

# TRADE PARTNER SAFETY HANDBOOK

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1. INTRODUCTION - This handbook has been provided to familiarize all TRADE PARTNERS and their SUPERVISORS with the Pepper Construction Company of Indiana (PEPPER CONSTRUCTION) safety rules, procedures, and guidelines for preventing jobsite accidents and injuries. It is the responsibility of the TRADE PARTNER to provide their Project Managers and Site Supervisors with a copy of this document. TRADE PARTNER is the chosen lexicon for SUBCONTRACTOR. Also, be advised that an officer of your company has read this handbook and agreed with its terms and conditions. This commitment assures your compliance with the safety rules, procedures, and guidelines outlined in this handbook, as well as all applicable Federal, State and Local regulations. This document does not replace, modify, or supersede the rights and obligations of the parties as set forth in the subcontract. The Trade Partner is ultimately responsible for the safety of its personnel and third parties that come in contact with the Trade Partner's operations. This handbook is not intended to replace the Trade Partner's policies or to make Pepper responsible for the subs' operations.

Items that are **bolded** may exceed OSHA minimum requirements. If OWNER safety requirements apply, the stricter requirement will be followed.

- 2. STATUTORY REQUIREMENTS Each TRADE PARTNER is expected to be aware of and comply with Federal, State, and Local safety regulations. In addition, each TRADE PARTNER has agreed to hold the Owner and PEPPER CONSTRUCTION harmless for all claims, damages (including legal fees), and/or penalties incurred because of TRADE PARTNER's failure to comply with such regulations.
- **3. INSURANCE REQUIREMENTS** TRADE PARTNERS may not start their work until a valid and acceptable certificate of insurance is on file with PEPPER CONSTRUCTION. This includes a copy being provided to the PEPPER CONSTRUCTION Site Superintendent.
- **4. SAFETY PRE-QUALIFICATION** Each TRADE PARTNER that will have direct employees on the jobsite must be Safety Prequalified by PEPPER CONSTRUCTION. The Safety Prequalification Information online application must be completed and submitted to PEPPER CONSTRUCTION prior to contract award.

# 5. SAFETY PLANNING & PROGRAMS

5.1. The TRADE PARTNER must submit a PEPPER CONSTRUCTION approved Project Specific Safety Plan. Templates are provided by PEPPER CONSTRUCTION. The completed safety plan must be submitted to PEPPER CONSTRUCTION for review and acceptance prior to the Safety Plan Review Meeting and the start of work. The plan shall be updated as site conditions warrant and reflect changes in safety procedures that are necessary to maintain a safe jobsite.

- 5.2. Safety Plan Review Meeting all TRADE PARTNERS are required to attend a Safety Plan Review Meeting that must take place before any work starts. The PEPPER CONSTRUCTION Superintendent will schedule the meeting. Required attendees include the TRADE PARTNER full time Site Superintendent/Foreman and the PEPPER CONSTRUCTION Superintendent. The TRADE PARTNER COMPETENT PERSON must be fully aware of this plan and the procedures necessary to eliminate any hazards.
- 5.3. The TRADE PARTNER is required to review the Project Specific Safety Plan with their tradespeople prior to beginning work.
- 6. COMPETENT PERSON REQUIREMENT The TRADE PARTNER must designate a Competent Person in writing. It is the competent person's responsibility to initiate and maintain an effective safety process at the jobsite. Each competent person shall have completed the 30-hour OSHA Construction Safety and Health Training course.
- 7. TRAINING Weekly toolbox and daily Task Hazard Analysis (Job Safety Analysis) meetings are required of all TRADE PARTNERS. Documentation of these meetings must be submitted to the PEPPER CONSTRUCTION site Superintendent weekly. Project meetings will include Safety as an agenda item and all TRADE PARTNER supervisors are required to attend.
- 8. SAFETY ORIENTATION TRADE PARTNERS are required to send trades people who are new to the project to the PEPPER CONSTRUCTION orientation before they begin work at the site. PEPPER CONSTRUCTION will conduct the orientation meetings.
- 9. INSPECTIONS TRADE PARTNERS are required to inspect daily the areas in which their employees are working and immediately report any unsatisfactory or unsafe conditions to the PEPPER CONSTRUCTION site Superintendent. Each TRADE PARTNER will perform, at a minimum, weekly documented inspections of their work. Documentation of these inspections must be submitted to the PEPPER CONSTRUCTION Site Superintendent weekly.
- **10. CONTRACTOR VIOLATIONS** If unsafe conditions, practices, or procedures are observed, the TRADE PARTNER supervisor will be requested to correct the situation. Failure to adequately correct the condition or refusal to comply or enforce the requirements referenced in this handbook may result in:
  - 10.1. Removal of involved employees from the jobsite;
  - 10.2. Removal of all TRADE PARTNER employees from the jobsite;
  - 10.3. Denial of future bid opportunities with PEPPER CONSTRUCTION.

- **11. EMPLOYEE VIOLATIONS** This procedure is established to provide for the discipline of employees who violate safety rules. Safety rules are written and enforced to provide for a safe and healthful place of employment.
  - 11.1. All TRADE PARTNER Superintendent's and Foremen are responsible for the enforcement of the safety and health program on PEPPER CONSTRUCTION projects. In order to accomplish this, they must ensure that each employee is properly instructed in the use of safety equipment and safe work practices. PEPPER CONSTRUCTION will monitor the safety performance of TRADE PARTNERS working on the jobsite.
  - 11.2. If violations of the statutory PEPPER CONSTRUCTION requirements and/or the Project Specific Safety Plan are observed, the responsible TRADE PARTNER must initiate the disciplinary policy with their employee. The response to a safety violation should be carefully evaluated based on the nature of the safety violation. It is imperative that the TRADE PARTNER Superintendent or Foreman warn employees when they violate a safety rule and remove any employee who refuses to comply with the safety rules from the PEPPER CONSTRUCTION project.
  - 11.3. When an employee is observed violating a safety rule, the tradesperson's employer, and/or PEPPER CONSTRUCTION shall implement the following steps:
    - 11.3.1. First offense written warning to employee (all written warnings shall be documented using the TRADE PARTNERS Employee Safety Violation Notice or letterhead);
    - 11.3.2. Second offense written warning to employee with a phone call and/or letter to TRADE PARTNER office within 24 hours of violation. Employees shall be prohibited from working on PEPPER CONSTRUCTION projects for 2 working days.
    - 11.3.3. Third offense within any twelve-month period is grounds for immediate removal from the project and prohibition of working on PEPPER CONSTRUCTION projects for one year.
  - 11.4. Serious Intentional Violations are defined as violations that may have potentially severe consequences, or place individual(s) in imminent danger. A serious intentional violation may result in immediate dismissal from the project and termination of the employees' ability to work on other PEPPER CONSTRUCTION projects. Examples of serious intentional violations include:

11.4.1. Smoking in non-designated areas;

- 11.4.2. Possession of alcohol, firearms, and/or illegal drugs;
- 11.4.3. Fighting or belligerent behavior;
- 11.4.4. Tampering with emergency equipment;
- 11.4.5. Working without a valid shutdown notification, hot work permit, or application of a Lockout/Tagout;
- 11.4.6. Working without proper fall protection, placing a person in imminent danger;
- 11.4.7. Entering excavations/trenches without appropriate sloping, shoring, or other protective measures, placing a person in imminent danger;
- 11.4.8. Entering areas designated and marked as "Do Not Enter", placing a person in imminent danger;
- 11.4.9. Operating equipment without valid licensing or training certification;
- 11.4.10. Not reporting work related injuries and/or damage to PEPPER CONSTRUCTION equipment or property;
- 11.4.11. Failure to report and/or correct recognized safety hazards;
- 11.4.12. Repeated or multiple safety violations of the same nature;
- 11.4.13. Other acts, which indicate a TRADE PARTNER employee's, disregard toward his/her safety, the safety of others, or neglect of proper care of PEPPER CONSTRUCTION property/equipment.
- 11.4.14. Falsify what transpired when reporting work place injuries or death.
- 11.5. TRADE PARTNER Superintendent or Foreman shall review with the employee the details of the safety violation including corrective actions and consequences.
- 11.6. Copies of the Safety Violation shall be forwarded to the PEPPER CONSTRUCTION Superintendent and Safety Director.
- 12. ACCIDENT REPORTING Each TRADE PARTNER will report immediately to the PEPPER CONSTRUCTION site Superintendent, any accident or injury involving Trade Partner employees or the employees of their second-tier Trade Partner(s), damage to property, public or private, general liability or injury to non-employees. Additionally, a copy of each accident report is to be provided to the PEPPER CONSTRUCTION site Superintendent within 24 hours. A written investigation report must be provided within 24 hours of the accident or injury.

- **13. MEDICAL FACILITIES** First Aid supplies are available in the PEPPER CONSTRUCTION site Superintendent's trailer or job office. Emergency telephone numbers are also posted at this location. The emergency numbers will include a nearby medical facility.
  - 13.1. By law, every TRADE PARTNER must provide a First Aid Kit in their job site office or gang box, provide at least one trained responder certified in First Aid/CPR, and administer care to injured workers.
  - 13.2. TRADE PARTNERS shall provide transportation from the job site to the specified doctor's office or clinic. The employer is responsible for transporting the injured worker to the designated medical facility.

