The University of North Carolina at Charlotte

Planning, Design & Construction

2nd Floor - Facilities Management

9151 Cameron Blvd.

Charlotte, N.C. 28223-0001

TEL: 704-687-0615

**PROJECT**: **UNC Charlotte
 Grigg HVAC & Controls**

**Code: 42326 Item: 320**

**SCO ID: 24-27749-01**

***Commissioning Services***

Thank you for your interest in the subject projects. This information is being provided to all firms which express an interest in the commissioning of the project(s). Limit the size of your submittal document to no greater than forty (40) pages (20 pages when printing double sided), 12½ inches in height and 9½ inches in width. Submittals are due in this office by 2:00 p.m., October 9th, 2025. **Do not transmit any submittal information via email.**

The University is seeking a Commissioning agent which is capable of reviewing design documents, preparing commissioning specifications and inspecting constructed facilities to ensure proper Mechanical, Electrical, and Plumbing (as needed for each project) commissioning of the facility described in the attachment. The selected firm will coordinate commissioning efforts with the project design engineer. One CxA will be selected for the project.

Submittals are to include the attached cover sheet, standard 330 Form, Commissioning Project Experience Listing form, along with any additional information considered appropriate. Please deliver one (1) hard copy of the submittal to my office at the address noted above along with one (1) digital submission (thumb-drive).

All submittals will be reviewed by the University Commissioner Evaluation Committee. The preliminary evaluation will be conducted in late October 2025. Firms selected (and those not selected) for interviews will be notified at that time.

Please deliver all submittals to me at the address written above.

Sincerely,

Bill Finley

Project Manager

The University of North Carolina at Charlotte

 **Grigg HVAC & Controls**

Building Commissioning Services

 **PROJECT DESCRIPTION:**

The project is to have the existing Pneumatic Actuators only replaced for the Chilled and Hot Water systems in the building mechanical plant. Replacement of all Actuators and Valves on AHU’s 1 through 10 including associated smoke dampers. Xenta controls in Cleanrooms removed/demoed and replaced with new full direct-digital control (DDC) for AHU’s 5 through 10. The Cleanrooms controls upgrade includes replacement of the pneumatic Phoenix valves and controls, also the replacement of pneumatic actuators associated with the lab exhaust fans. Sequence of operations to meet current building operational requirements. Update building graphics, trends and alarms where applicable.

**SCOPE OF SERVICES**

The Commissioning Authority (CxA) will serve as the University’s agent to commission all identified components in the Project. The CxA is not responsible for design concept, design criteria, compliance with codes, design or general construction scheduling, cost estimating, or construction management. The CxA may assist with problem solving or resolving non-conformance or deficiencies, but ultimately that responsibility resides with the construction manager and the engineering design team. The primary role of the CxA shall be to develop and coordinate the execution of a Commissioning Plan; observe and document the installation, checkout, start-up, and equipment and system testing to establish that equipment and systems are functioning in accordance with the requirements of the Contract Documents; and to assist in developing correct and complete documentation of the construction effort. **The CxA shall utilize a web application for managing the commissioning documentation associated with the project. A dedicated project site will be established, and this web application will provide real time data and a single interface for all project team members to share information and collaborate effectively.**

**COMMISSIONING TASKS**

The following tasks will be accomplished by the CxA to provide Commissioning during the design, construction and acceptance phases of the project

**A. Design Phase**

The CxA shall review and provide comments of the Construction Documents (95% design stage).

**B. Construction Phase**

During the Construction Phase, the CxA will monitor construction progress to ensure that established commissioning objectives will be achieved. The CxA shall provide the following tasks during the construction phase:

* Conduct a Pre-construction Commissioning Meeting to review Commissioning scope, plan, and schedule with the Designer’s architect and engineering team, Construction Manager, Site Superintendents, and Project Managers and Superintendents of applicable subcontractors. Applicable subcontractors must include mechanical, electrical and plumbing.
* Coordinate the Commissioning work and, with the Construction Manager (CM), ensure that Commissioning activities are being scheduled into the Contractor’s Project Schedule.
* Review Bulletin Drawings and Shop Drawings and inform University in situations where Commissioning Objectives are at risk.
* Attend Designer’s Monthly Project Progress Meetings and address major issues which impact successful commissioning.
* Continue to update Commissioning Schedule and coordination throughout construction with CM and subcontractors.
* Continually update and modify Commissioning Plan based on actual construction and installed equipment, and distribute to University, Design Team and CM.
* Prepare final pre-functional and final functional test procedures for the equipment and systems.
* Review and approve TAB Execution Plan.
* Maintain a Construction Variance and Deficiency Log of any items observed to be a problem, poorly installed, or discrepancies.
* Verify accessibility and maintainability of all operable equipment with emphasis on equipment mounted in the ceiling.
* Witness and verify the engineering approved BAS sequence of operations for all HVAC equipment and systems applicable to this project.
* Witness a sample of checkout, TAB, end-to-end testing, and calibration of controls.
* Observe first Pre-functional Test of each type of system, including mechanical, controls, electrical, and specialty systems.

**C. Acceptance Phase**

Commissioning during the Acceptance Phase is required to demonstrate that performance of the installed equipment and systems meet the requirements of the Contract Documents and Commissioning Plan. The CxA shall complete the following tasks during the Acceptance Phase:

**EXPECTATIONS OF THE COMMISSIONING TEAM**

Members of the Commissioning Team must be capable of listening, comprehending and responding to University leaders who will give both general and specific guidance for desired project parameters. The team must have a principal-in-charge that is a Professional Engineer in the State of North Carolina, with other Engineers as appropriate that are also registered Engineers. Project managers, lead field Engineers, and field support staff may be non-Engineers who have the technical training, past field experience and skill in Commissioning, especially in the areas of TAB, HVAC operations, DDC systems and electrical system operations. The required expertise for this project must be part of the skill and experience set of the firm making the proposal. It is the university’s desire that the Commissioning Authority (CxA) satisfy as many of the following preferences as possible:

1. It is desirable that the CxA will have acted as the principal CxA for multiple projects and as principal CxA for a project of a similar type facility as the Projects at hand.

2. The Commissioning team members should have extensive experience in:

1. operation and troubleshooting of HVAC systems,
2. direct digital control (DDC) systems,
3. testing, adjusting, and balancing (TAB) of HVAC systems. Extensive (minimum of five years)
4. field experience is required for this type of work and systems.
5. Demonstrate experience commissioning systems in an occupied building.
6. Experience with HVAC, BAS control systems.
7. Experience with Phoenix Valves and controls
8. Experience with University Labs, Vivarium’s, Cleanrooms, and Autoclaves
9. Experience with Regional Utility Plants and controls

3. Team members have knowledge and experience in building operations and maintenance, and have provided O & M training.

4. Team members have experience in energy-efficient systems design, and control strategy
optimization.

5. Team members have experience writing commissioning specifications and test procedures.

SCHEDULE: The Grigg HVAC & Controls project is currently in Design and scheduled to be completed in 2026.

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 COVER SHEET**

**COMMISSIONING SERVICES**

**Grigg HVAC & Controls**

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Commissioning/Engineering Firm Engineer of Record