

**REQUEST FOR QUALIFICATIONS
FOR
FEASIBILITY STUDY / MASTER PLAN FOR HVAC SYSTEM UPGRADES
and ENGINEERING FOR HVAC MODERNIZATION**

BID # 2022-17

Project Summary: The City of West Haven (City) is seeking a qualified engineering firm (“Engineer”) to provide MEP services for two phases of engineering tasks as related to HVAC systems at the Carrigan School: Phase I is to perform a feasibility study and prepare a master plan for systems upgrade / replacement over time. Phase II is to prepare detailed plans and specifications for selected project scope.

This solicitation covers Phase I and II as an RFQ. It is the City’s intention to use selected Engineer for Phase I work through Phase II to assure continuity. However, the City reserves the right to solicit pricing and retain another pre-qualified engineering firm for Phase II at the City’s discretion.

Mandatory Site Walk Through – Tuesday, June 21, 2022 at 1:00 pm

Deadline for Requesting Information – July 1, 2022 at 3:00 pm

All RFQ/P submissions must be received by Monday, July 11, 2022 by 3:00 pm

PROJECT REQUIREMENTS

A. Background

The City of West Haven, Connecticut, seeks a qualified MEP engineering firm to evaluate HVAC options for Carrigan School and use this information to develop an HVAC Master Plan for the school, located at 2 Tetlow St, West Haven, CT 06516 (Phase I Feasibility Study / Master Plan). The City has funding for substantial HVAC upgrades, in particular to modernize the buildings primary heating system. Additional goals of this project will include adding air conditioning, increasing outside air ventilation rates, improving indoor air quality (IAQ), providing long term cost effective building management system with remote access, etc...

Carrigan School has a steam boiler system with steam terminal units. Primary HVAC provided through unit ventilators.

B. Project Objective

The Feasibility Study / Master Plan shall address all of the following issues and project categories:

1. Replace Primary Heating System

The steam boilers have exceeded their expected useful life and the City is requesting a new energy efficient replacement system. This should consist of high efficiency hydronic heating boilers with variable capacity hydronic distribution.

2. Add Air Conditioning Capability to Classrooms

There is currently no air conditioning in classrooms. This should include recommended options for implementing air conditioning throughout the school; to include schematic design of at least three options, construction cost estimates for options, and block load energy analysis to provide approximate life cycle costs.

C. Phase I - Feasibility Study / Master Planning Services

The City's expectation is that Engineer will evaluate at minimum three (3) HVAC upgrade options as relates to items 1 – 3 and shall consider item 4 in terms of either direct RTU replacement or integrating with one of the aforementioned alternative HVAC options. The Engineer shall present preliminary feasibility findings to the City for review directional decision making. A subset of the most promising HVAC upgrade/replacement options shall be developed to a level consistent with "30 percent design".

The Engineer shall prepare a Master Plan based on detailed information from the Feasibility

Study. Specifically, the Master Plan shall make firm recommendations for how to address the building's HVAC system requirements and shall layout a timetable for implementing those recommendations, likely in multiple-year phasing. For example, the City anticipates a staggered approach to construction. That could include a near-term phase to add air conditioning to selected classrooms and address current HVAC operating deficiencies, and subsequent construction phases addressing replacing equipment at its end of service life. The master plan should address a ten-year period or longer.

1. Phase I Scope of Services

Services requested from the contractor the City engages to prepare this Feasibility Study / Master Plan include:

- **Kickoff meeting.** Participate in an introductory kickoff meeting with the City and/or City Agent to: 1) Review the managerial and technical requirements of the project; and 2) Identify and discuss considerations that require coordination or follow-up with the City.
- **Site visits.** Make site visits to confirm existing conditions, including: accessibility for adding new, future pipe/duct and/or electrical service; structural issues; etc. The existing conditions assessment is an essential component of the study and Engineer is expected to be thorough in their inspections and documentation of potential pitfalls so that selected update options can move forward confidently with subsequent investment in engineering development. West Haven has partially complete original drawings, which will be made available. These drawings are not “as-builts.” The Engineer shall field confirm all information on the drawings, as appropriate. The City can support Engineer with coordinating access, which may require some work to be scheduled to occur outside school hours (for example, above ceiling or UV inspections in classrooms). The City can also provide ladders.
- **Load calculations.** Prepare preliminary cooling load estimates to size prospective new equipment, as necessary.
- **Interim feasibility review.** Engineer shall present to City and City agent options under consideration with preliminary feasibility results for discussion. This step will give the City to opportunity to weigh in on the options, details associate them and/or equipment selection and lastly potentially drop option(s) under consideration, if agreed to by all parties.
- **Schematic Design preparation.** Prepare preliminary designs, including initial drawings, as necessary, to communicate intention of Plan consistent with “30% design level” for up to three viable HVAC project options. This should include “outline specifications” listing key equipment required and provide an overview of proposed installation details, such as where ducts run, electrical service plan, structural upgrade, etc.
- **Components to remain.** Verify that any existing systems, equipment, or components planned to remain are in a condition suitable for re-use consistent with a “new”

installation. These reusable items potentially could include, but are not limited to: structural steel, curb, ductwork, electrical components, controls network wiring.

- **Cost Estimating.** Provide a budgetary cost estimate for each solution being evaluated, with usual mechanical, electrical, plumbing disciplines, and also including controls and structural work.
- **Potential Utility Incentives:** Estimate utility incentives available for each option, assuming standard (prescriptive) offers.
- **Lifecycle Cost Evaluation.** Provide utility and maintenance cost estimates to use as inputs for lifecycle cost evaluation. Provide carbon impacts for each option.

2. Phase I Deliverables

The Feasibility Study / Master Plan report of findings shall include the following:

- **Executive Summary.** Provide high level summary of the recommend HVAC update program. The summary shall include financial information and timeline on the recommended HVAC option(s). Provide feasibility summary table that includes estimated construction cost, operating utility cost, maintenance cost and net lifecycle cost for each option considered.
- **Project Descriptions and Discussion.** Report section for each option considered including narrative description outline specifications, pros and cons discussion, etc.
- **Existing Conditions.** Section providing detail on existing building structure, mechanical, piping and electrical systems
- **Basis of Design (BOD).** Provide attachment, including items listed below. The intention of the BOD attachment is to provide a “30% design” suitable for handoff to a design engineering team to smoothly move the project forward to construction-grade plans and specification.
 - List of applicable building codes
 - Statement listing design-basis conditions
 - Preliminary drawings including equipment schedule, duct and piping layouts, electrical on-line for recommended solutions encompassing scope items B.1, B.2, B.3 and B.4 as applicable for future pipe/electrical tie-in points.
 - Initial specifications.
- **Backup Material.** Full complement of photographs and other supporting backup material.
- **Cost and Operating Cost Estimates and Calculations.** Provide installation cost estimates and operating cost calculation backup^{SEP} from lifecycle cost analysis.

D. Phase II - Detailed Engineering for Selected Option(s)

The selected Engineer shall provide Phase II Detailed Engineering to include preparing plans and specifications for a specific set of recommendations from the Phase I Feasibility Study / Master Plan. The City anticipates Phase II will include adding air conditioning to selected classrooms

and addressing current HVAC operating deficiencies. Addressing the replacement of end-of-life equipment will potentially occur at a later time.

- The MEP firm shall be responsible for making final equipment selections as well as to prepare demo and installation plans as necessary for building permits.
- Final selected replacement equipment shall maximize energy efficiency to the extent possible and shall be coordinated with Eversource to receive any available incentives.
- Design shall include stamped demolition and installation plans and specifications in accordance with all applicable codes and regulations, including civil, electrical, mechanical, piping, and structural aspects of the project as necessary. The Engineer will be considered Engineer of record and shall bear full responsibility for the final design.
- Engineer shall plan on periodic construction-period inspections and coordination with City Commissioning Agent for Commissioning services.

