

OCIP V



# Yale

### Owner Controlled Insurance Program Safety and Health Guidelines

### **General Information**

The Construction Manager and Subcontractors (includes Subcontractors/Sub-Subcontractors for the purpose of this document), at a minimum, must comply with all Applicable Laws, as they relate to the safety of persons, environment, public, or property. This document is not an attempt to reiterate Federal OSHA Standards, nor should it be considered an all-inclusive guideline to such Standards.

The Contractor Health & Safety Guidelines have specific health and safety requirements that in many instances exceed current federal, state, or local safety and environmental standards. In the event of a conflict, the Construction Manager and Subcontractor shall implement and comply with the more stringent health and safety procedures. If the event of a dispute over the applicability of a health or safety procedure, the Yale Office of Facilities Planning and Construction will identify the health or safety procedures to be followed.

The Construction Manager must develop a Site-Specific Safety Plan, which identifies specific safety requirements, anticipated exposures associated with the Project, and the means and methods to be employed to address these exposures. The Construction Manager must submit its Site-Specific Safety Plan to the Owner and Owner's Representative for review and comment at least fourteen (14) days prior to the start of any construction activities. The Construction Manager's Site-Specific Safety Plan must meet or exceed the safety and health guidelines outlined in this document and comply with all Applicable Laws.

Review of the Construction Manager's Site-Specific Safety Plan will not impose any liability on the Owner and Owner's Representatives. The Owner expects the Construction Manager to consider its review comments on the Construction Manager's Site-Specific Safety Plan, but the Construction Manager bears final responsibility for scope, detail, and administration of their Site-Specific Safety Plan. Review of the Contractor's Site-Specific Safety Plan shall not impose any liability on the Owner and Owner's Representatives.

The Construction Manager is responsible for overseeing the safety of all Subcontractor employees on the Project; however, this does not relieve each Subcontractor of its safety responsibilities. All Subcontractors must develop their own Site-Specific Safety Plan and submit that plan to the Construction Manager for review prior to beginning work on the project. Each Subcontractor Site-Specific Safety Plan must meet or exceed the safety and health guidelines outlined in this document and comply with all Applicable Laws.

The Construction Manager and Subcontractors are each responsible for administering their own Site-Specific Safety Plans. The Construction Manager and its Subcontractors bear the cost of compliance with their Site-Specific Safety Plans, Applicable Laws, and all applicable OSHA (including 29 CFR Part 1926 and 1910) and industry consensus standards referenced in these guidelines. Construction Manager and Subcontractors must know and understand the Applicable Laws and standards that apply to the Work. Contractors and Subcontractors must update their Site-Specific Safety Plan as OSHA Standards and other Applicable Laws change, provided the change is more stringent than what is in the Site-Specific Safety Plan.

Neither this document nor the safety services provided by the Owner or the Owner's Representatives are intended to mitigate the obligation of Construction Manager and Subcontractors to provide a safe and





healthy work environment for their employees and to secure the safety of the Project Site to ensure the safety of Owner employees, visitors, and the surrounding community. No accommodations will be made to the Construction Manager and Subcontractors due to ignorance regarding safety requirements.

This document is part of the Contract Documents and the requirements contained in this document are binding. Failure to comply is considered non-compliance with or default of the Contract and the owner reserves all of its rights and remedies under the Contract, at law or in equity. The Owner may withhold payments to Construction Manager until the Owner determines that Construction Manager or responsible Subcontractor is no longer in default. Failure to comply may result in removal from the Project.

References in these guidelines to "Yale", "Yale University", or the "campus" all include the Central, West, and Science Hill campuses, School of Medicine, nearby athletic fields, and other properties owned or controlled by Yale. Additional background information, campus maps, and individual overviews for many buildings are available from the Facilities website at <a href="https://www.facilities.yale.edu">www.facilities.yale.edu</a>.

The Owner reserves the right to make any changes and modifications to this document via bulletin form or any other written communication.





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#### CONSTRUCTION MANAGER SAFETY RESPONSIBILITY

The Construction Manager is responsible for overall Project Site safety. If required by Contract with the Owner, the Construction Manager will employ a full-time Project Safety Manager. The full-time Project Safety Manager's sole responsibility will be safety and he/she will be on the Project Site on a full-time, daily basis. The Project Safety Manager must have completed a 30-Hour OSHA Construction Outreach Program within the past 5 years and maintain a current CPR and First Aid certification. It is recommended that the Project Safety Manager have a minimum of five (5) years of construction safety experience. The Project Safety Manager will be on the Project Site at the time of mobilization and will remain on the Project Site until final punch list is completed. The Project Safety Manager is responsible for the implementation and enforcement of the Construction Manager's Site-Specific Safety Plan, and Applicable Health and Safety Laws, including OSHA Standards, and oversight and enforcement of the Subcontractor's Site-Specific Safety Plan.

If the Contract does not require a full-time Project Safety Manager, the Construction Manager's Superintendent or Assistant Superintendent will perform the job duties of a Project Safety Manager. The Superintendent or Assistant Superintendent must have completed a 30-Hour OSHA Construction Outreach Program within the past 5 years and maintain a current CPR and First Aid certification.

The Construction Manager's Project Safety Manager must:

- 1. Stop the Work if a hazard poses an imminent danger.
- 2. Conduct the Project Safety Orientation for all workers on-site. Assist the Owner with the drug testing program.
- 3. Perform <u>daily</u> inspections of the entire Project Site for safety and health exposures and document these daily inspections and any corrective actions.
- 4. Promptly address exposures with the responsible parties at the time of observation and follow-up on all open issues until they are addressed.
- 5. Notify Subcontractors in writing when abatement measures to address exposures are inadequate or additional abatement measures need to be taken. Copies of such written notifications must be kept in the Project records.
- 6. Coordinate safety efforts with Subcontractors and review Subcontractor's weekly safety inspection reports.
- 7. Receive, review, and distribute Incident Investigation Reports. Conduct a review and analysis of any incidents, accidents, injuries, or near misses on the Project Site.
- 8. Ensure that all employees on-site have received appropriate training and assist with training and retraining, as necessary.
- 9. Accompany any OSHA Compliance Officer on the Project Site during an inspection.
- 10. Ensure Subcontractors conduct daily Pre-Task Plan huddles and weekly Toolbox Talks and periodically attend, participate in, and monitor the quality of these daily Pre-Task Plan huddles and weekly Toolbox Talks.





#### SUBCONTRACTOR SAFETY RESPONSIBILITY

Each Subcontractor working the Project will designate a Safety Representative. This individual must be a foreperson or superintendent unless the Contract requires a full-time Safety Representative. The Safety Representative is responsible for the implementation and enforcement of the Subcontractor's Site-Specific Safety Plan and applicable OSHA Standards, as they apply to the Subcontractor's workers. The Subcontractor's Safety Representative must also have the authority to Stop Work if an imminent danger situation occurs. Unless otherwise stated in the Contract Documents, the Safety Representative (non-dedicated) may have other responsibilities (i.e., supervision of workforce, production, etc.). The foreperson or superintendent designated by the Subcontractor as their Safety Representative must have completed a 30-Hour OSHA Construction Outreach Program within the past 5 years and possess a current CPR and First Aid Certification.

If required by the Contract, certain Subcontractors may be required to have a full time, dedicated Safety Representative on-site for the entire duration of certain work activities. The dedicated Safety Representative must have 3 years of construction safety experience, must have completed a 30-Hour OSHA Construction Outreach Program within the past 5 years and possess a current CPR and First Aid Certification.

The Safety Representative (dedicated or non-dedicated) must also:

- 1. Stop the Work if a hazard poses an imminent danger.
- 2. Ensure that subcontractor crew leaders conduct daily Pre-Task Plan huddles and weekly Toolbox Talks.
- 3. Ensure that employees have received appropriate training and assist with training and retraining, as necessary.
- 4. Be familiar with current OSHA Standards and regulations for construction.
- 5. Instruct employees in safe work practices and work methods.
- 6. Ensure all employees comply with the Site-Specific Safety Plan and applicable OSHA Standards.
- 7. Conduct a daily informal inspection of his work area(s) and a formal (documented) weekly inspection of their work area(s). The daily inspection must be documented in a logbook or electronic recordkeeping system, and the weekly inspections must be documented with a written or electronic report, a copy of which the Safety Representative (dedicated or non-dedicated) must provide to the Construction Manager.
- 8. Respond in writing to safety recommendations submitted to his employer within 24 hours after receipt.
- 9. Correct or report immediately to the Construction Manager any observed unsafe conditions, practices, or violations.





#### **WORKER SAFETY RESPONSIBILITY**

- 1. Stop the Work if a hazard poses an imminent danger.
- 2. Comply with the Construction Manager's Site-Specific Safety Program, the Safety Program of their employer, and these General Safety and Health Guidelines.
- 3. Attend a project safety orientation conducted by the Construction Manager prior to commencing work on-site.
- 4. Perform their work in a safe and productive manner, for prevention of incidents to themselves, fellow workers, public, and property of all concerned.
- 5. Attend and participate in daily Pre-Task Plan Meetings and weekly Toolbox Talks.
- 6. Immediately correct, without delay, unsafe acts, and conditions over which a worker has responsibility.
- 7. Immediately alert his/her supervisor of any observed unsafe acts or conditions.
- 8. Conduct and present themselves in a professional manner (no foul or offensive language, display of offensive images, participate in horseplay, fighting, use of alcohol or drugs on-site, or wearing of clothing that is torn).
- 9. Constantly observe work conditions, equipment, and tools for the purpose of preventing recognizable and foreseeable incidents.
- 10. Report incidents and injuries immediately to his/her supervisor, without delay.
- 11. Immediately report sexual harassment; discrimination or harassment; workplace violence; and any incident, including without limitation, injury, property damage, theft, and near miss to their immediate supervisor.

### **VISITORS**

- 1. Yale University Representatives and Graham Company Representatives are not considered visitors. They are considered Owner Representatives.
- 2. For the purpose of this program, a visitor is any individual that has not received a project orientation.
- 3. The Construction Manager must have signs on the fence stating that all visitors must report to the Construction Manager's field office.
- 4. The Construction Manager must have a Visitor Release Form and a process to control visitors to the project.
- 5. All visitors must register with the Construction Manager prior to entry.
- 6. Each visitor must be escorted by a Construction Manager/Subcontractor employee that has received a project orientation.
- 7. The Construction Manager must have appropriate personal protective equipment available for visitors' use (e.g., hard hats, safety glasses, and safety vests and gloves).





8. The Construction Manager has the right to refuse entry to any visitor if they are not suitably attired (e.g., open toe shoes, high heel shoes).

### **PUBLIC PROTECTION**

- 1. The Construction Manager and each Subcontractor must take necessary precautions to ensure protection of the public on or adjacent to the project see ANSI A10.34 (latest edition).
- 2. The Construction Manager and each Subcontractor must maintain adequate temporary controls and restore any controls that were temporarily moved to perform work prior to leaving the site for break or the end of the shift, whichever is first.
- 3. Owner is sensitive to service interruptions. The Construction Manager and each Subcontractor are responsible for minimizing disruption to Owner operations to the greatest extent possible.
- 4. The Construction Manager must communicate all utility and mechanical system shutdowns, roadway access closures, extended delivery blockages and any other activities with the potential to interrupt or disrupt Owner operations 14 days in advance and coordinate such activities with the Owner.

### **YALE Community Meetings**

At the request of the Yale Project Manager, the Construction Manager shall participate in various meetings with representatives of the Yale Community to address sensitive populations or areas on campus. Any such meetings will be led by the Yale Project Manager and may involve other, affiliated University departments. At such meetings, Construction Manager may be asked to respond to safety and operational issues that have the potential to arise on Projects and will be expected to provide brief descriptions of their planned Work and such other information that may be appropriate to the Project.

### **Interruptions and Impact to Yale Operations**

All Yale locations are sensitive to service interruptions. Construction Managers are responsible for minimizing disruption to University operations to the greatest extent possible. Construction Managers must communicate all utility and mechanical system shutdowns, roadway access closures, extended delivery blockages and any other activities with the potential to interrupt or disrupt University operations in advance and coordinate with the Yale Project Manager. Depending upon the size, duration, and scope of the Project, as well as the nature of adjacent areas, input from other Yale departments may be necessary to establish and monitor appropriate controls; in such cases, the Yale Project Manager will inform the Contractor of the need for such input and shall coordinate with the Contractor.

Contractors shall take all precautions that may be necessary to ensure protection of the public on or adjacent to the project. The Contractor shall maintain adequate temporary controls and restore any controls that were temporarily moved to perform work prior to leaving the site for break or the end of the shift, whichever is first.





### **SPECIAL PROJECT TRAINING PREREQUISITE**

The Construction Manager and each Subcontractor must ensure that each worker is properly trained to complete assigned tasks. Each worker should be able to identify the steps required to complete the task, anticipated exposures, and the controls necessary to safely complete the task.

The Owner's Project Manager will meet with the Construction Manager Pre-Bid to determine specific training requirements for key subcontractors.

Each worker coming onto the site must present their 10-Hour OSHA Construction Outreach Course completion card to the Construction Manager prior to the safety orientation.

#### **SUBSTANCE ABUSE**

The Owner is committed to the principles of the DRUG FREE WORKPLACE ACT of 1988. To that end, the Construction Manager and Subcontractors must not allow workers to report to work under the influence of any drug (controlled substance, prescription medication, or over-the-counter medicine), alcohol, or intoxicant. The Owner prohibits the use, possession, distribution, or sale of drugs (or paraphernalia) or alcohol on the project premises. The project specific drug and alcohol testing program can be found in Attachment A.

#### **DISCRIMINATION and HARASSMENT**

- 1. The Construction Manager and Subcontractors must provide a workplace that is free from discrimination as defined by regulation, rule, or statute, including without limitation 29 CFR 1904.36.
- 2. The Construction Manager and Subcontractors must provide a workplace that is free of harassment, intimidation, and coercion at all work locations to which a worker may be assigned.
- 3. Harassment of any type (sexual, race, age, etc.) will not be tolerated.
- 4. While it is not possible to list all circumstances that may constitute sexual harassment, the following are some examples of conduct, which if unwelcome, may constitute sexual harassment depending upon the totality of the circumstances including the severity of the conduct and its pervasiveness:
  - a. Unwelcome sexual advances;
  - Sexual epithets, jokes, written or oral references to sexual conduct, gossip regarding one's sex life, comment on an individual's body, comment about an individual's sexual activity, deficiencies, or prowess;
  - c. Displaying sexually suggestive objects, pictures, cartoons;
  - d. Unwelcome leering, whistling, brushing against the body, sexual gestures, suggestive or insulting comments;
  - e. Inquiries into sexual experiences; and
  - f. Conversation involving sexual activities, or orientation.





5. Subcontractors must immediately report to the Construction Manager any complaint of discrimination or harassment.

### **WORKPLACE VIOLENCE**

Acts of violence by workers will be taken seriously and will be dealt with appropriately. An act of violence, includes without limitation, arguing, swearing, verbalization of wish or intent to hurt an individual, violent communications, sabotage or destruction of property, threats of suicide, physical altercations, possession or display of weapon, use of weapon or other dangerous object to harm others, or commits homicide, assault, arson, or inflicts bodily harm. All acts of violence must be immediately reported to the Construction Manager. Subcontractors must provide the Construction Manager with the necessary support to investigate and resolve acts of violence. Acts of violence may be grounds for removal from the project.

#### SECURITY AND PERSONAL SAFETY

The Construction Manager must provide for adequate Project Site security against theft, trespass and vandalism as outlined in the Contract Documents and must monitor the adequacy of the security as the work progresses.

While working in occupied areas, the Construction Manager and Subcontractors will conduct all work to maintain the privacy of the Owner's operations and staff. All workers are restricted to their assigned work areas and material transport routes and may not explore the Owner's buildings or use Owner's restrooms or amenities, including cafeterias and dining halls.

Fire/emergency lanes and exit ways must not be blocked, nor must vehicles be left idling or running near building air supply intake vents. Blocking of public rights of way is not permitted without prior approval from the jurisdiction having authority.

### **ELECTRONIC DEVICES and CAMERAS**

Televisions, radios, and Bluetooth-type audio/video devices are not permitted on the job site. Workers may not utilize a cell phone when such use diverts attention away from the activity to which they were assigned to complete, for example: equipment operation or ladder use.

Project personnel may not photograph, video, or record anyone or anything while on the project site without prior permission from the Construction Manager.

Owner Representatives are not restricted from taking pictures or videos while on-site.

#### **TOBACCO USE**

Tobacco use of any kind (e.g., cigarettes, smokeless, etc.), vaping, and use of e-cigarettes are prohibited on the Owner's property. This includes the project site.





### **BREAKS/LUNCH**

Workers must take breaks and lunch in contractor designated areas. Workers are not permitted to take breaks or lunch in active work areas. Workers must properly dispose of beverage containers and food materials, including wrappers, leftovers, and containers before leaving any break area.

A refrigerator, microwave, and air conditioner may be provided in break areas. These appliances must be maintained in a safe and healthy condition and in an area that will not create a health hazard. The appliances must be of the type that is appropriate for commercial / industrial use. Any other appliance including space heaters, toasters, etc. are only permitted if approved by the Construction Manager.

### **PERMITS**

The Construction Manager must institute a Permit System for the project. Permits, written and properly authorized, are required for the following work activities:

- Confined space entry
- Fall protection coordination (guardrail disruption)
- Hot work
- Utility outages or connections
- Access to buildings

The Construction Manager must obtain hot work permit booklets from the Owner on this project. The Construction Manager must also obtain and comply with fuel storage and hot work permits from the local fire department.

### **GENERAL SAFETY and HEALTH PROVISIONS**

The Construction Manager and Subcontractors must perform work in accordance with applicable OSHA requirements and the Site Safety Rules:

### **General Safety Rules**

- 1. Horseplay is strictly prohibited. Fighting will result in automatic dismissal from the jobsite. Verbal confrontations that are life threatening will also result in dismissal.
- 2. Workers may not utilize foul, lewd, or otherwise inappropriate language.
- 3. Workers must conduct themselves in a professional manner.
- 4. Workers may not wear clothing (including body art) that has offensive logos, or images.
- 5. Workers may not have any offensive logos or wording on their hard hats.
- 6. Workers may not enter or interfere with any use of an area occupied by the Owner or public, unless authorized.
- 7. Weapons, alcoholic beverages, and illegal drugs (including prescription drugs obtained without a prescription) are strictly prohibited on the owner's property which includes the Project. Persons found in violation will be permanently dismissed from the Project.





- 8. Notify your supervisor of any allergies or conditions that may require emergency assistance (bee stings, diabetes, heart conditions, etc.). Place a label with this information and emergency contact number inside hard hat.
- 9. Unless otherwise spelled out in the contract between the Construction Manager and Subcontractors, the Subcontractors are responsible for removing their own waste from the site as often as necessary to prevent a nuisance or hazard, for example: odor, rodent infestation, fire, or slip, trips and falls.
- 10. The Construction Manager will provide general access to the work site. Each Subcontractor must ensure that workers maintain safe access to Subcontractor specific work activities.
- 11. All protruding rebar, conduit, anchor bolts, and mechanical or plumbing stubs must be protected to mitigate tripping, abrasion and to eliminate impalement hazards. This protection must be provided and maintained by the Subcontractor, which installed same.
- 12. The Construction Manager must provide a trash container at each work area, to facilitate cleanup. The Construction Manager will direct workers to place waste material into the containers as it is created.

### **Workplace Safety Meetings**

- 1. Each worker accessing the project must have a "Negative" drug test result. The "negative" drug test result should be verified by the Construction Manager prior to the Project Safety Orientation.
- 2. Construction Manager will provide all workers with a Project Safety Orientation to familiarize them with the project safety requirements. Each Subcontractor is responsible for making sure their workers are aware of anticipated exposures for the work to be performed and that each worker has received proper instruction and training to complete the task(s) safely.
- 3. The Construction Manager must include safety and health matters in their agenda for their weekly progress meetings.
- 4. Each Subcontractor will conduct a weekly Toolbox Talk with their employees. At a minimum, the following must be discussed:
  - Summary of incidents (including near misses);
  - Changes in the workplace;
  - Weekly training topic; and
  - Opportunity for workers to request additional training, equipment, PPE, or answers to concerns that they may have regarding changes or conditions in the workplace.
- 5. Each worker must sign an attendance sheet indicating that they were in attendance for the weekly Toolbox Talk. A copy of the weekly Toolbox Talk along with the attendance sheet must be provided to the Construction Manager.
- 6. Each Subcontractor must conduct a documented Pre-Task Plan huddle with workers prior to the start of shift (and with change in activity). The Pre-Task Plan huddle must include the tasks to be performed, expected exposures, and controls to reduce the potential for injury. Subcontractor must make a copy of this Pre-Task Plan huddle available for review upon request.





### **Workplace Inspections**

- 1. The Construction Manager will conduct workplace inspections daily.
- Workplace inspections provide the Construction Manager with a means to evaluate worker performance related to the programs, procedures, and policies implemented with the Site-Specific Safety Program.
- 3. The Construction Manager's workplace inspection must be documented and be made available upon request.
- 4. Within 24 hours of notification, the Construction Manager must address any safety and health concerns brought to their attention by the Owner or the Owner's Representatives.
- 5. The Subcontractor must immediately resolve all life-threatening observations and abate all others within the time frame indicated by the Construction Manager.
- 6. The Subcontractor must provide a documented weekly safety inspection to the Construction Manager (Note: Additional inspections may be required based on at-risk observation history).
- 7. The Subcontractor providing temporary wiring must conduct a documented weekly inspection of each GFCI receptacle. A record of this inspection must be provided to the Construction Manager.
- 8. The Subcontractor providing temporary lighting must inspect and correct defective conditions daily, or as may be required to maintain general construction lighting levels in all work areas.

### **OSHA Inspections**

- 1. Construction Manager must immediately notify the Owner and the Owner's Representative of any OSHA inspection.
- 2. Subcontractors must immediately notify the Construction Manager of any OSHA inspection. The Subcontractor must document all images taken, paperwork reviewed, persons questioned, etc. by OSHA. The Subcontractor must provide this information to the Construction Manager upon request. The Subcontractor must cooperate with any independent review of the OSHA inspection conducted by the Construction Manager.
- 3. Construction Manager or any Subcontractor must obtain consent from the Owner prior to initiating a Voluntary Protection Program (VPP), OSHA Partnership Program, or an OSHA Consultation Program visit on this site.

### **Line Breaking and Testing**

Each electrical, demolition, fire protection, mechanical, plumbing, and site Subcontractor must ensure that all site workers are fully informed regarding the nature, location, procedures for safe performance and schedule of line breaking and testing.

### **Means of Egress**

The Construction Manager and Subcontractors must ensure that egress points (doorways, access ladders, stairways, etc.) and paths (hallways, aisles, etc.) are always kept clear of tools, equipment, and debris. Any





work required in these access areas must be coordinated with the Construction Manager. The Construction Manager must coordinate such work with the Owner.

The Construction Manager must authorize barricade removal and safety protocol during removal duration. Barricaded areas may not be entered without permission – see *Signs, Signals and Barricades* on page 17 for barricade types. The Subcontractor must adhere to entry requirements if entry approved. The Construction Manager must approve barricade replacement.

Subcontractors must immediately report any damage to the Construction Manager.

#### Water Use

Subcontractors must provide backflow prevention devices prior to coupling to a potable water source. Subcontractors must not knowingly allow water to leak or run to unnecessary waste or create a hazard to workers or public or environment (e.g., ice).

### Ownership of Safety/Quality

The Owner expects the Construction Manager to enforce their Site-Specific Safety Program, Applicable Law (e.g., OSHA regulations), applicable industry consensus standards referenced in these guidelines, and the safety requirements outlined in this document. The Construction Manager must establish a progressive disciplinary program and quality control program for the project.

The project safety orientation will outline what each worker can expect from the Construction Manager. The orientation will serve as a verbal warning. Employees that fail to heed these rules create a threat to the work force. Employees will be held accountable for their failure to follow the established Site Safety Rules.

Workers that damage work product installed by other subcontractors will be held accountable for their failure to follow established Site Safety Rules.





#### INCIDENT REPORTING and INVESTIGATION

#### **Incident Reporting**

The Construction Manager must report all injuries, occupational-related illnesses, property damage, and general liability incidents immediately to the Owner and Owner's Representatives. The Construction Manager is required to advise Owner and the Owner's Representative within sixty (60) minutes of being notified of an incident. Notification shall be via phone call, email, or text. The Construction Manager must be responsible for coordinating any incident investigation.

### **Incident Investigation Reports**

The Construction Manager must complete and provide to the Owner and the Owner's Representatives an Incident Investigation Report within 24 hours of knowledge of any incident (including near miss incidents) regardless of severity. If the Construction Manager cannot complete and submit the Incident Investigation Report within 24 hours, the Construction Manager must contact the Owner and Owner's Representatives to provide an explanation as to why. If the incident investigation extends beyond the 24-hour window, a preliminary Incident Investigation Report must be filed within 24 hours, pending the submission of the complete report.

#### **Incident Review**

All lost time incidents, general liability incidents, and significant property damage incidents will require a formal review. The Owner, Owner's Representatives, Construction Manager, and affected Subcontractor executives will discuss the incident to ensure that corrective actions have been implemented. The Construction Manager must document this meeting and forward a copy of the minutes to those in attendance, Owner, and Owner Representatives.

### **Lost Time Incident/Return to Work**

The Construction Manager must periodically follow-up with the Employer of any injured worker until the injured worker returns to work. The Subcontractor must promptly return injured workers to full or modified duty work (as their physical condition permits) as soon as being advised of the worker's ability to return to work. Upon such notification, the Employer must immediately return such injured worker to work whether or not such work is available on the Project.

Failure to promptly return a worker released to modified duty to work may result in a \$1,200.00 per week fine. This fine will be issued through a Non-Negotiable Deduct Change Order or other means approved by the Owner.

#### **CONFINED SPACES**

Subcontractors must perform work in accordance with OSHA requirements and the Site Safety Rules:

Note: The Owner considers all confined spaces to be permit required until the potential hazards (atmospheric, physical, etc.) inside the confined space are evaluated. Construction Manager must be aware of all confined space entries and review confined space entry procedures with the Subcontractor entering the confined space.

1. Each Subcontractor must coordinate all confined space work activities in advance with the Construction Manager.





- 2. Each Subcontractor must use a Confined Space Pre-Entry Checklist/Permit that the Construction Manager must verify prior to any confined space entry taking place.
- 3. The atmospheric conditions of confined spaces must be monitored prior to entry. Continuous monitoring will be a condition of entry. The testing instrument must be calibrated prior to use and utilized by a qualified individual.
- 4. Subcontractors must provide all equipment, including without limitation atmospheric monitoring equipment.
- 5. The Subcontractor is responsible for providing for rescue per 29 CFR 1926 Subpart AA. If local fire department, or third-party rescue service is utilized, the Subcontractor must schedule an on-site coordination meeting.

### **EMERGENCY ACTION PLAN**

The Construction Manager must develop a Site-Specific Emergency Action Plan. Subcontractors must make themselves familiar with the Site-Specific Emergency Action Plan.

Subcontractors must participate in evacuation drills on a frequency determined by the Construction Manager. The drills will be scheduled in advance to mitigate (to the extent possible) work disruption. All costs associated with the drill must be considered incidental to the cost of work.

Each Subcontractor must provide the Construction Manager with the "number of boots on the ground" within one hour of the start of each shift.

#### **HOUSEKEEPING**

The Construction Manager must develop an effective waste management plan for the project that incorporates a "nothing-hits-the-floor" expectation for waste (e.g., trash, scrap, and debris) and daily removal of waste from the building. "Nothing hits the floor" means that waste must be immediately placed in trash carts. Each subcontractor is required to adhere to and support this expectation through the provision of necessary labor and equipment. Each Subcontractor is responsible for their clean-up unless otherwise stated in their Contract with the Construction Manager. Personnel must always keep their work areas clean.

All work areas must be broom cleaned at least daily and accumulated trash/debris must be removed from the building(s) and deposited into the exterior dumpster(s) or removed from the project site at least daily.

When broom-sweeping surfaces, Subcontractors must use an approved sweeping compound to minimize the generation of fugitive airborne dust and potential for residue incompatibility with finished floor adhesives when broom cleaning, as may be necessary.

Material awaiting installation must be neatly stored on carts or pallets unless it is infeasible or would create a greater hazard to do so. All storage facilities and locations must be established so that a conflict is not created with work activity.





#### **PANDEMIC RESPONSE**

If a Public Health Emergency is declared by the Owner, federal government and/or City of New Haven, the Construction Manager must develop a Pandemic Work Plan that meets the requirements of the Owner, federal government, and/or City of New Haven. The Construction Manager must submit their Pandemic Work Plan to the Owner and Owner's Representative for review and comment if mandated by the Owner. The Construction Manager must review the Pandemic Work Plan with each Subcontractors if such plan is required.

If a Pandemic Work Plan is implemented on the site, all workers will be required to abide by the Pandemic Work Plan requirements while on Owner's property. There will be no exceptions for individuals who do not wear proper personal protective equipment (PPE).

If a Pandemic Work Plan is put in place on the site, all workers on-site must receive training on the plan. Anyone that has questions or concerns must contact their immediate supervisor.

#### OCCUPATIONAL HEALTH and ENVIRONMENTAL CONTROLS

- 1. The Construction Manager and each Subcontractor must be responsible for the execution of Contract work in a manner that minimizes potential exposure to site employees, Owner employees, and the community.
- 2. The Construction Manager and each Subcontractor must always provide an adequate number of first aid/CPR trained personnel on-site, so that an injured worker may be provided with immediate assistance. Subcontractors are responsible to maintain an adequate supply of first aid kits. The type and quantity of supplies must be determined by an appropriate medical professional. Additional provisions should be provided for the protection of first responders in the form of blood borne pathogen kits.
- 3. Washing facilities must be provided by any Subcontractor engaged in the application of paints, coatings, herbicides, or insecticides or in other operations where contaminants may be harmful to the employees.
- 4. Subcontractors are responsible for providing an adequate supply of drinking water. The water must be maintained in water containers deigned for potable water. These containers must be marked with the Subcontractors name and with the word 'Drinking' or 'Potable' Water.
- 5. Workers must take breaks and lunches in designated areas only and deposit trash from coffee breaks and lunch in the trash containers provided by the Construction Manager.
- 6. Subcontractors must coordinate with the Construction Manager to ensure appropriate task lighting for their workers.
- 7. Subcontractors must be responsible for providing adequate ventilation for all workers whenever hazardous substances such as dusts, fumes, mists, vapors, or gases exist or are produced during the construction work. The concentrations must not exceed the limits established by OSHA or in the absence of an OSHA level, the Safety Data Sheet (SDS). When it is not possible to provide adequate





ventilation, the Subcontractor must isolate the area or schedule the activity for the 2nd or 3rd shift. In any event, workers must be protected. The Subcontractor is responsible for all monitoring that may be required by Construction Manager and/or regulation.

- 8. Workers must remove spray fireproofing by pre-wetting, prior to hand scraping the material into a bucket.
- 9. The Construction Manager and responsible subcontractor must investigate complaints involving non-hygienic conditions. The Construction Manager and responsible subcontractor must take whatever actions are necessary to ensure that such unhealthy conditions are resolved amicably.

#### Mold

The Construction Manager must have a mold prevention and management plan. While enforcement of this mold prevention and management plan during the construction phase is ultimately the responsibility of the Construction Manager, all who are involved in the construction of the structure have a responsibility for complying with its provisions. The moisture controls to be utilized by the Construction Manager during the various construction phases must be outlined in the mold prevention and management plan.

In the event water enters the structure, during the construction phase (e.g., roof leak, pipe leak, weather-related flooding), the emphasis must shift to removing the water and encouraging any impacted materials to dry. In some cases, impacted porous materials may need to be removed and replaced. Response activities must commence immediately (within 24 to 48 hours) following the water event or upon discovery of the water damage.

### **Bat and Bird Feces Removal**

Subcontractors must instruct workers to stop work if bat or bird feces are encountered, so that a work plan can be established. The Subcontractor must provide the Construction Manager with an abatement work plan, which addresses the following: means and method (how will Subcontractor perform work to prevent spores from becoming airborne, or prevent the migration of airborne spores), respiratory protection, protective clothing, hygiene practices for workers, communication of hazards, housekeeping, recordkeeping, and competent person(s).

Controls may include: area isolation (to prevent migration of spores); use of water mist to dampen material during abatement (this will suppress spores from becoming airborne); level C PPE (Tyvek suit, impervious gloves, half-face piece respirator with HEPA filter or full-face piece for enhanced eye protection, and goggles); good hygiene practices (hand washing, donning and doffing PPE outside of work area, no eating, drinking or smoking prior to removal of PPE and washing, instructed not to touch face prior to removing PPE); and decontamination of PPE and tools, bagging and disposal of feces upon abatement.

### **Pest Management**

The Construction Manager must implement a pest control program in conjunction with the Owner to minimize the impact of pests (mice, rats, cockroaches, mosquitos, etc.) on Owner operations. The Construction Manager must continually evaluate the pest management program and address issues caused by construction activities. Construction Manager must plan for pests ahead of time and implement





controls to reduce/eliminate pests. Minimum controls include: control of storage and disposal of human food, cardboard, wood, and other items used during construction that might create a food source or habitat for pests; use of a pest control vendor to set traps or bait (coordinated with the Owner) around the exterior of the construction site; inspection of incoming materials for signs of pest infestation prior to bringing them onto the site; disposal or recycling of paper or cardboard immediately; grading of the site to reduce standing water; control of water sources on-site; and working with the HVAC Subcontractor to ensure there is positive airflow out of the building once it is enclosed to deter pests from entering.

Pest control visits must be coordinated with the Owner and must not disrupt Owner operations nor pose a threat to students, visitors, and employees at the Owner's facilities. Pest control vendor must observe all safety precautions throughout the performance of their work and the applicator must be licensed.

#### **Carbon Monoxide**

The following rules have been adopted on this project due to the possible presence of carbon monoxide:

- 1. The OSHA PEL for carbon monoxide is 50 parts per million (30 parts per million when temporary heating devices are utilized), and the NIOSH ceiling level is 200 parts per million. In no circumstances must these limits be exceeded (Note: The environment of adjacent occupied space(s) must be maintained at pre-construction levels).
- 2. Subcontractors must notify the Construction Manager prior to utilizing equipment or process that emits or has the potential to emit carbon monoxide adjacent to, or within an enclosed space. The Subcontractor must endeavor to utilize battery operated equipment. If the Subcontractor can demonstrate that there is no alternative, the Subcontractor must provide atmosphere testing devices (equipped with 8-hour TWA data logging functionality) to continuously monitor equipment operating in an enclosed space. In no instance may a hazardous atmospheric condition be allowed to persist. Exhaust and ventilation systems must be provided and maintained. Equipment must have scrubbers (e.g., catalytic converters) to prevent unnecessary air pollution.
- 3. The Subcontractor must provide the Construction Manager with all air monitoring test results immediately upon request. A log must be maintained by the Subcontractor and provided to the Construction Manager at the end of each week.

### **Dust – Nuisance, Respirable, Silica**

Subcontractors must perform work in accordance with OSHA and the Site Safety Rules:

1. Subcontractors must make a commitment to preventing hazards associated with dust while on this project and must provide and assure the use of appropriate controls to mitigate the generation of airborne dust. The Subcontractor must ensure that fugitive dust from, including but not limited to, abrasive blasting; demolition activity; mechanical and broom sweeping; and asphalt, concrete, masonry, granite cutting / grinding / crushing / chipping / hammering operations is controlled. The use of negative pressure (HEPA system vacuuming), air filtration and wet dust suppression is acceptable. Equipment/task that require an integrated water delivery system must be operated and maintained in accordance with the manufacturer's instructions to minimize dust emissions. Subcontractors performing work that may generate respirable crystalline silica dust must have a





Respirable Crystalline Silica Exposure Control Plan (containing the minimum required elements of 29 CFR 1926.1153(g)) as part of their Site-Specific Safety Program. The Subcontractor is responsible for providing the necessary dust control water, equipment, barricades, and housekeeping during dust generating operation.

- 2. The Subcontractor must monitor the work to ensure that workers (and the public) are not exposed to excessive levels of nuisance respirable, and silica containing dust. The concentrations must not exceed the limits established by OSHA under 29 CFR 1926.1153, Owner, or local, state, or federal regulations.
- 3. Workers must be trained about the health effects of dust and how exposure can be eliminated and controlled.

### **Hazard Communication**

The Construction Manager and each Subcontractor must have a written Hazard Communication Program, Chemical Inventory List, and Safety Data Sheets for the hazardous chemicals they anticipate using in the workplace. The Construction Manager must verify that each Subcontractor has a written Hazard Communication Program. This program must comply with OSHA requirements.

### Lead

The following rules have been adopted on this project due to the possible presence of lead:

- 1. Affected Subcontractors must provide the Construction Manager with a work plan, which addresses the following: regulated areas, exposure assessments and monitoring, methods of compliance, respiratory protection, protective clothing, hygiene facilities and practices for workers, communication of hazards, housekeeping, medical surveillance, recordkeeping, and competent person(s). This plan must be reviewed by a Certified Industrial Hygienist.
- 2. The Subcontractor must provide the Construction Manager with all air monitoring test results within 24 hours of their receipt.
- 3. The Subcontractor must provide the Construction Manager with a daily report listing the names of workers that entered the lead regulated area, along with the quantity and type of materials that were removed.
- 4. Appropriate barricades and signs must be provided and maintained in a legible condition.
- 5. All enclosures, regulated waste storage areas, and barricades must be maintained by the Subcontractor.
- 6. The Subcontractor must ensure that workers do not leave the worksite wearing contaminated clothing.

#### **Asbestos**

The following rules have been adopted on this project due to the possible presence of Asbestos Containing Material (ACM), or Presumed ACM:

1. Affected Subcontractors must provide the Construction Manager with a work plan, which addresses regulated areas, exposure assessments and monitoring, methods of compliance, respiratory protection, protective clothing, hygiene facilities and practices for workers, communication of





hazards, housekeeping, medical surveillance, recordkeeping, and competent person(s). This plan must be reviewed by a Certified Industrial Hygienist.

- 2. Subcontractors must provide the Construction Manager with all air monitoring test results within 24 hours of their receipt.
- 3. Subcontractors must provide the Construction Manager with a daily report listing the names of workers that entered the regulated abatement area, along with the quantity and type of materials that were removed. Each Subcontractor must provide the Construction Manager with a copy of all shipping manifests associated with regulated waste, as may be applicable.
- 4. All enclosures, regulated waste storage areas, and barricades must be maintained by the Subcontractor.

#### **Hexavalent Chromium**

Subcontractors must perform work in accordance with OSHA Hexavalent Chromium requirements and the Site Safety Rules:

- Affected Subcontractors must provide the Construction Manager with a work plan, which addresses
  regulated areas, exposure assessments and monitoring, methods of compliance, respiratory
  protection, protective clothing, hygiene facilities and practices for workers, communication of
  hazards, housekeeping, medical surveillance, recordkeeping, and competent person(s). This plan must
  be reviewed by a Certified Industrial Hygienist.
- 2. Subcontractors must provide the Construction Manager with all air monitoring test results within 24 hours of their receipt.
- 3. Subcontractors must provide the Construction Manager with a daily report listing the names of workers that entered the regulated work area.
- 4. All barricades and enclosures must be maintained by the Subcontractor.

### **Contaminated Soil**

If contaminated soil is anticipated, the Subcontractor(s) with exposed employees must prepare a Health and Safety Plan (HASP) in accordance with OSHA requirements. The HASP must be prepared by a Certified Industrial Hygienist. The HASP must include estimated exposure information for site workers, where and when possible. The Subcontractor(s) must provide all necessary labor, equipment, materials, supplies and training to execute the HASP protocols.

All Subcontractors must adhere to the following general conditions:

- 1. The Subcontractor must instruct workers to stop work, when a possible hazardous material is encountered (for example: a buried 55-gallon drum, or strong smell of diesel fuel) beyond the scope of the aforementioned.
- 2. All petroleum or hazardous material spills must be immediately reported to the Construction Manager. The responsible Subcontractor must immediately engage whatever forces are necessary to defend against the possible spreading of material and take responsibility for all costs associated with the restoration of site and disposal of impacted material and supplies.





### PERSONAL PROTECTIVE EQUIPMENT (PPE)

The Construction Manager and Subcontractors must perform work in accordance with OSHA requirements and Site Safety Rules:

- 1. The Owner has established a uniform PPE requirement for all projects unless otherwise expressly stated and upon completion of a PPE hazard assessment. <u>This minimum PPE requirement applies to all persons entering, exiting, or within the project site, including when on break or lunch:</u>
  - a. <u>Head protection</u> Head protection (i.e., hard hat or helmet) must be maintained and used in accordance with manufacturer requirements and meet current ANSI Z89.1 standard for head protection. Head protection must be inspected daily and may not be altered or modified except as permitted by the manufacturer. Welders must wear head protection designed to fit their welding shield (no soft-shell welding shields are permitted). Objects may not be stored inside the suspension. Where the manufacturer permits reverse donning, the adjustment of the suspension must always be made from behind the wearers head. Head protection may not be worn over sweatshirt hoods or ball caps.
  - b. <u>Eye Protection</u> Eye protection must be maintained and used in accordance with manufacturer requirements and meet current ANSI Z87.1 standard for eye protection. Workers with prescription or reading glasses must, during their project safety orientation, show evidence of those glasses (frames and lenses) meeting ANSI Z87.1 standard. Prescription glasses meeting ANSI Z87.1 standard must be equipped with fixed side shields.

Workers performing torch cutting and or welding must use the proper shade lenses in their eye protection.

When workers are performing tasks where goggles would better minimize the risk of eye injury, they must wear goggles that meet ANSI Z87.1 standard. NOTE: ANSI Z87.1-compliant face shields are also required in addition to safety glasses when performing grinding, chipping, cutting, and similar tasks.

- c. <u>Hand Protection</u> Gloves with a cut rating of at least A4 must worn at all times and be maintained and used in accordance with the manufacturer's requirements except where the wearing of gloves may create a greater hazard. For tasks where the wearing of gloves may create a greater hazard, the Subcontractor must prepare in advance of the task(s) a Job Hazard Analysis (JHA) indicating alternative hazard controls. Check Safety Data Sheets (SDS) and equipment operating guides for information concerning the type of hand protection that is required.
- d. <u>High Visibility Apparel</u> A high-visibility, retro-reflective ANSI Class II (daytime) or ANSI Class III (nighttime, low visibility) garment must be maintained and worn in accordance with the manufacturer's requirements until the building is enclosed, except where the wearing of such apparel may create a greater hazard. For tasks where the wearing of this apparel may create a greater hazard, the Subcontractor must prepare in advance of the task(s) a Job Hazard Analysis (JHA) indicating alternative hazard controls. Once the building is enclosed, the Construction Manager may permit the wearing of yellow/green or orange shirts.





- e. <u>Protective Footwear</u> Sturdy leather work boots with rubber soles must be maintained and worn in accordance with the manufacturer's requirements. Workers performing tasks where there is a crush hazard to the toes must wear safety-toe boots.
- f. <u>Appropriate Clothing</u> Appropriate clothing maintained in good condition that protects the body (long pants and shirt with a stitched collar and 4" sleeve) must be worn. Shorts, sweatpants, sneakers, sandals, sleeveless shirts (tank tops, cut-off sleeves), or clothing that is torn, are prohibited.
- 2. Additional PPE required depending upon the task(s) performed:
  - a. <u>Face Protection</u> A face shield *and* safety glasses must be worn by workers using a hand-held disc grinder, cut-off saw, chop saws, or other work activities that increase the potential for a foreign object to enter a worker's eye.
  - b. <u>Hearing Protection</u> Subcontractors must evaluate the level of noise emitted from their operations to ensure that, to the greatest extent possible, that the noise is attenuated. When noise levels cannot be mitigated, the Subcontractor must provide workers with personal hearing protection. The hearing protection must be worn in areas where posted, and where required by activity (e.g., when utilizing a powder actuated tool).
  - c. Respiratory Protection When tasks pose a respiratory hazard, the employer must first use accepted engineering control measures (e.g., enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials) to prevent atmospheric contamination. When those controls are not feasible, or while they are being instituted, appropriate respirators must be used. When respirators are necessary, they must be used in accordance with a respiratory protection program that meets the requirements of 29 CFR 1910.134. Note: The Subcontractor must provide the Construction Manager with all documentation (a written respiratory protection program and compliance certifications) pertaining to qualifications of workers that have been assigned respirators. The Subcontractor must provide the Construction Manager with a copy of 1910.134 Appendix D for any worker voluntarily utilizing a filtering-face piece respirator. Further, the Subcontractor must provide and utilize whatever engineering controls are necessary to limit exposure to harmful contaminants.
  - d. Personal Fall Arrest System (PFAS) A PFAS is a system used to safely stop a worker who is falling from an elevated level. It consists of a body harness, anchorage, and connector. The means of connecting may include a lanyard, deceleration device, lifeline, or a suitable combination of these. Workers must inspect their PFAS daily prior to use. Any defective equipment must be taken out of service. The employer must ensure that workers have received proper training on the use and limitations of the PFAS. Employers must also ensure that their workers have appropriate equipment for the work being performed (e.g., leading-edge hazards and welding are two examples common on construction projects).
- 3. Each employer must provide their employees with all required personal protective equipment (PPE) that may be necessary to complete the assigned work (does not include work boots).
- 4. The PPE must be utilized in accordance with manufacturer's instructions.





5. Defective PPE must be immediately removed from service.

#### FIRE PROTECTION and PREVENTION

- 1. Subcontractors must follow NFPA 241 Standard for Safeguarding Construction, Alterations & Demolition as well as requirements of the local jurisdiction.
- 2. Subcontractors performing hot work (open flame, spark, or arc) must obtain a permit from the Construction Manager.
- 3. Flammable and combustible fuel must be stored in metal FM/UL listed and approved safety cans and appropriately labeled as to contents and Subcontractor's name.
- 4. Bulk storage of flammable and combustible liquids must be per OSHA requirements.
- 5. All secondary containers must be labeled and disposed of properly by the Subcontractor.
- 6. All secondary containers (safety cans, compressed gas bottles, for example) must be secured to prevent accidental spillage, damage from falling objects, and / or mobile and mechanized equipment.
- 7. Secondary containment must be provided for all containers that are 55 gallons or greater in capacity. The secondary containment capacity must equal 110% of the largest container placed inside the containment system. The containment must be covered to prevent storm water contact and accumulation.
- 8. Subcontractor must provide all fire watch personnel, as may be required by permit. Owner requires a 1-hour fire watch and 3-hour monitor in the existing buildings. For new construction, the Construction Manager will outline the fire watch requirements that meets OSHA requirements until the building structure is enclosed. Once the building structure is enclosed, the Owner requires a 1-hour fire watch and 3-hour monitoring.
- 9. 20 lb. ABC fire extinguishers are required for general area fire extinguishers and must also be located at each chemical, flammable/combustible storage area, and/or paint storage location.
- 10. Each fire extinguisher must be properly tagged and properly inspected.
- 11. The Subcontractor must be responsible to store flammable and combustible material(s) in accordance with manufacturer's recommendations and local regulations.
- 12. All tarpaulins and plastic sheeting utilized (for temporary enclosures) on the project must be marked fire retardant.
- 13. All workers must use and inspect fire extinguishers per NFPA 10.
- 14. Adequate room must be maintained around area and task lighting and heating units.
- 15. There must be no open or barrel fires permitted on this project.
- 16. The Subcontractor supplying temporary standpipes must protect connections with temporary metal covers or caps and mark each standpipe location at the fire department coupling appropriate signs.





