

Policy No. 120

Policy: Construction Safety Requirements

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APPLICATION

NYU Langone Health

PURPOSE

To ensure the safety of building occupants, staff, contractor personnel, members of the public and adjacent properties during construction, demolition, and abatement at NYU Langone facilities. To comply with:

- federal, state and local regulations
- Joint Commission and Center for Medicare and Medicaid Services (CMS) requirements, and NFPA standards, including NFPA 101: Life Safety Code (2012) and NFPA 241: Safeguarding Construction, Alteration and Demolition Operations (2009), at NYS Article 28 facilities and similarly-regulated facilities in other jurisdictions.
- all health and safety requirements set forth in the contract and NYU Langone Design Guidelines
- all referenced NYU Langone safety policies
- all building owner/manager safety and security requirements at leased locations

POLICY AND GENERAL INFORMATION

1.0 **Application**

NYU Langone Health (NYULH) refers to the NYU Langone Health System, NYU Langone Hospitals, NYU Grossman School of Medicine, NYU Grossman Long Island School of Medicine, the Family Health Centers at NYU Langone, and all entities controlled by any of them.

This policy applies to:

- All indoor and outdoor areas of all NYULH owned and leased facilities.
- All employees, contractors, vendors and consultants of NYULH

2.0 **Definitions**

- 2.1 **ACSP:** Authorized Construction Safety Professional. A construction safety professional from, or authorized by, Environmental Health and Safety's (EH&S) Construction Safety group.
- 2.2 **AHJ:** Authority Having Jurisdiction (e.g. fire marshal, building/fire department, Department of Health, the Joint Commission, etc.).



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- 2.3 **Competent person:** A person who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous or dangerous to workers, and who has authorization to take prompt corrective measures to eliminate them.
- 2.4 **Complex task**: Any potentially hazardous task that requires specific competencies, such as structural engineering expertise, complex crane hoist/lift expertise, or industrial hygiene expertise, for safe and successful completion. Examples include, but are not limited to:
 - confined space entry
 - crane and rigging operations
 - structural demolition
 - excavation
 - hazardous substance abatement
 - work on equipment or systems which are energized or contain hazardous energy
- 2.5 **Construction:** Includes abatement, alteration, demolition, erection and renovation work, but excludes operations and maintenance (O&M) work.
- 2.6 **Controlling contractor (Contractor):** A prime contractor, general contractor, construction manager or any other legal entity which has the overall responsibility for construction of the project (e.g. planning, quality, and completion).
- 2.7 **Facilities trade staff:** Includes forepersons, mechanics, helpers, maintenance workers, etc.
- 2.8 **Manager:** The Facilities/Engineering manager or Real Estate manager.
- 2.9 **Occupant impact task:** Any task that presents a probability of negative impact to building occupants, infrastructure or NYULH operations, without appropriate coordination and controls. This includes, but is not limited to, tasks that could:
 - create noise or vibration above ambient levels
 - impact occupant life safety, e.g. by modifying egress or impairing fire protection systems
 - impact occupant utilities, e.g. through shutdowns
 - release air contaminants, e.g. dust, mold, gases, or vapors, outside of the work area
- 2.10 **PM**: The NYULH construction project manager.
- 2.11 **Potentially hazardous task**: Any task that presents a substantial probability of death, serious physical harm, or significant impairment to health without



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appropriate safety or health protective measures. Examples include, but are not limited to, tasks that could result in:

- being caught in an excavation cave-in
- being exposed to energized equipment
- being overexposed to health hazards
- being struck by an object
- falling to a lower level
- working on routine tasks that have become non-routine due to unexpected occurrences such as equipment breakdowns, weather conditions, or changes in the project-specific safety plan.

3.0 Responsibilities

- 3.1 **EH&S** is responsible for:
 - Developing the Construction Safety program (the program) and collaborating with others to implement and maintain it.
 - Training relevant groups, including Facilities, Real Estate and RED+F
 Design and Construction, on the requirements of the program.
 - Issuing Construction Safety permits and Interim Life Safety plans.
 - Functioning as a consultant on an as needed basis for construction safety issues.
 - Conducting quality assurance (QA) inspections of construction sites to verify that appropriate measures have been implemented.
 - Maintaining a list of third-party ACSPs.
- 3.2 Vice Presidents (VPs) and Senior Directors of Facilities, Real Estate, and RED+F Design and Construction, as applicable, are responsible for:
 - Implementing the Program within their divisions.
 - Ensuring all requirements of the policy are followed.
 - Ensuring personnel who are covered by this program are trained on its requirements.
- 3.3 **PMs and Managers** are responsible for:



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- Complying with the provisions of this policy.
- Incorporating the requirements of the policy into the contract or work specifications.
- Obtaining necessary environmental surveys (e.g. asbestos, lead, soil, PCB) prior to the start of work, sharing them with the contractor and the EH&S construction safety group, and performing any necessary abatement.
- Reviewing the safety requirements for the work with employees and contractors and ensuring they comply with this policy.
- Requesting all necessary NYULH permits and shutdowns in advance of the work.
- Planning and coordinating work with Facilities Management, the building manager, management of impacted occupied areas and other necessary departments (e.g. Infection Prevention and Control (IPC), EH&S, Security)

3.4 **PMs** are also responsible for:

• Conducting <u>daily</u> inspections of the work area (unless an alternate arrangement is approved by RED+F leadership), and sharing the deficiencies identified with the controlling contractor.

3.5 **Facilities Forepersons** and **Contractors** are responsible for:

- Complying with the provisions of this policy.
- Ensuring employees and contractor personnel have the required training and certifications.
- Planning the work, regularly inspecting the work area and actively supervising potentially hazardous work (e.g. demo, hot work, etc.), to ensure it is performed in a safe manner.
- Verifying necessary shutdowns are in place prior to the start of work.
- Stopping work to address an unsafe condition.
- Immediately notifying the PM or manager of any unsafe conditions or incidents.

3.6 **Contractors** are also responsible for:



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- Providing employees and subcontractor personnel with a site-specific orientation prior to their starting work.
- Complying with building owner/manager requirements at leased sites.

3.7 **Contractor personnel** and **Facilities trade staff** are responsible for:

- Complying with the provisions of this policy.
- Only undertaking work that they are trained and qualified to perform.
- Performing work in a safe and prudent manner.
- Stopping work that poses an imminent danger to themselves or others and notifying their foreperson.
- Immediately notifying their foreperson of an unsafe condition or incident.

4.0 General Requirements and Orientation

- 4.1 The PM or manager shall verify that the contractor superintendent responsible for on-site supervision of the work has completed the NYULH required American Society of Healthcare Engineers (ASHE) Health Care Construction and OSHA 30 hour construction courses.
- 4.2 The contractor shall verify that each worker on the site has completed an OSHA 10-hour course within the last 5 years. On <u>applicable</u> construction projects in New York City (NYC), the contractor shall ensure that all construction personnel working on the site submit completion documentation for the safety training required under section 3321 of the New York City Building Code.
- 4.3 Contractor shall provide all personnel with an orientation prior to the start of work. This orientation shall cover all items in the NYULH Safety Orientation for Contractor Personnel (see Appendix A), site-specific conditions (e.g. status of fire protection systems, etc.), rules established by the contractor, any building management safety and security requirements, and the fire/emergency evacuation procedures for the work site (e.g., an explanation of "RACE" and "PASS", the location of fire alarm pull stations, and evacuation routes).
- 4.4 The contractor shall maintain a daily log containing the name and contact number for each worker on site.



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5.0 Pre-project and Pre-task Safety and Health Planning

- Managers, contractors and forepersons shall incorporate pre-project and pre-task health and safety planning into its planning process, consistent with American National Standards Institute/American Society of Safety Professionals (ANSI/ASSP) Standard A10.1-2011, Pre-Project and Pre-task Safety and Health Planning.
 - Note: NYULH may grant exceptions to the literal requirements for pre-project and pre-task planning, e.g., in cases of practical difficulties or unnecessary hardships. These exceptions may permit use of other methods, but only when it is clearly indicated and documented that the chosen alternative methods provide adequate safety and health protection.
- As part of the pre-project planning process, contractor shall submit to the PM a project-specific plan which addresses the impact of safety and health on applicable critical topics, including, but not limited to:
 - Isolation of construction areas from occupied areas, including fire protection and infection control measures
 - Site access/egress, material delivery and waste out routes
 - Site security and illumination
 - Protection of NYULH facilities and adjacent buildings and property from construction operations
 - Public protection (e.g., temporary walkways, ramps, sidewalk bridges, lighting, signage, and traffic control)
 - Fall prevention and protection (of persons and material)
 - Site shanties and offices
 - Worker sanitary, washroom, and changing facilities
 - Onsite first aid, emergency eye wash and shower facilities
 - Decontamination facilities
 - Storage of combustibles, chemicals, flammable liquids, and compressed gas cylinders
 - Protection of existing site utilities
 - Materials handling
 - Control of environmental hazards
 - Location of crane(s), hoist(s), powered-mobile and stationary equipment
 - Inclement weather protection plan
 - Emergency evacuation plan

The PM will solicit input from an ACSP as needed.

5.3 Contractor shall develop a project-specific health and safety plan, which includes provisions for addressing complex tasks, occupant impact tasks, and potentially



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- hazardous tasks. Contractor shall submit the plan to the PM, who will solicit input from an ACSP as needed.
- Managers, forepersons and contractors shall conduct pre-task safety and health planning for complex tasks, occupant impact tasks, and potentially hazardous tasks. They shall solicit input from an ACSP as needed.
 - 5.4.1 A written task hazard analysis shall be completed in advance of work on any complex or potentially hazardous task. All task hazard analyses shall occur as close to the time the task will begin as is feasible.
 - 5.4.2 The competent person responsible for supervising and performing each complex, potentially hazardous, and occupant impact task shall be identified.
 - 5.4.3 Responsibility for implementation of safety and health control measures established for each complex, potentially hazardous, and occupant impact task shall be assigned.
 - 5.4.4 Each affected supervisor and all affected workers shall be informed about the task hazard analysis and required to participate in the process. Participation shall include discussion on accomplishing the task step-by-step with appropriate work activities, communication, and personal protective equipment.
 - 5.4.5 All workers shall be informed of how to contact the supervisor or competent person overseeing the complex, potentially hazardous, or occupant impact task.
 - 5.4.6 Each individual responsible for performing any part of a complex, potentially hazardous, or occupant impact task shall be properly trained to perform the task safely.
 - 5.4.7 All affected workers shall receive the safety and/or health equipment identified in the task hazard analysis and the appropriate training necessary to perform the task safely.

6.0 **NYULH Permits**

6.1 Before performing any work, the PM or manager shall post fully executed required NYULH permits, such as those listed below. The PM or manager shall review these permits with the contractor or Facilities foreperson and ensure they are laminated or placed in plastic sheet protectors and neatly posted at the



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entrance to the work area. The contractor or Facilities foreperson shall monitor personnel performing the work to ensure that it is conducted in accordance with permit requirements.

Environmental Health and Safety

- Construction Safety Permit (request in ATG 3 weeks prior to start of work)
- Interim Life Safety and Evacuation Plan (where required)
- Confined Space Entry Permit

Facilities Operations and Real Estate

- Utility Shutdown Permit
- Hot Work Permit
- Above Ceiling and Barrier Integrity (Penetrations) Permit
- Pre-Demolition Validation Permit
- Roof Access/Work Permit (where applicable)

Infection Prevention and Control

Infection Control Risk Assessment (ICRA) Permit

7.0 **Pre-commencement Conference**

- 7.1 A pre-commencement conference shall be held, attended by the contractor's supervisory personnel, the PM, representatives of all affected operating department(s), and an ACSP. If the project impacts NYULH patient care operations, a representative from IPC shall also be present.
- 7.2 The pre-commencement conference shall acquaint the contractor's representatives with NYULH safety procedures, and any special safety equipment that shall be required due to the hazards of the project.

8.0 **Security**

- 8.1 The PM and contractor shall ensure all personnel receive an I.D. badge issued by the NYULH Security Department or the building manager and wear it at all times.
- 8.2 The contractor or Facilities foreperson shall post an NYULH "Under Construction" sign at each entrance to the work area.
- 8.3 Prior to the start of work, the contractor shall install a keypad lock on each construction site entrance door (note: an ACSP shall assess securing of site doors in occupant egress pathways and stairs). Existing doors must first be surveyed for asbestos. Unless the entrance door is to be replaced as part of the project, the access control hardware chosen shall not damage the door or impact its fire-



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- rating. The contractor shall program an entry code approved by the facility or building manager. Weak codes (e.g. 0000, 12345, 54321) shall not be used.
- 8.4 Contractor and Facilities trade staff shall ensure that work area, roof, mechanical room, and electric room doors are kept closed and locked.
- 8.5 Contractor shall enclose outdoor work areas with a solid, 8-foot fence constructed of flame-retardant or non-combustible materials (unless an ACSP approves alternate protection) to keep unauthorized personnel out. Doors or gates in the fence shall not swing outward and shall be kept locked when not actively manned by a security officer or contractor supervisory personnel.
- 8.6 The PM or manager shall provide the NYULH Security Department or building manager advanced notice of all work: 1) to be performed after hours, 2) that needs to be performed in controlled or restricted areas, and 3) that may adversely affect NYULH occupants or operations.
- 8.7 Where required (e.g. NYC Building Code section 3303.3, NYS Building Code section 3314.1), the contractor shall provide a watchperson/fire watch during non-working hours.

9.0 Fire and Injury Incident Notification/Reporting and First Aid

- 9.1 Contractor personnel and Facilities trade staff shall immediately report any smoke or fire incident, regardless of severity, as follows:
 - 9.1.1 On sites with an active fire alarm system:
 - Activate the nearest pull station
 - Call:
 - Manhattan and Brooklyn 33911 (212.263.3911)
 - Mineola 33911 (516-663-3911)
 - Suffolk 3040 (631-447-3040)
 - Offsites call 911

and provide the exact location and nature of the incident

- Contact their foreperson
- 9.1.2 On sites which lack a fire alarm system, personnel shall call 911, provide the address and exact location of the incident, and then contact their foreperson.



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- 9.2 Contractor shall be responsible for providing first aid treatment for its personnel. In case of severe injury, personnel shall use the closest Emergency Department or call 911.
- 9.3 Contractor personnel and Facilities trade staff shall immediately report any incident which impacts building occupants or the public, NYULH operations/infrastructure or involves treatment of an injury beyond first aid, to their foreperson. The controlling contractor shall immediately notify the PM (in turn, the PM shall notify the EH&S construction safety group) and submit a written incident report within 24 hours. The PM shall forward this report to the EH&S construction safety group.

10.0 **Public and Occupant Protection**

- 10.1 Contractor and Facilities foreperson shall ensure personnel restrict use of cell phones and radio playing in occupied and construction areas, in ear devices and comply with NYULH Safety Policy 212 Use of Cellular, Mobile Phones, Personal Computers and Laptops.
- 10.2 Facilities trade staff and contractor personnel shall not perform work in an occupied patient room except in an emergency and with prior permission from nursing leadership.
- 10.3 Facilities trade staff and contractor personnel shall not perform work in an occupied area without an approved barrier in place (see sections 11.4, 11.5, 13.3).
- 10.4 The PM or manager shall plan and coordinate work to be performed in, or which may impact, an occupied area with the affected clinical, research, school or administrative manager.
- 10.5 Contractor and Facilities trade staff shall minimize, to the fullest extent possible, interactions with building occupants and members of the public. Where feasible:

 1) an elevator shall be dedicated to the demolition/construction work and programmed to stop only on floors where the work is occurring, and 2) passenger elevators shall be programmed not to stop on construction/demolition/abatement floors. Elevator dispatching and programming shall be coordinated by the PM or manager with Facilities or the building manager.
- 10.6 Where feasible, contractor and Facilities trade staff shall use a service entrance for material deliveries and debris removal. If no separate entrance is available, contractor shall schedule debris removal and material deliveries for times when there is minimal interaction with building occupants, factoring in the noise these activities create. Contractor and Facilities foreperson shall assign an escort for all



