The University of North Carolina at Charlotte

Capital Projects
Facilities Management
9201 University City Blvd.
Charlotte, N.C. 28223-0001

TEL: 704/687-0615

PROJECT: UNC Charlotte

West Substation

Advance Planning/Design Services

Code 41526 Item 309

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 40 pages, 20 pages when printing double sided—including standard forms, cover letters, and University issued Submittal Cover Sheets, but excluding the cover, tabs, separators, clear covers, bland pages, or cardstock backs. Actual page counts will be derived from the electronic pdf submittal. Do not include covers, blank pages, tabs, separators, etc. in your electronic submittal. Submittals are due in my office by 2:00 p.m., Tuesday, August 16th, 2016. 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 <u>five</u> copies of the submittal, along with <u>one</u> electronic copy in pdf format (CD, DVD, USB drive, etc. attached to a print submittal) 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 **late August**, and firms winnowed for interviews will be notified at that time. Interviews will take place **early September**.

There will be a **mandatory** proposal pre-submittal conference for any interested parties held at **11:00 a.m. on Tuesday, August 2nd, 2016, in Room 210, Cone Center** (Building #5 on the campus map — http://facilities.uncc.edu/maps). Visitor parking is available in **Cone Deck.**

The proposed site is open for review at any time.

Please deliver all submittals to me at the address provided above. Any questions about the project should be directed to the Project Manager, **Ms. Lisa Lanier** at llanier@uncc.edu.

Sincerely,

Joyce Clay

The University of North Carolina at Charlotte

West Substation

Advance Planning/Design Services
Code **41526** Item **309**

I. PROJECT DESCRIPTION:

The project is for the addition of a second electrical substation to feed electricity from Duke Energy's 100 KV-supply located west of UNC Charlotte's campus across W.T. Harris Blvd. This is needed to provide redundant electrical power support of critical loads, ensuring reliable power supply for research activities and business continuity in the case of natural or man-made disasters.

The design will be consistent with the Guiding Principles of the Campus Master Plan—www.masterplan.uncc.edu and the University Design & Construction Manual—http://facilities.uncc.edu/DCManual.

Some of the important design elements will be:

- Design consistent with established University Master Plan (Electrical Systems Infrastructure), and University Design manual;
- Site location and placement;
- Consolidation of critical load circuits:
- Determining associated tie-in methodology and location to existing electrical supplies serving campus;
- Substation sizing appropriate to carry identified critical loads;
- Coordination and communication between the University and Duke Energy;
- Simplicity of design with an emphasis on economical construction and maintainability;
- Effective and efficient electrical systems;

Location

The proposed West Substation site is located in the vicinity adjacent to Lot 27 on the West side of campus off of Alumni Way.

II. EXPECTATIONS OF THE DESIGNER:

The Designer will assist the University in identifying the appropriate location for the substation in accordance with the Campus Master Plan. During the Advanced Planning Phase, the Designer will present preliminary design options to the University for proposed routing from Duke Energy's 100 KV-supply to the proposed West substation. This will also include preliminary design options for distribution from the West substation to campus facilities that will be determined to require redundant power.

The Design team must include professionals who can demonstrate high standards of

accomplishments and knowledge in the following areas:

- Designing and administering construction of major electrical projects within budgets and in a timely manner—proven track records;
- Experience with various construction delivery methods to include design-bid-build;
- Working with external entities along with University customers;
- North Carolina State Construction Office and Department of Insurance requirements and procedures.

III. SCOPE OF WORK:

The scope of work for advance planning includes preliminary review and recommendations for the addition of a second electrical substation service to feed electricity from Duke Energy's 100 KV-supply located west of UNC Charlotte's campus across W.T. Harris Boulevard. In conjunction with University staff, the Designer will review and provide recommendations for which facilities will require critical building loads and determine what loads are required.

With the aid of University staff, the Designer will develop a presentation for the most economical and cost effective substation size and location. Meetings with end users and facilities management personnel will be necessary to define sizing needs, placement, and equipment requirements.

The Advance Planning Phase deliverables shall include:

- A narrative description of the project goals.
- Descriptive narrative, preliminary layout, and cost estimate of the recommended and effective solution to meet the University needs for this project.
- A conceptual design for the tie-in methodology and location to buildings requiring redundant power.
- Provide life cycle costs analysis for alternates to the design with considerations for sustainability.

The Designer shall schedule meetings with designated University representatives to review required data collection, technical, budget and schedule requirements.

The Designer shall develop a final Advance Planning Document that meets University needs and suffices for submission to the State Construction Office for approval.

Upon successful completion of the Advance Planning phase, University staff may solicit complete and comprehensive design services for the project from the Designer and their subconsultants.

IV. 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:

The current workload and past performance of sub-consultants on the designer's team will also be considered when evaluating qualifications.

For all relevant project examples submitted, provide a matrix indicating which design team members worked on the project(s).

V. SUBMITTAL REQUIREMENTS

- Provide a brief overview of the teams' understanding of the project. Also, provide the team members' accomplishments and responsibilities from similar projects.
- Five (5) bound booklets no more than **40 pages** (**20 if printing double sided**) containing design consultants' team with resumes and related work experience. Page limit shall be inclusive of Standard Form 330 Parts I & II.
- Submit booklet in digital format on one (1) DVD, CD, or USB drive in pdf format.
- Provide information in the following order:
 - A. UNC Charlotte Required Submittal Cover Sheet
 - B. Designer's Supplemental Information Form
 - C. Cover Letter (Optional)
 - D. SF 330 Parts I & II (List costs for all projects shown on SF 330 Part I in bold print within the project description).
 - E. Supplemental information organized into 10 categories with subheadings matching the 10 Designer Selection Criteria outlined above.

VI. SCHEDULE

The University estimates that the Advanced Planning for the project will take 6 months from time that the University gives the designer Notice to Proceed.

VII. BUDGET

The current budget authorization for this project is \$650,000.

The total project budget is \$6,500,000 which will include design support services, design fees, equipment, and construction of the elements listed 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 August 16, 2016

ADVANCE PLANNING/DESIGN

UNC CHARLOTTE West Substation

Electrical Engineering Firm or MEP Firm Location (Headquarters & Office Serving this Project) Subconsultant Firm & NC License # Location (Headquarters & Office Serving this Project)

West Substation UNC CHARLOTTE		Contact Name Phone:	
DESIGNER'S STAFFING INFOR	MATION (To 1	follow cover sheet)	
Instructions : Provide information list One person may be assigned to more addition to this form, design firms are the project.	than one respon	sibility. Add additiona	l sheets as necessary. In
PRINCIPAL IN CHARGE			
Name: St List of most recent North Carolina St	ate-owned proje	Office Loca	tion n has participated:
Past or Current Projects	% Complete	Location	Responsibility
DESIGN LEADER Name: List of most recent North Carolina St Past or Current Projects	ate-owned proje %	Office Loca ects on which this perso	n has participated: Responsibility
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Submitted by:	Si	gnature:	