1. **Phase II Scope of Services**

Phase II Detail Engineering design services for the HVAC updates shall include, but not be limited to:

- **Kickoff meeting.** Participate in an introductory kickoff meeting with the City and/or City Agent to: 1) Review the managerial and technical requirements of the project and 2) Identify and discuss considerations that require coordination or follow-up.
- **Site visits.** Make site visits to the work site to confirm equipment sizing and to identify existing conditions that may impact the work.
- **Load calculations.** Prepare detailed cooling load calculations, as necessary, to ensure that the new equipment is properly sized. (MEP firm shall not assume that existing equipment is properly sized.)
- **Complete and appropriate design.** Verify that all necessary system components are appropriately designed, that the new installation will be compliant with all state and local codes, and that any necessary components and/or subsystems have not been omitted from the overall system design.
- **Components to remain.** Verify that any existing systems or components to remain are in a condition suitable for re-use consistent with a “new” installation. These potentially include but are not limited to: air handlers and components, ductwork, piping, electrical components, controllers, valves and other controls-related field devices.
 - **Controls integration.** Provide full specifications and custom sequence of operation to achieve the owners required level of control, remote access, and operating costs.

- **Utility incentive application.** Prepare Eversource incentive application and assist City to secure Eversource incentive.

2. **Phase II Design Deliverables**

Design deliverables for Phase II Detailed Engineering are the construction documents, namely plans, specifications and cost estimates necessary for construction. Engineering deliverables and documents prepared by the Engineer shall include, but not be limited to, the following:

- Mechanical demolition and construction plans.
- Mechanical details and schedules.
- Mechanical schematics.
- Electrical plans and details.
- Mechanical and electrical general specifications, including commissioning and test and balance requirements
- Cut sheets and/or shop drawings of new equipment
- Controls specifications and sequences for BMS integration purposes
- Calculations necessary for Building Department approval and code compliance

3. **Schedule for Design Deliverables**

The Engineer shall complete and submit the design deliverables as follows (Note: 30% Design Submittal will be provided as part of Phase I):

- **50% Submittal:**
 - Engineer shall submit at minimum: Equipment selections & cut sheets; Initial demo and construction drawings: Equipment schedules and specifications.
 - Submission will include an electronic set of drawings and documents for distribution and three (3) hard copies if requested.
- **90% Submittal:**
 - Engineer shall submit a “draft” of the complete design, including all drawings and specifications, for review and approval by the City or City Agent.
 - Engineer shall provide an electronic set of drawings and documents and three (3) hard copies if requested.
 - Engineer shall provide an update on estimated construction budget for the project.
- **100% Submittal:**
 - Engineer shall submit the completed PE stamped design marked “approved for construction” with all drawings, specifications and supporting documents in electronic form and three (3) hard copies.
- **As-Built Drawing Set:**
 - Engineer shall submit a revised set of the 100% submittal drawings reflecting any approved changes incurred during the construction process and marked “As-Built”.

PROPOSAL REQUIREMENTS

(Note: requested proposal shall cover both Phase I and Phase II RFQ in one submission package)

A. Site Visit

All interested companies must participate in a walk through of the site which is mandatory. **This will take place on Tuesday, June 21, 2022 at 1:00 pm.**

B. Questions

Questions can be submitted via email to Rick Spreyer, Procurement Director, rspreyer@westhaven-ct.gov. Responses will be supplied to all interested firms via email. No direct or indirect contact with selection panel members is allowed and will be grounds for immediate rejection of the proposal; all questions must be submitted as described in this paragraph. **The deadline for requesting information is July 1, 2022 at 3:00 pm.**

C. Proposal Submission Deadline and Format

All RFQ/P submissions must be received by the City by Monday, July 11, 2022 by 3:00 pm. Bids received after the time set, will be considered informal and will be rejected.