- 17. Propane must not be stored within the building or overnight on the roof of the building. Oxygen and acetylene cylinders not in use must be stored outside the building in locked cages. Storage should be per the jurisdiction having authority.
- 18. The Construction Manager must contact the local fire department if temporary heat is necessary to determine the need for a permit. The Construction Manager must assume all responsibility for operating the temporary system, including fees, labor, supplies, material, and equipment.
- 19. Flammable and combustible liquids may not be transferred with air pressure.
- 20. A 20 lb. ABC fire extinguisher must be immediately available with any hot work activity.
- 21. Combustible materials (oil-soaked rags, paper, etc.) must be stored in a metal container with self-closing metal lid and must be removed from the building at the end of each shift.
- 22. Portable electric space heaters are prohibited from any project unless the Owner provides its express consent to the use of these devices. When the Owner provides their consent, portable electric space heaters must be UL-listed and used/maintained in strict accordance with the manufacturer's instructions and in accordance with the listing and labeling. This prohibition includes space heaters used in make-shift hot boxes for storing adhesives and similar materials. When hot boxes are necessary, the affected contractor(s) must use a hot box designed and listed for this use or use a manufactured box heater designed and listed for this purpose and used/maintained in accordance with the manufacturer's instructions and the device's listing and labeling.
- 23. Hot plates, barbecue grills and turkey fryers are not permitted on-site unless permission is given by the Owner or Owner's Representatives.

### SIGNS, SIGNALING, and BARRICADES

- 1. Red tape *Imminent Danger exists*. Only workers performing actual work are to be allowed within this barricade area. The only exception for entry into a red tape area is with prior permission of the Subcontractor that established the barricade. Note: yellow caution tape must not be used on this project. If there is an area that needs access restricted, use red tape.
- 2. Excessive speed on the site will result in the dismissal from the site of vehicle and driver drive to conditions. Obey speed limits, when posted.
- 3. Accident prevention tags must be used as a temporary means of warning workers of an existing hazard, such as a defective tool, equipment, etc. Workers must not utilize a tool that has been tagged. Tags must not be removed until the defective tool or equipment has been repaired.
- 4. Subcontractor must provide red tape, tags, and signs for their workforce, as may be necessary.
- 5. The Subcontractors must establish temporary traffic and pedestrian controls in accordance with the current edition of the MUTCD or any local jurisdictional regulation or ordinance.
- 6. Subcontractors must utilize 42" retro-reflective cones or other means to demarcate elevation changes, or other surface encumbrances (for example: conduits, raised manholes, pipe stubs).





7. Minor changes in elevation must be painted orange.

### MATERIAL HANDLING, STORAGE, USE and DISPOSAL

- 1. Subcontractors must provide each worker with instruction on how to perform manual material handling.
- Persons performing rigging operations (including inspecting rigging) must be trained in accordance with applicable ANSI A10.42 and ASME B30 industry consensus standards. Riggers must be qualified commensurate with their rigging responsibilities and in accordance with the current ANSI A10.42 industry consensus standard.
- 3. Except where the Owner expressly permits multiple lift hoisting operations for steel erection, multiple lifts for other items (e.g., rebar bundles, portable toilets) are prohibited.
- 4. Palletized loads (e.g., masonry and bricks) must be wrapped in plastic or banded to prevent material from falling during transportation and storage.
- 5. Winches must not be utilized to hoist material.
- 6. All equipment and devices utilized for overhead lifting must be marked in accordance with the applicable American Society of Engineers (ASME) industry consensus standard.
- 7. Subcontractors must not sling pallets unless the pallet is specifically designed for such activity.
- 8. A Competent Person designated by the employer must inspect ALL rigging before use even hand lines used for hoisting tools.
- 9. The Subcontractor must provide the Construction Manager with engineering and 125% proof load test results for each piece of custom hoisting (and rigging) equipment.
- 10. 5-gallon buckets or 55-gallon drums must not be utilized to hoist materials or supplies.
- 11. Sorting hooks may not be used for overhead lifting and may only be utilized to move material from a truck to the ground or from spot to spot on the ground.
- 12. Personal fall arrest equipment must not be utilized for material handling.
- 13. Material handling equipment must be utilized and maintained in accordance (and for the purpose intended) with the OEM operating instructions.
- 14. The Subcontractor must ensure that material handling equipment is utilized by properly trained and licensed (when required by jurisdiction) workers.
- 15. Subcontractors must ensure that workers installing chemical fasteners are certified by the manufacturer.
- 16. Subcontractors must coordinate the storage area established for compressed gases (that are not associated with temporary heating or torch cutting) with the Construction Manager. The cylinders must be secured in a vertical position with non-combustible material (i.e., chain, wire rope). Each cylinder must be marked with the Subcontractor's name.





### **TOOLS - HAND and POWER**

- 1. The Subcontractor must ensure that all original equipment manufacturer (OEM) safety devices are maintained functional.
- 2. Defective tools must be immediately tagged (with an 'Out of Service' or 'Do Not Use' tag, or Red *Danger Tape*) or disabled; or either, repaired or removed from the project.
- 3. The Subcontractor must ensure that workers have been trained in the proper use and maintenance of each tool that they may be assigned to utilize. Tools must be utilized only for purpose intended by the manufacturer.
- 4. Workers must use the proper tool for the assigned task.
- 5. Table saws must be equipped with guards when making through cuts. Table saws must be equipped with anti-automatic restart switches (to prevent a restart of the equipment if the power is interrupted).
- 6. Workers must provide a courtesy warning 'Firing' when firing a powder actuated tool (PAT). All workers utilizing a PAT must be trained by a qualified person. Subcontractors must provide the Construction Manager with evidence of worker training.
- 7. Subcontractors must guard all potential pinch points (belt and pulley, chain and sprocket, screw conveyors, hoist drums) that are located with 10' of a walking or working service. These guards must be designed to prevent accidental contact.
- 8. All tools, measuring tapes, etc. handled aloft must be tethered to the worker, or otherwise secured if there is a possibility of the tool, tape, etc. falling out of the building and striking another worker, the public, or an adjacent structure. Do not leave tools, materials, or debris on elevated surfaces.
- 9. Impact tools such as chisels and punches must be dressed, repaired, or replaced as the striking service becomes mushroomed.
- 10. Hand-held disc grinders must have the guard and handle in place.
- 11. Knives must be sheathed (or folder/retracted) when not in use and must be of appropriate sized and type for work. Utility knives must have self-retractable blades.
- 12. Each rotary hammer drill must be equipped with a vacuum system or water system to control dust.
- 13. Compressors must be equipped with safety check valves that will stop the air flow when a hose connection part or hose fails. Hoses must be pinned or secured with whip-checks to prevent accidental uncoupling.
- 14. Subcontractors must not utilize 55-gallon drums as work benches.





### WELDING, CUTTING and SOLDERING

- 1. Burning and cutting equipment must be inspected before each use *Defective equipment must not be utilized*.
- 2. All compressed gas cylinders must be marked with the Subcontractor's name. The marking must be weatherproof.
- 3. Carts used to hold and move oxygen and acetylene cylinders must be equipped with non-combustible 5' high air-gapped ½-hour rated fire-rated barrier.
- 4. Hoses and manifolds must be removed from the tanks and the tanks tightly capped after their use at the end of the day. Tanks may remain in carts for 24 hours after use, after that period the tanks must be removed to an appropriate storage area.
- 5. Compressed gas cylinders must be turned off and lines purged prior to break in activity (for example: coffee and lunch) and at the end of the day. Valve keys and / or wrenches must be attached to the fuel bottle.
- 6. Fuel gas hoses and welding leads must be maintained to prevent a tripping hazard.
- 7. Welders must wear eye protection under welding helmets. Hard hats must be worn by welders.
- 8. Flashback arrestors must be installed per the manufacturer of the equipment.
- 9. Subcontractors must ensure that welders wash their hands prior to eating or drinking.
- 10. Only electric welding machines must be utilized in an enclosed space. The Subcontractor must provide a separate power disconnect.
- 11. Hot electrodes must be dipped in water prior to being discarded.
- 12. Oxygen must not be utilized by a worker to blow off clothing or for ventilation.
- 13. All compressed gas bottles (irrespective of size) must be capped and stored in a vertical secured (with steel chains or wire) position in a well-protected and well-ventilated location in accordance with local jurisdiction requirements. *ABSOLUTELY* no storage is allowed in gang boxes, storage trailers or field offices. Empty cylinders must be marked 'MT'.
- 14. Subcontractors must provide whatever controls are necessary to protect other workers (and public) from arc flash and molten metal created during welding and cutting operations.
- 15. Welding screens may be necessary in stationary welding areas when co-workers or non-construction personnel are exposed to flash burn.





#### **ELECTRICAL**

- 1. All cords and tools onsite must be protected by GFCI devices, either at the source or by use of a GFCI 'pigtail'. Check with the Construction Manager if you are unsure whether a circuit is protected.
- 2. Inspect all cords and tools before use damaged cords and tools are dangerous to you and others and will be removed from service if discovered.
- 3. *DO NOT* access circuit panels unless you are appropriately trained and authorized to perform such work. Keep the area three (3) feet around the panels clear.
- 4. Subcontractors must maintain cords and tools so that they are off the floor, wherever possible.
- 5. *NEVER* run cords through pinch points or over sharp edges (such as the bottom track of a steel stud wall).
- 6. DO NOT run over cords be sure to stow cords properly when not in use.
- 7. NFPA 70E work practices must be observed. The Subcontractor performing the work or with exposed employees must provide assessments, proper equipment, PPE, and training. The Subcontractor whose employees are covered by NFPA 70E must provide documentation of the training required in the standard to the Construction Manager. The Construction Manager must verify that proper controls are in place.
- 8. Temporary wiring must conform with and be installed in accordance with the most current version of the National Electrical Code.
- 9. All electrical enclosures (j-boxes and cabinets) must be inspected to ensure that knockouts are filled when not occupied. Each cabinet must have voltage rating label.
- 10. All disconnects and circuit panels must be labeled with voltage and function. A breaker schedule must be posted inside each circuit panel. A label must be placed at each receptacle, or tool connection to identify the controlling circuit panel.
- 11. The bulbs of temporary lighting must be guarded to prevent accidental damage and / or thermal exposure.
- 12. All fish tapes must be non-conductive. No fish tape must be placed into a live panel or electrical enclosure.
- 13. Portable lights must have LED bulbs.
- 14. Flat cords are not permitted on the project.
- 15. Workers must maintain operational clearance distances from overhead power lines.
- 16. Each Subcontractor is responsible to coordinate with the local utility in advance of work to identify, protect and / or relocate utility(s). All costs associated with this are included in work.





#### **SCAFFOLDS**

- 1. Workers must be protected by a passive (guardrail) or active (personal fall arrest or restraint) system when exposed to an unprotected fall of six (6') or greater above lower levels.
- 2. Unless workers are protected by effective personal fall arrest/restraint systems, all scaffold work levels must have guardrails around all open sides and edges. This includes form scaffolds. Ladder access points must be protected by a gate or equivalent fall protection.
- All scaffolding must be altered, erected, dismantled, used, and moved under the direction of a Competent Person who has received documented training appropriate for the activity they have been assigned to undertake.
- 4. The Construction Manager must institute a daily inspection system for scaffolds used on the project site. The Competent Person from the Subcontractor responsible for the scaffold will place a tag at each access point to the scaffold to indicate the use status of the scaffold, as follows:
  - a. GREEN tag indicates that the scaffold is complete with guardrails, midrails, toeboards and planking. A green tag informs all users that the scaffold is safe to use.
  - b. YELLOW tag indicates that the scaffold cannot be erected with all components complete. A yellow tag informs the user that fall protection devices are required while on the scaffold with incomplete guardrails or platform.
  - c. RED tag indicates that the scaffold is not yet completely erected, being dismantled, or for some reason not safe and must not be used.
    - Note: workers must not utilize scaffold that is untagged or red tagged.
- 5. A Competent Person from the Subcontractor using the scaffold must initial and date the inspection tag affixed to scaffold that are permitted to be used prior to using the scaffold.
- 6. Subcontractors must keep all scaffold platforms free of debris and tripping hazards. Scaffold platforms must be equipped with toe boards and debris netting where there is a hazard to workers, or the public.
- 7. Scaffold platforms must be fully decked.
- 8. Platforms must be constructed of scaffold grade planks, or other suitable engineered manufactured material.
- 9. The use of a suspended scaffold must be coordinated with the Construction Manager. Scaffold inspection tags on suspended scaffold must be located on platform and at each tie-back termination point. All angulated rigging must be designed by a Professional Engineer. The Subcontractors must provide the Construction Manager with worker training certificates, equipment specifications and design engineering, and an erection, dismantling and use plan. The suspended scaffold design must be laminated and placed on the suspension system (located at both the platform and suspension beam) for reference.





