

Addendum Number 2

Project: Cone Center HVAC Modernization
The University of North Carolina at Charlotte
SCO Project # SCO #16-12981-01

Date: July 13, 2017

Owner: The University of North Carolina at Charlotte

Designer: McCracken & Lopez, PA

NOTICE TO BIDDERS

This addendum is issued prior to receipt of bids, proposals, and its contents do hereby become a part of the pricing documents for the above referenced project.

All trade contractor bidders are responsible for assuring that their subcontractors and vendors are properly apprised of the contents of this Addendum.

All information contained in this Addendum supersedes and takes precedence over any conflicting information in the original pricing documents.

All bidders must acknowledge receipt of this Addendum in the space provided on the Form of Proposal for their bid package.

GENERAL INFORMATION

There is a scheduled walk thru of the Cone Building on Monday, July 17, 2017 at 10:00 AM. Meet outside Mechanical Room 134 adjacent to loading dock entry on the parking deck side.

The bid date is Wednesday, July 26, 2017 at 2:00 PM, as indicated in Addendum 1. The location is Room 112 in the Cone Building at UNC Charlotte.

Bidders who will not attend the Bid Opening need to ensure their sealed bids are delivered **no later than 1:00 PM, Wednesday, July 26, 2017** to the address indicated on page 3 of reissued Section 00 21 19 "Notice to Bidders" (Addendum 1).

ATTACHMENTS

This Addendum includes the following attached Documents:

1. Section 01 23 00 – Alternates (*Revised Section*)
2. Section 23 08 45 – Duct Cleaning (*New Section*)
3. Form of Proposal (*Revised Section*)
4. UNC Charlotte "Good Faith Effort" Requirements (*New Section*)
5. Pre-Bid Meeting Sign in Sheet

SPECIFICATION Changes

Section 00 01 10 – Table of Contents

1. Add new line item under the “DIVISION 23 – MECHANICAL (HVAC)” list – listed in numerical order:

“23 08 45 Duct Cleaning”

2. Add new line item under the “FORMS” list, following line item “Form of Proposal”:

“-UNC Charlotte “Good Faith Effort” Requirements”

Section 01 23 00 – Alternates (Revised Section Issued)

1. On page 1, Delete paragraph 3.1.A. (Alternate 1) in its entirety.

Section 23 08 45 – Duct Cleaning (New Section Issued)

1. Add new SECTION 23 08 45 - DUCT CLEANING

Form of Proposal (Revised Section Issued)

1. On Page 2, Delete 2nd paragraph (Alternate #1) in its entirety.

UNC Charlotte “Good Faith Effort” Requirements (New Section Issued)

1. Add this new document after the above “Form of Proposal” and in front of the “MBE Participation Forms and Affidavits A thru D, Appendix E.”

End of Addendum 2

SECTION 01 23 00 – ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for alternates.
- B. The contractor shall review all addenda, drawings, and specifications to fully appraise the extent of each alternate.

1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.3 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A Schedule of Alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

- ~~A. Alternate 1: Base Bid to include the furnishing and installation of all piping, controls, start up and commissioning, as well as accessories required for complete system. Provide Add Alternate for towers by TowerTech.~~

- B. Alternate 2: Base Bid to include the furnishing and installation of hot water piping and insulation only as necessary to provide complete installation of new equipment. Alternate shall include cost to install all new hot water pipe and insulation for all existing piping outside of mechanical room for all of Cone South.

END OF SECTION 01 23 00

SECTION 23 08 45 – DUCT CLEANING

PART 1 - SPECIAL PROVISIONS

1.1 QUALIFICATION OF THE HVAC SYSTEM CLEANING CONTRACTOR

- A. Membership - The HVAC system cleaning contractor shall be a member in good standing of the National Air Duct Cleaners Association (NADCA), or shall maintain membership in a nationally recognized non-profit industry organization dedicated to the cleaning of HVAC systems.
- B. Certification - The HVAC system cleaning contractor shall have a minimum of one (1) Air System Cleaning Specialist (ASCS) certified by NADCA on a full time basis, or shall have staff certified by a nationally recognized certification program and organization dedicated to the cleaning of HVAC systems.
- C. Supervisor Qualifications - A person certified as an ASCS by NADCA, or maintaining an equivalent certification by a nationally recognized program and organization, shall be responsible for the total work herein specified.
- D. Experience - The HVAC system cleaning contractor shall submit records of experience in the field of HVAC system cleaning as requested by the Engineer. Bids shall only be considered from firms which are regularly engaged in HVAC system maintenance with an emphasis on HVAC system cleaning and restoration.
- E. Licensing - The HVAC system cleaning contractor shall provide proof of maintaining the proper license(s), if any, as required to perform work in this state. The HVAC system cleaning contractor shall comply with all federal, state, provincial, local, and/or Authorities Having Jurisdiction rules, regulations, and licensing requirements.

