



PROJECT SAFETY PLAN

Sample Location

03/05/2021

The safety rules and regulations contained herein are NOT all inclusive. All United States Department of Labor, Occupational Safety and Health Administration (OSHA) and other legal standards not specifically referenced in these rules, regulations, and policies shall apply when appropriate. In cases of conflict, the most stringent rule shall apply.

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I. Foreword

A. Management Policy Statement

For generations, Gilbane Building Company has taken great pride in our concern and commitment to safety and health on all projects. Safety is the single most important element of our work. Gilbane is committed to providing a safe working environment at all times. Everyone employed on our projects is expected to conduct their work in a safe manner, taking personal responsibility for their own as well as their co-workers' safety.

We take responsibility to work safely and stay vigilant in safeguarding our workers, visitors, the public and our clients.

Our commitment to safety starts with us along with our Division Management teams, which are responsible and accountable for the safe performance of work on our projects under their control. They are aided by our Division Safety Directors, and Project Safety teams, who develop, execute and monitor our safety programs.

All our efforts have made Gilbane one of America's safest builders. The goal is to perform all work incident and injury free.

Gilbane Building Company

The Sample Location Safety Plan embodies the policies and procedures for prevention of injury, property damage, fire damage and occupational illness. This document, the Gilbane contractor selection process and site field activities are all designed to support and reinforce this goal.

It is a joint and Gilbane Building Company policy to provide a safe place to work at all times and to conduct all operations in a manner as to provide protection for all individuals who might come into contact with these operations. The Owner's employees, Gilbane Building Company employees, Contractor and Subcontractor employees, and all others employed on this site, as well as anyone who comes on the site for any reason during construction, are expected to conduct their work in a safe manner and are required to comply with established safety programs. By contract, every Contractor on this site is obligated to perform all work in a safe manner, is obligated to conform to the requirements of the Federal Occupational Safety and Health act of 1970 (OSHA), all additions and revisions thereto, as well as other applicable Federal, State and Local requirements and the Sample Location Safety Plan.

All supervisory employees must accept their responsibility for the prevention of accidents and for conducting all operations under their direction in a safe and efficient manner.

With the cooperation, dedication and assistance of everyone, this will be a successful and safe project.

II. Contents

A. Definitions

1. Contract: A written agreement between the Owner and Gilbane, between Gilbane and a Subcontractor, between the Owner and Other Contractor(s), or between Other Contractor(s) and its (their) Subcontractor(s).
2. Contractor: Any company performing work under Contract at the project site including sub-tier contractors.
3. Employer: Any contractor, supplier, or vendor performing work under Contract at the project site.
4. Owner: An entity that has a contract between themselves and Gilbane or, between themselves and the Contractor.
5. Project: The premises owned by the Owner as described in the contract between the Owner and Gilbane and/or areas and ways contiguous thereto, including any work sites set up by the **Owner** for use by a contractor exclusively for the storage of material or equipment, or for on-site fabrication of materials to be used on the job site, including temporary locations.
6. Project Description:
 - a. Sample Project description here.

B. Administration

1. Coronavirus (COVID-19) Interim Guidelines

Collectively, we all need to ensure we are taking the necessary steps to prevent the spread of Coronavirus Disease 2019 (COVID-19). Gilbane continues to work with our clients, trade partners and suppliers in order to take all necessary precautions to protect our employees, clients, staff, guests and our client's customers. Gilbane's policy is to always provide a safe place to work and to conduct all operations in a manner as to provide protection for all individuals who might encounter these operations, as well as any of our client's requirements.

The interim guidance prepared for this jobsite is based on what is currently known about the COVID-19 disease and as obtained by the Centers of Disease Control & Prevention (CDC) and the Department of Health (DOH). As this issue progresses or recedes, we will update this guidance. This guidance is being implemented by Gilbane on a company-wide basis and our expectation is that all business partners will implement measures at least as protective as those outlined in the interim guidance. Please follow all direction given by the CDC, DOH and Local, State and Federal Agencies. In addition, many of our Project Owners have issued their own guidelines for their employees and those working on their properties. Gilbane's expectation is that all parties will adhere to the most stringent requirements to ensure project compliance and the safest possible working conditions for all.

2. Above-OSHA Requirements

This section contains an overview of Gilbane safety requirements that exceed - or are more specific than OSHA. The company and project team reserve the right to develop additional safety requirements based on hazards, risks or new regulations.

- a. Contractor Responsibilities (Inspections):
 1. Are to be an on-going process and documented at least weekly. Contractors should document inspections on the Site Audit Checklist or approved Contractor's form and submit to Gilbane on a weekly basis.
- b. Contractor Responsibilities (Required Policies, Programs and Procedures):
 1. Contractors must develop and submit a Site-Specific Safety Plan before mobilization using information obtained from pre-construction meetings and contract documents and will require sub-tier contractors to submit to the same requirements. The Contractor's standard Corporate Health and Safety Plan will not be accepted, the plan must be site specific.
- c. Contractor and Employee Responsibilities (Orientation):
 1. All employees must attend the Gilbane Safety Orientation before they can start work on site. All employees must pass the quiz at the end of the orientation.
 2. Employees must sign the Code of Safe Practices stating that they have read and understand the Site Safety Rules.
- d. Contractor Responsibilities (Site Safety Representatives):
 1. Site Safety Representatives will be required based on assessment of risk by the Gilbane Division Safety Director. Safety will be the only job duty of the Site Safety Representative. Unless otherwise specified, Contractors with a staff and crew of 20 or more on site shall appoint a full-time site safety representative. The candidate's resume including all safety training completed must be submitted to Gilbane for approval. The candidate may be interviewed before they will be accepted. The Site Safety Representatives shall have – at minimum - OSHA 30-hour training and first aid/CPR training. Additionally, the site safety representative must meet the requirements of a competent person in their discipline. Gilbane will have the right to reject a candidate based on qualifications. The site safety representative shall perform the following duties on a daily basis:
 - i. Lead stretch and flex.
 - ii. Review Safety Task Assignment (STA) and JHA for the day.
 - iii. Identify competent persons.
 - iv. Complete daily safety inspection.
 - v. Submit required permits.
 - vi. Coach Foremen on STA delivery.

- vii. Manage Hazardous materials and associated Safety Data Sheets (SDS).
 - viii. Attend weekly safety committee.
 - ix. Complete orientations for new workers.
 - x. Provide appropriate interpretation for their workers whose primary language is not English to assure complete comprehension.
- 2. Critical Trades required to provide Site Safety Representatives regardless of crew size.
- e. Contractor Responsibilities (Training):
 - 1. Contractor supervisors and Safety representatives shall provide proof of having completed the OSHA 30-hour Construction Safety and Health course.
 - 2. Participation in an 8 Hour workshop is required of Contractor project managers and superintendents. The workshop is designed to foster a culture of incident and injury free on the project and to provide effective practical field tools to promote that culture.
 - 3. In an effort to create an incident and injury free culture on the project, Gilbane may hold periodic Principals Meetings to discuss project safety with contractor principals. Project walkthroughs and worker feedback interviews will be part of these meetings. Contractor principal / owner attendance at these meetings is mandatory.
 - 4. Contractor shall ensure all employees are trained in the tasks, as well as the use of the tools and equipment.
 - 5. Contractors weekly toolbox safety meetings for all employees under their supervision. Minutes of tool box talks are to be maintained and a copy of each talk is to be given to Gilbane before end-of-shift the on the day it's given.
- f. Accident notification time requirements:
 - 1. Notify Gilbane immediately and file a full accident/injury report within 24 hours for:
 - 1. Any type of injury.
 - 2. Property damage.
 - 3. Near misses.
 - 4. Environmental spills.
 - 5. Bomb threats.
 - 6. Public demonstration.
 - 2. Results of the accident investigations and recommendations for preventive action shall be documented within five (5) work days of the incident.
- g. Cranes:
 - 1. A Gilbane crane plan is required for all crane use.
 - 2. Documented evidence of qualified rigger and signalperson training shall be provided by the subcontractor.
 - 3. A current, annual, independent third-party inspection by an authorized agency is required pre- and post-assembly, after adjustments or repairs and severe service.
 - 4. Independent third-party inspection recommendations are to be corrected before the next crane usage. All repairs and adjustments noted on the inspection shall be corrected prior to next use. 'Temporary alternative measures' for safety devices or operational aids as specified within Federal or State OSHA regulations will not be accepted.
 - 5. Evidence of documented Daily/Pre-shift inspections.
 - 6. All Safety Features and Operational aids must be in good working order before crane usage- NO temporary alternative measures shall be permitted.
 - 7. When lightning is observed, or thunder heard, all crane and lifting operations shall stop. Gilbane shall make the determination with the contractor's competent person, as to the proximity of the operation being performed. When lightning is 10 miles away or less, work must stop for 30 minutes after the last audible thunder or visible flash of lightning, unless work is being conducted inside a "Safe Building".
 - 8. A Crane Lift procedure including Job Hazard Analysis (JHA), and Pre-Lift meetings shall be required for all Critical lifts at or above 75% of Crane capacity, multi-crane lifts, lifts of 100 tons or greater, or where determined by Gilbane. All Critical Lift plans must be reviewed and stamped by a Registered Professional Engineer.
 - 9. Rigging - Chain falls are approved for certain instances as well as certain engineered rigging devices that contain chain components.
 - 10. Shake-out/sorting style hooks shall only be used to shake out steel once it has been unloaded and may not be used for overhead lifting.
 - 11. Only 'Standard Method' for signals shall be used per 1926.1400 App A.
 - 12. The Contractor shall conform to the more stringent of federal, State, local, client or Gilbane safety policy
- h. Cranes - Tower:
 - 1. Tower crane safety coordination meeting is required prior to the erecting of a tower crane.
 - 2. Tower cranes require self-rescue devices for the operator.
 - 3. A plan is required for erection, dismantling, raising & lowering of the tower crane.
 - 4. A tower crane site logistic plan shall be completed.
 - 5. A third-party, independent, state-licensed tower crane inspector shall inspect all tower crane components:
 - i. Upon arrival to the project and ensure they were not damaged during transport;
 - ii. Prior to erection;
 - iii. Upon erection and every three months;
 - iv. Bi-monthly in adverse conditions (After lightning strikes or significant environmental events);
 - v. After tower jumps.
- i. Danger Tape:
 - 1. When danger or caution tape is utilized it must be the reinforced style tape.
- j. Discipline Program:
 - 1. A progressive discipline program will be used on site unless there is an Immediately Dangerous to Life or Health (IDLH) situation

warranting immediate dismissal.

2. Fighting, threatening behavior and possession of weapons are prohibited, violators will be dismissed immediately.

k. Electrical:

1. All 120 volt, single phase, 15 & 20 amp temporary power circuits (with the exception of temporary lighting) shall have ground fault circuit interrupters installed.
2. All tools, cords and power sets shall have an Assured Equipment Grounding Program (AEGP) inspection maintained on quarterly basis and shall be used in conjunction with GFCI.
3. Extension cords used with portable tools must be of a heavy duty 3-wire type and must be 12 gauge or larger.
4. All extension cords will be adequately suspended at a minimum of seven feet (7') or higher above the finish floor or work platform, by non-conductive material.
5. All temporary lighting shall be UL approved. Open wiring is not permitted for temporary lighting.
6. Splices in temporary lighting shall be made within secured junction boxes and performed by a qualified electrician.
7. All wiring used for temporary lighting shall be run using SJTW cord type, minimum 14/2 Gauge conductor. Romex or crimp on style temporary lighting is not acceptable.
8. Splices in conductors, when required, shall have wire nuts and conductors protected by 5 tightly wrapped half lap wraps of 3M ScotchTM Super 33 Vinyl Electric Tape or equal for a thickness of 35 mils. Otherwise, splices shall be made within a secured junction box.
9. All power panels shall have metal covers installed at all times. Electrical room doors shall be self-closing and locked from unqualified persons at all times. When not working in the panel the door shall be closed and locked.
10. All open or exposed breaker spaces shall be adequately covered and labeled.
11. Fish tapes or lines made of metal or any other conductive medium are prohibited. Nonconductive tapes and lines will be used in their place.

l. Elevated Work (Other than Fall Protection):

1. No elevators or hoists are to be used for the movement of materials and personnel until the devices have been certified and licensed by a third-party inspector qualified to approve the equipment.
2. When overhead work or activities where materials could fall to an elevation below, an exclusion zone will be marked by a continuous physical barricade. Danger tape, caution tape or flagging does not meet the requirements of barricading for an exclusion zone. Examples include: 2x4 lumber, orange construction fencing supported every 6', metal railing system or physical barricade. Signage preventing unauthorized users from entering the area will be posted on the barricade.
3. Stilts shall not be used without a permit for use.
4. Tools used at elevation shall be tethered to prevent from dropping to a lower level.

m. Emergency Procedures:

1. Each Contractor and subcontractor shall post - in a conspicuous place - a list of emergency telephone numbers and the type of information to be transmitted for emergency situations. Emergency information is to be submitted to Gilbane.
2. Each contractor shall have a minimum of one First Aid/CPR and bloodborne pathogens trained individual on the project and inform Gilbane of their name.
3. Gilbane shall have at least one person on each construction project and office with current training in First Aid/CPR/AED and bloodborne pathogens.
4. Every project and office shall have a readily available and fully functional Automatic External Defibrillator
5. Gilbane must be notified immediately of all accidents/ incidents including near misses.
6. Contractor shall complete and provide to Gilbane an "Employer's First Report of Injury" within 24 hours of any/all incidents involving work activities associated with the project.
7. light-duty work: Restricted or light duty must be made available to the extent allowed by the doctor.
8. A Principals Meeting - which includes key project personnel - must be performed within 72 hours of a significant near miss incident, recordable accident or lost time accident. Lessons Learned shall be incorporated into future daily activities.
9. When lightning is observed, or thunder heard, all crane and lifting operations shall stop. Gilbane shall make the determination with the contractor's competent person, as to the proximity of the operation being performed. When lightning is 10 miles away or less, work must stop for 30 minutes after the last audible thunder or visible flash of lightning, unless work is being conducted inside a "Safe Building".

n. Excavation:

1. Trenches four (4) feet and deeper shall be protected.
2. Before any trench of excavation is opened or entered the Gilbane Trenching & Excavation permit shall be completed and approved by Gilbane daily.
3. All trenches and excavations shall be properly barricaded to prevent persons from walking into them. Examples include: Orange construction fence or metal fence panels.

o. Fall Protection:

1. 100% Fall Protection is required above 6 feet for all trades at all times. A fall protection plan is required when there is fall exposure of greater than 6'.
2. Controlled decking/access zones, monitoring programs, or warning lines are not permitted as means of fall protection.
3. When working at a leading-edge, fall protection shall conform to ANSI Z359.14.
4. Wire rope guardrails for perimeter and interior fall protection and interior sequence breaks must be constructed according to the Fall Protection Section of this plan.
5. Mesh fabric having openings of 1/2" or less and capable of withstanding 50 pounds of force without damage or displacement will be

secured to all wire rope guardrails.

6. A Personal Fall Restraint System shall be used and attached to the manufacturer's approved anchorage when working out of aerial lifts and scissors lifts.

p. Fire Protection:

1. No less than a 20-pound fire extinguisher is allowed for general use.
2. Fire alarms/alerts within the area of new construction will consist of three short blasts on an air horn located at the means of egress, stairway, ladder, or building entry or other suitable audible alarm.
3. At least a one-hour dedicated nonworking fire watch is required during the duration of the hot work including through break, lunch and end of shift/day. They shall be equipped with at a minimum of one 20-pound fire extinguisher for all hot work operations.
4. Fire watch must be provided at all levels below the hot work operation where a fire could occur. This may require more than one employee to preform dedicated fire watch. The cost associated with this employee is solely the responsibility of the contractor.
5. If multiple hot work procedures are occurring, multiple dedicated fire watches are required. Roaming fire watches are prohibited.
6. All plastic tarps are to be fire retardant.
7. Fire Protection Standpipes shall be installed in accordance with NFPA 241, International Fire code-1413, International Building Code-3311, and OSHA, including but limited to:
 1. At least one standpipe shall be installed in buildings four or more stories in height, and shall be installed where the progress of the building is not more than 40 ft. in height above the lowest level of fire department access.
 2. During construction, the standpipe installation shall be installed so that it is never more than one floor below the floor having secured decking or flooring.
 3. Standpipes shall be provided with fire department hose connections at accessible locations to usable stairs.
 4. Standpipes shall be installed and maintained so that they are always ready for use.
 5. For building under demolition, standpipes shall not be demolished more than one floor below the floor being demolished, and shall be maintained in an operable condition for use by the fire department.

q. Hazard Analysis:

1. A Job Hazard Analysis shall be conducted prior to, reviewed daily, and strictly followed for all work-related activities.
2. The Safety Task Assignment Form shall be completed and discussed each day for all work crews or when non-routine tasks occur. A copy shall be provided to Gilbane at the end of the work day.
3. To ensure that everyone who works on our project goes home safely each day, we expect that every worker will continually assess the hazards of their work tasks and environment, and take the necessary actions to avoid, prevent or correct the hazard. In support of this, Gilbane will require everyone adopt the Personal Safety Assessment policy. Individual's PSA's will be discussed during project safety inspections and daily communications. Gilbane will provide information on the PSA process in Project Safety Orientation and via other safety communication methods on the project.

r. Hazard Communication Program:

1. A Hazard communication program including a SDS for each chemical on site must be submitted to Gilbane before the chemical or material is used. List only the chemicals on site - not the entire book.

s. Inspections and Auditing:

1. Contractors are advised that the Project may be inspected from time to time by authorized third parties. Upon their proper identification and clearance through security, they are entitled to access and courteous consideration. Gilbane must be made aware of their presence upon arrival, and in any case as soon as possible, of the purpose and results of such visits which relate to safety.
2. Each Contractor is required to notify Gilbane in writing prior to starting work if they - by their Company policy - require a warrant for OSHA to inspect their work. Gilbane does not require a warrant.

t. Ladders:

1. Stairs or stair-towers are required as the primary means to access floors, roofs and elevated landings. Manufactured stairs, job built wood stairs, temporary stair towers or permanent stairs shall be provided for worker access. Stairs shall be equipped with required treads, stair rails and guardrails at intermediate landings, as well as at the slope, width, and landings, in accordance with applicable OSHA regulations and Building codes.
2. Ladders shall be used as the last resort for accessing work at height. Only podium Type 1A ladders maybe used to complete work with an approved ladder permit.
3. Portable metal ladders shall not be used.
4. Stepladders or extension ladders shall not be used as work platforms.
5. The use of mobile scaffolds, and aerial and scissor lifts is preferred.
6. Job built wood ladders used for temporary access to work areas (for example elevated decks and excavations), may only be used with approval by Gilbane for the application and timeframe specified, and must be built in accordance with ANSI standards.

u. Lock Out/Tag Out

1. Lock Out/Tag Out (LOTO) procedures from either the contractor or the owner must be used. Use the more stringent program.
2. A LOTO pre-task meeting will be conducted before activities that require LOTO.
3. Electrical tie-ins shall be conducted only on de-energized systems. If a condition makes this impossible, then a pre-task meeting with Gilbane is required. All "live work" shall conform to NFPA 70E, and will only be authorized by Gilbane Division Safety Director after signature from the Owner and Contractor's Electrical Supervisor on the Energized Electric Work Authorization Permit.
4. Inspections and investigative type work conducted on live systems will be conducted in accordance with NFPA 70E and will only be authorized by Gilbane Division Safety Director after signature from the Contractor's Electrical Supervisor on the Energized Electric Work Authorization Permit.

v. Motor vehicles and Equipment:

1. Documented inspections shall be completed upon arrival and daily prior to use.
 2. Contractor provided trained and equipped flag persons will be used when construction traffic must access the site from a public roadway.
 3. Contractors shall provide adequate spill kits to control spills of grease, oil, hydraulic fluid and any other fluids from equipment or from storing or transferring such fluids.
 4. Shall be equipped with a charged and inspected fire extinguisher.
 5. The maximum speed limit on the project is ten (10) miles per hour.
 6. All mobile equipment shall be equipped with an Engineered Roll Over Protection System (ROPS).
 7. If internal combustion engines are used in enclosed areas the responsible contractors must monitor air quality and provide adequate ventilation.
- w. Permits:
1. PERMITS are required for any Confined space entry procedures will be in accordance with OSHA 1926.Subpart AA.
 2. Permits are required for Hot Work along with a dedicated fire watch lasting for at least 1 hour after work has stopped on a daily basis.
 3. Permits may be required for guardrail work.
 4. Permits are required for Excavations
 5. Permits are required for Stilt use.
 6. Permits are required for Crane lifts.
 7. Permits are required for Off Hours Work.
 8. Permits may be required for elevator shaft work.
 9. Permits may be required for leading edge work.
 10. Permits are required for Ladder Use.
- x. Personal Protective Equipment and Clothing:
1. Hard hats or helmets meeting ANSI Z89.1 must be worn at ALL times in construction areas. This includes with the use of welding shields, face shields and additionally required PPE.
 2. Eye protection must meet ANSI Z87 requirements and must be worn at all times in construction areas. Prescription glasses must meet the requirements of ANSI Z87 (most recent version) or be covered with over-the-glass safety glasses or face shield.
 3. Contractor is required to provide and enforce the use of gloves meeting a minimum of ASTM/ISEA/ANSI Cut level 4. Gloves shall be worn 100% of the time while onsite. In addition, gloves shall be worn as specified by manufacturer recommendations of tools, equipment and material SDS.
 4. Shirts with sleeve and long pants are required at all times.
 5. Employers shall select, provide and require employees to use appropriate arm protection when employee's arms are exposed to severe cuts, lacerations, abrasions or punctures. All cut resistant sleeves shall have minimum ASTM/ISEA/ANSI Level 4 cut resistance and are required during all demolition, cold-formed metal framing, MEP in-wall metal stud rough-in, above ceiling work and sheet metal activities unless the pre-task plan indicates these hazards are not present for a specific task.
 6. ANSI Class II vest or ANSI Class II compliant apparel is required to be worn at all times within construction areas.
 7. Safety-toe footwear meeting ASTM F2413-11 (Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear) must be worn at all times while in construction areas.
 8. Wearable devices may be deployed and required as a part of each worker's Personal Protective Equipment on this project.
 9. No televisions, radios, CD players, cassette tape players or personal audio/video systems (e.g. iPod, Cell Phone, MP3 players, etc.) are allowed.
- y. Powder-Actuated Tools:
1. Powder Actuated tools using lead-free primers are preferred (e.g. Hilti CleanTec).
 2. Use of gas powered or pneumatic tools or CO2-powered nailers are also preferred.
 3. If lead-containing primers are used, then the contractor must comply with all provisions of OSHA's Lead in Construction Standard (1926.62) including but not limited to conducting Exposure Assessments, Lead training, PPE selection, medical surveillance, etc. In addition, the contractor shall control any lead exposures to other contractors. Contractor shall provide all applicable documentation to Gilbane for review and approval before using.
- z. Precast/ Prestressed Concrete:
1. A Preconstruction meeting is required between Gilbane, Fabricator and Erector.
 2. A written erection plan must be submitted to Gilbane.
 3. Any modifications to approved erection plan must be approved by the Gilbane Project Manager and/or Gilbane Superintendent.
 4. Fall Protection for all employees engaged in work with a fall exposure of 6 feet or greater above a lower level shall be either a guardrail system, a safety net system or personal fall arrest system. The use of "Safety Monitoring" and "Warning Line System" and "Controlled Access Zones" are not permitted. Refer to Section on Fall Protection in this document for additional requirements.
- aa. Protection of the Public:
1. Projects must be enclosed by a temporary 6-foot fence.
 2. All visitors must sign a hold-harmless agreement before touring the site.
- ab. Scaffolds and lifts:
1. Proof of competent person training is required.
 2. Narrow-frame scaffolding (e.g. Baker Scaffolding) – fall protection, such as guardrails, is required when the working surface is 4 feet above the floor. Outriggers are required when the working surface is 5 feet above the floor.
 3. Scaffolds shall be inspected daily by the contractor's competent person. Tags shall be attached to the leg of the scaffold that bears the inspection date, time and inspector's signature denoting inspection.

4. Scaffold X-bracing shall not be used as a guardrail.
 5. Ladder jack scaffolds are not permitted on Gilbane jobs.
 6. Dressed/ nominal grade lumber is not permitted as scaffold planks.
 7. All individuals who are in scissor lifts shall wear a full body harness and be tied off to a manufacturer's approved anchorage point within the scissor lift.
 8. A mast climbing elevating work platform that may be adjustable by manual or powered means must meet the requirements of ANSI Standard ANSI/SIA A92.9-2011, American National Standard for Mast-Climbing Work Platforms and be accessible by a stair system.
 9. Aerial Work Platforms and Elevated Work Platforms shall be properly fitted with appropriate primary or secondary guarding devices in an effort to eliminate operator crushing incidents.
 10. Operators must use engineered lift systems if the equipment will be used for hoisting work equipment (glass, dens glass, etc. must have engineered attachments).
- ac. Steel Erection:
1. An erection plan will be prepared by the Steel Erector's Qualified Person and reviewed with the Gilbane Project Safety Manager and Gilbane Project Superintendent prior to start of work. Refer to OSHA 1926, Subpart R, Appendix A.
 2. A tag line shall be used to control all loads.
 3. Crane personnel platforms will not be used for any purpose without the written approval of Gilbane Division Safety Director.
 4. Christmas treeing (multiple lifts) is not allowed, unless exception approved by Gilbane Division Safety Director.
- ad. Stretch and Flex Program:
1. Each Contractor shall design and implement a daily stretch and flex program on site for their employees with the goal of reducing soft tissue and musculoskeletal injuries.
 2. The stretch and flex program start time and location will be determined by Gilbane.
- ae. Substance Abuse policy:
1. Each employer must comply with the drug testing program as outlined in the project safety plan.
- af. Temporary Heat:
1. No Kerosene, oil fueled, solid fuel burning or convection heaters (a.k.a. 'Pot' heaters) are permitted.
 2. Only gas fired (propane vapor or natural gas), hydronic, steam, electric or infrared heaters are permitted, based on the application and use.
 3. Gas heaters must conform to the specifications
 1. Direct Fired heaters shall conform to ANSI Z 83.7 or Z 83.4
 2. Indirect Fired heaters shall conform to ANSI Z 83.8
 3. Infrared heaters shall conform to ANSI Z 83.6
 4. All flexible connectors must be UL approved and conform to specifications L -83.
 4. All heaters shall be designed, installed and maintained in accordance with applicable OSHA, ANSI, UL, NFPA, NEC, and local codes and approved by the Authority Having Jurisdiction and/or local fire dept. officials. All heaters to be AGA certified.
 5. Heater supplier and Contractor may be required to provide their Construction Heating Plan to the Gilbane Project Manager and/or Division Safety Director for review and approval.
 6. Whenever heaters are operating during non-working hours, the Contractor may be required by the client, local fire officials, or Gilbane to provide a qualified person to monitor and maintain the heaters. In such cases, the qualified person shall be trained in the safe operation of the heaters.
 7. Each heating appliance is to be inspected by a qualified person, at least at the beginning and end of each working day.
 8. Contractor shall monitor carbon monoxide levels when operating heaters indoors or within temporary enclosures and report results to Gilbane.
- ag. Welding:
1. Cylinders containing oxygen or acetylene or other fuel gas that are not in use shall be stored in designated areas outside the structure as approved by Gilbane.
 2. Flashback arrestors are required on oxygen and acetylene hoses at the regulators.
 3. Hard hats or helmets meeting ANSI Z89.1 must be worn at ALL times while welding.