#### 14. BLOODBORNE PATHOGENS

- 14.1. Exposure Determination OSHA requires employers to perform an exposure determination in which employees may incur occupational exposure to blood or other potentially infectious materials. This exposure determination is made without regard to the use of personal protective equipment. (Employees are considered exposed even if they wear personal protective equipment). This exposure determination is required to list all job classifications in which the employees may be expected to incur such occupational exposure, regardless of frequency. The employer is also required to list job classifications in which some employees may have exposure if performing certain tasks or procedures.
- 14.2. Personal Protective Equipment All personal protective equipment used at this project, for protection of bloodborne pathogens, will be provided without cost to employees by their employer. Personal Protective Equipment (PPE) will be chosen based on the reasonable likelihood of any possible exposure to blood or other infectious materials.

#### 14.3. Hepatitis B Vaccine

- 14.3.1. All employees who have been identified as having possible exposure to blood or other potentially infectious materials will be offered the Hepatitis B vaccine at no cost to the employee by their employer. The vaccine will be offered within 10 days of initial assignment involving potential exposure. Employees who decline the Hepatitis B vaccine must sign a waiver. Employees who initially decline the vaccine but who later wish to have it will be provided the vaccine at no cost.
- 14.3.2. Employees who perform first aid only on an emergency basis, he/she will be offered the Hepatitis B vaccine. In the event emergency first aid has been rendered, and responder has possible exposure to blood or other infectious

materials, he/she will be offered the Hepatitis B vaccine at no cost to the employee by their employer. If he/she declines the Hepatitis B vaccine, he/she will sign a waiver.

- 15. CONCRETE/MASONRY CORING & CUTTING If the TRADE PARTNER scope of work includes core drilling or sawing in concrete slabs and/or concrete/masonry walls, the TRADE PARTNER is required to use Ground Penetrating Radar or other suitable technology to define areas where it is safe to drill or cut in order to avoid damaging rebar, post-tension cables, electrical conduit or the like.
- 16. CONCRETE PUMP TRUCKS The TRADE PARTNER responsible for that equipment on site is the "Controlling Entity" for that activity and must verify that ground conditions are stable and that outrigger bearing pressures can be safely met. The TRADE PARTNER responsible for that work must establish a safe travel path of equipment, outrigger locations and ensure that no hazards such as overhead or underground utilities or vaults or structures exist.
- 17. CONFINED SPACE ENTRY All employees must be protected from hazards associated with confined space entry. No employee shall be permitted to enter a confined space that has not first been monitored to insure sufficient oxygen levels exist, toxic gas levels are below OSHA Permissible Exposure Limits (PEL), and combustible gases are below the Lower Flammable Limits (LEL). All work with exposure to confined spaces must be competed in accordance with OSHA 1926 Subpart AA.
- **18. CONTRABAND & FIREARMS** The following items shall be considered contraband stolen property, firearms, weapons, explosives, and any other hazardous substances and are strictly prohibited on any PEPPER CONSTRUCTION jobsite. Persons or employees found to be using or in possession of, or concealing any of the above-unauthorized items will be permanently removed from the jobsite.
- 19. UTILITY AND CRITICAL SYSTEM SHUTDOWN Utility Shutdowns and Critical System Service must be scheduled 10 calendar days before commencement of the work or as specified by client/project team. This work may result in a curtailment of owner's services and operations must be accomplished at the owners required schedule. The PEPPER CONSTRUCTION Superintendent in conjunction with the owner Project Manager/Facilities representative shall coordinate all shutdown requests.

All utility or system connections, shut-off, or interruptions must be scheduled with PEPPER CONSTRUCTION before commencement of the work.

- 19.1. Valves and other shutdowns shall be located before work begins.
- 19.2. Contingency plans shall be developed in the event of critical system interruption.

19.3. All Critical Systems shall be identified before the start of demolition. Lines shall be painted or flagged to indicate their presence.

## 20. CRANES

- 20.1. All operators of mobile, boom truck, lattice boom, telescopic boom (Hydro) and tower cranes, shall maintain a valid certification card issued by the Operating Engineers Certification Program (OECP), the National Commission for the Certification of Crane Operators (NCCCO) or a company program reviewed by an outside auditor. The certification must be specific to the type of crane being operated. Certifications must be current and in good standing. Certifications must be available for verification by PEPPER CONSTRUCTION at any time while the operator is on site.
- 20.2. The TRADE PARTNER responsible for crane work on site must verify that ground conditions are stable and outrigger bearing pressures imposed can be safety met. The TRADE PARTNER responsible for that work must establish and plan a travel path for the equipment, determine outrigger locations and ensure that no hazards such as overhead or underground utilities or vaults or structure exist. The TRADE PARTNER must perform these inspections and notify PEPPER CONSTRUCTION prior to any lift or pick taking place.
- 20.3. Crane appurtenances that exceed 200' above the ground or within 20,000 feet of an airport shall be marked and lighted, unless an exemption is received from the FAA. Contractors erecting the crane must review and complete FAA Form 7460 as required. Notice of Proposed Construction or Alteration (faa.gov)
- 20.4. Annual inspection is required, and a copy provided to PEPPER CONSTRUCTION upon request.
- 20.5. Tower Cranes must be inspected by a Third Party Qualified Person after erecting, climbing, jumping, de-jumping and/or dismantling activities. Additionally, a Registered Professional Engineer must verify that the host structure is strong enough to withstand forces imposed on it by braces, anchorages, and supporting floors. A copy of this inspection must be provided to PEPPER CONSTRUCTION upon request.
- 20.6. All signal persons and riggers must have certified training. Certifications must be current and in good standing. Certifications must be available for verification by PEPPER CONSTRUCTION at any time while the operator is on site.

20.7. Tag lines or guide ropes shall be used to control all loads.

- 20.8. Equipment operators and truck drivers must not operate closer than recommended minimum clearance distances from overhead or underground electrical wires. If work is required near these utilities, the TRADE PARTNER must consult with the PEPPER CONSTRUCTION site Superintendent about alternative action plans.
- 20.9. The TRADE PARTNER is required to complete the DAILY HOISTING PERMIT for all critical lifts. Critical Lifts are lifts in which a crane that is using 75% of the crane chart capacity or lifts involving more than one crane. A Daily Hoisting Permit form is in the Project Specific Safety Plan.
- 21. NON-CRANE HOISTING when using equipment such as but not limited to pulley, winches, come-a-longs, forklifts and gantry systems, the hoisting system must be designed and engineered to be used in such a manner. The hoisting system includes all hoisting equipment and components, anchor points, attachment points and rigging. Documentation, including the weight of objects being hoisted and capacity of each hoisting component and hoisting system as a whole, must be provided to Pepper Construction prior to hoisting.
- **22. DRONE USAGE** If the usage of an aerial drone is required by any Trade Partner/vendor on any PCCI project sites, the Trade Partners/vendors must contact the appropriate PCCI Drone Program Manager, Ethan McDonald for consultation with the PCG Legal Department prior to use and to ensure that the Trade Partner meets requirements as outlined in FAA's Small UAS (Unmanned Aircraft Systems) Rule (Part 107).
- **23. DEMOLITION** Demolition of existing electrical, plumbing, and/or mechanical must not commence without the following steps.
  - 23.1. The utility must be identified and marked by the trade responsible for that utility.
  - 23.2. Markings will be placed at 4ft (max) intervals and be color-coded that signify the following:
    - 23.2.1. Green Safe to Cut and Remove
    - 23.2.2. Red or not color coded Do Not Cut or Remove Stop Work and contact PEPPER CONSTRUCTION supervision.
    - 23.2.3. **Yellow** Dead but staying in place
    - 23.2.4. Orange Environmental (Asbestos, lead, PCBs)
  - 23.3. Surveying tape for color coding/flagging of the 'to be removed' materials and mechanicals shall be used.

#### 24. DRUG & ALCOHOL POLICY

- 24.1. All illegal and unauthorized substances, drugs, look-alike drugs, synthetic drugs, alcoholic beverages, and drug paraphernalia are strictly prohibited on PEPPER CONSTRUCTION jobsites.
- 24.2. Persons or TRADE PARTNER employees found to be using or in possession of, or concealing of any of the above items, will not be allowed on the PEPPER CONSTRUCTION jobsite.
- 24.3. Any employee of the TRADE PARTNER, suspected to be under the influence of drugs or alcohol, will be referred to their supervisor to determine their compliance to this Drug & Alcohol Policy and further disposition of the employee.
- 24.4. All employees, their vehicles, and personal property are subject to search and inspection, before entering or departing a PEPPER CONSTRUCTION job site.
- 24.5. PEPPER CONSTRUCTION has adopted a "Zero Tolerance" policy regarding drug or alcohol usage. Drug or alcohol use during the work shift is prohibited (This includes breaks and lunch).
- 24.6. On projects in Indiana, all contractor employees must possess a valid Substance Abuse card w/Photo ID, prior to working on a Pepper Construction project.
- 24.7. Pepper Construction will utilize the Construction Safesite system to verify whether the employee is "available" or "not available" for work.
- 24.8. All contractors must verify their employee's availability before sending them to a Pepper Construction project.
- 24.9. The following cards are accepted, CCS, IUCSAT, Quality Connection, Mechanical Pipe Trades, and ABC Trades card. A valid substance abuse card that meets the IUCSAT substance abuse program requirements, verifies that contractors have successfully complied with Pepper Construction's substance abuse policy.
- 24.10. Employees who have participated in a substance abuse test that fulfills Pepper Construction's testing requirements may obtain a CCS card by contacting DISA Global Solutions (holder of the CCS database) and presenting the test information for review. The card may be issued if the testing parameters are the same as the Pepper Construction Substance Abuse policy requirements.
- 24.11. Tradesmen shall present their photo ID and valid substance abuse card to the Pepper Construction onsite representative for documentation. In the event a card is lost supplemental info will be accepted until a new card is issued. Tradesmen that do not have a valid substance abuse card shall not be permitted on site until such time as one is obtained.

#### 25. ELECTRICAL

- 25.1. TRADE PARTNERS are responsible for maintenance of their extension cords, electrical tools, and equipment. Defective extension cords & equipment shall be removed from service immediately. OSHA requires daily inspection of extension cords, tool cords, and equipment cords.
- 25.2. TRADE PARTNERS must always use GFCI's, even if using permanent building power.
- 25.3. Temporary Power Installation Temporary electrical power, such as receptacle and lighting wire, may not be installed on PEPPER CONSTRUCTION sites as open conductors. Open conductors are copper conductors covered with one layer of insulating material. Temporary wiring connections with open conductors and /or utilizing wire nuts must be wrapped with electrical tape for additional protection. Temporary electrical service conductors, unless installed in metallic raceways, must utilize flexible cords and cables which carry the trade name "HARD SERVICE" or "JUNIOR HARD SERVICE", as defined in the 2002 edition of the NEC/Article 400/Table 400.4.
- 25.4. Electrical extension cord use:
  - 25.4.1. All cords shall be designed for hard or extra hard usage. (Not less than 12-gauge conductors)
  - 25.4.2. Contractors shall identify all extension cords with a tag or be imprinted identifying the contractor company name.
  - 25.4.3. All extension cords and portable equipment shall be inspected prior to each use.
  - 25.4.4. Any damaged or defective cord or tool shall not be used. Any worn, frayed or damaged extension cords shall be removed from service. Damaged extension cords may not be repaired and put back into use.
  - 25.4.5. Extension cords shall be placed so they do not cause slip, trip or fall hazards. Where cord sets have the potential to be damaged or where sets pose an unsafe condition, cords shall be suspended at a minimum of 8' above the work area or otherwise protected from damage. Means used to protect cords from damage shall not create a slip, trip, or fall hazard to workers as well as the public. Circumstances in which carts, aerial/scissor lifts, workers, or the public must traverse over cord sets the protection must protect the cord from damage as well as prevent a slip/trip fall hazard.

- 25.4.6. End of Day Roll-Up: Each contractor and/or TRADE PARTNER is responsible for disconnecting all extension cords from electrical sources at the end of the day or working shift with exception of cords used for running essential equipment such as pumps and battery chargers. All extension cords shall be "rolled up" and stored at appropriate storage areas such as (gang boxes, material storage areas etc.).
- 25.5. Energized parts must be guarded per OSHA 1926 Subpart K.
  - 25.5.1. The permanent or an acceptable temporary cover must be provided. Non-conductive material is acceptable for temporary covers. However, cardboard is an unacceptable temporary cover.
  - 25.5.2. All temporary covers must have a positive fastening device to secure it to the panel. Magnetic temporary covers may only be used during the work shift for guarding if the personnel responsible for the open panels are required to leave the immediate area. Magnetic covers may not be used overnight or if tradesmen will not be present for the next shift.
  - 25.5.3. It is acceptable to leave a panel open if the area that contains the panel is secured or isolated per the requirements of OSHA 1926.403 (i)(2).
  - 25.5.4. All energized devices, such as light switches and electrical outlets, shall have non- conductive and positively secured covers in place. If devices are not energized, covers are not required per PEPPER or OSHA requirements. The use of electrical tape as a substitute for covers is not permitted. If covers must be removed for the purpose(s) of drywall finishing, painting, wall covering installation or other types of work, all energized devices shall be de-energized and locked out/tagged out by a qualified person prior to cover removal.
- 25.6. Any employee who may be working on or near (within 10') live electrical parts shall be qualified as explained in OSHA 1910 Subpart S. Live parts to which an employee might be exposed shall be put into an electrically safe work condition before an employee works on or near them, unless the employer can demonstrate that deenergizing introduces additional or increased hazards or is infeasible due to equipment design or operational limitations.
  - 25.6.1. Examples of increased or additional hazards include, but are not limited to, interruption of life support equipment, deactivation of emergency alarm systems, and shutdown of hazardous location ventilation equipment or removal of illumination for an area.

- 25.6.2. Examples of work that may be performed on or near exposed energized electrical conductors or circuit parts because of infeasibility due to equipment design or operational limitations include performing testing or trouble shooting of electrical circuits that can only be performed with the circuit energized and work on circuits that form an integral part of a continuous process that would otherwise need to be completely shut down in order to permit work on one circuit or piece of equipment.
- 25.7. If the live parts cannot be placed in an electrically safe work condition, other safety related work practices shall be used to protect employees who might be exposed to the electrical hazards involved. Such work practices shall protect each employee from arc flash and from contact with live parts directly with any part of the body or indirectly through some other conductive object.
- 25.8. It is the goal of PEPPER CONSTRUCTION to achieve 100% lockout/tagout when working on all systems that have the potential to become energized. If it is determined that lockout/tagout can't be achieved, the TRADE PARTNER must implement an energized work safety policy. If this policy must be implemented, immediate notification of the PEPPER CONSTRUCTION Superintendent shall occur prior to initiating the work.
- 25.9. Lockout/Tagout Procedures shall be followed when work is to be performed on deenergized equipment. TRADE PARTNERS are required to develop and implement an energy control or lockout/tagout program and maintain onsite.

# **26. EXCAVATIONS**

- At any time, a TRADE PARTNER-controlled employee is involved in the creation of, or working in, any trench or excavation, that TRADE PARTNER must provide an on-site COMPETENT PERSON who has certification of excavation task specific training. This documentation must be provided to the PEPPER CONSTRUCTION site Superintendent upon request.
- 26.2. The TRADE PARTNER shall attend a Daily Coordination Meeting The PEPPER CONSTRUCTION Superintendent and the TRADE PARTNER(s) will meet before work starts at the beginning of each shift. The meeting agenda shall contain the following items:
  - 26.2.1. Review and Completion of the "DAILY EXCAVATION AND UNDERGROUND UTILITY DAMAGE PREVENTION PERMIT"
  - 26.2.2. A discussion plus documentation of previous days (shift) trenching and excavating activities on the Master Utility Location Drawing.

- 26.2.3. A discussion of the scope and location of work for the days (shift) work.
- 26.2.4. Verification of known underground utility locations and applicable private and public locates using the UUDP Deliverable.
- 26.2.5. Discussion of any private and public locates or relocates needed for upcoming trenching and excavating activities.
- 26.2.6. Review of the excavation protective system i.e. sloping, benching, trench box prior to being utilized during the shift.
- 26.2.7. Review of the pot-hole/daylight/hand excavation procedures for all located utility crossing points.
- 26.3. TRADE PARTNER Tradesmen Task Hazard Analysis TRADE PARTNERS shall perform a Task Hazard Analysis for each trenching and excavating activity. If more than one activity occurs in a shift, additional THA's shall be performed. Agenda shall include:
  - 26.3.1. Work scope.
  - 26.3.2. Known overhead and underground utility locations and applicable private and public locate markings,
  - 26.3.3. Requirement that limits machine excavating, digging or auguring up to a 4-ft. limit on either side of the utility markings.
  - 26.3.4. Requirement that all located utility crossing points are exposed by day lighting procedures with vacuum truck or hand excavate. Must have EYES ON buried utilities before continuing to machine dig.
- 26.4. TRADE PARTNERS are required to install and maintain barricades around excavations/trenches to protect pedestrian and vehicular traffic from entering.
- 26.5. Equipment operators and truck drivers must not operate closer than recommended minimum clearance distances from overhead or underground electrical wires. If work is required near these utilities, the TRADE PARTNER must consult with the PEPPER CONSTRUCTION site Superintendent about alternative action plans.
- 26.6. The excavation must be sloped or benched per OSHA standards, shored and /or safeguarded through the use of a trench box or other engineered earth retention device(s) when excavation reaches five (5) feet or greater in depth. Protection against cave-in at a depth of less than five (5) feet may be required if the COMPETENT PERSON determines that soil or other conditions warrant such protection.
- 26.7. Pepper Construction UUDP Excavation Permits must be completed daily.

