

PROJECT FACT SHEET

HVAC Test & Balance Services for
Four (4) School Projects

RFQ #SDOC-07-061-FPC

DESCRIPTION OF SERVICE: Represent the School District as their Consultant in Test & Balance for HVAC systems for the following projects:

<u>Project</u>	<u>Est. Construction Budget</u>	<u>Opening Date</u>
Elementary School "J"	\$18,200,000.00	August 2008
Elementary School "K"	\$16,000,000.00	January 2008
Elementary School "L"	\$18,200,000.00	August 2008
Sports Authority Store Conversion	\$8,500,000.00	August 2007

1. GENERAL

Anticipated services could include, but not be limited to the following:

- 1.1. Provide all services necessary to investigate and inspect HVAC equipment for problems that relate to but not be limited to materials, workmanship, age, warranty, and deterioration.
- 1.2. Provide all services necessary for review of HVAC design, preparation of construction drawings and specifications, and provide contract administration and project inspection services for the construction of HVAC equipment for the selected project.
- 1.3. Provide a Scope of Work detailing the type of system for the selected project requiring HVAC Test & Balance Services and submit to the School District Representative(s) for approval.
- 1.4. Provide technical support in HVAC Test & Balance matters to the Facilities and Maintenance Department.
- 1.5. Provide national performance guarantee from A.A.B.C. (Associated Air Balance Council) or N.E.B.B. (National Environmental Balancing Bureau).
- 1.6. Provide commissioning per A.A.B.C. standards and guidelines.
- 1.7. Review and comment on Educational Specifications, design submittals, and construction documents prepared by other consultants.

- 1.8. Review, provide inspection services, and report on specific areas of construction when requested.
- 1.9. Provide support with school site analysis, educational specification preparation, construction project budgeting, etc. in accordance with:
 - a. The current edition of Florida State Board of Education, State Requirements for Educational Facilities.
 - b. Osceola County Educational or Ancillary Specifications where required.
 - c. Provisions of the Florida State Board of Education, State Requirements for Educational Facilities, Section 1013 Florida Statutes.
 - d. Current industry standards.
- 1.10. Provide services for investigation, identification, analysis, and recommendation with costs for specific school facility problems or needs assigned on selected project(s).
- 1.11. Provide technical support by the use of other consultants when specialized areas of expertise are needed.
- 1.12. At the School District's option, the selected firm may be requested to attend School Board meetings.

2. SCOPE OF SERVICES

The Scope of Services will include, but will not be limited to, the following:

- 2.1. Pre-construction plan review will be performed to identify items which may cause problems in obtaining the final balance conditions, as required by the design. The review will include but will not be limited to; finding overlooked or missing items, elimination of items which may not be required, mechanical items which have caused problems due to malfunction or erroneous data, duct work that could prevent proper distribution, placement of air distribution outlets, etc. Upon completion of the review, a written report of the recommendations will be submitted. Adopted recommendations will be forwarded to the Project Architect and School District Representative(s). The HVAC Test and Balance Consultant will perform a minimum two (2) plan reviews for each construction project. The plan reviews will be performed during the Phase I and Phase II reviews of the project, or as required by the School District Representative(s).

- 2.2. Periodic inspections during construction will be made as the job advances. The HVAC Test and Balance Consultant will be required to visit the jobsite and make general inspections of the work being performed. A jobsite checklist will be made during these inspections which will include all items installed. Any discrepancies noted regarding equipment, installation, or placement will be immediately reported in writing to the School District Representative(s). Inspections will continue until completion of the project and each subsequent report will list corrections made from previous reports. The HVAC Test and Balance Consultant will assist the School District Representative(s) with resolving discrepancies and making corrections.