1.2 STANDARDS

- A. NADCA Standard ACR - The HVAC system cleaning contractor shall perform the services specified here in accordance with the current published NADCA Standard ACR.
 - 1. All terms in this specification shall have their meaning defined as stated in NADCA Standard ACR.
 - 2. NADCA Standard ACR must be followed with no modifications or deviations being allowed.

PART 2 - HVAC SYSTEM CLEANING SPECIFICATIONS AND REQUIREMENTS

2.1 SCOPE OF WORK

- A. Contractor shall include in their price, the cost of internally cleaning the following systems. Refer to mechanical demolition and new work plan notes for additional information.
 - 1. Medium pressure supply ductwork for all ductwork downstream of AHU-4 in Cone South Building. This excludes lined ductwork in mechanical room, this ductwork shall be cut and removed.

2. Low pressure supply ductwork downstream of all terminal units in Cone South.
3. Return air ductwork for all ductwork located in cone south building.
4. Exhaust ductwork from toilet room exhaust grilles up to rooftop exhaust fan.
5. Any ductwork which is found to be lined shall be surface vacuumed only, do not use abrasive means, bristled brush, chemicals or wet cleaning process.

2.2 HVAC SYSTEM ASSESSMENT AND SITE SURVEY:

- A. Prior to the commencement of any cleaning work, the HVAC system cleaning contractor shall perform an assessment of the HVAC system to determine appropriate engineering controls, safety measures, tools and equipment and cleaning methods required to satisfactorily complete the project.
- B. Qualifications
 1. The HVAC system cleaning contractor performing the assessment shall be an Air Systems Cleaning Specialist (ASCS), Certified Ventilation Inspector (CVI), or equivalent. If the HVAC system cleaning contractor is inspecting for microbial contamination they shall also be qualified (through training and experience) and licensed (where applicable by law) to determine Conditions 1, 2 and 3.
- C. Work Plans
 1. Prior to the commencement of any cleaning work, the HVAC system cleaning contractor shall provide a written work plan including the following information:
 - a. Scope of Work identifying which HVAC components are to be cleaned, as well as those components not included in the process, along with specific environmental engineering controls required for the workspace, and any unique requirements.
 - b. Means and methods of cleaning to be used on the project.
 - c. When applicable, the name of all firms, contractors and representatives involved with the project, along with contact information and the tasks they will be performing.
 - d. Project schedule outlining dates and times the work will take place and timeframe for completion. The HVAC system cleaning contractor shall be involved in determining the sequence of cleaning within the larger project in order to provide the project schedule.
 - e. Product submittals listing all general use and/or specific "chemical type" products and coatings specific to the project, along with Safety Data Sheets for all chemical products to be used on the project.
 - f. Safety plan concerns and defined responsibilities of each organization's designated representative involved with executing the plan for the duration of the project.
 - g. Disclaimers clearly identifying items not covered under any warranty or guarantee for the project.

2.3 ENGINEERING CONTROLS

- A. The HVAC system cleaning contractor shall use engineering controls to ensure worker and occupant safety, and to prevent cross-contamination. The HVAC system cleaning contractor shall follow specified industry standards and guidelines specific to the project environment/facility.
- B. Equipment Maintenance & Use
 - 1. All HVAC system cleaning contractor equipment shall be maintained in good working order, consistent with applicable jurisdictional requirements.
 - a. Before any equipment is brought onto the work site it shall be cleaned and inspected to ensure that it will not introduce contaminants into the indoor environment or HVAC system.
 - b. All equipment shall be serviced as needed to limit possible cross-contamination from poor hygiene, and/ or unsafe operating conditions for service personnel and building occupants.
 - c. Any activity requiring the opening of contaminated vacuum collection equipment on-site, such as servicing or filter maintenance shall be performed in an appropriate containment area or outside of the building.
 - d. All collection devices, vacuums and other tools and devices shall be cleaned or sealed before relocating to different areas of the building and before removing the equipment from building.
 - e. Fuel-powered equipment shall be positioned in a location to prevent combustion emissions and air exhaust emissions from entering the building envelope. The HVAC system cleaning contractor shall monitor and manage location of equipment to prevent introduction of combustion emissions into the occupied space.
 - f. When using vacuum collection equipment exhausting within the building envelope, the HVAC system cleaning contractor shall utilize equipment fitted with HEPA filtration and the equipment shall have a collection efficiency of 99.97% at 0.3 micron particle size.
- C. Disposal of Debris & Contaminated Materials
 - 1. All debris removed from the HVAC System shall be disposed of in accordance with applicable federal, state, provincial and local requirements. To prevent cross-contamination, all contaminated materials removed from the HVAC system shall be properly contained prior to removal from the building. Materials deemed to be hazardous by governmental agencies shall be handled in strict accordance with any applicable local, regional or national codes.
- D. Control of Product Emissions
 - 1. Any application of cleaning agents or other chemicals shall be used in strict accordance with manufacturer's recommended procedures and product application instructions, including exhaust ventilation as required.