#### **27. EXCAVATIONS - UNDERGROUND UTILITIES**

- 27.1. Our goal is to eliminate underground utility damage incidents on our projects, and to deliver accurate as-built information on utilities installed during our projects.
- 27.2. Each SUBCONTRACTOR shall attend the Safety Plan Review meeting per Section 5 item 5.2 of the Safety Handbook. The Underground Utility Damage Prevention policies and procedures specific to this project will be discussed in the meeting.
- 27.3. Each SUBCONTRACTOR shall attend a SAFETY ORIENTATION pursuant to section 8 of the Safety Handbook. The Underground Utility Damage Prevention policies and procedures specific to this project will be discussed in the orientation.
- 27.4. Each SUBCONTRACTOR shall follow the processes outlined in section 27 EXCAVATIONS of the Safety Handbook. This includes attending daily coordination meetings lead by the PEPPER CONSTRUCTION Superintendent. Coordination meetings will take place PRIOR to commencing work on any given day.
- 27.5. Each SUBCONTRACTOR will perform a Task Hazard Analysis for each trenching and excavate activity and will review with the PEPPER CONSTRUCTION Superintendent prior to commencing work on any given day.
- 27.6. Each SUBCONTRACTOR performing underground work is required to call in their own public utility locates and keep the dig numbers valid per 811 laws.
- 27.7. PEPPER CONSTRUCTION will coordinate and schedule the private utility locates
- 27.8. Each SUBCONTRACTOR shall perform potholing of underground utilities to get "Eyes-On" the utility PRIOR to continuing with machine excavating for the work at the following conditions:
  - 27.8.1. Where the excavation for the new utility crosses any underground utility
  - 27.8.2. Where the excavation for the new utility is within 4 ft of either side of the onsite utility marking (i.e. paint or flags)
  - 27.8.3. Where the PEPPER CONSTRUCTION superintendent directs the SUBCONTRACTOR to do so
- 27.9. Each SUBCONTRACTOR shall survey their installed utility PRIOR to backfilling. Survey shall be performed in accordance with the Survey Data Requirements Below and shall be delivered to PEPPER CONSTRUCTION no later than 24 hours after the data is collected.
- 27.10. As-Built Survey Data Requirements of **New Underground Utilities**
- 27.11. Newly installed utilities as a part of the contractor's scope of work shall be surveyed prior to backfill of utility as follows:
  - 27.11.1. Survey top of utility elevation
  - 27.11.2. Document size of utility at each survey point

- 27.11.3. Document type of utility at each survey point
- 27.12. Utilities shall be surveyed at the following frequency
  - 27.12.1. At the start and end of each utility run
  - 27.12.2. At each change in direction of the utility and/or at each tie in to new or existing structures
  - 27.12.3. At each change in elevation of the utility (excluding changes in elevation due to gravity slope of piping)
  - 27.12.4. If an "As-Built Intent Plan" is provided in the scope of work, as-built data should be collected on utilities at locations in conformance with this plan.
- 27.13. Information shall be provided in a format as follows:
  - 27.13.1. Information can be generated using AutoCAD, Civil 3D, or similar
  - 27.13.2. Information shall be delivered in the .dwg file extension version 2010 or newer
  - 27.13.3. Coordinate System of CAD file to be in accordance with the State Plan Coordinate system.
  - 27.13.4. Points shall be represented by linework in the CAD file as follows
    - 27.13.4.1. Points shall be represented with linework or Civil 3D points
    - 27.13.4.2. Points shall be shown at the correct "X, Y, Z" location relative to the project's site CAD file provided by the design team and/or Pepper Construction
    - 27.13.4.3. Points shall be accompanied by a text label/annotation clearly noting elevation of top of utility, size of utility, and type of utility
    - 27.13.4.4. Points shall be connected by linework to indicate the complete run of the system
  - 27.13.5. Points shall be provided in a .csv file format in PENZD format
- 27.14. Where possible and at the direction of the Pepper site superintendent, sight tubes should be installed at locations where as-built survey data has been collection for reference throughout the project.
  - 27.14.1. Install minimum diameter 4" PVC pipe on top of the exposed utility
  - 27.14.2. Install removable cap

- 27.14.3. Write on outside of pipe (above grade) the utility type, utility size, and appx utility depth below grade
- 27.14.4. Top of sight tube should be 2' above grade U.N.O.

#### 28. FALL PROTECTION

- 28.1. A fall protection program is designed to provide the required methods to prevent employees from exposure to or suffering an injury due to a fall from an elevation. Due to the extreme severity of fall related injuries, TRADE PARTNERS must exercise every precaution required. The use of fall protection systems and equipment is required on all PEPPER CONSTRUCTION jobsites. Any employee found to be in violation of PEPPER CONSTRUCTION Fall Protection requirements is subject to immediate removal from the jobsite. A "Fall Protection System" is defined as some engineered, physical means or methods that are designed to eliminate a fall exposure to employees. Under OSHA 1926 Subpart M, it is required to provide "Guard Rail Systems, Safety Net Systems or Personal Fall Arrest Systems." General Requirement: Fall protection is required whenever employees are exposed to falls of six (6) feet or greater, to a lower level.
- 28.2. OSHA 1926 Subpart M states that there may be work activities that qualify for an exception to the six (6) foot rule. However, it continues to state, "There is a presumption that it is feasible and will not create a greater danger to implement at least one of the above referenced systems." PEPPER CONSTRUCTION supports this presumption of feasibility, and any exception must have the approval of the PEPPER CONSTRUCTION Safety Department and site Superintendent. It has been demonstrated that effective fall protection can be provided for many concrete leading-edge operations, pre-cast plank and double-T erection, and low sloped (4 in 12 or less) roofing operations. It is required that the appropriate fall protection systems be provided. This must be addressed in the Site-Specific Safety Plan that each TRADE PARTNER is contractually required to provide to PEPPER CONSTRUCTION.
  - 28.2.1. **Concrete Leading-Edge Operations -** Engineered fall protection systems must be used to minimize fall exposures.
  - 28.2.2. Roofing A Fall Protection System is required for all low sloped (4 in 12 or less) roofing operations when the fall distance exceeds six (6) feet. Safety monitors are not considered positive fall protection. In addition, any employee engaged in the installation of sheet metal materials (including but not limited to flashing, coping caps, etc.) must use a Fall Protection

- System. Skylights shall be considered the same as a roof opening/hole and protected as such.
- 28.2.3. Warning Line Systems: Roofing and Non-Roofing Work on low sloped roofs All trade tasks not limited to roofing work being performed on low-sloped roofs must install a warning line system. The warning line system must be created with flagging or barricades and be established at a minimum of fifteen (15) feet from unprotected sides or edges, including skylights and roof openings/holes. A flagged or barricaded path must be established and maintained from the point of access to the warning line system. Any employee outside the warning line system must utilize a Fall Protection System.
  - 28.2.3.1. Lines: Warning lines must have a minimum tensile strength of 500 pounds and may be made of rope, wire, or chain. They must be also marked or flagged at not more than 6-foot intervals with high-visibility material. Lines must be rigged and supported in such a way that their lowest and highest points are no more than 34 inches and 39 inches, respectively, above the surface. Supports: Lines supported by stanchions must be installed so that the slack between two stanchions can't be taken up before the stanchions tip over. Stanchions must be able to withstand a 16-pound horizontal force applied 30 inches above the working surface. The force must be applied perpendicular to the warning line and in the direction of the roof edge.
  - 28.2.3.2. Rope grabs: rope grabs are to only be used in a vertical orientation only. Retractable lanyards are to be used in the place of rope grabs when there is the need to tie off for leading edge work.
- 28.2.4. **Steel Erection** All steel erection activities (erectors, connectors, and decker's) are contractually required by PEPPER CONSTRUCTION, to include 100% fall protection when fall hazard is six (6) feet or greater.
  - 28.2.4.1. The TRADE PARTNER (fabricator and their erector) is required to submit in writing a detailed plan of all fall protection to be used on the project. This includes a detailed analysis of all fall hazards greater than six feet. The plan shall include a detailed description of the specific personal fall arrest systems to be used

- including manufacturers and/or engineered designs, limitations of use, and the minimum clearance distance required for the system to prevent the worker from striking the floor/deck below. Systems that do not prevent contact with the surface below will not be permitted.
- 28.2.4.2. PEPPER CONSTRUCTION further requires that decking be installed every two stories or thirty (30) feet, whichever is less, before erecting additional levels.
- 28.2.4.3. Any exceptions based on feasibility or constructability constraints must have the written approval of the PEPPER CONSTRUCTION Safety Department, Project Manager and site Superintendent.
- 28.2.4.4. Working floors to be considered "controlled access" areas for ironworkers and decker's only until the floor has achieved 100% fall protection unless personal fall protection systems are utilized. All openings to be covered and cabled before access by other trades.
- 28.2.4.5. All openings greater than 16 square feet shall have cable guardrail systems installed in addition to being covered.

  Stanchion support locations should be coordinated to facilitate installation of interior shaft walls. If necessitated by fall protection distance requirements, stanchion installations should occur after decking on the floor above has been completed.
- 28.2.4.6. Cable must not deflect more than 2 in. when a 200-lb. force is applied. If a 2-in. deflection is exceeded additional intermediate supports must be provided. Maximum 2-in. deflection must be maintainable. Maximum distance between supports is 15 feet. Bracing/Kickers shall be provided at corner stanchions to maintain plumb when cables are pulled tight. The cable shall be provided with a positive tensioning device (such as a turnbuckle) which will reduce the sag in the cable to not more than 2 inches in a 20-foot span. The tension device shall have a breaking strength of not less than 10,000 pounds.