Bidders shall not include any Federal Excise Taxes or State of Connecticut Sales Taxes which otherwise may apply.

Request for Qualifications and Request for Proposals must be submitted in a sealed envelope clearly marked "CARRIGAN HVAC PROJECT". Five (5) copies should be submitted. The responses must be submitted to Rick Spreyer, Procurement Director, Department of Finance, 355 Main Street, West Haven, CT 06516.

All sealed bids must have on the lower right corner of the envelope the following information: Bid Name & number, Due Date & Time and Firm's Name & Phone number.

Any information or materials submitted as a response to this RFQ/P shall become property of the City of West Haven and will not be returned. Any expense incurred for the submission of this RFQ/P is the responsibility of the firm submitting and no expense will be reimbursed by the City. All submitted materials will be available for public review. D. Written Proposal Submission Summary / Checklist

Required proposal submission content is listed below. Please refer to sections E through J for further details on each submission requirement.

- Signed cover letter
- Firm overview
- Capacity of the firm to perform work scope
- Project approach, including narrative, staffing plan with resumes
- Relevant project experience / references
- Organization chart and key staff roles
- Disclosure of past claims or disputes, or statement of no past claims or disputes
- Confirm insurance coverage as specified
- Exceptions (only as applicable)
- Hourly Rate Schedule

A. Cover Letter/Executive Summary

Proposals shall include a Letter of Introduction on firm letterhead explaining the firm’s interest in the project and why your firm is the most qualified for this project. An officer of the company must sign this letter of introduction and intent. Include any information pertinent to the project or selection process that is not requested in the following.

B. Qualifications/ Proposal Package

Minimum information to be included:

1. Firm Overview

- Name of firm and firm’s representative and his/her contact information.
- Brief overview of firm, legal form of ownership, when it was organized and areas of focus / expertise. Confirm that the firm is licensed to work in the State of Connecticut and have on-staff Connecticut licensed engineers.
- Location of principal and branch offices that would work on this project. Please reference proximity to and familiarity with West Haven area, experience working with local installation contractors, etc.

2. Capacity of the Firm to Perform Work scope

Describe firm’s experience with similar size projects and available capacity of key staff required to perform the work within the required time frame. Include current project workload and any active State projects awarded

3. Project Approach

Minimum information to be included:

- **Approach.** Describe how your firm plans to approach the project. Include information on your selected team, how your firm will decide what options to evaluate and the evaluation process to conclude with final recommendations. Provide any technical insights into solution options you feel warrant inclusion in the study. Include details on how and which team members will verify existing conditions as

they potentially interfere with cost effectiveness or viability of upgrade options. How will your firm approach structural, architectural, etc... review, if not an in-house capacity? Include in the narrative any pertinent details such as organizational methods you have found works best, recommended communication plan (such as standing meetings), what support you will need from the City, and any other related topic. A thorough and thoughtful response to this section is expected.

- **Staffing.** Identify all staff to be assigned via organizational chart including managers, with roles and responsibilities. Provide full resumes for all staff. Include resume for any subconsultant(s) with indication as such
- **Partnerships.** Identify and provide information on any other firms or entities in partnership with your firm for this project. Include details on their planned involvement and history of working with your firm
- **Pricing.** Proposals must include staff title, rate and expected hours. See Fee Table template attached below (Schedule A).

4. Relevant Experience

List similar feasibility and/or master planning studies you have completed and provide the name of the client, the scope of services provided, and the name, title, phone number and email address of the key contact person. Also highlight if you have done work for a CT Public School District. *Submission of these projects shall constitute your permission for the Owner to contact those entities for references.*

C. Past Claims or Disputes.

- Please list any claims, disputes, or arbitration proceedings that have occurred on any school projects your firm has been involved with in the last five (5) years. Indicate who they were with and give a status of each even if they are pending.
- Please list any school building projects in the last five (5) years in CT for which your firm was removed or chose to leave during the project.
- Information concerning any suits filed, judgments entered or claims made against your firm during the last five (5) years with respect to services provided by your firm, or any declaration of default or termination for cause against your firm with respect to such services. In addition, state whether during the past five (5) years your firm or your proposed MEPs has been suspended from bidding or entering into any government contract.