2.4 HVAC SYSTEM CLEANING REQUIREMENTS

- A. All cleaning and restoration procedures shall achieve the minimum level of visibly clean or the specified level of cleanliness verification as defined in the contractual documents for components within the project scope of work as defined in NADCA Standard ACR.
- B. Negative Duct Pressurization
 - 1. Prior to and throughout duration of the cleaning process, the HVAC system and associated air duct shall be kept at an appropriate negative pressure differential relative to the indoor non-work area. This negative pressure differential shall be maintained between the portion of the HVAC duct system being cleaned and surrounding indoor occupant spaces.
 - a. Under all circumstances, the HVAC system cleaning contractor shall verify pressurization differential during the project.
 - b. When utilizing vacuum collection equipment exhausting indoors it shall utilize HEPA filtration and the equipment shall have a collection efficiency of 99.97% at 0.3 micron particle size and be capable of retaining dislodged debris.
 - c. All equipment used to create negative duct pressurization that does not have HEPA filtration shall be exhausted outdoors to a location that would not allow re-entrainment.
- C. Service Openings
 - 1. The HVAC system cleaning contractor shall utilize service openings, as required for proper cleaning, at various points of the HVAC system for physical and mechanical entry, and inspection.
 - a. The HVAC system cleaning contractor shall utilize existing service openings installed in the HVAC system where possible.
 - b. Service openings installed into the system as needed shall not degrade the structural, thermal, or functional integrity of the system and shall comply with applicable UL, SMACNA and NFPA standards, as well as local, regional, and state codes.
 - c. Service openings shall be created in a manner that allows for proper closure and shall not hinder, restrict, or alter the airflow within the air duct.
 - d. Service opening construction materials and methods shall be in compliance with industry standards and local codes, using materials acceptable under those standards and codes.
 - e. The HVAC system cleaning contractor shall use duct access doors and permanent panels fabricated with materials classified for flammability and smoke spread if the material is exposed to the internal airstream.
 - f. All tapes used in the installation and closure of service openings shall meet the requirements of UL 181A.

- g. Service panels used for closing service openings in the HVAC system shall be of an equivalent gauge or heavier so as to not compromise the structural integrity of the duct.
- h. Service panels used for closing service openings shall be mechanically fastened (screwed or riveted) at maximum every 4" on center and equally spaced. The panel shall overlap the duct surfaces by a minimum of 1" on all sides.
- i. Closures must be properly insulated to prevent heat loss/gain or condensation on surfaces within the system.
- j. Rigid fibrous glass duct systems shall be resealed in accordance with NAIMA recommended practices. Only closure techniques that comply with UL Standard 181 or UL Standard 181A are suitable for fibrous glass duct system closures.
- k. Access and closure of service openings installed in fibrous glass shall be created and closed in such a manner that there are no exposed fibrous glass edges within the system common to the airstream.
- l. Any fibrous glass removed during the installation of a service opening shall be repaired or replaced with like material of the same thickness so that there are no breaks or openings that would degrade the R value, service rating or vapor/air barrier characteristics.
- m. All service openings shall be closed with materials meeting UL 181 for smoke generation and flame spread.
- n. All service openings capable of being re-opened for future inspection or remediation shall be clearly marked and have their location reported to the Engineer in project report documents.
- o. Cutting service openings into flexible duct is not permitted. Flexible duct shall be disconnected at the ends as needed for proper cleaning and inspection and shall be properly reconnected.

D. Cleaning Methods

- 1. All HVAC components included in the scope of work shall be cleaned by using a suitable agitation device to dislodge contaminants from the HVAC component surface and then capturing the contaminants with a vacuum collection device. Acceptable methods will include those which will not potentially damage the integrity of the duct, nor damage porous surface materials such as liners inside the duct or system components.
 - a. The included HVAC components shall be cleaned using source removal mechanical cleaning methods designed to extract contaminants from within the HVAC system and safely remove contaminants from the facility.
 - b. It is the HVAC system cleaning contractor's responsibility to select source removal methods that will render the HVAC system visibly clean and capable of passing cleanliness verification methods as described in NADCA Standard ACR.