- 28.2.4.7. Roof levels must be protected with a Perimeter Guardrail
  System (top rail and mid- rail). PEPPER CONSTRUCTION must approve variations due to job conditions of this requirement.
- 28.2.4.8. Overhead protection On multi-story steel erection projects, a minimum of two decked floors one of which must be poured shall be in place between the erector's raising gang and trades below whose work is unrelated to the steel erection process.
- 28.2.4.9. 12 ft. Rated Lanyards: 12 ft. rated double hook or (Y) lanyards will be required when employees are tying off at their feet and/or when circumstances exist where the free fall distance prior to the lanyard engaging is beyond or exceeds six feet (6 ft.).
- 28.2.5. Masonry Fall Protection (Overhand Operations) A Fall Protection System must be provided to all workers exposed to a six (6) foot or greater fall hazard. Therefore, the OSHA 1926 Subpart M fall protection exception does not apply to overhand bricklaying operations on PEPPER CONSTRUCTION projects. This includes those engaged in overhand work including the laying of brick, block, and related materials, striking, and brushing joints. In relation to operations included in OSHA 1926 Subpart L, Scaffolding, all regulations shall be followed.
- 28.2.6. Floor Openings & Perimeter Protection Guardrail systems are provided at the perimeter, stairway openings, and shaft openings. Smaller floor openings, including those less than 2" in diameter, are to be covered and secured. This is done to provide for the safety of all personnel on the job site.
  - 28.2.6.1. A guardrail system is defined as a toprail @ 42", a midrail @ 21", and includes a toeboard.
  - 28.2.6.2. Hole covers must be installed and maintained. If a hole cover is removed by another trade that TRADE PARTNER or trade assumes responsibility to cover and maintain that hole.
  - 28.2.6.3. Hole covers shall be designed to withstand twice the weight of workers, equipment, and materials. Floor covers must be raised or suitably barricaded to prevent overloading from mobile equipment such as scissors and boom lifts.
  - 28.2.6.4. Covers shall be secured against displacement horizontally and vertically.

- 28.2.6.5. All covers shall be marked with the words "HOLE, FLOOR OPENING, OR DO NOT REMOVE."
- 28.2.6.6. All floor covers must be sealed to the floor with watertight sealant unless otherwise specified by PEPPER CONSTRUCTION supervisor or Safety Department
- 28.2.6.7. If a TRADE PARTNER finds it necessary to remove a guardrail system, an authorized PEPPER CONSTRUCTION representative must be notified, and the removal and replacement of the protective device is to be coordinated with them. This procedure is critical in assuring that these systems maintain their required protective designs.
- 28.2.6.8. Should a TRADE PARTNER damage any protective system, they must notify an authorized PEPPER CONSTRUCTION supervisor immediately. Do not remove or repair these systems without notifying PEPPER CONSTRUCTION. Whenever guardrail systems or covers are removed, employees must be protected with appropriate fall protection systems. Failure to replace protective systems, may subject the responsible employee to removal from the jobsite. Further, failure to replace protective system will result in PEPPER CONSTRUCTION performing this work and the cost for this activity will not be negotiable, based on the SUBCONTRACT AGREEMENT with the respective firm.
- 28.3. Leading Edge rated lanyards leading edge rated lanyards (Class 2) will be required when an employee's anchor point is below the employee's dorsal D-Ring, and in the case of a fall, the lanyard would contact sharp edge, such as, but not limited to, steel, metal decking and concrete.
- **29. CONTROLLED DECKING ZONE** Controlled Decking Zone A controlled decking zone will be established in that area of the structure over 6 feet above a lower level where metal decking is initially being installed and forms the leading edge of a work area. In each CDZ, the following shall apply:
  - 29.1. Each employee working at the leading edge in a CDZ shall be protected from fall hazards of more than 6 feet (1.83 m), whichever is less.
  - 29.2. Access to a CDZ shall be limited to only those employees engaged in leading edge work.
  - 29.3. The boundaries of a CDZ shall be designated and clearly marked. The CDZ shall not be more than 90 feet (27.4 m) wide and 90 (27.4 m) feet deep from any leading edge. The CDZ shall be marked by the use of control lines or the equivalent. Examples of acceptable procedures for demarcating CDZ's can be found in Appendix D to subpart 1926.761.

- 29.4. Each employee working in a CDZ shall have completed CDZ training in accordance with 1926.762
- 29.5. Unsecured decking in a CDZ shall not exceed 3,000 square feet
- 29.6. Safety deck attachments shall be performed in the CDZ from the leading edge back to the control line and shall have at least two attachments for each metal decking panel.
- 29.7. Final deck attachments and installation of shear connectors shall not be performed in the CDZ.
- **30. FALLING OBJECTS PREVENTION** Personal fall protection has long been the #1 priority in construction for good reason, as falls from height remain the most frequent cause of construction worker fatalities. Recently, a new type of fall protection is gaining momentum, falling object protection, due to the number of injuries and fatalities resulting from dropped or falling objects. When objects (tools, material, etc.) have the potential to drop to a lower level, some type of preventative measure must be taken. Examples of preventative measures include but are not limited to:
  - 30.1. Controlled Access Zone a physical barrier to prevent access to area(s) below overhead work.
  - 30.2. Tool tethers Tethers must be specifically designed for the sole purpose of preventing tools from being dropped. Job made products are not permitted.
  - 30.3. Spotter a person, designated as a spotter, must be positioned to prevent unauthorized access below overhead work. This person shall have no other duty while designated as a spotter. If the spotter must leave the area, the overhead work must cease.

#### 31. FIRE PROTECTION

- 31.1. Good housekeeping practices are the singularly most important element of fire protection. Combustible materials must be placed in trash receptacles and removed by the TRADE PARTNER performing the work from the project in a timely fashion.
- 31.2. When portable heaters are used, make certain they are placed well away from the combustible materials (both side to side and above and below.)
- 31.3. Temporary heaters will be checked for correct operation prior to being put into service each day.
- 31.4. Fire extinguisher shall be placed in conspicuous areas and be accompanied with proper signage.

- 31.4.1. All fire extinguishers shall be placed in boxes or on stands painted red, or hung on walls with red backboards at approximately 48" height. No fire extinguisher may be allowed to rest on bare ground.
- 31.4.2. One portable dry chemical fire extinguisher not rated less than 20lb ABC to be provided within five (5) feet of wherever gasoline operated equipment is being used.
- 31.4.3. Fire extinguishers are not to be tampered with or removed from assigned locations (except for emergency use). If discharged for any reason, the fire extinguisher must be replaced or recharged immediately.
- 31.5. Procedures to be followed in the event of a fire should be rehearsed regularly.
- 31.6. Hot Work Operations In occupied buildings or at the discretion of the PEPPER CONSTRUCTION Superintendent a Hot Work Permit is required for operations or activities involving an open flame or work which may produce sparks or smoke including but not limited to: welding, torch cutting, soldering, grinding, chop saw use and open flames.
  - 31.6.1. Permits are valid for only the date, shift, and location indicated.
  - 31.6.2. It is the responsibility of the TRADE PARTNER to provide adequate fire extinguishers in the work area. One portable dry chemical fire extinguisher not rated less than 20lb ABC to be provided within twenty-five (25) feet of work.
  - 31.6.3. A fire watch shall be maintained whenever welding, cutting, or spark producing operations take place and there is a threat of fire.
  - 31.6.4. A properly trained fire watch shall be provided and shall have no additional duties.
  - 31.6.5. Fire watch shall be continued for a minimum of (40) minutes after hot work has been completed. Procedures may vary by exposure.
  - 31.6.6. The Hot Work Permit must be submitted to an authorized PEPPER CONSTRUCTION representative. The PEPPER CONSTRUCTION site Superintendent may designate an authorized person for this purpose. All guidelines contained within that Hot Work Permit must be followed.
  - 31.6.7. Asphalt/Pitch kettles are covered by the Hot Work Permit Program. Tar Pots are always required to be attended. Under no circumstances shall "tar pots" be located closer than 35 feet to any combustible storage area.

## 31.7. Flammable Storage/Use

- 31.7.1. Gasoline and other flammables must be kept in an approved metal safety can (approved by a nationally recognized testing laboratory) for the handling and use of flammable liquids. Further, a safety can, by definition, is a container with a capacity of 5 gallons or less and equipped with a spring-closing lid and spout cover, a means to relieve internal pressure, and flash-arresting screen. The limits of quantities stored must meet local, state, and/or federal regulations. Plastic gas cans are prohibited. Flammables must be stored in properly labeled containers (HAZCOM requirement). It is the responsibility of the TRADE PARTNER to provide adequate fire extinguishers. Smoking is strictly forbidden in areas where flammables are stored or used. "NO SMOKING" signs must be posted and obeyed.
- 31.7.2. Portable fuel tanks will be installed in accordance with federal, state and local requirements. It is the Contractor's responsibility to secure all required permits and provide proof of same.
- 31.7.3. Flammable liquids shall be stored outside, away from buildings, in a safe and secure location in standard approved storage containers or tanks.
- 31.7.4. No flammables may be stored inside tool trailers, job toolboxes or other closed locations.
- 31.7.5. Storage of fuel gas cylinders shall be outside in an area approved by PEPPER CONSTRUCTION.
- 31.7.6. Portable tanks not to be nearer than 20 feet from any building. Portable fuel tanks/containers are not allowed inside the building under any circumstances.
- 31.7.7. At least one portable fire extinguisher having a rating of not less than 20-B units shall be located not less than 25 feet, nor more than 75 feet, from any flammable liquid storage area located outside.
- 31.7.8. Fueling and refueling operations for equipment, whether gasoline or diesel, shall be done outside of the building, no closer than 35' from the building.
- 31.7.9. Liquefied Petroleum Gas (L-P Gas) Storage of L-P gas cylinders within buildings is strictly prohibited. L-P gas containers, when in use, must stand on a substantially level, firm surface and secured in an upright position to prohibit falling, tipping or toppling of containers. Heating equipment must

be located at least 6 feet from L-P gas containers and the heat directed away from the containers.