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- material deliveries and debris removal to protect building occupants. The PM and contractor shall review any exterior hoisting of material and debris with an ACSP (see section 18).
- 10.7 Contractor and Facilities trade staff shall protect the building (and its occupants) against water intrusion, freezing temperatures, dust, odors, and other hazards. Contractor and Facilities trade staff shall also protect windows against physical damage. The materials used to accomplish this shall be flame-retardant or noncombustible.
- 10.8 Contractor shall protect building occupants and members of the public from construction, demolition, and abatement operations through the use of appropriate construction partitions, fences, barricades, sidewalk bridges, controlled access (safety) zones, and other protective measures. Posting of proper warning and directional signage is required.
- 10.9 Contractor shall ensure that temporary pedestrian walkways are at least 5 feet in width, kept free of tripping and other hazards and illuminated as needed. Where pedestrians are directed into a roadway, concrete jersey barriers shall be used to separate this walkway from vehicular traffic. The barriers shall have reflectors or flashing lights at 15 foot intervals. All sidewalk, walkway and lane changes/closures shall be set up in accordance with a plan approved by the Authority Having Jurisdiction (AHJ). Ramps and curb cuts shall be constructed in accordance with a registered architect or engineer's drawing to ensure compliance with applicable codes (e.g., ADA).
- 10.10 Contractor shall install sidewalk bridges and/or other protective measures for the benefit of the public, building occupants, workers and adjacent property where required by code (e.g. NYC/NYS Building Code chapter 33) or otherwise deemed necessary by NYULH. All protection shall be installed in accordance with a registered architect or engineer's drawing reviewed in advance by EH&S. Bridges shall not obstruct any building exits or fire department connections. An adequate number of four foot vandal-resistant fluorescent or LED fixtures shall be installed by a licensed electrical contractor prior to, or the same day, the bridge roof is installed. The top of the sidewalk bridge shall be accessed from the building. Where this is not feasible, a stair tower shall be installed at grade to provide proper access to the top of the bridge. The base of the stair tower shall be fully enclosed with an 8 foot fence and a framed door equipped with closing and latching hardware as well as a keypad lock (see section 8.3) to prevent unauthorized access to the bridge and building.



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- 10.11 Installation and removal of sidewalk bridges, temporary pedestrian walkways and other public protection shall be performed at times where there is limited interaction with the public or the area is closed.
- 10.12 Contractor shall protect elevated leading edges and work platforms against falling objects by installing toe boards and vertical netting.
- 10.13 Contractor shall provide an adequate number of flag persons to direct pedestrian and vehicular traffic wherever construction operations, trucks, and equipment traverse public areas.
- 10.14 Contractor shall not pick loads over people or occupied vehicles. Where loads must be picked into or over an occupied building, at a minimum, the portion of two floors below that the load, and boom while under load, will travel over, shall be vacated unless specifically authorized by the AHJs (e.g. building department, Department of Health).
- 10.15 Contractor shall ensure that workers performing tasks while elevated above grade or floor level tether their tools to prevent them from falling.
- 10.16 Contractor shall secure all tools, material, equipment and debris against displacement by winds. The contractor must limit staging and storage of materials on roofs to the fullest extent possible. Nothing is to be staged or stored atop a parapet. Materials which must be on the roof (including materials to protect the roof or provide overhead protection,mechanical equipment, skylights, etc.) shall be positively secured to structure other than the roof (e.g. parapet, dunnage). Where this is not feasible, the means for securing this material shall be approved by a licensed engineer, and EH&S. The contractor shall inspect all construction areas in advance of wind and other weather events to ensure that adequate protection is in place.
- 10.17 In New York City, the PM shall ensure that an occupant or tenant (residential) protection plan is created and reviewed by an ACSP prior to submittal to the building department. Such plans shall comply with NYC Administrative and Building Code requirements. Outside of New York City, the ACSP shall incorporate occupant/tenant protection measures into the Construction Safety Permit and any Interim Life Safety and Evacuation Plan.

11.0 Fire Safety and Egress

- 11.1 PM or manager and contractor shall comply with the following NYULH Safety Policies:
 - 104: Tobacco Free Facilities



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- 111: Fire Emergency Response Procedures
- 115: Fire Alarm and Fire Protection Systems: Inspection, Testing, Maintenance, and Impairments
- 116: Fire Extinguishers
- 122: Fire Prevention
- 143: Hot Work Program
- 145: Interim Life Safety Program
- NYU Langone Facilities Operations, Preventative Maintenance and Inspection Program Policy T.01 – Penetrations in Smoke/Fire Walls/Slabs and Repair Fireproofing of Structural Steel
- 11.2 Contractor and Facilities trade staff shall not obstruct corridor egress, access to stairs, or exit signage in an occupied area unless planned with the PM or manager, and an ACSP (see NYULH Interim Life Safety Program policy). Tools, material, equipment and debris shall not be staged or stored in occupied areas (e.g., corridors, stairs, elevator lobbies). Stairwell and fire/smoke doors shall be kept closed.
- 11.3 Where proposed construction work will obstruct the exits or designated egress paths for a <u>place of assembly</u> occupancy, the PM shall ensure that an occupant protection plan showing the alternate means of egress is reviewed with Facilities or Real Estate, and EH&S and submitted to the AHJ for approval. A copy of the approved plan shall be provided to the Facilities office or Real Estate department representative.
- 11.4 The PM shall ensure that walls separating construction from occupied areas have a one-hour fire-resistance rating, unless there is an active, full-coverage automatic fire sprinkler system in the site which complies with the NFPA 13 standard (see NFPA 241 section 8.6.2). The door and frame in a one-hour fire-rated wall shall have a 45-minute rating. Fire-rated walls shall have self-stick signage or be stenciled to indicate their rating and be painted on the occupied side.
- All perimeter site walls shall be constructed of sheetrock, or a fire-rated material approved by EH&S, be smoke-tight and extend up to the deck or to a fire-rated barrier which isolates the construction from the occupied area.

The use of flame-retardant plastic or other non-fire rated materials as a construction site barrier is prohibited in Article 28 facilities and similarly-regulated facilities in other jurisdictions (see

https://www.jointcommission.org/standards/standard-faqs/ambulatory/environment-of-care-ec/000001325/).

Exception: short duration work in occupied areas (see section 13.3)



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- 11.6 Contractor shall ensure that all construction partition doors, regardless of rating, self-close, latch, are maintained free of penetrations and do not have a gap exceeding 3/4" at the bottom or 1/8" between the door(s) and its frame. Fire-rated doors and frames shall contain legible labels.
- 11.7 Existing sprinkler coverage in the construction area shall be kept active for the duration of the project unless otherwise specifically indicated by RED+F leadership and EH&S, and approved by the AHJ. Buildings shall not be taken offline with central station unless approved by Facilities, Real Estate or the building manager, and EH&S. Pull stations and speaker/strobes in the site shall be kept active. Pull stations within the construction area and along the material delivery/debris removal pathway shall be properly protected against physical damage and accidental activation. The contractor shall post a notice at the site entrance advising of the status of the site's fire protection systems (for example, "this site contains active upright sprinkler heads") and provide visual markers for sprinkler heads and smoke/heat detectors.
- 11.8 Where the ceiling in a construction space is to be removed, the PM or manager, and contractor shall ensure that existing sprinkler heads are replaced with upright heads positioned in accordance with NFPA 13 (2010), sections 8.5 through 8.9. Sprinkler heads shall be protected with a sprinkler guard (cage), however, the guard shall not be equipped with a plate, baffle, or heat collector (NFPA 13, section 8.5.4.1.4) which prevents water from reaching the deck above.
- 11.9 The PM or Manager, and Contractor shall plan and coordinate all work on fire protection systems (sprinkler, standpipe, fire pump, fire alarm) with Facilities or the building manager, an ACSP, and where required, with the AHJ (e.g. fire marshal). All work on fire suppression systems shall be performed by, or under the supervision of, a licensed master plumber or licensed fire suppression contractor. All work on the fire alarm system shall be performed by the building's authorized fire alarm vendor.
- 11.10 The PM or manager, and contractor shall ensure that sprinklers within a construction area are kept active during hot work (NYC Fire Code 2604.1.8, NYS Fire Code 3504.1.8). The contractor shall properly protect sprinkler head(s) near hot work against activation. This protection shall be removed once hot work is complete.
- 11.11 Contractor and Facilities trade staff shall ensure that nothing (e.g. visual markers for sprinkler and detectors, cables, lines, conduit, ductwork, insulation, etc.) makes contact with, lies on, or is attached to, sprinkler or standpipe lines, hangers or supports.