3. Management Statement of Final Authority

- a. All persons who come into the work area for any reason during construction will be required to comply with the established safety regulations that govern the project.
- b. Contractors are committed by contract to observe and comply with all applicable safety regulations and procedures. Each Contractor will participate in the Project Safety Program, hereafter referred to as the "Program".
- c. If Gilbane finds Contractor areas of work or individuals being, or acting in noncompliance with OSHA regulations or any other applicable regulations, Gilbane shall have the authority to order immediate correction and cessation of the non-compliant occurrence. **Non-compliance with Project Safety Regulations will be grounds for Contractor dismissal and/or employee(s) being forbidden entry onto the project.** All costs of correction shall be borne by the Contractor deemed responsible. **Gilbane's decision of responsibility shall be final.**
- d. Nothing contained herein, however, shall serve to relieve the Contractor of their liabilities and/or obligations under the Federal OSH Act and all additions and revisions thereto, as well as all other applicable Federal, State and Local requirements.
- e. The most stringent regulation shall apply if a conflict arises in the interpretation of the safety requirements of Gilbane, or the Federal, State or local Government.

C. Responsibilities

1. Construction Manager – Gilbane

- a. Audit activities of the Trade Contractor's safety program so that it conforms to the Safety Program.
- b. Provide weekly, written site inspections of the job site, notify the Trade Contractors of any unsafe practices and conditions for which they are responsible and counsel them on the appropriate corrective actions when necessary. Site inspections and corrective measures shall be reviewed and discussed with the construction team to eliminate unsafe practices and conditions. Please see the "Inspection & Auditing" section of this document for details.
- c. Provide all new Trade Contractors and their subcontractor's employees with a Gilbane safety orientation before they start working on site. The orientation shall include at least a list of work rules, identification of hazardous areas, and the location of SDS sheets. This orientation will inform the Trade Contractor's/ subcontractor's employees of hazards specific to the Owner's on-site operations. After the orientation is complete, employees shall be required to sign a statement and complete an exam to confirm that they received and understood the training.
- d. Identify the location where SDS sheets provided from the Trade Contractors/ subcontractors can be found for the project.
- e. Maintain required records and accident prevention materials at the job site so that an adequate history is maintained for the project.
- f. Control the entrance and exit of the Trade Contractor's/subcontractor's employees and visitors to and from the job site.
- g. Review the Trade Contractors' prior injury and illness log before awarding them work on site. Trade Contractors with poor safety records may be disqualified from being awarded work on this project.
- h. Review injury and near miss records during the project to identify trends to take positive action to reduce or eliminate such incidents from continuing to occur on the project.
- i. The Construction Manager will examine and familiarize himself/herself with the job site and adjacent areas from the standpoint of access and facilities regarding safety. The job site should be explored regarding installing and operating the construction plan, and evaluating any difficulties that might be encountered in complete execution of the work safely.
- j. The Construction Manager shall immediately investigate all accidents or near miss accidents and take corrective actions to help prevent reoccurrence.
- k. Specific Responsibilities
 1. Gilbane Project Manager
 - i. The Project Manager directs and administers the Safety Program on this Project. All reports, surveys, accident reports and other information relating to safety are to be submitted to the Project Manager.
 - ii. The Project Manager shall establish a safety organization to assure the involvement of all personnel in the safety effort and to provide for their participation. The Project Manager appoints the Project Superintendent as their representative to monitor all safety activities on the site. The Project Manager evaluates individual subcontractor's safety performance for compliance with all applicable Federal, State, local, Gilbane's and the Owner's safety requirements.
 2. Gilbane Superintendent
 - i. The Superintendent is responsible for the active control of the Project Safety Plan.
 - ii. The Superintendent is responsible for planning and requiring all work to be done in compliance with the Project Safety Plan.
 - iii. Weekly inspections relating to safety shall be made and documented.

2. Contractors

- a. Contractors are responsible for carrying out the procedures required by their Safety Program and the Gilbane Project Safety Plan.
- b. Compliance with Federal, State, Local Laws and regulations is the contractual obligation of Contractors working on this project. Conflicts between current laws or contractual requirements shall be resolved by adhering to the more stringent requirement. Any project site safety regulations which exceed the minimum standards established by OSHA shall be incorporated in contractor's safety program.
- c. If Contractor fails to correct safety violations, Gilbane will issue the Contractor written notification outlining safety violations. Failure of the contractor to abate may result in the removal of the Contractor from the project site; Gilbane's approved bidders' list or other appropriate measures.
- d. Site safety inspections are to be an ongoing process and documented at least weekly. Contractors shall submit to Gilbane.
- e. The Contractor is responsible for conforming to OSHA and NFPA standards of fire protection and prevention practices. Contractor shall also comply with all fire and safety rules and regulations established on the project.
- f. Accidents:
 1. Immediately report all accidents in which personal injury, property damage or a near-hit occurs.
 2. Contractors shall submit near-miss and accident reports on required forms.
 3. Contractor shall assist Gilbane in accident investigations.
 4. Lessons learned from such investigations shall be incorporated into all future daily activities and plans of the contractor.
 5. Should a Significant Near Miss, Recordable or Lost Time accident occur involving a Contractor's employee, the Principal/Owner of the Contractor shall attend a "Principals" meeting at the project location to review the incident. Gilbane will conduct this meeting.
- g. The Contractor shall ensure that its supervisors are aware of their responsibilities, which include:
 1. Attend and participate in all supervisors' safety meetings, pre-construction, kick-off, and regularly scheduled meetings.
 2. Carrying out the procedures required by the Safety Plan.
 3. Ensure that each employee under their supervision has received the initial project safety orientation provided by Gilbane.
 4. Conduct or arrange for weekly "toolbox" safety meetings for all employees under their supervision as required. Minutes of Tool Box

- Talks are to be maintained and a copy of each Talk is to be given to Gilbane before end-of -shift the day given.
5. Become familiar with the requirements of all accident prevention standards and safety rules pertaining to their job.
 6. Explain to all employees applicable safe practice rules and regulations under their direct supervision.
 - a. In the event a contractor utilizes employees whose primary language is not English, the contractor shall provide for appropriate interpretation to assure complete comprehension.
 7. Supervise the instruction and training of new employees either personally or through delegated experienced persons until the new employee satisfactorily demonstrates their ability to perform the work in a safe and efficient manner.
 8. Be responsible for continuous housekeeping in their area and for the use and maintenance of all personal protective devices, equipment, and safeguards.
 9. Ensure that all hazards created in an area as a result of work activities are addressed before the crew leaves the area, including breaks or lunch.
 10. Report to their own direct supervisor all cases of employees who, in their opinion, are not qualified for the work to which they have been assigned or who engage in unsafe practices.
 11. Notify their direct supervisor and/or the contractor's safety representative concerning work areas where they believe protective devices are required.
 - a. NOTE: Such safety devices will include, but not limited to, the following: machine guards, operational shields, exhaust vent hoods and systems, welding shields, approved personal protective equipment, automatic stops and controls, barricades, railings, etc.
- h. Required policies, programs and procedures:
1. Contractors are required to provide a site specific safety plan that is in compliance with all safety standards required by Gilbane Building Company, and the Federal, State and Local agencies prior to the commencement of work.
 2. Contractor is responsible for notifying Gilbane of any hazardous chemicals or substances that are brought or cause to have been brought on project site. Contractor shall provide Gilbane with a copy of Contractor's Hazardous Communication Program, Chemical information list, and Safety Data Sheet(s) (SDS) for the chemical(s) or substance(s) intended for use on the site. Gilbane will provide a centrally located place for this information. Contractor is responsible for maintaining a copy of Contractor's Hazard Communication Program, Chemical Information List, and Safety Data Sheet(s) on site for Contractor's own reference and employee training. The proper storage, use and disposal of wastes of any hazardous chemicals or substances are the responsibility of Contractor.
- i. Contractor's Safety Representatives: The name of and resume for each Contractor's project/site safety representative will be provided to Gilbane for review prior to the Contractor starting work at the project site.
1. Site Safety Representatives will be required based on assessment of risk by the Gilbane Division Safety Director. Unless otherwise specified, Contractors with a staff and crew of 20 or more on site shall appoint a full-time site safety representative. The candidates resume including all safety training completed must be submitted to Gilbane. The candidate may be interviewed before they will be accepted. The Site Safety Representatives shall have – at minimum - OSHA 30-hour training and first aid/CPR training. Additionally, the site safety representative must meet the requirements of a competent person in their discipline. Gilbane will have the right to reject a candidate based on qualifications. The site safety representative shall perform the following duties on a daily basis:
 - a. Lead stretch and flex.
 - b. Review STA and JHA for the day.
 - c. Identify competent persons.
 - d. Complete daily safety inspection.
 - e. Submit required permits.
 - f. Coach Foremen on STA delivery.
 - g. Manage SDS materials.
 - h. Attend weekly safety committee.
 - i. Complete orientations for new workers.
 - j. Provide appropriate interpretation for their workers whose primary language is not English.
 2. Critical Trades are required to provide a site safety representative regardless of crew size.
 3. Each safety representative shall participate in accident and incident investigation involving their work and employees and those of their subcontractors.
 4. Each safety representative has the right and authority to stop any and all hazardous work being performed by their employer whenever unsafe acts or conditions are found or imminent danger to life and health exists. They shall be empowered to take immediate action to eliminate unsafe acts and/or conditions.
 5. The site safety representative shall conduct regular and frequent inspections of their Contractor's areas.
 6. Each safety representative shall attend safety meetings scheduled by Gilbane.
 7. The safety representative shall have a minimum of an OSHA 30-hour construction certification; be certified as a competent person in the type of work being performed; First Aid and CPR certified; experienced in the construction industry in the type of work being performed. Copies of certifications will be on file in the construction office.
 8. Ensure that prior to the start of any work activity every foreman has reviewed each task assignment with every affected employee to assure a comprehensive understanding of the safety requirements and precautions to be taken while performing this work.
 9. Ensure that appropriate personal protective equipment is provided and its use enforced.
- j. Training, orientation and education requirements:
1. The Contractor shall instruct each employee on the project site in the recognition and avoidance of unsafe acts and/or conditions applicable to its work environment to control or eliminate injury or illness.
 2. All records of training, education and certification shall be maintained at a location accessible to Gilbane.
 3. Contractor Project Supervisors will be required to attend Gilbane's Supervisor Skills Workshop when offered. The training will consist of

two (2) – four (4) hour sessions and be taught by a designated Gilbane employee. This training is in support of Gilbane's goal of creating an incident and injury free culture on the jobsite.

4. In an effort to create an incident and injury free culture on the project, Gilbane may hold periodic Principals Meetings to discuss project safety with contractor principals. Project walkthroughs and worker feedback interviews will be part of these meetings. Contractor principal / owner attendance at these meetings is mandatory.
5. Short Service Worker (SSW) Program- New workers to a project are particularly at risk as they learn of their project work environment and project safety processes designed to support their safety. Therefore, Gilbane requires every worker on the project 30 days or less to participate in the SSW program. The program will be administered by the Contractor Supervisor Foreman and requires documented demonstration of project safety processes and safe behaviors by the worker at the end of 30 days to graduate from the program. Gilbane will provide details of the SSW Program for the Contractor Foreman to administer, and will monitor and assess program effectiveness.
- k. Job/Activity Hazard Analysis and Safety Task Assignment:
 1. A Job Hazard Analysis (JHA) is required for every discreet work operation that has potential hazards that must be controlled and managed. The JHA must be submitted to the Gilbane project team prior to the start of any operation.
 2. Each Contractor shall complete a Safety Task Assignment Process form each day for all work crews, discuss with each work crew on a daily basis or when non-routine tasks occur and provide a copy to Gilbane at the end of the work day with their daily report.
 3. Ensure that prior to the start of any work activity every Supervisor has reviewed each task assignment with every affected employee to assure a comprehensive understanding of the safety requirements and precautions to be taken while performing this work.
 4. Periodically analyze work methods in detail for the purpose of job simplification and for the establishment of safe work methods.
- l. Personal Protective Equipment:
 1. Contractor is responsible for providing and requiring the use of appropriate personal protective equipment in all operations where there is an exposure to hazardous conditions. All records shall be maintained at an accessible location.

3. Employees

- a. No employee shall be required or knowingly permitted to work in an unsafe environment except for the purpose of making safety corrections and then only after proper precautions have been taken for their protection.
- b. Each employee is responsible for learning and abiding by those rules and regulations which are applicable to the assigned tasks and for reporting observed or anticipated hazards to their immediate Supervisor. If the hazard is not immediately corrected, the affected employee will report the hazard to Gilbane.
- c. **All employees shall observe the following Rules of Conduct/Code of Safe Practices:**
 1. **Courtesy:** Employees shall observe standards of behavior and conduct their work in a manner to avoid offending any Owner employees, the public or visitors. ***Every individual on this Project must be given the courtesy that would be extended to one's family or best friend.***
 2. **Personal Protective Equipment:** All persons on the site will wear hard hats or helmets meeting ANSI Z89.1, eye protection meeting ANSI Z87, appropriate Cut level 4 gloves, ANSI Class II vest or ANSI Class II compliant apparel, and safety-toe footwear meeting ASTM F2413-11 with substantial soles. All other personal protective equipment, including respirators or eye protection, as appropriate to assigned tasks, shall be utilized in the proper manner at all times while there is exposure to the hazards.
 3. **Clothing:** Clothing suitable for the weather and your work shall be worn. Torn or loose clothing, cuffs or neckwear which may be a hazard are not allowed. Shirts must be worn and have sleeves. Pants must have legs (no shorts allowed). Clothing shall be maintained in a clean, neat and repaired fashion.
 4. **Vehicles:** Employees shall park their vehicles in designated areas. Operation of vehicles on the project site shall conform to all local traffic laws. The maximum speed limit on the project is ten (10) miles per hour.
 5. **Smoking: Smoking is permitted only in designated areas.**
 6. **Intoxicants:** Consumption of alcoholic beverages or controlled substances is not allowed on the project. All workers who are taking physician-prescribed or over-the-counter medication must be fit for work. ***All employees are specifically directed to the "Substance Abuse Policy" which is a part of this Safety Plan.***
 7. **Accidents:** All employees must immediately advise their Supervisor of any injury on the project or any non-injury accident which involves damage to property or equipment.
 8. **Personal Conduct:** Practical jokes, horseplay, scuffling, wrestling or fighting is prohibited.
 9. **Good Housekeeping:** Good housekeeping on the project is mandatory and every employee must do their part daily to minimize dust and to clean up their work area to keep the project clean for safety and efficiency. ***Controls shall be observed which keep dirt from being tracked into areas outside the work space.*** Clean up methods shall follow prescribed techniques to minimize the distribution of dust into the air.
 10. **Authorized Access:** Employees shall confine their activities to the areas designated at the work site. ***The employee's supervisor shall obtain permission from the appropriate Gilbane representative prior to entry into any areas outside the work site.***
 11. **Fire Protection:** Employees shall adhere to all fire protection regulations and shall conduct their work in a manner to prevent a fire.
 12. **Music:** No televisions, radios, CD players, cassette tape players or personal audio/video systems (e.g. iPod, MP3 players, etc.) are allowed.
 13. **Safety Orientation:** All employees must attend the Gilbane Safety Orientation before they can start work onsite. All employees must pass the quiz at the end of the orientation. Employees must read and understand the site safety rules and sign the Code of Safe Practices.

14. **Personal Safety Assessments (PSA):** To ensure that everyone who works on our project goes home safely each day, we expect that every worker will continually assess the hazards of their work tasks and environment, and take the necessary actions to avoid, report, prevent or correct the hazard. In support of this, Gilbane will require everyone adopt the Personal Safety Assessment. Individual's PSA's will be discussed during project safety inspections and daily communications. Gilbane will provide information on the PSA process in Project Safety Orientation and via other safety communication methods on the project.

D. General Requirements

1. Accident Investigation

- a. Gilbane shall be notified immediately in case of injuries, fatalities, near misses, property damage, environmental spills, bomb threats, or public demonstrations. ALL accident reports must be filed immediately with Gilbane.
- b. It will be each Contractor's responsibility to complete the First Report of Injury for their employees and to transmit copies of these reports to Gilbane within 24 hours.
- c. Any accident or incident resulting in a lost-time injury, fatality, damage to property or equipment exceeding U.S. \$1,000, a significant "near-miss" or the recognition of a potential hazard to health and environment is to be investigated by a committee comprised of the following: the Project Superintendent, the Gilbane Project Safety Coordinator and Contractor's Supervisor or anyone familiar with the practices involved in the incident who can contribute to its analysis and make recommendations for action to prevent a reoccurrence. The investigation shall begin promptly after the incident. Results of the investigation and recommendations for preventive action shall be documented within five (5) work days of the incident. A principal's meeting will be required for such accidents.
- d. Gilbane shall review first aid injuries to establish trends and practices that deviate from work standards and shall report and take corrective actions.

2. Accident Reporting Procedures

- a. For all fatalities, cases requiring hospitalization, OSHA recordable events or possible lost-time injuries, Gilbane is to be notified immediately. Gilbane will immediately notify the Insurance Carrier's Claim Representative of all accidents and will immediately forward Employer's First Report of Injury Forms, General Liability Loss Notice Forms, subsequent inquiries or correspondence received relative to the matter, including Court Summons or other legal documents, to the Claim Representative with copies to the Gilbane Corporate Attorney. Copies of ALL accident reports must be filed with the Gilbane Project Manager immediately.

3. Blood Borne Pathogens

- a. OSHA (29 CFR 1910.1030) requires that each employee exposed to blood and other infectious materials be advised of the potential Blood-borne pathogen hazards and how to guard against those hazards. Each contractor, and each sub-contractor, whose employees are occupationally exposed to blood and other potentially infectious materials (including all body fluids in situations where it is difficult or impossible to differentiate between body fluids, etc.) must develop a list of all such tasks on the project; instruct the employees in the potential risks involved; develop a labeling system for all infectious materials; train all potentially exposed personnel in the hazards and the proper controls for all listed tasks; provide safety materials and equipment; and offer appropriate medical treatment and advice for any exposure. These steps are outlined in detail in the following material. Employee training for this requirement will be documented and acknowledged by signatures following each session using the documentation statement included in this Blood-borne Pathogen Safety Program.
- b. **Exposure Control Plan**
 1. Every contractor will be responsible for development and maintenance of a list of tasks within the project operations which involve occupational exposure to blood and other infectious materials. Each contractor will be further responsible for training their employees, obtaining medical services for their employees, and maintaining medical records for their employees assigned to all such hazardous tasks. One copy of the list identifying the hazardous tasks and of each employee assigned to perform those tasks will be forwarded to Gilbane.
 2. Employees will be allowed access to this Blood-borne Pathogen Safety Program and to information regarding those specific tasks in their work areas identified as involving exposure to blood and other infectious materials. All questions relating to the contractor's program should be directed to the contractor's superintendent or safety officer. All questions relating to the Project Safety Plan are to be directed to Gilbane.
- c. **Employee Information and Training**
 1. All new and present employees will be given information regarding the requirements of this Blood-borne Pathogens Safety Program; the hazardous tasks present in their work place; and the potential health risks of these tasks. This requirement must be met through orientation sessions for all employees prior to assignment to the specifically identified hazardous tasks, and through annual refresher courses for all employees currently performing those tasks. The information and training shall include the following elements:
 2. The risks and symptoms of exposure to Blood-borne pathogens shall be identified.
 3. How to determine the presence of blood or other infectious materials in the work place.
 4. Methods to be used to reduce or prevent the exposure to blood and other infectious materials, such as control procedures, work practices, or personal protective equipment.
 5. Procedures to follow in the event of an exposure to blood or other infectious materials.

6. Identification of the log maintained in the project office in which is listed all tasks involving occupational exposure to blood and other infectious materials on the site.
7. How to review tasks to minimize the potential hazards of infection.
8. When a task involves the handling of blood and other infectious materials, how those materials are to be contained, labeled and properly disposed.
9. The necessity for proper housekeeping and personal hygiene techniques including handwashing shall be emphasized.
10. Employees must have the opportunity to ask questions and obtain answers from the trainer who must be knowledgeable in the subject matter.

d. Container Labeling and Disposal

1. The Contractor and Gilbane will verify that all containers used to store or transport blood and other infectious materials generated at the site are clearly labeled with warning labels which include the orange or orange-red biohazard symbol. Labels shall indicate the contents, the hazards involved, and the name and address of the project. Red bags or containers may be used instead of labeling, but the management of these receptacles shall be controlled by employees specifically trained in this program. The Contractor and Gilbane will ensure that all secondary containers of the blood and other infectious materials have clear warning labels with the same information as the original container. Each contractor's superintendent, or safety representative if one is assigned, shall perform the above responsibilities for all their materials generated.
2. All containers of blood and other infectious materials shall be controlled until delivered to an authorized disposal facility for incineration or decontamination by legally approved means. Arrangements may be made with a local hospital to receive and dispose of limited quantities of these regulated wastes in cases of first-aid treatment. Each contractor shall be responsible for proper disposal of all regulated wastes generated by their work.

e. Hazardous Non-Routine Tasks and Nearby Work

1. In the event an employee is assigned to perform a non-routine task, or is assigned to work in an area where a hazardous task non-routine to their work, is being performed, the employee will be given the additional information and training related to the hazards which may be encountered in the non-routine task. This information and training will be provided as described elsewhere in this program by the first-line foreman, contractor safety representative or a trainer who must be knowledgeable in this subject. The information will include the specific hazards of the task, the controls and protective measures required the types of personal protective equipment required, how to use the equipment, the nature of other work being performed in or near the non-routine task, and what emergency procedures are involved with the task.

f. Universal Precautions

1. To ensure that employees who work on tasks presenting an exposure to blood and other infectious materials are afforded the greatest protection available, the following policy has been established:
2. Prior to starting work on any task involving blood and other infectious materials, all employees will review safety precautions which should be taken. Universal precautions shall be observed which means treating all blood and other potentially infectious materials as if infectious. Particular attention shall be given to contaminated sharp objects which may penetrate the skin including, but not limited to, needles, broken glass, and exposed ends of wires.
3. Work practices and engineering controls shall be followed diligently including the provision and use of the following:
4. Gloves, latex.
5. Masks and eye protection.
6. Resuscitation bags and mouthpieces.
7. Gowns, aprons or specialized clothing where required by established engineering practices.
8. Hand-washing facilities, and other decontamination where required by established engineering practices.
9. Decontamination of personal protective items shall be conducted by trained personnel following approved procedures. Disposable items shall be discarded into red bags or properly labeled containers and delivered for disposal as required elsewhere in this program. Items which are reusable and any work areas which were contaminated by blood and other infectious materials shall be cleaned and disinfected with a solution containing a strong concentration of chlorine bleach.

g. Audit and Review

1. It will be the responsibility of Gilbane to review the entire Blood-borne Pathogen Safety Program at least annually, and revise and update the material contained herein to reflect all changes in the management, disposal, storage, and handling of blood and other infectious materials generated at the project site. It will be the further responsibility of Gilbane, to periodically audit procedures in use on tasks identified as exposing employees to blood and other infectious materials in order that they meet the requirements as set forth in the OSHA 1910.1030 standards. Each contractor's superintendent or safety representative shall perform the above responsibilities for all their tasks and procedures.

h. Hepatitis B Vaccination

1. Hepatitis B vaccinations shall be made available to all employees who have occupational exposure to blood within ten (10) working days of assignment, at no cost, at a reasonable time and place, under the supervision of a licensed physician or health care professional and according to the latest recommendations of the U.S. Public Health Service (USPHS). Prescreening may not be required as a condition of receiving the vaccine. Employees must sign a declination form if they choose not to be vaccinated, but may later opt to receive the vaccine at no cost to the employee. Should booster doses later be recommended by the USPHS, they must be offered to the employees.

i. Post-Exposure Evaluation and Follow-Up

1. OSHA standard 1910.1030 specifies detailed procedures to be made available to all employees who have had an exposure incident. These procedures and any laboratory tests must be conducted by an accredited laboratory at no cost to the employee. Follow-up procedures must include a confidential medical evaluation documenting the circumstances of exposure, identifying and testing the

source individual if feasible, testing the exposed employee's blood with the employee's consent, post-exposure prophylaxis, counseling and evaluation of reported illnesses. Health care professionals must be provided specific information to facilitate the evaluation and their written opinion on the need for hepatitis B vaccination following the exposure. Information such as the employee's ability to receive the hepatitis B vaccine must be supplied to the employer. All diagnoses must remain confidential.

j. Recordkeeping

1. Medical records shall be maintained on each employee, with occupational exposure to blood and other infectious materials, for the duration of employment plus thirty (30) years. Medical records must be made available to the subject employee, anyone with written consent of the employee, OSHA and NIOSH. Medical records are not available to the employer. Disposal of medical records must be in accord with OSHA's standard covering access to records. These employee medical records must be confidential and must include the following information:
2. Employee's name and social security number.
3. Hepatitis B vaccination status, including dates.
4. Results of any examinations, medical testing and follow-up procedures.
5. Copy of the health care professional's written opinion.
6. Copy of the information provided to the health care professional.
7. Training records shall be maintained for a period of three years and must include the dates, contents of the training program or summary, trainer's name and qualifications, names and job titles of all persons attending the sessions.

4. Concrete (Cast-in-Place)

- a. All equipment and materials used in concrete construction and masonry work shall meet the applicable requirements as prescribed in ANSI A10.9 most recent version, "Safety Requirements for Concrete Construction and Masonry Work."
- b. All work where exposure to respirable crystalline silica dust is possible will be done in accordance with "Environmental – Silica" of this Safety Plan and will also meet the requirements of the OSHA construction standard on silica (29 CFR 1926.1153).
- c. Please reference the fall protection section of the Safety Plan.

5. Confined Space Entry

- a. Contractor shall develop an entry procedure and written plan to be used when Contractor's employees are required to enter confined areas or spaces. Confined Space entry procedures will conform to all applicable OSHA standards and/or the owner's requirements, whichever are most stringent and approved by Gilbane.
- b. Documentation of appropriate formal training for all involved in the confined space activity (entrants, attendants, supervisor, and rescue personnel) shall be submitted to Gilbane for approval prior to any entry.
- c. Rescue team identification and availability must be confirmed by the exposing contractor and those rescue procedures and provisions included in the plan.
- d. A confined space entry permit must be completed and posted at the entrance to the confined area. See Appendix for a sample Confined Space Permit.