## 32. HAZARD COMMUNICATION

- 32.1. In accordance with PEPPER CONSTRUCTION's Hazard Communication Program, all hazardous material containers must be properly labeled. Every TRADE PARTNER must supply a Safety Data Sheet (SDS) to the PEPPER CONSTRUCTION site Superintendent at least seven (7) days before introducing a hazardous material to the jobsite. A list of the hazardous materials used on the jobsite by the TRADE PARTNER will be maintained in the TRADE PARTNER'S file. An additional set will be maintained in PEPPER CONSTRUCTION's site job file.
- The TRADE PARTNER must maintain their written HAZCOM Program at the jobsite, along with the training program utilized for their employees. Revision to this program must be provided when requested by the PEPPER CONSTRUCTION Site Superintendent or Safety Department.
- The SDS must be maintained on the job site. A copy of the PEPPER CONSTRUCTION HAZCOM Program may be obtained from the PEPPER CONSTRUCTION Safety Director's office located at 1850 W 15th Street, Indianapolis IN 46202, upon written request.
- 32.4. All chemicals on site will be stored in their original or approved containers with a proper label attached. Any container not properly labeled should be given to the Contractor Supervisor for labeling or proper disposal.
  - 32.4.1. Immediate us means that the hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

#### 33. HOUSEKEEPING

- Our policy is "nothing hits the floor". All work operations shall be provided with appropriate trash receptacles for debris, scrap, cutoffs and packaging. All debris, especially combustible scraps and debris must be cleared from the building and work areas daily.
- 33.2. Daily housekeeping by each TRADE PARTNER is essential for maintaining a safe job site. TRADE PARTNERS are responsible for housekeeping procedures in their respective work areas. The working definition for Daily Housekeeping at PEPPER CONSTRUCTION is as follows:

- 33.2.1. All debris, especially combustible scraps and debris must be cleared from the building and work areas daily.
- 33.2.2. Nails, wire ties, and other accessories shall be promptly removed from lumber or any other used lumber at the time of stripping or dismantling. If it is not practical to remove or bend nails in used lumber to avoid tripping hazards and nail traps, the lumber must be stacked for cleaning and re-use. Lumber must not be scattered.
- 33.2.3. The work site, especially stairways and walkways, shall be kept clear of obstructions that may create tripping or other hazards.
- 33.2.4. Tools must be stored in toolboxes. If laid aside temporarily, the tools must be placed where they will not present a hazard. Tools must not be placed in a position to fall on someone at a lower level.
- 33.2.5. All construction materials and supplies stored neatly in designated areas.
- 33.2.6. Floors shall be swept daily using wax based sweeping compound to remove accumulated construction dust.
- 33.3. TRADE PARTNER failure to maintain their work areas as required or directed will result in PEPPER CONSTRUCTION performing this clean-up. The cost for this activity will not be negotiable, based on our SUBCONTRACT AGREEMENT with the respective firm.
- **34. INDOOR AIR QUALITY** In General the use of gas-powered equipment is prohibited within the building structure. If no other feasible option, the contractor using said gas powered equipment must provide safeguards: such as, continuous CO air monitoring for the duration of the work in that same area, installation of scrubbers on the equipment used, local ventilation, or scheduling off hours. All Federal and Local requirements must be followed.
- 35. LADDERS Our goal is to reduce the risk posed by using ladders to access work at height by reducing the overall percentage of work completed using ladders. This involves Identifying alternatives to ladder use for work scopes at the planning phase. Alternatives to ladders include scissor lifts, man lifts, and scaffolds.

When ladders are determined to be the best option the following requirements apply:

- 35.1. Step ladders 6' or greater of working height shall be platform ladders unless the users are protected with suitable fall personal fall protection systems.
- 35.2. All ladders must be used in strict accordance with the manufacturers and ANSI requirements.

- 35.3. Step and extension ladders shall be constructed of fiberglass and rated Type IA, IAA or IAAA. Wood and metal ladders are prohibited.
- 35.4. Whether using portable, fixed, or job-made ladders, proper safety precautions must always be followed. Employees must always ascend or descend a ladder with three (3) points of contact.
- 35.5. Ladders must be inspected daily; broken or damaged ladders will be removed from service immediately and destroyed.
- 35.6. Extension ladders cannot be separated for use as single units. Extension or straight single ladders must be properly secured at the top and if possible, the bottom. A minimum of thirty-six (36) inches is required above the top access point of an extension or straight ladder.
- 35.7. Documentation of ladder safety training must be provided at the request of the PEPPER CONSTRUCTION site Superintendent.
- 35.8. For work from ladders within ten feet of the exposed edge or perimeter of the building or structure; where other positive means of conventional fall protection do not already exist; positive means of fall protection, such as but not limited to personal fall arrest systems (PFAS) will be employed.

#### **36. MASONRY CONSTRUCTION**

- 36.1. A Limited Access Zone shall be established whenever a freestanding masonry wall is being constructed.
- 36.2. The Limited Access Zone shall be established before the start of the wall construction, equal to the height of the wall to be constructed plus four feet, run the entire length of the wall, and established on the side of the wall that will not have scaffold installed.
- 36.3. Limited Access Zone entry is restricted to employees who are actively engaged in the construction of the wall. No other employees shall be permitted to enter the zone.
- 36.4. The Limited Access Zone shall remain in place until the wall is adequately supported to prevent overturning. OSHA considers bracing as adequate support.
- 36.5. An engineered bracing design shall be used for all freestanding masonry walls over eight (8) feet in height to prevent overturning and collapse. Bracing shall remain in place until permanent supporting elements of the structure are in place.
- 36.6. All block and brick cutting activities that create the potential for respirable crystalline silica dust exposure shall use water as an engineering control. If it is determined by

PEPPER that water cannot be used, all exposed employees shall wear approved respirators and the operation shall be in an area where non-protected employees and the general public are not exposed to silica containing dust.

#### 37. MATERIAL HANDLING

- 37.1. Materials shall not be stored outside of designated construction areas.
- 37.2. Sheet materials (ex: drywall, plywood, oriented strand board, hardboard, fiberboard, overlay plywood) and doors shall not be stored on edge or on drywall carts.
- 37.3. In order to maximize mobility and safe transport of materials, loading of drywall carts shall be limited to one half of the rated weight capacity.
- 37.4. Metal banding shall not be used for concrete formwork. Acceptable means include poly or nylon.
- 37.5. Material Handling for Multi-Story Structures
  - 37.5.1. The practice of swinging or pulling a suspended load into a building by any method is strictly prohibited. This practice places employees, equipment, and the structure at substantial and unnecessary risk. This operation must be analyzed in the site-specific safety plan.
  - 37.5.2. Proper loading systems including, but not limited to, are: material/man hoists, platform lifts, landing platforms or lookouts.
  - 37.5.3. If guardrails are removed on landing platforms, lookouts or hoists, personal fall protection must be provided for exposed employees. Additionally, if guardrails are removed, flagging must be installed to warn of fall hazard or unprotected edge condition.
- 37.6. Free-Rigging is prohibited: Free rigging is the direct attachment to or placement of rigging equipment (slings, shackles, rings, etc.) onto the tines of a powered industrial truck for a below-the-tines lift. This type of lift does not use an approved lifting attachment.
- 37.7. Personnel are strictly forbidden from riding on material hoisting equipment at any time.

#### **38. MOTORIZED EQUIPMENT**

38.1. All motorized equipment that has limited or obstructed view by the operator during reverse or backing up movement, must have a back-up alarm installed and operating. This includes skid steer equipment.

- 38.2. All operators of motorized equipment/machinery must wear seatbelts if said equipment has been manufactured with one.
- 38.3. All equipment operators must shut down their engines during the refueling process. Fire extinguisher(s) must be readily available during refueling, located within twenty-five (25) feet of lateral distance.
- 38.4. Only authorized person's licensed and certified as required by local, state or federal mandates, shall operate machinery, equipment, tools or vehicles.
- 38.5. No riders on machinery or equipment without proper seating accommodations.

  Riders in trucks are to be seated, in a seat while the vehicle is moving. No workers may be transported in the back of a pick-up truck AT ANY TIME.
- 38.6. All mobile machinery must have operable backup alarms and/or flashing strobe type lights at ALL times.
- 38.7. A flag person must be used to direct the backing up of a vehicle in any congested or noisy area. Any flag person exposed to vehicular traffic must be properly trained and certified for this task and must always wear a reflective vest.
- 38.8. The use of a mobile phone while operating any power-industrial trucks or power-industrial equipment and earth moving equipment is strictly prohibited.