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- 11.12 In construction spaces with <u>existing</u> smoke detectors, prior to the start of any work, the PM shall:
 - 11.12.1 Have the design professional or a life safety consultant determine whether the smoke detectors are <u>required</u> by code. If they are not, the PM shall review with Facilities, Real Estate or the building manager, an ACSP and the AHJ whether they should be removed or converted to 135 degree Fahrenheit rate of rise heat detectors by the building's authorized fire alarm vendor. <u>The contractor and its subcontractors are not authorized to disable, modify or remove any fire alarm device or system.</u>
 - 11.12.2 Review with Facilities, Real Estate or the building manager, an ACSP and the AHJ changing required smoke heads in the space to 135-degree Fahrenheit rate of rise heat detectors to prevent unnecessary fire alarm activations (see NYC and NYS Building Code, section 907.4.3; and NFPA 72 (2010), sections 10.14.3.1, and 17.7.1.9).
 - 11.12.3 Arrange for the building's authorized fire alarm vendor to install and test the approved heat detectors. The vendor shall install heat detectors in accordance with NFPA 72 sections 17.6.3 and 29.8.4.
 - 11.12.4 Once construction is complete, the PM shall arrange for the authorized fire alarm vendor to remove heat detectors and make the necessary changes to the fire alarm system in accordance with the AHJ approved drawings.
- 11.13 Where work may activate smoke or heat detectors, the PM or manager shall arrange for a shutdown of these detectors in advance with Facilities, Real Estate or the building manager.
- 11.14 The PM or manager shall arrange for a trained, and where required, certified fire watch for the full duration of impairment to a fire protection system or <u>required</u> fire or smoke barrier. See Section 4 of NYULH Safety Policy 145 Interim Life Safety Program.
- 11.15 Contractor shall maintain a minimum 3-foot wide path of egress within the site, marked with lighted or photo-luminescent exit signs with directional arrows. All site doors shall be available for exit during working hours. The site shall be illuminated at all times.
- 11.16 Contractor shall ensure that combustible debris is removed from the site daily.



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- 11.17 Contractor shall ensure that materials introduced into the site (e.g. plywood, plastic sheeting, tarps, and debris netting) are flame-retardant or non-combustible.
- 11.18 Contractor shall not use gasoline, propane or liquid oxygen unless specifically reviewed by the PM or manager, and an ACSP.
- 11.19 Any work performed above a ceiling or which penetrates a smoke or fire barrier requires an Above Ceiling and Barrier Integrity permit. Such permits shall be requested through the ATG system by the PM or manager. Penetrations in floor, wall and ceiling fire/smoke barriers, existing or created during the course of the work, shall be temporarily fire-stopped by the contractor when not actively being worked on and at the end of each work day utilizing fire-resistant materials. Acceptable temporary fire-resistant materials include mineral wool, concrete and masonry, fire-rated doors/frames/access panels, U.L. listed drywall assemblies and Hilti fire-stopping products. Materials such as flame-retardant plywood, plastic sheeting and corrugated plastic board (corex), as well as Masonite, fiberglass and spray foam insulation, are not fire-resistant materials and therefore not acceptable for use. Penetrations shall be permanently restored with like-kind surrounding and rated fire-resistant materials immediately upon completion of the work. Raised drywall ("scab") patching is prohibited.
- 11.20 The PM or manager, and contractor shall ensure that the fire-stopping specified in the current NYULH Design Guidelines document is installed by certified personnel and inspected by a qualified third-party.
- 11.21 The contractor shall provide a 10lb. ABC dry chemical fire extinguisher with tag showing annual and monthly inspection record for every 1,500 square feet of space. The distance between any two extinguishers shall not exceed 75 feet. Site extinguishers must be mounted at least 4 inches off the floor and the top of the extinguisher shall not be mounted more than 5 feet above the floor. A 10lb. ABC dry chemical extinguisher shall also be immediately available near hot work and flammable liquid storage. Contractor shall remove extinguishers from the site at the end of the project. Please refer to Section 7 of NYULH Safety Policy 116 Fire Extinguishers for more construction site extinguisher requirements.
- 11.22 The contractor shall provide fluorescent or LED site and task lighting and enforce NYULH's prohibition against the use of "hot" lighting (e.g. incandescent, halogen, quartz, etc.). Light bulbs shall be protected against damage.
- 11.23 Storage of flammable liquids below grade is prohibited. Indoor storage of flammable liquids in quantities of five (5) gallons or more requires a permit from the AHJ and use of a UL 1275 listed flammable safety cabinet.



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- 11.24 Where required (NYC Building Code section 3303.3, NYS Building Code section 3314.1), the contractor shall provide a watchperson/fire watch during nonworking hours.
- 11.25 The PM shall review proposed indoor and outdoor contractor material storage locations (including flammable/combustible liquids) with Facilities, Real Estate or the building manager, and an ACSP. The contractor shall obtain all necessary storage and use permits from the AHJ.
- 11.26 The contractor shall have materials delivered to the site periodically as the work progresses, not stockpile them, to maintain egress and keep flammable/combustible load at the lowest level feasible.
- 11.27 The PM and contractor shall review any proposed use of temporary heat or portable heaters with an ACSP. Electric heaters approved for use shall be UL listed and equipped with a thermostat and automatic overheat shutoff.
- 11.28 The contractor and Facilities trade staff shall maintain fire alarm speaker/strobes, pull stations and their associated wiring and protect them against physical damage. Any damage caused to these devices or components shall be immediately reported to Facilities or the building manager.
- 11.29 The PM shall notify the contractor that smoking is prohibited within, and in front of, NYULH buildings (including roofs, terraces, plazas, courtyards and balconies) as well as within outdoor construction areas.
- 11.30 The use of torch down or other hot roofing methods is prohibited unless specifically reviewed and approved by Facilities, Real Estate or the building manager, and EH&S. See Miscellaneous section 6, Roofing and Waterproofing, in the NYULH Design Guidelines.
- 11.31 The contractor shall employ alternatives to hot work on, and over, roofs with exposed combustible materials or complete all hot work prior to staging or installing combustibles on the roof. Where this is not feasible, the PM shall review the roof work in advance with appropriate RED+F leadership, the building manager (if any), and EH&S to specify the protective measures to be employed (e.g. relocate combustibles 35 feet way, protect non-exposed or immovable combustibles in place).
- 11.32 The PM or manager shall plan all shaft work with an ACSP to ensure that all potential hazards (e.g. fire separation, fall protection, hot work, etc.) are adequately addressed.



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- 11.33 All worker and material storage sheds (shanties), contractor offices and storage areas at <u>all</u> NYULH locations shall comply with the applicable requirements set forth in section 3303.16 of the 2022 NYC Building Code. The use of portable heaters in sheds, offices and storage areas <u>within a building is prohibited</u>. The contractor shall conduct weekly inspections of all sheds, offices and storage areas to identify and correct deficiencies (e.g. overloading of circuits, improper storage, etc.). A written record of these inspections shall be kept.
- 11.34 Construction personnel and vendors are prohibited from bringing lithium-ion battery powered bikes, scooters and similar mobility devices inside NYULH owned and leased buildings. Storage, but not charging, of these devices is permitted in <u>outdoor</u> construction areas, but not inside buildings or contractors' shanties or offices, and not in close proximity to flammables and combustibles. For power tools and equipment, only manufacturer-certified (e.g. UL, IEC, CSA, ANSI) lithium-ion batteries, power adapters and cords shall be used by the contractor and Facilities trade staff. Lithium-ion batteries shall be regularly inspected for overheating, physical damage and performance issues and discarded where issues are found. Lithium-ion batteries shall only be charged in a well-ventilated area (e.g. not in a gang box or similar closed space) that is free of flammables and combustibles.
- 11.35 The use of spray foam insulation must be reviewed with, and approved by, RED+F leadership and EH&S.

