# & Salem | STATE UNIVERSITY

#### INVITATION TO BID – THIS IS NOT AN ORDER

- 1. Salem State University is an agency of the Commonwealth of Massachusetts and is exempt from any state or federal excise tax.
- 2. Unless otherwise stated, the unit price shall be the net price. Separate unit and total prices must be shown if applicable.
- 3. Unless otherwise stated, all quoted prices shall be FOB university address inside delivery.
- 4. Bid must be received electronically on or before August 14th, 2020 by 3 pm EST.
- 5. Submit your proposal electronically by emailing Reynaldo Ramos at rramos@salemstate.edu. Your electronic file should not exceed 10 megabytes.

Subject line in your email should reference: RFP 2020-09 North Campus Clean Energy Feasibility Study

- 6. No PAPER or FAX copies will be accepted.
- 7. Salem State University reserves the right to waive informalities and to reject any and all bids.

#### **EQUAL OPPORTUNITY**

The selected firm agrees not to discriminate against any employee or applicant for employment because of race, sex, color, religious creed, national origin, gender identification or expression, sexual orientation, marital/parental status and/or ancestry. The selected firm agrees to post in conspicuous places notices to be provided by the Massachusetts Commission Against Discrimination with respect to the Fair Employment Practice laws of the Commonwealth which are herein made part of this contract reference.

## SALEM STATE UNIVERSITY 352 Lafayette Street, Salem, MA 01970

# Request for Proposal – RFP 2020-09 for North Campus Clean Energy Feasibility Study June 26, 2020

## 1. SCOPE AND DESCRIPTION

## 1.1. Project Objective

Salem State University (SSU) seeks a high-level, phased roadmap for heating/cooling North Campus buildings that will allow the university to transition from fossil fuels to a clean, efficient and sustainable energy source or sources. The project will encompass guidance on strategies, technologies, fuel sources, and whether Salem State should maintain the centralized system that serves eight buildings or pursue building-specific solutions. The project will also provide specific heating/cooling options for the near-term Horace Mann building renovation and the science lab addition. Salem State seeks to engage a forward-thinking firm that can bring fresh ideas to this project and provide a robust plan to match the university's deep commitment to sustainability.

## **1.2.** Contract Value: The value of the award is \$0.00 - \$100,000.

Bids are subject to M.G.L. c. 149, §44A-J and to the minimum wage rates as required by the M.G.L. c. 149, §26 to 27H inclusive. The University reserves the right to reject any Bid Proposal that is not in full compliance with the Contract Specifications; to reject any or all bids wholly or in part; to waive technicalities; to make awards in a manner deemed in the best interest of the University; and to correct any award erroneously made as a result of a clerical error on the part of the University.

#### 1.3. Contract and Schedule Duration

Salem State anticipates that work will commence in September. The project completion date is March 31st, 2021.

## 1.4. Bid Questions

Any clarification of requirements or requests for additional information by bidders must be made in writing via email to Reynaldo Ramos, Senior Director for Purchasing and Vendor Relations at rramos@salemstate.edu and submitted no later than 12 pm EST on Friday, July 10th, 2020. Questions will not be accepted or answered after this date. Answers to all questions will be made in writing and distributed as an addendum to the RFP to all participants.

#### 1.5. Bid Submission Requirements

Submit your proposal electronically by emailing Reynaldo Ramos, Senior Director for Purchasing and Vendor Relations at rramos@salemstate.edu by Friday, August 14th no later than 3:00pm EST. Your electronic file should not exceed 10 megabytes. The subject line in your email should referenced: RFP# 2020-09 North Campus Clean Energy Feasibility Study.

## 1.6. Selection Team

A selection Team, including representatives from Salem State's Department of Campus Planning and Business Affairs and Purchasing and Vendor Relations, will review the responses to this solicitation, evaluate the proposals using the criteria specified in this Scope of Work (SOW) and select the consultant that provides the best value to the Commonwealth based upon the specified SOW requirements and criteria. Virtual interviews will be held during the project evaluation period.

All Consultants are responsible for reviewing and adhering to all information, forms and requirements for the entire RFP, which are incorporated herein. Responses received after the deadline shall be disqualified. All Consultants should plan advance lead time for submitting proposals in a timely manner prior to the deadline. The university is an agency of the Commonwealth of Massachusetts and is exempt from any State tax or Federal excise tax.

Salem State University reserves the right to waive informalities and to reject any and all bids; and to accept the bid deemed best for the Commonwealth.