6. Crane Safety

a. General Requirements

1. The contractor shall conform to the more stringent of Federal, State, local, client or Gilbane safety policy. Copies of certifications will be on file in the construction office.
2. Contractors whose activities require the use of cranes shall be responsible for their proper set up and operation and shall advise Gilbane prior to the arrival on-site. The Gilbane Crane Use Plan and Permit shall be used (refer to Appendix).
3. The contractor shall supply Gilbane with documented evidence of their competent person's training, and of their 'qualified persons', as required by 1926.1404, 1926.1427, 1926.1428, and where specified in 1926.1400, including the Operators, Riggers, Signal Persons, and 'Assembly/Disassembly Director'.
4. The Assembly/Disassembly Director shall be responsible to ensure that all provisions of safety as specified in 1926.1404 are met including but not limited to: adequate site and ground bearing conditions, proper blocking and cribbing, knowing load weights and center of gravity, equipment capacity, support of booms and counterweights, rigging of boom and suspension systems, determination of safe wind speeds, etc.
5. No work shall proceed without evidence of a current annual inspection meeting Gilbane requirements. No claims will be accepted for losses sustained by the contractor for delays caused by failure to comply with these requirements.

b. Inspection

1. A new independent third-party inspection is required pre- and post-assembly in the configuration that the crane will be used, after severe weather and after adjustment or repair, for each piece of equipment. Severe weather includes hurricane, tornado and/or earthquake.
2. Contractors shall provide Gilbane evidence of annual inspection by a third-party inspection agency not under the control or ownership of the crane owner and approved by the Gilbane Division Safety Director.
3. All repairs and adjustments noted on the inspection shall be corrected prior to next use. 'Temporary alternative measures' for safety devices or operational aids as specified within Federal or State OSHA regulations will not be accepted.

4. At least every 12 months, or if the crane or its associated rigging has sustained any incident which may have resulted in damage, in cases of severe weather, or after if any repair or modification the crane and its associated rigging shall be fully re-inspected by a qualified person in accordance with OSHA regulations, with proof of inspection provided to Gilbane. This certification will be for each crane and lifting device and associated rigging equipment brought onto the site.
5. Documented inspections shall be performed by a qualified person designated by the contractor in accordance with 1926.1412, 1926.1413 and the manufacturer's recommendation and ANSI B30 Standard for the type of crane being inspected and the most current version. This inspection shall be completed prior to each shift starting work, and when equipment is modified, repaired or adjusted, post assembly, monthly, annually and in conditions of severe service. Evidence of documented inspections shall be made available to Gilbane.
6. The inspection requirements apply to power-operated equipment used in construction that can hoist, lower and horizontally move a suspended load as specified in 1926.1400. Such equipment includes, but is not limited to: articulating cranes (such as knuckle-boom cranes); crawler cranes; floating cranes; cranes on barges; locomotive cranes; mobile cranes (such as wheel-mounted, rough-terrain, all-terrain, commercial truck-mounted, and boom truck cranes); multi-purpose machines when configured to hoist and lower (by means of a winch or hook) and horizontally move a suspended load; industrial cranes (such as carry-deck cranes); dedicated pile drivers; service/mechanic trucks with a hoisting device; a crane on a monorail; tower cranes (such as fixed jib "hammerhead boom", luffing boom and self-erecting); pedestal cranes; portal cranes; overhead and gantry cranes; straddle cranes; side-boom tractors; derricks; and variations of such equipment.

c. Operation

1. Operational Aids, including but not limited to: boom hoist limiting device, boom angle indicator, load radius indicator, luffing jib limiting device, anti-tube-locking device, load weighing device (such as a load moment indicator), and outrigger stabilizer position monitor must be in proper working order. Temporary alternative measures for safety devices or operational aids are not permitted to be used.
2. Safety devices - including but not limited to: crane level indicator, boom and jib stops, foot pedal locks, check valves on hydraulic outrigger and stabilizer jacks, horns and anemometer must be in proper working order before equipment operations can begin. Completion of a lift plan is required for each load. Temporary alternative measures are not permitted to be used.
3. A maximum wind speed for crane operations during the project shall be determined and agreed to by all parties prior to any crane use. Continued operation during winds exceeding 20 mph shall be reviewed.
4. When lightning is observed, or thunder heard, all crane and lifting operations shall stop. Gilbane shall make the determination with the contractor's competent person, as to the proximity of the operation being performed. When lightning is 10 miles away or less, work must stop for 30 minutes after the last audible thunder or visible flash of lightning, unless work is being conducted inside a "Safe Building". A Safe Building standards include: enclosed roof, exterior walls, concrete floor, permanent or plastic sealed windows, permanent or temporary doors on the exterior and no standing water within the work area. Contractor shall plan work activities according to the latest weather forecast and be prepared to stop operations until such weather has safely passed.

d. Operator

1. The crane operator(s) shall be proficient in the operation of the crane(s) and licensed in the State/City where the operation is being performed, or certified by an accredited crane operator testing organization, such as the National Commission for the Certification of Crane Operators (NCCO), or by an audited employer program developed by an accredited crane operator testing organization and audited by a third party qualified auditor.

e. Power line safety

1. Crane and rigging operations are not permitted within 20 ft. of power lines unless the power lines are de-energized and confirmed by a qualified utility company representative.
2. Where encroachment is required within 20 ft. from power lines, a planning meeting shall be conducted with the assembly/disassembly director, operator, utility agency, crew and other workers in the area to review steps to prevent encroachment, in accordance with 1926.1408, Table A.
3. Tag lines must be non-conductive.
4. Dedicated spotters shall be used.
5. Proximity alarms or range control warning device shall be used.

f. Special procedures

1. A Crane Lift Plan and Permit shall be developed by the Contractor's qualified person and overseen by the Contractor's qualified and competent assembly/disassembly director for the following and submitted to Gilbane prior to the lift taking place:
 - i. A Critical Lift. Critical lifts are defined as lifting a load when the weights are at or over 75% of the rated capacity of the crane and rigging as determined by the manufacturer.
 - ii. Multi-Crane Lifts.
 - iii. 100 Tons or greater Lift.
 - iv. Any application that deviates from the manufacturers recommendations.
 - v. When special/unique hazards are under/adjacent to the load at any time during the lift.
 - vi. When Gilbane determines such a procedure is necessary.
2. The lift procedure will include a Job Hazard Analysis developed by the Contractor and submitted to Gilbane along with Pre-Lift meetings which shall be held at 30 days prior to the lift, the day prior to the lift and immediately prior to the lift with the actual workforce doing the lift. All concerned parties must be present for the meetings with minutes of the meeting recorded by Gilbane.
3. The lift procedure will include documentation of calculations which incorporates weight of all material and all rigging equipment, a load chart for the crane(s) that will be used, a site plan and layout sheet which will include the path of travel of the load, swing radius protection and any other necessary factors.
4. The Gilbane Crane Lift Plan/ Crane Critical Lift checklist, or equivalent shall be used (See Appendix).

g. Record keeping

1. All records pertaining to crane inspections shall be kept with the crane or in the trade contractor's site field office in accordance with applicable OSHA regulations.
2. If during any safety inspection, the operator or supervisor cannot produce the required crane inspection sheets, the crane shall be shut down as soon as possible and shall be inspected.
3. Where crane operators are required to be licensed by the State where the project is being built, they shall have a current license and provide a copy to Gilbane when requested. Duplicates of Certification records shall be maintained on project site by Contractor and made available to Gilbane upon request. Evidence of competency of the operator shall be provided by the contractor to Gilbane.

h. Rigging

1. Only qualified riggers shall perform rigging operations.
2. A Competent Person appointed by the Contractor shall inspect all rigging equipment. Inspection shall be done and documented prior to each shift starting work, monthly and annually in accordance with 1926.1413.
3. If there are any deficiencies in rigging equipment, the equipment shall be immediately removed from service and the project site or destroyed.
4. Tag lines shall be used on all loads.
5. Wire rope slings shall bear a legible manufacturers capacity tag.
6. Shake-out/sorting style hooks shall only be used to shake out steel once it has been unloaded and may not be used for overhead lifting.

i. Signals

1. The contractor shall appoint a qualified and trained signal person that meets the definition of 1926.1428 and 1926.1430.
2. When hand signals are used, only the standard method for signals shall be used 1926.1400 Appendix A.
3. **Operator and signal person shall meet prior to hoisting lifts to confirm understanding of signals.**

7. Cranes - Tower

a. Tower Crane Erection and Dismantling Safety Coordination Meeting

1. Tower Crane Safety Coordination Meeting - Prior to the planned erecting, dismantling or jumping of tower cranes, a 'Safety Coordination Meeting' shall be conducted with Gilbane and the following stakeholders as applicable:
 - i. General Contractor Superintendent / Designee;
 - ii. Subcontractor providing, leasing or using the crane;
 - iii. Independent third-party Crane Inspector;
 - iv. Crane Operator and Oiler;
 - v. Lead Tower Rigger and Rigging Crew – if available;
 - vi. Jumping Crew Foreman and backup personnel – if available;
 - vii. Professional Engineer of Record for the Crane/ Designee;
 - viii. Crane Site Safety Coordinator;
 - ix. Site Safety Manager;
 - x. Flagmen/Communications Personnel;
 - xi. All Other Personnel Taking Part in the Operation;
 - xii. State or local regulatory agency representative if applicable.
2. The following topics are to be covered during the Tower Crane Safety Coordination meeting:
 - i. A written job plan which describes the intended operation of the subject crane including specific uses of the crane and the nature and weight of anticipated loads (Scope and sequence of work);
 - ii. The Plan for Erection, Dismantling, Raising & Lowering of the Tower Crane;
 - iii. Tower Crane Site Logistics Plan;
 - iv. Roles and responsibilities; Required Licenses and certifications;
 - a. Qualifications and training of personnel;
 - b. Operators shall have a current applicable state hoisting license. Where no applicable state hoisting license is applicable, the operator shall hold a current certification by NCCCO as a certified tower crane operator. Written statement of each crane operator's experience and qualification to operate the type of tower crane utilized shall be included with the copy of applicable state-issued license or NCCCO certificate available on site. The certification shall be current to within one year of the operation period of the crane on the project
 - c. Riggers who rig or connect loads lifted by a tower crane shall be qualified to ANSI A10.42 or hold a current certificate by NCCCO as a certified rigger. The certification shall be current to within one year of the operation period of the crane on the project
 - d. Signalpersons who provide hand or verbal signals to a tower crane shall be qualified and trained, or hold a current certificate by NCCCO as a certified signalperson. The certification shall be current to within one year of the operation period of the crane on the project
 - v. Documentation of compliance with FAA and other state and local permits as applicable;
 - vi. All engineered drawings, certifications and specifications (including foundation designs and structural bracing design and installation and crane mat engineered design drawings);
 - vii. Plan for tower cranes during inclement weather, including relevant weather warnings and compliance with manufacturer's manual (including maximum recommended wind speeds for erection/dismantling, and anemometer equipment/location);
 - viii. Communications systems;

- ix. Self-rescue devices for the operator;
- x. All loads and lifting components and capabilities;
- xi. Written crane inspection program containing inspection responsibilities of supervisors, inspection schedule/intervals and a listing of all equipment to be inspected including but not limited to: collars, ties, and bolts;
 - a. Crane Installation inspection – A third-party, independent tower crane inspector shall inspect all tower crane components upon arrival to the project and ensure they were not damaged during transport. Once fully erected, the third-party crane inspector for the crane must provide Gilbane with a certified and signed report stating that he/she has inspected the crane installation. This certified report must verify that the crane is installed in accordance with plans filed with Gilbane and the city or state where applicable, and that the third-party crane inspector for the crane has reviewed the appropriate technical testing records, including torque, plumb, and magnetic particle reports for the crane. Every three (3) months, the crane shall be inspected by a qualified third-party, independent crane inspector;
 - b. Written crane maintenance and preventative maintenance program;
 - c. A written testing schedule (in accordance with manufacturers requirements and ANSI B30.3) for functional motions, limiting devices and brakes, including, but not limited to: load hoisting and lowering, boom hoisting, lowering and traversing the trolley, swing motion, brakes and clutches, and limit, locking and safety devices;
- xii. Safety meeting intervals, who will conduct meetings and what general and specific topics will be discussed.

b. The Plan for Erection, Dismantling, Raising & Lowering of the Tower Crane shall include:

1. The engineer of record for the crane must submit written plans and specifications to Gilbane and the applicable state or federal agency that detail the erection, jumping and dismantling procedure for the crane that is to be erected, jumped or dismantled at the site. These plans must be prepared by the licensed engineer and in conjunction with the licensed rigger and must be received prior to the safety coordination meeting.
2. A site-specific Job Hazards Analysis describing the steps involved in tower crane erection, jumping, dismantling and operation, the related hazards, and the controls to be implemented to mitigate these hazards. The JHA shall also address protection from fall hazards to the erection crews and fall rescue;
3. The manufacturer's erection sequence for counter-jib, jib, counter-weight machine deck, and tower spire and procedures for installation of jib and counter-jib support pendants;
4. Verification by the crane employer that during the time periods of erection, climbing and dismantling of the tower crane, a qualified representative of the licensed crane certifier, or safety representative for the distributor or manufacturer will be present on site to assure that such processes and operations are performed in accordance with the manufacturer's recommendations and any applicable state and federal safety regulations;
5. Verification that – before each climb – the following have been performed:
 - i. Inspection of the load-bearing members of the climbing and support system;
 - ii. Balancing the crane per the manufacturer's instructions;
 - iii. Inspection of the crane to determine that there are not obstructions to the free movement of the mast (tower).
6. Verification that no employees, other than those engaged in the erection, climbing or dismantling of the crane, are to be permitted in the area below the crane during erection, climbing and dismantling work. No other work shall be performed on the crane while these processes are taking place. The clear area below the crane shall be that open area below the current activity where employees are exposed to potential hazards within the maximum radius of the crane measured from its base;
7. Erection, climbing, jumping and dismantling shall be conducted during off-hours or on weekends when no other workers (other than those engaged in the activity) are present.
8. The type and calibration of torque wrenches and/or belt-stretchers and the procedure to be used for all tower sections and slew-ring bolts, including re-torqueing after final assembly;
9. A procedure for written verification of all slew-ring and tower section bolt torques to be maintained at the worksite or on the crane;
10. Climbing schedule;
11. Specifications of the assist/erection crane and rescue crane;
12. Rigging materials to be used (including softening material if nylon web slings used);
13. Inspection scope and frequency of all rigging equipment, materials and tools prior to erection, dismantling and raising/lowering;
14. Rigging diagrams, capacities and specific sequence of rigging operations;
15. Manufacturer's maximum recommended wind speeds for erection, jumping, dismantling and operation;

c. The Tower Crane Site Logistics Plan shall include:

1. A plan stamped by a Registered Professional Engineer detailing the tower crane supports, such as foundation, railway, floor support and tie-in collars, as well as soil stability and bearing capacity, reinforced steel design, foundation tower anchor placement and concrete specifications available on site;
2. Crane swing radius plans, including plans to ensure multiple tower cranes on site will not strike each other;
3. Site plans showing ground storage space for each component, including truck positioning and off-loading activities as well as pre-assembly work;
4. A description of the relationship of the crane at the maximum possible radius to the building under construction, including minimum clearances between the tower, counter-weights, jibs, and any other relevant moving parts of the crane to parts of the building, including thrust-outs, cornices, window bays, and any other fixed points;
5. A description of the maximum permissible radius and load ratings for the configuration and the building component weights to be lifted;
6. Description of the proximity of high voltage overhead power lines to the operating radius of the tower crane, and tower electrical grounding methods;
7. Communication plans for ground-crew, riggers, other crane operators and others on site;

8. Identification of each lift with respect to weight, the necessary mobile crane reach and rigging accessories required (refer to Gilbane Crane Lift Plan). A scale on site to verify the weights of each component is recommended;
9. Counter-weight specifications if they are prepared on site;
10. Safety, proximity and redundancy systems and limit switches to be installed;
11. Size of banners to be applied and 'wind sails.' only after consulting the manufacturer and the Engineer of Record;
12. Location and type of wind measuring devices;

d. Tower Crane Base Enclosure.

1. An 8-12' high plywood or anti-climb design fence must enclose the entire base of the tower crane and meet the following requirements:
 - i. Gaps of the enclosure to any other surface must not exceed 4"
 - ii. The enclosure must include one door to access the tower crane base
 - iii. The door must include a lock with two keys; one for the crane operator and one for Gilbane
 - iv. The Gilbane key must be kept in a secure location within the jobsite trailer or office; when missing, lost or stolen, the lock must be rekeyed
 - v. The Crane Operator must lock the base enclosure upon completion of their daily shift
 - vi. Gilbane will verify the crane enclosure is locked at the open and close of business
 - vii. Night and after-hours lighting must illuminate the interior and exterior of the tower crane base enclosure
 - viii. The enclosure must be provided and assembled by the subcontractor or vendor supplying the tower crane for the project
 - ix. The enclosure must be approved by the Professional Registered Engineer for the crane to ensure the enclosure does not interfere with the crane's operation
 - x. Installation of these security measures must occur within 48 hours of the tower crane erection.

e. Security System.

1. A security system plan must be developed by the project team in conjunction with the Corporate Security Director
2. The security system plan must include monitored, motion-activated cameras that, at a minimum, provide coverage of the site perimeter and the base of the crane, and are positioned in a location to detect an individual climbing the crane mast
3. The security system plan must then be sent to the Preferred Security Vendors for pricing through the Supply Chain Department.
4. Installation of these security measures must occur within 48 hours of the tower crane erection.

f. Perimeter Signage.

1. Signage must be attached to the perimeter fence near all gates, at every change of direction and approximately every 100 feet along the fence perimeter indicating the following: No Trespassing, Violators Will be Prosecuted, Monitored by Video Surveillance.
2. Installation of these security measures must occur within 48 hours of the tower crane erection.

g. Inspections and Testing.

1. An inspection shall be conducted by a state-licensed independent tower crane inspector:
 - i. Prior to erection;
 - ii. Upon erection and every three months;
 - iii. Bi-monthly in adverse conditions (After lightning strikes or significant environmental events);
 - iv. After tower jumps.
2. Capacity testing of tower crane after erection and jumping. This shall be performed with a known weight to ensure proper calibration per the manufacturer's instruction;
3. Proof load testing in accordance with manufacturer's requirements within 12 months preceding the cranes arrival and use on site;
4. The third-party tower crane inspector shall perform visual and functional motion tests on all systems and components in accordance with the manufacturer's requirements. The inspection shall include:
 - i. Non-destructive testing and inspection of all welds and Magnaflux testing on all welds suspected to be damaged.
 - ii. X-ray welds;
 - iii. Visual inspection of boom lattice, turntable, bolts, pins, load blocks, weight ball, slings, hoist lines, limit switches, counterweights, walking surfaces, braces, collars, etc.;

h. Safety Log.

1. The General Contractor, or their designee, shall keep a log on site (available at all times) of all safety coordination meetings held, inspection logs, certifications, engineering plans, work orders, manufacturers specifications, etc. Peri

8. Demobilization

- a. The Project Superintendent and each contractor shall organize and schedule the orderly removal of their project site offices and trailer facilities, the termination of temporary utility services, the transfer of telephone services to their offices, and the forwarding of mail. The site shall be left in the conditions specified by the contract documents. The Project Superintendent shall inspect the site with the Owner to verify that all permanent security and safety devices are in place and performing their intended function.

9. Demolition - Structural

- a. An engineering and hazardous material survey shall be completed before the start of demolition.
- b. All structural shoring shall have stamped drawing and calculations by a registered Professional Engineer.
- c. Areas being demolished must be secured by means of barricades to prevent unauthorized personnel from entering the area.
- d. Subcontractors must submit, prior to the start of construction, a detailed demolition plan to include, means and methods, related drawings,

and other relevant safety plans.

- e. Gilbane will obtain from the owner a site survey identifying the locations of Asbestos and lead - containing materials and any other hazardous materials that may be on site. If the owner is unable to provide this information, the Subcontractor shall employ a testing agency that can identify and/or verify areas suspected of containing these materials prior to their disturbance during the demolition operation at their own cost.
- f. An engineering survey shall be completed before the start of demolition.
- g. All electric, gas, water, steam, sewer, and other service lines shall be shut off, capped, or otherwise controlled outside the building line before demolition work is started. The Subcontractor will notify any utility company whose services are affected in advance.
- h. If electric, gas, water, steam, sewer, or other utilities are necessary during demolition; their lines shall be temporarily relocated and protected.
- i. Before demolition begins, the building will be checked to determine whether any hazardous chemicals, gases, explosives, flammable materials, or similarly dangerous substances have been used in pipes, tanks, or other equipment on the property. If found shall be eliminated before demolition is started. Any hazardous glass fragments shall be removed.
- j. Guardrails and covers shall protect all floor and wall openings, which pose a fall exposure during demolition.
- k. If debris is dropped through holes in the floor without the use of chutes, the area onto which the material is dropped will be completely enclosed with barricades not less than 42 inches high and not less than 6 feet back from the project openings. Signs shall be posted at each level, warning of the hazard of falling materials. Removal of the debris from the lower area shall not be permitted until debris handling from above has ended.
- l. Floor openings not used, as material drops will be covered with material that can withstand two times the weight of any intended load. The floor opening cover will be secured to prevent it from being incidentally moved.
- m. Demolition of exterior wall construction and floor construction will begin at the top of the structure and proceed downward, except for the cutting of holes in floors or walls for chutes and material drops, preparation of storage space, and similar preparatory work. Each story of exterior wall and floor construction will be Removed and dropped into the storage space prior to removing exterior walls and floor construction in the story below.
- n. Wheel stops shall be installed on all open sides of floors to prevent equipment and material from going over the edge.
- o. Entrances to multi-story structures being demolished shall be completely protected by sidewalk sheds, canopies, or both. Protection shall be provided from the face of the building for a minimum of 8 feet. Canopies shall be at least 2 feet wider (1 foot each side) than the opening or entrance being protected, and will be capable of sustaining a load of 150 pounds per square foot.

10. Discipline - Enforcement

a. Imminent Danger

1. Should an imminently dangerous condition be discovered, all work in the danger area will be stopped until corrections are made.

b. Non-Compliance

- a. Should Gilbane find contractor work areas or individuals being or acting in non-compliance with OSHA or the Project Safety Plan, Gilbane has the authority to order immediate correction of the non-compliant occurrence.
 - i. All costs of correction shall be borne by the Trade contractor deemed responsible. If more than one contractor is deemed responsible, Gilbane's division of responsibility shall be final.
 - ii. Nothing contained herein, however, shall serve to relieve the contractor of their liabilities and/or obligations under OSHA as well as other applicable Owner, Federal, State and local requirements as well as the Project Safety Plan.
 - iii. Gilbane may withhold payment of any sums due contractors for failure to follow the Project Safety Plan policies and procedures.
 - iv. Gilbane will issue a written, 24-hour notice in this regard requiring immediate response by the contractor.
 - v. Repeated violations or lack of cooperation with regard to the Project Safety Plan by employees of a contractor will indicate non-compliance with provisions included in the contract and may be reason for the employee being barred from the project site and/or for termination of the contractor's contract. Additionally, if contractor receives three (3) written citations because of the actions of one or more of their employees; a meeting will be held with a representative from the Contractor, the Gilbane Superintendent, the Gilbane Division Safety Director and the Gilbane Project Manager and/or Project Executive to determine whether the Contractor's Field Supervisor is appropriate or whether replacement will be required.

c. Orientation

1. At orientation, new employees are given their first warning: These are the rules; if you fail to follow them you will receive a citation.
2. **1st Violation:** Notice is sent to employer. Employee must come in and see Gilbane to review violation so we can be sure the employee knows how serious this citation is and what corrective action must be taken.
3. **2nd Violation:** This constitutes three (3) warnings. The individual may be removed from the property or from further access to the site.
4. **"Immediate removal from the property" Citations** will result when:
 - i. Any employee, supervisor or manager exposes themselves, the public or other employees to imminent loss of life.
 - ii. Any employee, supervisor or manager openly exhibits disregard, defiance or disrespect for the safety plan.
 - iii. Any employee, supervisor or manager knowingly falsifies any investigative document or testimony involved in an investigation.
 - iv. A violent physical encounter (i.e. fighting) or threat of violence occurs, all individuals involved in the incident are subject to permanent removal. False accusations or knowingly failing to take corrective action against violent behavior will not be tolerated.
 - v. Theft or destruction of property occurs.
 - vi. Any employee, supervisor or manager consumes, possesses, distributes or is under the influence of alcohol/drugs.
 - vii. Violations of safety, traffic, housekeeping or material storage rules.

d. Dispute Resolution

1. All disputes involving the Project Safety Plan shall be resolved by Gilbane whose decision is final and not subject to arbitration.

11. Electric - Temporary

a. General

- a. All electrical work, installation and wire capacities shall be in accordance with the applicable pertinent provisions of the National Electrical Code (most current version), ANSI and OSHA Standards.

b. Ground Fault Circuit Interrupter (GFCI) and Assured Equipment Grounding Program (AEGP)

1. All 120-volt, single phase, 15 & 20-amp temporary power circuits (with the exception of temporary lighting) shall have GFCIs installed. In addition, all tools, cords and power sets shall have an AEGP maintained on quarterly basis.
2. Portable tools will have the appropriate color code affixed to the male (plug) end following inspection. Extension cords will have the appropriate color code affixed to both ends (plug & receptacle). The previous quarter's color code will be removed to avoid confusion.
3. When using permanent power, once established in new construction or in renovation work, GFCIs must be used in conjunction with the AEGP inspections.
4. The color codes used for identifying inspected & tested equipment on this project are:

January, February, March	White
April, May, June	Green
July, August, September	Red
October, November, December	Orange

(NOTE: The cycle of colors is repeated for the next year)

a. Extension Cords

1. Extension cords used with portable tools must be of heavy duty 3-wire type and a minimum 12-gauge wire. Damaged electrical cords shall not be used.
2. All extension cords will be suspended seven feet (7') above finish floor or work platform. Extension cords will not be fastened with staples, hung from nails or suspended by non-insulated wire.
3. Receptacles shall not be connected to the same ungrounded conductor of multi-wire circuits which supply temporary lighting.

b. Temporary Lighting

1. Temporary lighting circuits must be a UL-approved assembly.
2. Open wiring is NOT acceptable for temporary lighting circuits. 'Open wiring' refers to the individual conductors being physically separated (as in the McGill "String-O-Lights.")
3. Lighting on barricades, fences or sidewalk coverings shall be encased in metal raceway.
4. Bulbs for temporary lighting must have guards to prevent accidental contact.
5. Temporary lights must be suspended by the lamp fixture and by non-conductive twine or cord or other material.
6. All wiring used for temporary lighting shall be run using SJTW cord type, minimum 14/2 Gauge conductor. Romex or crimp on style temporary lighting is not acceptable.
7. Splices shall be made within secured junction boxes and performed by a qualified electrician. Splices in conductors, when required, shall have nuts and conductors protected by 5 tightly wrapped half-lap wraps of 3M Scotch TM Super 33 Vinyl electric tape (or equal) for a thickness of 35 mils.
8. Portable electric lighting used in moist or other hazardous locations such as drums, tanks, vessels, bins, bunkers, etc., shall be operated at a maximum of 12 volts (non-explosive).
9. All shop lighting and portable task lighting shall have a cover and guard installed when in use or available for use.
10. Receptacles shall not be connected to the same ungrounded conductor of multi-wire circuits which supply temporary lighting.
11. Any temporary lighting must be on a dedicated circuit only utilized for temporary lighting.

c. Wiring Ground

1. All temporary wiring shall be effectively grounded in accordance with the National Electrical Code (Articles 305 and 310).
2. All non-current carrying parts of electrical equipment must be grounded or double-insulated. Grounded circuits must have enough capability to carry all currents likely to be imposed on it.
3. All electrical equipment and wiring in hazardous locations must conform to the National Electrical Code standards.

d. Protection of Energized Parts

1. All power panels shall have metal covers installed at all times. Electrical room doors shall be self-closing and locked from unqualified persons at all times. When not working in the panel the door shall be closed and locked.
2. All open or exposed breaker spaces shall be adequately covered and labeled.
3. Fish tapes or lines made of metal or any other conductive medium are prohibited. Nonconductive tapes and lines will be used in their place.