- c. No cleaning method, or combination of methods, shall be used which could potentially damage components of the HVAC system or negatively alter the integrity of the system.
- d. Wet cleaning, power washing, steam cleaning and any other form of wet process cleaning of HVAC system components shall not damage or result in subsequent damage to the components. Cleaning agents or water shall never be applied to electrical, fibrous glass or other porous HVAC system components.

E. Particulate Collection

- 1. All methods used shall incorporate the use of vacuum collection devices that are operated continuously during cleaning. A vacuum collection device shall be connected to the component being cleaned through a predetermined opening. The vacuum collection device must be of sufficient power to render all areas being cleaned under negative pressure, such that containment of debris and the protection of the indoor environment are assured. When the vacuum collection device is used to convey air with debris, it shall maintain a sufficient velocity and negative pressure differential in the portion of the mechanical system being cleaned.
 - a. All vacuum devices exhausting air inside the building shall utilize HEPA filtration and the equipment shall have a collection efficiency of 99.97% at 0.3 micron particle size, including hand-held vacuums and wet-vacuums.
 - b. All vacuum devices exhausting air outside the facility shall be equipped with particulate collection including adequate filtration to contain debris removed from the HVAC system. Such devices shall exhaust in a manner that will not allow contaminants to re-enter the facility. Precautions shall be taken to locate the equipment down wind and away from all air intakes and other points of entry into the building. Release of debris outdoors must not violate any outdoor environmental standards, codes or regulations.

F. Containment

- 1. Debris removed during cleaning shall be collected and precautions must be taken to ensure that debris is not otherwise dispersed outside the HVAC system during the cleaning process.

G. Controlling Odors

- 1. Measures shall be employed to control odors and/or mist vapors during the cleaning process.

H. Component Cleaning

- 1. All HVAC components included in the Scope of Work must be cleaned in accordance with NADCA Standard ACR. Cleaning methods shall be employed such that all included HVAC system components must be visibly clean as defined in NADCA Standard ACR.
- 2. Air Duct Systems - If air duct cleaning is included in the scope of work, the HVAC system cleaning contractor shall:

- a. Clean air ducts to remove all non-adhered substances so that they are capable of passing NADCA cleanliness verification tests.
 - b. Access air ducts through service openings in the system that are large enough to accommodate mechanical cleaning procedures and allow for cleanliness verification.
 - c. Use mechanical agitation methods to remove particulate, debris, and surface contamination.
 - d. Capture dislodged substances with a vacuum collection device.
 - e. Not use any cleaning methods that will damage any HVAC components.
 - f. Mark the position of dampers and any air-directional mechanical devices inside the HVAC system prior to cleaning and, upon completion, restore them to their marked position.
 - g. Verify cleanliness after cleaning has been performed as described in NADCA Standard ACR.
3. Internally Insulated Duct System Components (e.g. Internal Duct Insulation & Sound Attenuators) - If internally insulated duct system component cleaning is included in the scope of work, the HVAC system cleaning contractor shall:
- a. Use cleaning methods that will not cause damage to internal insulation or sound attenuating components and will render the system capable of passing cleanliness verification tests.
 - b. Clean fibrous glass duct liner or duct board present in equipment or air ducts using mechanical agitation methods to remove particulate, debris, and surface contamination.
 - c. Ensure the mechanical cleaning methods selected for duct liner or fibrous glass duct board shall not create abrasions, breaks, or tears to fibrous glass liner or duct board surfaces.
 - d. Ensure the HVAC system is under constant negative pressure when cleaning internally insulated thermal or acoustical insulation components.
 - e. Ensure insulated thermal or acoustical insulation components do not get wet, in accordance with applicable NADCA and NAIMA standards and recommendations.
 - f. Verify cleanliness after cleaning has been performed as described in NADCA Standard ACR.
 - g. Identify for replacement fibrous glass materials with evidence of damage, deterioration, delaminating, friable materials, biological growth, or moisture such that they cannot be restored by cleaning or resurfacing.
 - h. When requested or specified, be capable of remediating exposed damaged insulation in air handlers and/or ducts requiring replacement.

- i. Scrape clean the base surface of all metal surfaces of the duct system that have undergone removal of degraded thermal-acoustic material such that they are free of loose, visible debris prior to installation of new insulation.
- j. In the event the fibrous glass removal was due to mold contamination, clean the base surface prior to reapplying any fibrous glass insulating products in the event the fibrous glass removal was due to mold contamination.
- k. In the event internal insulation materials must be replaced, ensure all materials conform to applicable industry codes and standards, including those of UL, NFPA 90-A, 90-B and SMACNA. All materials used for insulation replacement within the HVAC system shall meet or exceed the specifications of the original materials or current applicable codes. Installation of the replacement materials shall be in accordance with the manufacturer's written instructions. Installation of thermal-acoustic HVAC insulation common to the air stream shall comply with current SMACNA, NAIMA and other applicable codes and standards.
- l. Following completion of the installation of replacement materials, ensure all new fibrous glass surfaces shall be capable of meeting NADCA cleanliness verification requirements.