## 1.7. Number of Awards

There will be one award. Consultants may team with other companies and/or sub-consultants to form a "Project Team."

#### 2. PROCUREMENT CALENDAR

## 2.1 Calendar

| EVENT  | DATE                    |  |
|--|-------------------------|--|
| Availability of RFP on COMMBUYS  | June 26, 2020           |  |
| Deadline for Submission of Consultant<br>Questions to <u>rramos@salemstate.edu</u> | July 10,, 2020 12:00 PM |  |
| Responses to Consultant Questions Provided   | July 23, 2020           |  |
| Proposal Submission Deadline   | August 14, 2020 3:00 PM |  |
| Finalist Interviews  | September 1 – 4, 2020   |  |
| Estimated Contract Award Date  | September 22, 2020      |  |
| Project Completion Date  | March 31, 2021          |  |

## 3. SCOPE OF WORK (SOW)

#### 3.1 Background

#### 3.1.1. Salem State University and Sustainability Commitments

Located just 15 miles north of Boston, Salem State University (SSU) is one of the largest and most diverse state universities in the Commonwealth of Massachusetts and is an important partner in the economic, cultural and intellectual vitality of the greater north-of-Boston region. Situated in the historic seacoast city of Salem, Massachusetts on more than 115 acres and five campuses, Salem State provides a diverse community of over 7,500 undergraduate and graduate students, a high quality, student-centered education; one that prepares them to contribute responsibly and creatively to a global society and to serve as a resource to advance the region's cultural, social and economic development.

Salem State has a strong tradition of commitment to sustainability as exemplified by its Board of Trustees, President, faculty, staff, students and alumni. Some sustainability highlights that illustrate this commitment include:

- Commitments/Activism
  - Divested endowment from fossil fuels in 2018
  - Adopted goal to be carbon neutral by 2050
  - President Keenan signed an open letter in 2017 signaling that <u>"We Are Still In"</u> the movement to address climate change
  - Strong Sunrise movement and other student sustainability groups on campus
- Academic

- Approximately 30 sustainability courses offered
- o Interest in climate change courses has increased four-fold in recent years
- Operations
  - Installed solar arrays on five buildings
  - Support energy needs with geothermal (Library) and cogen (O'Keefe) systems
  - Built or renovated five LEED buildings

**State goals.** Leading By Example Executive Order 484 requires state entities to reduce greenhouse gas emissions 40 percent by 2020, obtain 30 percent of electricity from renewable sources by 2020, reduce overall energy consumption (on a per square foot basis) 35 percent by 2020, and reduce GHG 80 percent by 2050. The Leading By Example program is working to develop 2030-2050 targets intended to expand these goals and support the new statewide mandate to achieve net zero energy by 2050 with a reduction in GHG emissions by at least 85 percent. Extreme reduction or elimination of fossil fuel use for state buildings and fleets, whether through increased renewable capacity, strategic electrification, or other means, will be critical to meeting these long-term statewide mandates. In working toward a net zero future, we will want to ensure that our energy plan is compatible with both the statewide and Leading By Example goals.

## 3.1.2. North Campus Opportunity

While Salem State University has a goal to be carbon neutral by 2050, we currently lack a roadmap and interim goals to ensure that we are on track to meet or exceed this important goal. We are currently pursuing a capital planning project entitled Project BOLD that makes the development of specific energy plans, particularly for north campus, very timely. Salem State does not anticipate using offsets to meet its 2050 goal. Note that the 2017 "North Campus Precinct Plan" master planning document and the 2019 "SSU BOLD" study will be made available to the successful consultant.

**Project BOLD encompasses**: the sale of South Campus; the renovation of the recently vacated Horace Mann school as an academic building; the construction of an addition comprising seven, new state-of-art wet labs to Meier Hall; and the creation of classrooms from underutilized space within the Berry Library. These changes will benefit our campus in exciting ways but also create an opportunity to consider long-term energy goals as we re-envision north campus.

## 3.1.3. North Campus Thermal Energy Needs

Two dorm buildings on north campus, Peabody and Bowditch Halls, are not on the central plant but are served by their own gas-fired boilers for heating needs. The below description of the SSU Central heating plant serving the remaining eight buildings is from RFS Engineering report entitled "Salem State University North Campus Heating Energy – Master Plan Report." Meter data are also available.