#### **39. TRANSPORTATION OF PERSONNEL**

- 39.1. Transportation of persons in the back of pick-up trucks is prohibited.
- 39.2. No person will be permitted to ride with arms or legs outside of a vehicle body, in a standing position on the body, on running boards, seated on side fenders, cabs, cab shields, bed of the truck or on the load.
- 39.3. The number of passengers in passenger-type vehicles shall not exceed the number that can be seated
- 39.4. Trucks used to transport personnel shall be equipped with a securely anchored seating arrangement, a rear end gate, and guardrail. Steps or ladders, for mounting and dismounting, shall be provided.
- 39.5. All tools and equipment shall be guarded, stowed, and secured when transported with personnel.
- 39.6. Vehicles transporting personnel shall not be moved until the driver has ascertained that all persons are seated, and the guardrails and rear end gates are in place or doors closed.
- 39.7. Getting on or off any vehicle while it is in motion is prohibited.

39.8. All motor vehicles shall be shut down prior to and during fueling operations.

# **40. PERSONAL PROTECTIVE EQUIPMENT**

- 40.1. TRADE PARTNERS are responsible for providing their employees with all necessary PPE.
- 40.2. Clothing Appropriate clothing must always be worn. Clothing must consist of long pants and a shirt that covers the shoulders with a minimum 4" sleeve. Clothing must not be torn and must be free of offensive sayings or pictures. Loose clothing, shorts, athletic shoes, or sleeveless shirts are not permitted on the jobsite. Jewelry of any kind is strongly discouraged on the jobsite. The risk of becoming "caught on" or "caught in" increases substantially when necklaces, dangling jewelry, or rings are worn.

# 40.2.1. High Visibility Clothing

- 40.2.1.1. Flaggers and workers exposed to hazards posed by vehicles, earth moving equipment, extendable boom forklifts and cranes shall wear high visibility reflective clothing. High visibility clothing is defined as reflective and fluorescent vests or shirts that workers should wear to make them more visible when working near traffic and heavy equipment, in all light conditions, day and night. The following guidelines shall be used for selection of high visibility clothing:
- 40.2.1.2. ANSI Class 1 garment: For workers that are separated from vehicular traffic that does not exceed 25 miles per hour; where background settings and worker tasks are not complex.
- 40.2.1.3. ANSI Class 2 garments: Necessary for greater visibility during inclement weather; where work background is more complex and is close to moving traffic and vehicles; workers' attention will likely be diverted from traffic traveling at speeds from 25 to 50 miles per hour.
- 40.2.1.4. ANSI Class 3 garments: Traffic speed is greater than 50 miles per hour; worker must be conspicuous and identifiable as a person through the full range of body motions at a minimum of 1,280 feet.
- 40.2.1.5. At the discretion of Pepper Construction, projects may require high visibility clothing 100% of the time.

- 40.3. Footwear Construction workers and visitors are required to wear a well-constructed hard sole, closed-toe work shoe.
- 40.4. Gloves Appropriate hand protection is required 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. Leather and cotton gloves are not considered cut resistant.
  - 40.4.1. The use of cut resistant gloves is always required for trades with exposure to hand and finger cut hazards.
  - 40.4.2. 100% hand protection is required for the following trades: ELECTRICAL, MECHANICAL, PLUMBING, CARPENTRY, DRYWALL, CONCRETE AND DEMOLITION.
- 40.5. Hard Hats Approved hard hats must be worn on the job site at all times. TRADE PARTNERS are not allowed to work without hard hats. PEPPER CONSTRUCTION will not provide loaner hard hats to TRADE PARTNER's employees.
- 40.6. Hearing Protection Appropriate hearing protection must be utilized for the anticipated noise levels encountered. The threshold for hearing protection is 90dBA.
- 40.7. Respirators The use of some types of respirators requires a medical examination and documented fit testing. Documentation must be provided to PEPPER CONSTRUCTION and kept on file.
- 40.8. Eye Protection The use of safety glasses with side shields or other suitable eye protection is required at all times. Additionally, face shields must be worn during the use of powder actuated tools, chop saws, partner saws, grinders, hydro vac excavating, or for tasks that create flying debris that can strike the face.
- 40.9. Welding shields shall attach to hard hats.
- 40.10. Roofing All workers involved with charging of roofing kettles shall wear task specific PPE. These items would include hood that provides face/neck protection, suitable outer- wear and gauntlet gloves.

## **41. POWDER ACTUATED TOOLS**

- 41.1. Only employees who have been trained in the operation of the tool in use shall be allowed to operate a powder-actuated tool.
- 41.2. All Personal Protective Equipment (PPE) required (including but not limited to eye protection, face protection, gloves and hearing protection) must be used during the

- operation of the tool. All live loads remaining in a used clip shall be discarded properly.
- 41.3. Proper disposal could include a container of water or other closed container that does not allow accidental detonation of unused loads.
- **42. PUBLIC PROTECTION** Construction activities attract the public. TRADE PARTNERS must provide safety barriers, walkways, lighting, fences, and any other means necessary to protect the public from possible injury because of the TRADE PARTNERS work. This must be part of the site-specific safety plan.
  - 42.1. Construction work areas must be barricaded and/or posted with appropriate signage. At no time shall work be performed over persons or aisles without such barricades in place to prevent access.
  - 42.2. Red barricade tape is to be used to enclose hazardous work areas. Entry into these areas is restricted to authorized personnel.
  - 42.3. Yellow barrier tape shall be used to enclose areas where caution must be exercised.
  - 42.4. When steel plates, wood planking or similar covers are located where there is pedestrian traffic or exposure, they shall be tapered on all sides with cutback, cold mix or similar material to eliminate tripping hazards. Covers will be non-slip in nature or have a non- slip surface.
- **43. RADIOS** Electronic entertainment devices are prohibited in the job site work area. Radios are permitted in the site trailer or office primarily for public notification of emergencies (such as weather, security alerts, etc.). Repeat violations of this policy will result in the appropriate discipline, up to and including removal from the jobsite.

#### 44. SCAFFOLDING

- 44.1. Per OSHA 1926 requirements, any employee that uses, erects, or dismantles a scaffolding system must be trained in this task. TRADE PARTNER documentation of this training must be provided to PEPPER CONSTRUCTION upon request.
- 44.2. A scaffold tagging system shall be used to identify the status of each scaffold.

  Scaffold status should include the following categories: complete/all requirements met, complete/hazards noted, and/or incomplete do not use.
- 44.3. Fall protection at heights above 6 feet is required during scaffold erection and dismantlement. Fall protection systems may include horizontal static lines or vertical lifelines.

- 44.4. The footings for scaffolding must be rigid, sound, and capable of carrying the load without settlement or displacement. Unstable objects such as barrels, boxes, loose brick, concrete blocks, or pieces of scrap lumber shall not be used to support scaffolding. Mudsills, base plates, and leveling jacks must be used.
- 44.5. Standard scaffolding, whenever feasible, shall have guardrails (top and mid rails) whenever the work platform is located at six (6) feet or greater above lower level. If X- brace pivot point is greater than thirty- eight (38) inches but less than forty-eight (48) inches above work platform, only a midrail is required. If X-brace pivot point is greater than twenty (20) inches but less than thirty (30) inches above the work platform only a top rail is required. All other scaffolding situations require guardrails per OSHA standards.
- 44.6. All scaffolding that is less than forty-five (45) inches wide must have guardrails whenever the work platform is at forty-eight (48) inches or greater above lower level. This includes Perry and Baker-type scaffolds. Toe boards are required to provide for falling object protection, unless the area below is barricaded and be considered a limited access zone.
- 44.7. Work platforms must be fully planked, except during the erection and dismantling process. At that time, two planks or an eighteen (18) inch wide (minimum) work platform will be provided. Planks must be scaffold grade or documentation provided substantiating that plank material to be of equal or greater strength. This includes planking used by concrete contractors on forming systems. All planking of work platforms must be overlapped a minimum of twelve (12) inches or secured from movement with cleats. Scaffold planks shall extend over their end supports not less than six (6) inches or more than twelve (12) inches. Planks must be inspected before each use and cracked or damaged planks must be removed from service prior to use.
- 44.8. An access ladder or equivalent device, to allow safe access, must be provided for all scaffolding. If the fall distance exceeds 15', stair towers or internal ladder systems must be used. Safe access includes a gate, chains or other barriers that eliminate fall hazards after platform is accessed.
- 44.9. All diagonal bracing must be in place and secure. Braces do not take the place of mid and top rails (except as noted above.)
- 44.10. The scaffold system must be tied to and securely braced against the structure per the minimum requirements of the OSHA standard. If the scaffolding system is to be enclosed for wind or weather protection, it must be designed by a competent person to withstand the additional loads.