- 2.3. Air distribution test and balance or re-balance will include balancing of the air conditioning, ventilating, and exhaust systems to achieve the air quality specified. Prior to proceeding with work, the HVAC Test and Balance Consultant will perform a full inspection of all mechanical systems to determine their compliance with design drawings. A written report of deficiencies will be submitted to the School District Representative(s). Tests and procedures may include, but not be limited to the following:
 - a. Test fan RPM to design requirements;
 - b. Test and record motor running amperage for each phase;
 - c. Make pitot tube traverse at main supply ducts and obtain design CFM at fans;
 - d. Test and record systems static pressures, suction and discharge;
 - e. Test and adjust system for design re-circulated air CFM;
 - f. Test and adjust system for design outside air CFM (heating and cooling);
 - g. Test and record entering air temperatures (dry bulb for heating and cooling);
 - h. Test and record entering air temperatures (wet bulb for cooling);
 - i. Adjust all main supply and return air ducts to proper design CFM;
 - j. Adjust all zones to proper design CFM, supply and return;
 - k. Test and adjust each diffuser, grille, and register to within plus or minus 10 percent of design requirements, if possible. If not possible, balance to optimum performance capability of system and inform the School District Representative(s) in writing;
 - l. In cooperation with the control manufacturer's representatives, setting adjustments of automatically operated dampers to operate as specified, indicated, and/or noted. The HVAC Test and Balance Consultant will check all controls for proper calibrations and list all controls requiring adjustment.
 - m. All diffusers, grilles, and registers will be adjusted to minimize drafts in all areas;

- n. Fume hood fans will be adjusted to CFM requirements specified. Test of fume hood enclosures will be made to determine velocities across opening in accordance with applicable safety codes.
- 2.4. Hydronic systems test and balance or re-balance will include balancing of condenser, chilled and heating hot water circulating systems to obtain water quantities, and temperature differentials through all system components. The HVAC Test and Balance Consultant will perform the tests and adjustments, listed below, in balancing the hydronic systems. Prior to proceeding with work, the HVAC Test and Balance Consultant will perform a full inspection of all mechanical systems to determine their compliance with design drawings. A written report of deficiencies will be submitted to the School District Representative(s). Prior to commencing any tasks in this category, all water systems will be determined by the HVAC Test and Balance Consultant to be free of construction debris and/or any foreign materials. The work may include, but not be limited to, the following types of tests and procedures:
- a. Perform when requested, performance evaluation of water chiller (centrifugal or reciprocal) in conformance with ARI 550-83 (or latest applicable procedure).
 - b. Test and record pump head at full flow and no flow.
 - c. Record pump motor running amps, volts, and brake horsepower.
 - d. Compare pump operating head and brake horsepower with pump curve for flow verification.
 - e. Test and record flow station pressure drop in corresponding GPM.
 - f. Test and record chiller and condenser pressure drops, and entering and leaving water temperatures.
 - g. Balance condenser water flow cooling tower particularly to each cooling tower basin, and perform an eight hour log study of cooling tower.
 - h. Test and record terminal elements pressure drop, entering and leaving wet and dry bulb temperatures.
 - i. Test and record terminal elements final total heat transfer.
 - j. List water metering device readings.
- 2.5. Sound analysis, if requested by Owner, the HVAC Test and Balance Consultant will conduct tests in selected areas of the building as specified. Sound level readings will be measured in decibels on the A and C scales of the General Radio Sound Level Meter or equal sound level meter that meets the current American Standard procedures based on the acoustic referenced power of db/re 10.13 watts. Readings will set forth the total random sound level of the selected rooms or areas with the system in operation as compared to total background sound level with the system not in operation.

- 2.6. The system increase over the background level will be recorded in decibels on the A and C scales. If sound levels are above those specified, adjustments will be made to bring the sound level within the range set forth, if possible, with the equipment installed.
- 2.7. A corrective action report will include all test results by building number and room number where the various tests occurred. Reading and thermal analysis performed during the major component performance analysis will be stated and compared with the manufacturer's specifications of the components. Problems will be generally and specifically identified and recommendations for corrective action(s) will be provided to the School District Representative(s).
- 2.8. Corrective action inspection will occur upon completion of those items selected by the School District Representative(s) from the corrective action report for repair, adjustment, or clearing. The HVAC Test and Balance Consultant will submit a written report to the School District Representative(s) providing the results of the inspection prior to proceeding with the test and balance of air distribution and hydronic systems.
- 2.9. Instruction of operation to School District personnel will occur upon completion of the testing and balancing of all systems. The HVAC Test and Balance Consultant will provide a thorough review of the final HVAC Test and Balance report including any open deficiencies and design concerns to the School District Representative(s).
- 2.10. The following services will be provided under work designated New Construction:
 - a. Pre-construction plan review;
 - b. Periodic inspection during construction;
 - c. Air distribution test and balance;
 - d. Hydronic systems test and balance;
 - e. Sound analysis, if requested;
 - f. Reporting results to the School District Representative(s) of inspections, tests, and/or work performed;
 - g. Instruction of operation to School District personnel.
- 2.11. The following services will be provided under any work designated Existing Facilities:
 - a. Major component performance analysis;
 - b. Corrective action report;