4. Inspections and investigative type work conducted on live systems will be conducted in accordance with NFPA 70E and will only be authorized by Gilbane Division Safety Director after signature from the Contractor's Electrical Supervisor on the Energized Electrical Work Authorization Permit.

e. Defective Electrical Tools and Equipment

1. All electrical tools and extension cords found to be defective (Examples: missing or broken ground pins, exposed internal conductors) will immediately be rendered in-operative by cutting off the plug end or by immediately removing from the project.

12. Elevated Work (Other than Fall Protection)

a. Ladders/Stairs

1. Refer to section on Ladders/Stairs.

b. Scaffolding

1. Refer to section on Scaffolding.

c. Concrete and Masonry

1. All equipment and materials used in concrete construction and masonry work shall meet the applicable requirements as prescribed in ANSI-A10.9-2013 (or most recent version) "Safety Requirements for Concrete Construction and Masonry Work."

d. Stairways

1. Upon delivery to the project site all office trailers and material storage trailers shall be provided with stairway access to all doorways and shall have landings with railings which allow for at least 20 inches of clearance in front of any door swing.
2. Stairway placement shall follow placement of the upper floor deck, as soon as practical.

e. Hoists and Elevators

1. Temporary personnel elevators and material hoists shall be constructed, installed and maintained in compliance with the manufacturer's instructions and the provisions of applicable statutes and regulations of governing authorities.
2. No elevators or hoists are to be used for the movement of materials or personnel until the devices have been certified and licensed by a third-party inspector qualified to approve the equipment after assembly (before service), after alterations, and every three months.
3. No person shall be allowed to ride on top of a material hoist except for the purposes of inspections and maintenance.

f. Overhead Work

1. When overhead work or activities where materials could fall to an elevation below, an exclusion zone will be marked by a continuous physical barricade. Danger tape, caution tape or flagging does not meet the requirements of barricading for an exclusion zone. Examples include: 2x4 lumber, orange construction fencing supported every 6', metal railing system or physical barricade.
2. Signage preventing unauthorized users from entering the area will be posted on the barricade.

g. Stilts

1. Stilts shall not be used unless the working surface is free from potentially hazardous conditions. Refer to Appendix for Stilt Use Permit.

h. Tool Tethering

1. Tools and equipment (including hard hats) used at elevation at the floor edge or near floor openings shall be tethered with an engineered tether to prevent from dropping to a lower level.

13. Elevator Safety

- a. Contractors shall comply with all applicable provisions of OSHA, ANSI, Gilbane Safety requirements and the National Elevator Industry Inc., Field Employees Safety handbook.
- b. The elevator contractor shall hold a pre-installation meeting with Gilbane where safe work practices will be discussed.

14. Emergency Procedures - Alarms, Fire, Bomb, Weather, Environmental and Public Demonstration

a. General Procedures

1. Each project shall develop a written Site-Specific Emergency Action Plan. The Site-Specific Emergency Action Plan shall be posted and distributed.
2. In order for necessary emergency services to be supplied promptly, each contractor and sub-contractor shall post telephone numbers and addresses of the physicians, hospital and ambulance along with the type of information to be transmitted for each emergency situation.
3. All accidents are to be handled by the ranking person present, with whoever is available to assist. The ranking person shall direct someone to notify first-aid personnel, and to call for emergency services as necessary. The Project Superintendent is to be notified as soon as this can be done without delaying assistance to the injured. They will then take appropriate action.
4. In accidents resulting in injury to personnel, individuals qualified to administer first-aid will assist the injured, will stabilize their condition and may arrange for transportation to a hospital if further treatment is required.
5. Except when necessary to avoid further injury, or to prevent additional damage to the work, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by the Project Superintendent or the person designated to make the investigation and report. As soon as the Project Superintendent, Owner or Authorities can release the area from this constraint, contractors concerned will clean-up and make repairs to return to a normal situation.

b. Alarms

1. Gilbane shall be notified of all emergencies and notify the appropriate emergency service of the incident and initiate appropriate action.
2. Fire alarms within the area of construction will consist of three short blasts on an air horn (or other suitable alarm) located at the means of

egress, stairway, ladder, or building entry. Telephone notification of the fire department will be initiated immediately after sounding the air horn alarm. Telephones are available in the project site office. Radio contact with the project site office and Gilbane shall be used to inform all concerned regarding the fire.

3. A continuous long blast on the air horn may be used to summon first aid assistance in the event of an accident.

c. Fire

1. The following procedures are established in the event of a fire. **"RACE"**

- **R** **Rescue...** anyone in immediate danger.
- **A** **Alarm...** activate pull station, go to phone and dial 911.
- **C** **Contain...** close doors and windows, isolate the fire.
- **E** **Extinguish...** use correct extinguisher.

d. Accident Involving Serious Injury or Death

1. The following procedures are established in the event of an accident involving serious injury or death to employees or members of the general public:
 - i. Individuals qualified to administer first-aid will assist the injured, will stabilize their condition, and will arrange for transportation to the hospital emergency room if further treatment is required.
 - ii. Gilbane is to be notified immediately. Immediate notification (within 8 hours) of the local OSHA office is required in the event of a fatality or serious injuries which may lead to a fatality.
 - iii. All non-essential personnel shall be removed and/or kept back from the area.
 - iv. Rescue personnel shall be provided assistance as requested.
 - v. No comments shall be made. All inquiries shall be referred to the Project Manager.
 - vi. No on-site photographs are to be taken without the specific approval of the Project Manager and the Project Superintendent.
 - vii. Gilbane shall make a full investigation and file an Accident/Injury Report within twenty-four (24) hours of the occurrence.
 - viii. Within the immediate area of the accident scene, nothing is to be disturbed nor removed after proper evacuation of the injured personnel. Except when necessary to avoid further injury, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by the Project Superintendent or other person designated to make the investigation and report.
 - ix. As soon as Gilbane can release the area from the above constraint, contractors concerned will clean-up and make repairs to return to a normal situation.

e. Property Damage Accidents

1. The following procedures are established in the event of an accident involving property damage:
 - i. Gilbane is to be notified as soon as this can be done without delaying efforts to prevent further damage. Gilbane then takes appropriate action and direct other personnel to assist as necessary.
 - ii. Efforts shall be taken to protect against further damage where possible.
 - iii. All non-essential personnel shall be removed and/or kept back from the area.
 - iv. No comments shall be made. All inquiries shall be referred to Gilbane.
 - v. No on-site photographs are to be taken without the specific approval of Gilbane.
 - vi. Gilbane shall make a full investigation and file an Accident/Injury Report within twenty-four (24) hours of the occurrence.
 - vii. Within the immediate area of the accident scene, nothing is to be disturbed nor removed after proper evacuation of the injured personnel. Except when necessary to avoid further injury, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by Gilbane.
 - viii. As soon as Gilbane can release the area from the above constraint, contractors concerned will clean-up and make repairs to return to a normal situation.

f. Severe Weather

1. The following procedures are intended to prepare the project site in the event of severe weather conditions. Since severe weather may be reasonably anticipated to occur during the duration of the project, without significant advance warning, all work activities and project site conditions must be planned with a concern for emergency preparations.
 - i. Each contractor, at the time of mobilization, shall deliver to Gilbane a complete list of the contractor's supervisors with the complete after-hours telephone numbers. The list shall be kept current and shall be updated accordingly.
 - ii. Each contractor shall insure that their field trailers and sub-tier contractors' field trailers are anchored in at least three locations.
 - iii. Upon notification of a Severe Weather Watch by the National Weather Service the following actions are to be initiated:
 - iv. Each contractor having on-site generators which are fuel-powered is requested to notify Gilbane of the numbers and wattage. Generators may be needed to provide temporary power for rescue or clean-up activities.
 - v. All materials shall be secured to prevent them from becoming air borne during high winds. Particular attention will be given to picking up scrap materials and hauling or covering trash containers.
 - vi. Crawler and mobile cranes shall have booms lowered at the end of the shift. Cranes not capable of lowering booms shall be permitted to weather-vane or free-swing. Check to assure that swinging booms will not contact other objects such as power lines, structures, etc.
 - vii. Sufficient flashlights, batteries, and bulbs shall be provided to assigned emergency response personnel. A supply of fresh batteries shall be maintained at the project for use in an emergency response.
 - viii. Each contractor shall coordinate with Gilbane and establish a secure location for sheltering of workers in a severe weather event.
 - ix. When lightning is observed, or thunder heard, all crane and lifting operations shall stop. Gilbane shall make the determination with the contractor's competent person, as to the proximity of the operation being performed. When lightning is 10 miles away or less, work must stop for 30 minutes after the last audible thunder or visible flash of lightning, unless work is being conducted inside a "Safe Building".

g. Other Major Catastrophe

1. Examples of other major catastrophes include:
 - i. Major fire.
 - ii. Collapse of large portions of structures or large sections of scaffolds.
 - iii. Heavy damage by wind or floods.
2. The owner's security or local authorities will be provided with an emergency call list to summon Gilbane personnel and the contractor's personnel to the site in the event of a major catastrophe outside working hours. The Gilbane Project Superintendent or a qualified alternate will cooperate fully with the directives of the owner's staff or local emergency authorities in the event of a major catastrophe. Gilbane will take any or all of the following actions as appropriate:
 - i. Stop work.
 - ii. Initiate firefighting, tie down building, etc.
 - iii. Call for assistance from outside (fire trucks, ambulances, electricians, life flight helicopters, Civil Defense Support, police)
 - iv. Call for site evacuation, to clear site access roads.
 - v. Issue instructions to supervisors and to others as necessary.
 - vi. Set up security control at the disaster area.
 - vii. Set up communications center in site trailers (radio/telephone).
 - viii. Call in operators for heavy equipment such as front loaders, cranes, etc.
 - ix. Other actions considered necessary for the particular situation.

h. Bomb Threat

1. When a bomb threat is received or if a suspicious article is found, Gilbane will take the following actions:
 - i. Work shall be stopped immediately and the project and office shall be evacuated of all personnel. A count will be made to assure that all are present.
 - ii. Local police, fire or bomb disposal authorities shall be notified. A search of the premises by the authorities will be made as directed by appropriate authorities.
 - iii. If a suspicious article is found, DO NOT TOUCH IT, notify the appropriate authorities.
 - iv. Do not allow anyone except authorized personnel to re-enter the area.
 - v. If necessary to stop or detour traffic away from the affected area, local police or flagmen shall be utilized.
 - vi. No comments shall be made. All inquiries shall be referred to Gilbane.
 - vii. No on-site photographs are to be taken without the specific approval of Gilbane
 - viii. Gilbane shall make a full investigation and file a report within twenty-four (24) hours of the occurrence.
 - ix. If repeated threats occur within a short period of time, Gilbane will evaluate the situation and take appropriate action. This action may include shutting down the project site for that day.

i. Environmental Spill

1. In the event of a spill of environmentally damaging materials, immediate response is required to prevent or minimize the impact this event will have upon the environment and the public welfare. All personnel shall continue to observe standard precautions for handling the materials as detailed in the manufacturer's product Safety Data Sheet (SDS), including the use of personal protective equipment. Where conditions warrant, the contractor shall have emergency spill containment supplies available for immediate use. The following general procedures apply to the immediate response which must be initiated:
 - i. Immediately, all personnel in the immediate area of the release shall be alerted to the hazardous material and the nature of the immediate danger to themselves and the environment. As soon as possible, Gilbane shall be notified and requested to initiate emergency containment and clean up procedures.
 - ii. The Local Fire Department shall be notified.
 - iii. If safe to do so, every effort shall be made to contain the materials within berms, by absorbent materials, or through other appropriate means, until proper handling and disposal personnel may be mobilized at the site. Particular attention needs to be taken to avoid contamination of surface water, storm sewers, sanitary sewers, ground, plants and animals.
 - iv. All non-essential personnel shall be removed and kept back from the area.
 - v. No comments shall be made. All inquiries shall be referred to the Project Manager.
 - vi. No on-site photographs are to be taken without the specific approval of the Project Manager and the Project Superintendent.
 - vii. Gilbane shall make a full investigation and file an Accident/Injury Report within twenty-four (24) hours of the occurrence.
 - viii. Within the immediate area of the accident scene, nothing is to be disturbed nor removed after proper evacuation of the injured personnel. Except when necessary to avoid further injury, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by the Project Superintendent or other person designated to make the investigation and report.
 - ix. Purchasing shall be notified to initiate the response of available environmental remediation contractors who are under standby contract.
 - x. As soon as the site has been cleared by the environmental remediation contractor and authorities, the Project Superintendent will release the area for contractors concerned to clean-up and make necessary repairs to return to a normal situation.

j. Public Demonstrations

1. When a public demonstration is expected or occurs, Gilbane will take the following actions:
 - i. Work on the project site shall continue where not encumbered by the public demonstration; however, work in the immediate area shall be stopped and all project employees shall be evacuated. A count will be made to assure that all are present.
 - ii. Local police shall be notified, and all employees shall cooperate fully with the law enforcement authorities.
 - iii. Do not allow anyone except authorized personnel to enter the project site. All visitor passes are revoked and all visitors shall be escorted from the project site.
 - iv. If necessary to stop or detour traffic away from the affected area, local police or flagmen shall be utilized.

- v. No comments shall be made. All inquiries shall be referred to the Project Manager.
- vi. No on-site photographs are to be taken without the specific approval of Gilbane.
- vii. Gilbane shall make a full investigation and file a report within twenty-four (24) hours of the occurrence.
- viii. If repeated public demonstrations occur within a short period of time, Gilbane will evaluate the situation and take appropriate action. This action may include shutting down the project site for that day or obtaining a judicial restraining order.

15. Emergency Procedures - Medical Services

a. Contractor's Responsibilities

1. Prior to commencement of work, provisions must be made for prompt medical attention in case of serious injury. Each contractor shall have a minimum of one First Aid/CPR trained individual on the project and inform Gilbane of their name.
2. Contractor shall ensure that each of its lower-tier contractors meet these medical requirements.
3. Ensure that adequate first aid supplies shall be easily accessible when required.
4. Telephone numbers and addresses of the physicians, hospital and ambulance shall be conspicuously posted.
5. Contractor's first aid attendant or other competent person shall treat the injured employee as often as necessary to ensure complete recovery, or until a decision is made to seek medical treatment.
6. If it is necessary to call the outside medical facility, this call should be made by Gilbane Project Manager while the injured employee is being transported.
7. Provide proper equipment for prompt transportation of the injured person to a physician or hospital, or a communication system for contacting necessary ambulance service.
8. Medical cases requiring ambulance services would be such cases as severe head injuries, amputations, heart attacks, severe bleeding, stopped breathing, etc. Should ambulance service be necessary, the following procedures should be taken immediately:
 - i. Contact Contractor first aid attendant or nearest employee properly trained and certified in first aid.
 - ii. While first aid is being administered, contact Gilbane.
9. A representative of the Contractor shall drive the injured employee to the medical facility and remain at the facility until the employee is ready to return. Contractor's representative shall carry necessary forms; i.e., authorization slips, return to work notices to the medical facility
10. If it is necessary for the Contractor's first aid attendant to accompany the injured employee, provisions must be made by Contractor to have another employee, properly trained and certified in first aid, available to render same during the absence of the regular first aid attendant.
11. Contractor shall complete and provide to Gilbane an "Employer's First Report of Injury" within 24 hours of any/all incidents involving work activities associated with the project. Contractors are advised to maintain their own OSHA 300 Log.
12. If the employee is able to return to the project site the same day, he/she must return with a statement from the doctor stating same and containing such information as date, employee's name, and date of return to regular or restricted duty, date he/she is to return to doctor, diagnosis, signature and address of doctor. If the injured employee is unable to return to the project site the same day, the employee who transported him/her should bring this information back to the project site and report it to Gilbane.
13. If the injured employee is released by the doctor for light or restricted work duty, the Contractor shall make available restricted duty work for the injured employee.
14. Each occupational illness, injury or near miss shall be reported immediately by Contractor's employee to Contractor's first aid attendant and Gilbane.

16. Environmental - Asbestos

- a. Occupational Safety and Health Administration (OSHA) regulations have been promulgated to protect workers from exposure to airborne asbestos fibers. Under the Asbestos Control and Licensing Act, a contractor must be licensed by the Department of Labor and the State in which the work is being performed in order to remove asbestos.
- b. Notification - Before starting asbestos removal work, the United States Environmental Protection Agency (USEPA) and the Local Department of Environmental Management must be notified in writing by the contractor and appropriate permits must be on file. Gilbane and/or its agent will verify this information by way of contract requirements.
- c. Training - Employees of the contractor must be appropriately trained and licensed prior to the removal of any asbestos contaminated material. Any contractor's employees who may be exposed to Asbestos must be trained in the recognition of hazards and appropriate controls.
- d. Posting - The asbestos material removal area shall be cordoned-off to prevent entry. Appropriately worded caution signs must be posted at all approaches to the area at such interval to allow individuals to take any necessary protective steps before entering the removal area.
- e. Asbestos Handling - The encapsulation, removal and/or disposal of ACM shall be performed by a Contractor licensed to do such work in which the work is being performed and in accordance with all applicable Federal, State and Local Regulations per approved abatement plans.
- f. Work Practices - Asbestos containing materials shall be worked in a wet state sufficient to prevent the emission of airborne fibers in excess of the permissible exposure limits. Work areas are to be adequately protected, through appropriate type enclosures, to ensure that no asbestos contaminated material will be permitted to leave the controlled area.
- g. Personal Protective Equipment - In instances where re-usable clothing is used, the following precautions must be followed:
 1. Contaminated clothes must be appropriately bagged and labeled. Proper notification is to be made to authorized laundries and haulers.
 2. All employees working in asbestos removal areas shall wear appropriate personal protective equipment.
- h. Signage - The following signage is required outside of all containment areas:
 - **OSHA Danger Sign:**
 - **Asbestos – May Cause Cancer, Causes Damage to Lungs**
 - **Authorized Personnel Only**

- i. Cleanup - There shall be no dry sweeping of asbestos material. Use floor coverings to prevent debris from falling to lower floors and to expedite house-keeping.
 1. Labeling and Waste Disposal - Appropriately worded labels must be affixed to all materials, waste, debris, etc., containing asbestos friable materials. Asbestos waste and/or asbestos contaminated material must be collected and discarded in sealed, labeled, impervious containers by contractor.
 2. The following label content is acceptable to both the EPA and OSHA:
 - **CAUTION**
 - **CONTAINS ASBESTOS FIBERS**
 - **AVOID CREATING DUST**
 - **BREATHING ASBESTOS DUST MAY**
 - **CAUSE SERIOUS BODILY HARM**
- j. If applicable, Gilbane shall be provided with copies of all air monitoring reports and certified disposal receipts prior to final payment.

17. Environmental - Lead

- a. In keeping with the requirements of the Occupational Safety & Health Administration's (OSHA's) Lead Exposure in the Construction Industry Standard (29 CFR 1926.62), every painted surface shall be considered a potential lead hazard.
- b. A potential source of lead emission is the disturbing of painted surfaces of structures and components within these facilities. Typical activities that would significantly disturb a painted surface include the following:
 1. Removal of all or part of the paint by hand or power tools
 2. Removal of all or part of the paint by blast cleaning
 3. Removal of all or part of the paint by other means such as the use of chemical strippers or a heat gun
 4. Structural work to the surface such as welding, burning, cutting, or drilling
 5. Manual demolition of buildings, portions of buildings, or the building components
- c. The primary consideration when specifying work methods shall be the requirement to protect workers from exposure to lead above the Permissible Exposure Limit (PEL). Further considerations when specifying work methods shall be the effort to reduce the release of lead into the air, water and soil, and to reduce to a minimum the generation of debris.
- d. At all times when activities which disturb paint are in process, the Site competent person for lead shall have unrestricted access to the work area for inspection, and shall have the authority to stop work when the control measures being utilized are not as specified in this section or the OSHA Standard, if the control measures are not adequately controlling exposures or if other hazards are identified which require work to be stopped.
- e. All air monitoring conducted by the site competent person for lead or other qualified representative shall be performed in accordance with the OSHA Standard. Detailed and accurate records of all monitoring and other relevant data used in conducting employee exposure assessments shall be kept and maintained in accordance with the applicable OSHA Standard.
- f. Signs shall be posted in each work area where work on painted surfaces disturbs the paint in such a way so as to expose personnel to lead contaminated dust, debris, or lead fumes. At a minimum, they shall read:
 - WARNING
 - LEAD WORK AREA
 - POISON
 - NO SMOKING OR EATING
- g. All worker protection requirements will, at minimum, meet the current OSHA Standard. These requirements include but are not limited to:
 1. Signage, Barriers & Access
 2. Exposure Monitoring
 3. Respiratory Protection
 4. Medical Surveillance & Records
 5. Education & Testing
 6. Decontamination & Clearance
- h. All work involving lead removal or re-coating shall be conducted in a manner that minimizes the release of lead and lead containing materials into the air, water, and soil.
- i. All lead-containing hazardous wastes that are generated shall be contained, collected, segregated, labeled and held at a location designated or approved by the Owner or Gilbane pending the appropriate disposition.
- j. Contractor shall provide for proper disposal of waste, including EPA identification number, notification, certification, manifest, etc.
- k. All waste containers must be leak proof and capable of being securely covered.
- l. All waste containers shall be clearly labeled with weather resistant labels using indelible ink to identify the type of waste they contain.

18. Environmental - On-site Hazards

- a. Material that is designated as a hazardous substance requires special attention by the Contractor and workers to minimize the exposure. A plan addressing the proper handling, storage and disposal of hazardous material must be developed. Gilbane and the Owner must be immediately notified of any hazardous material leak or spill. Any Contractor-caused oil spills must be reported immediately to Gilbane. If unanticipated potentially hazardous material is discovered, the Contractor shall stop work immediately, notify Gilbane, and develop a health and safety plan and site-specific work plan for approval.

19. Environmental - Silica

- a. Contractors shall submit a written silica exposure control plan for review by Gilbane prior to the pre-construction conference. At a minimum, the contractor's silica exposure control plan shall comply with OSHA regulations including, but not limited to 29 CFR 1926.1153. Contractors can either use an exposure control method laid out in Table 1, or they can measure workers' exposure to silica and independently decide which dust controls work best to limit exposures to the PEL in their workplaces. Regardless of which exposure control method is used, all contractors are required to:
 1. Establish and implement a written exposure control plan that identifies tasks that involve exposure and methods used to protect workers, including procedures to restrict access to work areas where high exposures may occur.
 2. Designate a competent person to implement the written exposure control plan.
 3. Restrict housekeeping practices that expose workers to silica where feasible alternatives are available.
 4. Offer medical exams—including chest X-rays and lung function tests—every three years for workers who are required by the standard to wear a respirator for 30 or more days per year.
 5. Train workers on work operations that result in silica exposure and ways to limit exposure.
 6. Keep records of workers' silica exposure and medical exams.
- b. Table 1 matches common construction tasks with dust control methods. The dust control measures listed in the table include methods known to be effective, like using water to keep dust from getting into the air or using ventilation to capture dust. In some operations, respirators may also be needed. Contractors who follow Table 1 correctly are not required to measure workers' exposure to silica and are not subject to the PEL. (Refer to 1926.1153 Respirable crystalline silica. Table 1 for more information.)
- c. For tasks not listed in Table 1, or where the contractor does not fully and properly implement the engineering controls, work practices, and respiratory protection described in Table 1:
 1. The contractor shall conduct an exposure assessment to ensure that no employee is exposed to an airborne concentration of respirable crystalline silica in excess of 50 µg/m³, calculated as an 8-hour Time-Weighted Average (TWA).
 2. Exposure Assessment Requirements:
 - i. The contractor shall assess the exposure of each employee who is or may reasonably be expected to be exposed to respirable crystalline silica at or above the action level (25 µg/m³) in accordance with either the performance option or the scheduled monitoring option stated below.
 - ii. Performance option: The contractor shall assess the 8-hour TWA exposure for each employee on the basis of any combination of air monitoring data or objective data sufficient to accurately characterize employee exposures to respirable crystalline silica.
 - iii. Scheduled monitoring option: The contractor shall perform initial monitoring to assess the 8-hour TWA exposure for each employee on the basis of one or more personal breathing zone air samples that reflect the exposures of employees on each shift, for each job.

20. Excavation

- a. Prior to opening any excavation or trench, an excavation inspection form is required (See Appendix). The penetrating contractor shall notify 811 and all necessary personnel to determine whether under-ground installations; i.e. sewer, telephone, fuel, electric lines, etc., may be encountered and where they are located. Excavation permits shall be required on a daily basis while the excavation is open.
- b. The contractor must designate a competent person trained in soil classification and the recognition of trenching and excavation hazards. This person must be on-site when excavating or trenching is being done.
- c. Appropriate documentation to meet the OSHA trenching and excavation standards is to be maintained on site.
- d. Trenches 4 feet and over in depth or presenting a hazard to the worker shall be shored or walls cut back to protect employees from cave-in.
- e. Trenches and excavations 6 feet or more in depth require fall protection in accordance with the Fall Protection section.
- f. All trenches and excavations shall be properly barricaded to prevent persons from walking into them. All trenches should be evaluated by the competent person and trenches less than 4 feet in depth may require protection.
- g. Where protective systems as defined in 29 CFR 1926.650-652 are designed by a licensed Professional Engineer, the resulting design documents must be reviewed by Gilbane prior to the commencement of the work to assure that the documents make accurate and complete assumptions (as set forth in the current, applicable contract specifications) upon which the design is based. Copies should be readily available on the site.
- h. Excavation contractors will provide a spill kit for use on site in the event of a hazardous material spill.
- i. Drilled caissons will have fall protection provided both during and upon completion of the drilling by use of personal fall protection, guardrails or use of casing extending a minimum of 42 inches above the ground.