- 44.11. When work is to be completed in stairwells rolling scaffolds shall not be used.
- 44.12. Narrow frame scaffolds (Perry/baker type), are not designed to support additional pick boards, walk boards, or scaffold planks. This practice is not allowed.
- 44.13. Training, inspection procedures, maintenance, and operation of self-propelled mobile scaffolds must comply with the manufacturer's requirements and documentation. This documentation must be provided when requested by the PEPPER CONSTRUCTION Safety Department or site Superintendent.
- 44.14. Outriggers or stabilizers must be used, as required, by the manufacturer, guardrails in place and access gates closed while unit is in use.
- 44.15. Minimum safe distances from energized power lines must always be maintained (refer to the site-specific safety plan).
- 44.16. Manually Propelled Mobile Scaffolds All casters shall be provided with a positive locking device to prevent scaffolding from rolling. Platforms will be tightly planked for their full width. The floor or work surface must be free from voids, holes, or obstructions. The height of rolling scaffolds must not exceed four (4) times the shortest base dimension.
- 44.17. Two-Point Suspension Scaffolds The roof iron or hooks shall be of proper size, design, and material. Installation must be secure and anchored properly under the supervision of a trained, competent person. Tiebacks shall serve as a secondary means of anchorage installed at right angles to the face of the structure and secured to a structurally sound element of the building. All employees must be trained in the hazards associated with suspended scaffolding, as well as the controls necessary to eliminate each hazard. Fall protection systems must be used in conjunction with suspended scaffolds.

#### 45. STILTS

- 45.1. A competent person shall first train each employee who is assigned to wear stilts in the safe use and inspection of the equipment. The competent person shall also make the determination that the tradesman is proficient in the use of stilts before the tradesman is assigned to work on them.
- 45.2. Stilts shall be thoroughly inspected before each use.
- 45.3. Stilts shall only be used on hard level terrain, which is free of debris, slippery surfaces, electrical cords, or other obstructions, such as stored materials in the work path.

45.4. Tradesmen are responsible to notify their supervisors of any unsafe conditions or hazards concerning the safe use of stilts. Stilts shall not be used until all unsafe conditions have been corrected.

#### **46. SCISSORS AND AERIAL LIFTS**

- 46.1. Scissors and Aerial Lifts may not be "field modified" for uses other than those intended by the manufacturer unless the manufacturer has certified the modification in writing.
- 46.2. All lifts shall be inspected before use. Any deficiencies or equipment in need of repair shall be reported to the Superintendent or Foreman before use. If any equipment needs repair, the equipment shall not be used until authorization is received from the Superintendent or Foreman. Equipment in need of repair shall be tagged out until serviced. Inspection documentation shall be maintained with each piece of equipment for review.
- 46.3. Employees shall always stand firmly on the floor of the basket or platform, and shall not sit or climb on the edge or rails of the basket or use planks, ladders, or other devices for a work position.
- 46.4. Lifts shall not be loaded in excess of the designed working load. Lifts are designed for lifting personnel and small hand tools. Lifts are not to be used in lieu of a crane.

  Aerial lifts shall not be used to transport construction materials.
- 46.5. A full body harness shall be worn with a self-retracting lanyard attached to the boom or basket when working from an aerial lift.
- 46.6. Operator must have documented proof of training (available upon request) and use equipment as intended.
- 46.7. Lifts must not be field altered and must use only engineered attachments approved by the manufacturer. It is highly recommended that operator of lift does not work alone.
- **47. SILICA EXPOSURES** any TRADE PARTNER that may create respirable silica dust must develop and implement a site silica exposure control plan in accordance with OSHA Subpart Z 1926.1153.
- 48. UTILITIES Equipment operators and truck drivers must be cautioned not to operate closer than recommended distances from overhead or underground electrical wires. If work is required near these utilities, the TRADE PARTNER must consult with the PEPPER CONSTRUCTION site Superintendent about alternative action plans. Whenever the TRADE PARTNER undertakes excavation work, it is their responsibility to contact the appropriate one

- call locating services. Work may not start until these dig numbers have been submitted to the PEPPER CONSTRUCTION site Superintendent and the schedule of excavation approved.
- **49. UTV** (**Utility Type/Terrain Vehicles**) To safely operate a utility type vehicle, the operator must use similar safe work habits as used with tractors, skid steer loaders, and ATVs. A safe, successful driver should become familiar with the machine before using it. This can be done by reading the owner's manual and following safety labels found on the vehicle. A qualified operator (salesperson) can also demonstrate the correct operation.
  - 49.1. Safety practices to follow when driving a UTV:
    - 49.1.1. Maximum speed while operating a UTV on a Pepper jobsite is 5 mph.
    - 49.1.2. Always keep legs and arms inside the vehicle.
    - 49.1.3. Drive slowly and turn smoothly to avoid an overturn.
    - 49.1.4. When hauling cargo, the vehicle's center of gravity is raised, increasing the chance of overturning.
    - 49.1.5. Drive completely up or down a slope or hill before making a turn. Do not turn the vehicle in mid-slope or hill as this increases the probability of overturning.
    - 49.1.6. Use the appropriate speed on rough terrain.
    - 49.1.7. Operators and passengers have been thrown from vehicles.
    - 49.1.8. Stay clear of ditches and embankments.
    - 49.1.9. Passengers must be tall enough to reach handhold while their backs are against the seat and their feet are flat on the floorboards.
    - 49.1.10. Each passenger must ride in his/her own seat, not anywhere else on the UTV.
    - 49.1.11. Operators must back up carefully and utilize horn.
    - 49.1.12. Operators should be free from the influence of drugs or alcohol.
    - 49.1.13. Due to the hauling purpose of a UTV, special attention should be paid to making sure cargo or material is properly secured during transport.
- 50. VISITORS Any person not directly involved with the on-site construction of this Project shall not enter the site without first going to PEPPER CONSTRUCTION's job office and signing a visitor's release and obtaining a hard hat and safety glasses which is to be returned to PEPPER CONSTRUCTION. Visitors must always be accompanied by a person that has attended site orientation, is responsible for that (person/group) visitor on site and is familiar with the

PEPPER CONSTRUCTION Site Safety Plan. All visitors must wear required PPE items such as hardhats, safety glasses, well-constructed hard sole, closed-toe work shoe and long pants. Visitors must not enter Construction or Restoration areas wearing shorts, skirts, open toed-shoes or high-heels. Visitors must sign-out when leaving the project. Note: Contractors are responsible and must always accompany equipment repair vendors brought on site.

#### 51. WELDING AND CUTTING

- 51.1. The TRADE PARTNER must initiate a Hot Work permit with the PCCI Superintendent prior to conducting welding and cutting operations.
- 51.2. When necessary to provide protection for other employees and materials, screens or shields must be used where it is feasible.
- 51.3. All equipment used for welding and cutting including welding cables, gas cylinders, regulators and gauges, hoses, and torch sets shall be inspected each day before use.
- 51.4. Flash back arrestors shall be installed at the oxy-acetylene regulators in addition to the required torch head protection.
- 51.5. Valve protection caps shall always be in place except where cylinders are in use or connected for use. Regulators and hoses will be removed at the end of the work shift.
- 51.6. Compressed gas cylinders will not be stored inside of any structure this includes gang boxes, storage trailers and similar closed spaces.
- Personal Protective Equipment Head and eye protection must always be worn. Hard hats with eye and face protection for welding applications. Safety glasses with side shields or goggles are required when chipping or grinding a work piece if not wearing a welding helmet. All fabric garments must be resistant to spark, heat, and flame. Respiratory Protection is needed when ventilation is not sufficient to remove welding fumes or when there is risk of oxygen deficiency. Suitable welding gloves are required.
- 51.8. Welding fume extractors must be used for all hot work in occupied facilities to prevent the spread of fumes and smoke. Local exhaust ventilation shall consist of freely movable hoods intended to be placed by the welder or burner as close as practicable to the work. This system shall be of sufficient capacity and so arranged as to remove fumes, smoke at the source, and keep the concentration of them in the breathing zone within safe limits as defined in OSHA 1926 Subpart D.
- 51.9. For all welding and cutting operations, keep 35' clear of combustibles in all directions.

51.10. Shield combustible flooring with wet sand, fire retardant tarpaulins or sheet metal. Clean the area of oily deposits and trash. Cover any storage or other combustibles that cannot be moved away. It is the responsibility of the TRADE PARTNER to provide, install and maintain welding blankets when conditions warrant their use. Block off any duct openings where sparks can spread.

#### 52. PRE-CAST / TILT UP WALL PANEL ERECTION

- 52.1. Pre-cast wall erector is to submit a written erection plan to the project team at least 7 days prior to mobilization on site.
- 52.2. **Erection plan must detail the following:** 
  - 52.2.1. Erection plan must document the competent person for erector. Any change of competent person on the project site requires a written notification to the project team.
  - 52.2.2. Bracing plan: engineered drawing to be submitted to Pepper Construction and reviewed prior to erection of panels. Bracing must be installed per the engineered drawing, any deviation must be submitted and approved by the engineer of record.
  - 52.2.3. Panel connection details: engineered drawing to be submitted to Pepper Construction, panel connection details must be reviewed by the erection competent person and the Pepper Construction Superintendent prior to starting erection.
  - 52.2.4. At no time will a panel be erected and left without being braced or have all permanent connections installed per the engineered drawing. Any deviation from the plan must be submitted and approved by the engineer of record.
  - 52.2.5. Panel connection details at all 90-degree connections or any connection that is not a butt joint must be installed per the engineered drawing.
  - 52.2.6. Panel connection welds: welds must match details per the engineered drawing, any field modifications must be submitted and approved by engineer of record.
  - 52.2.7. Rigging plan to be submitted in this document: details of all rigging needed including but not limited to specialty hardware for picking and tripping loads.