- c. Corrective action inspection;
 - d. Air distribution test and balance;
 - e. Hydronic systems test and balance; and,
 - f. Reporting results of inspections, tests, and/or work performed to the School District Representative(s).
- 2.12. The following services will be provided under any work designated Consultations and Trouble Shooting:
- a. When directed, investigate problems of existing systems;
 - b. Report findings of investigation;
 - c. If directed, perform corrective work to make system operative or more efficient.

3. TEST & BALANCE QUALIFICATIONS

In order to be qualified to perform services under the HVAC Test and Balance Contract, a firm must meet the following basic requirements and provide documentation when required:

- 3.1. Minimum of five (5) years of documented experience in the field of services, in compliance with Florida Building Code Chapter 13.
- 3.2. Test & Balance experience with the School District of Osceola County or other school districts.
- 3.3. Documentation as to the Respondent's personnel experience, which shall include the name and registration number of the staff's professional engineer(s), if applicable, and/or the resume(s) and certification(s) of the field technician(s) who will be performing the work.
- 3.4. Proposal shall address and assure the School District that all services performed and/or provided will be under the direction of a registered Florida State Professional Engineer or the organization itself has been approved and licensed by the Associated Air Balance Council, (A.A.B.C.), headquarters in Washington, D.C.; per the rules of Florida State Board of Educational Facilities, State Requirements for Educational Facilities.
- 3.5. Photocopy of the current annual A.A.B.C. certificate issued to the firm shall be provided in the proposal.

4. PRESENTATIONS / INTERVIEWS

- 4.1. In addition to the materials provided in the written responses to this RFQ, the School District **may** request additional material, information, references, interviews or presentations from the Respondent(s) submitting qualifications packages.
- 4.2. The School District, at its sole discretion, **may** ask any Respondent to make an oral presentation and/or demonstration without charge to the School District. The School District reserves the right to require any Respondent to demonstrate to the satisfaction of the School District that the Respondent has the fiscal and technical ability to furnish the service(s) or product(s) as proposed. The demonstration must satisfy the School District, and the School District shall be the sole judge of compliance.
- 4.3. The School District reserves the right to conduct discussions with any Respondent(s) who has (have) a realistic possibility of Contract award.
- 4.4. Respondents are cautioned not to assume that they will be asked to make a presentation and should include all pertinent and required information in their original qualifications package.
- 4.5. The School District reserves the right to have phone interviews, informal interviews/presentations, present additional questions to short listed firms for further clarification or waive the interview/presentation stage and select the highest ranked firm based on their submittal package.

5. AWARD OF RESPONSE

- 5.1. The School District has the sole discretion and reserves the right to cancel this RFQ, to reject any and all submittals, to waive any and all informalities and/or irregularities, or to re-advertise with either the identical or revised specifications, if it is deemed to be in the best interest of the School District to do so.
- 5.2. The School District reserves the right to make award to the response deemed to be most advantageous to the School District.
- 5.3. The School District reserves the right to award the Contract to a single Vendor or make multiple awards to multiple Vendors.
- 5.4. Firms will be notified in writing as to whether or not they have been selected for this Contract.

6. RESTRICTED DISCUSSIONS

- 6.1. From the date of issuance of the RFQ until final School District action, the Respondent shall not discuss the RFQ or any part thereof with any employee, agent, or representative of the School District except as expressly authorized by the School District point of contact identified below for this solicitation. Violation of this restriction will result in REJECTION of the Respondent's qualifications package.
- 6.2. All prospective professionals are hereby cautioned not to contact any Board Member of The School District of Osceola County after submittals are received nor to attempt to persuade or promote through other channels. After submittals are received all contacts must be channeled through the School District's sole point of contact listed below. Failure to comply with these procedures shall be cause for disqualification of the firm's expression of interest.
- 6.3. No negotiations, decisions, or actions shall be initiated or executed by the Respondent as a result of any discussions with any School District employee. Only those communications that are in writing from the authorized School District's sole point of contact identified below shall be considered pertinent to this RFQ. Only communications from the Respondent that are signed and in writing will be recognized by the School District as duly authorized expressions on behalf of the Respondent.