I. Antimicrobial Agents

1. If the application of antimicrobial agents is included in the scope of work, products must be legally approved for the application for which they will be used.
 - a. Antimicrobial agents shall only be applied if active biological growth is reasonably suspected, or where unacceptable levels of biological contamination have been verified through testing.
 - b. Application of any antimicrobial agents used to control the growth of biological contaminants shall be performed after the removal of surface deposits and debris.
 - c. When used, antimicrobial agents shall be applied in strict accordance with the manufacturer's written recommendations and EPA registration listing.

2.5 CLEANLINESS VERIFICATION

- A. All components within the project scope of work shall achieve, at minimum, the level of visibly clean or the specified method of cleanliness verification defined in the contractual documents. Cleanliness verification shall be performed on specified components as described in NADCA Standard ACR.
1. Cleanliness verification will be performed immediately after HVAC system component cleaning and prior to use in operation.
 2. Cleanliness verification will be determined after mechanical cleaning and before the application of any treatment or introduction of any treatment-related substance to the HVAC system, including biocidal agents and coatings.

B. Visual Inspection

1. Visual inspection of porous and non-porous HVAC system components shall be conducted to assess that the HVAC system is visibly clean as defined in NADCA Standard ACR or the specified method of cleanliness verification defined in the contractual documents.
 - a. If no contaminants are evident through visual inspection, the HVAC system shall be considered clean.
 - b. If visible contaminants are evident through visual inspection, those portions of the system where contaminants are visible shall be re-cleaned and subjected to re-inspection for cleanliness.

2.6 POST-PROJECT DOCUMENTATION

- A. At the conclusion of the project, if specified in the contract, the HVAC system cleaning contractor shall provide documentation showing compliance with this specification for all work performed. This documentation may include the following:
1. Success of the cleaning project, as verified through visual inspection and/or cleanliness verification.
 2. Photo images, HVAC plans and other supporting documents such as submittal forms for materials used and/or warranties or guarantees.
 3. System areas found to be damaged and/or in need of repair.
 4. A copy of the lab results, if NADCA Vacuum Test is used for cleanliness verification.
 5. Chain of custody documentation, if any outside laboratories or testing agencies are used.

2.7 SUPPLEMENTAL INFORMATION

- A. Applicable Standards and Publications - The following current standards and publications of the issues currently in effect form a part of this specification to the extent indicated by any reference thereto:
1. National Air Duct Cleaners Association (NADCA): "Assessment, Cleaning & Restoration of HVAC Systems (ACR)."
 2. National Air Duct Cleaners Association (NADCA): "Introduction to HVAC System Cleaning Services," 2004.
 3. Underwriters' Laboratories (UL): UL Standard 181.
 4. American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE): Standard 62, "Ventilation for Acceptable Indoor Air Quality".
 5. American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE): Standard 180 – "Standard Practice for Inspection and Maintenance of Commercial Building HVAC systems".

6. American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE): Standard 62.2-2010, "Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings".
7. Environmental Protection Agency (EPA): "Building Air Quality," December 1991.
8. Environmental Protection Agency (EPA): "Mold Remediation in Schools and Commercial Buildings", September 2008.
9. Sheet Metal and Air Conditioning Contractors' National Association (SMACNA): "HVAC Duct Construction Standards - Metal and Flexible," 1985.
10. North American Insulation Manufacturers Association (NAIMA): "Cleaning Fibrous Glass Insulated Air Duct Systems," 1993.
11. National Fire Protection Association (NFPA): 90-A and 90-B
12. Institute of Inspection Cleaning and Restoration Certification (IICRC): S520.
13. US Green Building Council LEED Existing Buildings: Operations & Maintenance.

END OF SECTION 23 08 45

FORM OF PROPOSAL

Cone Center HVAC Modernization

Contract: _____

University of North Carolina at Charlotte

Bidder: _____

SCO-ID #16-12981-01

Date: _____

The undersigned, as bidder, hereby declares that the only person or persons interested in this proposal as principal or principals is or are named herein and that no other person than herein mentioned has any interest in this proposal or in the contract to be entered into; that this proposal is made without connection with any other person, company or parties making a bid or proposal; and that it is in all respects fair and in good faith without collusion or fraud. The bidder further declares that he has examined the site of the work and the contract documents relative thereto, and has read all special provisions furnished prior to the opening of bids; that he has satisfied himself relative to the work to be performed. The bidder further declares that he and his subcontractors have fully complied with NCGS 64, Article 2 in regards to E-Verification as required by Section 2.(c) of Session Law 2013-418, codified as N.C. Gen. Stat. § 143-129(j).