12.0 Utility Safety

- 12.1 Prior to the start of work at an owned site, the PM or manager shall request a Pre-Demolition Validation permit through the ATG system and ensure that all utilities impacted by the work (e.g. medical and natural gas, electric, fire protection systems, steam, plumbing, HVAC, IT) are marked green ("go" or "demo") or red ("remain") and properly terminated or locked/tagged out by Facilities. At leased sites, the PM or manager shall coordinate this with the building manager. All vertical utilities within the construction area shall be protected within a framed plywood enclosure from the floor to a height of 4 feet. Warning "live utility" signage shall be posted on all sides of the enclosure and shall indicate the type of utility and any Facility designation associated with it.
- 12.2 Contractor shall comply with the following NYULH Safety Policies:
 - 133: Medical Gas Outlets and Piping
 - 137: Petroleum Bulk Storage Management Program
 - 157: Electrical Safety
 - 167: Control of Hazardous Energy (Lockout/Tagout)
 - 169: Enterprise Utility and Essential Equipment Shutdown



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- 12.3 The PM or manager and contractor shall not perform work on any live utilities, systems, or equipment unless planned with, and approved by Facilities, Real Estate or the building manager, and an ACSP. Approved work on live electrical systems shall be performed in accordance with all requirements set forth in the NFPA 70e standard.
- 12.4 Contractor shall contact 811 and comply with their requirements prior to starting any excavation work.
- 12.5 Contractor shall employ ground penetrating radar (GPR) or equivalent technology to locate and mark underground utilities prior to the start of excavation. Where the excavation reaches the approximate horizontal or vertical location of a utility, the contractor shall employ safe methods (e.g. vacuum truck, hand digging) to avoid striking or damaging it. The utility shall be protected, supported and/or relocated for the benefit of the workers and to prevent damage.
- 12.6 Where work requires penetrating a floor, the contractor or manager shall use GPR to detect in-slab utilities. Where the floor slab is 10 inches or greater in depth, the PM and contractor must plan penetrations with an ACSP. The contractor shall also use an appropriate device to detect utilities within wall cavities prior to the start of demolition (e.g., wall scanner for drywall, GPR for masonry).
- 12.7 Contractor shall not use existing building electrical receptacles unless approved by Facilities, Real Estate or the building manager.
- Where a temporary electrical panel is to be employed outdoors, contractor shall properly protect the panel against exposure to water, and the panel shall be equipped with Ground Fault Circuit Interrupter (GFCI) breakers.
- 12.9 Contractor and Facilities trade staff shall ensure that electrical cables are not run on the ground, through doorways, or in direct contact with conductive materials or sharp edges where they are subject to pinching or chafing.
- 12.10 Contractor and Facilities trade staff shall ensure that live electrical panels are covered and locked when not being worked on and that a controlled access zone is in place around a live, open panel during work.
- 12.11 The contractor shall have a licensed electrical contractor install a temporary lighting and power system in the construction area. At owned sites, these temporary systems shall be connected to the building's electrical service by a Facilities electrician or authorized vendor. At leased sites, this connection shall be made by the building manager's authorized vendor. The temporary power system



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- shall employ ground-fault circuit interrupter breakers or otherwise be maintained under an assured equipment grounding program
- 12.12 The PM shall review and plan the installation of new, or modification of existing, fuel oil tanks and piping with EH&S (see NYULH Safety Policy 137 Petroleum Bulk Storage Management Program).

13.0 Control of Hazardous Materials and Infection / Air Contaminants

- 13.1 Prior to the start of work, the PM or manager shall:
 - Obtain the necessary environmental surveys (e.g. asbestos, lead, soil, PCBs), share them with the contractor and EH&S and complete any necessary abatement.
 - request an ICRA permit via the ATG system for work in patient care areas.
 The contractor or Facilities trade staff shall comply with all requirements set forth in this permit.
 - arrange for removal of NYULH supplies, equipment, furniture and records from the space. Immovable items shall be protected against dust intrusion and physical damage.
- 13.2 The non-construction side of all partitions shall be painted (washable) and have cove base installed.
- 13.3 Contractor shall use a modular panel partition system (e.g. Edge Guard, STARC, etc.) which provides dust and security protection or a mobile containment unit (e.g. Clean Work Booth, or Kontrol Kube) for short duration work in occupied areas.
- 13.4 The PM, manager and contractor shall comply with the following NYULH Safety Policies:
 - 108a: Hazardous Waste from Construction and Building Maintenance
 - 121: Hazard Communication Program
 - 144: Lead Management Program
 - 159: Asbestos Management Program
- 13.5 Managers and contractors shall:
 - ensure personnel have asbestos awareness training and do not disturb suspect asbestos-containing material (ACM)
 - validate that an asbestos survey was completed prior to undertaking any work that may disturb suspect ACM



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Please note: in buildings constructed prior to 1980, caulks and duct sealant which may be disturbed shall be tested for both ACM and PCBs (see Section 7.5 of NYULH Safety Policy 159 - Asbestos Management Program and Section 4.1 of NYULH Safety Policy 108a - Hazardous Waste from Construction and Building Maintenance)

- immediately stop work, secure the area, and contact EH&S, and any PM, if suspect ACM is found at any point during the course of the project.
- 13.6 To ensure the safety of building occupants, staff and contractor personnel, PMs, managers and contractors who will disturb surfaces coated with lead-containing paint (e.g. walls and ceilings constructed prior to 1980, metal painted surfaces, etc.) shall maintain compliance with:
 - the OSHA Standard for Lead in Construction. At a minimum, this means having a written lead control program; providing OSHA lead training; conducting an exposure assessment; providing appropriate PPE during the exposure assessment; maintaining proper housekeeping; ensuring vacuums are HEPA-filtered; providing handwashing facilities; communicating the exposure assessment results to impacted workers; and maintaining records. There are additional requirements if the exposure monitoring shows exposures above OSHA's Action Level.
 - NYULH requirements for controlling air contaminants during construction work (e.g., containment barriers; negative pressure; frequent changing of prefilters on HEPA-filtered equipment).
 - all applicable requirements of NYULH Safety Policy 144 Lead Management Program.
 - NYULH requirements for segregating waste paint chips/flakes that contain lead. NYULH shall dispose of all lead-containing material.
 - All metal painted surfaces (e.g. structural members, lintels, tanks, etc.) are presumed to contain lead which shall be abated as necessary to prevent the release of lead fume while performing hot work.
- 13.7 The PM, manager and contractor shall comply with all provisions contained in NYULH Safety Policy 144 Lead Management Program, in dealing with lead shielding materials. Unless EH&S authorizes lead shielding waste be sent to an approved recycler, EH&S shall dispose of all lead waste.
- 13.8 Managers and contractors shall ensure that their personnel comply with the respective OSHA general industry (1910.1053) or construction (1926.1153) Respirable Crystalline Silica standard.