7. ECONOMY OF PRESENTATION

Each qualifications package shall be prepared simply and economically, providing a straightforward, concise description of the Respondent's capabilities to satisfy the conditions and requirements of this RFQ. Fancy bindings, colored displays, and promotional material are not desired. Emphasis in each qualifications package must be on completeness and clarity of content. To expedite the evaluation of qualifications packages, it is **mandatory** that Respondent's follow the format and instructions contained herein. The School District is not liable or responsible for any costs incurred by any Respondent in responding to this RFQ including, without limitation, costs for presentations and/or demonstrations if requested. Applications that do not comply with the instructions including Selection Criteria will not be considered. All information received will be maintained with the project file and cannot be returned.

8. QUALIFICATIONS PACKAGE GUIDELINES

- 8.1. To facilitate analysis of its qualifications package, the Respondent shall prepare its qualifications package in accordance with the instructions outlined in this section. If the Respondent's qualifications package deviates from these instructions, such qualifications package may, in the School District's sole discretion, be rejected.
- 8.2. The School District **EMPHASIZES THAT THE RESPONDENT CONCENTRATE ON ACCURACY, COMPLETENESS, AND CLARITY OF CONTENT.**
- 8.3. Cross Referencing - to the greatest extent possible, each section shall be written on a stand-alone basis so that its contents may be evaluated with a minimum of cross-referencing to other sections of the qualifications package. Information required for evaluation of qualifications, which is not found in its designated section, will be assumed to have been omitted from the qualifications package.
- 8.4. Glossary of Abbreviations and Acronyms - each section shall contain a glossary of all abbreviations and acronyms used, with an explanation for each. If no abbreviations and/or acronyms are used, then a Glossary is not required.
- 8.5. Page Size and Format - Page size shall be 8.5 x 11 inches, not including foldouts. Pages shall be single-spaced. The text size shall be 11 point or larger. Use at least one (1) inch margins on the top and bottom and three-quarter (3/4) inch side margins. Pages shall be numbered sequentially by section.
- 8.6. Legible tables, charts, graphs and figures shall be used wherever practical to depict organizations, systems and layouts, implementation schedules, plans, etc. These displays shall be uncomplicated, legible and shall not exceed eleven (11) by seventeen (17) inches in size. Foldout pages shall fold entirely within the section, and count as a single page. Foldout pages may only be used for large tables, charts, graphs, diagrams, and schematics; And not for pages of text.
- 8.7. Binding and Labeling - All sections of the qualifications package should be spiral bound, with section tabs, which shall permit the qualifications package to lie flat when opened. Staples shall not be used.

- 8.8. **Please submit five (5) copies of your proposal** with your letter of interest in an 8 1/2" x 11" edge bound format, (covers may be slightly larger) tabbed to correspond with the listed **Qualifications Package Guidelines** noted below, along with two (2) Electronic copies of your proposal saved in Adobe Acrobat PDF format to a CD or DVD (CD/DVD) which will be archived in the master file, the other CD/DVD will be made available to Committee members wishing to view the information via computers using the Electronic format. It is important that the proposals, whether in hard copy or electronic format be identical.) Contents shall be in general conformance with required criteria utilizing your firms phrasing to complete the requested listing. Failure to submit the information and format requested may result in your proposal being deemed non-responsive. A non-responsive proposal shall receive no further consideration.

9. QUALIFICATIONS PACKAGE GUIDELINES - TABBED SECTIONS

Tab A Standard Form 330: Submit a completed copy of the new U.S. Government Architect-Engineer Standard Form 330.