- 10. The use of hooks to suspend, or tieback (to an anchor point) suspended scaffold requires engineering evaluation.
- 11. A stair tower must be used for access to all supported stationary scaffold higher than one frame, unless infeasible. In which case, appropriate ladder frame and or bolt on ladder scaffold access accessory must be used in conjunction with gate to protect opening.
- 12. Stepladders may not be used for scaffold access.
- 13. All OEM (and Code of Safe Practices in absence of OEM) user instructions must be adhered too.
- 14. Perry 'step-up' type mobile workstations must not be utilized as a temporary work platform beyond 24" above supporting surface. The platform must be two planks wide.
- 15. All mast climbing scaffold utilization must be coordinated and previously approved by the Construction Manager (engineering will be required for tieback and shoring).
- 16. Scaffolds may not be loaded beyond the design capacity. Subcontractors must provide design engineering for each scaffold that has debris netting, overhead protection, and weather protection. The design must include procedures for removing and replacing connections (ties), for example.
- 17. No scaffold component must be altered or repaired without the consent of the manufacturer or Professional Engineer.
- 18. Subcontractors providing scaffolds under which workers (or the public) are to pass must be provided with 1/2" mesh, #18-gauge wire screen or equivalent between the toeboard and the handrail. In no instance may masonry, tile, or similar material be stacked higher than 24" above the surface of work platforms. Materials must not be stored on scaffolds or runways in excess of supplies needed for immediate operations.
- 19. Original equipment manufacturers (OEM) rails must be the first choice for scaffold guardrails. Job made guardrails are acceptable where OEM guardrails are not feasible.
- 20. The Subcontractor must document that the structural capacity of an elevated platform is sufficient for the intended use that it plans to utilize during construction. The use of the scaffold system must be coordinated in advance with the Construction Manager.
- 21. All scaffold users must be trained per OSHA requirements.





### **AERIAL and SCISSORS LIFTS (LIFTS)**

- The Construction Manager and Subcontractors must plan and coordinate the sequencing of the work
  to accommodate worker access concerns and ensure that the risk of accessing work is mitigated to
  the extent feasible using such means as prevention-through-design efforts and proper planning and
  execution of the work.
- Subcontractors must select the aerial/scissors lift that is best designed to allow the workers to safely
  access their work. This selection should be addressed in the Pre-Task Plans developed for each day's
  tasks.
- 3. Each lift must have an original equipment manufacturer (OEM) operating and ANSI guide on board. Use of lifts must be limited to OEM design and instructions for use. Only manufacturer approved modifications or retrofit kits will be allowed. All ANSI warning and control labels must be maintained in a legible condition.
- 4. Each worker must be properly trained to operate the lift they will be assigned to use. The Subcontractor must provide evidence of training to the Construction Manager.
- 5. When working in a scissors reach or boom reach, occupants must wear a full body harness connected to a self-retracting lanyard connected to an anchor point provided by the OEM. Workers must keep their feet on the lift platform at all times they may not stand on toeboards, guardrail system, or buckets to gain height. Always close gates and chains.
- 6. Subcontractors are responsible to ensure that ground conditions and environment are suitable for lift use. Subcontractors must have appropriate pedestrian controls if they are booming over sidewalks and the counterweight of the lift must be within a barricade if the lift is used in areas with pedestrian foot traffic.
- 7. NEVER use lifts as cranes:
  - Hoist only tools and personnel within the guardrails.
  - Only materials that fit within the guardrails are allowed.
  - Do not overload the lift.
- 8. Ensure that the lift has its periodic and annual inspection as required by ANSI. The Subcontractor must not utilize lift equipment that creates a potentially hazardous atmosphere or unstable condition.
- 9. Inspect each travel area and forecast prior to and during use:
  - Check for cords, holes, and changes in elevation.
  - Do not drive over covers or elevated structures (e.g., vaults, decks, bridges), unless designed to support the lift.
  - Do not operate lift when parameters of operating environment exceed OEM operating conditions, for example: wind, capacity, weather condition, and slope and pitch of supporting surface.
- 10. Cords used for charging lifts should be coiled up and unplugged when not in use. Use the appropriate size wire gauge.





### **FALL PROTECTION**

- 1. This project has a 100% six (6) foot fall protection policy, regardless of trade or work activity. This simply means there is a fall prevention, fall arrest, or fall restraint method in place anytime work occurs more than six (6) feet or more above the ground or lower level. Passive controls (like guardrails and safety nets), or active controls (like personal fall arrest or restraint systems) are considered acceptable when utilized properly. The utilization of controlled access zones, safety monitors, overhand bricklaying, for example is not permissible.
- 2. The Subcontractor must utilize personal fall arrest equipment in accordance with the OEM.
- 3. The Subcontractor must train workers in accordance with OSHA requirements. Subcontractors must provide documented re-training as may be required during the progression of work. Workers must not utilize equipment until training and an inspection has been completed.
- 4. Do not use equipment designed for material handling (rigging) as part of a fall arrest system, unless coordinated with an applicable OSHA letter of interpretation.
- 5. Workers must have a twin lifeline (lanyard) to maintain 100% active fall protection when transferring between anchor points.
- 6. Knots must not be tied into or used to terminate any lifeline (except at the end of a vertical lifeline to prevent a rope grab from over traveling).
- 7. Lifelines must be designed for the application of intended use, or otherwise protected against environmental conditions that might degrade lifeline integrity, such as abrasive and sharp surfaces. For example: self-retractable lifelines used on leading edge work must be rated LE or in accordance with OEM technical bulletins.
- 8. Horizontal lifelines must be designed, installed, and used under the supervision of a qualified person. Except for horizontal lifelines manufactured by recognized manufacturers of fall protection, subcontractors intending to use their own horizontal lifeline systems must submit the engineering design drawings and testing data to the Construction Manager for review and comment 21 business days prior to the desired use.
- 9. Workers must be attached to lifeline rope grabs in accordance with the manufacturer's instructions. Typically, this limited to a 3' lanyard. Lifeline anchor points (when not within sight of the user) must be labeled "Do Not Remove".
- 10. Subcontractors are responsible for the prompt and proper protection of any guardrail, floor, or roof opening that it creates during the execution of their work. Each guardrail and cover must be constructed and marked in accordance with OSHA regulations. Subcontractors must provide the Construction Manager with advance notice prior to creating, or opening an existing guardrail, floor, or roof opening. The Construction Manager must have a *Fall Protection Coordination Permit* (e.g., *Guardrail Disruption Permit*). Subcontractor(s) is responsible for all labor, equipment, training that is necessary to execute and maintain work under this permit.





- 11. Construction Manager must monitor and manage disruption of any guardrail system and debris protection (toeboards, pearl weave, etc.) in order to make sure it gets properly re-installed after the Subcontractor completes work in an area.
- 12. Wire rope guardrails must be constructed of 3/8" galvanized aircraft cable (minimum) with the toprail at 42-inches above the finished floor, midrail at 21-inches above the finished floor, and a 3-1/2-inch toe board. The wire rope guardrail must be flagged every 6-feet, be terminated with at least 3 wire rope clamps, and have turnbuckles installed at regular intervals including at least one turnbuckle per change of direction and per length of cable. The use of lap joints is prohibited. The Subcontractor installing the wire rope guardrail system must install cable clamps at each column to prevent a cable from being loosened and deflecting around the entire perimeter. Construction Manager must maintain a deflection of less than 3 inches with posts located at intervals to maintain cable deflection requirements. Workers must not utilize wire rope guardrails to anchor personal fall arrest equipment (PFAE) unless it has been engineered for such purpose.
- 13. Subcontractors must provide documentation from the original equipment manufacturer (OEM) or Professional Engineer (PE) for horizontal lifelines (whether set at the feet or overhead) that will be utilized on the project. Horizontal lifelines must be utilized in accordance with the instructions provided by the OEM and/or PE.
- 14. Welders must utilize fire-retardant/resistant harnesses and lifelines (cable, for example) that are compatible with the hot work environment.
- 15. Access ladders (portable or job-built) must be placed in ladder ways (access through a guardrail is not permitted). At each landing surface, the Subcontractor must provide an offset corral or gate to prevent workers from accidentally backing or walking through the ladder access opening.
- 16. Subcontractors are required to coordinate overhead work (or work that exposes their workers to overhead hazards) with the Construction Manager. Subcontractors are responsible for providing, inspecting, and maintaining a falling object protection system when creating such exposure.
- 17. Subcontractors must ensure that all tools, equipment, and materials used/stored on elevated levels are secured to prevent accidental displacement/falling to lower levels.
- 18. There is no safe distance from any unprotected side or edge, leading edge, or shaft that would exempt a worker from fall protection (i.e., distance is not fall protection). Safety monitors are not permitted.
- 19. No one may ride on top of the elevator or personnel hoist car except during erection, dismantling, and inspection operations. The Subcontractor must install a guardrail on the top of the cab to protect workers from falling or ensure that workers utilize a Personal Fall Arrest System (PFAS) if the anchor point meets OSHA requirements.
- 20. For permanent elevator construction, the Subcontractor will ensure that the false car or temporary platform is enclosed on all sides by guardrails and toeboards, in compliance with OSHA requirements and that a removable front rail is provided on the car to provide access onto and from the car.





#### **CRANES**

Subcontractors must perform work in accordance with OSHA (e.g., 1926 Subpart N and CC), ASME B30.5 (mobile crane), ASME B30.3 (tower cranes) and the Site Safety and Health Requirements:

- 1. The Construction Manager must have a Crane Hoist Plan for all crane lift operations on-site.
- 2. The Subcontractor using a crane to make a lift must submit a Crane Hoist Plan to the Construction Manager.
- 3. The Construction Manager's crane hoist plan must be submitted to the owner for review at least 14 calendar days prior to scheduled use. A Logistics Plan must be submitted with the hoist plan. The Subcontractor utilizing the crane for the lift must complete the crane hoist plan for all crane lifts, including truck unloading. Note: helicopter lifts and tower cranes must be approved by the Construction Manager and Owner. All work requiring the use of a suspended personnel platform must be approved by the Construction Manager and Owner.
- 4. Lifts exceeding 75% of the crane's capacity chart, requiring movement of a crane carriage with the load, use of personnel platforms, sensitive loads (long lead time, cost), loads requiring two (or more) cranes, hoisting over occupied facilities (other than the Project) or work involving encroachment on public rights of way are considered "critical lifts". These lifts must be authorized 21 calendar days in advance. A Logistics Plan must be submitted with the critical lift plan. Critical crane lift plans, if authorized, may have to be reviewed by a Professional Engineer (the Subcontractor must carry the PE review in project cost). All Critical Lift Plans must be submitted for review at least 21 calendar days prior to the planned lift. The Owner and Owner's Representatives must be part of all Critical Lift Meetings.
- 5. Subcontractors must provide a collision mitigation plan when a potential boom conflict is present. The mitigation plan must be coordinated through the Construction Manager. The Construction Manager will determine which activity has priority. Costs associated with plan development and execution are the responsibility of the end user of the crane.
- 6. Banners may be placed on crane booms only when approved in writing by the OEM and Owner.
- 7. Subcontractors are required to coordinate (90 days in advance of the activity) the use of cranes in excess of 200' in height with the FAA. The Subcontractor must provide and maintain all permits, FAA lighting and flags that may be necessary.
- 8. If necessary, the Construction Manager must coordinate with adjacent Owners and medical helicopter services to ensure there is communications and an access plan for heliports and medical helicopters.
- 9. Each crane must be inspected by an independent third party within the past twelve months. Any crane requiring a support crane for assembly must be inspected (and tested) by a 3rd party inspector, as follows: all components prior to assembly, after assembly and prior to use. The Subcontractor must be responsible for providing test weights. The 3rd party inspector must be certified (and firm registered with) by the Crane Certification Association of America (CCAA). A copy of the 3rd party inspection report and deficiency clearance report must be forwarded to the Construction Manager.