Thermal energy for SSU's North Campus is provided by a Central Heating Plant and associated District Steam Distribution System. The existing Central Heating Plant in the basement of the Administration Building services approximately eight buildings and 553,497 square feet. Buildings served by the North Campus Central Heating Plant include:

- Administration Building
- North Campus Dining Commons
- Sophia Gordon Center for Creative and Performing Arts

- Meier Hall
- Sullivan Hall
- Horace Mann School (vacated elementary school)
- Ellison Campus Center
- Frederick E. Berry Library and Learning Commons

The central heating plant contains two active natural gas-fired steam boilers, which were installed in 2008 and are rated for 20,700 lbs./per hour. The current peak campus load is approximately 27,120 lbs./per hour.

The steam distribution system includes a combination of direct-buried, tunnel-installed and building installed piping infrastructure. The total distance of installed steam/condensate distribution piping is approximately 1,740 lineal feet (including both steam supply piping and condensate return piping) of which 740 lineal feet is direct buried. Improvements to the existing steam distribution system over the last 30 years have been limited. Approximately 64% of SSU's existing steam infrastructure is over 40 years old and beyond its expected service life.

The Administration Building, Sullivan Building, Horace Mann Laboratory School and Ellison Campus Center are served by an 8" steam line which exits the North side of the heating plant, and Gordon Center, Commons Dinning Hall, Meier Hall and Berry Library and Learning Commons are served by an 8" steam line, which exits the South side of the heating plant. This radial configuration limits SSU's ability to serve down-stream buildings when system maintenance is required.

The existing steam boilers are configured to burn both natural gas and #2 fuel oil, providing SSU with fuel choice flexibility.

A Central Heating Plant limits fuel burning equipment to one location, limiting equipment requirements in individual buildings which include large flue stacks at each building.



Note that Bowditch Hall is not shown in this drawing. It is just beyond the map's lower left corner.

The "North Campus Heating Energy Master Plan Report" was completed by RSF Engineering in 2017, to study potential upgrades to the existing steam plant and piping system and is available upon request. Note that there is a 144 ton, 48 well geothermal system serving the library.

Additional recent energy work on North Campus has included investment grade audits that preceded three phases of an energy performance contract project begun in 2015. The three-phase performance contract work on North Campus included EMS, lighting upgrades, HVAC modifications, and steam trap repair. Steam trap audits and repairs were also conducted in 2018/2019. Lighting upgrade projects were undertaken in both 2019 and 2020 and a significant, campus-wide lighting upgrade will occur in the winter/spring of 2021. SSU understands that additional efficiency upgrades and building controls work are needed and will be addressing priority gaps each year.

## **3.2 Project Objectives**

Salem State seeks a high-level, phased feasibility study for heating/cooling North Campus buildings that allows the university to transition from fossil fuels to a clean, efficient and sustainable energy source or sources. Via our planned renovations of Meier Hall and Horace Mann, SSU will be locking in 50-year decisions, presenting a perfect opportunity to transition to clean energy. This energy feasibility study will bring multiple benefits: providing a roadmap for the transition to clean energy sources, lower GHG emissions and operational costs; helping move towards the university's goal of carbon neutrality; and allowing Salem State to demonstrate leadership and inspire/educate students and the wider SSU community.

#### The study should address these critical questions:

- A. What clean energy sources and technologies should SSU consider for the near-term and longerterm effort to decarbonize? Solutions to be considered might include air, water, and groundsource heat pumps, clean biomass, combined heat and power (CHP), geothermal energy, renewable energy, aggressive building standards, and energy storage. These technologies would need to meet the minimum fuel and performance standards of both current and future iterations of the Alternative Energy Portfolio Standard as well as other state programs (e.g., clean peak standard, new executive orders) and any use of CHP would need to incorporate the potential for the use of renewable fuel in the future.
- B. Should SSU maintain the central plant ideology or develop building-specific energy systems?
- C. How can SSU leverage planned capital projects and integrate new clean energy systems over time?
- D. What are the projected up-front and operating costs and other relevant considerations associated with the proposed options? What GHG reductions will the different options provide? Are there additional ancillary benefits such as energy resilience?
- **E.** What should Salem State's long and short-term decarbonization priorities be and what does our north campus 2050 energy roadmap look like? How can we prepare now for technologies and/or fuels that may be more cost-effective in the future?

#### 3.3 Work Plan

At project outset, the consultant will complete a Work Plan, identifying team responsibilities and documenting the approach to completing the required tasks and deliverables. The Work Plan will establish project goals and objectives, describe tasks, and list required deliverables. In addition, the Work Plan should include an updated project schedule, and an updated breakdown of fees (as shown in Exhibit B).