D. Additional Requirements

Proposal shall confirm the following in writing:

1. Insurance coverage

The Contractor shall purchase the following types of insurance, and maintain all insurance coverage for the life of the contract, from an insurance company or companies with an A.M. Best rating of A- (VII) or better. Such insurance shall protect and indemnify City of West Haven and West Haven Board of Education from all claims

which may arise out of or result from the Contractor's obligations under this Agreement, whether caused by the Contractor or by a subcontractor or any person or entity directly or indirectly employed by said Contractor or by anyone for whose acts said Contractor may be liable.

As to the insurance required, the insurer(s) and/or their authorized agents shall provide City of West Haven and West Haven Board of Education with certificates of insurance prior to commencement of the work, describing the coverage and providing that the insurer shall give City of West Haven and West Haven Board of Education written notice at least ten (10) days in advance of any termination, expiration or changes in coverage.

Worker's Compensation

Contractor shall provide worker's compensation and employer's liability insurance that complies with the regulations of the State of Connecticut with limits no less than \$1,000,000 each accident by bodily injury; \$1,000,000 each accident by disease; and a policy limit of \$1,000,000. Such policy shall contain a "waiver of our right to recover from others endorsement" in favor of the City of West Haven and West Haven Board of Education.

Commercial General Liability Insurance

Contractor shall provide a commercial general liability insurance policy that includes products, operations and completed operations. Limits should be at least: Bodily injury & property damage with an occurrence limit of \$1,000,000; Personal & advertising injury limit of \$1,000,000 per occurrence; General aggregate limit of \$2,000,000 (other than products and completed operations); Products and completed operations aggregate limit of \$2,000,000. Such coverage will be provided on an occurrence basis and will be primary and shall not contribute in any way to any insurance carried by the City of West Haven and West Haven Board of Education. Such Policy shall name the City of West Haven and West Haven Board of Education as an Additional Insured with respect to claims arising out of the Contractor's negligence or for the negligence of those for whom the Contractor is responsible, by endorsement, ISO Forms CG2010 and CG 2037 or their equivalent.

Commercial Automobile Insurance

Contractor shall provide commercial automobile insurance for any owned autos (symbol 1 or equivalent) in the amount of \$1,000,000 each accident covering bodily injury and property damage on a combined single limit basis. Such coverage shall also include hired and non-owned automobile coverage.

Umbrella Liability Insurance

Contractor shall provide an umbrella liability policy in excess (without restriction or limitation) of those limits and coverage described in items (A) through (C). Such policy shall contain limits of liability in the amount of \$5,000,000 each occurrence and \$5,000,000 in the aggregate.

Engineers Professional Liability Insurance

Contractor shall purchase and maintain a policy covering their errors & omissions with limits no less than \$2,000,000 each claim and \$2,000,000 in the aggregate. If written on a claims made basis, such insurance shall be maintained for no less than three years after completion of the work.

2. Independent Contractor

All activities performed by the Firm and its agents, employees or representatives are, for all purposes under this Agreement, performed as an independent contractor and not as an employee of City of West Haven and West Haven Board of Education and neither the Firm nor its employees shall be entitled to any benefits to which employees of City of West Haven and West Haven Board of Education are entitled including, but not limited to, worker's compensation, overtime, retirement benefits, health care benefits, vacation pay or sick leave.

3. Indemnification

The firm shall indemnify and hold harmless the City of West Haven & West Haven Board of Education and its agents and Employees from and against all claims, damages, losses and expenses, including Attorney's fees arising out of, or resulting from the performance of the work.

E. Exceptions to RFQ/RFP Requirements Herein

Provide a detailed list with explanations of any and all exceptions being made in the proposal to the scope of services outlined above.