The Bidder proposes and agrees if this proposal is accepted to contract with the UNC Charlotte in the form of contract specified below, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation and labor necessary to complete the construction of Cone Center HVAC Modernization in full in complete accordance with the plans, specifications and contract documents, to the full and entire satisfaction of the State of North Carolina, the requirements of McCracken & Lopez, P.A. and The University of North Carolina at Charlotte with a definite understanding that no money will be allowed for extra work except as set forth in the General Conditions and the contract documents, for the sum of:

SINGLE PRIME CONTRACT:

Base Bid: _____ Dollars(\$)

General Subcontractor:
_____ Lic _____

Plumbing Subcontractor:
_____ Lic _____

Mechanical Subcontractor:
_____ Lic _____

Electrical Subcontractor:
_____ Lic _____

GS143-128(d) requires all single prime bidders to identify their subcontractors for the above subdivisions of work. A contractor whose bid is accepted shall not substitute any person as subcontractor in the place of the subcontractor listed in the original bid, except (i) if the listed subcontractor's bid is later determined by the contractor to be non-responsible or non-responsive or the listed subcontractor refuses to enter into a contract for the complete performance of the bid work, or (ii) with the approval of the awarding authority for good cause shown by the contractor.

ALTERNATES:

Should any of the alternates as described in the contract documents be accepted, the amount written below shall be the amount to be "added to" or "deducted from" the base bid. (List "Add (+)" or "Deduct (-)" as appropriate.)

~~Alternate #1: Base Bid to include the furnishing and installation of all piping, controls, start-up and commissioning, as well as accessories required for complete system. Provide Add Alternate for towers by TowerTech.~~

_____ Dollars(\$)

Alternate #2: Base Bid to include the furnishing and installation of hot water piping and insulation only as necessary to provide complete installation of new equipment. Alternate shall include cost to install all new hot water pipe and insulation for all existing piping outside of mechanical room for all of Cone South.

_____ Dollars(\$)

UNIT PRICES

Removal and Replacement of 100 SF of existing dry wall ceiling.
Include disposal, after hours work and paint to match.

Unit Price(\$)

Removal of 100 SF of existing lay-in ceiling and grid per spec to mach.

Unit Price(\$)

ALLOWANCES

Provide allowance of \$12,000 for repair of ductwork located concealed in chase on 3rd level at entrance to Call Center. Condition of duct is unknown and removal/replacement may be required after investigation. Repair/Replacement must be completed after hours and operational by A.M.

MINORITY BUSINESS PARTICIPATION REQUIREMENTS

Provide with the bid - Under GS 143-128.2(c) the undersigned bidder shall identify **on its bid** (Identification of Minority Business Participation Form) the minority businesses that it will use on the project with the total dollar value of the bids that will be performed by the minority businesses. **Also** list the good faith efforts (Affidavit **A**) made to solicit minority participation in the bid effort.

NOTE: A contractor that performs all of the work with its own workforce may submit an Affidavit (**B**) to that effect in lieu of Affidavit (**A**) required above. The MB Participation Form must still be submitted even if there is zero participation.

After the bid opening - The Owner will consider all bids and alternates and determine the lowest responsible, responsive bidder. Upon notification of being the apparent low bidder, the bidder shall then file within 72 hours of the notification of being the apparent lowest bidder, the following:

An Affidavit (**C**) that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, which is equal to or more than the 10% goal established. This affidavit shall give rise to the presumption that the bidder has made the required good faith effort and Affidavit **D** is not necessary;

* **OR** *

If less than the 10% goal, Affidavit (**D**) of its good faith effort to meet the goal shall be provided. The document must include evidence of all good faith efforts that were implemented, including any advertisements, solicitations and other specific actions demonstrating recruitment and selection of minority businesses for participation in the contract.

Note: Bidders must always submit **with their bid** the Identification of Minority Business Participation Form listing all MB contractors, vendors and suppliers that will be used. If there is no MB participation, then enter none or zero on the form. Affidavit A or Affidavit B, as applicable, also must be submitted with the bid. Failure to file a required affidavit or documentation with the bid or after being notified apparent low bidder is grounds for rejection of the bid.