The Work Plan must include project milestone check-in meetings with the Salem State project team. Communication between the consultant and the SSU team is critical so that we can review options before the team selects specific approaches for more intensive analysis to ensure an implementable plan. The plan should include bi-weekly calls and/or videoconference presentations, as appropriate.

#### **3.3 Scope of Work Elements**

#### Phase I.

- A. Conduct site visit and review background materials.
- B. Establish initial work plan and timeline.
- C. Review existing conditions and master planning opportunities and summarize findings.
- D. Discuss B and C by videoconference with SSU team.
- E. Phase 1 deliverables: workplan/timeline and findings of existing conditions and master planning opportunities.

#### Phase 2.

- F. Evaluate low-carbon fuel options, technologies and strategies (e.g., building standards, load reduction).
- G. Determine preferred options for maintaining central plant, moving to building-specific systems, or a hybrid solution.
- H. Provide videoconference presentation(s) (via PowerPoint or similar) of several options addressing fuel source, technology, strategies and centralized/decentralized approach. Provide expected up front and operating costs. In consultation with Salem State, select at least three solutions to study in detail. Assess costs and benefits and provide interim and longer-term steps.

- I. Provide revised detailed workplan and final report template.
- J. Phase 2 deliverables: Videoconference presentation(s) and PowerPoint, report on options considered and finalist options selected, final report template and revised workplan.

## Phase 3.

- K. Evaluate the proposed options and pathways in greater detail:
  - Develop energy models and technical data to support the paths recommended including GHG emissions and typical energy usage.
  - Identify space needed (and approximate possible locations) for new systems (geothermal wells, building systems, renewable energy systems, fuel storage, etc.).
  - Identify supporting technology, relative capital costs and relative operation costs for each option, and additional staff needs for proposed systems.
- L. Identify specific approaches to implementing these strategies into near-term building projects for Horace Mann and the Meier Hall lab addition.
- M. Develop draft sequencing and roadmap with actions by year. Recommend timeline of key actions and energy use reduction goals for key years (e.g., 2030, 2035, 2040). Address all 10 north campus buildings.
- N. Develop draft project report. Meet via videoconference at least two times during Phase 3.
- O. Phase 3 Deliverables: Draft final roadmap report and presentation(s) on proposed options and pathways and approaches to integration into near-term projects.

## Phase 4.

- P. Incorporate feedback from Salem State, gained in Phase 3, into draft north campus clean energy road map with sequenced pathway of actions that achieve carbon neutrality by 2050 or sooner.
- Q. Identify year by which SSU north campus could anticipate being carbon neutral and provide documentation.
- R. Present draft roadmap to SSU via videoconference and provide draft final report.
- S. Develop and present final roadmap. A final report should accompany the presentation and should include an executive summary that addresses the objectives noted in this document.
- T. Phase 4 deliverables: Draft report, final report, executive summary, videoconference presentation(s) of draft report; final videoconference presentation. Provide all project documentation and elements in both PDF and Microsoft Word, Excel or PowerPoint, as appropriate. Deliver Energy Models in both pdf and original software form.

## 3.4. Project Collaboration

Salem State anticipates engaging state agencies DCAMM and DOER in the project process to ensure that their expertise and our shared goals are reflected in the project outcomes.

## 3.5. Additional Services

Although not anticipated or budgeted at this time, additional services may be required. If requested by Salem State University, the consultant may prepare a proposal or solicit from others as needed.

#### 4. **RESPONSE SUBMISSION REQUIREMENTS**

#### 4.1 Required Components for Response Submissions

To ensure that the bid evaluation process is fair and bids are comparable, the following components specific to this RFP must be included in the order outlined below with your response. Failure to include all the requested information and completed required forms may result in rejection of your firm's

submission. Technical terms should be explained clearly, and the proposal should be clear and straightforward. Required SOW components are as follows:

- **Response Cover Sheet Exhibit A:** Complete the Response Cover Sheet, a copy of which is attached as Exhibit A.
- **Consultant Cover Memo:** A statement of understanding of the RFP and commitment to perform.
- **Firm Profile:** Provide the team organization with a chart and roles, as well as qualifications for each principal and key staff persons who will be assigned to the project.
- **Relevant Experience and References:** Outline comparable projects demonstrating experience and expertise. Bidders should have experience in higher education and carbon mitigation planning. Bidders should also note where relevant energy strategies and/or long-term energy plans developed by the consultant have been adopted at colleges or universities. Please provide references from comparable projects.
- **Project Approach:** Provide a narrative description of the team's approach. This narrative should be developed such that it can convince the Selection Team that the respondent understands the objectives of the project, the nature of the required work, and the level of effort necessary to successfully complete the contract.
- Work Plan: The proposed detailed Work Plan should clearly break down and build upon the Scope of Work provided herein. Tasks should include clear deliverables and approximate durations in weeks. (In Exhibit B, a less detailed Work Plan should be provided with fees broken down by Task.).
- Summary of Deliverables and Timeline.
- **Pricing Response Exhibit B:** Complete the Pricing Response Form, a copy of which is attached as Exhibit B. This fee must include all out-of-pocket expenses for the full Scope of Work. Costs not included in the fee will not be compensated. Note that \$100,000 is the maximum award for this project.

## 5. RESPONSE EVALUATION CRITERIA

The Selection Team will evaluate respondents based upon the information and materials contained in the response to this solicitation, interviews, and any other information requested or obtained by the Selection Team. Salem State University is seeking a creative, forward-thinking firm, preferably with experience developing decarbonization roadmaps for other universities or institutions. The project team members should have expertise in decarbonization strategies, emerging technologies and be able to point to successful projects they completed.

The Selection Team will select the proposal that provides the best value to the Commonwealth based upon the specified SOW requirements and criteria. The Team will evaluate firm profile and depth of relevant experience, quality of proposal and work plan, proposed pricing, and references.

During the selection process, the Selection Team reserves the right to take any or all of the following actions if it deems them to be in the interests of the Commonwealth of Massachusetts: a) reject any and all proposals; b) waive any minor informalities in proposals received or request Respondents to correct them; c) request additional information from Respondents and seek clarification from a Respondent provided the Selection Team determines it is not prejudicial to the interests of the other Respondents to

do so. Action by the Selection Team in this regard should not be construed to imply acceptance or rejection of a proposal.

Responses will be rated and ranked to determine which Consultants will receive a Contract award.

## 5.1. Contract

The winning vendor will be **required** to sign a Commonwealth of Massachusetts Standard Contract and Terms and Conditions without exception.

## **EXHIBIT A – RESPONSE COVER SHEET**

Response Cover Sheet for

## STATEMENT OF WORK for Salem State University North Campus Clean Energy Feasibility Study

**Issued by:** Salem State University, 352 Lafayette Street, Salem, MA 0197

Issued on:

June 26, 2020

| COMPANY NAME:                                   |                     |  |
|---|---------------------|--|
|   |                     |  |
| Company's Federal ID Number:                    |                     |  |
| Address:  |                     |  |
| Remit to Address:                               |                     |  |
| CITY  | STATEZIP            |  |
| TELEPHONE NO                                    | Toll Free or "800": |  |
| E-Mail Address:                                 |                     |  |
| Web address:                                    |                     |  |
| Name:   |                     |  |
| Title:  |                     |  |
| Authorized Signature:                           |                     |  |
| Date:   |                     |  |
| Main Contact:                                   |                     |  |
| Person responsible for proposal (if different): |                     |  |

#### EXHIBIT B – PRICING RESPONSE FORM

Please complete the following table for the Proposed Work Plan below. Use the phased Scope of Work Elements in Section 3.3 and add any appropriate additional details. Include all costs associated with each Phase as payment will be provided upon completion of each phase.

| WORK PLAN TASKS AND DELIVERABLES                    | PRICE                                 |
|---|---------------------------------------|
| Phase 1.  |                                       |
| a. DESCRIPTION                                      |                                       |
| DELIVERABLES  |                                       |
| a.  | \$                                    |
|   |                                       |
|   |                                       |
|   | \$                                    |
|   |                                       |
|   | \$                                    |
|   | , , , , , , , , , , , , , , , , , , , |
|   |                                       |
|   | \$                                    |
|   |                                       |
|   |                                       |
| TOTAL COST/PRICE FOR SERVICES IDENTIFIED IN THE SOW | \$                                    |

NOTE: Salem State University will pay for delivered products upon approval at the end of each phase of work.

NOTE: Salem State University will not pay for transportation costs or meals. Any other out-of-pocket expenses shall be paid only with Salem State University's prior approval and only at cost without markup.