21. Fall Protection

- a. A Fall Protection Plan must be developed by the contractor for all work with a fall exposure greater than 6-feet with a copy provided to Gilbane prior to start of work.
- b. "Controlled Access Zones", "Controlled Decking Zones", use of a "Safety Monitor" and "Warning Lines" are not permitted as primary means of fall protection.
- c. **Personal Fall Arrest Systems (PFA)**
 1. Personal Fall Protection systems providing 100% fall protection shall be worn and used by all employees when working six (6') feet or more above the ground/floor or whenever working in a precarious position, unless other adequate fall protection (guardrails or safety nets) is provided.
 2. All lanyards are to be as short as possible, but in no event longer than six (6') feet. Retractable devices are preferred for most applications. Selection must be on a case-by-case basis. Wire rope lanyards are prohibited unless approved by contractor's fall protection engineer.
 3. When working at a leading-edge, fall protection shall conform to ANSI Z359.14.
- d. A Personal Fall Restraint System shall also be used and attached to the manufacturer's approved anchorage when working out of aerial lifts and

scissors lifts.

- e. Only one individual shall use a vertical lifeline at a time. A Personal Fall Protection System shall be used and attached to vertical lifelines when working from suspended scaffolding.
- f. When wire rope is used a horizontal lifeline, it shall be designed by a registered Professional Engineer experienced in fall protection engineering and installed and maintained by a competent person. It shall be designed, installed and maintained to meet, at a minimum, the requirements of OSHA as contained in 29 CFR 1926.502.
- g. To eliminate the potential of a fall when working on a flat roof or deck, a warning barrier meeting the following requirements may be used 15 feet from the fall hazard. If a worker is between the warning barrier and the fall hazard, a positive means of fall protection must be used. Warning tape is not allowed as a warning barrier. Warning barriers shall consist of ropes, wires, or chains, and supporting stanchions erected as follows:
 1. The rope, wire, or chain shall be flagged at not more than 6-foot (1.8 m) intervals with high-visibility material;
 2. The rope, wire, or chain shall be rigged and supported in such a way that its lowest point (including sag) is no less than 34 inches (.9 m) from the walking/working surface and its highest point is no more than 39 inches (1.0 m) from the walking/working surface;
 3. After being erected, with the rope, wire, or chain attached, stanchions shall be capable of resisting, without tipping over, a force of at least 16 pounds (71 N) applied horizontally against the stanchion, 30 inches (.8 m) above the walking/working surface, perpendicular to the warning line, and in the direction of the floor, roof, or platform edge;
 4. The rope, wire, or chain shall have a minimum tensile strength of 500 pounds (2.22 kN), and after being attached to the stanchions, shall be capable of supporting, without breaking, the loads applied to the stanchions as prescribed in paragraph (f)(2)(iii) of the applicable OSHA section;
 5. The line shall be attached at each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in adjacent sections before the stanchion tips over.

h. Wire Rope Perimeter Protection

1. Immediately following the erection of beams and columns, a guardrail system consisting of a minimum of two (2) 3/8-inch diameter 7 x 19 galvanized new aircraft cables shall be installed as follows:
 - i. Top rail of the wire rope cables shall be erected at 43.5 inches from the finished floor.
 - ii. Mid rail of the wire rope cables shall be installed approximately halfway between the finished floor and the top guardrail – approximately 22 inches.
 - iii. Wire rope guardrails shall initially be tensioned to 2,400 pounds of force and be maintained to comply with OSHA fall protection requirements.
2. Termination.
 - i. The length of cable shall not exceed 120 feet without being terminated.
 - ii. Cables shall be terminated at all 90-degree turns.
 - iii. Connections shall be 'looped' connections with three (3) wire rope clips (not alternating sides) used at all connections – line splicing is not permitted.
 - iv. All sequence breaks will require a two (2) cable assembly.
3. Stanchions - Steel angle stanchions shall be installed and spaced on perimeter bays as follows:
 - i. In bays with column spacing less than thirty (30) feet install at least one intermediate stanchion. Rigged between 39"-45".
 - ii. In bays with column spacing greater than thirty (30) feet install at least two intermediate stanchions. Rigged between 39"-45".
 - iii. Steel stanchions used at corners shall have diagonal supports installed to at least 80% of the height of the stanchion.
 - iv. Turnbuckles shall be installed on top and mid rail wire rope cables at each perimeter side, or more to maintain tightness of wire rope.
 - v. Intervals shall not exceed 120 feet or as directed by Gilbane.
 - vi. Loading bays shall have separate guardrail and turnbuckle assemblies installed.
 - vii. Guardrails will not be used as a horizontal lifeline as part of a personal fall arrest system unless designed by a Registered Professional Engineer experienced in Fall Protection and installed under the supervision of the steel erector's competent person.
 - viii. Guardrails shall not be used as an attachment point for equipment or materials (e.g. electrical cords, welding leads, pneumatic hoses).
 - ix. Mesh fabric having openings of 1/2" or less and capable of withstanding 50 pounds of force without damage or displacement will be secured to all guardrails.

i. Interior Protection

1. Installation of guardrails at interior floor openings (e.g. stairs or mechanical shafts) shall conform to one – or a combination – of the following:
 - Option 1 – Install 3/8 inch galvanized aircraft cable through stanchions at 43.5 inches above the finished floor. Terminate the cables at 90-degree turns.
 - Option 2 – Bolt 2 1/2" x 2 1/2" x 1/4" steel angles horizontally to the stanchions to serve as top- and mid-rails. A mid-stanchion post is required for spans greater than eight (8) feet.
 - Option 3 – Secure 2" x 4" construction grade lumber horizontally to adequate stanchions to serve as top- and mid-rails. A mid-stanchion post is required every eight (8) feet.
2. Guardrails will not be used as a horizontal lifeline as part of a personal fall arrest system unless designed by a Registered Professional Engineer experienced in Fall Protection and installed under the supervision of the steel erector's competent person.
3. Guardrails shall not be used as an attachment point for equipment or materials (e.g. electrical cords, welding leads, pneumatic hoses).
4. Top- and mid-rail cables – as outlined above – shall also be used at all sequence breaks.

22. Fire Protection

- a. Contractor shall be responsible for fire prevention in its work and operational areas, including offices, tool rooms, and storage areas twenty-four (24) hours per day, seven days per week through the duration of this Contract.
- b. Appropriate fire suppression equipment, as required by OSHA and the local fire protection code, must be provided by the contractor. No less than a

20-pound fire extinguisher is allowed for general use.

- c. At least a one-hour dedicated nonworking fire watch is required during the duration of hot work operations including through break, lunch and end of shift/day. The fire watch shall be equipped with a minimum of a 20-pound fire extinguisher.
- d. Fire watch must be provided at all levels below the hot work operation where a fire could occur. This may require more than one employee to preform dedicated fire watch. The cost associated with this employee is solely the responsibility of the contractor.
- e. If multiple hot work procedures are occurring, multiple dedicated fire watches are required. Roaming fire watches are prohibited.
- f. Only safety containers approved by UL and the local Fire Marshall, and properly labeled as to their contents, are to be used for handling and/or storage of flammable liquids in quantities more than one gallon.
- g. Hot work permits are required from Gilbane before starting any activities which create fire, sparks, cinders, slag, abrasive blasting, etc. See Appendix.
- h. All tarpaulins and plastic used for temporary enclosures or barriers shall be of fire retardant manufacture.
- i. Fire Protection Standpipes shall be installed in accordance with NFPA 241, International Fire code-1413, International Building Code-3311 and OSHA, including but limited to:
 - 1. At least one standpipe shall be installed in buildings four or more stories in height, and shall be installed where the progress of the building is not more than 40 ft. in height above the lowest level of fire department access.
 - 2. During construction, the standpipe shall be installed so that it is never more than one floor below the floor having secured decking or flooring.
 - 3. Standpipes shall be provided with fire department hose connections at accessible locations to usable stairs.
 - 4. Standpipes shall be installed and maintained so that they are always ready for use.
 - 5. For building under demolition, standpipes shall not be demolished more than one floor below the floor being demolished, and shall be maintained in an operable condition for use by the fire department.

23. Hazard Analysis

- a. Prior to beginning work, each contractor shall prepare a job hazard analysis that defines the activities to be performed and identifies the sequence of the work, the specific hazards, and the methods to be used to eliminate or minimize each hazard. The job hazard analysis shall be submitted prior to, and will be reviewed during the pre-construction meeting by Gilbane, and the contractor's supervisors and safety representative. The job hazard analysis shall be written in a form acceptable to Gilbane. See Appendix.
- b. Each Contractor Foreman will inform their work crew of the Hazard Analysis for their work activity each day prior to start of work or when conditions change.
- c. Each contractor shall submit for review by Gilbane a site-specific safety program and Illness and Injury Prevention Program which addresses all the elements of this safety plan as they will be implemented by the contractor, its contractors, vendors and suppliers. The hazard analysis will be included as an appendix to the contractor's site-specific safety program.
- d. All high hazards, such as Exclusion Zones, shall be identified and documented daily as a part of the daily Safety Task Assignment, discussed with the work crews and distributed to all trades on site via the Daily Shift Start or equivalent meeting.
- e. The Safety Task Assignment form shall be completed and discussed each day for all work crews or when non-routine tasks occur. A copy shall be provided to Gilbane at the end of the work day.
- f. To ensure that everyone who works on our project goes home safely each day, we expect that every worker will continually assess the hazards of their work tasks and environment, and take the necessary actions to avoid, prevent or correct the hazard. In support of this, Gilbane will require everyone adopt the Personal Safety Assessment policy. Individual's PSA's will be discussed during project safety inspections and daily communications. Gilbane will provide information on the PSA process in Project Safety Orientation and via other safety communication methods on the project.

24. Hazard Communication Program

- a. The Occupational Safety and Health Act (OSHA) requires that each employee potentially exposed to hazardous chemicals or materials be advised of the potential hazards and how to guard against those hazards. Each contractor whose employees are potentially exposed to hazardous chemicals must develop a list (Hazardous Materials Inventory) of all such chemicals used on the project; gather material safety data sheets (SDSs) for those materials; develop a labeling system for all materials; and train all potentially exposed personnel in the hazards and their controls for all listed compounds. These steps are outlined in detail in the following material. Employee training for this requirement will be documented and acknowledged by signatures following each session using the acknowledgment statement found at the end of this section.

1. Safety Data Sheets (SDS)

- i. Every contractor will be responsible for development and maintenance of a list of hazardous chemicals utilized within the project operations and will be further responsible for obtaining and maintaining SDSs for all such hazardous chemicals. Employees will be allowed access to this information and the specific SDSs for chemicals utilized in their work areas. All questions relating to the program should be directed to the contractor's superintendent or safety representative. A copy of each SDS will be delivered to Gilbane prior to work involving that substance.

2. Employee Information and Training

- i. All new and present employees will be given information regarding the requirements of the Chemical Hazard Communication Program; the hazardous chemicals present in their work place; and the physical and health risks of these chemicals. This requirement may be met through orientation sessions for new employees and refreshers for everyone during toolbox talks. The information and training will also include the following elements:
 - ii. The symptoms of overexposure to the chemicals.
 - iii. How to determine the hazardous presence or release of a chemical in the work place.
 - iv. Methods to reduce or prevent the exposure to hazardous chemicals, such as control procedures, work practices, or personal protective

- equipment.
- v. Procedures to follow in the event of an exposure to hazardous chemicals. The location of the log containing the SDSs which apply to their work place and the location of the written Chemical Hazard Communication Program.
- vi. How to review SDSs to obtain the hazard information for the chemical, and how to read the labels which are required on the chemical containers. When a new hazardous chemical is obtained for use, each employee who could be exposed will be given the information and training as described above, and a copy of the SDSs for the chemical will be obtained and distributed to those who use the chemical in the work place. The SDSs will be available to all employees during each work shift.
- 3. **Proper Disposal Procedures** of waste materials shall be enforced. Labeling of waste containers and disposal of all hazardous materials by a licensed disposal facility is required.
- 4. **Container Labeling**
 - i. All chemical containers at the site must be clearly labeled as to the contents, the hazards involved, and the name and address of the manufacturer. All secondary containers of hazardous chemicals are to be clearly labeled with the same information as the original container. Each contractor's superintendent or safety representative shall perform the above responsibilities for all their materials.
- 5. **Hazardous Non-Routine Tasks and Nearby Work**
 - i. In the event an employee is assigned to perform, or is assigned to work in an area where a hazardous task, non-routine to their work, the employee will be given the additional information and training related to the hazardous chemicals which may be encountered in the non-routine task. This information and training will be provided by the first-line foreman, contractor superintendent, or contractor safety representative. The information will include the specific chemical hazards of the task, the controls and required protective measures, the types of personal protective equipment required, how to use the equipment, the nature of other work being performed in or near the non-routine task, and what emergency procedures are involved with the task.
- 6. **Demolition**
 - i. Contractor shall stop the work if material reasonably believed to be asbestos, lead, polychlorinated biphenyl (PCB) or hazardous materials is encountered in the work area.
- 7. **Chemicals in Unlabeled Pipes, Vessels and Containers**
 - i. To ensure that employees who work on unlabeled pipes, vessels or containers have been informed as to the hazardous materials contained within, the following policy has been established: Prior to starting work on unlabeled pipes, vessels or containers, employees are to contact their foreman for the following information:
 - ii. Type of chemical in the pipe, vessel or container.
 - iii. Potential hazards.
 - iv. Safety precautions which should be taken.
- 8. **Audit and Review**
 - i. It will be the responsibility of each contractor's superintendent and safety representative to review the entire Hazard Communication Program, and to revise and update the material contained herein to reflect all changes in the purchase, use, storage, and handling of hazardous chemicals at the project site. It will be the further responsibility of the superintendent and safety representative to periodically audit that procedures in the use of the hazardous chemicals meet the requirements as set forth in the SDSs.

25. Hospital Renovation

- a. Hospital renovation requires comprehensive pre-construction planning to incorporate dust and infection control, interim life safety measures, and outside public health agency certification. Before the start of construction, it is important to ensure that all materials identified in the pre-demolition survey and during site inspections are considered and plans for their removal and abatement completed. A pre-construction survey shall be completed to include the locations of shut-offs of critical power supplies, medical gas lines, sanitary lines, ventilation hoods, and other special hazards and considerations. Consideration should be given to electrically isolating the construction work from the existing hospital facility to prevent voltage fluctuations. Use of cell phone and radios should be coordinated with the hospital to prevent Radio Frequency concerns.
- b. Refer to AIA document "*Guidelines for Design and Construction of Hospital Healthcare Facilities*" 2018 edition along with the Joint Commission on Accreditation of Healthcare Organizations and the National Fire Protection Association publications for guidance where necessary.
- c. **Security**
 - 1. Security measures are necessary to prevent non-construction individuals such as disoriented patients, hospital visitors or staff to be in or walk through the construction areas. All construction personnel must have either security badge with personal photo or hardhat with company identification.
- d. **Dust & Infection Control**
 - 1. All work where exposure to respirable crystalline silica dust is possible will be done in accordance with the Environmental – Silica Section of this Safety Plan.
 - 2. All concrete and block shall be wet cut.
 - 3. Powered hand tools shall be of the dust collecting type.
 - 4. All temporary partitions must have a fire rating equal to that which they are replacing, meet NFPA requirements for temporary barriers and meet the requirements set forth by the Authority Having Jurisdiction.
 - 5. All temporary partitions shall be installed deck-to-deck and taped to prevent dust transmission.
 - 6. Where solid partitions are not possible, fire retardant materials shall be used. All seams will be sealed.
 - 7. Appropriate signage will be posted at construction entrances.
 - 8. Construction areas must maintain negative air pressure. To accomplish this, the use of portable HEPA-filtered air machines shall be

used. Use of the hospital ventilation system shall only be utilized when the use of HEPA-filtered air machine use is not possible. Approval from the hospital is required. Confirmation of air differentials shall be logged by instrument.

9. Routes shall be established for the removal of debris and movement of materials through occupied areas of hospital. All debris containers must be covered before being removed from the construction area.
10. Walk-off mats or other means shall be used at construction entrances to prevent dust and other foreign matter from being tracked throughout the hospital.
11. Doors and entrances shall have bottom floor-sweeps installed.
12. Housekeeping must be performed on a continuous basis.
13. Eating and smoking are not allowed inside the hospital or construction work areas.
14. Temporary toilet facilities must be provided with adequate hand washing facilities equipped with towels and hand soap.

e. Interim Life Safety Measures

1. Interim life safety measures shall be coordinated with the hospital or occupied area before construction starts in a written plan. This should include re-routing of fire escapes, signage requirements, fire exits, area mapping, and local fire marshal approval of the plan.
2. Fire protection plan shall include – Hot work permits, fire watch, provisions for protection when sprinklers, smoke, and heat detectors are inactive, storage of compressed gas cylinders and coordination for ventilation control in a fire or smoke emergency.

f. Public Health Agency Certification

1. Coordination with the hospital and public health agencies is critical to ensuring the project is completed on the scheduled start date. Interfacing with these agencies helps the project teams meet the requirements.

26. Housekeeping and Facilities

- a. The site, work areas, and all premises occupied by Gilbane or Contractor personnel shall be maintained in a clean, healthy, and sanitary condition.
- b. Work areas, passageways, and stairs in and around buildings and structures, shall be kept clear of debris. Construction materials shall be stored in an orderly manner. Storage areas and walkways on the site shall be maintained free of dangerous depressions, obstructions, and debris. Construction equipment shall be stored or placed in an orderly manner.
- c. Material may not be stored within 10 feet of an edge, adjacent to any shafts or stairwells.
- d. All material lay down areas must be coordinated and designated by the General Contractor to promote mobility of staged material. Pipes, conduits, metal fabrications and steel framing are to be stored on rolling racks, bins or similar means. Bulk material will be palletized or put in bins to allow for easy mobility using a pallet jack or wheeled device. There will be no waste materials. Hazard Analysis shall be done when the scope of the work or conditions change.
- e. All materials shall be placed in carts, racks or other wheeled devices to allow easy movement and prevent the accumulation of loose materials.
- f. Good housekeeping on the project is mandatory and every employee must do their part daily to minimize dust and to clean up their work area to keep the project clean for safety and efficiency. Controls shall be observed which keep dirt from being tracked into areas outside the work space. Immediate cleanup is required when dust, dirt, or debris may affect the owner's operations.
- g. "Nothing-hits-the ground" All debris generated during a day's work shall be loaded into containers on the same day as created to maintain good housekeeping conditions. No debris when generated by a task shall accumulate on any surface and instead be placed or directed into a suitable, contractor supplied container immediately. This includes waste shipping and packing materials.
- h. Debris and other loose materials shall not be allowed to accumulate in stairwells.
- i. Containers shall be provided for the collection and separation of waste, trash, oily and used rags and other refuse. Metal (dumpster type) containers must be used and emptied promptly.
- j. Contractor shall notify Gilbane of any hazardous waste it will generate during performance of the Work. Contractor has the direct responsibility of maintaining proper storage of these wastes while on site and will verify to Gilbane in writing that the wastes have been disposed of in a legal manner. A copy of the haulers manifest must be provided to Gilbane.
- k. Contractor shall not pour, bury, burn, nor in any way dispose of a chemical on the work project site.
- l. Contractor shall clear all combustible debris to a solid waste disposal project site properly licensed under the laws of the State having jurisdiction. No open burning of debris or rubbish will be permitted anywhere on the project site.
- m. Materials and supplies shall be stored in locations which will not block access-ways, and arranged to permit easy cleaning of the area. In areas where equipment might drip oil or cause other damage to the floor surface, a protective cover of heavy gauge, flame resistant, oil proof sheeting shall be provided between the equipment and the floor surface sheeting so that no oil or grease contacts the concrete. This requirement is applicable to both finished and unfinished floors.
- n. All hoses, cables, extension cords, and similar materials shall be located, arranged and grouped so that they will not block any access-way and will permit easy cleaning and maintenance.
- o. All materials delivered to the site shall be labeled by color code, bar code or QR code.
- p. All work where exposure to respirable crystalline silica dust is possible will be completed in accordance with the Environmental – Silica Section of this Safety Plan.
- q. Failure to maintain adequate housekeeping and to perform daily clean-up will result in the following actions:
 1. Written Notice: Upon receipt, the contractor shall take immediate action to perform housekeeping and clean-up.
 2. If having been given sufficient notice, the contractor fails to clean-up; the work will be performed by others, and the errant contractor back-charged for all related costs.
- r. Daily and final clean-up must be performed in accordance with contract documents.
- s. **Facilities**
 1. The locations of lunch areas and employee toilet facilities will be designated by Gilbane and approved by the Owner.
 2. Eating within the construction project, if permitted, will be confined to designated areas.

3. Each contractor shall provide an adequate number of covered garbage containers. Employees shall properly dispose of all break/meal refuse and drink containers in covered trash receptacles.
4. The site will be cleaned and garbage and refuse will be collected at least daily and removed from the building.

t. Potable Water

1. Each contractor shall provide potable water for its employees.
2. Sanitary facilities shall be provided for personal hygiene.

27. Incentives and Awards

- a. Safety awareness and recognition campaigns during construction will include the posting of banners, posters and signs emphasizing safety awareness, the proper use of safety equipment and safe work practices. Individuals and crews will be recognized and rewarded for performing above and beyond project requirements.

28. Inspection and Auditing

a. Purpose and Scope

1. To establish a basic inspection/audit program for the elimination of unsafe practices by employees and to establish a hazard free work environment for all employees on the project.

b. Objectives

1. To reduce and eliminate incidents through planning and inspection.

c. Procedures

1. Accident prevention will be achieved only when each trade contractor fulfills their contractual and statutory responsibilities and applies all practical steps to maintain safe and healthful work practices and conditions.

d. Project Controls

1. Continued monitoring/audit of the performance of the Contractor and their supervision under this section will be made by Gilbane. Contractors will be notified of any unsafe practices observed. The Contractor's safety supervisor, the Project Safety representative and the Construction Manager's field staff shall utilize Predictive Solutions.

e. Supervisory Control

1. Contractor - Each Contractor will be responsible for conducting continuous daily inspections of their operations to eliminate hazards.
2. Planning - Contractors must extensively plan the procedures to be followed for each operation using Hazard Analysis procedures and submit such plans to Gilbane. Personnel chosen to perform any such planned operation shall be thoroughly briefed in all aspects of the procedure, including emergency actions to be taken in the event of a mishap.

f. Inspections - OSHA

1. It is Gilbane policy to allow OSHA to conduct an inspection of the project (subject to review by Gilbane Corporate Legal if necessary). If a contractor wishes to assert their rights under the U.S. Constitution regarding inspection by OSHA, then the contractor must so notify OSHA prior to the start of an inspection.
2. Each Contractor is required to notify Gilbane in writing prior to starting work if they, by their Company policy, they will require a warrant for OSHA to inspect their work. Gilbane does not require a warrant.
3. Contractors shall forward copies of any and all inspection reports and/or citations received by the Contractor from OSHA to Gilbane.
4. In the event an OSHA Compliance Officer visits the site, he/she will be directed to the Gilbane office. Gilbane will accompany the OSHA inspection party at all times. The appropriate Contractors will then be notified so that an Opening Conference may be conducted. Gilbane will organize an inspection party, consisting of both employer and employee representatives.

g. Third Party Inspections – Non-OSHA

1. In addition to visits and safety inspections by its own corporate or insurance representatives, Contractor is advised that the Project may be inspected from time to time by authorized third parties. Among others so authorized are representatives of the Owner and/or its agent, insurance companies, and OSHA (addressed above). Upon their proper identification and clearance through security, third party inspectors are entitled to access and courteous consideration. The Contractor shall notify Gilbane of inspectors and their purpose upon their arrival. Gilbane will accompany inspectors. Contractor shall notify Gilbane of results of inspections.

h. Notification of Hazards

1. Each Contractor shall notify Gilbane verbally or in writing of the existence of any hazardous conditions, property, or equipment at the work site which are not under the Contractor's control. However, it is the Contractor's responsibility to take all necessary precautions against injury until corrected by the responsible party. Every worker on a Gilbane project has stop-work authority.

29. Interim Life Safety

- a. Whenever construction affects the facility's ability to accommodate occupants (either because of disruption of services, interruption of normal operations, or when hazards are present), it will become necessary to implement interim life safety measures, as follows:
 1. Ensure that all exits are clear. This includes areas directly affected as well as all other exits.
 2. Ensure that there is free access to emergency services, that vehicles, material, etc. are not blocking the access route. Fire lanes are to be kept free of all objects.
 3. Disabling of fire protection systems. A small disaster could escalate if the fire protection system is not functional. Care should be given to provide an alternate system while the primary system is off-line (post fire watch). This includes scheduled maintenance, upgrade, repairs, or adding of coverage resulting in disabling system, and disabling system to allow maintenance or repairs to be completed on other systems (e.g.

hot work).

4. Fire alarm, detection, and suppression systems must not be impaired. A temporary (but equivalent) system shall be used if the system is impaired. These temporary systems must be tested monthly.
5. Temporary construction partitions shall be smoke-tight and noncombustible. Adequate signage shall discourage casual observers from opening or entering the partitions.
6. Additional (double) fire-fighting equipment must be provided, as well as personnel trained in its use.
7. Smoking is prohibited in and adjacent to all construction areas. Strict enforcement must occur.
8. Construction site shall be kept clean and orderly. This includes material piles, debris, platforms, and break areas.
9. Hazard surveillance of sites shall be increased and documented. Attention is to be given to evacuation routes, construction areas, storage, office/lunch areas, and fuel storage.
10. Whenever the safety of adjacent areas is compromised because of construction, staff shall be informed. Alternate exit routes shall be identified.
11. Facility-wide education programs are conducted explaining interim life safety matters and current life safety deficiencies.
12. The construction site must be restricted from all but authorized staff. Adequate signage shall be provided.
13. Alternate access must be provided for public and emergency traffic whenever disruption occurs.
14. Policy and procedures must ensure that roads and pathways are clear of mud, debris, materials, etc.
15. Proper notification must be made to local authorities (fire, police, other) whenever life safety is diminished.
16. Governing body shall be kept apprised of status of life safety during project.
17. Construction workers must be made aware of egress routes and egress routes must be inspected daily to ensure no obstacles.
18. Effective storage, housekeeping, and debris-removal policies and procedures must be in place to reduce collection of combustibles in construction areas.
19. Whenever fire zones are altered, the owner's staff will be informed in regard to new or different life safety measures regarding their changed compartmentation and fire safety.