Proposal Signature Page

The undersigned further agrees that in the case of failure on his part to execute the said contract and the bonds within ten (10) consecutive calendar days after being given written notice of the award of contract, the certified check, cash or bid bond accompanying this bid shall be paid into the funds of the owner's account set aside for the project, as liquidated damages for such failure; otherwise the certified check, cash or bid bond accompanying this proposal shall be returned to the undersigned.

Respectfully submitted this day of _____

(Name of firm or corporation making bid)

WITNESS:

(Proprietorship or Partnership)

By: _____
Signature

Name: _____
Print or type

Title _____
(Owner/Partner/Pres./V.Pres)

Address _____

ATTEST:

By: _____

Title: _____
(Corp. Sec. or Asst. Sec. only)

License No. _____

Federal I.D. No. _____

Email Address: _____

(CORPORATE SEAL)

Addendum received and used in computing bid:

Addendum No. 1 _____ (check)

Addendum No. 2 _____ (check)

UNC Charlotte
“Good Faith Effort” Requirements
(Cone Center HVAC Modernization)

This information is provided as a guide for firms who may be new to UNC Charlotte and may not be familiar with our expectations regarding minority business participation on University Managed Projects (UMP) projects. Bidders should be familiar with the ***Guidelines for Recruitment & Selection of Minority Businesses for Participation In University of North Carolina Construction Contracts***

Identification of HUB Certified/Minority Business Participation form – Only list minority firms that you will use as construction subcontractors, vendors, suppliers or professional service providers on this project. The bidder cannot list himself on this form as he cannot subcontract to himself. **Note:** This form should be submitted with your bid, even if left blank.

Affidavit A – Listing of Good Faith Efforts – the bidder is certifying that he has made a good faith effort to comply under those areas checked on the form. Do not check a Good Faith Effort item unless you can provide the following;

1. Contacting minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor or available on State or local government maintained lists **at least 10 days before the bid or proposal date** and notifying them of the nature and scope of the work to be performed.

Example: Copies of written (emailed or faxed) notification to minority businesses and copies of quotes/proposals received for work solicited to minority businesses. Notification should include, at a minimum, project location, location where plans and specifications may be obtained or viewed, trade or scopes of work for which subcontracts are being solicited, contact person within the prime contractor organization.

Be sure to maintain a telephone log to confirm that minority firms received your IFB. The log should contain the date contacted, telephone number, and name of the individual representing the minority firm who acknowledged receipt of your IFB. ***Also maintain a telephone log to confirm that minority firms acknowledged a “bid/no bid” to your IFB.*** The log should contain the date contacted, telephone number, and name of the individual representing the minority firm who acknowledged “bid/no bid” to your IFB.

2. Making the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bid or proposals are due.
Example: Copies of written (emailed or faxed) notification to minority businesses should include, at a minimum, project location, location where plans and specifications may be obtained or viewed, trade or scopes of work for which subcontracts are being solicited, contact person within the prime contractor organization.
3. Breaking down or combining elements of work into economically feasible units to facilitate minority participation.
Example: Document steps taken to segment elements of work into economically feasible units to meet minority business availability. Identify sub-contractors/suppliers/consultants and scope of work involved in segmenting.

Be sure that you are soliciting quotes from **at least** three (3) minority firms in scopes of work that typically have adequate numbers of minority firms available that can perform the work required (hauling, concrete, flooring, masonry, painting, electrical suppliers, etc.). Do not solicit quotes from minority firms in those scopes of work that typically do not have minority firms available that

can perform the work required (elevators, fire suppression systems, roofing, etc.). If there are minority firms that you typically use on your projects then by all means, feel free to use them, if you are sure you are receiving reasonable pricing and quality work.

4. Working with minority trade, community or contractor organization identified by the Office for Historically Underutilized Businesses (HUB) and included in the bid documents that provide assistance in recruitment of minority businesses. **Note:** Minority plan rooms are not applicable.
Example: Provide a copy of meeting minutes between prime contractor and minority trade, community or contractor organization. At minimum the following topics should be discussed/reviewed during the meeting: project location; location where plans and specifications may be obtained or viewed; trade or scopes of work for which subcontracts are being solicited; bonding requirements; insurance requirements; prime contractor's contact person; minority trade, community or contractor organization contact person; strategies to segment elements of the work into economically feasible units to meet minority business availability; strategies to increase minority business utilization through joint ventures and/or partnerships; notification that the meeting will be counted toward the contractor's good faith effort.
Example: Maintain a copy of the request, and have the date, telephone number and name of the individual who acknowledged receipt of your request and information regarding any/all assistance provided by the organization
5. Attending any pre-bid meetings scheduled by the public owner.
Example: Attendance will be verified by conference sign-in sheet.
6. Providing assistance in getting required bonding or insurance or providing alternatives to bonding or insurance for subcontractors.
Example: Documentation describing the type of assistance provided or offered to minority businesses. Provide names and contacts of minority businesses to which assistance was offered and names of the contact person of bonding companies or financial institutions offering assistance.
7. Negotiating in good faith with interested minority businesses and not rejecting them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.
Example: Document number of bids received from minority businesses in the trade or scopes of work for which subcontracts are being solicited, the number of minority businesses that submitted low bids or proposals, the number of minority businesses the bidder has offered to negotiate prices or services, and the number of minority businesses the bidder has agreed to utilize on the project, outline steps taken.
8. Providing assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required or assisting minority businesses in obtaining the same unit pricing with the bidders supplier.
Example: Document names, addresses and telephone numbers of minority businesses to which assistance was offered, outline steps taken. Give dates assistance was offered and document outcome.
9. Negotiating joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
Example: Provide a copy of joint venture or partnership arrangements between bidder and minority business.