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- 13.9 Contractor and Facilities trade staff shall employ appropriate engineering controls (e.g., exhaust ventilation, power tools with HEPA vacuum attachments, wet methods) when performing dust, smoke, vapor and fume producing work indoors and outdoors. A HEPA vacuum shall be kept in the work area to clean the site and for personnel to clean dust from their clothing.
- 13.10 Contractor shall plan and coordinate with the PM, Facilities or the building manager, and an ACSP all work to be performed in close proximity to an occupied building's air intakes to ensure proper controls are in place.
- 13.11 Prior to the start of, and for the duration, of the work, the contractor and Facilities trade staff shall ensure that the work area partition is smoke-tight, supply and return HVAC registers are capped with sheet metal and sealed, and that the site is maintained under negative pressure at all times, with air exhausted directly outdoors. Where exhausting air outdoors is not feasible, the PM or manager shall assess alternatives with Facilities, Real Estate or the building manager, and an ACSP prior to start of work (e.g. negative pressure entrance vestibule, neutral air pressure with recirculating HEPA units). The PM shall have the contractor install a device reviewed by EH&S containing an analog or digital display to continuously monitor negative (.03) and neutral (0) air pressure within the construction area, unless an ACSP indicates otherwise.
- 13.12 Contractor and Facilities trade staff <u>shall not</u> use the building's return air system to exhaust air out of the construction space, or exhaust air from the construction space to a clinical or other occupied area.
- 13.13 Contractor and Facilities trade staff shall place a sticky mat immediately <u>inside</u> each site door and change it as necessary to capture dust (e.g., on workers' shoes or cart wheels).
- 13.14 Contractor shall ensure that the ends of ductwork delivered to, and staged in, the site are sealed with plastic film to keep dust out.
- 13.15 The PM shall notify the architect and controlling contractor that all chemical products, including roofing and waterproofing, must comply with the the NYULH Design Guidelines. The PM and controlling contractor shall review and sniff test each chemical product prior to use with EH&S. Where the only feasible chemical product is non-compliant, the PM, controlling contractor and EH&S shall review and sniff test the product and plan the work to ensure that adequate protective measures are in place for its use.. The controlling contractor shall maintain a Safety Data Sheet on-site for each chemical product.



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- 13.16 Contractor and Facilities trade staff shall ensure that a fume extractor (smoke eater) is in use at the point of all welding and other smoke/odor producing hot work.
- 13.17 Contractor shall ensure that all debris containers are wiped down and capped/sealed with plastic prior to leaving indoor work areas.
- 13.18 The PM or manager shall arrange for terminal cleaning of the work area prior to the return of occupants.
- 13.19 The contractor shall comply with all federal, state, local and NYULH Covid-19 requirements.

14.0 Fall Prevention and Protection

- 14.1 Contractor and Facilities trade staff shall comply with the following NYULH Safety Policies:
 - 160: Fall Prevention and Protection Program
 - 163: Ladders, Scaffolds and Mobile Elevating Work Platforms

15.0 **Demolition**

- 15.1 The PM or manager shall plan demolition with an ACSP, and schedule a "Time out" with the contractor or Facilities trade staff prior to starting to ensure that all necessary protection and controls are in place.
- 15.2 Manager or contractor shall plan and conduct all demolition work in a safe, controlled and prudent manner and in accordance with OSHA 1926 subpart T, the applicable building codes and the provisions of NFPA 241.
- 15.3 The controlling contractor shall have a competent Superintendent present <u>at all</u> times when demolition work is performed.
- 15.4 The PM or manager shall plan the demolition of mechanical systems, including tanks and pressure vessels, with EH&S to ensure they have been properly emptied, purged and certified devoid of pressure, flammable, combustible or toxic gases, liquids and/or other hazardous materials (e.g. oil, lead-based paint, etc.).



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16.0 Excavation, Foundation and Erection

- 16.1 For trenches and excavations greater than 4 feet in depth, contractor shall ensure ladder access at 25-foot intervals. The contractor shall ensure that trenches and excavations 5 feet or greater in depth are properly sloped, benched or protected by an engineer-designed shoring or shielding system. The contractor's designated competent person shall inspect excavations daily and ensure all hazards are properly controlled.
- 16.2 Contractor shall protect the topside perimeter of the excavation/foundation with a guard rail system (top rail, mid rail and toe board).
- 16.3 Contractor shall install shoring and concrete formwork in accordance with the manufacturer's specifications and the design professional's stamped drawings.
- 16.4 Contractor shall cap rebar which poses an impalement or laceration hazard. Contractor shall not use rebar as a fence post.

17.0 **Power Tools and Equipment**

- 17.1 All power tools and equipment used <u>within buildings and on roofs</u>, shall be electric-powered.
- 17.2 The PM or manager shall review any proposed <u>outdoor</u> use of fuel-powered equipment with an ACSP. Where diesel-powered equipment represents the only feasible option, it shall be equipped with a tier 4 or 5 engine or a diesel particulate filter reviewed by an ACSP.
- 17.3 Power tools and equipment shall be used and maintained in accordance with the manufacturer's specifications. A GFCI device shall be used with power tools, extension cords and equipment.
- 17.4 Contractor personnel and Facilities trade staff shall inspect all power tools and equipment prior to use. Tools and equipment missing the manufacturer's supplied guards or other safety devices, found to contain a defect or otherwise not functioning properly, shall be removed from service.

18.0 Exterior Material Handling, Crane, Hoist and Rigging Operations

18.1 The PM and Contractor shall plan all exterior material handling and crane operations, as well as rigging operations involving loads 2,500 lbs. or greater,



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with an ACSP <u>at least 3 weeks in advance</u>. All potentially impacted parties shall be included in the planning. These operations shall be performed in accordance with OSHA 1926 subparts H, N, R and CC, and all local laws. Unless the area can be closed, crane and exterior rigging operations shall be performed at times where there is limited interaction with the public and building occupants. Lifting operations performed in proximity to exposed power lines shall be planned with an ACSP to ensure a minimum of 20-foot clearance (OSHA 1926.1408(a)(2)(iii) or de-energizing of the power lines (OSHA 1926.1408(a)(2)(i).

- 18.2 The Contractor shall provide a professional engineer (P.E.) stamped crane logistics drawing and rigging diagram. The P.E. drawing shall include assessment of ground conditions for equipment placement. Contractor shall avoid picks which meet the OSHA 1926.751 definition of a "critical lift" (loads that exceed 75% of the lifting equipment manufacturer's 85% load chart capacity) or requires the use of more than one crane), where feasible, by breaking down picks to reduce weight, or specifying lifting equipment with greater capacity. Where this is not feasible, the pick shall be approved by an ACSP.
- 18.3 The PM shall have all interior surfaces that rigged material or equipment 2,500 lbs. or greater in weight will travel on assessed by a structural engineer.
- 18.4 Rigging shall be inspected daily prior to use by the contractor's designated competent person. A log of these inspections shall be kept. Any damaged rigging is to be immediately removed from service and the site. Chafing protection is to be employed whenever rigging may come into contact with sharp edges.
- 18.5 Contractor shall not pick loads over people or occupied vehicles. Where loads must be picked into or over an occupied building, at a minimum, the portion of two floors below that the load, and boom while under load, will travel over shall be vacated unless specifically authorized by the AHJs (e.g. building department, Department of Health).
- 18.6 The contractor shall install and maintain personnel hoists in accordance with the manufacturer's specifications, OSHA 1926 subpart N, the ANSI A10.4 standard, the approved P.E. drawing and all local laws. The <u>personnel hoist and any runback structure shall be inspected by a qualified third-party upon completion of installation and every 6 months thereafter.</u>
- 18.7 The contactor shall install and maintain material hoists in accordance with the P.E. design drawing, the manufacturer's specifications, OSHA 1926 subpart N, the ANSI A10.5 standard, and all local requirements. The material hoist shall be electric-powered. The hoist, rigging (e.g. wire rope, clamps, hooks with safety latches, etc.) and safety devices, shall be inspected daily prior to use. The hoist is



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to be taken out of service if any rigging or safety devices are damaged or otherwise not functioning properly. The contractor is not to load the hoist in excess of the limit set forth by the manufacturer. A physical barrier-controlled access zone shall be established on the ground and at each working level of the hoist way to protect workers and pedestrians.

- 18.8 The contractor shall not use cranes, hoists, suspended scaffolds or other lifting equipment when wind speeds exceed the limit set forth by the manufacturer or applicable code, whichever is less.
- 18.9 Contractor shall employ controlled access zones and an adequate number of flag persons to control pedestrians and vehicular traffic.

19.0 Motor Vehicles, Powered-Mobile Equipment and Industrial Trucks

- 19.1 Contractor shall comply with NYULH Safety Policy 149 Powered Industrial Truck Program.
- 19.2 Contractor shall inspect, maintain and use all powered-mobile equipment in accordance with the manufacturer's specifications.
- 19.3 Contractor shall ensure that powered-mobile equipment contains all manufacturer-supplied guards and safety devices, which shall not be removed or over-ridden during operation. Outriggers shall be fully deployed at all times. Equipment shall not be modified or loaded in excess of its rated capacity.
- 19.4 Roll off container trucks must be stationary during the loading and unloading process. Containers shall not loaded/unloaded in close proximity to people. During the loading process, the driver must exit the truck to ensure proper rail alignment. During unloading, the cable must be kept under tension to ensure a controlled descent of the container.