Tab B Certificates, Registrations and Insurance: Submit a copy of the firm's current Professional Registration Certificate from the appropriate governing board. An applicant must be properly registered and insured at the time of its application to practice their profession in the State of Florida. If the applicant is a corporation, it must be properly chartered with the Florida Department of State to operate in Florida and provide a copy of its Corporate Charter Registration with the Department of State to operate in Florida. Firm shall submit a copy of their Professional Liability Insurance with a minimum of \$1,000,000 in coverage.

SELECTION CRITERIA: Attached to each letter of application, provide sufficient information to describe each Selection Criteria. Firms will be evaluated in the following areas:

Tab C Current Workload: (15 Points) List each project and fee amount currently under contract, including contracts as a consultant to another firm. Describe how you will meet your current contract obligations and our project(s) Contract if selected.

Tab D Past Performance: (30 Points) Respondent's shall list all projects for which a contract was signed for professional services in the past two (2) years. Provide the project name, the owner, and the name and telephone number of the owner's representative.

Tab E Experience with Similar Work: (25 Points) List projects of comparable type, size, and complexity, which were accomplished by the Respondent. List owner's in which the Respondent has provided similar services for the School District of Osceola County and/or other school districts. List experience as being the lead consultant and having other consultants performing work under the Respondent's contract.

Tab F Location: (5 Points) Due to the nature of the Contract the Respondent's physical distance to the School District will have bearing on the selection. Location relates to reviews, coordination, and communication.

Tab G Ability to Provide Service: (25 Points) Respondent's ability to provide service includes available staff to support the School District's needs in a timely manner. Respondent's cost estimating capabilities and methods used to control cost during design and construction of a project. Respondent's method used in project administration to insure the School District's goals and objectives are obtained in design and construction. Provide the resume(s) and certification(s) and details of any special qualifications held by the Respondent's professional engineer and field technician(s) assigned to the project (specific education, seminars etc. with dates and copies of certificates).

Respondent shall address and assure the School District that all services performed and/or provided will be under the direction of a registered Florida State Professional Engineer or the organization itself has been approved and licensed by the Associated Air Balance Council, (A.A.B.C.), headquarters in Washington, D.C.; per the rules of Florida State Board of Educational Facilities, State Requirements for Educational Facilities.

Respondent shall provide a photocopy of the current annual A.A.B.C. certificate issued to the firm shall be provided in the proposal.

Tab H Any other additional information that may be beneficial for consideration in the selection process. Representative samples of related work may be submitted at the Respondent's option.

10. QUESTIONS CONCERNING RFQ

10.1 Lisa Kesecker, CPPB, Purchasing Specialist will be responsible for the selection process and will be the sole point of contact for all Respondents. Questions concerning any portion of this RFQ shall be directed in writing [fax and e-mail accepted] to the below named individual who shall be the official point of contact for this RFQ. Questions should be submitted at least seven (7) days before the closing date.

- 10.2 Mark subject line or cover page or envelope "Questions on RFQ # and title.
- 10.3 Submit questions to: Lisa Kesecker, CPPB – Purchasing Specialist
Purchasing Department
[Email: keseckel@osceola.k12.fl.us](mailto:keseckel@osceola.k12.fl.us)
Fax #407-870-4618
- 10.4 Failure by a potential Respondent to ask questions or request changes by the dates indicated shall constitute the Respondent's acceptance of the requirements set forth in this RFQ.
- 10.5 No answers given in response to questions submitted shall be binding upon this RFQ unless released in writing as an addendum to the RFQ by the Purchasing Specialist.

11. RECEIPT OF SUBMITTALS

Submittals must be received by the Purchasing Department at 817 Bill Beck Boulevard, Building 2000, Kissimmee, Florida 34744, Attn: Lisa Kesecker, CPPB – Purchasing Specialist before 2:00 PM on January 23, 2007.

12. DEFINITIONS

Air-Conditioning and Refrigeration Institute (ARI)- The trade association representing manufacturers of more than 90 percent of the air conditioning and commercial refrigeration equipment installed in North America.

Associated Air Balance Council (AABC) - A non-profit association of qualified, independent test and balance agencies. <http://www.aabchq.com>

CFM- Cubic Feet per Minute

Construction Manager (CM): An organization or individual possessing the requisite training and experience with the resources to provide construction management services. This person or entity may remain as adviser during construction or become the construction contractor.