30. Ladders/Stairs

- a. Stairs or stair-towers are required as the primary means to access floors, roofs and elevated landings. Manufactured stairs, job built wood stairs, temporary stair towers or permanent stairs shall be provided for worker access. Stairs shall be equipped with required treads, stair rails and guardrails at intermediate landings, as well as at the slope, width, and landings, in accordance with applicable OSHA regulations and Building codes.
- b. Ladders shall be used as the last resort for accessing work at height and may only be used with a ladder permit approved by Gilbane for the application and timeframe specified. Only manufactured Podium Type 1A ladders shall be used on the project and shall comply with the regulations of ANSI-A14.1-2017 (or most recent version), Safety Code for Portable Wood Ladders or ANSI-A14.2-2017 (or most recent version), as required by OSHA. See Appendix for Ladder Permit.
 1. When working on/from a ladder at elevations greater than six (6') feet or more above the work surface, all ladders must be tied, blocked, stabilized by a second worker or otherwise secured against accidental displacement. Where adequate anchorages are available, workers shall tie off using a Personal Fall Arrest System.
 2. Stepladders or extension ladders shall not be used as work platforms.
 3. The use of mobile scaffolds, aerial lifts and scissor lifts is preferred.
- c. Ladders shall be inspected daily and before each use.
- d. All ladders shall be used in the manner and for the purposes for which they were designed and constructed.
- e. Portable metal ladders shall not be used.
- f. The side rails or extension shall extend 36 inches above the landing. When this is not possible, grab rails shall be installed.

31. Lockout/Tagout (LOTO) Procedures

- a. The contractor must adhere and strictly follow either the Project LOTO requirements, the owner's requirements or the contractor's own requirements, whichever is the most stringent.
- b. A Lockout/Tagout (LOTO) meeting will be conducted prior to initiating activities that will require LOTO. At this meeting, the contractor shall provide to Gilbane Superintendent for review, the contractor's project-specific LOTO program, including providing samples of the locks and tags to be used, a list of authorized employees that will be applying their locks and tags
- c. Electrical work (e.g. tie-ins, panel maintenance) shall be conducted only on de-energized (locked out and tagged out) systems. All circuit disconnects must be placed in an electrically safe work condition, (i.e. zero energy state), including being locked in the open position and or otherwise appropriately identified with affixed tags stating "DANGER - DO NOT ENERGIZE" or other equivalent wording, and tested, and grounded (if applicable) prior to working on the system or equipment.
- d. For non-electric work including, but not limited to, pneumatic, hydraulic, kinetic or other energy, the contractor planning to work on the system must dissipate or restrain stored energy, (such as from springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam and water pressure) by methods such as blocking, bleeding, de-pressurizing, etc., prior to working on the system or equipment.
- e. Employees are not permitted to work on any energized circuits unless de-energizing introduces additional or increased hazards (examples include interruption of life support equipment, deactivation of emergency alarm systems, shutdown of hazardous location ventilation equipment, of life support systems, OR de-energizing is not possible, due to equipment design or operational limitations (examples include start-up or trouble-shooting diagnostics and testing).
- f. Notification for energized work must be made to the Gilbane Division Safety Director. The pre-task planning and justification for all work on Energized systems must be submitted for review and signature by Owner, Gilbane Division Safety Director and Electrical Supervisor on the Energized Electric Work Authorization Permit. Safety representatives from each contractor involved in energized electrical Work request must participate in this pre-task

planning. Additionally, work practices must conform to all applicable owner, state and federal requirements including the NEC and the most recent version of NFPA 70E.

- g. If energized electric work is anticipated, the contractor's qualified Supervisor shall identify to Gilbane - and have on site - the appropriate Personal Protective Equipment (according to the contractor's calculated incident energy from their flash hazard analysis) based on the designated Hazard Risk Category - and in accordance with arc flash warning labels on electrical equipment and NEC and NFPA 70E requirements.
- h. Consideration must be given to the potential of auto-start generators or similar equipment.
- i. **Disruption of Systems (Line Break)**
 - 1. Policy - Any entry into an operating Process System under installation, testing, or operating conditions is subject to the procedures for "line breaking". Utilize double block and bleed method.
 - 2. All employees are to be informed of the inherent dangers of working on operating process systems.
 - 3. Entries can be made only with approval of the Owner and Gilbane.
 - 4. Added hazard potential exists when cooling occurs, vacuums which may be holding liquids in pockets often break without warning and liquid is released to run to the lowest point. Plugs (particularly solidified process materials) can move and release materials after the first connection has been broken.
 - 5. The Owner and Gilbane must agree on the location of first breaks
 - 6. All systems must be considered as having the potential to discharge contained energy/material from open ends of lines or broken flanges at any time even after the line has been drained and vented. Lock-out tag-out procedures will be followed due to the potential release of energy.
 - 7. Cautions:
 - i. No Contractor may enter an operating piping system or equipment until the requirements of this procedure are met. Systems activated for testing purposes fall under this procedure.
 - ii. Under no circumstances will any line/system be violated other than via the lock and tag procedure.
- j. **Lockout Devices.**
 - a. Only individually keyed padlocks shall be used. Padlocks are to be painted per the craft color code for easier detection and craft identification. A lockout device of the standard scissor type that will allow the placing of more than one padlock is required, when more than one craft is working on a circuit or mechanical process. A piece of chain or cable may be necessary to complete a lockout on some valves or controls.
 - b. Danger Tags: Danger tags are not danger signs and shall not be used where a sign is needed. Two standardized danger tags shall be used on this project:
 - i. "DANGER – DO NOT USE." This tag must be attached to each padlock on a lockout.
 - ii. "UNSAFE – DO NOT USE." This tag does not require an attachment to a padlock, but may be used if needed. This tag shall be used to identify tools, equipment, vehicles, etc.

32. Masonry

- a. In addition to the requirements contained in OSHA 29 CFR 1926.706, the following is required:
 - 1. All work where exposure to respirable crystalline silica dust is possible will be done in accordance with the Environmental – Silica Section of this Safety Plan.
 - 2. The masonry contractor(s) shall appoint a competent person to prepare a job hazard analysis with recognition of the updated OSHA regulation for respirable crystalline silica dust (29CFR1926.1153). The job hazard analysis will be reviewed with the Gilbane Project Safety Manager and Gilbane Project Superintendent prior to start of work.
 - 3. The Mason's qualified person shall approve all changes in the Job Hazard Analysis.
 - 4. A copy of the Job Hazard Analysis shall be maintained at the project site showing all approved changes with a copy provided to Gilbane.
 - 5. The implementation of the Job Hazard Analysis shall be by a person appointed by the Masonry contractor who meets the OSHA definition of competent.
 - 6. The hazard analysis shall be reviewed with each person daily.
 - 7. A safe means of access to the level being worked shall be maintained.
 - 8. There shall be protection provided to prevent tools and material from striking any person below the work/storage level. This includes tethering of tools, equipment with engineered tethers.
 - 9. A tag line shall be used to control all loads.
 - 10. When loads are being hoisted, all personnel are to be prevented from walking under the load.
 - 11. No one shall be permitted to ride a load under any circumstances.
 - 12. A measuring device to accurately determine wind speed shall be provided by the masonry contractor with observations made available to Gilbane upon request.
 - 13. Impalement hazards will be protected including anchor bolts.
- b. **Masonry Wall Bracing**
 - 1. The masonry contractor shall provide to Gilbane a design, prepared by a Professional Engineer, meeting the requirements of OSHA 29 CFR 1926.706 (b) and the Standard Practice for Bracing Masonry Walls under Construction as developed by the Council for Masonry Wall Bracing.
 - 2. No one shall be permitted within the limited access zone of an unbraced or braced wall subjected to winds of more than 35 mph (20 mph if during the initial period of construction).
 - 3. A DANGER sign shall be placed on every unsupported masonry wall that is more than 6 feet in height, braced or unbraced, and 50 feet or less in length. The sign shall be placed at each end of the wall and at intervals of not more than 100 feet along each side of the wall. The sign shall contain the words *DANGER* and *THIS UNSUPPORTED WALL IS UNSTABLE IN WINDY CONDITIONS*.
- c. **Fall Protection (See Fall Protection Section)**
 - 1. All employees engaged in masonry work, including overhand laying or any other activity that exposes them to a fall of 6 feet or greater shall be

provided with and use 100% fall protection. This protection shall be either a personal fall arrest system consisting of a full-body harness, double, shock-absorbing lanyard, and anchorage or a safety net or a guardrail. "Controlled Access Zones" are not permitted.

2. Fall protection requirements shall be rigorously enforced with any observed violation cause for removal from the project.

d. Perimeter Protection

1. A guardrail system will be constructed in accordance with OSHA 29 CFR 1926.500. Or alternative fall protection consisting of safety nets or personal fall arrest equipment provided.

33. Motor Vehicles and Equipment

- a. All equipment must have documented inspections before first use and daily use by Contractor's operator. Documented and complete inspections must also be made by Contractor at 30 day intervals with proper documentation maintained at the project site by Contractor and copies shall be made available to Gilbane upon request.
- b. Defective equipment shall be red-tagged first, then repaired or removed from service immediately.
- c. All Contractors' operators of construction equipment should be properly licensed and certified by a competent person. Copies of the certifications shall be maintained on project site by Contractor and made available to Gilbane upon request.
- d. Vehicles used to transport employees shall have seats firmly secured and adequate for the number of employees to be carried. All passengers shall be properly seated with seat-belt used. Standing/kneeling on the back of moving vehicles is prohibited.
- e. Locations for storage of all fuels, lubricants, starting fluids, etc., shall be reviewed by Gilbane prior to use by Contractor for storage and shall conform to the requirements of the NFPA as well as the local Fire Marshal.
- f. Where required, contractors shall provide equipment diapers to protect from environmental spills.
- g. Contractors shall provide adequate spill kits to control spills of grease, oil, hydraulic fluid and any other fluids from equipment or from storing or transferring such fluids.
- h. If internal combustion engines are used on motorized equipment in enclosed areas, the contractor is responsible for monitoring the quality of breathing air for harmful contaminants and adequate oxygen and is responsible for providing adequate ventilation.
- i. Drivers of motor vehicles shall have a valid state driver's license (CDL when applicable) and be instructed to exercise judgment as well as observe posted speed limits.
- j. All contractors' means of ingress and egress shall be adequately marked and kept clear of stored material, debris and equipment.
- k. Pedestrians always have right-of-way over motorized traffic.
- l. Horns shall be sounded at blind corners, when passing, and/or for warning.
- m. Shall be equipped with a charged and inspected fire extinguisher.
- n. The maximum speed limit on the project is ten (10) miles per hour.
- o. All mobile equipment shall be equipped with an Engineered Roll Over Protection System (ROPS)
- p. Established hand signals or turn signals are to be used.
- q. Reckless driving or other non-observance of these instructions will be cause for withdrawal of driving privileges on the project.
- r. Any ATVs used on the project shall be four-wheeled. ATVs shall not be used on roofs. All ATVs shall be equipped with an Engineered Roll Over Protection System (ROPS)
- s. If required, all vehicles permitted access to the site must display an appropriate vehicle identification badge from the rear-view mirror or other conspicuous location at all times while on the project.
- t. Seat belts shall be worn by all employees operating motor vehicles and any equipment with rollover protection structures during performance of work.
- u. Properly trained and equipped flag persons shall be used whenever construction traffic accesses or exits from public highways as well as when construction traffic and deliveries interfere with the planned flow of traffic on public highways.
- v. Keep hands, tools and loose clothing away from machinery rotating parts.

34. Personal Protective Equipment (PPE) and Clothing

a. Eye and Face Protection

1. Appropriate eye protection meeting the requirements of ANSI Z87 (most recent version) with side shields are required to be worn in a manner to protect the eyes while in construction areas at all times.
2. Goggles, welding hoods and shields, or face shields will be required to be properly worn at all times when in the area of operations, such as when welding, burning, grinding, chipping, chemical handling, working with corrosive liquids or molten materials, drilling, sawing, driving nails, using power actuated tools, concrete pouring, tampers, and gasoline fueled hand operated equipment (i.e. chain saws). In addition, goggles, welding hoods/shields, or face shields shall be worn as specified by manufacturer recommendations of tools, equipment, and material SDS. This section will also apply to those employees of Contractors who are assisting any worker as an apprentice or helper.
3. Prescription glasses must meet the requirements of ANSI Z87 (most recent version), or be covered with over-the-glass safety glasses or face shield or goggles.
4. Safety glasses with dark lenses are not allowed for work in low-light environments. Clear or yellow-tinted lenses must be provided for low-light environments.

b. Hand and Arm Protection

1. Employers shall select, provide, and require employees to use appropriate hand protection when employees' hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns; thermal burns; and harmful temperature extremes. All gloves shall have a minimum ASTM/ISEA/ANSI Level 4 cut resistance and are required 100% of the time while on-site. Any deviation must be reviewed by the Division Safety Director.
2. Employers shall base the selection of the appropriate hand protection on an evaluation of the performance characteristics of the hand protection

relative to the task(s) to be performed, conditions present, duration of use, and the hazards and potential hazards identified. All gloves shall have a minimum ASTM/ISEA/ANSI Level 4 cut resistance. In addition, gloves shall be worn as specified by manufacturer recommendations of tools, equipment, and material SDS. See Appendix for Hand Protection Reference.

3. Knife use and protection. Trades shall work to reduce their reliance on knife use. Identifying the proper tool for the job is fundamental to safety. If trades discover through the pre-task planning process that knives are the safest choice then special permissions must be obtained from Gilbane.
4. Employers shall select, provide and require employees to use appropriate arm protection when employee's arms are exposed to severe cuts, lacerations, abrasions or punctures. All cut resistant sleeves shall have a minimum ASTM/ISEA/ANSI Level 4 cut resistance and are required during all demolition, cold-formed metal framing, MEP in-wall metal stud rough-in, above ceiling work and sheet metal activities unless the pre-task plan indicates these hazards are not present for a specific task.

c. Clothing

1. Shirts with sleeves and long pants are required at all times.
2. ANSI Class II vest or ANSI Class II compliant apparel is required to be worn at all times within construction areas.
3. Safety-toe footwear meeting ASTM F2413-11 (Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear) must be worn at all times while in construction areas.
4. Hard hats or helmets meeting ANSI Z89.1 must be worn at all times in construction areas.
5. Wearable devices may be deployed and required as a part of each worker's Personal Protective Equipment on this project.
6. No televisions, radios, CD players, cassette tape players or personal audio/visual systems (ex. iPod, Cell Phone, MP3 players, etc) are allowed to be used on site.

35. Powder-Actuated Tools

- a. Powder-actuated tools shall use lead-free powder loads. Safety data sheets shall be submitted to Gilbane for verification.
- b. Requests for variances to the lead-free requirement must be submitted in writing to Gilbane and include a copy of all lead dust provisions and controls that will be implemented in accordance with 29 CFR 1926.62 including but not limited to negative exposure assessments, respiratory protection, dust controls, housekeeping and training.

36. Precast/Prestressed Concrete

- a. **Fall Protection** for all employees engaged in work with a fall exposure of 6 feet or greater above a lower level shall be either a guardrail system, a safety net system or personal fall arrest system. The use of "Safety Monitoring" and "Warning Line System" and "Controlled Access Zones" are not permitted. Refer to Section on Fall Protection in this document for additional requirements.
- b. **A Pre-Construction Meeting** between Gilbane, the Fabricator and the Erector must be held to discuss the following topics:
 1. Sequence of erection;
 2. Schedule of delivery by load list;
 3. Anchor bolt certification;
 4. Review of the structural plans and details;
 5. The written erection plan described below
- c. **The Erector is to provide Gilbane the following:**
 1. Written erection plan prepared by a Company Officer or Professional Engineer indicating complete details of all phases of erection that shall include at least the following:
 - i. Crane capacities, Crane lift plans with load calculation based on the crane(s) to be used and various setup locations.
 - ii. Written stabilization plans for all phases including the use of temporary guying and bracing for columns and wall panels.
 - iii. Written documentation of temporary bracing and connection details for use until permanent connections are completed including capabilities of workers doing the installation, types of welds or adequacy of bolted connections.
 - iv. Listing of competent persons for fall protection, crane operation and erection along with phone numbers for emergency contact.
 - v. Fall protection plan in accordance with the Project Safety Plan including Leading Edge protection both during installation and after. Sequencing breaks and end of workday protective measures will also be detailed. Interior floor hole protection must be provided per OSHA Subpart M greater than 2 inches in the least dimension.
 - vi. Custody of Guardrail cables following completion of precast erection. Erector to present a plan detailing how the cables will be safely removed utilizing Personal Fall Arrest Systems; or safety nets.
 - vii. All work where exposure to crystalline silica dust is possible will be done in accordance with the Environmental – Silica Section of this Safety Plan.
 - viii. Hazard Analysis of all operations, presented to all workers prior to each shift on hazards specific to the day's operation.
 - ix. Proof of training for all erection crewmembers.
 - x. Delivery locations for trailers including adequate ground preparation and plan for unloading.
 - xi. Wind loading considerations including when operations will be suspended due to high winds.
 2. Any proposed field modifications to the approved Erection Plan shall be approved by a Company Officer or the Professional Engineer of Record, added to the plan, which shall be available at the jobsite. A copy must be submitted to Gilbane and approved by the Gilbane Project Manager and/or Gilbane Superintendent prior to any change.
- d. **Lifting and Handling Requirements**
 - a. Lifting inserts, which are embedded or otherwise attached to precast concrete members, shall be capable of supporting at least four times the maximum intended load applied or transmitted to them, and shall be used in accordance with the manufacturer's recommendations.

- b. Lifting hardware shall be capable of supporting at least five times the maximum intended load applied or transmitted to the lifting hardware.
- c. Adjustment of precast members, after initial placement, which requires the lifting of the members in any manner, shall not be made unless wire rope safety tie backs are used or the members are attached to the crane load line.
- d. Chains are not permitted to be used as slings. Chain "come-along" are permitted with proof of required inspections and certification.

37. Pressure Testing Safety Requirements

- a. Pressure testing involves hazards, such as the release of hazardous energy, being struck by loose fittings or burst pipe. In addition, if an inert gas, such as nitrogen is used, it can displace oxygen and can create an oxygen-deficient atmosphere, which can be harmful or fatal. If flammable gas is used, it can cause an explosion if there is an ignition source.
- b. The following procedure shall set forth the minimum requirements to ensure that pressure testing is performed safely. Contractors shall also develop a site/task specific Job Hazard Analysis (JHA), as well as their own procedures for safely pressure testing pipe, and review with Gilbane prior to starting this activity.
 1. Contractor performing pressure testing shall barricade area off and place signage restricting access to only authorized personnel.
 2. Authorized personnel shall wear appropriate PPE consistent with the contractors JHA.
 3. All mechanical devices, such as valves and blinds used to isolate the system shall have a lock and tag affixed by the contractor to prevent accident pressure release.
 4. Contractor and authorized personnel shall walk down the system and check the integrity of all connections, caps, seals and fittings within the system to be tested to ensure they are secure.
 5. Contractor shall install additional supports on piping necessary for increased pressure or weight of testing medium.
 6. Test equipment and gauges shall be inspected by the contractor and confirmed to be in proper working order before testing is begun.
 7. Maximum test pressure and duration of the test shall be communicated to the contractor's authorized testing personnel and Gilbane.
 8. Contractor to develop a venting procedure for dissipating gases safely. Monitors will be used to confirm adequacy of the ventilation scheme.
 9. Contractor shall develop a Drain procedure to drain water or other fluids safely, without polluting drains or creating slippery conditions.
 10. Contractor shall review the JHA with all authorized personnel prior to the test.
 11. Testing shall be performed under the supervision of the contractor supervisor.
 12. Testing shall be conducted in accordance with pipe and testing equipment manufacturer's precautions and specifications.
 13. Test pressure shall not exceed the maximum allowable test pressure for any vessel, pumps, valves, or other components in the system.
 14. All repairs or adjustments to the system being tested shall be done only after the system pressure is safely and completely relieved and the test gauges indicate 0 psig pressure.
 15. Only mechanical devices, such as gate or ball valves shall be used for incremental release of flow in depressurizing systems. The opening or 'breaking' of flanges shall never be used as a means of depressurizing a tested system.
 16. Upon acceptance of the pressure test, pressure in the system shall be completely relieved so that the test gauges indicate 0 psig, and verified by contractor's supervisor.
 17. Contractor shall conduct all testing in accordance with applicable laws, codes, and ASME B31, B16 and related standards.

38. Project - Code of Safe practices

a. Each individual working on this project will be required to attend a safety orientation meeting at the start of their assignment. At the conclusion of the meeting, each will be required to sign a Code of Safe Practices as follows, indicating their agreement to follow that Code while on the Project. This does not relieve the trade contractor of any responsibility to properly orient and train their employees for the specifics of their work.

b. Sample Page:

Code of Safe Practices

[Project Name]

Employee Name (Print): _____

I agree to abide by the following Code of Safe Practices while on this project.

1. To assist the project in being incident and injury free, I have granted permission to the Construction Manager to discuss all aspects of working safely with me. Likewise, I have the right to discuss safety issues with the Construction Manager, other trades (regardless of trade jurisdiction or craft) and to stop work at any time I feel there is an unsafe condition to me or others.
2. I understand there are above-OSHA requirements in the Project Safety Plan and the Gilbane Interim Guidance- Coronavirus Disease 2019 (COVID 19) ("Guidelines") and I will abide by those requirements.
3. I will work in a safe manner, protecting myself and others, and will report observed hazards to my supervisor. If not addressed, I will further report these hazards to the Gilbane Superintendent.
4. I will dress appropriately for the project, wearing a long or short-sleeved shirt, long pants, ANSI Class II reflective clothing/ vest and safety toe (a.k.a. steel toe) footwear with substantial soles.
5. I will use personal protective equipment as required by my trade, and will wear a hard hat, safety glasses and cut level 4 gloves at all times. I will also wear a face covering as appropriate for the work I am performing or as required.
6. I will maintain Social Distancing requirements as required by law and identified in the Guidelines.
7. I will not enter the Project if I have a fever as defined by the CDC or if I am experiencing COVID 19 symptoms as described by the CDC or been in close

contact with someone diagnosed with COVID 19.

8. If I experience a fever or COVID 19 symptoms while on site I will immediately inform the Construction Manager and leave the Project. I will also quarantine myself as required by the CDC and notify the County Public Health officials.
9. I will abide by the six-foot fall protection rules, including use of harnesses where required.
10. I will park only in designated areas and observe a ten-mile per hour speed limit on site.
11. I will only smoke or use tobacco products in designated areas.
12. I will eat only in designated areas and dispose of trash in proper containers.
13. I will not use any intoxicants or other controlled substances on the project.
14. I will report all injuries and accidents involving persons or property.
15. I will not bring any weapons - including firearms or pocket knives onto the site.
16. I will conduct myself in a professional manner and not engage in any workplace violence, horseplay, practical jokes, or other behavior obnoxious to the general public. I will not harass anyone else on site or any member of the public, sexually or otherwise. I will not bring onsite or write or draw any sexually explicit materials.
17. I will not use any headset-type radios, music players, personal televisions or other personal entertainment devices on site.
18. I will not use my cell phone in work areas, around heavy equipment or while engaged in work activities. If I must use a cell phone I will do so in safe areas.
19. I will comply with the security procedures established throughout the project, for entrance to the site.
20. I will comply with all site Guidelines and other infectious disease policies. I understand that failing to follow these policies may result in verbal warnings, written warnings, suspension and/or permanent removal from site. Infractions include – but are not limited to:
 - Not adhering to CDC and State specific policies.
 - Not maintaining a minimum safe distance of six (6) feet from other site personnel.
 - Failure to wash hands after using restroom.
 - Disobeying verbal or written safety orders from Gilbane or my supervisor.
 - Failure to clean up after myself and dispose of trash and debris properly.
 - Failure to always have proper PPE.
 - Failure to report any health issues prior to coming on to the jobsite.
 - Failure to abide by manlift overcrowding rules.
 - Tampering with PPE or any provided supplies, hand sanitizers, hand wash stations or restroom areas.
 - False reporting of positive COVID-19 or any other infectious diseases.

Signed _____

39. Project - Safety Rules

- a. All personnel on this project, including the employees of Contractor, will be required to comply with these rules. Contractor shall ensure and indicate that all its employees have read these rules and understood its contents. The employee must sign a declaration which shall then be retained by Contractor with the employee's personnel file. In addition, Contractor shall comply with the following:
- b. Long or short sleeve shirts shall be worn at all times. All shirts shall be tucked in trousers at all times. All shirts shall be hemmed at neck, sleeve and tail. "Muscle Shirts" are prohibited.
- c. Long pants are required. "Shorts" are prohibited.
- d. Loose fitting clothes or dangling jewelry shall not be worn around moving machinery, grinding operations, welding, or other hazardous operations.
- e. Hair which could come in contact with, or be caught in machinery, shall be protected by a hard hat or other appropriate means.
- f. Approved hard hats meeting specifications contained in the most current addition of the American National Standards Institute (ANSI), Z89.1 and/or Z89.2 are required. "Cowboy-type" hard hats are not allowed. Baseball caps and other soft headwear are not allowed under the Hard Hat suspension.
- g. Eye protection must meet ANSI Z87 requirements and must be worn at all times in construction areas. Prescription glasses must meet the requirements of ANSI Z87 (most recent version) or be covered with over-the-glass safety glasses or face shield.
- h. Gloves meeting ANSI Cut level 4 shall be worn during all work activities. In addition, gloves shall also be worn as specified by manufacturer recommendations of tools, equipment and material SDS.
- i. ANSI Class II vest or ANSI Class II compliant apparel is required to be worn at all times within construction areas.
- j. Safety-toe footwear meeting ASTM F2413-11 (Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear) must be worn at all times while in construction areas. Sandals, tennis shoes or any other street type shoes (even if equipped with ANSI toe protection), will not be permitted.
- k. All contractors' means of ingress and egress shall be adequately marked and kept clear of stored material, debris and equipment.
- l. No firearms are allowed on the project site.
- m. Practical jokes, horseplay, scuffling, wrestling and/or fighting are prohibited and may be grounds for immediate dismissal.
- n. Drinking and/or possession of intoxicants on the Owner's property are forbidden. The use of narcotics, unless authorized by a physician, and the Project Manager/Supervisor is forbidden. Violation(s) of the above will result in immediate dismissal.

