***The University of North Carolina at Charlotte***

Capital Projects

Facilities Management

9151 S Cameron Blvd.

Charlotte, N.C. 28223-0001

TEL: 704-687-0615

PROJECT: **UNC Charlotte**

**Rup-2 & Fretwell HVAC & Controls**

**Design Services**

**Code: 42226 Item 320**

**Code: 42226 Item 326**

Thank you for your interest in the subject project. This information is being provided to all firms which express an interest in the design of the project. Limit the size of your submittal document to no greater than 12½ inches in height and 9½ inches in width **maximum 30 pages – including standard forms**. Submittals are due in my office by 2:00 p.m., **March 2nd, 2023**. Do not transmit any submittal information via email.

Submittals **must** include the cover sheet, Sections I and II of the Standard Form 330, the Designer’s Supplemental Information Form, along with any additional information considered appropriate. Please deliver one copies of the submittal, along with **one** electronic copy in pdf format USB to my office at the address noted above. Each hard copy should be bound together as a document and the digital submission should be assembled into a single file.

All submittals will be reviewed by the University Designer Evaluation Committee. The preliminary evaluation process will be complete in **May, 2023** and firms winnowed for interviews will be notified at that time.

Please deliver all submittals to me at the address written above

Sincerely,

LaKeya Hewlin

The University of North Carolina at Charlotte

**Rup-2 & Fretwell - HVAC & Controls**

Design Services

Code: 42226 Item 320

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**PROJECT DESCRIPTION:**

**RUP-2**

The project will include the design scope of the following items:

**Control Systems**

* Upgrading the existing LON controls and Tridium JACE network controllers with SE EcoStruxure BACnet IP controllers and Automation servers (network controllers).
* Removal of the existing TEKWORX Optimization package
* Replace existing immersion temperature sensors (reuse existing sensor bulb wells).
* Replace existing space sensors and ODA sensors.
* Replace all existing flow meters, control valves and damper actuators.
* Provide secondary BACnet/MSTP and/or BACnet/IP communications to DDC panels.
* Conduct Retro-commissioning to identify system deficiencies, and to help with design decisions.
* Design a full-scale building control system operating per the Owner approved sequence of operation.

**Mechanical Systems**

* Design or a heat pump split system to serve the restroom.

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* Design and specify cooling tower makeup and blowdown valves and meters.
  + And new domestic water meter.

**Electrical Systems**

* Design for lighting fixture (LED) upgrades in the back of house (MEP rooms, Storage rooms, IT closets, and staircases).

**FRETWELL**

**Control Systems**

* Design controls to DDC.(currently pneumatic)
* Design for replacement of all water flow meters, control valves and air damper actuators.
* Design for new VAV boxes
* Provide Retro-commissioning services to identify system deficiencies.
* Design building control system operating per the owner-approved sequence of operations.

**Mechanical Systems**

* Conduct feasibility Study to see if we can connect CHW/HHW from RUP-5 or

McEniry CHW or replace the existing Chillers.

* Upgrade existing Air Handling Unit (AHU-1) to include fan walls, O/A dampers, drain pans and control valves.
* Conduct Test, Adjusting, Balancing (TAB) on AHU-1

Design cooling tower makeup and blowdown valves and meters. and domestic water meter.

**Electrical Systems**

* Design new VFDs that serve Cooling Tower 1 cells, Secondary hot/chilled water pumps, chiller room exhaust fans and boiler air supply fans.
* Design for lighting fixture (LED) upgrades in the back of house (MEP rooms, Storage rooms, IT closets, and staircases).

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**EXPECTATIONS OF THE DESIGNER:**

The Design team must include professionals who can demonstrate high standards of accomplishments and knowledge in the following areas:

* North Carolina State Construction Office and Department of Insurance requirements and procedures;
* Demonstrated experience with direct-digital control, building control sensors, variable frequency drives and sequence of operations design.
* Success in working with other required disciplines for project design deliverables.

**Scope of Work:**

The Designer shall be responsible for, but not limited to, the following items:

* Review all data furnished by the University including existing building documents, reports and records of the existing HVAC and controls.
* Meet with University Engineering and Maintenance Operations Department to review design requirements and expectation for the project success.
* Prepare SD/DD and CD plans and specifications in accordance with the NC SCO requirements.
* Provide bidding, contracting assistance and construction administration services.

**Designer Selection Criteria**

As detailed in the North Carolina Administrative Code (01 NCAC 30D .0303), the University’s Design Selection Committee will use the following in evaluating qualifications:

(1) Specialized or appropriate expertise in the type of project.

(2)  Past performance on similar projects.

(3) Adequate staff for the proposed project design team.

(4)  Current workload and State projects awarded.

(5) Proposed design approach for the project.

(6)  Recent experience with project costs and schedules.

(7)  Construction administration capabilities.

(8)  Proximity to and familiarity with the area where project is located.

(9)  Record of successfully completed projects without major legal or technical problems.

(10) Other factors that may be appropriate for the project.

Note: One designer will be selected to furnish design for both RUP 2 and Fretwell HVAC & Controls.

**SCHEDULE:**

The designer must be able to complete all requirements of the contract and complete the Construction Document submission for this project in **December 2023.**

**BUDGET:**

The total budget for this project is $2,305,509 which must provide for design support services, design fees, Construction Administration, and construction of the project scope described above.

This sheet is to be the cover sheet for the submittal. If the submittal is bound in a binder, this will be the top sheet visible upon opening the binder cover.

**SUBMITTAL**

**March 2nd, 2023**

**DESIGN**

**UNC CHARLOTTE**

**Rup-2 & Fretwell-HVAC & Controls**

**FIRM INFORMATION**

Engineering Firm Location (Headquarters & Office Serving this Project)

Add others as needed Location (Headquarters & Office Serving this Project)

**Rup-2 & Fretwell - HVAC & Controls** Design Firm

**UNC CHARLOTTE** Contact Name

**Code: 42226 Item 320**

**Code: 42226 Item 326**

Phone:

Email:

## DESIGNER’S STAFFING INFORMATION (To follow cover sheet)

**Instructions**: Provide information listed below regarding personnel who will be assigned to this project. One person may be assigned to more than one responsibility. Add additional sheets as necessary. In addition to this form, design firms are requested to submit Standard Form 330 for all personnel who will work on the project.

**PRINCIPAL IN CHARGE**

Name: License # Office Location

List of most recent North Carolina State-owned projects on which this person has participated:

**%**

**Past or Current Projects** **Complete** **Location Responsibility**

**DESIGN LEADER**

Name: License # Office Location

List of most recent North Carolina State-owned projects on which this person has participated:

**%**

**Past or Current Projects** **Complete** **Location Responsibility**

# CONSTRUCTION ADMINISTRATOR

Name: License # Office Location

List of most recent North Carolina State-owned projects on which this person has participated:

**%**

**Past or Current Projects** **Complete** **Location Responsibility**

Submitted by:

Signature: