Updated 3/28/2024

ENVIRONMENTAL HEALTH & SAFETY

Contractor Safety Program

UNC Charlotte
9201 University City Blvd. Charlotte, NC 28223

Table of Contents

I. Purpose

This document provides Contractors with a clear and concise understanding of the safety requirements and expectations that are instated while working on UNC Charlotte property and facilities. Contractor understanding of safety requirements reduces risk taking behaviors that cause personal injury, property damage, and liability losses due to construction, renovation, and demolition of UNC Charlotte owned or leased buildings / facilities.

II. Objectives

The main objectives of the Contractor Safety Program are listed below:

A. Inform Contractors of their responsibilities when working on UNC Charlotte property.

B. Protect Employees, Students, Visitors, Property, and the Environment from potential hazards.

C. Comply with all Federal, State and Local Safety, and Environmental Regulations.

III. Scope

This program applies to any Contractors working for UNC Charlotte. Contractors include, but are not limited to the following:

A. General Contractors

B. Laboratory Testing Contractors

C. Remediation Contractors

D. Service Contractor

E. Sub-Contractors

In this document, the term “Contractor” shall mean those entities that have contracted either directly or indirectly (i.e., subcontractors) with UNC Charlotte to perform services related to the property, facilities, or buildings owned or leased by UNC Charlotte.

IV. Program Responsibilities

A. Executive Leadership

1. The University of North Carolina at Charlotte has legal responsibility for compliance with occupational safety and health standards.

B. Program Administrator - Environmental Health and Safety Office (EHS)

1. Planning and recommending programs that adhere to all applicable federal, state, and local laws and regulations pertaining to environmental health and safety.
2. Assisting supervisors with implementing environmental health and safety programs in their areas.
3. Curtailing or stopping work that poses a clear and imminent danger to the health or safety of the University community.
4. Periodically reviewing the program and updating it as needed to ensure compliance with all applicable federal state regulations.

C. Departmental Management

1. Planning and developing budget requests for departmental safety programs.
2. Developing safety procedures, work practices, and safe working areas for all those under their supervision.
3. Supporting safety and health as a model to those they supervise.
4. Supplying appropriate equipment and training.
5. Enforcing environmental health and safety regulation by invoking disciplinary action or administrative sanction.

V. Contractor Responsibilities

Listed below, are the items that all Contracting entities are responsible for and are expected to follow while performing work on any UNC Charlotte property or facility:

A. The Contractor shall have Environmental Health and Safety programs in place. Contractors are solely responsible for ensuring that such programs comply with Federal, State, and Local regulations.

B. The Contractor shall ensure proper Environmental Health and Safety precautions are followed in accordance with the Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA), Code of Federal Regulations (CFR), and any other applicable regulatory agency.

C. The Contractor shall ensure individuals working at the site are trained and are aware of potential hazards. Contractors shall also ensure that these individuals are provided with proper safety equipment to prevent accidental injury in accordance with OSHA 1910 and OSHA 1926.

D. The Contractor shall ensure all personnel follow all Local, State, and Federal regulations as well as all UNC Charlotte requirements.

VI. UNC Charlotte & Regulatory Agencies Contractor Standards

A. Training

1. Contractors shall train their employees so that they can complete

work on campus in a safe and OSHA compliant manner. In some instances, UNC Charlotte site specific training may be required due to facility specific risks, hazards, or processes.

B. Housekeeping and Egress

1. The Contractor shall keep all corridors and exit doors always clear. In addition, all external exit ways, walks, and drives shall be kept free from debris, material, tools, and vehicles in accordance with 29 CFR 1926.25 and 29 CFR 1926.34.

C. Barricades and Fencing

1. Barricades act as warning devices that alert others of the hazards created by construction activities and shall be used to control traffic, both vehicular and pedestrian, safely through or around the work site. Contractors shall use barricades as required in 29 CFR 1926 Subpart G – Signs, Signals, and Barricades and Part VI of the US DOT Manual on Uniform Traffic Control Devices (MUTCD) wherever necessary to provide for the physical protection of faculty, staff, students, public, or property. Temporary cyclone fencing, plastic safety fencing, and portable manhole barricades are examples of acceptable exterior barricading. Yellow caution tape and/or cones are considered acceptable barricades for internal use or in an emergency until more suitable barricades can be erected. Signage and illumination should be used where appropriate.

D. Fire Protection Systems

1. The Contractor shall **NOT** disable any fire protection equipment unless given prior authorization by UNC Charlotte Project Manager (UPM). If authorization is granted, Contactors shall implement Fire Protection procedures that comply with 29 CFR 1926.150 and/or provide a temporary system to ensure the safety of building occupants.
2. Contractors shall keep all Fire Department Accesses, Fire Department Connections, and Fire Hydrants always clear of obstructions and ready for use in accordance with 26 CFR 1926.150(a)(2), North Carolina Fire Code (NCFC) Chapter 9 Section 912, and NCFC Chapter 5 Section 503.

E. Fire Rated Building Components

1. During new construction and/or renovation(s), Contractors shall prioritize the implementation of Fire Walls, Exit Stairways, Fire Doors, and Fire Cutoffs in accordance with 29 CFR 1926.150(f)(1).

2. Any time a Contractor's scope of work involves the alteration of Fire Rated Building Components, the Contractor shall ensure that all Fire

Cutoffs are maintained or replaced in accordance with 29 CFR 1926.150(f)(2).

3. Any time that a Contractor's scope of work requires the modification or addition to an existing sprinkler system, the sprinkler modification must be completed before any other work is started. This is to ensure that any new construction and/or renovation does not cause deficiencies in sprinkler coverage, and/or hydraulic calculations of the existing system in accordance with the National Fire Protection Association (NFPA), *NFPA 13 - Chapter 30: Existing System Modification*.

F. Hazardous Materials and Hazard Communication

1. Contractors shall have Safety Data Sheets (SDS) at the jobsite for all hazardous chemical(s) that they will be using / handling on UNC Charlotte property.

2. No solvents, paints, or similar flammable, toxic, or irritating materials shall be used in areas occupied by UNC Charlotte Employees, Faculty, or Students unless specifically approved by UNC Charlotte.

3. The Contractor shall maintain adequate ventilation when paints or solvents are used to keep vapor/fume exposure levels below applicable OSHA permissible exposure levels. The Contractor shall use flammable solvents and materials with extreme caution and to all manufacturer specifications.

4. The Contractor shall store flammable paints and solvents in UL /Factory Mutual approved flammable liquid storage containers. Flammable materials shall not be stored in UNC Charlotte facilities without prior approval by UNC Charlotte personnel.

G. Hazard Communication

1. The Contractor shall develop or have their own Hazard Communication Plan that complies with 29 CFR 1910.1200. The Contractor shall have copies of SDS on-site and available for review for all hazardous materials that are on UNC Charlotte property.

2. The Contractor shall also ensure that all containers that are brought on site for the storage of hazardous materials (e.g., gas, paint) are labeled and inspected as required by applicable regulations. The Contractor shall remove all hazardous materials and EPA “hazardous wastes” that it generates on-site while completing work with specific hazardous chemical/s unless prior arrangements are made with UNC Charlotte personnel.

3. The Contractor may request and review SDS for any materials that

they may encounter on UNC Charlotte property during the performance of its work. Requests should be made to the UNC Charlotte Project Manager (UPM).

H. Confined Space Entry

1. UNC Charlotte has developed and implemented a Confined Space Entry Program for the safety of all persons required to enter confined spaces on UNC Charlotte property. This program defines a “Confined Space” in accordance with 29 CFR 1910.146, 1910.268, and 1910.269, respectively. (Consider adding 1926.1203 Subpart AA Confined Spaces in Construction)

2. As part of the Confined Space Entry Program, UNC Charlotte has completed hazard assessments, developed inventories, and has posted confined space signage at the points of entry. These postings include information on the classification of the space in wording such as “Danger-Permit Required Confined Space, Do Not Enter”. **Note:** All manholes on campus are considered to be “Permit Required Confined Spaces”.

3. Before entering any University identified confined space, the Contractor shall develop, implement, and maintain its own Confined Space Entry Program, including provisions for emergency rescue, in accordance with all safety regulations. Applicable regulations include, but may not be limited to, 29 CFR 1910.146, 1910.268, and 1910.269, and 1926.1203.

4. Additionally, the following requirements shall be adhered to by the Contractor:

   a. If during the course of its work, a Contractor encounters a confined space that has not been previously identified by UNC Charlotte, they must bring the space to the attention of the UPM and delay entry until the appropriate UPM has contacted the Environmental Health and Safety office to examine the space to determine the course of action.

   b. Contractors are required to provide their own rescue equipment, air monitors, ventilation fans, personal protective equipment, communication equipment, adequate lighting equipment, barriers, and shields and/or equipment for safe egress, etc. to safely complete confined space entries.

   c. Contractors are required to use their own confined space entry permits when completing confined space entries.

d. When both UNC Charlotte personnel and Contractor personnel are working in or near confined spaces, the Contractor must coordinate all operations with the affected UNC Charlotte personnel/Departments before entry. For listing of campus confined spaces see **Table 1**.

Table 1 - UNC Charlotte Confined Space Summary Sheet

UNC Charlotte – Permit Required Confined Space Summary Sheet – 07/2018 Revision						
Building	**Description**	**Hazard**	**Permit Required Confined Space**	**Hazard Control Procedure**	**Atmospheric Monitoring**	**Comments**
Entire Campus	Air Handlers (fans and motor compartments) Housings that allow for personnel entry	Mechanical parts - rotating fans and associated equipment, electrical hazards. Atmospheric hazards- vapors, fumes, VOCs	N	Air handlers are non-permit required confined spaces for normal entries if the equipment is fully de-energized (LO/TO) per the applicable procedure. **The air handler becomes permit required if any kind of welding, cutting or burning is completed or if chemicals are used that release fumes or vapors within the air handler enclosure.** Ventilate with portable fans as necessary to remove any fumes or vapors from work processes.	4-Gas Meter and continuous air monitoring required if any kind of atmospheric hazard is present or created (burning, cutting, welding, solvent, combustible, flammables) within the space.	All access doors should be opened whenever possible to allow for air circulation within smaller air handling units. **An air handler becomes a permit required confined space when welding, brazing, cutting or chemical usage produces the potential for change in the atmosphere within the area where work is being completed.**
Boiler Plant	Boilers (any entry inside the cavity of a boiler unit)	Extremely tight space for entry and work. Potential for oxygen deficient atmosphere, electrical hazards, heat and burn hazards if boiler has not fully cooled prior to entry.	Y	Allow boiler to cool at least 72 hours before entry. Electrical, mechanical and fuel energy sources to the equipment must be de-energized and controlled (LO/TO) before entry. Ventilation is to be used if any kind of welding, cutting or burning is completed within the enclosure. **Non-permit confined space ONLY when the entire boiler housing end cap is removed for full boiler access. Boiler interior access through hatchway or manway opening is a permit required confined space entry.**	Continuous 4-gas monitoring with 4-gas meter. Check atmosphere in space by using stratified method before allowing entry. Use ventilation if conditions warrant, or if welding, cutting, brazing or solvent usage is undertaken.	All hatchways/manways should be opened whenever possible to allow for air circulation within the boiler. Full permit completion required for entry into a boiler unit through a hatchway or manway. Full boiler end cap removal is a non-permit required confined space entry.
Burson	Roof Monitors (Dog Houses)	Mechanical parts - rotating fans and associated equipment, electrical hazards, heat (during summer), very confined, congested work area. Atmospheric hazards- vapors, fumes, VOCs	Y	Notify lab(s) of ventilation service interruption. Electrical energy to the equipment being serviced must be de-energized and controlled (LO/TO) initially upon entry. At least two people are required to be present at all times while working inside a roof monitor or associated enclosures. Loose fitting clothing or hair should be removed or controlled due to rotating equipment hazards. Personnel are required to have two-way radios. Protective gloves should be worn whenever exposure to ductwork interior surfaces or chemical residue can occur.	4-Gas Meter and continuous air monitoring required if any kind of atmospheric hazard is present or created (burning, cutting, welding, solvent, combustible, flammables) within the space.	This confined space is considered to be permit required due to the rotational hazards present with the operation of the exhaust fan units. Guards on fan units must remain in place except for the units that are de-energized and being serviced.
CAB Dining Hall	Crawl Space	Tight entry to all areas of the space. Potential for hazardous atmosphere if a sewer leak occurs. Potential for bacteria exposure if a sewer leak occurs.	Y	Ventilation may be required before entry depending on atmosphere test. Full Tyvek suit, gloves and goggles are required before entry. Due to tight, crawling access required, attendant(s) need to keep in contact with entrants. Flashlights or other portable lighting will be needed. Polyethylene plastic sheeting is helpful to have to place on crawl space floor in work area.	Continuous 4-gas monitoring with 4-gas meter. Check atmosphere before entering through crawl space vent (if available in area where work is to be done). Check air on the way in to the work area upon initial entry.	This confined space has narrow passages from one area of the building to the next. Always keep an adequate open path behind you so that emergency removal can be conducted as easily as possible.
Entire Campus	Cooling Towers	Mechanical parts - rotating fans and associated equipment, electrical hazards, heat (during summer), water hazard within sump, pressurized water hazard.	N	Cooling towers are non-permit required confined spaces for normal entries if the equipment is fully de-energized (LO/TO) per the applicable procedure. All electrical energy, make up supply water (if applicable), and chemical pumps (if applicable) to associated cooling tower equipment must be de-energized and controlled before entry. **The cooling tower becomes permit required if any kind of welding, cutting or burning is completed or if chemicals are used that release fumes or vapors within the cooling tower enclosure.** Ventilate with portable fans as necessary to remove any fumes or vapors from work processes.	4-Gas Meter and continuous air monitoring required if any kind of atmospheric hazard is present or created (burning, cutting, welding, solvent, combustible, flammables) within the space.	All access doors should be opened whenever possible to allow for air circulation within the cooling tower. **A Cooling Tower becomes a Permit Required Confined Space when welding, brazing or cutting or chemical usage produces the potential for change in the atmosphere within the area where work is being completed.**
Facilities Management (main boiler, RUP #1 & RUP #2)	Fuel Tanks (Heating and Diesel Fuel)	Lack of easy entry due to access through manways/hatchways. Potential for hazardous atmosphere and fire due to petroleum contents.	Y	Electrical pumping equipment must be de-energized and controlled (LO/TO). Fully drain all fuel from tank to be entered. Open all hatches, if possible, to allow ventilation; space must have forced ventilation before entry. Entrant must have body harness with rope held by attendant at hatch opening for emergency retrieval.	Continuous 4-gas monitoring with 4-gas meter. Check atmosphere in space by using stratified method before allowing entry.	Hot work permit needed for any cutting, welding or brazing on the interior of the tank. Tank interior must be protected from sparks if residual petroleum remains. Full permit completion required for entry into a tank.
Entire Campus	Dust Collectors and Cyclones	Converging walls/engulfment, electrical hazards, dust hazards	Y	Electrical energy and compressed air must be de-energized and controlled (LO/TO). If hopper or dust collector/cyclone housing is large enough to be entered, all electrical and mechanical equipment must be de-energized. 1/2 face respirators with HEPA filters must be worn to make entry.	Continuous 4-gas monitoring with 4-gas meter. Check atmosphere in space by using stratified method before allowing entry.	Hot work permit needed for any cutting, welding or brazing on the hopper or collection unit if material is combustible/ flammable. Full permit completion required for entry into a dust collector/cyclone.
Entire Campus	Electrical Manholes & Vaults (depending on configuration)	Electrical hazards, potential atmospheric hazards such as insufficient oxygen and carbon monoxide	Y	Cordon/barricade area to prevent pedestrian traffic/entry. Check manhole lid for elevated temperature before removing; crack lid slightly to relieve pressure, if any. Full ventilation may be required before entry depending on atmosphere test. Full harness and retraction device required. Electrical hazard must be eliminated or controlled (LO/TO) before entry. All watches, rings and other jewelry must be removed. Follow all high voltage and NFPA arc flash control procedures. All persons and public must be back a safe distance from work location when re-energization occurs.	Continuous 4-gas monitoring with 4-gas meter. Check atmosphere in space by using stratified method before allowing entry.	Manholes are located around campus. Depths of manholes may vary greatly. Always check atmosphere from top to bottom before entering. Full permit completion required.
Entire Campus	Mechanical Room Steam Line Sumps/pits	Electrical hazards, lack of illumination, water accumulation, slip, trip, and fall	Y	Electrical energy to the equipment must be de-energized and controlled (LO/TO) before entry. Ventilation must be used if any kind of welding, cutting or burning is completed within the enclosure. Body harness must be worn and connected to a retraction device in the event the entrant must be removed from the space in an emergency.	Continuous 4-gas monitoring with 4-gas meter. Check atmosphere in space by using stratified method before allowing entry. Use ventilation if conditions warrant or welding, cutting, brazing or solvent usage is undertaken.	Hot work permit needed for any cutting, welding or brazing within the sump if any materials in the sump are combustible/flammable. Full permit completion required for entry into a mechanical room sump.
Entire Campus	Sanitary and Storm Sewer Pump Lift Stations	Toxic gases - hydrogen sulfide, sewer gas, methane, insufficient oxygen, bacteria potential	Y	Lift station pump system must be fully de-energized (LO/TO) according to the applicable procedure. Forced air ventilation is required before entry unless the space is proven to be free of atmospheric hazards, or no atmospheric changes will occur due to work operations or lift station conditions. Full Tyvek suit and gloves before entry; body harness and retraction device required.	Continuous 4-gas monitoring with 4-gas meter. Check atmosphere in space by using stratified method before allowing entry.	Always check atmosphere from top to bottom before entering a sanitary sewer lift station. Full permit completion required.
Entire Campus	Sanitary Sewer Manholes	Toxic gases - hydrogen sulfide, sewer gas, methane, insufficient oxygen, bacteria potential	Y	Forced air ventilation is required before entry unless the space is proven to be free of atmospheric hazards, or no atmospheric changes will occur due to work operations or manhole conditions. Full Tyvek suit and gloves must be worn before entry; body harness and retraction device required.	Continuous 4-gas monitoring with 4-gas meter. Check atmosphere in space by using stratified method before allowing entry.	Manholes are located around campus. Depths of manholes may vary greatly. Always check atmosphere from top to bottom before entering. Full permit completion required.
Entire Campus	Steam & Hot Water Supply Manholes	Heat, burn hazards, potential for insufficient oxygen, carbon monoxide from vehicles and equipment usage	Y	Cordon/barricade area to prevent pedestrian traffic/entry. Ventilation may be required before entry depending on atmosphere test. Body harness and retraction device required. Steam service must be off in the manhole (LO/TO) before entry, or special precautions must be taken for hot tap/work. All persons and public must be back a safe distance from work location when re-energization occurs.	Continuous 4-gas monitoring with 4-gas meter. Check atmosphere in space by using stratified method before allowing entry.	Manholes are located around campus. Depths of manholes may vary greatly. Always check atmosphere from top to bottom before entering. Full permit completion required.
Entire Campus	Stormwater Manholes	Toxic gases - hydrogen sulfide, sewer gas, methane, insufficient oxygen, bacteria potential	Y	Forced air ventilation is required before entry unless the space is proven to be free of atmospheric hazards, or no atmospheric changes will occur due to work operations or manhole conditions. Full Tyvek suit, gloves, body harness and retraction device required. If at all possible, do not enter manhole if there is any possibility of precipitation occurring during the manhole entry period.	Continuous 4-gas monitoring with 4-gas meter. Check atmosphere in space by using stratified method before allowing entry.	Manholes are located around campus. Depths of manholes may vary greatly. Always check atmosphere from top to bottom before entering. Full permit completion required.
Entire Campus	Telecommunication Manholes	Electrical hazards, potential atmospheric hazards such as insufficient oxygen and carbon monoxide	Y	Cordon/barricade area to prevent pedestrian traffic/entry. Ventilation may be required before entry depending on atmosphere test. Ventilate space fully if hazardous atmosphere is present. Full harness and retraction device required. Any electrical/energy hazards must be eliminated or controlled (LO/TO) before entry.	Continuous 4-gas monitoring with 4-gas meter. Check atmosphere in space by using stratified method before allowing entry.	High voltage hazard controls may be required additionally if manhole contains high voltage circuits and feeds. Full permit completion required.
Environmental Health & Safety Office						July 2018

I. Lockout/Tagout (LO/TO)

1. UNC Charlotte protects its Students, Faculty, Employees, Visitors and Property in part by complying with 29 CFR 1910.147 – *Control of Hazardous Energy Sources (Lockout/Tagout)* and 29 CFR 1910.269 *Electric Power Transmission and Distribution* Standard. As part of UNC Charlotte's LO/TO Program, standard locks and tags are used to control the start-up of equipment that is being serviced or maintained by its employees.

J. Contractor LO/TO Responsibilities & Expectations

1. UNC Charlotte Facilities Management personnel will shut down and start up utility systems for Contractors, unless otherwise specifically directed by the University.
2. The Contractor shall maintain a log of all machines and equipment that are locked out and/or tagged out during the performance of the work while under contract. The Contractor's log shall identify the equipment that was affected, the date(s) that work was performed, and the name of the individual performing the work. The Contractor shall keep this log at the worksite for examination by UNC Charlotte officials.
3. Whenever the Contractor and UNC Charlotte Facility Management personnel must perform a group LO/TO, both LO/TO programs must be coordinated to comply with 29 CFR 1910.147, 29 CFR 1926.417 and the UNC Charlotte LO/TO program.
4. At no time shall a Contractor or its employees override any locks or tags that they encounter during the performance of its work.
5. The Contractor shall develop, implement, and maintain a LO/TO program in accordance with 29 CFR 1910.147 and/or 29 CFR 1926.417 as it applies to the work within their contract. The Contractor shall have a copy of its Lockout/Tagout Program on-site and readily available for examination by UNC Charlotte officials before the start of any work where 29 CFR 1910.147 and/or CFR 1926.417 is applicable.

K. Electrical Safety Requirements

1. The Contractors shall ensure that only qualified Electricians are permitted to work on electrical systems and equipment that uses or controls electrical power.
2. The Contractor shall demonstrate to UNC Charlotte Medium Voltage Supervisor or his/her designee that the new or modified components have been installed in accordance with design specifications

BEFORE energizing equipment related to the following systems:

a. UNC Charlotte High Voltage Systems

b. Steam Plants

c. Emergency Power

d. Generation Systems

e. Fire Alarm Systems

3. UNC Charlotte Facilities Management personnel will shut down and start up utility systems in coordination with Contractors performing work on such systems, unless otherwise specifically directed by UNC Charlotte.
4. All work shall be conducted in accordance with all State and Local regulations, 29 CFR 1910.269, 29 CFR 1910.301, 29 CFR 1926.400, and the NFPA 70E Standard for Electrical Safety in the Workplace.
5. The Contractor shall not operate electrical tools or equipment in wet areas or areas where potentially flammable dusts, vapors, or liquids are present, unless specifically approved for the location.
6. In the event of a circuit breaker or other protective device "tripping", the Contractor shall ensure that a qualified Electrician checks the circuit and equipment and corrects problems before resetting the breaker.
7. The Contractor shall erect barriers and post warning signs to ensure non-authorized personnel stay clear of all work areas.
8. The Contractor shall report hazards (lack of protective guards or covers, damaged equipment, etc.) to the UPM immediately.
9. The Contractor shall not leave electrical boxes, switchgear, cabinets, or electrical rooms open when Contractor personnel are not present at the work site. Energized parts shall be insulated when covers have been removed or doors are ajar. Cardboard, plywood, or other combustible materials shall not be used to cover energized circuits.

L. High (Medium) Voltage Power Safety

1. For the purposes of this Procedure any current exceeding 600 volts meets the definition of High Voltage. In these procedures High Voltage and Medium Voltage are used interchangeably.
2. The Contractor shall develop, implement, and maintain an Electrical Power Transmission, and Distribution safety program in accordance with OSHA regulations as it applies to the work of their contract.
3. The Contractor shall have a copy of its high voltage safety program at the work site before the start of any work where 29 CFR 1910.269 (OSHA Electric Power Transmission and Distribution Standard) is applicable to contract work. The Contractors High Voltage safety procedures must be consistent with restrictions and prohibitions of UNC Charlotte’s Medium Voltage Electrical Distribution safety program to ensure the safety of UNC Charlotte Students, Faculty, Employees, Public and Property.
4. All applications shall conform to 29 CFR 1910.269, 29 CFR 1910

Subpart S, 29 CFR 1926 Subpart K, NFPA 70E Safety Related Work Practices, and UNC Charlotte Safe Operating Procedures for Medium Voltage Electrical Distribution Equipment.

5. ***Note:** Supplementary electric generating equipment that is used to supply the workplace for emergency, standby, or similar purposes must be compliant with OSHA 1910 Subpart S.*
6. The Contractor shall demonstrate to the UNC Charlotte High Voltage Supervisor or his/her designee that the new or modified components have been installed in accordance with design specifications **BEFORE** energizing equipment related to the following systems:

    a. UNC Charlotte High Voltage System

7. UNC Charlotte Facilities Management personnel will shut down and start up utility systems, unless otherwise specifically directed by UNC Charlotte.

M. Fall Protection

1. The OSHA Standard "29 CFR 1926 Subpart M – Fall Protection" identifies areas or activities where fall protection is required for construction work. These include, but are not limited to, ramps, runways, and other walkways; excavations; hoist areas; holes; formwork and reinforcing steel; leading edge work; unprotected sides and edges; overhand bricklaying and related work; roofing work; precast concrete erection; wall openings; residential construction; and other walking/working surfaces.
2. The rule sets a uniform threshold height of 6 feet (1.8 meters), thereby providing consistent protection. Contractors must protect their employees from fall hazards and falling objects whenever an affected employee is 6 feet (1.8 meters) or more above a lower level.
3. Contractors shall also provide protection for any workers who are exposed to the hazard of falling into dangerous equipment.

***Note:** Any opening from which there is a drop of more than* 4 feet *from which UNC Charlotte faculty, staff, students, or the public may fall shall be guarded in accordance with "29 CFR 1910 Subpart D – Walking Surfaces".*

4. The Contractor must perform its work in compliance with the OSHA standards, which include, but are not limited to, the following:

    a. Maintain guardrails, mid rails, and toe boards located in UNC Charlotte buildings or on UNC Charlotte property unless removal is approved by the UPM as part of the work of a contract. (29 CFR 1926.502)

    b. Cover all open holes, skylights, trenches, or excavations into which UNC Charlotte's employees may fall and/or have

guardrails, mid rails, and toe boards installed around them. (29 CFR 1926.501)

c. Provide Contractor employees with personal fall protection equipment or other hazard control measures listed within the fall protection standard and ensure proper usage of equipment. (29 CFR 1926.501)

d. Ensure that all Contractor personnel are trained in accordance with the requirements listed in 29 CFR 1926 Subpart M.

e. Ensure that falling hazards are thoroughly communicated to Contractor employees and Subcontractors. (29 CFR 1926.501(c))

f. Secure and tether all tools and equipment to prevent objects from falling to the ground below. (29 CFR 1926.501(c))

g. Ensure control lines are within the correct distance from the leading edge and are properly marked and anchored. (29 CFR 1926. 502)

N. Ladders

1. Contractors shall follow 29 CFR 1926 Subpart X - Stairways and Ladders, always that ladders or stairways are being used on the job site. This standard applies to all ladders including job-made ladders.
2. Fixed ladders shall be provided with cages, wells, ladder safety devices, or self-retracting lifelines where the length of climb is less than 24 feet (7.3 m) but the top of the ladder is at a distance greater than 24 feet (7.3 m) above lower levels. (29 CFR 1926.1053(a)(18))
3. All ladders on university property installed before November 19, 2018, must be equipped with a personal fall arrest system, ladder safety system, cage, or well. 29 CFR 1910.28(b)(10)(ii)

Note: Final deadline. On and after November 18, 2036, all fixed ladders must be equipped with a personal fall arrest system or a ladder safety system. 29 CFR 1910.28(b)(9)(i)(D)

4. Each fixed ladder installed on university property on and after November 19, 2018, must be equipped with a personal fall arrest system or a ladder safety system. 1910.28(b)(9)(i)(B)
5. When portable ladders are used for access to an upper landing surface, the ladder side rails shall extend at least 3 feet (.9 m) above the upper landing surface to which the ladder is used to gain access; or, when such an extension is not possible because of the ladder's length, then the ladder shall be secured at its top to a rigid support that will not deflect, and a grasping device, such as a grab rail, shall

be provided to assist employees in mounting and dismounting the ladder. In no case shall the extension be such that ladder deflection under a load would, by itself, cause the ladder to slip off its support. (29 CFR 1926.1053(b)(1))

6. Ladders shall be inspected by a competent person for visible defects on a periodic basis and after any occurrence that could affect their safe use. (29 CFR 1926.1053(b)(15))

Note: All ladders must always have the load capacity and warning labels legible.

a. Portable ladders with structural defects, such as, but not limited to, broken or missing rungs, cleats, or steps, broken or split rails, corroded components, or other faulty or defective components, shall either be immediately marked in a manner that readily identifies them as defective, or be tagged with "Do Not Use" or similar language, and shall be withdrawn from service until repaired. (29 CFR 1926.1053(b)(16))

b. Fixed ladders with structural defects, such as, but not limited to, broken or missing rungs, cleats, or steps, broken or split rails, or corroded components, shall be withdrawn from service until repaired. The requirement to withdraw a defective ladder from service and mark in a manner that readily identifies it as defective. (29 CFR 1926.1053(b)(17) and 1926.1053(b)(17)(ii)

7. Ladders shall not be loaded beyond the maximum intended load for which they were built, nor beyond their manufacturer's rated capacity. (29 CFR 1926.1053(b)(3)

American National Standards Institute (ANSI) Standard Ladder Duty Ratings.

ANSI ASC A14.8-2020		
Duty Rating	**Ladder Type**	**Working Load (Pounds)**
Special Duty	**IAA**	**375**
Extra Heavy Dusty	**IA**	**300**
Heavy Duty	**I**	**250**
Medium Duty	**II**	**225**
Light Duty	**III**	**200**

O. Compressed Gas Cylinders

1. Compressed gases can pose a severe hazard to UNC Charlotte’s Students, Faculty, Staff, Public, and Property. Contractors shall

follow 29 CFR 1926.350(a) when transporting, moving, and storing compressed gas cylinders on University Property. Contractors shall take all safety measures listed in 29 CFR 1926.350(a) and all University specific safety requirements any time their scope of work includes compressed gas cylinders. Valve protection caps must be in place when compressed gas cylinders are transported, moved, or stored. Close cylinder valves and replace valve covers when work is complete and when cylinders are empty or moved.

2. Secure compressed gas cylinders in an upright position in a welding cart or to a solid object (using chains, straps, or a rigid retaining bar). Secure compressed gas cylinders in an approved carrier while being transported.
3. When cylinders are transported by powered vehicles, they shall be secured in a vertical position.
4. Keep cylinders at a safe distance or shielded from welding or cutting operations. Do not place cylinders where they can contact an electrical circuit.
5. Keep oxygen and flammable gas regulators in proper working order and a wrench in position on the acetylene valve when in use. If not manifolded together, separate oxygen and flammable gas cylinders by 20 feet or a 5-foot-high fireproof barrier that has a rating of at least one-half hour.
6. If a leak develops in a cylinder and it cannot be immediately corrected, move the cylinder to a safe location outside the building. Contact UNC Charlotte Police and Public Safety immediately at **(704) 687-2200** and tell them the campus location of the leaking cylinder.
7. Use only approved spark igniters to light torches.
8. Cylinders must not be taken into or stored in confined spaces, including gang boxes and office/storage trailers.
9. Do not store hoses and regulators in unventilated or closed containers or areas.
10. All cylinders belonging to Contractors must be removed from UNC Charlotte property when the work is complete.

P. Window Washing

1. At all times that window washing is being conducted on University Property, the Contractor must ensure that all suspended scaffolding (single or two point), boatswain’s chair, or any other OSHA complaint suspension method, must follow all requirements listed in 29 CFR 1910.28 and 29 CFR 1926.451.
2. The window washing Contractor must keep copies of all chemical cleaning agents SDS anytime chemical cleaning agents are used in the Contractor's Scope of Work in accordance with 29 CFR 1910.1200.
3. Window washing anchors located on any UNC Charlotte building shall be verified by the Window Washing Contractor to be in good condition and suitable for use as an anchor point. Reports or

inspections of anchor points must be provided to UNC Charlotte when there is an issue/problem with an anchor point or when requested by UNC Charlotte personnel.

Q. Powder-Actuated Tools

1. Powder-actuated tools can pose hazards to UNC Charlotte Students, Faculty, Employees, Visitors and Property. These tools shall not be used in occupied UNC Charlotte buildings without prior approval by UNC Charlotte. If approval is given by the University to use Powder-Actuated Tools, the Contractor must follow all requirements listed 29 CFR 1926.302(e) The following bullets detail tool usage requirements:

   a. Contractors who operate powder-actuated tools shall be properly trained in their particular use by the equipment manufacturer.

   b. Fasteners shall not be driven into very hard or brittle materials including, but not limited to, cast iron, glazed tile, surface-hardened steel, glass block, live rock, face brick, or hollow tile.

   c. No fastener shall be driven into a spalled area caused by an unsatisfactory fastening.

   d. Each powder-actuated tool shall be stored in its own locked container when not being used.

   e. Powder-actuated tools shall be left unloaded until they are ready to be used.

   f. Powder-actuated tools shall not be used in an explosive or flammable atmosphere.

   g. Powder-actuated tools shall be inspected for obstructions or defects before use on each workday.

   h. Any powder-actuated tool found not in proper working order, or that develops a defect during use, shall be immediately removed from service and not used until properly repaired.

   i. All powder-actuated tools shall be used with the correct shield, guard, or attachment recommended by the manufacturer.

   j. Powder-actuated tools used by employees shall meet all other applicable requirements of American National Standards Institute (ANSI), A10.3-1970, Safety

Requirements for Explosive- Actuated Fastening Tools.

k. All powder-actuated tool operators shall have and use appropriate personal protective equipment such as hard hats, safety goggles, safety shoes, and ear protection.

R. Hot Work - Welding, Cutting, and Brazing

1. Any time a Contractor needs to perform Hot work (welding, cutting, and brazing) on University Property, the Contractor must receive authorization from a UPM before performing any work.
2. Before beginning any Hot Work activities, the Contractor shall develop, implement, and maintain its own Hot Work Program in accordance with 29 CFR 1910 Subpart Q and 29 CFR 1926 Subpart J. The Contractor shall use a hot work permit for each separate work activity and shall ensure that the conditions of the permit are met at all times. A copy of this permit should be readily available upon request from any UNC Charlotte official.

Note: According to NFPA 51 B: Fire Prevention During Welding, Cutting, and Other Hot Work Section 5.5.4, Hot work permits shall not be valid for a time period exceeding 24 hours.

3. If a contractor needs to impair any Fire Protection or Fire Alarm System regarding Hot Work, the request for a Fire System Impairment must be made to the UPM before any work is initiated
4. Contractors shall post visible hazard signs where the hot work is accessible to persons other than the Hot Work Operator in accordance with the NCFC Chapter 35 Section 3503.6.

S. Cranes and Rigging

1. Each crane, rigging, or hoist brought onto UNC Charlotte property must have an annual inspection performed by a certified testing agency. Before operations begin on site, documentation, including a logbook, must be provided to the UPM or their designee and be available upon request by UNC Charlotte Officials at all times while on university property.
2. All Contractors must comply with all sections of 29 CFR 1926 Subpart CC - Cranes and Derricks, anytime that cranes, hoist, or rigging are in use on UNC Charlotte Property.
3. All operators must possess a valid North Carolina Certified Crane Operators License. Documentation of this license shall be kept at the work site and be available upon request by UNC Charlotte Officials. At no time shall loads be hoisted by a non-licensed operator.
4. The operator is responsible for the proper placement of the crane in relation to the load to be handled and the landing area so as to

obtain the best rated lift capacity. Additionally, the operator is responsible for the installation and maintenance of crane swing radius protection.

5. No lifts shall be made over Faculty, Staff, Students, and the Public. Lifts over occupied facilities may only be made after consultation with and approval by the UPM and EHS.

T. Excavation

1. Any Contractor performing work on UNC Charlotte property related to excavation and trenching must comply with sections 29 CFR 1926.650 - 1926.652 of 29 CFR 1926 Subpart P - Excavations. Contractors performing excavation type work may encounter the following hazards during excavation: underground utilities, egress and fall risks, hazardous atmospheres, water accumulation, chemical or biological hazards, stability of adjacent structures, and cave-ins.

2. The following requirements must be met before any work related to excavation is started:

   a. UNC Charlotte Facilities Management must be notified prior to any excavation work, driving of spikes/stakes into the ground, and drilling so that utility locations can be determined and demarcated.

   b. Additionally, excavation shall not begin until Facilities Management and UPM approval is given, and all utility companies have marked existing utilities in the field.

   c. All excavations 5 feet or more in depth must be shored, sloped, or have a protective system in use.

   d. When excavation activities approach a utility, North Carolina General Statute 87-117. requires that if the diameter of the facility is known, the distance of one-half of the known diameter plus 24 inches on either side of the designated center line or, if the diameter of the facility is not marked, 24 inches on either side of the outside edge of the mark indicating a facility or, for subaqueous facilities, a clearance of 15 feet on either side of the indicated facility.

   e. The area around the trench/excavation must be kept clear of surface encumbrances. Adjacent structures must be shored and/or protected in accordance with the design documents to prevent collapse.

   f. A stairway, ladder, ramp, or other safe means of egress shall be located in trench excavations that are 4 feet (1.22 m) or

more in depth so as to require no more than 25 feet (7.62 m) of lateral travel for employees.

g. Where oxygen deficiency (atmospheres containing less than 19.5 percent oxygen) or a hazardous atmosphere exists or could reasonably be expected to exist, such as in excavations in landfill areas or excavations in areas where hazardous substances are stored nearby, the atmospheres in the excavation shall be tested before employees enter excavations greater than 4 feet (1.22 m) in depth Guardrails or some other means of fall protection shall be installed around the perimeter of the excavation. While the excavation is open, underground installations shall be protected, supported, or removed as necessary to safeguard employees.

h. The spoil pile removed from a trench must always remain a minimum of 2 feet away from the edge of the trench.

U. Asbestos Containing Materials (ACM) Management

1. Demolition, renovation, or remodeling projects are likely to involve some asbestos abatement. Designers are required to have a qualified asbestos consultant on the Design Team. The University will provide available information on identified asbestos on any site, but the Designer may encounter questionable materials which may contain asbestos. Designers will perform an on-site visual survey and will have testing conducted on questionable materials involved with or interfering with the project. Designers will provide the UPM with a copy of the report.
2. The Contractor shall not disturb asbestos-containing materials unless such activities are part of their contracted scope of work. Disturbance of ACM requires that the Contractor is specifically trained, licensed by the State of NC, licensed by Mecklenburg County to complete ACM abatement work, and comply with all sections of 29 CFR 1926.1101-Asbestos
3. The Contractor shall not sweep, dust, vacuum, or mop dust and/or debris that is believed to be ACM. The Contractor shall also not pick up or throw away any suspected ACM waste or trash. The Contractor shall immediately notify the UPM and EHS at 704-687- 1111 or UNC Charlotte Police if suspected ACM materials are damaged.
4. Stripping of floor finishes that contain ACM or potential ACM floor surfaces shall only be done by using low abrasion pads at speeds lower than 300 rpm. Only wet stripping methods shall be used. The Contractor shall take care not to over-strip floors and shall stop stripping immediately upon removal of the old surface coat. The sanding of flooring material shall not be completed unless it is part of your contracted work, and you are specifically trained to do so.
5. Any suspected asbestos containing material that is observed by

the Contractor to be crushed, ripped, broken, or in any way damaged should be reported to the UPM immediately. Within 24 hours, Contractors must convey to the UPM and EHS of any information they discover concerning the presence, location, and quantity of asbestos-containing or potentially asbestos-containing materials.

V. Lead Paint

1. While performing work at UNC Charlotte, Contractors are to assume that any painted surface they encounter is coated with lead-based paint unless UNC Charlotte provides a specific non-lead paint notice.

   Contractors are to follow all guidance of 29 CFR 1926.62 when working with known containing or possibly containing lead building materials.
2. Contractors must not perform any intrusive, dust-generating work on painted surfaces (e.g., drilling, cutting, brazing, scraping, demolition), unless the surface is confirmed to be non-lead or unless the work is part of your contracted project, and you are specifically trained to do so.
3. Any painted surfaces that have loose, flaking, chipped or otherwise non-intact paint shall not be disturbed by the Contractor and should be reported to the UPM immediately
4. Any time a contractor is performing lead paint removal, the Contractor must post warning signs at all entrances that comply with 29 CFR 1926.62(m)(1)(i).

W. Control of Universal Waste (Used Light Bulbs and Ballasts) and Hazardous Waste

1. It is the policy at UNC Charlotte that all spent fluorescent tubes and high-pressure metal halide/mercury vapor bulbs generated on-site be recycled. Please refer to UPM and/or your standard renovation contract to determine how you will dispose of the universal waste bulbs that you will be generating. If it is determined that the University will be handling your waste bulbs, they must be stored in cardboard boxes obtainable from either the contractor or by UNC Charlotte Facilities Management.
2. Contractors should reference 29 CFR 1926.65 - Hazardous Waste Operations and Emergency Response, regarding the safe handling of hazardous waste material.
3. All types of fluorescent bulbs, high pressure sodium vapor, and mercury vapor bulbs are considered “Universal Wastes” in North Carolina if they are properly handled and not broken during replacement and packaging. UNC Charlotte and EPA designate broken fluorescent tubes and high- pressure metal halide / mercury vapor bulbs as “Hazardous Wastes” when they are broken. Disposal of these bulbs in regular construction waste is **NOT PERMITTED**

under any circumstances. Contact UPM or EHS if you generate broken bulbs.

4. Boxes of tubes and bulbs must be stored indoors, and the contractor must repackage boxes damaged by the weather before the University accepts them. Boxes containing universal waste bulbs must always be closed except when waste is being added to the container and labeled as “Universal Waste-Used Bulbs”. Bulbs are not permitted to stick out of the boxes.

    a. Ballasts

        i. Older (pre-1980) light ballasts are regulated waste in North Carolina under the EPA Toxic Substances Control Act (TSCA) due to the presence of polychlorinated biphenyls (PCBs). Ballasts manufactured after 1980 do not contain PCBs, however, it is the policy of UNC Charlotte to collect ballasts and send them off-site for recycling. Ballasts cannot be disposed of with the general trash. Ballasts that do not contain PCBs will state “No PCBs” on the ballast label. If there is no information on the label regarding PCBs it is a PCB containing ballast. It is more expensive to dispose of PCB ballasts. As a result, PCB and non-PCB ballasts must be segregated as they are removed from the fixtures. Separate containers should be established for each type of ballast and labeled appropriately.

    b. Hazardous Waste

        i. All chemicals (liquids, solids, gases, etc.) used by Contractors that are characteristic or listed EPA Hazardous Wastes shall be safely managed and stored on campus. Hazardous Wastes shall be removed from university property promptly and shall be properly disposed of by licensed hazardous waste disposal firms off-site when they are no longer usable and have been designated as a waste product. Hazardous Wastes are not permitted to be drained, spilled, leaked, deposited, or otherwise placed on university grounds and property in any way.

X. Personal Protective Equipment (PPE)

1. All contractors shall ensure their employees have been trained, issued and are wearing the appropriate PPE for the work being completed. It is the contractor’s responsibility to ensure the correct use of PPE per OSHA standards.
2. Regulations governing the use, selection, and maintenance of

personal protective and lifesaving equipment are described under 29 CFR 1926 Subpart E.

Y. Mobile Elevated Working Platforms (MEWP) & Aerial Lifts

1. Any time a Contractor is using an Aerial lift or a MEWP as part of their contract work, they must follow all standards in 29 CFR 1926.453.
2. Contractors shall properly barricade and fence off any work areas so that when aerial lifts or MEWP are in use, they are safeguarded from unauthorized access in accordance with 29 CFR 1926. Subpart G.
3. Contractors shall not leave any unattended lift or platform in the elevated position unless property barricaded to safeguarded from unauthorized access or tampering.
4. Aerial lifts or MEWP shall not be placed in front of or block any emergency exits, fire protection equipment, fire lane, or ADA accessible areas when in use or being stored unless proper safeguards are in place and authorized by the UNC Charlotte Planning, Design, Construction Project/Construction Manager.

Z. Spill Prevention

1. Contractors shall be responsible for any costs (direct or indirect) associated with damage and/or cleanup of a hazardous substance and/or oil spill caused by the Contractor or their subcontractors. This responsibility shall extend to freight carriers who were hired by the Contractor to deliver the commodity or service to the end user. While on the University campus, the Contractor shall comply with all local, State and Federal requirements for the proper handling of hazardous substances and/or oil.
2. For the purpose of this section, hazardous substances shall be defined as any substance, other than oil, which when discharged in any quantity may present an imminent and substantial danger to public health, welfare and/or environment. Oil shall be defined as any oil of any kind and in any form, including but specifically not limited to petroleum, crude oil, diesel oil, fuel oil, gasoline, lubrication oil, oil refuse, oil mixed with other waste, oil sludge, petroleum related products or by-products, and all other liquid hydrocarbons, regardless of specific gravity, whether singly or in combination with other substances.
3. In addition, the Contractor agrees to indemnify and hold UNC Charlotte harmless against all claims, liabilities, and costs, including attorney’s fees, incurred in the defense of any claim brought against the end user resulting from such a spill.
4. Anytime that contract work requires that above ground storage tanks or other oil containment vessels be brought onto campus, that the Contracting company have their own Spill Prevention, Control & Countermeasure Plan instated that complies with 40 CFR 110 & 40 CFR 112.

AA. Blasting

1. Blasting is strongly discouraged. If blasting is authorized by the UPM, a blasting plan and schedule must be submitted by the Contractor to the Designer's geotechnical engineer for approval. A blasting plan will include at a minimum: seismograph monitoring locations and dust, traffic, and noise control contingencies. The contractor is responsible for documenting the conditions of adjacent structures when collateral damage is possible. The contractor is responsible for collateral damage to existing conditions. The Contractor is required to obtain the necessary permits and for hiring a UNC Charlotte approved inspector.

BB. Miscellaneous Additional Safety Rules for the Protection of UNC Charlotte Students, Faculty, Employees, Neighbors and Property

1. The Contractor must not perform work over the heads of people or leave tools or equipment overhead. The Contractor must isolate the work area with appropriate barriers and use UNC Charlotte Police or Parking Services details when pedestrian and/or vehicular traffic is impeded.
2. The Contractor must abide by all posted signage (i.e., radiation hazard, authorized personnel only, no smoking, chemical hazard, caution, danger, biohazard).
3. All portable ladders, including but not limited to extension ladders, step ladders, and job made ladders are the Contractor's sole responsibility to maintain and use according to 29 CFR 1910.27.
4. Immediately report unsafe acts or conditions affecting the work site at UNC Charlotte to your Supervisor, EHS at (704) 687-1111 or UNC Charlotte Police (704) 687-2200.

CC. Program Review

1. The written program and all its contents will be reviewed periodically by the Contractor Safety Program Administrator to ensure compliance with all State, Federal, and Local Laws.

DD. Recordkeeping

1. All program records will be maintained in accordance with the University's Records Retention policy and OSHA requirements.

Appendix: A - Contractor Safety Program Handout

A. Emergency Procedures

In case of an emergency please call Campus Police (from a cell phone) 704-687-2200, or 911 (from a campus land line phone).

B. Barricades and Fencing

Construction chain link fencing must be erected around capital new construction job sites. Temporary cyclone fencing, plastic safety fencing and portable manhole barricades are examples of acceptable exterior barricading. Yellow caution tape and/or cones are considered acceptable barricades for internal use.

C. Training

Contractors shall train their employees so that they can complete work on campus in a safe and OSHA compliant manner. In some instances, UNC Charlotte site specific training may be required due to facility specific issues, hazards, or processes.

D. Housekeeping and Egress

1. The Contractor must keep all corridors and exit doors always clear. In addition, all external exit ways, walks, and drives shall be kept free from debris, material, tools, and vehicles.
2. Jobsites must stay clean, orderly and debris must be disposed of regularly.
3. Fire prevention methods such as Fire Watch, additional Fire Extinguishers and Material Storage must be used when required.

E. Fire Protection Equipment

1. The Contractor shall **NOT** disable any fire protection system without receiving prior authorization from the UPM.
2. All fire protection equipment impairments must be coordinated with UPM to ensure proper notifications to building occupants and regulatory agencies.
3. A temporary system must always be in place during fire protection equipment impairments.

F. Hazardous Communication

1. Contractors shall have SDS at the jobsite for all hazardous chemical(s) that they will be using/handling on UNC Charlotte

property.

2. The Contractor may request and review the SDS for any materials that are encountered on UNC Charlotte property during the performance of its work.

G. Confined Space Program

1. Before entering any University-identified confined space, the Contractor shall develop, implement, and maintain its own Confined Space Entry Program, including provision for emergency rescue, in accordance with all regulations. **Note:** All manholes are considered permit required confined spaces.