Consultant - Independent contractors who are considered to have education, specialized knowledge, experience or abilities not generally available within the School District. This includes but is not limited to: accountants, actuaries, appraisers, architects, artists, auditors, counselors, designers, economists, educators, engineers, financial analysts, lobbyists, management and systems analysts, medical practitioners, planners, promoters,

researchers, scientists, sociologists, surveyors, trainers, and other professionals as designated by the Purchasing Director.

Contract – Agreement between the Respondent and the School District of Osceola County for services as defined in the Scope of Work.

Florida Statute 2006- A permanent collection of state laws organized by subject area into a code made up of titles, chapters, parts, and sections. The Florida Statutes are updated annually by laws that create, amend, or repeal statutory material.

HVAC Test and Balance- A systematic process or service applied to heating, ventilating and air-conditioning (HVAC) systems and other environmental systems to achieve and document air and hydronic flow rates.

HVAC Test and Balance Consultant- Respondent's primary representative and project manager.

National Environmental Balancing Bureau (NEBB) - A nonprofit organization, founded in 1971 by contractors in the heating, ventilating and air conditioning (HVAC) industry. NEBB exists to help architects, engineers, building owners, and contractors produce great buildings with HVAC systems that perform in ways they have been visualized and designed.
<http://www.nebb.org>

Owner- The School District, School Board, and or designated representative(s).

Project Architect- The Project Architect role usually indicates the individual who is responsible for overseeing the Architectural aspects of the development of the design and production of the construction documents ("plans") and specifications. The position generally involves coordinating the needs of the School District, designer and technical staff, and outside consultants such as structural engineers, Mechanical Engineers, Civil Engineers, and Landscape architects.

Respondent- The person, firm, or corporation who submits a response.

RPM- Revolutions Per Minute

School Board- The Osceola County Schools Board Members

School District- The School District's Facilities and Maintenance Department's Project Manager, and/or the School Board of Osceola County, or their designee.

School District Representative- May include the School District Project Manager and/or the Construction Manager (CM) for the project.

Scope of Work- The complete details of the work involved in the design, fabrication, and assembly of the components of a project's deliverable into a working product.

State Requirements For Educational Facilities (SREF)- The SREF is generally organized by sequence of steps required in the facilities procurement process and covers general definitions, property acquisition/disposal, finance, lease and lease-purchase, historic buildings, program development, professional services, inspection services, design standards, and inspection standards.

Vendor- Any business firm that will be or has been awarded a contract by the School District.

13. REFERENCES

Air-Conditioning and Refrigeration Institute (ARI) - <http://www.ari.org>

Associated Air Balance Council- <http://www.aabchq.com>

Florida Board of Professional Engineers- <http://www.fbpe.org/>

Florida Building Code- <http://www.floridabuilding.org>

Florida Department of Education (FDOE) - <http://www.fdoe.org>

Florida Statute 2006- <http://www.flsenate.gov/Statutes/index.cfm>

National Environmental Balancing Bureau (NEBB) - <http://www.nebb.org>

Osceola County Educational or Ancillary Specifications

State Requirements For Educational Facilities (SREF) - <http://www.firn.edu/doe/rules/begin.htm>

PROJECT MILESTONE

January 05, 2007	Legal Advertisements Legal Ad in Orlando/Osceola Sentinel	
January 10, 2007		Legal Ad in Orlando/Osceola Sentinel
January 14, 2007		Legal Ad in Orlando/Osceola Sentinel
January 23, 2007	Responses to RFQ due at 2:00 PM Location: School District of Osceola County Purchasing Department 817 Bill Beck Blvd., Bldg 2000 Kissimmee, FL 34744	
January 23 - February 5	Selection Committee to review RFQ's	
February 5, 2007	Notification of Selected Short List Candidates	
February 13, 2007	Short List Oral Presentations and Interviews Presentations will be presented before the Selection Committee and possibly the School Board. Location: School District of Osceola County FPC Annex Conference Room 809 Bill Beck Boulevard Kissimmee, FL 34744 Time: 8:00 AM – 12:00 Noon	
February 27, 2007	Recommendations to School Board for Approval	

The School District of Osceola County is an Equal Opportunity Agency.