10. Providing quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.

Example: Provide a copy of quick pay agreements and/or policies and document the number of minority businesses that will utilize the quick pay agreement. Provide a copy of the quick pay agreement between bidder and minority business.

Note: Referencing the Good Faith Efforts listed above in your IFB is not enough. You must be able to document your efforts.

Affidavit B – Intent to Perform Contract with Own Workforce – In making this certification the bidder is stating that he does not customarily subcontract elements of this type project and normally performs and has the capability to perform and will perform all elements of the work on this project with his own current workforce. The bidder agrees to make a Good Faith Effort to utilize minority suppliers where possible. “**Self-performing**” means the contractor has all equipment, personnel and supplies on hand to perform the contract. If the contractor needs to purchase supplies or rent equipment and operators to perform the work, then the contractor **is not** self-performing and should make efforts to purchase supplies or equipment, or temporary labor from minority firms. **Note:** No other Affidavits are required if the Bidder meets this criteria.

Affidavit C – Portion of the Work to be Performed by HUB Certified/Minority Businesses – This form is to be submitted only by the apparent lowest responsible, responsive bidder with equal to or greater than 10% minority participation.

Affidavit D – Good Faith Efforts – This form is to be submitted only by the apparent lowest responsible, responsive bidder with less than 10% minority participation along with their backup documentation.

Minority-owned Pre-qualified Bidders – **must also** meet the minority participation goals set for the project. Work performed by the minority-owned pre-qualified bidder will be counted towards the minority participation goal **only if** the minority contractor is **self-performing** and submitted Affidavit B.

Certification Requirements – Ensure the minority firms you contact for subcontracting opportunities are listed in the Statewide Uniform Certification (SWUC) Vendor database as **only firms** listed in the SWUC Vendor database, at the time of contract award, **will be counted** towards the minority participation goal for this project. Go to <https://www.ips.state.nc.us/vendor/searchvendor.aspx?t=h> for access to the SWUC Vendor database.

Assistance:

Email (**Email Subject: Cone HVAC Modernization**) the UNC Charlotte HUB Coordinator, Dorothy Vick, at dlvick@uncc.edu, by **12:00 Noon, Thursday, July 13, 2017**, for the following;

1. **Assistance in finding certified minority firms who have worked on UNC Charlotte projects and who can perform the scopes of work (site work, concrete, electrical, etc.) you are seeking, and/or**
2. **A list of minority trade, community or contractor organizations** identified by the Office for Historically Underutilized Businesses that provide assistance in recruitment of minority businesses.



UNC Charlotte
 Cone Center HVAC Modernization
 SCO #16-12981-01

M&L Project #216.084
 Pre-Bid Meeting – July 6, 2017

Attendance Sheet

Company	Address	Phone	Fax	Prime Contact	E-mail Address
UNC CHARLOTTE		704- 687-0527			ALVICK@UNCC.EDU
UNC CHARLOTTE		704- 687-0523			AWHITE22@UNCC.EDU
UNC P.C. GODFREY		704 334 8604			BSPRANS@GODFREY.COM
UNC SMS		336- 501-1024		Tim/Anny Fields	jfields@superiorhvac.com



UNC Charlotte
 Cone Center HVAC Modernization
 SCO #16-12981-01

M&L Project #216.084
 Pre-Bid Meeting - July 6, 2017

Attendance Sheet

Company	Address	Phone	Fax	Prime Contact	E-mail Address
UNC Charlotte	Tom Sparks				tsparks@unc.edu
UNC Charlotte		704-687-0535		Siva Janier	Janier@unc.edu
UNC Charlotte		687-7012		Morgan Mecher	Morgan-mecher@unc.edu