20.0 Confined Space Entry

20.1 The PM or manager, and contractor shall plan any work to be performed in a confined space at least one week in advance with EH&S. Such work shall be performed in accordance with OSHA 1926 subpart AA and NYULH Safety Policy 138 – Confined Space Entry Program.



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21.0 Personal Protective Equipment and Clothing

- 21.1 Contractor shall comply with OSHA 1926 subpart E: Personal Protective and Life Saving Equipment. The Manager and contractor shall comply with NYULH Safety Policy 119 Personal Protective Equipment.
- 21.2 Contractor personnel and Facilities trade staff shall wear, at a minimum, work boots, long pants and a short sleeve shirt.
- 21.3 Contractor personnel and Facilities trade staff shall wear the proper ANSI Z89 hard hat for the hazard that exists (e.g., impact, falling/flying object, or electrical hazard).
- 21.4 Contractor and Facilities foreperson shall ensure personnel have and use all necessary task-specific personal protective equipment and clothing, including but not limited to:
 - Cut-resistant and fire-resistant gloves
 - Dust mask
 - Hearing protection
 - Safety glasses and face shields
 - Welding helmet and jacket
- 21.5 Contractor shall ensure personnel wear reflective vests when directing traffic and working in close proximity to trucks and powered-mobile equipment. Such vests **shall not** be worn when performing hot work.
- 21.6 The manager or contractor shall implement engineering controls (e.g. ventilation or wet methods) to eliminate the need for respiratory protection where possible.
- 21.7 Manager or contractor shall complete a pre-task assessment in coordination with EH&S prior to personnel undertaking any work which requires the use of a respirator.
 - Contractors whose personnel wear respirators shall provide their written respiratory protection plan to an ACSP for review.
 - Manager or contractor shall maintain and have available documentation of medical clearance, fit testing and training in the proper use and maintenance of respirators.

Issue date	03/2025	
Replaces	aces 08/2023	
Reviewed by	ed by S. Haney, Environmental Health and Safety	
	NYU Langone Health Construction Safety Committee	
	NYU Langone Hospital Environment of Care (EOC) Committee	



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NYU Langone Hospital – Brooklyn EOC Committee
NYU Langone Orthopedic Hospital EOC Committee
NYU Langone Hospital – Long Island EOC Committee
NYU Langone Hospital –Suffolk EOC Committee
Family Health Centers at NYU Langone EOC Committee

Summary of Revisions

Revision Date	Section	Changes
March 2025	Throughout	Incorporates generic requirements to accommodate other NYULH
		locations
	3.5	Replaces "directly" with "actively"
	10.0,10.16	Adds "Occupant"
		Clarifies requirements for storage of construction tools, materials
		and debris; Adds requirements for staging/storage of materials on roofs.
	11.5,11.7,11.	Adds assembly requirements for perimeter site walls
	8,11.21,11.2	Clarifies sprinkler coverage requirements in construction areas
	7,11.34,11.3	Updates requirements for sprinkler heads
	5	Clarifies fire extinguisher requirements
		Specifies requirements for electric heaters.
		Clarifies requirements for lithium-ion battery powered mobility
		devices on indoor/outdoor construction sites.
		Adds instructions for the use of spray foam insulation
	12.5	Specifies safe methods for when excavating in proximity to below
		grade utilities
	13.5,13.7,13.	Adds ACM and PCB testing requirements for buildings
	15	constructed prior to 1980
		Adds provision for disposal of lead shielding waste at recycler
		when approved by EH&S
		Adds "controlling contractor"; Adds sniff-test requirements for
		chemical products
	15.3	Adds Superintendent requirements during demolition
	18.1, 18.2	Specifies loads requirements
		Clarifies OSHA's definition of "critical lift"
	19.4	Adds requirements for loading and unloading of roll off containers.
	Appendix A	Adds emergency number for NYU Langone Health - Suffolk
	Reviewed By	Adds NYU Langone Health – Suffolk EOC Committee
August 2023	1.0	Changes NYU Long Island School of Medicine to NYU Grossman Long Island School of Medicine
June 2022	2.0	Adds Authority Having Jurisdiction "AHJ" definition



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	4.2	Clarifies requirement for contractor personnel at all NYULH sites
	10.1	to have 10-hour OSHA training within the last 5 years
	10.1	Updates restriction for cell phone and radio playing in occupied
		areas and the use of in-ear devices
	11.6, 11.12.3,	Adds requirement for construction partition doors to be
	11.19, 11.32,	maintained free of penetrations
	11.33, 11.34	Adds requirement for installed heat detectors to be tested
		• Clarifies requirement to permanently restore penetrations with
		like kind and rated materials immediately upon completion of
		work and prohibits raised drywall ("scab") patching
		Adds requirement for PM and manager to plan shaft work with an ACSP to ensure that all hazards are addressed
		Adds requirements for worker and material storage sheds
		(shanties), contractor offices and storage areas
		Adds requirements for lithium-ion battery use, inspection,
		charging and storage
	12.2	References NYULH Control of Hazardous Energy
	12.2	(Lockout/Tagout) and Utility and Essential Equipment Shutdowns
		safety policies
	13.11	Adds requirement for contractor to install a device to continuously
		monitor air pressure within the construction area
	18.1, 18.2	Clarifies requirement to perform crane and rigging operations
	,	at times where there is limited interaction with the public and
		building occupants unless area can be closed
		Updates definition of a "critical lift"
March 2021	Throughout	Changes NYU Winthrop Hospital to NYU Langone Hospital-Long
	Time argument	Island (NYULH-LI)
October 2020	Throughout	Updates policy name to "Construction Safety Requirements";
		Updates "Facilities mechanics" to "Facilities trade staff"
	2.0	Adds "Competent Person", "Construction", "Controlling
		Contractor", Facilities staff person", and "Manager" definitions
	3.0	Adds Responsibilities section
	4.4	Adds requirement for contractor to maintain a daily contact log
	6.1	Interim Life Safety permit changed to Construction Safety permit
	8.7	Adds requirement to provide watchperson on certain NYC
		construction sites
	10.18	Adds occupant/tenant protection plan requirement
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11.3, 11.5, 11.7, 11.8, 11.12, 11.20, 11.21, 11.22, 11.23, 11.24, 11.25, 11.26, 11.27, 11.28, 11.29, 11:31, 11:32	 Adds requirement for AHJ to review proposed alternate egress for place of assembly occupancies; Prohibits use of flame-retardant plastic as a construction barrier except for short duration work in occupied areas; Clarifies requirements for maintaining and modifying fire protection systems and compartmentation during construction; Adds requirement for PM to include egress, fire protection and compartmentation changes in occupant protection plan; Clarifies procedure for addressing existing smoke detectors in areas to undergo construction; Adds section on protecting fire/smoke barriers; Adds requirement for fire-stopping to be installed by certified personnel and inspected by a qualified third-party; Adds section on fire extinguisher requirements; Adds section prohibiting use of "hot" lighting; Adds requirement to flammable liquid storage; Adds requirement to provide watchperson on certain NYC sites; Adds requirement to review proposed contractor indoor/outdoor material storage locations; Adds requirement for contractor not to stockpile materials on site; Adds requirement for temporary heat/portable heaters to be approved by EH&S Adds requirement for fire alarm devices and wiring to be protected; any damage caused to same reported; Adds requirement for building to be enclosed and hot work on roof complete prior to placing combustible building materials on roof
12.10, 12.11	Adds requirement to protect live electric panels, requirement for temporary power and lighting system in construction areas
13.6, 13.7, 13.8, 13.15, 13.19, 13.20	 Adds requirements for work involving lead painted surfaces and lead shielding materials; Adds requirement to comply with silica standards; Adds requirement for PM to notify architect that chemical products must comply with NYULH design guidelines; Adds terminal cleaning requirement prior to reoccupation; Adds requirement for contractor to comply with NYULH and NYC/NYS Covid-19 requirements