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- 10. Cranes must be assembled and disassembled under the direct observation of an Assembly/Disassembly Director. The Assembly/Disassembly Director must be trained by the crane manufacturer qualified supervision. (for tower cranes, this supervisor must be a factory representative).
- 11. Subcontractors must maintain all operational aids in working condition.
- 12. Crane operators must meet the requirements of 29 CFR 1926.1427 specific to training, certification/licensing, and evaluation. Documentation must be maintained on site. Crane operators must maintain an appropriate jurisdictional license, if applicable, and current USDOT medical certificate. If the crane operator is working in an area that does not require a jurisdictional license, the crane operators must have an NCCCO crane operator license. Subcontractor must provide a copy of the crane operators license to the Construction Manager.
- 13. Subcontractors must conduct a documented daily inspection of each crane they have on-site. A copy of the inspection must be provided to the Construction Manager at the end of each shift. The condition of the crane must be monitored throughout the shift.
- 14. The Subcontractor must provide the Construction Manager with an electronic or hard copy of the crane manual for each crane on site.
- 15. Swing radius barricades must incorporate red danger tape and danger signs (or equivalent).
- 16. All outrigger pads must be properly cribbed, so that the weight of crane and load is proper supported and distributed. Note: The Subcontractor must calculate the ground bearing pressure exerted by the crane on its outriggers or tracks for the worst-case hoisting scenario (maximum radius and weight) and provide these calculations to the Construction Manager as part of the hoist plan. The Subcontractor must evaluate all documentary and non-documentary information concerning ground conditions. The Subcontractor is required to provide all supporting material, as required for safe operation. The Subcontractor must provide engineering to determine the load bearing capacity of the ground that will be supporting the crane.
- 17. If outriggers are not planned to be extended 100%, a detailed explanation on the hoist plan shall be provided.
- 18. Tag lines must be used to control all loads unless their use creates a greater hazard or is infeasible.
- 19. The Subcontractor must establish and maintain a barricade line to prevent workers from walking or working in the fall zone of suspended loads.
- 20. Subcontractors (and their lower tier Subcontractors) must attend whatever meeting(s) is necessary to review a crane lift plan.
- 21. Subcontractors are responsible for all professional engineering services (including, without limitation, utility location, engineering) that may be required to develop and / or execute a crane lift plan.
- 22. Multi-Lift Rigging Procedures must be approved by the Construction Manager.





### **MOBILE and MECHANIZED EQUIPMENT**

- Operators must be competent in the use and inspection of the equipment that they may operate (the Subcontractor (including lower-tier Subcontractors) must provide the Construction Manager with a copy of any license, medical certificate, or training certificate that may be required by OSHA or the local jurisdiction.
- 2. Equipment must not be left idling for any period longer than 5 minutes, except were provided by local, state, or federal regulation. Equipment near air intakes or possible exhaust exposure to building occupants must be equipped with exhaust scrubbers.
- 3. Equipment must be inspected daily. The Subcontractor must provide the Construction Manager with a copy of all inspection daily reports. All equipment must have had a complete documented inspection prior to arrival on the site. A copy of the inspection report must be provided to the Construction Manager.
- 4. Attachment changes, maintenance, and repairs must be performed in accordance with manufacturer requirements.
- 5. Be aware of backup and travel alarms stay clear of any backing equipment. Equipment with defective or missing alarms will be parked until repairs have been completed. Equipment must have a backup alarm audible above the surrounding noise.
- 6. Subcontractors must instruct operators to minimize backing to the extent possible.
- 7. Workers must never be placed in buckets of machines to reach elevated or lower work areas.
- 8. All Original Equipment Manufacturer (OEM) equipment (limit switches, cab glass, mirrors, exhaust systems, bi-directional alarms, horns, guards, parking and service brakes, defrosters, etc.) must be maintained in safe working condition. Equipment must not create a hazardous atmosphere.
- 9. Forklifts must be operated in accordance with OSHA requirements and OEM operating instructions.
- 10. Operators must have an appropriate amount of working lights, number of rearview and side view mirrors.
- 11. Workers must make eye contact with operators before crossing their path and should never cut within the swing or dig radius of any equipment.
- 12. At all times on the project site, seatbelts must be worn by operators and passengers seat and seatbelt are required. Riding in the bed of a pickup truck, saddle tank, for example will result in disciplinary action against the driver *and* the rider(s).
- 13. Workers must not jump from vehicles, whether moving or stationary.
- 14. The Subcontractor must provide the equipment specifications to the Construction Manager prior to placing equipment (i.e., forklift, skid steer loader, buggies, prime movers, etc.) within a structure, to





ensure that the equipment ground bearing pressure does not exceed the elevated floors (or vault, etc.) capacity.

- 15. Roll-Over-Protection devices must not be removed from equipment.
- 16. The Subcontractor must maintain operating authority for Commercial Motor Vehicles from local jurisdictions (public utilities commission, department of motor vehicles, etc.) and the Federal Motor Carrier Safety Administration (FMCSA). In addition to the operating authority, the Subcontractor must be responsible for the administration, inspection, maintenance, and operation of all vehicles in accordance with the regulations of the aforementioned authorities.
- 17. Equipment must not be overloaded.
- 18. Operators must sound the horn of equipment prior to moving from a parked position and as they approach a blind intersection or corner.
- 19. All equipment operated (e.g., trucks, forklifts, rubber tire loaders / excavators) over-the-road use must be registered. In the absence of registration, the Subcontractor must provide a police detail as an escort.
- 20. When parking equipment on a grade, the wheels must be turned to the side or chocked.
- 21. All cargo must be secured prior to the movement of a vehicle.
- 22. All earth or load engaging attachments must be placed on the ground when parked or idled. The engines must be shut-off when the equipment is left unattended (operator is greater than 25' from equipment).
- 23. The accessory equipment (booms, for example) of supplier's delivery trucks must be inspected by a 3<sup>rd</sup> party every 12 months see *Crane Section* for qualifications of inspector.
- 24. The Subcontractor must provide the Construction Manager with a schedule of equipment, material, or supply deliveries.
- 25. Prior to workers on foot approaching excavator operators to speak to the operator, the worker on foot must signal the operator from a safe distance and the operator must place the boom attachment on the ground. The operator must then disengage the control lock lever to disable the control sticks.





#### **EXCAVATIONS**

- 1. Any Subcontractor performing trenching/excavation work must complete an Excavation Permit and submit it to the Construction Manager for review.
- 2. The Subcontractor must notify PA One Call and Owner to determine the estimated location of each underground utility prior to opening an excavation. The Subcontractor must pre-mark (in white paint) the limits of each proposed excavation area(s) and the Subcontractor's name. The Subcontractor must utilize safe and acceptable means to locate underground utility installations.
- 3. Site Subcontractors must maintain current and provide 'as-built' drawings to the Construction Manager. The 'as-built' drawings must indicate the location of newly installed underground utilities, as well as the location of any existing underground utility that is verified in the field.
- 4. The estimated location of underground utilities must extend for a distance of 18" on either side of the outside edge of the underground facility on a horizontal plane.
- 5. All soil is Type C unless the Subcontractor can prove otherwise.
- 6. Each employee in an excavation must be protected from cave-ins by an adequate protective system designed in accordance applicable OSHA standards except when:
  - a. Excavations are made entirely in stable rock; or
  - b. Excavations are less than five feet in depth and examination of the ground by a competent person provides no indication of a potential cave-in.
- 7. The Subcontractor must provide the Construction Manager tabulated data or design engineering drawings for each earth support system that will be utilized.
- 8. All sides of trenches and excavations must be sloped at 1 ½:1, shored, or otherwise supported when five (5) feet deep, or less when a hazard exists. The Subcontractor must provide the Construction Manager tabulated data or design engineering drawings for each earth support system that will be utilized.
- 9. The Subcontractor is responsible for preventing water from accumulating within an excavation.
- 10. The competent person must determine that the excavation is safe prior to entry and throughout the shift, as may be necessary. These inspections must be documented by the Subcontractor. Do not enter if the trench or excavation is not properly protected, STOP work immediately and notify a Superintendent or Site Safety Manager.
- 11. The Subcontractor must provide all equipment, labor, and materials necessary for compliance.
- 12. Trenches greater than 4-feet in depth must be checked for hazardous atmospheres if the Subcontractor is digging in potentially contaminated soil. The Subcontractor must provide all instrumentation required for this task.
- 13. All excavations must be protected by the Site Subcontractor.





14. Workers must have adequate means of egress from a trench or excavation within 25' of their work location. A worker must be able to walk out of trench or excavation unaided if a structural ramp is utilized. This typically requires a maximum slope of 3:1.

### **CONCRETE and MASONRY CONSTRUCTION**

Subcontractors must perform work in accordance with OSHA requirements and the Site Safety Rules:

- 1. All unsupported concrete block walls must be braced in accordance the MCAA Standard Practice for Bracing Masonry Walls Under Construction or engineer requirements to prevent overturning and to prevent collapse. The bracing must remain in place until permanent support elements of the structure are in place. The Subcontractor must provide a plan prepared by a Profession Engineer.
- 2. Concrete buckets must be equipped with handles.
- 3. The Subcontractor must be responsible to provide, place and maintain protection for all exposed rebar.
- 4. The shop drawings for pre-cast concrete must be stamped by a Professional Engineer indicating that embedded lifting inserts meet the safety factors required by 29 CFR 1926.704 and are designed for two hook rotation, for example.

#### STEEL ERECTION

- 1. Workers must be protected from fall hazards at 6' fall exposure with 100% passive (guardrail) or active (personal fall arrest/restraint system) fall protection.
- 2. There is no safe distance to an unprotected side or edge that renders fall protection unnecessary.
- 3. The Subcontractor must use tag lines for controlling loads during hoisting unless their use creates a greater hazard or is infeasible.
- 4. No multiple lifts will be permitted on this Project without authorization from the Owner. The Subcontractor must submit a written request to the Owner for authorization which must include the justification for and procedures to be followed to perform multiple lifts.
- 5. The Subcontractor must plan their work to ensure that no load will be swung over occupied buildings (other than the project building), public roadways open to traffic, and the public. The Subcontractor must take all steps necessary to protect workers below from falling objects.
- 6. All tools, measuring tapes, etc. handled or carried aloft must be tethered to the worker, or otherwise secured.
- 7. Each component of column lifting equipment must have a 5:1 safety factor. The device must be tagged to identify its working load limit.
- 8. The Subcontractor must provide copies of training certificates for each worker, as required by 29 CFR 1926.761.
- 9. The Subcontractor must provide a safe means of access for workers.
- 10. No riding a load.
- 11. No climbing or sliding on columns or diagonals.





- 12. Wire rope guardrails must be secured with wire rope clips meeting ASME B30.26 industry consensus standards and be flagged every 6' with red tape.
- 13. Nuts must not be utilized to connect guardrails to columns.
- 14. The steel fabricator must consider and incorporate into shop drawings and fabricated pieces fall protection anchor points or equipment.
- 15. The Construction Manager and Owner's Representative for safety reserve the right to inspect all work areas on-site. This includes areas where the steel erector is completing work. If the steel erector's employees are in a work area without fall protection, the area is considered to be accessible for the Construction Manager's and Owner's Representative safety personnel.