2. The Contractor shall complete a Permit Required Confined Space Permit before initial entry to any Permit Required Confined Space on campus. Contractors are required to provide their own equipment and permits when conducting confined space entries. When simultaneous work is to be conducted by the contractor and UNC Charlotte a procedure will be developed by the contractor to coordinate entry.

    a. Contractor has reviewed Confined Space Summary Sheet indicating permit spaces and requirements for entry. Contractor has notified UNC Charlotte of Permit Space Program it will follow while on campus. The contractor is apprised of precautions and procedures UNC Charlotte has in effect concerning the specified Confined Space.

    b. Contractors are advised of procedures to coordinate the entry of their employees with UNC Charlotte employees.

    c. Debrief the contractor after entry operations were concluded regarding Permit Space program followed, any hazards confronted, or hazards created.

H. LO/TO Program: Control of Hazardous Energy

The Contractor shall have a LO/TO program in accordance with OSHA regulations (29 CFR 1910.147) as it applies to the work of their contract. The Contractor shall have a copy of its LO/TO Program on-site and readily available for examination by university officials before the start of any work. At no time shall the Contractor or its employees override any locks or tags that they encounter during the performance of its work unless otherwise specifically directed by the University. UNC Charlotte Facilities Management personnel will shut down and start up utility systems.

1. The Contractor shall maintain a log of all machines and equipment that are locked out and/or tagged out during the performance of the work of while under contract. The Contractor’s log shall identify the equipment

that was affected, the date(s) that work was performed, and the name of the individual performing the work. The Contractor shall keep this log at the worksite for examination by university officials.

2. Whenever the Contractor and UNC Charlotte Facilities Management personnel must perform a group LO/TO, both LO/TO programs must be coordinated to comply with 29CFR 1910.147 and the UNC Charlotte LO/TO program.
3. On energized systems, The Contractor shall notify the UPM before the application of LO/TO devices **AND** when the Contractor's LO/TO has been canceled and the affected process/es are to be brought on-line.

I. Electrical Safety Program

1. Contractors shall ensure that only qualified electricians are permitted to work on electrical systems and equipment that uses or controls electrical power.
2. UNC Charlotte Facilities Management personnel will shut down and start up utility systems in coordination with Contractor performing work on such systems, unless otherwise specifically directed by UNC Charlotte.
3. All work shall be conducted in accordance with all applicable OSHA regulations and the NFPA 70E Standard for Electrical Safety in the Workplace.
4. The Contractor shall not leave electrical boxes, switch gear, cabinets, or electrical rooms open when Contractor personnel are not present at the worksite.

J. Medium Voltage Program

1. For the purposes of this Procedure any current exceeding 600 volts meets the definition of Medium/High Voltage. In UNC Charlotte procedures Medium Voltage and High Voltage are used interchangeably.
2. The Contractor shall have a copy of its high voltage safety program at the work site before the start of any work where 29 CFR 1910.269, Electric Power Transmission and Distribution Standard are applicable to contract work.
3. Unless otherwise specifically directed by UNC Charlotte, UNC Charlotte Facilities Management personnel will shut down and start up utility systems.

K. Fall Protection and Elevated Work Program

1. Fall protection must be used above the uniform threshold height of 6 feet from a lower level.
2. Reduce fall potential by using Engineering Methods, Administrative Methods, and PPE.

3. Any opening from which there is a drop of more than 4 feet from which UNC Charlotte faculty, staff, students, or the public may fall, shall be guarded in accordance with “29 CFR 1910 Subpart D – Walking Surfaces”.
4. The Contractor must not perform work over the heads of people or leave tools or equipment overhead.

L. Compressed Gas Cylinder Safety Program

1. Separate oxygen and flammable gas cylinders by 20 feet or a 5 feet high fireproof barrier.
2. Secure compressed gas cylinders in an upright position in a welding cart or to a solid object (using chains, straps or a rigid retaining bar).
3. Valve protection caps must be in place when compressed gas cylinders are transported, moved, or stored.

M. Powder Actuated Tools Safety Program

1. Contractors who operate powder-actuated tools shall be properly trained on their use. Documentation should be readily available.

2. Powder-actuated tools shall be left unloaded until they are ready to be used.

N. Hot Work Program: Welding, Cutting and Brazing

The Contractor engaged in Hot Work must be authorized to do so by a UPM. The Contractor shall develop, implement, and maintain its own Hot work program and any permits associated with their program.

1. The Contractor shall use their company’s hot work permit for each separate work activity and shall ensure that the conditions of the permit are always met.
2. Request for a fire system inspection to determine if the system needs to be shut down or modified, must be made to the UPM at least 24 hours before starting any hot work.

O. Cranes and Rigging Program

1. Each crane, rigging, or hoist brought onto UNC Charlotte property must have an annual inspection performed by a certified testing agency.
2. All operators must possess a valid North Carolina Certified Crane Operators (CCO) License.

3. No lifts shall be made over faculty, staff, students and public. Lifts over occupied facilities may only be made after consultation with and approval by the UPM and EHS.

P. Excavation and Trenching Program

1. UNC Charlotte Facilities Management must be notified prior to any excavation work, driving of spikes/stakes into the ground and drilling so that utility locations can be determined and demarcated.
2. All excavations 5-feet or more in depth must be shored or sloped unless certified by a Registered Professional Engineer.
3. Excavations must be barricaded.

Q. Asbestos Containing Materials (ACM) Management

1. Unless otherwise noted, UNC Charlotte will have determined the presence, location, and quantity of ACM or potential ACM that would be specifically impacted by the work of your contract.
2. The Contractor shall not disturb asbestos-containing materials unless such activities are part of your contracted work, and you are specifically trained and licensed by the State of NC and Mecklenburg County to undertake ACM abatement work. Any suspected asbestos containing material that is observed by the Contractor to be crushed, ripped, broken or in any way damaged should be reported to the UPM immediately.

R. Lead Program

1. Unless UNC Charlotte provides a specific lead-paint notice, Contractor is to assume that any painted surface they encounter is coated with lead-based paint.
2. Any painted surfaces that have loose, flaking, and chipping or otherwise non-intact paint shall not be disturbed by the Contractor and should be reported to the UPM immediately.

S. Control of Hazardous Chemicals / Waste

1. All chemicals (liquids, solids, gases, etc.) used by Contractors that are characteristic or listed EPA Hazardous Wastes shall be safely managed and stored on campus. Hazardous waste shall be removed from university property promptly and shall be properly disposed of by licensed hazardous waste disposal firms off-site when they are no longer usable and have been designated as a waste product.
2. Hazardous Wastes are not permitted to be drained, spilled, leaked, deposited, or otherwise placed on university grounds or property in any way.

T. Personal Protective Equipment, PPE

1. All contractors must issue their employees with appropriate PPE for the work being undertaken.

2. It is the contractor's responsibility to ensure the correct use of PPE.

U. Spill Prevention

1. Contractors shall be responsible for any costs (direct or indirect) associated with damage and/or cleanup of a hazardous substance and/or oil spill caused by the Contractor or their agent.

V. Miscellaneous Additional Safety Rules

1. Contractor must abide by all posted signage.
2. All ladders are the contractor's sole responsibility.
3. Immediately report unsafe acts or conditions affecting UNC Charlotte to your supervisor, UNC Charlotte Planning Design and Construction, Environmental Health and Safety, or Campus Police.