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	15.3	Adds requirement for planning demolition of tanks and pressure
		vessels.
August 2017	Throughout	Updates logo and organizational references
	10.3-10.11	Adds fire safety requirements
February 2017	Application	Changes NYULMC to NYU Langone
	1.0	Defines NYU Langone
	Review by	Adds review by HJD, Lutheran, and Lutheran Family Health Centers EOC Committee
November	2.2, 2.4	Adds training requirements
2016	7.1	Adds requirement to call 212 263-3911
	8.2, 8.3, 8.7,	Adds requirements for public protection and work in occupied
	8.8, 8.11	areas
	9.2	Adds requirement for fire-resistance rated construction partitions
	9.3, 9.5, 9.7	Adds requirements for construction partition doors, removal of
		combustible materials and restricted use of gasoline and propane
	10.6, 10.7,	Adds requirements to use a scanner to detect in wall utilities,
	10.9	restricted use of building outlets and protection of electrical cables
	11.9-11.13,	Adds requirements for infection/dust control
	11.17	-
	16	Adds requirements for exterior material handling, crane and
		rigging operations
	Appendix A	Adds NYULMC Safety Orientation for Contractor Personnel
November	11.2	Specifies use of Edge Guard or equivalent partition system
2015	Summary of	Adds Summary of Revisions
	Revisions	

Construction Safety Requirements NYU Langone Health Safety Orientation for Contractor Personnel Page 1 of 4

NYU Langone Health values safety and is committed to protecting its patients, staff, contractor personnel and the public from hazards associated with construction.

As a worker on an NYU Langone Health construction site, you are responsible for:

- pursuing safety on a daily basis
- complying with the law, standards and procedures
- following NYU Langone Health's Construction Safety Rules
- proactively helping to identify and address safety concerns
- intervening to correct unsafe conditions and behaviors
- stopping work if a hazard presents an imminent danger to yourself or others
- looking out for co-workers and helping them correct any unsafe behaviors

Failure to meet your responsibilities for safety will result in strict disciplinary action.

You should report all concerns about safety to your foreman. You may also report them anonymously to NYU Langone Health's division of Environmental Health and Safety (EH&S) at 212 263-5159.

The following basic rules apply at all NYU Langone facilities:

Category	Construction Safety Rules
Asbestos	 Prior to performing work in an existing facility, confirm that an asbestos survey was done and any necessary abatement completed. If you come into contact with suspect asbestos-containing material, immediately stop work, secure the area, and notify your foreperson.
Communication / Behavior	 Do not speak to patients. Communicate with medical center personnel only when necessary. In patient care areas, communicate only with the Charge Nurse. Ensure all communication is courteous and professional. The use of cell phones and radio playing in occupied areas is prohibited, as is the use of in-ear devices in construction areas during work hours. Clothing or gear containing offensive language or themes is prohibited. NYU Langone Health has a zero-tolerance policy for inappropriate communication and behavior (e.g. harassment, verbal/physical altercation, drug/alcohol use, or smoking). Such behavior will result in immediate and permanent removal from NYU Langone facilities.
Doors	Keep construction site, stairwell, mechanical and electrical room and roof doors closed.

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Egress	Prior to work	that may obstruct or restrict egress:	
Egicss		inimize the impact to occupants.	
		•	
		ne NYU Langone Interim Life Safety (ILS) and Evacuation Plan	
	_	EH&S prior to starting the work.	
F1 4 1	•	at all precautions listed in the ILS and Evacuation Plan.	
Electrical	• Do not use building receptacles unless approved by Facilities or the building		
	manager.		
		CI device with power tools, extension cords and equipment.	
Fire	•	report any smoke or fire incident, <u>regardless of severity</u> , as	
	follows:		
		an active fire alarm system:	
		the nearest pull station	
	Call:	A1-44	
		Manhattan and Brooklyn – 33911 (212.263.3911)	
	- Mineola - 33911 (516.663.3911) - Suffolk - 3040 (631.447.3040)		
	 Off-sites – call 911 and provide the address and exact location of the incident 		
		which lack a fire alarm system, call 911, provide the address and	
	exact location	of the incident, and then contact your foreman.	
	If you discover smoke or fire, implement R-A-C-E: Rescue remove people to a safe area		
	Alarm	activate the nearest pull station	
	Confine	close windows, doors, gases, electrical equipment to contain fire	
	Extinguish	small fires only if safe to do so with an extinguisher using	
		P-A-S-S - Pull pin, Aim at base of fire, Squeeze the lever and	
		Sweep side to side)	
	or	-	
	Evacuate	use nearest stair or horizontal exit. Evacuate minimum of two	
		floors below incident floor. Do not use elevators.	

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Hot Work	E.g., all cutting, welding, burning, brazing, grinding or other operations that		
	produce flame, sparks or slag.		
	• <u>Do not</u> perform hot work unless you and others working on the task have		
	the required training and valid certifications (e.g., certificates of fitness,		
	license).		
	Obtain a new Hot Work Permit each day, e.g., from Facilities or the		
	building manager.		
	• Before starting work, remove flammables/combustibles within 35 feet of the		
	hot work area.		
	• Implement protective measures to contain sparks and slag.		
	• Use a smoke eater at the point of welding and other smoke/odor producing		
	hot work.		
	• Remove oxygen and flammable gas cylinders from building when not in use		
	and at the end of each work day.		
ID	Wear NYU Langone ID at all times.		
Infection	Review the Infection Control Risk Assessment (ICRA) permit during		
Control	planning.		
	Implement all controls listed on the ICRA.		
	• Do not work in an occupied patient room.		
	• Do not work in an occupied area without a smoke-tight construction barrier		
	in place.		
	• Prior to work, remove all clinical supplies, equipment and furniture from the		
	area. If items cannot be removed, protect them from dust and physical		
	damage.		
Injuries	Report all injuries requiring treatment beyond first aid immediately to your		
	foreperson.		
Life Safety	Review the Construction Safety permit during planning.		
	• Implement all controls listed in the Construction Safety Permit.		
Isolation from	• Ensure that all work is properly isolated from occupied areas by utilizing a		
occupied areas	smoke-tight partition or a clean work booth (e.g., a Kontrol Kube).		
_	• Seal all HVAC vents with sheet metal to prevent migration of construction		
	dust to other occupied areas.		
	 Use exhaust fans equipped with HEPA filters within work areas and work 		
	booths to capture construction dust.		
	Do not stage or store tools, materials, equipment, or debris in occupied		
	areas.		
	1 222		

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Penetrations	 Obtain an above ceiling permit from Facilities or the building manager prior to performing any work above the ceiling or penetrating a smoke or fire barrier. Wear the blue penetrations vest (if applicable) and have the Penetrations Permit with you when working above the ceiling. Use only Hilti fire-stopping products. Seal all penetrations in smoke/fire barriers with proper fire-resistant materials (e.g., mineral wool, fire caulk, U.L. listed drywall assemblies or rated access panels) at the end of each work day.
	• Do not seal penetrations with plywood, plastic, corex, masonite, fiberglass or spray foam insulation.
Planning	Plan all work and implement necessary protective measures (e.g., for windows, air intakes, and public walkways) prior to beginning work.
Smoking	 <u>Do not</u> smoke or use electronic cigarettes within medical center facilities, courtyards, roofs, or within 25 feet of entrances to them. Only smoke in designated smoking locations.
Utility Shutdowns and Control of Hazardous Energy	 <u>Do not</u> perform work on live utilities unless planned and specifically approved by Facilities or the building manager, and EH&S. Plan with Facilities or the building manager and confirm shutdown of: fire alarm and fire suppression system components (e.g., sprinkler systems or smoke detectors) prior to any work that has potential to activate them (e.g., work involving dust, hot work, steam, heat or physical contact). any necessary utilities (e.g., electric, medical gas, plumbing, steam, and HVAC) prior to undertaking any demolition, using the Pre-Demolition Validation Permit. Scan floor slabs with GPR and walls with a wall scanner prior to penetrating.
Waste	Wipe down and seal with plastic all debris containers prior to traveling from a construction area to an occupied area.