40. Protection of the Public

a. Access to the Site

1. No work shall be performed in any area occupied by the public unless specifically reviewed and permitted by Gilbane. In that the project interfaces with the public, precautions to be taken include, but are not limited to:
 - i. Each Contractor shall take such necessary action as is needed to protect and maintain safe public use of sidewalks, entrances to

buildings, lobbies, corridors, aisles, doors, exits and vehicular roadways. The Contractor shall protect the public with appropriate sidewalk sheds, canopies, catch platforms, fences, guardrails, barricades, shields, and adequate visibility as required by laws and regulations of governing authorities. Such protection shall guard against flying materials, falling or moving materials and equipment, hot or poisonous materials, flammable or toxic liquids and gases, open flames, energized electric circuits or other harmful exposures.

Guardrails shall be made of rigid materials complying with the requirements for standard guardrails as defined by OSHA and the Project Safety Plan. Temporary sidewalks, ramps or stairs shall be provided with guardrails on both sides whenever permanent sidewalks, ramps or stairs are obstructed by the work. Barricades, secured against accidental displacement, meeting the requirements of local authorities, may be authorized by Gilbane where fences, sheds, walkways and/or guardrails are impractical. During the period when any barricade, fence, shed, walkway, or guardrail is removed for the purpose of work, a watchman shall be placed at all openings.

- ii. Appropriate warnings, signs and instructional safety signs shall be conspicuously posted where necessary. In addition, a signalman shall control the moving of motorized equipment in areas where the public might be endangered. Warning lights, including lantern and electric lights, meeting the requirements of governing authorities shall be provided and maintained from dusk to sunrise along guardrails, barricades, temporary sidewalks and at every obstruction to the public. These warning signs and lights shall be placed at both ends of such protection or obstruction and not over 20 feet apart alongside of such protection or obstructions.
- iii. With respect to operations being performed on public roadways, all DOT and/or municipality requirements towards public safety will be strictly observed.
- iv. Access to the site is limited to the entrance(s) designated for construction traffic as indicated on the site logistics plans issued with the construction documents. At no time are Contractor personnel or vehicles to obstruct traffic on public streets or Owner entry driveways. All material deliveries shall be scheduled in advance with the Project Superintendent and shall be completed within the time segment allocated for the specific delivery.
- v. A temporary eight-foot high fence, in compliance with contract specifications and regulations of governing authorities, shall be provided and maintained around the perimeter of operations on the project site to control access to the work by employees, to protect the public, and to restrict access by unauthorized individuals. The rules and regulations of the governing authority shall apply when the owner of the property specifically prohibits such protective devices.

b. Authorized Visitors

1. All visitors to the site are required to register with Gilbane upon arrival. Each Contractor will be expected to regulate their visitors accordingly. All visitors must sign a hold harmless agreement before touring the jobsite. Visitor passes expire upon departure from the site and are to be surrendered to Gilbane. See Appendix.

c. Parking

1. Parking shall be in designated areas only. All vehicles delivering materials to the Project shall be authorized to do so by Gilbane. Unauthorized vehicles may be removed at the direction of Gilbane and all towing charges will be the responsibility of the vehicle Owner.
2. **Fire hydrants and all designated fire lanes shall remain clear at all times for the use of emergency vehicles.**

d. Employee Identification

1. Where required, all project site employees will be issued a hard hat sticker upon completion of their initial safety orientation and after having passed their alcohol and drug test. All persons without a hard hat identification sticker shall report to the Gilbane office for verification of employment status, attendance at an orientation session, or issuance of a single day visitor pass.
2. This identification badge will remain the property of Gilbane and the Owner. The identification badge shall be maintained in good condition and on the person to whom it is issued. The identification badge shall be returned to Gilbane or the Owner when employment on the Project is terminated or when requested by Gilbane, or other authorized and designated person. All lost or stolen identification cards shall be immediately reported to Gilbane or the Owner.

e. Tours

1. It is of the utmost importance that a high degree of protection be afforded all persons touring the project site. The following guidelines shall be complied with by personnel who are responsible for the organization, direction and safe conduct of the tours:
 1. All group tours will be cleared through the Owner's representative and Gilbane.
 2. All tours will be coordinated by Gilbane to accommodate the Project schedule, to make necessary preparations, and to assure safety precautions are observed.
 3. Gilbane will review the following items with the person requesting the tour:
 - **Number of visitors** - Individual tour groups in non-hazardous areas should be limited to no more than five persons per tour guide (i.e. a tour group of 10 will require at least two tour guides).
 - **Clothing** - Tour groups will be required to wear appropriate clothing (i.e. slacks") and safety toe footwear (aka. steel toe).
 - **Children** - Children will not be permitted to accompany tours. Only those 18 years of age and older are permitted to work/visit/tour on the project.
 - **Protective equipment** - Safety toed footwear, hard hats, safety glasses, reflective vest and gloves will be worn at all times while visitors are on site. Raincoats, and other necessary protection will be supplied as required.
 - **Release and Hold Harmless Agreement** - Each visitor will be required to sign this form prior to the start of the tour. See Appendix.
2. Immediately prior to entering the project site, all visitors shall be briefed about the need for careful and orderly conduct, including mention of any special hazards which may be encountered.
3. Technical and official visitor tours will be conducted in accordance with the above safety precautions. Since technical tours are often conducted through areas of more hazardous work, it is recommended that the number of people on such tours be proportionate to the degree of hazard involved.

41. Safety Coordination

- a. A project pre-construction and/or kick-off meeting will be held with the superintendent(s), safety coordinator and Foremen of each new Contractor prior to coming on the site.
- b. Gilbane will issue the project start package information and special instructions to the Contractors in support of the Safety Plan when needed.
- c. Gilbane will conduct regularly scheduled meetings with the Supervisors of new Contractors coming on the site and explain safety goals, contents of this manual and otherwise provide site orientation, safety activities and information. All Supervisors will be required to attend this orientation after coming on the site.
- d. Contractor meetings will be held as necessary and as directed by Gilbane. All Contractors working on the Project will have a representative at the safety meeting to maintain all safety requirements for their trade.
- e. Gilbane will conduct safety meetings on a regularly scheduled basis. Minutes of the meeting will be a topic of all scheduling and progress meetings.
- f. All Contractors are required to hold weekly 10-15 minute "Tool Box" safety meetings for all employees. Topics related to work assigned, and current safety problems will be discussed. Gilbane may monitor these "Tool Box" meetings through personal attendance or by reviewing a copy of the meeting report.
- g. Prior to starting any major operation, which would involve locking/tagging procedures, a meeting must be set up involving Gilbane, and every Contractor Superintendent and every Contractor Safety representative affected by the work.
- h. Pre-construction meetings.
 1. The Contractor, before starting work at the project site, shall attend a pre-construction "award" meeting with Gilbane to understand the project conditions and safety requirements.
 2. A project site tour shall be made to confirm the Contractor's awareness of potential safety hazards.
 3. The Contractor shall provide appropriate methods, equipment, devices and material.
 4. The Contractor shall provide or develop their own project specific safety program and submit it to Gilbane for review prior to starting work at the project site.
 5. Such review shall not relieve the Contractor of responsibility for safety, nor shall such reviews be construed as limiting in any manner.
- i. It is the Contractor's obligation to undertake any action, which may be required to establish and maintain safe working conditions at the project site.

42. Scaffolds/Lifts

- a. The Contractor's designated Competent Person shall inspect all scaffolds prior to each work shift with written documentation provided to Gilbane on a daily basis. All scaffolds shall bear a tag, signed and dated by the contractor's competent person, denoting that the scaffold has been inspected and is safe to use prior to any employee utilizing that scaffold that day.
 1. Any contractor using scaffolding shall provide to Gilbane the name of their competent person along with the content of the competent person's training experience and proof of Scaffold User Training for all employees who may work on scaffolding.
- b. All employees erecting, using and dismantling scaffolds shall be trained in the hazards present and the safe procedures to be followed to eliminate exposure to those hazards and shall be provided with fall protection when six (6) feet or more above the next lower level. Daily, documented inspections will be performed by a designated competent person.
- c. Scaffold cross-bracing is not permitted to be used as a substitute for guardrails. Swing gates will be provided at all ladder or stair access points. Where material is being landed on a scaffold, the outrigger extension will not be used to support the material unless it is deemed adequate by the manufacturer and a factor of safety of 4 is provided.
- d. All non-mobile scaffold frames shall have base plates installed and sill boards.
- e. Dressed Nominal grade lumber is not allowed as scaffold planking.
- f. All mobile scaffolds will have wheels locked when in use and stationary.
- g. Scaffolds with a width less than 60 inches must have guardrails (top, mid and toe) installed when the work platform is in excess of 48 inches above the floor or lower work area. Outriggers are required when the working surface is 5 feet above the floor.
- h. All individuals shall wear a Personal Fall Restraint System attached to the manufacturer's approved anchorage point when working out of aerial lifts and scissors lifts. Standing on guardrails is not allowed.
- i. Aerial Work Platforms and Elevated Work Platforms shall be fitted with appropriate primary or secondary guarding devices in an effort to eliminate operator crushing incidents. A primary guarding device is a physical structure that prevents the operator from being crushed. A secondary guarding device is an alarm and or sensor bar that alerts ground personnel when an operator is in a potential crush hazard. Operators must use engineered lift systems if the equipment will be used for hoisting work equipment (glass, dens glass, etc. must have engineered attachments).
- j. A mast-climbing elevating work platform that may be adjustable by manual or powered means must meet the requirements of ANSI Standard ANIS/SIA A92.2 (most recent version) Standard for Mast-Climbing Work Platforms and be accessible by a stair system. All attachment points to be torqued per manufacturer requirements. Documentation shall be provided to Gilbane.
- k. Stair Scaffolds:
 1. 'System' scaffold stairs shall be erected as early as possible during the building construction to facilitate safe access to all working levels once the steel erector has released the floor/level to Gilbane. Scaffold stairs shall remain in place until the permanent stairs are constructed and made available for use by Gilbane.
 2. Stair scaffolds shall be constructed in accordance with the manufacturer's instructions by trained and qualified workers under the direction of a competent person.
 3. Stair scaffolds shall be inspected daily by a competent person – reviewed by Gilbane – at the beginning of each shift. The competent person shall date and initial a scaffold tag and place the tag at the entrance to the stair scaffold.
 4. Stair scaffolds used during winter months shall be enclosed to prevent ice and snow from creating slippery conditions.
 5. Temporary lighting accordance with OSHA requirements shall be installed on all enclosed stair scaffolds.
- l. Ladder Jack scaffolds are not permitted on Gilbane projects.

43. Signs, Signals, Barricades and Lights (Motor Vehicle Exposure)

- a. Signs, signals and barricades shall be visible at all times where a hazard exists and will be in compliance with ANSI D6.1 (most recent version), Uniform Manual of Traffic Control or regulations promulgated by the local authority.

44. Steel Erection

a. Erection Plan

1. An erection plan will be prepared by the Steel Erector's Qualified Person, stamped by a registered Professional Engineer and reviewed with the Gilbane Project Superintendent and Gilbane Project Safety Manager prior to start of work.
2. The erection contractor's qualified person shall approve all changes in the safety erection plan.
3. A copy of the erection plan shall be maintained at the project site showing all approved changes with a copy provided to Gilbane.
4. The implementation of the erection plan shall be under the supervision of a competent person.
- b. A safe means of access to the level being worked shall be maintained. Climbing and sliding on columns or diagonals, is not allowed.
- c. Containers, such as buckets or bags, shall be provided for storing or carrying bolts or rivets. When bolts, drift pins, or rivet heads are being removed, a means shall be provided to prevent accidental displacement. Tools shall be secured in such a manner to prevent their falling.
- d. Fall protection provisions, such as lifeline attachments, dynamic fall restraints and other such devices shall be considered during shop drawing preparation, shall be incorporated in fabricated pieces, and shall have safety lines or devices attached prior to erection wherever possible.
- e. A tag line shall be used to control all loads.
- f. For the protection of other crafts on the project, signs shall be posted in the erection area by the erection contractor reading, "*Danger Workers Overhead*" and only ironworkers allowed in this area. This will include shake-out areas, erection areas and the load travel path from the storage area to the erection area.
- g. When loads are being hoisted, all personnel are to be prevented from walking or working under the load.
- h. No one shall be permitted to ride a load under any circumstances.
- i. Crane personnel platforms will not be used for any purpose without the written approval of the Gilbane Division Safety Director.
- j. Material shall not be hoisted to a structure unless it is ready to be put into place and secured.
- k. Bundles of metal decking or small material shall be so secured as to prevent their falling out from the rigging.
- l. Multiple lifts (e.g. "Christmas-treeing," "Suit casing") of any type are not allowed unless approved by the Gilbane Division Safety Director.

m. Fall Protection (See Fall Protection Section)

1. All employees engaged in steel erection activities including connecting, bolting-up, decking, welding or any other activity that exposes them to a fall of 6 feet or greater shall be provided with and use 100% fall protection. This protection shall be either a personal fall protection system consisting of a full-body harness, double, shock-absorbing lanyard, and anchorage or a safety net or a guardrail. Neither "Controlled Decking Zones" nor "Safety-monitor systems" are permitted. Metal deck is not considered a form of fall protection.
2. Fall protection requirements shall be rigorously enforced during steel erection with any observed violation cause for removal from the project.
3. Only full body harnesses will be used as part of a personal fall protection system.

n. Perimeter Protection

1. Immediately following the erection of beams and columns a guardrail system consisting of a minimum of two (2) 3/8-inch diameter 7 x 19 galvanized new aircraft cables shall be installed as follows:
 - i. Top rail of the wire rope cables shall be erected at 43.5 inches from the finished floor.
 - ii. Mid rail of the wire rope cables shall be installed approximately halfway between the finished floor and the top guardrail – approximately 22 inches.
 - iii. Wire rope guardrails shall initially be tensioned to 2,400 pounds of force and be maintained to comply with OSHA fall protection requirements.
 - iv. Termination.
 - The length of cable shall not exceed 120 feet without being terminated.
 - Cables shall be terminated at all 90-degree turns.
 - Connections and shall be 'looped' connections with three (3) wire rope clips (not alternating sides) used at all connections – line splicing is not permitted.
 - All sequence breaks will require a two (2) cable assembly.
2. Stanchions
 - i. Steel angle stanchions shall be installed and spaced on perimeter bays as follows:
 - In bays with column spacing less than thirty (30) feet install at least one intermediate stanchion. Rigged between 39"-45".
 - In bays with column spacing greater than thirty (30) feet install at least two intermediate stanchions. Rigged between 39"-45".
 - Steel stanchions used at corners shall have diagonal supports installed to at least 80% of the height of the stanchion.
3. Turnbuckles shall be installed on top and mid rail wire rope cables at each perimeter side.
 - i. Intervals shall not exceed 120 feet or as directed by Gilbane.
 - ii. Loading bays shall have separate guardrail and turnbuckle assemblies installed.
4. Guardrails will not be used as a horizontal lifeline as part of a personal fall arrest system unless designed by the steel erector's Qualified Person and installed under the supervision of the steel erector's competent person.
5. Guardrails shall not be used as an attachment point for equipment or materials (e.g. electrical cords, welding leads, pneumatic hoses).

o. Interior Protection

1. Installation of guardrails at interior floor openings (e.g. stairs or mechanical shafts) shall conform to one – or a combination – of the following:

- i. Option 1 – Install 3/8 inch galvanized aircraft cable through stanchions at 43.5 inches above the finished floor. Terminate the cables at 90-degree turns.
 - ii. Option 2 – Bolt 2 1/2" x 2 1/2" x 1/4" steel angles horizontally to the stanchions to serve as top- and mid-rails. A mid-stanchion post is required for spans greater than eight (8) feet.
 - iii. Option 3 – Secure 2" x 4" construction grade lumber horizontally to steel stanchions to serve as top- and mid-rails. A mid-stanchion post is required every eight (8) feet.
2. Guardrails will not be used as a horizontal lifeline as part of a personal fall arrest system unless designed by the steel erector's Qualified Person and installed under the supervision of the steel erector's competent person.
 3. Guardrails shall not be used as an attachment point for equipment or materials (e.g. electrical cords, welding leads, pneumatic hoses).
 4. Top- and mid-rail cables, as outlined above, shall also be used at all sequence breaks.

45. Stretch and Flex Program

- a. All contractors and trade workers at this project are required to design and implement a Stretch and Flex Program for their employees. The purpose of the program is to gently condition the muscles and tendons of the workers before they engage in their duties in order to avoid injury.
- b. A Stretch and Flex Program shall be developed by each Contractor and submitted to Gilbane prior to commencing activities on site.
- c. Stretch and Flex activities shall be performed every day work activities are scheduled and they shall be performed before the work activities begin. Everyone is required to participate.
- d. Recommendations.
 1. Consult with a licensed Physician/Physical Trainer/Stretching Instructor/Yoga Instructor for the most suitable stretches for your work crew.
 2. Incorporate incentives for active participants.
 3. Check with your Company's insurance carrier. They may provide services, suggestions and guidance for your company's program.

46. Substance Abuse Policy - Minimum

a. Purpose

1. The Owner and Gilbane have a commitment to protect people and property and to provide a safe working environment. The purpose of this policy is to provide a drug-free and alcohol-free work environment for each worker.

b. Policy

1. The Owner and Gilbane prohibit the use, possession, distribution or sale on the project premises, facilities or work places of any of the following: alcoholic beverages, intoxicants, drugs and related drug paraphernalia.
2. Workers must not report for duty or perform work while under the influence of any drug, alcoholic beverage or intoxicant. Workers on the project premises will be subject to search as provided herein. Applicants and workers will be required to consent to drug testing as provided herein.
3. This policy will apply where state law or regulation and/ or collective bargaining agreements allow.

c. Definitions - When used herein, the following terms will have the meanings given below:

1. Company - Gilbane Building Company.
2. Alcohol - Ethyl (Ethanol) - References to use or possession of fermented or distilled liquor included in any beverage, mixture, or preparation which may cause intoxication.
3. Illegal Drug and/or Controlled Substance - Any drug or drug-like substance, whose sale, use or possession is unlawful (as defined by section 802 (6) of Title 21 of the United States Code, the possession of which is unlawful under chapter 13 of that Title) or any drug whose use is legal but which has not been legally obtained. The term "illegal drugs" does not mean the use of a controlled substance pursuant to a valid prescription or other uses authorized by law.
4. Medication - Drugs prescribed for the named individual's personal treatment by a licensed physician and over the counter drugs which have been legally obtained and are being used for the purpose for which they were prescribed or manufactured.
5. Employer - Any individual or firm that provides workers to perform work on the project premises and is responsible for their hiring, advancement, payment, discipline, and termination, including the Owner, the Architect, Gilbane, all contractors, all sub-tier contractors, all vendors, all suppliers, all material dealers, any Other Contractors, and any others coming on the project premises.
6. Applicant - Any individual who is referred or makes application for employment on the project premises.
7. Project Premises - All parts of any office, work site, or other work location, including parking lots under the control of the owner and/or Gilbane.
8. Testing Facilities - A laboratory where a specimen can be tested for drugs and alcohol within threshold limits according to standards established by the U. S. Department of Transportation and is certified by the U. S. Department of Health and Human Services (HHS) under the National Laboratory Certification Program (NLCP) or in the case of a foreign laboratory is approved for participation by the U.S. department of Transportation with respect to Part 40.
9. Accident - Any event resulting in injury to a person or property to which the Company believes a worker contributed as a direct or indirect cause.
10. Near Miss - Any event, which the Company determines, has all the attributes of an accident, except that no harm was caused to personnel or property.
11. Worker(s) - Any individual, salaried or hourly, of any employer who will be performing work on the project premises.
12. Pre-Employment Testing - Drug testing of all individuals who are tentatively selected for employment, where not prohibited by law.
13. Random Testing - Drug testing imposed without individualized suspicion that a particular employee is using illegal drugs, where not prohibited by law; such testing to be administered to a statistically random sampling of employees based on neutral criteria.
14. Reasonable Suspicion Testing - Drug testing based upon a belief that an individual uses illegal drugs. The belief is drawn from specific observations, facts and reasonable inferences from these facts, where not prohibited by law.

15. Post-Accident Testing - Drug and/or blood alcohol and/or breathalyzer testing performed as a result of an occupational accident and/or injury and/or near miss.

d. Drug and Alcohol Detection Thresholds

1. All confirmatory drug testing shall be done in NLCP-certified facility.
2. Drug and Alcohol Detection Thresholds will be in accordance with U.S. D.O.T.
3. Alcohol maximum content shall not exceed 0.02g/100ml blood or equivalent.

e. Prescription Drugs

1. Any worker using a prescription drug, which may impair mental or motor function, shall, as soon as possible, notify their employer who is to notify the Company and/or their Employer. For the safety of all workers, the Company may direct the Employer to not permit the worker on the project premises until released as fit for duty by the prescribing physician. The Company reserves the right to obtain a confirming medical opinion before allowing the worker to return to duty.

f. Worker Testing

1. Pre-Employment Testing (per applicable State Laws and Project Labor Agreements (PLAs)). All workers, salaried or hourly, who are hired, transferred or temporarily assigned to the project premises shall be required to consent to drug testing in accordance with applicable State laws prior to assuming project responsibilities. Employers shall certify to the Company in writing on company letterhead signed by an Officer of the company that their current workers have passed a drug test immediately prior or no later than 72 hours prior to assignment to working on the project premises.
2. Post-Accident or Post-Near Miss drug and alcohol testing (per applicable State Laws and PLAs). After an accident or near miss incident, the Company will ask the Employer to test all those involved. An Employer's supervisor is to accompany injured employee or those employees involved in the accident or the incident involving an Employer's worker to the clinic or medical facility. If the injured worker refuses to give a specimen of body fluid, the Employer's supervisor is to notify the Company. The worker is to be advised, again, that the refusal to submit to drug screening is a violation of the Project Safety Plan and that refusal will result in removal from the site. Employers must certify negative test results to the Company; otherwise worker(s) shall not be permitted to return to the project premises.
3. Reasonable Suspicion Testing (per applicable State laws and PLAs). The Company will ask the Employer to test workers when a reasonable suspicion exists that the worker has been using drugs or alcohol. The belief must be drawn from specific observations, facts and reasonable inferences from these facts. Employers must certify negative test results to the Company; otherwise worker shall not be permitted to return to the project premises.
4. Random Testing (per applicable State Laws and PLA's). The Company may conduct random testing without individualized suspicion that a particular individual is using illegal drugs at unannounced intervals during the course of the project. A minimum of 12% of active employees on site will be selected, at random, for drug screening, or as required per Regional Substance Abuse Program Consortium or PLA's. Employers shall advise their employee immediately prior to selection for Random testing and shall ensure workers submit to drug screening as soon as possible, and no longer than 1 hour from being notified. Employers must certify negative test results to the Company; otherwise worker shall not be permitted to return to the project premises.

g. Discipline and Rehabilitation

1. Unless a Project Specific Substance Abuse Policy by the Company or Owner is in effect, each Employer shall certify that they have a Drug Enforcement Policy which incorporates as a minimum the following requirements:
 - i. When an applicant submits to pre-assignment testing and passes the required test, he or she will be eligible for further employment consideration.
 - ii. If the applicant fails the required test, s/he may reapply for employment consideration after a period of no less than sixty (60) calendar days have elapsed. The Company may waive this sixty-day waiting period if the applicant completes an acceptable drug/alcohol rehabilitation program and presents acceptable proof of completion of the program to the Company Project management personnel. An applicant who fails the second test will not be considered for employment at the project premises for a period of no less than one year.
 - iii. All workers who refuse to submit to a drug and alcohol test, or who fail to pass a drug and alcohol test will be removed from the project premises by the Employer and will be referred to their Employer's personnel management for Employee Assistance Programs and/or for disciplinary action.
 - iv. A worker on the project premises, facility, or work place in possession of Illegal Drugs and/or controlled substances is subject to disciplinary action, up to and including barring from the site by the Company and immediate termination by the Employer. Authorities will be notified of such an occurrence.

h. Financial Obligation of the Employer

1. The Employer will bear the cost of time, transportation, and testing for workers who are being given drug and alcohol tests.

i. Confidentiality

1. The Company will take steps to maintain the confidentiality of information generated by the implementation and enforcement of this policy and these procedures. Disclosure will be made only in appropriate circumstances. The Employer shall be responsible for maintaining the confidentiality of all information generated by the implementation and enforcement of this policy and these procedures for their own workers. The Company shall have the right to audit compliance with this policy and these procedures by the Employer, which shall include access to this confidential information.

j. Training

1. Supervisors and management personnel will be trained to recognize appropriate symptoms and to administer the policy in a consistent, confidential and intelligent manner.

k. Contractors and Suppliers

1. The Company and all Employers will include the provisions of this policy and these procedures, or another acceptable program, in their contracts with contractors, suppliers, consultants, agents, and others involved in providing goods or services on the project premises, and will require that they do the same with respect to their lower-tier contractors, suppliers, etc.

I. Posting and Distribution

1. Significant sections of this policy and these procedures will be given to each applicant and worker upon request.
2. This Minimum Drug Enforcement Policy will be included in each pre-bid and pre-construction meeting as well as an integral part of the project Safety plan and contract documents.
3. The Company may revise and amend this policy and these procedures as required.

m. Procedures for Examination Post-Accident Screening when required by Gilbane.

1. An Employer supervisor is to accompany injured employee or those employees involved in the accident or incident involving an Employer's worker to the clinic or medical facility. Employers shall certify any worker(s) involved in an accident or incident tested negative for drugs and alcohol prior to allowing them to return to the project premises.
2. If the injured worker refuses to give a specimen of body fluid, the Employer's supervisor is to notify the Company. The worker is to be advised, again, that the refusal to submit to drug screening is a violation of the Project Safety Plan and that refusal will result in removal from the site.
3. Workers must report all injuries immediately to their supervisor, whether the injury requires medical treatment or first aid only. Late reporting may result in denial of a claim.

47. Temporary Heat

- a. No Kerosene, oil fueled, solid fuel burning, or convection heaters (a.k.a. 'Pot' heaters) are permitted.
- b. Only gas fired (propane vapor or natural gas), hydronic, steam, electric or infrared heaters are permitted, based on the application and used with a hot work permit issued and approved by Gilbane.
- c. Gas heaters must conform to the specifications
 1. Direct Fired heaters shall conform to ANSI Z83.7 or Z83.4
 2. Indirect Fired heaters shall conform to ANSI Z83.8
 3. Infrared heaters shall conform to ANSI Z83.6
 4. All flexible connectors must be UL approved and conform to specifications UL-83.
- d. All heaters shall conform to (or exceed) applicable OSHA, ANSI, UL, NFPA, NEC, and related standards for design, construction, installation, clearance and use, as well as to all local codes. All heaters shall be AGA certified.
- e. Temporary construction heaters proposed shall be approved for use by the client and Gilbane. They shall conform to the approved heating plan, to manufacturer installation requirements, to applicable Codes and Standards and to the local fire official's requirements.
- f. Heater supplier and Contractor shall provide their construction heating plan to the Gilbane Project Manager and Division Safety Director for review and approval. This plan must include specifications for the heaters, and heater and fuel placement and storage, as well as heater maintenance, service and inspection schedule and competent persons to implement the Plan.
- g. Whenever heaters are operating during non-working hours, the Contractor may be required by the client, local fire officials, or Gilbane to provide a qualified person to monitor and maintain the heaters. In such cases, the qualified person shall be trained by qualified person in the safe operation of the heaters.
- h. Installation of an appliance meeting the following specifications shall be made by a qualified technician according to safety measures as outlined in ANSI A10.10, NFPA-58, NFPA-54, U.L., the operators/manufacturers manual, and local codes.
- i. Installation must be a coordinated effort between Gilbane personnel, the heating appliance supplier, the fuel supplier and local trades, referring to the heating plan, with instruction.
- j. Flammable and combustible material shall be kept away from the heater a minimum of 50'/30' respectively or more as indicated by heating unit manufacturer, local fire authority, owner, or unique conditions of the site.
- k. Each heating appliance is to be inspected by a qualified person, at least at the beginning and end of each working day.
- l. Contractor shall continuously monitor carbon monoxide levels when operating heaters indoors and shall ensure levels are below the ACGIH TLV (The American Conference of Governmental Industrial Hygienists Threshold Limit Value of 25 ppm (or 29 mg/m³)) as a time-weighted average for a normal 8-hour workday and a 40-hour workweek. Contractor shall report results to Gilbane.

