be in the best interest of the city.

VI

Pricing Sheet

FIELD TESTING	UNITS
<p>A. Soils Field Inspection: Field engineer to:</p> <ul style="list-style-type: none"> • Determine that the site has been prepared in accordance with the approved soils report <p>Field soils technician to:</p> <ul style="list-style-type: none"> • During fill placement, determine the material being used and the maximum lift thickness comply with the approved report • Monitor the placement of fill and determine the in-place moisture and density of fill soils. <p>Daily Soils Report</p>	<p>Field Engineer per hour Field Soils Technician Per day and half day</p> <p>Reports Per Each</p>

<p>B. Concrete with Reinforcing Steel Field Inspection:</p> <ul style="list-style-type: none"> • Inspect reinforcing steel, including pre-stressing tendons and placement • Inspect reinforcing steel welding • Inspect bolts to be installed in concrete prior to and during placement of concrete • Verify use of required design mix of concrete • Perform quality-control testing on-site to include slump test, air content, concrete and air temperature of fresh concrete at the time of making specimens for strength tests • Inspect concrete (or shot Crete) placement for proper application 	<p>Special Inspector per Hour</p> <p>Field Technician Per Day and Half Day</p>
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<p>techniques</p> <ul style="list-style-type: none"> • Inspect for maintenance of specified curing temperature and techniques <p>Daily Reinforced Concrete Report</p>	<p>Reports Per Each</p>
<p>C. Pre-cast, Pre-stressed Concrete: Qualified Personnel to:</p> <ul style="list-style-type: none"> • Inspect for application of pre-stressing forces • Inspect grouting of bonded pre-stressing tendons in the seismic-force-resisting system (if applicable) • Inspect erection of pre-cast concrete members • Verify in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs. <p>Daily Pre-cast Concrete Reports</p>	<p>Qualified Personnel per Half Day and Full Day</p> <p>Reports Per Each</p>
<p>D. Masonry Special Inspector to:</p> <ul style="list-style-type: none"> • Inspect proportions of site-prepared mortar and grout • Inspect placement of masonry units and construction of mortar joints and verify compliance • Inspect reinforcement and connectors, verify placement in compliance, as well as size and type • Inspect welding of reinforcing bars, placement of grout, size and location of anchors • Inspect cleanliness of grout space, proportions of site-produced grout, construction of mortar joints and grout placement <p>Daily Masonry Report</p>	<p>Special Inspector per Hour</p> <p>Reports Per Each</p>

Daily Plant Inspection Report	Reports Per Each
I. Nuclear Density Gauge Rental	Per Hour
J. Project Engineer	Per Hour
K. Project Manager	Per Hour
L. Professional Engineer	Per Hour
M. Principal	Per Hour

LABORATORY TESTING

A. Compression test of 6"x12" cyl:	Each
B. Compression test of cyl made by others:	Each
C. Washed Sieve Analysis Includes coarse and fine aggregate and #200 wash	Each
D. Moisture Density Relationship: Modified or standard method	Each
E. Compression Test of Mortar Cubes	Each
F. Compression Test of Grout Prisms	Each
G. Compression test of masonry Prism – 2-high	Each

MISCELLANEOUS AND TRAVEL

A. Mileage/Technician Time	
B. Sample Pick-ups only	
C. Overtime	

**NOTE: Pricing is for evaluation purposes only.
Actual project work may require different or additional services.**