### **DEMOLITION**

- 1. For structural demolition, the engineering survey must be conducted by a Professional Engineer registered in the jurisdiction where the work is taking place. This engineer must also sign the report compiled from any such survey. For non-structural demolition and deconstruction, the Subcontractor may have a Qualified Person complete the Engineering Survey Report.
- 2. The Subcontractor must provide all equipment, materials, shoring, environmental controls, PPE, training that may be necessary to complete this work.
- 3. The Subcontractor must ensure that temporary demolition debris staging and material storage areas, and equipment operation does not exceed the allowable floor load(s). When the existing floor loads are unable to be established though historic engineering and / or project construction references, a plan must be prepared by a professional engineer licensed within the state that the project is located.
- 4. The Subcontractor must obtain and review a copy of the hazardous material survey conducted by the owner, prior to the commencement of demolition activity. Work must not proceed in an area that has been identified as containing hazardous material until a copy of the abatement certification has been provided.
- 5. No material must be allowed to drop to any point lying outside the exterior walls of the structure until the ground below is effectively barricaded.
- 6. No material must be allowed to drop to any point lying outside the exterior walls of a structure containing wall openings (e.g., window) until the interior floor area is effectively barricaded. Nor must material be allowed to drop until the hazard of breaking glass is removed.
- 7. Chutes will be designed and installed by a qualified person.
- 8. The discharge end chutes must be controlled at all times, either by a dumpster, gate, or worker.
- 9. Each chute loading point must have a secured wheel stop that is not less than mid-axle height.
- 10. Nails must be removed and / or bent over; and broken glass and loose material must be removed, as work progresses.





### **BLASTING and USE of EXPLOSIVES**

Subcontractors must perform work in accordance with OSHA and Yale University Division of Public Safety requirements and the Site Safety Rules:

- 1. The Subcontractor must provide a written plan for review and approval by the Construction Manager and Owner 28 days prior to work starting. The plan must identify how the activity will be undertaken to mitigate incident.
- 2. The Subcontractor must provide and maintain all signs and barricades that may be necessary.
- 3. The warning horn must be provided by the Subcontractor.
- 4. The Subcontractor must provide all personnel required to secure blast site.
- 5. Construction Manager or Subcontractor must arrange for a Pre-Blast Survey of surrounding properties to determine existing damage and pre-existing conditions.

### **LADDERS and STAIRWAYS**

- 1. Ladders, stairs, or ramps will be provided where there is a change in elevation of 19 inches or greater.
- 2. A-Frame ladders must be designed for use in the closed or open position (e.g., Cross Step, LeanSafe).
- 3. Workers must be trained on the safe use of ladders.
- 4. Ladders are required to ascend or descend truck beds and/or trailers.
- 5. Ladders will extend past the bearing point of the upper landing surface no less than 36 inches.
- 6. Ladder access points and landings must remain clear of all obstacles and obstructions to allow easy access on and off the ladder.
- 7. When ladders are used to access upper levels, they must be secured at the base and at the top by tying to prevent displacement.
- 8. Aluminum ladders are prohibited.
- The Subcontractor must allow only competent persons to utilize portable ladders. Workers must inspect portable ladders prior to use. The Subcontractor will immediately remove or repair defective ladders.
- 10. Each portable ladder must be fiberglass and type 1A rated or better.
- 11. The Subcontractor must maintain the original equipment manufacturers (OEM) labels on each ladder.
- 12. The Subcontractor must ensure that ladders are used only for the purpose intended by the manufacturer.
- 13. Workers must not stand above the second step from the top of a stepladder, or the fourth rung from the top of an extension or straight ladder.
- 14. Workers must not sit on the pail shelf of a stepladder.





- 15. Workers must utilize personal fall arrest equipment when 3 points of contact are not possible, if an adequate anchor point is available, or scaffold should be utilized.
- 16. Workers utilizing a portable ladder adjacent to a perimeter or interior fall hazard that is six (6) feet or greater above a lower level (over guardrails) must utilize active fall arrest equipment if the hazard is within 1.5 times the distance away, for example: if you are on an 8' ladder and within 12' of the edge, you must be tied off. The Subcontractor may provide mobile scaffold fitted with guardrails, in lieu of personal fall arrest equipment.
- 17. Stairways having four or more risers or rising 30 inches or more must have a stair rail system 36 inches high on each unprotected side of the stairs.
- 18. Metal pan stairs must not be used unless the pans are filled to prevent a tripping hazard. Foam insulation and similar type materials are not suitable for temporary infill.





### ATTACHMENT A - DRUG and ALCOHOL TESTING PROGRAM

The policy directs the establishment and maintenance of an effective program for achieving a drug and alcohol-free workplace. Accordingly, the Construction Manager and Subcontractors are required to adopt and enforce this policy as a condition of their work with the Owner.

The intention of this program is to establish Projects as drug and alcohol-free workplaces in order to ensure safe and productive working conditions with due regard for the personal privacy interests of Project employees. The program will apply to all personnel, including on-site management. This policy does not apply to off-duty activities of Project employees away from the project site unless those activities have a job-related impact.

The basic elements of the program are:

- 1. Use, possession or sale of illegal drugs or alcohol on the Owner's property is prohibited. Persons who violate this rule will not be permitted access to the project.
- 2. Employees who report for Work with illegal drugs, legal drugs causing impairment and/or alcohol in their system will not be permitted to remain on the project. Such employees will be barred from the project.

The policy will be enforced by drug and alcohol testing, as permitted by state and federal laws. Safeguards have been undertaken to ensure that testing will be conducted by a qualified vendor, under strict state and federal requirements, including provisions to ensure test reliability, employee privacy and confidentiality. All confirmatory testing will be conducted by federally approved laboratories in accordance with both the Department of Transportation Drug and Alcohol Rules and Regulations (49 CFR Part 40) and the U.S. Department of Health and Human Services, as amended.

All Pre-Assignment and Reasonable Suspicion/For Cause drug and alcohol testing shall be at designated locations. Pre-Assignment and Reasonable Suspicion/For Cause drug and alcohol testing will be by urinalysis using an instant test cup, a breath alcohol device. Medical emergencies requiring offsite treatment may warrant drug and alcohol testing at the facility providing the service.

### PRE-ASSIGNMENT - Drug and Alcohol Testing

The special circumstances and working conditions on this Project warrant special assurances that Construction Manager and Subcontractor personnel to be employed at the site are certified as drug and alcohol-free before they are eligible for regular employment.

Employees are required to submit to Pre-Assignment drug and alcohol testing if they have not been drug and alcohol tested under the Yale University OCIP previously or if they have changed employer. Example: Employee is working for ABC Company on a project. He/she completes work and then goes to work for XYZ Company on the same project. The employee must go through the Pre-Assignment drug and alcohol testing, as he/she has switched employers on-site.

Construction Manager and Subcontractor prospective employees will only be granted access to the project after the Construction Manager and/or Subcontractor received documentation confirming that the prospective employee has passed the required drug test. A document confirming that the employee has successfully completed a negative initial drug test and alcohol will be issued by the testing agency and





shown to the Project Safety Manager. Only after the results are confirmed "Negative" will an employee be permitted access to the Project.

Any employee testing "Positive", per the testing requirements, will be barred from the Project. The prospective employee shall be given a copy of any positive drug test result. The results of any such test shall be confidential and shall not be disclosed to any person other than any such employee to whom such disclosure is necessary.

Any employee so barred will not be eligible for referral back until he/she satisfactorily completes a drug test not less than ninety (90) days following the initial disqualification.

Refusal on the part of any employee to comply with the testing procedure will be considered a "Positive Test" and will disqualify the applicant from consideration for employment on the Yale construction projects for not less than ninety (90) days.

### **REASONABLE SUSPICION/FOR CAUSE – Drug and Alcohol Testing**

All Construction Manager and Subcontractor employees are subject to a drug and alcohol test where the Construction Manager's staff, Program Safety Monitor, additional authorized persons, including but not limited to all Safety Representatives, and/or Owner has reasonable suspicion that the employee is under the influence of drugs or alcohol which adversely affects or could adversely affect such employee's job performance. Reasonable suspicion means reliable objective facts and circumstances sufficient to warrant a prudent person to believe that the employee may have ingested or used an intoxicating substance resulting in impairment while on duty. If testing results from an observation, the observation must be confirmed by a second member of Construction Manager's staff or Program Safety Monitor, Owner, or Owner's Representatives who has received appropriate training on the detection of possible impairment through observation. Observation shall be reviewed with a union steward in the employee's applicable trade, if applicable, and only on the condition that the steward is readily available.

Employees removed from duty for reasonable suspicion testing will remain off duty until test results are received. If the employee tests "Negative" for drugs and/or alcohol, the employee may be entitled to back pay for the time missed. Such payment will not be subject to reimbursement from the Owner, Program Safety Monitor, or Owner's Representatives. If the employee tests "Positive", per the testing requirements, the employee will be barred from Owner Projects.

#### **ALCOHOL SCREENING**

Alcohol screening shall be conducted utilizing certified Breath Alcohol Testing devices. Any initial screen yielding an initial result of .02 bac or greater will result in a required confirmatory test to be administered after 15 minutes but no longer than 30 minutes. A confirmatory test result greater than .02 bac is considered a "Positive" result and in violation of the policy. If the worker tests "Positive", the worker will be barred from the Project Site effective the date and time of the specimen collection.

#### **TEST PROCEDURES**

All Construction Manager and Subcontractor prospective employees will be informed in writing by the Construction Manager prior to arrival on site of the Owner's intent to conduct a drug test and the applicable testing requirements.

Prospective employees that leave a Project will not be tested upon their return to the Project, provided they return within 30 days.





Confirmatory testing procedures, including which drugs are to be screened, chain of custody and threshold and confirmation test levels, shall comply with state and federal laws. Standards Protocol shall be developed by the Owner to address the provisions of this policy, including specific testing procedures and the requirement that the Subcontractor shall be required to contact the Third-Party Administrator until a test result is confirmed "Negative" or "Positive".

#### FIT FOR DUTY EVALUATION

Recreational marijuana usage is not an acceptable defense for a "Positive" drug test.

If a Contractor or Subcontractor employee receives a result that is "Negative" with a note stating: Donor is taking a prescription medication that may affect workplace safety and a fitness for duty evaluation is recommended, the employee must have a Fit for Duty Evaluation. A Fit for Duty Evaluation must be performed at a designated location. The Third-Party Administrator will direct the Contractor or Subcontractor to send their employee to a designated location. The Construction Manager or Subcontractor must call for an appointment. Cost for the Fit for Duty Evaluation shall be the responsibility of the employee or his employer.

#### **REFUSAL**

Failure to sign the appropriate release forms or to comply with the testing procedures shall result in the worker being barred from working on the Project and future OCIP projects. A refusal to test is treated as a "Positive" test result.

#### **CONFIDENTIALITY REQUIREMENTS**

Strict confidentiality shall be maintained at all times for all substance abuse testing program activities. All information generated in connection with the testing program is inherently sensitive and is to be treated as confidential. In implementing this program care must be taken to:

- 1. Safeguard all written reports by maintaining separate, secured files and limiting written and verbal communications to the necessary functions of this procedure.
- Conduct testing as privately as possible.
- 3. Limit the number of persons involved in testing activities to essential personnel only.
- 4. Prohibit the communication of confidential information about searches, tests, investigations, or the results of same to persons not authorized to receive it, including family members, friends, union representatives, or law enforcement agencies.
- Release information only to those necessary to administer site employment, safety, and security; in response to legal process or when a written release has been obtained from the individual involved.
- 6. Drug and/or alcohol test results shall only be released to designated employee representatives from the Construction Manager, Subcontractor, Owner, or Owner's Representatives. Written authorization from the donor of the urine specimen and/or breath alcohol test shall be required for any others requesting drug and/or alcohol results. Federal, state, and/or local authorities will be able to obtain drug and/or alcohol test results only with written consent of the person tested





or with a subpoena. The procedure to release drug and/or alcohol results is per 49 CFR Part 40 of the federal requirements. Drug test results shall be maintained along with other employee medical records and shall be subject to the privacy protections provided for in C.G.S. § 31-128a to 31-128h, inclusive.

### **STATISTICAL REPORTS**

The Third-Party Administrator shall provide a report indicating the individuals that passed the drug test by the end of each week. The reports and method of reporting shall also meet strict confidentiality protocol. The Third-Party Administrator shall provide monthly reports on all test results to the Owner, and Program Safety Monitor. The reports shall be sorted by employer, number of tests performed, percent of Negative test results, number of tests for the month and the number of tests to date.

