

REQUEST FOR QUALIFICATIONS

EXECUTIVE MECHANICAL ENGINEERS

FOR THE

UNIVERSITY OF CALIFORNIA, SAN DIEGO

**MULTIPLE BUILDINGS
VAV UPGRADES**

Managed by UCSD Facilities Management

**Proposals due
Tuesday, December 1, 2009, 4:00 p.m.**

Issue date – Friday, November 6, 2009

I. INTRODUCTION

The University of California, San Diego, will be selecting multiple Executive Mechanical Engineers to perform design, prepare construction and bid documents, and provide construction phase services to upgrade campus building laboratory fume hood and HVAC systems from constant volume to variable air volume. This includes associated architectural, structural and electrical modifications as required. These projects are located at the UCSD La Jolla campus. The overall budget for construction is estimated to be approximately \$46 million at CCCI 5298. The project is subject to the campus/University academic and administrative approval. The University will select several firms to be assigned as appropriate to upcoming projects.

II. PROJECT DESCRIPTION

Each project will typically consist of the retrofit of laboratory fume hoods with Phoenix Controls airflow control valves, or equivalent, to modulate airflow in the fume hood supply and exhaust systems, and reduce the energy use of the facility. The scope shall include installation of the valves; installation and wiring of fume hood monitors, sash sensors, and occupancy sensors; installation and wiring of temperature sensors and controllers, and electric actuators on hot water valves; installation of airflow control wiring and re-working of existing pneumatics to control new valves; and ensuring that the central HVAC systems operate properly in coordination with the modifications at the zone level.

Crucial elements of each project will typically include planning and scheduling to minimize impact on building occupants. The project shall be scheduled in phases, and areas not under construction shall maintained normal operation while the retrofit work is being accomplished in designated construction areas. This applies to all areas of the building, including (but not limited to) duct systems (airflow), hydronic systems (mainly heating hot water), pneumatic systems, and electrical systems. At every stage of the project the occupied zones shall maintain temperature and pressure control. Upon the completion of the project the system shall be fully commissioned to ensure a high-quality environment and improved energy efficiency. All fume hoods shall maintain a minimum 100 fpm capture velocity and all zones shall control temperature within + 2 degrees Fahrenheit.

The buildings likely to receive VAV upgrades are:

1. Sverdrup Hall
2. Center for Magnetic Recording research, (CMRR).
3. Center for Molecular Genetics, (CMG).
4. Engineering Building Unit II, (EBU-2).
5. Humanities and Social Sciences, (H&SS).
6. Cellular and Molecular Medicine East, (CMME).
7. Hubbs Hall
8. George Palade Laboratories, formerly CMMW.
9. Bonner Hall

10. York Hall
11. Warren Lecture Hall
12. AP&M
13. McGill/Mandler Hall
14. MTF
15. CTF (Hillcrest)
16. Gymnasium
17. Geisel Library
18. Scholander Hall
19. Mandeville

UCSD may choose to add or delete buildings to the above list at its sole discretion.

III. SCOPE OF SERVICES

The scope of services for each project will typically consist of basic engineering and architectural services, including field investigation, schematic design, design development, detailed phasing plan, construction documents, creation of a Systems Manual, cost estimates, scheduling, the bid/award process, and construction contract administration services. The Executive Engineer will provide documentation as directed by the University, including accurate plan views and riser diagrams to substantiate the as-built field survey work, and a Systems Manual detailing the building's current sequence of operations and existing HVAC mechanical and electrical systems. Three-dimensional CAD modeling of the main ductwork and terminal units may be requested to aid with project phasing.

After selection Executive Mechanical Engineers fees will be negotiated based upon a more specific scope per each building assigned. These projects are intended to commence in 2010 and 2011.

IV. PROJECT DELIVERY METHOD

The project delivery method will be Design-Bid-Build.

V. JOINT VENTURES/ASSOCIATIONS

The University will not entertain joint ventures for this project.

VI. CONSULTANTS

The University is only selecting Executive Mechanical Engineers at this time. All sub-consultants, such as, but not limited to, architect, other engineering disciplines (Electrical, Structural, etc.), will be selected at a later date in collaboration with each selected Executive Mechanical Engineering firm, per project.

VII. SUBMITTAL REQUIREMENTS AND SELECTION CRITERIA

The University of California, San Diego requests the following submittal material for use in the selection of a professional engineering firm to perform the Scope of Services described in Section III:

- A. Demonstrated recent experience and excellence in the design of HVAC renovations within a University laboratory environment.
- B. Experience working with the LEED certification process and familiarity with LEED v3 for Existing Buildings.
- C. Proven technical, cost management, scheduling, and quality control capabilities.
- D. Qualifications of the Principals and Project Team Members, including a clear definition of the primary responsibility of each.
- E. Outline of the basic work plan to accomplish the work.
- F. Proximity to the UCSD site will be heavily weighted.
- G. Ability to provide Professional Liability Insurance in the amount of \$1,000,000.

VIII. STATEMENT OF UNDERSTANDING

While each Executive Mechanical Engineer will be selected utilizing qualification based selection, a Statement of Understanding will be requested from each of the short-listed engineering firms prior to interview that, if selected; they agree to provide their services within specifically stated and limited fee parameters.

IX. INTERVIEWS

Interviews for shortlisted firms will occur on Thursday, January 14, 2010.

X. PROCEDURES FOR SUBMISSION

Engineering firms wishing to be considered should submit background materials indicating their experience in the programming and design of HVAC renovations within a University laboratory environment, including references, Standard Form 330 and University Statement of Qualifications (Attachment B). This proposal (one hard copy and one digital copy) is due in this office no later than Tuesday, December 1, 2009, 4:00 p.m.

Forward material **by mail, messenger or overnight express** to:

University of California, San Diego
M. Boone Hellmann, FAIA, Associate Vice Chancellor
Office of Facilities Design and Construction
10280 North Torrey Pines Road Suite 465, MC 0916
La Jolla, California 92037-0916

Send digital copy **by email** to:

Anna Levitt
Assistant Campus Energy Manager
Facilities Management
University of California, San Diego
alevitt@ucsd.edu

Hours of business: Monday through Friday, 8:00 am to 4:30 pm.

Technical questions or questions regarding the scope of the project should be addressed to John Dilllott, Director of Energy and Utilities, Facilities Management, at (858) 822-2807. (Waiting to hear back from Dave LaGuardia regarding who to contact with questions)

UCSD requests that interested firms refrain from contacting any other party regarding this project.

The University of California is an Equal Opportunity Employer - minorities and women are encouraged to apply for consideration.