48. Tool Box Training

- a. Instruction and training of employees is an OSHA requirement and, as such, will be required on this project. Training of contractor personnel is the responsibility of the contractor. Examples of such required training are:
 1. Newly employed, promoted and/or transferred personnel shall be verbally instructed in the safety practices required by their work assignments.
 2. All new work assignments must include specific attention to safety. "Follow-up" monitoring is required in order to prevent accidents.
 3. Any Non-routine tasks as required by OSHA
 4. When operating specific equipment
- b. Training of contractor personnel is the responsibility of the contractor.
- c. Conduct Tool Box safety meetings for all employees at least once a week.
 1. Maintain an attendance record by having employees sign the reverse side of the Toolbox Safety Meeting Report, or equivalent form.
 2. Complete the report and submit it to the Gilbane Office within 24 hours after each meeting.
 3. File all toolbox meeting reports and summaries so that they are available for review at any time during project operations or for a period of five years following termination of the project.
- d. It is the responsibility of Trade Contractor supervision to explain the hazards involved in an assignment to all employees, either individually or in a group before they begin an assigned task.
 1. This task may only require a few words, but in many cases, it will require the actual demonstration of how the project can be done safely and the pointing out of the hazards that may be or will be encountered in any task.

49. Welding, Cutting and Burning - Hot-work

- a. A suitable, approved fire extinguisher (minimum 20 lb. ABC) shall be ready for instant use in any location where welding is done. Screens, shields, or other safeguards should be provided for the protection of workers or materials, below or otherwise exposed to sparks, slag, falling objects, or the direct rays of the arc.
- b. A dedicated fire watch shall be present at all welding operations and remain for at least one hour after the hot work has halted.
- c. The welder shall wear ANSI approved eye and head protection. Workers assisting the welder shall also wear protective glasses, head protection and protective clothing. Adequate exhaust ventilation shall be maintained at all welding and cutting work areas.
- d. Work permits shall be obtained daily, prior to any welding operations on the site.
- e. An approved fire extinguisher shall be readily available.
- f. Appropriate personal protective equipment, such as burning glasses, shields, and/or gloves shall be used. Adequate exhaust ventilation shall be maintained at all welding and cutting work areas.
- g. Work permits shall be obtained daily, prior to any burning or cutting operations on the site.
 1. **Electric Arc Welding**
 - i. Electric welding equipment, including cables, shall meet the requirements of the National Electric Code. All arc welding and cutting cables shall be of the completely insulated flexible type capable of handling the maximum current requirements of the work. Cables in need of repair shall not be used. The frames of all arc welding and cutting machines shall be grounded either through a third wire in the cable connecting the circuit connector or through a separate wire which is grounded at the source of the current. All ground connections shall be inspected to ensure that they are mechanically strong and electrically adequate for the required current. Welding practices shall comply with all applicable regulations.
 2. **Gas Welding or Cutting**
 - i. When gas cylinders are stored, moved, or transported, the valve protection cap shall be in place. When cylinders are hoisted, they shall be secured in an approved cage or basket. The valve cap shall never be used for hoisting. All cylinders shall be stored, transported, and used in an upright position. If the cylinder is not equipped with a valve wheel, a key shall be kept on the valve stem while in use.
 - ii. At the end of each work day or if work is suspended for a substantial period of time, compressed gas cylinder valves must be closed, regulators removed and properly stored.
 - iii. Cylinders containing oxygen or acetylene or other fuel gas shall not be taken into confined spaces.
 - iv. Cylinders containing oxygen or acetylene or other fuel gas shall be stored in designated areas outside the structure and protected from sunlight. Areas shall be approved by Gilbane.
 - v. No one shall use a cylinder's contents for purposes other than those intended by the supplier.
 - vi. All hoses used for carrying acetylene, oxygen or other fuel gas shall be inspected at the beginning of each working shift. Defective hoses shall be removed from service.
 - vii. Oxygen cylinders and fittings shall be kept away from oil and grease.
 - viii. Regulators, gauges, backflow check valves, and torches shall be kept in proper working order.
 - ix. Flash arrestors are required on the oxygen and acetylene hoses; positioned at the regulators.

50. Work Permit Procedures

- a. **General Procedures**
 1. A copy of this section of the Project Safety Plan will be issued to all Contractors, and will serve as notice by Gilbane that a work permit as specified by Gilbane is necessary before starting any hazardous work activity.
 2. The work permit shall be obtained from Gilbane before starting each day's work. The procedures for initiating a hazardous work permit are listed on the permit application appropriate to the type of work.
 3. Work permits shall follow the specific project procedure, which may require paper permits or electronic permits obtained through the project-specific controls system.
 4. Hazardous work permits include, but are not limited to, the following activities: Hot work, confined space entry, guardrail removal, line breaks, after-hours work, trenching and excavation, crane use, barricade installation, and shaft work.
 5. Due to special project conditions, additional job-specific hazardous work permits may be required to be incorporated into the safety plan. Additional job-specific hazardous work permits shall also be considered as a contract commitment.
- b. **Hot Work**
 1. Hot work is defined as a process or procedure which could result in a fire if not properly controlled. Common types of hot work are welding, burning, cutting, brazing, soldering.
 2. Hot work will usually be permitted only during normal working hours. Permits will be issued the day before work is to be accomplished, and the work area will be inspected to verify that adequate control has been established. A copy of the permit will be available at the point of work. An adequate number of fire extinguishers will be available within 50-feet of the point of work for which a permit is issued. The Contractor will take the necessary precautions when welding or burning above walls to assure that protection is maintained on both sides of the wall and that the areas below are protected on multilevel buildings.
 3. Inspection of the permit area one hour (or more) post-completion of hot work is required by the contractor.
- c. **Confined Space**
 1. When work in confined spaces is scheduled, such as a caisson, boiler, deep excavations, etc., consideration must be given to two major known and recognized hazards:
 2. The possibility of fire or explosion, flammable gases, fumes, vehicle fumes, vapors, or dusts.

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3. The possibility of injury to the worker (or loss of consciousness) as a result of inhalation or absorption through the skin of toxic materials or from oxygen deficiency.
 4. For work in a confined space, the responsibility for recognition and advance notification is the Contractor's. The Project Superintendent will be notified and will evaluate the situation, issuing a work permit in those cases for which he considers it necessary. The Contractor will be responsible for providing equipment and special instructions for the worker, such as ventilating units, respirators, personal fall protection, air monitoring devices and life lines, etc., and for conformance to all applicable OSHA standards.
 5. It is required that the "buddy system" be used and that an observer tend to all the workers in a confined space. Rescue procedures should be agreed upon beforehand.
- d. **Guard Rail Opening**
1. Work which requires the opening of guard rails or the removal of holes covers to be performed shall be approved in advance by the Project Superintendent. Particular attention shall be given to the alternate means of fall protection which will be required to safely perform the work and protect other workers in the vicinity of the fall exposure. Specific plans for providing alternate fall protection shall be described in the request for the work permit.
- e. **Off-Hours Work**
1. The Project Superintendent and the Project Safety Coordinator shall approve work, which is required to be performed outside normal working hours established at the site, in advance. Any work occurring within the existing Owner facility shall be at the convenience of the Owner, and shall comply with all conditions imposed by the contract specifications and the work permit issued by the Project Safety Coordinator or other persons identified by the Owner.
-

III. Appendices

A. Job Hazard Analysis

PROJECT NAME: _____ CONTRACTOR: _____

AUTHOR: _____ DATE: _____

Activity / Operation	List unsafe condition(s), unsafe action(s) or potential hazards	How the activity can be done safely (Correcting items in column to left)

B. Hot Work Permit

No. _____ Project No. _____

REMOVE ALL COMBUSTIBLE MATERIAL FROM THE WORK AREA

Date: _____ Location: _____

Start Time: _____ Stop Time: _____

Description of Work: _____

Torch Cut Solder Weld Other Hot Work

One Class 2A portable fire extinguisher required.

Or

Dry Chemical fire extinguisher Required

Wet Down upon Completion

Fire Watch required for _____ Hours after completion of Hot Work

PERMIT EXPIRES AT STOP TIME

IF FIRE OCCURS CALL FIRE DEPARTMENT THEN NOTIFY PROJECT SUPERINTENDENT

Gilbane Project Superintendent will arrange to inspect area 2 hours after stop time.

Person authorized to do hot work: _____ Person issuing permit: _____

Print Name _____ Print Name: _____

Sample Location



Signature:

Signature:

Company:

Company:

C. Confined Space Permit

Date Submitted _____ Work to be performed on _____ Time ____:____ AM/PM

Location / Description of Line Break: _____

Contents of Line: _____

Name of Responsible person: _____ Tel: _____

(In charge of Work)

Contractor Name: _____ Tel: _____

Special Requirements	Yes	No		Work to be performed	Yes	No
Lock-out / de-energize				Permits Obtained		
Lines broken - capped or blanked				Burning		
Purge - flush or vent				Welding		
Ventilation - ____mechanical ____natural				Brazing		
Secure area				Grinding		
Protective clothing				Open flames		
Non-sparking tools				other		
Full body harness and lifeline					Yes	No
Tripod or other hoisting equipment				Hazards Expected		
Electrical eqpt for explosive atmosphere				Corrosives		
Lighting				Flammables		
Fire Extinguishers				Toxics		
Respiratory protection				X-temps		
Powered communications				Electrical		
				Physical - engulfment		
Tests to be Taken	P.E.L	Yes	No	Actual Reading	Time Tests Taken	
% of oxygen						
% of L.E.L.						
Carbon monoxide						
Aromatic hydrocarbon						
Sulfur dioxide						
Ammonia						
Hydrocyanic acid						
Hydrogen sulfide						
Testing Equipment _____ Serial No. _____						
Calibrated by _____ Date calibrated ____/____/____						
Testing conducted by _____						
Personnel making entry:				Standby Person:		
				Rescue Tel:		
				Permit canceled on ____/____/____		
				Time _____ AM / PM		

The above individuals have been informed of the hazards, provided with protective equipment and trained in its use as well as safe work practices. All individuals have been trained.

ORIGINAL POSTED AT ENTRY LOCATION - COPY TO SAFETY

Sample Location



Contractor Name:(print)_____ Signature: _____

Gilbane Name:(print) _____ Signature _____

D. Hold Harmless Agreement

To: **Gilbane Building Company** Date:

Job No: Job Name:

Job Location:

In consideration of permission granted to the undersigned to enter and inspect the premises as described above, which permission is given as a courtesy to me (us) and for my (our) benefit only. I (we) herewith agree for myself (ourselves) and for my (our) heirs, executors and administrators that I (we) will, to the full extent permitted by law, and do release and forever discharge **Gilbane Building Company**, and its affiliates, subsidiaries, officers, directors, agents, employees, representatives

and/or (Owner)

and/or the contractors or subcontractors who may be performing work on the said premises from all manner of claims, actions or causes of action which I (we) now have or which I (we) or my (our) heirs, executors or administrators hereafter can, shall or may have because of bodily injury or damage to property which I (we) may suffer while on said premises, whether the said injury or damage may be due to the act or negligence of the said **Gilbane Building Company**, and its affiliates, subsidiaries, officers, directors, agents, employees, representatives

or of (Owner)

Or of any contractor and subcontractor or otherwise; it is understood that I (we) accept full responsibility for the above-mentioned risk.

IN WITNESS WHEREOF, I (we) have hereunto set my (our) hand this of 20

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

E. Excavation Inspection Form

Date Time AM PM

Project Number Project Name

Weather Dig Safe Contacted Yes No

Log prepared by (Name-Print) Signature

Competent Person

Trench depth ft. Trench width ft. Trench length ft.

Protective System Trench shield Sloping Shoring Other

Purpose of Trench Drainage Sewer Water Gas Utility Other

Were Visual soil tests made Yes No

If yes, what type?

Were Manual soil tests made Yes No

If yes, what type?

Type of soil Stable rock Type A Type B Type C

Surface encumbrances Yes No

If yes, what type?

Water Conditions Wet Dry Submerged

Hazardous atmosphere exists Yes No

If yes, follow confined space entry procedures and permit and monitor for hazardous atmospheres

Is ladder within 25 ft. of all workers Yes No

Are employees exposed to vehicular traffic Yes No

Is excavated material stored 2 ft. or more from edge of trench Yes No

Are Utilities protected Yes No

Are all employees trained in the recognition and avoidance of hazards Yes No

Periodic Inspections

1. AM / PM 2. AM / PM 3. AM / PM

4. AM / PM 5. AM / PM 6. AM / PM

F. Hand Protection Reference

PURPOSE - To aid in the prevention of hand and finger injuries when performing construction operations.

SCOPE

Employers shall select, provide, and require employees to use appropriate hand protection 100% of the time while on site. All gloves shall have a minimum ASTM/ISEA/ANSI Level 4 cut resistance. Employers shall base the selection of appropriate hand protection on an evaluation of the conditions present, duration of use, and the hazards and potential hazards identified. Gloves shall also be worn as specified by manufacturer recommendations of tools, equipment, and material SDS.

If an appropriate glove for the task is not available in a minimum Level 4 cut resistance, the employer shall submit a JHA and product data for review and approval by Gilbane.

Different exposures require the use of different types of gloves. Evaluate each situation to ensure which is the appropriate type of hand protection. (See chart below)

OPERATION	GLOVE TYPE
Energized Electrical Work (EEW)	Electrically insulated-rated rubber gloves with leather protectors
Welding operations	Gauntlet-type leather welding gloves
Grinding Operations	Tight-fitting leather gloves
Exposure to sharp edges & metal burrs (sharp metal)	Cut-resistant gloves (Kevlar® or tight-fitting leather)
Utility knives, hacksaws, & cross-cut saws	Cut-resistant gloves (Kevlar®)
Concrete work	Rubber or leather gloves
Exposure to petroleum products	Chemical-resistant gloves per the MSDS requirements & manufacturers requirements (Neoprene, PVC, Nitrile or Rubber) *
Exposure to hazardous materials such as solvents, paints, adhesives, etc.	Chemical-resistant gloves per the MSDS requirements & manufacturers requirements (Neoprene, PVC, Nitrile or Rubber) *
Working around machinery	Tight-fitting leather gloves should be utilized when hand protection is necessary around rotating equipment to prevent entanglement of gloves/hands in machinery
Exposure to excessive heat, hot piping or equipment.	Kevlar® heat resistant gloves and sleeves.
Using saws – porta band, and reciprocating.	Tight-fitting leather gloves.
Handling wire rope/rigging.	Tight-fitting leather gloves.
Handling glass	Cut-resistant gloves - Kevlar®
Handling wood	Tight-fitting leather gloves

GLOVES*

Neoprene – Protects from acids, caustics, oils, greases and many solvents

PVA – protects from aromatics, ketones and chlorinated solvents (Xylene, Trichloroethylene)

Butyl – protects against common organic acids and caustics, alcohols, esters, acetone and ketones

PVC – protects against chemicals, oil and greases, acids and petroleum hydrocarbons

Nitrile – protects against greases, oils, acids and solvents

G. Stilt Use Permit

THE FOLLOWING ITEMS MUST BE COMPLETED FOR STILT USE:

1. Must wear either a hard hat with chin strap or a helmet with chin strap.
2. Must have an established transition station to sit when getting on and off stilts, no jumping!
3. Stilt tags or Stickers must be signed off / inspected by the contractor's competent person from the office or their safety representative and affixed to the stilts.
4. Must be signed off ready for use daily by operator.
5. Operator must show some type of proof of training for stilts.
6. Area must be swept clean prior to starting work and verified by user and or foreman signed.
7. Power cords must be elevated or rerouted out of work area.
8. Must use battery operated tools only, no tools with cords with be allowed while on stilts.
9. Trash carts must be utilized during work so trash goes into container and not the floor.
10. A "Spotter or Ground person" must work with stilt operator at all times.
11. NO stilts will be used above a height of 3 feet above finish floor.
12. Area of work must be designated at all times and is to be relocated as the work progresses.
13. All stilts must have articulating feet.
14. The RESPONSIBILITY OF USING STILTS and the awareness as to when and when not to use them resides in the person using them as well as the competent person.

COMPANY _____ DATE _____

SIGNATURE / COMPETENT PERSON _____

SIGNATURE OF GILBANE REPRESENTATIVE _____ DATE _____

H. Crane Lift Plan

This plan should be based on "worst case" combination of load weight and lift radius for a specific crane configuration in the location as indicated on the Lift Plan. The Lift Plan may be valid for more than one day, as long as the configuration, location, maximum expected load and maximum expected radius do *not* change from the Lift Plan as submitted. Every crane setup and operation must be covered by the Lift Plan as submitted. A Crane Use Permit is also required for each crane set up location prior to lifting.

Date Submitted:		Proposed Date(s) For Lift	
Contractor/ Rigging Company:		Start :	Complete:
Crane Company:		Emergency Phone Number	
Project:		Lift Location/Nearest Building(s):	
Description of Lifting Work to be done			
Description of Lifting Scope: number of days _____, number of items to be picked _____			
1. Crane Information			
Make	Model	Capacity (tons)	
Crane's Total Boom Length for this Configuration (Boom only)	Jib Used?	Length	Offset, if Used
Will outriggers be fully extended? ____ If not, please explain setting:			
Will the Lift be based on 360° crane use and chart? ____ If not, please explain:			
Maximum Boom Length Required		Maximum Pick Radius Required	
Is FAA or Airport Notification Required?			
Owner or local regulatory agency notification required?			
2. Load Characteristics			
Description of Max Load			
Dimensions of Max Load .		Provide sketch	
Weight of Max Load _____	How was this determined?	Please attach calculations.	
What is the maximum safe wind speed allowed for the picks covered under this lift plan?			
Will the load be unbalanced? Y N If so, how will it be leveled during pick?			
3. Rigging Information:			
List Rigging Components Please be specific – number, type, softeners, size, length, lift beam, capacity, etc.			
Worst Case Weight of Line, Block, and All Rigging:			
4. Other Weights to be Considered to Determine Total Gross Load of Item to be Lifted:			
a. Weight of Max Load			
b. Weight of Rigging:			
c. Added weight for factor of safety (minimum 20% of line a for uncertified weight)			
Total Gross Load:			

5. Crane Location/Clearances			
a. Has contractor developed a plan to control and protect vehicular and pedestrian traffic? _____ Please submit.			
b. Will a full road blockage or partial road blockage be required?			
c. Will load be placed on permanent facilities such as existing roof or landscaping at any time during pick?			
d. Has Contractor developed a to scale plot plan showing crane location, adjacent structures, roadways, underground Utilities, etc. within swing radius? Y N Please submit showing direction of swing			
e. Has Contractor completed a to-scale elevation sketch or drawing depicting crane, adjacent structures, and load? Y N Please submit.			
f. Has Contractor surveyed the area for overhead power lines and other hazards?			
g. Has Digsafe or Underground Utility Locator service marked area beneath crane set up? Y N			
h. Have ground conditions adequate to support all loads been verified?			
i. Will load or any part of crane/rigging be within 20 feet of energized power lines or any process system at any time during assembly/disassembly or hoisting?			
6. Summary "Worst Case " Lift Scenario			
a. Max Pick Radius	b. Total Gross Load	c. Crane Chart Capacity @ Max Pick Radius	d. % of Crane Capacity (line 6b/ 6c)
7. Contractor Assembly/Disassembly Director to Verify the Following			
☐ Crane Operators Certified and Riggers, Signal persons qualified and documentation provided	☐ Daily, Monthly, Annual Inspections current and available to Operator in cab	☐ Lift Plan Reviewed and copy in cab	☐ Crane Configuration in Compliance with Lift Plan and manufacturers requirements
☐ Outriggers Extended per Lift plan and Proper pad supports Installed			☐ Operator has confirmed that Winds not excessive for Picks/per mfr req'ts
☐ Overhead hazards reviewed		☐ Ground conditions adequate for superimposed loads/verified w/controlling entity	
☐ Slings and Rigging Inspected	☐ Taglines to be Used	☐ Swing Radius Barricaded, secure	☐ Lift Plan and Crane Permit Reviewed with Erection/Demolition Crew
☐ Traffic Control Plan in Place		☐ Signals System In Place	
☐ Measure and confirm max pick radius without load		☐ Confirm total Gross Load weight prior to reaching max radius	
☐ Work area controlled- fall zone restricted		☐ Power lines deenergized/ 20 ft distance maintained	
☐ Safety devices functioning		☐ Operational aids functioning	
☐ Fall protection equipment/methods in place		☐ Crew trained on hazards/safe work plan?	

8. Certified/Qualified personnel (documentation must be provided)			
☐ Operators	☐ Riggers	☐ Signalpersons	
☐ Equipment/rigging Inspectors		☐ Designated spotters	
9. Documentation Provided (all must be provided):			
☐ Plot Plan w/Crane Location etc	☐ Elevation Sketch	☐ Weight Calculations for Max Load	☐ Rigging List/Sketch ☐ Appropriate Crane Charts
☐ De-energization/grounding of power lines from utility		☐ Underground conditions reports	
10. Safety work plans (all must be provided):			
☐ Fall protection Plan	☐ Work around power lines	☐ Assembly/disassembly Plan	☐ Work area control
☐ Traffic Control Plan		☐ Job/Activity Hazard Analysis for all other related activities	

11. Attachments and supports			
☐ Foundation per mfr req'ts or Structural PE?	☐ Collars/struts per mfr req'ts?	☐ Attachment to building/structure per PE?	
12. Critical Lift		Yes	No

Signatures			
Crane Company Qualified Person	Signature:	Contractor/Rigger Assembly/Disassembly Director	Signature:

Date:		Date:
Contractor Assembly/Disassembly Director is solely responsible for accuracy and completeness of this lift plan and the safe execution of the lift (s). Contractor Assembly/Disassembly Director and equipment Operator will verify lift will comply with applicable OSHA and ANSI Standards and manufacturer requirements.		
Construction Manager (CM) Representative	Signature:	Date:
Safety Representative from CM	Signature:	Date:
Certified Operator(s)	Signature(s):	Date:
Qualified rigger(s)	Signature(s):	Date:
Qualified Signalperson(s)	Signature(s):	Date:
Contractor Assembly/Disassembly Director is solely responsible for accuracy and completeness of this lift plan and the safe execution of the lift (s). Contractor Assembly/Disassembly Director and equipment Operator will verify lift will comply with applicable OSHA and ANSI Standards and manufacturer requirements.		

The Gilbane review is only to acknowledge the receipt of the Contractor/ Rigger and Crane Company's lift plan

I. Crane Use Permit

A crane use permit is required for *each and every time* a crane is setup and operated. A signed off lift plan is required before a crane use permit can be issued. No Lifting or extension of outriggers can be done until all sections of the crane permit have been signed off.

Date:	Time of Crane Use: Start _____ Complete _____		
Pick Location:			
Pick Location (nearest buildings):			Gilbane Representative for Pick:
Contractor/ Rigging Company:			Emergency Phone No:
Lead Rigger/Competent Person:			Emergency Phone No:
Crane Company:			
Crane Operator:		License #	Expiration Date:
Make	Model	Capacity	S/N
Boom Length	Jib Used? _____ If so, length? _____		Offset, if Used
2. Load Characteristics (From Lift Plan dated _____)			
Description of Maximum Load		Dimensions of Max Load	
Total Gross load from Lift plan (max Load, Rigging & contingency)			
Max Pick Radius	Crane Capacity at Max radius		% Total Gross Load / Crane capacity
3. Operator to Verify the Following			
☐ All Required OSHA Paperwork, Licenses and Certifications been completed and available in Cab	☐ Daily Inspection Completed and in Cab	☐ Lift Plan Reviewed and copy in cab	☐ Crane Configuration in Compliance with Lift Plan
☐ Outriggers Extended per Lift plan and Proper Dunnage Installed (Minimum 3'X3'x4")			☐ Operator has confirmed that Winds not excessive for Picks
☐ Operator has reviewed Overhead hazards		☐ Operator has reviewed underground hazards	
☐ Operator will measure and confirm max pick radius without load		☐ Operator will confirm total Gross Load weight prior to reaching max radius	
4. Contractor/Rigger to Verify			
☐ Slings and Rigging Inspected	☐ Taglines to be Used	☐ Swing Radius Barricaded, secure	☐ Lift Plan and Crane Permit Reviewed with Erection/Demolition Crew
☐ Traffic Control Plan in Place		☐ Signals System In Place	
Signatures			
Crane Operator		Contractor/Rigger	
Date and Time		Date and Time:	
Contractor/Rigger and Operator are the competent persons and are solely responsible for the safe execution of the lift(s) and will complete the lift(s) in accordance with OSHA and ANSI standards.			
Construction Management (CM) Representative		Date & Time:	
This Permit is issued to the above competent persons for the performance of the above planned lift(s).			

J. Ladder Permit



LADDER PERMIT



Project #:
Date: **Valid Until:**
Location:
Permit Issued To: **#:**
Company:

**Ladder Permit Information**

Consider how work may be accomplished at or from the ground-level to minimize elevated work. Ladders are to only be used where no safer means exists to access elevated areas. Consider the use of scaffolds, aerial and scissor lifts, rolling stairs, etc. as safer alternatives. NOTE: If three points of contact cannot be maintained, 100% fall protection is required.

Reason Ladder is Only Option:
Activity/Task to be performed from Ladder:
Type of Ladder: **Other:** **Weight Capacity:** **Height (ft):**
Will you be 6ft or more above a working surface? YES ☐ NO ☐
If YES, what specific Fall-Arrest System will you use and what will be your anchor point (Retractable Device is the only appropriate method of fall protection) – Fall Arrest System?

Workers Involved:
Worker's Name: **Orientation Sticker #:**
CM Representative: **Date and Time:**